



monitoring **the future**  
occasional paper series

Paper 71

**DEMOGRAPHIC SUBGROUP TRENDS FOR VARIOUS  
LICIT AND ILLICIT DRUGS, 1975–2008**

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Jerald G. Bachman  
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### **Monitoring the Future: A Continuing Study of the Lifestyle and Values of Youth**

As its title suggests, this study is intended to assess the changing lifestyles, values, and preferences of American youth on a continuing basis. Each year since 1975, about 17,000 seniors have participated in the annual survey, which is conducted in some 130 high schools nationwide. Since 1991, the study's annual surveys also have included surveys of similar nationally representative samples of eighth and tenth grade students. In addition, subsamples of seniors from previously participating classes receive follow-up questionnaires by mail each year.

This Occasional Paper Series is intended to disseminate a variety of products from the study, including pre-publication (and somewhat more detailed) versions of journal articles, other substantive articles, and methodological papers.

A full listing of occasional papers and other study reports is available on the study's Web site, [www.monitoringthefuture.org](http://www.monitoringthefuture.org). The Web site contains a complete listing of all publications from the study, the abstracts or full text of many of these publications, and recent press releases.

The mailing address of Monitoring the Future is Institute for Social Research, The University of Michigan, P.O. Box 1248, Ann Arbor, MI 48106.

**Demographic Subgroup Trends for Various Licit and Illicit Drugs**

**1975–2008**

*Monitoring the Future Occasional Paper 71*

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## INTRODUCTION

This occasional paper serves as a supplement to the first of two annual monographs from the Monitoring the Future study, published by the study's sponsor, the National Institute on Drug Abuse. The full 2008 survey results are reported in *Monitoring the Future National Survey Results on Drug Use, 1975–2008: Volume I, Secondary School Students*.<sup>1</sup> That monograph, which can be accessed on the Monitoring the Future Web site, contains a description of the design and purposes of the Monitoring the Future study, so that information is not repeated here; it also contains extended reporting on a number of related factors in addition to drug use, such as attitudes, age of initiation, noncontinuation of drug use, conditions in the social environment, etc.

*Volume I* also contains (in appendix D) tabular data on trends in drug use for various demographic subgroups for each of the many drugs under study. The present occasional paper presents those subgroup trends in *graphic* form, because graphic presentations are much easier to comprehend. (Showing the trends in color greatly facilitates the differentiation of the various trend lines in each graph.) The graphic presentations have not been included in *Volume I* due both to their length and the cost of printing them in color.

The demographic subgroups covered here (identical to those covered in *Volume I*) are based on:

- Gender
- College plans
- Region of the country
- Population density
- Education level of the parents (a proxy for socioeconomic level)
- Racial/ethnic identification

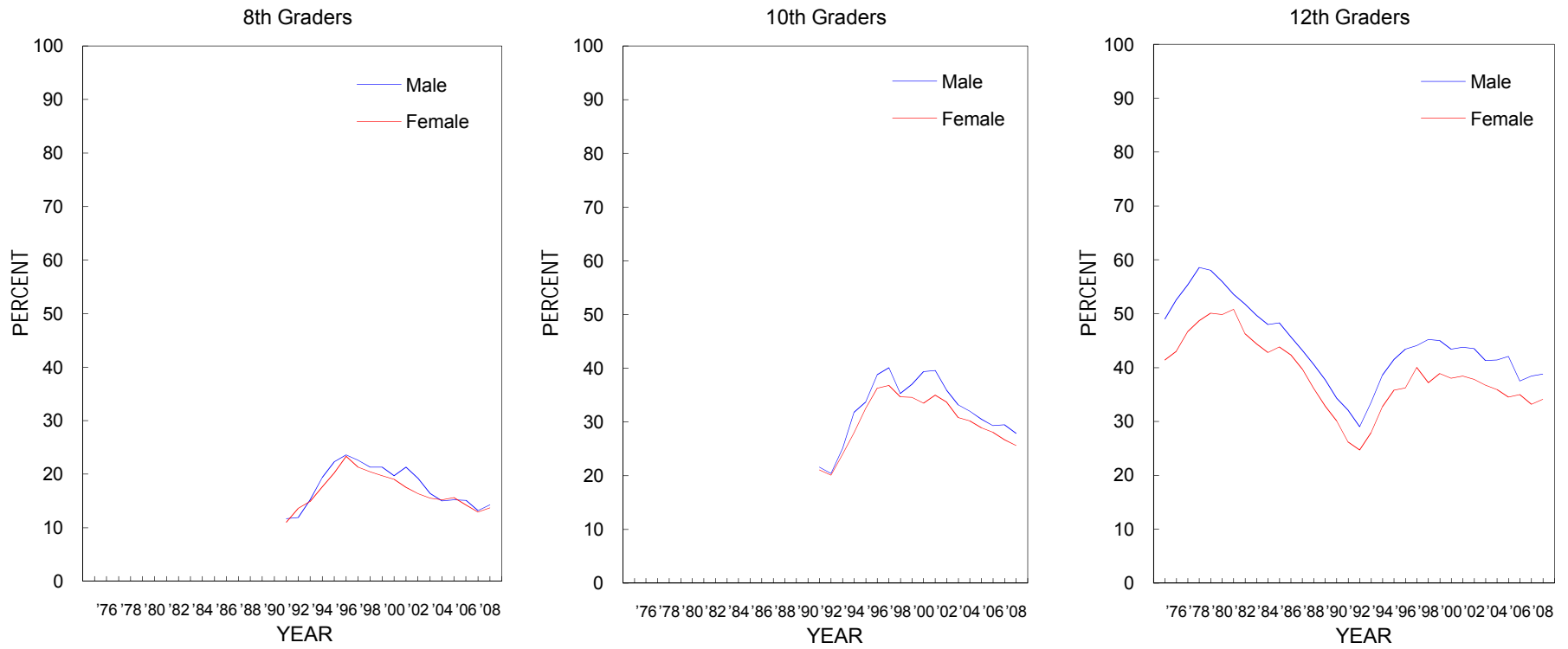
Trend data are presented for 12th-grade respondents beginning with 1975, the first year in which nationally representative samples of high school seniors were surveyed. Trend data for 8th and 10th grades are presented beginning with 1991, when those grade levels were added to the study design. The numerical information upon which these graphics are based is contained in the relevant appendix D tables of the full volume. Detailed definitions of the demographic categories are given in appendix B of that volume. For the reader's convenience, both appendix B and appendix D from *Volume I* have also been included in this occasional paper.

This occasional paper is available only in electronic form. *Volume I* is available both on the Web site and in printed form.

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<sup>1</sup>Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2009). *Monitoring the Future national survey results on drug use, 1975–2008. Volume I: Secondary school students* (NIH Publication No. 09-7402). Bethesda, MD: National Institute on Drug Abuse. (Also available online at [www.monitoringthefuture.org](http://www.monitoringthefuture.org). Look under "Publications," and then under "Monographs.") This monograph should be available in hard-copy form in August or September of 2009.

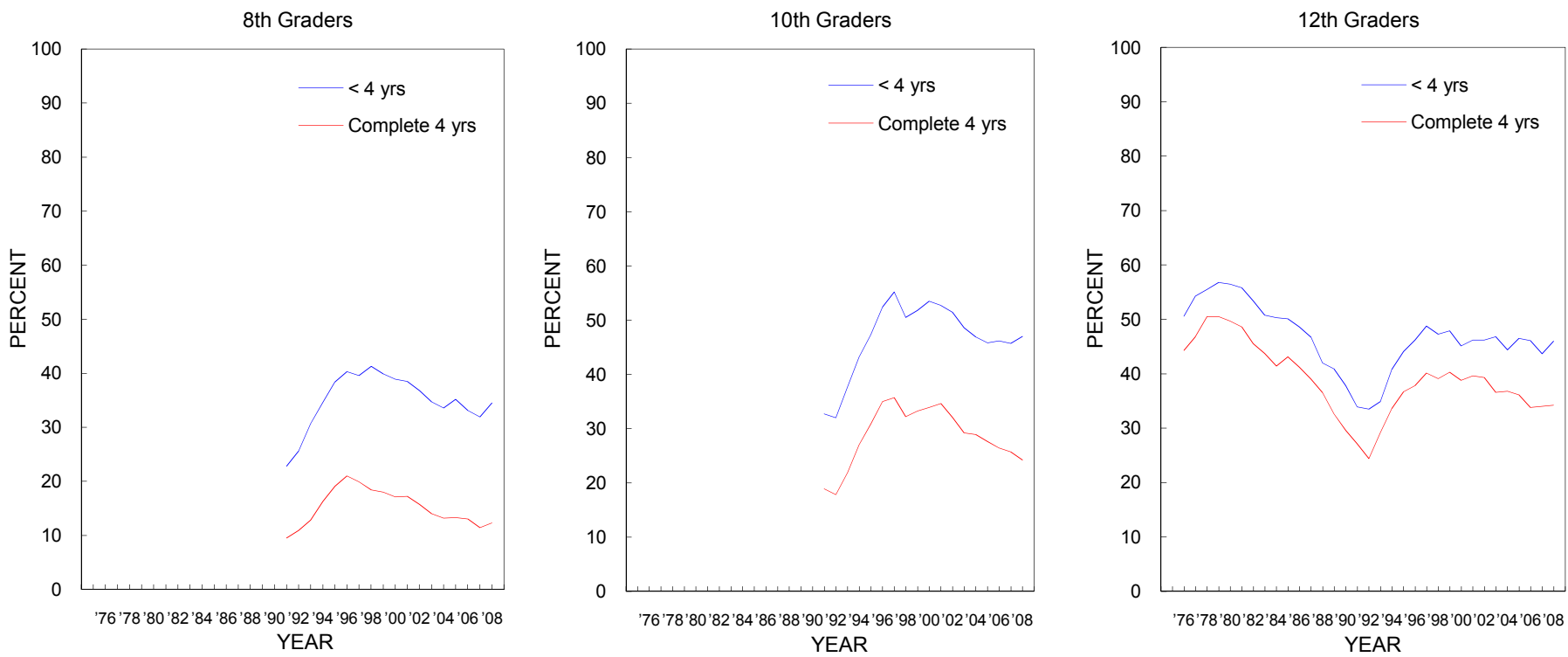
**FIGURE 1**  
**Any Illicit Drug: Trends in Annual Prevalence by Gender**



Source. The Monitoring the Future study, the University of Michigan.

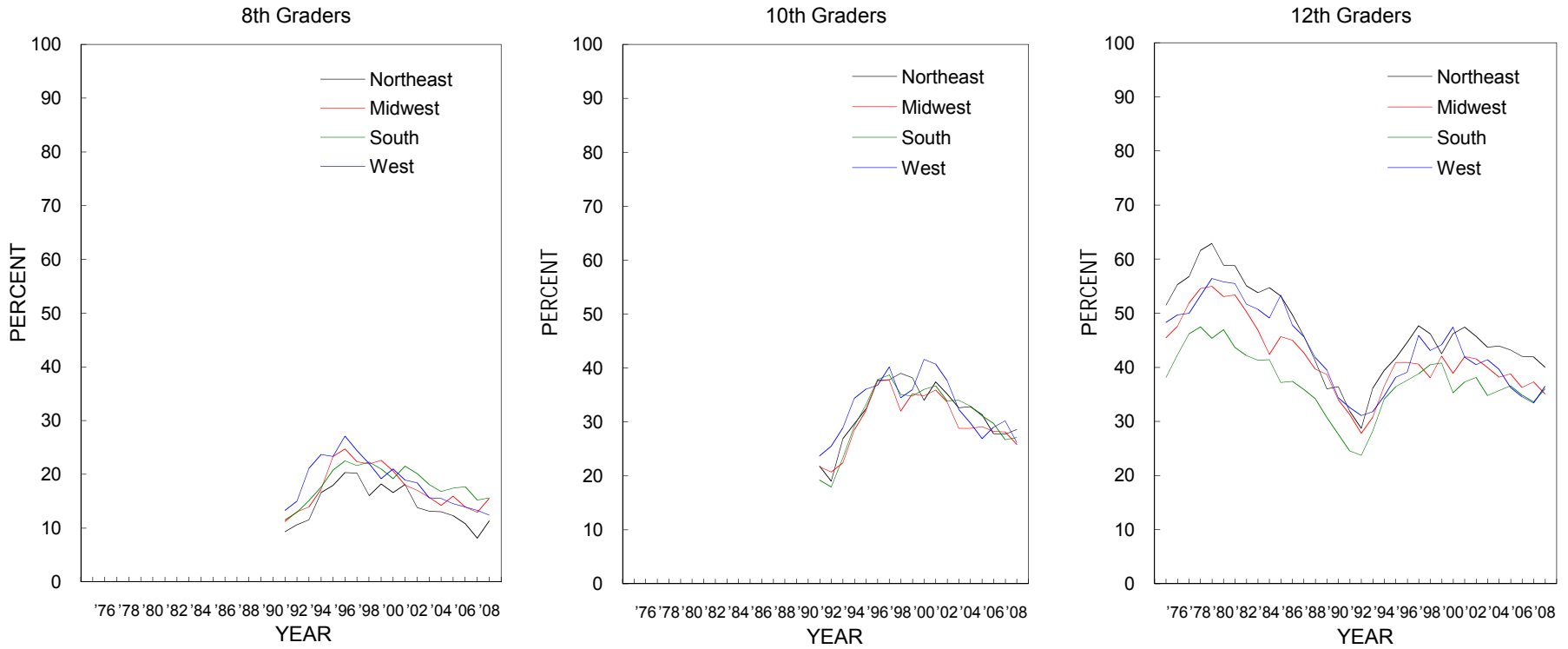


**FIGURE 2**  
**Any Illicit Drug: Trends in Annual Prevalence by College Plans**



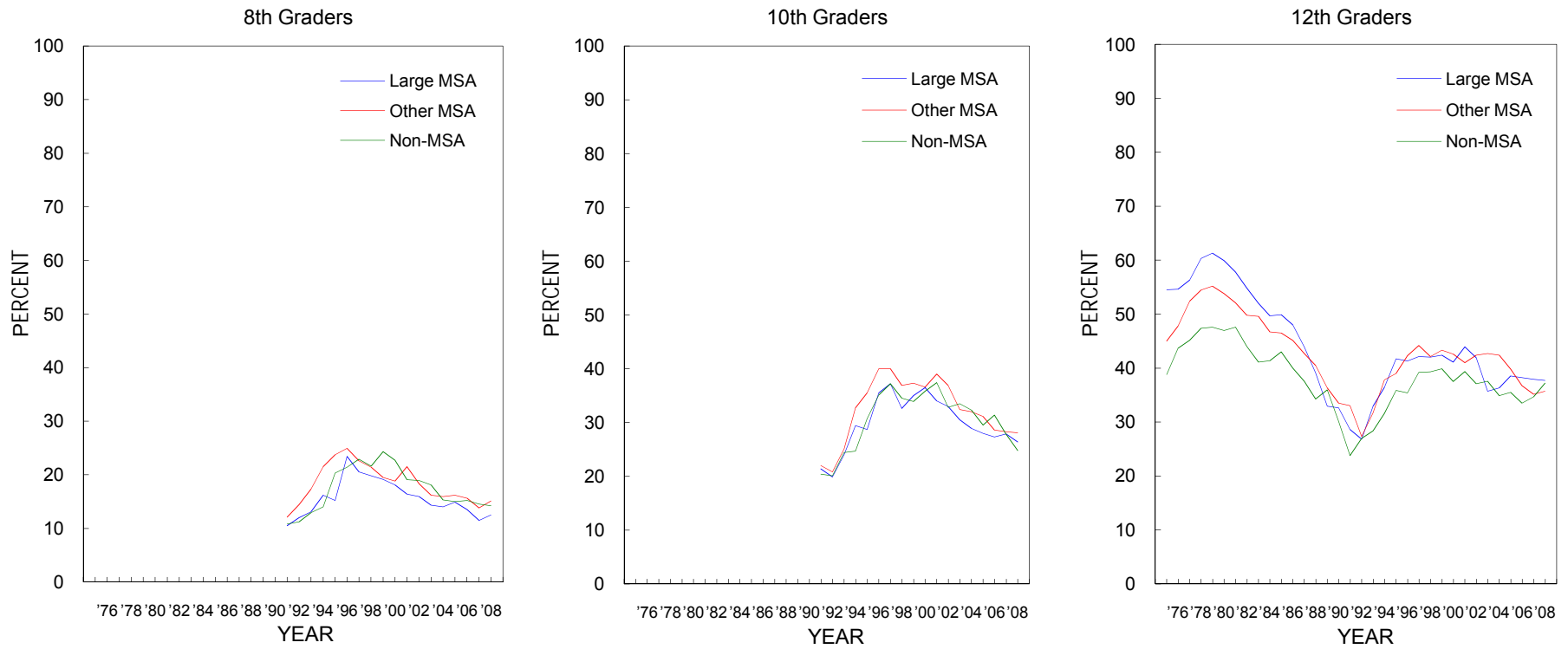
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 3**  
**Any Illicit Drug: Trends in Annual Prevalence by Region**



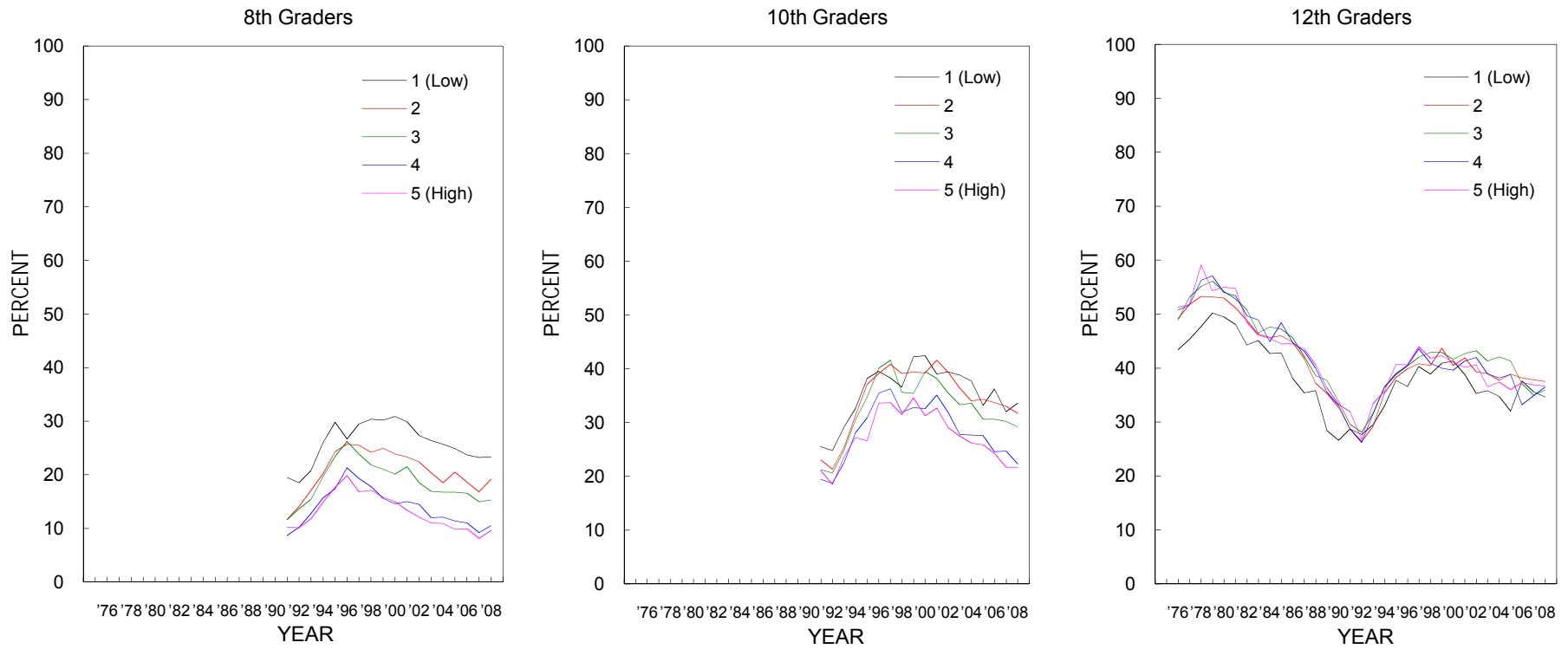
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 4**  
**Any Illicit Drug: Trends in Annual Prevalence by Population Density**



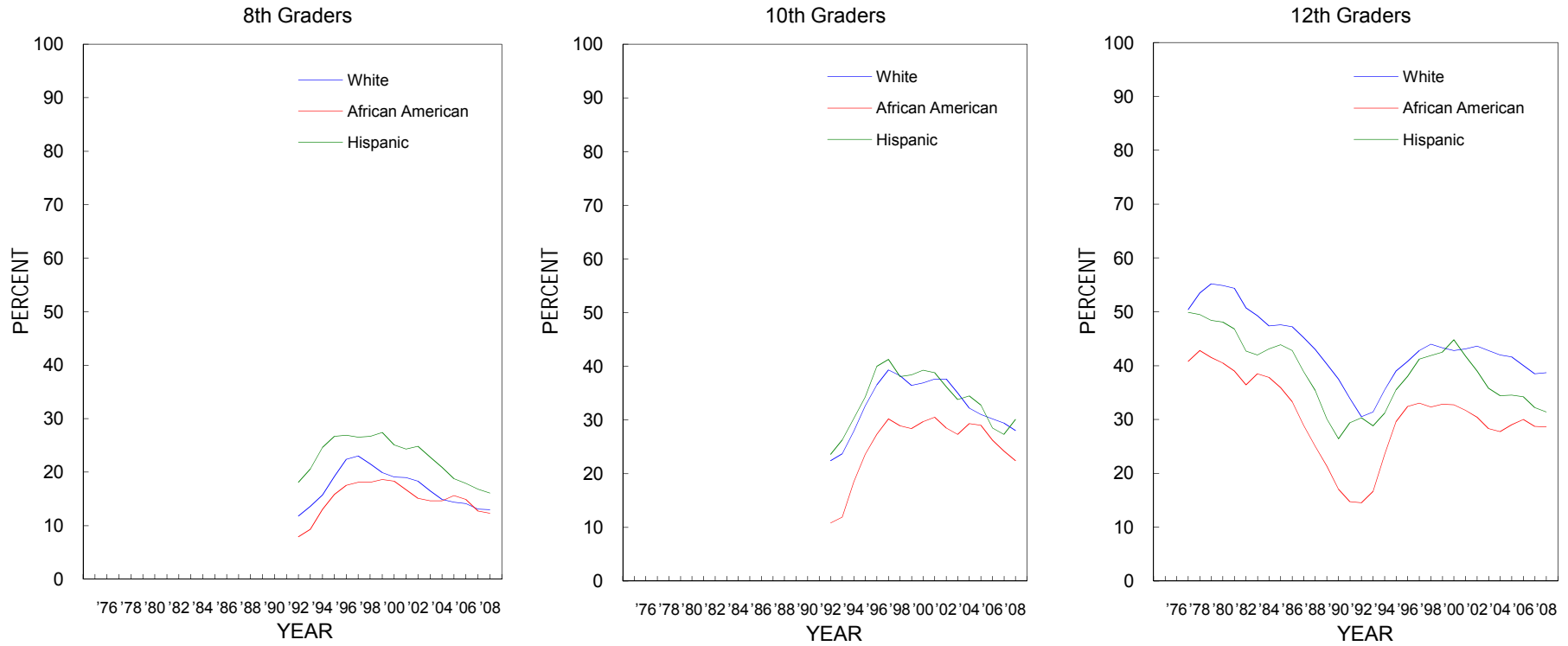
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 5**  
**Any Illicit Drug: Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

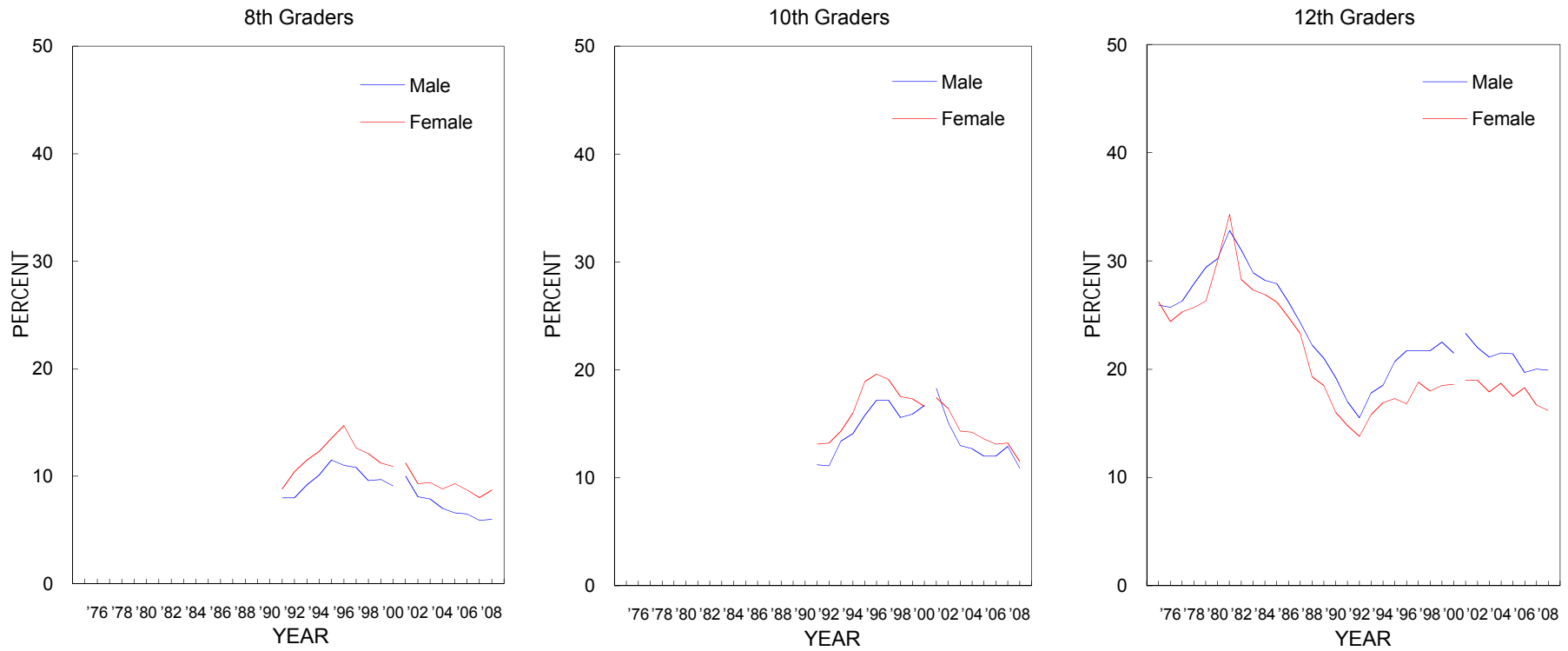
**FIGURE 6**  
**Any Illicit Drug: Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

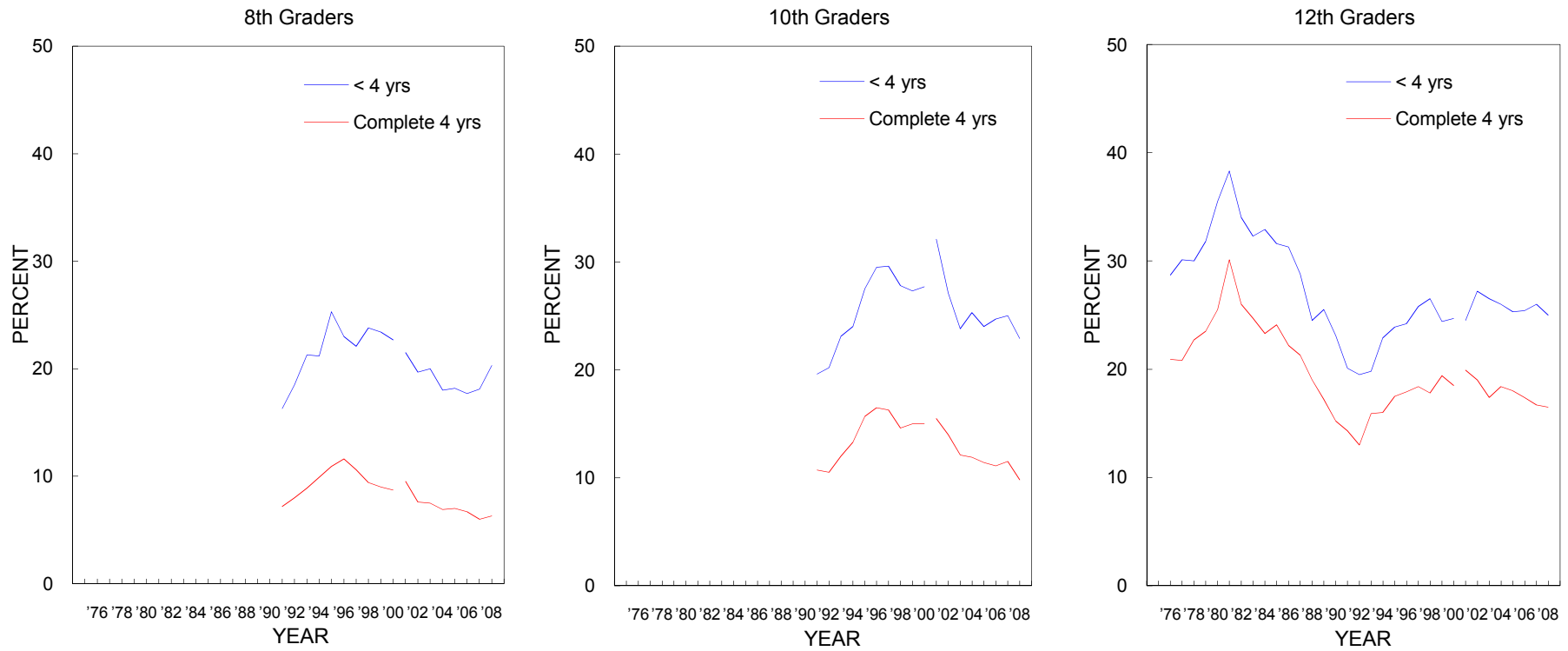
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Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, revised sets of questions on other hallucinogen and tranquilizer use were introduced. Data for “any illicit drug other than marijuana” are affected by these changes. Refer to corresponding tables for further details.

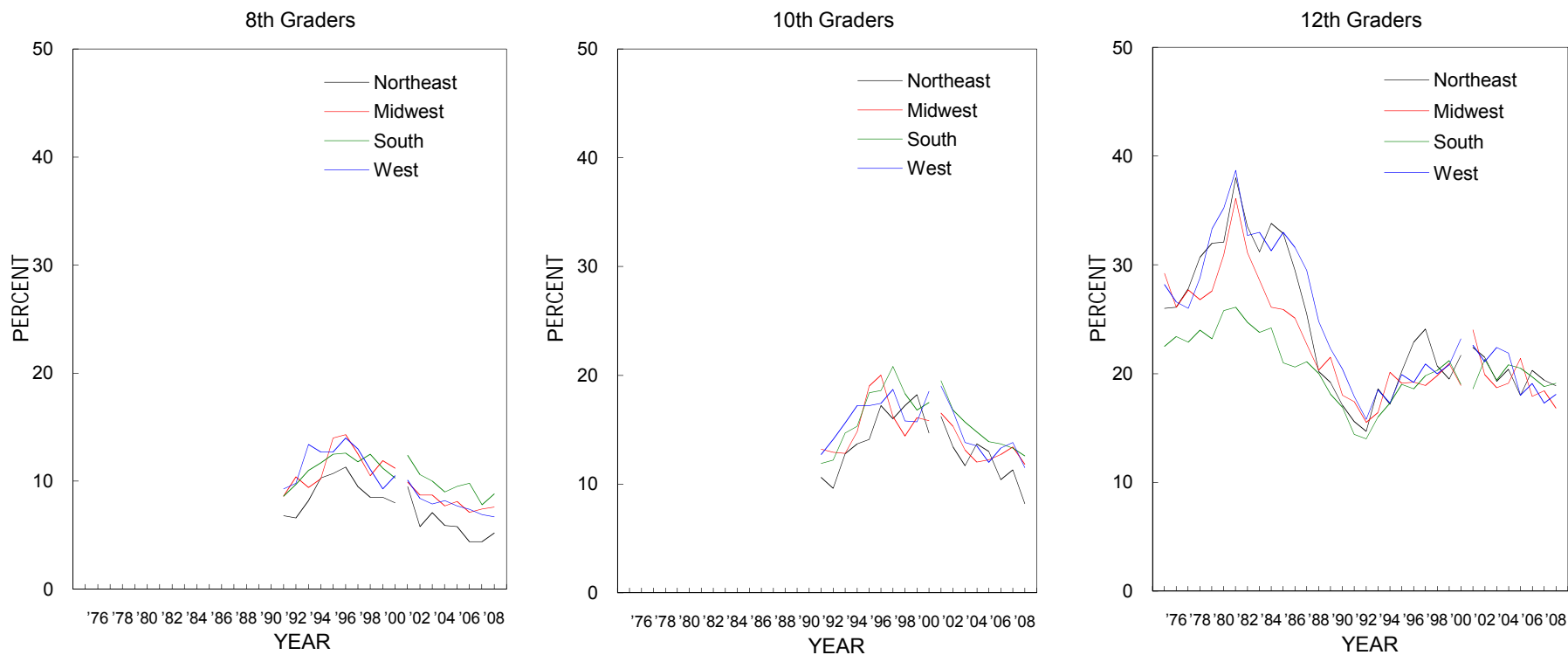
**FIGURE 8**  
**Any Illicit Drug other than Marijuana:\* Trends in Annual Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, revised sets of questions on other hallucinogen and tranquilizer use were introduced. Data for “any illicit drug other than marijuana” are affected by these changes. Refer to corresponding tables for further details.

**FIGURE 9**  
**Any Illicit Drug other than Marijuana:\* Trends in Annual Prevalence by Region**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, revised sets of questions on other hallucinogen and tranquilizer use were introduced. Data for “any illicit drug other than marijuana” are affected by these changes. Refer to corresponding tables for further details.



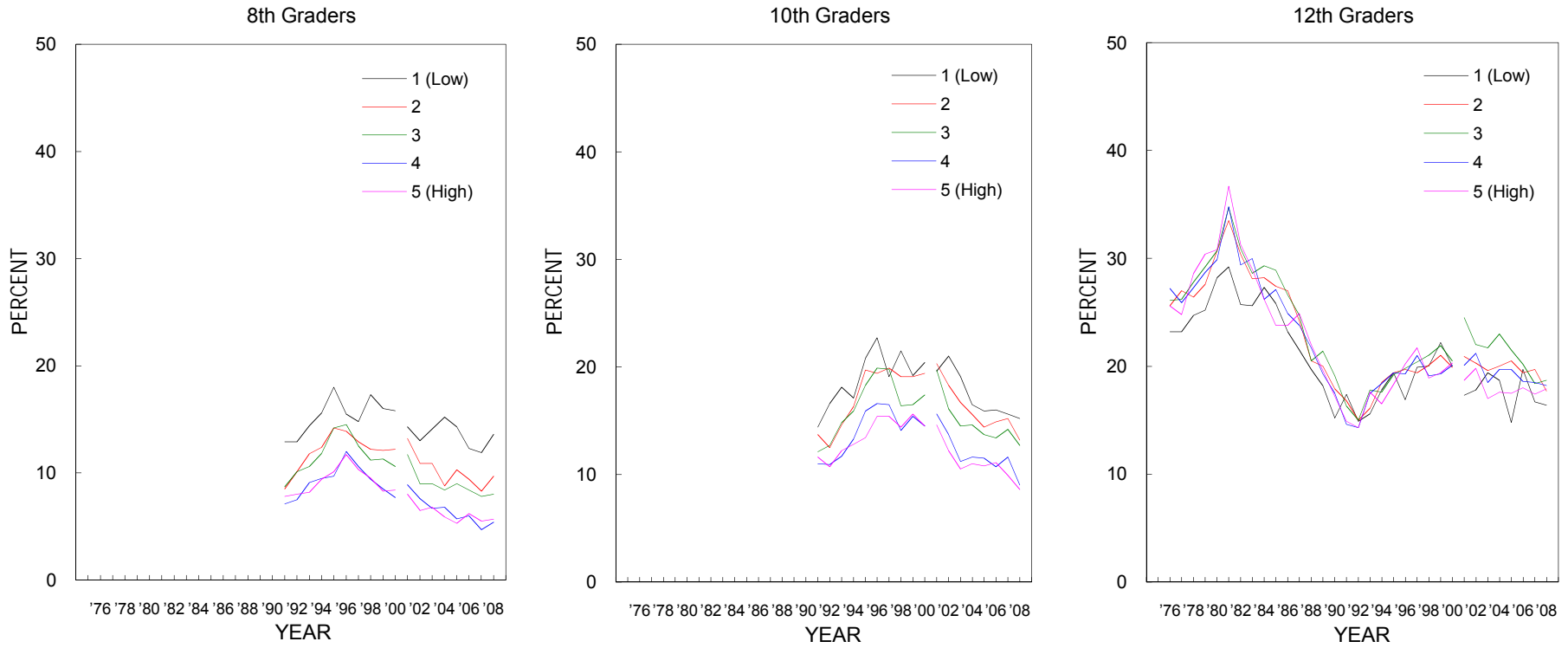
**FIGURE 10**  
**Any Illicit Drug other than Marijuana:\* Trends in Annual Prevalence by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, revised sets of questions on other hallucinogen and tranquilizer use were introduced. Data for “any illicit drug other than marijuana” are affected by these changes. Refer to corresponding tables for further details.

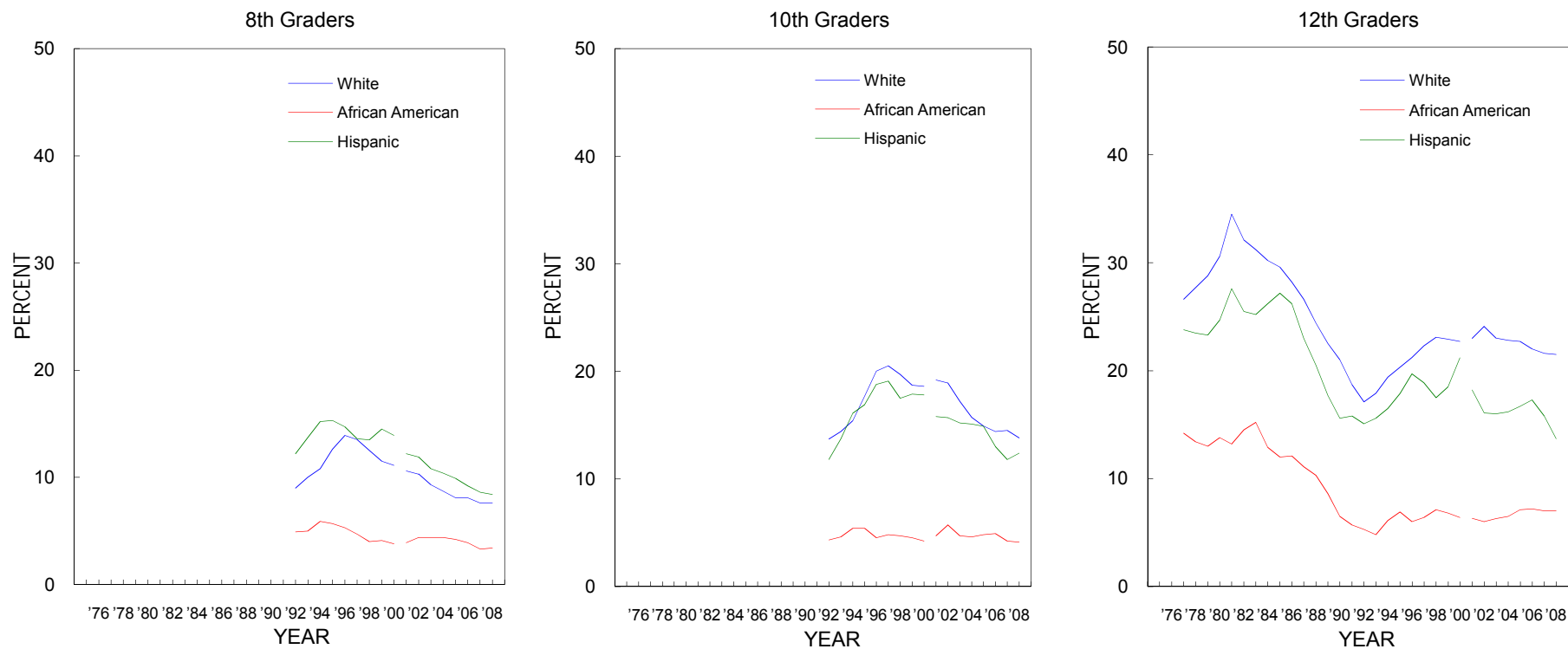
**FIGURE 11**  
**Any Illicit Drug other than Marijuana:\* Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, revised sets of questions on other hallucinogen and tranquilizer use were introduced. Data for “any illicit drug other than marijuana” are affected by these changes. Refer to corresponding tables for further details.

**FIGURE 12**  
**Any Illicit Drug other than Marijuana:\* Trends in Annual Prevalence by Race/Ethnicity\*\***

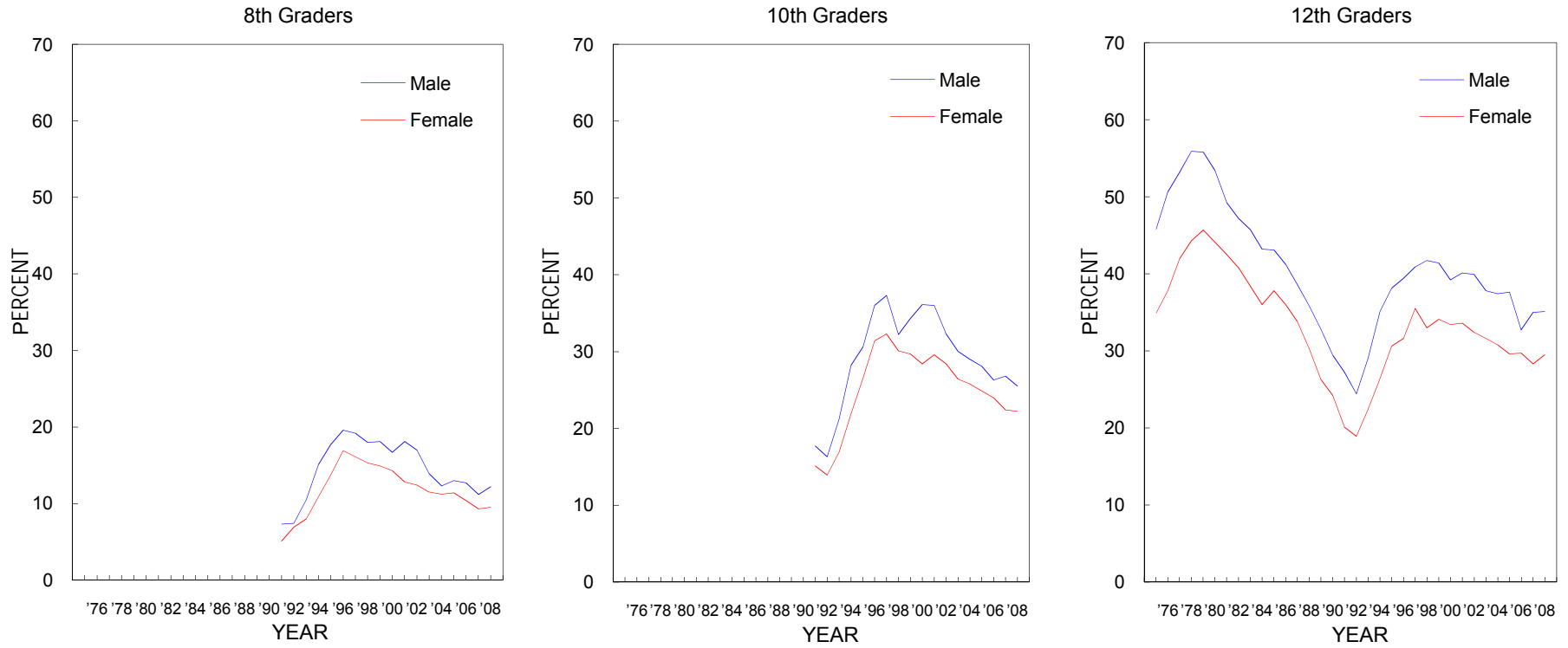


Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, revised sets of questions on other hallucinogen and tranquilizer use were introduced. Data for “any illicit drug other than marijuana” are affected by these changes. Refer to corresponding tables for further details.

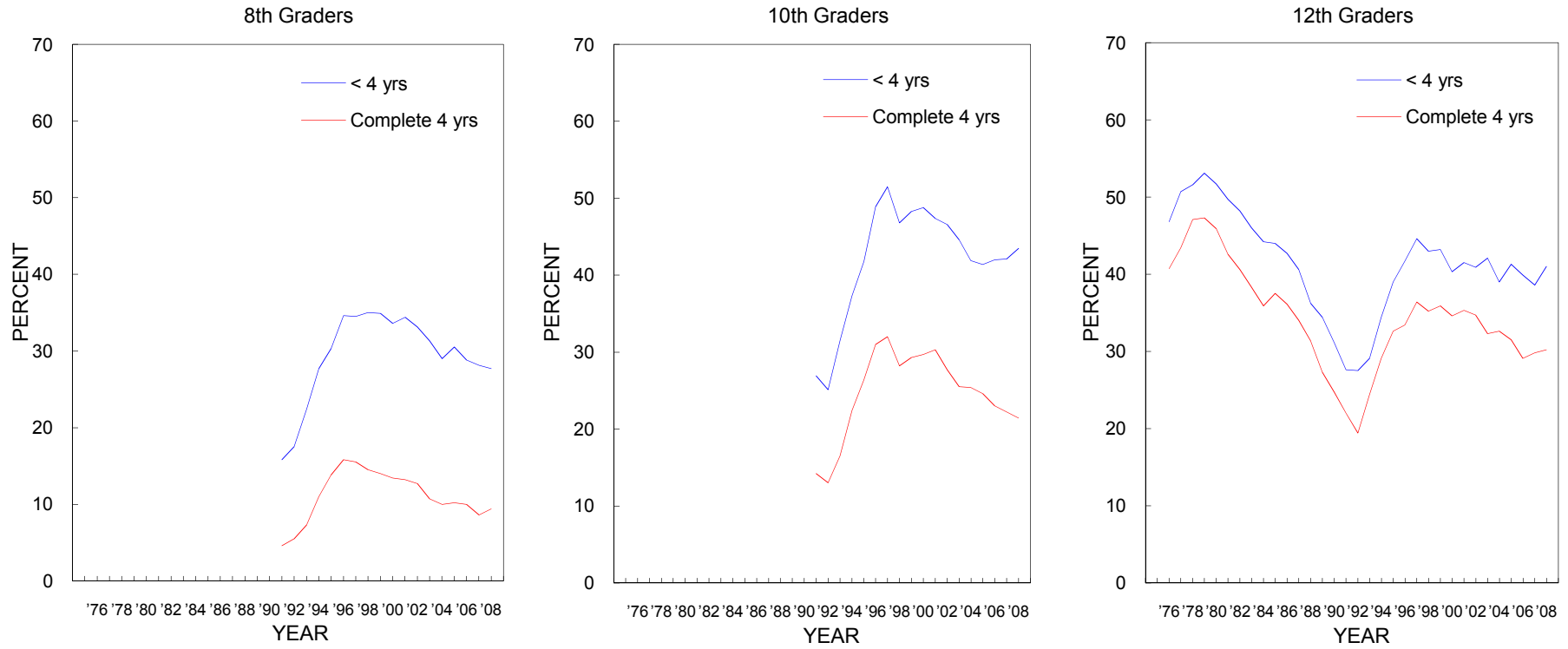
\*\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 13**  
**Marijuana: Trends in Annual Prevalence by Gender**



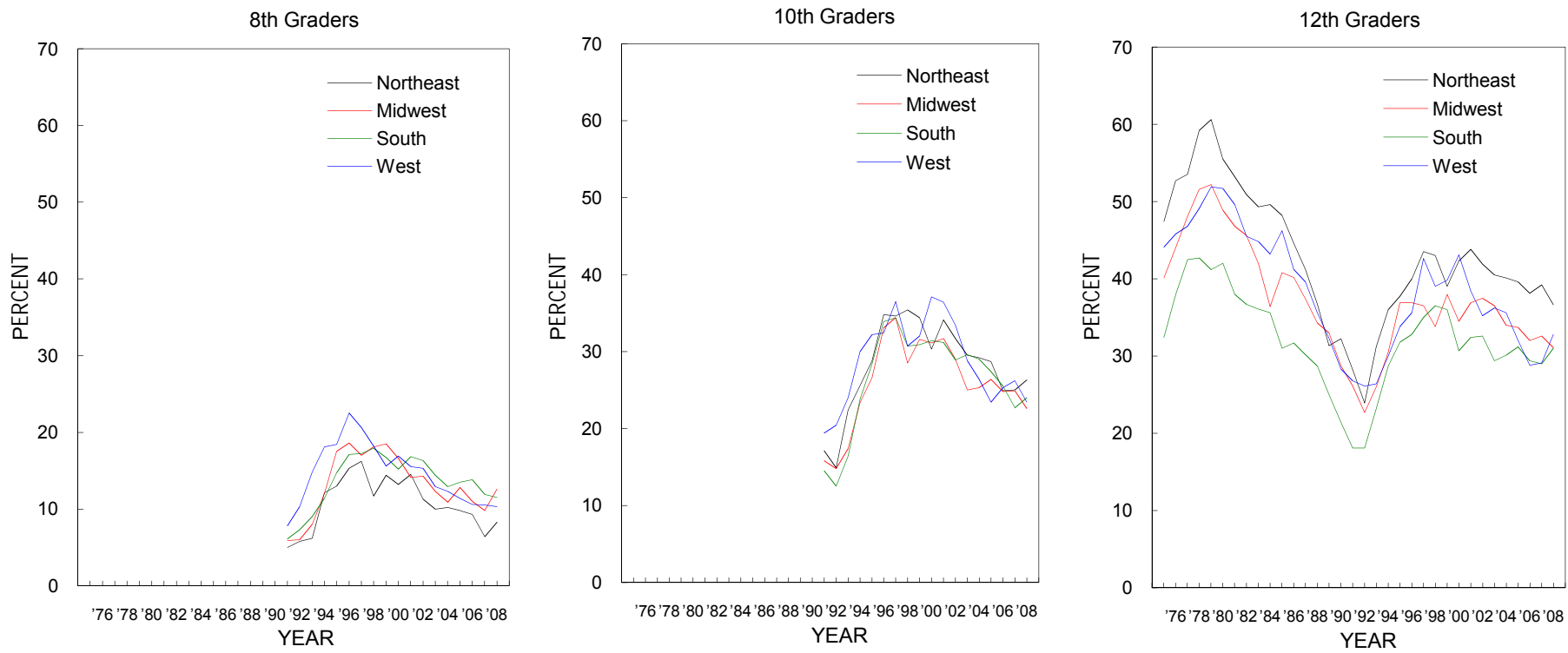
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 14**  
**Marijuana: Trends in Annual Prevalence by College Plans**



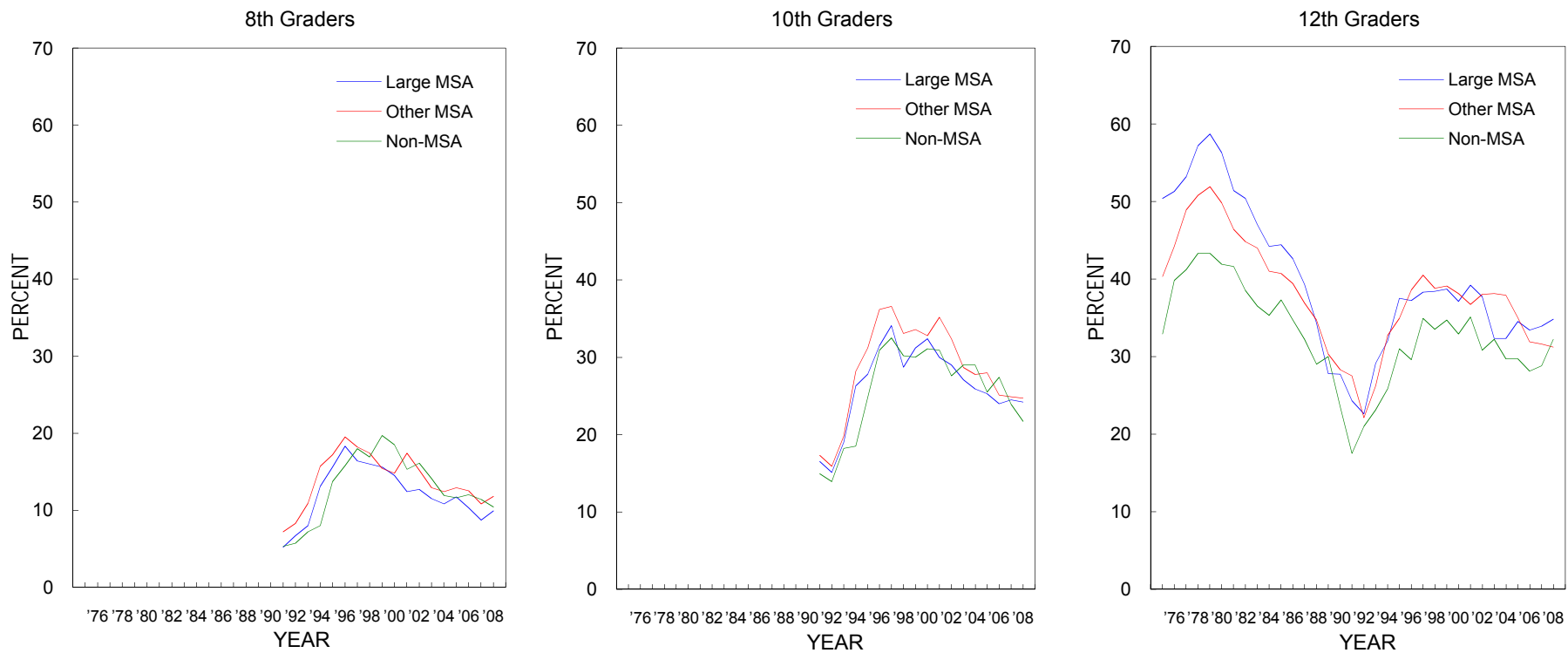
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 15**  
**Marijuana: Trends in Annual Prevalence by Region**



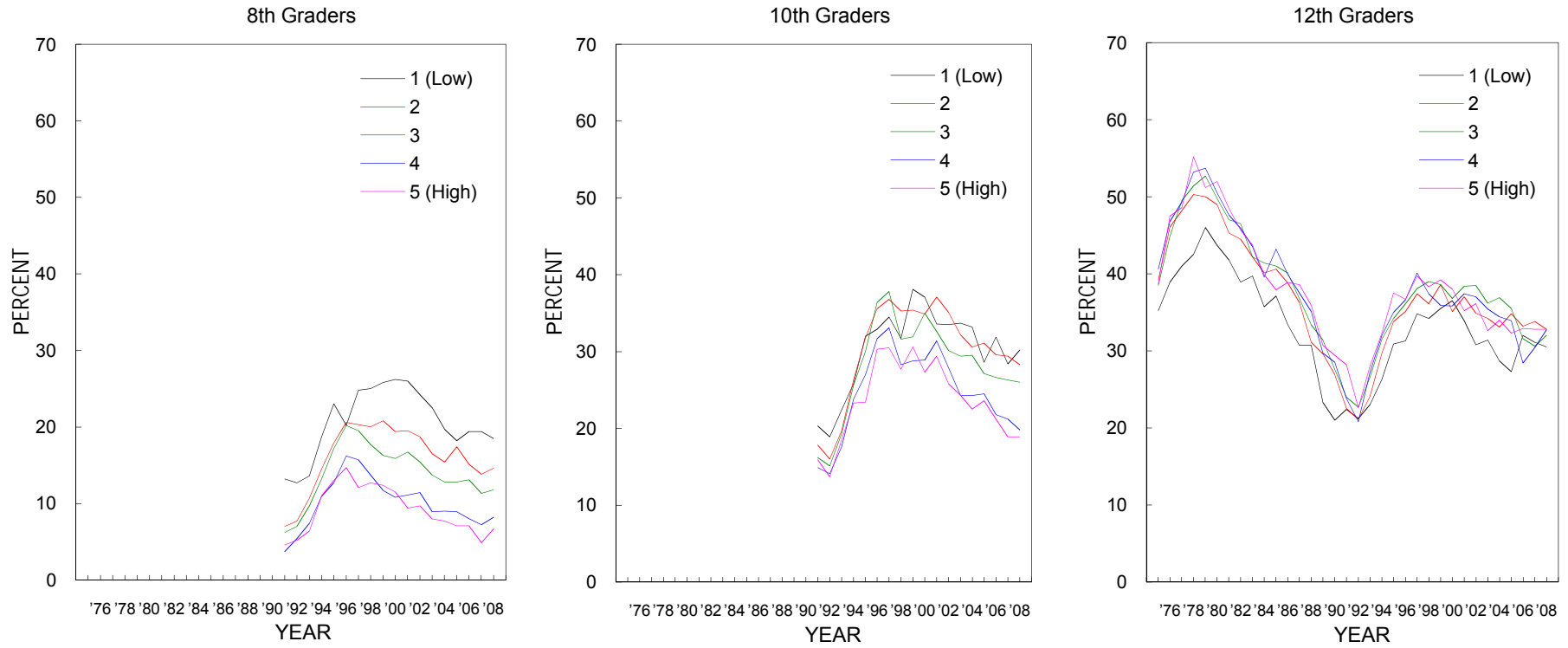
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 16**  
**Marijuana: Trends in Annual Prevalence by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

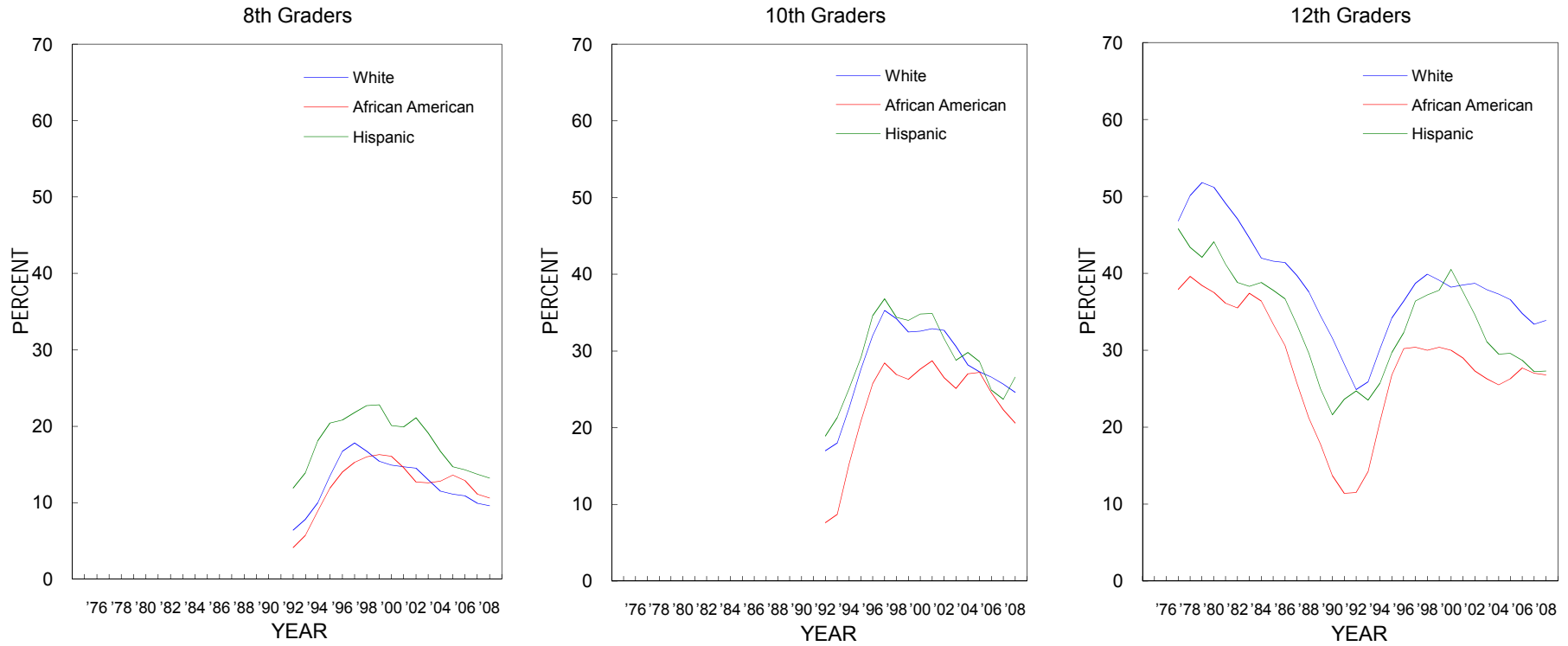
**FIGURE 17**  
**Marijuana: Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.



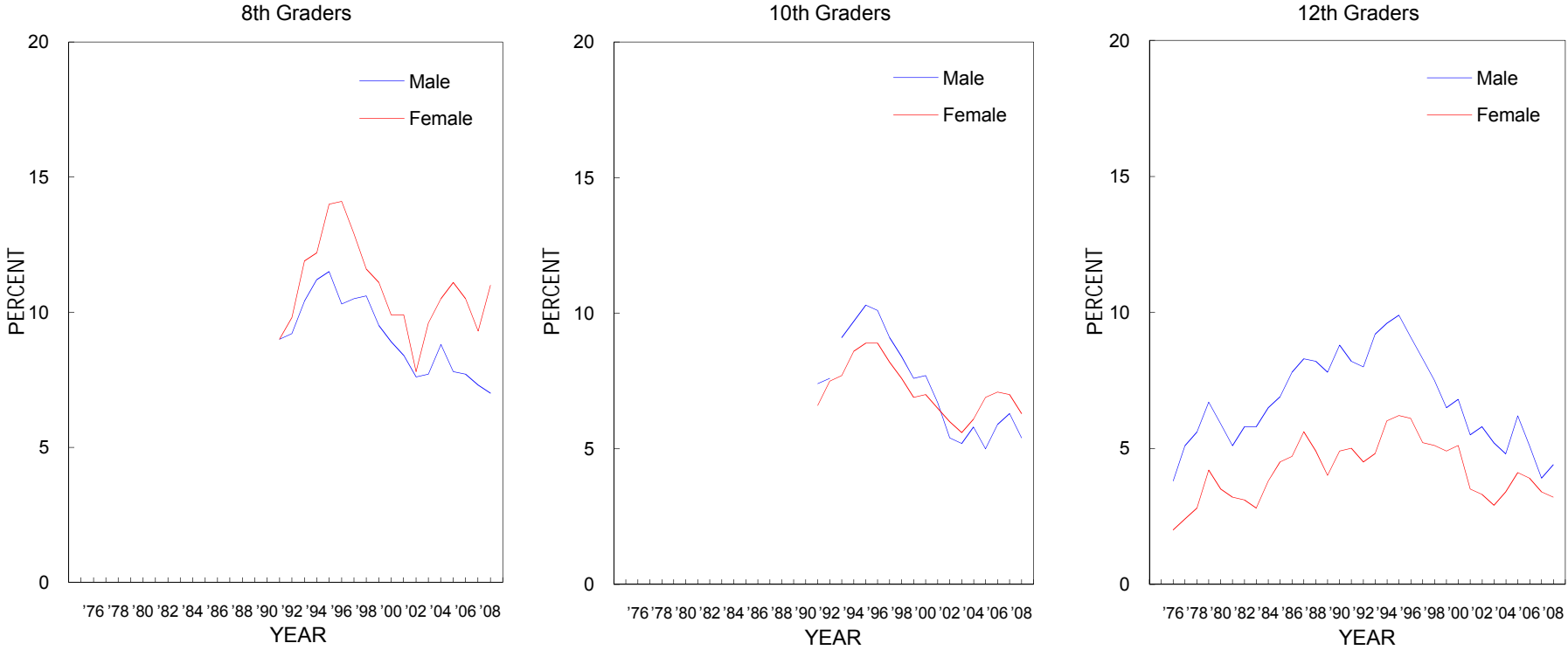
**FIGURE 18**  
**Marijuana: Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

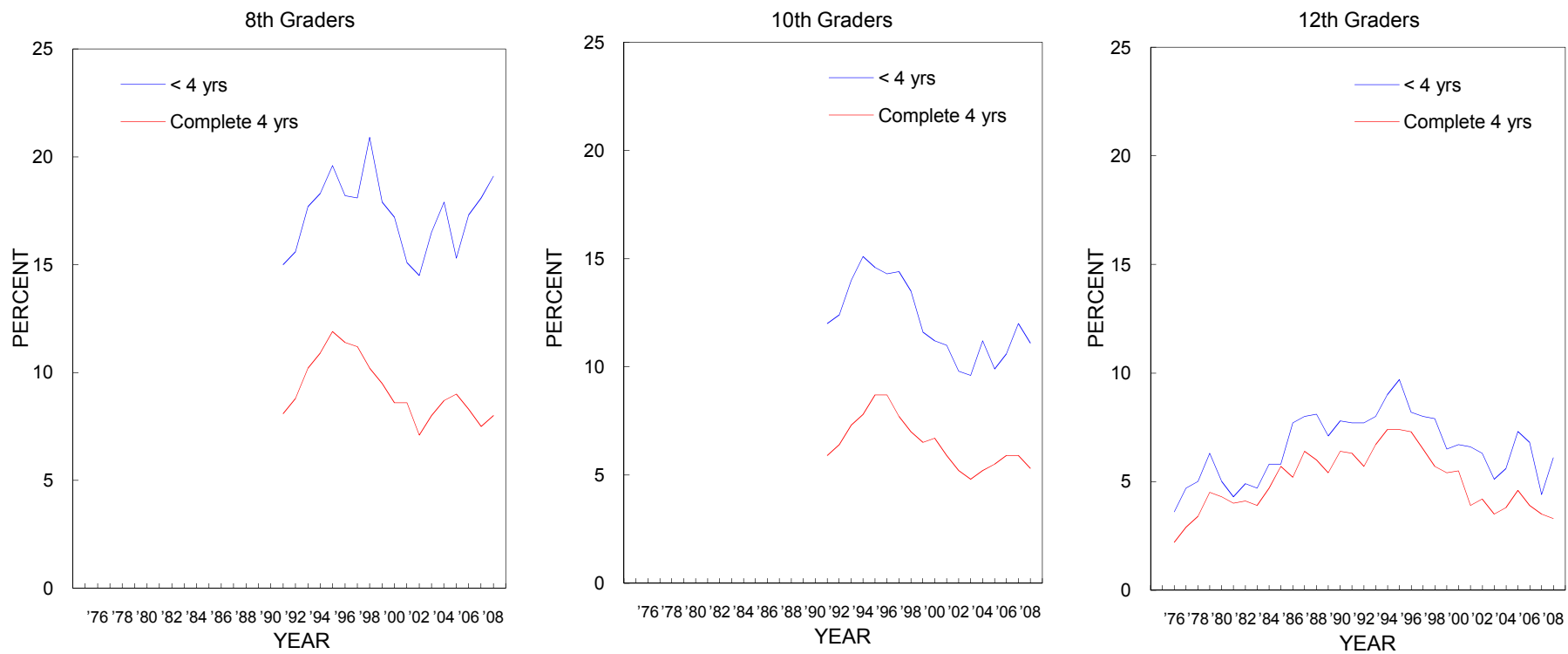
\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 19**  
**Inhalants: Trends in Annual Prevalence by Gender**



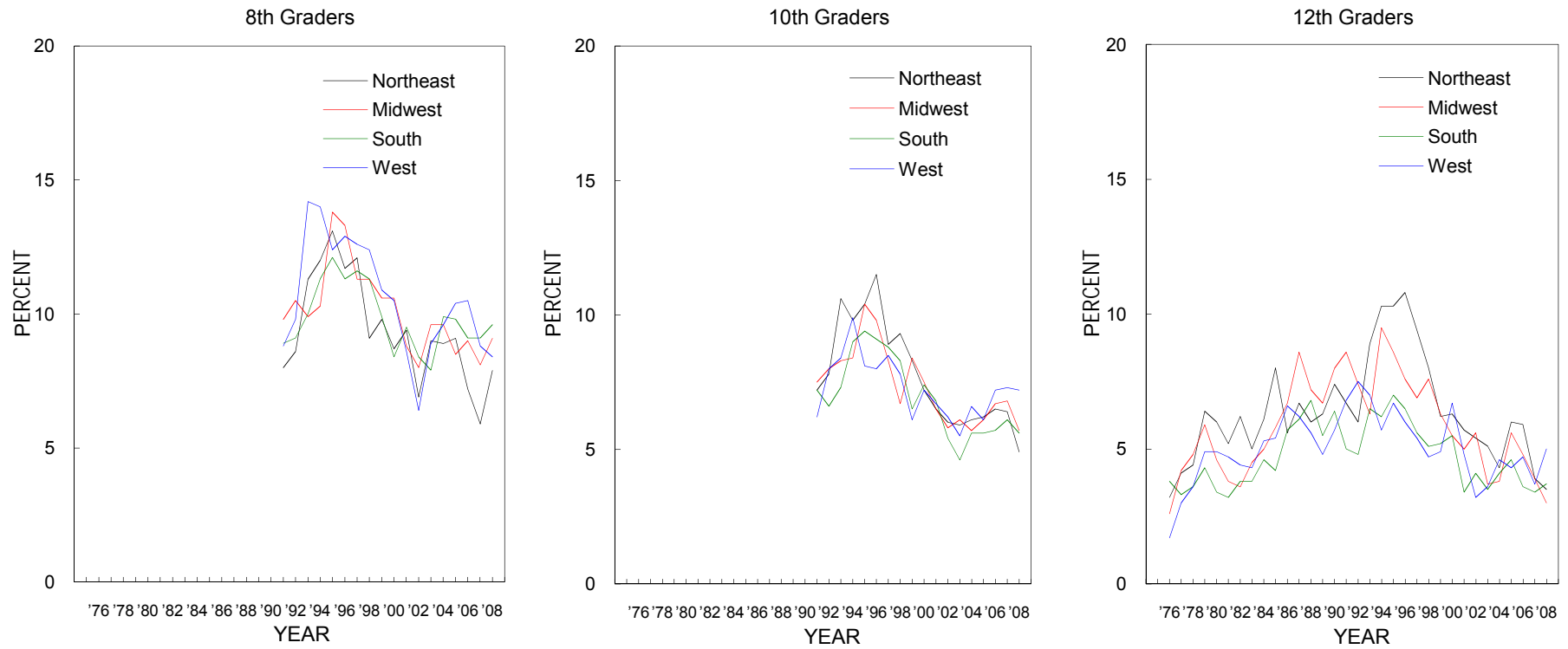
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 20**  
**Inhalants: Trends in Annual Prevalence by College Plans**



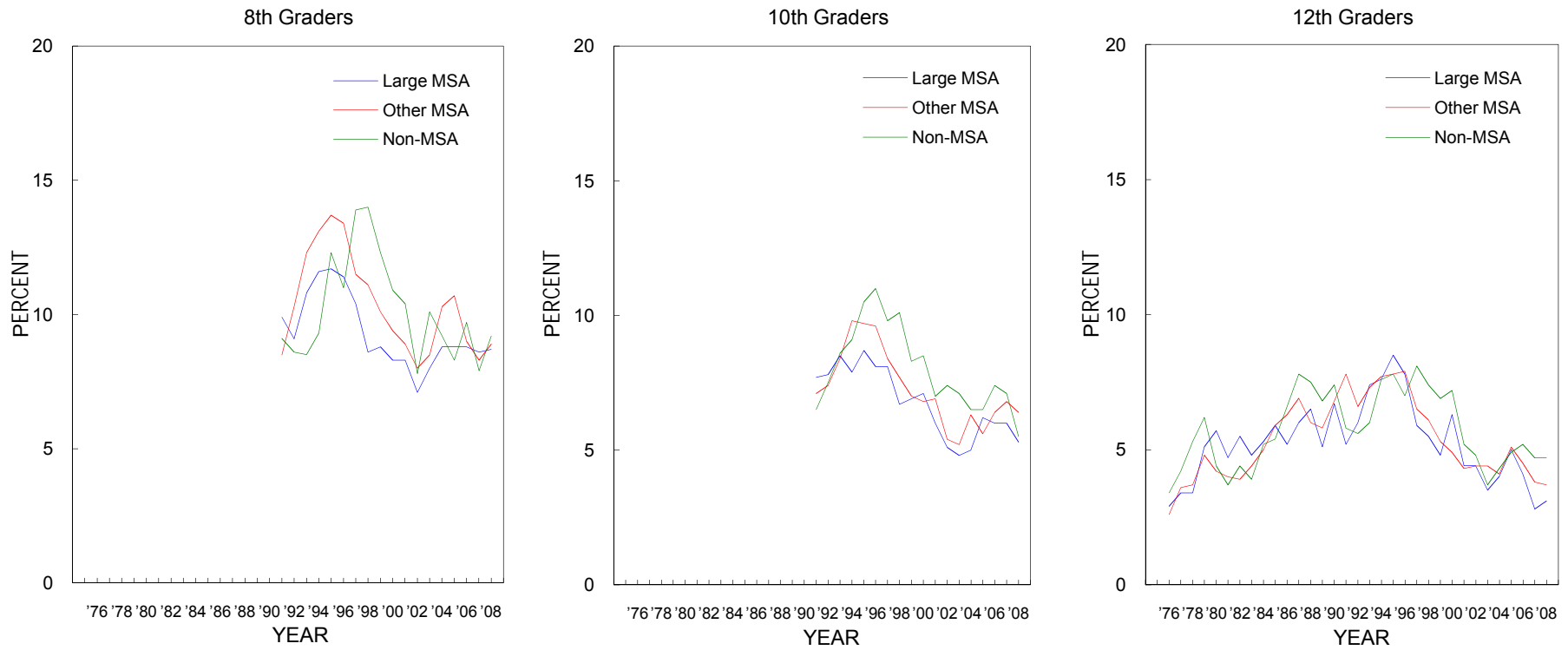
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 21**  
**Inhalants: Trends in Annual Prevalence by Region**



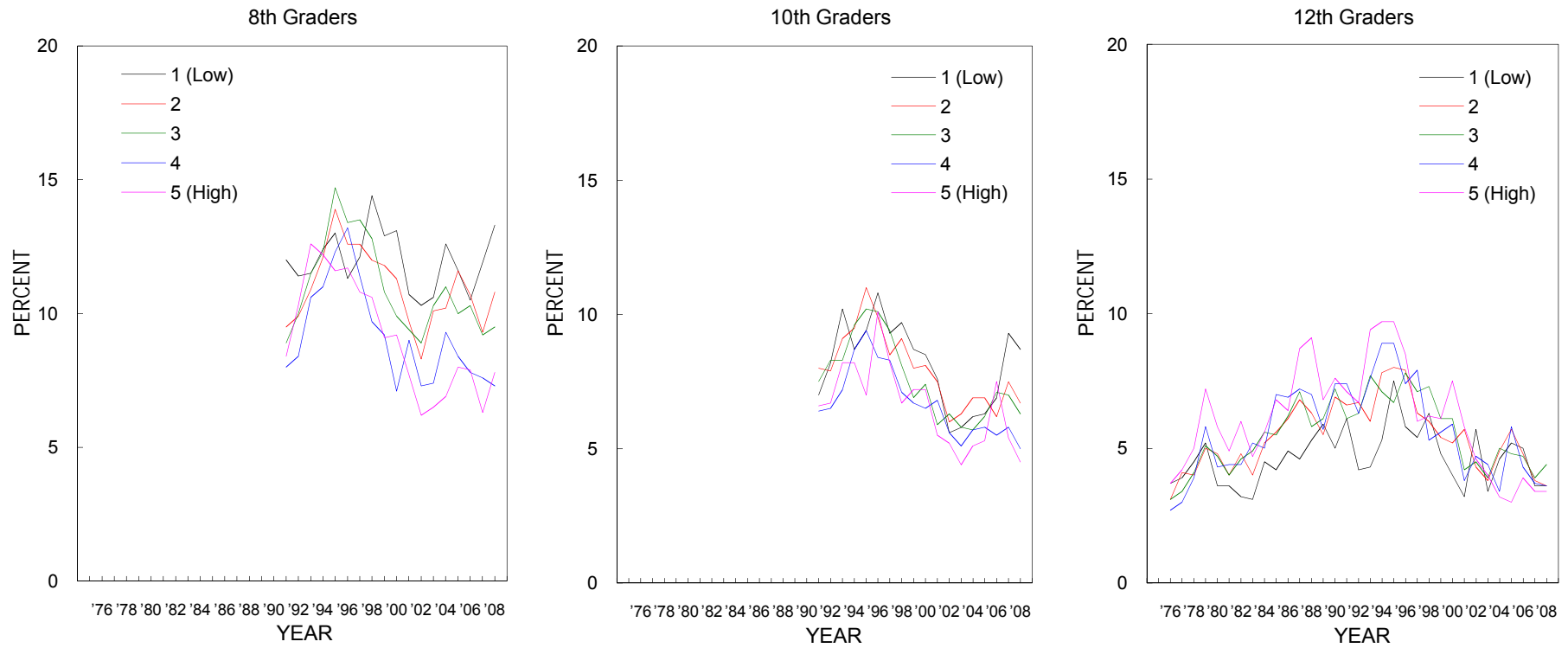
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 22**  
**Inhalants: Trends in Annual Prevalence by Population Density**



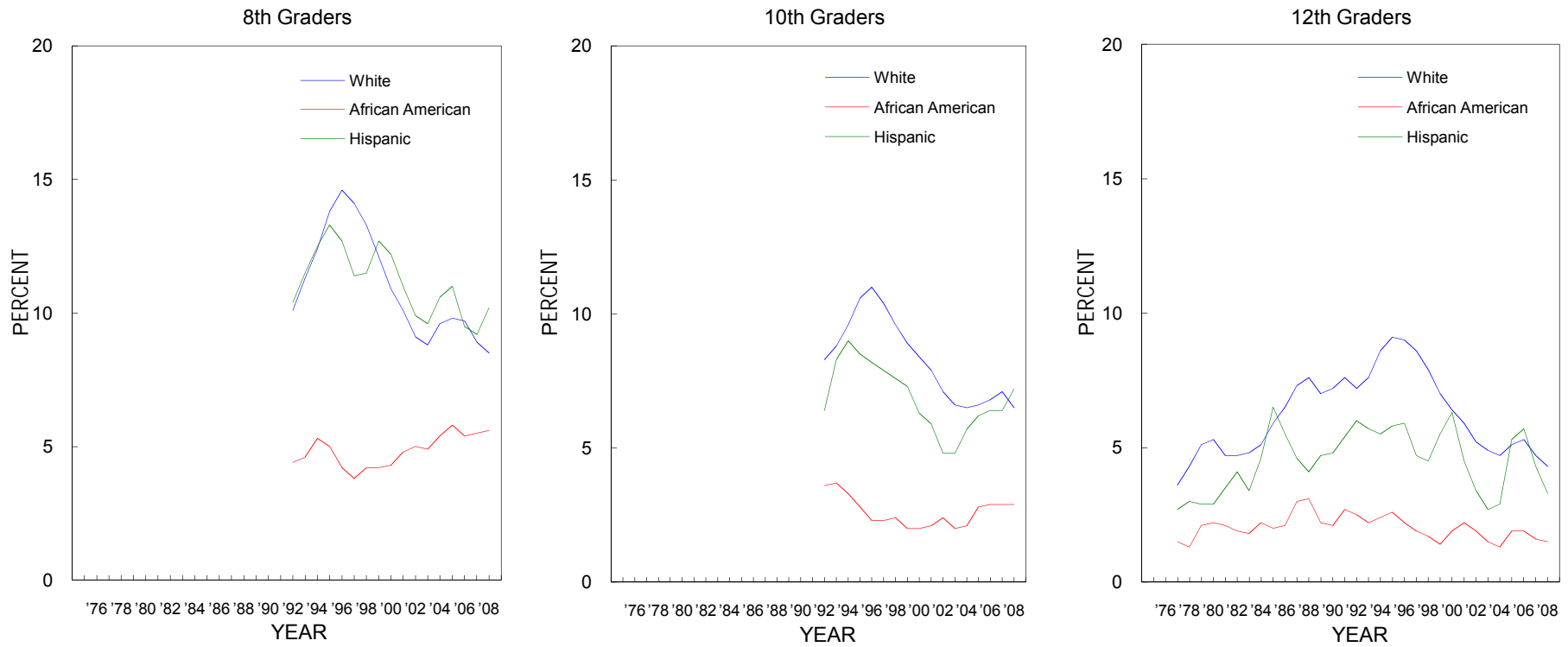
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 23**  
**Inhalants: Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

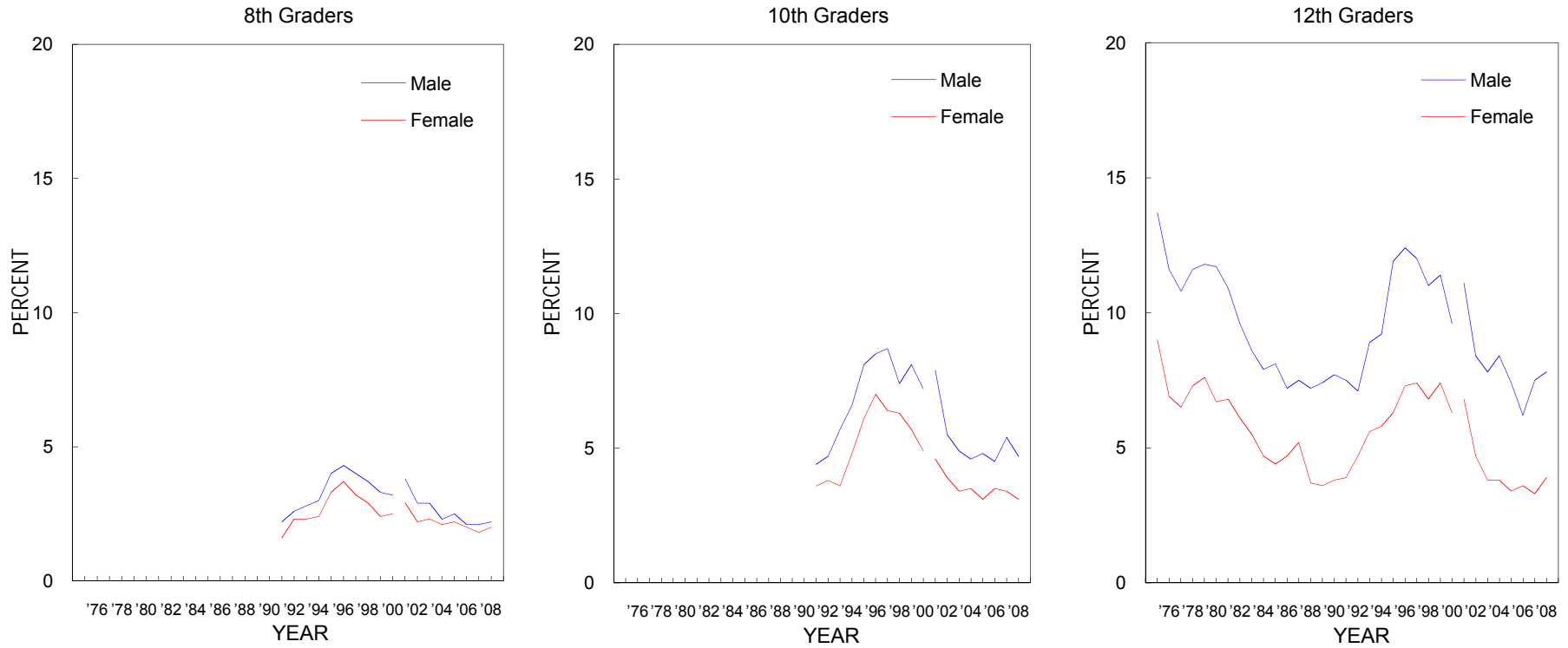
**FIGURE 24**  
**Inhalants: Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 25**  
**Hallucinogens:\* Trends in Annual Prevalence by Gender**

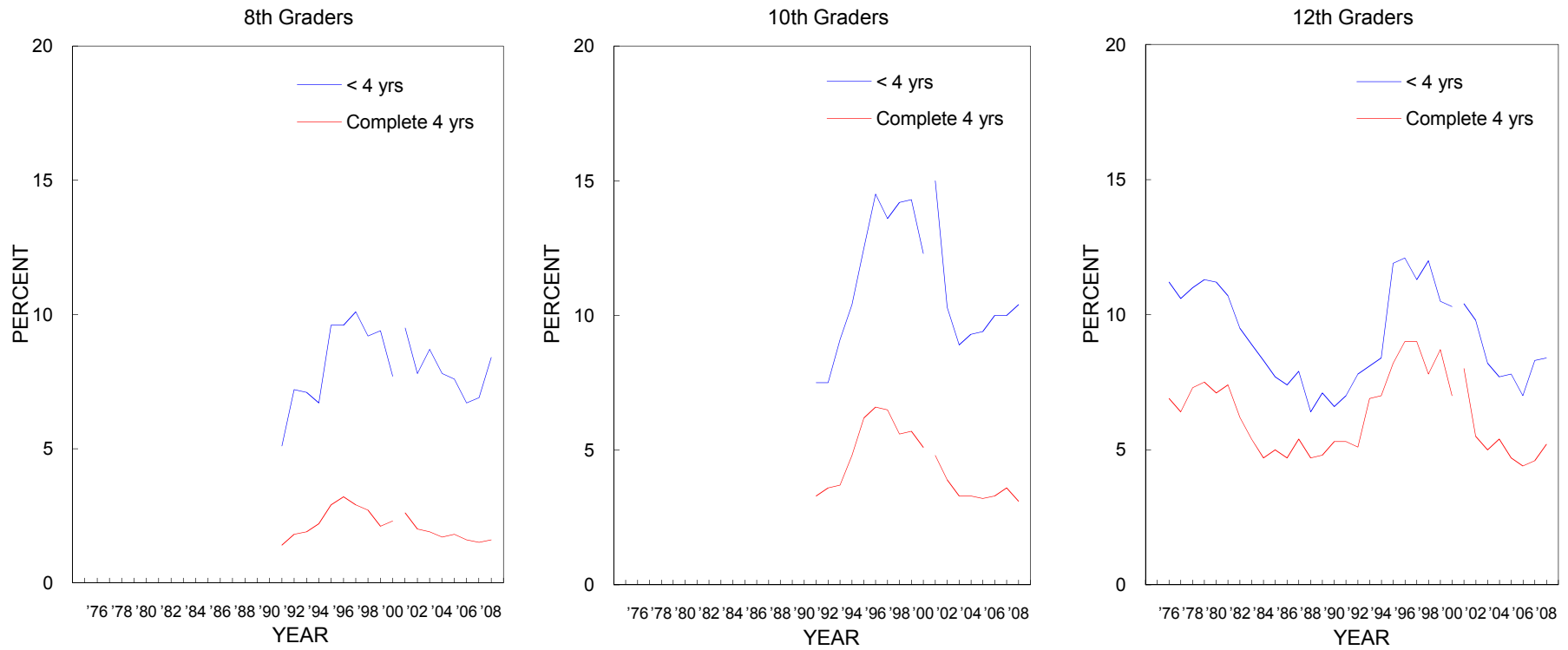


Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on other hallucinogen use was introduced. Data for hallucinogens are affected by these changes. Refer to corresponding tables for further details.



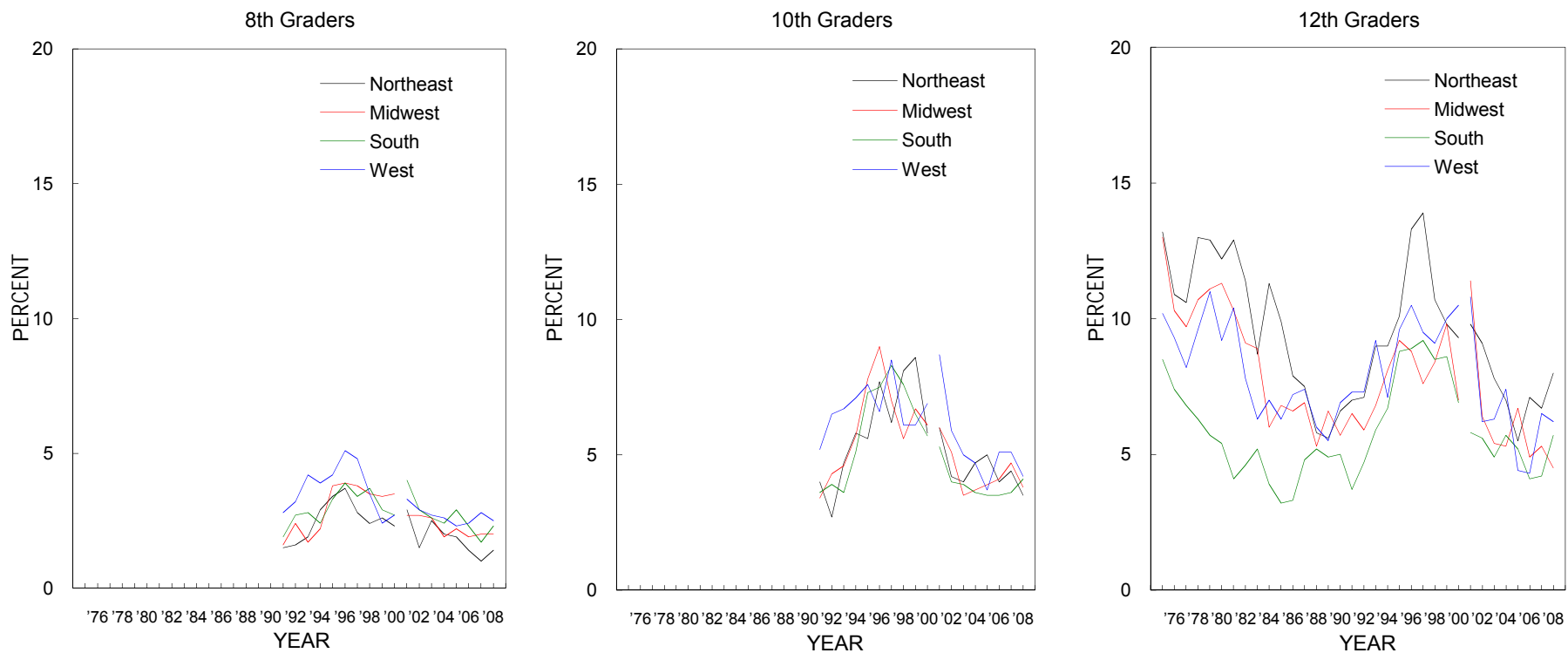
**FIGURE 26**  
**Hallucinogens:\* Trends in Annual Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on other hallucinogen use was introduced. Data for hallucinogens are affected by these changes. Refer to corresponding tables for further details.

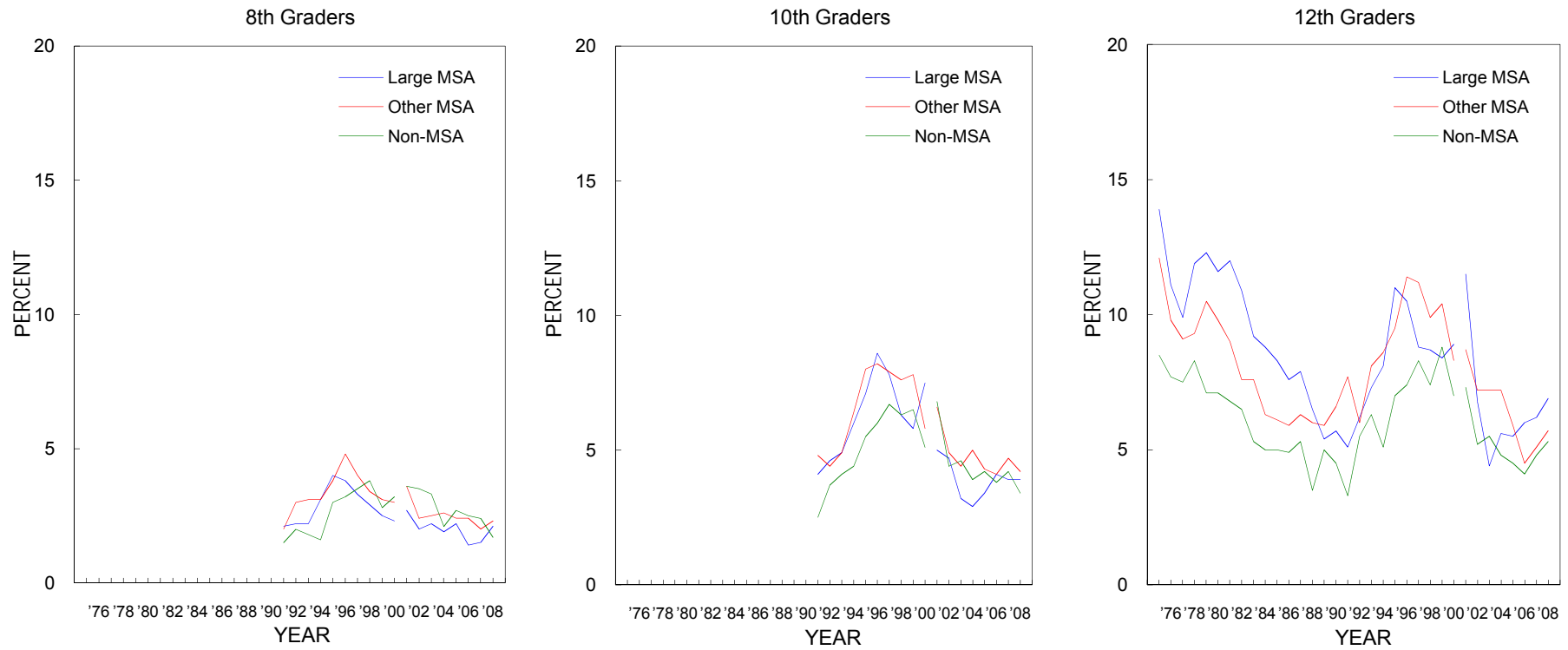
**FIGURE 27**  
**Hallucinogens:\* Trends in Annual Prevalence by Region**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on other hallucinogen use was introduced. Data for hallucinogens are affected by these changes. Refer to corresponding tables for further details.

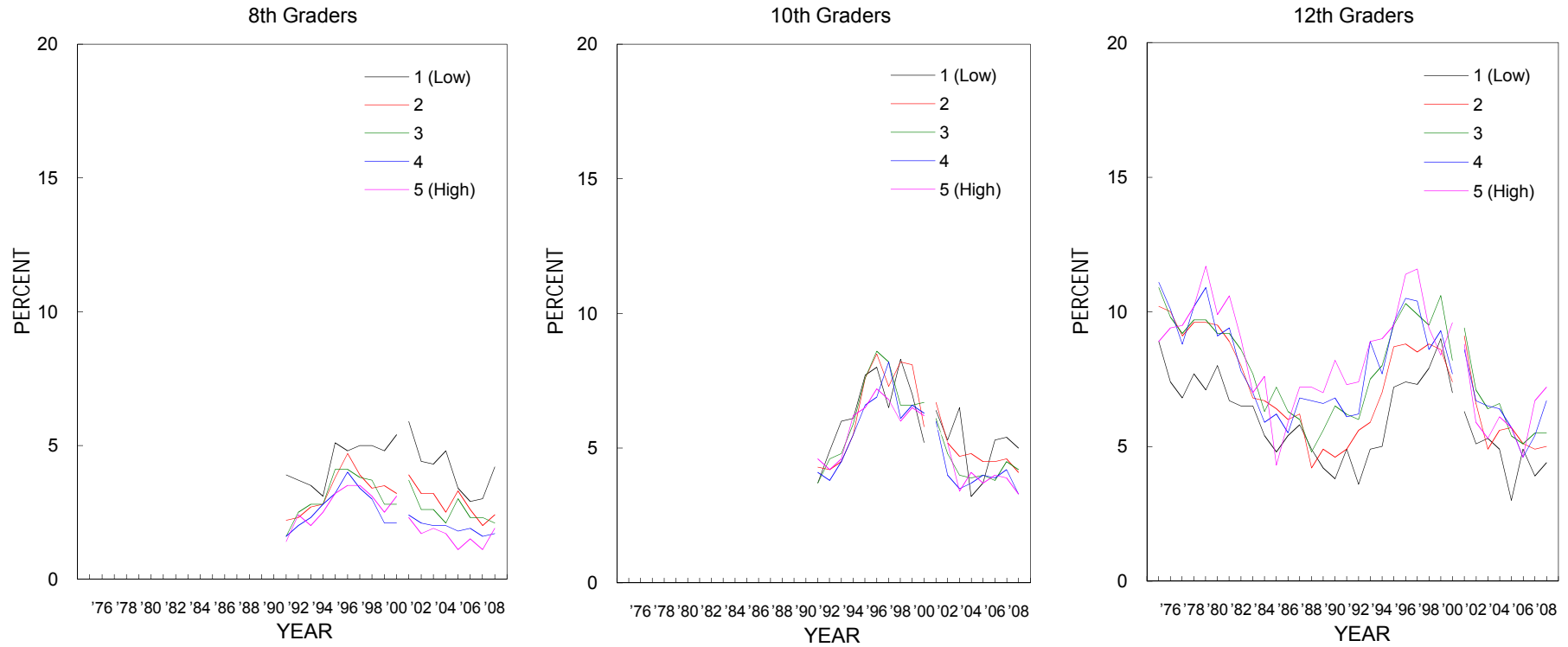
**FIGURE 28**  
**Hallucinogens:\* Trends in Annual Prevalence by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on other hallucinogen use was introduced. Data for hallucinogens are affected by these changes. Refer to corresponding tables for further details.

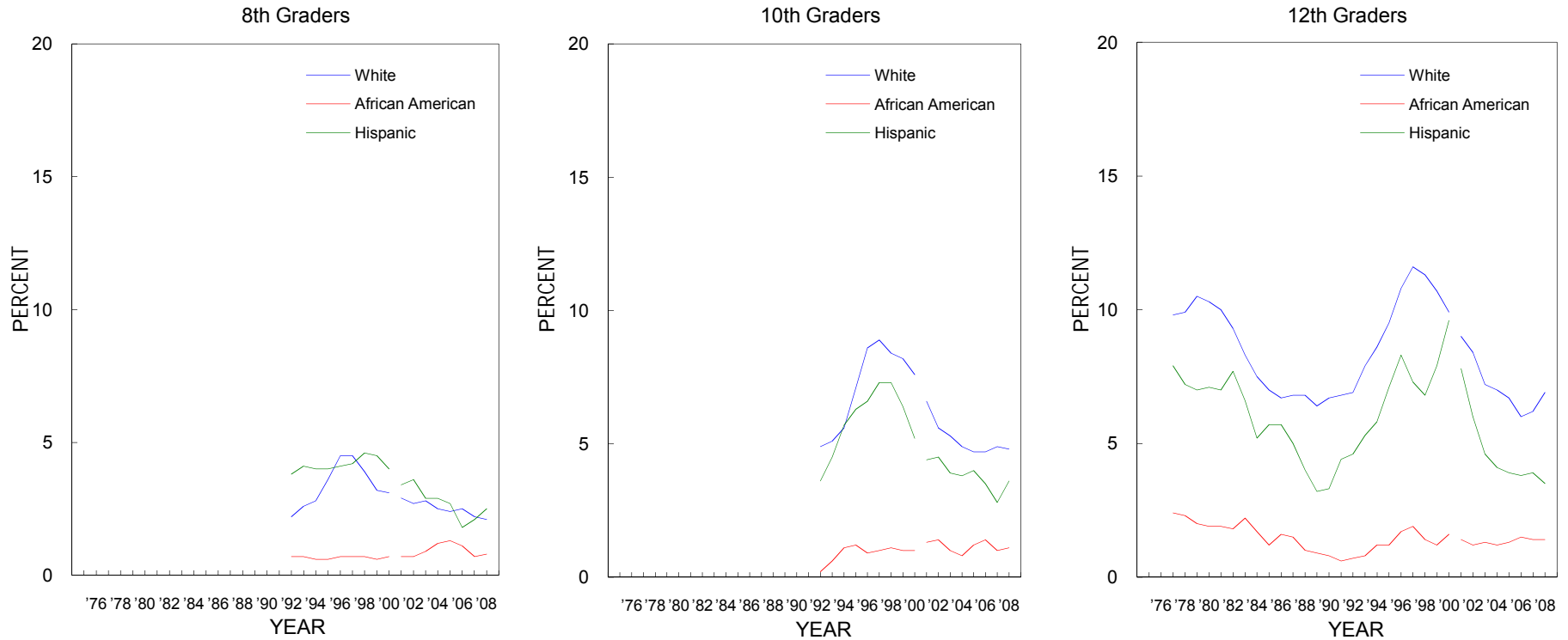
**FIGURE 29**  
**Hallucinogens:\* Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on other hallucinogen use was introduced. Data for hallucinogens are affected by these changes. Refer to corresponding tables for further details.

**FIGURE 30**  
**Hallucinogens:\* Trends in Annual Prevalence by Race/Ethnicity\*\***

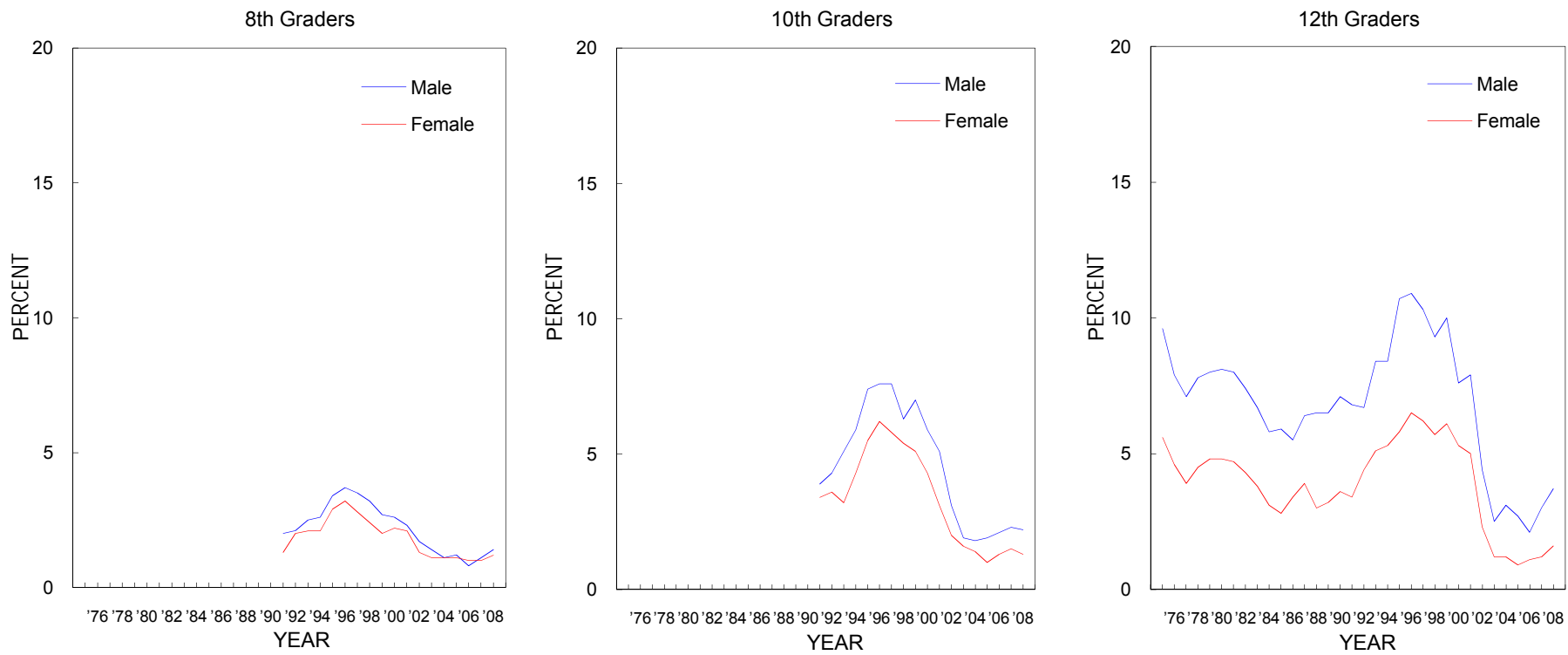


Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on other hallucinogen use was introduced. Data for hallucinogens are affected by these changes. Refer to corresponding tables for further details.

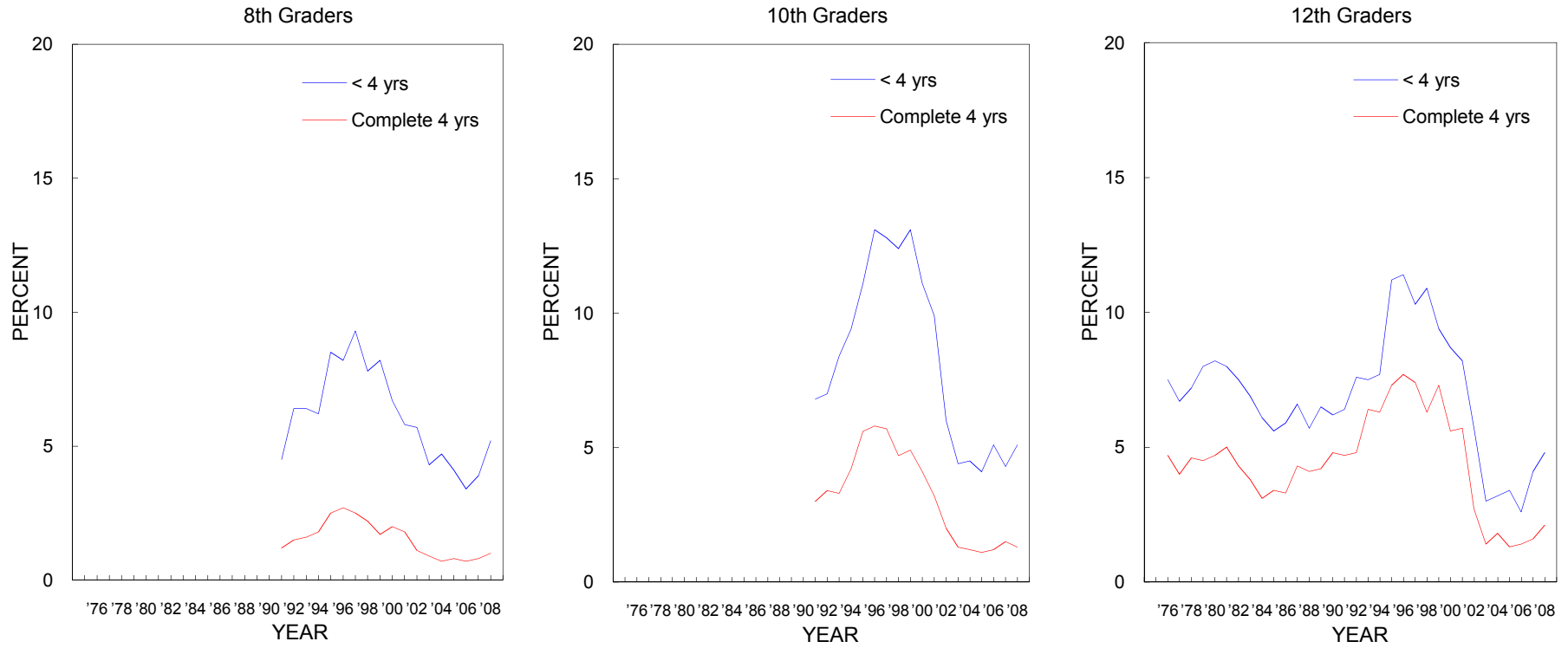
\*\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 31**  
**LSD: Trends in Annual Prevalence by Gender**



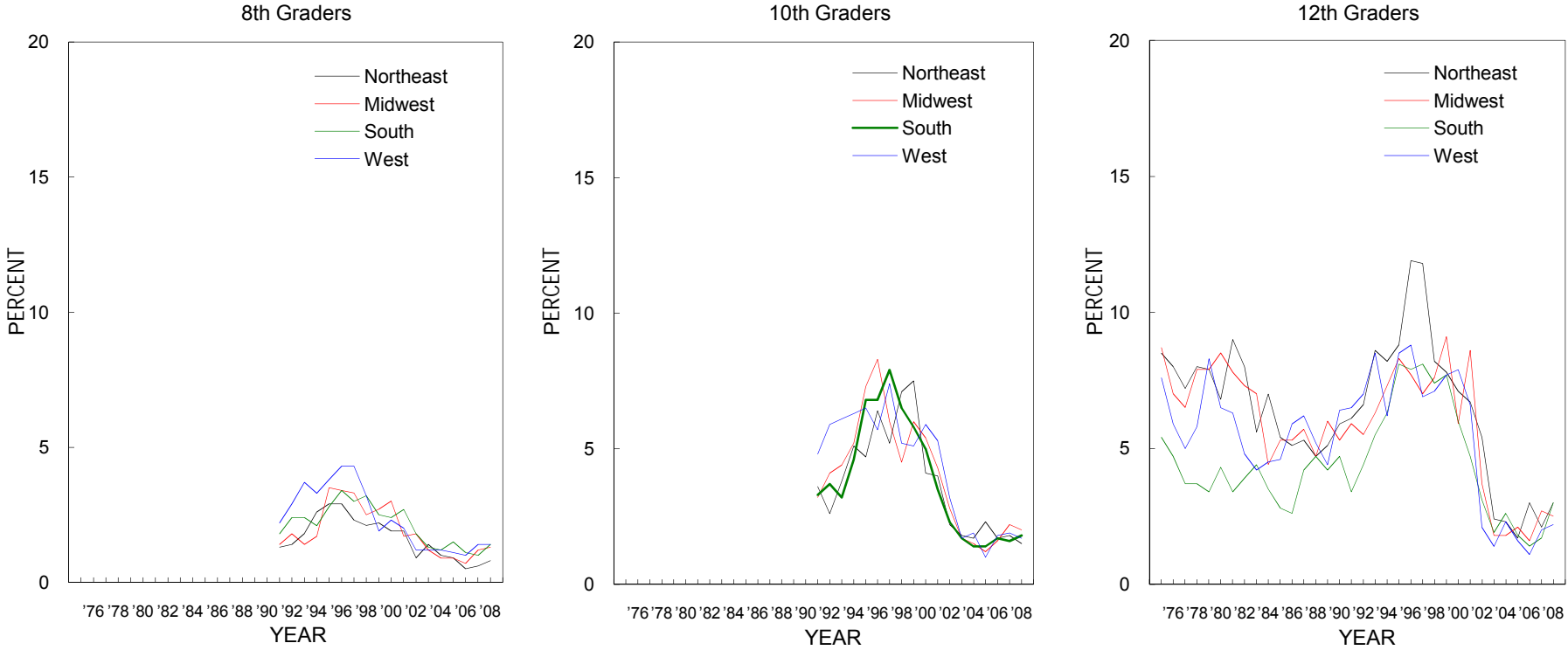
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 32**  
**LSD: Trends in Annual Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

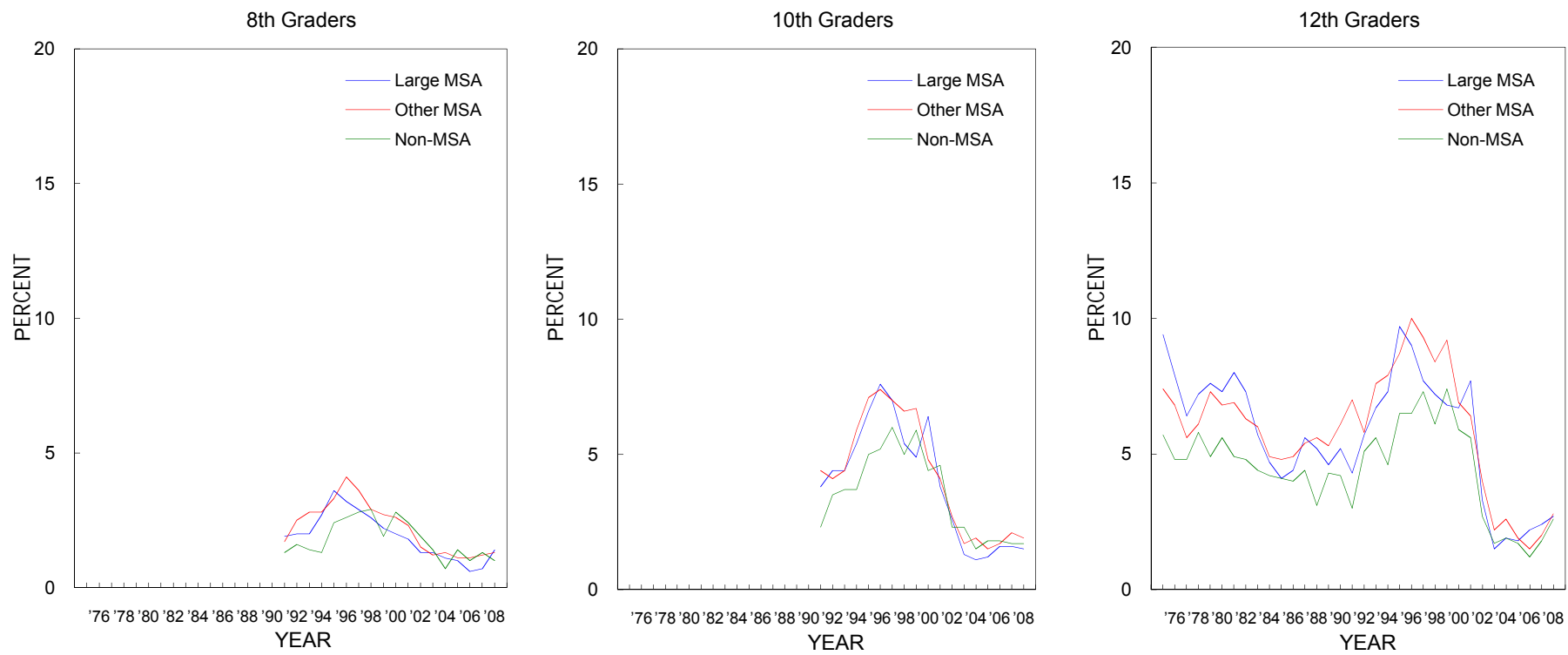
**FIGURE 33**  
**LSD: Trends in Annual Prevalence by Region**



Source. The Monitoring the Future study, the University of Michigan.

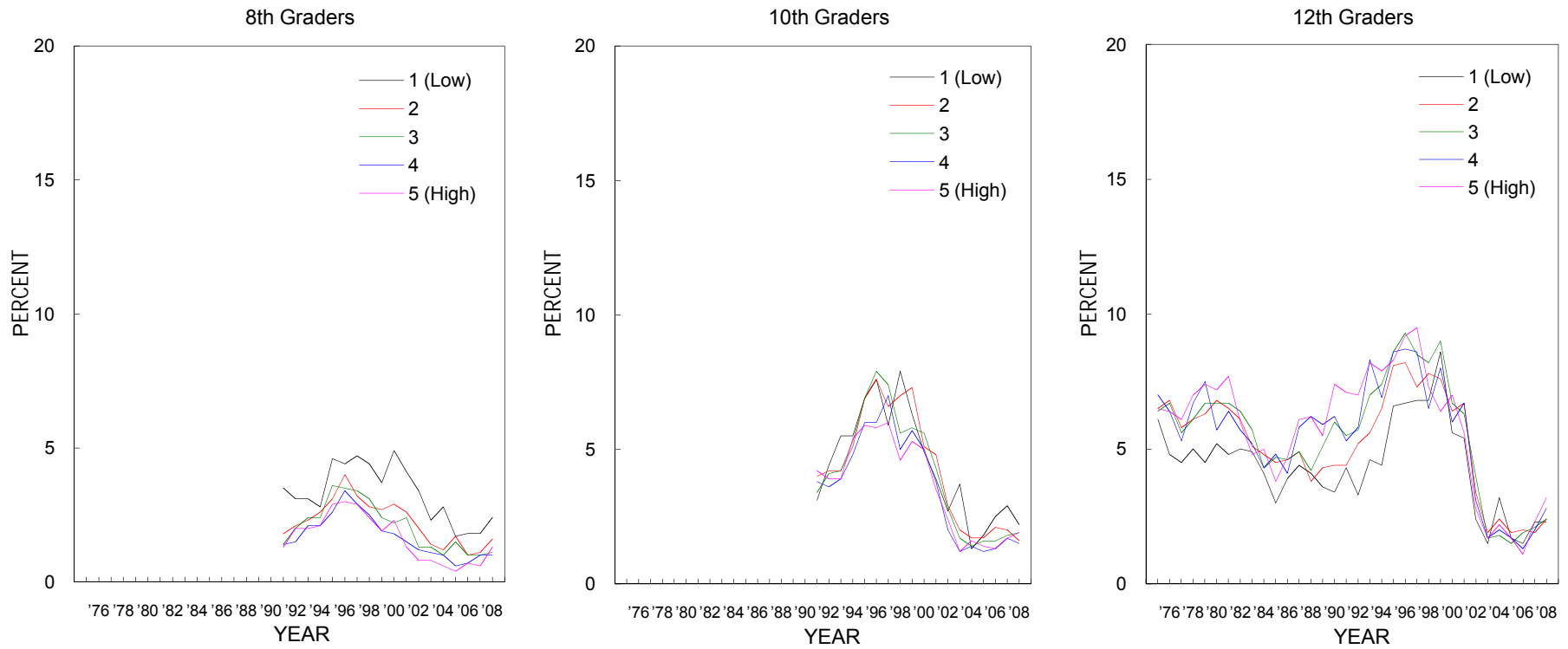


**FIGURE 34**  
**LSD: Trends in Annual Prevalence by Population Density**



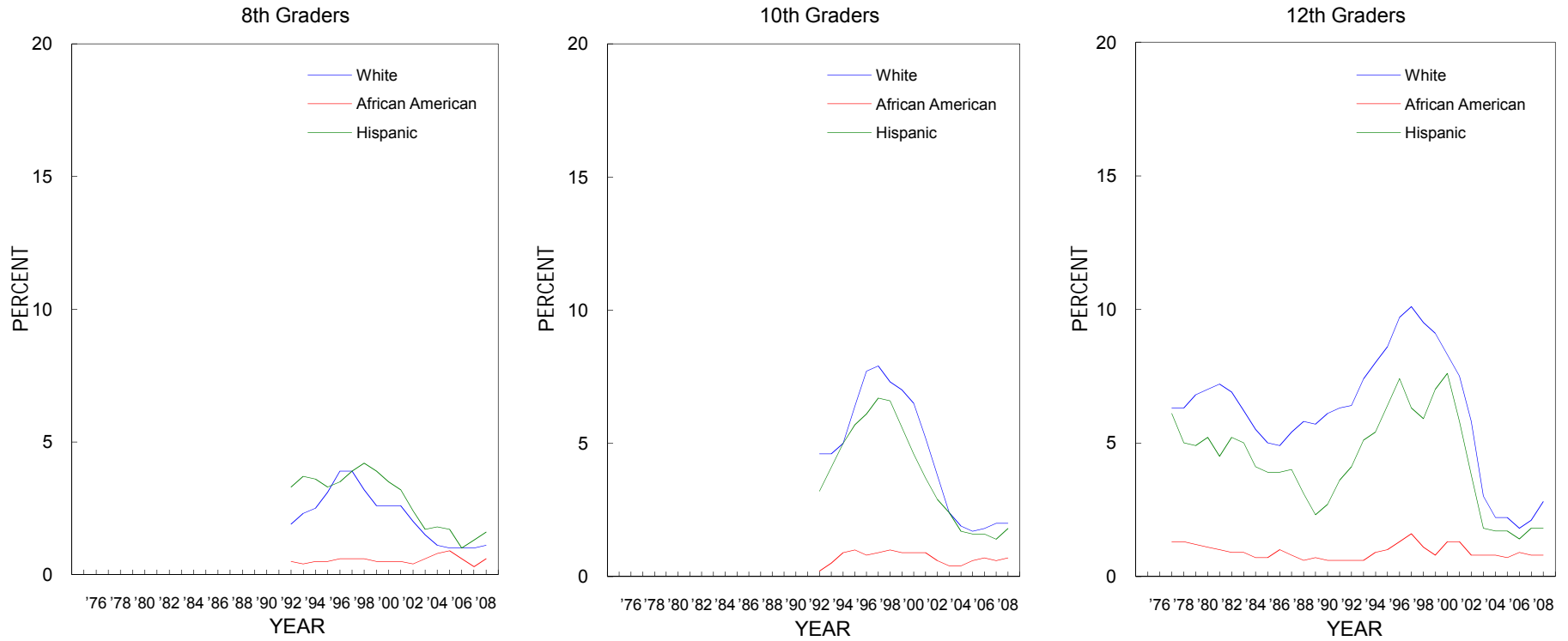
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 35**  
**LSD: Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

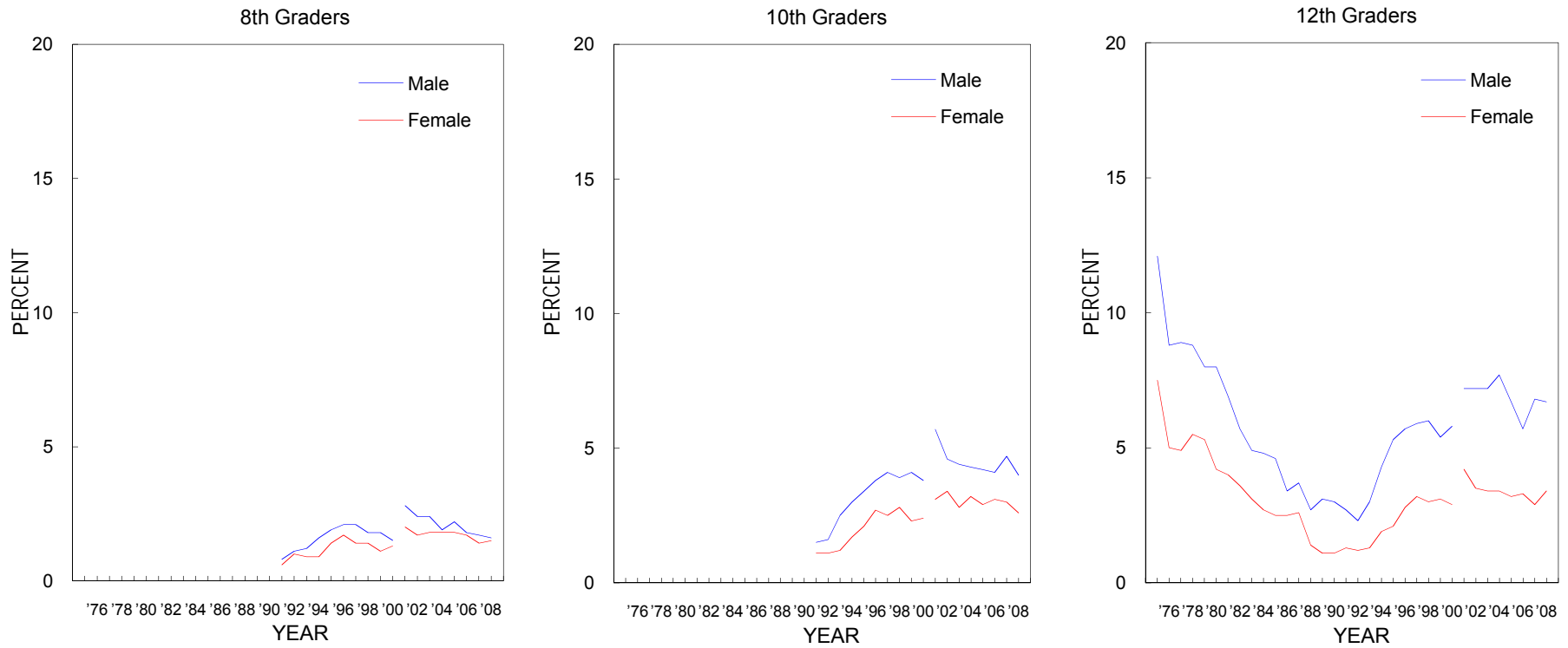
**FIGURE 36**  
**LSD: Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

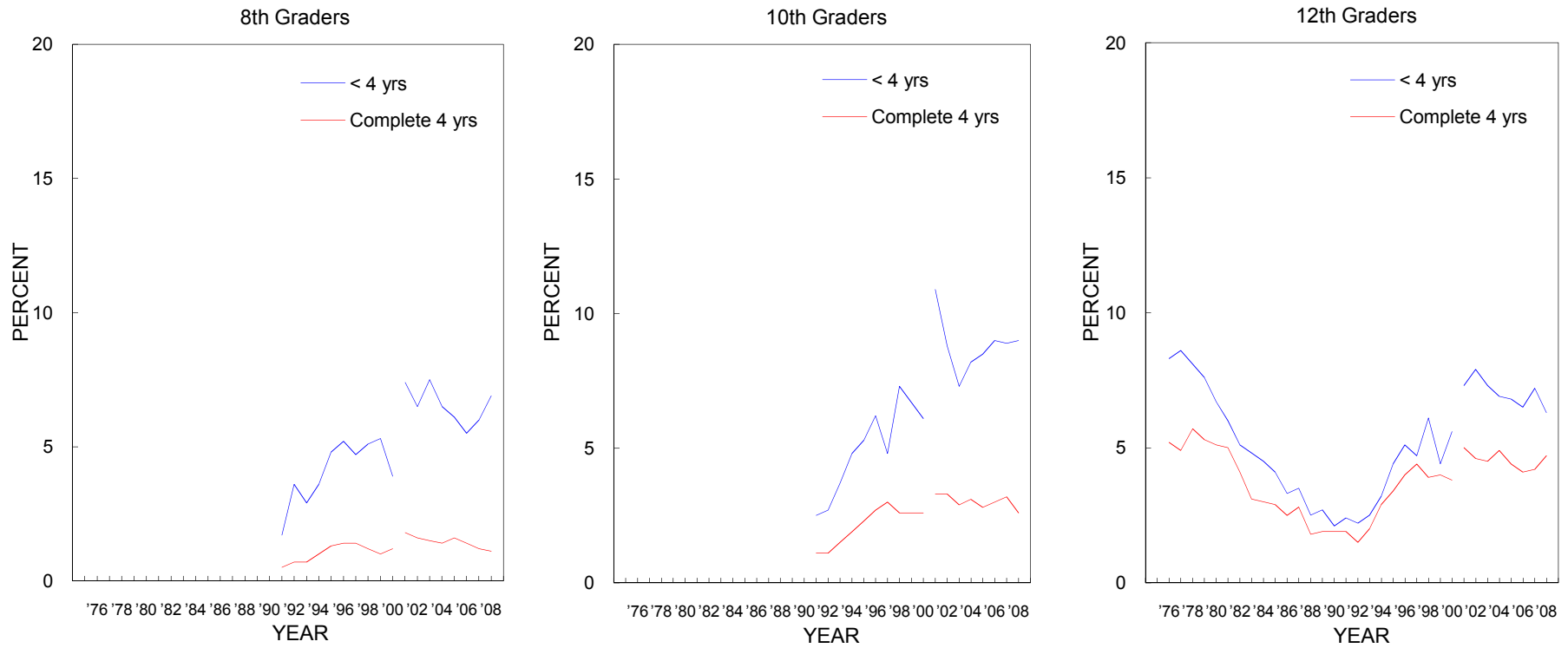
**FIGURE 37**  
**Hallucinogens other than LSD:\* Trends in Annual Prevalence by Gender**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on use of hallucinogens other than LSD was introduced. Refer to corresponding tables for further details.

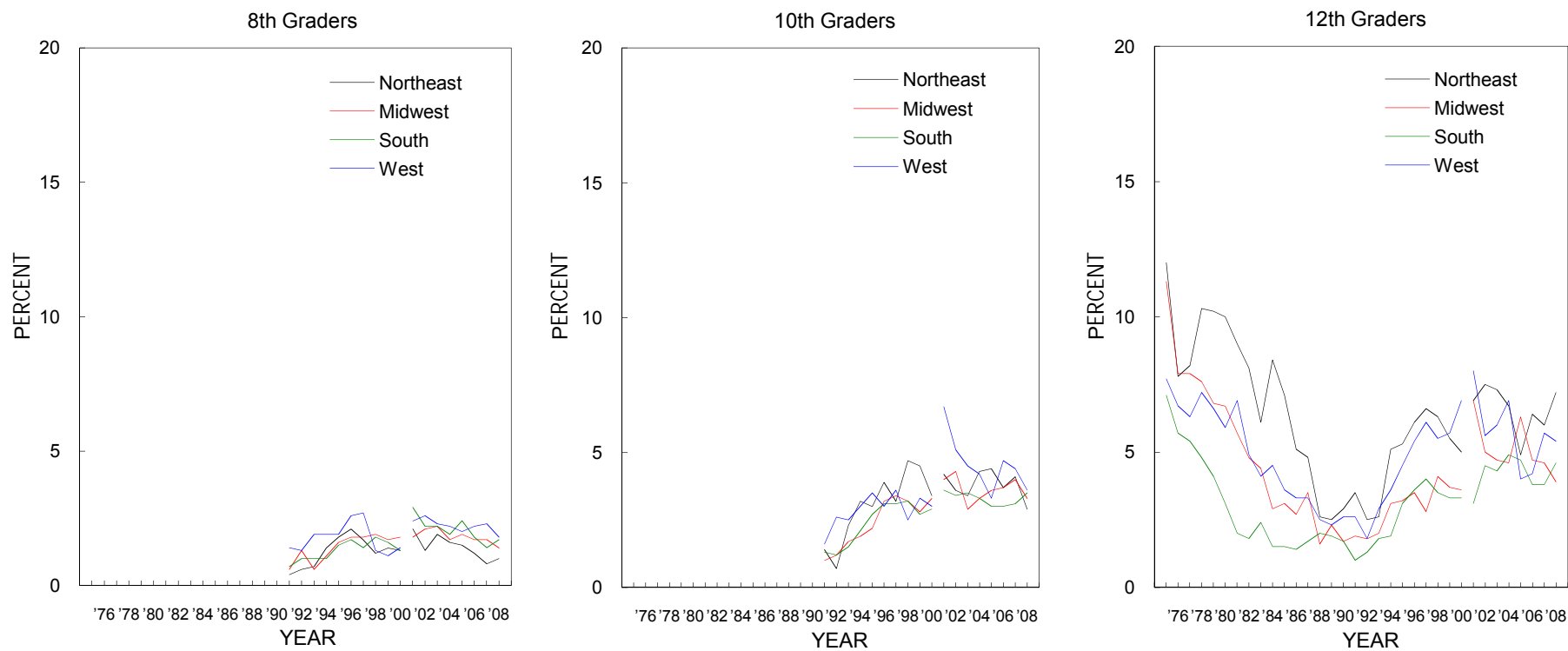
**FIGURE 38**  
**Hallucinogens other than LSD:\* Trends in Annual Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on use of hallucinogens other than LSD was introduced. Refer to corresponding tables for further details.

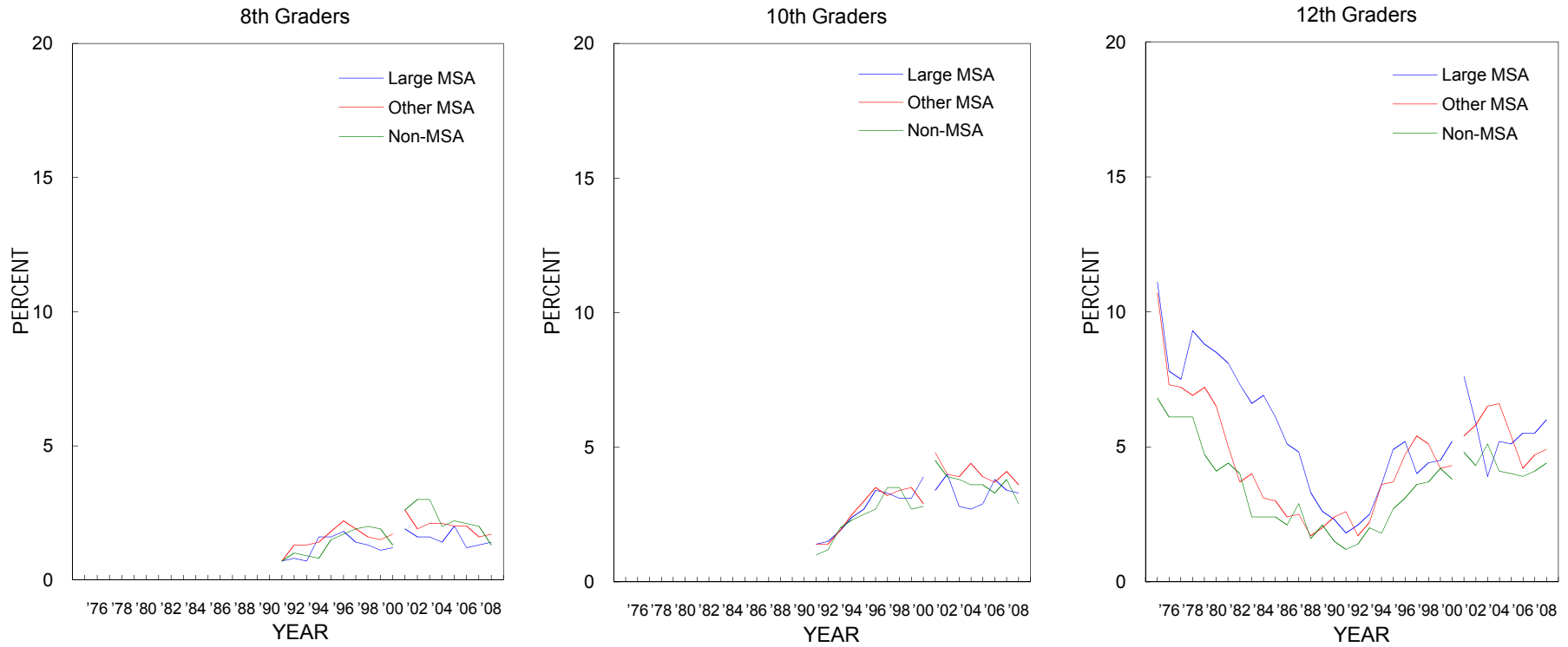
**FIGURE 39**  
**Hallucinogens other than LSD:\* Trends in Annual Prevalence by Region**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on use of hallucinogens other than LSD was introduced. Refer to corresponding tables for further details.

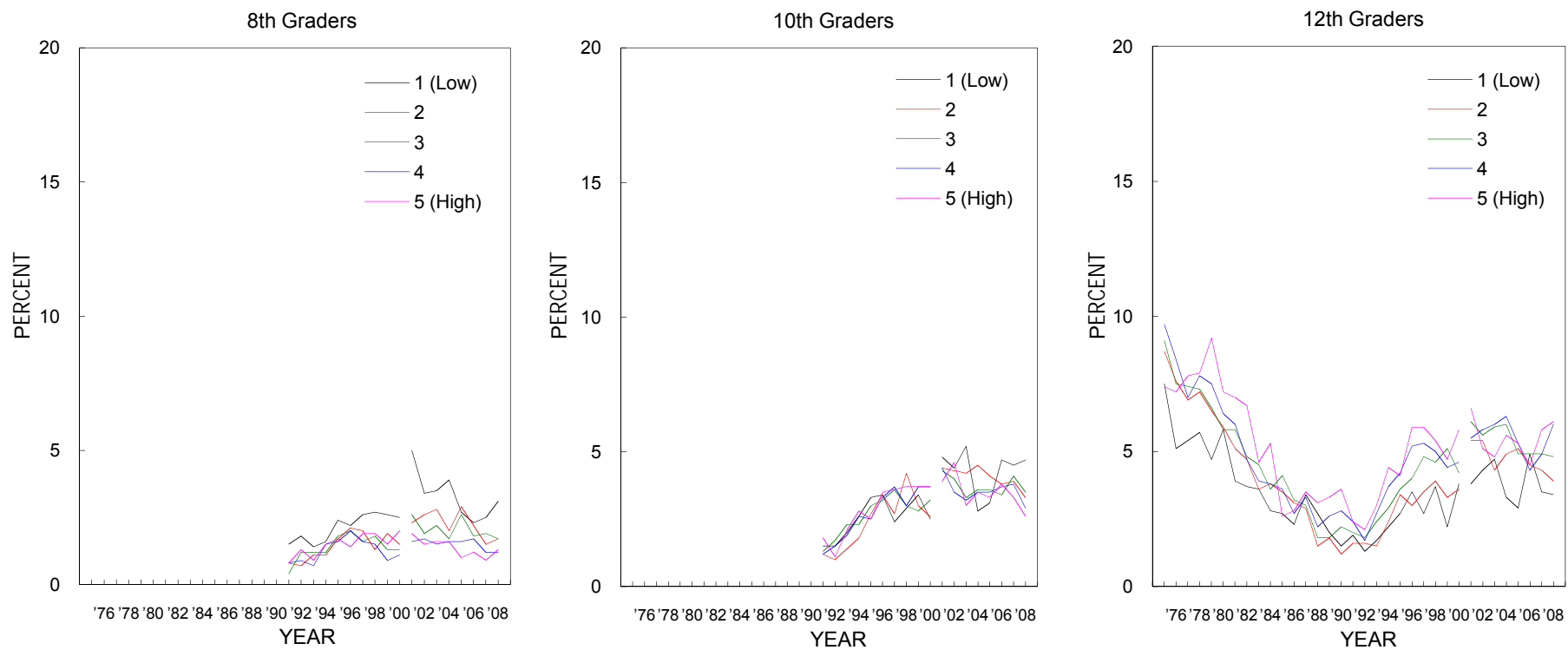
**FIGURE 40**  
**Hallucinogens other than LSD:\* Trends in Annual Prevalence by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on use of hallucinogens other than LSD was introduced. Refer to corresponding tables for further details.

**FIGURE 41**  
**Hallucinogens other than LSD:\* Trends in Annual Prevalence by Parents' Average Education**

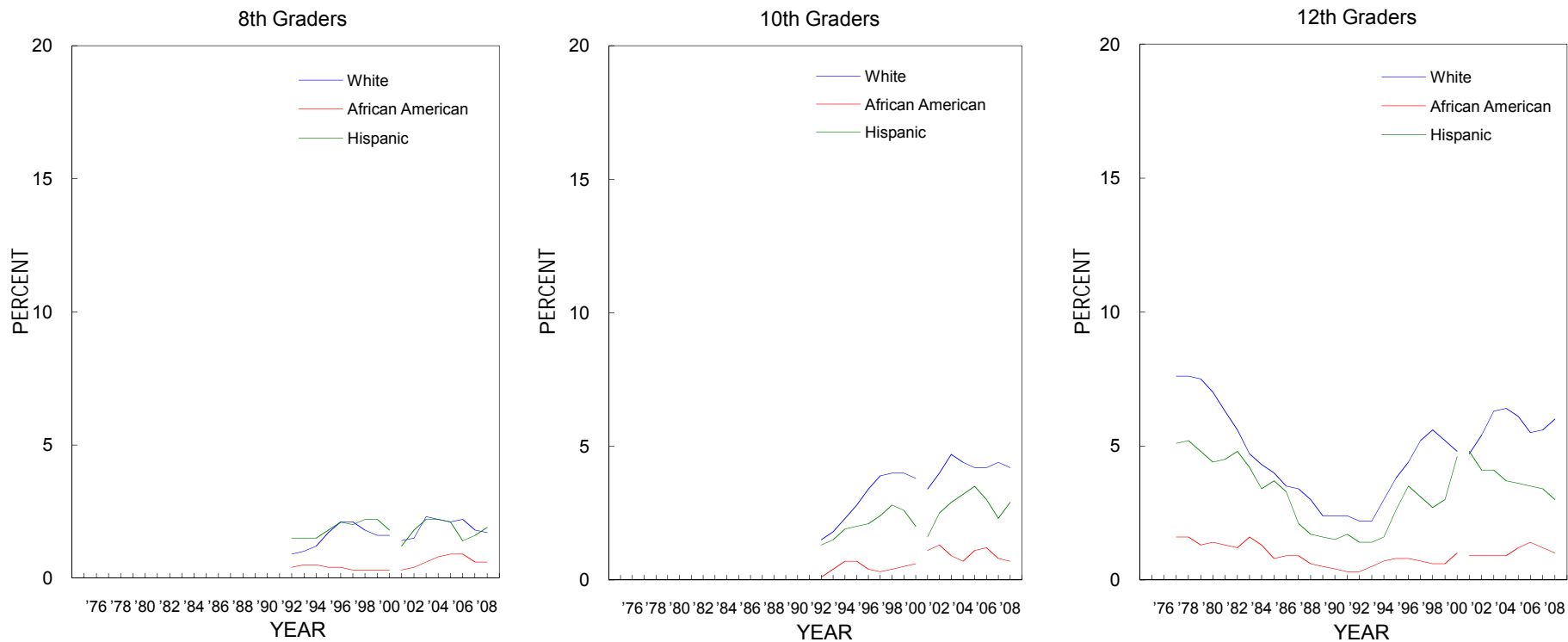


Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on use of hallucinogens other than LSD was introduced. Refer to corresponding tables for further details.



**FIGURE 42**  
**Hallucinogens other than LSD:\* Trends in Annual Prevalence by Race/Ethnicity\*\***

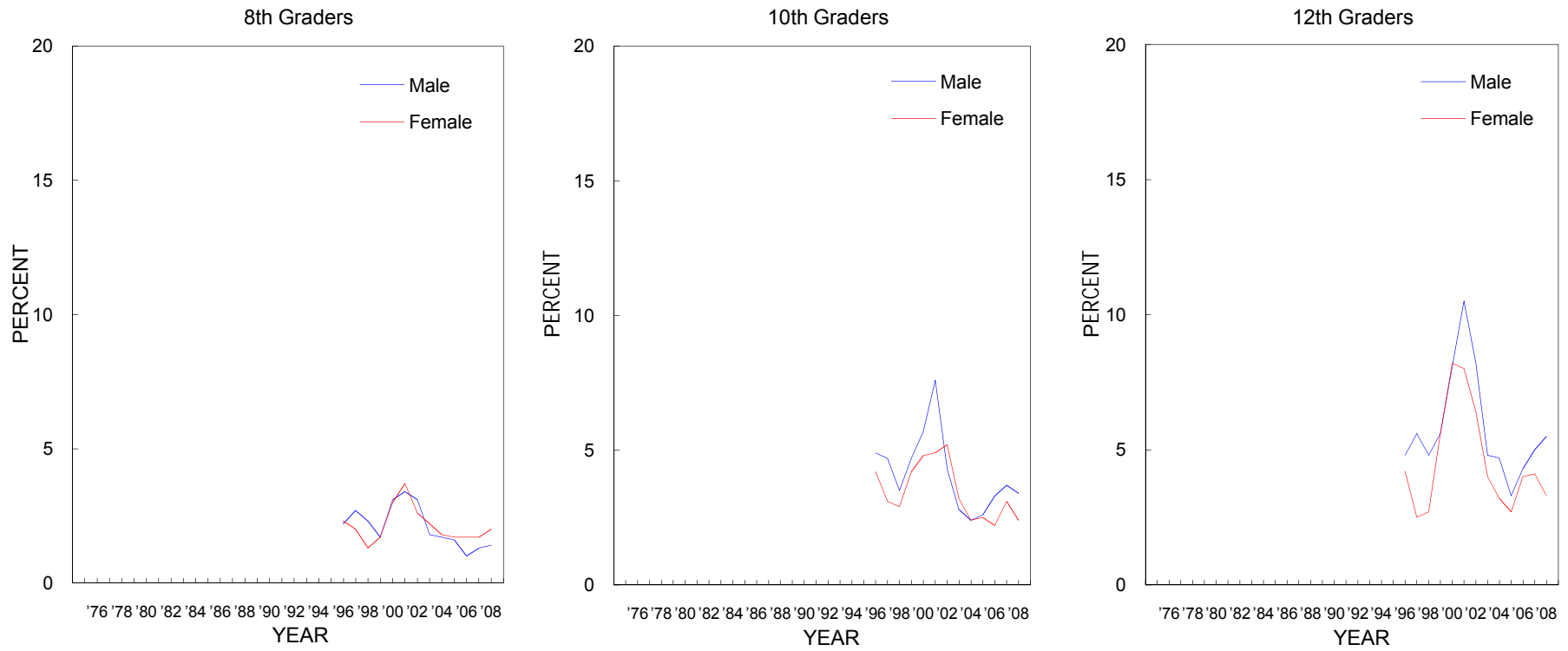


Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on use of hallucinogens other than LSD was introduced. Refer to corresponding tables for further details.

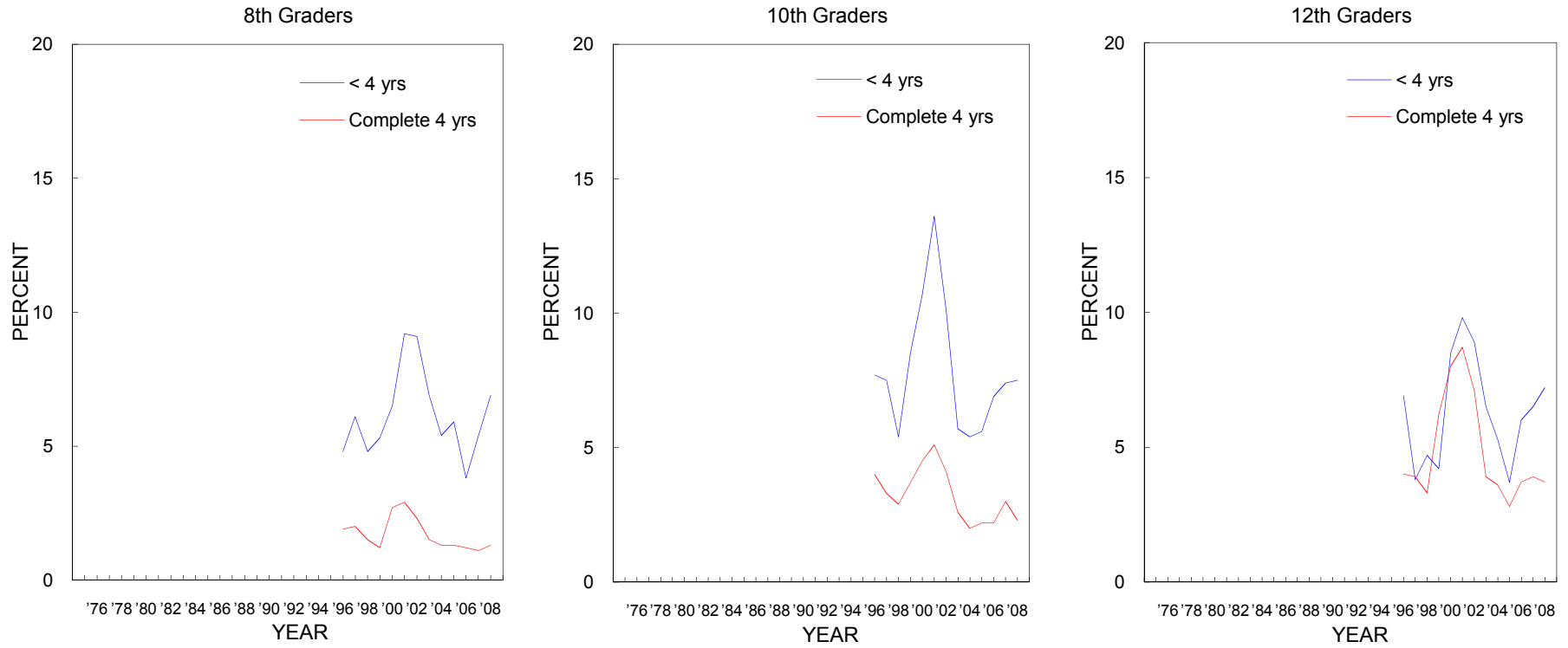
\*\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 43**  
**Ecstasy (MDMA): Trends in Annual Prevalence by Gender**



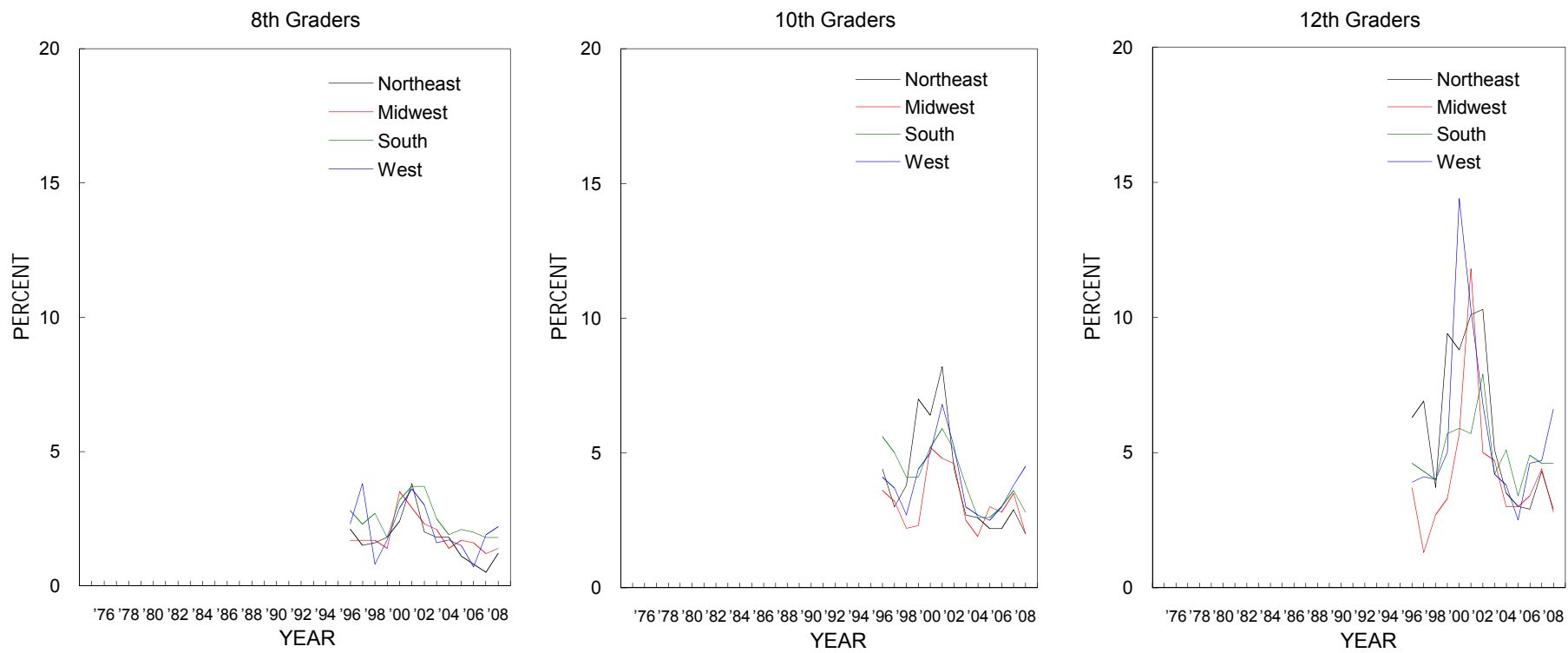
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 44**  
**Ecstasy (MDMA): Trends in Annual Prevalence by College Plans**



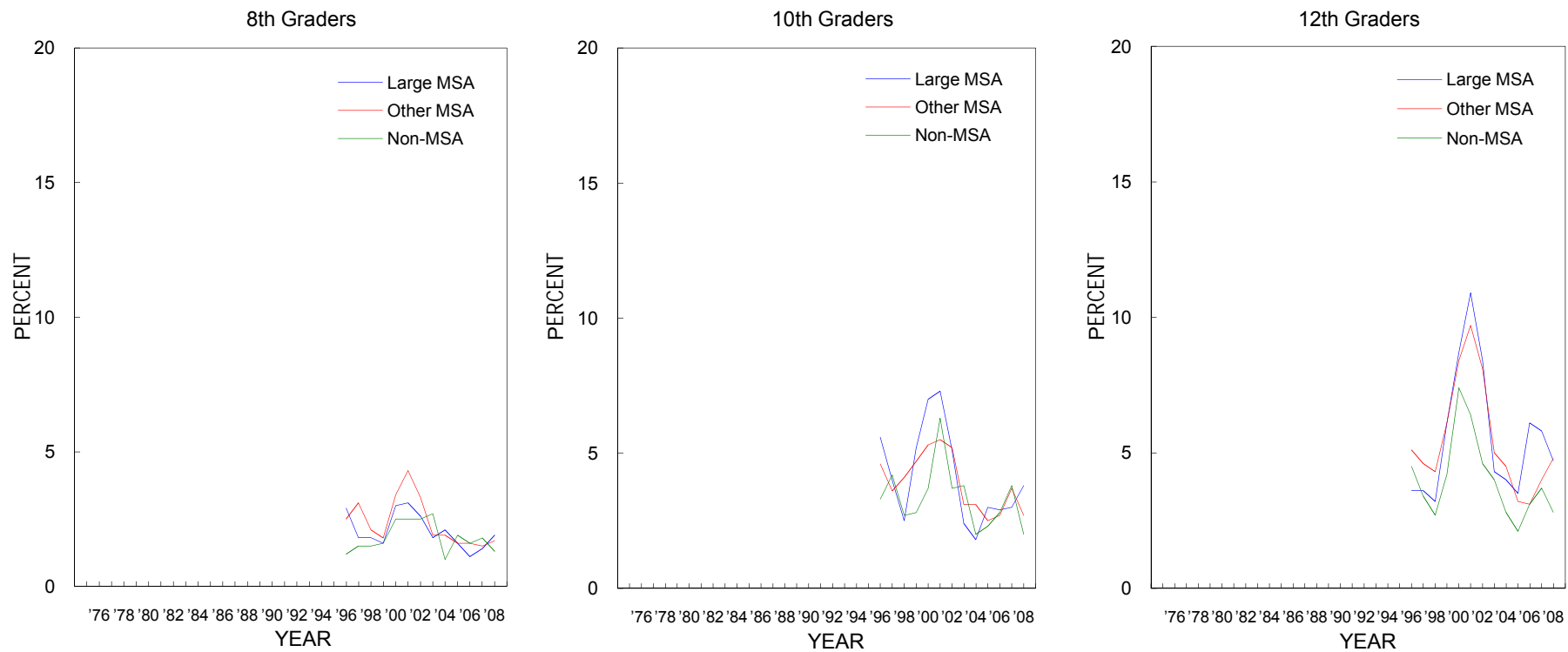
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 45**  
**Ecstasy (MDMA): Trends in Annual Prevalence by Region**



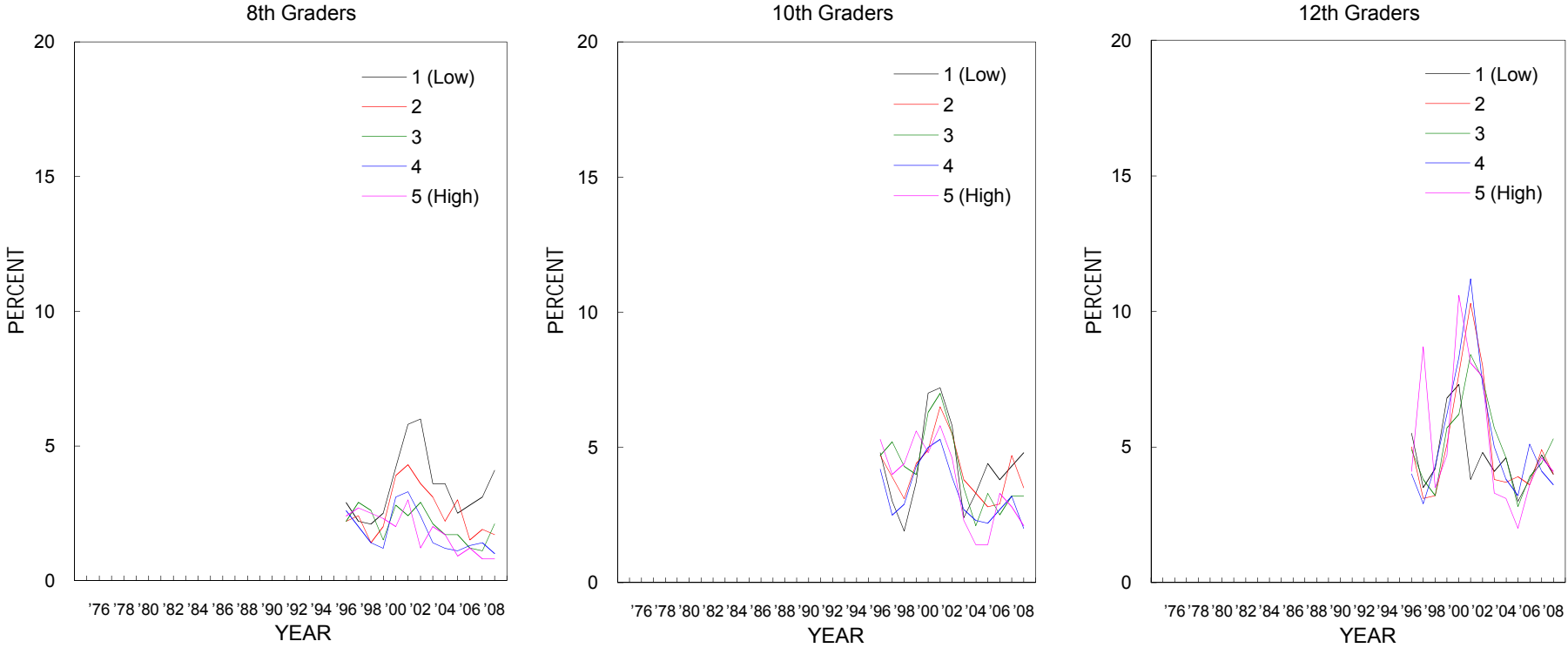
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 46**  
**Ecstasy (MDMA): Trends in Annual Prevalence by Population Density**



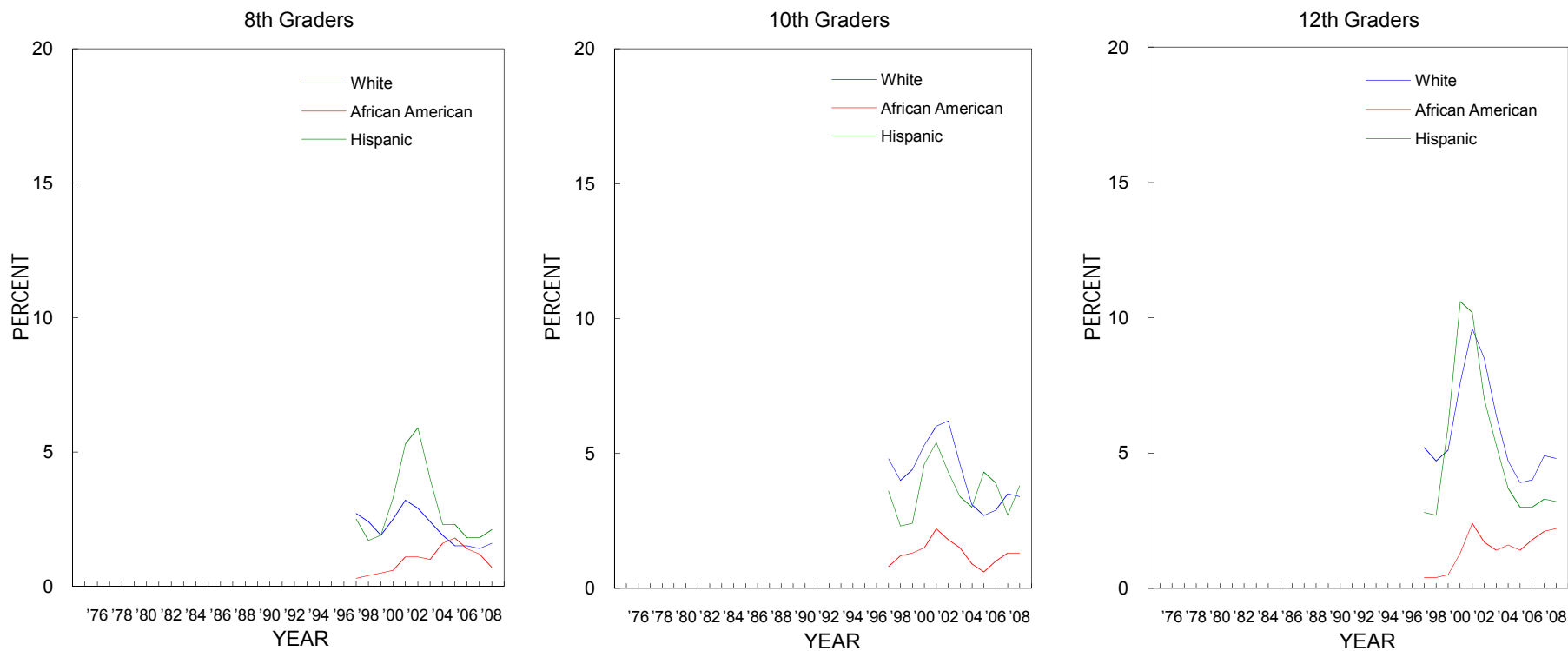
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 47**  
**Ecstasy (MDMA): Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

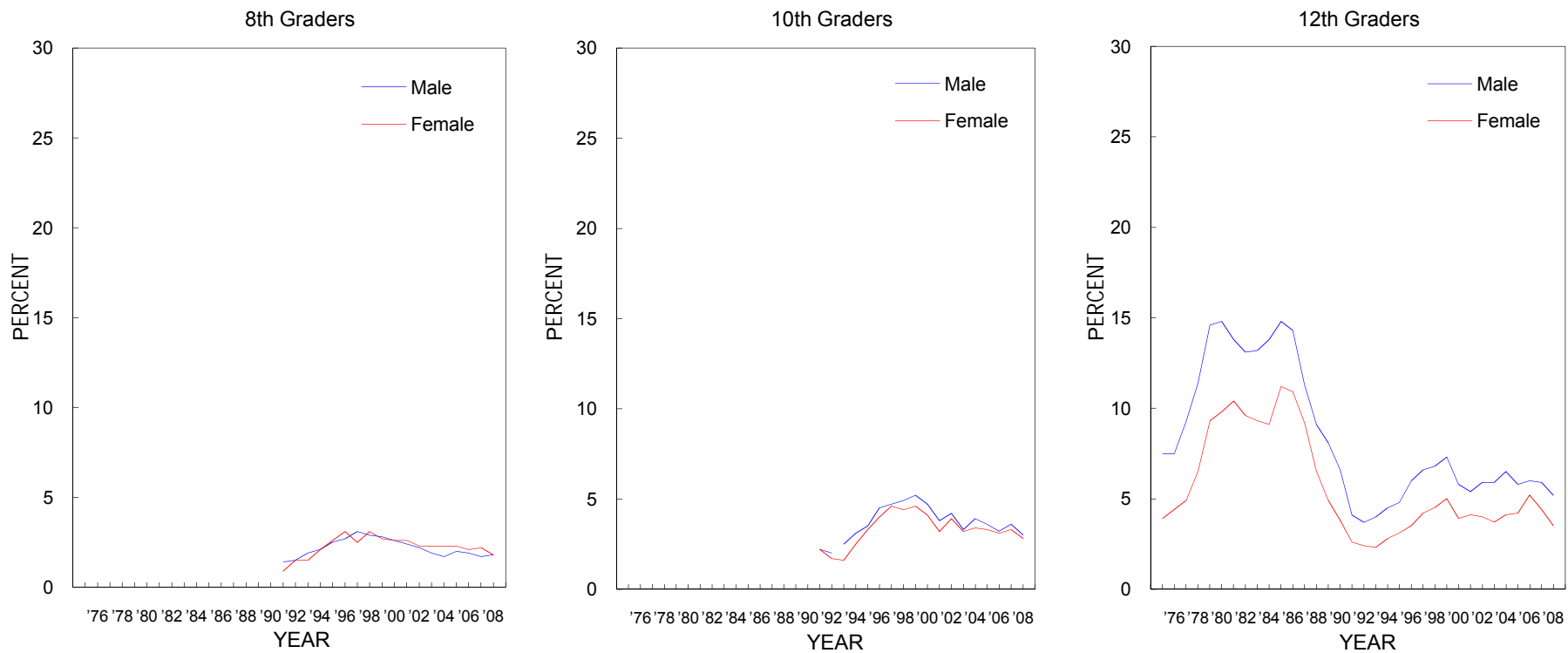
**FIGURE 48**  
**Ecstasy (MDMA): Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

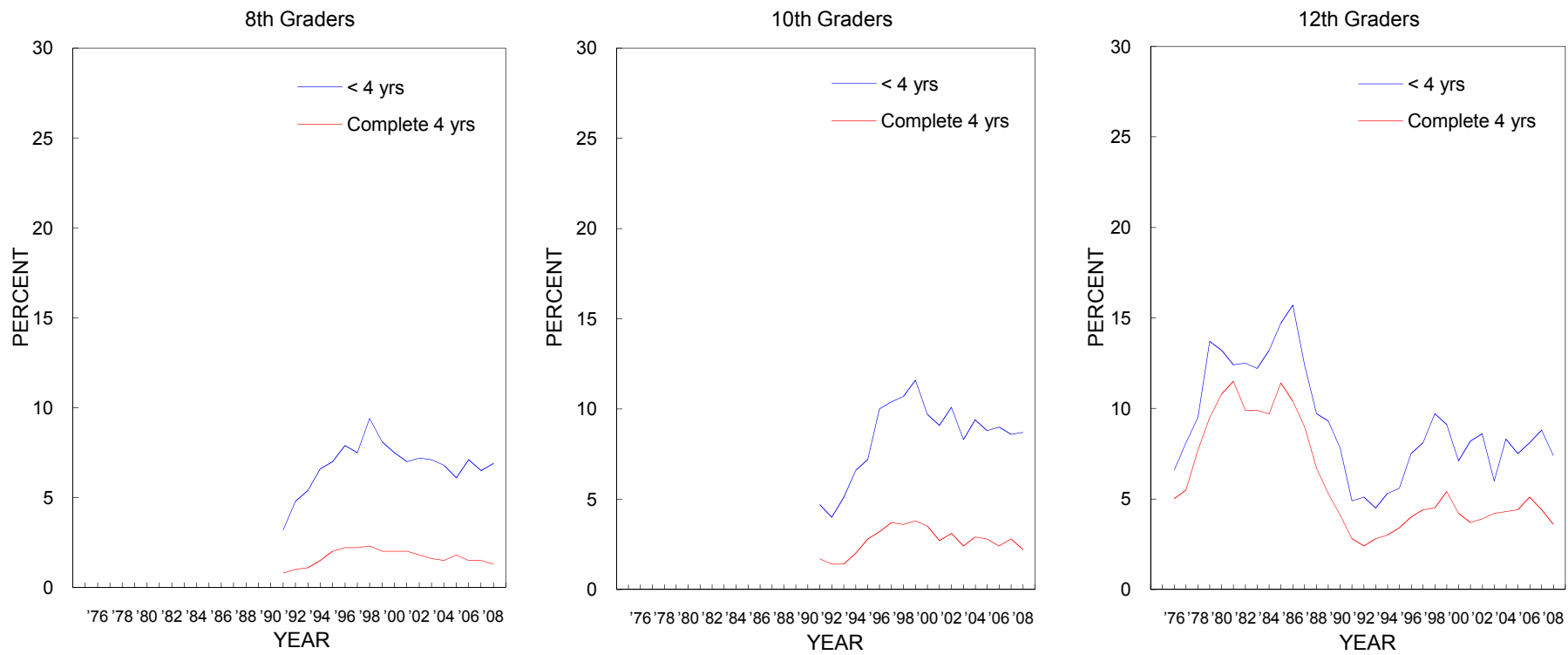
**FIGURE 49**  
**Cocaine: Trends in Annual Prevalence by Gender**



Source. The Monitoring the Future study, the University of Michigan.

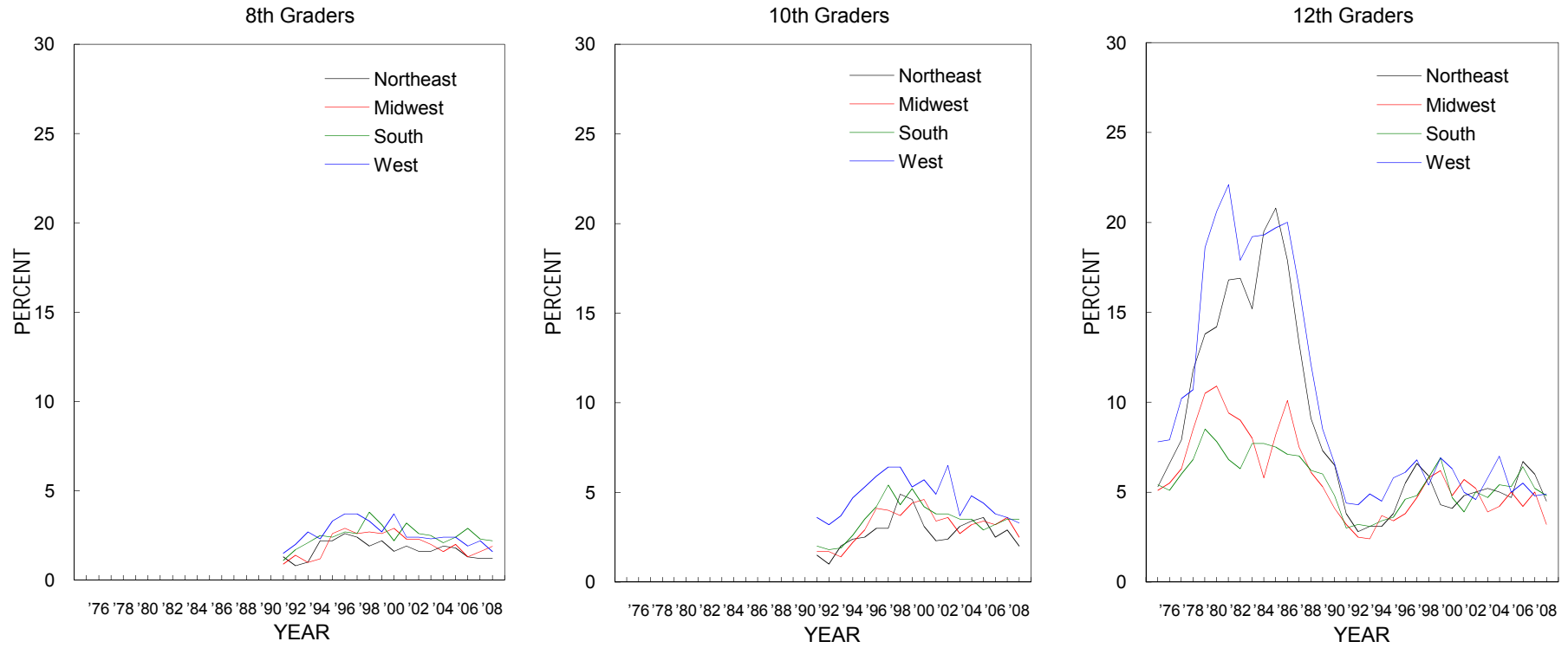


**FIGURE 50**  
**Cocaine: Trends in Annual Prevalence by College Plans**



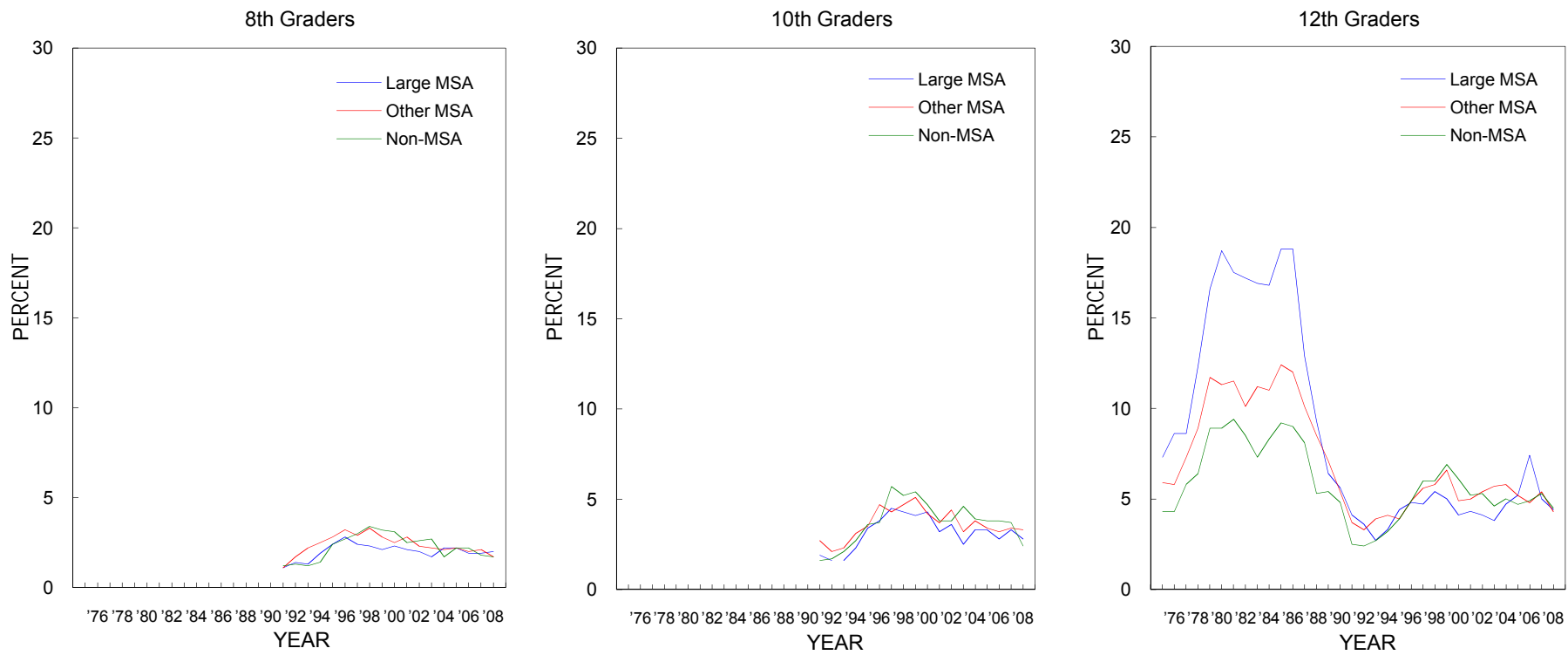
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 51**  
**Cocaine: Trends in Annual Prevalence by Region**



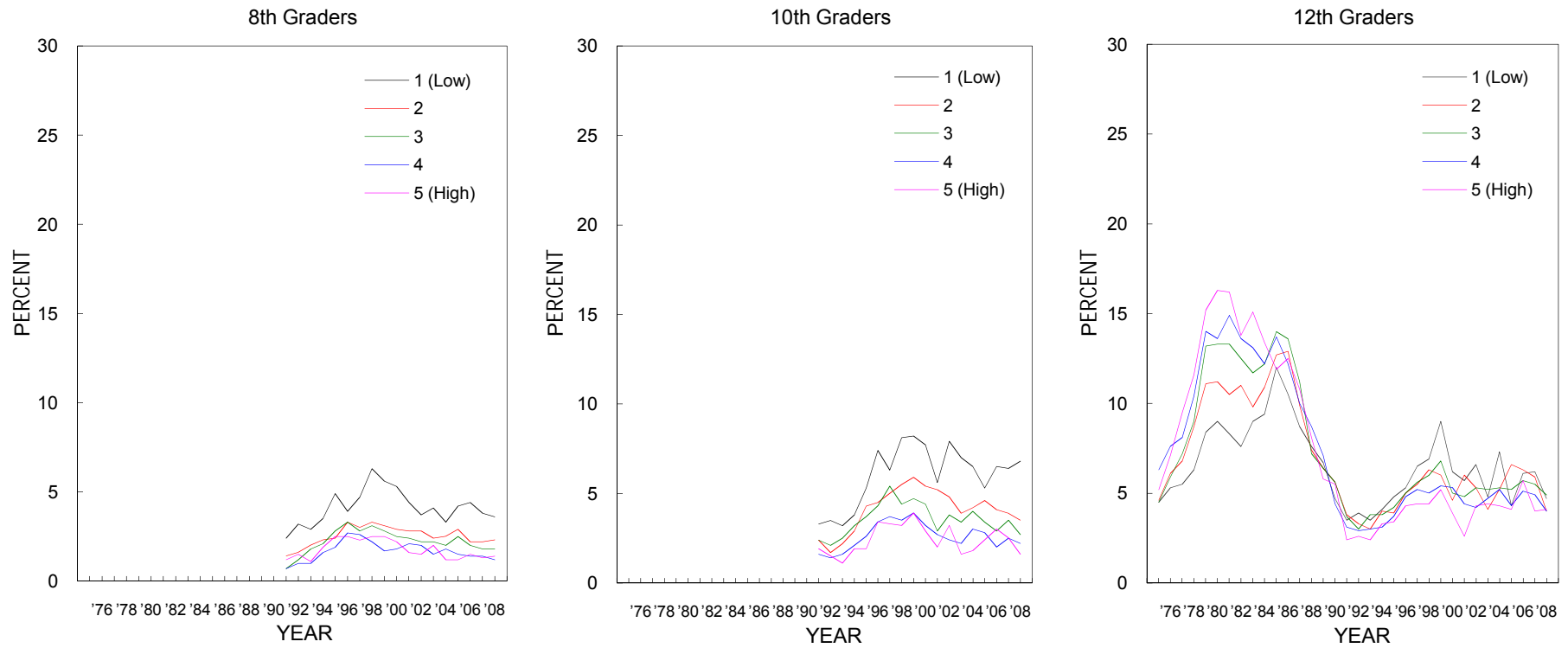
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 52**  
**Cocaine: Trends in Annual Prevalence by Population Density**



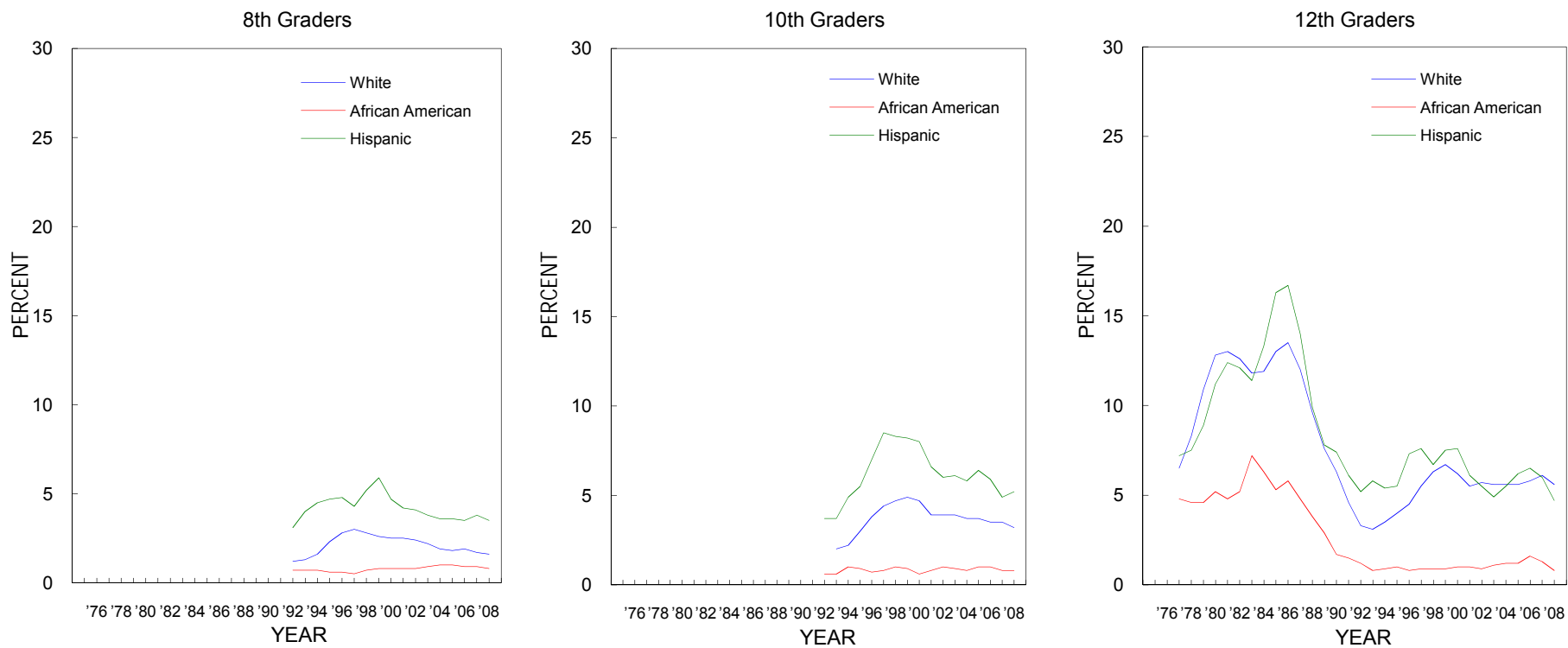
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 53**  
**Cocaine: Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

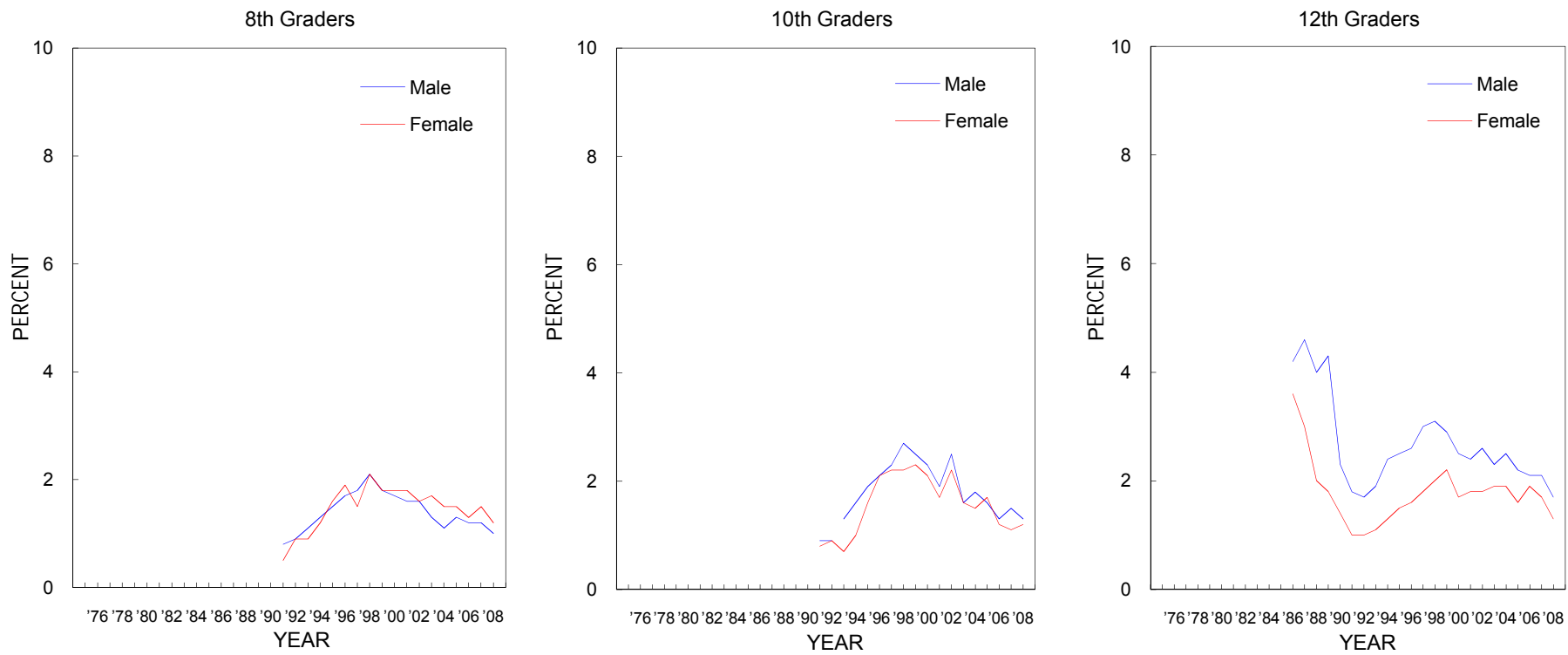
**FIGURE 54**  
**Cocaine: Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

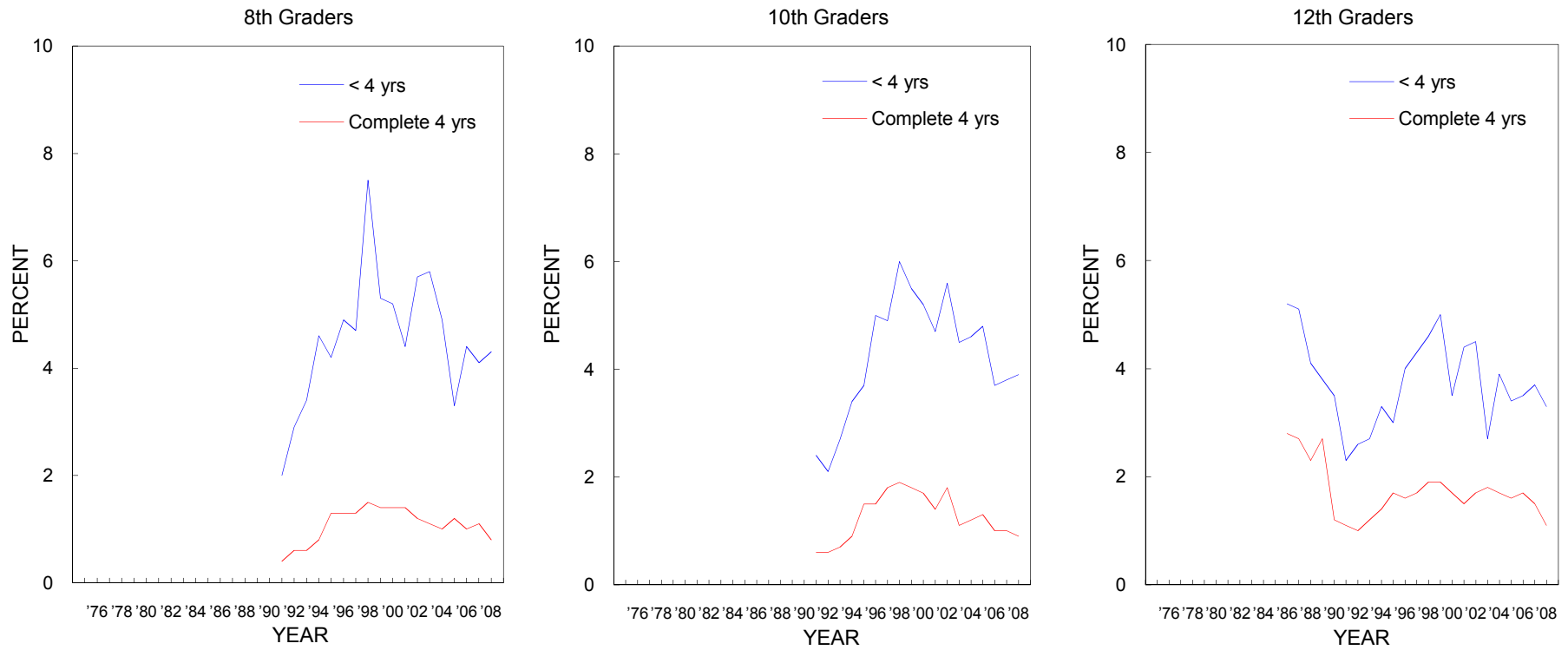
\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 55**  
**Crack: Trends in Annual Prevalence by Gender**



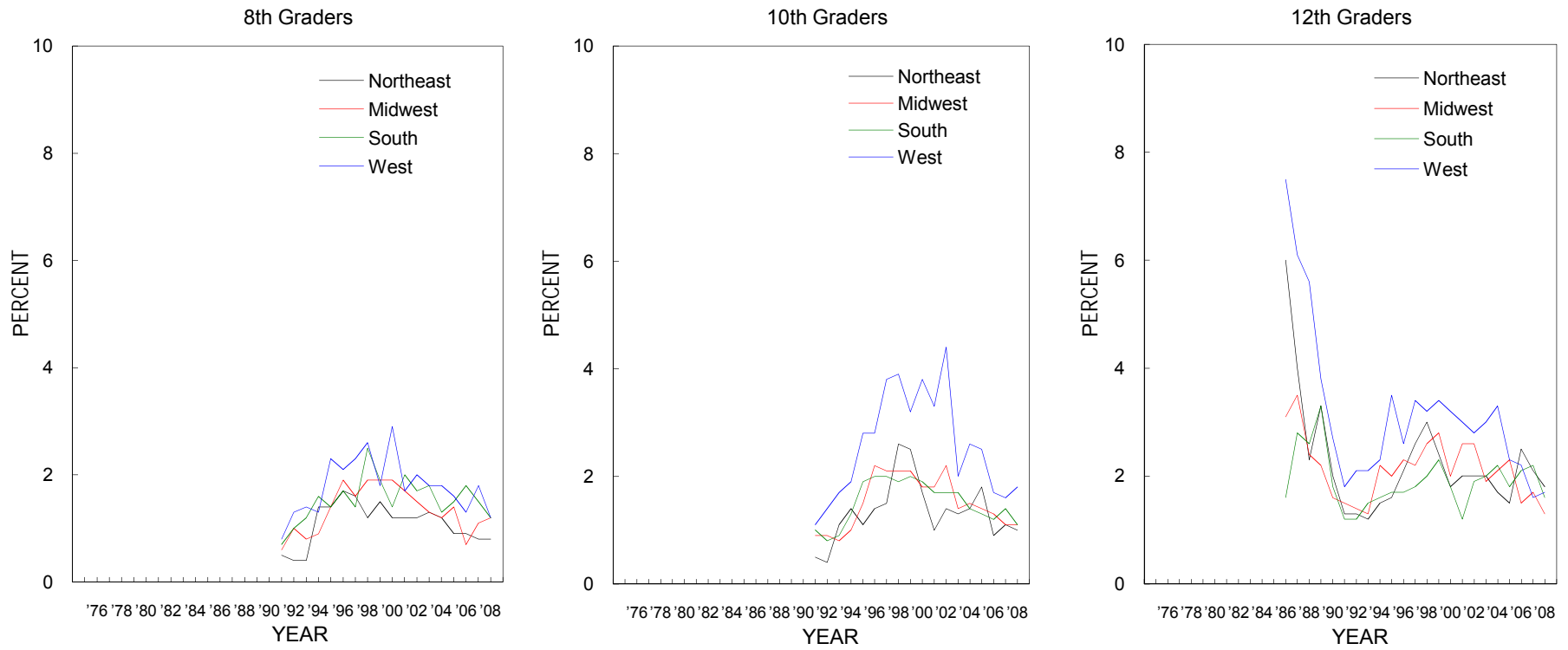
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 56**  
**Crack: Trends in Annual Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

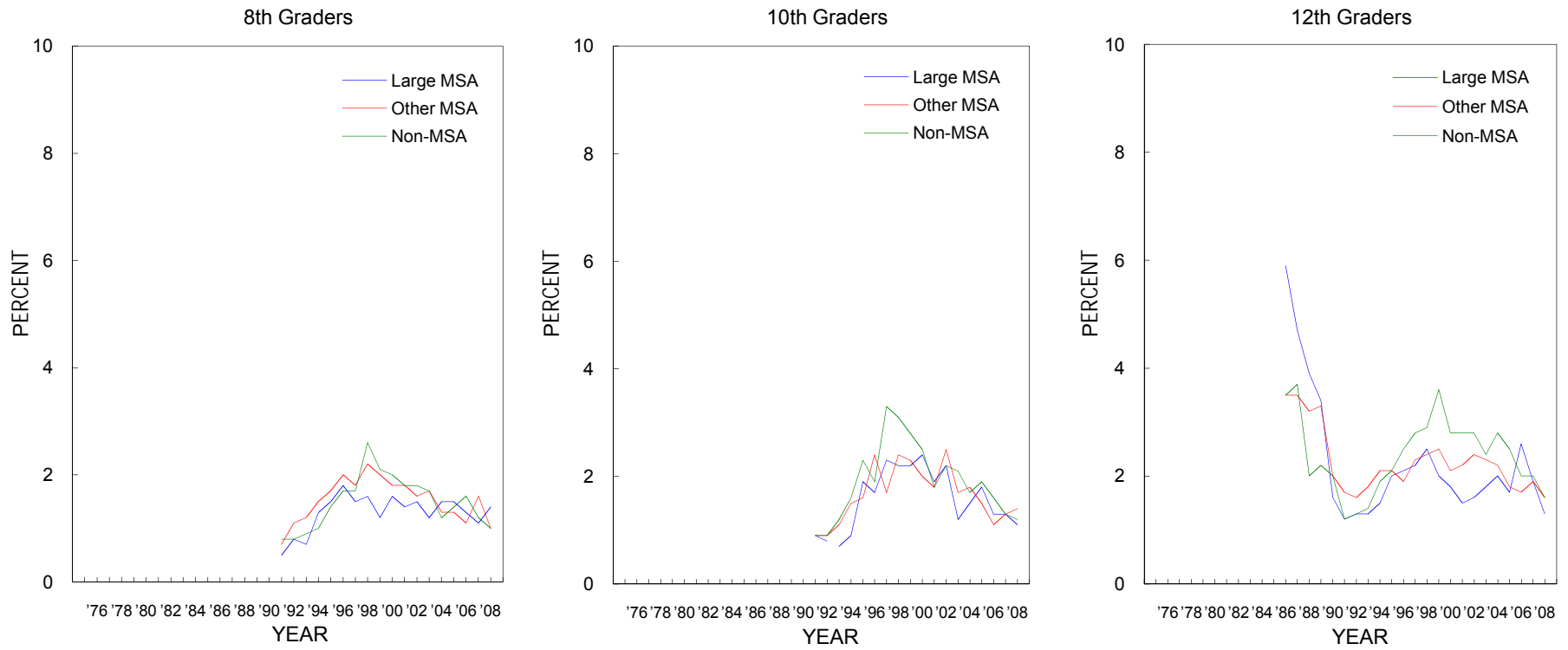
**FIGURE 57**  
**Crack: Trends in Annual Prevalence by Region**



Source. The Monitoring the Future study, the University of Michigan.

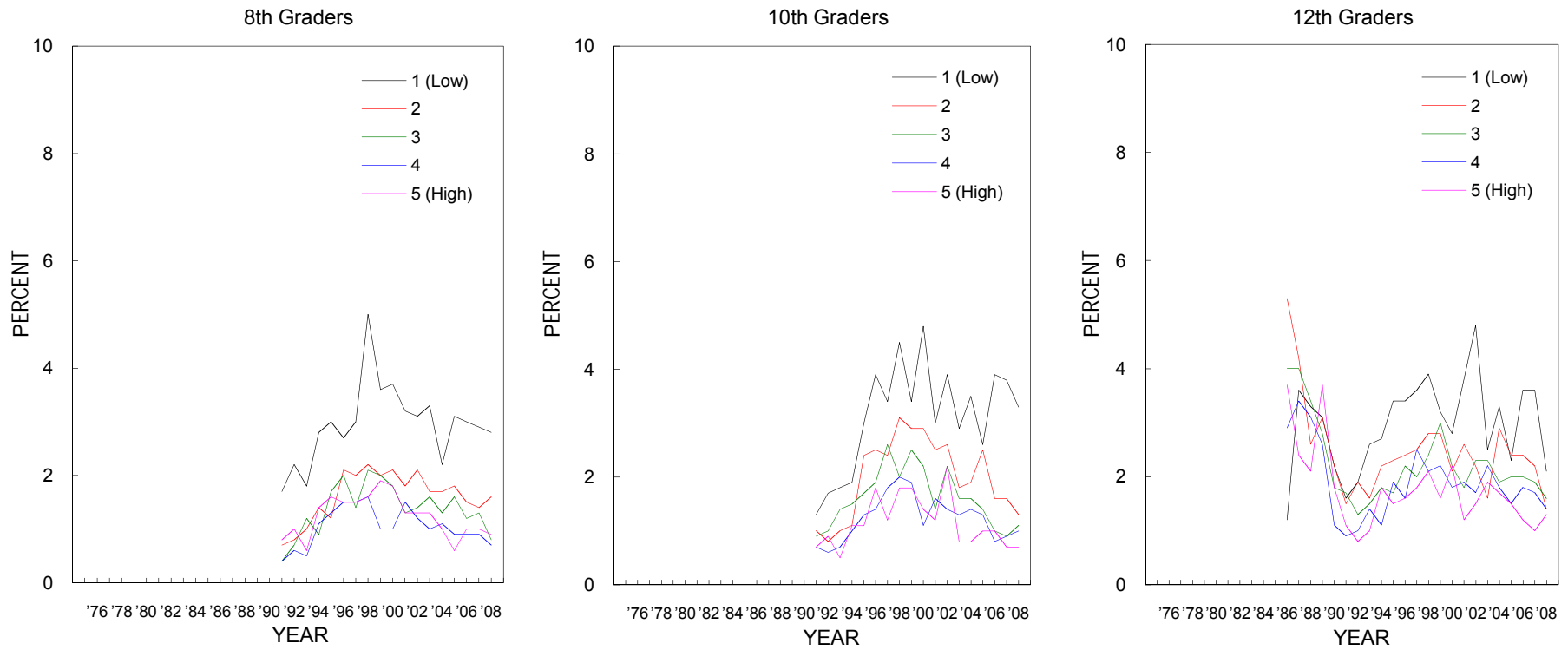


**FIGURE 58**  
**Crack: Trends in Annual Prevalence by Population Density**



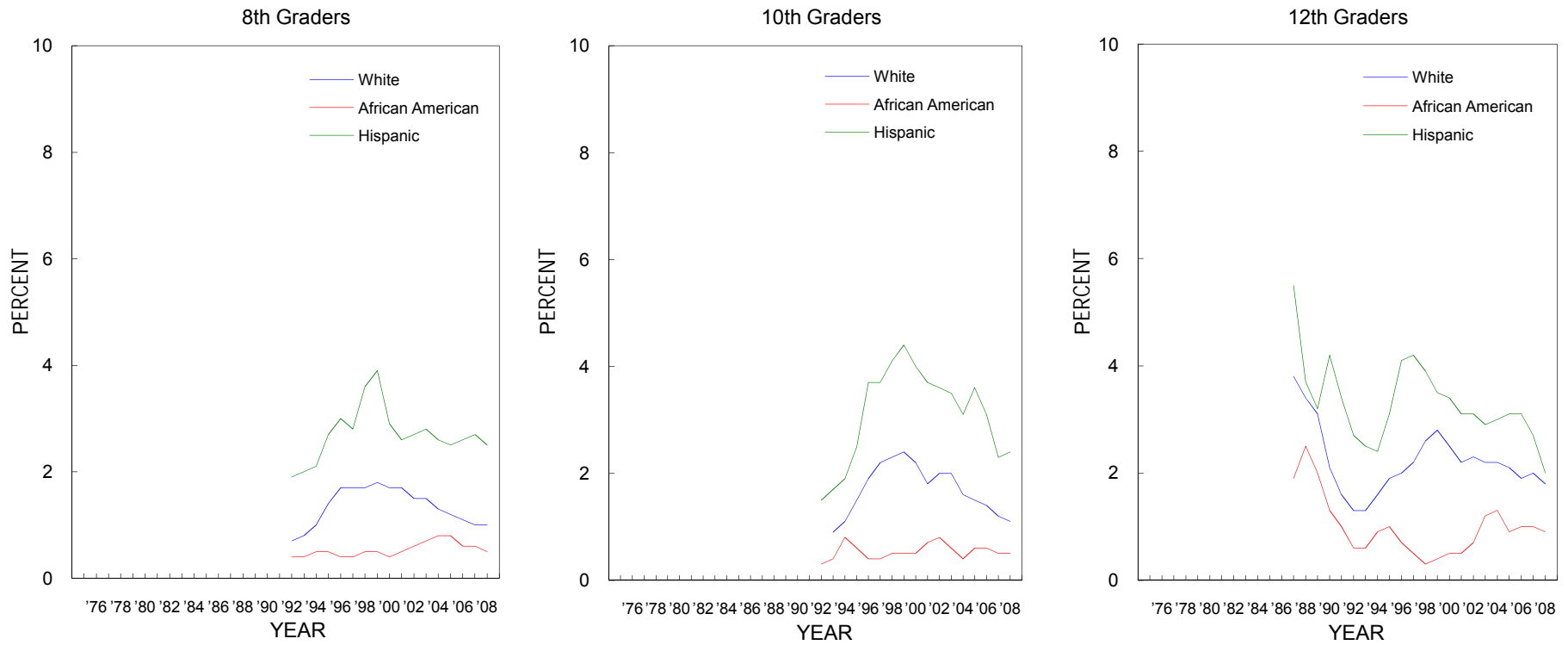
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 59**  
**Crack: Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

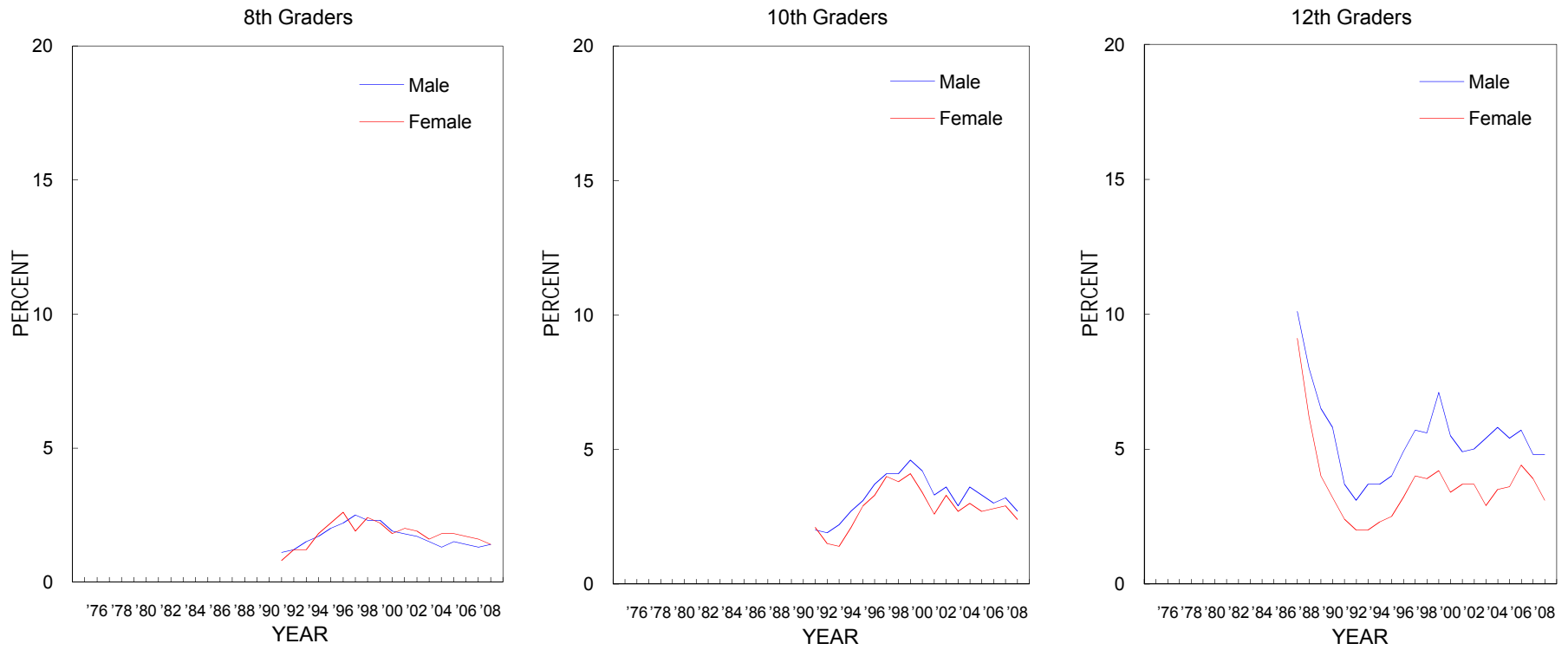
**FIGURE 60**  
**Crack: Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

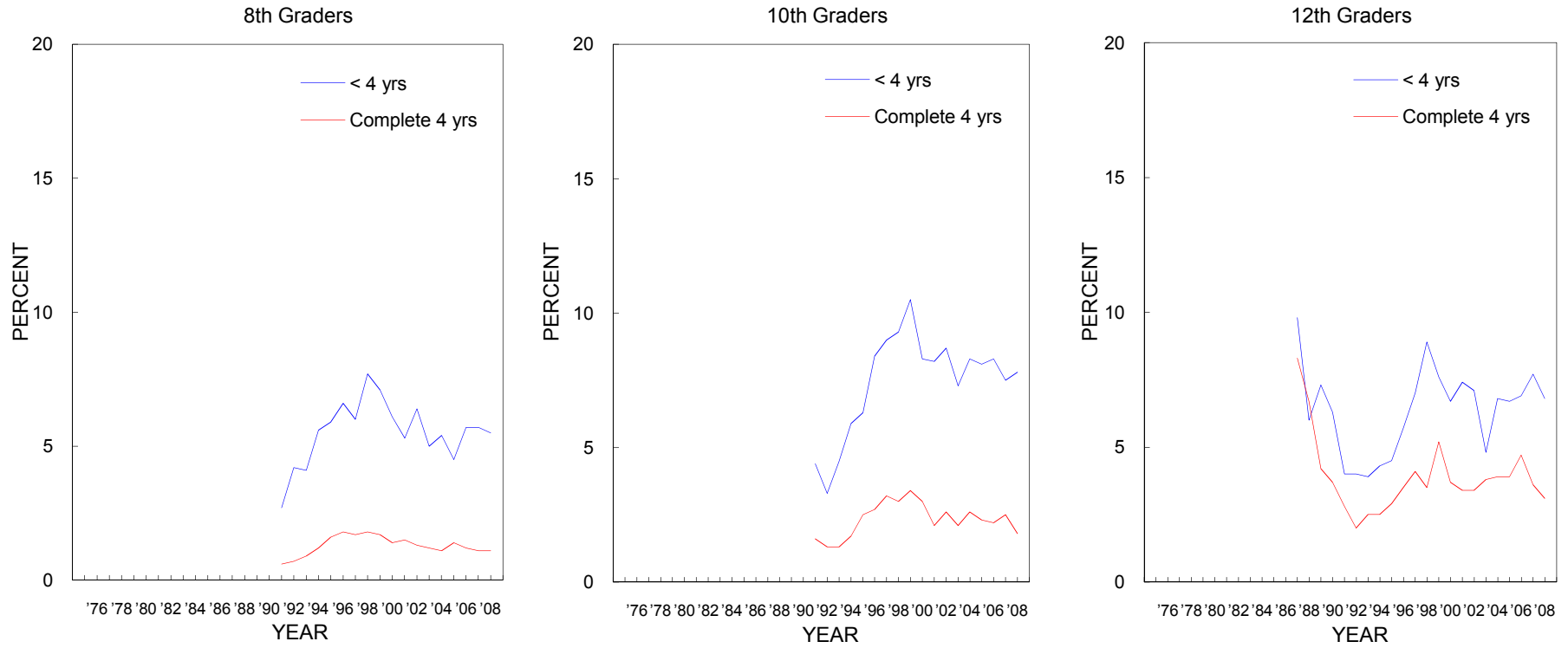
\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 61**  
**Other Cocaine: Trends in Annual Prevalence by Gender**



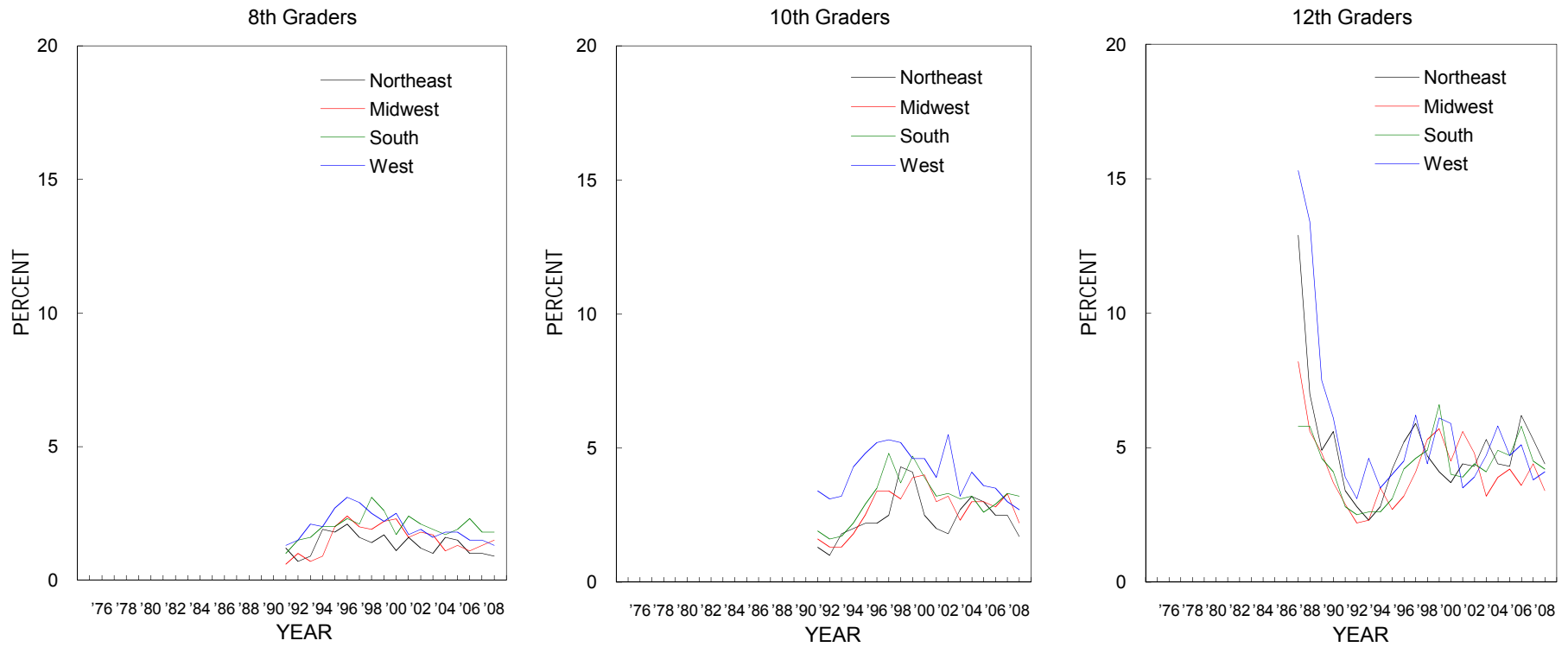
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 62**  
**Other Cocaine: Trends in Annual Prevalence by College Plans**



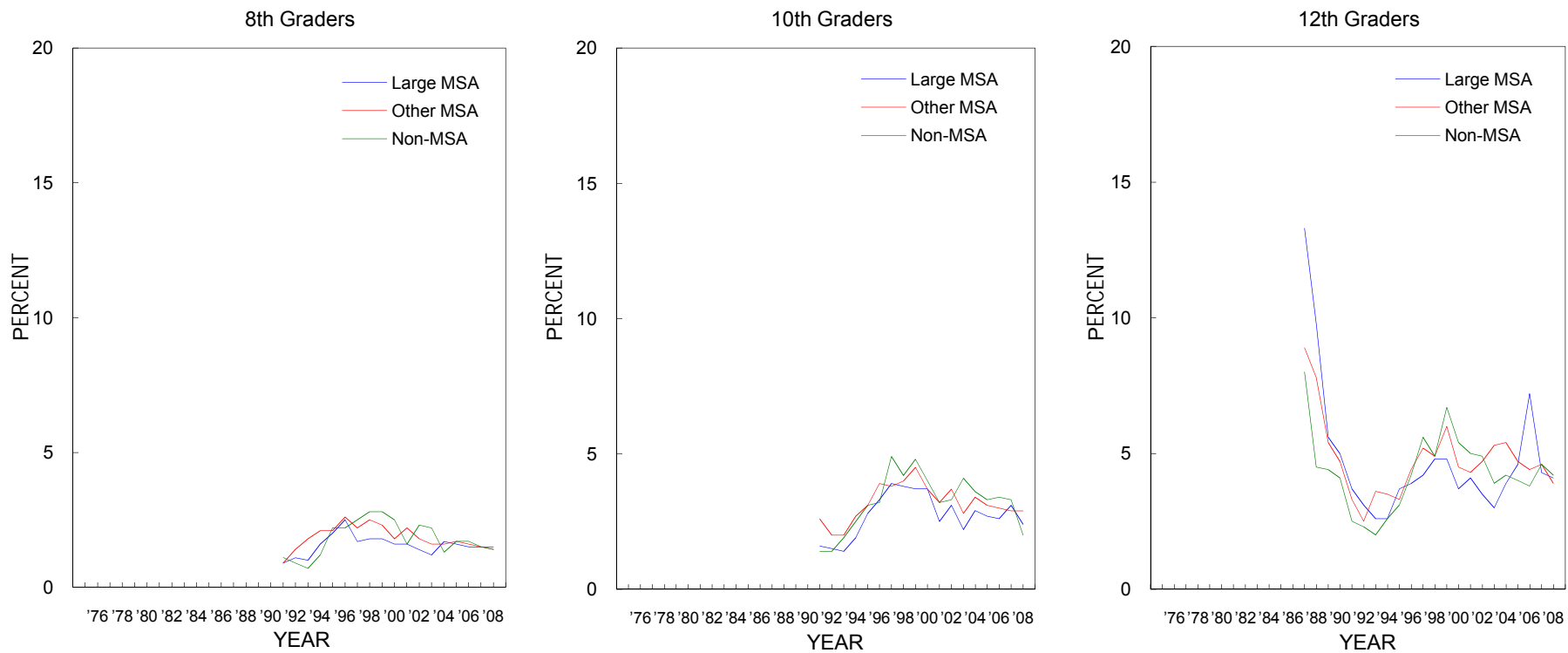
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 63**  
**Other Cocaine: Trends in Annual Prevalence by Region**



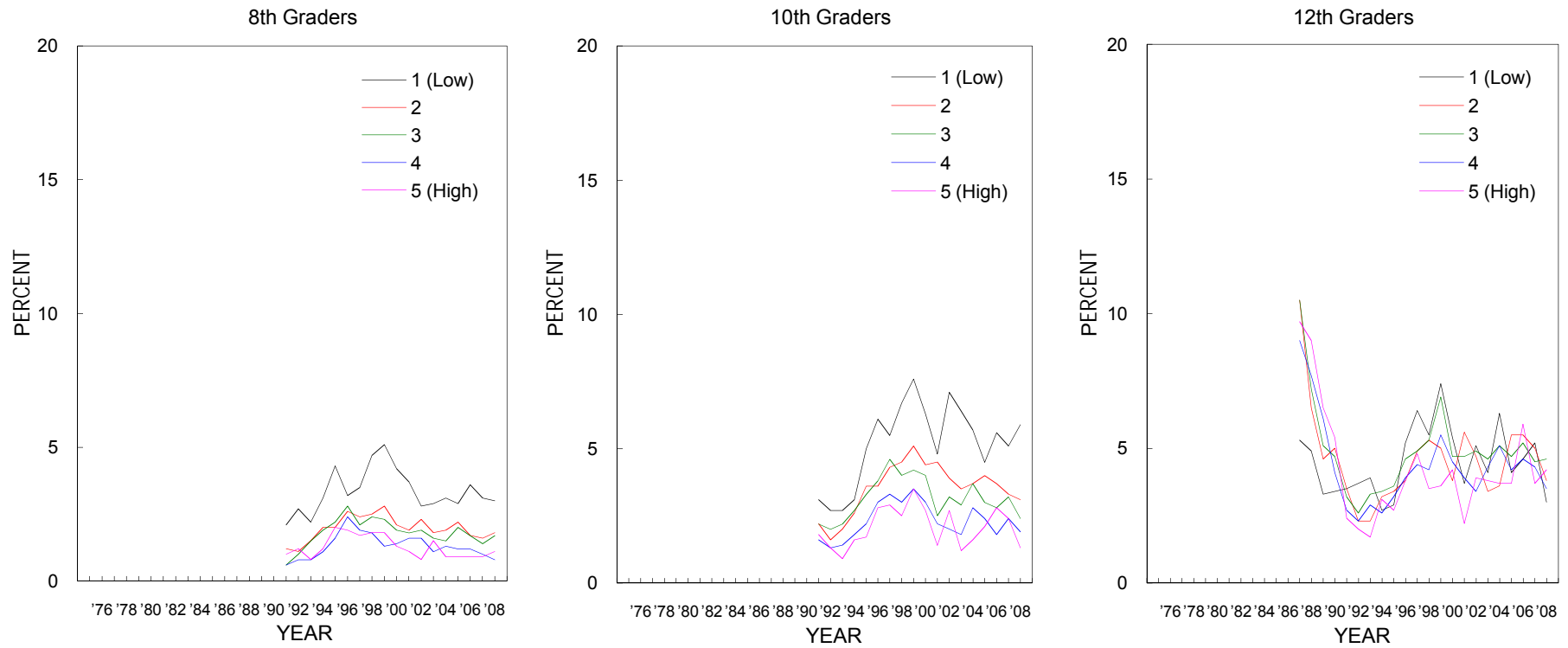
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 64**  
**Other Cocaine: Trends in Annual Prevalence by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

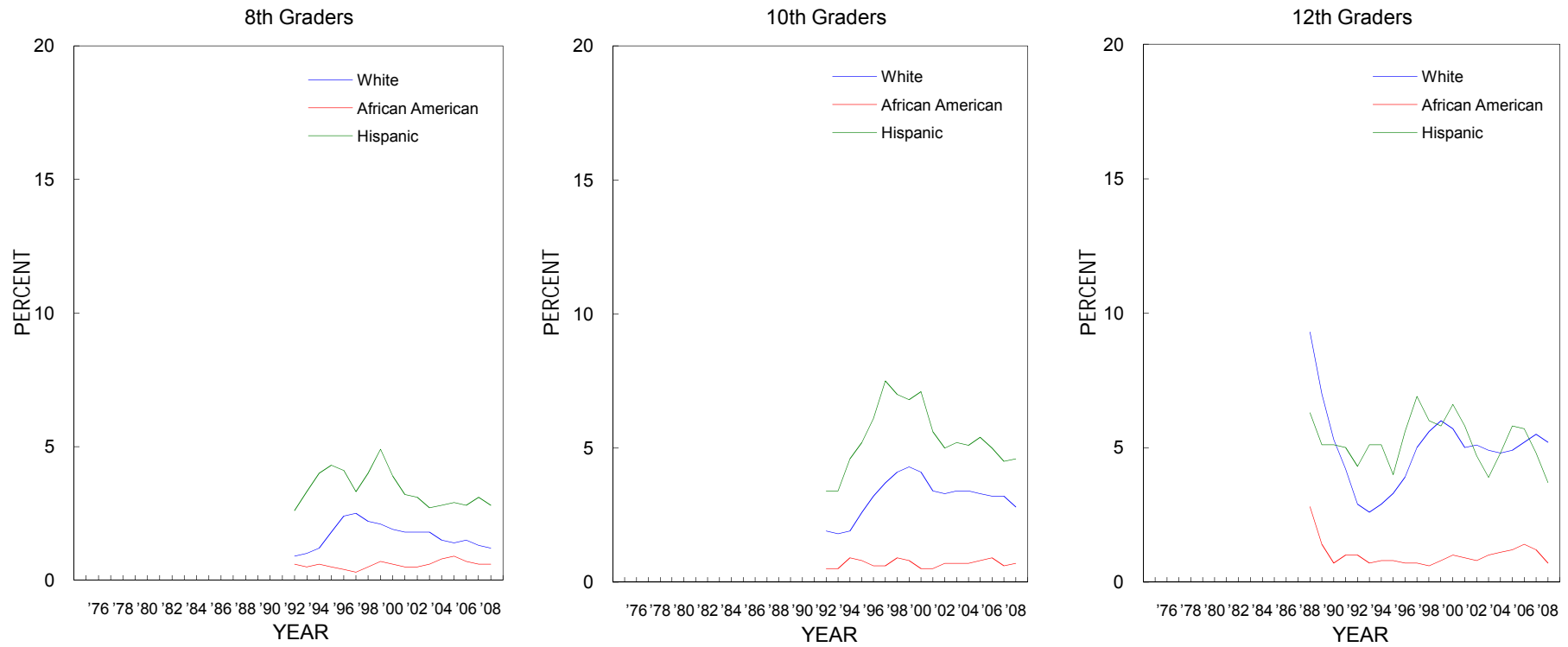
**FIGURE 65**  
**Other Cocaine: Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.



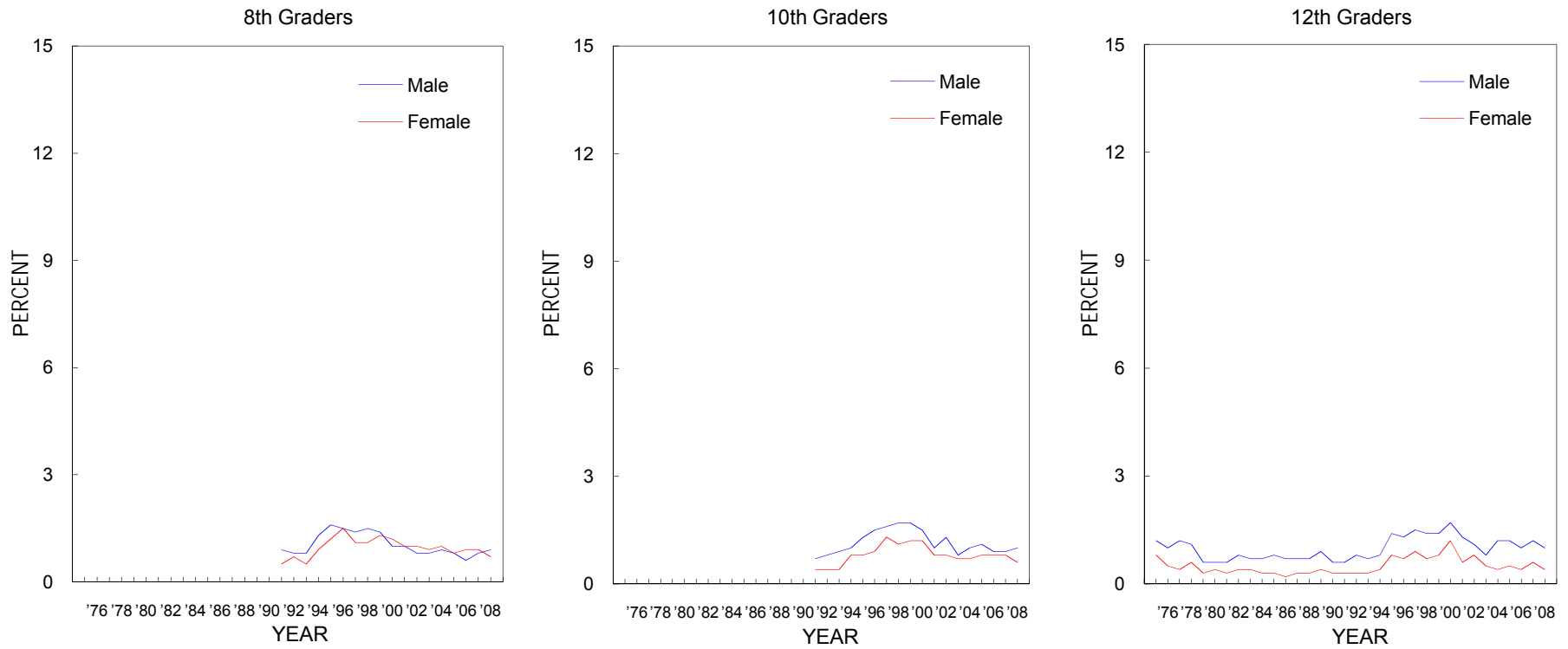
**FIGURE 66**  
**Other Cocaine: Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

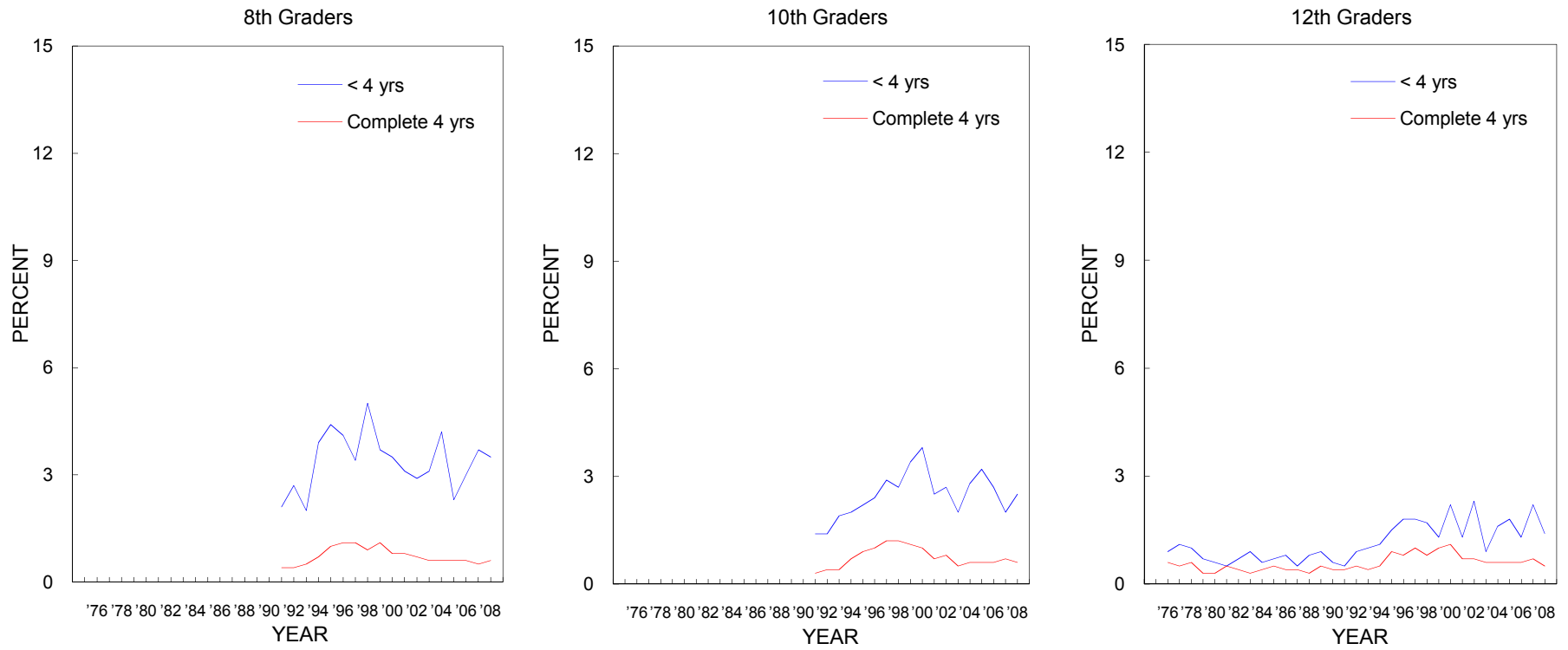
\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 67**  
**Heroin: Trends in Annual Prevalence by Gender**



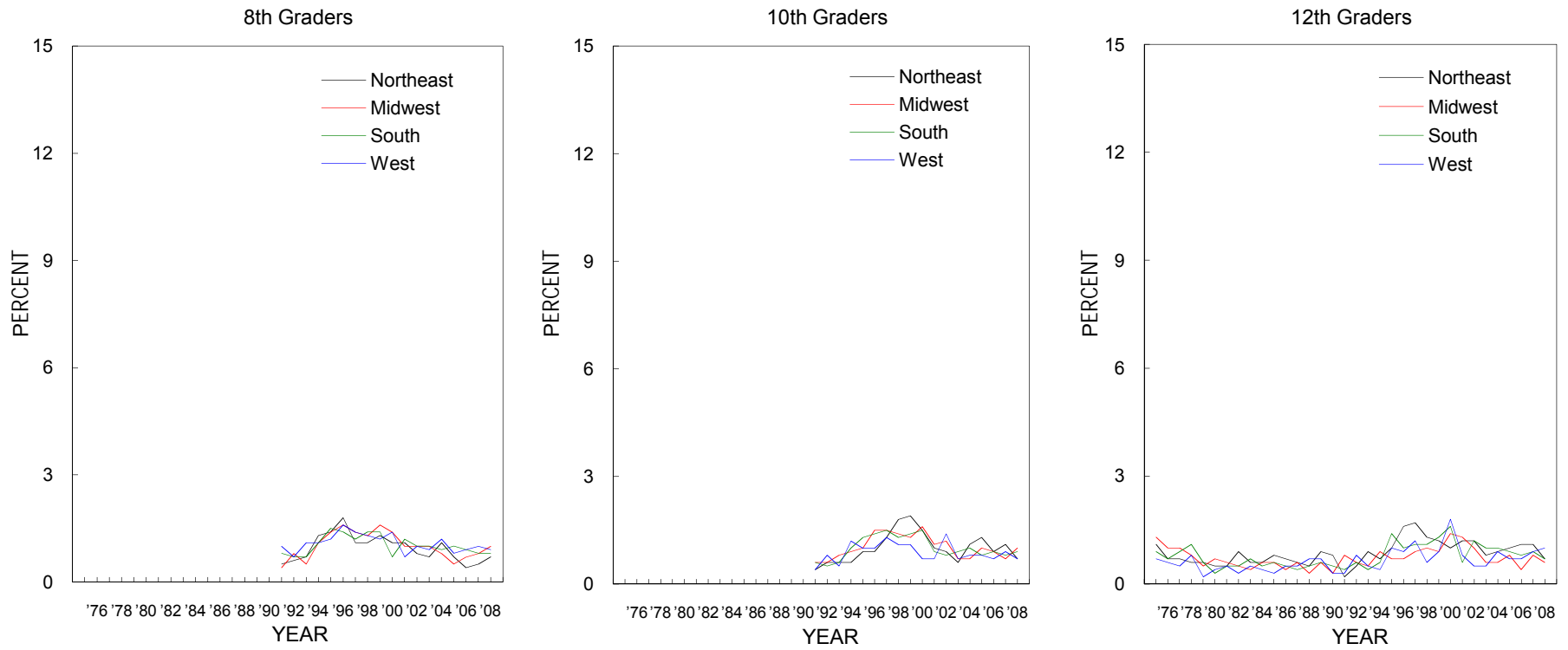
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 68**  
**Heroin: Trends in Annual Prevalence by College Plans**



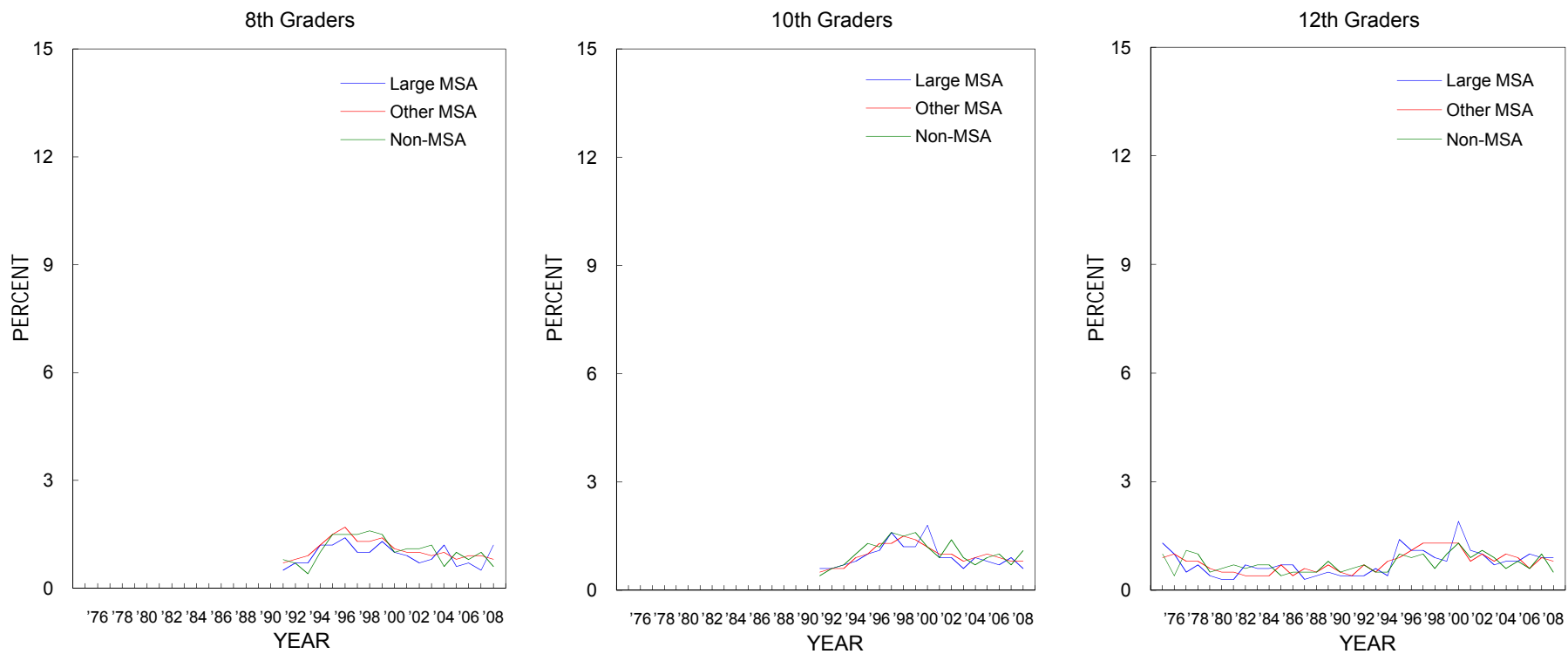
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 69**  
**Heroin: Trends in Annual Prevalence by Region**



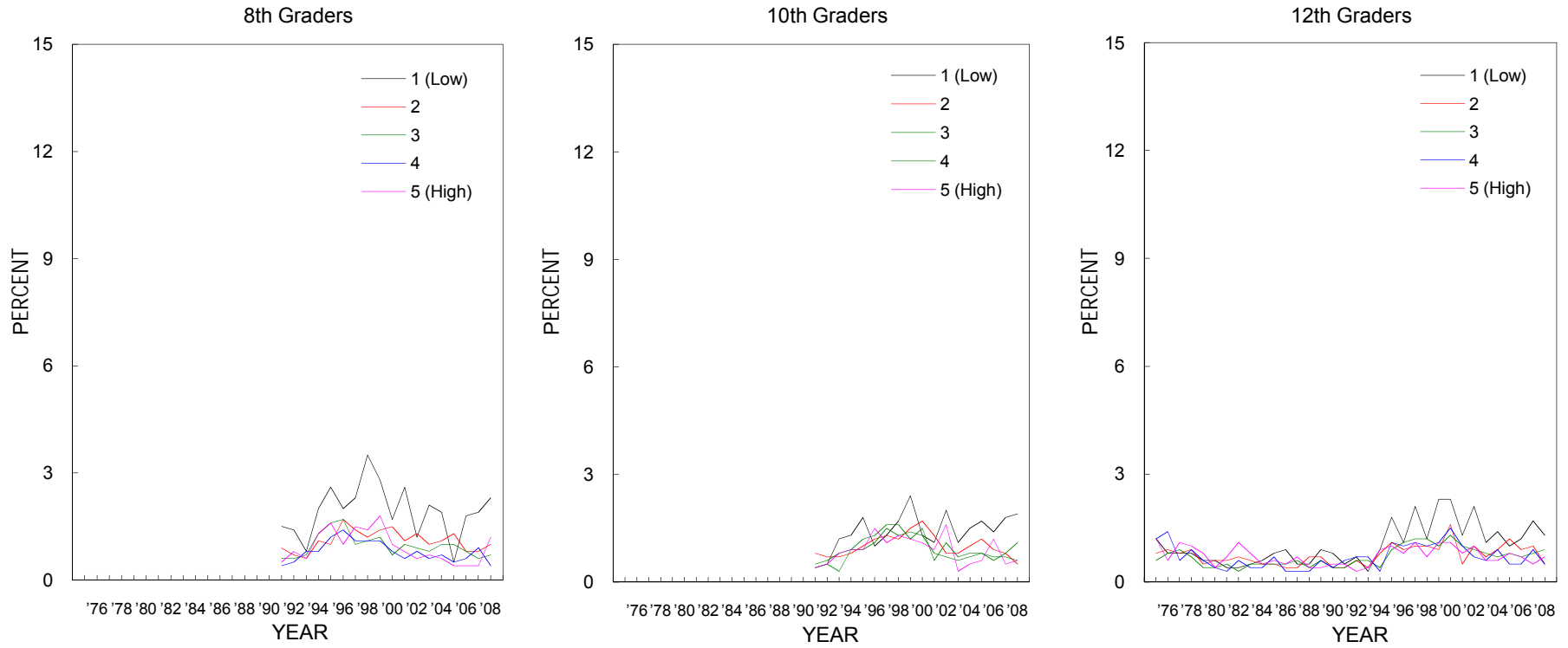
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 70**  
**Heroin: Trends in Annual Prevalence by Population Density**



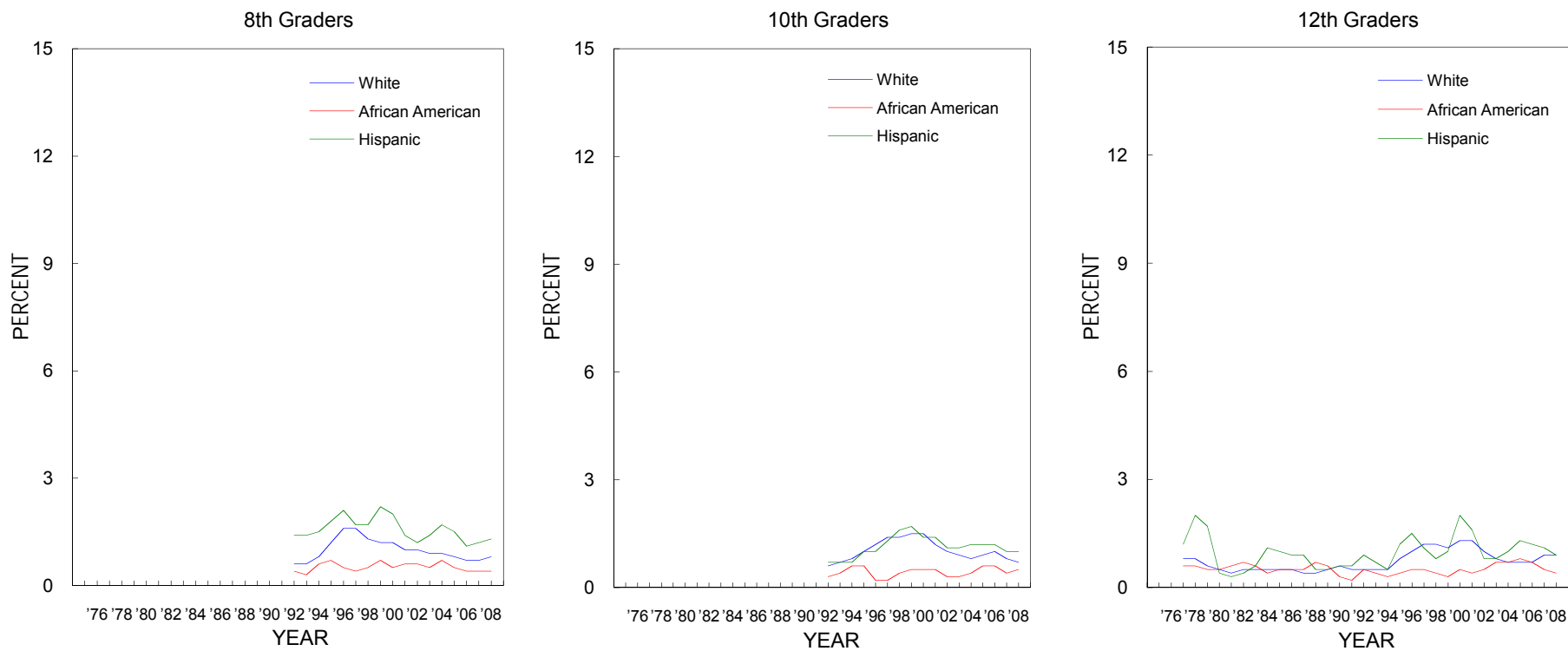
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 71**  
**Heroin: Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

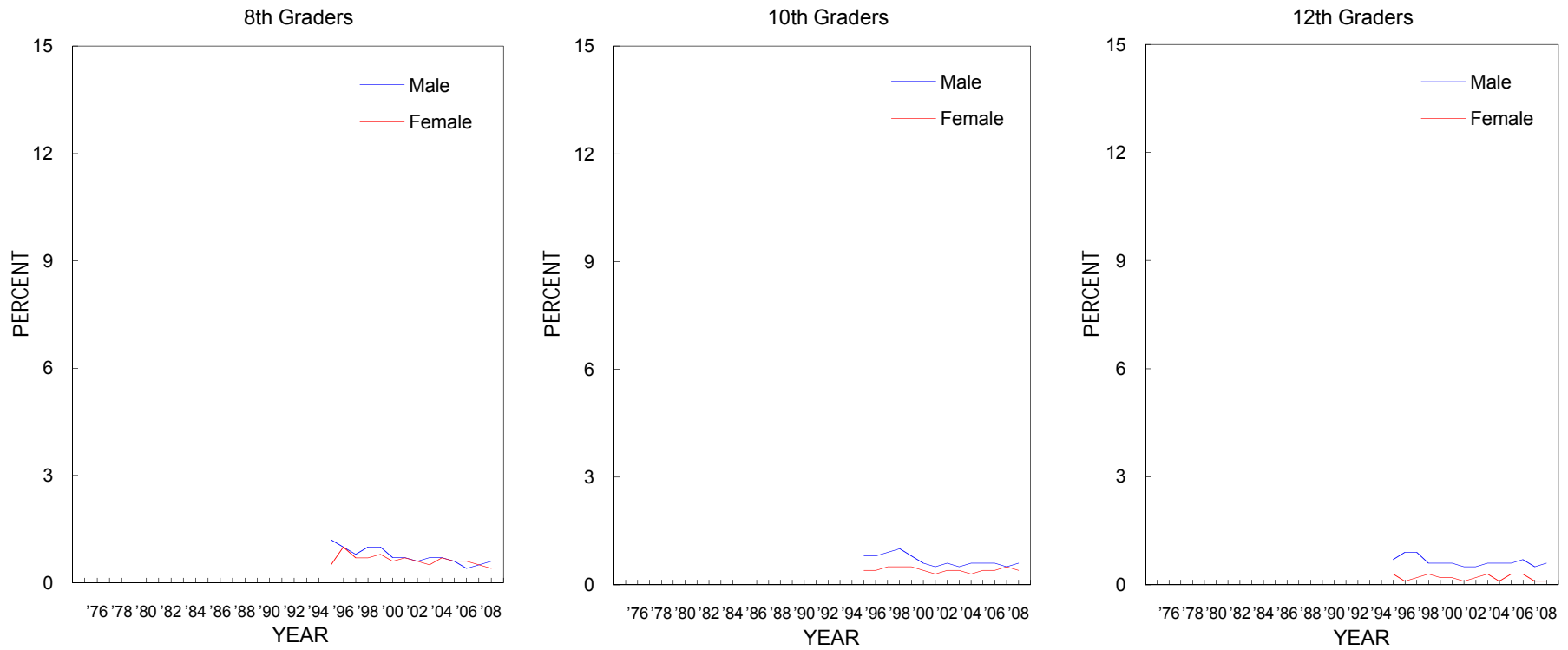
**FIGURE 72**  
**Heroin: Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

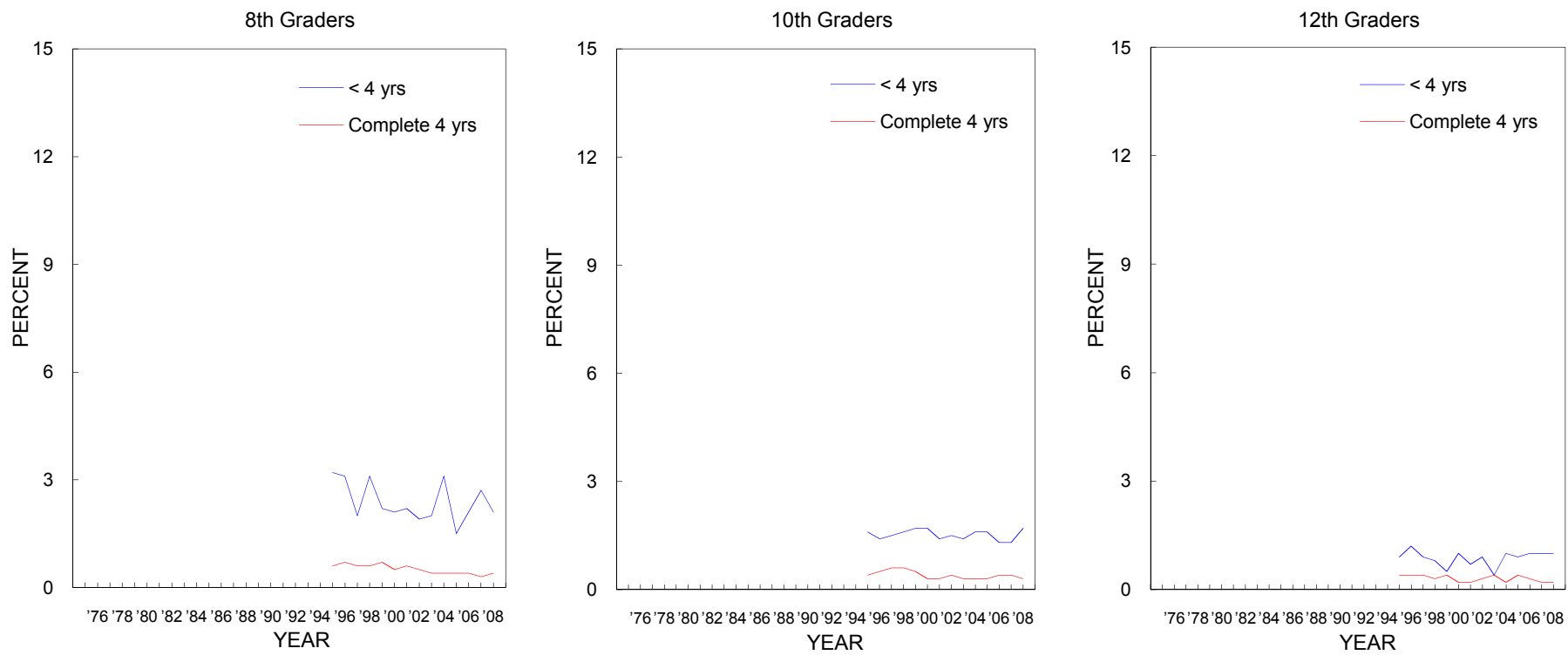
**FIGURE 73**  
**Heroin with a Needle: Trends in Annual Prevalence by Gender**



Source. The Monitoring the Future study, the University of Michigan.

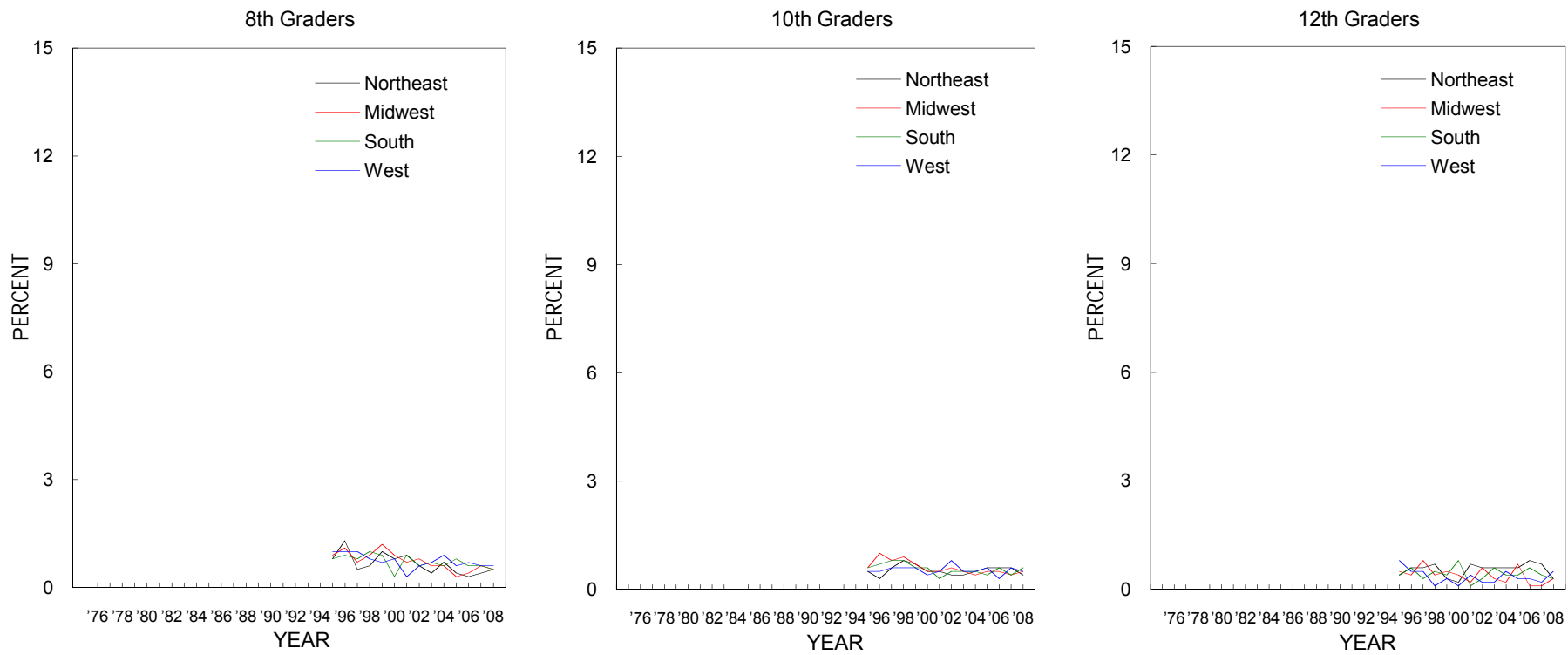


**FIGURE 74**  
**Heroin with a Needle: Trends in Annual Prevalence by College Plans**



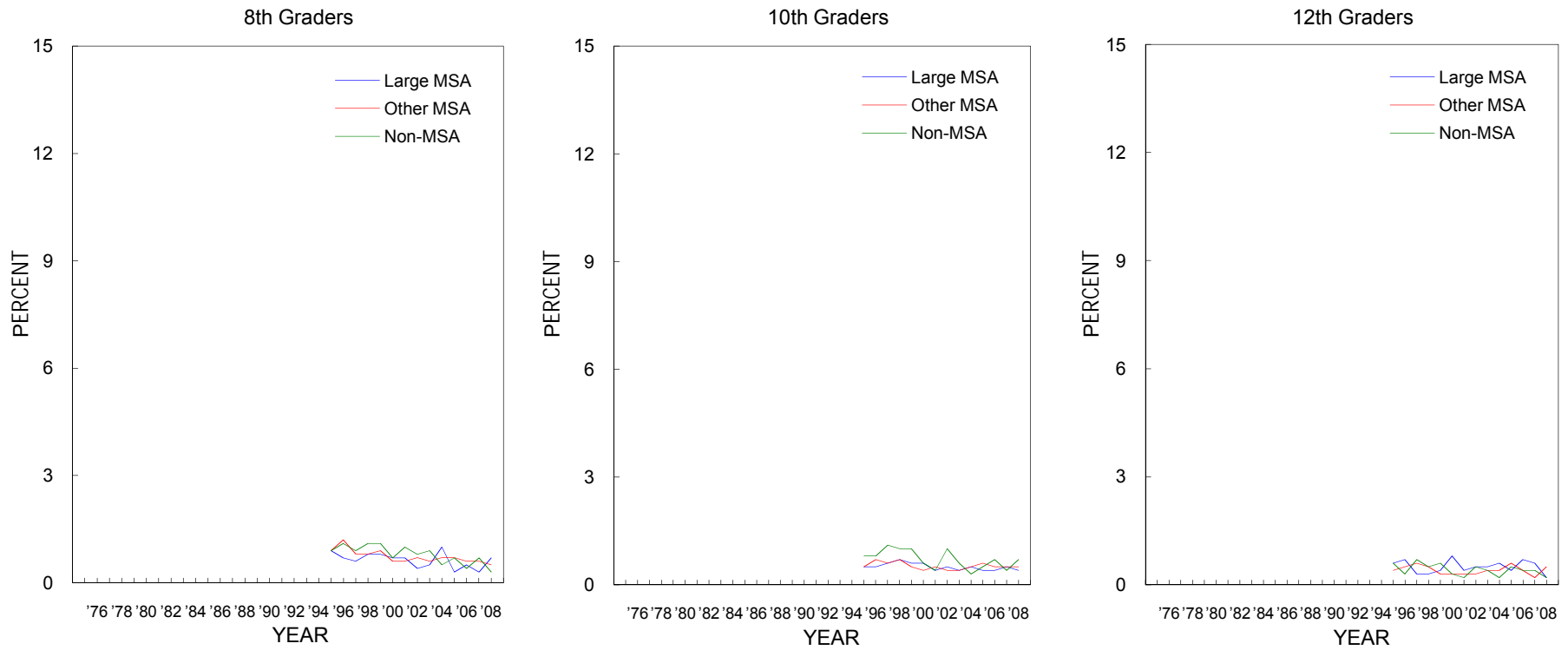
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 75**  
**Heroin with a Needle: Trends in Annual Prevalence by Region**



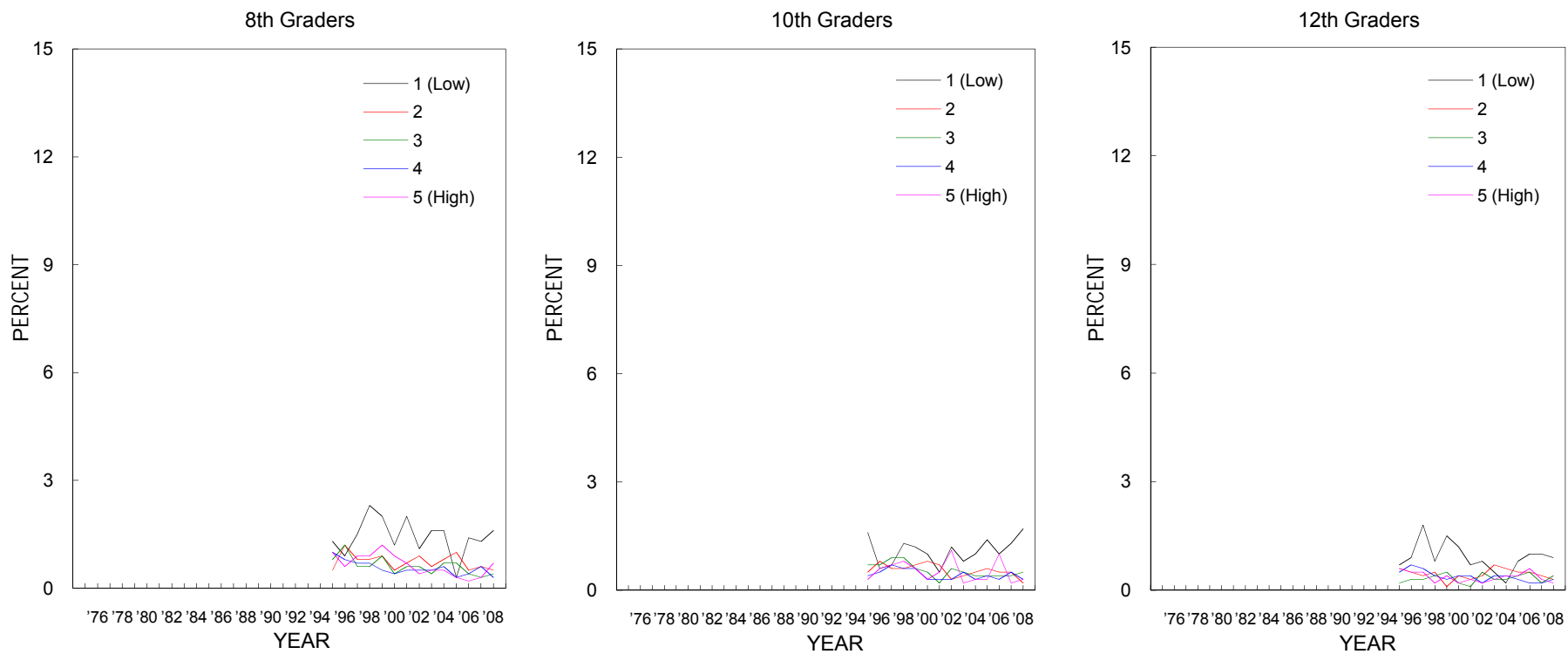
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 76**  
**Heroin with a Needle: Trends in Annual Prevalence by Population Density**



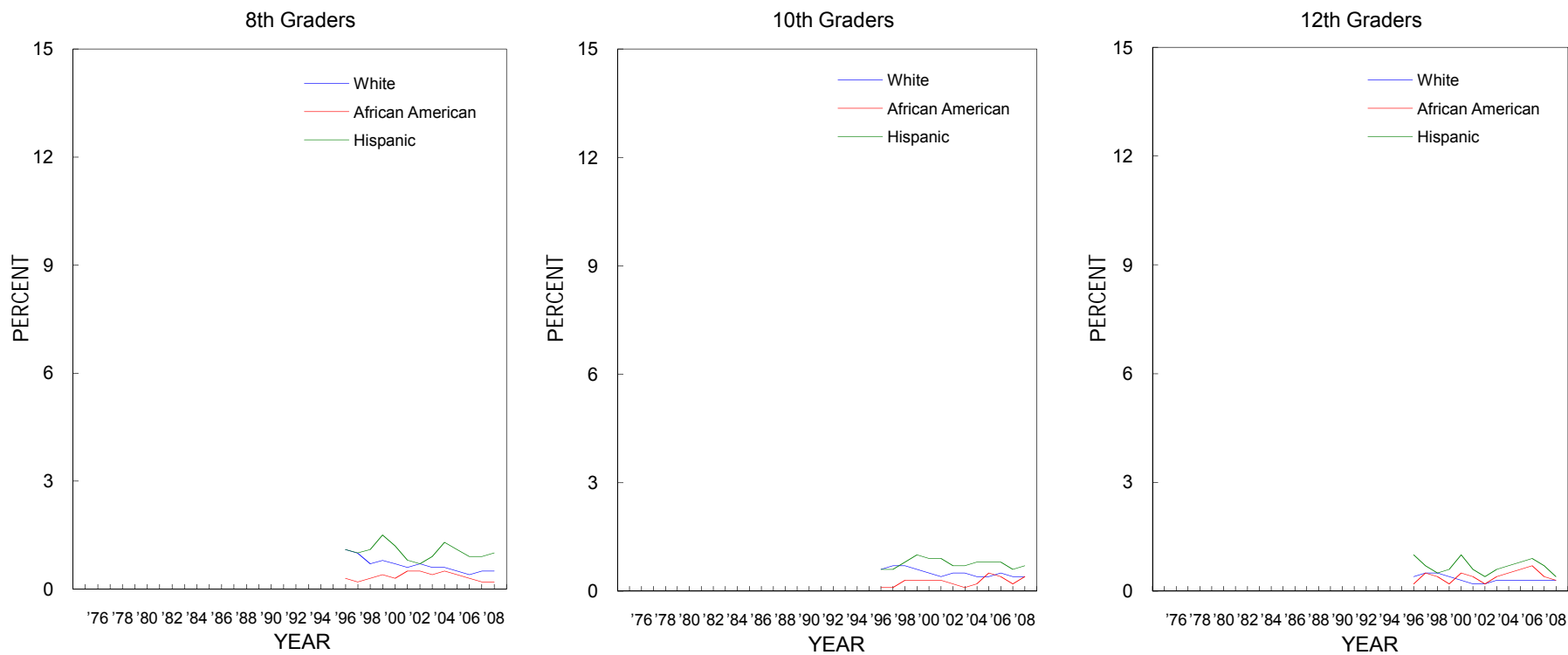
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 77**  
**Heroin with a Needle: Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

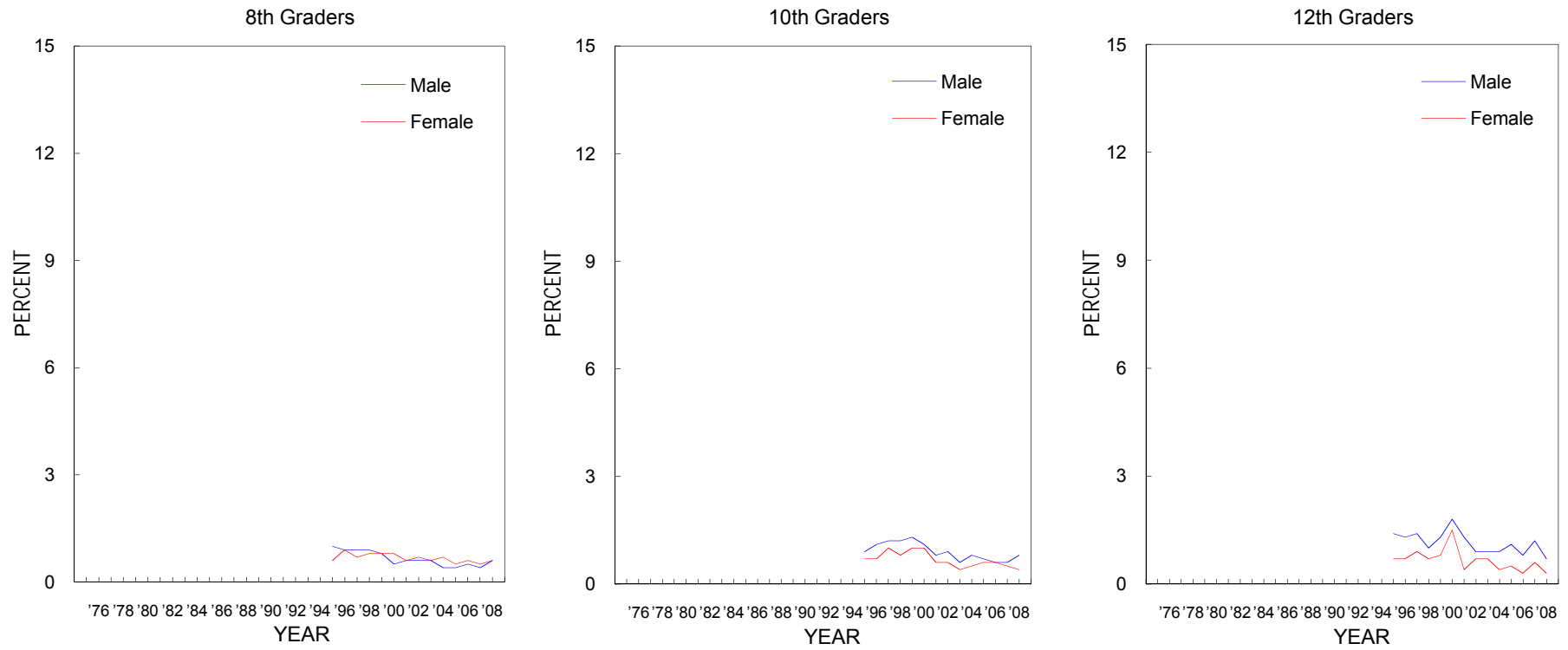
**FIGURE 78**  
**Heroin with a Needle: Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

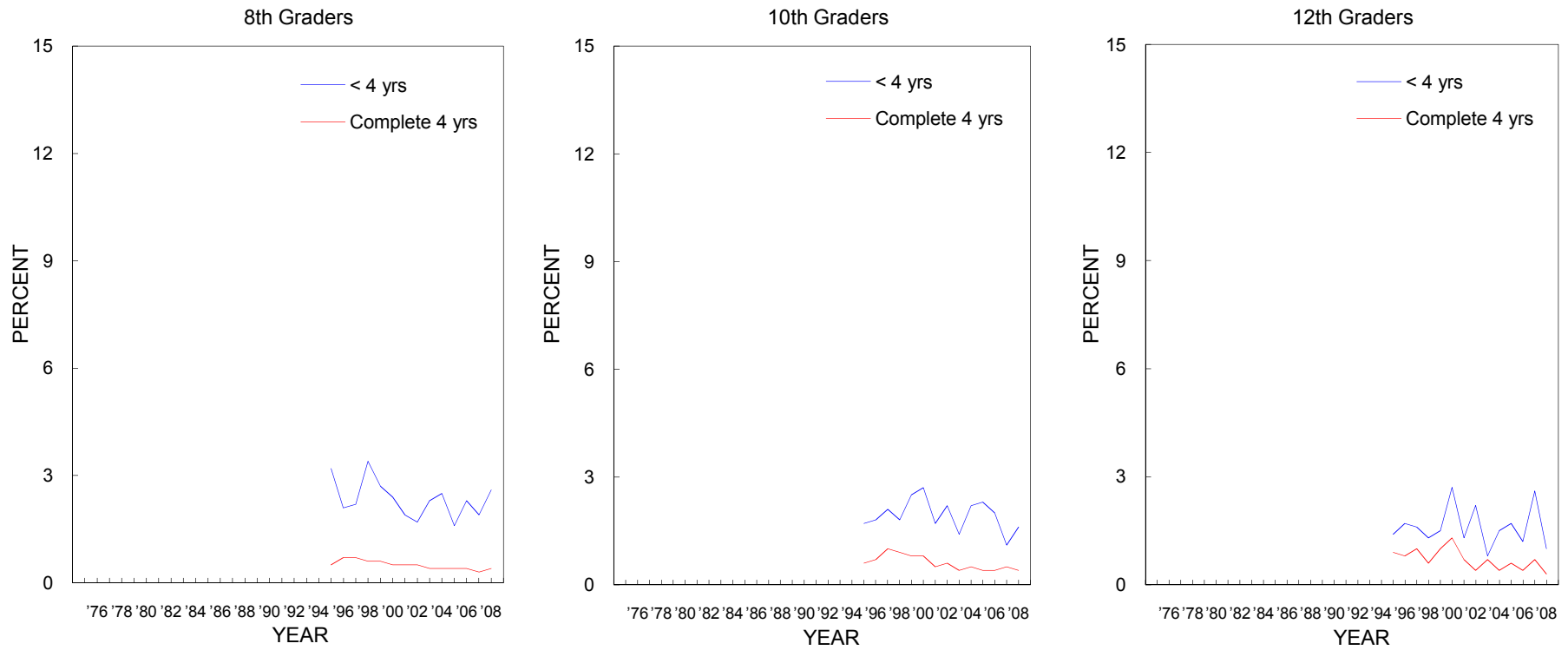
\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 79**  
**Heroin without a Needle: Trends in Annual Prevalence by Gender**



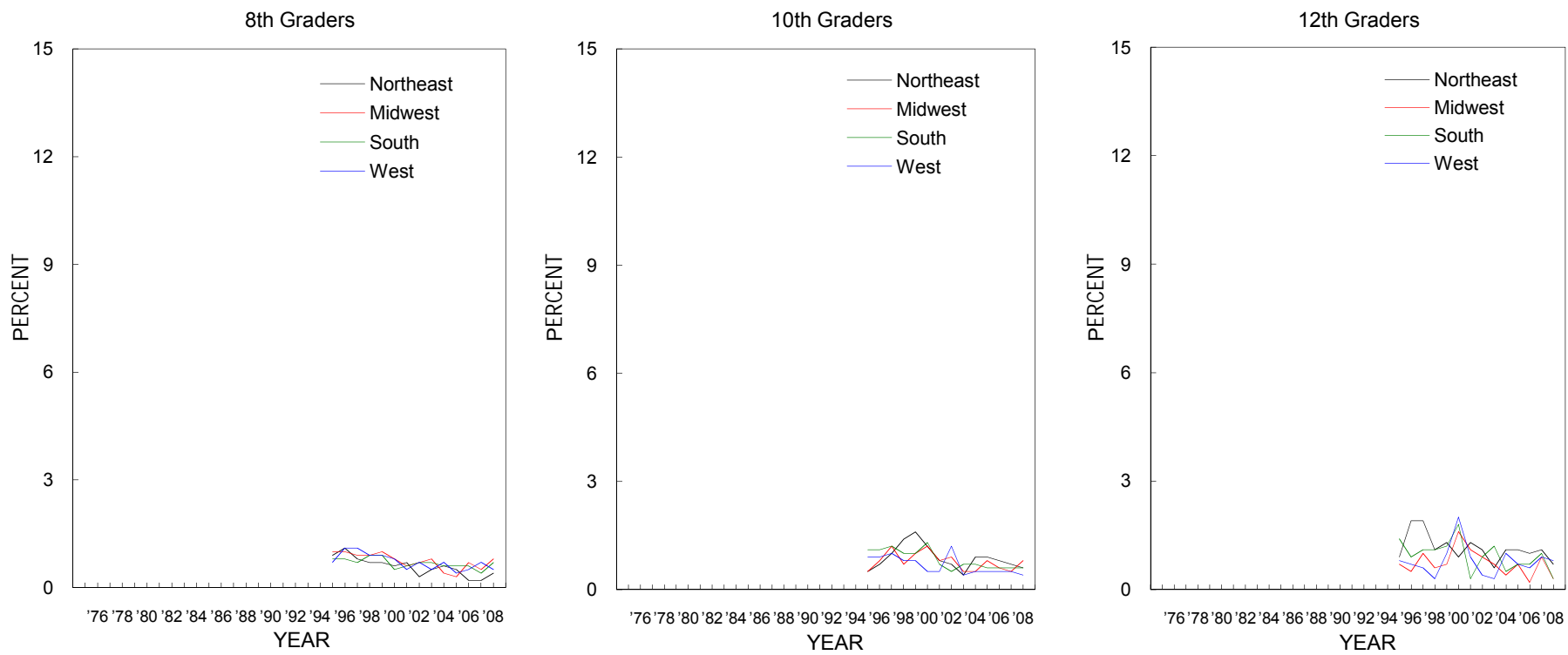
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 80**  
**Heroin without a Needle: Trends in Annual Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

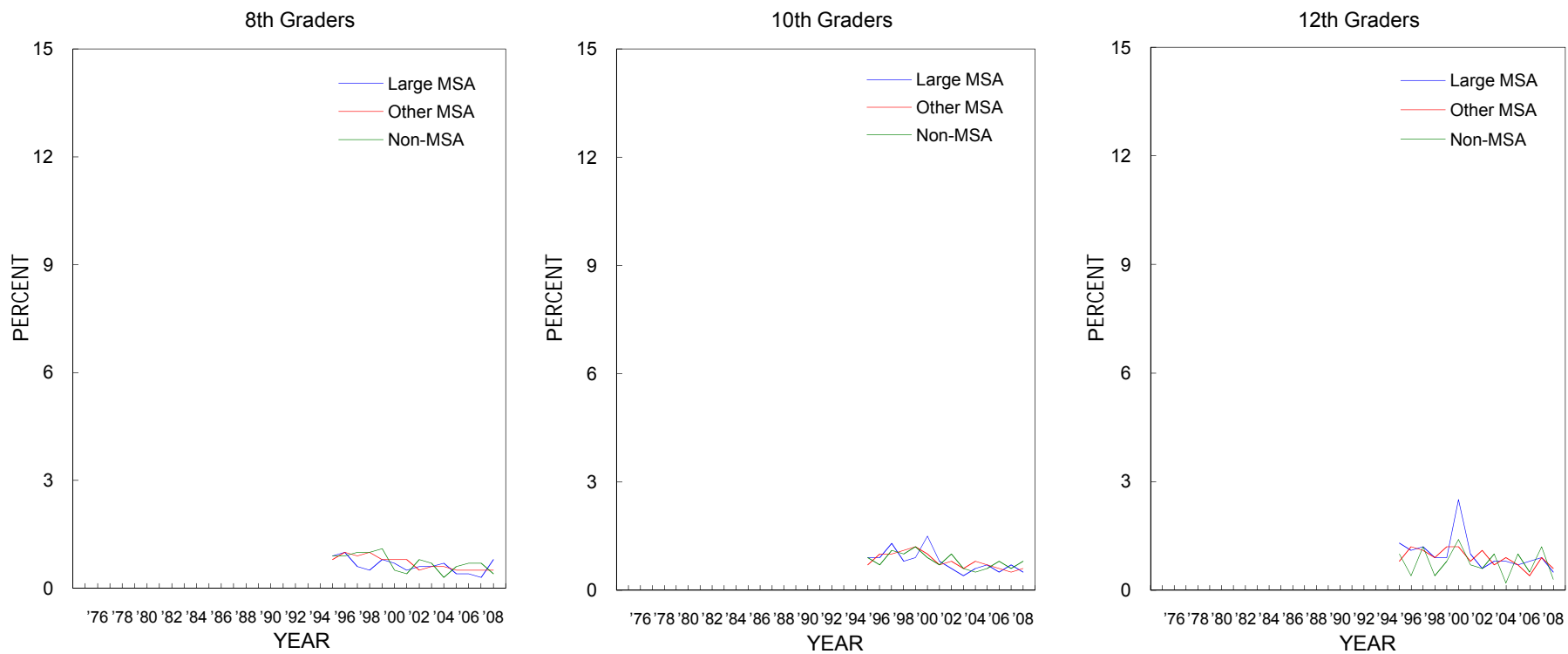
**FIGURE 81**  
**Heroin without a Needle: Trends in Annual Prevalence by Region**



Source. The Monitoring the Future study, the University of Michigan.

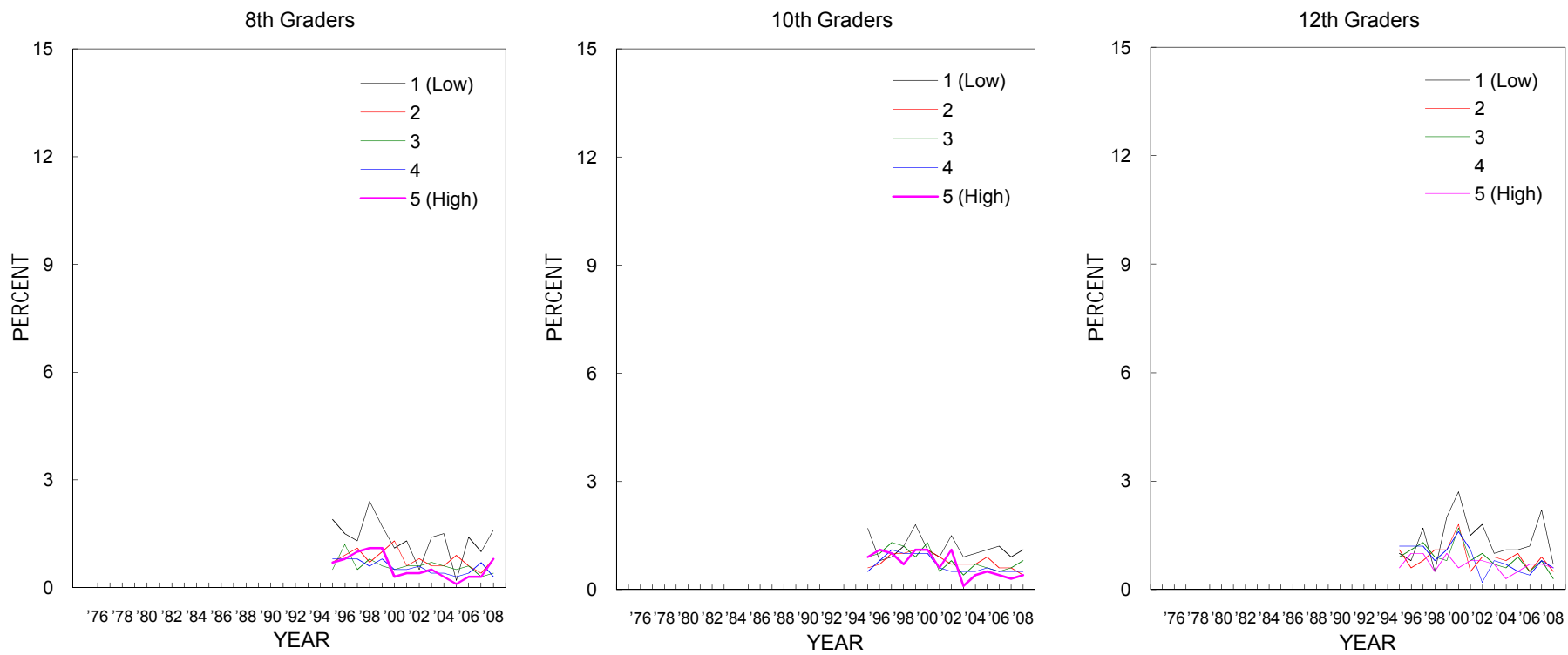


**FIGURE 82**  
**Heroin without a Needle: Trends in Annual Prevalence by Population Density**



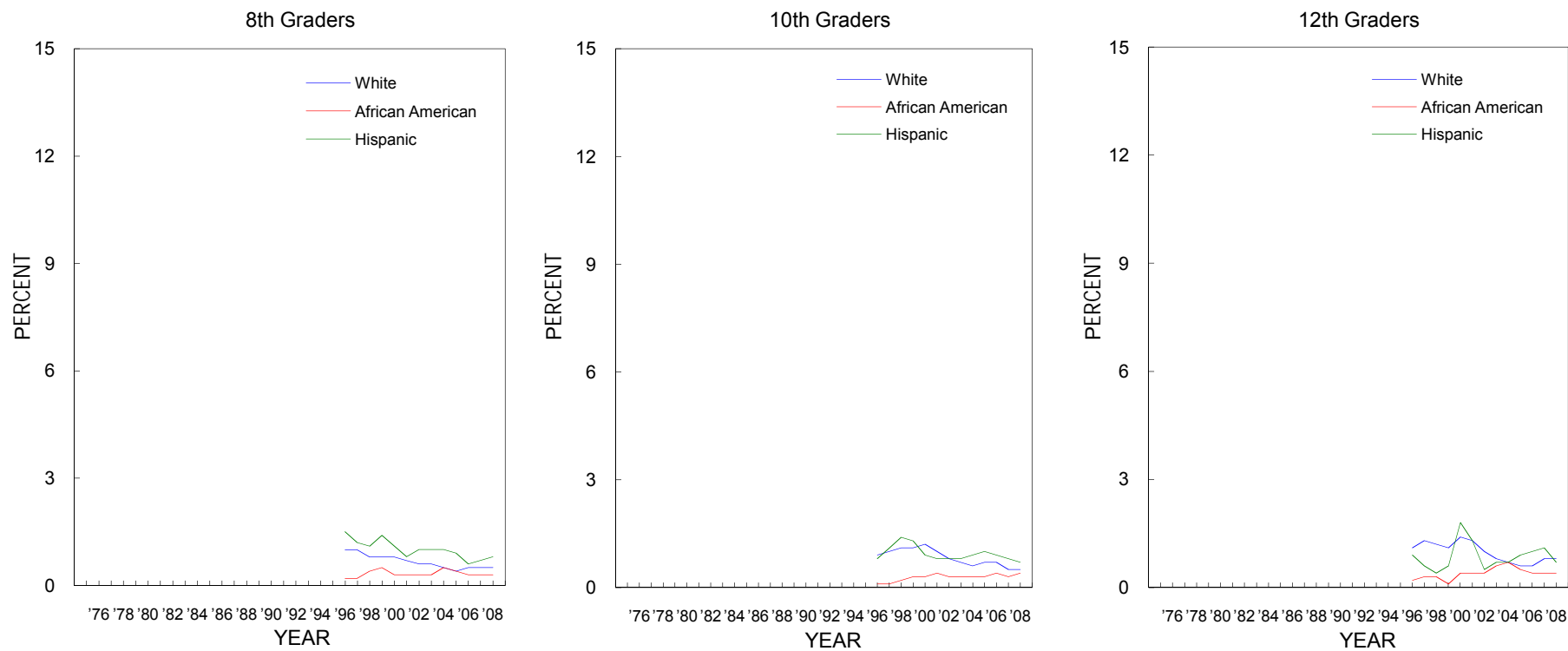
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 83**  
**Heroin without a Needle: Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

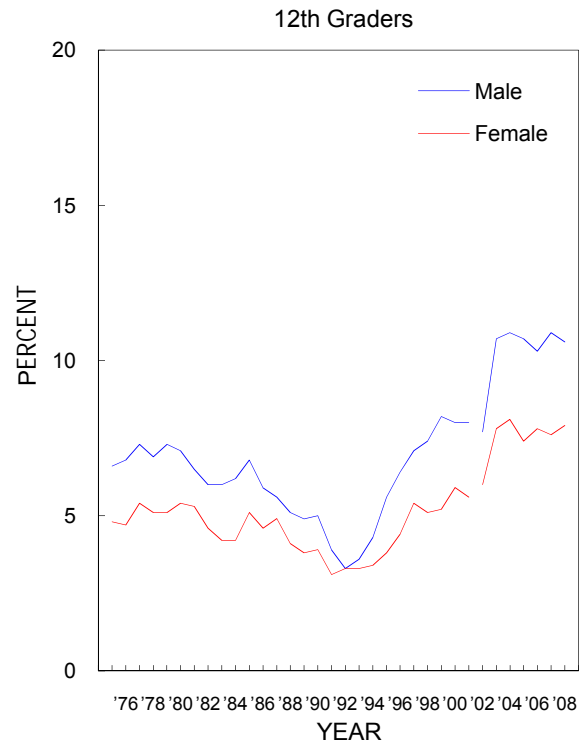
**FIGURE 84**  
**Heroin without a Needle: Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

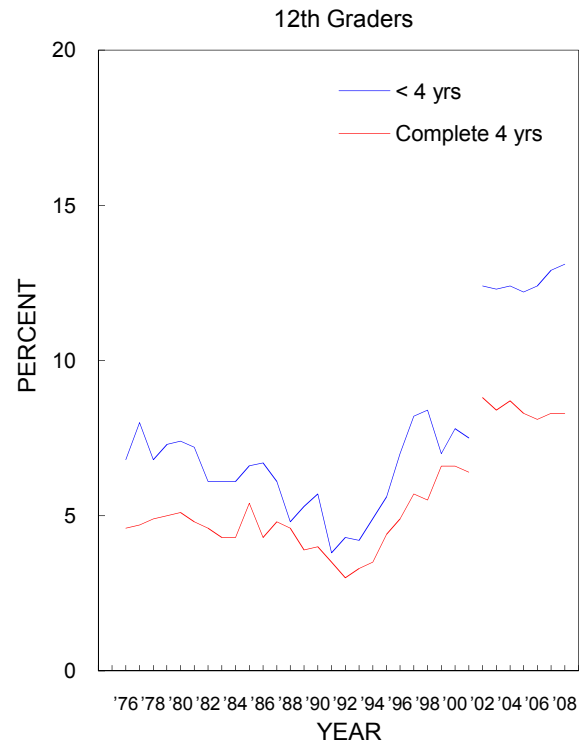
**FIGURE 85**  
**Narcotics other than Heroin:\* Trends in Annual Prevalence by Gender**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2002, a revised set of questions on use of narcotics other than heroin was introduced. Refer to corresponding tables for further details.

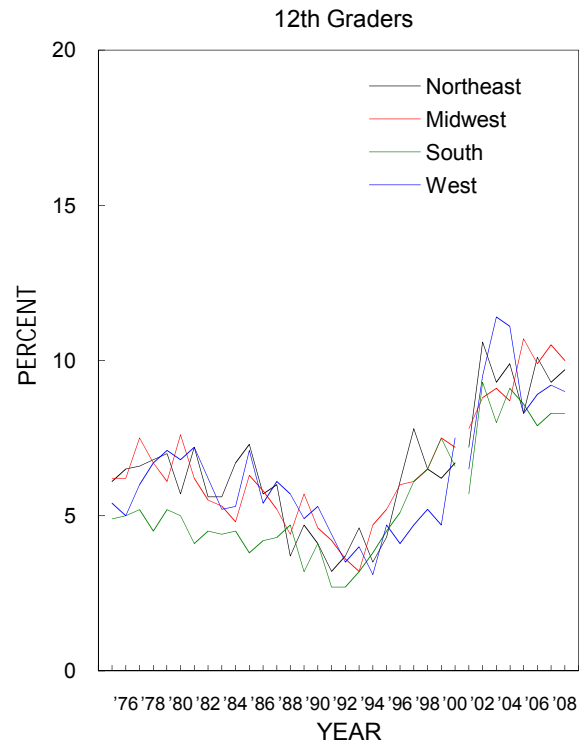
**FIGURE 86**  
**Narcotics other than Heroin:\* Trends in Annual Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2002, a revised set of questions on use of narcotics other than heroin was introduced. Refer to corresponding tables for further details.

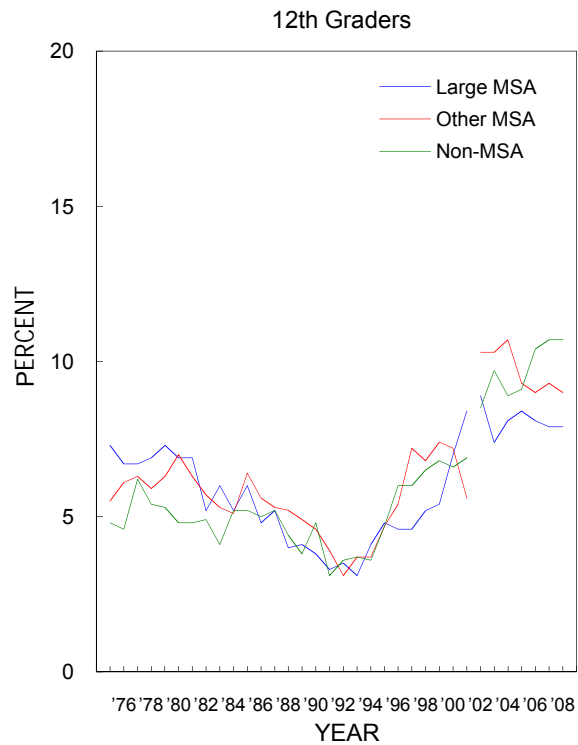
**FIGURE 87**  
**Narcotics other than Heroin:\* Trends in Annual Prevalence by Region**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2002, a revised set of questions on use of narcotics other than heroin was introduced. Refer to corresponding tables for further details.

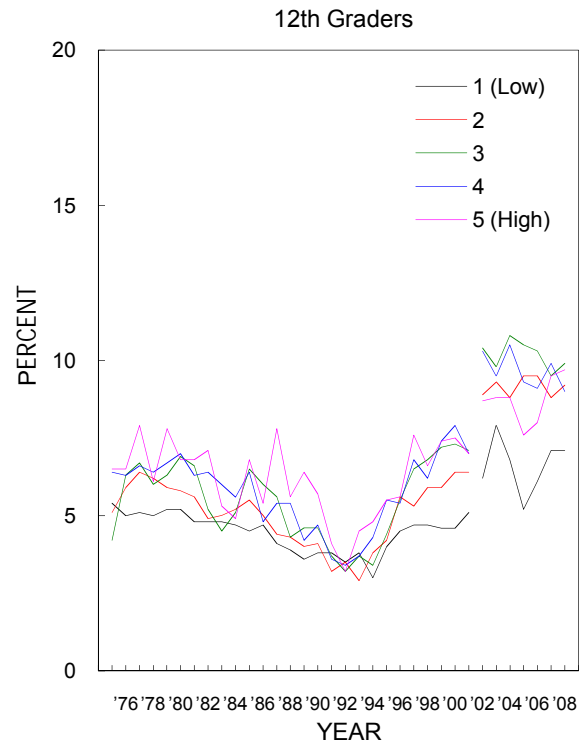
**FIGURE 88**  
**Narcotics other than Heroin:\* Trends in Annual Prevalence by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2002, a revised set of questions on use of narcotics other than heroin was introduced. Refer to corresponding tables for further details.

**FIGURE 89**  
**Narcotics other than Heroin:\* Trends in Annual Prevalence by Parents' Average Education**

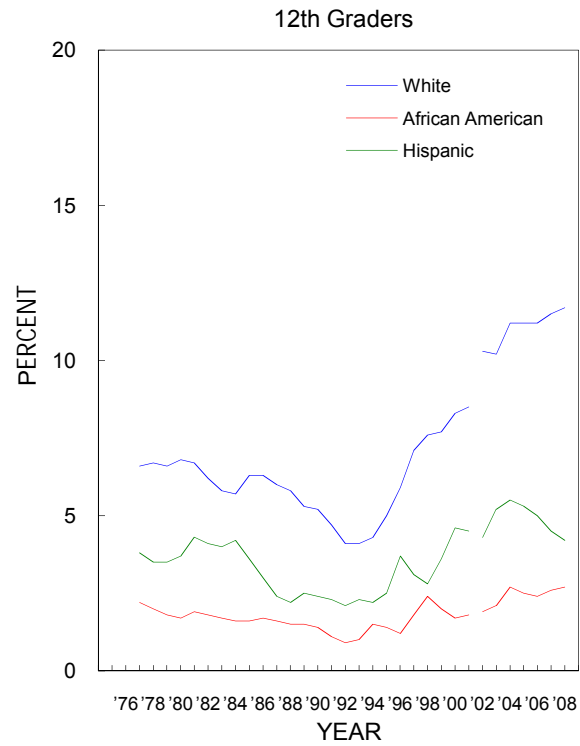


Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2002, a revised set of questions on use of narcotics other than heroin was introduced. Refer to corresponding tables for further details.



**FIGURE 90**  
**Narcotics other than Heroin:\* Trends in Annual Prevalence by Race/Ethnicity\*\***

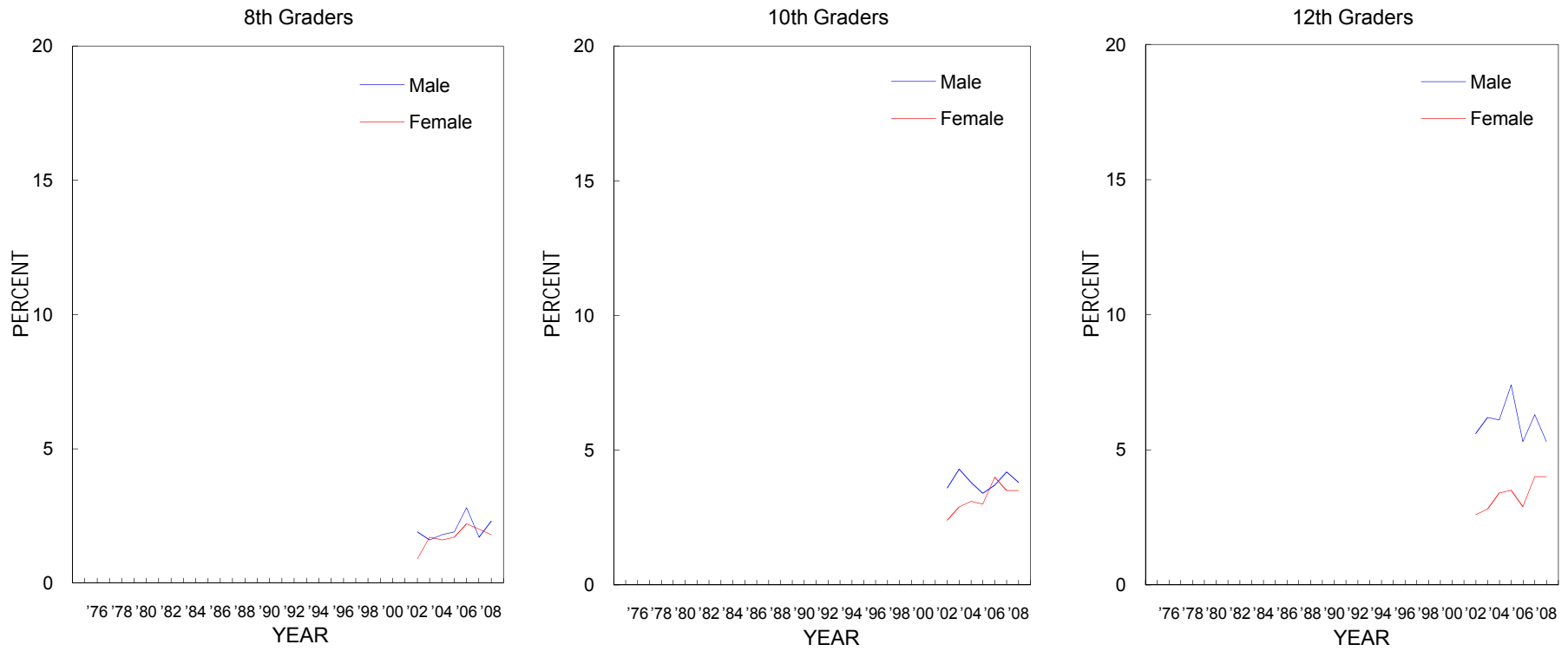


Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2002, a revised set of questions on use of narcotics other than heroin was introduced. Refer to corresponding tables for further details.

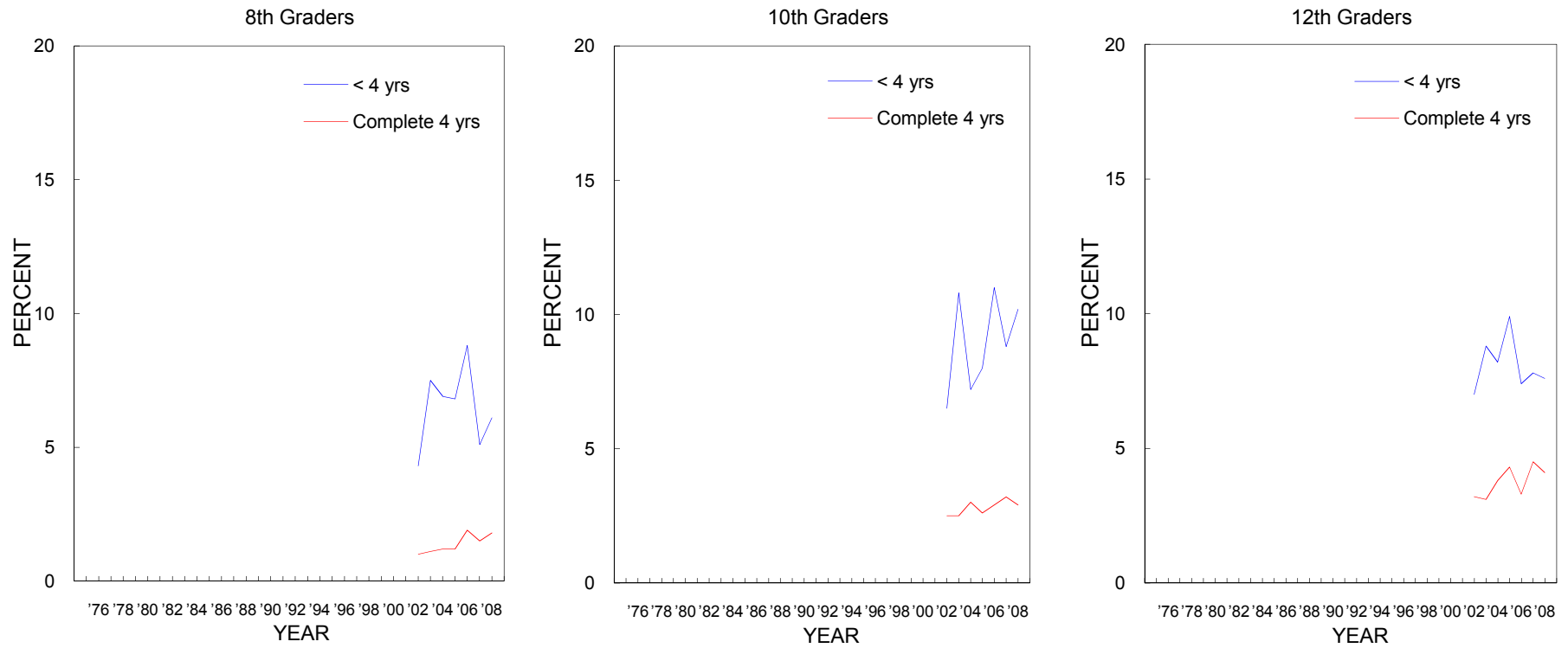
\*\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 91**  
**OxyContin: Trends in Annual Prevalence by Gender**



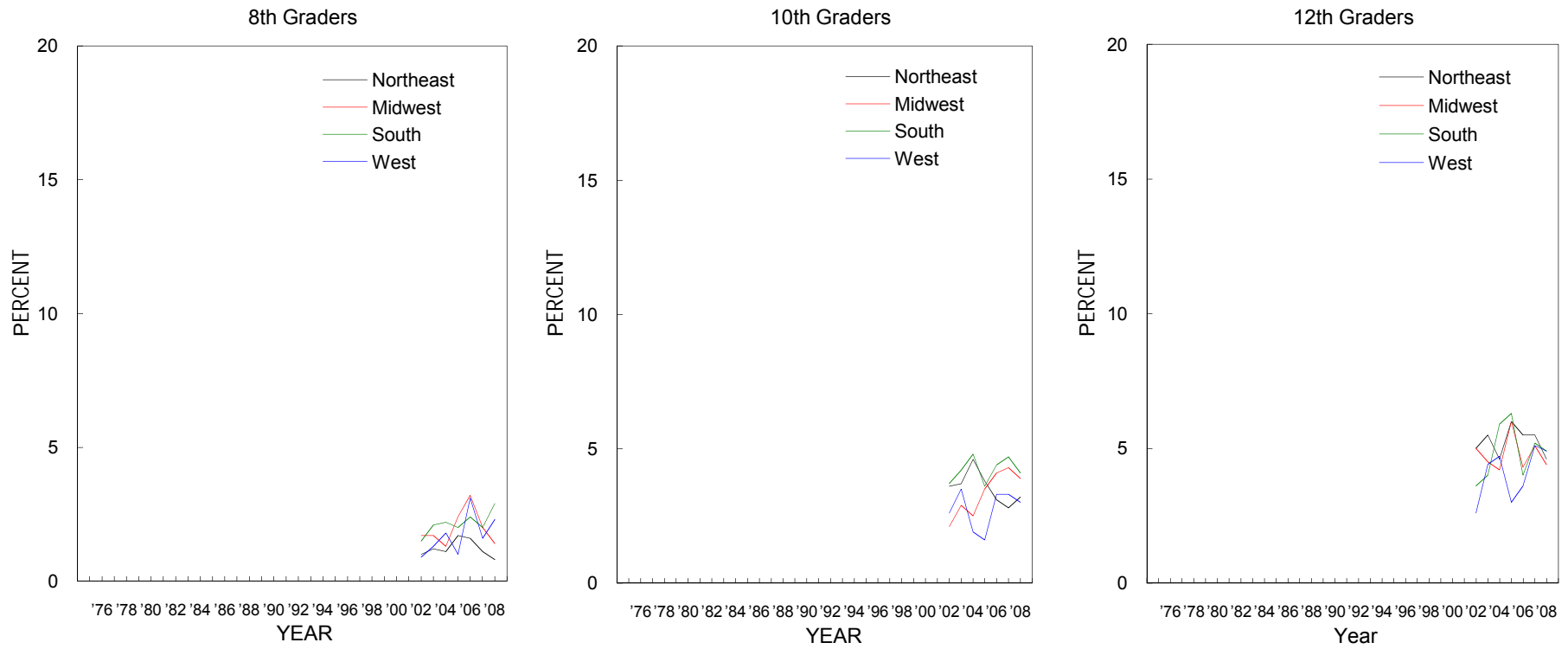
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 92**  
**OxyContin: Trends in Annual Prevalence by College Plans**



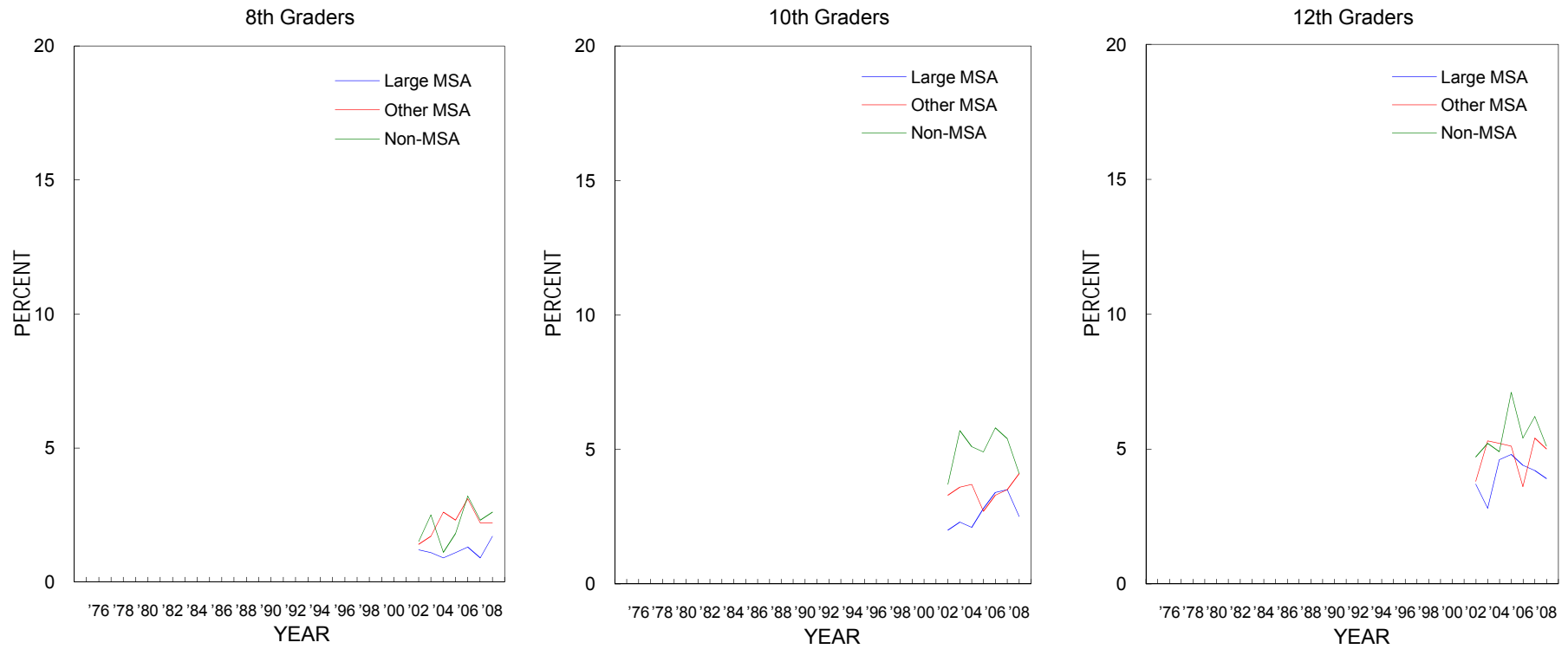
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 93**  
**OxyContin: Trends in Annual Prevalence by Region**



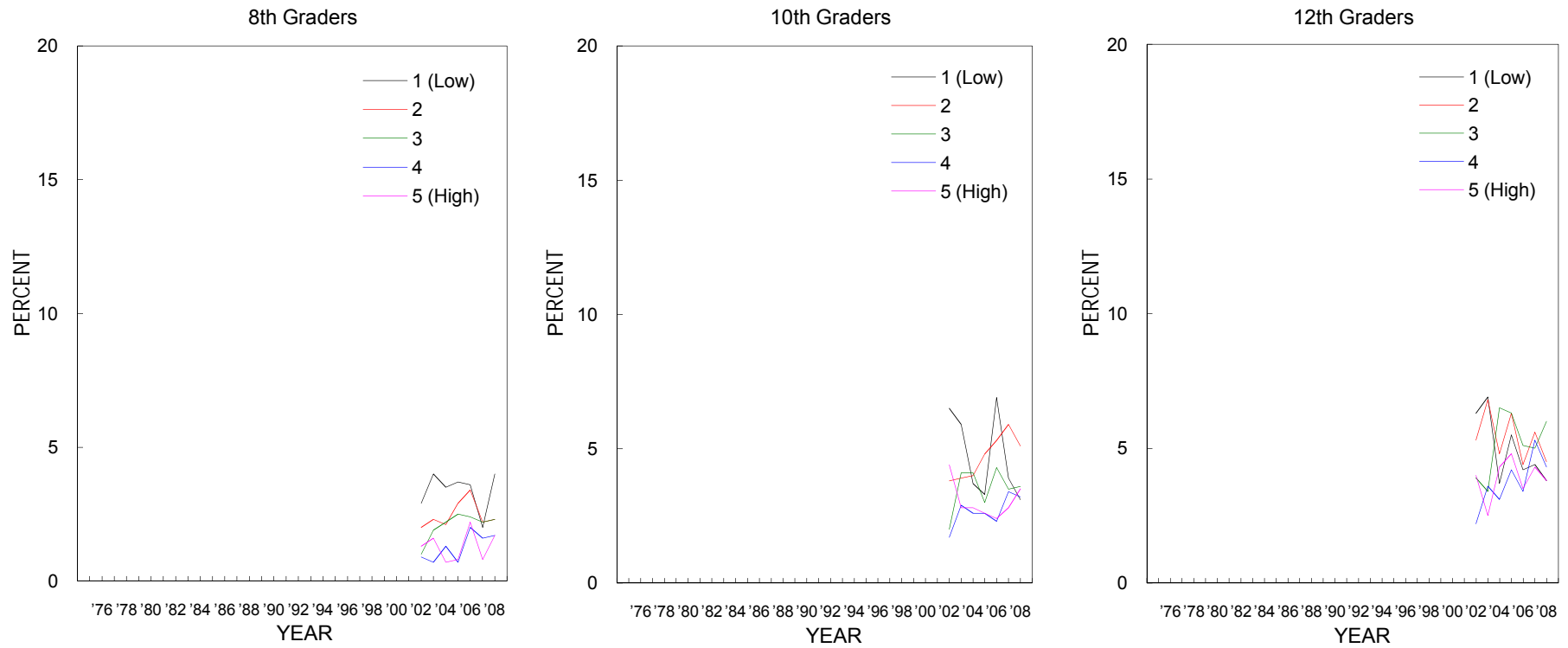
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 94**  
**OxyContin: Trends in Annual Prevalence by Population Density**



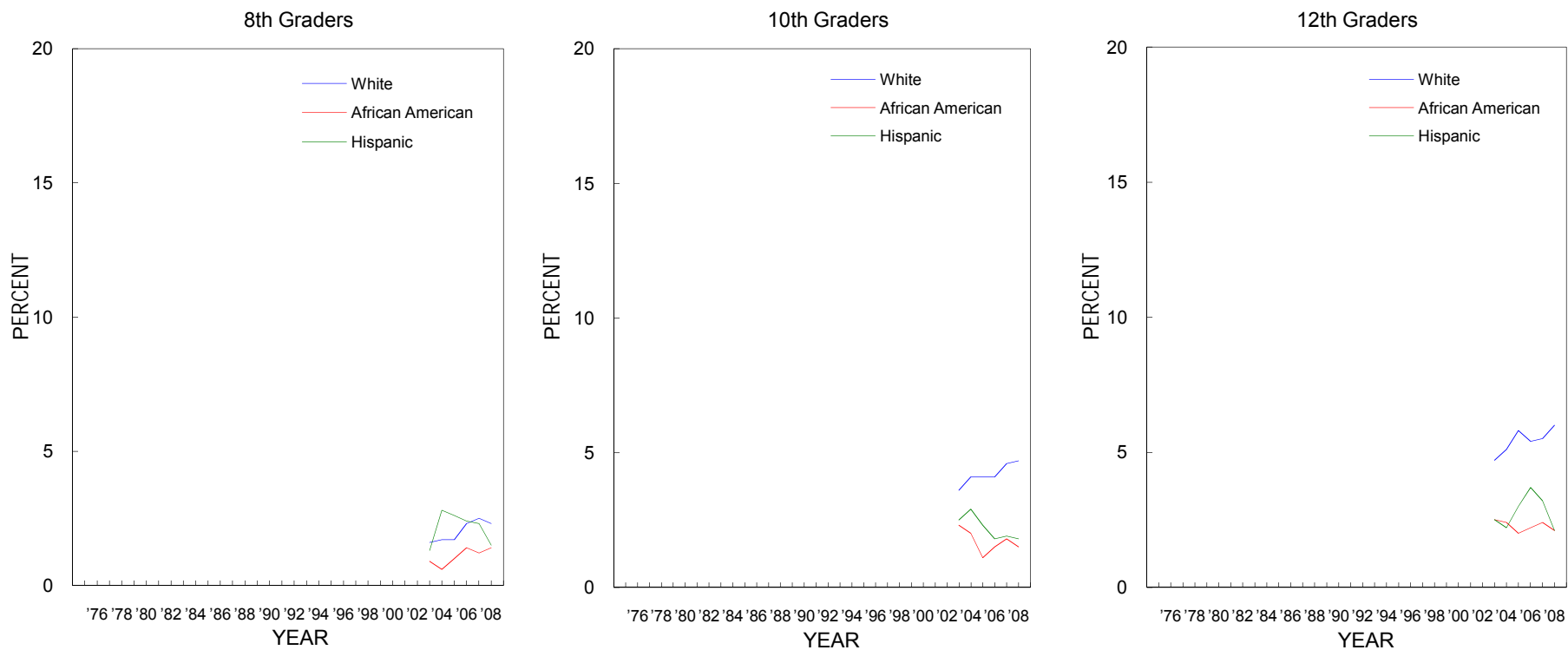
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 95**  
**OxyContin: Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

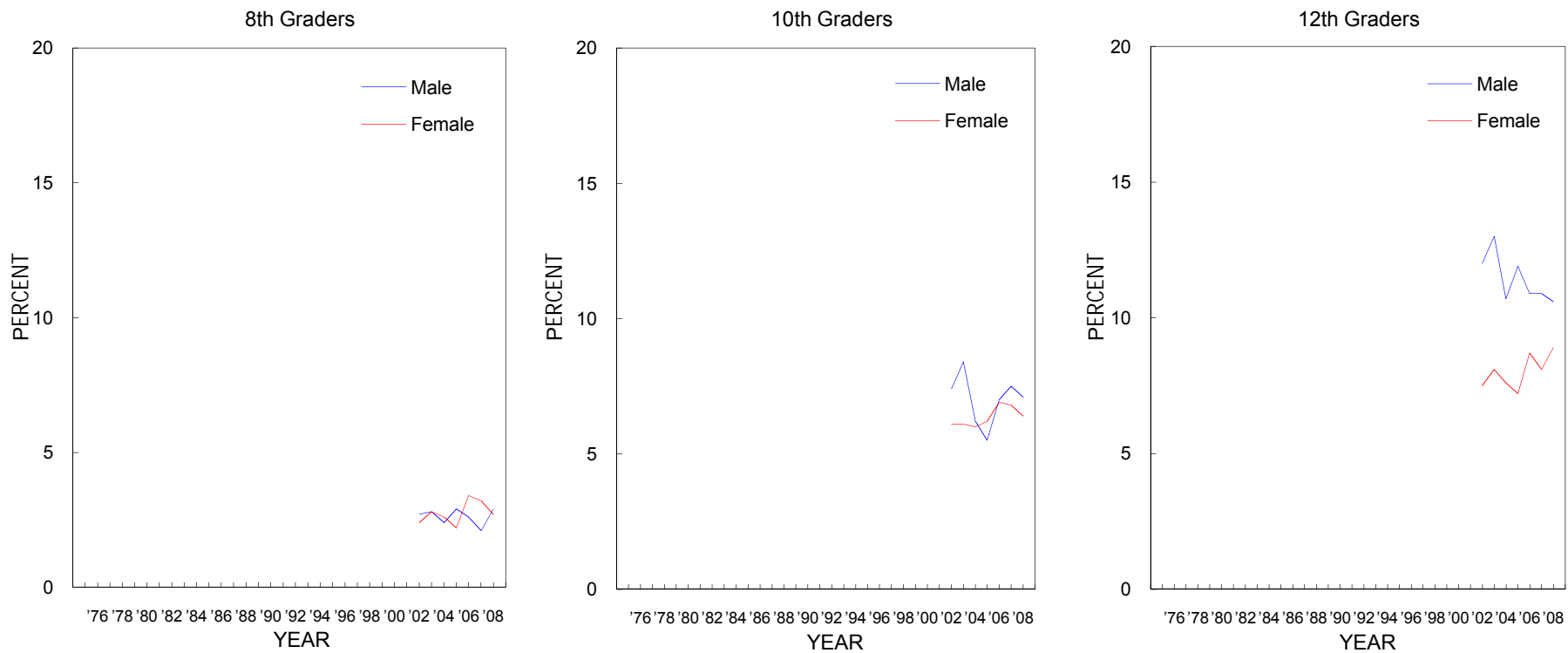
**FIGURE 96**  
**OxyContin: Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

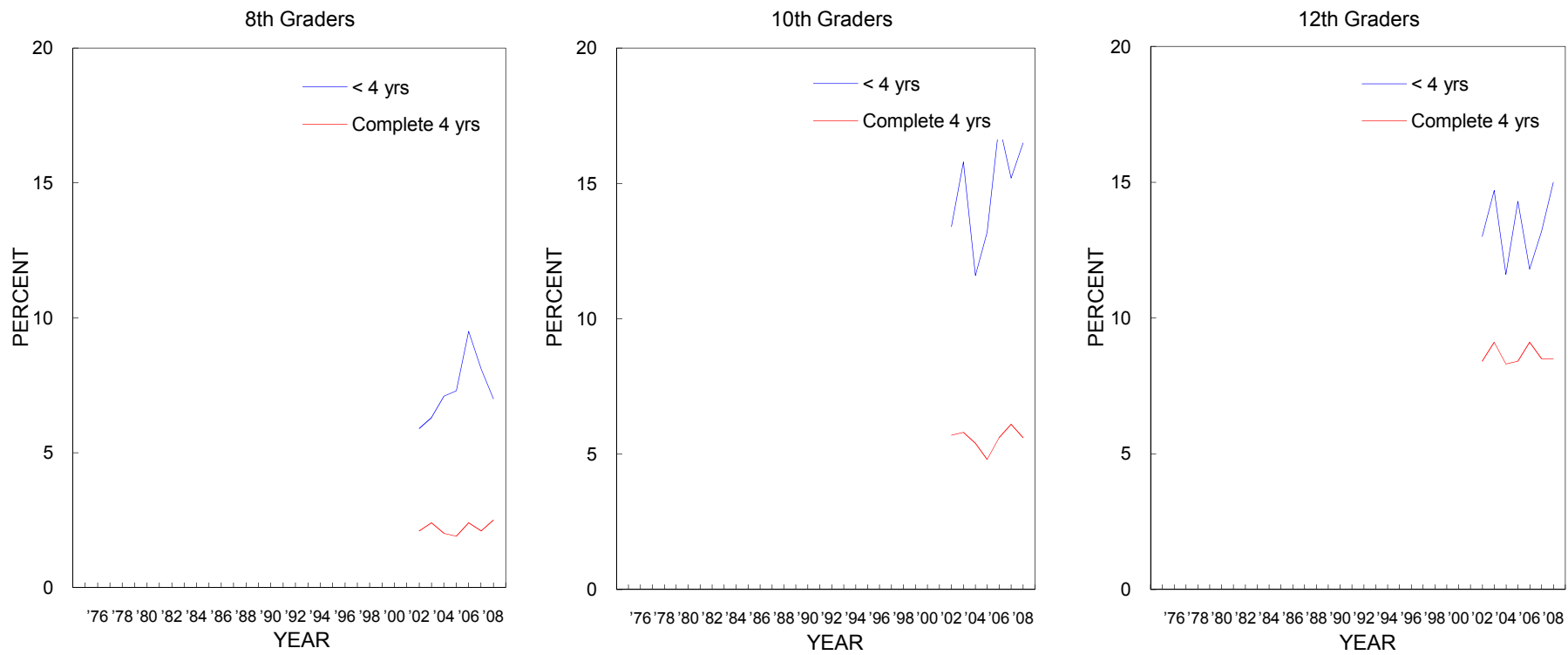
**FIGURE 97**  
**Vicodin: Trends in Annual Prevalence by Gender**



Source. The Monitoring the Future study, the University of Michigan.

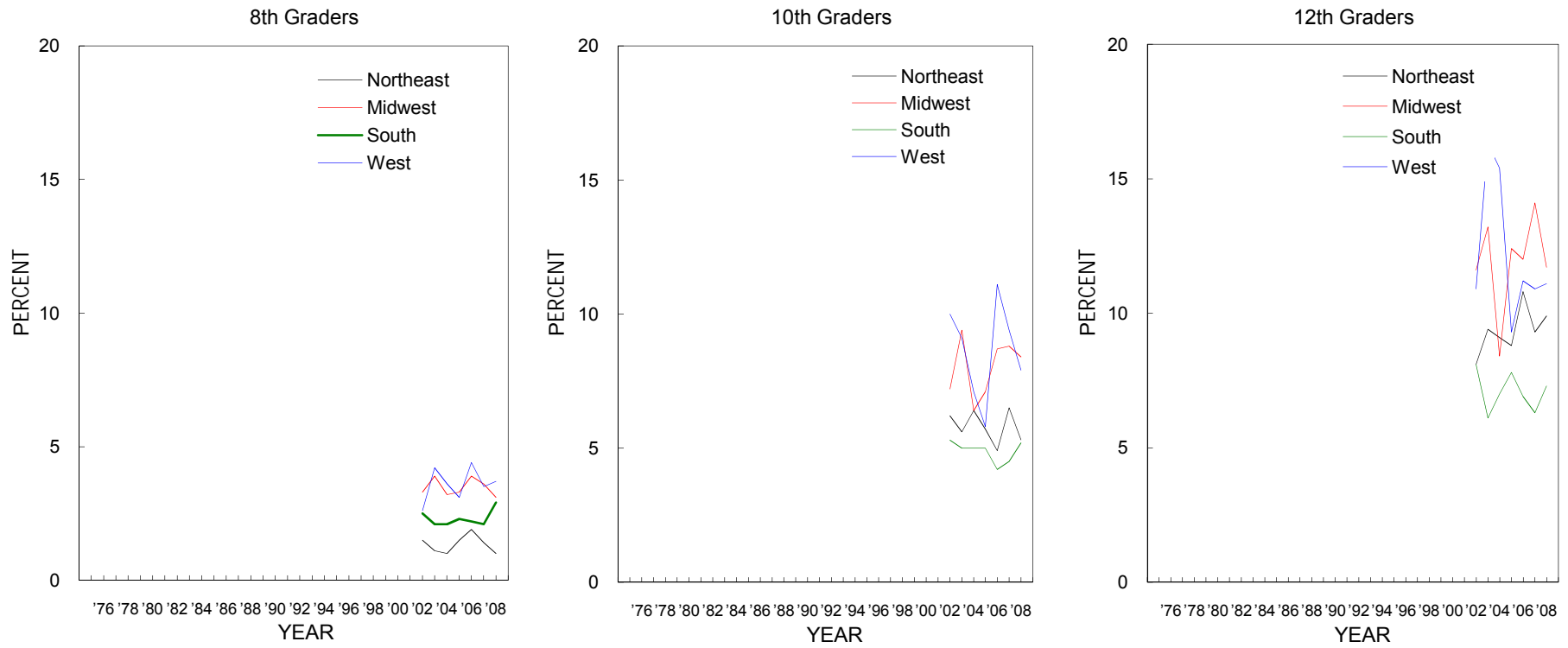


**FIGURE 98**  
**Vicodin: Trends in Annual Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 99**  
**Vicodin: Trends in Annual Prevalence by Region**



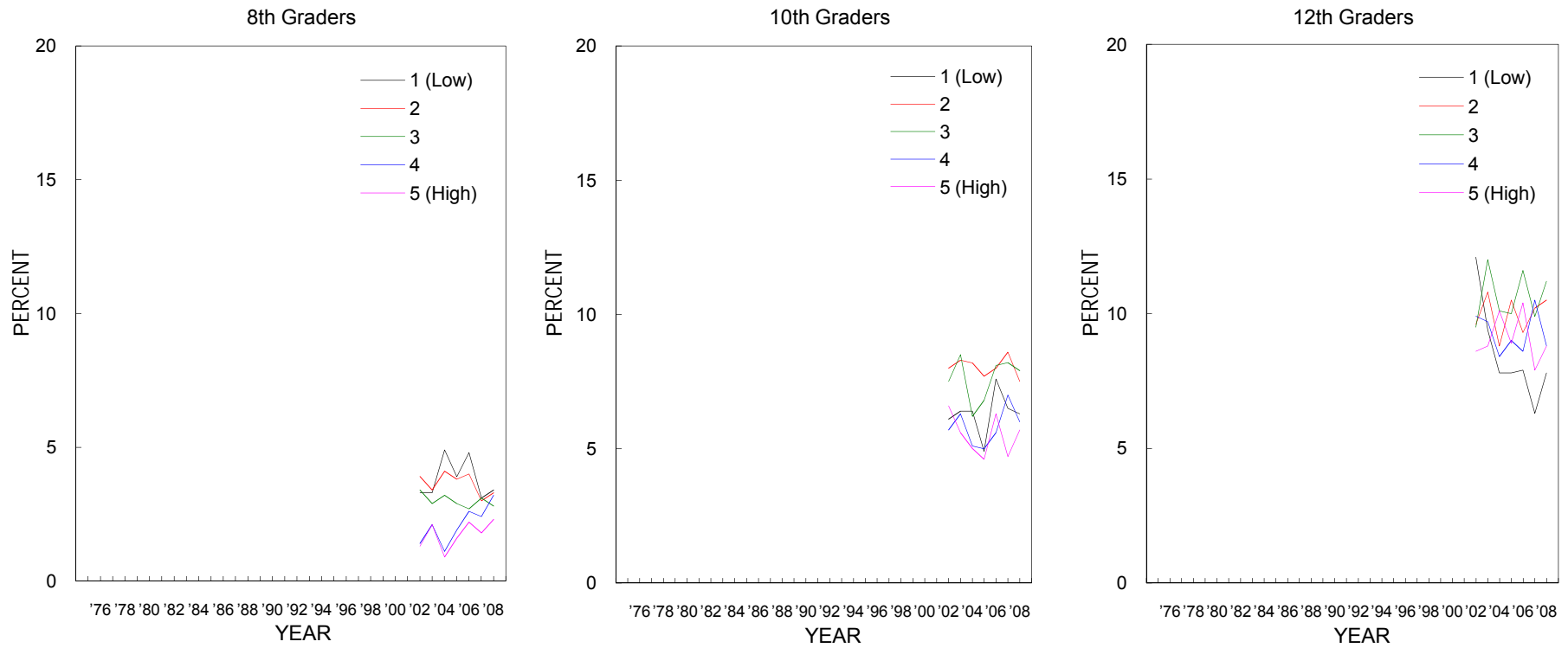
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 100**  
**Vicodin: Trends in Annual Prevalence by Population Density**



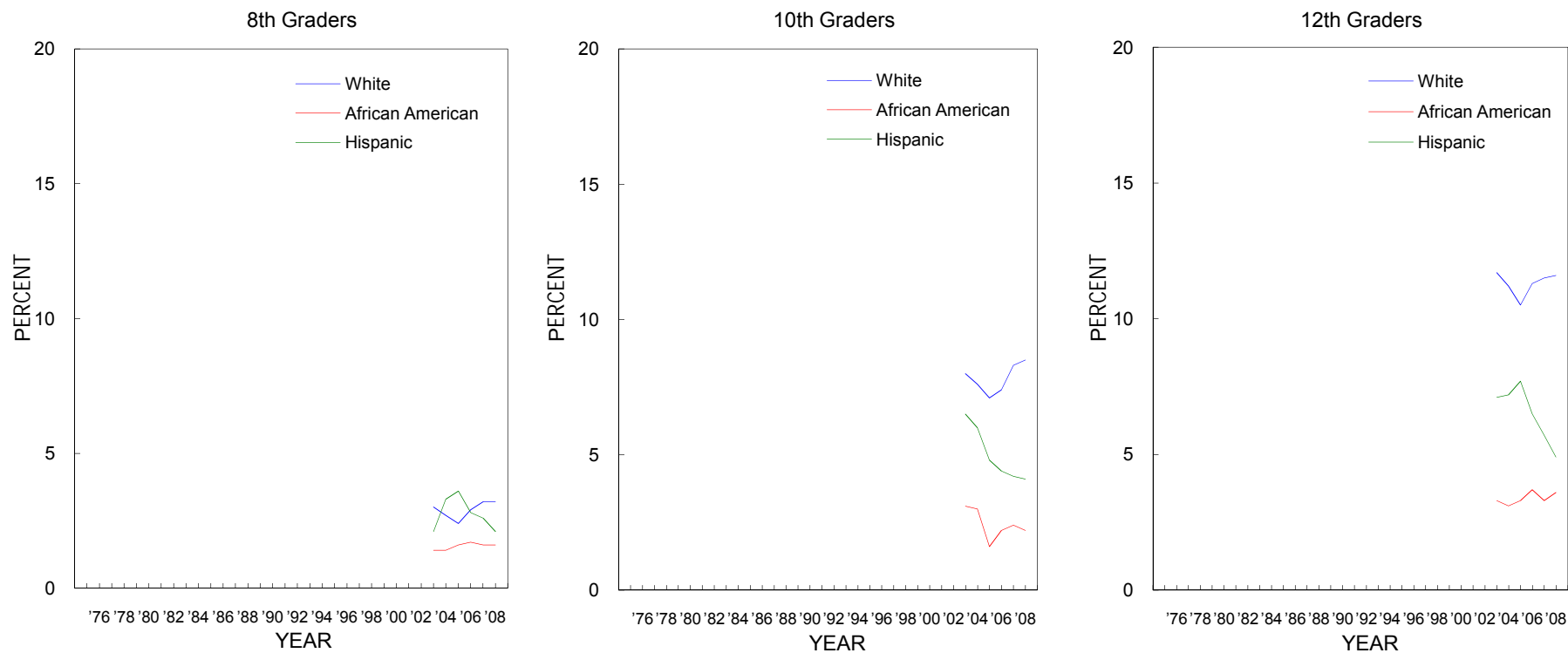
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 101**  
**Vicodin: Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

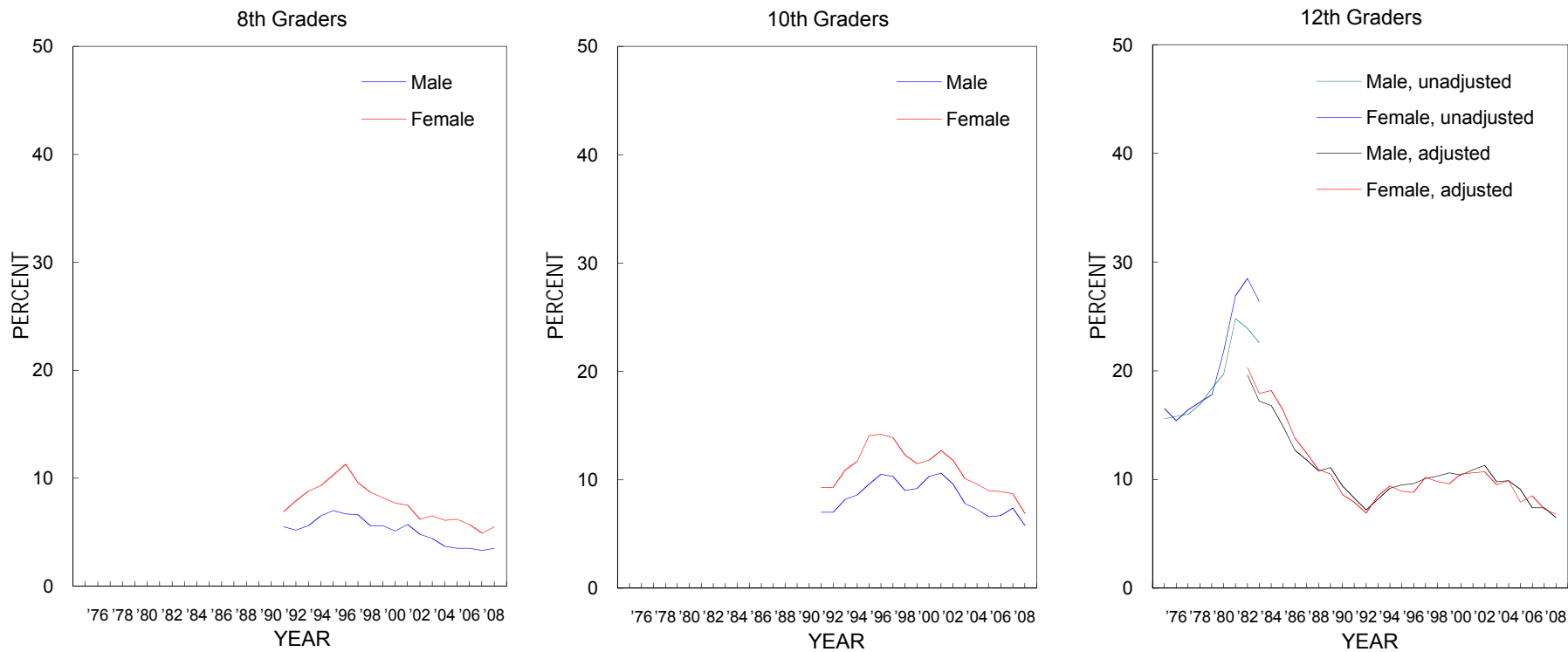
**FIGURE 102**  
**Vicodin: Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

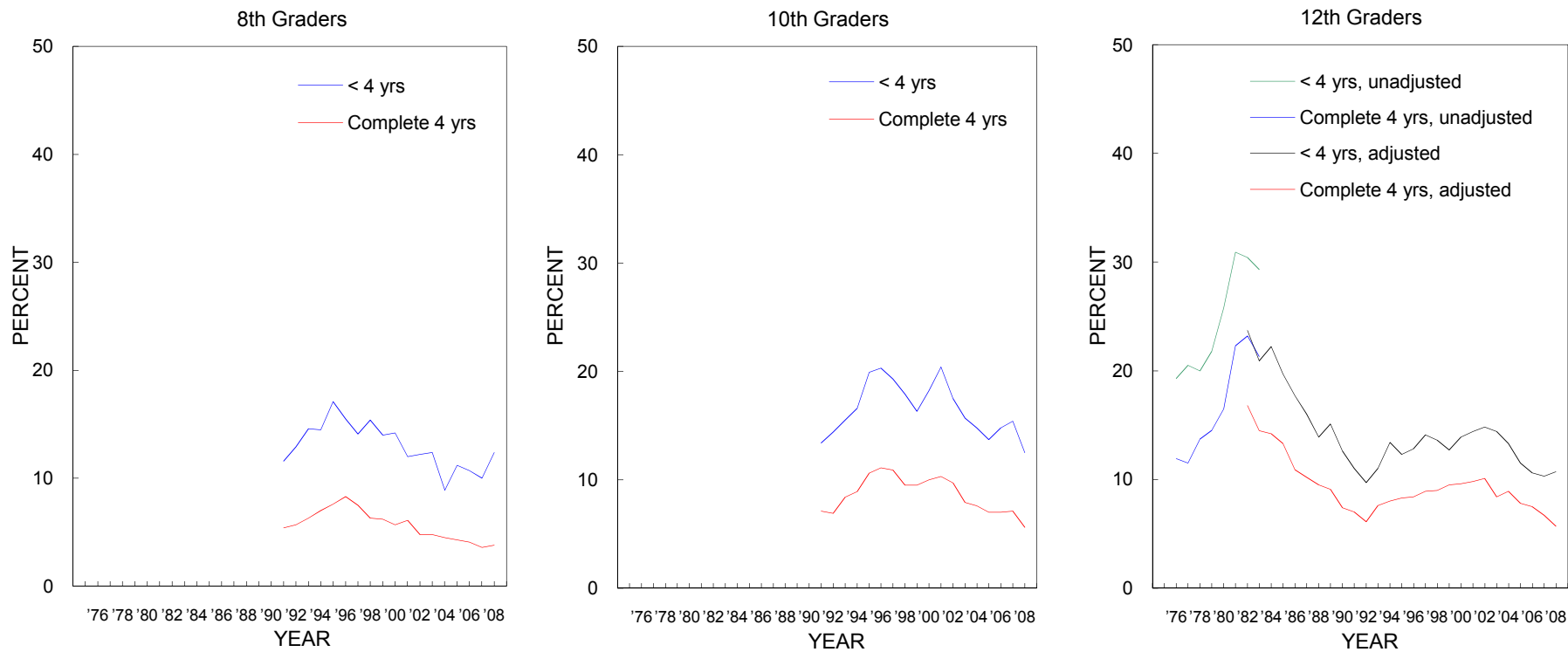
**FIGURE 103**  
**Amphetamines:\* Trends in Annual Prevalence by Gender**



Source. The Monitoring the Future study, the University of Michigan.

\*After 1982, the question about amphetamine use was revised to further clarify that nonprescription stimulants should not be included in the answers.

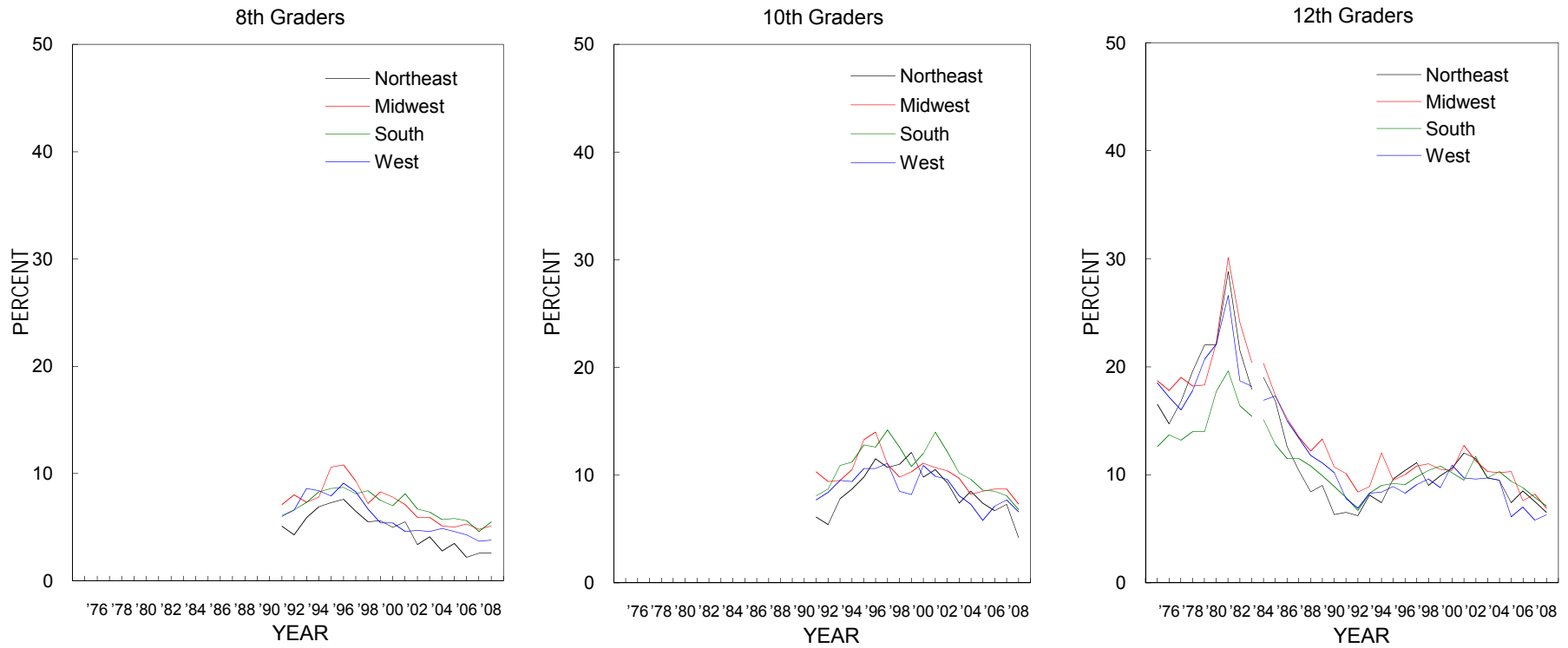
**FIGURE 104**  
**Amphetamines:\* Trends in Annual Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

\*After 1982, the question about amphetamine use was revised to further clarify that nonprescription stimulants should not be included in the answers.

**FIGURE 105**  
**Amphetamines:\* Trends in Annual Prevalence by Region**

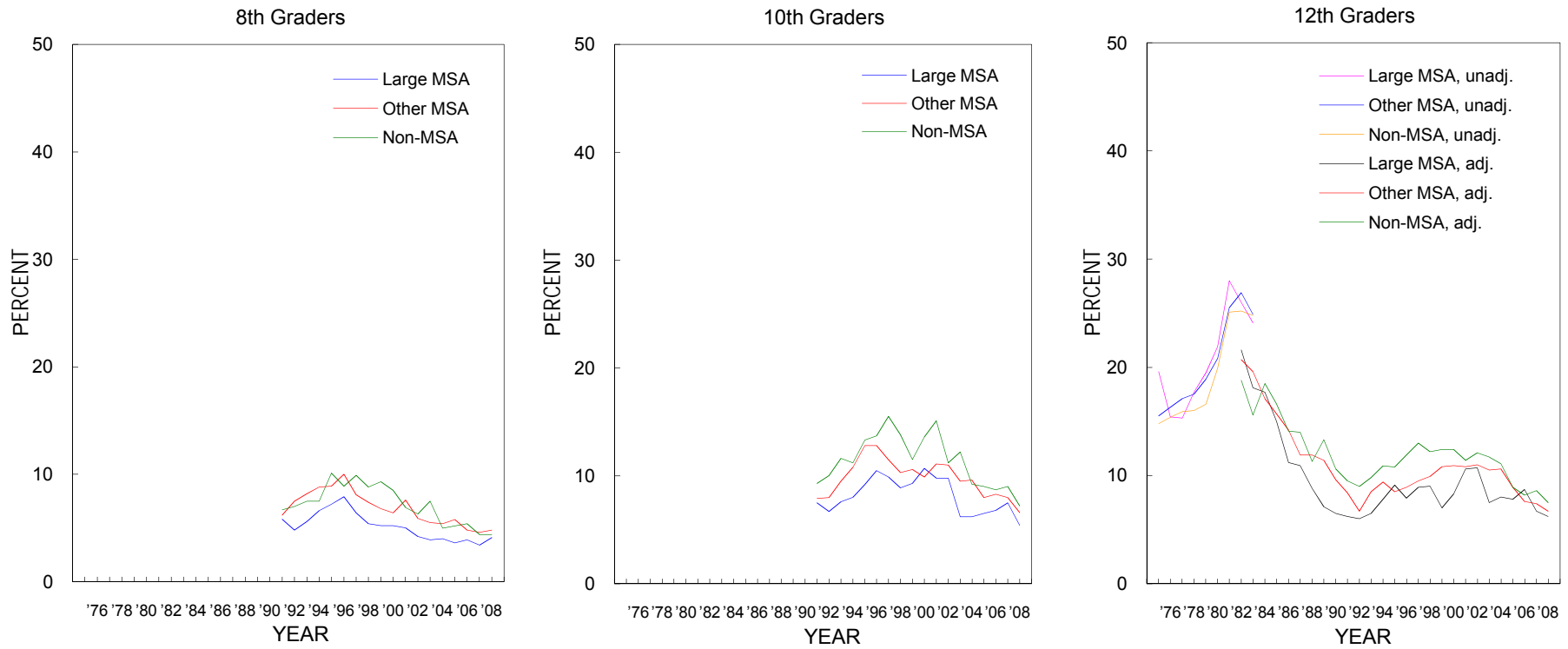


Source. The Monitoring the Future study, the University of Michigan.

\*After 1982, the question about amphetamine use was revised to further clarify that nonprescription stimulants should not be included in the answers.



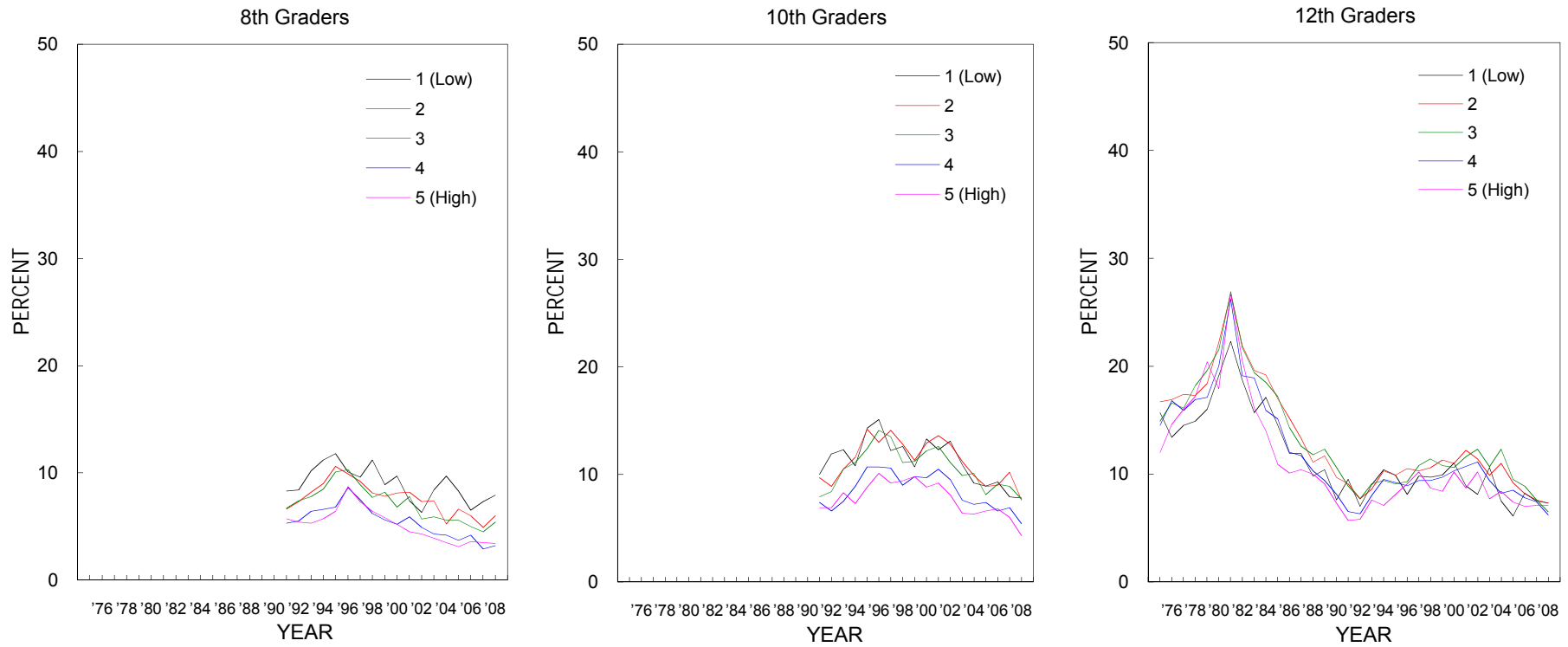
**FIGURE 106**  
**Amphetamines:\* Trends in Annual Prevalence by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

\*After 1982, the question about amphetamine use was revised to further clarify that nonprescription stimulants should not be included in the answers.

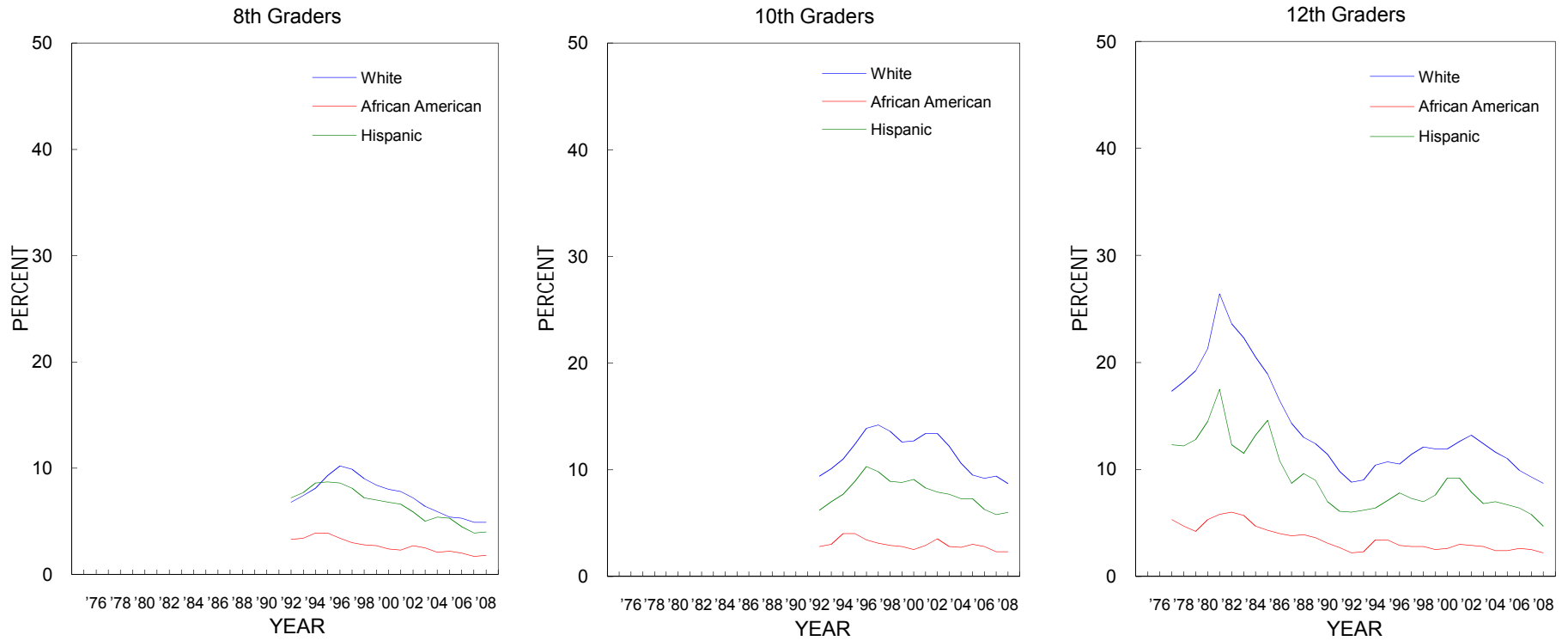
**FIGURE 107**  
**Amphetamines:\* Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

\*After 1982, the question about amphetamine use was revised to further clarify that nonprescription stimulants should not be included in the answers.

**FIGURE 108**  
**Amphetamines: \* Trends in Annual Prevalence by Race/Ethnicity\*\***

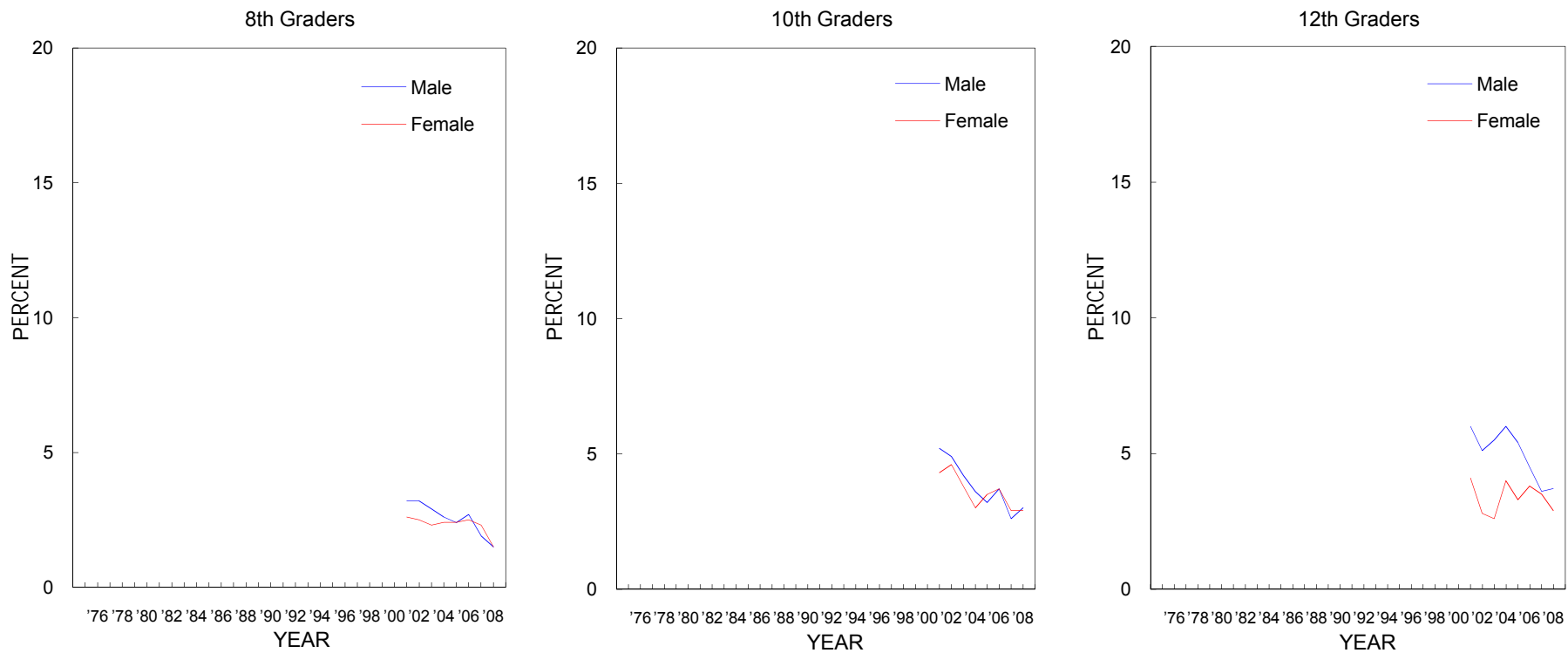


Source. The Monitoring the Future study, the University of Michigan.

\*After 1982, the question about amphetamine use was revised to further clarify that nonprescription stimulants should not be included in the answers.

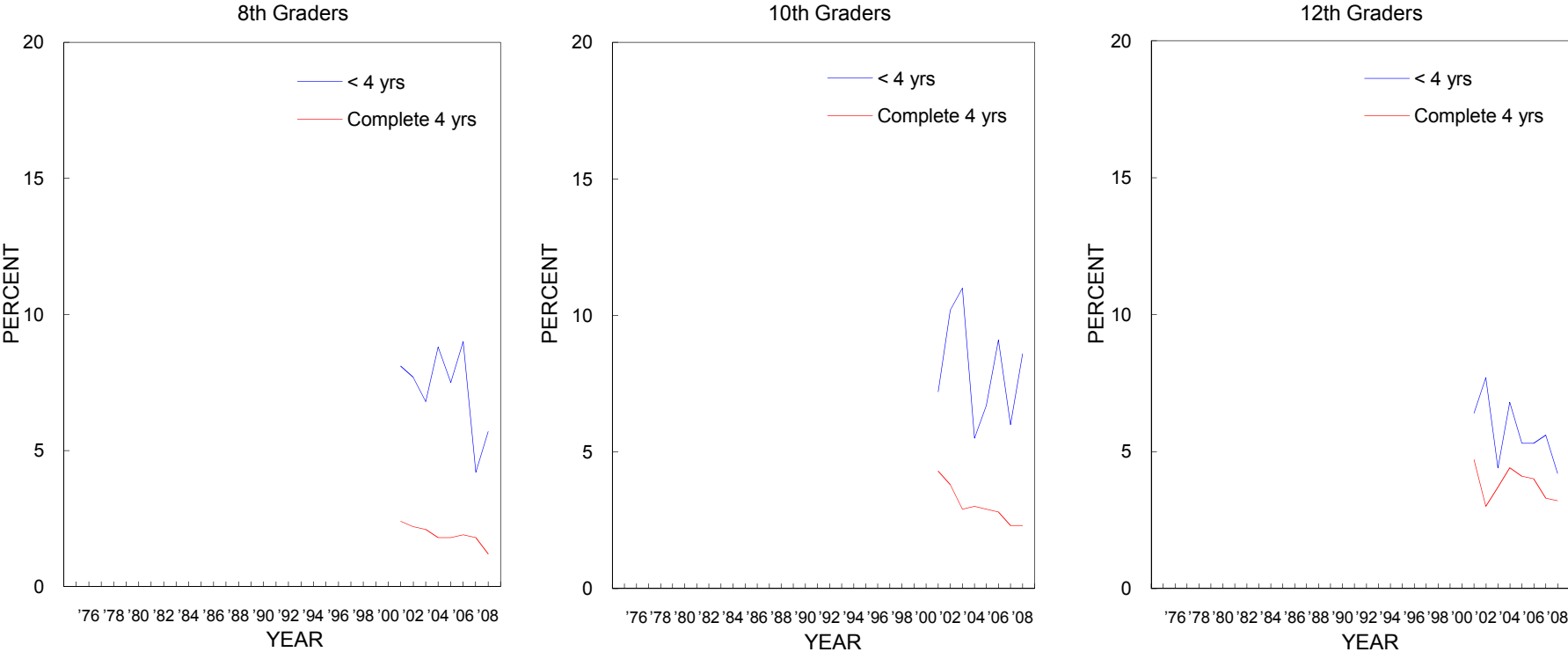
\*\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 109**  
**Ritalin: Trends in Annual Prevalence by Gender**



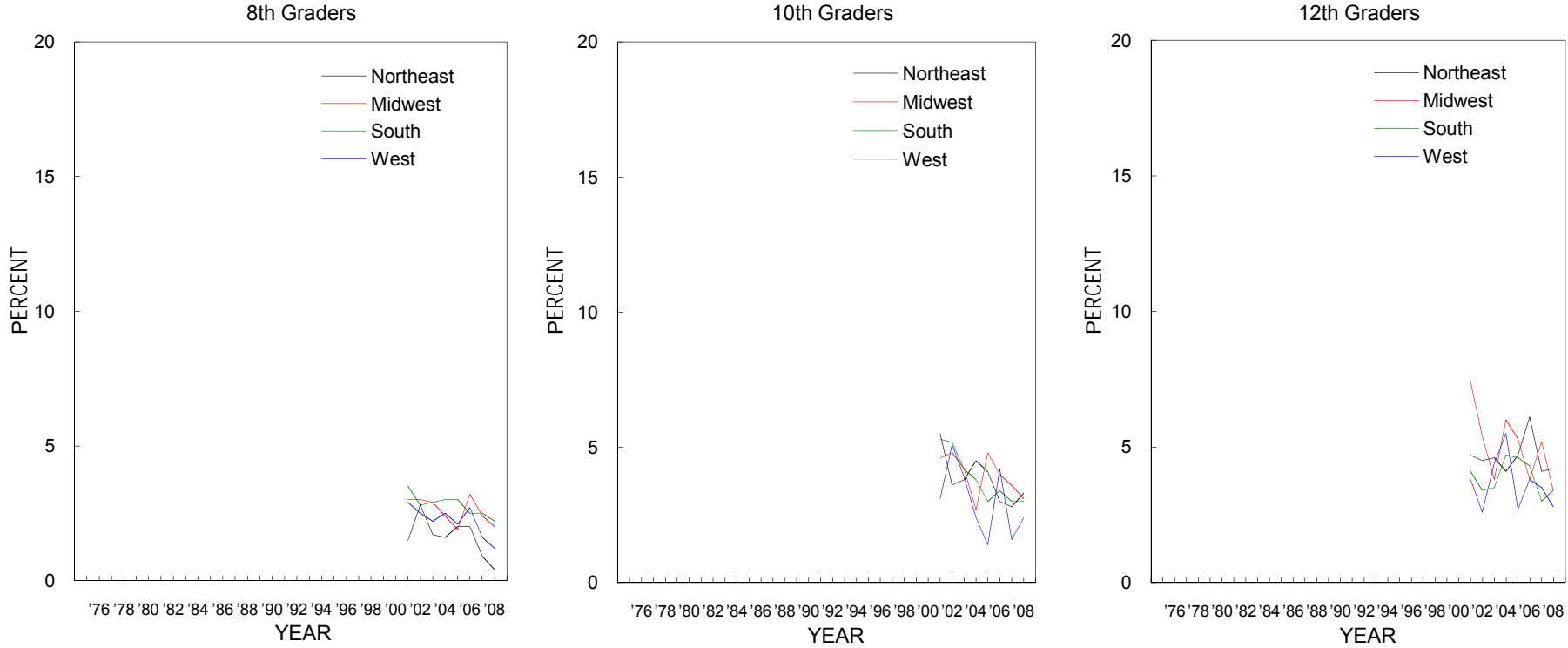
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 110**  
**Ritalin: Trends in Annual Prevalence by College Plans**



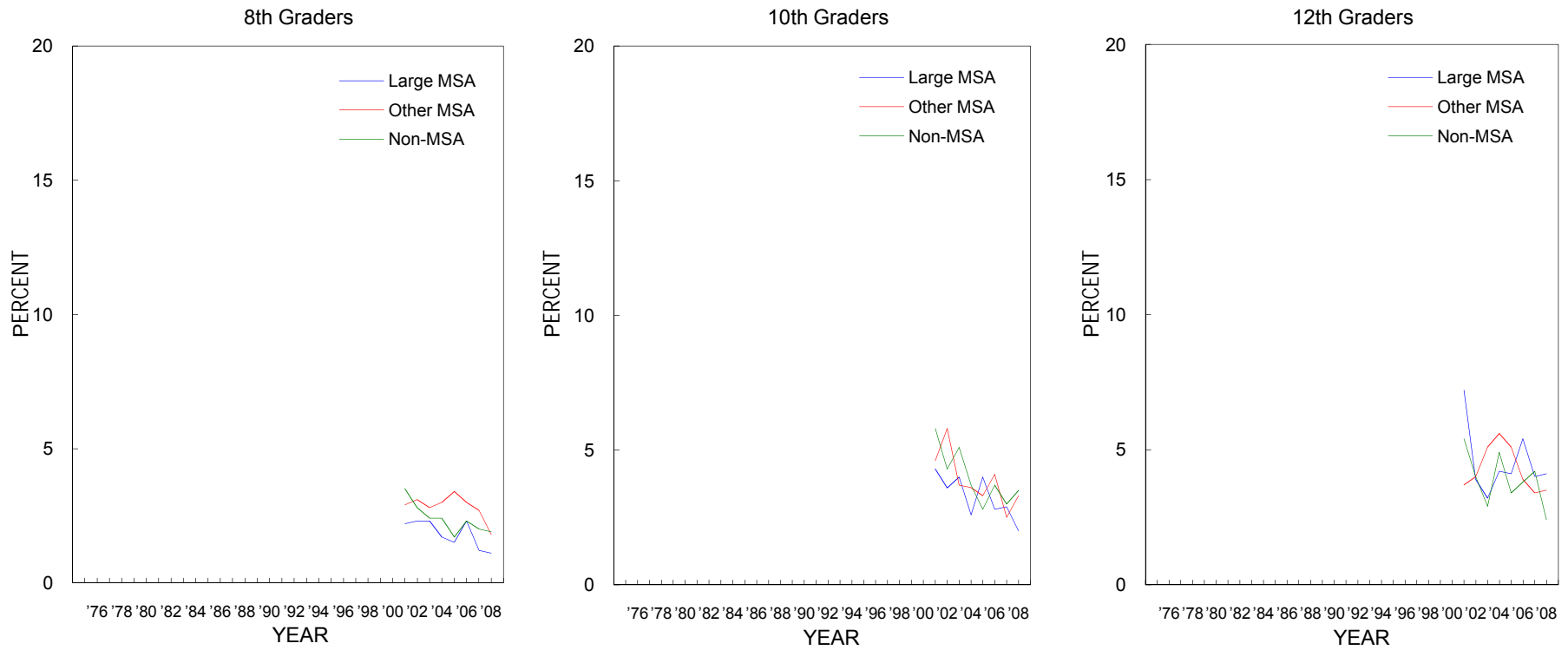
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 111**  
**Ritalin: Trends in Annual Prevalence by Region**



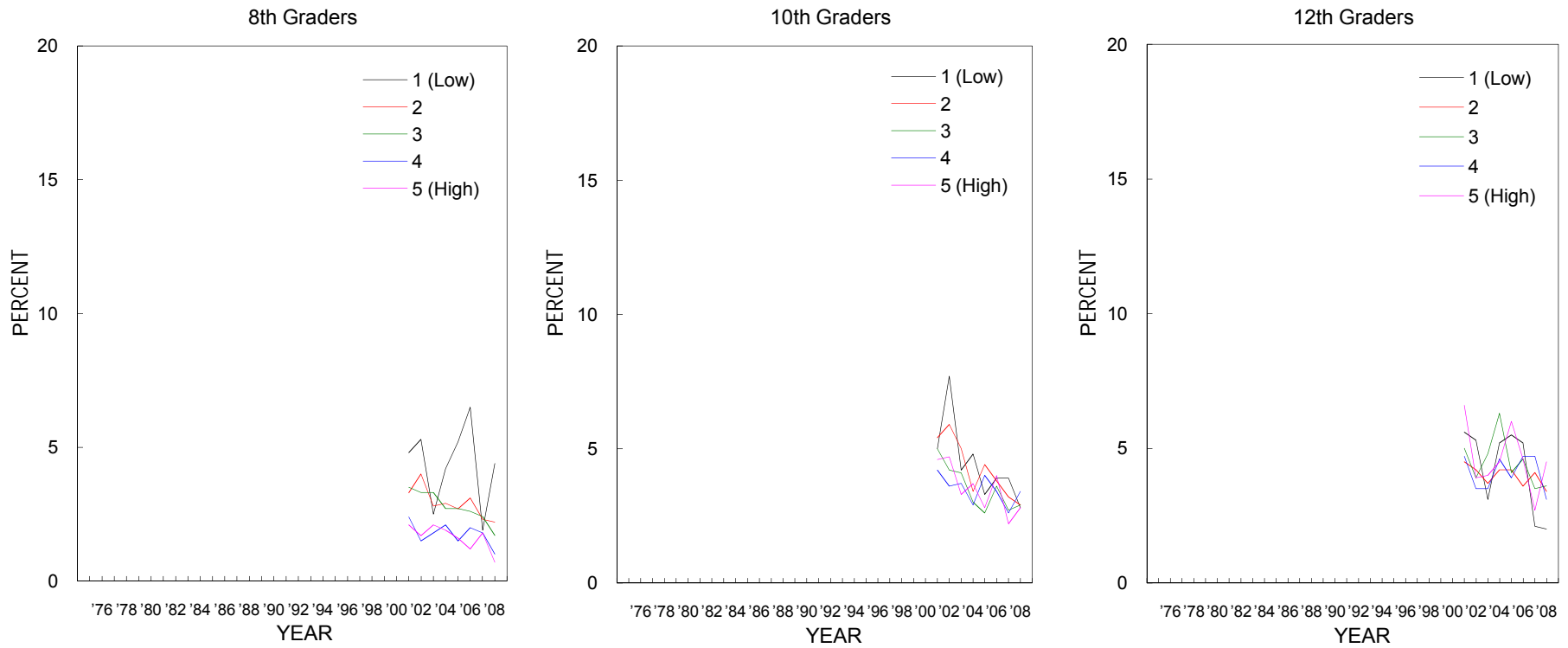
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 112**  
**Ritalin: Trends in Annual Prevalence by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

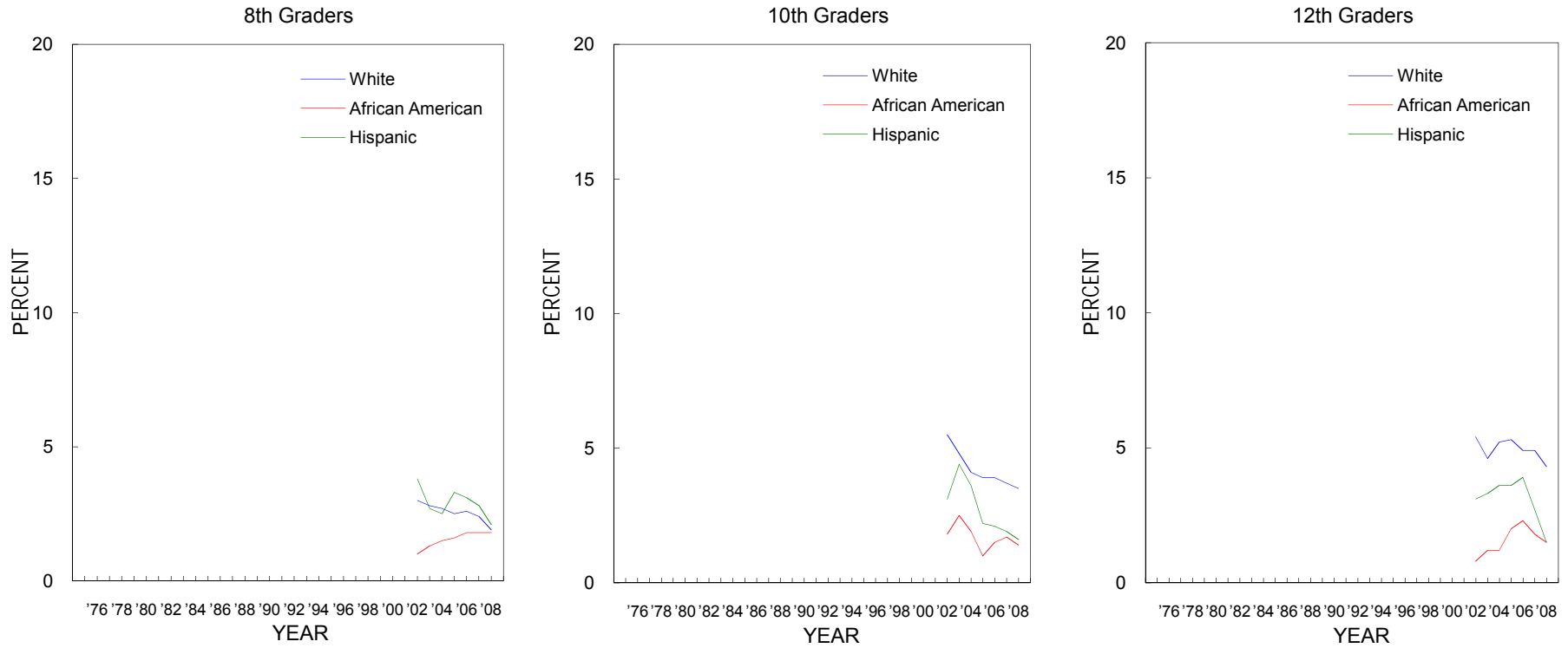
**FIGURE 113**  
**Ritalin: Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.



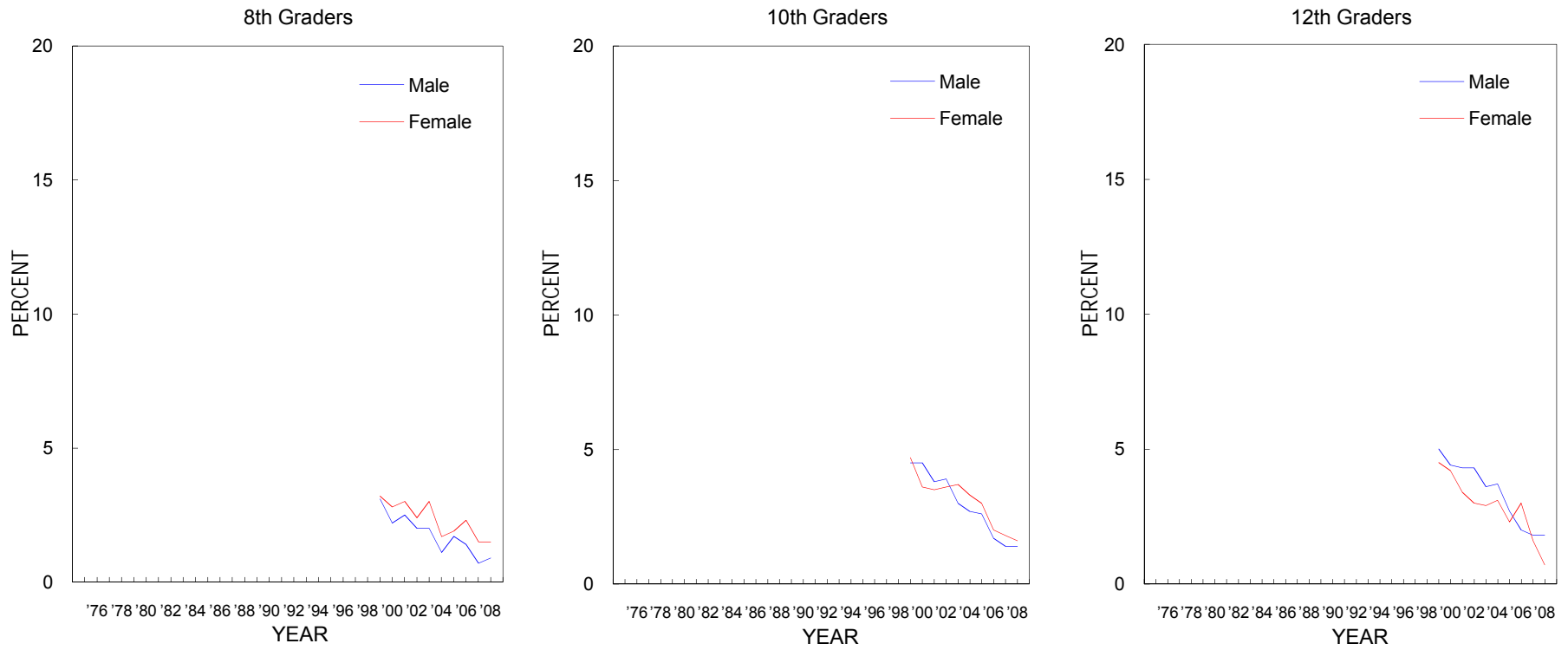
**FIGURE 114**  
**Ritalin: Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

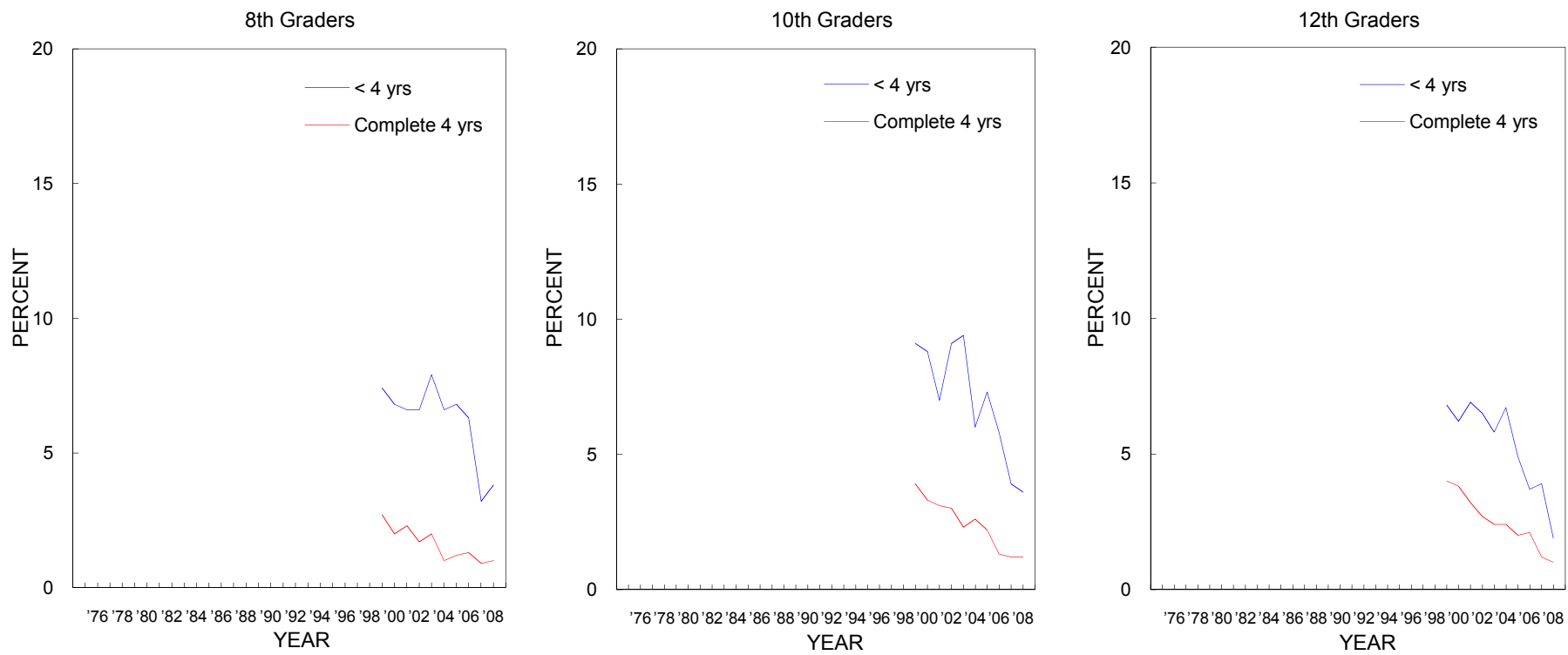
\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 115**  
**Methamphetamine: Trends in Annual Prevalence by Gender**



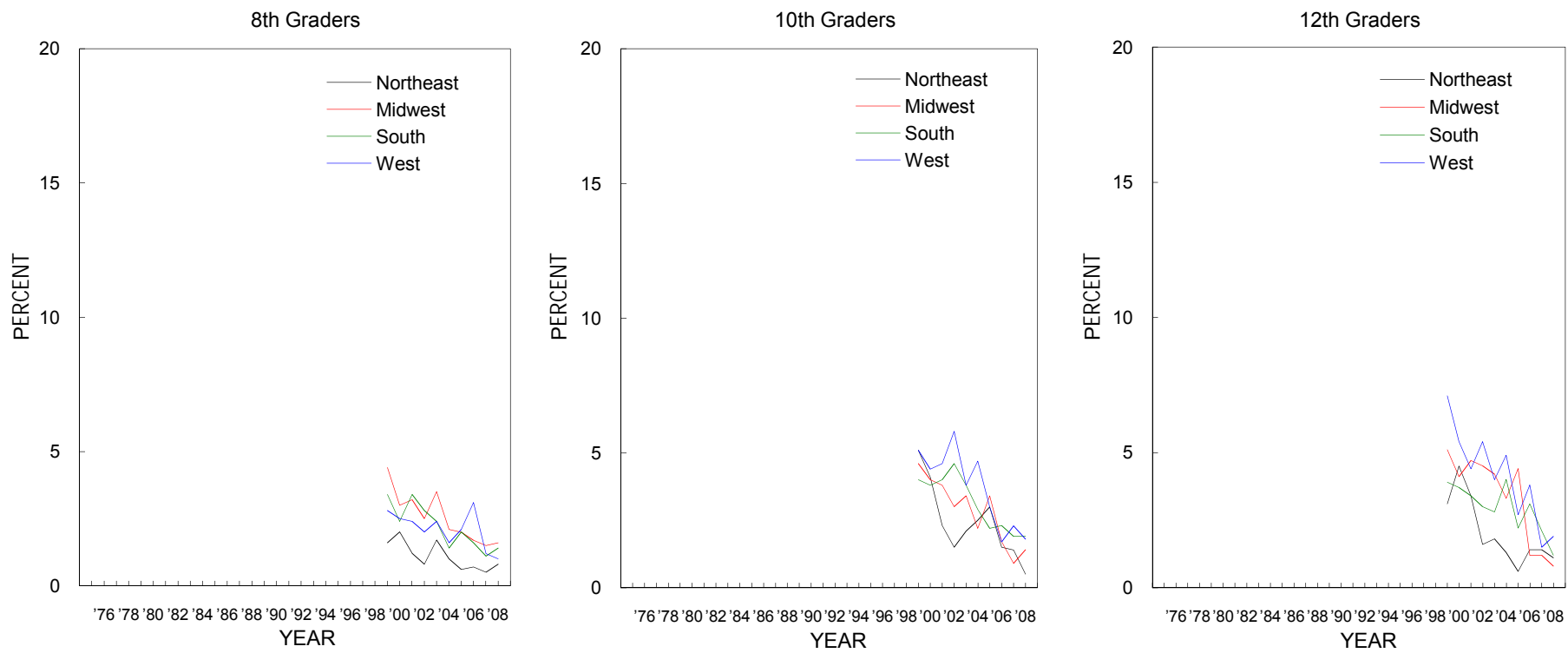
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 116**  
**Methamphetamine: Trends in Annual Prevalence by College Plans**



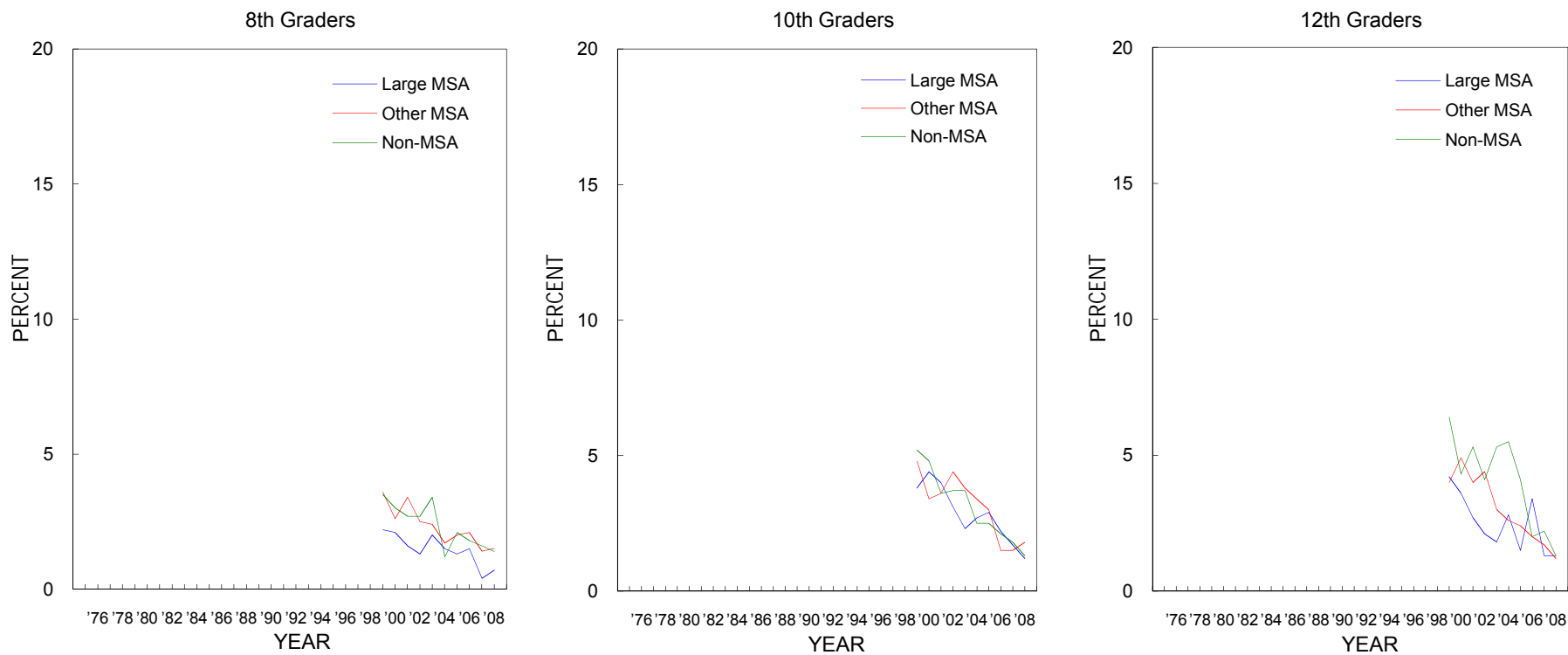
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 117**  
**Methamphetamine: Trends in Annual Prevalence by Region**



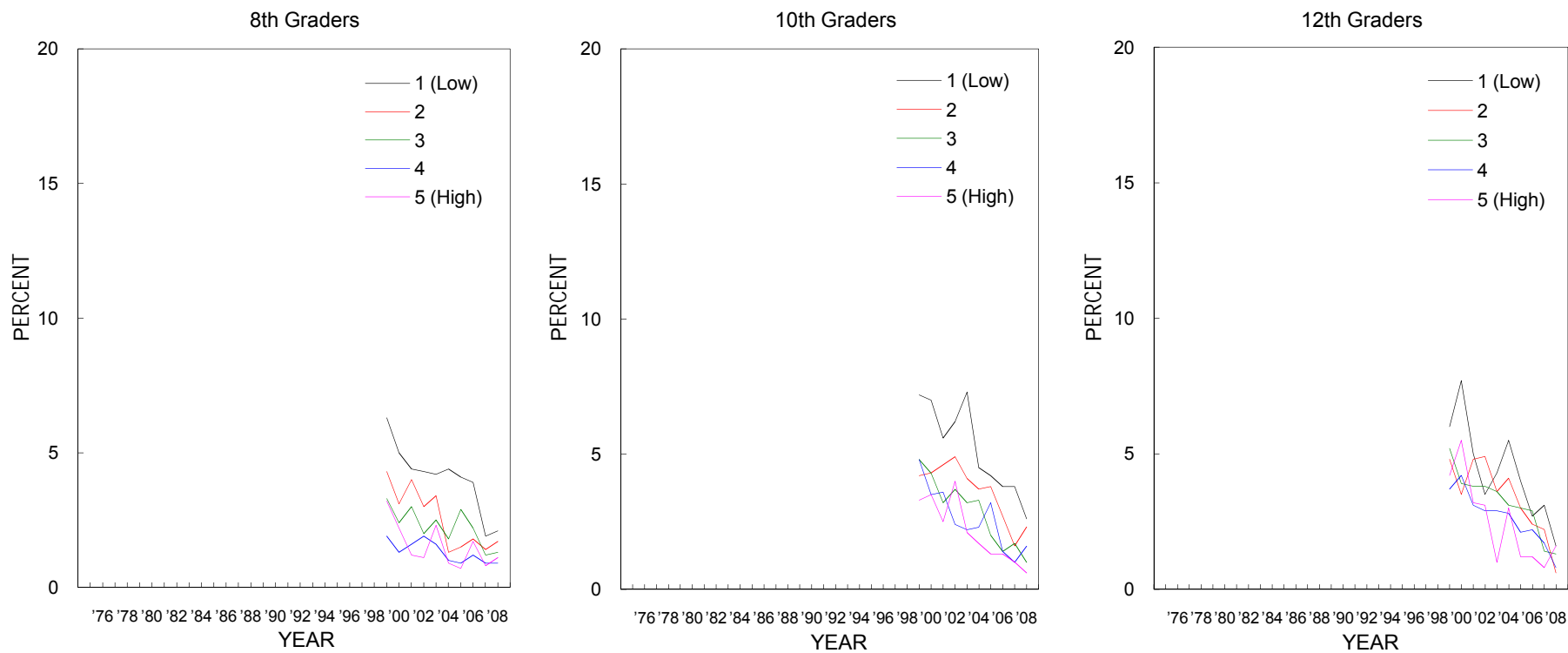
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 118**  
**Methamphetamine: Trends in Annual Prevalence by Population Density**



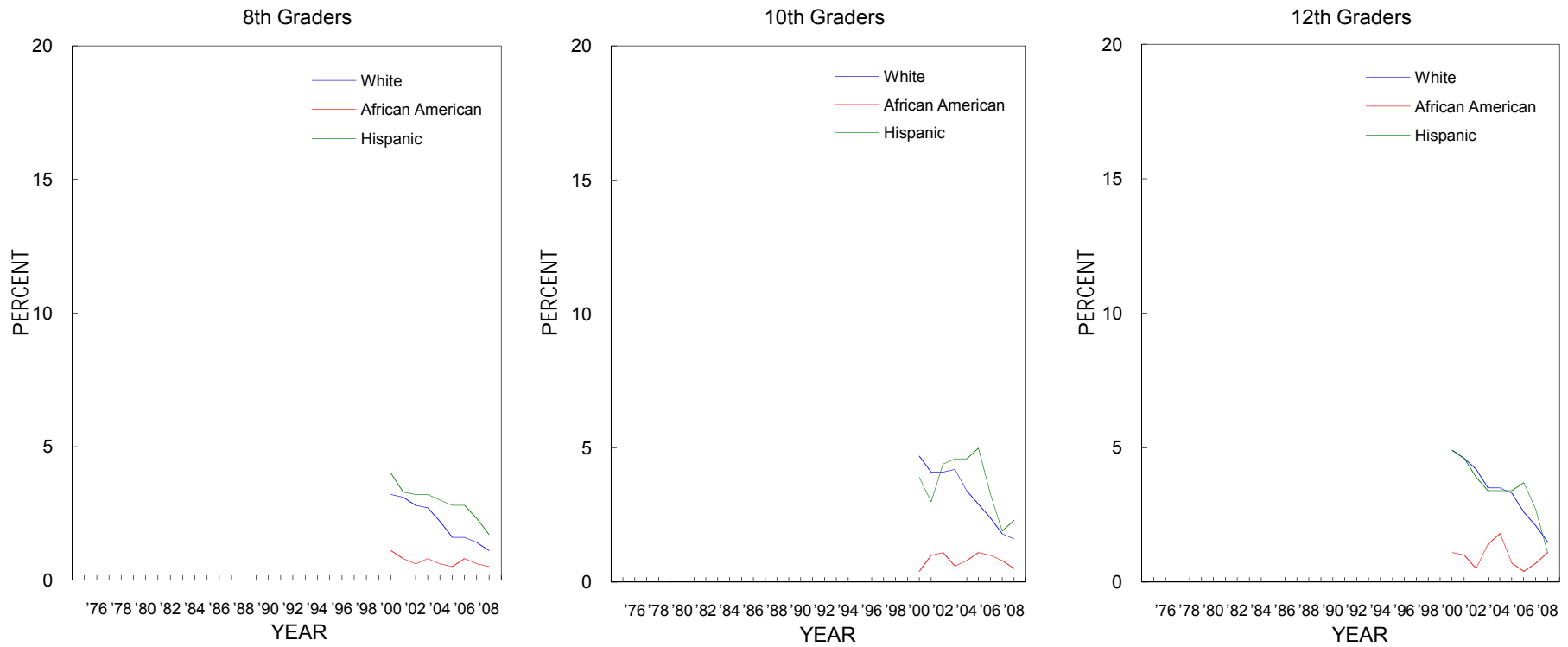
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 119**  
**Methamphetamine: Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

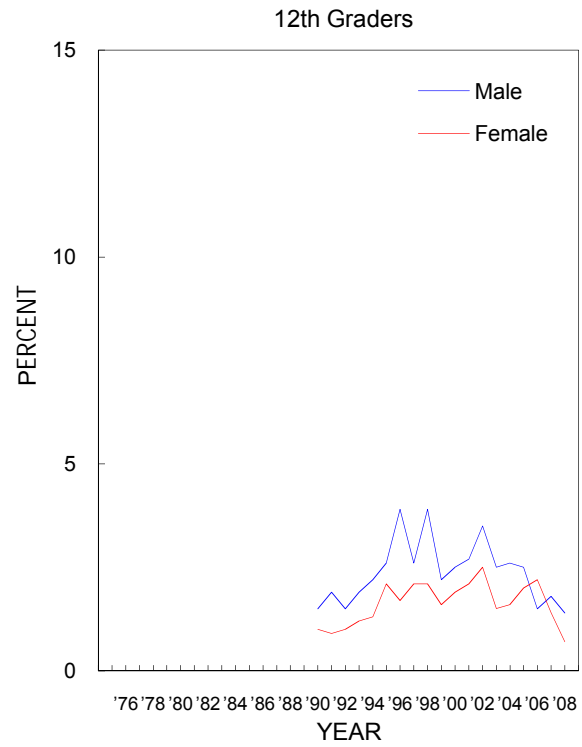
**FIGURE 120**  
**Methamphetamine: Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

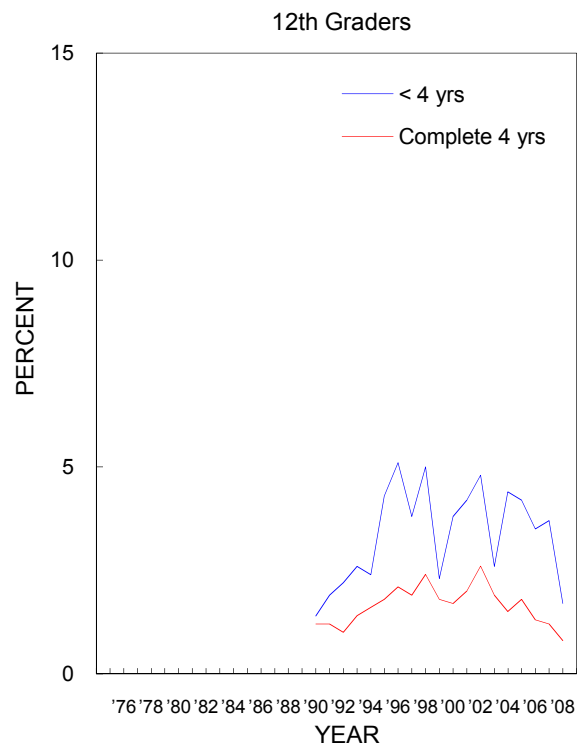
**FIGURE 121**  
**Crystal Methamphetamine (Ice): Trends in Annual Prevalence by Gender**



Source. The Monitoring the Future study, the University of Michigan.

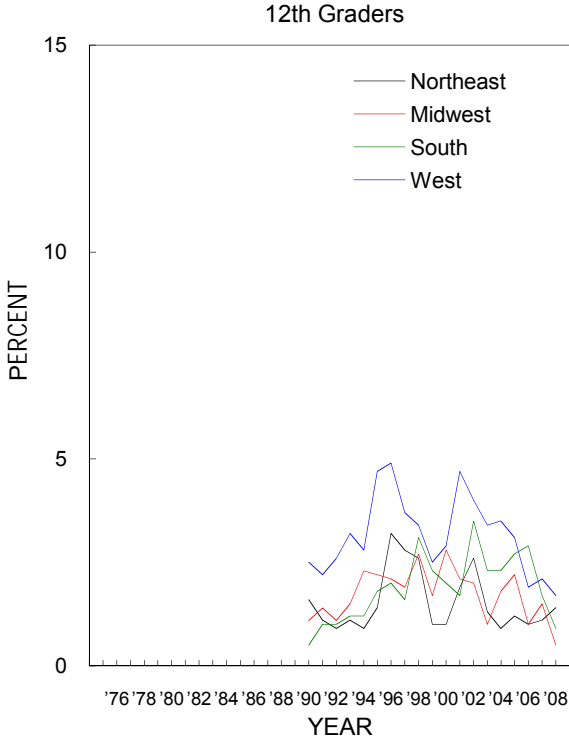


**FIGURE 122**  
**Crystal Methamphetamine (Ice): Trends in Annual Prevalence by College Plans**



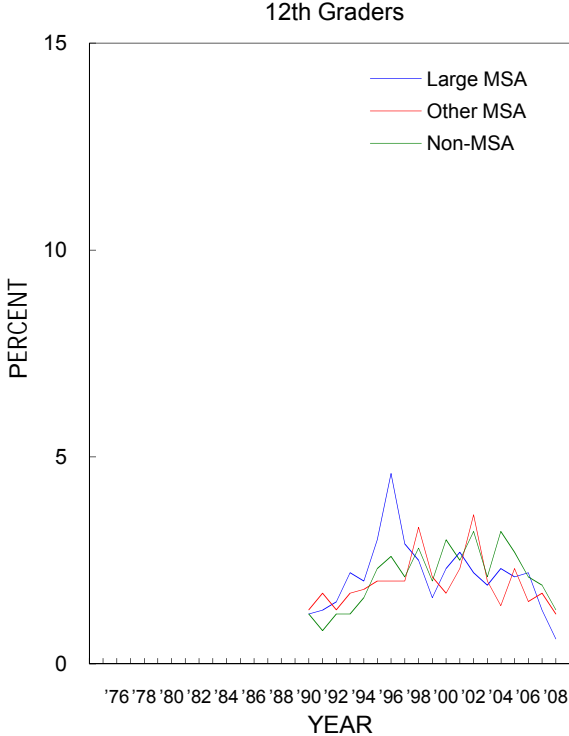
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 123**  
**Crystal Methamphetamine (Ice): Trends in Annual Prevalence by Region**



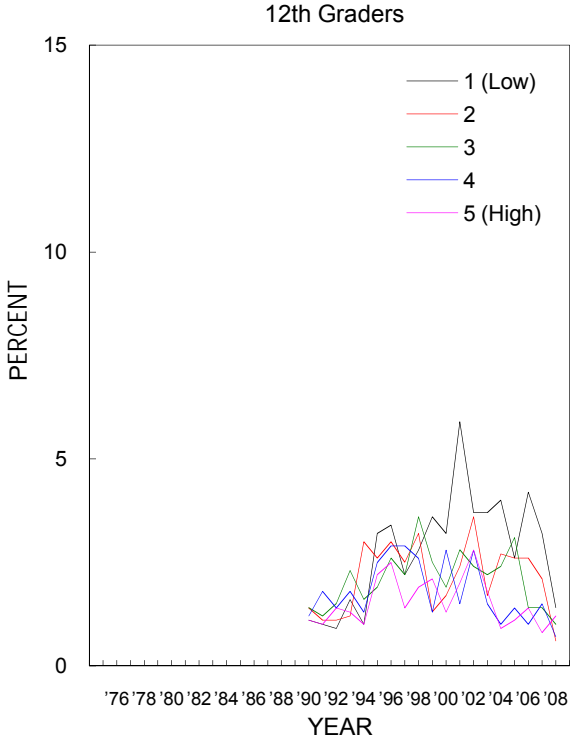
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 124**  
**Crystal Methamphetamine (Ice): Trends in Annual Prevalence by Population Density**



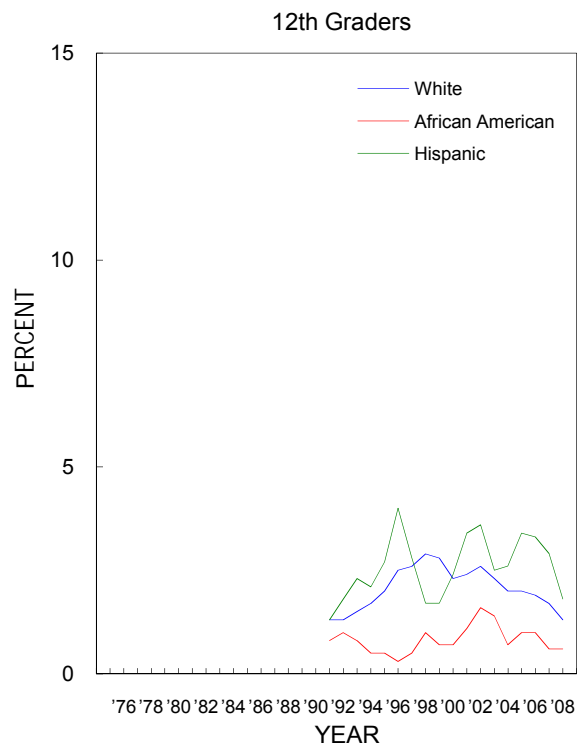
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 125**  
**Crystal Methamphetamine (Ice): Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

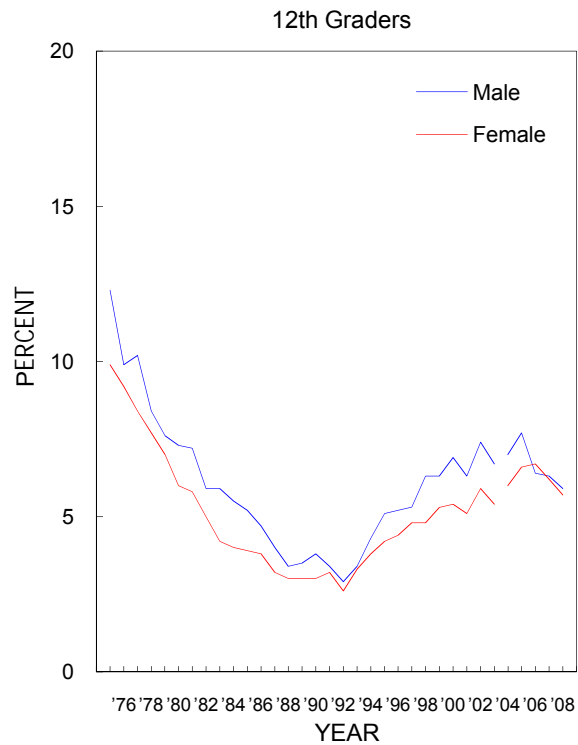
**FIGURE 126**  
**Crystal Methamphetamine (Ice): Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

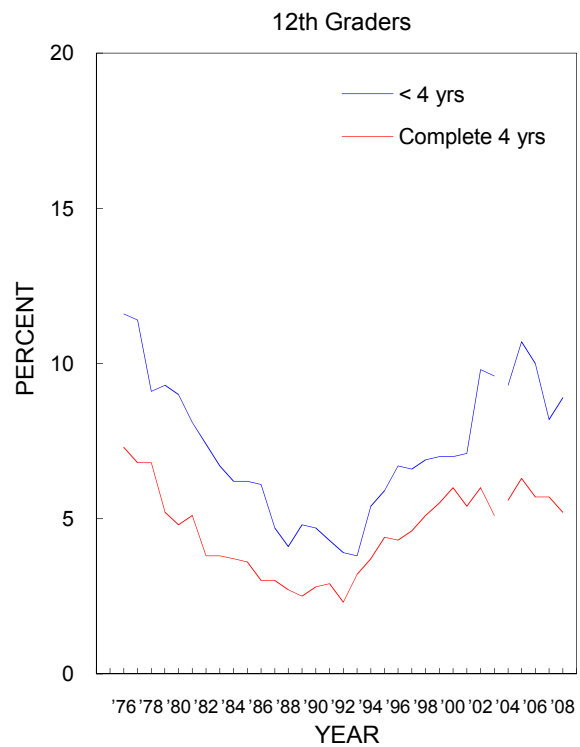
**FIGURE 127**  
**Sedatives (Barbiturates):\* Trends in Annual Prevalence by Gender**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2004, a revised set of questions on sedative (barbiturate) use was introduced. Refer to corresponding tables for further details.

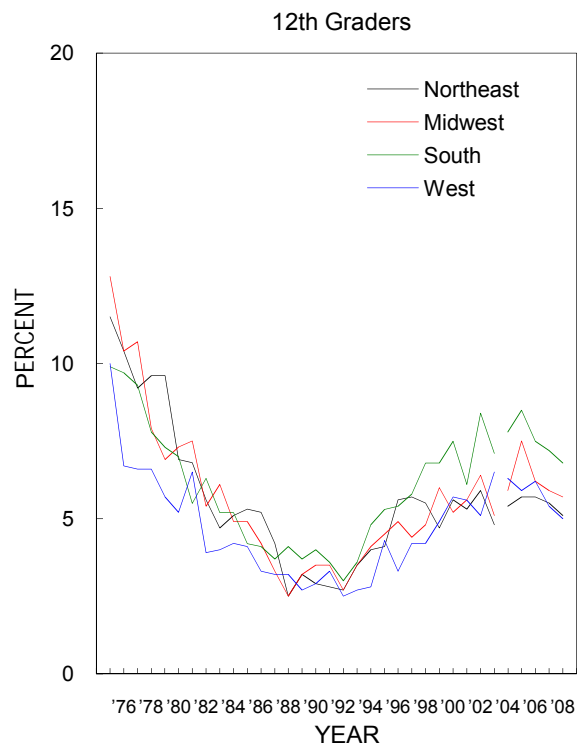
**FIGURE 128**  
**Sedatives (Barbiturates):\* Trends in Annual Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2004, a revised set of questions on sedative (barbiturate) use was introduced. Refer to corresponding tables for further details.

**FIGURE 129**  
**Sedatives (Barbiturates):\* Trends in Annual Prevalence by Region**

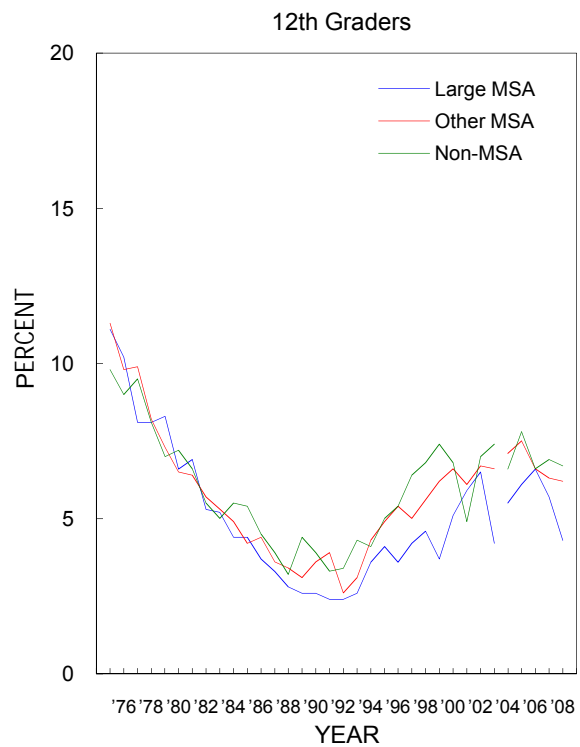


Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2004, a revised set of questions on sedative (barbiturate) use was introduced. Refer to corresponding tables for further details.



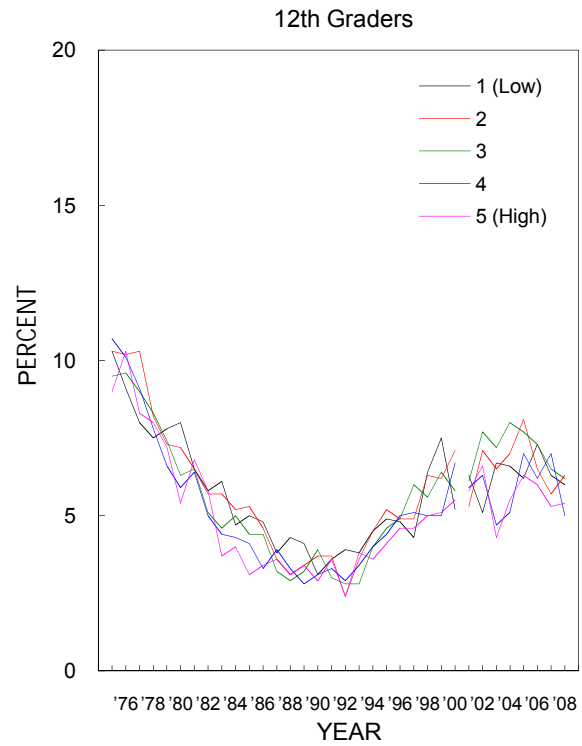
**FIGURE 130**  
**Sedatives (Barbiturates):\* Trends in Annual Prevalence by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2004, a revised set of questions on sedative (barbiturate) use was introduced. Refer to corresponding tables for further details.

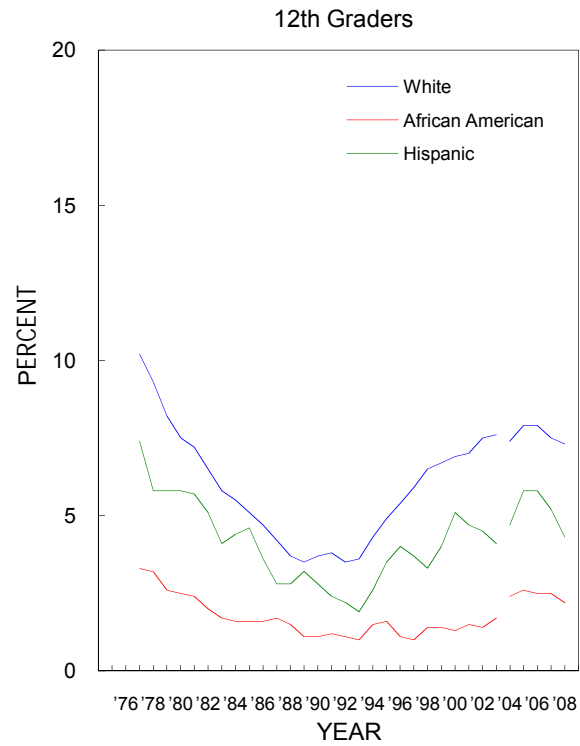
**FIGURE 131**  
**Sedatives (Barbiturates):\* Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2004, a revised set of questions on sedative (barbiturate) use was introduced. Refer to corresponding tables for further details.

**FIGURE 132**  
**Sedatives (Barbiturates):\* Trends in Annual Prevalence by Race/Ethnicity\*\***

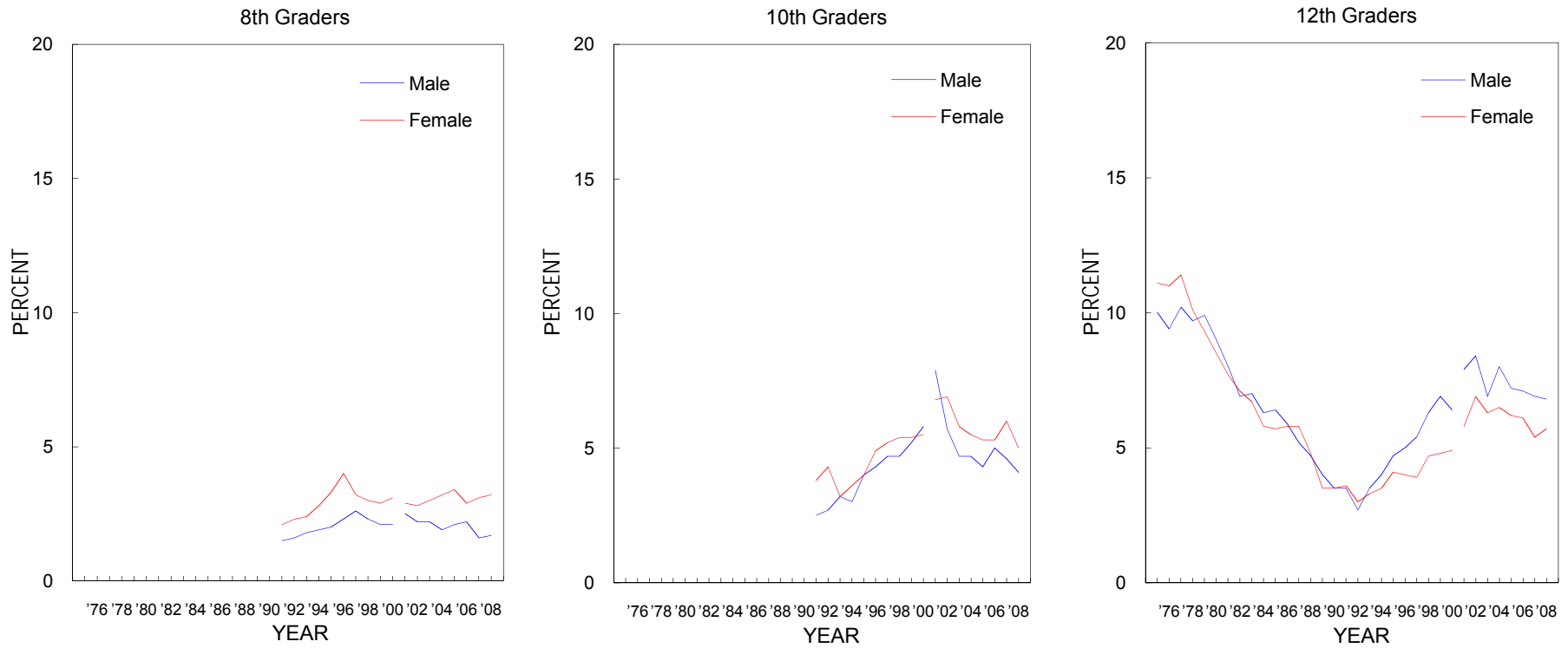


Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2004, a revised set of questions on sedative (barbiturate) use was introduced. Refer to corresponding tables for further details.

\*\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

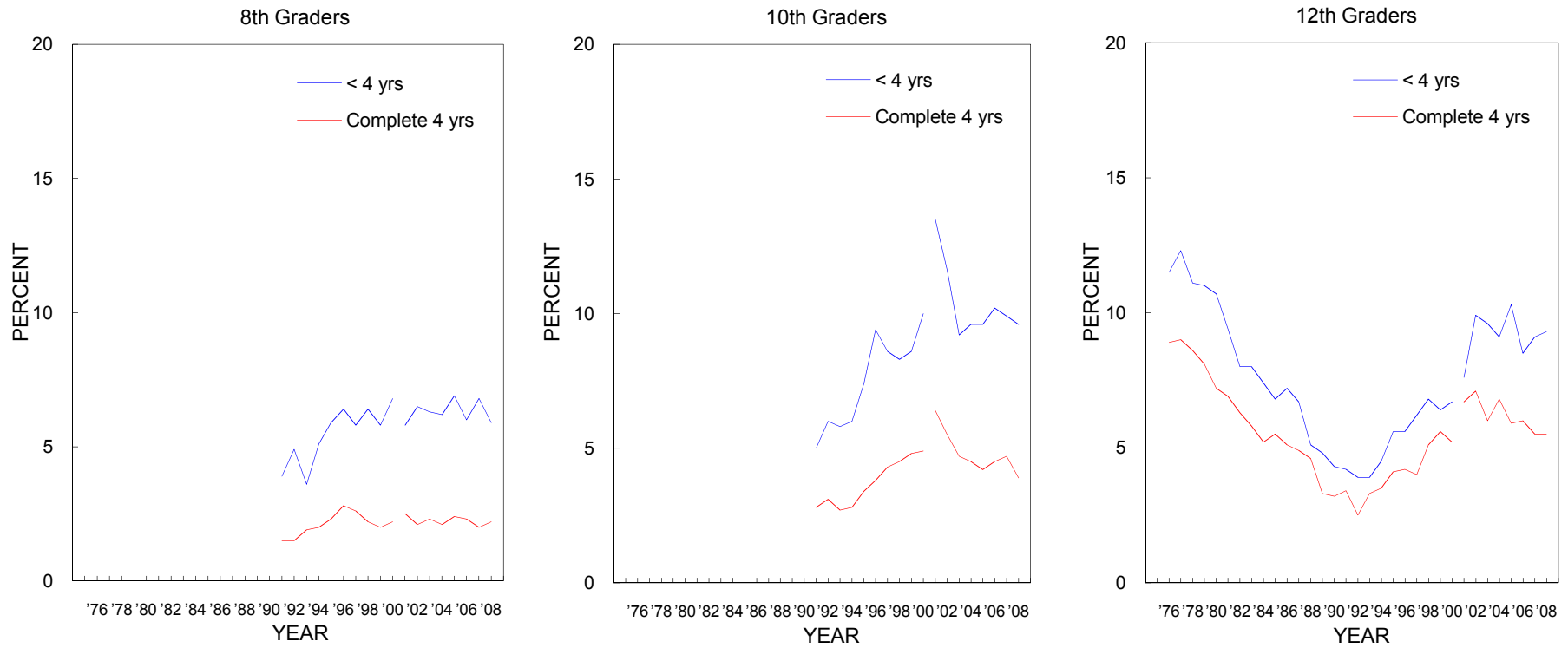
**FIGURE 133**  
**Tranquilizers:\* Trends in Annual Prevalence by Gender**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on tranquilizer use was introduced. Refer to corresponding tables for further details.

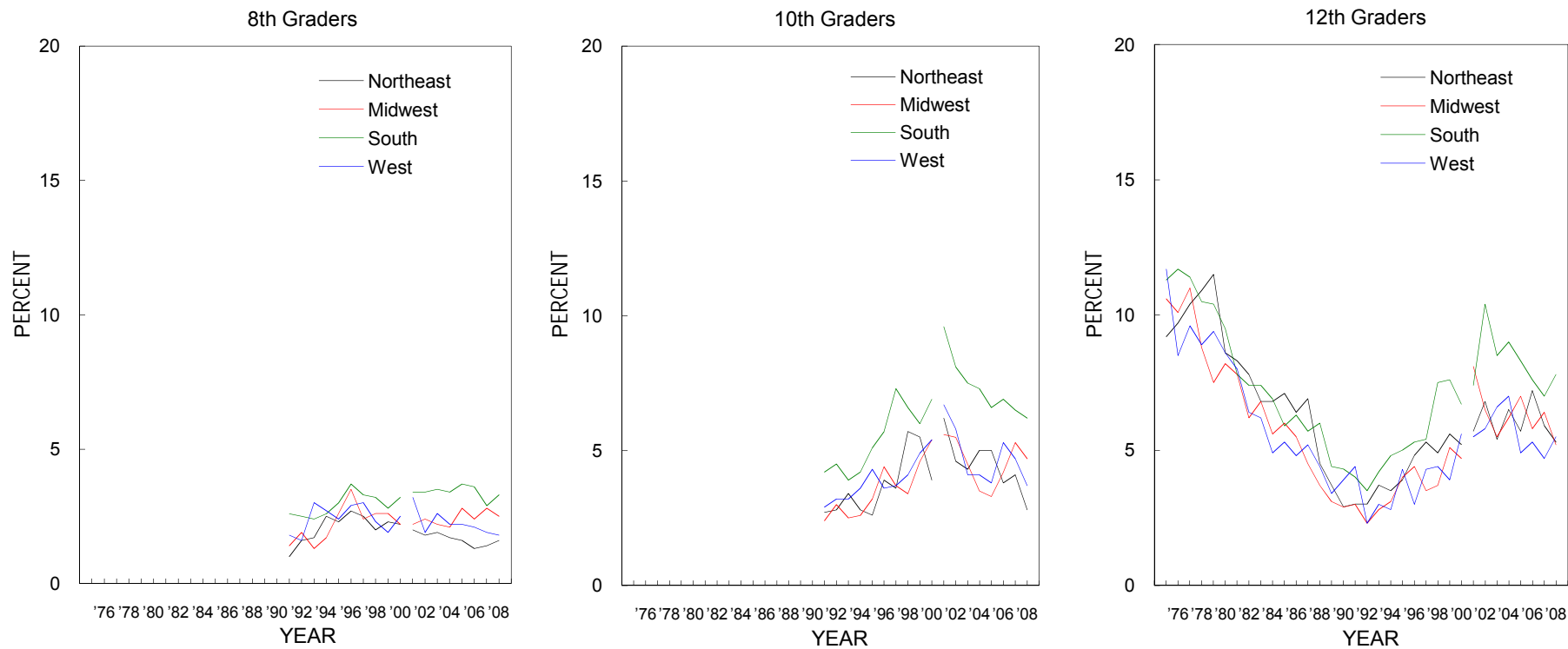
**FIGURE 134**  
**Tranquilizers:\* Trends in Annual Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on tranquilizer use was introduced. Refer to corresponding tables for further details.

**FIGURE 135**  
**Tranquilizers:\* Trends in Annual Prevalence by Region**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on tranquilizer use was introduced. Refer to corresponding tables for further details.

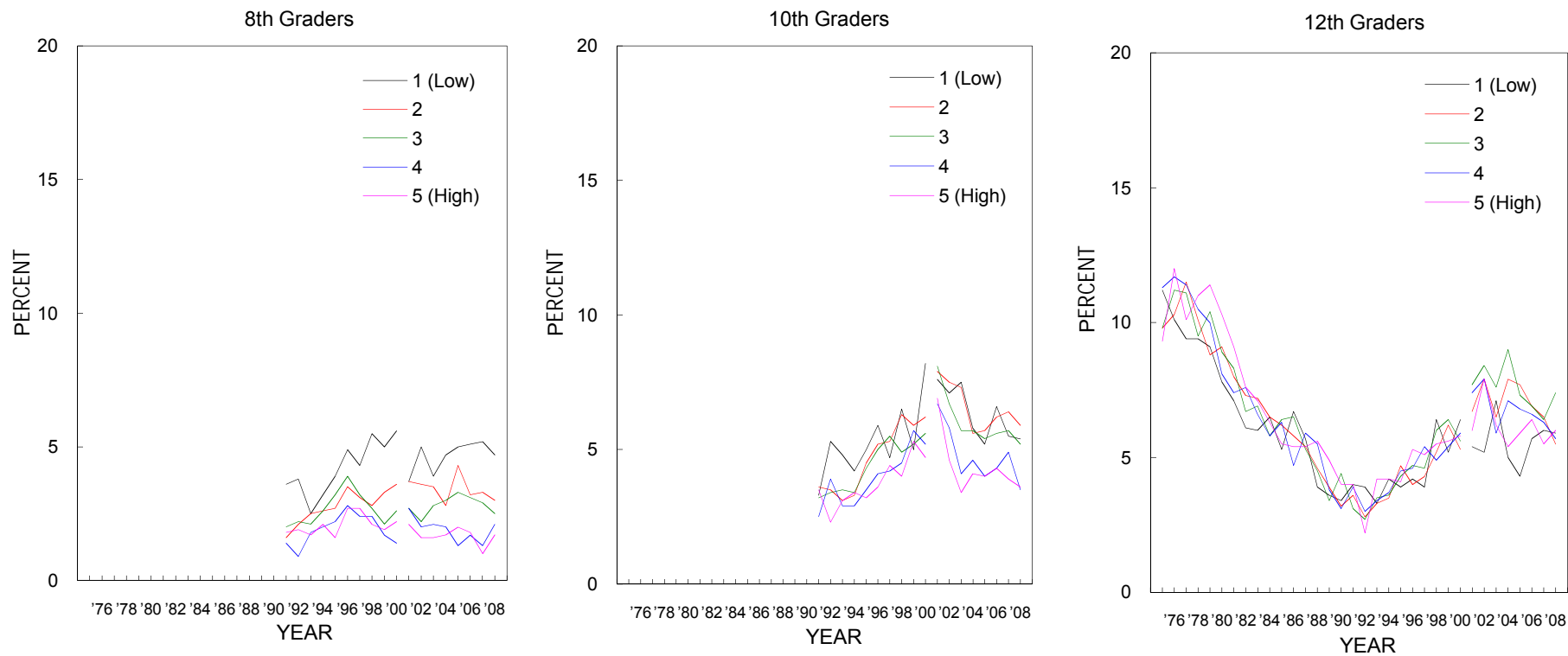
**FIGURE 136**  
**Tranquilizers:\* Trends in Annual Prevalence by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on tranquilizer use was introduced. Refer to corresponding tables for further details.

**FIGURE 137**  
**Tranquilizers:\* Trends in Annual Prevalence by Parents' Average Education**

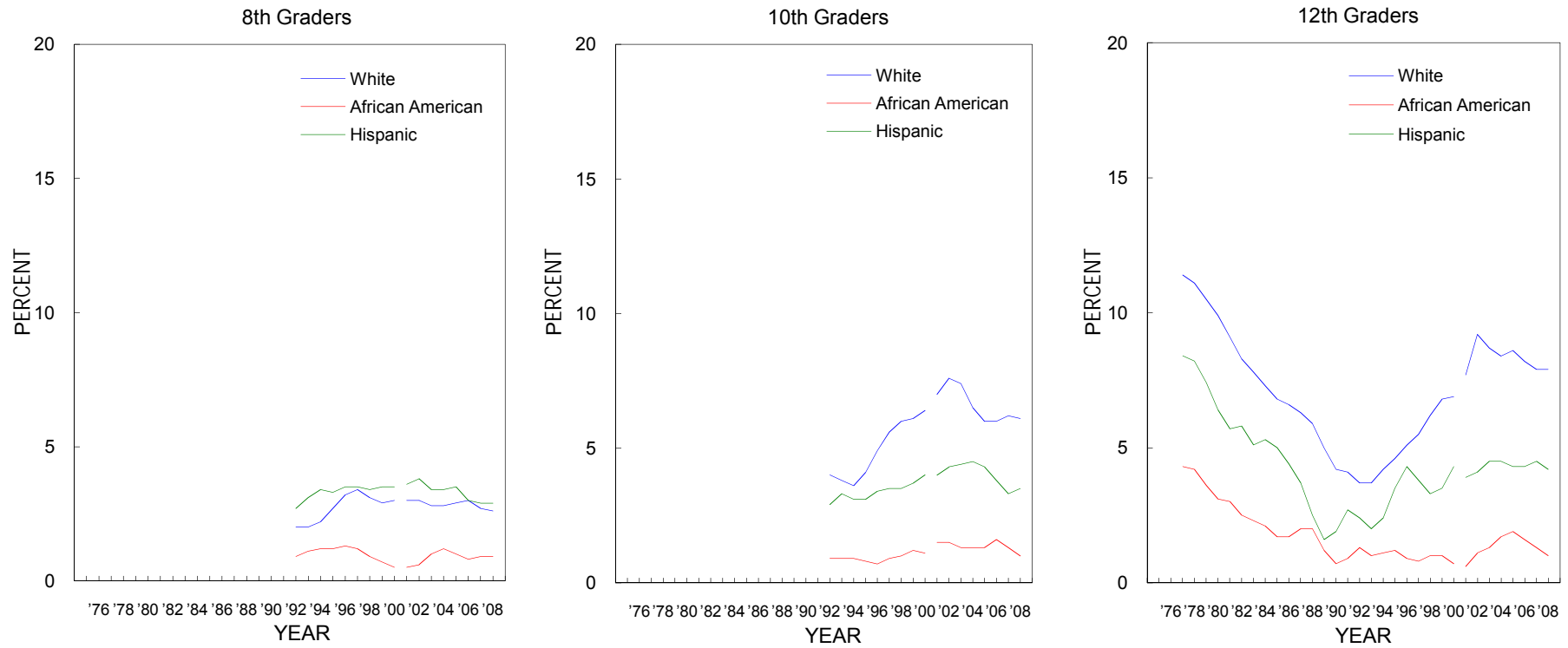


Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on tranquilizer use was introduced. Refer to corresponding tables for further details.



**FIGURE 138**  
**Tranquilizers:\* Trends in Annual Prevalence by Race/Ethnicity\*\***

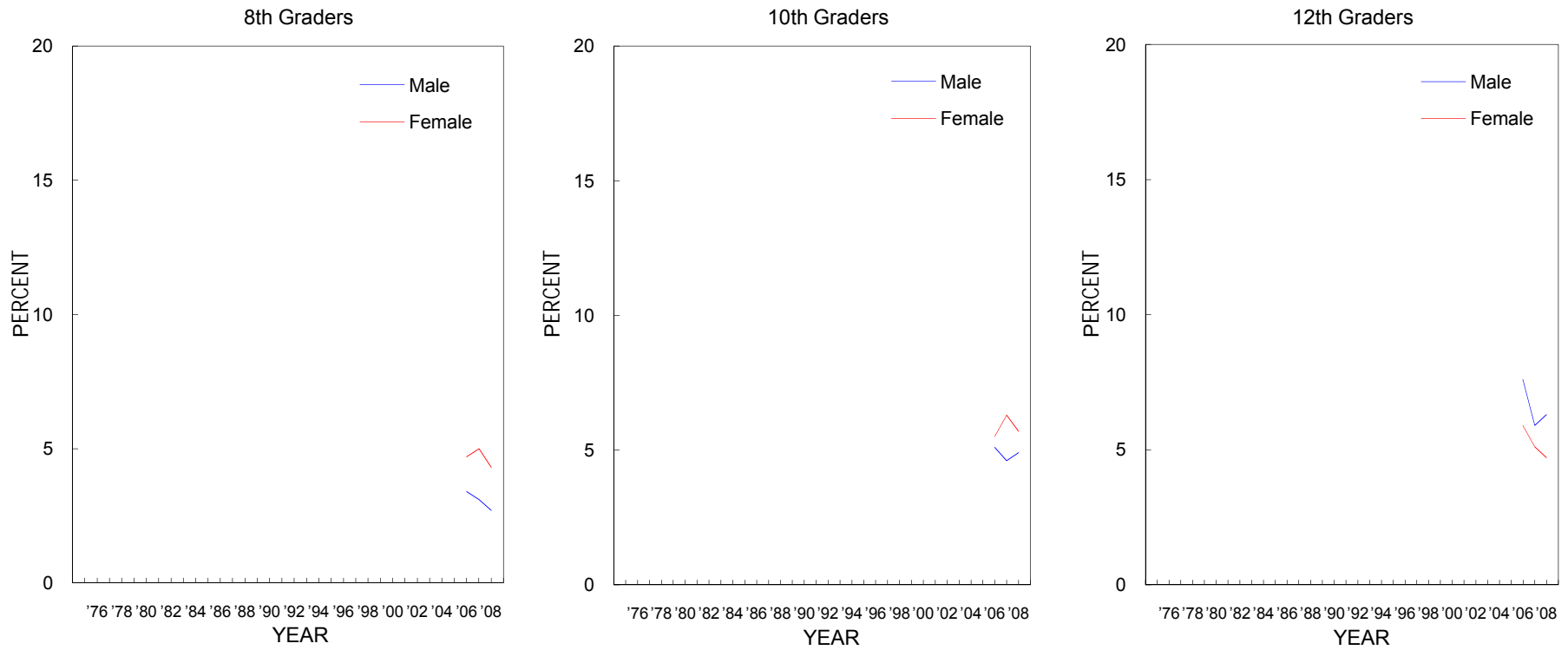


Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2001, a revised set of questions on tranquilizer use was introduced. Refer to corresponding tables for further details.

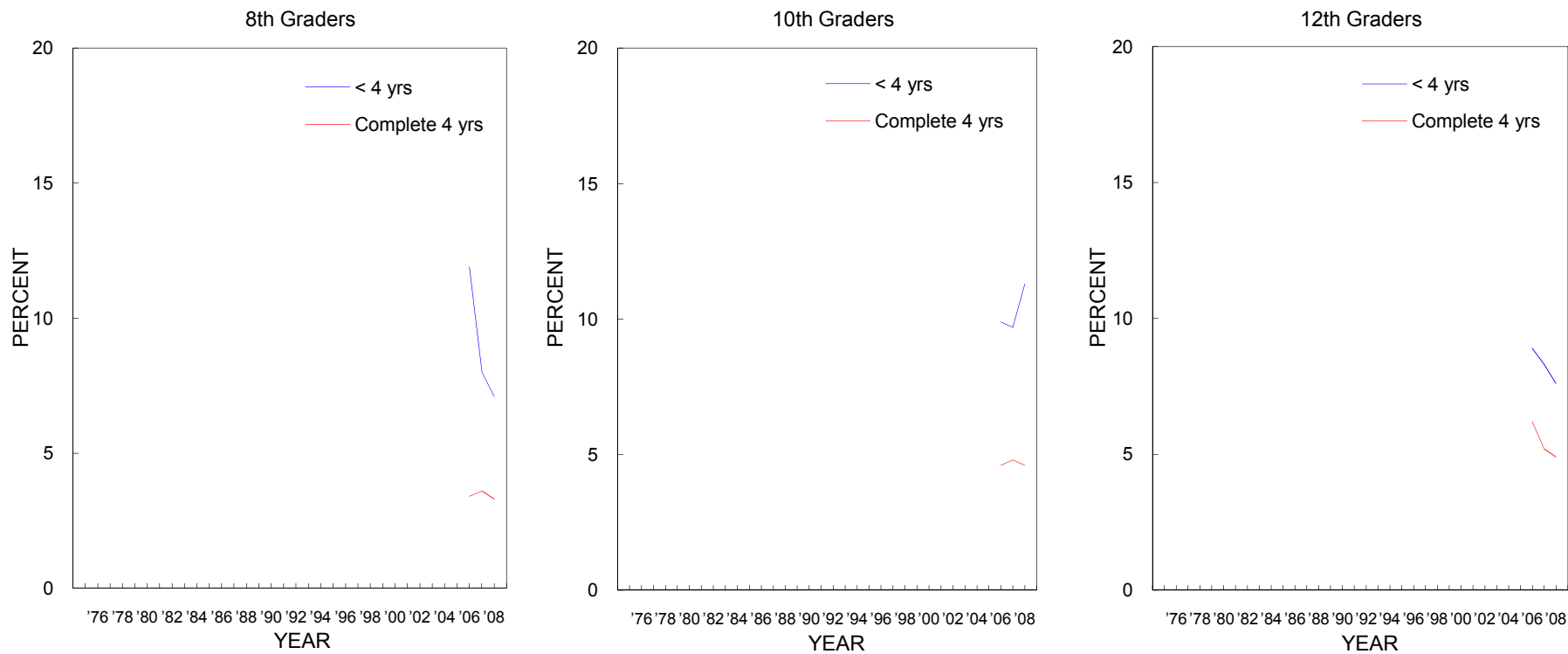
\*\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 139**  
**Over-the-Counter Cough/Cold Medicines: Trends in Annual Prevalence by Gender**



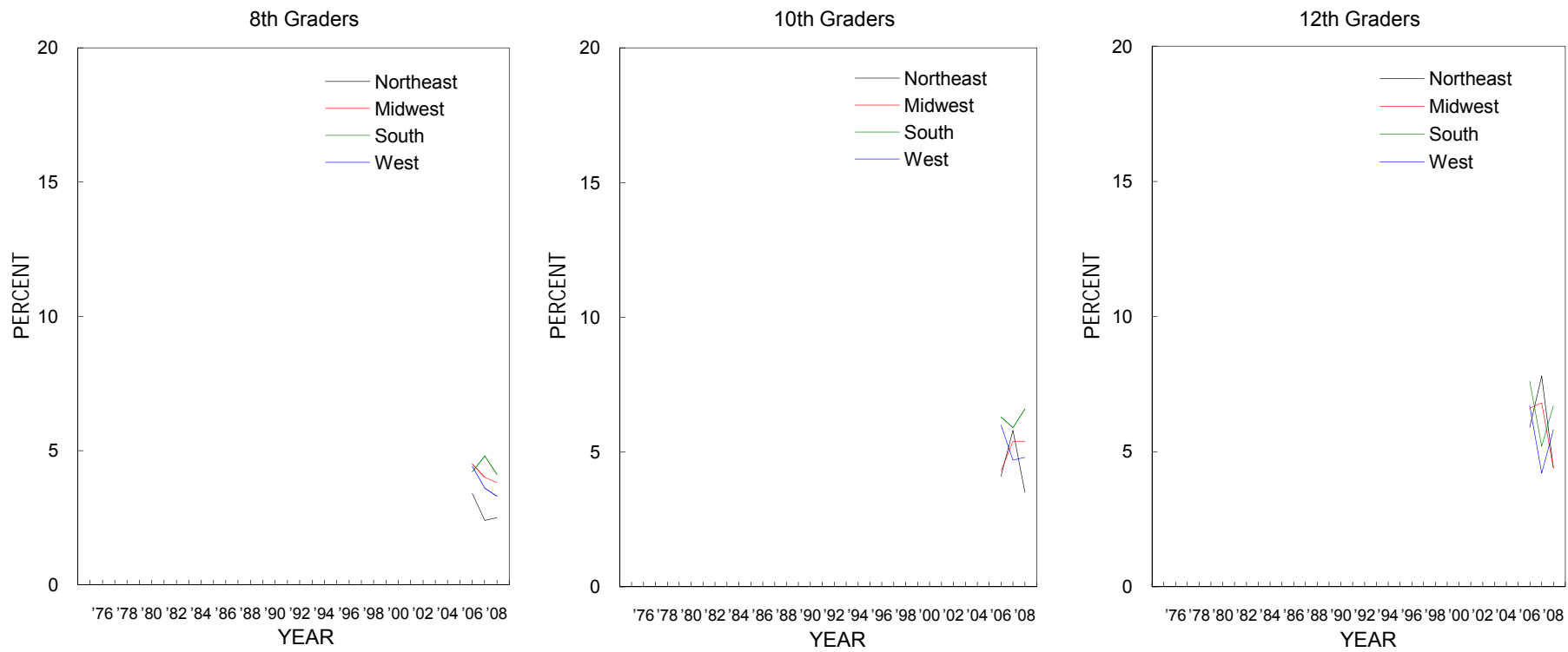
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 140**  
**Over-the-Counter Cough/Cold Medicines: Trends in Annual Prevalence by College Plans**



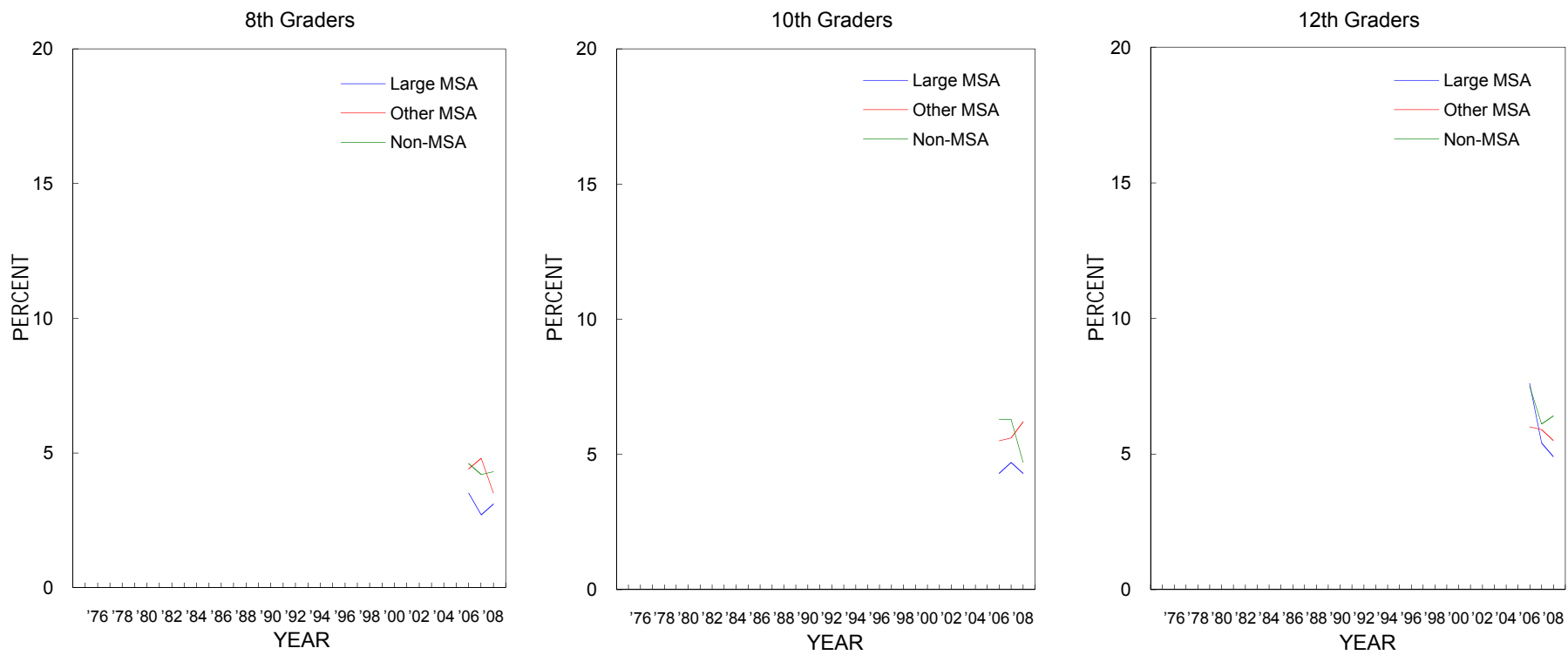
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 141**  
**Over-the-Counter Cough/Cold Medicines: Trends in Annual Prevalence by Region**



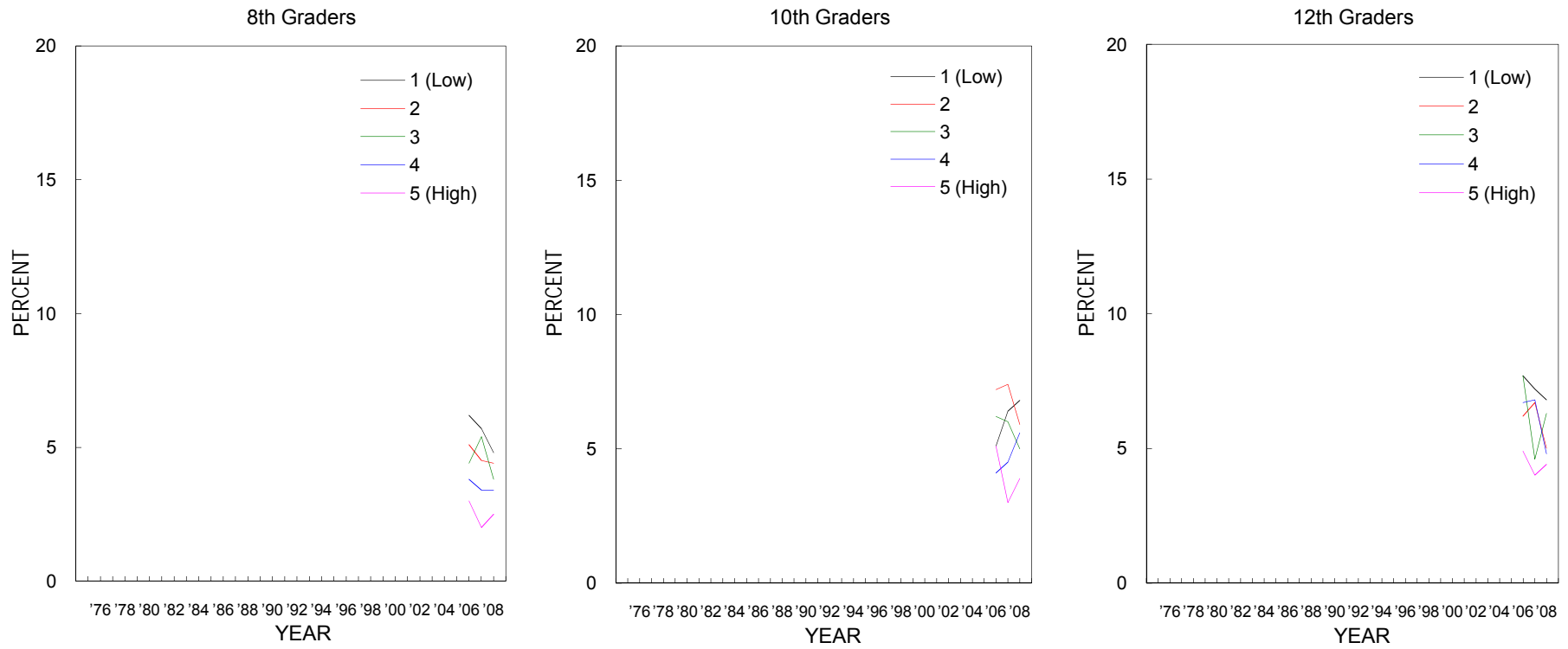
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 142**  
**Over-the-Counter Cough/Cold Medicines: Trends in Annual Prevalence by Population Density**



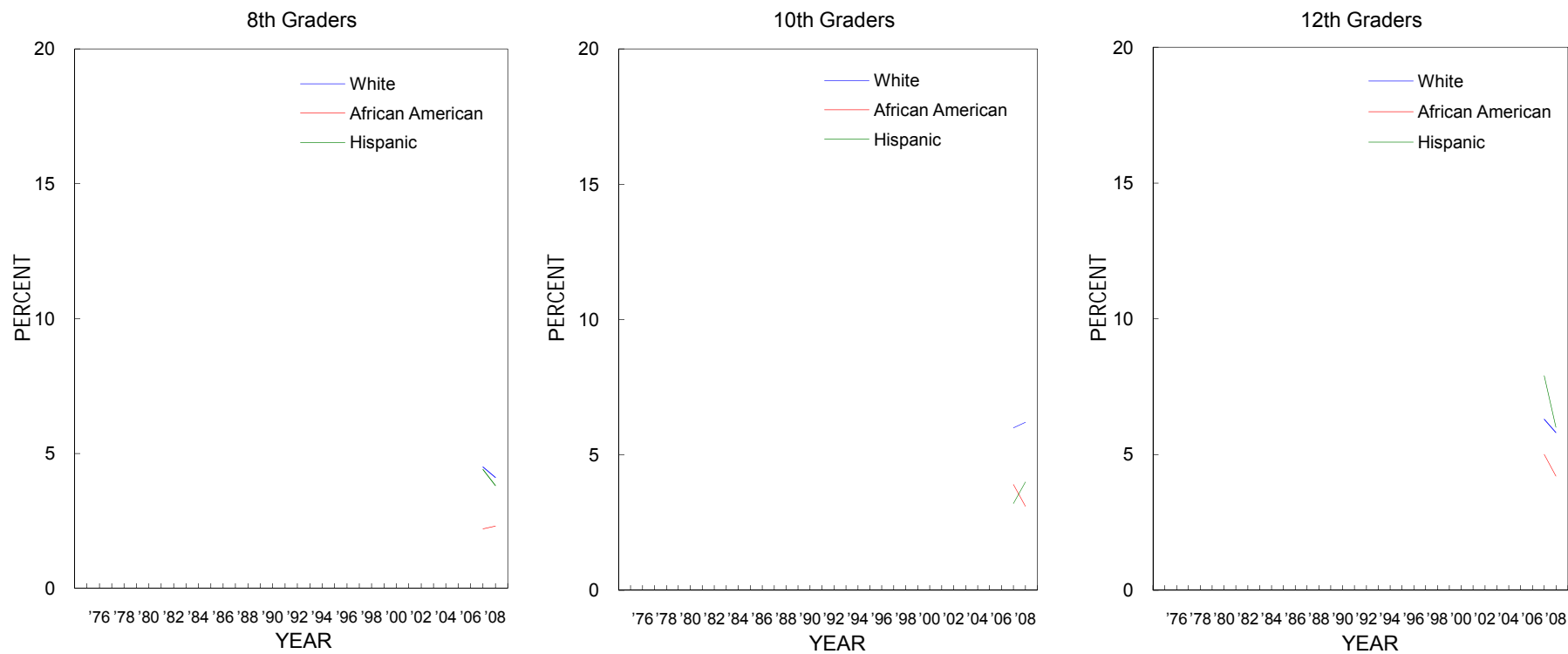
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 143**  
**Over-the-Counter Cough/Cold Medications: Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

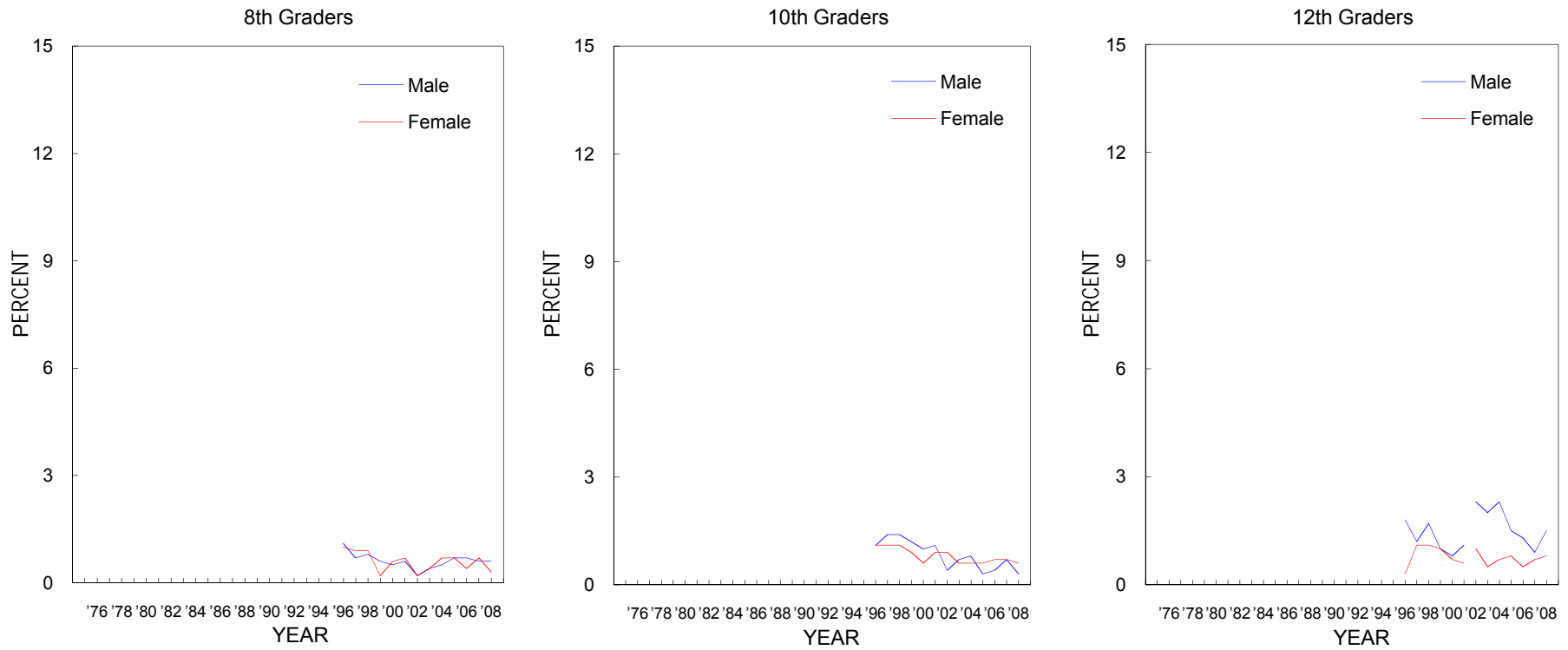
**FIGURE 144**  
**Over-the-Counter Cough/Cold Medications: Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 145**  
**Rohypnol:\* Trends in Annual Prevalence by Gender**

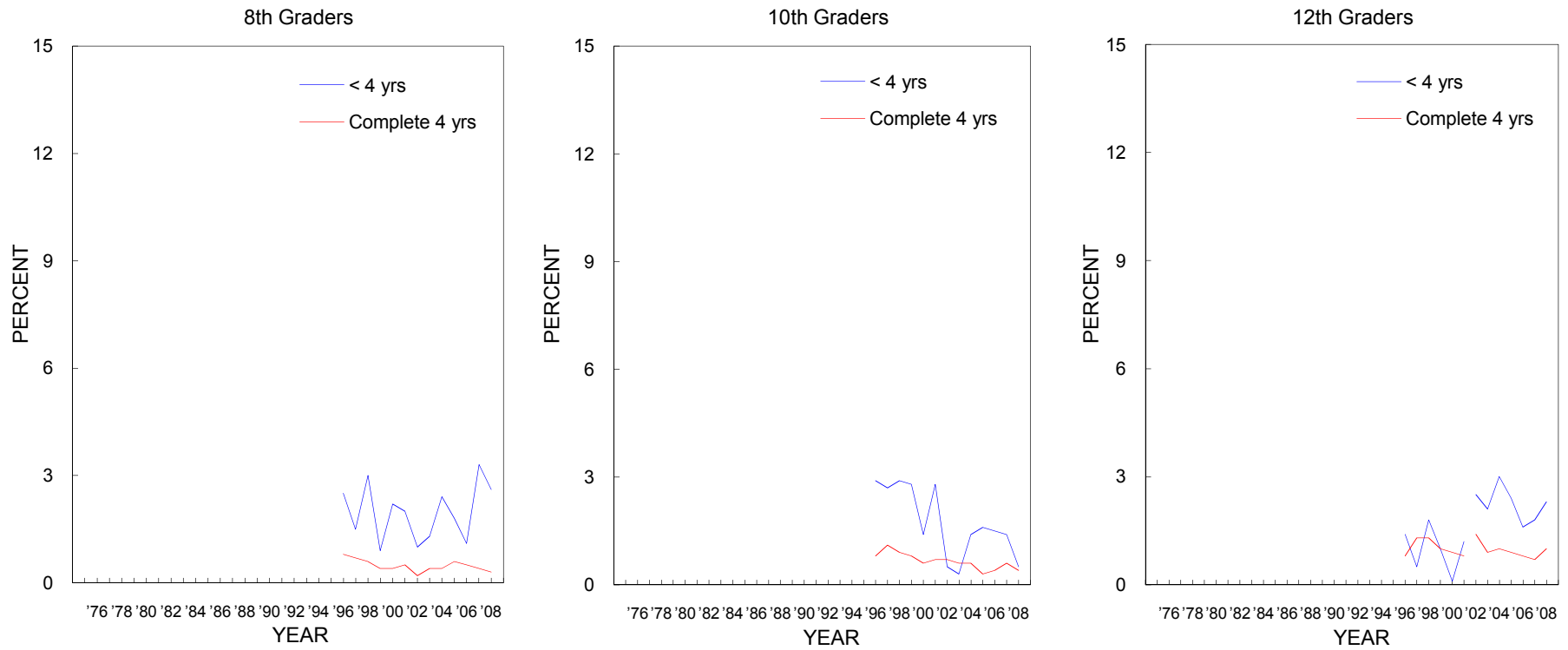


Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2002, a revised set of questions on Rohypnol use was introduced. Refer to corresponding tables for further details.



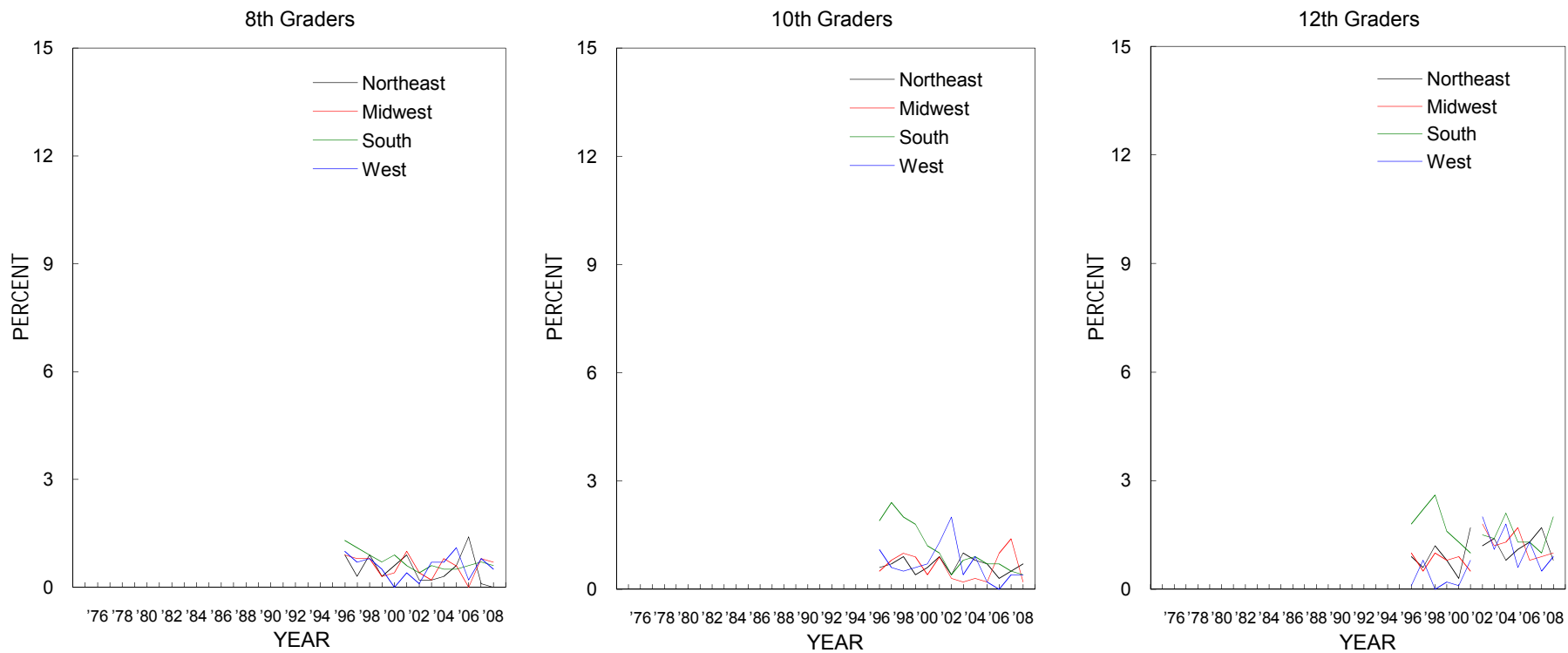
**FIGURE 146**  
**Rohypnol:\* Trends in Annual Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2002, a revised set of questions on Rohypnol use was introduced. Refer to corresponding tables for further details.

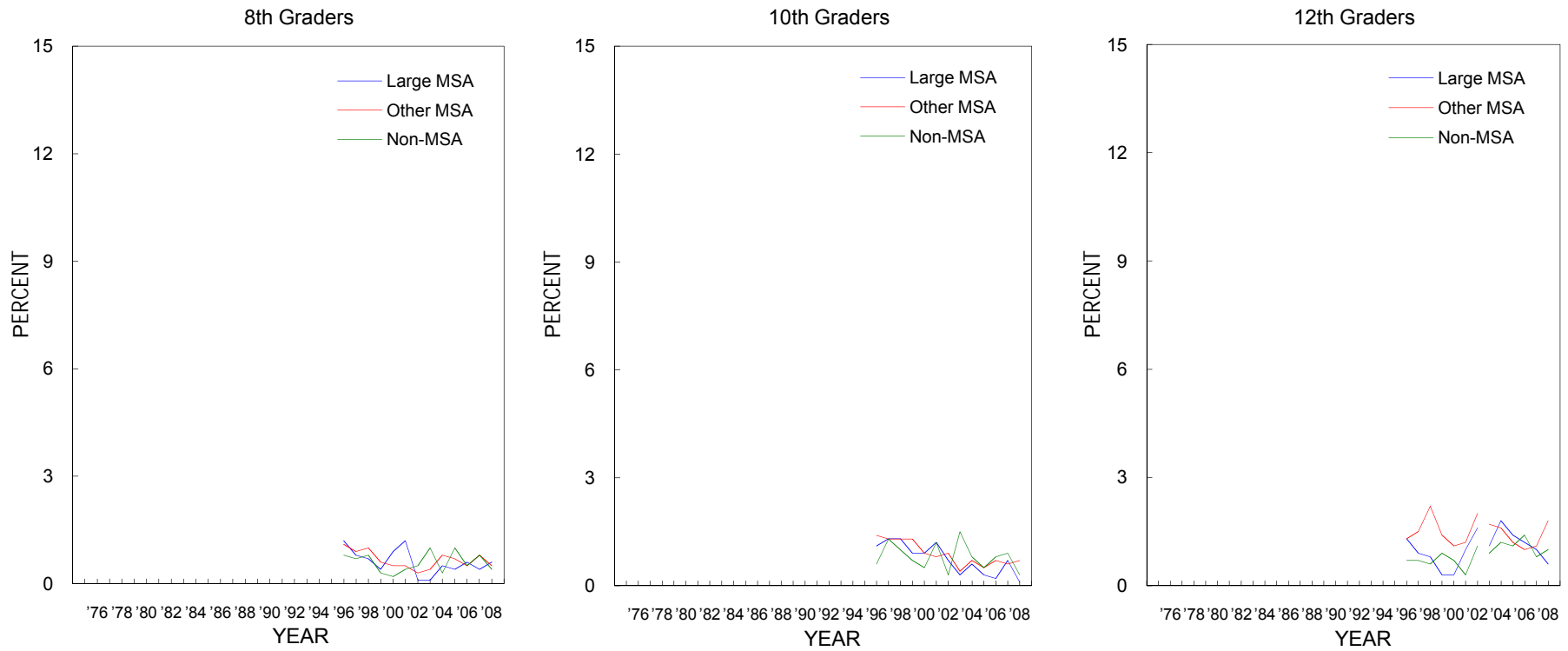
**FIGURE 147**  
**Rohypnol:\* Trends in Annual Prevalence by Region**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2002, a revised set of questions on Rohypnol use was introduced. Refer to corresponding tables for further details.

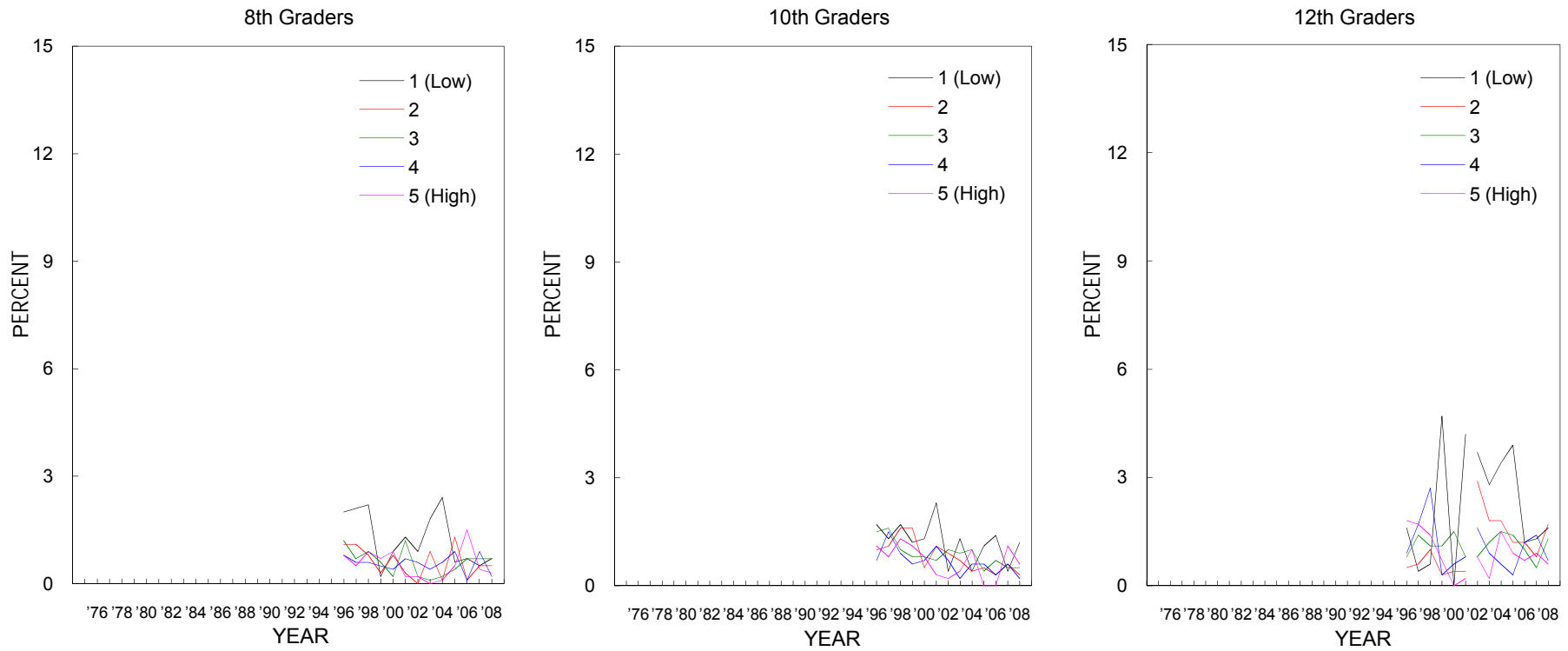
**FIGURE 148**  
**Rohypnol:\* Trends in Annual Prevalence by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2002, a revised set of questions on Rohypnol use was introduced. Refer to corresponding tables for further details.

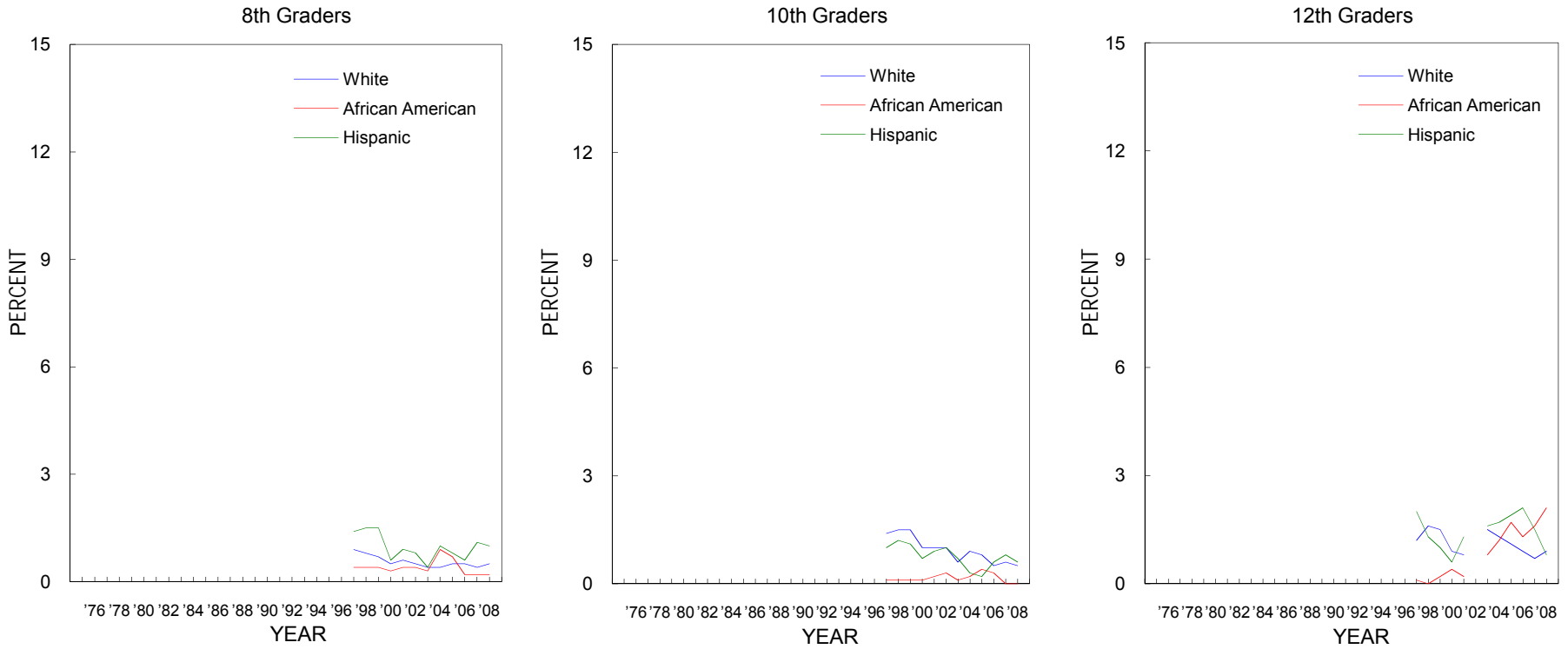
**FIGURE 149**  
**Rohypnol:\* Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2002, a revised set of questions on Rohypnol use was introduced. Refer to corresponding tables for further details.

**FIGURE 150**  
**Rohypnol:\* Trends in Annual Prevalence by Race/Ethnicity\*\***

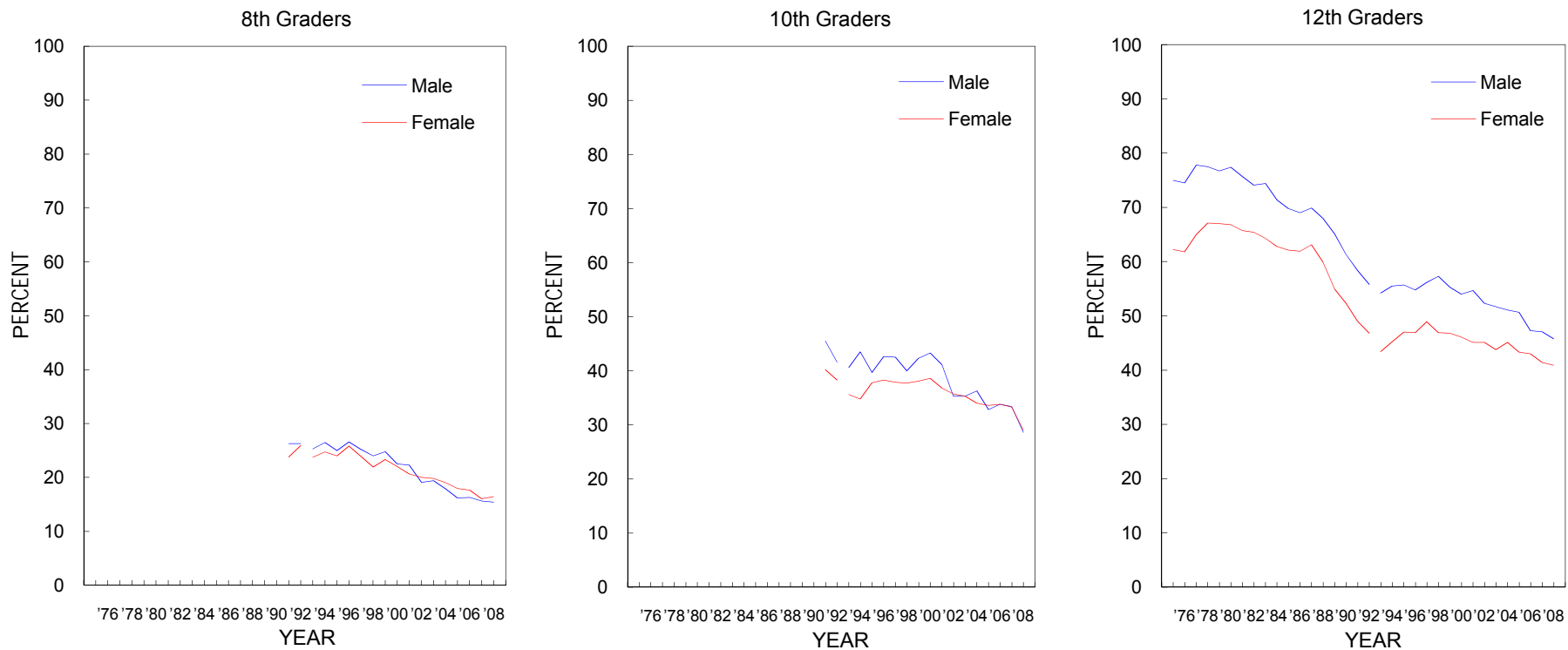


Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 2002, a revised set of questions on Rohypnol use was introduced. Refer to corresponding tables for further details.

\*\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

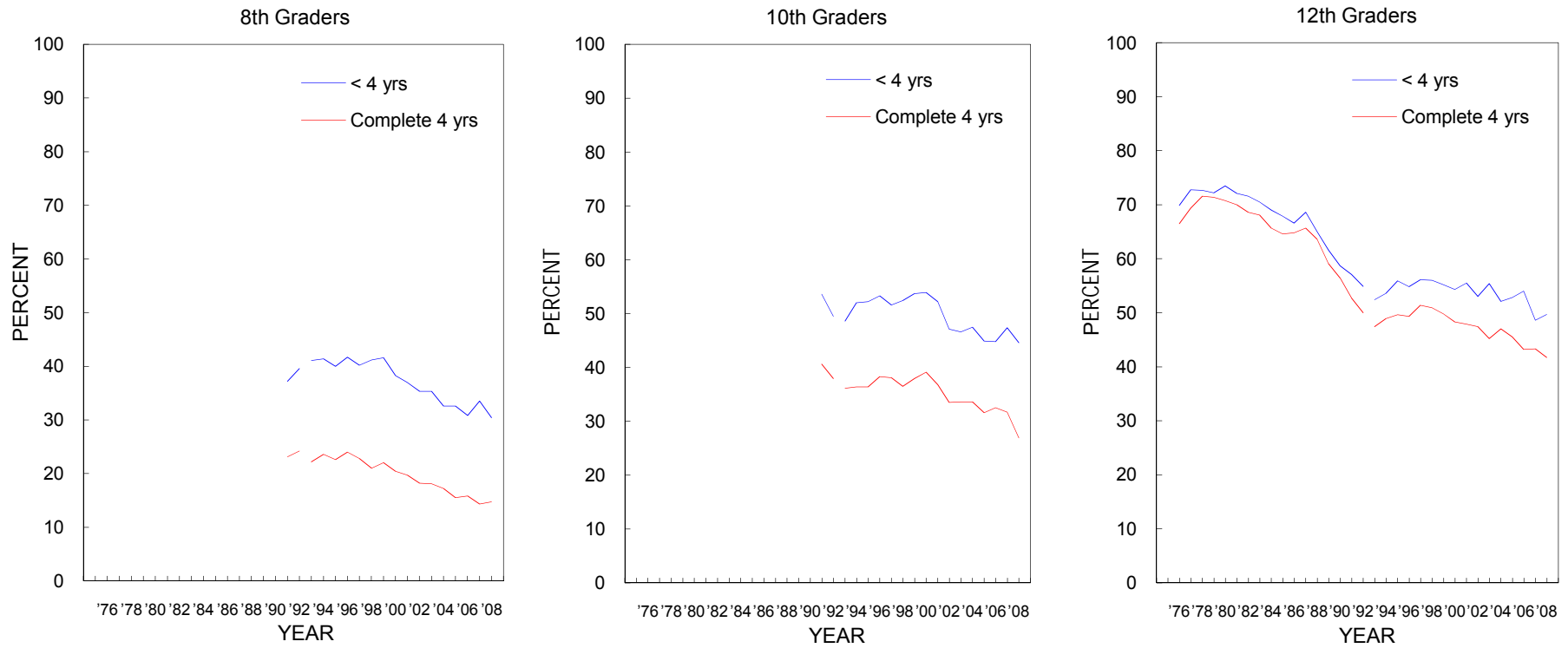
**FIGURE 151**  
**Alcohol:\* Trends in 30-Day Prevalence by Gender**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 1993, a revised set of questions on alcohol use was introduced. Refer to corresponding tables for further details.

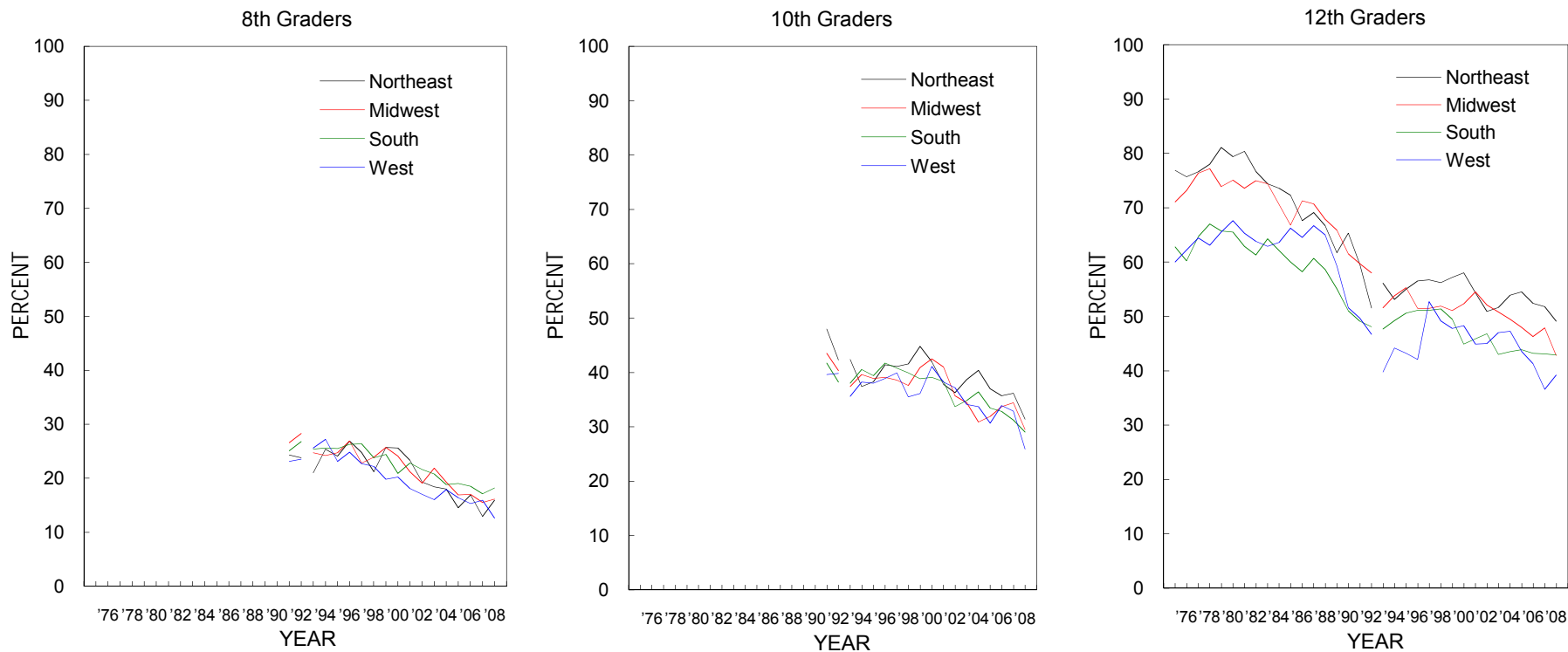
**FIGURE 152**  
**Alcohol:\* Trends in 30-Day Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 1993, a revised set of questions on alcohol use was introduced. Refer to corresponding tables for further details.

**FIGURE 153**  
**Alcohol:\* Trends in 30-Day Prevalence by Region**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 1993, a revised set of questions on alcohol use was introduced. Refer to corresponding tables for further details.



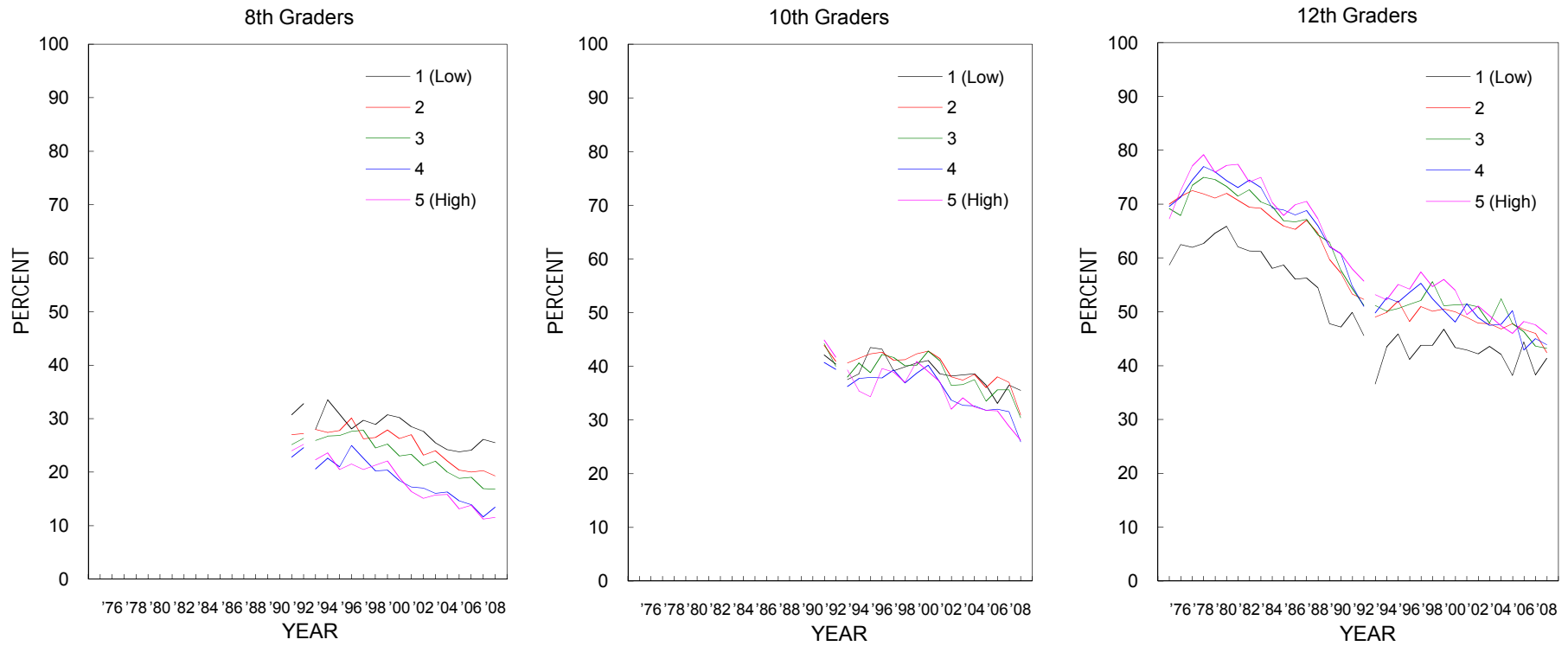
**FIGURE 154**  
**Alcohol:\* Trends in 30-Day Prevalence by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 1993, a revised set of questions on alcohol use was introduced. Refer to corresponding tables for further details.

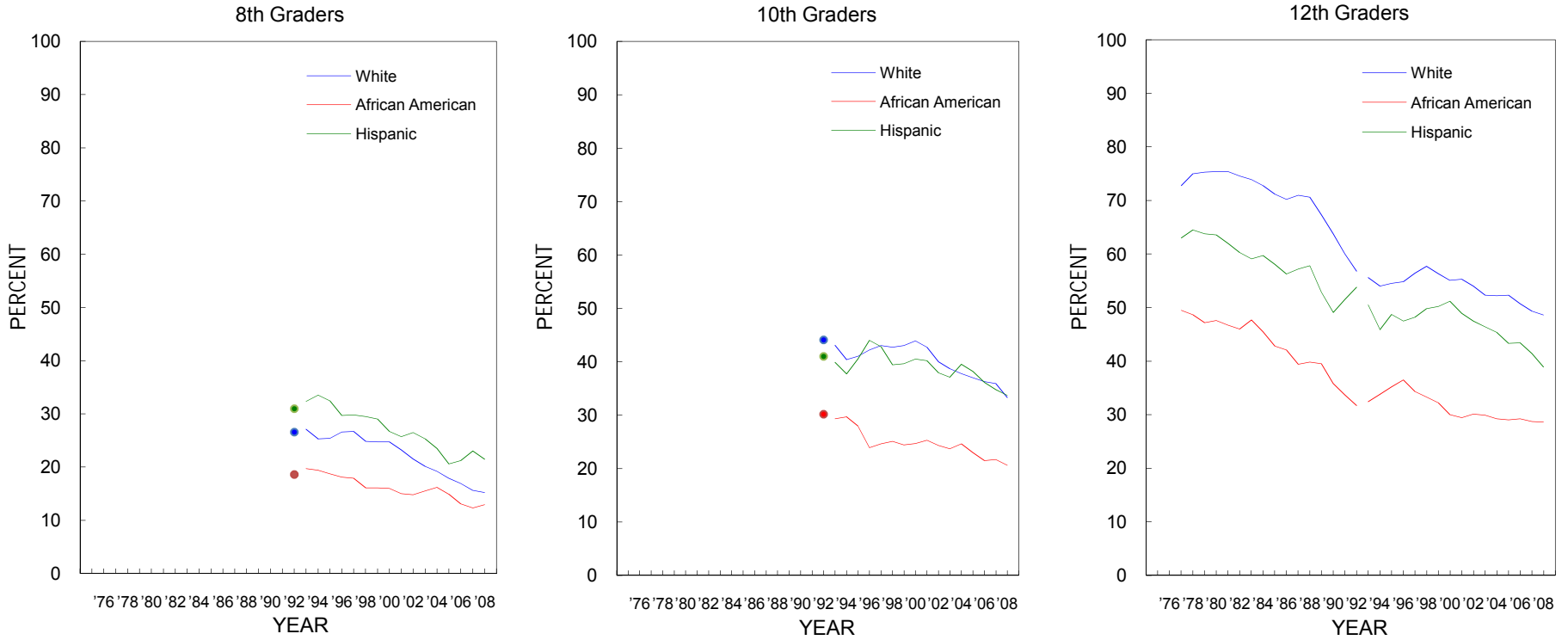
**FIGURE 155**  
**Alcohol:\* Trends in 30-Day Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 1993, a revised set of questions on alcohol use was introduced. Refer to corresponding tables for further details.

**FIGURE 156**  
**Alcohol: \* Trends in 30-Day Prevalence by Race/Ethnicity\*\***

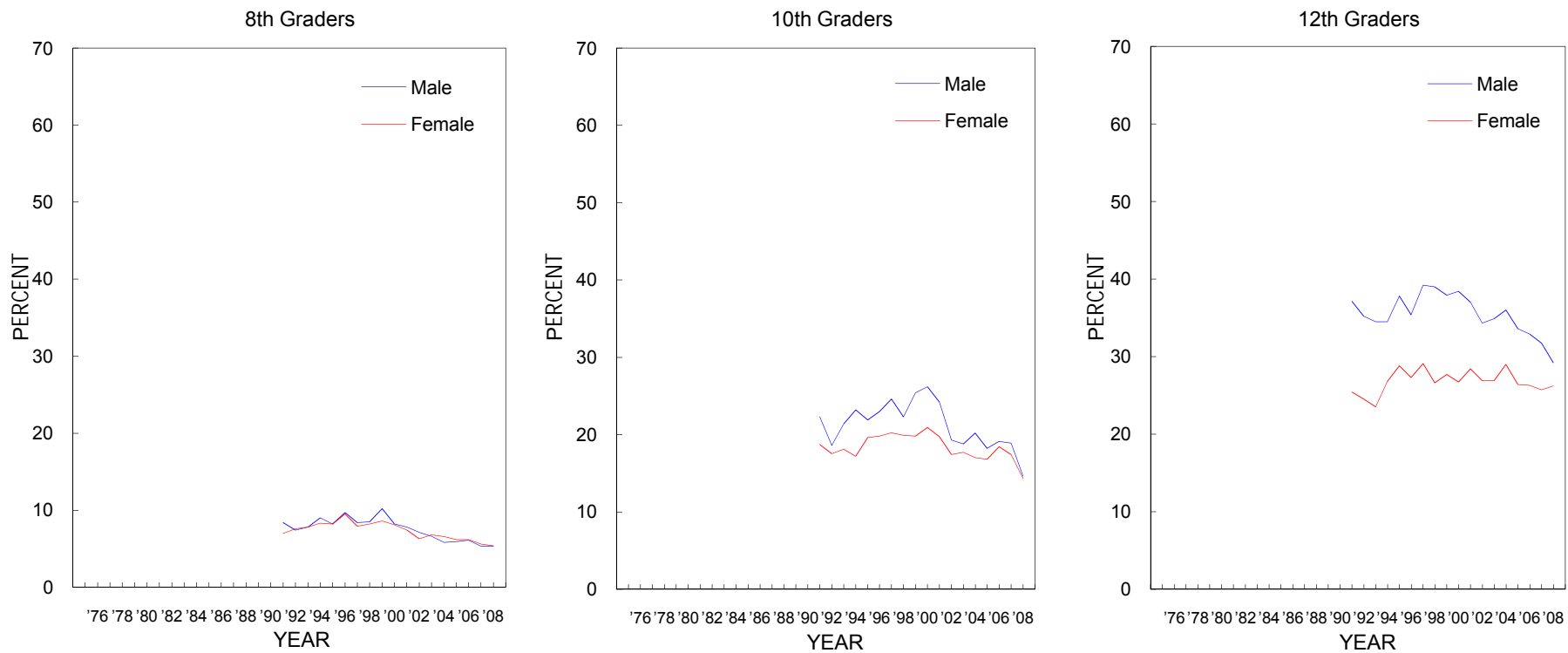


Source. The Monitoring the Future study, the University of Michigan.

\*Beginning in 1993, a revised set of questions on alcohol use was introduced. Refer to corresponding tables for further details.

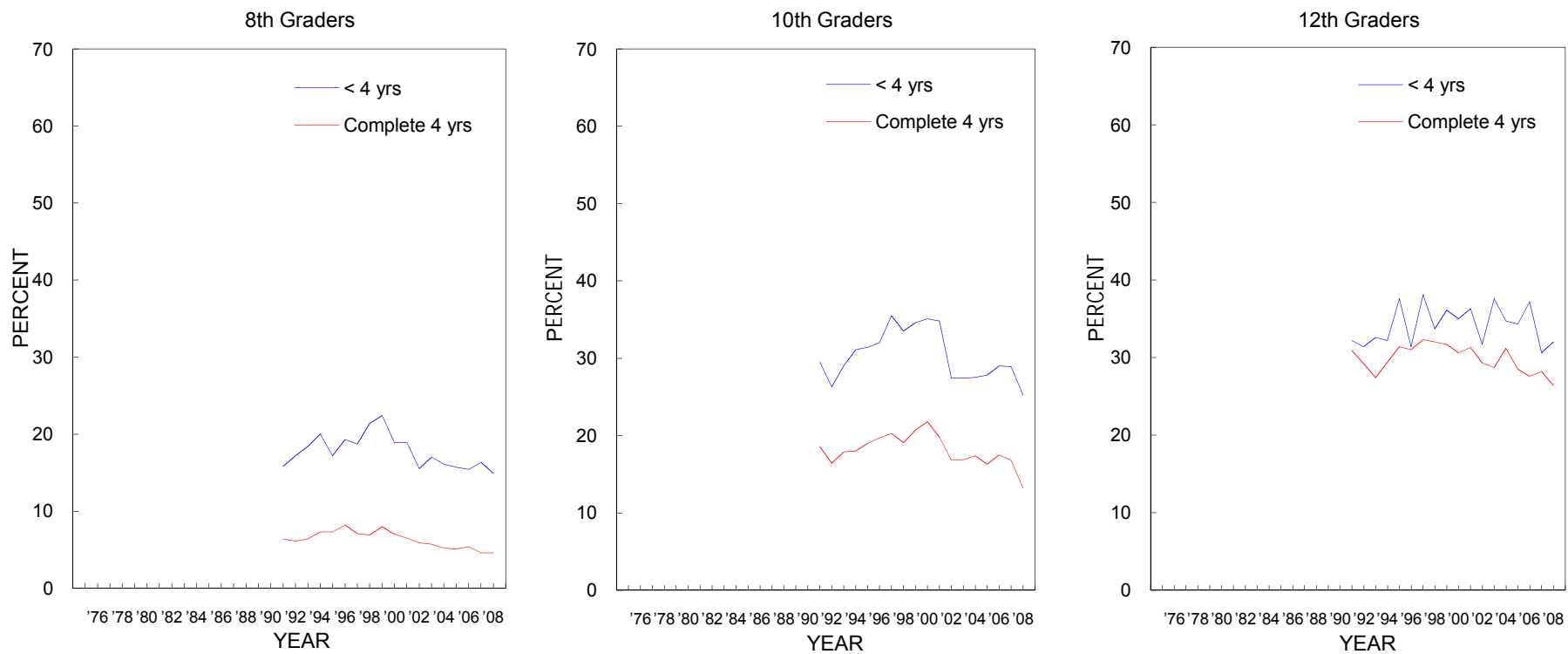
\*\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 157**  
**Alcohol: Trends in 30-Day Prevalence of Having Been Drunk by Gender**



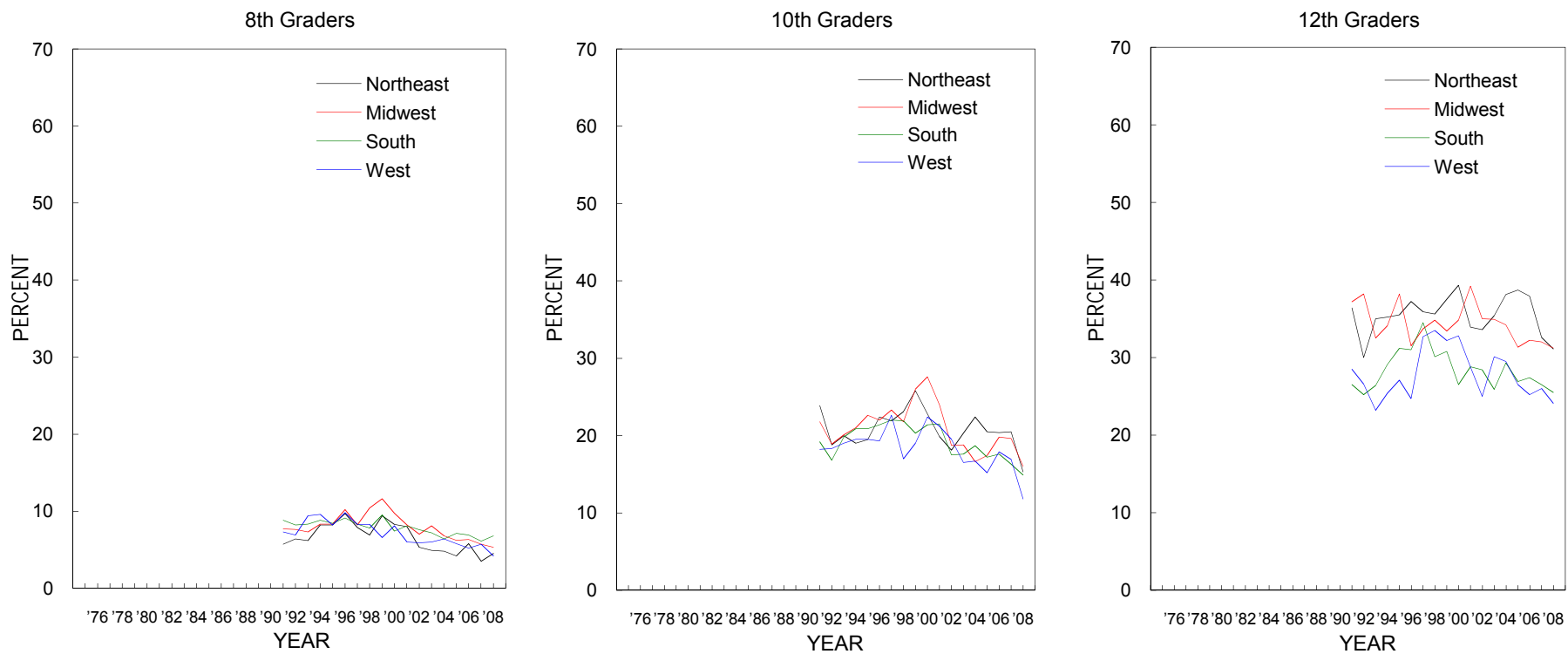
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 158**  
**Alcohol: Trends in 30-Day Prevalence of Having Been Drunk by College Plans**



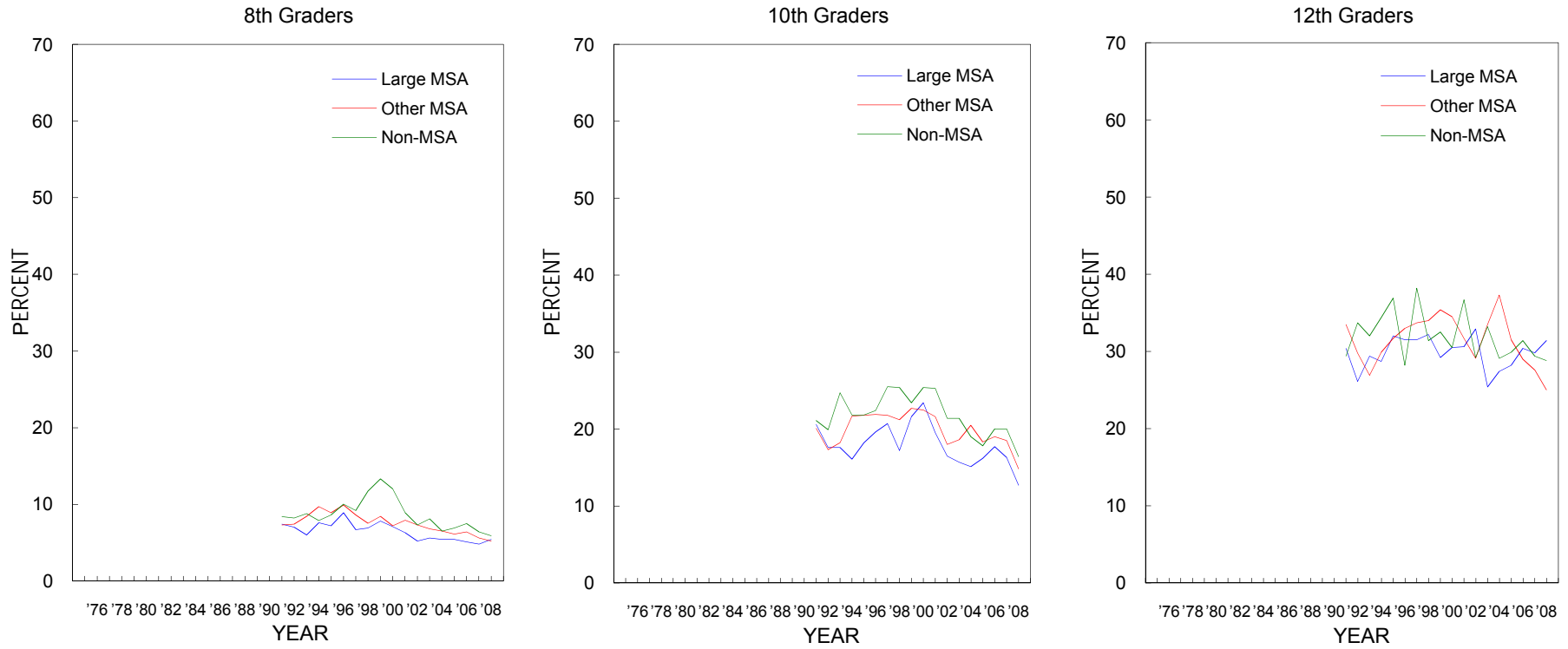
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 159**  
**Alcohol: Trends in 30-Day Prevalence of Having Been Drunk by Region**



Source. The Monitoring the Future study, the University of Michigan.

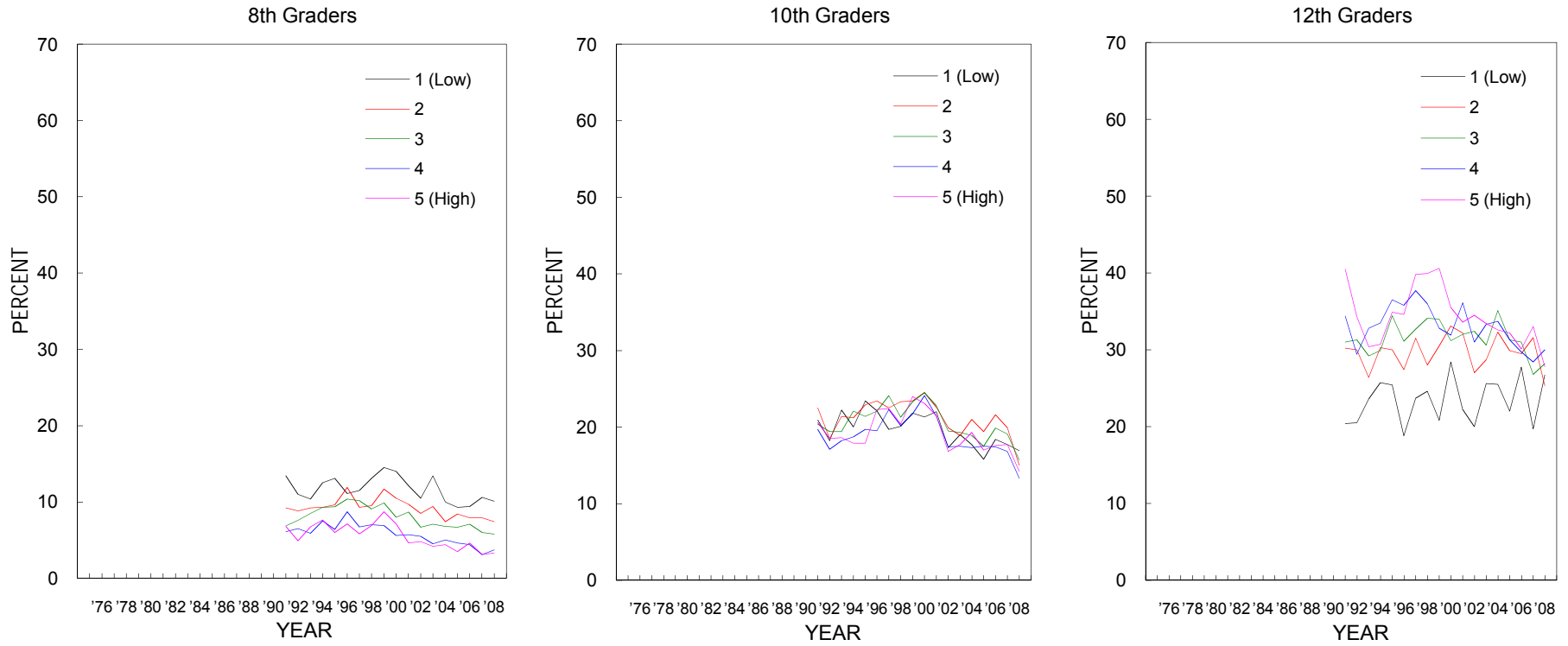
**FIGURE 160**  
**Alcohol: Trends in 30-Day Prevalence of Having Been Drunk by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 161**

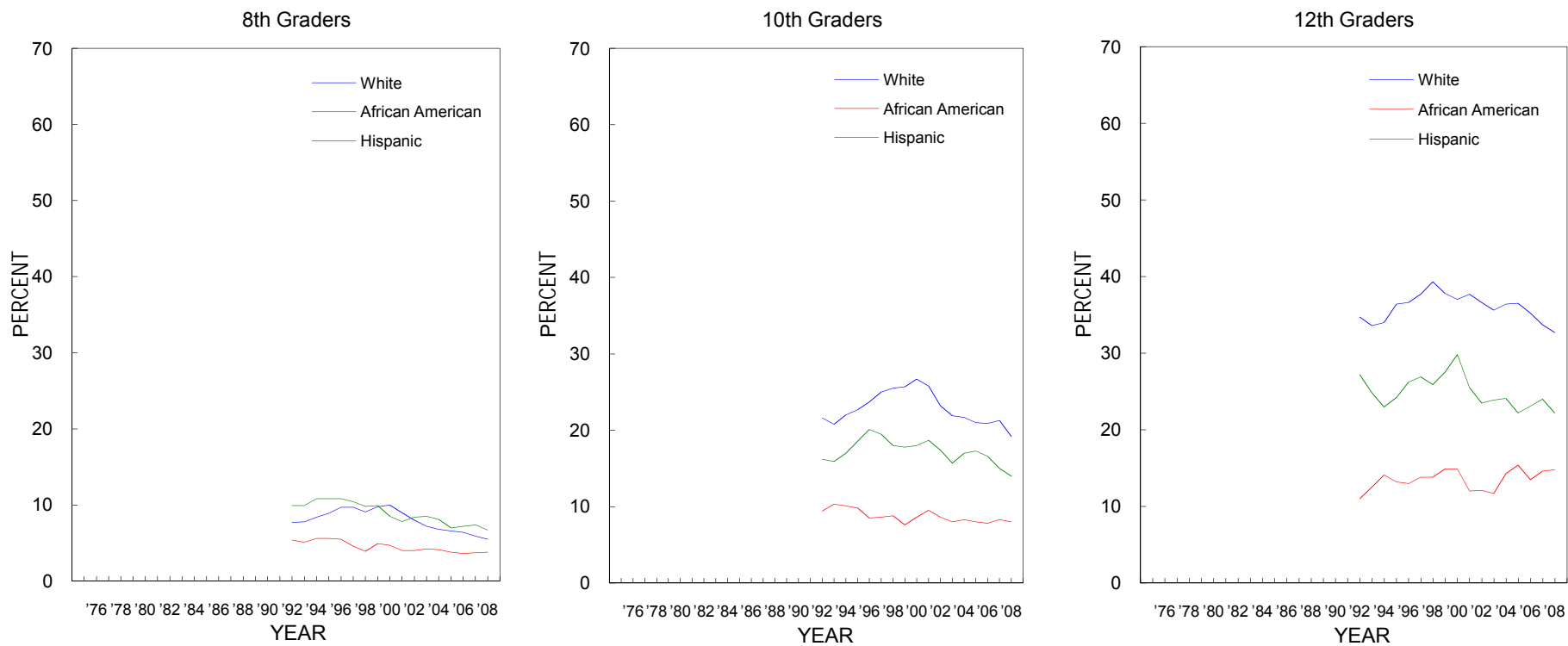
**Alcohol: Trends in 30-Day Prevalence of Having Been Drunk by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.



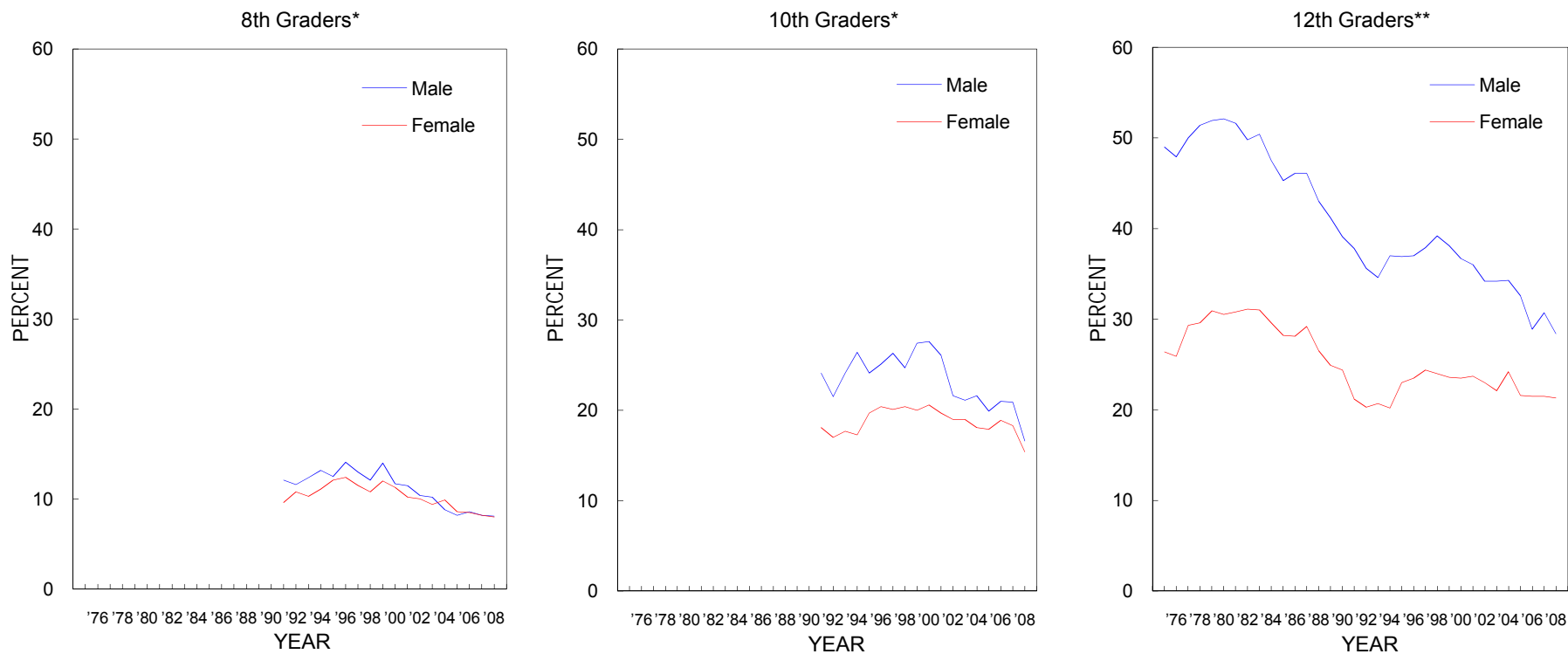
**FIGURE 162**  
**Alcohol: Trends in 30-Day Prevalence of Having Been Drunk by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 163**  
**Alcohol: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Gender**

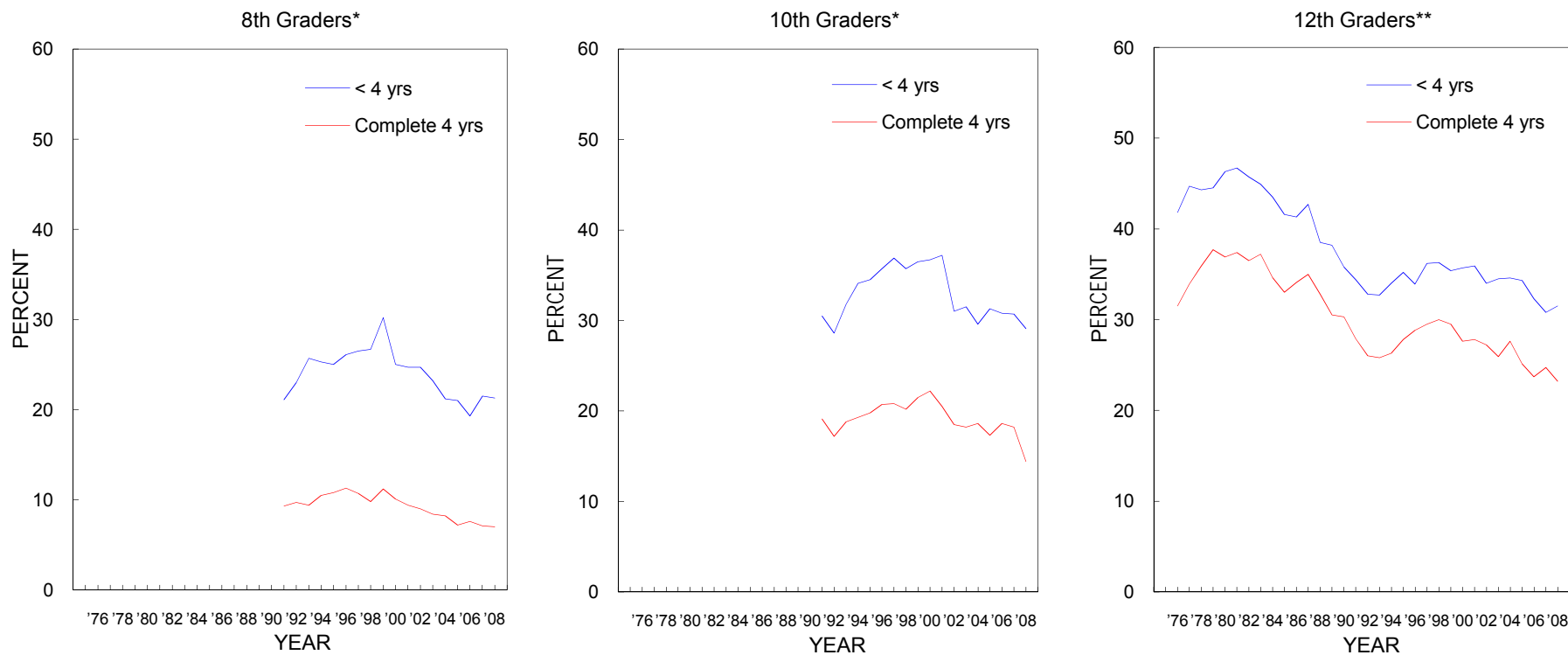


Source. The Monitoring the Future study, the University of Michigan.

\*For 8th and 10th graders: The 1991–2007 estimates for five or more drinks in a row differ slightly from some previous reports due to an error in the data editing process prior to 2008. The revised estimates average about 2 percentage points lower than the estimates previously reported. Those previous overestimates have been corrected in this table.

\*\*For 12th graders: Due to a coding error, previously released versions of this table contained values that were slightly off for the measure of five or more drinks in a row for 2005 and 2006. These have been corrected here.

**FIGURE 164**  
**Alcohol: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by College Plans**

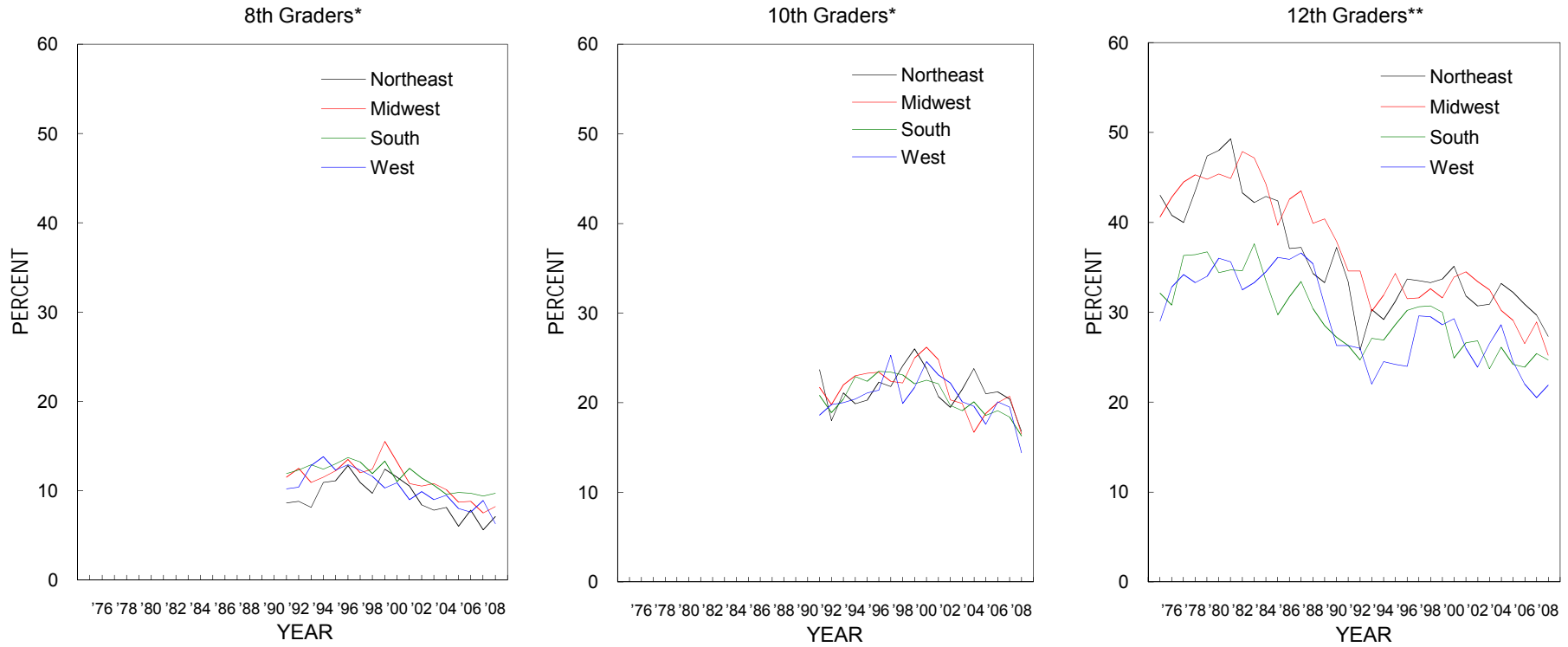


Source. The Monitoring the Future study, the University of Michigan.

\*For 8th and 10th graders: The 1991–2007 estimates for five or more drinks in a row differ slightly from some previous reports due to an error in the data editing process prior to 2008. The revised estimates average about 2 percentage points lower than the estimates previously reported. Those previous overestimates have been corrected in this table.

\*\*For 12th graders: Due to a coding error, previously released versions of this table contained values that were slightly off for the measure of five or more drinks in a row for 2005 and 2006. These have been corrected here.

**FIGURE 165**  
**Alcohol: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Region**

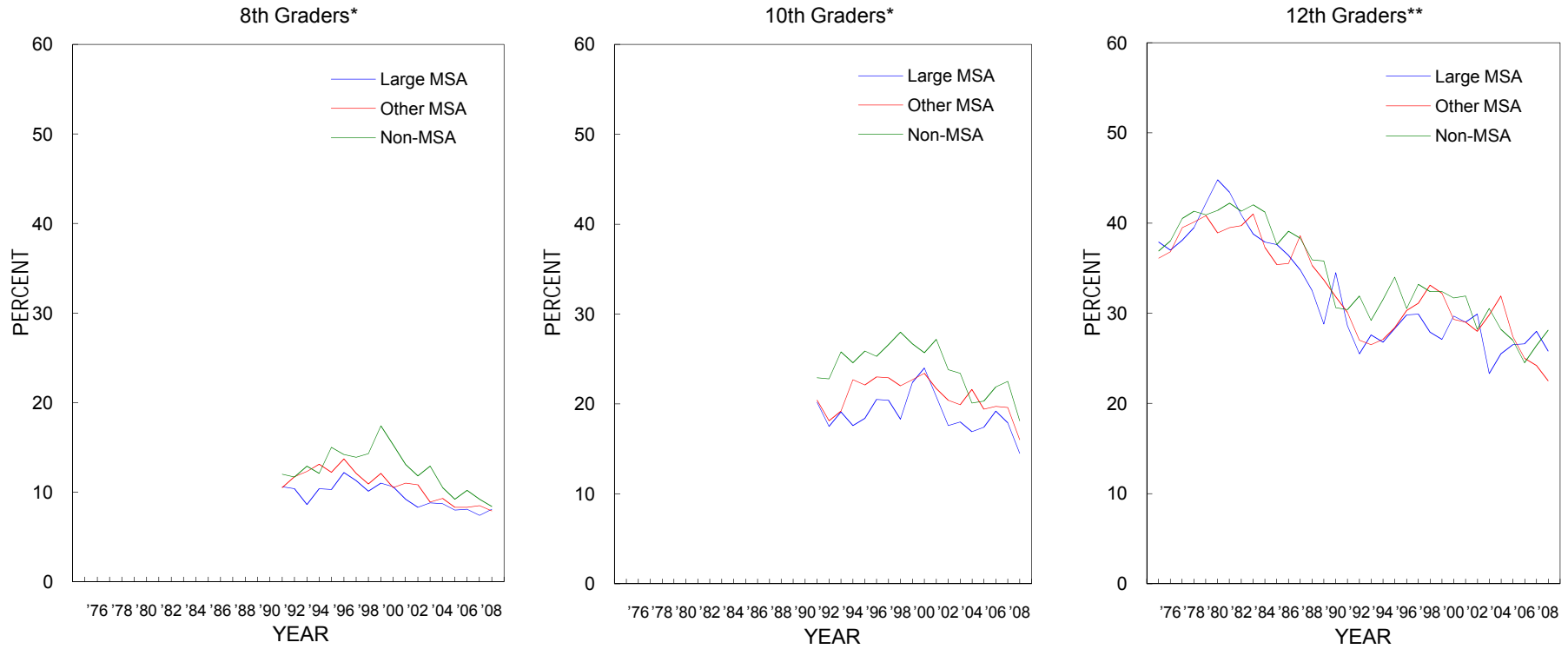


Source. The Monitoring the Future study, the University of Michigan.

\*For 8th and 10th graders: The 1991–2007 estimates for five or more drinks in a row differ slightly from some previous reports due to an error in the data editing process prior to 2008. The revised estimates average about 2 percentage points lower than the estimates previously reported. Those previous overestimates have been corrected in this table.

\*\*For 12th graders: Due to a coding error, previously released versions of this table contained values that were slightly off for the measure of five or more drinks in a row for 2005 and 2006. These have been corrected here.

**FIGURE 166**  
**Alcohol: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Population Density**



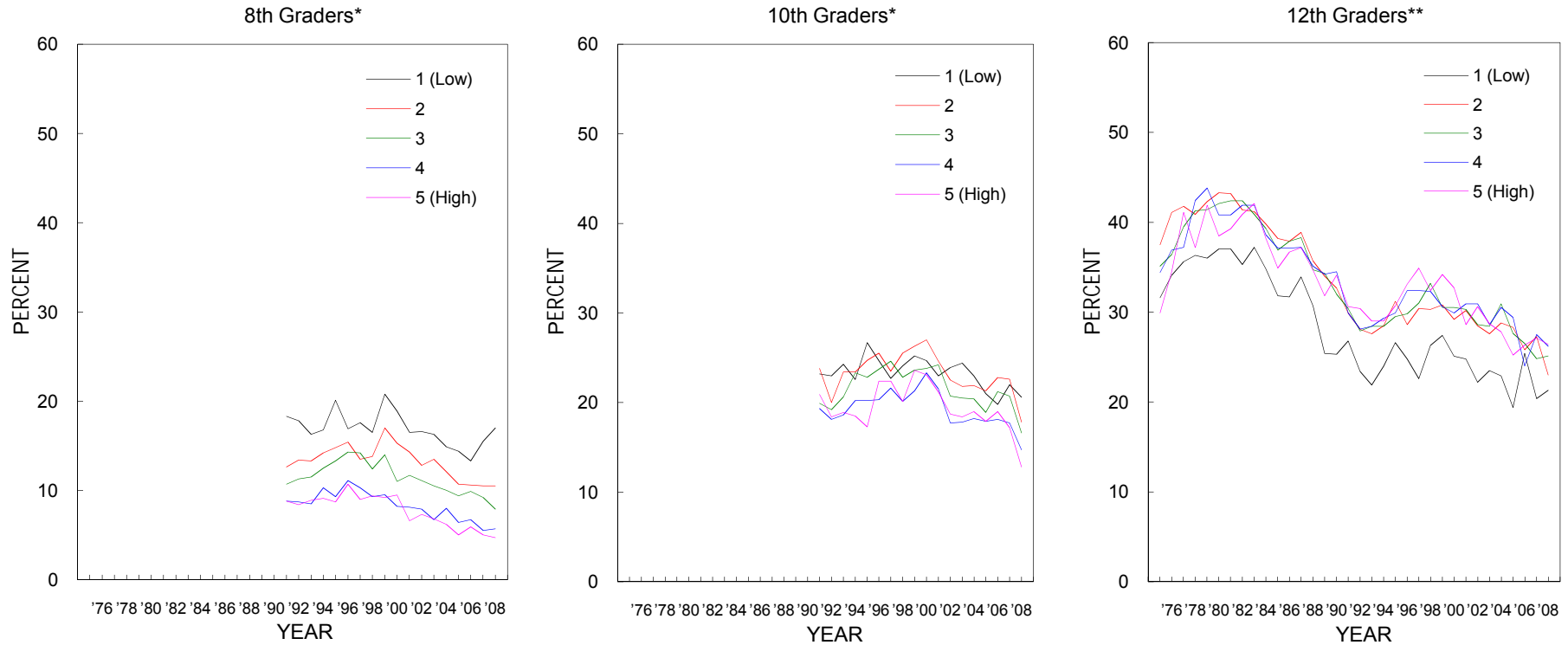
Source. The Monitoring the Future study, the University of Michigan.

\*For 8th and 10th graders: The 1991–2007 estimates for five or more drinks in a row differ slightly from some previous reports due to an error in the data editing process prior to 2008. The revised estimates average about 2 percentage points lower than the estimates previously reported. Those previous overestimates have been corrected in this table.

\*\*For 12th graders: Due to a coding error, previously released versions of this table contained values that were slightly off for the measure of five or more drinks in a row for 2005 and 2006. These have been corrected here.

**FIGURE 167**

**Alcohol: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Parents' Average Education**

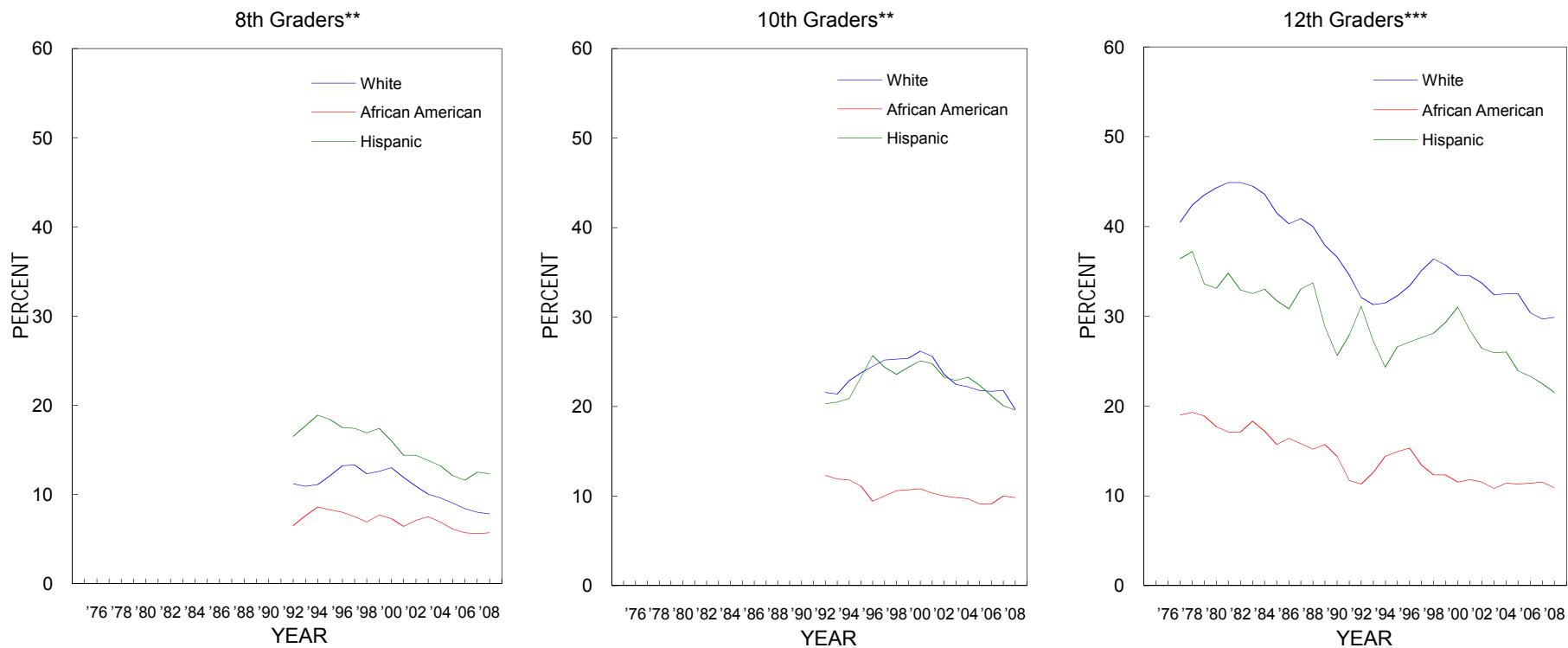


Source. The Monitoring the Future study, the University of Michigan.

\*For 8th and 10th graders: The 1991–2007 estimates for five or more drinks in a row differ slightly from some previous reports due to an error in the data editing process prior to 2008. The revised estimates average about 2 percentage points lower than the estimates previously reported. Those previous overestimates have been corrected in this table.

\*\*For 12th graders: Due to a coding error, previously released versions of this table contained values that were slightly off for the measure of five or more drinks in a row for 2005 and 2006. These have been corrected here.

**FIGURE 168**  
**Alcohol: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Race/Ethnicity\***



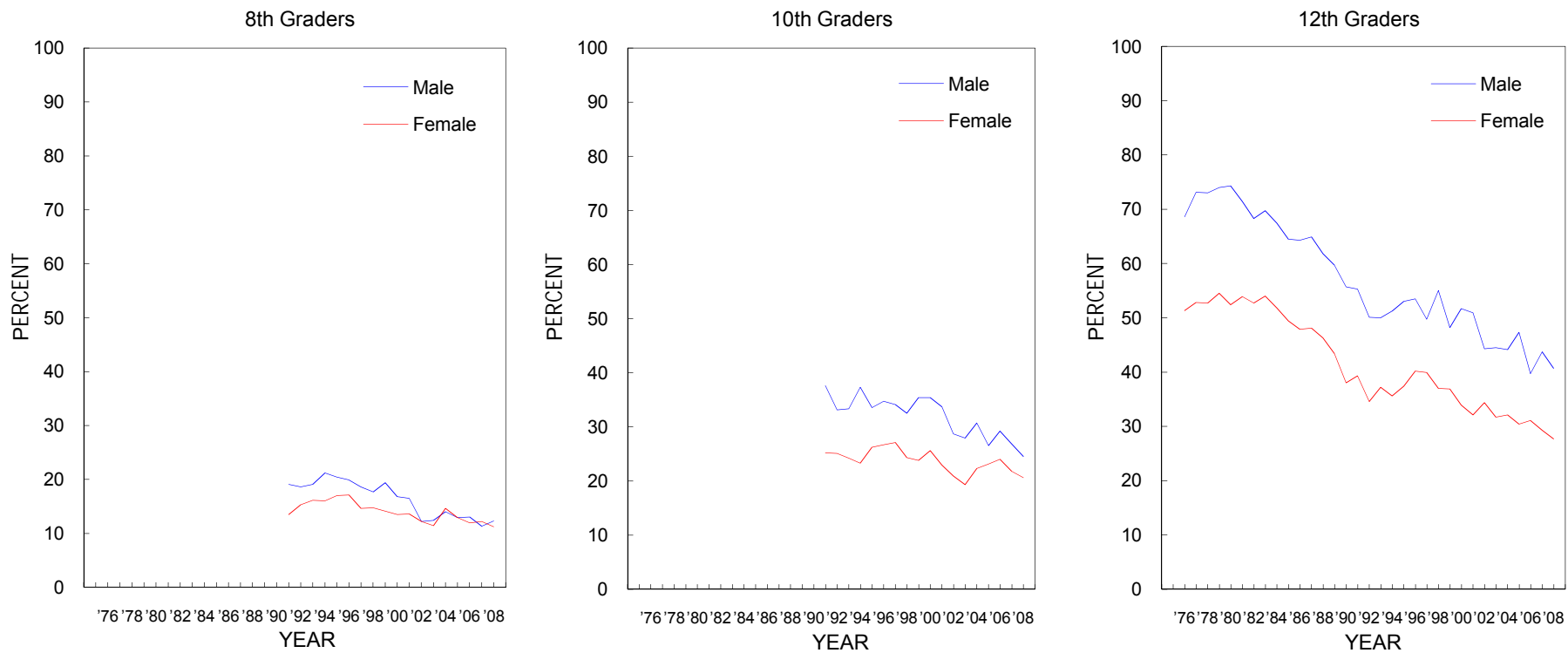
Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

\*\*For 8th and 10th graders: The 1991–2007 estimates for five or more drinks in a row differ slightly from some previous reports due to an error in the data editing process prior to 2008. The revised estimates average about 2 percentage points lower than the estimates previously reported. Those previous overestimates have been corrected in this table.

\*\*\*For 12th graders: Due to a coding error, previously released versions of this table contained values that were slightly off for the measure of five or more drinks in a row for 2005 and 2006. These have been corrected here.

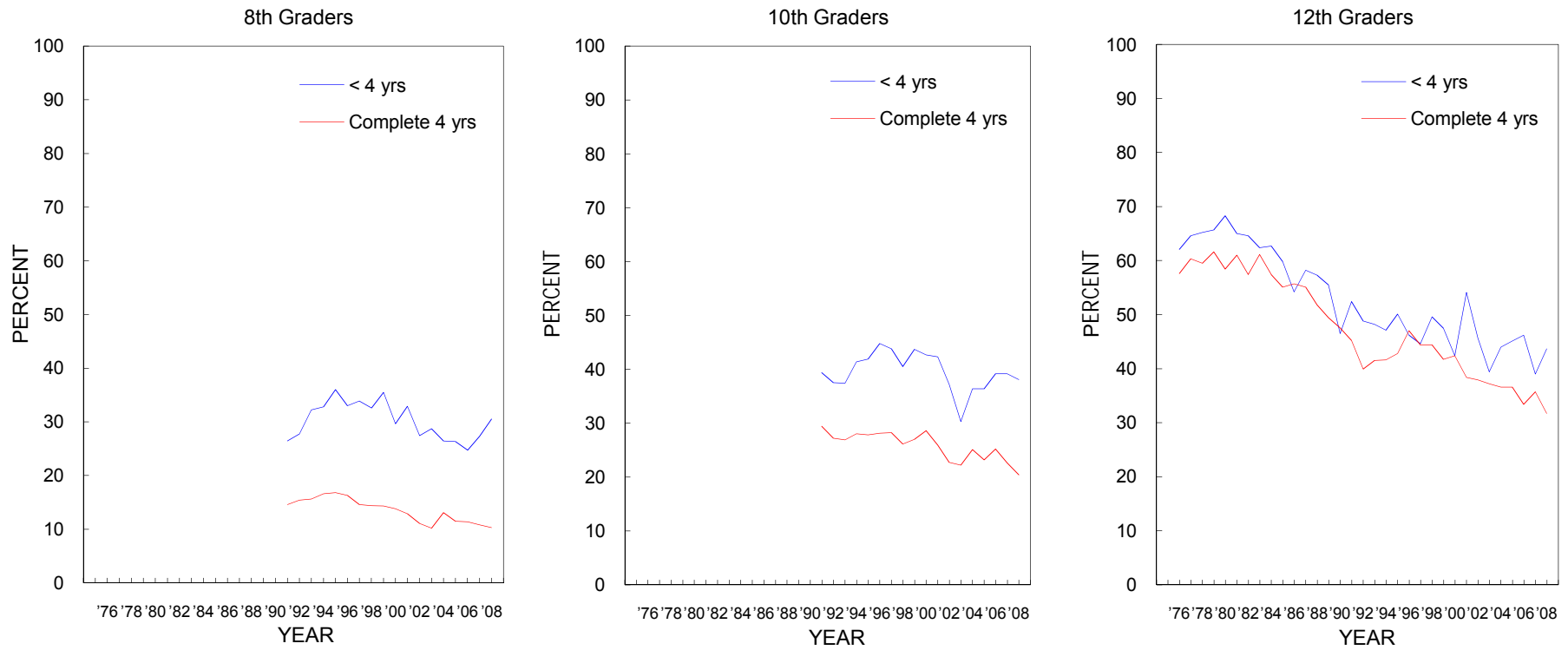
**FIGURE 169**  
**Beer: Trends in 30-Day Prevalence by Gender**



Source. The Monitoring the Future study, the University of Michigan.

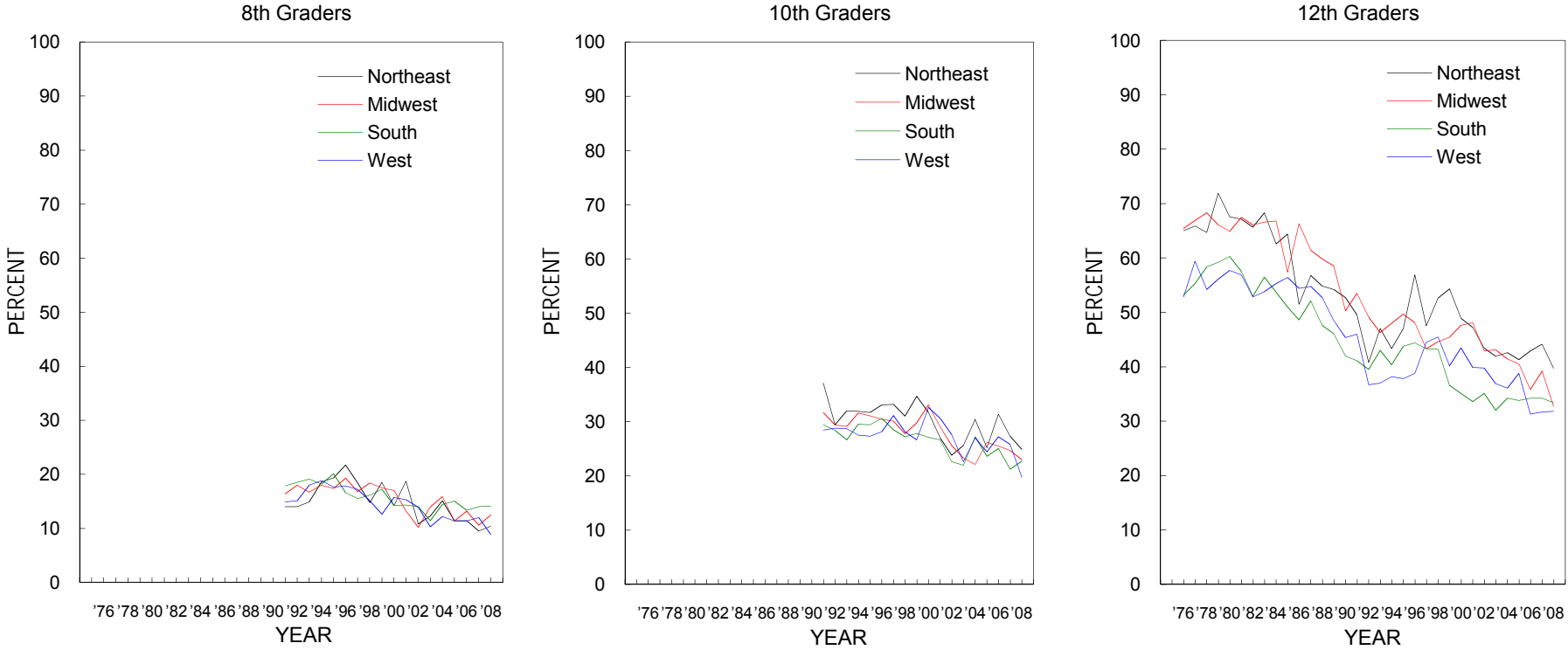


**FIGURE 170**  
**Beer: Trends in 30-Day Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 171**  
**Beer: Trends in 30-Day Prevalence by Region**



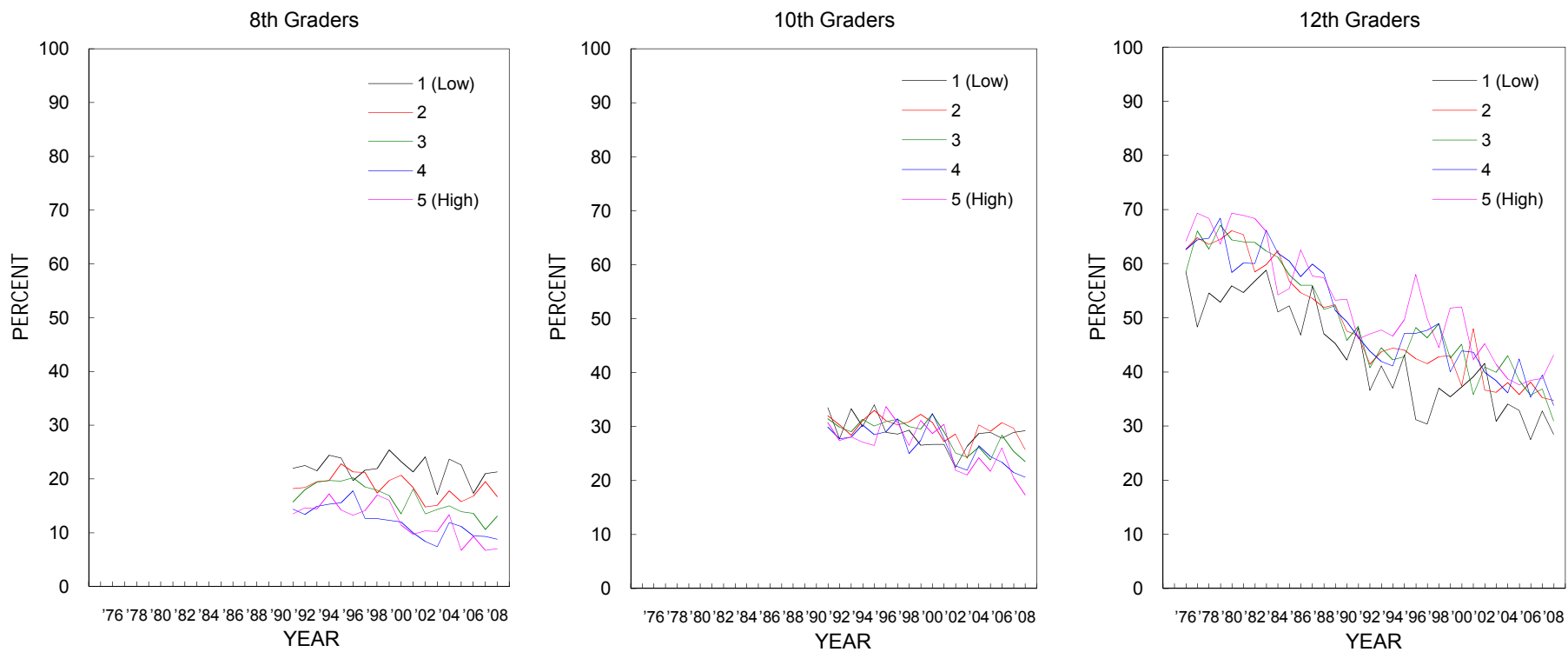
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 172**  
**Beer: Trends in 30-Day Prevalence by Population Density**



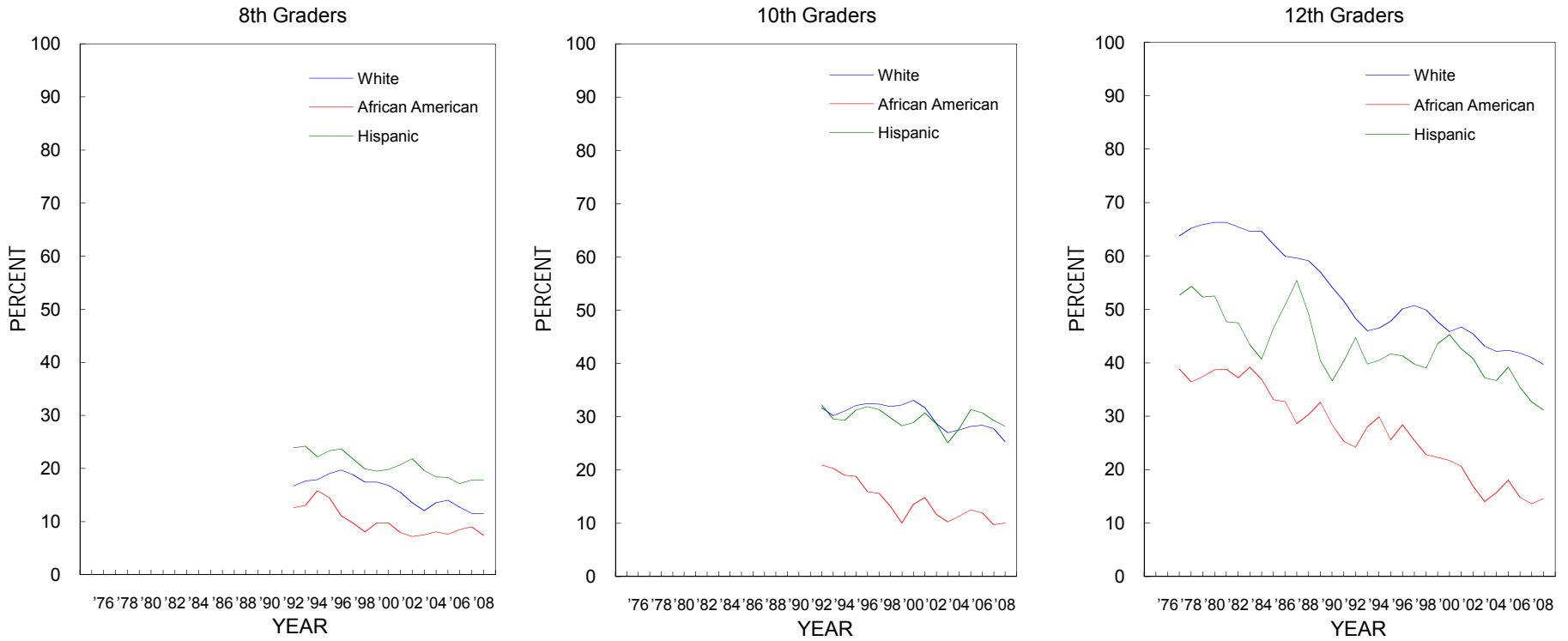
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 173**  
**Beer: Trends in 30-Day Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

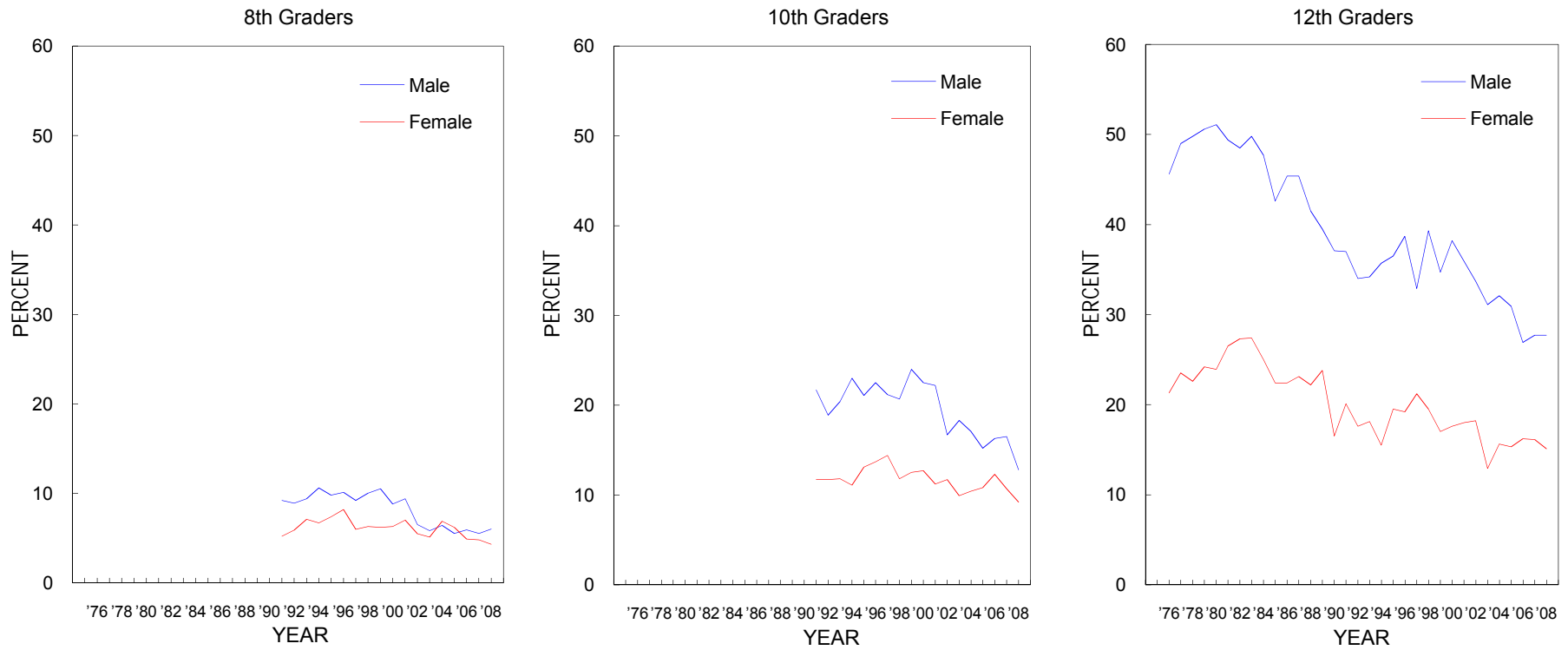
**FIGURE 174**  
**Beer: Trends in 30-Day Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

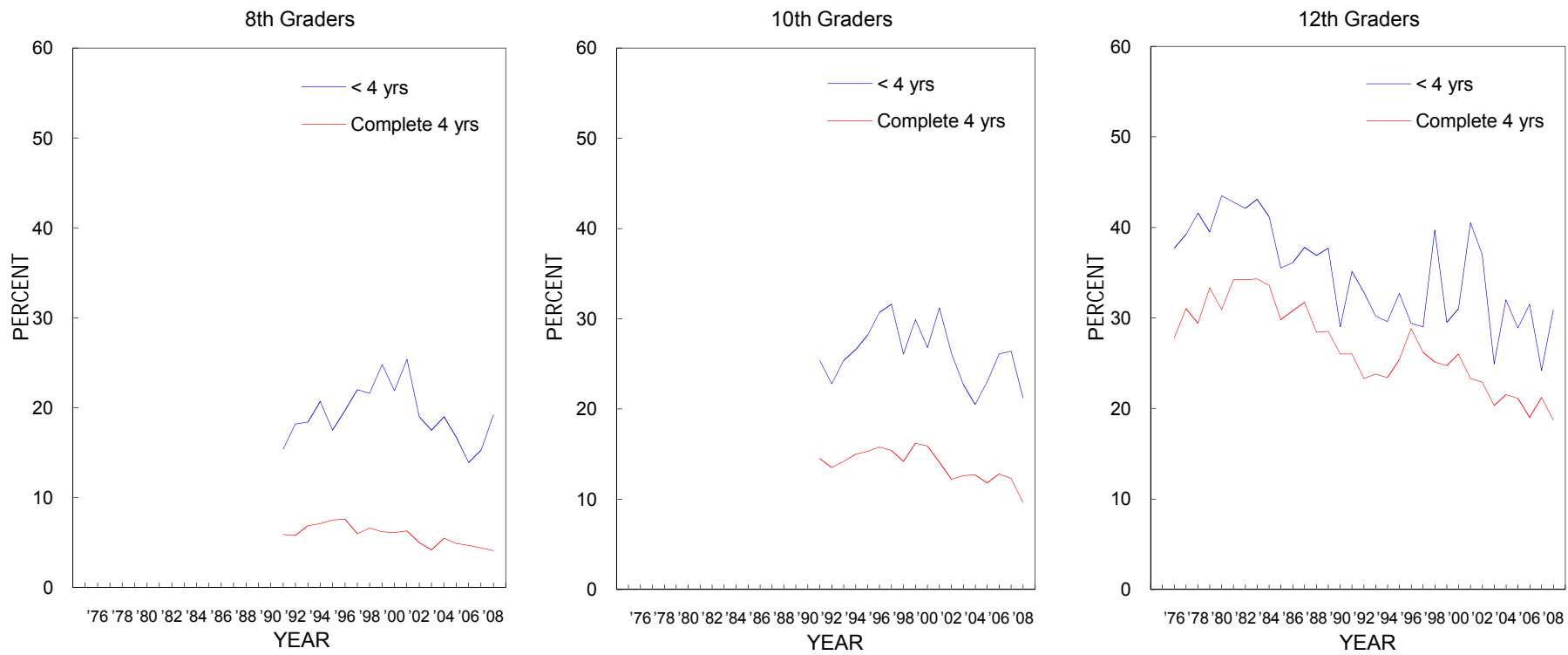
\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 175**  
**Beer: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Gender**



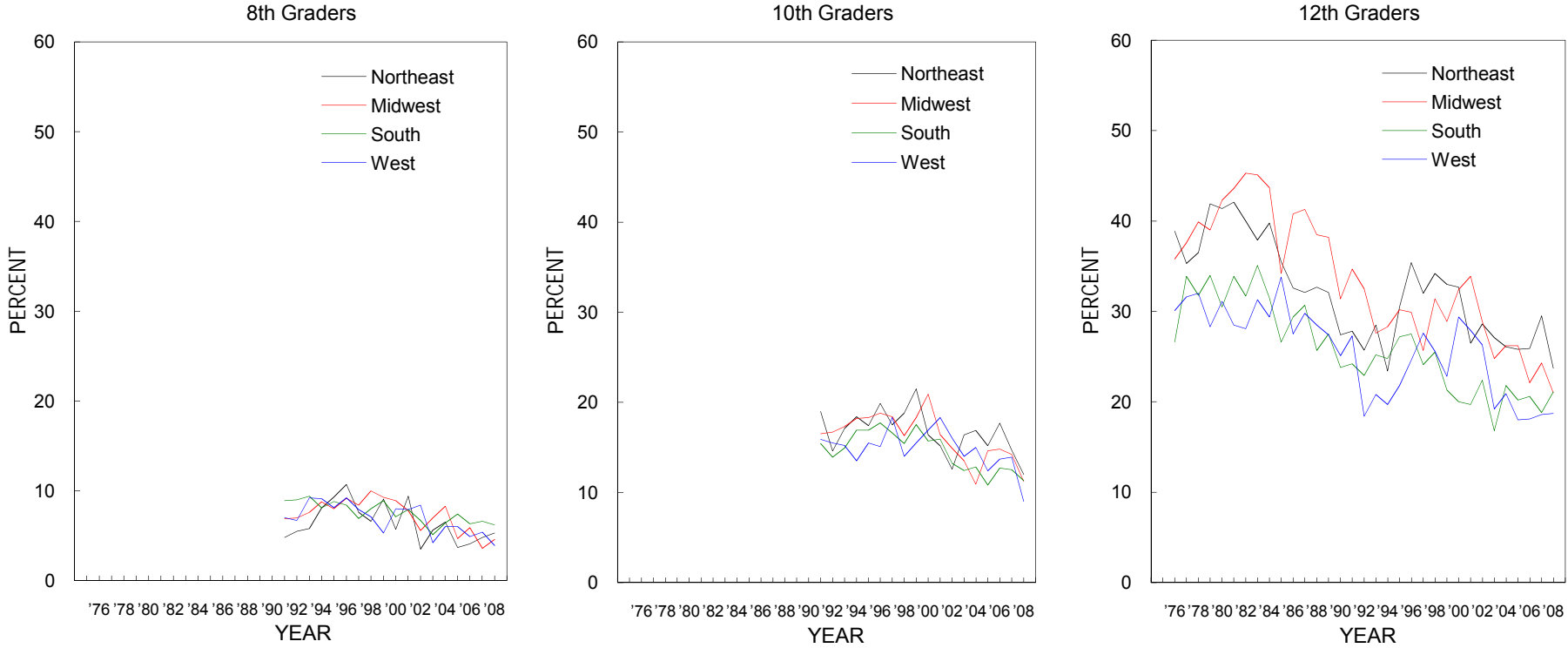
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 176**  
**Beer: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

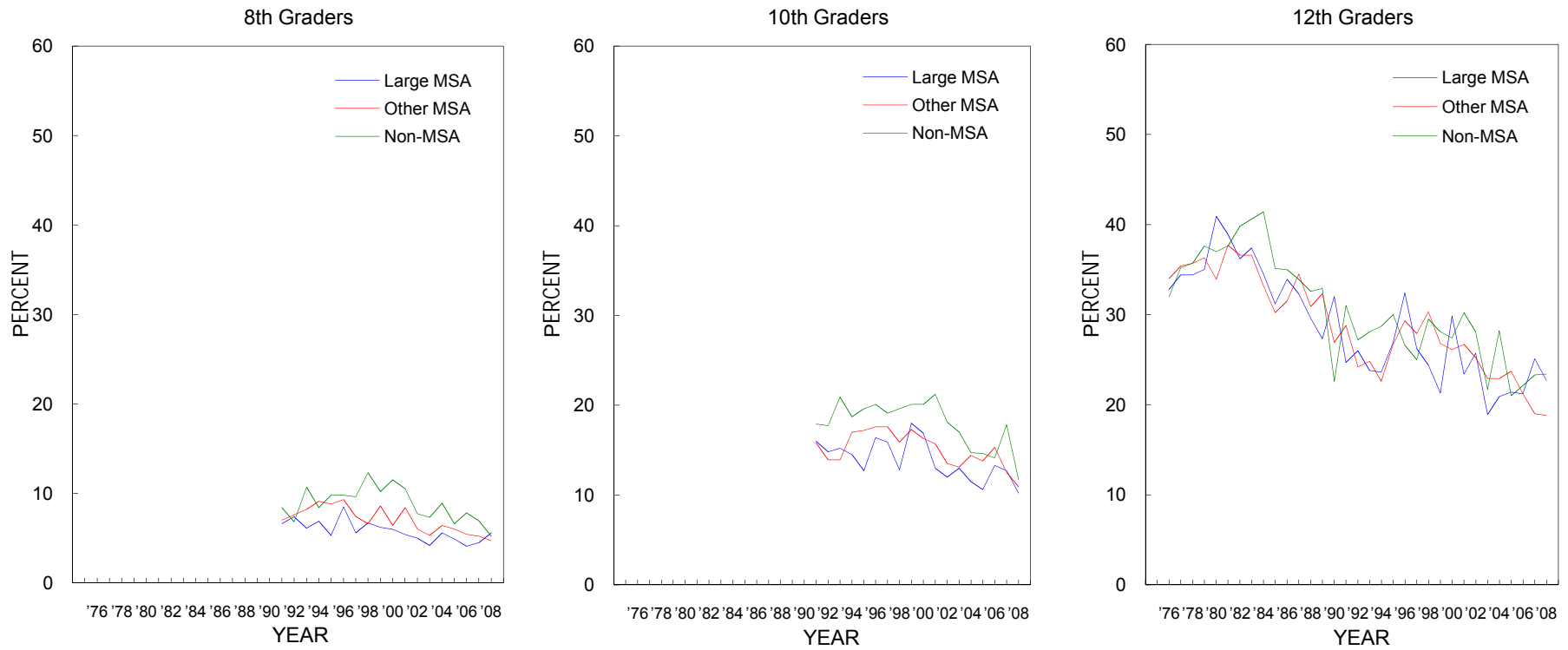
**FIGURE 177**  
**Beer: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Region**



Source. The Monitoring the Future study, the University of Michigan.

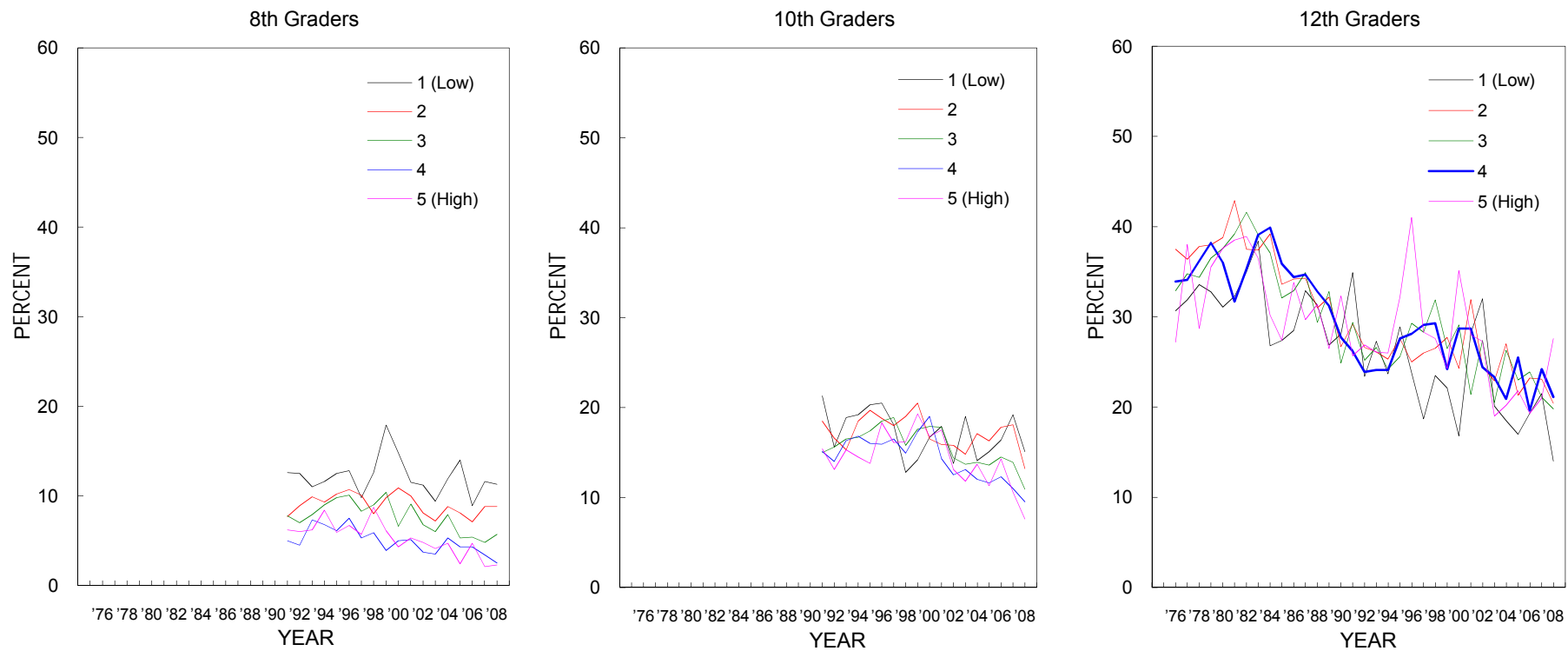


**FIGURE 178**  
**Beer: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Population Density**



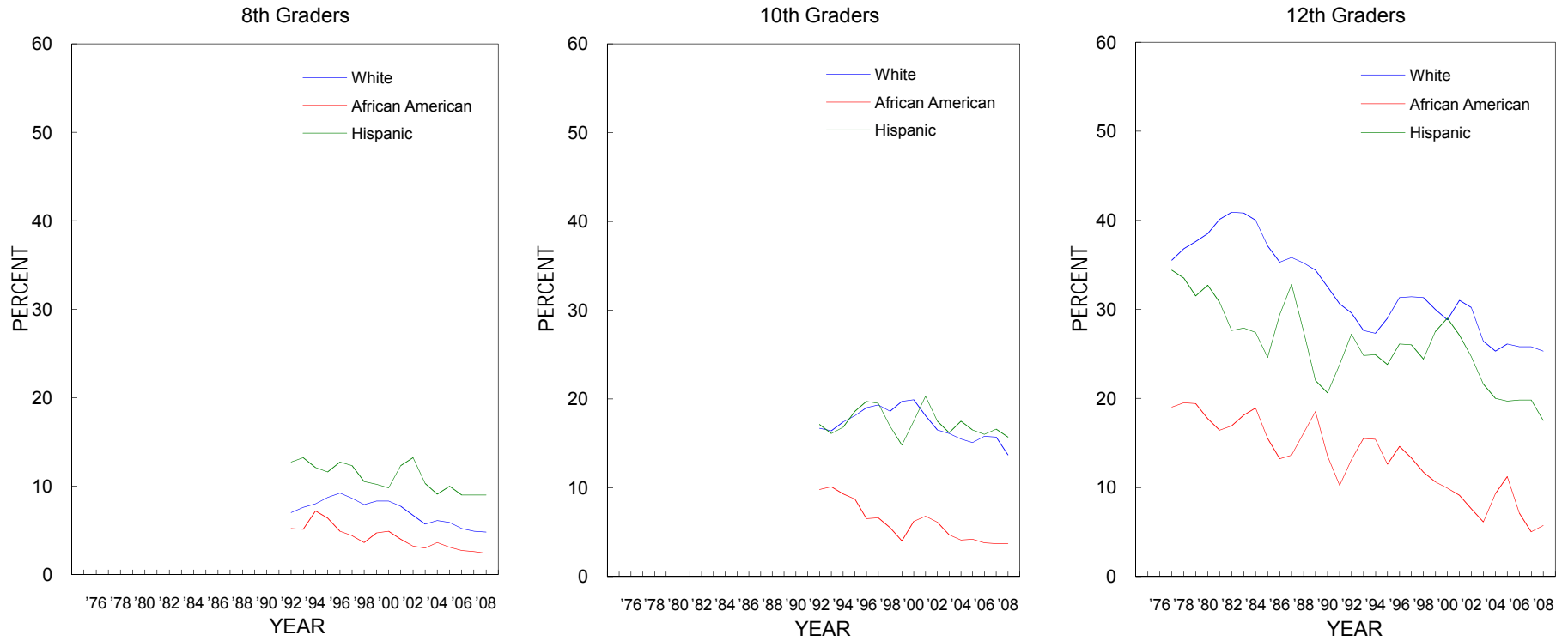
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 179**  
**Beer: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

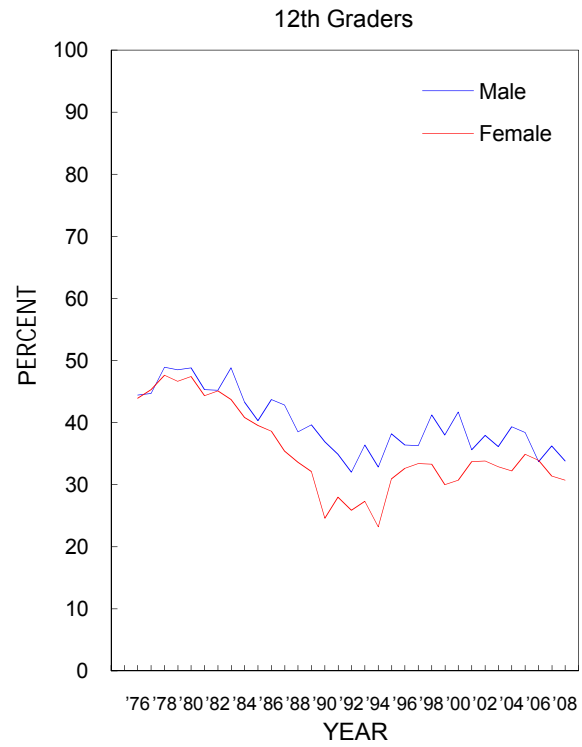
**FIGURE 180**  
**Beer: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

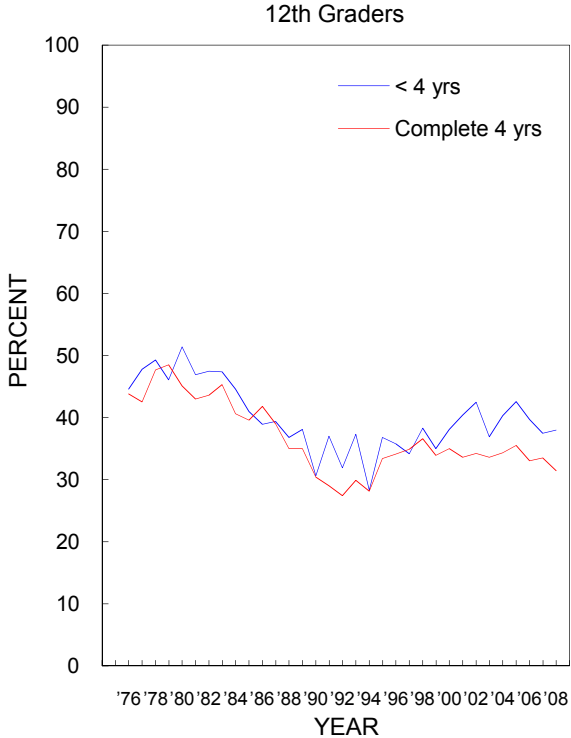
\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 181**  
**Liquor: Trends in 30-Day Prevalence by Gender**



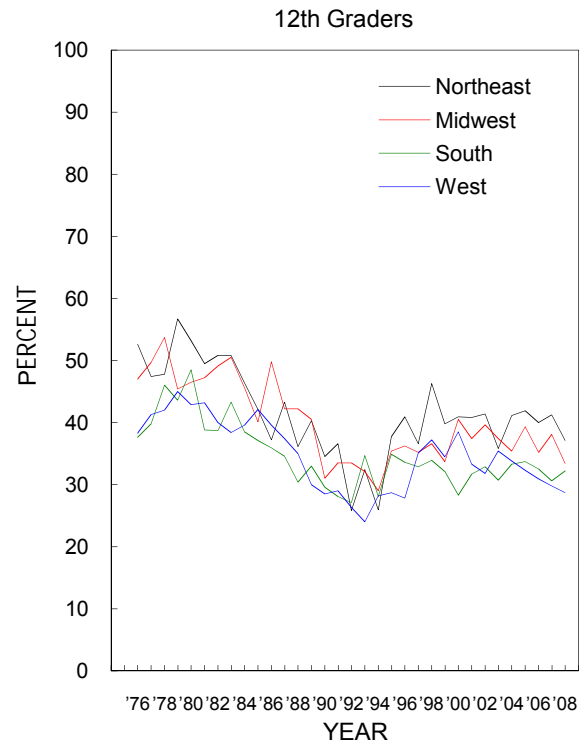
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 182**  
**Liquor: Trends in 30-Day Prevalence by College Plans**



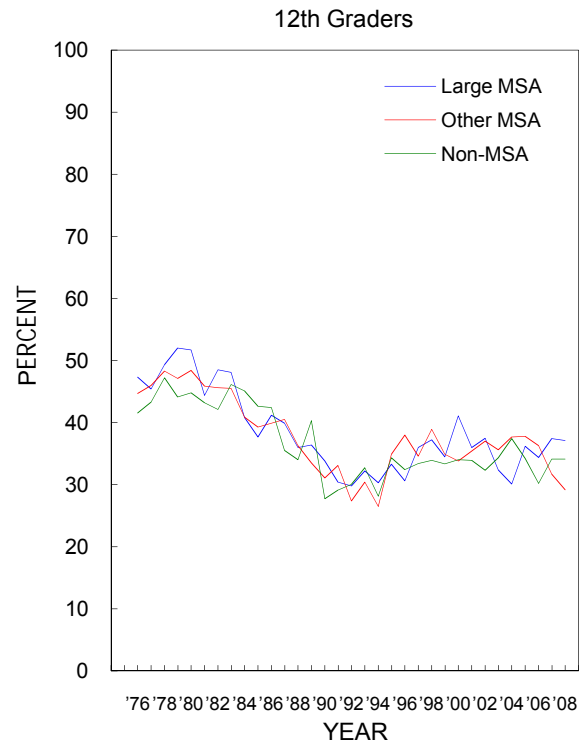
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 183**  
**Liquor: Trends in 30-Day Prevalence by Region**



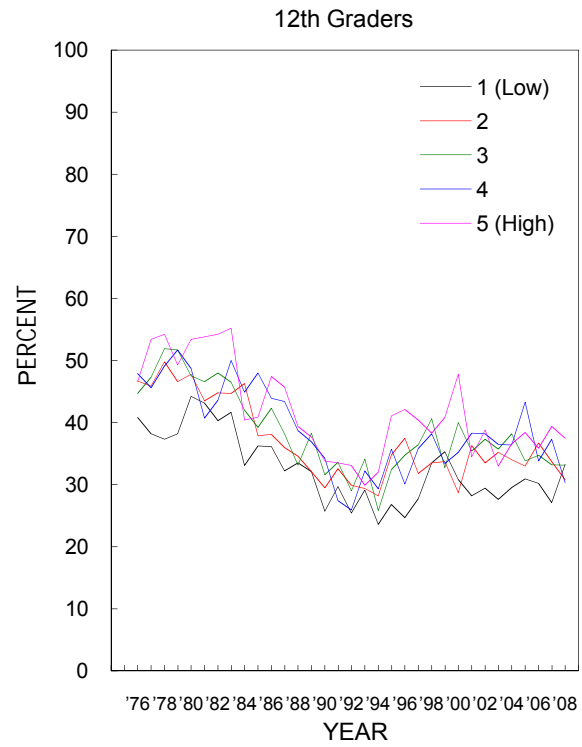
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 184**  
**Liquor: Trends in 30-Day Prevalence by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

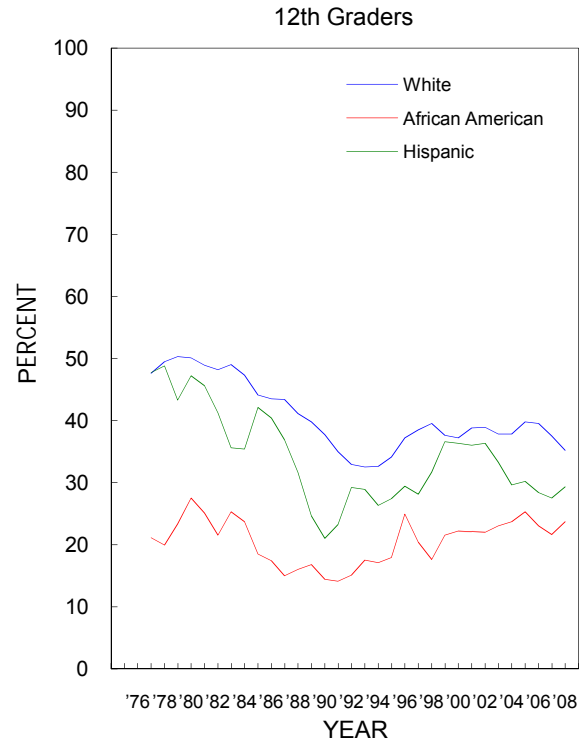
**FIGURE 185**  
**Liquor: Trends in 30-Day Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.



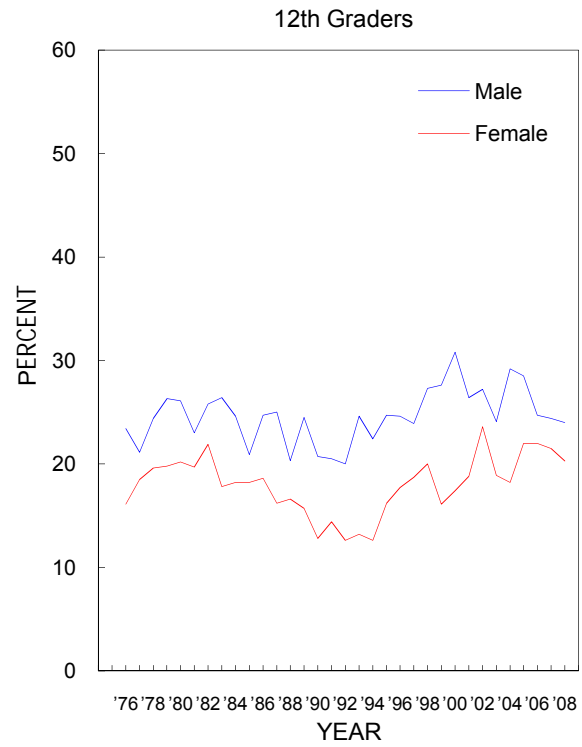
**FIGURE 186**  
**Liquor: Trends in 30-Day Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

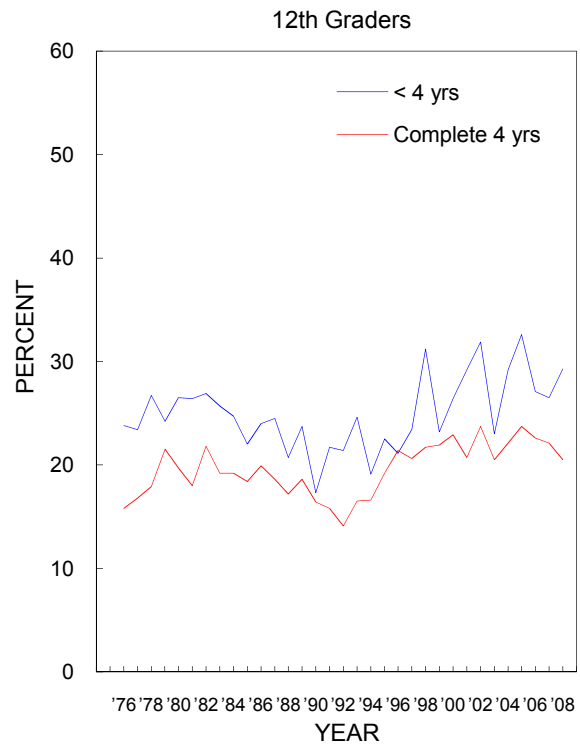
**FIGURE 187**  
**Liquor: Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row by Gender**



Source. The Monitoring the Future study, the University of Michigan.

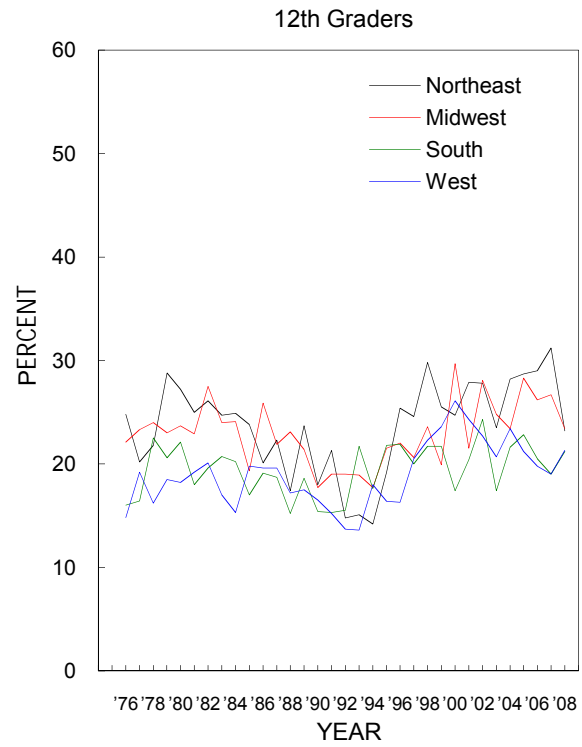
**FIGURE 188**

**Liquor: Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

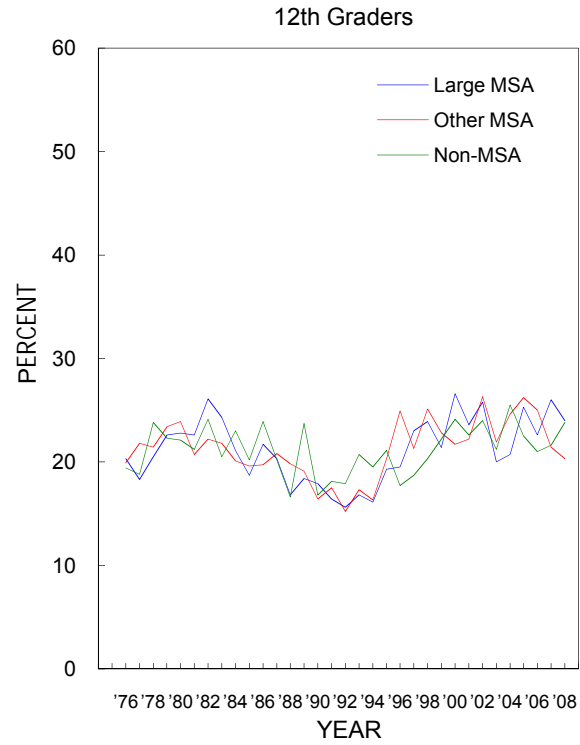
**FIGURE 189**  
**Liquor: Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row by Region**



Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 190**

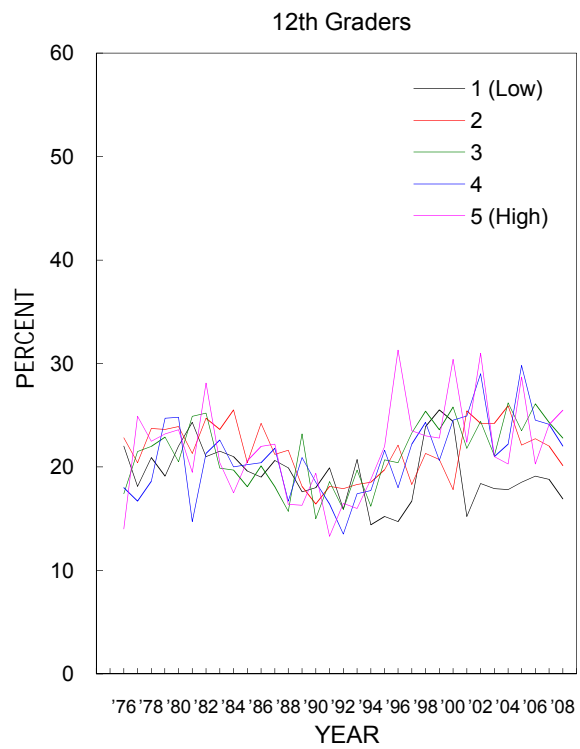
**Liquor: Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 191**

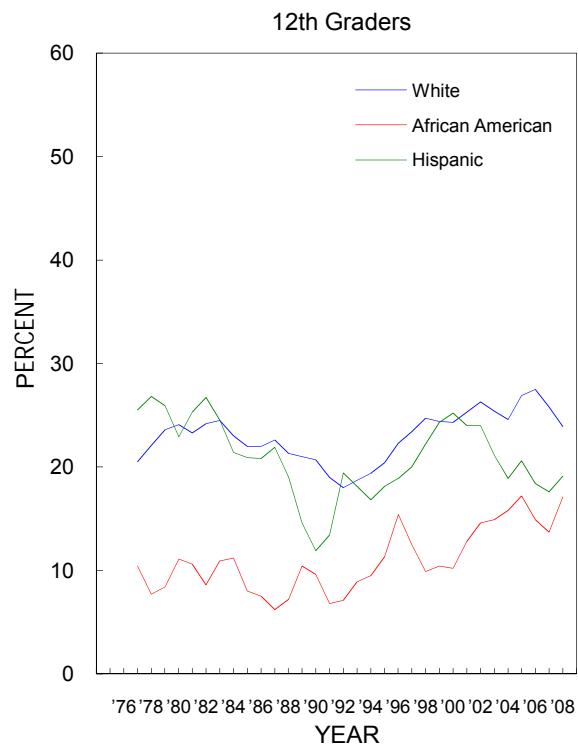
**Liquor: Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 192**

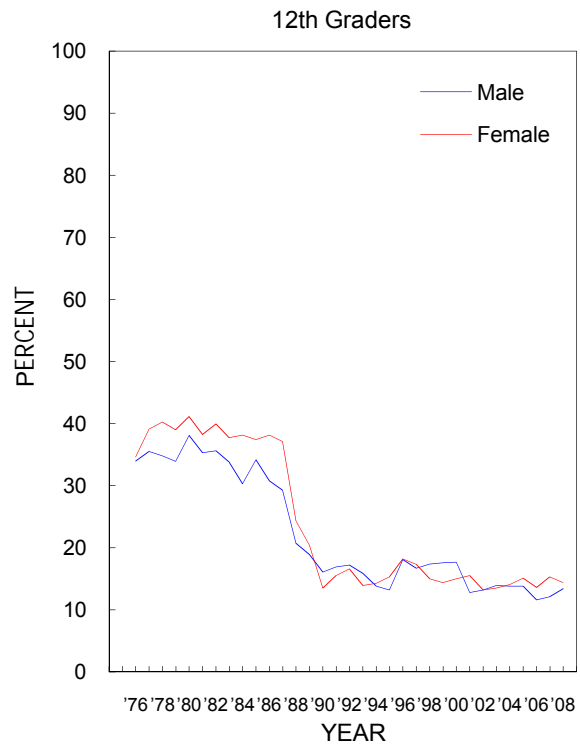
**Liquor: Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 193**  
**Wine:\* Trends in 30-Day Prevalence by Gender**

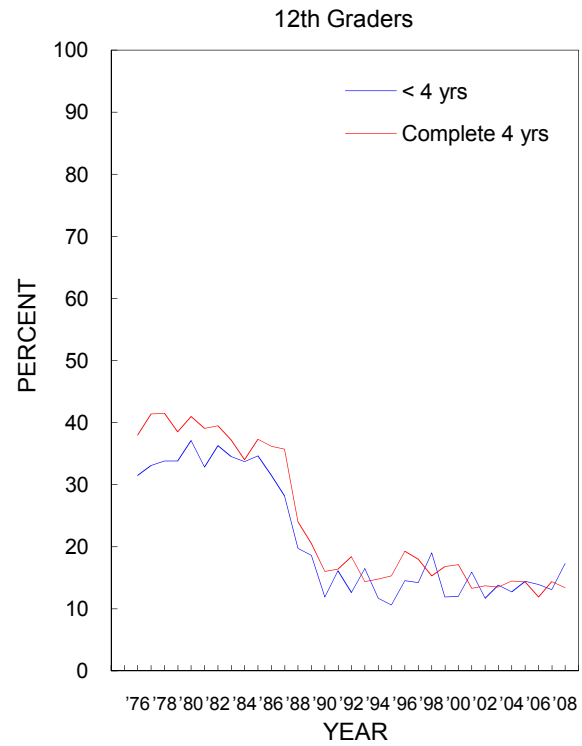


Source. The Monitoring the Future study, the University of Michigan.

\*In the 1988 questionnaires, a question on the use of wine coolers was added. This change may account for the discontinuity between the 1987 and 1988 use rates for wine.



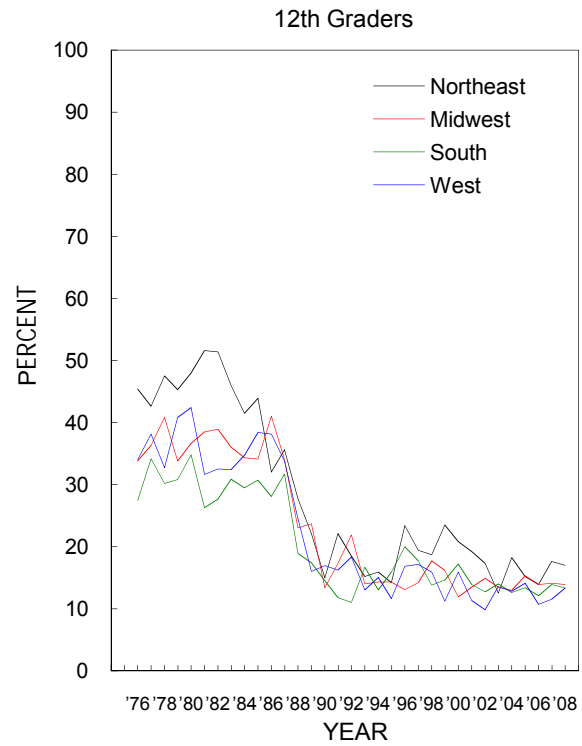
**FIGURE 194**  
**Wine:\* Trends in 30-Day Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

\*In the 1988 questionnaires, a question on the use of wine coolers was added. This change may account for the discontinuity between the 1987 and 1988 use rates for wine.

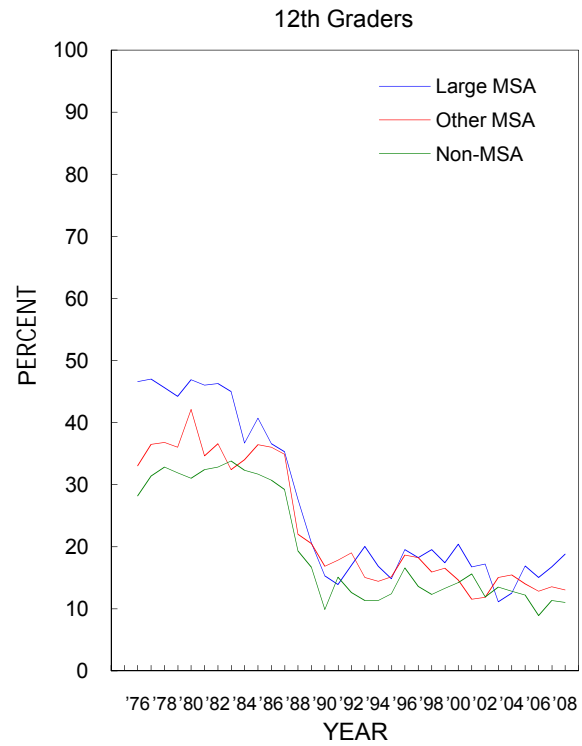
**FIGURE 195**  
**Wine:\* Trends in 30-Day Prevalence by Region**



Source. The Monitoring the Future study, the University of Michigan.

\*In the 1988 questionnaires, a question on the use of wine coolers was added. This change may account for the discontinuity between the 1987 and 1988 use rates for wine.

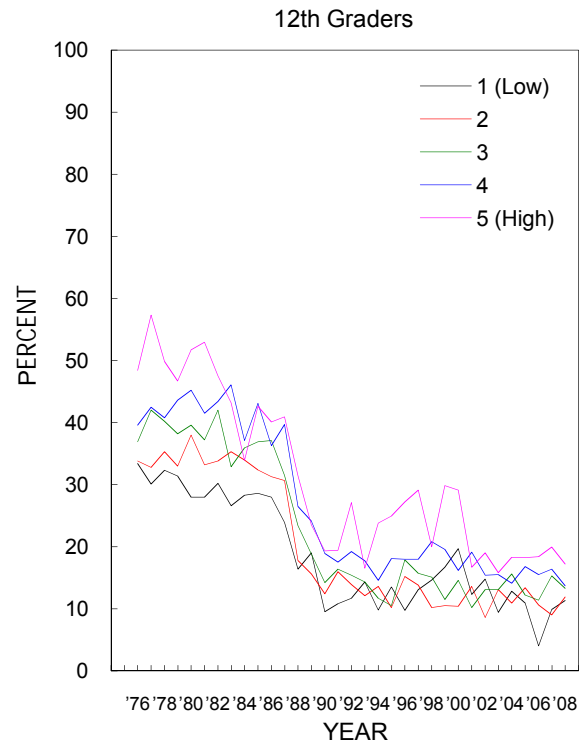
**FIGURE 196**  
**Wine:\* Trends in 30-Day Prevalence by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

\*In the 1988 questionnaires, a question on the use of wine coolers was added. This change may account for the discontinuity between the 1987 and 1988 use rates for wine.

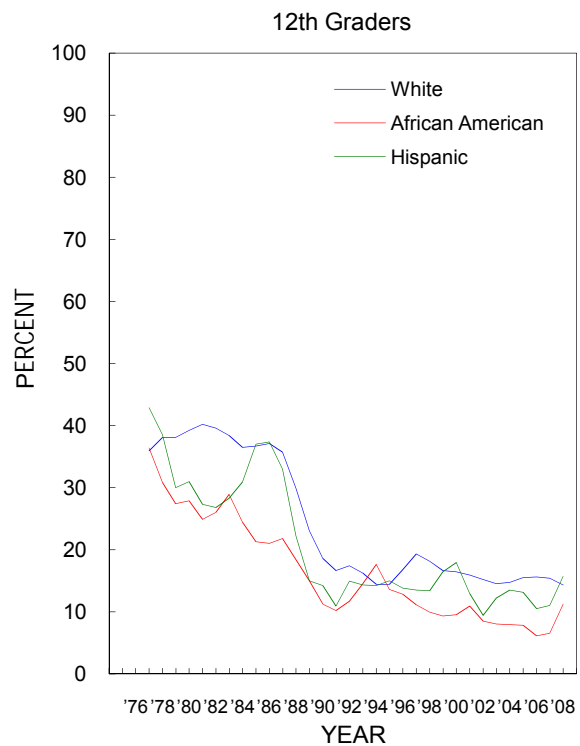
**FIGURE 197**  
**Wine:\* Trends in 30-Day Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

\*In the 1988 questionnaires, a question on the use of wine coolers was added. This change may account for the discontinuity between the 1987 and 1988 use rates for wine.

**FIGURE 198**  
**Wine:\* Trends in 30-Day Prevalence by Race/Ethnicity\*\***

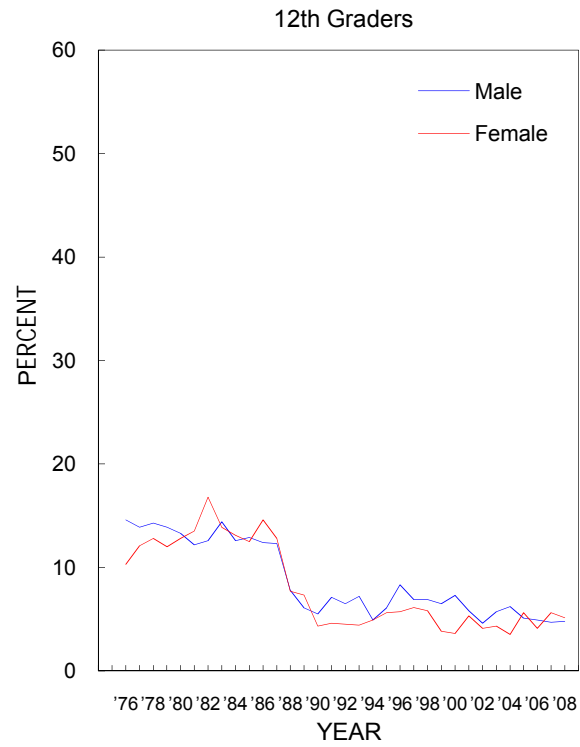


Source. The Monitoring the Future study, the University of Michigan.

\*In the 1988 questionnaires, a question on the use of wine coolers was added. This change may account for the discontinuity between the 1987 and 1988 use rates for wine.

\*\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 199**  
**Wine:\* Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row by Gender**

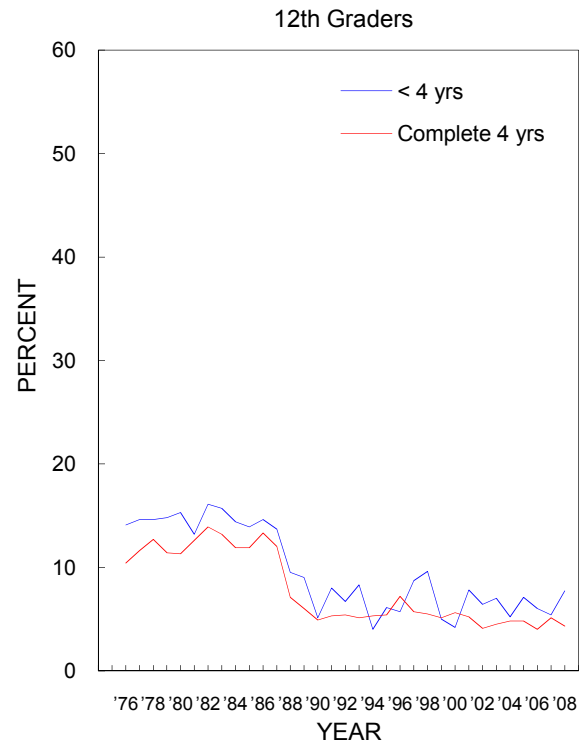


Source. The Monitoring the Future study, the University of Michigan.

\*In the 1988 questionnaires, a question on the use of wine coolers was added. This change may account for the discontinuity between the 1987 and 1988 use rates for wine.

**FIGURE 200**

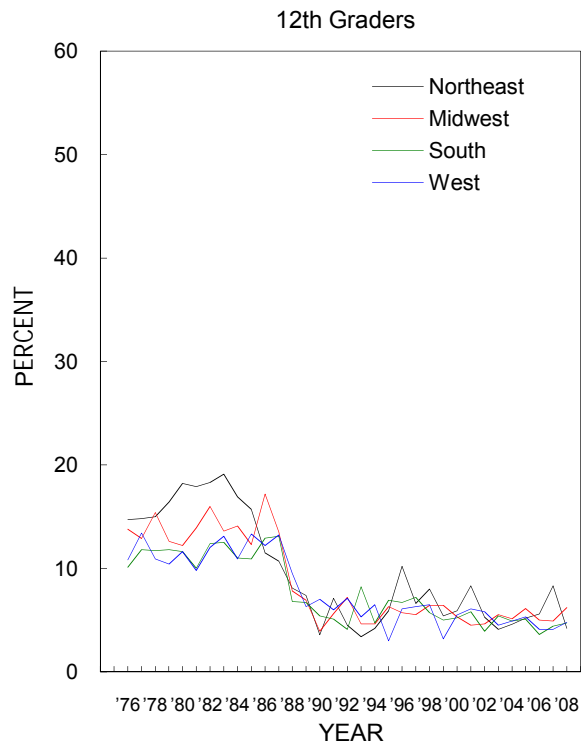
**Wine:\* Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

\*In the 1988 questionnaires, a question on the use of wine coolers was added. This change may account for the discontinuity between the 1987 and 1988 use rates for wine.

**FIGURE 201**  
**Wine:\* Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row by Region**



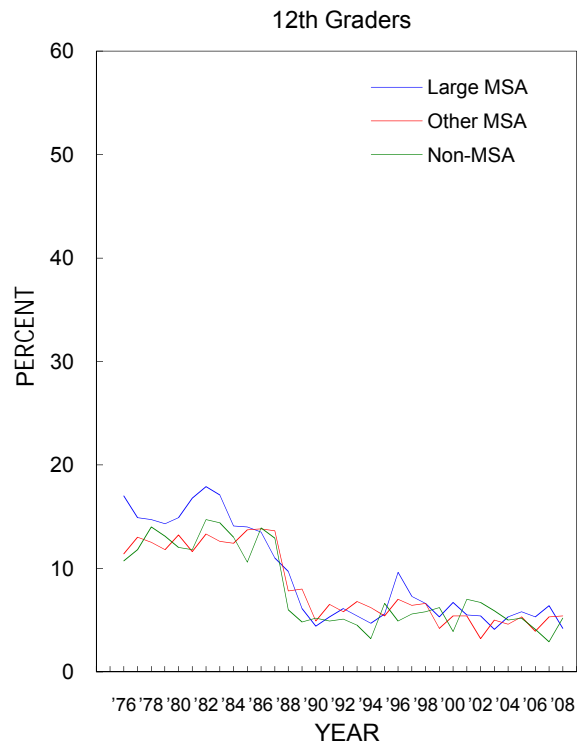
Source. The Monitoring the Future study, the University of Michigan.

\*In the 1988 questionnaires, a question on the use of wine coolers was added. This change may account for the discontinuity between the 1987 and 1988 use rates for wine.



**FIGURE 202**

**Wine:\* Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row by Population Density**

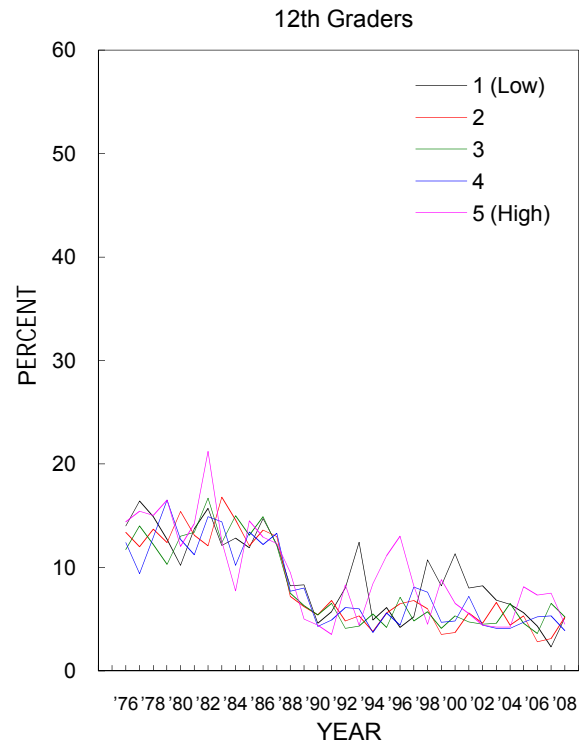


Source. The Monitoring the Future study, the University of Michigan.

\*In the 1988 questionnaires, a question on the use of wine coolers was added. This change may account for the discontinuity between the 1987 and 1988 use rates for wine.

**FIGURE 203**

**Wine:\* Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row by Parents' Average Education**

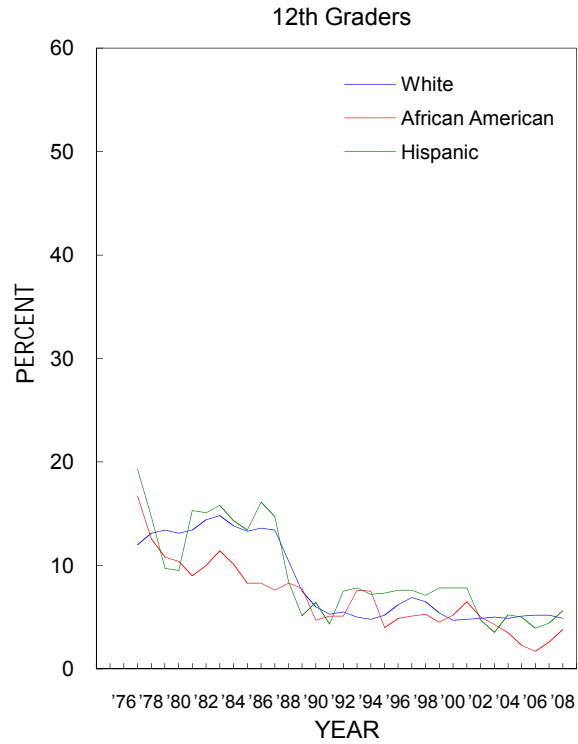


Source. The Monitoring the Future study, the University of Michigan.

\*In the 1988 questionnaires, a question on the use of wine coolers was added. This change may account for the discontinuity between the 1987 and 1988 use rates for wine.

**FIGURE 204**

**Wine:\* Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row by Race/Ethnicity\*\***

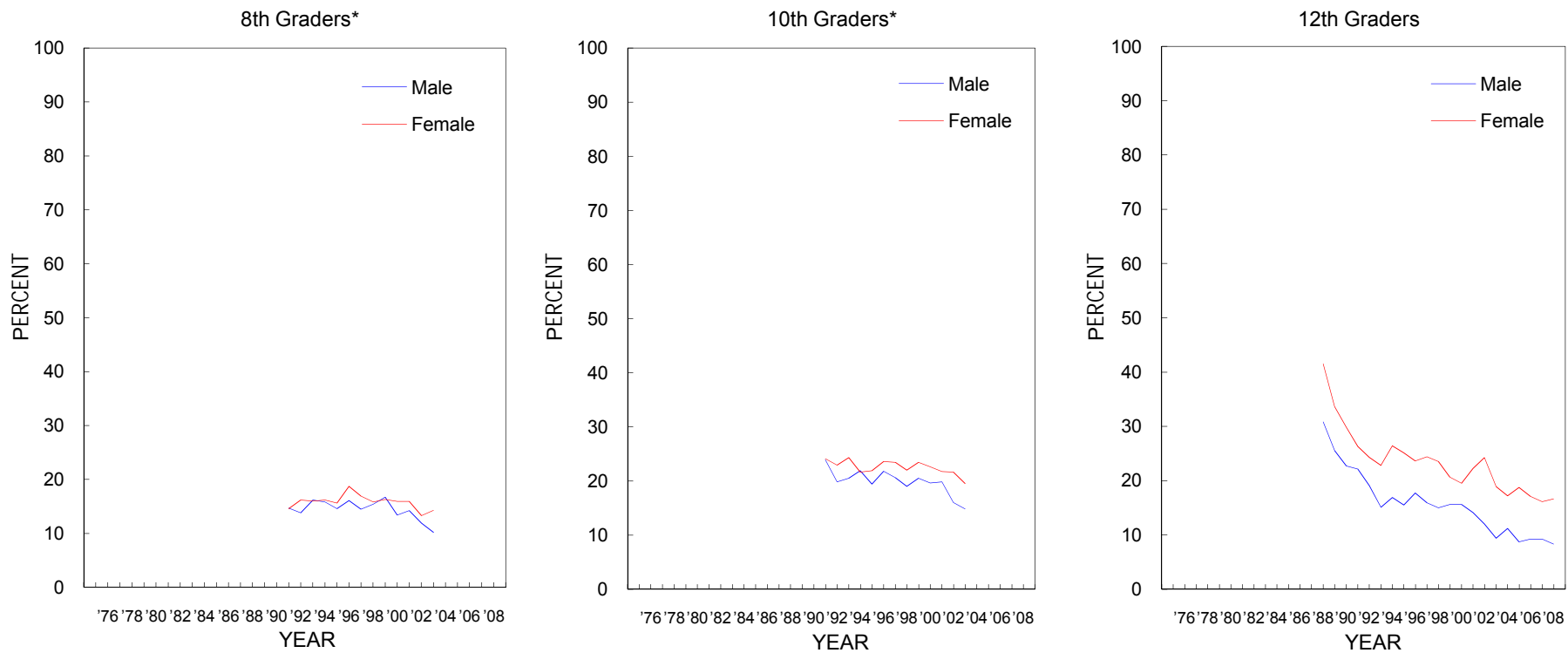


Source. The Monitoring the Future study, the University of Michigan.

\*In the 1988 questionnaires, a question on the use of wine coolers was added. This change may account for the discontinuity between the 1987 and 1988 use rates for wine.

\*\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

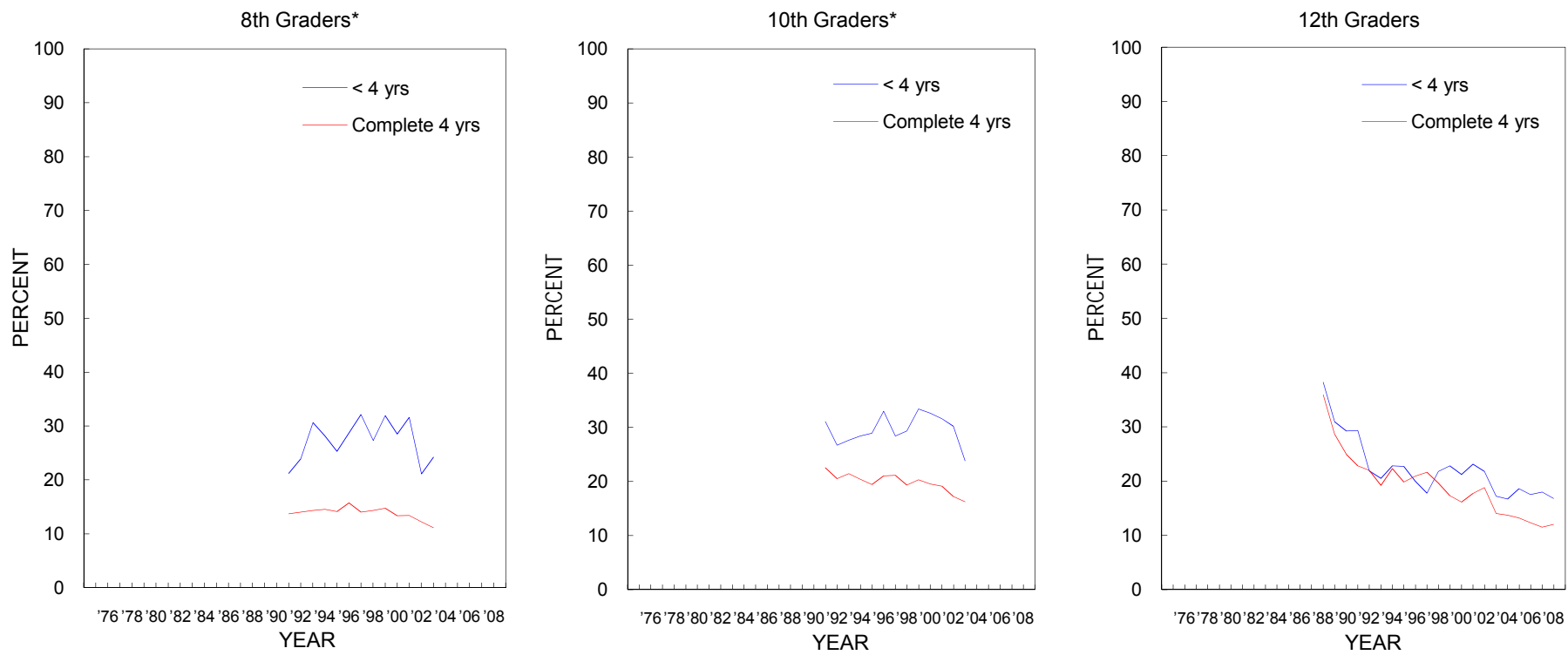
**FIGURE 205**  
**Wine Coolers: Trends in 30-Day Prevalence by Gender**



Source. The Monitoring the Future study, the University of Michigan.

\*Question discontinued for 8th and 10th graders in 2004.

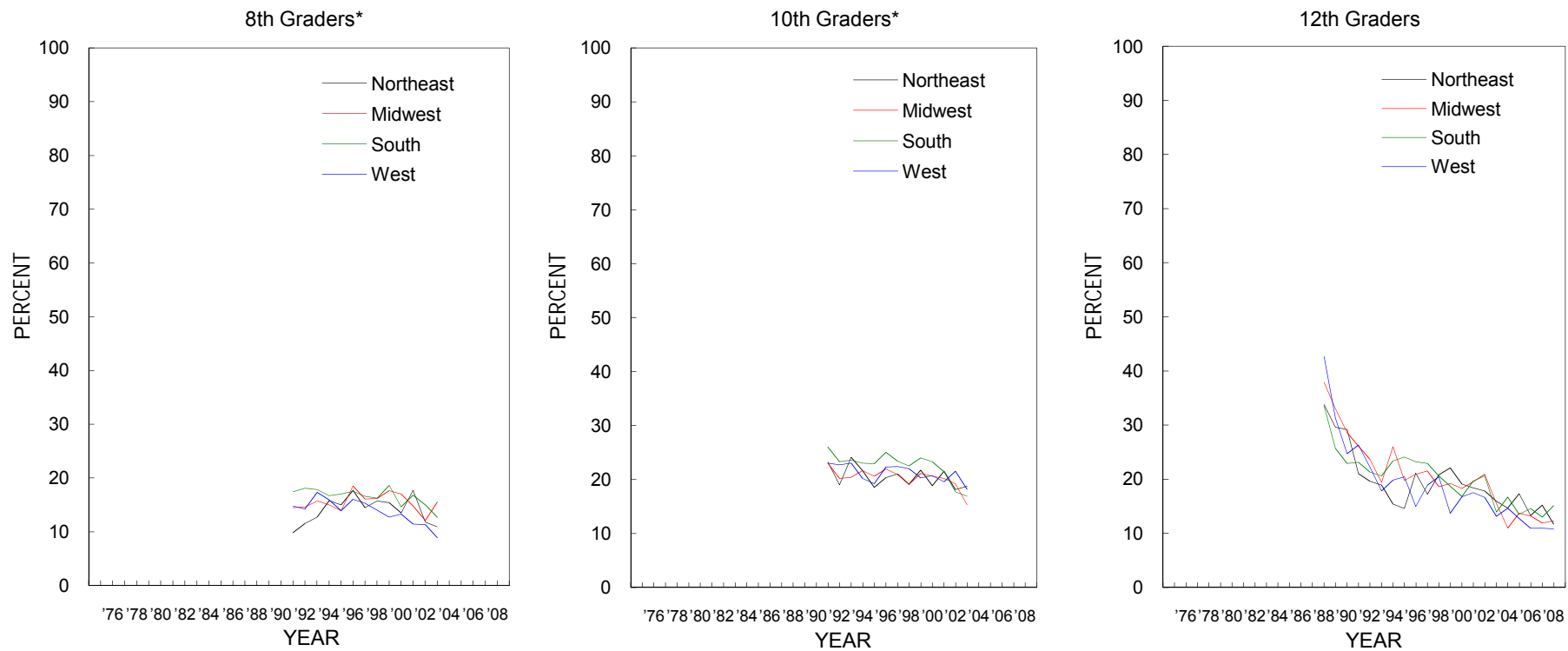
**FIGURE 206**  
**Wine Coolers: Trends in 30-Day Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

\*Question discontinued for 8th and 10th graders in 2004.

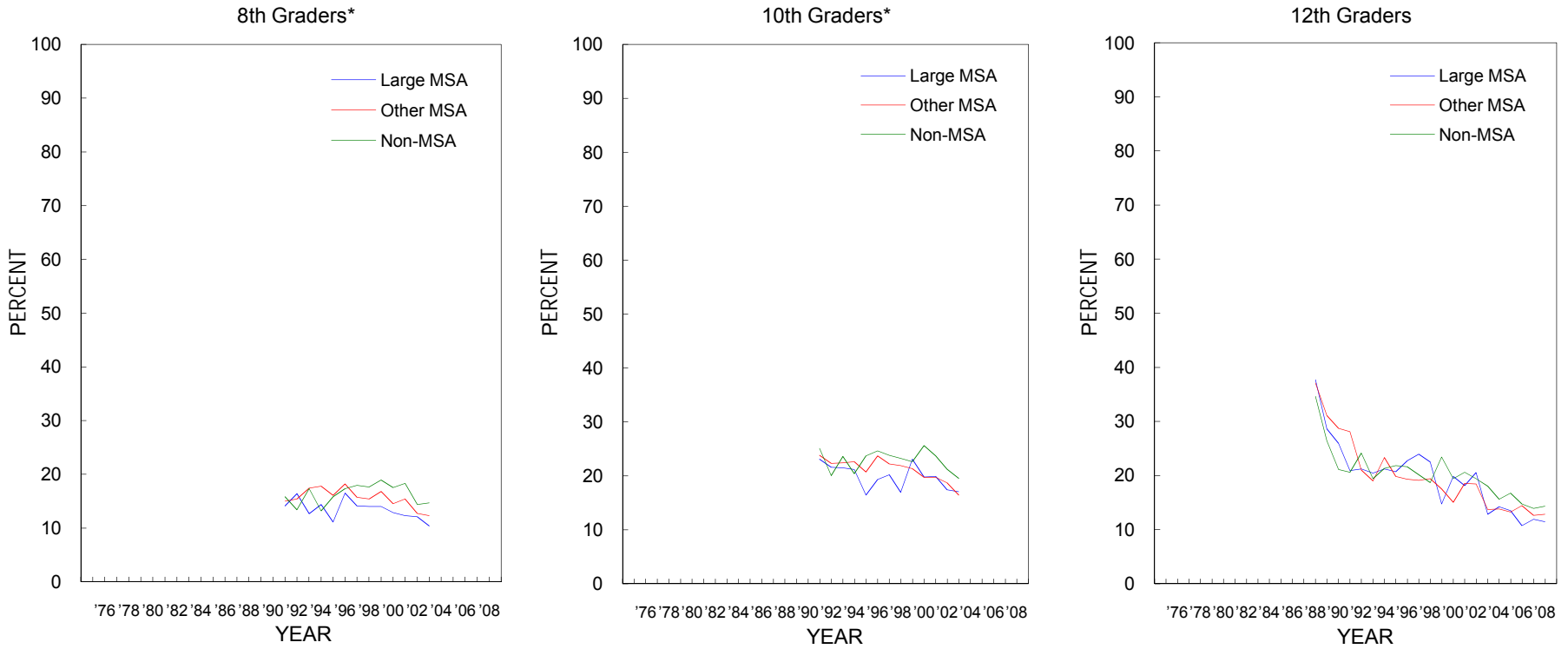
**FIGURE 207**  
**Wine Coolers: Trends in 30-Day Prevalence by Region**



Source. The Monitoring the Future study, the University of Michigan.

\*Question discontinued for 8th and 10th graders in 2004.

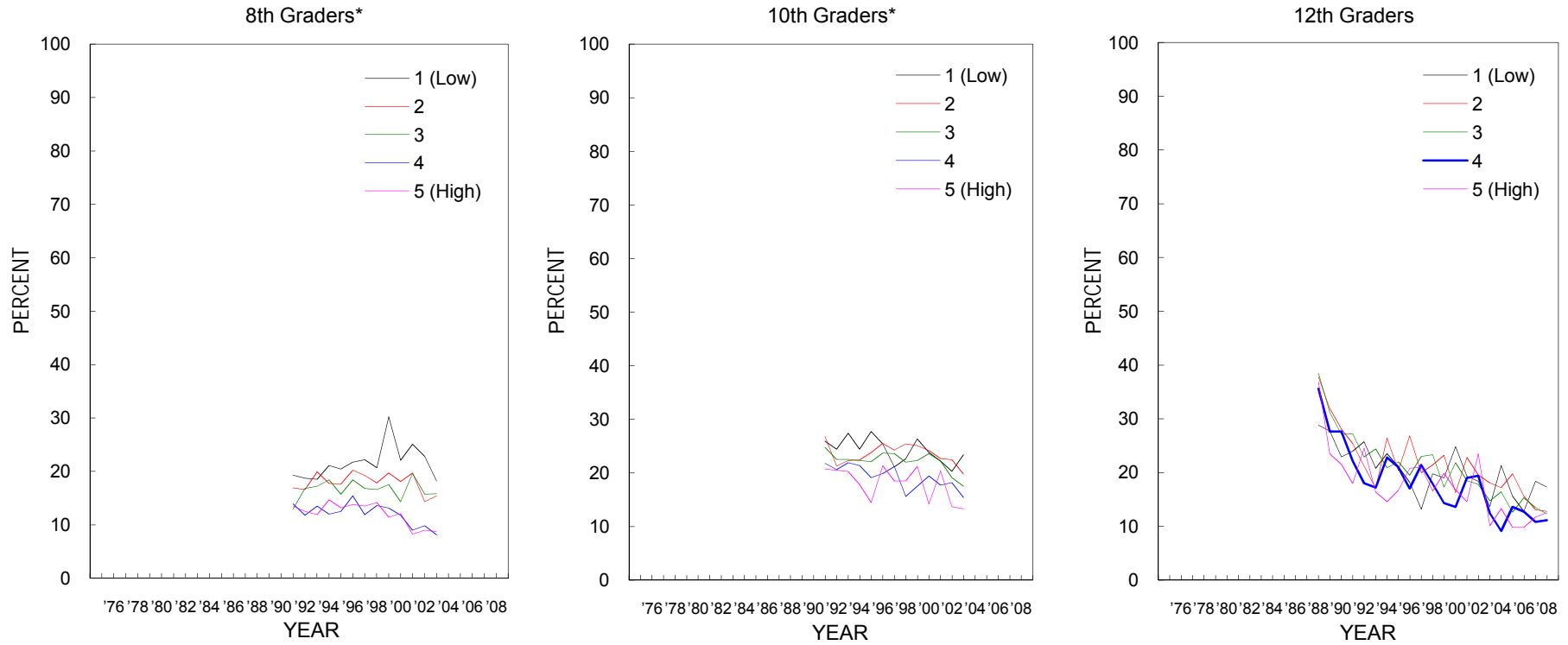
**FIGURE 208**  
**Wine Coolers: Trends in 30-Day Prevalence by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

\*Question discontinued for 8th and 10th graders in 2004.

**FIGURE 209**  
**Wine Coolers: Trends in 30-Day Prevalence by Parents' Average Education**

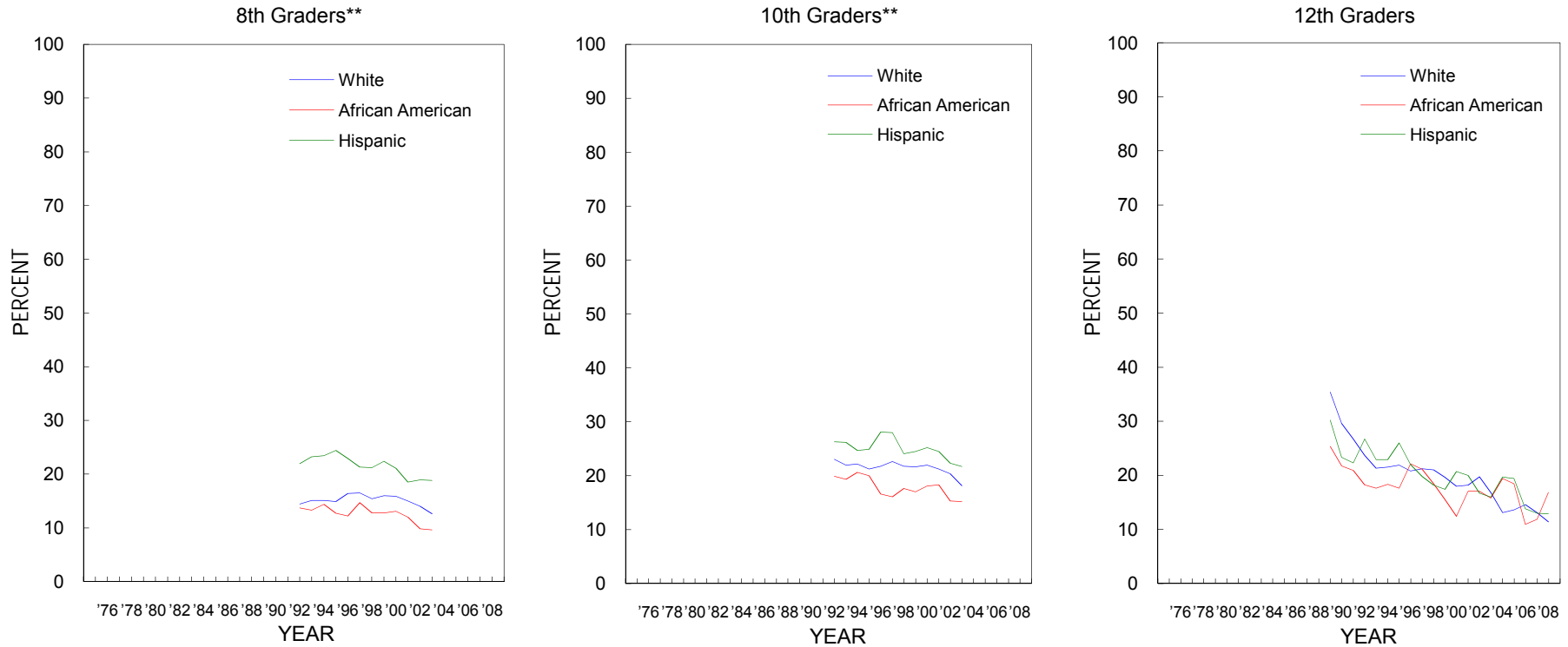


Source. The Monitoring the Future study, the University of Michigan.

\*Question discontinued for 8th and 10th graders in 2004.



**FIGURE 210**  
**Wine Coolers: Trends in 30-Day Prevalence by Race/Ethnicity\***



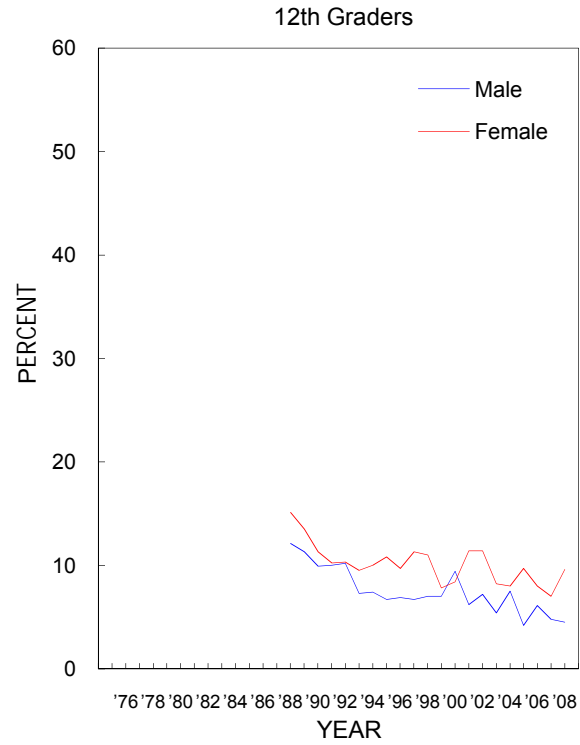
Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

\*\*Question discontinued for 8th and 10th graders in 2004.

**FIGURE 211**

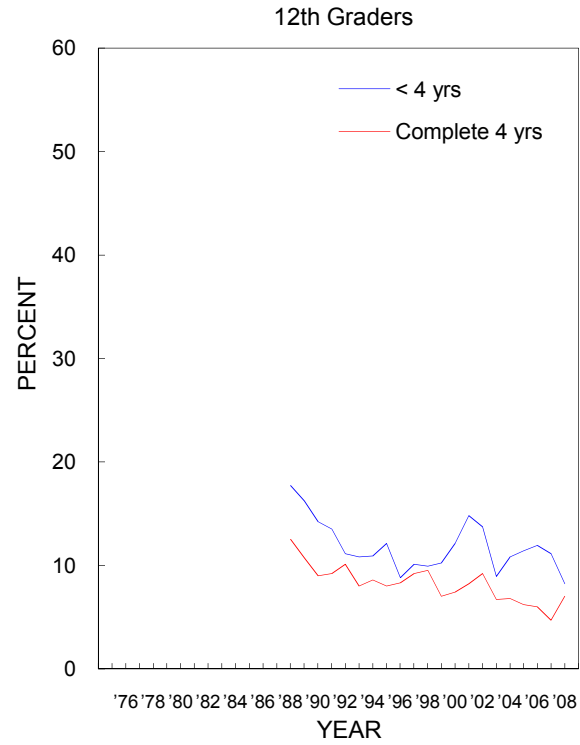
**Wine Coolers: Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row by Gender**



Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 212**

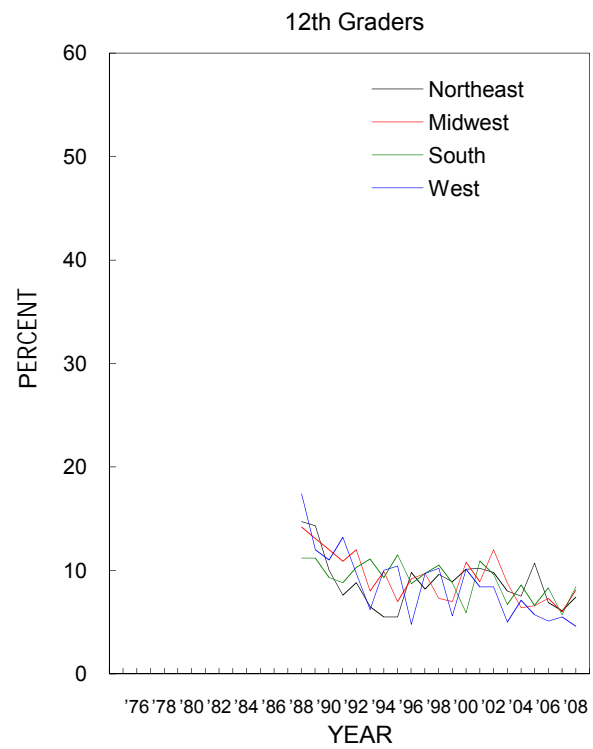
**Wine Coolers: Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 213**

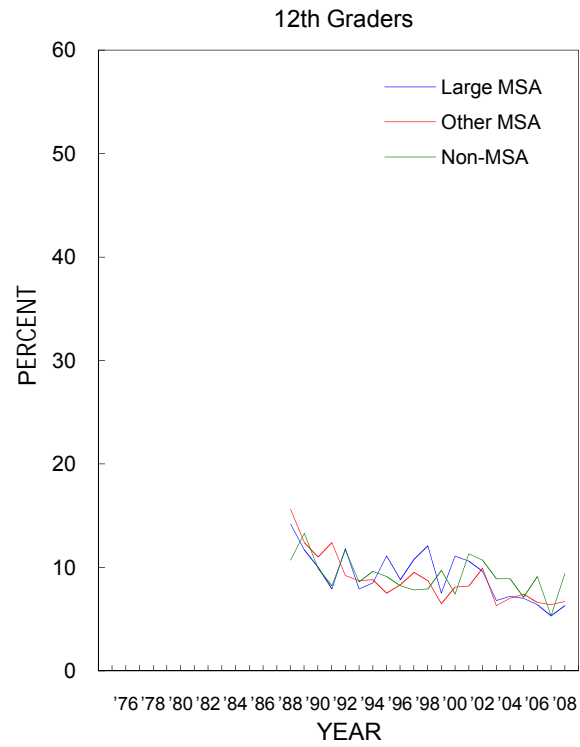
**Wine Coolers: Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row by Region**



Source. The Monitoring the Future study, the University of Michigan.

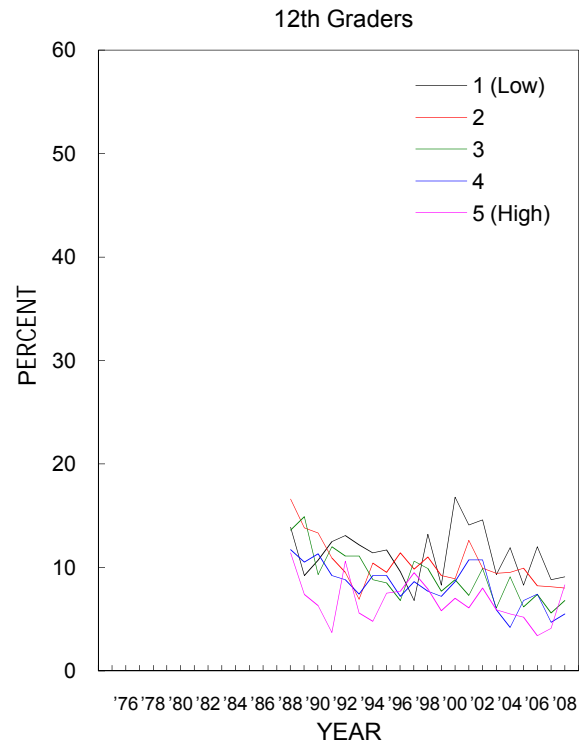
**FIGURE 214**

**Wine Coolers: Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

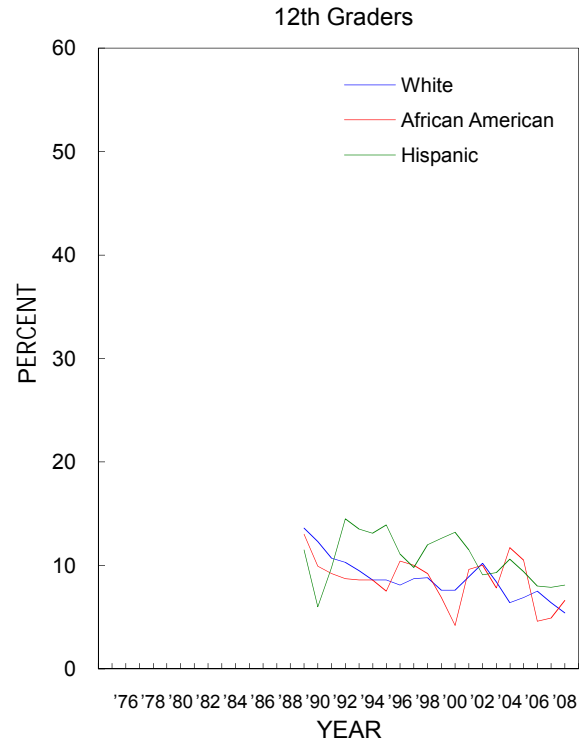
**FIGURE 215**  
**Wine Coolers: Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row**  
**by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 216**

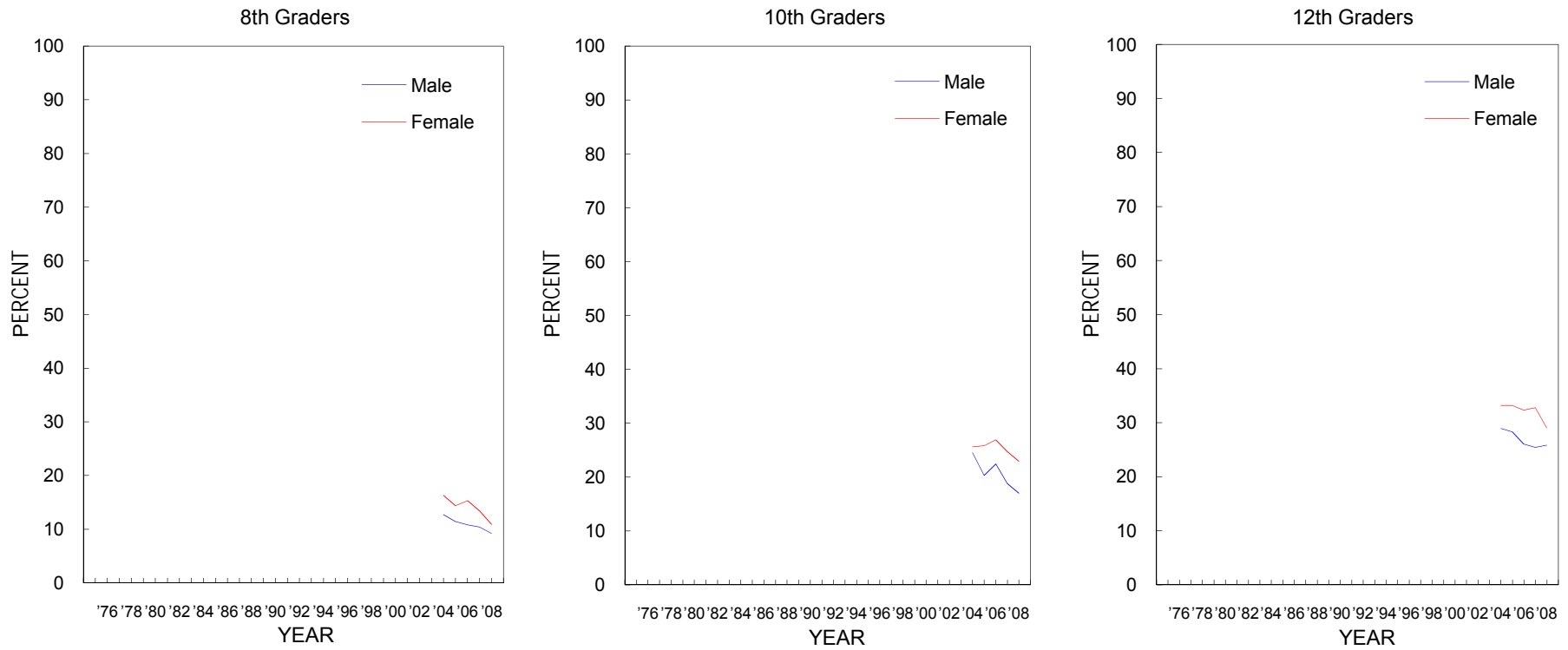
**Wine Coolers: Trends in 2-Week Prevalence of Having 5 or More Drinks in a Row by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

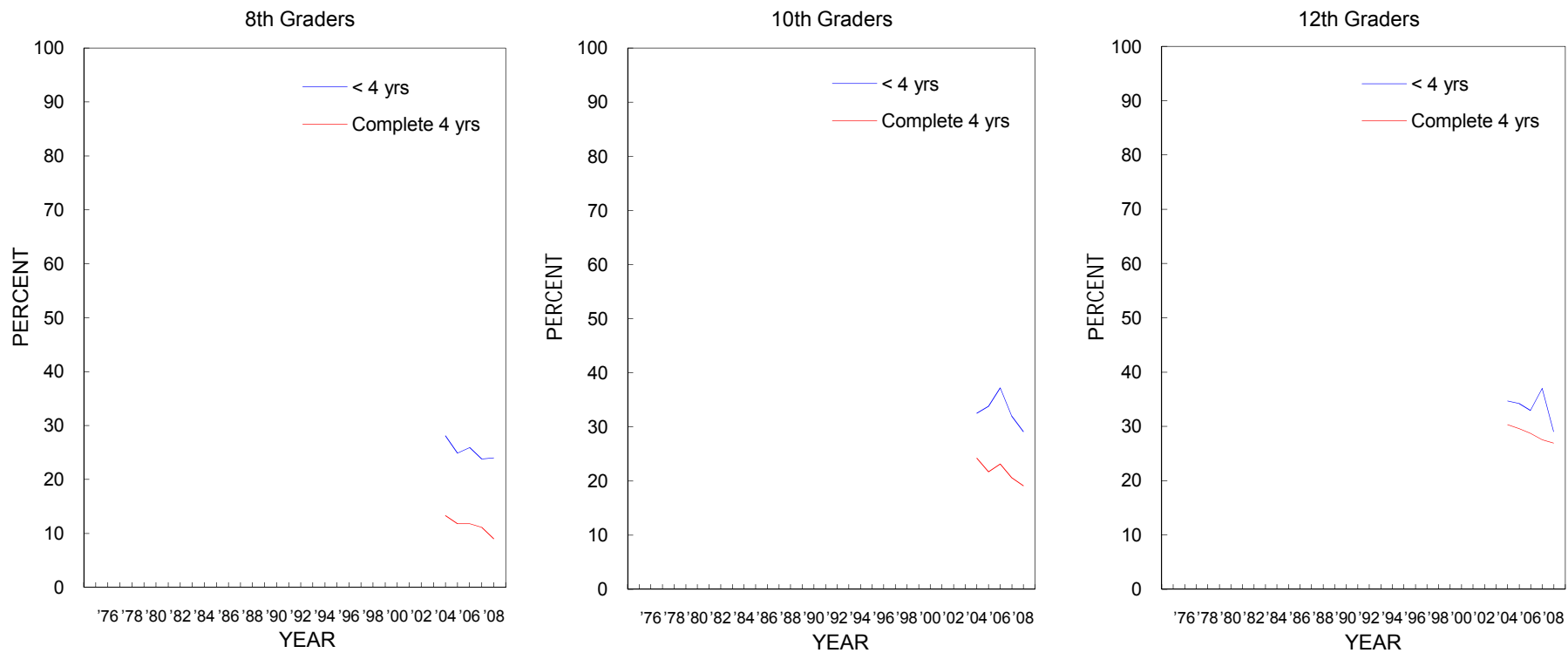
**FIGURE 217**  
**Flavored Alcoholic Beverages: Trends in 30-Day Prevalence by Gender**



Source. The Monitoring the Future study, the University of Michigan.

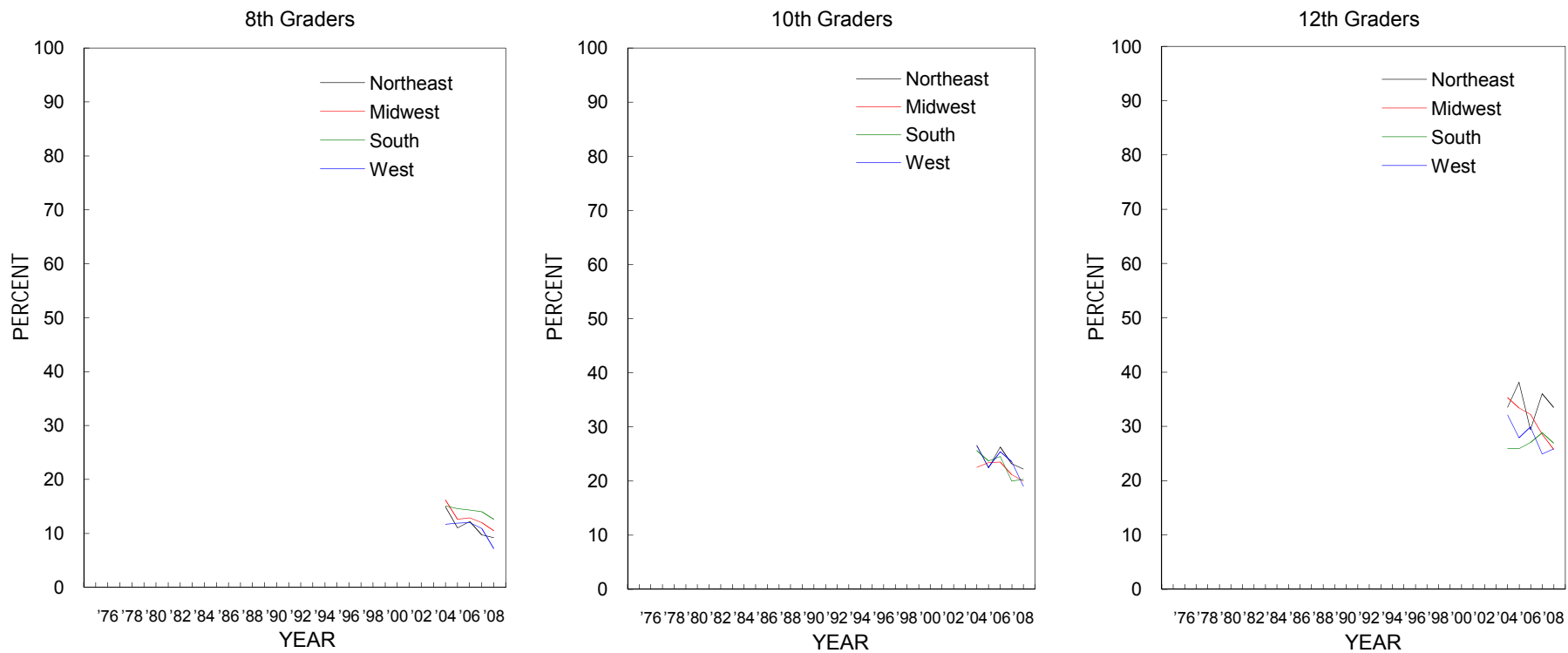


**FIGURE 218**  
**Flavored Alcoholic Beverages: Trends in 30-Day Prevalence by College Plans**



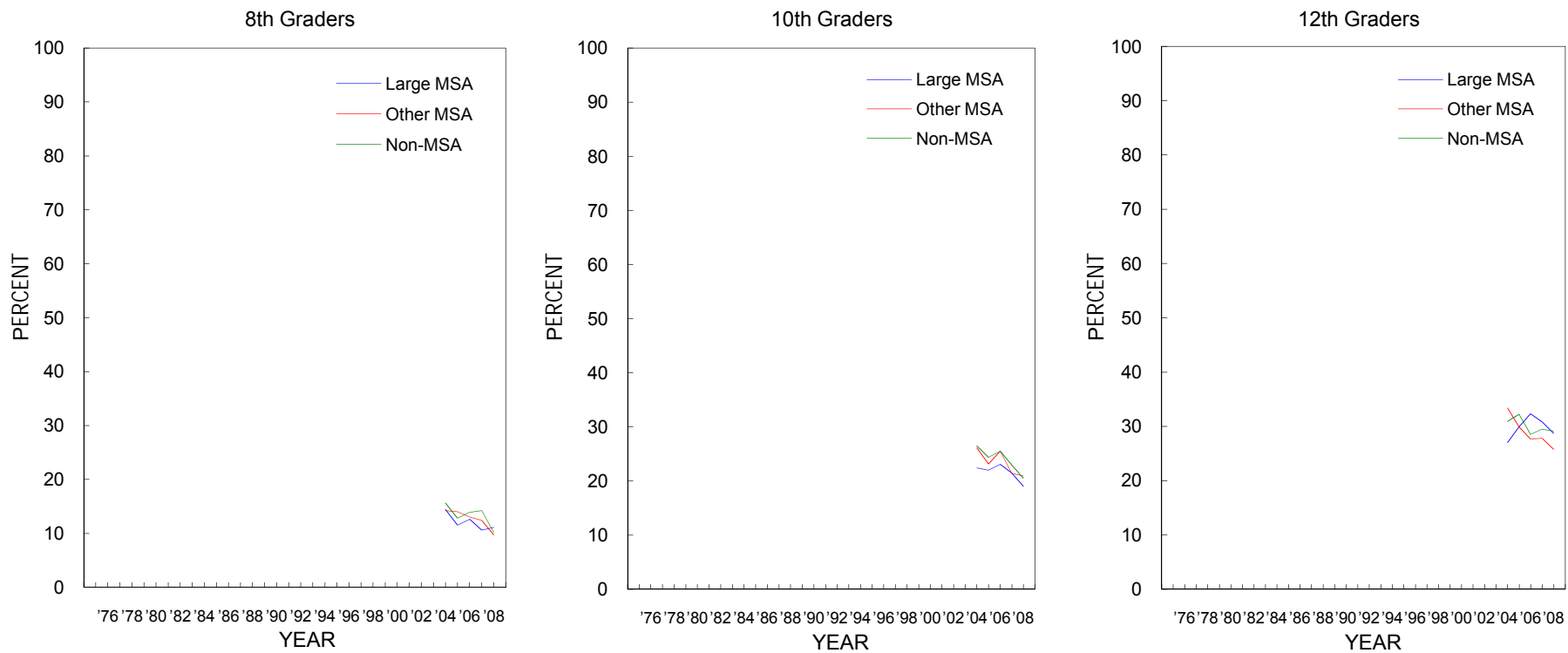
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 219**  
**Flavored Alcoholic Beverages: Trends in 30-Day Prevalence by Region**



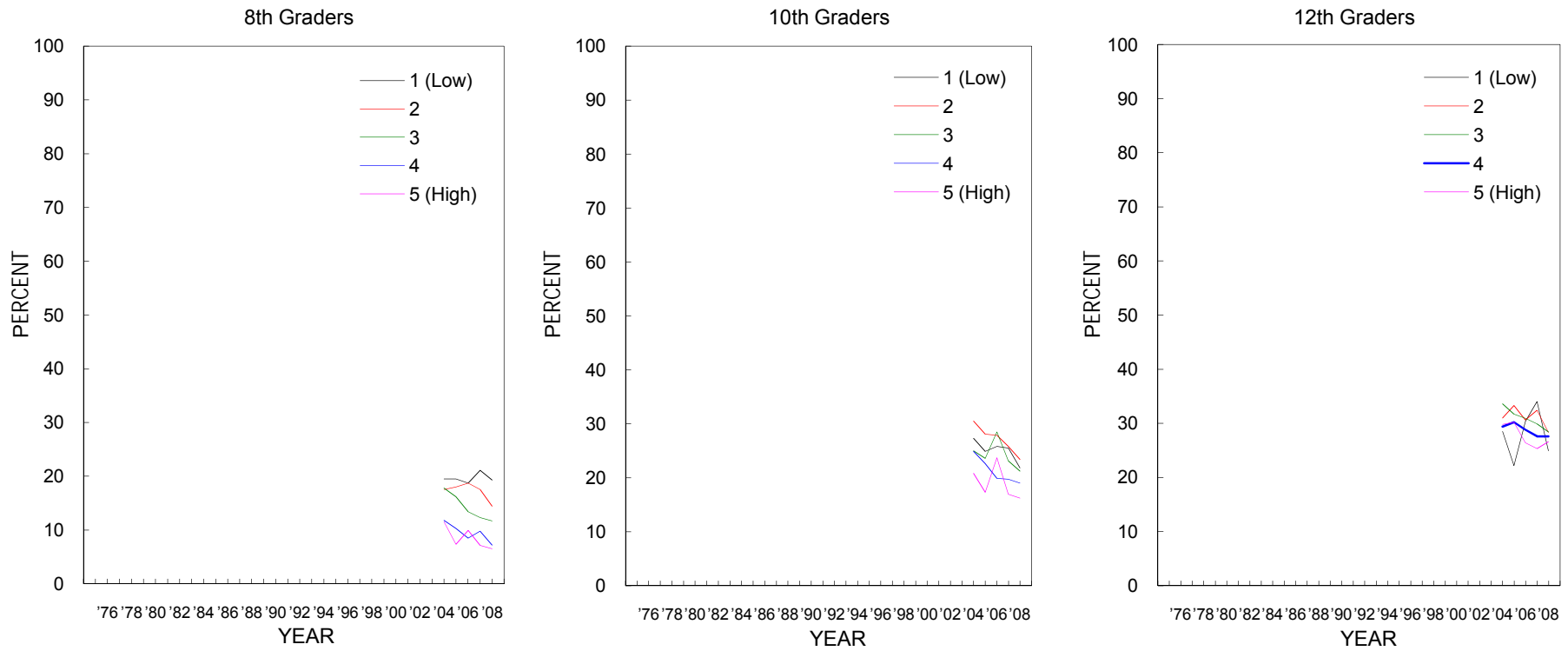
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 220**  
**Flavored Alcoholic Beverages: Trends in 30-Day Prevalence by Population Density**



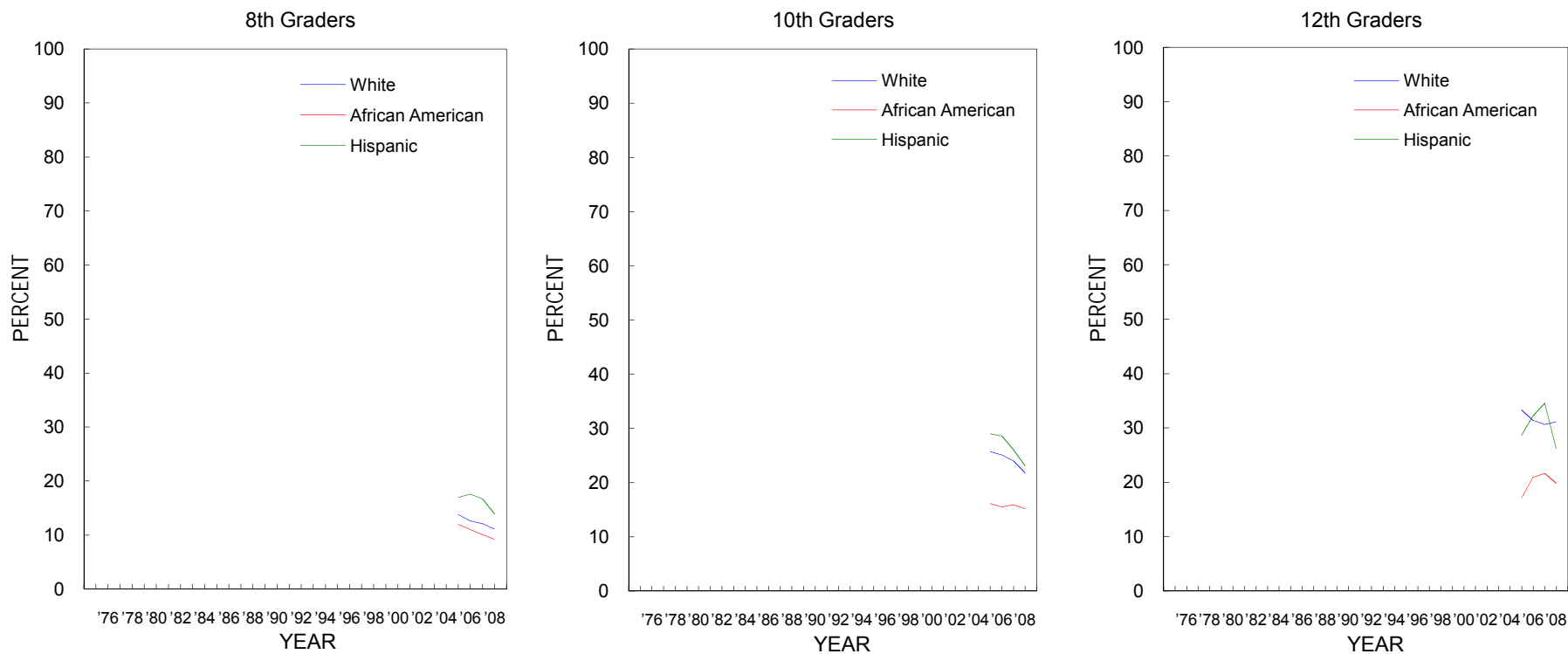
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 221**  
**Flavored Alcoholic Beverages: Trends in 30-Day Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

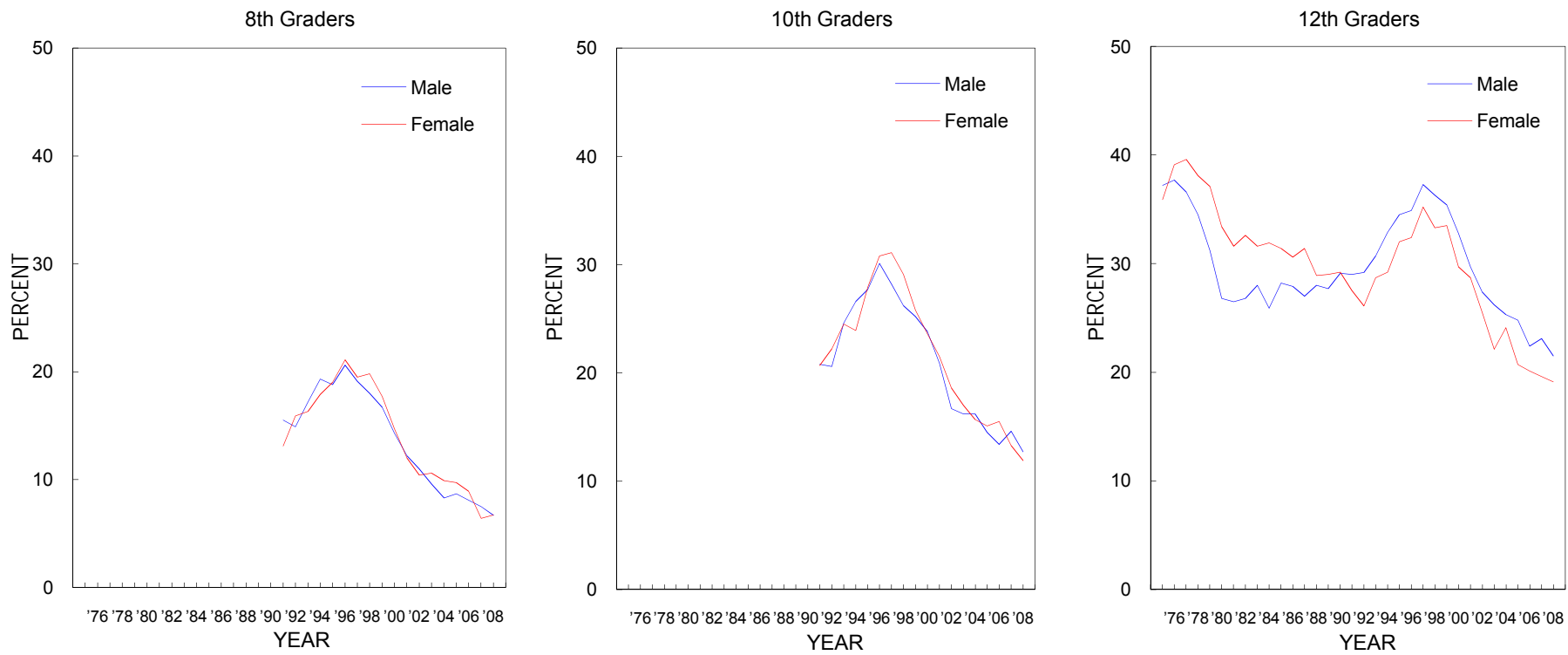
**FIGURE 222**  
**Flavored Alcoholic Beverages: Trends in 30-Day Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

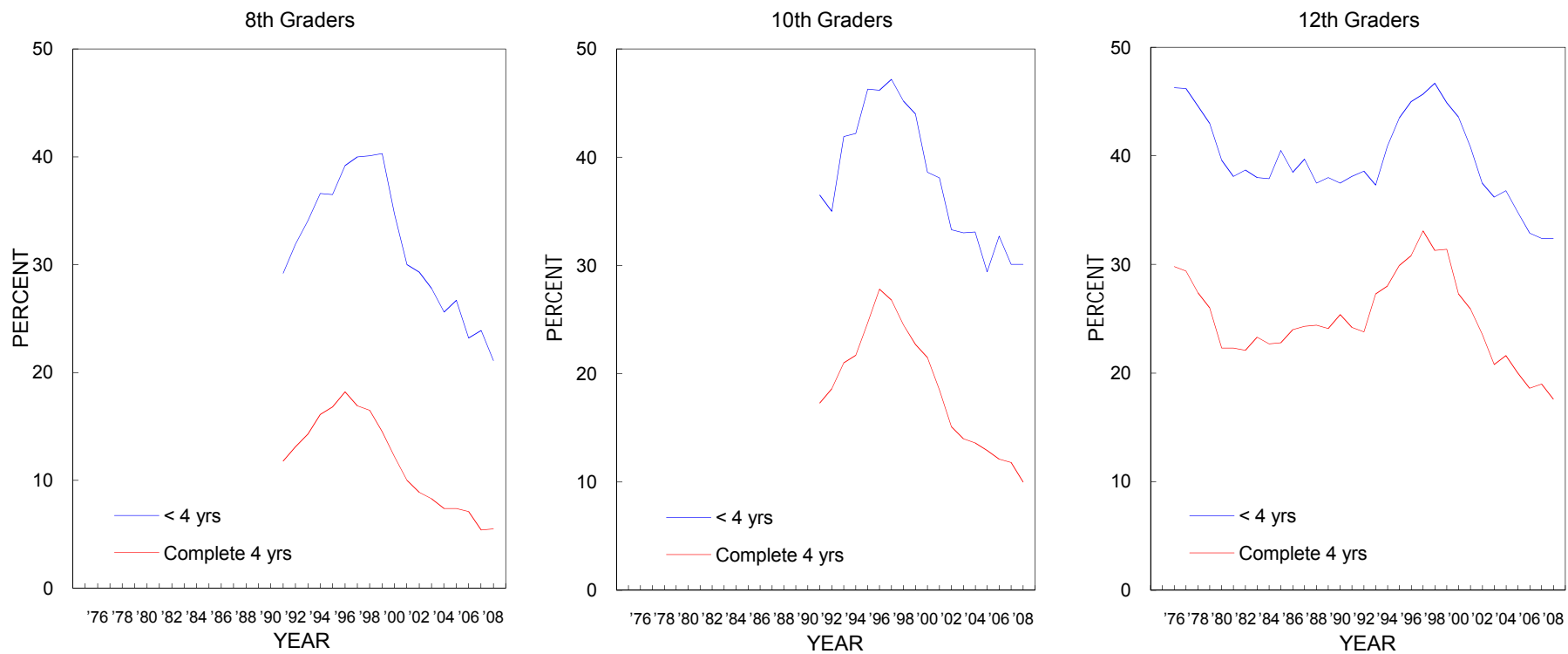
\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 223**  
**Cigarettes: Trends in 30-Day Prevalence by Gender**



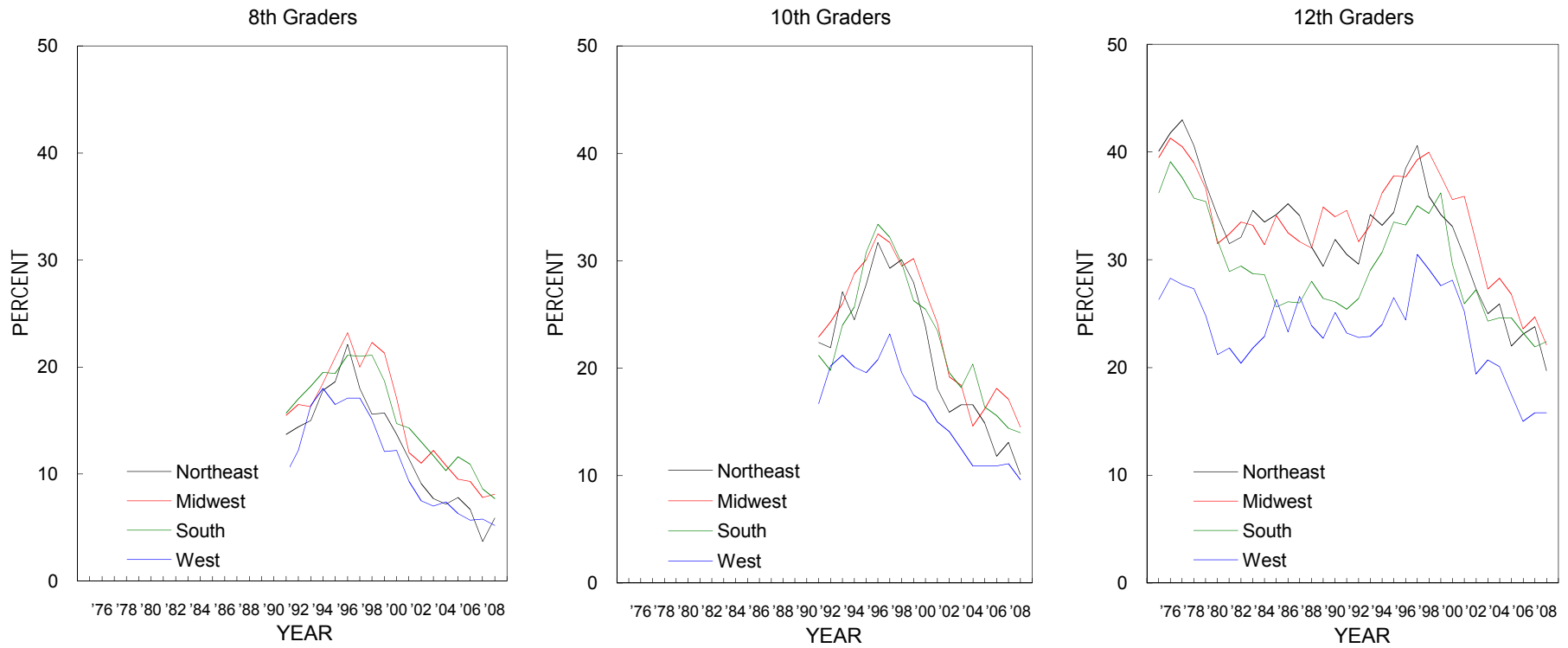
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 224**  
**Cigarettes: Trends in 30-Day Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

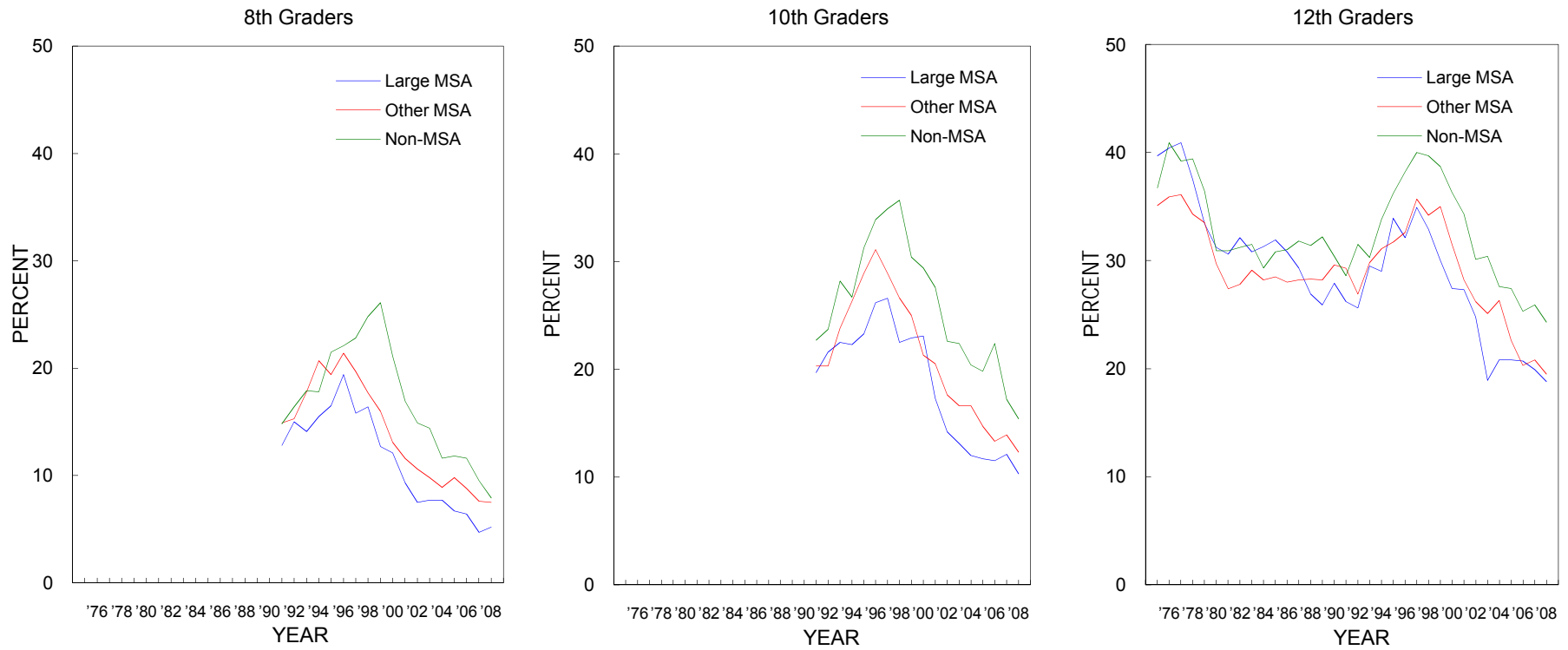
**FIGURE 225**  
**Cigarettes: Trends in 30-Day Prevalence by Region**



Source. The Monitoring the Future study, the University of Michigan.

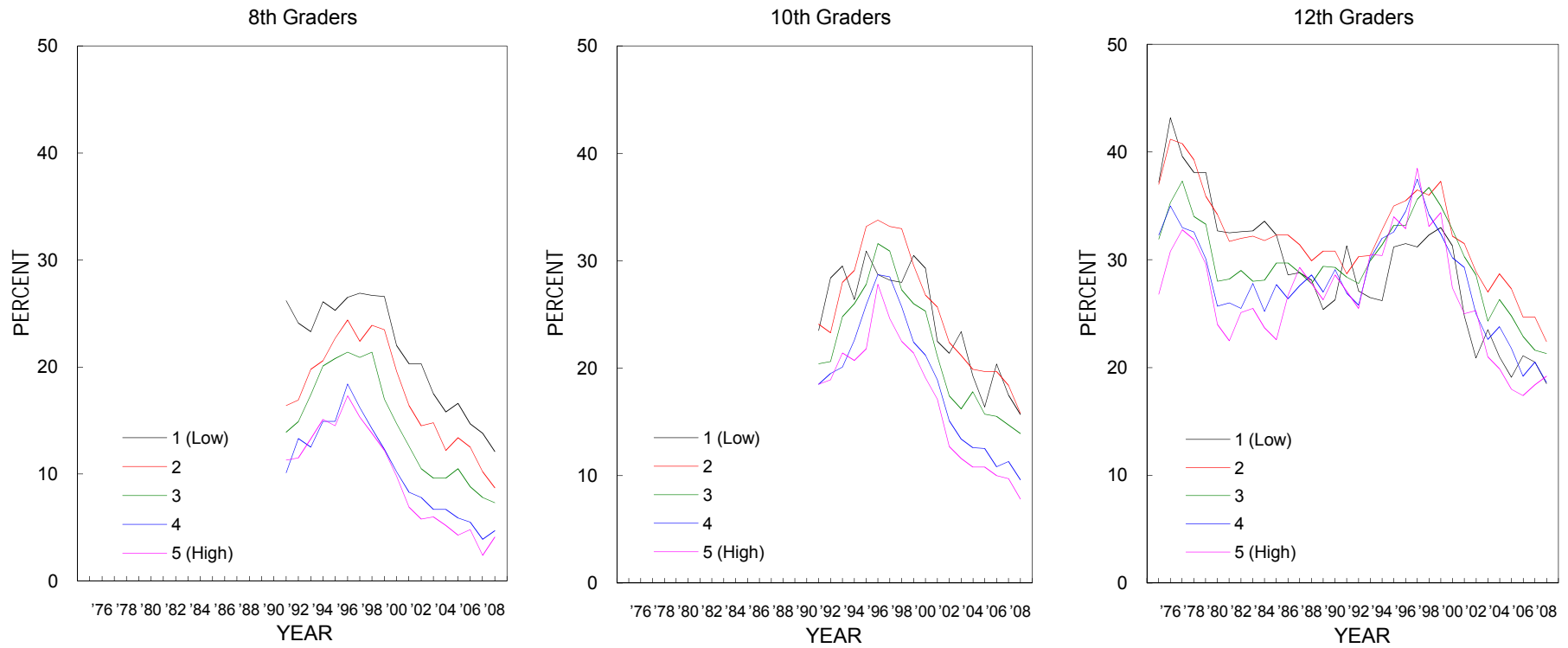


**FIGURE 226**  
**Cigarettes: Trends in 30-Day Prevalence by Population Density**



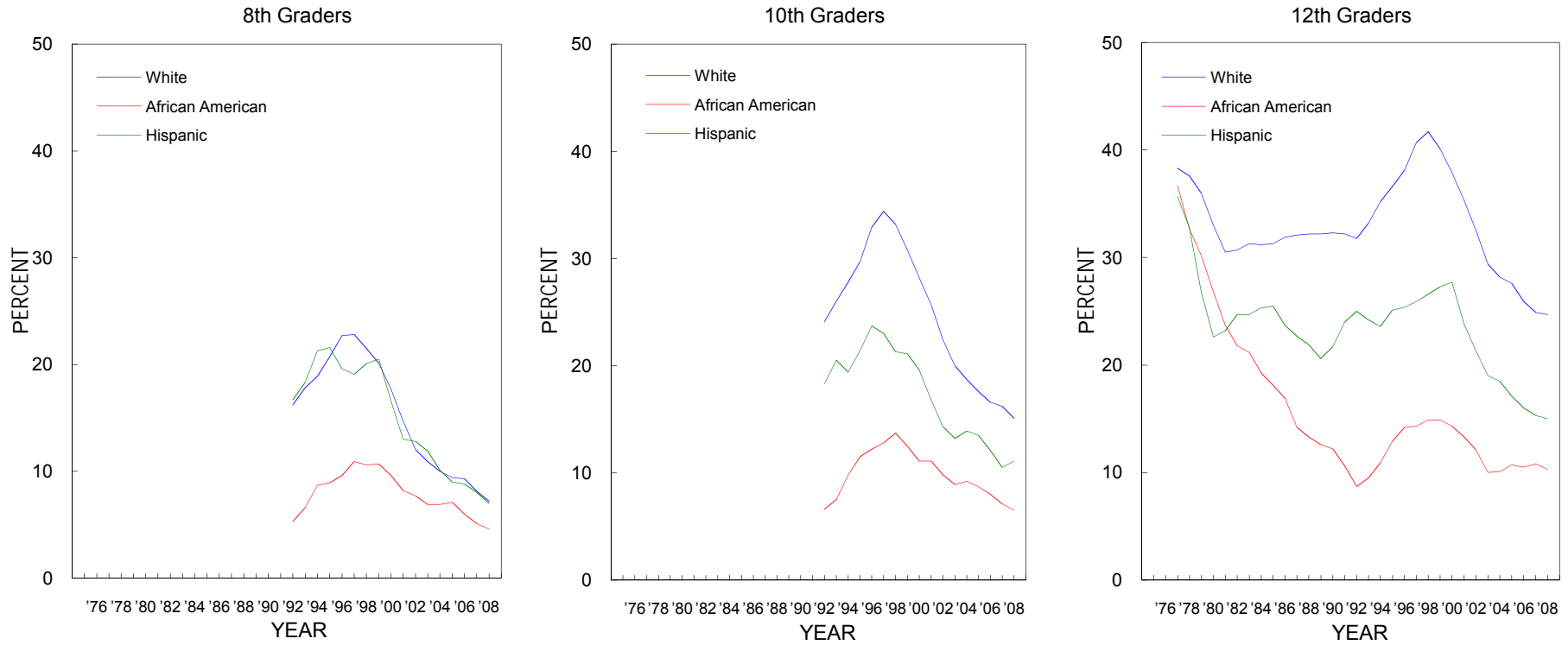
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 227**  
**Cigarettes: Trends in 30-Day Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

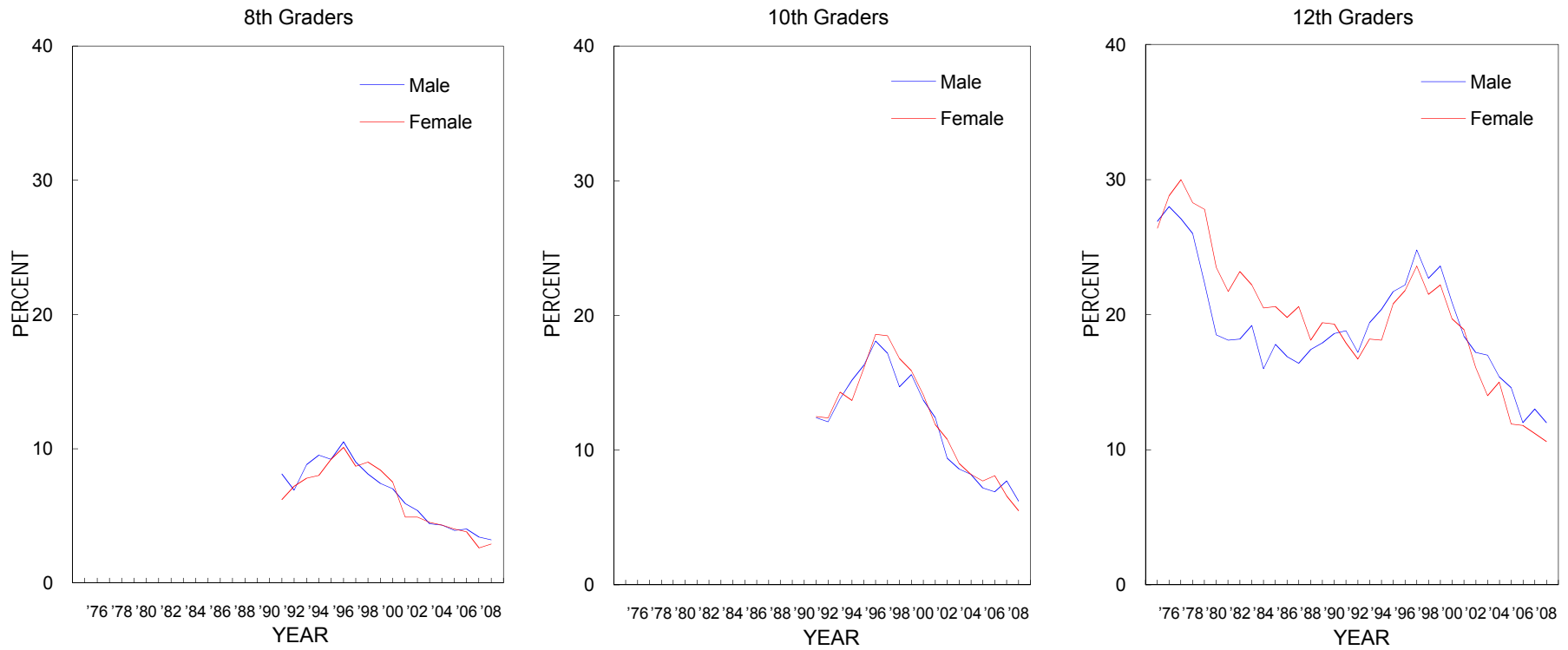
**FIGURE 228**  
**Cigarettes: Trends in 30-Day Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

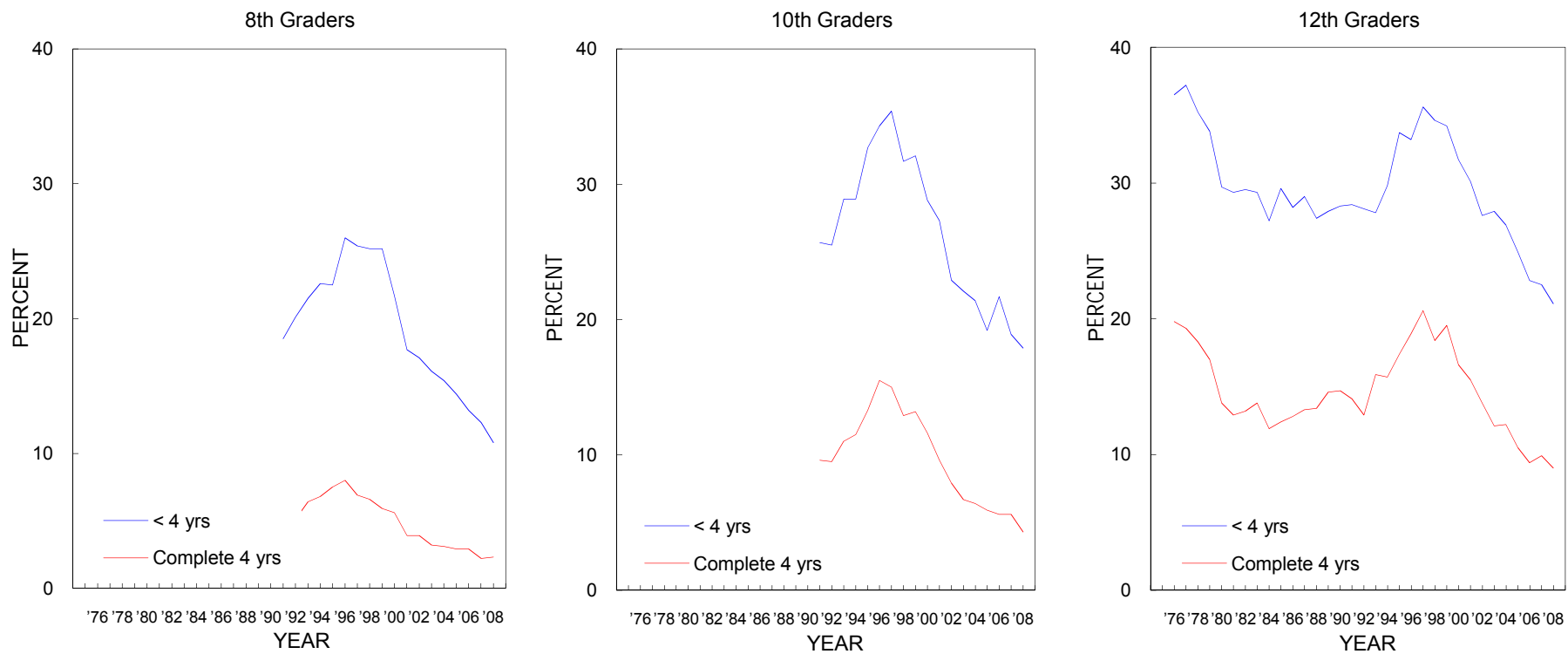
\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 229**  
**Cigarettes: Trends in 30-Day Prevalence of Daily Use by Gender**



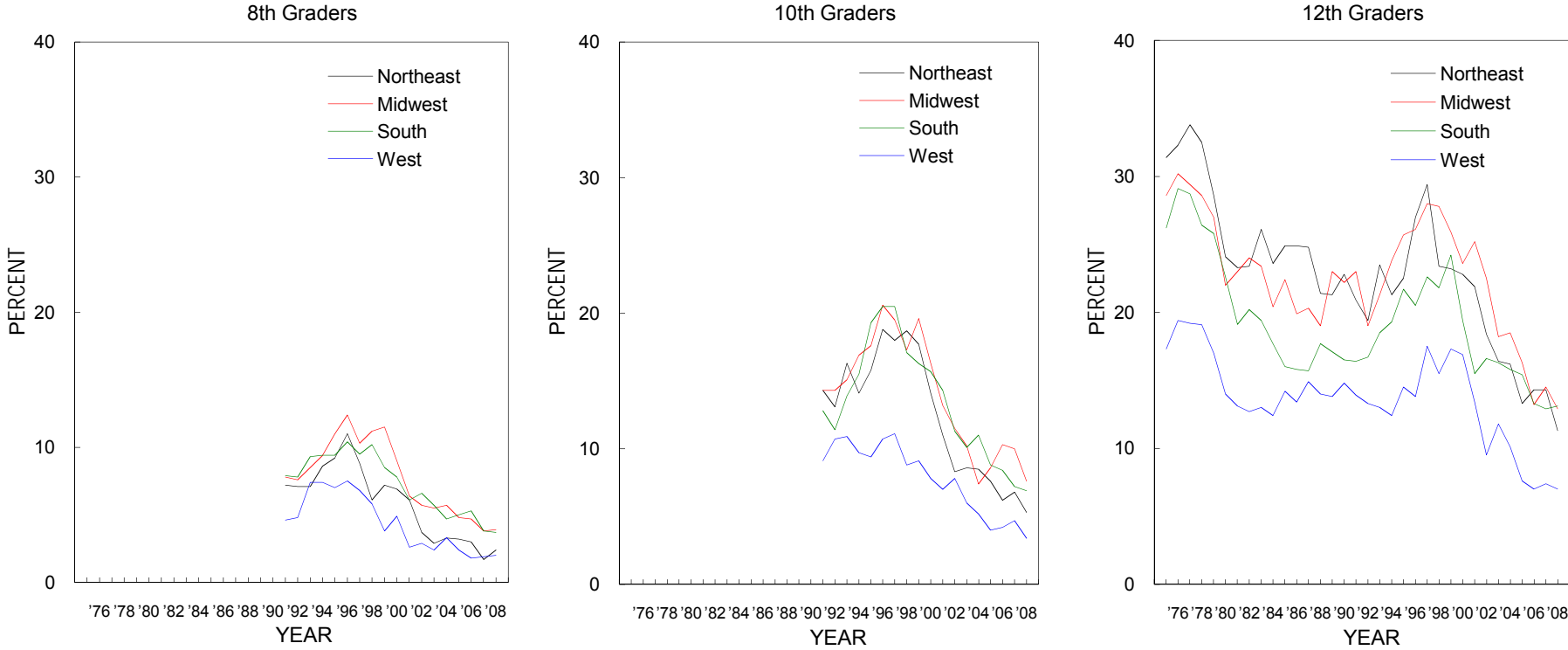
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 230**  
**Cigarettes: Trends in 30-Day Prevalence of Daily Use by College Plans**



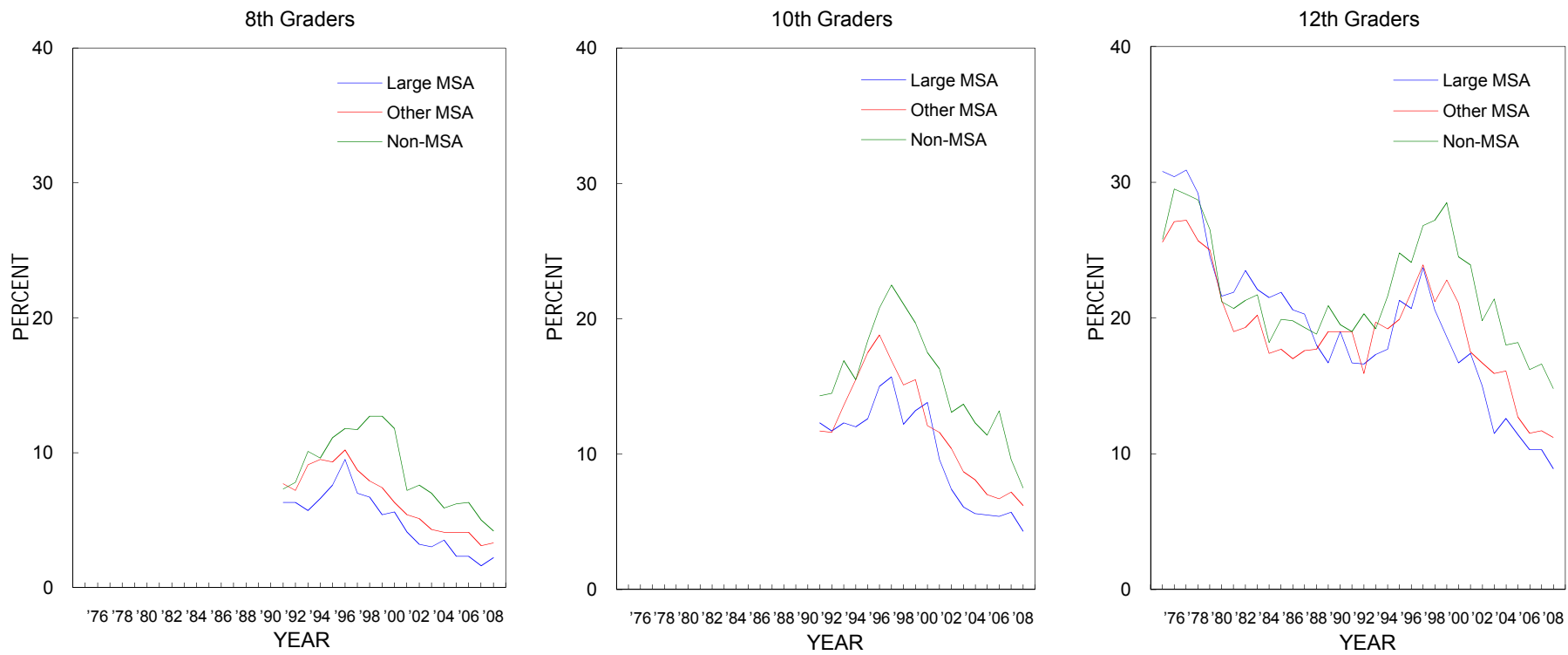
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 231**  
**Cigarettes: Trends in 30-Day Prevalence of Daily Use by Region**



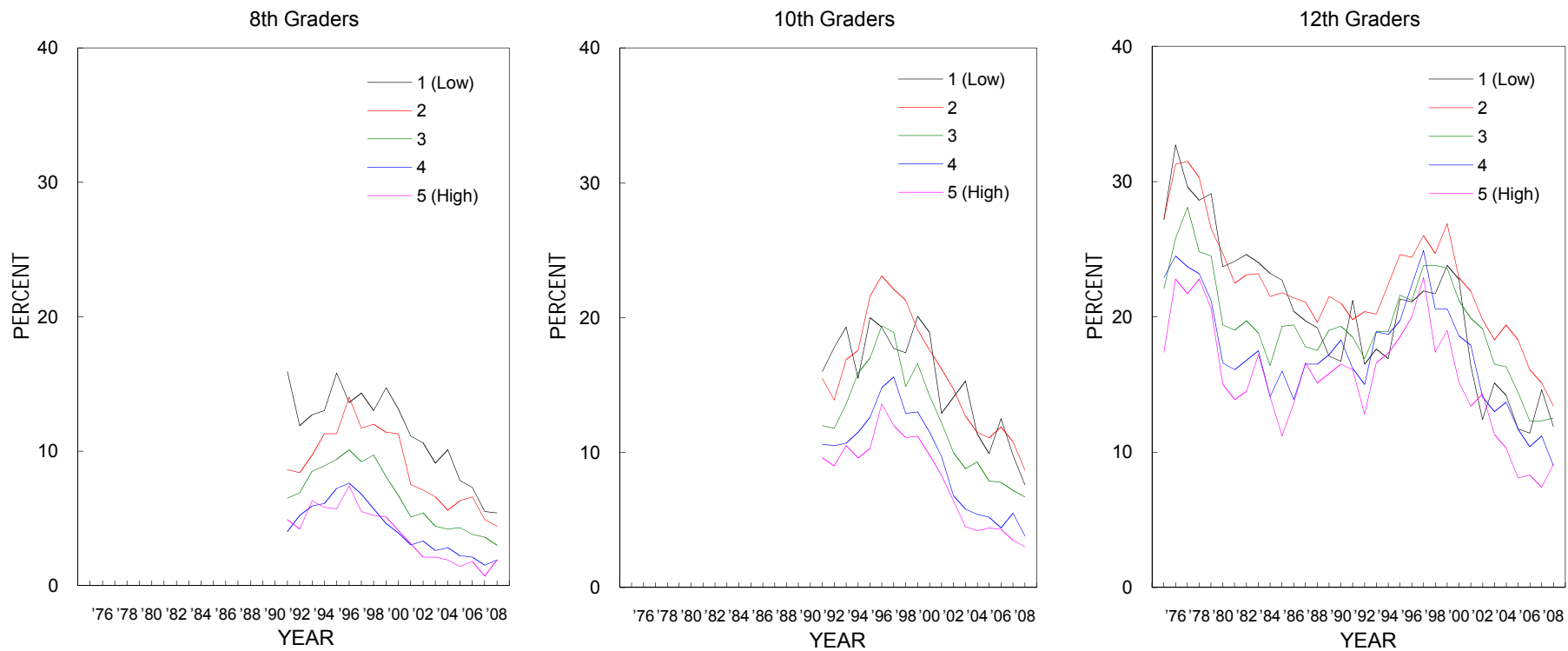
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 232**  
**Cigarettes: Trends in 30-Day Prevalence of Daily Use by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

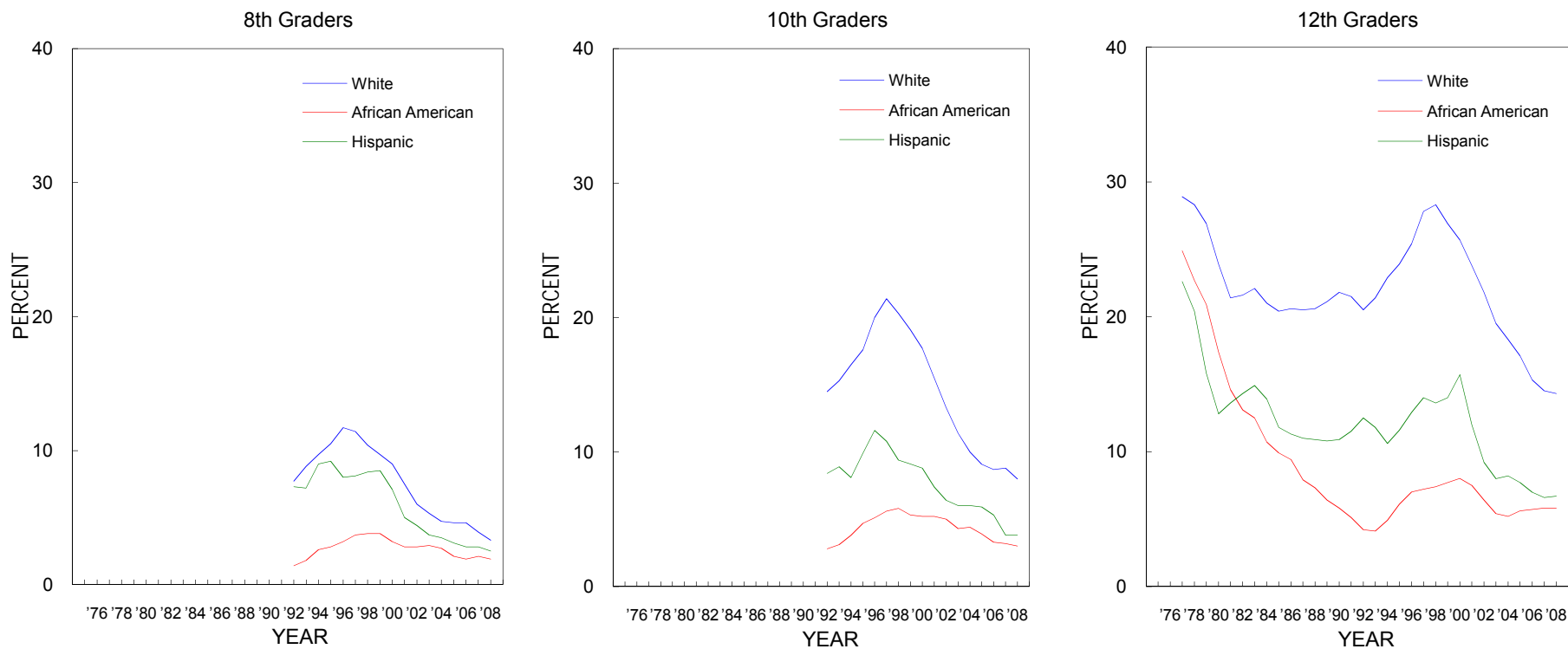
**FIGURE 233**  
**Cigarettes: Trends in 30-Day Prevalence of Daily Use by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.



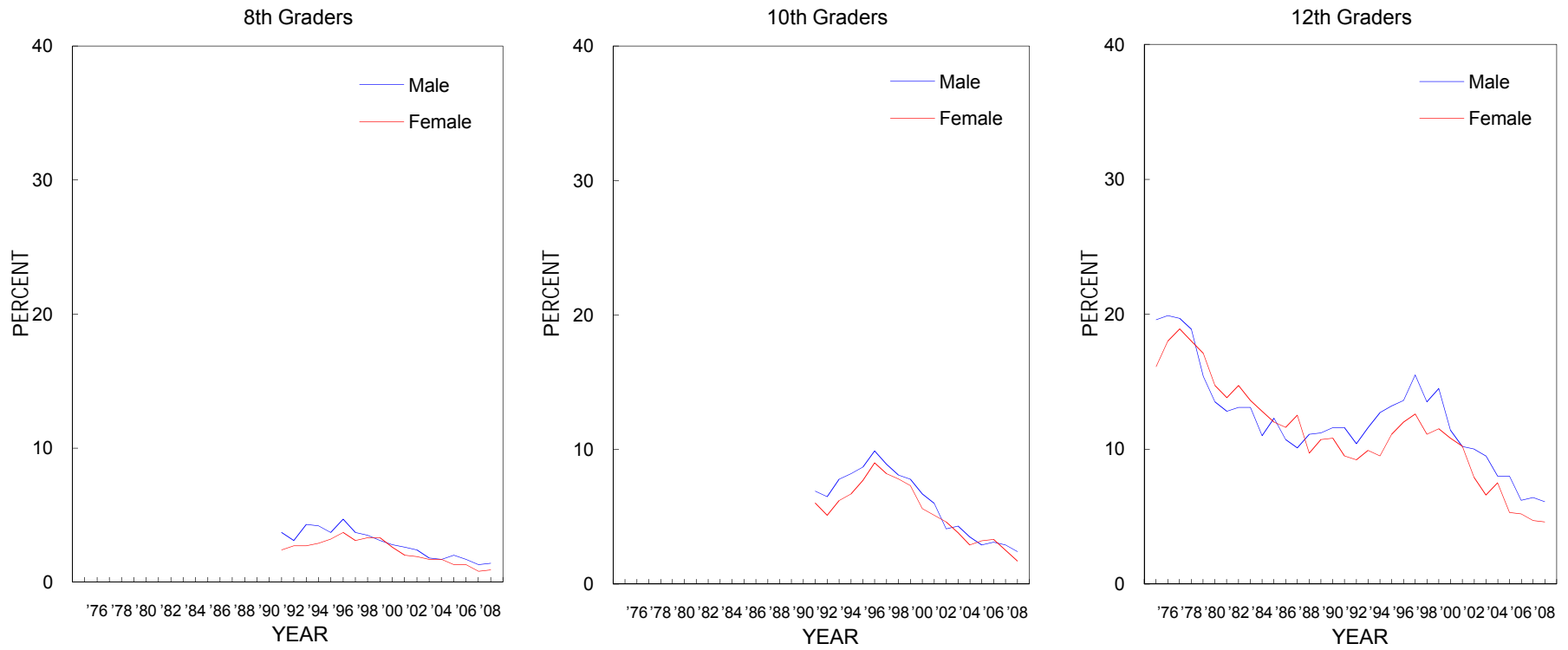
**FIGURE 234**  
**Cigarettes: Trends in 30-Day Prevalence of Daily Use by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

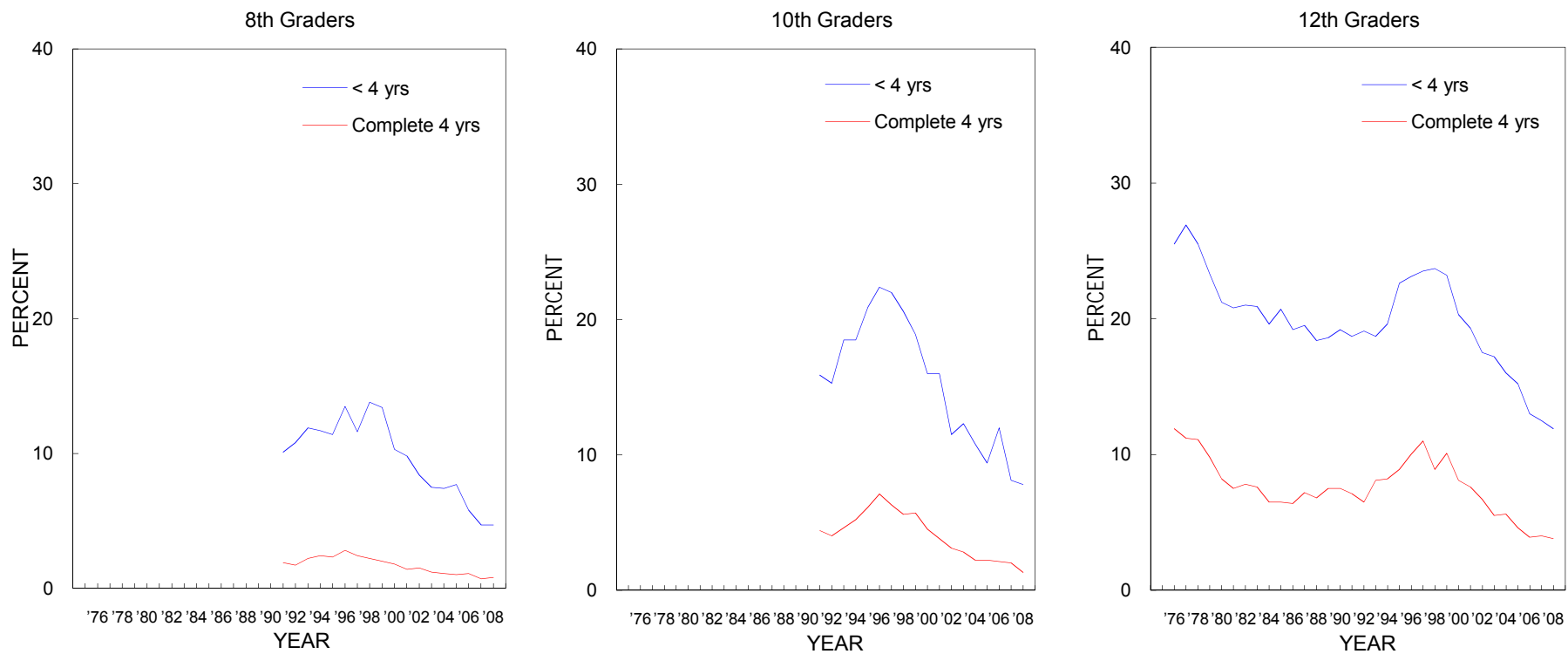
\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 235**  
**Cigarettes: Trends in 30-Day Prevalence of Use of Half Pack a Day or More by Gender**



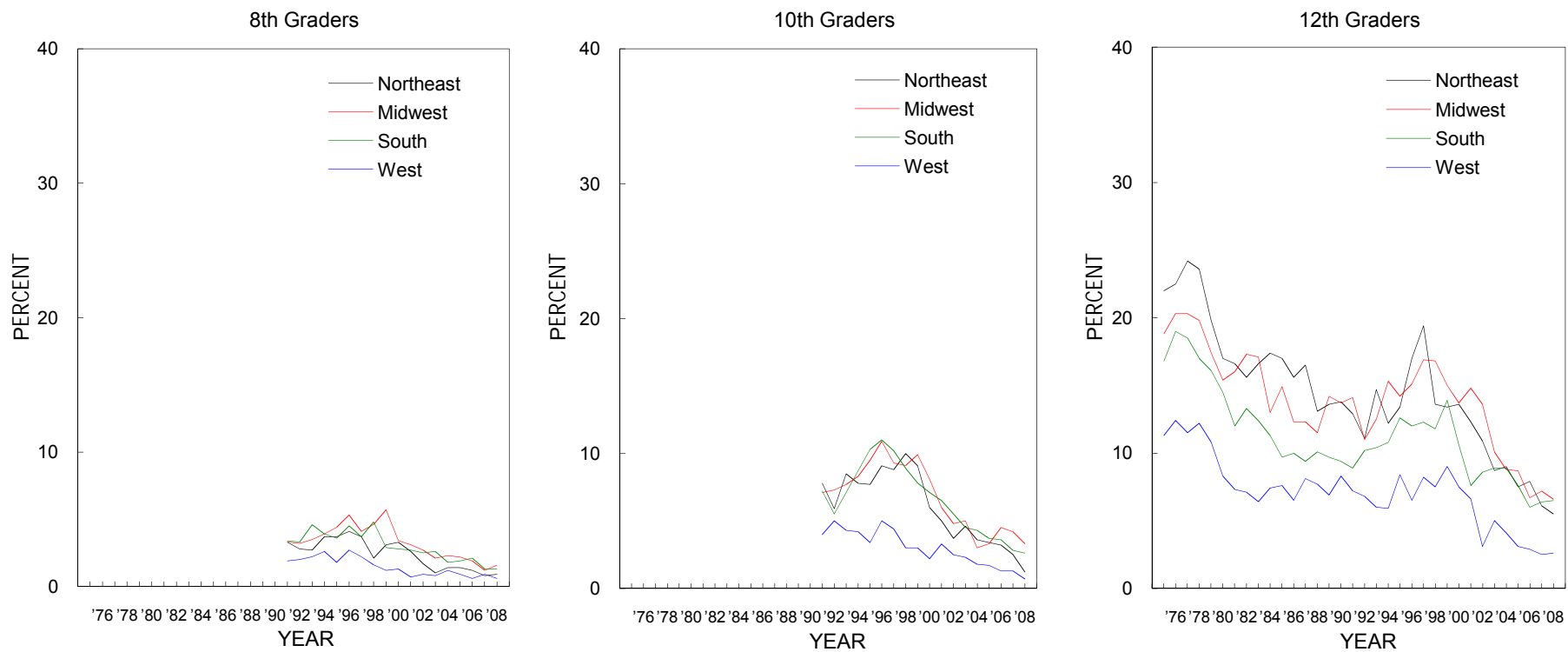
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 236**  
**Cigarettes: Trends in 30-Day Prevalence of Use of Half Pack a Day or More by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

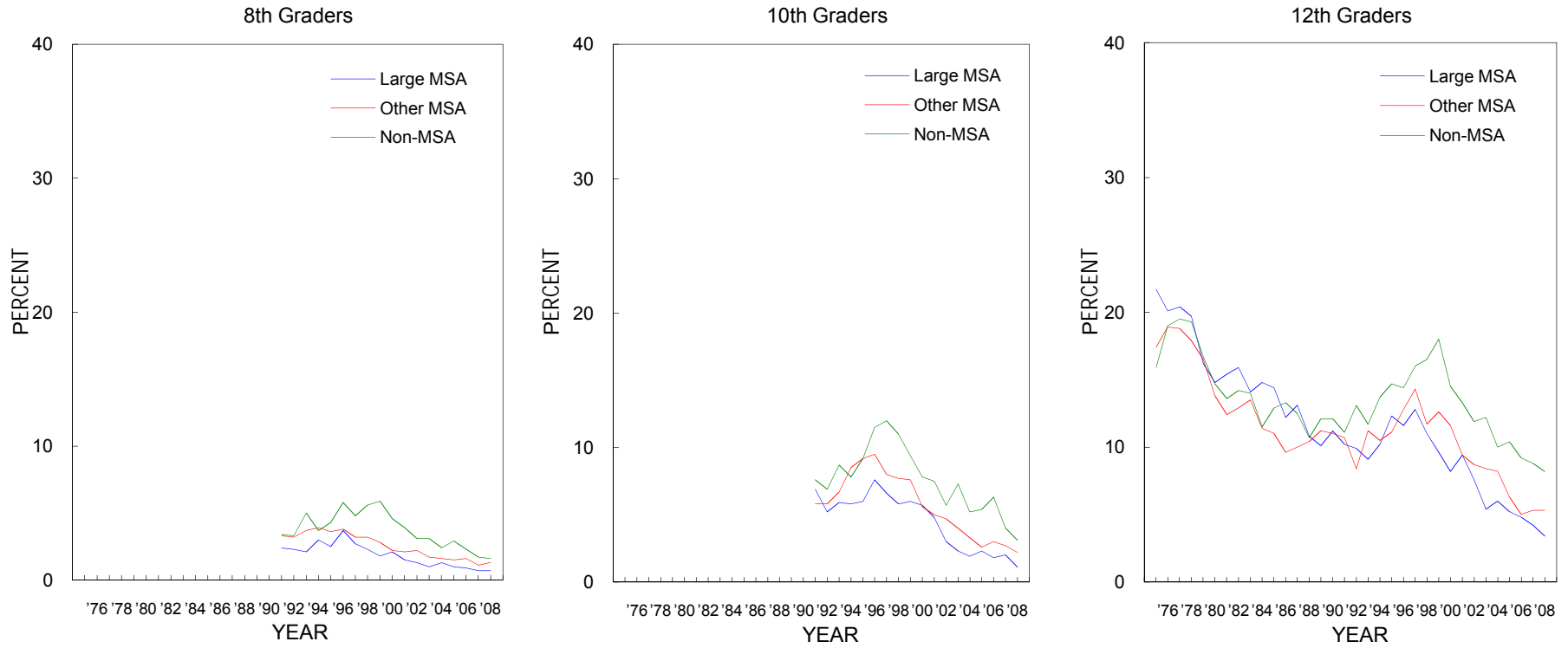
**FIGURE 237**  
**Cigarettes: Trends in 30-Day Prevalence of Use of Half Pack a Day or More by Region**



Source. The Monitoring the Future study, the University of Michigan.

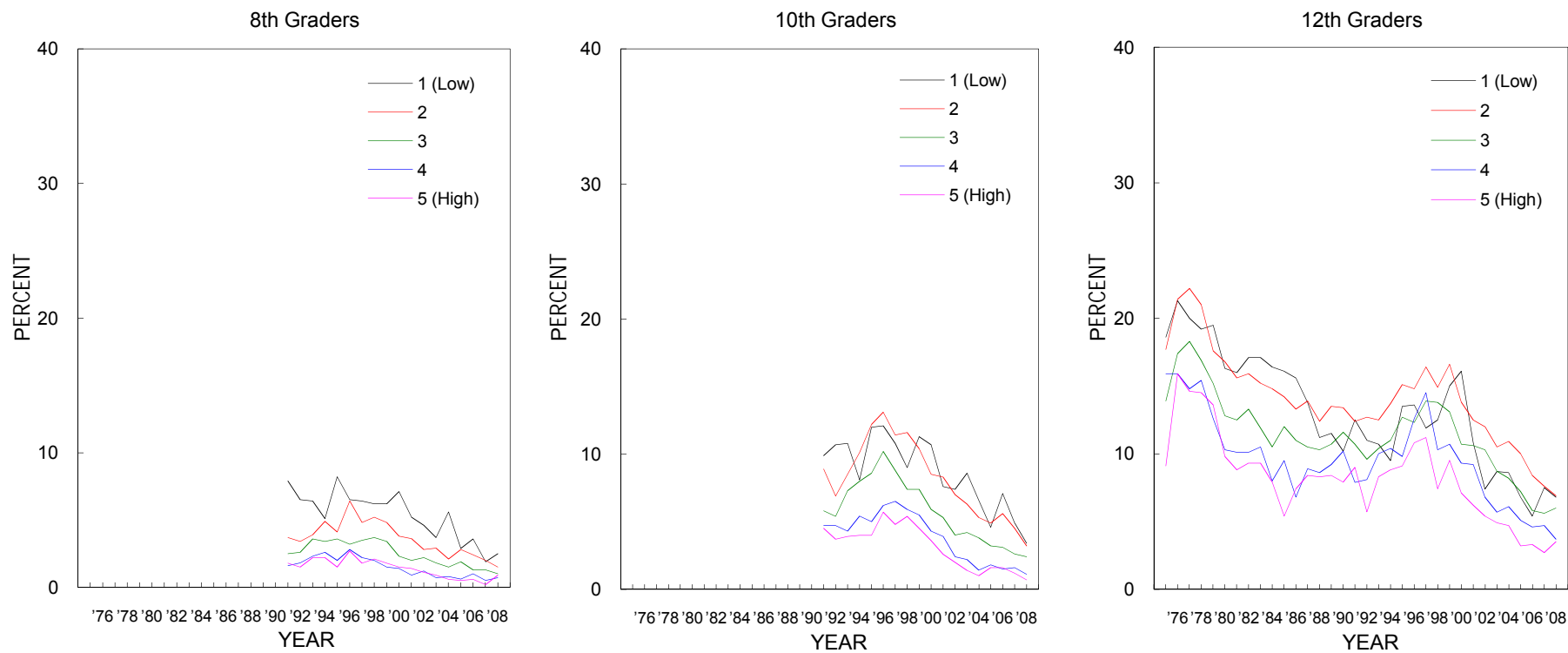
**FIGURE 238**

**Cigarettes: Trends in 30-Day Prevalence of Use of Half Pack a Day or More by Population Density**



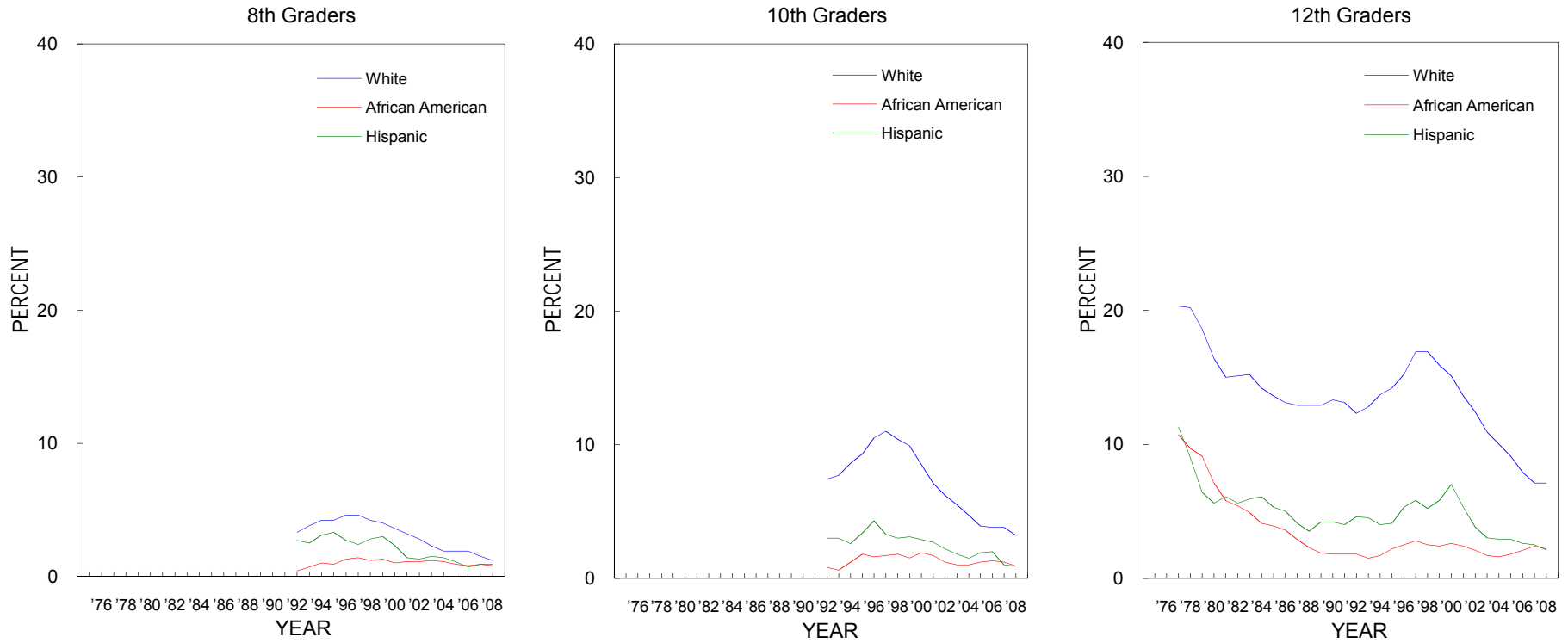
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 239**  
**Cigarettes: Trends in 30-Day Prevalence of Use of Half Pack a Day or More by**  
**Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

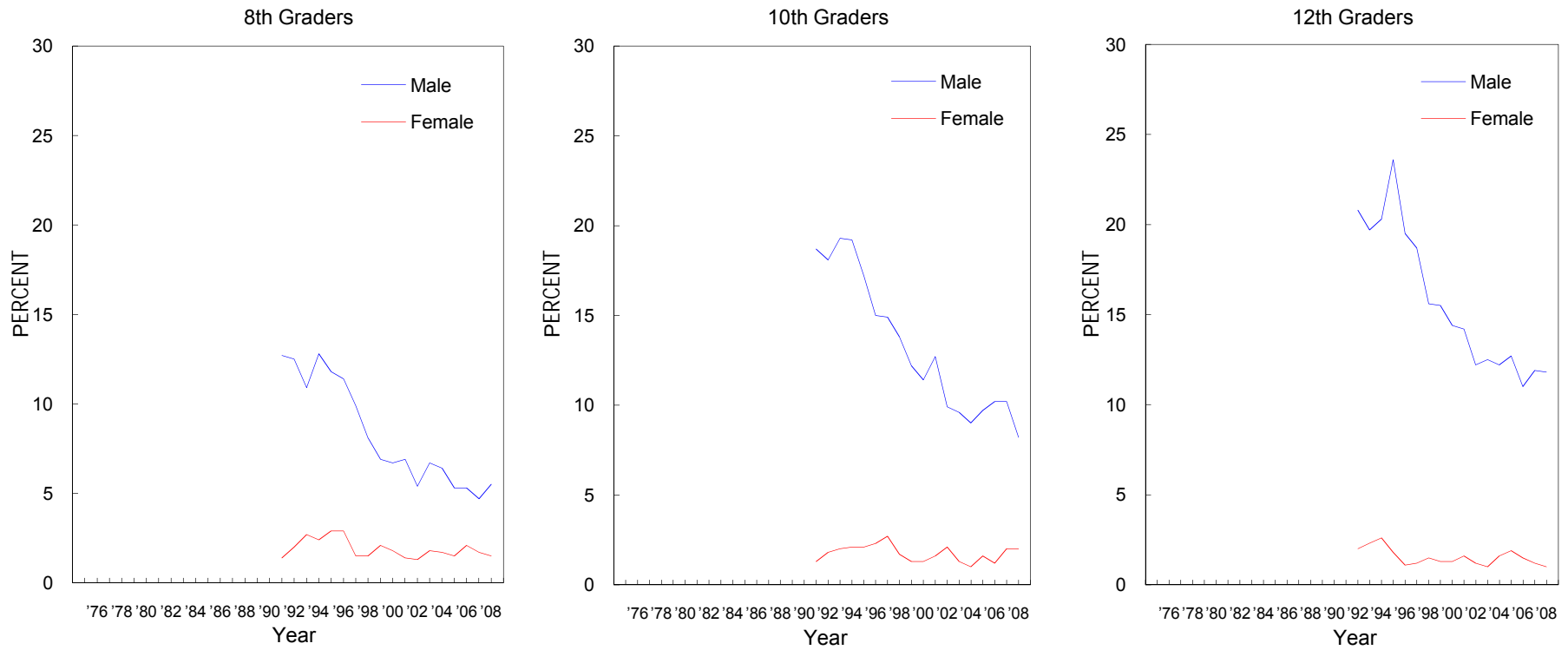
**FIGURE 240**  
**Cigarettes: Trends in 30-Day Prevalence of Use of Half Pack a Day or More by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

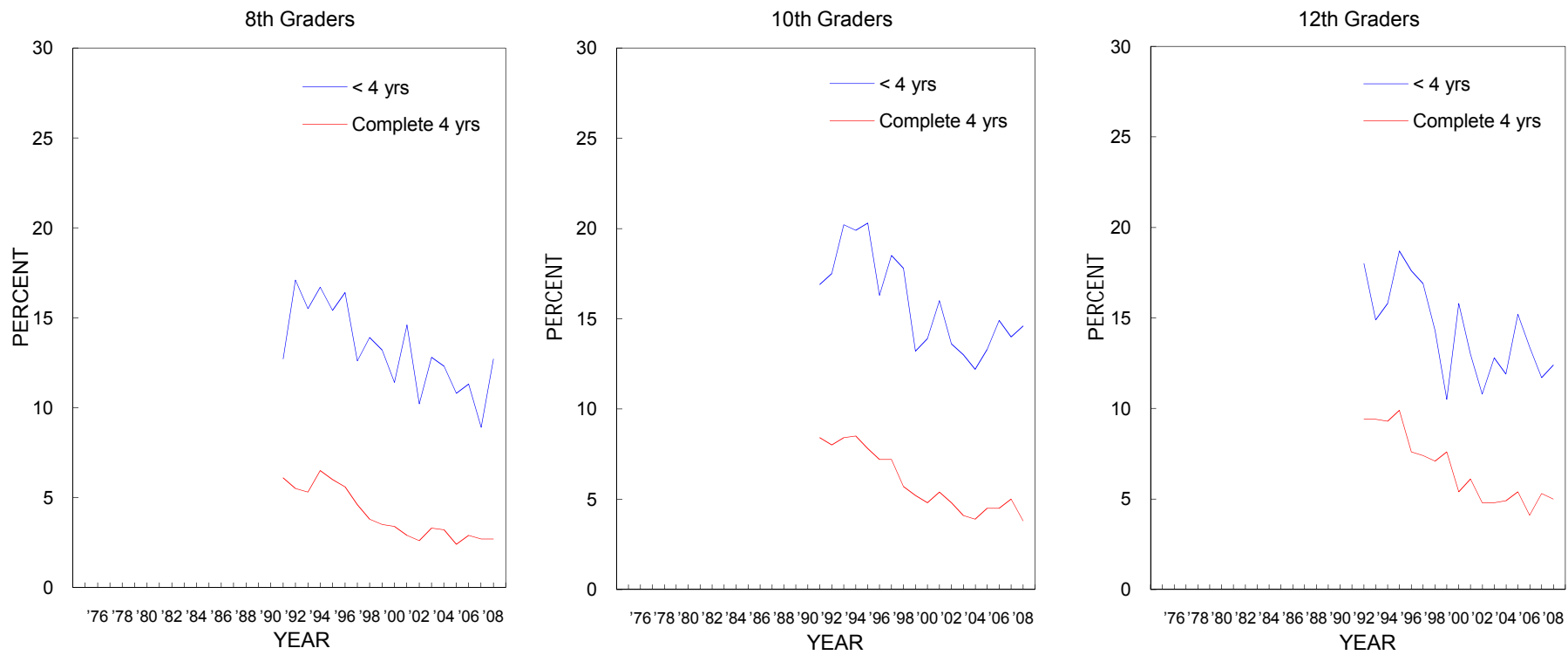
**FIGURE 241**  
**Smokeless Tobacco: Trends in 30-Day Prevalence by Gender**



Source. The Monitoring the Future study, the University of Michigan.

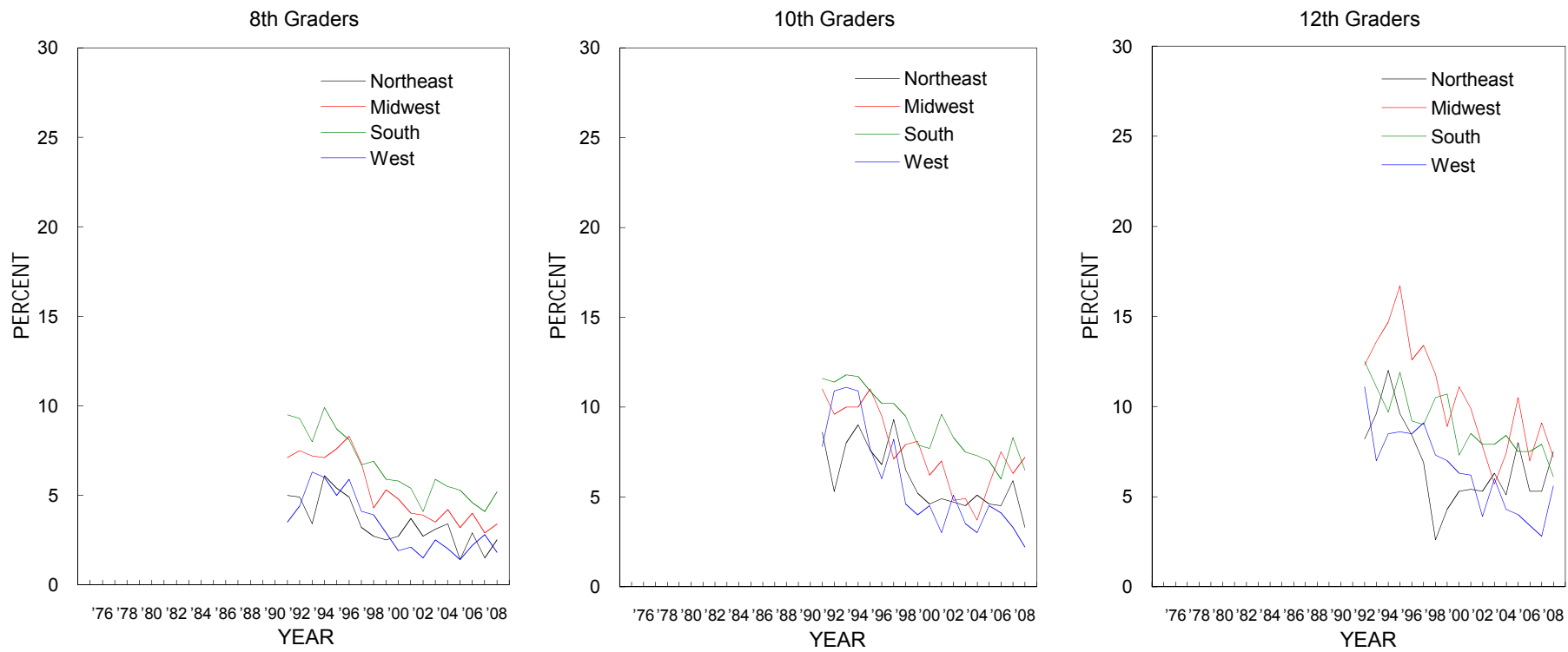


**FIGURE 242**  
**Smokeless Tobacco: Trends in 30-Day Prevalence by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 243**  
**Smokeless Tobacco: Trends in 30-Day Prevalence by Region**



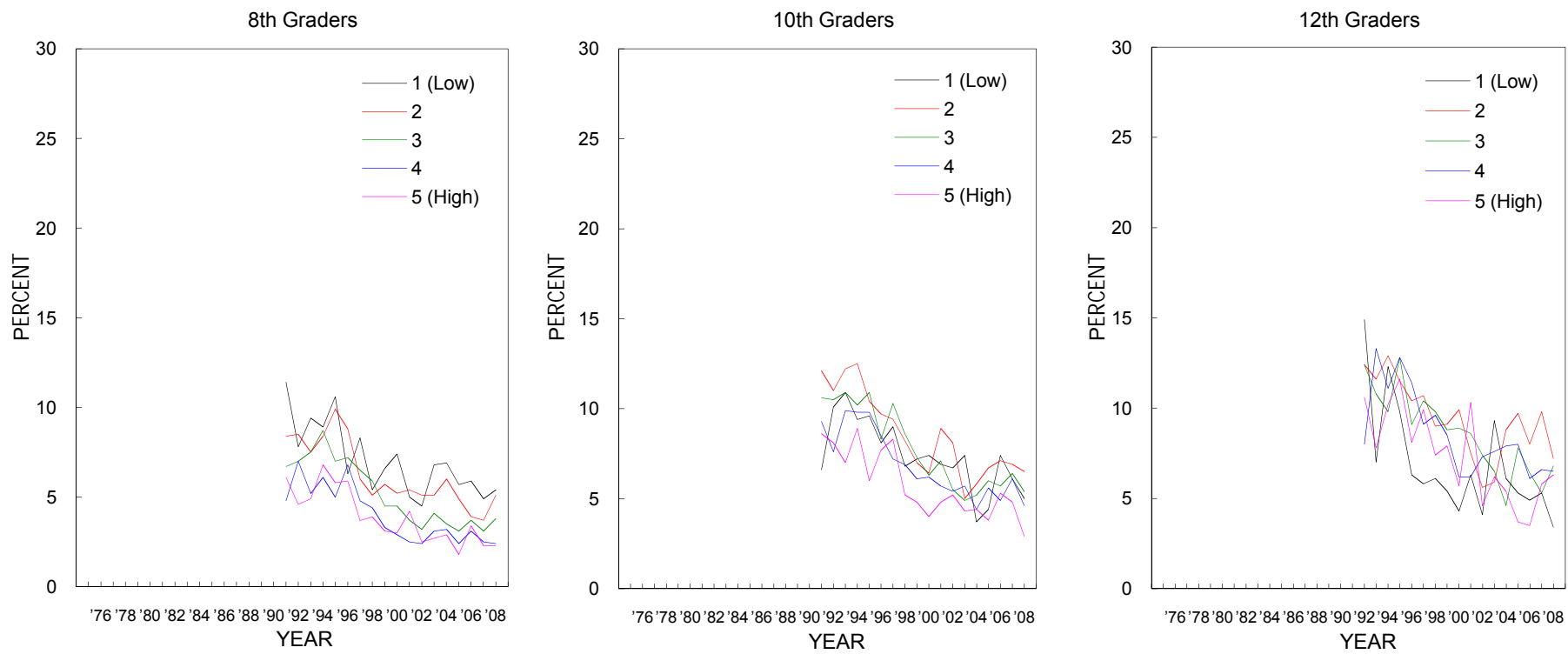
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 244**  
**Smokeless Tobacco: Trends in 30-Day Prevalence by Population Density**



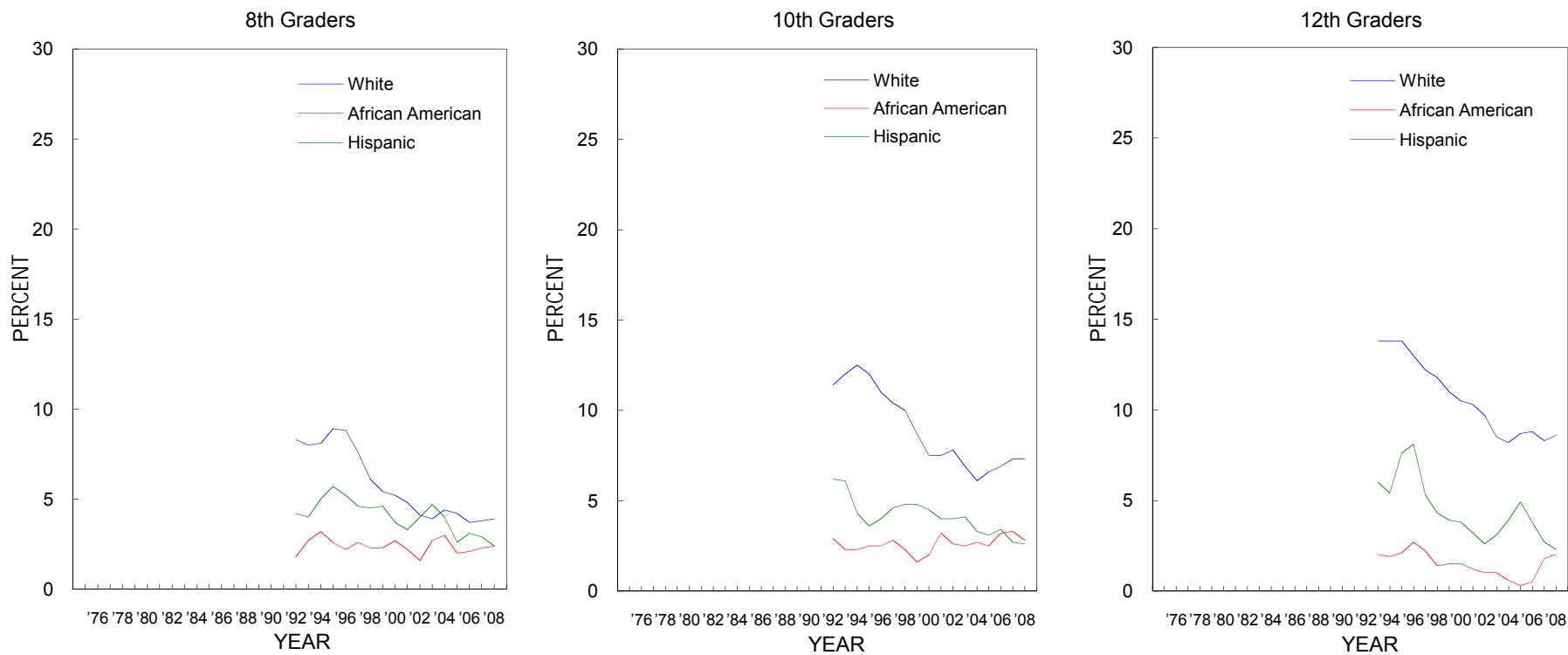
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 245**  
**Smokeless Tobacco: Trends in 30-Day Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

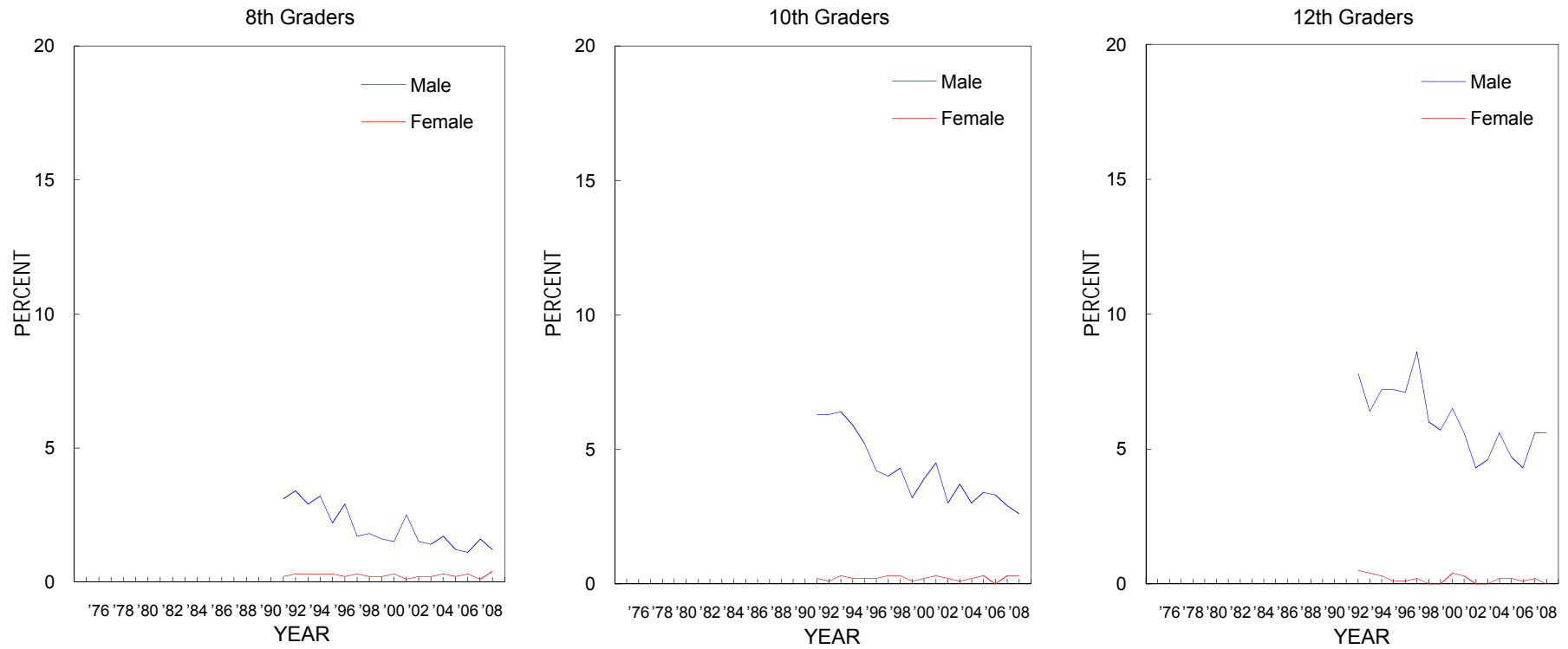
**FIGURE 246**  
**Smokeless Tobacco: Trends in 30-Day Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

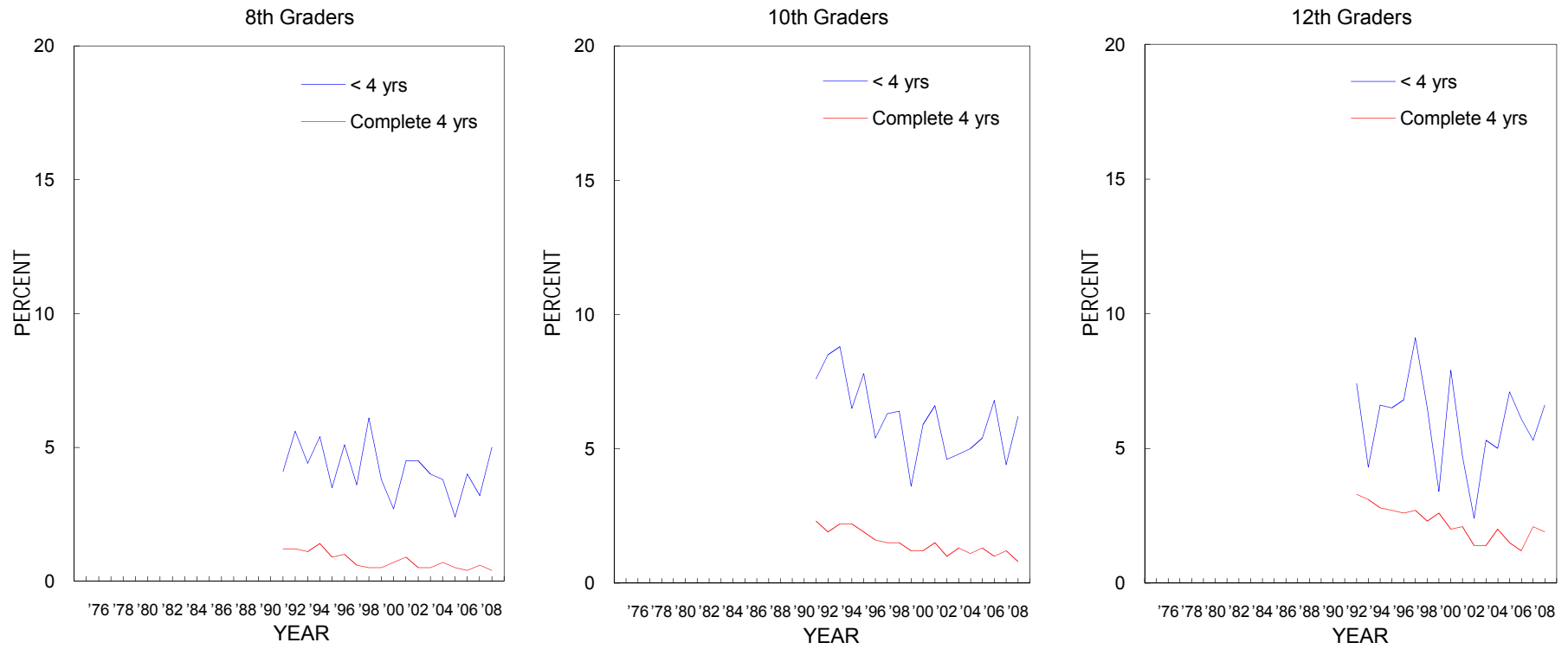
\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 247**  
**Smokeless Tobacco: Trends in 30-Day Prevalence of Daily Use by Gender**



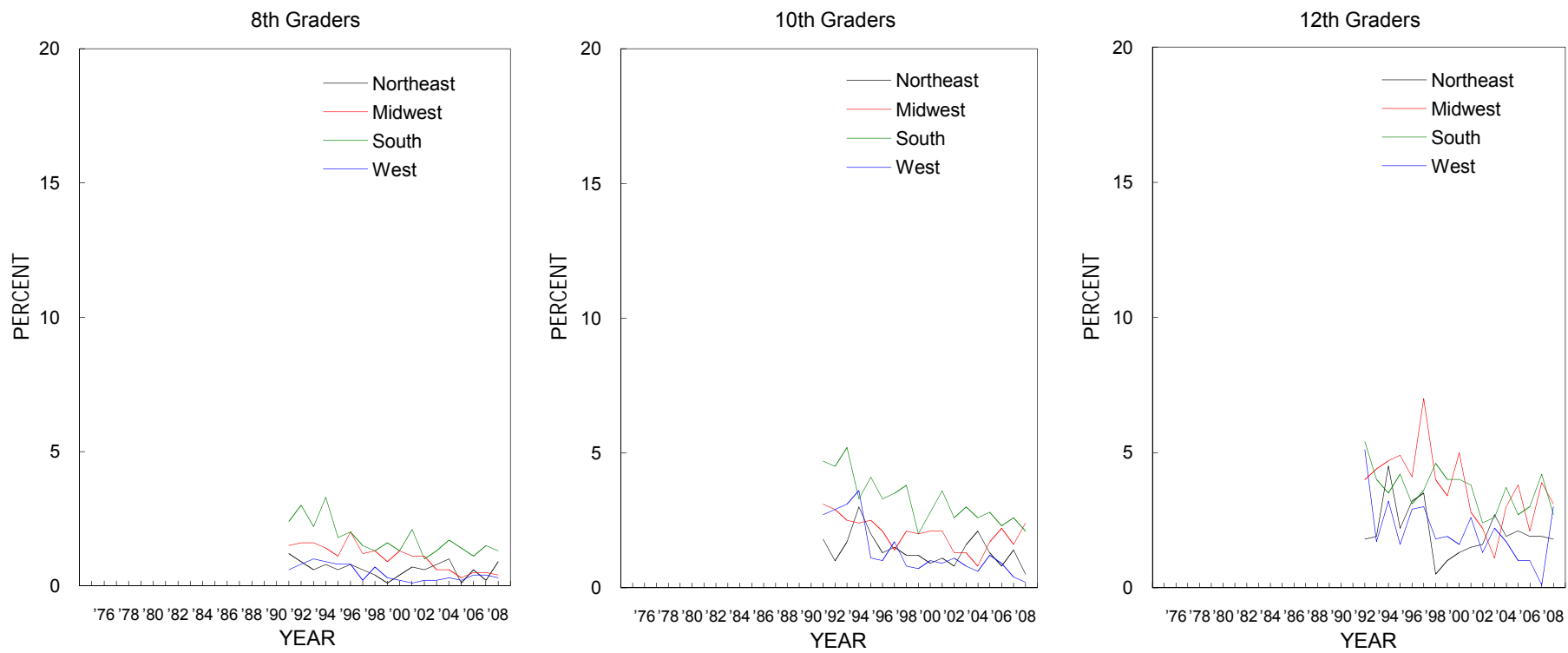
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 248**  
**Smokeless Tobacco: Trends in 30-Day Prevalence of Daily Use by College Plans**



Source. The Monitoring the Future study, the University of Michigan.

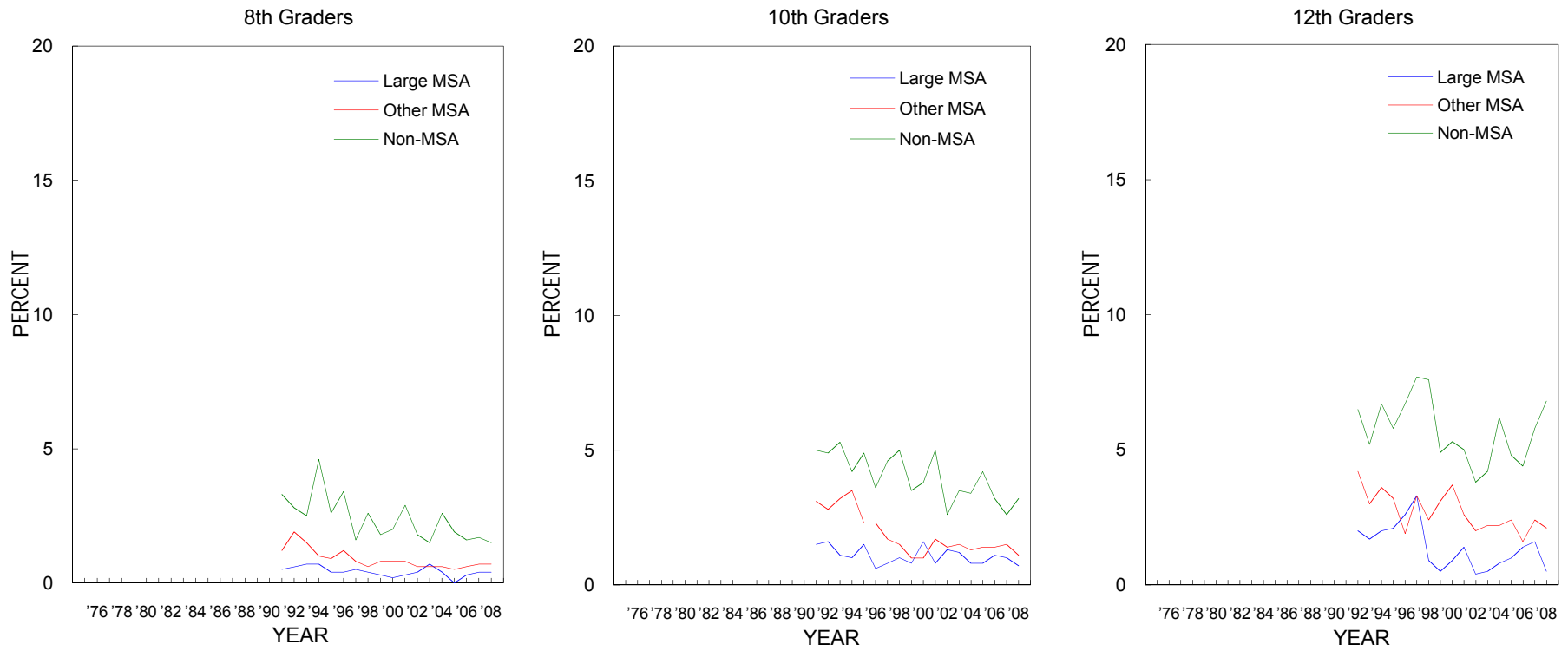
**FIGURE 249**  
**Smokeless Tobacco: Trends in 30-Day Prevalence of Daily Use by Region**



Source. The Monitoring the Future study, the University of Michigan.

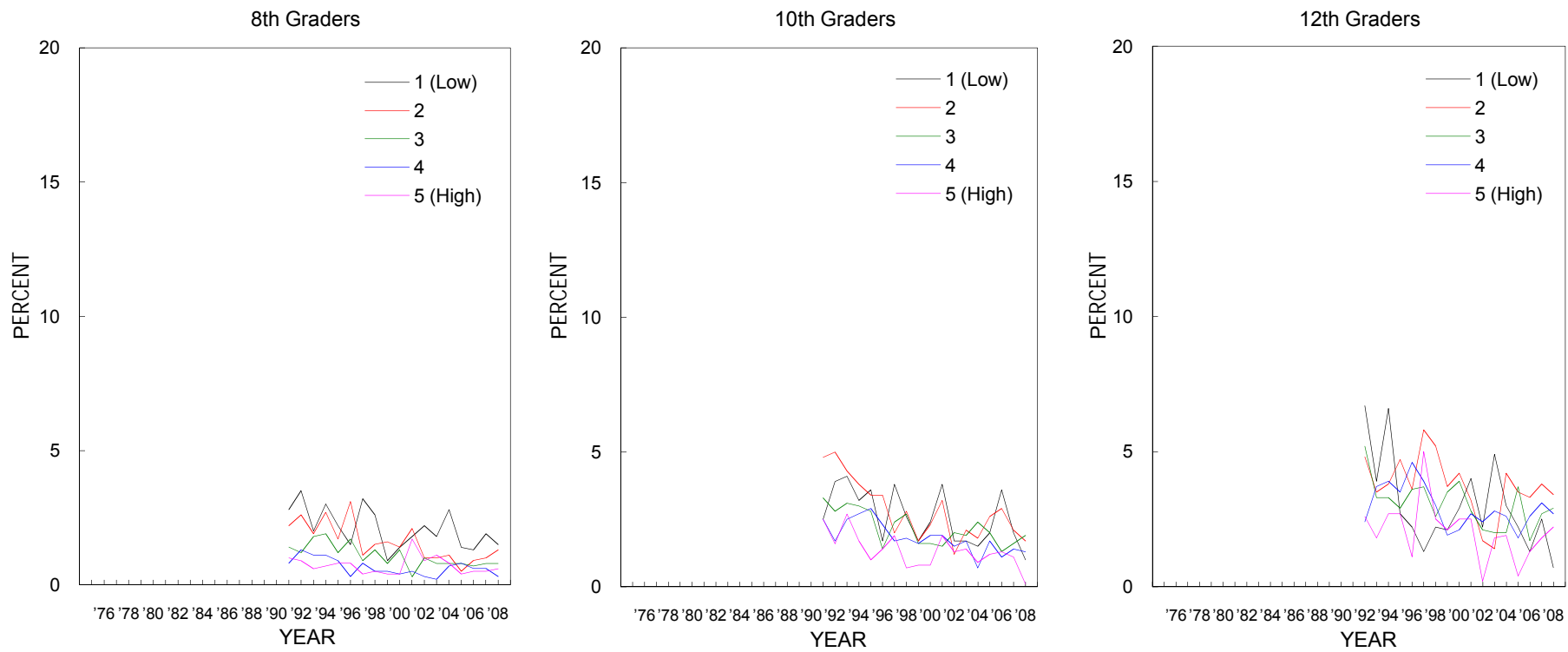


**FIGURE 250**  
**Smokeless Tobacco: Trends in 30-Day Prevalence of Daily Use by Population Density**



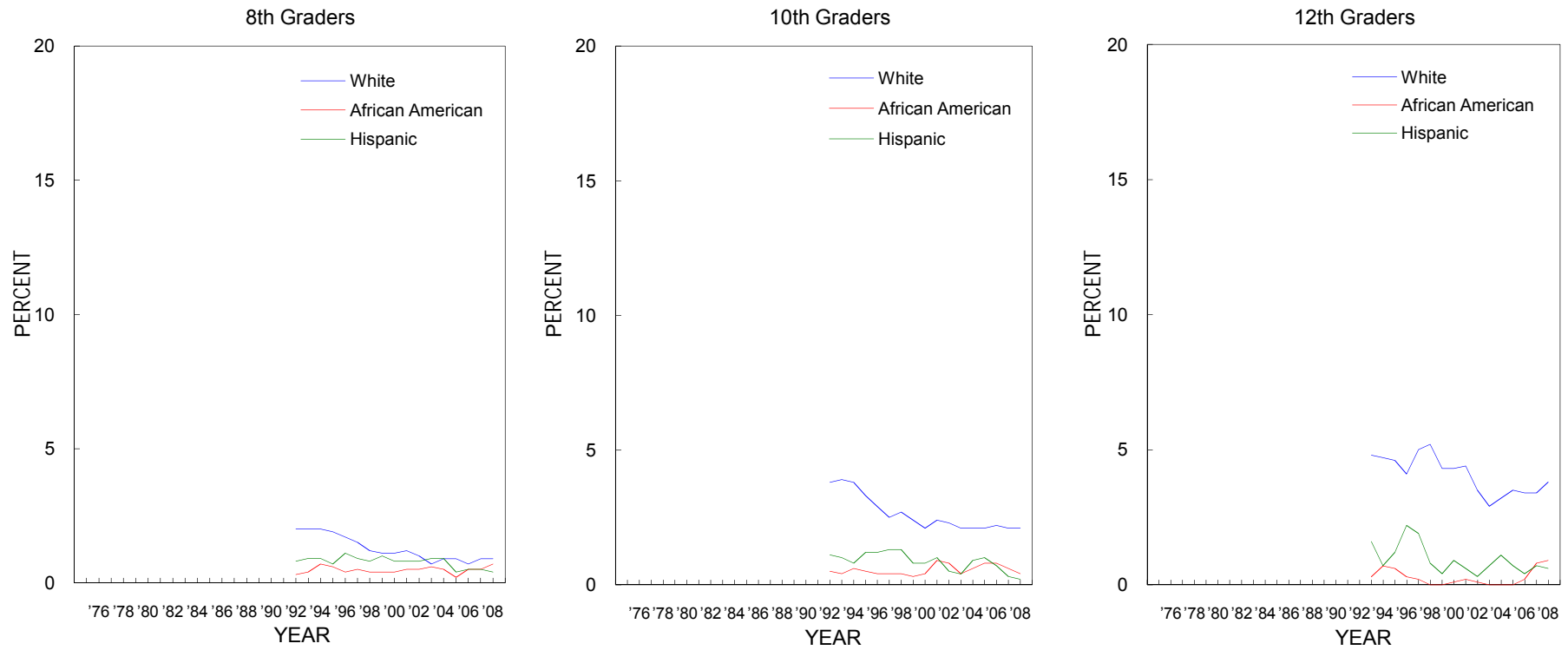
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 251**  
**Smokeless Tobacco: Trends in 30-Day Prevalence of Daily Use by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.

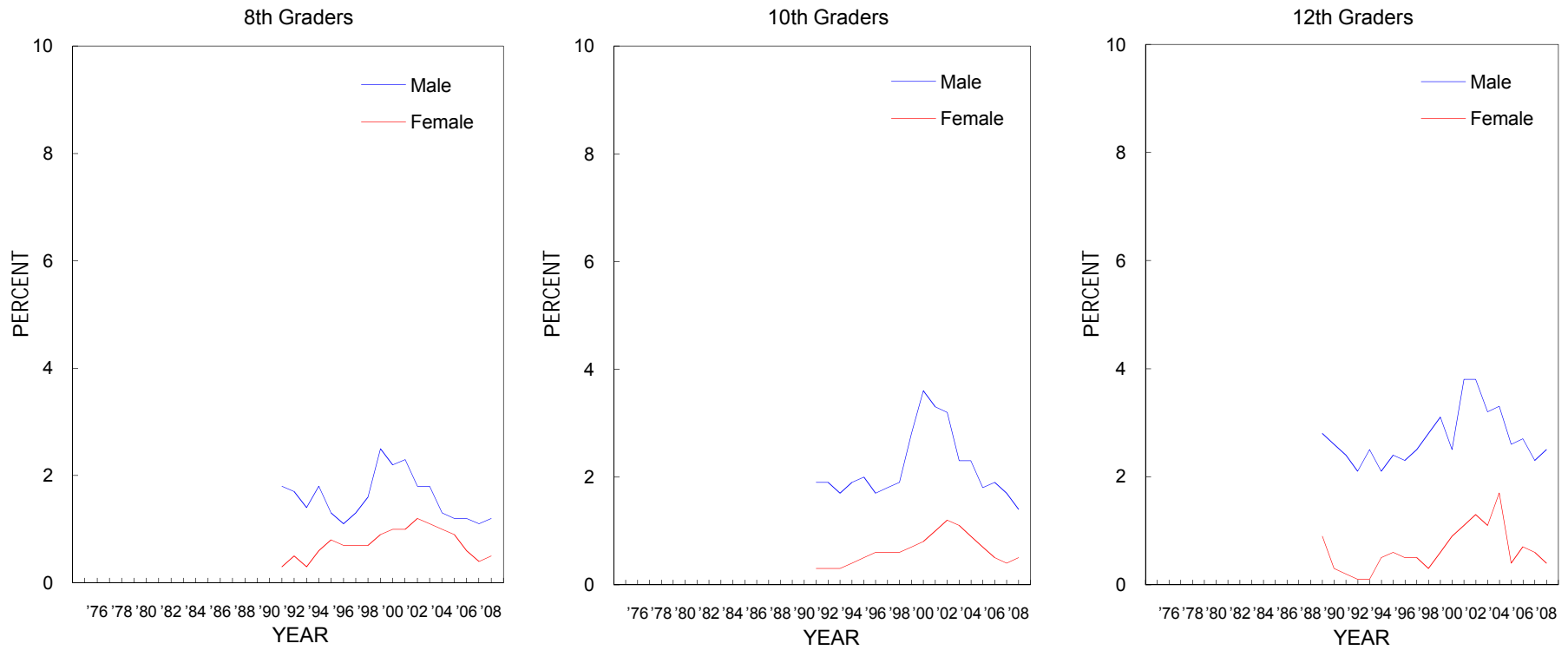
**FIGURE 252**  
**Smokeless Tobacco: Trends in 30-Day Prevalence of Daily Use by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

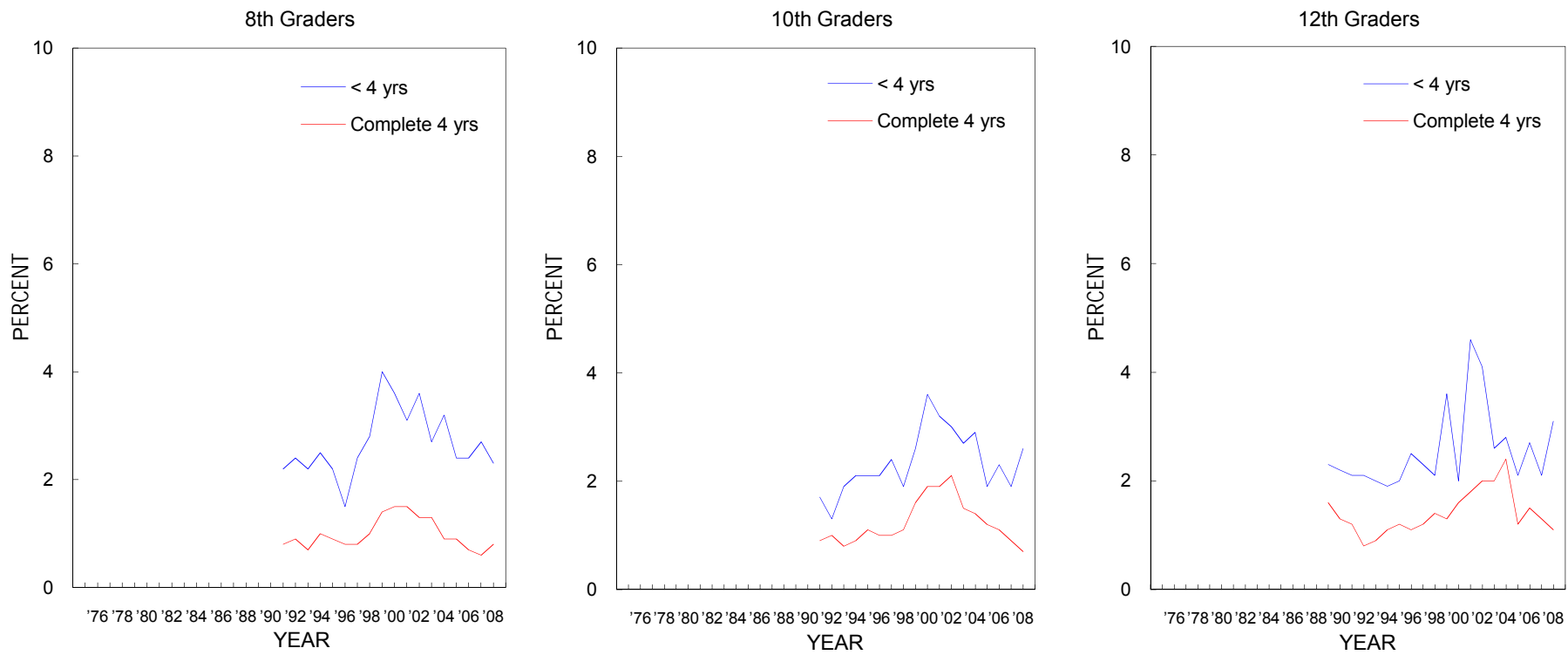
\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**FIGURE 253**  
**Steroids: Trends in Annual Prevalence by Gender**



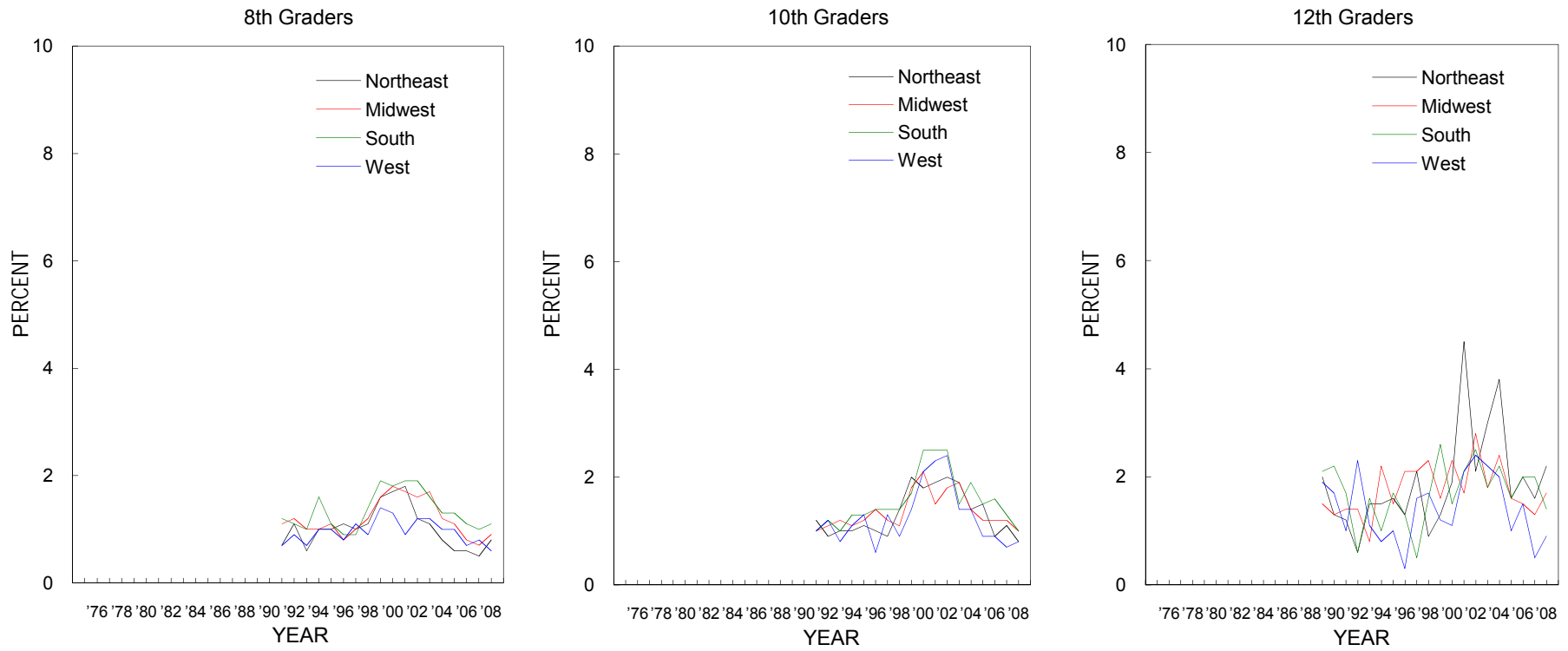
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 254**  
**Steroids: Trends in Annual Prevalence by College Plans**



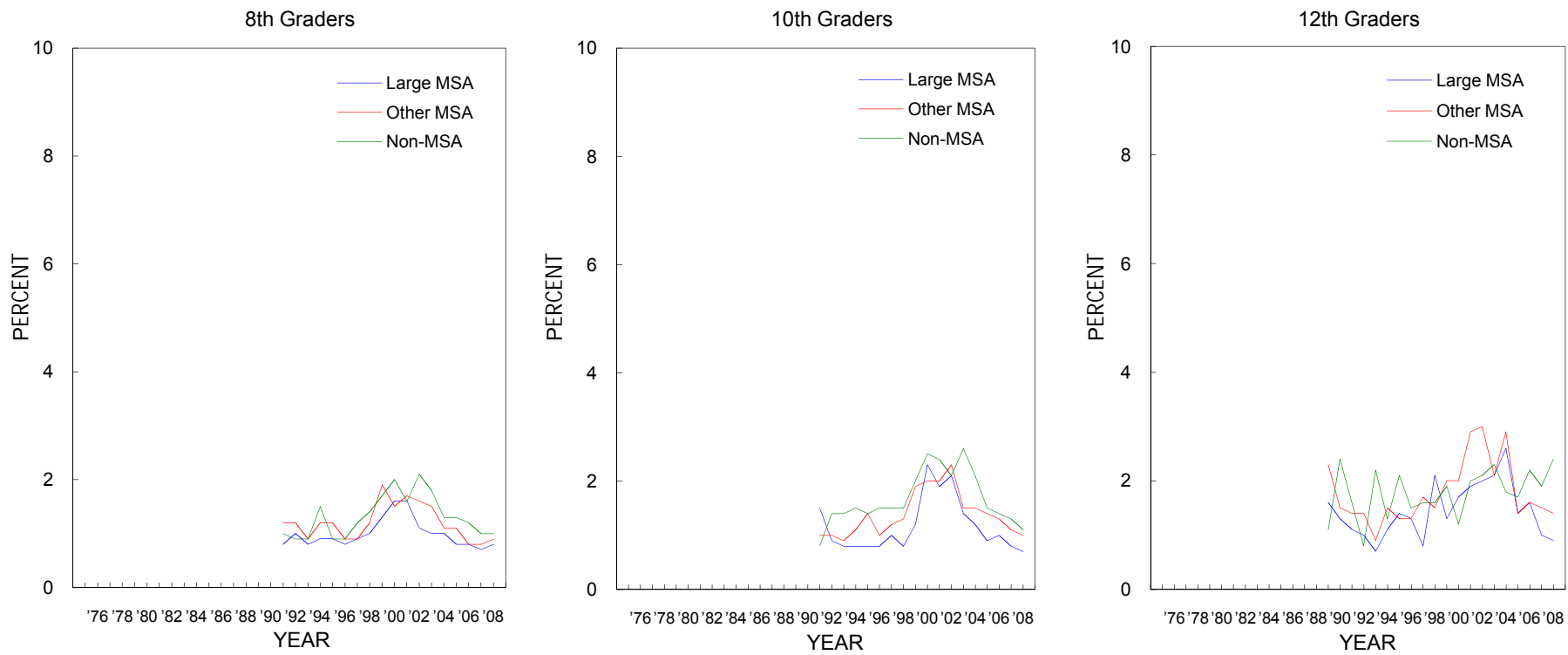
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 255**  
**Steroids: Trends in Annual Prevalence by Region**



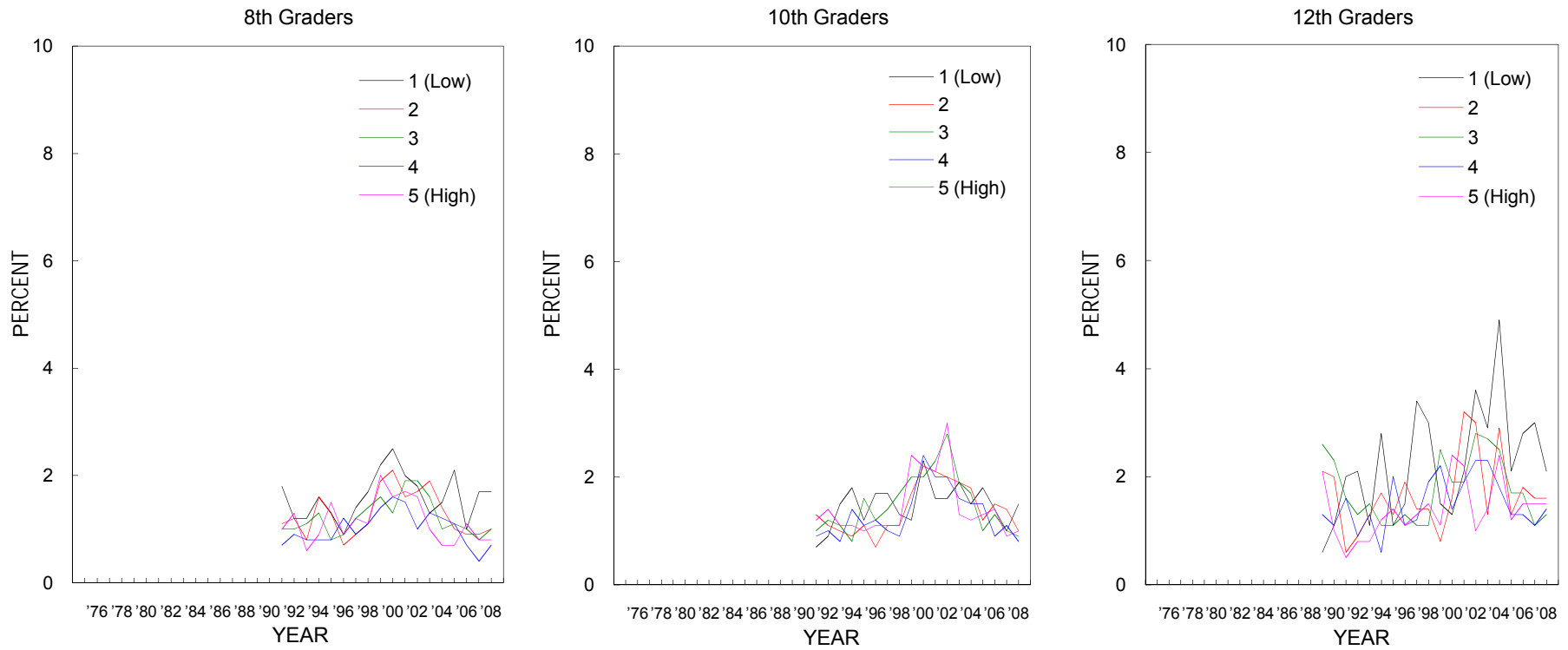
Source. The Monitoring the Future study, the University of Michigan.

**FIGURE 256**  
**Steroids: Trends in Annual Prevalence by Population Density**



Source. The Monitoring the Future study, the University of Michigan.

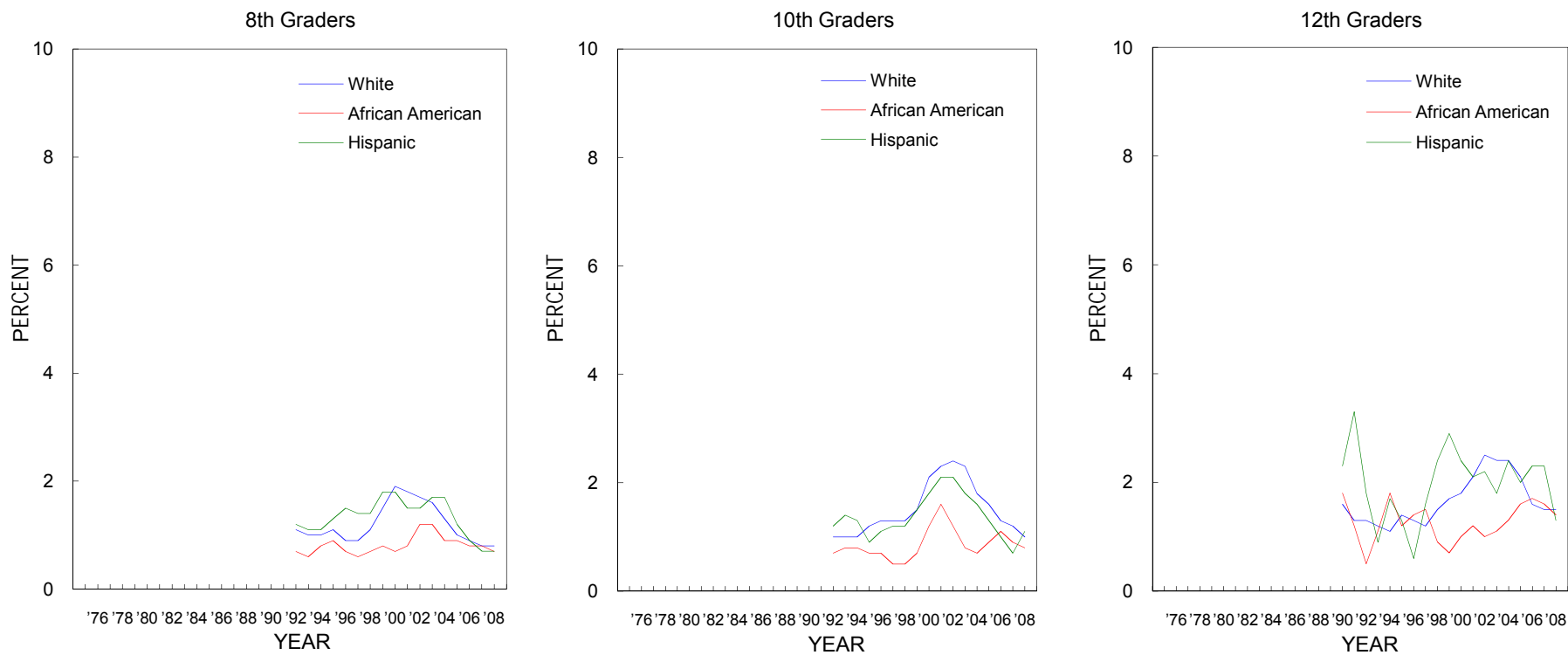
**FIGURE 257**  
**Steroids: Trends in Annual Prevalence by Parents' Average Education**



Source. The Monitoring the Future study, the University of Michigan.



**FIGURE 258**  
**Steroids: Trends in Annual Prevalence by Race/Ethnicity\***



Source. The Monitoring the Future study, the University of Michigan.

\*To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

## Appendix B

### DEFINITION OF BACKGROUND AND DEMOGRAPHIC SUBGROUPS

The following are brief definitions of the background and demographic subgroups used in this volume. (Note: All case counts provided in the tables are based on weighted *N*s.)

**Total:** The total sample of respondents in a given year of the study based on weighted cases (set to equal the actual total number of cases).

**Gender:** *Male and female.* Respondents are asked “What is your sex?” Those with missing data on the question are omitted from the data presented by gender.

#### College

**Plans:** Respondents are asked how likely it is that they will graduate from a four-year college program. College plans groupings are defined as follows:

*None or under four years.* Respondents who indicate they “definitely won’t” or “probably won’t” graduate from a four-year college program. (Note that, among those who do not expect to complete a four-year college program, a number still expect to get some postsecondary education.)

*Complete four years.* Respondents who indicate they “definitely will” or “probably will” graduate from a four-year college program.

Those not answering the college plans question are omitted from both groupings.

**Region:** Region of the country in which the respondent’s school is located. There are four mutually exclusive regions of the country based on U.S. Census Bureau categories, defined as follows:

*Northeast.* Census classifications of New England and Middle Atlantic states consist of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania.

*Midwest (formerly North Central).* Census classifications of East North Central and West North Central states consist of Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.

*South.* Census classifications of South Atlantic, East South Central, and West South Central states consist of Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida,

Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas.

*West.* Census classifications of Mountain and Pacific states consist of Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, and California (Alaska and Hawaii are also included in this Census region, but are not included in the study).

**Population  
Density:**

Population density of the area in which the schools are located. There are three mutually exclusive groups that have been variously defined, as described below. (The 1975–1985 samples were based on the 1970 Census; in 1986, one half of the sample was based on the 1970 Census and the other half was based on the 1980 Census. In 1987 through 1993 the samples were based on the 1980 Census; in 1994, half of the sample was based on the 1980 Census and half on the 1990 Census. Starting in 2006, each first-year half-sample of schools comes from a sample design that utilizes 2000 Census counts as the measure of size for first-stage units. The three levels of population density were defined in terms of Standard Metropolitan Statistical Area (SMSA) designations through 1985, and then changed to the new Census Bureau classifications of Metropolitan Statistical Areas (MSAs), as described here:

*Large MSA.* These were the 12 largest Standard Metropolitan Statistical Areas (SMSAs) as of the 1970 Census and were used for the 1975–1985 samples: New York, Los Angeles, Chicago, Philadelphia, Detroit, San Francisco, Washington, Boston, Pittsburgh, St. Louis, Baltimore, and Cleveland. As of the 1980 Census, the “large MSA” group consisted of the 16 largest MSAs. This new structure was used for the 1986–1994 samples. These 16 MSAs include all of the MSAs mentioned above (except Cleveland) plus Dallas-Fort Worth, Houston, Nassau-Suffolk, Minneapolis-St. Paul, and Atlanta.

A new sample design was developed, based on the 1990 Census, beginning with the first-year half-sample of schools chosen in 1994. In the 1990s sample, only the eight largest MSAs are represented with certainty at all three grade levels; 16 other large MSAs are divided into pairs, with half randomly assigned to the 12th- and 8th-grade samples and the other half assigned to the 10th-grade sample. The eight largest MSAs are New York, Los Angeles, Chicago, Philadelphia PA-NJ, Detroit, Washington DC-MD-VA, Dallas-Ft. Worth, and Boston. The other 16 large MSAs are Houston, Atlanta, Seattle-Tacoma, Minneapolis MN-WI, St. Louis MO-IL, San Diego, Baltimore, Pittsburgh, Phoenix, Oakland, Cleveland, Miami, Newark, Denver, San Francisco, and Kansas City MO-KS.

*Other MSAs.* This category consists of all other Metropolitan Statistical Areas, as defined by the Census, except those listed previously. Except in the New England states, an MSA is a county or group of contiguous counties that contain at least one city of 50,000 inhabitants or more, or twin cities with a combined population

of at least 50,000. In the New England states, MSAs consisted of towns and cities instead of counties until 1994, after which New England Consolidated Metropolitan Areas (NECMAs) were used to define MSAs. Each MSA must include at least one central city, and the complete title of an MSA identifies the central city or cities. For the complete description of the criteria used in defining MSAs, see the Office of Management and Budget publication, *Metropolitan Statistical Areas, 1990* (NTIS-PB90-214420), Washington, D.C. The population living in MSAs is designated as the metropolitan population.

**Non-MSAs.** This category consists of all areas not designated as Metropolitan Statistical Areas—in other words, they do not contain a town (or twin cities) of at least 50,000 inhabitants. The population living outside MSAs constitutes the nonmetropolitan population.

**Parental**

**Education:**

This is an average of mother's education and father's education based on the respondent's answers about the highest level of education achieved by each parent, using the following scale: (1) completed grade school or less, (2) some high school, (3) completed high school, (4) some college, (5) completed college, (6) graduate or professional school after college. Missing data was allowed on one of the two variables. The respondent is instructed, "If you were raised mostly by foster parents, stepparents, or others, answer for them. For example, if you have both a stepfather and a natural father, answer for the one that was most important in raising you."

**Race/**

**Ethnicity:**

From 1975 through 2004, respondents were asked "How do you describe yourself?" and presented with a list of various racial/ethnic categories. A general instruction told them to select the *one* best response for each question. In 2005 we revised the instructions in half of the forms in order to be more consistent with the guidelines of the Office of Management and Budget for assessing race/ethnicity. In the changed forms, respondents were presented with a list of racial/ethnic categories and instructed to "select one or more responses." An examination of the data showed that relatively few respondents (about 6% in 2005) selected more than one racial/ethnic category. In 2006 and thereafter the revised instruction was used in all forms.

For the volume reporting the 2005 results, the data from the original race/ethnicity question were combined with data from the revised race/ethnicity question in the following manner: For the original question, respondents were assigned to the racial/ethnic group specified in their response. For the revised question, those checking only White and no other racial/ethnic group were categorized as White; those checking Black or African American and no other racial ethnic group were categorized as African American; and those checking Mexican American or Chicano, Cuban American, Puerto Rican, or other Hispanic or Latino and no other

racial/ethnic group were categorized as Hispanic.<sup>113</sup> In the volumes for 2006 and beyond, all questionnaire forms use the revised question on race/ethnicity. Those checking multiple racial/ethnic groups or one of the other specified groups are omitted from the reporting on race/ethnicity in this volume, because of the small numbers of cases.

***White.*** Consists of those respondents who describe themselves as White or Caucasian in 1975–2004. In 2005 the unchanged questionnaire forms were treated in a similar manner and the changed forms were treated in the manner described above. Beginning in 2006 all forms were treated in the manner described above.

***African American.*** Consists of those respondents who in 1975–1990 describe themselves as Black or Afro-American or who, in 1991–2004, describe themselves as Black or African American. In 2005 the unchanged questionnaire forms were treated in a similar manner and the changed forms were treated in the manner described above. Beginning in 2006 all forms were treated in the manner described above.

***Hispanic.*** Consists of those respondents who in 1975–1990 describe themselves as Mexican American or Chicano, or Puerto Rican or other Latin American. After 1990 this group includes those respondents who describe themselves as Mexican American or Chicano, Cuban American, Puerto Rican American, or other Latin American. After 1994, the term “Puerto Rican American” was shortened to “Puerto Rican.” In 2005 the unchanged questionnaire forms were treated in a similar manner and the changed forms were treated in the manner described above. Beginning in 2006 all forms were treated in the manner described above.

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<sup>113</sup>Because some survey questions appear in only one or a few forms, there was some variation in the version of the race/ethnicity question upon which the 2005 data are based. Based on the analyses we have examined, we do not believe these different permutations make any appreciable difference in the results.

## Appendix D

### TRENDS BY SUBGROUP: SUPPLEMENTAL TABLES FOR SECONDARY SCHOOL STUDENTS

Trend data for the population subgroups discussed in this volume (i.e., defined by gender, college plans, region, community size, level of parental education, and race/ethnicity) are presented here for all of the major classes of licit and illicit drugs. Due to the sheer quantity of information such trend tables generate for each prevalence measure (e.g., lifetime, annual, 30-day, daily), we have selected the prevalence periods that seem most useful for understanding subgroup differences. Thus, for most drugs, we include only annual prevalence; but rates for different prevalence periods are provided for alcohol, cigarettes, and smokeless tobacco because of their more frequent use.

The subgroups distinguished in these tables are used throughout this volume and defined in appendix B. The reader should note that *two-year moving averages* are given for the three major racial/ethnic groups included here in order to reduce random fluctuations in the trends, particularly among Hispanics. A footnote in each table describes the procedure. A question change was introduced in half of the questionnaire forms in 2005 for the race/ethnicity variable, allowing respondents to select multiple categories of race/ethnicity rather than just one (see appendix B). In 2006, the remaining questionnaire forms were changed in a like manner. However, we believe that this change has had little or no effect on the results because so few respondents selected more than one of the categories offered.

For nearly all drugs there is one table presenting the subgroup trends for 8th graders, a second table for 10th graders, and a third table giving the longer term trends for 12th graders. However, for two of the drugs—sedatives (barbiturates) and narcotics other than heroin—the 8th- and 10th-grade data have been omitted, as they have been throughout the volume, because we are less certain about the validity of the answers provided by those younger students. Specifically, we believe that they often fail to omit nonprescription substances. Usage questions for a few other drugs are simply not asked of 8th and 10th graders; thus only 12th-grade tables are presented.

Sample sizes, provided in Tables D-107 through D-109, should be taken into account when interpreting the importance of any changes observed. The reader should be aware that the numbers provided in those tables assume that all respondents were asked about their use of the drug. Some of the drugs were not contained in all questionnaire forms, meaning that the subgroup and total *Ns* must be adjusted accordingly. The “Notes” section at the bottom of each table will indicate if only a fraction of the sample received the question.

Chart presentations of the trends presented in these tables for the various demographic subgroups may be found in Occasional Paper No. 71, which is on the study’s Web site ([www.monitoringthefuture.org](http://www.monitoringthefuture.org)) under “Publications” and then under “Occasional Papers.”<sup>121</sup>

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<sup>121</sup>Johnston, L. D., O’Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2009). *Demographic subgroup trends for various licit and illicit drugs, 1975–2008* (Monitoring the Future Occasional Paper No. 71) [Online]. Ann Arbor, MI: Institute for Social Research, 425 pp.

## *Monitoring the Future*

This chart presentation, which uses color to help distinguish the various subgroups, is published in electronic form only due to the high cost of printing a document of this length in color. Because the figures are considerably easier to comprehend than large data tables, the reader interested in these trends is encouraged to make use of the occasional paper.

**List of 2008 Appendix D Tables**

Substance	Table Number			Time Period		
	8th Grade	10th Grade	12th Grade	Annual	30-Day	Daily
Any illicit drug	D-1	D-2	D-3	X		
Any illicit drug other than marijuana	D-4	D-5	D-6	X		
Marijuana	D-7	D-8	D-9	X		
Inhalants	D-10	D-11	D-12	X		
Hallucinogens	D-13	D-14	D-15	X		
LSD	D-16	D-17	D-18	X		
Hallucinogens other than LSD	D-19	D-20	D-21	X		
Ecstasy (MDMA)	D-22	D-23	D-24	X		
Cocaine	D-25	D-26	D-27	X		
Crack	D-28	D-29	D-30	X		
Other cocaine	D-31	D-32	D-33	X		
Heroin	D-34	D-35	D-36	X		
Heroin with a needle	D-37	D-38	D-39	X		
Heroin without a needle	D-40	D-41	D-42	X		
Narcotics other than heroin	—	—	D-43	X		
OxyContin	D-44	D-44	D-45	X		
Vicodin	D-46	D-46	D-47	X		
Amphetamines	D-48	D-49	D-50	X		
Ritalin	D-51	D-51	D-52	X		
Methamphetamine	D-53	D-54	D-55	X		
Crystal methamphetamine (ice)	—	—	D-56	X		
Sedatives (barbiturates)	—	—	D-57	X		
Tranquilizers	D-58	D-59	D-60	X		
OTC cough/cold medicines	D-61	D-61	D-61	X		
Rohypnol	D-62	D-63	D-64	X		
Alcohol	D-65	D-66	D-67		X	
Been drunk	D-68	D-69	D-70		X	
5+ drinks in a row	D-71	D-72	D-73			X
Beer	D-74	D-75	D-76		X	
5+ drinks in a row	D-77	D-78	D-79			X
Liquor	—	—	D-80		X	
5+ drinks in a row	—	—	D-81			X
Wine	—	—	D-82		X	
5+ drinks in a row	—	—	D-83			X
Wine coolers	D-84	D-85	D-86		X	
5+ drinks in a row	—	—	D-87			X
Flavored alcoholic beverages	D-88	D-88	D-88		X	
Cigarettes	D-89	D-90	D-91		X	
Daily	D-92	D-93	D-94			X
1/2 pack+/day	D-95	D-96	D-97			X
Smokeless tobacco	D-98	D-99	D-100		X	
Daily	D-101	D-102	D-103			X
Steroids	D-104	D-105	D-106	X		
Weighted <i>N</i> s by subgroups	D-107	D-108	D-109			



**TABLE D-1**  
**Any Illicit Drug:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007– 2008 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		
Total	11.3	12.9	15.1	18.5	21.4	23.6	22.1	21.0	20.5	19.5	19.5	17.7	16.1	15.2	15.5	14.8	13.2	14.1	+0.8	
Gender:																				
Male	11.7	11.9	15.2	19.4	22.3	23.6	22.6	21.3	21.3	19.7	21.3	19.2	16.4	15.0	15.2	15.1	13.2	14.3	+1.1	
Female	11.0	13.6	14.9	17.6	20.2	23.3	21.3	20.4	19.7	19.0	17.5	16.3	15.5	15.2	15.6	14.2	12.9	13.7	+0.8	
College Plans:																				
None or under 4 years	22.8	25.6	30.7	34.6	38.4	40.3	39.6	41.3	39.9	38.9	38.5	36.8	34.7	33.6	35.2	33.1	31.9	34.5	+2.6	
Complete 4 years	9.5	10.9	12.8	16.3	19.1	21.0	19.9	18.4	18.0	17.1	17.2	15.7	14.0	13.2	13.3	13.0	11.4	12.3	+0.8	
Region:																				
Northeast	9.3	10.6	11.5	16.6	17.9	20.3	20.2	16.0	18.2	16.6	18.1	13.8	13.1	13.0	12.3	10.8	8.1	11.3	+3.2 s	
Midwest	11.2	13.0	13.9	17.2	23.3	24.7	22.3	21.9	22.6	20.6	18.0	17.0	15.7	14.2	15.9	13.9	12.9	15.5	+2.7	
South	11.5	12.9	15.1	17.6	20.8	22.5	21.6	22.3	21.0	19.2	21.5	20.1	18.1	16.8	17.4	17.7	15.2	15.6	+0.4	
West	13.3	15.0	21.1	23.7	23.3	27.1	24.4	22.0	19.2	21.0	18.9	18.4	15.6	15.5	14.5	13.9	13.3	12.4	-0.9	
Population Density:																				
Large MSA	10.5	12.0	13.1	16.2	15.2	23.4	20.5	19.8	19.1	18.1	16.4	15.9	14.3	14.0	14.9	13.5	11.5	12.5	+1.0	
Other MSA	12.1	14.4	17.3	21.5	23.7	24.9	22.6	21.4	19.5	18.8	21.5	18.3	16.2	15.9	16.2	15.6	13.8	15.1	+1.3	
Non-MSA	10.8	11.2	12.9	14.0	20.3	21.4	22.9	21.6	24.3	22.7	19.1	18.9	18.1	15.3	15.0	15.2	14.5	14.2	-0.3	
Parental Education: <sup>b</sup>																				
1.0–2.0 (Low)	19.5	18.5	20.8	26.1	29.8	26.7	29.5	30.4	30.2	30.9	29.9	27.3	26.4	25.7	24.9	23.7	23.2	23.3	0.0	
2.5–3.0	11.7	14.1	17.1	20.2	24.3	25.7	25.5	24.2	24.9	23.9	23.3	22.4	20.4	18.5	20.5	18.6	16.8	19.2	+2.4	
3.5–4.0	11.6	13.6	15.4	19.7	23.4	26.2	23.8	21.8	21.0	20.1	21.5	18.5	16.9	16.7	16.7	16.5	14.9	15.3	+0.4	
4.5–5.0	8.7	10.2	12.8	15.7	17.4	21.3	19.3	17.8	15.6	14.6	15.0	14.5	12.0	12.1	11.4	11.0	9.2	10.5	+1.3	
5.5–6.0 (High)	10.2	10.1	11.8	14.9	17.7	19.8	16.8	17.1	15.8	15.0	13.4	12.1	11.0	10.9	9.8	9.9	8.1	9.6	+1.5	
Race (2-year average): <sup>c</sup>																				
White	—	11.8	13.6	15.7	19.2	22.4	23.0	21.5	19.9	19.1	19.0	18.3	16.5	14.9	14.4	14.1	13.1	13.0	-0.1	
African American	—	7.9	9.3	13.0	15.8	17.5	18.1	18.1	18.6	18.3	16.7	15.1	14.6	14.6	15.6	14.9	12.7	12.3	-0.4	
Hispanic	—	18.1	20.6	24.6	26.7	26.9	26.5	26.7	27.4	25.1	24.3	24.8	22.8	20.9	18.8	17.9	16.8	16.1	-0.6	

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Use of “any illicit drug” includes any use of marijuana, LSD, other hallucinogens, crack, other cocaine, or heroin; or any use of amphetamines or tranquilizers not under a doctor’s orders. The use of narcotics other than heroin and sedatives (barbiturates) has been excluded because 8th and 10th graders appear to overreport their use (perhaps because they include the use of nonprescription drugs in their answers).

<sup>b</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-2**  
**Any Illicit Drug:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007– 2008 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100		
Total	21.4	20.4	24.7	30.0	33.3	37.5	38.5	35.0	35.9	36.4	37.2	34.8	32.0	31.1	29.8	28.7	28.1	26.9	-1.2	
Gender:																				
Male	21.6	20.4	25.1	31.8	33.7	38.8	40.1	35.3	37.0	39.4	39.6	35.9	33.2	32.0	30.5	29.3	29.5	27.9	-1.6	
Female	21.1	20.1	24.0	28.0	32.5	36.3	36.8	34.7	34.6	33.5	35.0	33.7	30.8	30.2	28.9	28.1	26.7	25.6	-1.1	
College Plans:																				
None or under 4 years	32.7	32.0	37.7	43.2	47.3	52.4	55.2	50.5	51.8	53.5	52.7	51.5	48.6	46.9	45.8	46.2	45.7	47.0	+1.3	
Complete 4 years	18.9	17.8	21.9	27.0	30.8	35.0	35.7	32.2	33.2	33.9	34.6	32.1	29.2	28.9	27.6	26.4	25.7	24.2	-1.5	
Region:																				
Northeast	21.8	19.0	26.9	29.6	32.4	37.7	37.8	39.0	38.2	34.0	37.4	35.2	32.6	32.8	31.3	27.8	27.7	28.6	+0.9	
Midwest	21.7	20.7	22.4	28.5	32.1	37.6	37.7	32.0	35.2	34.8	35.9	33.7	28.8	28.8	29.1	28.2	28.1	25.8	-2.3	
South	19.2	17.9	23.3	29.2	33.2	37.9	38.7	35.1	34.8	36.0	36.7	33.9	34.0	32.9	31.1	29.7	26.7	27.1	+0.5	
West	23.7	25.5	28.9	34.4	36.1	36.8	40.2	34.5	36.0	41.6	40.7	37.7	32.3	29.8	26.9	29.0	30.2	26.2	-4.0	
Population Density:																				
Large MSA	21.4	19.9	24.0	29.4	28.7	35.5	37.2	32.6	35.0	36.5	34.0	33.0	30.5	28.9	28.0	27.3	27.9	26.4	-1.6	
Other MSA	22.0	20.8	25.1	32.7	35.5	40.0	40.0	36.9	37.3	36.6	39.0	36.9	32.4	32.0	31.1	28.6	28.3	28.1	-0.3	
Non-MSA	20.4	20.1	24.4	24.7	30.7	35.1	37.2	34.5	33.9	35.8	37.4	32.8	33.5	32.3	29.5	31.4	27.8	24.8	-3.0	
Parental Education: <sup>b</sup>																				
1.0–2.0 (Low)	25.5	24.8	29.2	32.6	38.2	39.5	38.3	36.6	42.2	42.4	39.0	39.4	38.8	37.7	33.2	36.2	32.0	33.6	+1.6	
2.5–3.0	23.0	21.3	25.4	31.1	37.1	39.1	40.8	39.1	39.4	39.2	41.6	39.4	36.4	34.0	34.3	33.7	33.0	31.7	-1.3	
3.5–4.0	21.2	20.6	24.9	30.5	34.7	40.1	41.6	35.6	35.4	39.5	38.2	35.5	33.3	33.6	30.6	30.6	30.2	29.2	-1.0	
4.5–5.0	19.4	18.7	22.5	28.1	30.9	35.5	36.3	31.9	32.8	32.6	35.1	31.9	27.8	27.7	27.6	24.6	24.7	22.3	-2.5	
5.5–6.0 (High)	21.1	18.5	23.6	27.2	26.6	33.6	33.7	31.5	34.6	31.3	32.7	29.1	27.5	26.2	25.9	24.3	21.7	21.7	-0.1	
Race (2-year average): <sup>c</sup>																				
White	—	22.4	23.7	27.9	32.6	36.5	39.3	38.2	36.4	36.9	37.6	37.6	35.0	32.2	31.0	30.2	29.4	28.0	-1.3	
African American	—	10.8	11.9	18.5	23.6	27.3	30.2	28.9	28.4	29.7	30.5	28.5	27.3	29.3	29.0	26.2	24.2	22.4	-1.8	
Hispanic	—	23.6	26.3	30.3	34.3	40.0	41.3	38.1	38.4	39.3	38.8	36.2	33.8	34.5	32.8	28.5	27.3	30.1	+2.8	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Use of "any illicit drug" includes any use of marijuana, LSD, other hallucinogens, crack, other cocaine, or heroin; or any use of amphetamines or tranquilizers not under a doctor's orders. The use of narcotics other than heroin and sedatives (barbiturates) has been excluded because 8th and 10th graders appear to overreport their use (perhaps because they include the use of nonprescription drugs in their answers).

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-3**  
**Any Illicit Drug:<sup>a,b</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	<i>9,400</i>	<i>15,400</i>	<i>17,100</i>	<i>17,800</i>	<i>15,500</i>	<i>15,900</i>	<i>17,500</i>	<i>17,700</i>	<i>16,300</i>	<i>15,900</i>	<i>16,000</i>	<i>15,200</i>	<i>16,300</i>	<i>16,300</i>	<i>16,700</i>	<i>15,200</i>	<i>15,000</i>
Total	45.0	48.1	51.1	53.8	54.2	53.1	52.1	49.4	47.4	45.8	46.3	44.3	41.7	38.5	35.4	32.5	29.4
Gender:																	
Male	49.0	52.6	55.4	58.6	58.1	56.0	53.6	51.8	49.7	48.0	48.3	45.7	43.2	40.6	37.7	34.3	32.1
Female	41.4	43.0	46.7	48.7	50.1	49.8	50.8	46.3	44.4	42.8	43.8	42.3	39.7	36.1	32.8	30.1	26.2
College Plans:																	
None or under 4 years	—	50.6	54.3	55.5	56.8	56.5	55.8	53.4	50.8	50.3	50.1	48.6	46.7	42.0	40.9	37.8	33.9
Complete 4 years	—	44.3	46.8	50.5	50.5	49.7	48.6	45.5	43.7	41.4	43.1	41.2	39.0	36.5	32.6	29.6	27.1
Region:																	
Northeast	51.5	55.3	56.8	61.6	62.9	58.9	58.8	55.1	53.8	54.7	53.2	49.7	45.8	41.2	36.0	36.4	31.9
Midwest	45.5	47.6	51.9	54.6	55.0	53.1	53.4	50.3	46.9	42.4	45.7	45.0	42.7	39.7	38.7	34.0	31.3
South	38.1	42.3	46.2	47.5	45.4	47.0	43.7	42.2	41.3	41.4	37.2	37.4	35.9	34.2	30.7	27.6	24.5
West	48.3	49.7	50.0	53.2	56.4	55.8	55.5	51.7	50.7	49.1	53.3	47.8	45.7	41.8	39.5	34.4	32.6
Population Density:																	
Large MSA	54.5	54.6	56.3	60.3	61.3	59.9	57.8	54.8	52.0	49.7	49.9	48.0	43.9	39.1	32.9	32.6	28.6
Other MSA	45.0	47.8	52.4	54.5	55.2	53.8	52.1	49.8	49.6	46.7	46.5	45.1	42.7	40.5	36.3	33.5	33.0
Non-MSA	38.8	43.7	45.2	47.4	47.6	47.0	47.6	44.0	41.1	41.4	43.0	40.0	37.6	34.3	36.0	30.1	23.8
Parental Education: <sup>c</sup>																	
1.0–2.0 (Low)	—	43.4	45.3	47.7	50.2	49.5	48.1	44.3	45.1	42.7	42.8	38.1	35.4	35.8	28.4	26.6	28.7
2.5–3.0	—	49.2	51.8	53.3	53.2	53.0	51.2	48.8	46.3	45.7	46.0	44.8	41.8	37.2	35.3	32.7	28.7
3.5–4.0	—	48.9	53.1	55.1	56.1	54.2	52.8	50.8	46.5	47.6	47.2	45.6	42.2	38.6	37.7	33.8	29.6
4.5–5.0	—	50.8	51.7	56.3	57.1	54.0	53.4	49.7	48.9	44.9	48.4	44.7	43.1	40.0	35.5	33.1	28.7
5.5–6.0 (High)	—	51.3	51.8	59.1	54.3	55.0	54.8	48.5	46.1	45.5	44.5	44.5	43.5	40.6	36.3	33.3	31.9
Race (2-year average): <sup>d</sup>																	
White	—	—	50.4	53.5	55.2	54.9	54.4	50.7	49.3	47.4	47.6	47.2	45.2	43.0	40.3	37.5	33.9
African American	—	—	40.8	42.8	41.5	40.5	39.0	36.4	38.5	37.8	35.9	33.3	28.9	25.0	21.3	17.0	14.7
Hispanic	—	—	49.9	49.5	48.4	48.1	46.8	42.7	42.0	43.1	43.9	42.8	38.9	35.4	30.1	26.4	29.4

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

(Table continued on next page.)

**TABLE D-3 (cont.)**  
**Any Illicit Drug:<sup>a,b</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																	2007– 2008 change	
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>		
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	27.1	31.0	35.8	39.0	40.2	42.4	41.4	42.1	40.9	41.4	41.0	39.3	38.8	38.4	36.5	35.9	36.6	+0.6	
Gender:																			
Male	29.0	33.5	38.6	41.5	43.4	44.1	45.2	45.0	43.4	43.8	43.5	41.3	41.4	42.1	37.5	38.4	38.8	+0.4	
Female	24.7	27.9	32.7	35.8	36.2	40.0	37.2	38.9	38.0	38.4	37.8	36.7	35.9	34.5	35.0	33.2	34.1	+1.0	
College Plans:																			
None or under 4 years	33.5	34.9	40.8	44.1	46.2	48.8	47.3	47.9	45.1	46.2	46.2	46.8	44.4	46.5	46.1	43.7	46.0	+2.3	
Complete 4 years	24.4	29.2	33.6	36.7	37.8	40.1	39.1	40.3	38.8	39.6	39.3	36.6	36.8	36.1	33.8	34.0	34.2	+0.2	
Region:																			
Northeast	28.7	36.1	39.4	41.7	44.6	47.7	46.2	42.5	46.2	47.4	45.7	43.7	43.9	43.2	42.0	41.9	40.0	-2.0	
Midwest	27.8	30.8	36.5	40.9	40.9	40.6	38.1	42.1	38.9	42.0	41.6	40.0	38.2	38.8	36.3	37.3	35.1	-2.2	
South	23.7	28.2	34.1	36.4	37.6	38.8	40.5	40.8	35.3	37.3	38.1	34.8	35.7	36.6	34.9	33.6	36.0	+2.4	
West	31.1	31.8	34.7	38.2	39.1	45.9	43.1	44.2	47.4	41.9	40.5	41.4	39.6	36.3	34.6	33.4	36.5	+3.1	
Population Density:																			
Large MSA	26.8	32.9	36.4	41.7	41.3	42.1	42.0	42.4	41.1	43.9	41.9	35.7	36.3	38.5	38.2	37.9	37.7	-0.3	
Other MSA	27.3	31.7	37.8	39.0	42.3	44.2	42.1	43.3	42.6	41.0	42.4	42.7	42.4	39.8	36.7	35.1	35.7	+0.6	
Non-MSA	27.0	28.4	31.6	35.9	35.4	39.2	39.3	39.9	37.5	39.4	37.1	37.6	34.9	35.5	33.5	34.7	37.2	+2.6	
Parental Education: <sup>c</sup>																			
1.0–2.0 (Low)	27.7	29.5	32.9	37.7	36.6	40.3	38.9	40.9	41.3	38.8	35.3	35.8	34.7	32.0	37.6	35.6	34.6	-0.9	
2.5–3.0	26.4	29.2	35.4	38.3	39.9	40.8	40.5	43.7	40.5	41.9	39.3	39.0	37.7	38.9	38.2	37.8	37.5	-0.3	
3.5–4.0	28.1	31.6	36.4	38.8	40.4	42.0	42.9	42.9	41.6	42.7	43.2	41.3	42.1	41.3	37.1	35.0	35.9	+0.9	
4.5–5.0	26.2	31.5	36.5	39.0	40.5	43.6	40.9	40.0	39.6	41.3	42.0	38.9	38.2	38.8	33.2	34.9	36.5	+1.6	
5.5–6.0 (High)	26.8	33.4	35.7	40.7	40.6	44.0	41.8	42.3	41.1	40.1	40.6	36.5	37.4	36.0	37.3	36.9	36.7	-0.1	
Race (2-year average): <sup>d</sup>																			
White	30.5	31.4	35.5	39.0	40.8	42.8	44.0	43.3	42.8	43.1	43.6	42.8	42.0	41.6	40.0	38.5	38.7	+0.1	
African American	14.5	16.6	23.5	29.6	32.4	33.0	32.3	32.8	32.7	31.7	30.4	28.3	27.7	29.0	30.0	28.7	28.6	-0.1	
Hispanic	30.3	28.8	31.2	35.5	38.0	41.2	41.9	42.5	44.8	41.8	39.0	35.8	34.4	34.5	34.2	32.2	31.4	-0.7	

<sup>a</sup>Use of "any illicit drug" includes any use of marijuana, LSD, other hallucinogens, crack, other cocaine, or heroin; or any use of narcotics other than heroin, amphetamines, sedatives (barbiturates), methaqualone (excluded since 1990), or tranquilizers not under a doctor's orders.

<sup>b</sup>Beginning in 1982 the question about amphetamine use was revised to get respondents to exclude the inappropriate reporting of nonprescription amphetamines. The prevalence-of-use rate dropped slightly as a result of this methodological change.

<sup>c</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>d</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-4**  
**Any Illicit Drug other than Marijuana:<sup>a</sup> Trends in Annual Prevalence of Use**  
**by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007–	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001 <sup>b</sup>	2002 <sup>b</sup>	2003	2004	2005	2006	2007	2008	2008	
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		
Total	8.4	9.3	10.4	11.3	12.6	13.1	11.8	11.0	10.5	10.2‡	10.8	8.8	8.8	7.9	8.1	7.7	7.0	7.4	+0.4	
Gender:																				
Male	8.0	8.0	9.2	10.1	11.5	11.0	10.8	9.6	9.7	9.1‡	10.0	8.1	7.9	7.0	6.6	6.5	5.9	6.0	+0.2	
Female	8.8	10.4	11.5	12.3	13.5	14.7	12.6	12.1	11.2	10.9‡	11.2	9.3	9.4	8.8	9.3	8.7	8.0	8.7	+0.7	
College Plans:																				
None or under 4 years	16.3	18.5	21.3	21.2	25.3	23.0	22.1	23.8	23.4	22.7‡	21.5	19.7	20.0	18.0	18.2	17.7	18.1	20.3	+2.2	
Complete 4 years	7.2	8.0	8.9	9.9	10.9	11.6	10.6	9.4	9.0	8.7‡	9.5	7.6	7.5	6.9	7.0	6.7	6.0	6.3	+0.3	
Region:																				
Northeast	6.8	6.6	8.2	10.3	10.7	11.3	9.5	8.5	8.5	8.0‡	9.5	5.8	7.1	5.9	5.8	4.4	4.4	5.2	+0.7	
Midwest	8.6	10.4	9.4	10.2	14.0	14.3	12.5	10.5	11.9	11.2‡	9.9	8.7	8.7	7.7	8.1	7.1	7.4	7.6	+0.1	
South	8.6	9.7	11.0	11.7	12.5	12.6	11.8	12.5	11.2	10.3‡	12.4	10.6	10.0	9.0	9.5	9.8	7.8	8.8	+1.0	
West	9.3	9.8	13.4	12.7	12.7	14.0	13.0	11.1	9.3	10.5‡	10.1	8.4	7.9	8.2	7.7	7.4	6.9	6.7	-0.3	
Population Density:																				
Large MSA	8.0	8.1	8.8	9.8	8.7	12.3	9.9	8.9	8.4	8.5‡	9.7	7.4	7.1	6.9	7.1	6.6	6.1	6.8	+0.8	
Other MSA	8.6	10.4	11.8	12.5	13.5	14.1	12.2	11.2	10.7	10.1‡	11.8	9.2	8.7	8.5	8.8	8.0	7.6	7.7	+0.1	
Non-MSA	8.6	8.9	9.8	9.8	13.2	12.1	13.0	12.8	12.8	12.3‡	10.3	9.8	11.0	8.0	8.1	8.8	7.1	7.6	+0.5	
Parental Education: <sup>c</sup>																				
1.0–2.0 (Low)	12.9	12.9	14.4	15.6	18.0	15.5	14.8	17.3	16.0	15.8‡	14.3	13.0	14.1	15.2	14.3	12.3	11.9	13.6	+1.7	
2.5–3.0	8.5	10.1	11.8	12.4	14.2	13.9	12.9	12.2	12.1	12.2‡	13.2	10.9	10.9	8.8	10.3	9.4	8.3	9.7	+1.4	
3.5–4.0	8.7	10.1	10.6	11.8	14.2	14.5	12.5	11.2	11.3	10.6‡	11.7	9.0	9.0	8.4	9.0	8.4	7.8	8.0	+0.2	
4.5–5.0	7.1	7.5	9.1	9.5	9.7	12.0	10.6	9.4	8.5	7.7‡	8.9	7.6	6.7	6.8	5.7	6.0	4.7	5.4	+0.7	
5.5–6.0 (High)	7.8	8.0	8.2	9.4	10.1	11.7	10.3	9.5	8.3	8.4‡	8.0	6.5	6.8	5.9	5.3	6.2	5.5	5.7	+0.3	
Race (2-year average): <sup>d</sup>																				
White	—	9.0	10.0	10.8	12.6	13.9	13.5	12.5	11.5	11.1	10.6‡	10.3 <sup>e</sup>	9.3	8.7	8.1	8.1	7.6	7.6	0.0	
African American	—	4.9	5.0	5.9	5.7	5.3	4.7	4.0	4.1	3.8	3.9‡	4.4 <sup>e</sup>	4.4	4.4	4.2	3.9	3.3	3.4	+0.1	
Hispanic	—	12.2	13.7	15.2	15.3	14.7	13.6	13.5	14.5	13.9	12.2‡	11.9 <sup>e</sup>	10.8	10.4	9.9	9.2	8.6	8.4	-0.2	

(Table continued on next page.)

**TABLE D-4 (cont.)**  
**Any Illicit Drug other than Marijuana:<sup>a</sup> Trends in Annual Prevalence of Use  
by Subgroups in Grade 8**

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* “‡” indicates some change in the question. See relevant footnote. See relevant figure to assess the impact of the wording changes.

Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

“—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Use of “any illicit drug other than marijuana” includes any use of LSD, other hallucinogens, crack, other cocaine, or heroin; or any use of amphetamines or tranquilizers not under a doctor’s orders. The use of narcotics other than heroin and sedatives (barbiturates) has been excluded because 8th and 10th graders appear to overreport their use (perhaps because they include the use of nonprescription drugs in their answers).

<sup>b</sup>In 2001 the question text was changed on half of the questionnaire forms. “Other psychedelics” was changed to “other hallucinogens,” and “shrooms” was added to the list of examples. For the tranquilizer list of examples, Miltown was replaced with Xanax. The 2001 data are based on the changed forms only; *N* is one half of *N* indicated. In 2002 the remaining forms were changed. Beginning in 2002, the data are based on all forms. Data for hallucinogens and hallucinogens other than LSD are also affected by these changes and have been treated in a parallel manner.

<sup>c</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>d</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

<sup>e</sup>Due to changes in the question wording in half of the questionnaire forms in 2001, the 2002 entry comprises half of the 2001 sample data double-weighted (the half with the new version of the question) and all of the 2002 sample data.

**TABLE D-5**  
**Any Illicit Drug other than Marijuana:<sup>a</sup> Trends in Annual Prevalence of Use**  
**by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007– 2008
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001 <sup>b</sup>	2002 <sup>b</sup>	2003	2004	2005	2006	2007	2008	change
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100	
Total	12.2	12.3	13.9	15.2	17.5	18.4	18.2	16.6	16.7	16.7†	17.9	15.7	13.8	13.5	12.9	12.7	13.1	11.3	-1.7 s
Gender:																			
Male	11.2	11.1	13.4	14.1	15.8	17.2	17.2	15.6	15.9	16.7†	18.3	15.1	13.0	12.7	12.0	12.0	12.9	10.9	-2.0 s
Female	13.1	13.2	14.3	16.0	18.9	19.6	19.1	17.5	17.3	16.6†	17.4	16.4	14.3	14.2	13.6	13.1	13.2	11.5	-1.7
College Plans:																			
None or under 4 years	19.6	20.2	23.1	24.0	27.5	29.5	29.6	27.8	27.3	27.7†	32.1	27.1	23.8	25.3	24.0	24.7	25.0	22.9	-2.2
Complete 4 years	10.7	10.5	12.0	13.3	15.7	16.5	16.3	14.6	15.0	15.0†	15.5	14.0	12.1	11.9	11.4	11.1	11.5	9.8	-1.7 s
Region:																			
Northeast	10.6	9.6	12.8	13.7	14.1	17.2	16.0	17.2	18.2	14.7†	16.2	13.4	11.7	13.7	13.0	10.4	11.3	8.2	-3.1 s
Midwest	13.2	12.9	12.8	14.8	19.0	20.0	16.2	14.4	16.1	15.8†	16.5	15.3	13.1	12.0	12.2	12.7	13.4	11.8	-1.6
South	11.9	12.2	14.7	15.3	18.4	18.6	20.8	18.3	16.8	17.5†	19.5	16.8	15.7	14.8	13.9	13.7	13.3	12.6	-0.7
West	12.7	14.1	15.6	17.2	17.2	17.4	18.7	15.8	15.7	18.5†	19.0	16.7	13.8	13.5	12.0	13.3	13.8	11.5	-2.3
Population Density:																			
Large MSA	11.8	11.4	12.2	13.1	13.5	16.8	16.3	14.6	15.0	17.2†	15.6	14.3	10.8	10.4	10.9	11.5	12.0	9.9	-2.2
Other MSA	12.3	12.3	14.1	16.1	18.5	19.5	18.0	16.6	17.3	15.6†	17.4	16.5	14.2	15.1	13.2	12.9	13.4	12.1	-1.3
Non-MSA	12.4	13.1	15.0	14.6	17.6	18.3	20.8	18.9	17.5	18.1†	21.5	16.1	17.2	14.5	14.7	14.1	14.0	11.8	-2.2
Parental Education: <sup>c</sup>																			
1.0–2.0 (Low)	14.4	16.6	18.1	17.1	20.8	22.7	19.1	21.5	19.2	20.4†	19.6	21.0	19.1	16.5	15.9	16.0	15.6	15.2	-0.4
2.5–3.0	13.7	12.5	14.6	16.3	19.7	19.4	19.9	19.1	19.1	19.4†	20.3	18.3	16.7	15.6	14.4	14.9	15.2	13.2	-2.0
3.5–4.0	12.1	12.7	14.8	15.9	18.3	19.9	19.8	16.4	16.5	17.4†	19.7	16.1	14.5	14.6	13.7	13.4	14.2	12.7	-1.5
4.5–5.0	11.0	10.9	11.7	13.3	15.9	16.6	16.5	14.1	15.4	14.5†	15.6	13.7	11.2	11.6	11.5	10.7	11.6	9.0	-2.5 ss
5.5–6.0 (High)	11.6	10.7	12.2	12.8	13.4	15.4	15.4	14.4	15.6	14.5†	14.6	12.2	10.5	11.0	10.8	11.1	9.9	8.6	-1.3
Race (2-year average): <sup>d</sup>																			
White	—	13.7	14.4	15.4	17.7	20.0	20.5	19.7	18.7	18.6	19.2†	18.9 <sup>e</sup>	17.2	15.7	14.9	14.4	14.5	13.8	-0.6
African American	—	4.3	4.6	5.4	5.4	4.5	4.8	4.7	4.5	4.2	4.7†	5.7 <sup>e</sup>	4.7	4.6	4.8	4.9	4.2	4.1	-0.2
Hispanic	—	11.8	13.7	16.1	16.9	18.8	19.1	17.5	17.9	17.8	15.8†	15.7 <sup>e</sup>	15.2	15.1	14.9	13.0	11.8	12.4	+0.6

(Table continued on next page.)

**TABLE D-5 (cont.)**  
**Any Illicit Drug other than Marijuana:<sup>a</sup> Trends in Annual Prevalence of Use  
by Subgroups in Grade 10**

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* “±” indicates some change in the question. See relevant footnote. See relevant figure to assess the impact of the wording changes.

Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ .

“—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Use of “any illicit drug other than marijuana” includes any use of LSD, other hallucinogens, crack, other cocaine, or heroin; or any use of amphetamines or tranquilizers not under a doctor’s orders. The use of narcotics other than heroin and sedatives (barbiturates) has been excluded because 8th and 10th graders appear to overreport their use (perhaps because they include the use of nonprescription drugs in their answers).

<sup>b</sup>In 2001 the question text was changed on half of the questionnaire forms. “Other psychedelics” was changed to “other hallucinogens,” and “shrooms” was added to the list of examples. For the tranquilizer list of examples, Miltown was replaced with Xanax. The 2001 data are based on the changed forms only;  $N$  is one half of  $N$  indicated. In 2002 the remaining forms were changed. Beginning in 2002, the data are based on all forms. Data for hallucinogens and hallucinogens other than LSD are also affected by these changes and have been treated in a parallel manner.

<sup>c</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>d</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

<sup>e</sup>Due to changes in the question wording in half of the questionnaire forms in 2001, the 2002 entry comprises half of the 2001 sample data double-weighted (the half with the new version of the question) and all of the 2002 sample data.



**TABLE D-6**  
**Any Illicit Drug other than Marijuana:<sup>a,b</sup> Trends in Annual Prevalence of Use**  
**by Subgroups in Grade 12**

	Percentage who used in last 12 months																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	9,400	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	26.2	25.4	26.0	27.1	28.2	30.4	34.0	30.1	28.4	28.0	27.4	25.9	24.1	21.1	20.0	17.9	16.2
Gender:																	
Male	25.9	25.7	26.3	27.9	29.4	30.2	32.8	31.0	28.9	28.2	27.9	26.2	24.3	22.2	21.0	19.2	17.0
Female	26.2	24.4	25.3	25.7	26.3	30.0	34.3	28.3	27.3	26.9	26.2	24.8	23.3	19.3	18.5	16.0	14.8
College Plans:																	
None or under 4 years	—	28.7	30.1	30.0	31.8	35.5	38.3	34.0	32.3	32.9	31.6	31.3	28.8	24.5	25.5	23.1	20.1
Complete 4 years	—	20.9	20.8	22.7	23.5	25.5	30.1	26.0	24.7	23.3	24.1	22.2	21.3	19.0	17.2	15.2	14.3
Region:																	
Northeast	26.0	26.1	27.8	30.7	32.0	32.1	38.0	33.5	31.2	33.8	32.9	29.5	25.5	20.2	19.2	17.1	15.6
Midwest	29.2	26.1	27.7	26.8	27.6	30.9	36.1	31.1	28.6	26.1	25.9	25.1	22.7	20.3	21.5	18.0	17.4
South	22.5	23.4	22.9	24.0	23.2	25.8	26.1	24.7	23.8	24.2	21.0	20.6	21.1	20.0	18.1	16.9	14.4
West	28.2	26.6	26.0	28.8	33.3	35.2	38.7	32.7	33.0	31.3	33.0	31.6	29.5	24.8	22.3	20.4	17.9
Population Density:																	
Large MSA	30.3	27.5	27.1	30.2	32.1	34.6	38.3	33.8	31.5	30.5	30.4	28.3	24.5	20.7	16.9	16.0	14.2
Other MSA	26.3	25.8	26.8	27.3	28.7	30.1	33.3	30.0	29.7	27.8	26.9	26.4	24.5	22.7	20.9	18.5	17.9
Non-MSA	23.4	23.3	24.2	24.2	24.7	27.5	31.4	27.0	24.4	26.2	25.5	23.1	23.0	18.4	21.1	18.4	14.9
Parental Education: <sup>c</sup>																	
1.0–2.0 (Low)	—	23.2	23.2	24.7	25.2	28.2	29.2	25.7	25.6	27.3	25.8	23.2	21.5	19.7	18.2	15.2	17.4
2.5–3.0	—	25.6	27.0	26.4	27.6	30.7	33.5	30.4	28.1	28.2	27.4	27.0	24.2	20.5	20.0	17.9	16.8
3.5–4.0	—	26.1	26.2	27.8	29.2	30.7	34.7	30.9	28.6	29.3	28.9	26.6	24.7	20.5	21.4	19.1	16.3
4.5–5.0	—	27.2	25.9	27.3	28.7	29.9	34.8	29.4	30.0	26.2	27.1	24.9	23.8	21.7	19.3	17.5	14.6
5.5–6.0 (High)	—	25.6	24.8	28.6	30.4	30.8	36.7	31.3	29.0	26.2	23.8	23.8	24.9	22.0	19.6	17.2	14.9
Race (2-year average): <sup>d</sup>																	
White	—	—	26.6	27.7	28.8	30.6	34.5	32.1	31.2	30.2	29.6	28.2	26.6	24.4	22.5	21.0	18.7
African American	—	—	14.2	13.4	13.0	13.8	13.2	14.5	15.2	12.9	12.0	12.1	11.1	10.3	8.6	6.5	5.7
Hispanic	—	—	23.8	23.5	23.3	24.7	27.6	25.5	25.2	26.2	27.2	26.2	23.0	20.5	17.7	15.6	15.8

(Table continued on next page.)

**TABLE D-6 (cont.)**  
**Any Illicit Drug other than Marijuana:<sup>a,b</sup> Trends in Annual Prevalence of Use**  
**by Subgroups in Grade 12**

	Percentage who used in last 12 months																2007– 2008 change		
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001<sup>e</sup></u>	<u>2002<sup>e</sup></u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>		<u>2008</u>	
<i>Approximate wtd. N =</i>	<i>15,800</i>	<i>16,300</i>	<i>15,400</i>	<i>15,400</i>	<i>14,300</i>	<i>15,400</i>	<i>15,200</i>	<i>13,600</i>	<i>12,800</i>	<i>12,800</i>	<i>12,900</i>	<i>14,600</i>	<i>14,600</i>	<i>14,700</i>	<i>14,200</i>	<i>14,500</i>	<i>14,000</i>		
Total	14.9	17.1	18.0	19.4	19.8	20.7	20.2	20.7	20.4‡	21.6	20.9	19.8	20.5	19.7	19.2	18.5	18.3	-0.3	
Gender:																			
Male	15.5	17.8	18.5	20.7	21.7	21.7	21.7	22.5	21.5‡	23.3	22.0	21.1	21.5	21.4	19.7	20.0	19.9	-0.1	
Female	13.8	15.8	16.9	17.3	16.8	18.8	18.0	18.5	18.6‡	19.0	19.0	17.9	18.7	17.5	18.3	16.7	16.2	-0.5	
College Plans:																			
None or under 4 years	19.5	19.8	22.9	23.9	24.2	25.8	26.5	24.4	24.7‡	24.5	27.2	26.5	26.0	25.3	25.4	26.0	25.0	-1.0	
Complete 4 years	13.0	15.9	16.0	17.5	17.9	18.4	17.8	19.4	18.5‡	19.9	19.0	17.4	18.4	18.0	17.4	16.7	16.5	-0.1	
Region:																			
Northeast	14.7	18.6	17.2	20.2	22.9	24.1	20.7	19.5	21.7‡	22.4	21.5	19.3	20.4	18.0	20.3	19.4	18.9	-0.5	
Midwest	15.5	16.4	20.1	19.1	19.2	18.9	19.8	20.9	18.9‡	24.0	19.9	18.7	19.1	21.4	17.9	18.4	16.8	-1.6	
South	14.0	16.0	17.3	19.0	18.6	19.8	20.3	21.2	19.0‡	18.6	21.3	19.4	20.8	20.5	19.7	18.8	19.1	+0.3	
West	15.8	18.5	17.3	19.9	19.2	20.9	20.0	20.8	23.2‡	22.6	21.1	22.4	21.9	18.0	19.1	17.3	18.1	+0.7	
Population Density:																			
Large MSA	13.5	15.1	16.7	20.2	18.9	18.6	19.0	17.6	19.4‡	23.6	20.6	15.9	18.0	18.6	20.1	18.4	16.9	-1.5	
Other MSA	14.9	18.2	19.2	19.2	20.2	21.5	20.4	21.6	20.9‡	21.2	21.6	22.0	22.3	20.6	18.7	18.1	18.2	+0.2	
Non-MSA	16.1	16.8	17.2	18.7	19.8	21.2	21.3	22.4	20.7‡	20.3	20.2	20.9	19.7	19.3	18.9	19.5	19.8	+0.3	
Parental Education: <sup>c</sup>																			
1.0–2.0 (Low)	14.9	15.6	17.8	19.4	16.9	19.9	20.0	22.2	20.0‡	17.3	17.8	19.4	18.7	14.8	19.7	16.7	16.4	-0.3	
2.5–3.0	15.0	16.1	18.5	19.4	19.7	19.4	20.1	21.0	19.9‡	20.9	20.3	19.6	20.0	20.5	19.4	19.7	17.7	-2.0	
3.5–4.0	15.0	17.8	17.6	19.2	19.8	20.4	21.0	21.9	20.5‡	24.5	22.0	21.7	23.0	21.5	20.2	18.4	18.7	+0.3	
4.5–5.0	14.3	17.5	18.4	19.4	19.3	21.0	19.1	19.3	20.1‡	20.1	21.2	18.5	19.7	19.7	18.6	18.5	18.2	-0.3	
5.5–6.0 (High)	14.3	17.6	16.5	18.3	20.2	21.7	18.9	19.4	20.3‡	18.7	19.8	17.0	17.6	17.5	18.0	17.4	17.9	+0.5	
Race (2-year average): <sup>d</sup>																			
White	17.1	17.9	19.4	20.3	21.2	22.3	23.1	22.9	22.7	23.0‡	24.1 <sup>f</sup>	23.0	22.8	22.7	22.0	21.6	21.5	-0.1	
African American	5.3	4.8	6.1	6.9	6.0	6.4	7.1	6.8	6.4	6.3‡	6.0 <sup>f</sup>	6.3	6.5	7.1	7.2	7.0	7.0	-0.1	
Hispanic	15.1	15.6	16.5	17.9	19.7	18.9	17.5	18.5	21.2	18.2‡	16.1 <sup>f</sup>	16.0	16.2	16.7	17.3	15.8	13.7	-2.0	

(Table continued on next page.)

**TABLE D-6 (cont.)**  
**Any Illicit Drug other than Marijuana:<sup>a,b</sup> Trends in Annual Prevalence of Use  
by Subgroups in Grade 12**

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* “±” indicates some change in the question. See relevant footnote. See relevant figure to assess the impact of the wording changes.

Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ .

“—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Use of “any illicit drug other than marijuana” includes any use of LSD, other hallucinogens, crack, other cocaine, or heroin; or any use of narcotics other than heroin, amphetamines, sedatives (barbiturates), methaqualone (excluded since 1990), or tranquilizers not under a doctor’s orders.

<sup>b</sup>Beginning in 1982 the question about amphetamine use was revised to get respondents to exclude the inappropriate reporting of nonprescription amphetamines. The prevalence-of-use rate dropped slightly as a result of this methodological change.

<sup>c</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>d</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

<sup>e</sup>In 2001 the question text was changed on half of the questionnaire forms. “Other psychedelics” was changed to “other hallucinogens” and “shrooms” was added to the list of examples. For the tranquilizer list of examples, Miltown was replaced with Xanax. The 2001 data are based on the changed forms only;  $N$  is one half of  $N$  indicated. In 2002 the remaining forms were changed. Beginning in 2002, the data are based on all forms. Data for hallucinogens and hallucinogens other than LSD are also affected by these changes and have been treated in a parallel manner.

<sup>f</sup>Due to changes in the question wording in half of the questionnaire forms in 2001, the 2002 entry comprises half of the 2001 sample data double-weighted (the half with the new version of the question) and all of the 2002 sample data.

**TABLE D-7**  
**Marijuana: Trends in Annual Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007– 2008	
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	change	
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		
Total	6.2	7.2	9.2	13.0	15.8	18.3	17.7	16.9	16.5	15.6	15.4	14.6	12.8	11.8	12.2	11.7	10.3	10.9	+0.6	
Gender:																				
Male	7.3	7.4	10.5	15.1	17.7	19.6	19.2	18.0	18.1	16.7	18.1	17.0	13.9	12.3	13.0	12.7	11.2	12.2	+1.1	
Female	5.1	6.9	8.0	10.9	13.7	16.9	16.1	15.3	14.9	14.3	12.8	12.4	11.5	11.2	11.4	10.4	9.3	9.5	+0.2	
College Plans:																				
None or under 4 years	15.8	17.5	22.4	27.7	30.3	34.6	34.5	35.0	34.9	33.6	34.4	33.1	31.3	29.0	30.5	28.8	28.1	27.7	-0.4	
Complete 4 years	4.6	5.5	7.3	11.0	13.8	15.8	15.5	14.5	14.0	13.4	13.2	12.7	10.7	10.0	10.2	10.0	8.6	9.4	+0.7	
Region:																				
Northeast	5.0	5.8	6.2	12.1	13.0	15.3	16.2	11.7	14.4	13.2	14.5	11.3	10.0	10.2	9.8	9.3	6.4	8.3	+1.8	
Midwest	5.9	6.0	8.0	12.0	17.5	18.6	17.0	18.1	18.5	16.6	14.1	14.3	12.3	10.9	12.8	11.0	9.8	12.6	+2.8 s	
South	6.1	7.3	9.0	11.4	14.7	17.1	17.2	17.9	16.7	15.2	16.8	16.3	14.4	12.9	13.5	13.8	11.9	11.5	-0.4	
West	7.8	10.3	14.8	18.1	18.4	22.5	20.6	18.2	15.6	16.9	15.5	15.3	12.9	12.3	11.4	10.6	10.5	10.3	-0.2	
Population Density:																				
Large MSA	5.2	6.7	8.0	13.1	15.6	18.3	16.4	16.0	15.6	14.5	12.4	12.7	11.5	10.8	11.7	10.3	8.7	9.9	+1.1	
Other MSA	7.2	8.3	10.9	15.7	17.2	19.5	18.2	17.4	15.4	14.8	17.4	15.2	12.9	12.4	12.9	12.5	10.8	11.8	+1.0	
Non-MSA	5.3	5.7	7.2	8.0	13.7	15.8	18.0	16.9	19.7	18.5	15.3	16.1	14.1	11.9	11.6	12.0	11.4	10.4	-1.1	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	13.2	12.7	13.6	18.7	23.0	20.2	24.8	25.0	25.8	26.2	26.0	24.2	22.5	19.7	18.2	19.4	19.4	18.5	-0.9	
2.5–3.0	7.0	7.7	10.7	14.5	17.9	20.6	20.3	20.0	20.8	19.4	19.5	18.7	16.5	15.4	17.4	15.1	13.8	14.6	+0.8	
3.5–4.0	6.2	7.0	9.7	13.2	17.2	20.2	19.5	17.7	16.3	15.9	16.7	15.4	13.7	12.8	12.8	13.1	11.3	11.8	+0.5	
4.5–5.0	3.7	5.4	7.4	10.9	12.7	16.2	15.7	13.7	11.7	10.8	11.1	11.4	8.9	9.0	8.9	8.0	7.2	8.2	+0.9	
5.5–6.0 (High)	4.6	5.2	6.4	11.0	13.0	14.7	12.1	12.7	12.4	11.5	9.4	9.7	8.0	7.7	7.1	7.1	4.9	6.7	+1.8	
Race (2-year average): <sup>b</sup>																				
White	—	6.4	7.8	10.0	13.5	16.7	17.8	16.7	15.4	14.9	14.7	14.5	13.0	11.5	11.1	10.9	9.9	9.6	-0.3	
African American	—	4.1	5.7	8.9	11.9	14.0	15.3	16.0	16.3	16.1	14.6	12.7	12.6	12.8	13.6	12.9	11.1	10.6	-0.5	
Hispanic	—	11.9	13.9	18.1	20.4	20.8	21.8	22.7	22.8	20.1	19.9	21.1	19.1	16.7	14.7	14.3	13.7	13.2	-0.5	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-8**  
**Marijuana: Trends in Annual Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007– 2008
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	change
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100	
Total	16.5	15.2	19.2	25.2	28.7	33.6	34.8	31.1	32.1	32.2	32.7	30.3	28.2	27.5	26.6	25.2	24.6	23.9	-0.6
Gender:																			
Male	17.7	16.3	21.2	28.2	30.6	36.0	37.3	32.2	34.3	36.1	36.0	32.3	30.0	29.0	28.1	26.3	26.8	25.5	-1.3
Female	15.1	13.9	16.9	21.9	26.5	31.4	32.3	30.1	29.7	28.4	29.6	28.4	26.4	25.8	24.9	24.0	22.4	22.2	-0.2
College Plans:																			
None or under 4 years	26.9	25.1	31.5	37.3	41.8	48.9	51.5	46.8	48.3	48.8	47.4	46.6	44.6	41.9	41.4	42.0	42.1	43.5	+1.3
Complete 4 years	14.2	13.0	16.5	22.4	26.4	31.0	32.0	28.2	29.3	29.7	30.3	27.7	25.5	25.4	24.6	23.0	22.2	21.4	-0.8
Region:																			
Northeast	17.1	14.9	22.4	25.6	28.8	34.8	34.6	35.4	34.4	30.3	34.1	31.7	29.5	29.2	28.7	24.9	25.0	26.3	+1.3
Midwest	15.8	14.8	17.4	23.4	26.6	33.1	34.4	28.5	31.6	31.1	31.7	29.0	25.0	25.3	26.4	24.8	24.9	22.6	-2.2
South	14.5	12.5	16.4	23.8	28.4	33.9	34.4	30.7	30.9	31.4	31.2	28.9	29.6	29.0	27.4	25.5	22.7	24.0	+1.2
West	19.4	20.4	24.0	30.0	32.2	32.4	36.5	30.7	32.0	37.1	36.4	33.4	28.8	26.4	23.4	25.3	26.2	23.4	-2.9
Population Density:																			
Large MSA	16.5	15.1	19.0	26.3	27.8	31.5	34.1	28.7	31.2	32.4	30.0	29.0	27.1	25.9	25.3	24.0	24.5	24.2	-0.3
Other MSA	17.3	15.9	19.8	28.2	31.2	36.2	36.6	33.1	33.6	32.8	35.2	32.4	28.7	27.8	28.0	25.1	24.9	24.7	-0.2
Non-MSA	14.9	13.9	18.2	18.5	24.8	30.9	32.5	30.2	30.0	31.1	30.9	27.6	29.0	29.0	25.5	27.4	23.9	21.7	-2.3
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	20.3	18.9	22.4	25.8	32.0	32.9	34.5	31.7	38.1	37.1	33.6	33.5	33.7	33.2	28.6	31.9	28.4	30.2	+1.8
2.5–3.0	17.8	16.0	19.7	26.3	31.8	35.6	36.8	35.3	35.4	34.9	37.1	35.1	32.2	30.6	31.1	29.6	29.4	28.3	-1.1
3.5–4.0	16.2	15.1	19.3	25.6	30.0	36.4	37.8	31.6	31.9	35.0	32.6	30.1	29.4	29.5	27.1	26.6	26.3	26.0	-0.3
4.5–5.0	14.9	14.1	17.6	23.8	27.0	31.7	33.1	28.3	28.8	28.9	31.4	27.9	24.3	24.3	24.5	21.8	21.2	19.8	-1.4
5.5–6.0 (High)	15.9	13.7	18.5	23.3	23.4	30.3	30.5	27.7	30.6	27.3	29.4	25.8	24.3	22.5	23.6	21.2	18.9	18.9	-0.1
Race (2-year average): <sup>b</sup>																			
White	—	17.0	18.0	22.6	27.7	32.0	35.3	34.2	32.5	32.6	32.9	32.7	30.6	28.2	27.3	26.6	25.7	24.6	-1.1
African American	—	7.6	8.7	15.3	20.9	25.7	28.4	26.9	26.3	27.6	28.7	26.5	25.1	27.0	27.2	24.5	22.3	20.6	-1.7
Hispanic	—	18.9	21.3	25.1	29.2	34.6	36.8	34.4	34.0	34.8	34.9	31.6	28.8	29.8	28.6	24.9	23.7	26.6	+2.9

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-9**  
**Marijuana: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	9,400	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	40.0	44.5	47.6	50.2	50.8	48.8	46.1	44.3	42.3	40.0	40.6	38.8	36.3	33.1	29.6	27.0	23.9
Gender:																	
Male	45.8	50.6	53.2	55.9	55.8	53.4	49.2	47.2	45.7	43.2	43.1	41.2	38.6	35.8	32.8	29.4	27.2
Female	34.9	37.8	42.0	44.3	45.7	44.1	42.5	40.8	38.4	36.0	37.8	36.0	33.8	30.3	26.3	24.2	20.1
College Plans:																	
None or under 4 years	—	46.8	50.7	51.6	53.1	51.7	49.7	48.2	46.0	44.2	44.0	42.7	40.6	36.2	34.4	31.1	27.6
Complete 4 years	—	40.7	43.4	47.1	47.3	45.9	42.6	40.6	38.3	35.9	37.5	36.1	34.0	31.3	27.3	24.7	22.0
Region:																	
Northeast	47.4	52.7	53.5	59.2	60.6	55.5	53.2	50.9	49.3	49.6	48.2	44.6	41.2	36.7	31.3	32.2	28.2
Midwest	40.1	44.0	48.1	51.6	52.2	48.9	46.8	45.6	42.0	36.4	40.8	40.2	37.4	34.3	33.0	28.7	26.1
South	32.4	37.9	42.5	42.7	41.2	42.0	38.0	36.7	36.1	35.6	31.0	31.7	30.2	28.7	25.0	21.4	18.1
West	44.1	45.8	46.8	49.1	51.9	51.7	49.6	45.5	44.8	43.2	46.2	41.2	39.6	35.6	32.3	28.3	26.8
Population Density:																	
Large MSA	50.4	51.3	53.2	57.2	58.7	56.3	51.4	50.4	47.0	44.2	44.4	42.6	39.3	34.3	27.8	27.7	24.3
Other MSA	40.3	44.2	48.9	50.8	51.9	49.8	46.4	44.8	44.0	41.0	40.7	39.4	36.9	34.7	30.3	28.3	27.5
Non-MSA	32.9	39.8	41.2	43.3	43.3	41.9	41.6	38.5	36.5	35.3	37.3	34.7	32.2	29.0	30.0	23.5	17.5
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	35.2	38.9	41.0	42.5	46.0	43.7	41.8	38.9	39.7	35.7	37.1	33.4	30.7	30.7	23.3	21.0	22.4
2.5–3.0	39.2	46.1	48.2	50.3	50.0	49.0	45.3	44.5	42.2	40.1	40.6	38.8	36.3	31.1	29.6	26.9	22.5
3.5–4.0	38.5	44.9	49.5	51.4	52.7	49.8	47.0	46.5	42.2	41.4	41.0	40.1	36.8	33.4	31.4	27.6	24.0
4.5–5.0	40.6	46.8	49.3	53.2	53.7	50.5	47.6	45.9	43.5	39.6	43.2	39.9	37.5	35.1	29.7	28.5	23.8
5.5–6.0 (High)	38.7	47.5	48.6	55.2	51.2	52.0	48.5	45.7	43.7	39.9	37.9	38.9	38.6	35.9	30.7	29.4	28.2
Race (2-year average): <sup>b</sup>																	
White	—	—	46.8	50.1	51.8	51.2	49.1	47.1	44.6	42.0	41.6	41.4	39.7	37.6	34.5	31.6	28.2
African American	—	—	37.9	39.6	38.4	37.5	36.1	35.5	37.4	36.4	33.4	30.6	25.7	21.2	17.8	13.7	11.4
Hispanic	—	—	45.8	43.4	42.1	44.1	41.2	38.8	38.3	38.8	37.8	36.7	33.3	29.6	25.0	21.6	23.6

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

(Table continued on next page.)

**TABLE D-9 (cont.)**  
**Marijuana: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																	2007– 2008 change	
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	21.9	26.0	30.7	34.7	35.8	38.5	37.5	37.8	36.5	37.0	36.2	34.9	34.3	33.6	31.5	31.7	32.4	+0.7	
Gender:																			
Male	24.4	29.0	35.1	38.1	39.4	40.9	41.7	41.4	39.2	40.1	39.9	37.8	37.4	37.6	32.7	35.0	35.1	+0.1	
Female	18.9	22.4	26.4	30.6	31.6	35.5	33.0	34.1	33.4	33.6	32.4	31.6	30.8	29.6	29.7	28.3	29.5	+1.2	
College Plans:																			
None or under 4 years	27.5	29.1	34.4	39.0	41.7	44.6	43.0	43.2	40.3	41.5	40.9	42.1	39.0	41.3	39.9	38.6	41.0	+2.5	
Complete 4 years	19.4	24.4	29.1	32.6	33.4	36.4	35.2	35.9	34.6	35.3	34.7	32.3	32.6	31.5	29.1	29.8	30.2	+0.3	
Region:																			
Northeast	23.9	31.2	36.0	37.7	40.0	43.5	43.0	39.0	42.3	43.8	41.9	40.5	40.1	39.6	38.1	39.2	36.6	-2.6	
Midwest	22.7	26.0	30.5	36.9	36.9	36.5	33.8	38.0	34.5	36.9	37.5	36.5	34.0	33.7	32.0	32.6	31.1	-1.5	
South	18.1	23.2	28.7	31.8	32.8	35.0	36.5	36.0	30.7	32.4	32.6	29.4	30.1	31.2	29.4	29.0	31.0	+2.0	
West	26.1	26.4	30.0	33.8	35.6	42.6	39.0	39.8	43.1	38.4	35.2	36.2	35.6	32.0	28.8	29.1	32.8	+3.7	
Population Density:																			
Large MSA	22.6	29.1	32.0	37.5	37.2	38.3	38.4	38.7	37.1	39.2	37.7	32.3	32.3	34.5	33.4	33.9	34.8	+1.0	
Other MSA	22.1	26.2	32.7	34.9	38.6	40.5	38.8	39.1	38.1	36.7	38.0	38.1	37.9	35.0	31.9	31.6	31.2	-0.3	
Non-MSA	21.0	23.1	25.8	31.0	29.6	34.9	33.5	34.7	32.9	35.1	30.8	32.2	29.7	29.7	28.1	28.8	32.2	+3.4	
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	21.2	23.0	26.3	30.9	31.3	34.8	34.2	35.5	36.5	33.9	30.8	31.4	28.7	27.3	32.0	31.1	30.5	-0.7	
2.5–3.0	21.1	24.1	29.7	33.8	35.1	37.4	36.1	38.6	35.1	37.0	34.9	34.2	33.1	34.8	33.2	33.8	32.8	-1.0	
3.5–4.0	22.7	26.6	31.5	34.2	36.1	38.1	39.0	38.6	36.8	38.4	38.5	36.2	36.9	35.5	31.6	30.6	32.0	+1.4	
4.5–5.0	20.8	27.2	32.0	35.0	36.6	40.1	37.4	35.9	35.8	37.4	37.0	35.4	34.4	33.9	28.4	30.4	32.7	+2.3	
5.5–6.0 (High)	22.6	28.0	32.3	37.5	36.7	39.7	38.3	39.2	38.0	35.2	36.1	32.6	34.0	32.3	32.9	32.8	32.8	+0.1	
Race (2-year average): <sup>b</sup>																			
White	24.9	25.9	30.2	34.2	36.4	38.7	39.9	39.1	38.2	38.5	38.7	37.9	37.3	36.6	34.8	33.4	33.9	+0.5	
African American	11.5	14.2	20.7	26.8	30.2	30.4	30.0	30.4	30.0	29.0	27.3	26.3	25.5	26.3	27.7	27.0	26.8	-0.3	
Hispanic	24.7	23.5	25.7	29.7	32.3	36.4	37.2	37.8	40.5	37.6	34.6	31.1	29.5	29.6	28.7	27.2	27.3	+0.1	

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-10**  
**Inhalants: Trends in Annual Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007–	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008	
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		
Total	9.0	9.5	11.0	11.7	12.8	12.2	11.8	11.1	10.3	9.4	9.1	7.7	8.7	9.6	9.5	9.1	8.3	8.9	+0.6	
Gender:																				
Male	9.0	9.2	10.4	11.2	11.5	10.3	10.5	10.6	9.5	8.9	8.4	7.6	7.7	8.8	7.8	7.7	7.3	7.0	-0.4	
Female	9.0	9.8	11.9	12.2	14.0	14.1	12.9	11.6	11.1	9.9	9.9	7.8	9.6	10.5	11.1	10.5	9.3	11.0	+1.7 s	
College Plans:																				
None or under 4 years	15.0	15.6	17.7	18.3	19.6	18.2	18.1	20.9	17.9	17.2	15.1	14.5	16.5	17.9	15.3	17.3	18.1	19.1	+1.0	
Complete 4 years	8.1	8.8	10.2	10.9	11.9	11.4	11.2	10.2	9.5	8.6	8.6	7.1	8.0	8.7	9.0	8.3	7.5	8.0	+0.5	
Region:																				
Northeast	8.0	8.6	11.3	12.0	13.1	11.7	12.1	9.1	9.8	8.7	9.4	6.9	9.0	8.9	9.1	7.2	5.9	7.9	+2.0	
Midwest	9.8	10.5	9.9	10.3	13.8	13.3	11.3	11.3	10.6	10.6	8.8	8.0	9.6	9.6	8.5	9.0	8.1	9.1	+1.0	
South	8.9	9.1	10.0	11.3	12.1	11.3	11.6	11.3	9.9	8.4	9.5	8.4	7.9	9.9	9.8	9.1	9.1	9.6	+0.5	
West	8.8	9.8	14.2	14.0	12.4	12.9	12.6	12.4	10.9	10.5	8.6	6.4	8.9	9.6	10.4	10.5	8.8	8.4	-0.4	
Population Density:																				
Large MSA	9.9	9.1	10.8	11.6	11.7	11.4	10.4	8.6	8.8	8.3	8.3	7.1	8.0	8.8	8.8	8.8	8.6	8.7	+0.1	
Other MSA	8.5	10.3	12.3	13.1	13.7	13.4	11.5	11.1	10.1	9.4	8.9	8.0	8.5	10.3	10.7	9.0	8.3	8.9	+0.5	
Non-MSA	9.1	8.6	8.5	9.3	12.3	11.0	13.9	14.0	12.3	10.9	10.4	7.8	10.1	9.2	8.3	9.7	7.9	9.2	+1.3	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	12.0	11.4	11.5	12.4	13.0	11.3	12.1	14.4	12.9	13.1	10.7	10.3	10.6	12.6	11.6	10.5	11.9	13.3	+1.4	
2.5–3.0	9.5	9.9	10.9	12.1	13.9	12.6	12.6	12.0	11.8	11.3	9.7	8.3	10.1	10.2	11.6	10.7	9.3	10.8	+1.4	
3.5–4.0	8.9	10.0	11.5	12.3	14.7	13.4	13.5	12.8	10.8	9.9	9.4	8.9	10.3	11.0	10.0	10.3	9.2	9.5	+0.3	
4.5–5.0	8.0	8.4	10.6	11.0	12.3	13.2	11.4	9.7	9.2	7.1	9.0	7.3	7.4	9.3	8.4	7.8	7.6	7.3	-0.3	
5.5–6.0 (High)	8.4	10.3	12.6	12.2	11.6	11.7	10.8	10.6	9.1	9.2	7.7	6.2	6.5	6.9	8.0	7.9	6.3	7.8	+1.5	
Race (2-year average): <sup>b</sup>																				
White	—	10.1	11.3	12.4	13.8	14.6	14.1	13.3	12.1	10.9	10.1	9.1	8.8	9.6	9.8	9.7	8.9	8.5	-0.4	
African American	—	4.4	4.6	5.3	5.0	4.2	3.8	4.2	4.2	4.3	4.8	5.0	4.9	5.4	5.8	5.4	5.5	5.6	+0.1	
Hispanic	—	10.4	11.5	12.5	13.3	12.7	11.4	11.5	12.7	12.2	11.0	9.9	9.6	10.6	11.0	9.5	9.2	10.2	+1.0	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.



**TABLE D-11**  
**Inhalants: Trends in Annual Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007– 2008	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	change	
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100		
Total	7.1	7.5	8.4	9.1	9.6	9.5	8.7	8.0	7.2	7.3	6.6	5.8	5.4	5.9	6.0	6.5	6.6	5.9	-0.7	
Gender:																				
Male	7.4	7.6	9.1	9.7	10.3	10.1	9.1	8.4	7.6	7.7	6.7	5.4	5.2	5.8	5.0	5.9	6.3	5.4	-0.9	
Female	6.6	7.5	7.7	8.6	8.9	8.9	8.2	7.6	6.9	7.0	6.5	6.0	5.6	6.1	6.9	7.1	7.0	6.3	-0.7	
College Plans:																				
None or under 4 years	12.0	12.4	14.0	15.1	14.6	14.3	14.4	13.5	11.6	11.2	11.0	9.8	9.6	11.2	9.9	10.6	12.0	11.1	-0.9	
Complete 4 years	5.9	6.4	7.3	7.8	8.7	8.7	7.7	7.0	6.5	6.7	5.9	5.2	4.8	5.2	5.5	5.9	5.9	5.3	-0.7	
Region:																				
Northeast	7.2	7.8	10.6	9.8	10.4	11.5	8.9	9.3	8.3	7.2	6.5	6.0	5.9	6.1	6.2	6.5	6.4	4.9	-1.6	
Midwest	7.5	8.0	8.3	8.4	10.4	9.8	8.3	6.7	8.4	7.5	6.5	5.8	6.1	5.7	6.1	6.7	6.8	5.7	-1.1	
South	7.2	6.6	7.3	9.0	9.4	9.1	8.8	8.3	6.5	7.4	6.8	5.4	4.6	5.6	5.6	5.7	6.1	5.6	-0.5	
West	6.2	8.0	8.4	9.9	8.1	8.0	8.5	7.8	6.1	7.2	6.7	6.2	5.5	6.6	6.1	7.2	7.3	7.2	-0.1	
Population Density:																				
Large MSA	7.7	7.8	8.5	7.9	8.7	8.1	8.1	6.7	6.9	7.1	6.0	5.1	4.8	5.0	6.2	6.0	6.0	5.3	-0.7	
Other MSA	7.1	7.4	8.4	9.8	9.7	9.6	8.4	7.7	7.0	6.8	6.9	5.4	5.2	6.3	5.6	6.4	6.8	6.4	-0.4	
Non-MSA	6.5	7.5	8.6	9.1	10.5	11.0	9.8	10.1	8.3	8.5	7.0	7.4	7.1	6.5	6.5	7.4	7.1	5.5	-1.6	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	7.0	8.2	10.2	8.7	9.4	10.8	9.3	9.7	8.7	8.5	7.6	5.6	5.8	6.2	6.3	6.9	9.3	8.7	-0.6	
2.5–3.0	8.0	7.9	9.1	9.5	11.0	9.9	8.5	9.1	8.0	8.1	7.5	6.0	6.3	6.9	6.9	6.2	7.5	6.7	-0.7	
3.5–4.0	7.5	8.3	8.3	9.6	10.2	10.1	9.4	8.1	6.9	7.4	5.9	6.3	5.8	5.7	6.2	7.1	7.0	6.3	-0.7	
4.5–5.0	6.4	6.5	7.2	8.7	9.4	8.4	8.3	7.1	6.7	6.5	6.8	5.6	5.1	5.7	5.8	5.5	5.8	5.0	-0.8	
5.5–6.0 (High)	6.6	6.7	8.2	8.2	7.0	10.1	8.2	6.7	7.2	7.2	5.5	5.2	4.4	5.1	5.3	7.5	5.4	4.5	-0.9	
Race (2-year average): <sup>b</sup>																				
White	—	8.3	8.8	9.6	10.6	11.0	10.4	9.6	8.9	8.4	7.9	7.1	6.6	6.5	6.6	6.8	7.1	6.5	-0.6	
African American	—	3.6	3.7	3.3	2.8	2.3	2.3	2.4	2.0	2.0	2.1	2.4	2.0	2.1	2.8	2.9	2.9	2.9	0.0	
Hispanic	—	6.4	8.3	9.0	8.5	8.2	7.9	7.6	7.3	6.3	5.9	4.8	4.8	5.7	6.2	6.4	6.4	7.2	+0.8	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-12**  
**Inhalants:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
<i>Approximate wtd. N =</i>	9,400	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	—	3.0	3.7	4.1	5.4	4.6	4.1	4.5	4.3	5.1	5.7	6.1	6.9	6.5	5.9	6.9	6.6
Adjusted <sup>b</sup>	—	—	—	—	8.9	7.9	6.1	6.6	6.2	7.2	7.5	8.9	8.1	7.1	6.9	7.5	6.9
Gender:																	
Male	—	3.8	5.1	5.6	6.7	5.9	5.1	5.8	5.8	6.5	6.9	7.8	8.3	8.2	7.8	8.8	8.2
Female	—	2.0	2.4	2.8	4.2	3.5	3.2	3.1	2.8	3.8	4.5	4.7	5.6	4.9	4.0	4.9	5.0
College Plans:																	
None or under 4 years	—	3.6	4.7	5.0	6.3	5.0	4.3	4.9	4.7	5.8	5.8	7.7	8.0	8.1	7.1	7.8	7.7
Complete 4 years	—	2.2	2.9	3.4	4.5	4.3	4.0	4.1	3.9	4.7	5.7	5.2	6.4	6.0	5.4	6.4	6.3
Region:																	
Northeast	—	3.2	4.1	4.4	6.4	6.0	5.2	6.2	5.0	6.1	8.0	5.6	6.7	6.0	6.3	7.4	6.7
Midwest	—	2.6	4.2	4.8	5.9	4.6	3.8	3.6	4.5	5.0	5.8	6.7	8.6	7.2	6.7	8.0	8.6
South	—	3.8	3.3	3.6	4.3	3.4	3.2	3.8	3.8	4.6	4.2	5.7	6.1	6.8	5.5	6.4	5.0
West	—	1.7	3.0	3.6	4.9	4.9	4.7	4.4	4.3	5.3	5.4	6.6	6.2	5.6	4.8	5.7	6.8
Population Density:																	
Large MSA	—	2.9	3.4	3.4	5.1	5.7	4.7	5.5	4.8	5.3	5.9	5.2	6.0	6.5	5.1	6.7	5.2
Other MSA	—	2.6	3.6	3.7	4.8	4.2	4.0	3.9	4.4	5.0	5.9	6.3	6.9	6.0	5.8	6.8	7.8
Non-MSA	—	3.4	4.2	5.3	6.2	4.4	3.7	4.4	3.9	5.2	5.4	6.6	7.8	7.5	6.8	7.4	5.8
Parental Education: <sup>c</sup>																	
1.0–2.0 (Low)	—	3.7	3.9	4.5	5.2	3.6	3.6	3.2	3.1	4.5	4.2	4.9	4.6	5.3	5.9	5.0	6.1
2.5–3.0	—	3.1	4.1	4.0	5.0	4.8	4.0	4.8	4.0	5.2	5.6	6.1	6.8	6.3	5.5	6.9	6.6
3.5–4.0	—	3.1	3.4	4.1	5.1	4.7	4.0	4.6	4.9	5.6	5.5	6.2	7.1	5.8	6.1	7.2	6.1
4.5–5.0	—	2.7	3.0	3.9	5.8	4.3	4.4	4.4	5.2	5.0	7.0	6.9	7.2	7.0	5.7	7.4	7.4
5.5–6.0 (High)	—	3.7	4.2	5.0	7.2	5.8	4.9	6.0	4.7	5.6	6.8	6.4	8.7	9.1	6.8	7.6	7.1
Race (2-year average): <sup>d</sup>																	
White	—	—	3.6	4.3	5.1	5.3	4.7	4.7	4.8	5.1	5.9	6.5	7.3	7.6	7.0	7.2	7.6
African American	—	—	1.5	1.3	2.1	2.2	2.1	1.9	1.8	2.2	2.0	2.1	3.0	3.1	2.2	2.1	2.7
Hispanic	—	—	2.7	3.0	2.9	2.9	3.5	4.1	3.4	4.6	6.5	5.5	4.6	4.1	4.7	4.8	5.4

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on four of five forms in 1976–1988;  $N$  is four fifths of  $N$  indicated in Table D-109. Data based on five of six forms in 1989–1998;  $N$  is five sixths of  $N$  indicated in

Table D-109. Data based on three of six forms beginning in 1999;  $N$  is three sixths of  $N$  indicated in Table D-109.

(Table continued on next page.)

**TABLE D-12 (cont.)**  
**Inhalants:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																	2007– 2008 change
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	6.2	7.0	7.7	8.0	7.6	6.7	6.2	5.6	5.9	4.5	4.5	3.9	4.2	5.0	4.5	3.7	3.8	+0.1
Adjusted <sup>b</sup>	6.4	7.4	8.2	8.4	8.5	7.3	7.1	6.0	6.2	4.9	4.9	4.5	4.6	5.4	4.7	4.1	4.0	-0.1
Gender:																		
Male	8.0	9.2	9.6	9.9	9.1	8.3	7.5	6.5	6.8	5.5	5.8	5.2	4.8	6.2	5.1	3.9	4.4	+0.5
Female	4.5	4.8	6.0	6.2	6.1	5.2	5.1	4.9	5.1	3.5	3.3	2.9	3.4	4.1	3.9	3.4	3.2	-0.2
College Plans:																		
None or under 4 years	7.7	8.0	9.0	9.7	8.2	8.0	7.9	6.5	6.7	6.6	6.3	5.1	5.6	7.3	6.8	4.4	6.1	+1.7
Complete 4 years	5.7	6.7	7.4	7.4	7.3	6.5	5.7	5.4	5.5	3.9	4.2	3.5	3.8	4.6	3.9	3.5	3.3	-0.1
Region:																		
Northeast	6.0	8.9	10.3	10.3	10.8	9.4	8.0	6.2	6.3	5.7	5.4	5.1	4.3	6.0	5.9	3.9	3.5	-0.4
Midwest	7.4	6.3	9.5	8.6	7.6	6.9	7.6	6.3	5.5	5.0	5.6	3.7	3.8	5.6	4.8	3.9	3.0	-0.9
South	4.8	6.5	6.2	7.0	6.5	5.6	5.1	5.2	5.5	3.4	4.1	3.5	4.1	4.6	3.6	3.4	3.7	+0.2
West	7.5	7.0	5.7	6.7	6.0	5.4	4.7	4.9	6.7	4.8	3.2	3.6	4.6	4.3	4.7	3.7	5.0	+1.4
Population Density:																		
Large MSA	6.0	7.4	7.6	8.5	7.8	5.9	5.5	4.8	6.3	4.4	4.4	3.5	4.0	5.0	4.1	2.8	3.1	+0.2
Other MSA	6.6	7.3	7.7	7.8	7.9	6.5	6.1	5.3	4.9	4.3	4.4	4.4	4.1	5.1	4.5	3.8	3.7	0.0
Non-MSA	5.6	6.0	7.6	7.8	7.0	8.1	7.4	6.9	7.2	5.2	4.8	3.7	4.3	4.9	5.2	4.7	4.7	+0.1
Parental Education: <sup>c</sup>																		
1.0–2.0 (Low)	4.2	4.3	5.3	7.5	5.8	5.4	6.3	4.8	4.0	3.2	5.7	3.4	4.6	5.2	5.0	3.6	3.6	0.0
2.5–3.0	6.7	6.0	7.8	8.0	7.9	6.3	6.0	5.4	5.2	5.7	4.3	3.8	4.9	5.7	4.8	3.8	3.6	-0.1
3.5–4.0	6.3	7.7	7.1	6.7	7.8	7.1	7.3	6.1	6.1	4.2	4.5	3.9	5.0	4.8	4.7	3.9	4.4	+0.5
4.5–5.0	6.3	7.6	8.9	8.9	7.4	7.9	5.3	5.6	5.9	3.8	4.7	4.4	3.4	5.8	4.3	3.7	3.6	-0.2
5.5–6.0 (High)	6.7	9.4	9.7	9.7	8.5	6.0	6.2	6.1	7.5	5.8	4.6	4.0	3.2	3.0	3.9	3.4	3.4	+0.1
Race (2-year average): <sup>d</sup>																		
White	7.2	7.6	8.6	9.1	9.0	8.6	7.9	7.0	6.4	5.9	5.2	4.9	4.7	5.1	5.3	4.7	4.3	-0.4
African American	2.5	2.2	2.4	2.6	2.2	1.9	1.7	1.4	1.9	2.2	1.9	1.5	1.3	1.9	1.9	1.6	1.5	0.0
Hispanic	6.0	5.7	5.5	5.8	5.9	4.7	4.5	5.5	6.3	4.5	3.4	2.7	2.9	5.3	5.7	4.3	3.3	-1.0

<sup>a</sup>All data are unadjusted for underreporting of amyl and butyl nitrites, except where otherwise noted.

<sup>b</sup>Adjusted for underreporting of amyl and butyl nitrites. See text for details.

<sup>c</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>d</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-13**  
**Hallucinogens: Trends in Annual Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007– 2008	
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001<sup>a</sup></u>	<u>2002<sup>a</sup></u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>change</u>	
<i>Approximate wtd. N =</i>	<i>17,500</i>	<i>18,600</i>	<i>18,300</i>	<i>17,300</i>	<i>17,500</i>	<i>17,800</i>	<i>18,600</i>	<i>18,100</i>	<i>16,700</i>	<i>16,700</i>	<i>16,200</i>	<i>15,100</i>	<i>16,500</i>	<i>17,000</i>	<i>16,800</i>	<i>16,500</i>	<i>16,100</i>	<i>15,700</i>		
Total	1.9	2.5	2.6	2.7	3.6	4.1	3.7	3.4	2.9	2.8†	3.4	2.6	2.6	2.2	2.4	2.1	1.9	2.1	+0.2	
Gender:																				
Male	2.2	2.6	2.8	3.0	4.0	4.3	4.0	3.7	3.3	3.2†	3.8	2.9	2.9	2.3	2.5	2.1	2.1	2.2	+0.1	
Female	1.6	2.3	2.3	2.4	3.3	3.7	3.2	2.9	2.4	2.5†	2.9	2.2	2.3	2.1	2.2	2.0	1.8	2.0	+0.3	
College Plans:																				
None or under 4 years	5.1	7.2	7.1	6.7	9.6	9.6	10.1	9.2	9.4	7.7†	9.5	7.8	8.7	7.8	7.6	6.7	6.9	8.4	+1.5	
Complete 4 years	1.4	1.8	1.9	2.2	2.9	3.2	2.9	2.7	2.1	2.3†	2.6	2.0	1.9	1.7	1.8	1.6	1.5	1.6	+0.1	
Region:																				
Northeast	1.5	1.6	1.9	2.9	3.4	3.7	2.8	2.4	2.6	2.3†	2.9	1.5	2.5	2.0	1.9	1.4	1.0	1.4	+0.4	
Midwest	1.6	2.4	1.7	2.2	3.8	3.9	3.8	3.5	3.4	3.5†	2.7	2.7	2.6	1.9	2.2	1.9	2.0	2.0	-0.1	
South	1.9	2.7	2.8	2.4	3.3	3.9	3.4	3.7	2.9	2.7†	4.0	2.9	2.6	2.4	2.9	2.3	1.7	2.3	+0.6	
West	2.8	3.2	4.2	3.9	4.2	5.1	4.8	3.5	2.4	2.7†	3.3	2.9	2.7	2.6	2.3	2.4	2.8	2.5	-0.3	
Population Density:																				
Large MSA	2.1	2.2	2.2	3.1	4.0	3.8	3.3	2.9	2.5	2.3†	2.7	2.0	2.2	1.9	2.2	1.4	1.5	2.1	+0.6	
Other MSA	2.0	3.0	3.1	3.1	3.8	4.8	4.0	3.4	3.1	3.0†	3.6	2.4	2.5	2.6	2.4	2.4	2.0	2.3	+0.3	
Non-MSA	1.5	2.0	1.8	1.6	3.0	3.2	3.5	3.8	2.8	3.2†	3.6	3.5	3.3	2.1	2.7	2.5	2.4	1.7	-0.7	
Parental Education: <sup>b</sup>																				
1.0–2.0 (Low)	3.9	3.7	3.5	3.1	5.1	4.8	5.0	5.0	4.8	5.4†	5.9	4.4	4.3	4.8	3.4	2.9	3.0	4.2	+1.2	
2.5–3.0	2.2	2.3	2.7	2.8	3.8	4.7	3.9	3.4	3.5	3.2†	3.9	3.2	3.2	2.5	3.3	2.6	2.0	2.4	+0.4	
3.5–4.0	1.6	2.5	2.8	2.8	4.1	4.1	3.8	3.7	2.8	2.8†	3.7	2.6	2.6	2.1	3.0	2.3	2.3	2.1	-0.1	
4.5–5.0	1.6	2.0	2.3	2.8	3.2	4.0	3.4	3.0	2.1	2.1†	2.4	2.1	2.0	2.0	1.8	1.9	1.6	1.7	+0.2	
5.5–6.0 (High)	1.4	2.4	2.0	2.5	3.2	3.5	3.5	3.1	2.5	3.1†	2.3	1.7	1.9	1.7	1.1	1.5	1.1	1.9	+0.7	
Race (2-year average): <sup>c</sup>																				
White	—	2.2	2.6	2.8	3.6	4.5	4.5	3.9	3.2	3.1	2.9†	2.7 <sup>d</sup>	2.8	2.5	2.4	2.5	2.2	2.1	-0.1	
African American	—	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.6	0.7	0.7†	0.7 <sup>d</sup>	0.9	1.2	1.3	1.1	0.7	0.8	+0.1	
Hispanic	—	3.8	4.1	4.0	4.0	4.1	4.2	4.6	4.5	4.0	3.4†	3.6 <sup>d</sup>	2.9	2.9	2.7	1.8	2.1	2.5	+0.4	

(Table continued on next page.)

**TABLE D-13 (cont.)**  
**Hallucinogens: Trends in Annual Prevalence of Use by Subgroups in Grade 8**

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* "‡" indicates some change in the question. See relevant footnote. See relevant figure to assess the impact of the wording changes.

Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

"—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>In 2001 the question text was changed on half of the questionnaire forms. "Other psychedelics" was changed to "other hallucinogens," and "shrooms" was added to the list of examples. The 2001 data are based on the changed forms only; *N* is one half of *N* indicated. In 2002 the remaining forms were changed. Beginning in 2002, the data are based on all forms. Data for any illicit drug other than marijuana and hallucinogens are also affected by these changes and have been treated in a parallel manner.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

<sup>d</sup>Due to changes in the question wording in half of the questionnaire forms in 2001, the 2002 entry comprises half of the 2001 sample data double-weighted (the half with the new version of the question) and all of the 2002 sample data.

**TABLE D-14**  
**Hallucinogens: Trends in Annual Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007– 2008
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001<sup>a</sup></u>	<u>2002<sup>a</sup></u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>change</u>
<i>Approximate wtd. N =</i>	<i>14,800</i>	<i>14,800</i>	<i>15,300</i>	<i>15,800</i>	<i>17,000</i>	<i>15,600</i>	<i>15,500</i>	<i>15,000</i>	<i>13,600</i>	<i>14,300</i>	<i>14,000</i>	<i>14,300</i>	<i>15,800</i>	<i>16,400</i>	<i>16,200</i>	<i>16,200</i>	<i>16,100</i>	<i>15,100</i>	
Total	4.0	4.3	4.7	5.8	7.2	7.8	7.6	6.9	6.9	6.1‡	6.2	4.7	4.1	4.1	4.0	4.1	4.4	3.9	-0.5
Gender:																			
Male	4.4	4.7	5.7	6.6	8.1	8.5	8.7	7.4	8.1	7.2‡	7.9	5.5	4.9	4.6	4.8	4.5	5.4	4.7	-0.8
Female	3.6	3.8	3.6	4.8	6.1	7.0	6.4	6.3	5.7	4.9‡	4.6	3.9	3.4	3.5	3.1	3.5	3.4	3.1	-0.3
College Plans:																			
None or under 4 years	7.5	7.5	9.1	10.4	12.5	14.5	13.6	14.2	14.3	12.3‡	5.0	10.3	8.9	9.3	9.4	10.0	10.0	10.4	+0.3
Complete 4 years	3.3	3.6	3.7	4.8	6.2	6.6	6.5	5.6	5.7	5.1‡	4.8	3.9	3.3	3.3	3.2	3.3	3.6	3.1	-0.6
Region:																			
Northeast	4.0	2.7	4.7	5.8	5.6	7.7	6.2	8.1	8.6	5.8‡	6.0	4.2	4.0	4.7	5.0	4.0	4.4	3.5	-0.8
Midwest	3.4	4.3	4.6	5.7	7.8	9.0	7.0	5.6	6.7	6.1‡	6.0	5.1	3.5	3.7	3.9	4.1	4.7	3.8	-1.0
South	3.6	3.9	3.6	5.1	7.3	7.5	8.3	7.6	6.5	5.7‡	5.3	4.0	3.9	3.6	3.5	3.5	3.6	4.1	+0.5
West	5.2	6.5	6.7	7.1	7.6	6.6	8.5	6.1	6.1	6.9‡	8.7	5.9	5.0	4.7	3.7	5.1	5.1	4.2	-0.9
Population Density:																			
Large MSA	4.1	4.6	4.9	6.0	7.1	8.6	7.8	6.3	5.8	7.5‡	5.0	4.7	3.2	2.9	3.4	4.1	3.9	3.9	-0.1
Other MSA	4.8	4.4	4.9	6.4	8.0	8.2	7.9	7.6	7.8	5.8‡	6.6	4.9	4.4	5.0	4.3	4.1	4.7	4.2	-0.6
Non-MSA	2.5	3.7	4.1	4.4	5.5	6.0	6.7	6.3	6.5	5.1‡	6.8	4.4	4.6	3.9	4.2	3.8	4.2	3.4	-0.9
Parental Education: <sup>b</sup>																			
1.0–2.0 (Low)	3.7	4.9	6.0	6.1	7.7	8.0	6.5	8.3	7.0	5.2‡	6.4	5.3	6.5	3.2	3.7	5.3	5.4	5.0	-0.3
2.5–3.0	4.3	4.2	4.5	5.5	7.6	8.5	7.3	8.2	8.1	5.8‡	6.7	5.2	4.7	4.8	4.5	4.5	4.6	4.1	-0.5
3.5–4.0	3.7	4.6	4.8	5.9	7.6	8.6	8.2	6.6	6.6	6.7‡	6.1	4.8	4.0	3.9	4.0	3.8	4.5	4.2	-0.3
4.5–5.0	4.1	3.8	4.5	5.5	6.6	6.9	8.2	6.1	6.6	6.3‡	6.0	4.0	3.5	3.7	4.0	3.9	4.2	3.3	-0.9
5.5–6.0 (High)	4.6	4.2	4.6	6.2	6.5	7.2	6.8	6.0	6.5	6.2‡	5.8	5.2	3.4	4.1	3.7	4.0	3.9	3.3	-0.6
Race (2-year average): <sup>c</sup>																			
White	—	4.9	5.1	5.6	7.1	8.6	8.9	8.4	8.2	7.6	6.6‡	5.6 <sup>d</sup>	5.3	4.9	4.7	4.7	4.9	4.8	-0.2
African American	—	0.2	0.6	1.1	1.2	0.9	1.0	1.1	1.0	1.0	1.3‡	1.4 <sup>d</sup>	1.0	0.8	1.2	1.4	1.0	1.1	+0.1
Hispanic	—	3.6	4.5	5.7	6.3	6.6	7.3	7.3	6.4	5.2	4.4‡	4.5 <sup>d</sup>	3.9	3.8	4.0	3.5	2.8	3.6	+0.8

(Table continued on next page.)

**TABLE D-14 (cont.)**  
**Hallucinogens: Trends in Annual Prevalence of Use by Subgroups in Grade 10**

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* "‡" indicates some change in the question. See relevant footnote. See relevant figure to assess the impact of the wording changes.

Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ .

"—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>In 2001 the question text was changed on half of the questionnaire forms. "Other psychedelics" was changed to "other hallucinogens," and "shrooms" was added to the list of examples. The 2001 data are based on the changed forms only;  $N$  is one half of  $N$  indicated. In 2002 the remaining forms were changed. Beginning in 2002, the data are based on all forms. Data for any illicit drug other than marijuana and hallucinogens are also affected by these changes and have been treated in a parallel manner.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

<sup>d</sup>Due to changes in the question wording in half of the questionnaire forms in 2001, the 2002 entry comprises half of the 2001 sample data double-weighted (the half with the new version of the question) and all of the 2002 sample data.

**TABLE D-15**  
**Hallucinogens:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	<i>9,400</i>	<i>15,400</i>	<i>17,100</i>	<i>17,800</i>	<i>15,500</i>	<i>15,900</i>	<i>17,500</i>	<i>17,700</i>	<i>16,300</i>	<i>15,900</i>	<i>16,000</i>	<i>15,200</i>	<i>16,300</i>	<i>16,300</i>	<i>16,700</i>	<i>15,200</i>	<i>15,000</i>
Total	11.2	9.4	8.8	9.6	9.9	9.3	9.0	8.1	7.3	6.5	6.3	6.0	6.4	5.5	5.6	5.9	5.8
Adjusted <sup>b</sup>	—	—	—	—	11.8	10.4	10.1	9.0	8.3	7.3	7.6	7.6	6.7	5.8	6.2	6.0	6.1
Gender:																	
Male	13.7	11.6	10.8	11.6	11.8	11.7	10.9	9.6	8.6	7.9	8.1	7.2	7.5	7.2	7.4	7.7	7.5
Female	9.0	6.9	6.5	7.3	7.6	6.7	6.8	6.1	5.5	4.7	4.4	4.7	5.2	3.7	3.6	3.8	3.9
College Plans:																	
None or under 4 years	—	11.2	10.6	11.0	11.3	11.2	10.7	9.5	8.9	8.3	7.7	7.4	7.9	6.4	7.1	6.6	7.0
Complete 4 years	—	6.9	6.4	7.3	7.5	7.1	7.4	6.2	5.4	4.7	5.0	4.7	5.4	4.7	4.8	5.3	5.3
Region:																	
Northeast	13.2	10.9	10.6	13.0	12.9	12.2	12.9	11.4	8.7	11.3	9.9	7.9	7.5	5.8	5.6	6.6	7.0
Midwest	13.0	10.3	9.7	10.7	11.1	11.3	10.3	9.1	8.9	6.0	6.8	6.6	6.9	5.3	6.6	5.7	6.5
South	8.5	7.4	6.8	6.3	5.7	5.4	4.1	4.6	5.2	3.9	3.2	3.3	4.8	5.2	4.9	5.0	3.7
West	10.2	9.3	8.2	9.6	11.0	9.2	10.4	7.8	6.3	7.0	6.3	7.2	7.4	6.0	5.5	6.9	7.3
Population Density:																	
Large MSA	13.9	11.1	9.9	11.9	12.3	11.6	12.0	10.9	9.2	8.8	8.3	7.6	7.9	6.5	5.4	5.7	5.1
Other MSA	12.1	9.8	9.1	9.3	10.5	9.8	9.0	7.6	7.6	6.3	6.1	5.9	6.3	6.0	5.9	6.6	7.7
Non-MSA	8.5	7.7	7.5	8.3	7.1	7.1	6.8	6.5	5.3	5.0	5.0	4.9	5.3	3.5	5.0	4.5	3.3
Parental Education: <sup>c</sup>																	
1.0–2.0 (Low)	8.9	7.4	6.8	7.7	7.1	8.0	6.7	6.5	6.5	5.4	4.8	5.4	5.8	4.9	4.2	3.8	4.9
2.5–3.0	10.2	10.0	9.1	9.6	9.6	9.5	8.9	8.0	6.8	6.7	6.4	6.0	6.2	4.2	4.9	4.6	4.9
3.5–4.0	10.9	9.8	9.2	9.7	9.7	9.2	9.2	8.6	7.7	6.3	7.2	6.3	6.0	4.8	5.6	6.5	6.2
4.5–5.0	11.1	10.1	8.8	10.2	10.9	9.1	9.4	7.8	7.0	5.9	6.2	5.5	6.8	6.7	6.6	6.8	6.1
5.5–6.0 (High)	8.9	9.4	9.5	10.2	11.7	9.9	10.6	9.0	7.0	7.6	4.3	5.9	7.2	7.2	7.0	8.2	7.3
Race (2-year average): <sup>d</sup>																	
White	—	—	9.8	9.9	10.5	10.3	10.0	9.3	8.3	7.5	7.0	6.7	6.8	6.8	6.4	6.7	6.8
African American	—	—	2.4	2.3	2.0	1.9	1.9	1.8	2.2	1.7	1.2	1.6	1.5	1.0	0.9	0.8	0.6
Hispanic	—	—	7.9	7.2	7.0	7.1	7.0	7.7	6.6	5.2	5.7	5.7	5.0	4.0	3.2	3.3	4.4

(Table continued on next page.)



**TABLE D-15 (cont.)**  
**Hallucinogens:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																	2007– 2008
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001<sup>e</sup></u>	<u>2002<sup>e</sup></u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>change</u>
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	5.9	7.4	7.6	9.3	10.1	9.8	9.0	9.4	8.1‡	9.1	6.6	5.9	6.2	5.5	4.9	5.4	5.9	+0.5
Adjusted <sup>b</sup>	6.2	7.8	7.8	9.7	10.7	10.0	9.2	9.8	8.7‡	9.7	7.2	6.5	6.4	5.9	5.3	5.8	6.1	+0.3
Gender:																		
Male	7.1	8.9	9.2	11.9	12.4	12.0	11.0	11.4	9.6‡	11.1	8.4	7.8	8.4	7.4	6.2	7.5	7.8	+0.3
Female	4.7	5.6	5.8	6.3	7.3	7.4	6.8	7.4	6.3‡	6.8	4.7	3.8	3.8	3.4	3.6	3.3	3.9	+0.5
College Plans:																		
None or under 4 years	7.8	8.1	8.4	11.9	12.1	11.3	12.0	10.5	10.3‡	10.4	9.8	8.2	7.7	7.8	7.0	8.3	8.4	+0.1
Complete 4 years	5.1	6.9	7.0	8.2	9.0	9.0	7.8	8.7	7.0‡	8.0	5.5	5.0	5.4	4.7	4.4	4.6	5.2	+0.6
Region:																		
Northeast	7.1	9.0	9.0	10.1	13.3	13.9	10.7	9.8	9.3‡	9.8	9.1	7.8	7.0	5.5	7.1	6.7	8.0	+1.3
Midwest	5.9	6.8	8.1	9.2	8.8	7.6	8.4	9.8	7.0‡	11.4	6.4	5.4	5.3	6.7	4.9	5.3	4.5	-0.8
South	4.7	5.9	6.7	8.8	8.9	9.2	8.5	8.6	6.9‡	5.8	5.6	4.9	5.7	5.2	4.1	4.2	5.7	+1.5
West	7.3	9.2	7.1	9.6	10.5	9.5	9.1	10.0	10.5‡	10.8	6.2	6.3	7.4	4.4	4.3	6.5	6.2	-0.3
Population Density:																		
Large MSA	6.2	7.3	8.1	11.0	10.5	8.8	8.7	8.4	8.9‡	1.5	6.8	4.4	5.6	5.5	6.0	6.2	6.9	+0.8
Other MSA	6.0	8.1	8.6	9.5	11.4	11.2	9.9	10.4	8.3‡	8.7	7.2	7.2	7.2	5.9	4.5	5.1	5.7	+0.5
Non-MSA	5.5	6.3	5.1	7.0	7.4	8.3	7.4	8.8	7.0‡	7.3	5.2	5.5	4.8	4.5	4.1	4.8	5.3	+0.5
Parental Education: <sup>c</sup>																		
1.0–2.0 (Low)	3.6	4.9	5.0	7.2	7.4	7.3	7.9	9.0	7.0‡	6.3	5.1	5.3	4.9	3.0	4.9	3.9	4.4	+0.5
2.5–3.0	5.6	5.9	7.0	8.7	8.8	8.5	8.8	8.6	7.4‡	9.1	6.6	4.9	5.6	5.7	5.1	4.9	5.0	+0.1
3.5–4.0	6.0	7.5	8.0	9.5	10.3	9.9	9.5	10.6	8.2‡	9.4	7.1	6.4	6.6	5.4	5.1	5.5	5.5	0.0
4.5–5.0	6.2	8.9	7.7	9.6	10.5	10.4	8.6	9.3	7.7‡	8.6	6.7	6.5	6.4	5.7	4.6	5.4	6.7	+1.3
5.5–6.0 (High)	7.4	8.9	9.0	9.5	11.4	11.6	9.4	8.4	9.6‡	8.8	5.9	5.3	6.1	5.7	4.6	6.7	7.2	+0.5
Race (2-year average): <sup>d</sup>																		
White	6.9	7.9	8.6	9.5	10.8	11.6	11.3	10.7	9.9	9.0‡	8.4 <sup>f</sup>	7.2	7.0	6.7	6.0	6.2	6.9	+0.7
African American	0.7	0.8	1.2	1.2	1.7	1.9	1.4	1.2	1.6	1.4‡	1.2 <sup>f</sup>	1.3	1.2	1.3	1.5	1.4	1.4	-0.1
Hispanic	4.6	5.3	5.8	7.1	8.3	7.3	6.8	7.9	9.6	7.8‡	6.0 <sup>f</sup>	4.6	4.1	3.9	3.8	3.9	3.5	-0.3

(Table continued on next page.)

**TABLE D-15 (cont.)**  
**Hallucinogens:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 12**

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* “±” indicates some change in the question. See relevant footnote. See relevant figure to assess the impact of the wording changes.

Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ .

“—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>All data are unadjusted for the underreporting of PCP, unless otherwise indicated.

<sup>b</sup>Adjusted for the underreporting of PCP. See text for details.

<sup>c</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>d</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

<sup>e</sup>In 2001 the question text was changed on half of the questionnaire forms. “Other psychedelics” was changed to “other hallucinogens,” and “shrooms” was added to the list of examples. The 2001 data are based on the changed forms only;  $N$  is one half of  $N$  indicated. In 2002 the remaining forms were changed. Beginning in 2002, the data are based on all forms. Data for any illicit drug other than marijuana and hallucinogens are also affected by these changes and have been treated in a parallel manner.

<sup>f</sup>Due to changes in the question wording in half of the questionnaire forms in 2001, the 2002 entry comprises half of the 2001 sample data double-weighted (the half with the new version of the question) and all of the 2002 sample data.

**TABLE D-16**  
**LSD: Trends in Annual Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007– 2008	
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	change	
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		
Total	1.7	2.1	2.3	2.4	3.2	3.5	3.2	2.8	2.4	2.4	2.2	1.5	1.3	1.1	1.2	0.9	1.1	1.3	+0.2	
Gender:																				
Male	2.0	2.1	2.5	2.6	3.4	3.7	3.5	3.2	2.7	2.6	2.3	1.7	1.4	1.1	1.2	0.8	1.1	1.4	+0.3	
Female	1.3	2.0	2.1	2.1	2.9	3.2	2.8	2.4	2.0	2.2	2.1	1.3	1.1	1.1	1.1	1.0	1.0	1.2	+0.1	
College Plans:																				
None or under 4 years	4.5	6.4	6.4	6.2	8.5	8.2	9.3	7.8	8.2	6.7	5.8	5.7	4.3	4.7	4.1	3.4	3.9	5.2	+1.3	
Complete 4 years	1.2	1.5	1.6	1.8	2.5	2.7	2.5	2.2	1.7	2.0	1.8	1.1	0.9	0.7	0.8	0.7	0.8	1.0	+0.2	
Region:																				
Northeast	1.3	1.4	1.8	2.6	2.9	2.9	2.3	2.1	2.2	1.9	1.9	0.9	1.4	1.0	0.9	0.5	0.6	0.8	+0.2	
Midwest	1.4	1.8	1.4	1.7	3.5	3.4	3.3	2.5	2.7	3.0	1.7	1.8	1.2	0.9	0.9	0.7	1.2	1.3	+0.1	
South	1.8	2.4	2.4	2.1	2.8	3.4	3.0	3.2	2.5	2.4	2.7	1.8	1.3	1.2	1.5	1.1	1.0	1.4	+0.4	
West	2.2	2.9	3.7	3.3	3.8	4.3	4.3	3.2	1.9	2.3	2.0	1.2	1.2	1.2	1.1	1.0	1.4	1.4	+0.1	
Population Density:																				
Large MSA	1.9	2.0	2.0	2.7	3.6	3.2	2.9	2.6	2.2	2.0	1.8	1.3	1.3	1.1	1.0	0.6	0.7	1.4	+0.7	
Other MSA	1.7	2.5	2.8	2.8	3.3	4.1	3.6	2.9	2.7	2.6	2.3	1.5	1.2	1.3	1.1	1.1	1.2	1.3	+0.1	
Non-MSA	1.3	1.6	1.4	1.3	2.4	2.6	2.8	2.9	1.9	2.8	2.4	1.9	1.4	0.7	1.4	1.0	1.3	1.0	-0.3	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	3.5	3.1	3.1	2.8	4.6	4.4	4.7	4.4	3.7	4.9	4.1	3.4	2.3	2.8	1.7	1.8	1.8	2.4	+0.6	
2.5–3.0	1.8	2.1	2.3	2.6	3.1	4.0	3.2	2.8	2.7	2.9	2.6	2.0	1.4	1.2	1.7	1.0	1.1	1.6	+0.5	
3.5–4.0	1.4	2.0	2.4	2.4	3.6	3.5	3.4	3.1	2.4	2.2	2.4	1.3	1.3	1.0	1.5	1.0	1.0	1.1	+0.1	
4.5–5.0	1.4	1.5	2.1	2.1	2.6	3.4	2.9	2.5	1.9	1.8	1.5	1.2	1.1	1.0	0.6	0.7	1.0	1.0	+0.1	
5.5–6.0 (High)	1.3	2.0	2.0	2.1	2.9	3.0	2.9	2.4	1.9	2.3	1.3	0.8	0.8	0.6	0.4	0.7	0.6	1.3	+0.7	
Race (2-year average): <sup>b</sup>																				
White	—	1.9	2.3	2.5	3.1	3.9	3.9	3.2	2.6	2.6	2.6	2.0	1.5	1.1	1.0	1.0	1.0	1.1	+0.1	
African American	—	0.5	0.4	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.6	0.8	0.9	0.6	0.3	0.6	+0.2	
Hispanic	—	3.3	3.7	3.6	3.3	3.5	3.9	4.2	3.9	3.5	3.2	2.4	1.7	1.8	1.7	1.0	1.3	1.6	+0.3	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-17**  
**LSD: Trends in Annual Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007– 2008 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100	
Total	3.7	4.0	4.2	5.2	6.5	6.9	6.7	5.9	6.0	5.1	4.1	2.6	1.7	1.6	1.5	1.7	1.9	1.8	-0.1
Gender:																			
Male	3.9	4.3	5.1	5.9	7.4	7.6	7.6	6.3	7.0	5.9	5.1	3.1	1.9	1.8	1.9	2.1	2.3	2.2	0.0
Female	3.4	3.6	3.2	4.3	5.5	6.2	5.8	5.4	5.1	4.3	3.1	2.0	1.6	1.4	1.0	1.3	1.5	1.3	-0.2
College Plans:																			
None or under 4 years	6.8	7.0	8.4	9.4	11.1	13.1	12.8	12.4	13.1	11.1	9.9	6.0	4.4	4.5	4.1	5.1	4.3	5.1	+0.8
Complete 4 years	3.0	3.4	3.3	4.2	5.6	5.8	5.7	4.7	4.9	4.1	3.2	2.0	1.3	1.2	1.1	1.2	1.5	1.3	-0.2
Region:																			
Northeast	3.6	2.6	3.8	5.1	4.7	6.4	5.2	7.1	7.5	4.1	4.0	2.2	1.8	1.7	2.3	1.7	1.8	1.5	-0.3
Midwest	3.2	4.1	4.4	5.2	7.3	8.3	6.0	4.5	6.0	5.4	4.3	2.8	1.7	1.5	1.2	1.6	2.2	2.0	-0.2
South	3.3	3.7	3.2	4.6	6.8	6.8	7.9	6.5	5.8	5.0	3.5	2.3	1.7	1.4	1.4	1.7	1.6	1.8	+0.2
West	4.8	5.9	6.1	6.3	6.5	5.7	7.4	5.2	5.1	5.9	5.3	3.2	1.7	1.9	1.0	1.8	1.9	1.7	-0.3
Population Density:																			
Large MSA	3.8	4.4	4.4	5.4	6.6	7.6	7.0	5.4	4.9	6.4	3.8	2.6	1.3	1.1	1.2	1.6	1.6	1.5	-0.1
Other MSA	4.4	4.1	4.4	5.9	7.1	7.4	7.0	6.6	6.7	4.8	4.1	2.7	1.7	1.9	1.5	1.7	2.1	1.9	-0.2
Non-MSA	2.3	3.5	3.7	3.7	5.0	5.2	6.0	5.0	5.9	4.4	4.6	2.3	2.3	1.5	1.8	1.8	1.7	1.7	0.0
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	3.1	4.4	5.5	5.5	6.9	7.6	5.9	7.9	6.3	4.9	3.9	2.7	3.7	1.3	1.8	2.5	2.9	2.2	-0.7
2.5–3.0	4.0	4.2	4.2	5.1	6.9	7.6	6.6	7.0	7.3	5.1	4.8	2.9	2.0	1.7	1.7	2.1	2.0	1.6	-0.4
3.5–4.0	3.4	4.1	4.2	5.3	6.9	7.9	7.4	5.6	5.8	5.6	4.3	2.8	1.7	1.4	1.6	1.6	1.8	1.9	+0.1
4.5–5.0	3.8	3.6	3.9	4.8	6.0	6.0	7.0	5.0	5.7	5.0	3.8	2.0	1.2	1.4	1.2	1.3	1.7	1.5	-0.2
5.5–6.0 (High)	4.2	3.9	3.9	5.4	5.9	5.8	6.0	4.6	5.3	5.0	3.5	2.4	1.2	1.6	1.4	1.3	1.7	1.9	+0.2
Race (2-year average): <sup>b</sup>																			
White	—	4.6	4.6	5.0	6.4	7.7	7.9	7.3	7.0	6.5	5.2	3.8	2.4	1.9	1.7	1.8	2.0	2.0	0.0
African American	—	0.2	0.5	0.9	1.0	0.8	0.9	1.0	0.9	0.9	0.9	0.6	0.4	0.4	0.6	0.7	0.6	0.7	+0.1
Hispanic	—	3.2	4.1	5.0	5.7	6.1	6.7	6.6	5.6	4.6	3.7	2.9	2.4	1.7	1.6	1.6	1.4	1.8	+0.4

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-18**  
**LSD: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
<i>Approximate wtd. N =</i>	9,400	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	7.2	6.4	5.5	6.3	6.6	6.5	6.5	6.1	5.4	4.7	4.4	4.5	5.2	4.8	4.9	5.4	5.2
Gender:																	
Male	9.6	7.9	7.1	7.8	8.0	8.1	8.0	7.4	6.7	5.8	5.9	5.5	6.4	6.5	6.5	7.1	6.8
Female	5.6	4.6	3.9	4.5	4.8	4.8	4.7	4.3	3.8	3.1	2.8	3.4	3.9	3.0	3.2	3.6	3.4
College Plans:																	
None or under 4 years	—	7.5	6.7	7.2	8.0	8.2	8.0	7.5	6.9	6.1	5.6	5.9	6.6	5.7	6.5	6.2	6.4
Complete 4 years	—	4.7	4.0	4.6	4.5	4.7	5.0	4.3	3.8	3.1	3.4	3.3	4.3	4.1	4.2	4.8	4.7
Region:																	
Northeast	8.5	8.0	7.2	8.0	7.9	6.8	9.0	8.0	5.6	7.0	5.4	5.1	5.3	4.7	5.1	5.9	6.1
Midwest	8.7	7.0	6.5	7.9	7.9	8.5	7.8	7.3	7.0	4.4	5.3	5.3	5.7	4.7	6.0	5.3	5.9
South	5.4	4.7	3.7	3.7	3.4	4.3	3.4	3.9	4.4	3.5	2.8	2.6	4.2	4.7	4.2	4.7	3.4
West	7.6	5.9	5.0	5.8	8.3	6.5	6.3	4.8	4.2	4.5	4.6	5.9	6.2	5.2	4.4	6.4	6.5
Population Density:																	
Large MSA	9.4	7.9	6.4	7.2	7.6	7.3	8.0	7.3	5.7	4.7	4.1	4.4	5.6	5.2	4.6	5.2	4.3
Other MSA	7.4	6.8	5.6	6.1	7.3	6.8	6.9	6.3	6.0	4.9	4.8	4.9	5.4	5.6	5.3	6.1	7.0
Non-MSA	5.7	4.8	4.8	5.8	4.9	5.6	4.9	4.8	4.4	4.2	4.1	4.0	4.4	3.1	4.3	4.2	3.0
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	6.1	4.8	4.5	5.0	4.5	5.2	4.8	5.0	4.9	4.1	3.0	3.9	4.4	4.1	3.6	3.4	4.3
2.5–3.0	6.5	6.8	5.8	6.1	6.3	6.8	6.5	6.1	5.1	4.8	4.5	4.6	4.9	3.8	4.3	4.4	4.4
3.5–4.0	6.4	6.7	5.6	6.1	6.7	6.7	6.7	6.4	5.7	4.3	4.7	4.6	4.9	4.2	5.1	6.0	5.5
4.5–5.0	7.0	6.4	5.3	6.7	7.5	5.7	6.4	5.7	5.2	4.3	4.8	4.1	5.8	6.2	5.9	6.2	5.3
5.5–6.0 (High)	6.5	6.4	6.1	7.0	7.4	7.2	7.7	6.0	4.8	5.0	3.8	4.7	6.1	6.2	5.5	7.4	7.1
Race (2-year average): <sup>b</sup>																	
White	—	—	6.3	6.3	6.8	7.0	7.2	6.9	6.2	5.5	5.0	4.9	5.4	5.8	5.7	6.1	6.3
African American	—	—	1.3	1.3	1.2	1.1	1.0	0.9	0.9	0.7	0.7	1.0	0.8	0.6	0.7	0.6	0.6
Hispanic	—	—	6.1	5.0	4.9	5.2	4.5	5.2	5.0	4.1	3.9	3.9	4.0	3.1	2.3	2.7	3.6

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

(Table continued on next page.)

**TABLE D-18 (cont.)**  
**LSD: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																	2007– 2008 change	
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>		
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	5.6	6.8	6.9	8.4	8.8	8.4	7.6	8.1	6.6	6.6	3.5	1.9	2.2	1.8	1.7	2.1	2.7	+0.6	
Gender:																			
Male	6.7	8.4	8.4	10.7	10.9	10.3	9.3	10.0	7.6	7.9	4.4	2.5	3.1	2.7	2.1	3.0	3.7	+0.7	
Female	4.4	5.1	5.3	5.8	6.5	6.2	5.7	6.1	5.3	5.0	2.3	1.2	1.2	0.9	1.1	1.2	1.6	+0.4	
College Plans:																			
None or under 4 years	7.6	7.5	7.7	11.2	11.4	10.3	10.9	9.4	8.7	8.2	5.7	3.0	3.2	3.4	2.6	4.1	4.8	+0.8	
Complete 4 years	4.8	6.4	6.3	7.3	7.7	7.4	6.3	7.3	5.6	5.7	2.7	1.4	1.8	1.3	1.4	1.6	2.1	+0.5	
Region:																			
Northeast	6.6	8.6	8.2	8.8	11.9	11.8	8.2	7.8	7.1	6.7	5.4	2.4	2.3	1.7	3.0	2.1	3.0	+0.9	
Midwest	5.5	6.3	7.3	8.3	7.7	7.0	7.6	9.1	5.9	8.6	3.7	1.8	1.8	2.1	1.6	2.7	2.5	-0.3	
South	4.4	5.5	6.3	8.1	7.9	8.1	7.4	7.7	6.0	4.7	3.1	1.9	2.6	1.8	1.4	1.7	3.0	+1.3 s	
West	7.0	8.5	6.2	8.5	8.8	6.9	7.1	7.7	7.9	6.6	2.1	1.4	2.3	1.6	1.1	2.0	2.2	+0.2	
Population Density:																			
Large MSA	5.7	6.7	7.3	9.7	9.0	7.7	7.2	6.8	6.7	7.7	3.3	1.5	1.9	1.8	2.2	2.4	2.7	+0.3	
Other MSA	5.8	7.6	7.9	8.7	10.0	9.3	8.4	9.2	6.9	6.4	4.0	2.2	2.6	1.9	1.5	2.0	2.8	+0.7	
Non-MSA	5.1	5.6	4.6	6.5	6.5	7.3	6.1	7.4	5.9	5.6	2.7	1.7	1.9	1.7	1.2	1.8	2.6	+0.8	
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	3.3	4.6	4.4	6.6	6.7	6.8	6.8	8.6	5.6	5.4	2.4	1.5	3.2	1.7	1.5	2.3	2.3	0.0	
2.5–3.0	5.2	5.6	6.5	8.1	8.2	7.3	7.8	7.6	6.4	6.7	3.4	1.9	2.4	1.9	2.0	1.9	2.4	+0.5	
3.5–4.0	5.7	7.0	7.4	8.6	9.3	8.5	8.2	9.0	6.7	6.3	4.0	1.7	1.8	1.5	1.9	2.1	2.4	+0.3	
4.5–5.0	5.8	8.3	6.9	8.6	8.7	8.6	6.5	8.0	6.0	6.7	3.1	1.7	2.0	1.7	1.3	2.0	2.8	+0.8	
5.5–6.0 (High)	7.0	8.2	7.9	8.3	9.2	9.5	7.3	6.4	7.0	5.6	2.8	1.7	2.2	1.7	1.1	2.3	3.2	+0.9	
Race (2-year average): <sup>b</sup>																			
White	6.4	7.4	8.0	8.6	9.7	10.1	9.5	9.1	8.3	7.5	5.8	3.0	2.2	2.2	1.8	2.1	2.8	+0.7	
African American	0.6	0.6	0.9	1.0	1.3	1.6	1.1	0.8	1.3	1.3	0.8	0.8	0.8	0.7	0.9	0.8	0.8	0.0	
Hispanic	4.1	5.1	5.4	6.4	7.4	6.3	5.9	7.0	7.6	5.8	3.8	1.8	1.7	1.7	1.4	1.8	1.8	-0.1	

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-19**  
**Hallucinogens other than LSD: Trends in Annual Prevalence of Use**  
**by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007– 2008	
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001<sup>a</sup></u>	<u>2002<sup>a</sup></u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	change	
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		
Total	0.7	1.1	1.0	1.3	1.7	2.0	1.8	1.6	1.5	1.4‡	2.4	2.1	2.1	1.9	2.0	1.8	1.6	1.6	0.0	
Gender:																				
Male	0.8	1.1	1.2	1.6	1.9	2.1	2.1	1.8	1.8	1.5‡	2.8	2.4	2.4	1.9	2.2	1.8	1.7	1.6	-0.1	
Female	0.6	1.0	0.9	0.9	1.4	1.7	1.4	1.4	1.1	1.3‡	2.0	1.7	1.8	1.8	1.8	1.7	1.4	1.5	+0.1	
College Plans:																				
None or under 4 years	1.7	3.6	2.9	3.6	4.8	5.2	4.7	5.1	5.3	3.9‡	7.4	6.5	7.5	6.5	6.1	5.5	6.0	6.9	+0.9	
Complete 4 years	0.5	0.7	0.7	1.0	1.3	1.4	1.4	1.2	1.0	1.2‡	1.8	1.6	1.5	1.4	1.6	1.4	1.2	1.1	-0.1	
Region:																				
Northeast	0.4	0.6	0.7	1.4	1.8	2.1	1.7	1.2	1.4	1.3‡	2.1	1.3	1.9	1.6	1.5	1.2	0.8	1.0	+0.2	
Midwest	0.6	1.3	0.6	1.1	1.6	1.8	1.8	1.9	1.7	1.8‡	1.8	2.1	2.2	1.7	1.9	1.7	1.7	1.4	-0.3	
South	0.7	1.0	1.0	1.0	1.5	1.7	1.4	1.8	1.6	1.3‡	2.9	2.2	2.2	1.9	2.4	1.8	1.4	1.7	+0.3	
West	1.4	1.3	1.9	1.9	1.9	2.6	2.7	1.3	1.1	1.4‡	2.4	2.6	2.3	2.2	2.0	2.2	2.3	1.8	-0.5	
Population Density:																				
Large MSA	0.7	0.8	0.7	1.6	1.6	1.8	1.4	1.3	1.1	1.2‡	1.9	1.6	1.6	1.4	2.0	1.2	1.3	1.4	+0.2	
Other MSA	0.7	1.3	1.3	1.4	1.8	2.2	1.9	1.6	1.5	1.7‡	2.6	1.9	2.1	2.1	2.0	2.0	1.6	1.7	+0.1	
Non-MSA	0.7	1.0	0.9	0.8	1.5	1.7	1.9	2.0	1.9	1.3‡	2.6	3.0	3.0	2.0	2.2	2.1	2.0	1.3	-0.6	
Parental Education: <sup>b</sup>																				
1.0–2.0 (Low)	1.5	1.8	1.4	1.6	2.4	2.2	2.6	2.7	2.6	2.5‡	5.0	3.4	3.5	3.9	2.7	2.3	2.5	3.1	+0.6	
2.5–3.0	0.8	0.7	1.1	1.1	1.7	2.1	2.0	1.3	1.9	1.5‡	2.3	2.6	2.8	2.0	2.9	2.2	1.5	1.7	+0.1	
3.5–4.0	0.4	1.2	1.2	1.2	1.8	2.0	1.6	1.8	1.3	1.3‡	2.6	1.9	2.2	1.7	2.6	1.8	1.9	1.7	-0.3	
4.5–5.0	0.8	0.9	0.7	1.5	1.6	2.0	1.6	1.5	0.9	1.1‡	1.6	1.7	1.5	1.6	1.6	1.7	1.2	1.2	0.0	
5.5–6.0 (High)	0.8	1.3	0.9	1.5	1.7	1.4	1.9	1.9	1.5	2.0‡	1.9	1.5	1.6	1.6	1.0	1.2	0.9	1.3	+0.5	
Race (2-year average): <sup>c</sup>																				
White	—	0.9	1.0	1.2	1.7	2.1	2.1	1.8	1.6	1.6	1.4‡	1.5 <sup>d</sup>	2.3	2.2	2.1	2.2	1.8	1.7	-0.2	
African American	—	0.4	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3‡	0.4 <sup>d</sup>	0.6	0.8	0.9	0.9	0.6	0.6	0.0	
Hispanic	—	1.5	1.5	1.5	1.8	2.1	2.0	2.2	2.2	1.8	1.2‡	1.8 <sup>d</sup>	2.2	2.2	2.1	1.4	1.6	1.9	+0.3	

(Table continued on next page.)

**TABLE D-19 (cont.)**  
**Hallucinogens other than LSD: Trends in Annual Prevalence of Use**  
**by Subgroups in Grade 8**

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* "‡" indicates some change in the question. See relevant footnote. See relevant figure to assess the impact of the wording changes.

Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

"—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>In 2001 the question text was changed on half of the questionnaire forms. "Other psychedelics" was changed to "other hallucinogens," and "shrooms" was added to the list of examples. The 2001 data are based on the changed forms only; *N* is one half of *N* indicated. In 2002 the remaining forms were changed. Beginning in 2002, the data are based on all forms. Data for any illicit drug other than marijuana and hallucinogens are also affected by these changes and have been treated in a parallel manner.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

<sup>d</sup>Due to changes in the question wording in half of the questionnaire forms in 2001, the 2002 entry comprises half of the 2001 sample data double-weighted (the half with the new version of the question) and all of the 2002 sample data.



**TABLE D-20**  
**Hallucinogens other than LSD: Trends in Annual Prevalence of Use**  
**by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007–	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001 <sup>a</sup>	2002 <sup>a</sup>	2003	2004	2005	2006	2007	2008	2008	
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100		
Total	1.3	1.4	1.9	2.4	2.8	3.3	3.3	3.4	3.2	3.1‡	4.4	4.0	3.6	3.7	3.5	3.7	3.8	3.3	-0.5	
Gender:																				
Male	1.5	1.6	2.5	3.0	3.4	3.8	4.1	3.9	4.1	3.8‡	5.7	4.6	4.4	4.3	4.2	4.1	4.7	4.0	-0.7	
Female	1.1	1.1	1.2	1.7	2.1	2.7	2.5	2.8	2.3	2.4‡	3.1	3.4	2.8	3.2	2.9	3.1	3.0	2.6	-0.4	
College Plans:																				
None or under 4 years	2.5	2.7	3.7	4.8	5.3	6.2	4.8	7.3	6.7	6.1‡	10.9	8.8	7.3	8.2	8.5	9.0	8.9	9.0	+0.1	
Complete 4 years	1.1	1.1	1.5	1.9	2.3	2.7	3.0	2.6	2.6	2.6‡	3.3	3.3	2.9	3.1	2.8	3.0	3.2	2.6	-0.6 s	
Region:																				
Northeast	1.4	0.7	2.3	3.2	3.0	3.9	3.2	4.7	4.5	3.4‡	4.2	3.6	3.4	4.3	4.4	3.7	4.1	2.9	-1.1	
Midwest	1.0	1.2	1.7	1.9	2.2	3.2	3.4	3.2	2.8	3.3‡	4.0	4.3	2.9	3.3	3.6	3.7	4.0	3.3	-0.7	
South	1.3	1.2	1.5	2.1	2.7	3.1	3.1	3.2	2.7	2.9‡	3.6	3.4	3.5	3.3	3.0	3.0	3.1	3.5	+0.3	
West	1.6	2.6	2.5	3.0	3.5	3.0	3.6	2.5	3.3	3.0‡	6.7	5.1	4.5	4.2	3.3	4.7	4.4	3.6	-0.8	
Population Density:																				
Large MSA	1.4	1.5	1.9	2.4	2.7	3.4	3.3	3.1	3.1	3.9‡	3.4	4.0	2.8	2.7	2.9	3.8	3.4	3.3	-0.1	
Other MSA	1.4	1.4	1.9	2.5	3.0	3.5	3.2	3.4	3.5	2.9‡	4.8	4.0	3.9	4.4	3.9	3.7	4.1	3.6	-0.6	
Non-MSA	1.0	1.2	2.0	2.3	2.5	2.7	3.5	3.5	2.7	2.8‡	4.5	3.9	3.8	3.6	3.6	3.3	3.8	2.9	-0.8	
Parental Education: <sup>b</sup>																				
1.0–2.0 (Low)	1.5	1.5	2.0	2.6	3.3	3.4	2.4	2.9	3.4	2.5‡	4.8	4.4	5.2	2.8	3.1	4.7	4.5	4.7	+0.2	
2.5–3.0	1.2	1.0	1.4	1.8	2.7	3.4	2.7	4.2	3.0	2.6‡	4.4	4.3	4.2	4.5	4.1	3.8	3.9	3.3	-0.5	
3.5–4.0	1.3	1.7	2.3	2.3	3.0	3.2	3.6	3.0	2.8	3.2‡	4.3	4.0	3.3	3.6	3.6	3.4	4.1	3.5	-0.6	
4.5–5.0	1.2	1.5	1.9	2.6	2.5	3.3	3.7	3.0	3.7	3.7‡	4.4	3.5	3.2	3.5	3.5	3.7	3.8	2.9	-0.9	
5.5–6.0 (High)	1.8	1.1	2.1	2.8	2.5	3.5	3.6	3.7	3.7	3.7‡	3.9	4.6	3.0	3.5	3.3	3.8	3.3	2.6	-0.7	
Race (2-year average): <sup>c</sup>																				
White	—	1.5	1.8	2.3	2.8	3.4	3.9	4.0	4.0	3.8	3.4‡	4.0 <sup>d</sup>	4.7	4.4	4.2	4.2	4.4	4.2	-0.2	
African American	—	0.1	0.4	0.7	0.7	0.4	0.3	0.4	0.5	0.6	1.1‡	1.3 <sup>d</sup>	0.9	0.7	1.1	1.2	0.8	0.7	0.0	
Hispanic	—	1.3	1.5	1.9	2.0	2.1	2.4	2.8	2.6	2.0	1.6‡	2.5 <sup>d</sup>	2.9	3.2	3.5	3.0	2.3	2.9	+0.6	

(Table continued on next page.)

**TABLE D-20 (cont.)**  
**Hallucinogens other than LSD: Trends in Annual Prevalence of Use**  
**by Subgroups in Grade 10**

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* "‡" indicates some change in the question. See relevant footnote. See relevant figure to assess the impact of the wording changes.

Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

"—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>In 2001 the question text was changed on half of the questionnaire forms. "Other psychedelics" was changed to "other hallucinogens," and "shrooms" was added to the list of examples. The 2001 data are based on the changed forms only; *N* is one half of *N* indicated. In 2002 the remaining forms were changed. Beginning in 2002, the data are based on all forms. Data for any illicit drug other than marijuana and hallucinogens are also affected by these changes and have been treated in a parallel manner.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

<sup>d</sup>Due to changes in the question wording in half of the questionnaire forms in 2001, the 2002 entry comprises half of the 2001 sample data double-weighted (the half with the new version of the question) and all of the 2002 sample data.

**TABLE D-21**  
**Hallucinogens other than LSD: Trends in Annual Prevalence of Use**  
**by Subgroups in Grade 12**

	Percentage who used in last 12 months																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	9,400	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	9.4	7.0	6.9	7.3	6.8	6.2	5.6	4.7	4.1	3.8	3.6	3.0	3.2	2.1	2.2	2.1	2.0
Gender:																	
Male	12.1	8.8	8.9	8.8	8.0	8.0	6.9	5.7	4.9	4.8	4.6	3.4	3.7	2.7	3.1	3.0	2.7
Female	7.5	5.0	4.9	5.5	5.3	4.2	4.0	3.6	3.1	2.7	2.5	2.5	2.6	1.4	1.1	1.1	1.3
College Plans:																	
None or under 4 years	—	8.3	8.6	8.1	7.6	6.7	6.0	5.1	4.8	4.5	4.1	3.3	3.5	2.5	2.7	2.1	2.4
Complete 4 years	—	5.2	4.9	5.7	5.3	5.1	5.0	4.1	3.1	3.0	2.9	2.5	2.8	1.8	1.9	1.9	1.9
Region:																	
Northeast	12.0	7.8	8.2	10.3	10.2	10.0	9.0	8.1	6.1	8.4	7.1	5.1	4.8	2.6	2.5	2.9	3.5
Midwest	11.3	7.9	7.9	7.6	6.8	6.7	5.7	4.8	4.4	2.9	3.1	2.7	3.5	1.6	2.3	1.7	1.9
South	7.1	5.7	5.4	4.8	4.1	3.1	2.0	1.8	2.4	1.5	1.5	1.4	1.7	2.0	1.9	1.7	1.0
West	7.7	6.7	6.3	7.2	6.6	5.9	6.9	4.9	4.1	4.5	3.6	3.3	3.3	2.5	2.3	2.6	2.6
Population Density:																	
Large MSA	11.1	7.8	7.5	9.3	8.8	8.5	8.1	7.3	6.6	6.9	6.1	5.1	4.8	3.3	2.6	2.3	1.8
Other MSA	10.7	7.3	7.2	6.9	7.2	6.5	5.0	3.7	4.0	3.1	3.0	2.4	2.5	1.7	2.0	2.4	2.6
Non-MSA	6.8	6.1	6.1	6.1	4.7	4.1	4.4	4.0	2.4	2.4	2.4	2.1	2.9	1.6	2.1	1.5	1.2
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	7.5	5.1	5.4	5.7	4.7	5.8	3.9	3.7	3.6	2.8	2.7	2.3	3.4	2.7	2.0	1.5	1.9
2.5–3.0	8.7	7.6	6.9	7.2	6.5	5.9	5.1	4.7	3.6	3.8	3.5	3.1	2.9	1.5	1.8	1.2	1.6
3.5–4.0	9.1	7.5	7.4	7.3	6.6	5.8	5.8	4.8	4.5	3.6	4.1	3.2	3.0	1.8	1.8	2.2	2.0
4.5–5.0	9.7	8.4	7.0	7.8	7.5	6.4	6.0	4.7	3.9	3.8	3.6	2.7	3.3	2.2	2.6	2.8	2.4
5.5–6.0 (High)	7.4	7.2	7.8	7.9	9.2	7.2	7.0	6.7	4.6	5.3	2.6	2.8	3.5	3.1	3.3	3.6	2.4
Race (2-year average): <sup>b</sup>																	
White	—	—	7.6	7.6	7.5	7.0	6.3	5.6	4.7	4.3	4.0	3.5	3.4	3.0	2.4	2.4	2.4
African American	—	—	1.6	1.6	1.3	1.4	1.3	1.2	1.6	1.3	0.8	0.9	0.9	0.6	0.5	0.4	0.3
Hispanic	—	—	5.1	5.2	4.8	4.4	4.5	4.8	4.2	3.4	3.7	3.3	2.1	1.7	1.6	1.5	1.7

(Table continued on next page.)

**TABLE D-21 (cont.)**  
**Hallucinogens other than LSD: Trends in Annual Prevalence of Use**  
**by Subgroups in Grade 12**

	Percentage who used in last 12 months																	2007– 2008 change	
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001 <sup>c</sup>	2002 <sup>c</sup>	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	1.7	2.2	3.1	3.8	4.4	4.6	4.6	4.3	4.4†	5.9	5.4	5.4	5.6	5.0	4.6	4.8	5.0	+0.2	
Gender:																			
Male	2.3	3.0	4.3	5.3	5.7	5.9	6.0	5.4	5.8†	7.2	7.2	7.2	7.7	6.7	5.7	6.8	6.7	-0.1	
Female	1.2	1.3	1.9	2.1	2.8	3.2	3.0	3.1	2.9†	4.2	3.5	3.4	3.4	3.2	3.3	2.9	3.4	+0.5	
College Plans:																			
None or under 4 years	2.2	2.5	3.2	4.4	5.1	4.7	6.1	4.4	5.6†	7.3	7.9	7.3	6.9	6.8	6.5	7.2	6.3	-0.9	
Complete 4 years	1.5	2.0	2.9	3.4	4.0	4.4	3.9	4.0	3.8†	5.0	4.6	4.5	4.9	4.4	4.1	4.2	4.7	+0.5	
Region:																			
Northeast	2.5	2.6	5.1	5.3	6.1	6.6	6.3	5.5	5.0†	6.9	7.5	7.3	6.7	4.9	6.4	6.0	7.2	+1.2	
Midwest	1.8	2.0	3.1	3.2	3.5	2.8	4.1	3.7	3.6†	6.9	5.0	4.7	4.6	6.3	4.7	4.6	3.9	-0.7	
South	1.3	1.8	1.9	3.1	3.6	4.0	3.5	3.3	3.3†	3.1	4.5	4.3	4.9	4.7	3.8	3.8	4.6	+0.8	
West	1.8	2.9	3.6	4.5	5.4	6.1	5.5	5.7	6.9†	8.0	5.6	6.0	6.9	4.0	4.2	5.7	5.4	-0.3	
Population Density:																			
Large MSA	2.1	2.5	3.6	4.9	5.2	4.0	4.4	4.5	5.2†	7.6	5.9	3.9	5.2	5.1	5.5	5.5	6.0	+0.5	
Other MSA	1.7	2.2	3.6	3.7	4.7	5.4	5.1	4.2	4.3†	5.4	5.8	6.5	6.6	5.4	4.2	4.7	4.9	+0.2	
Non-MSA	1.4	2.0	1.8	2.7	3.1	3.6	3.7	4.2	3.8†	4.8	4.3	5.1	4.1	4.0	3.9	4.1	4.4	+0.3	
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	1.3	1.7	2.2	2.7	3.5	2.7	3.7	2.2	3.8†	3.8	4.3	4.7	3.3	2.9	4.9	3.5	3.4	-0.2	
2.5–3.0	1.6	1.5	2.4	3.4	3.0	3.5	3.9	3.3	3.6†	5.4	5.4	4.3	4.9	5.1	4.5	4.3	3.9	-0.4	
3.5–4.0	1.8	2.4	2.9	3.6	4.0	4.8	4.6	5.1	4.2†	6.1	5.6	5.9	6.0	4.9	4.9	4.9	4.8	-0.1	
4.5–5.0	1.7	2.7	3.7	4.2	5.2	5.3	5.0	4.4	4.6†	5.5	5.8	6.0	6.3	5.3	4.3	4.9	6.0	+1.0	
5.5–6.0 (High)	2.1	3.0	4.4	4.1	5.9	5.9	5.4	4.7	5.8†	6.6	5.1	4.8	5.6	5.3	4.5	5.8	6.1	+0.3	
Race (2-year average): <sup>b</sup>																			
White	2.2	2.2	3.0	3.8	4.4	5.2	5.6	5.2	4.8	4.7†	5.4 <sup>d</sup>	6.3	6.4	6.1	5.5	5.6	6.0	+0.4	
African American	0.3	0.5	0.7	0.8	0.8	0.7	0.6	0.6	1.0	0.9†	0.9 <sup>d</sup>	0.9	0.9	1.2	1.4	1.2	1.0	-0.2	
Hispanic	1.4	1.4	1.6	2.6	3.5	3.1	2.7	3.0	4.6	4.8†	4.1 <sup>d</sup>	4.1	3.7	3.6	3.5	3.4	3.0	-0.5	

(Table continued on next page.)

**TABLE D-21 (cont.)**  
**Hallucinogens other than LSD: Trends in Annual Prevalence of Use**  
**by Subgroups in Grade 12**

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* “±” indicates some change in the question. See relevant footnote. See relevant figure to assess the impact of the wording changes.

Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

“—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

<sup>c</sup>In 2001 the question text was changed on half of the questionnaire forms. “Other psychedelics” was changed to “other hallucinogens,” and “shrooms” was added to the list of examples. The 2001 data are based on the changed forms only; *N* is one half of *N* indicated. In 2002 the remaining forms were changed. Beginning in 2002, the data are based on all forms. Data for any illicit drug other than marijuana and hallucinogens are also affected by these changes and have been treated in a parallel manner.

<sup>d</sup>Due to changes in the question wording in half of the questionnaire forms in 2001, the 2002 entry comprises half of the 2001 sample data double-weighted (the half with the new version of the question) and all of the 2002 sample data.

**TABLE D-22**  
**Ecstasy (MDMA): Trends in Annual Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007– 2008 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	—	—	—	—	—	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		
Total	—	—	—	—	—	2.3	2.3	1.8	1.7	3.1	3.5	2.9	2.1	1.7	1.7	1.4	1.5	1.7	+0.2	
Gender:																				
Male	—	—	—	—	—	2.2	2.7	2.3	1.7	3.1	3.4	3.1	1.8	1.7	1.6	1.0	1.3	1.4	+0.1	
Female	—	—	—	—	—	2.3	2.0	1.3	1.7	3.0	3.7	2.6	2.2	1.8	1.7	1.7	1.7	2.0	+0.3	
College Plans:																				
None or under 4 years	—	—	—	—	—	4.8	6.1	4.8	5.3	6.5	9.2	9.1	6.9	5.4	5.9	3.8	5.4	6.9	+1.6	
Complete 4 years	—	—	—	—	—	1.9	2.0	1.5	1.2	2.7	2.9	2.3	1.5	1.3	1.3	1.2	1.1	1.3	+0.1	
Region:																				
Northeast	—	—	—	—	—	2.1	1.5	1.6	1.8	2.4	3.8	2.0	1.8	1.8	1.1	0.8	0.5	1.2	+0.7	
Midwest	—	—	—	—	—	1.7	1.7	1.7	1.4	3.5	2.9	2.3	2.1	1.4	1.7	1.6	1.2	1.4	+0.2	
South	—	—	—	—	—	2.8	2.3	2.7	1.8	3.2	3.7	3.7	2.5	1.9	2.1	2.0	1.8	1.8	-0.1	
West	—	—	—	—	—	2.3	3.8	0.8	1.7	2.9	3.6	3.0	1.6	1.7	1.5	0.7	1.9	2.2	+0.3	
Population Density:																				
Large MSA	—	—	—	—	—	2.9	1.8	1.8	1.6	3.0	3.1	2.6	1.8	2.1	1.6	1.1	1.4	1.9	+0.6	
Other MSA	—	—	—	—	—	2.5	3.1	2.1	1.8	3.4	4.3	3.3	1.9	1.9	1.6	1.6	1.5	1.7	+0.3	
Non-MSA	—	—	—	—	—	1.2	1.5	1.5	1.6	2.5	2.5	2.5	2.7	1.0	1.9	1.6	1.8	1.3	-0.6	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	—	—	—	—	—	2.9	2.2	2.1	2.5	4.2	5.8	6.0	3.6	3.6	2.5	2.8	3.1	4.1	+1.0	
2.5–3.0	—	—	—	—	—	2.2	2.4	1.4	2.0	3.9	4.3	3.6	3.1	2.2	3.0	1.5	1.9	1.7	-0.2	
3.5–4.0	—	—	—	—	—	2.2	2.9	2.6	1.5	2.8	2.4	2.9	2.1	1.7	1.7	1.2	1.1	2.1	+1.0	
4.5–5.0	—	—	—	—	—	2.6	2.0	1.4	1.2	3.1	3.3	2.4	1.4	1.2	1.1	1.3	1.4	1.0	-0.4	
5.5–6.0 (High)	—	—	—	—	—	2.4	2.7	2.5	2.3	2.0	3.0	1.2	2.0	1.7	0.9	1.2	0.8	0.8	0.0	
Race (2-year average): <sup>b</sup>																				
White	—	—	—	—	—	—	2.7	2.4	1.9	2.5	3.2	2.9	2.4	1.9	1.5	1.5	1.4	1.6	+0.1	
African American	—	—	—	—	—	—	0.3	0.4	0.5	0.6	1.1	1.1	1.0	1.6	1.8	1.4	1.2	0.7	-0.4	
Hispanic	—	—	—	—	—	—	2.5	1.7	1.9	3.3	5.3	5.9	4.0	2.3	2.3	1.8	1.8	2.1	+0.3	

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of two forms in 1996;  $N$  is one half of  $N$  indicated in Table D-107. Data based on one of four forms in 1997–2001;  $N$  is one third of  $N$  indicated in Table D-107. Data based on two of four forms beginning in 2002;  $N$  is one half of  $N$  indicated in Table D-107.

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-23**  
**Ecstasy (MDMA): Trends in Annual Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007– 2008 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	—	—	—	—	—	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100		
Total	—	—	—	—	—	4.6	3.9	3.3	4.4	5.4	6.2	4.9	3.0	2.4	2.6	2.8	3.5	2.9	-0.6	
Gender:																				
Male	—	—	—	—	—	4.9	4.7	3.5	4.7	5.7	7.6	4.3	2.8	2.4	2.6	3.3	3.7	3.4	-0.3	
Female	—	—	—	—	—	4.2	3.1	2.9	4.2	4.8	4.9	5.2	3.2	2.4	2.5	2.2	3.1	2.4	-0.7	
College Plans:																				
None or under 4 years	—	—	—	—	—	7.7	7.5	5.4	8.5	10.7	13.6	10.1	5.7	5.4	5.6	6.9	7.4	7.5	+0.1	
Complete 4 years	—	—	—	—	—	4.0	3.3	2.9	3.7	4.5	5.1	4.1	2.6	2.0	2.2	2.2	3.0	2.3	-0.7 s	
Region:																				
Northeast	—	—	—	—	—	4.4	3.0	3.8	7.0	6.4	8.2	4.4	2.7	2.6	2.2	2.2	2.9	2.0	-0.8	
Midwest	—	—	—	—	—	3.6	3.2	2.2	2.3	5.2	4.8	4.6	2.5	1.9	3.0	2.8	3.5	2.0	-1.5	
South	—	—	—	—	—	5.6	5.0	4.1	4.1	5.2	5.9	5.1	3.8	2.6	2.6	3.0	3.6	2.8	-0.8	
West	—	—	—	—	—	4.1	3.7	2.7	4.4	5.0	6.8	5.2	3.0	2.7	2.5	3.0	3.8	4.5	+0.7	
Population Density:																				
Large MSA	—	—	—	—	—	5.6	4.0	2.5	5.2	7.0	7.3	5.1	2.4	1.8	3.0	2.9	3.0	3.8	+0.7	
Other MSA	—	—	—	—	—	4.6	3.6	4.1	4.7	5.3	5.5	5.2	3.1	3.1	2.5	2.7	3.7	2.7	-0.9	
Non-MSA	—	—	—	—	—	3.3	4.2	2.7	2.8	3.7	6.3	3.7	3.8	2.0	2.3	2.8	3.8	2.0	-1.8 s	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	—	—	—	—	—	4.8	3.0	1.9	3.7	7.0	7.2	5.8	2.4	3.3	4.4	3.8	4.3	4.8	+0.5	
2.5–3.0	—	—	—	—	—	4.7	3.9	3.1	4.4	4.9	6.5	5.5	3.8	3.3	2.8	2.9	4.7	3.5	-1.2	
3.5–4.0	—	—	—	—	—	4.7	5.2	4.3	4.0	6.3	7.0	5.5	3.5	2.1	3.3	2.5	3.2	3.2	0.0	
4.5–5.0	—	—	—	—	—	4.2	2.5	2.9	4.3	5.0	5.3	3.9	2.7	2.3	2.2	2.7	3.2	2.0	-1.2	
5.5–6.0 (High)	—	—	—	—	—	5.3	4.0	4.4	5.6	4.8	5.8	4.6	2.3	1.4	1.4	3.3	2.8	2.1	-0.7	
Race (2-year average): <sup>b</sup>																				
White	—	—	—	—	—	—	4.8	4.0	4.4	5.3	6.0	6.2	4.6	3.1	2.7	2.9	3.5	3.4	-0.1	
African American	—	—	—	—	—	—	0.8	1.2	1.3	1.5	2.2	1.8	1.5	0.9	0.6	1.0	1.3	1.3	0.0	
Hispanic	—	—	—	—	—	—	3.6	2.3	2.4	4.6	5.4	4.3	3.4	3.0	4.3	3.9	2.7	3.8	+1.1	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of two forms in 1996; *N* is one half of *N* indicated in Table D-108. Data based on one of four forms in 1997–2001; *N* is one third of *N* indicated in Table D-108. Data based on two of four forms beginning in 2002; *N* is one half of *N* indicated in Table D-108.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-24**  
**Ecstasy (MDMA): Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months															2007– 2008 change	
	1975– 1979	1980– 1989	1990– 1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007		2008
<i>Approximate wtd. N =</i>	—	—	—	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	—	—	—	4.6	4.0	3.6	5.6	8.2	9.2	7.4	4.5	4.0	3.0	4.1	4.5	4.3	-0.2
Gender:																	
Male	—	—	—	4.8	5.6	4.8	5.6	8.1	10.5	8.2	4.8	4.7	3.3	4.3	5.0	5.5	+0.4
Female	—	—	—	4.2	2.5	2.7	5.6	8.2	8.0	6.4	4.0	3.2	2.7	4.0	4.1	3.3	-0.7
College Plans:																	
None or under 4 years	—	—	—	6.9	3.8	4.7	4.2	8.5	9.8	8.9	6.5	5.3	3.7	6.0	6.5	7.2	+0.7
Complete 4 years	—	—	—	4.0	3.9	3.3	6.2	8.0	8.7	7.1	3.9	3.6	2.8	3.7	3.9	3.7	-0.2
Region:																	
Northeast	—	—	—	6.3	6.9	3.7	9.4	8.8	10.1	10.3	5.1	3.5	3.0	2.9	4.3	2.9	-1.4
Midwest	—	—	—	3.7	1.3	2.7	3.3	5.7	11.8	5.0	4.7	3.0	3.0	3.4	4.4	2.8	-1.5
South	—	—	—	4.6	4.3	4.0	5.7	5.9	5.7	7.9	4.2	5.1	3.4	4.9	4.6	4.6	0.0
West	—	—	—	3.9	4.1	4.0	5.0	14.4	10.3	6.8	4.2	3.8	2.5	4.6	4.7	6.6	+1.8
Population Density:																	
Large MSA	—	—	—	3.6	3.6	3.2	6.1	8.7	10.9	8.4	4.3	4.0	3.5	6.1	5.8	4.7	-1.1
Other MSA	—	—	—	5.1	4.6	4.3	6.1	8.4	9.7	8.1	5.0	4.5	3.2	3.1	4.0	4.8	+0.7
Non-MSA	—	—	—	4.5	3.4	2.7	4.2	7.4	6.4	4.6	4.0	2.8	2.1	3.1	3.7	2.8	-0.8
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	—	—	—	5.5	3.5	4.2	6.8	7.3	3.8	4.8	4.1	4.6	3.0	3.8	4.7	4.0	-0.7
2.5–3.0	—	—	—	5.0	3.1	3.2	5.1	7.7	10.3	8.0	3.8	3.7	3.9	3.6	4.9	4.0	-0.9
3.5–4.0	—	—	—	4.9	3.8	3.2	5.7	6.2	8.4	7.5	5.7	4.6	2.8	3.9	4.4	5.3	+0.8
4.5–5.0	—	—	—	4.0	2.9	4.3	6.2	8.3	11.2	7.3	5.0	3.8	3.2	5.1	4.1	3.6	-0.4
5.5–6.0 (High)	—	—	—	4.1	8.7	3.5	4.7	10.6	8.1	7.6	3.3	3.1	2.0	3.6	4.6	4.1	-0.5
Race (2-year average): <sup>b</sup>																	
White	—	—	—	—	5.2	4.7	5.1	7.6	9.6	8.5	6.4	4.7	3.9	4.0	4.9	4.8	0.0
African American	—	—	—	—	0.4	0.4	0.5	1.3	2.4	1.7	1.4	1.6	1.4	1.8	2.1	2.2	0.0
Hispanic	—	—	—	—	2.8	2.7	6.0	10.6	10.2	7.0	5.3	3.7	3.0	3.0	3.3	3.2	-0.1

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table. Data based on one of six forms in 1996–2001;  $N$  is one sixth of  $N$  indicated in Table D-109. Data based on two of six forms beginning in 2002;  $N$  is two sixths of  $N$  indicated in Table D-109.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.



**TABLE D-25**  
**Cocaine: Trends in Annual Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007– 2008 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700	
Total	1.1	1.5	1.7	2.1	2.6	3.0	2.8	3.1	2.7	2.6	2.5	2.3	2.2	2.0	2.2	2.0	2.0	1.8	-0.2
Gender:																			
Male	1.4	1.5	1.9	2.1	2.5	2.7	3.1	2.9	2.8	2.6	2.4	2.2	1.9	1.7	2.0	1.9	1.7	1.8	+0.1
Female	0.9	1.5	1.5	2.1	2.6	3.1	2.5	3.1	2.7	2.6	2.6	2.3	2.3	2.3	2.3	2.1	2.2	1.8	-0.3
College Plans:																			
None or under 4 years	3.2	4.8	5.4	6.6	7.0	7.9	7.5	9.4	8.1	7.5	7.0	7.2	7.1	6.8	6.1	7.1	6.5	6.9	+0.4
Complete 4 years	0.8	1.0	1.1	1.5	2.0	2.2	2.2	2.3	2.0	2.0	2.0	1.8	1.6	1.5	1.8	1.5	1.5	1.3	-0.2
Region:																			
Northeast	1.3	0.8	1.0	2.2	2.2	2.6	2.4	1.9	2.2	1.6	1.9	1.6	1.6	1.9	1.8	1.3	1.2	1.2	-0.1
Midwest	0.9	1.4	1.0	1.2	2.6	2.9	2.6	2.7	2.6	2.9	2.3	2.3	2.0	1.6	2.0	1.3	1.6	1.9	+0.3
South	1.1	1.7	2.1	2.5	2.4	2.7	2.6	3.8	3.1	2.2	3.2	2.6	2.5	2.1	2.4	2.9	2.3	2.2	-0.1
West	1.5	2.0	2.7	2.3	3.3	3.7	3.7	3.3	2.7	3.7	2.4	2.4	2.3	2.4	2.4	1.9	2.2	1.6	-0.6
Population Density:																			
Large MSA	1.1	1.4	1.3	1.9	2.4	2.8	2.4	2.3	2.1	2.3	2.1	2.0	1.7	2.2	2.2	1.9	1.9	2.0	+0.1
Other MSA	1.1	1.7	2.2	2.5	2.8	3.2	2.9	3.3	2.8	2.5	2.8	2.3	2.2	2.1	2.2	2.0	2.1	1.7	-0.4
Non-MSA	1.2	1.3	1.2	1.4	2.4	2.7	3.0	3.4	3.2	3.1	2.5	2.6	2.7	1.7	2.2	2.2	1.8	1.7	0.0
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	2.4	3.2	2.9	3.5	4.9	3.9	4.7	6.3	5.6	5.3	4.4	3.7	4.1	3.3	4.2	4.4	3.8	3.6	-0.2
2.5–3.0	1.4	1.6	2.0	2.3	2.4	3.3	3.0	3.3	3.1	2.9	2.8	2.8	2.4	2.5	2.9	2.2	2.2	2.3	+0.2
3.5–4.0	0.7	1.2	1.8	2.1	2.8	3.3	2.8	3.1	2.8	2.5	2.4	2.2	2.2	2.0	2.5	2.0	1.8	1.8	0.0
4.5–5.0	0.7	1.0	1.0	1.6	1.9	2.7	2.6	2.2	1.7	1.8	2.1	2.0	1.5	1.8	1.5	1.4	1.4	1.2	-0.1
5.5–6.0 (High)	1.2	1.5	1.1	1.9	2.5	2.5	2.3	2.5	2.5	2.2	1.6	1.5	2.0	1.2	1.2	1.5	1.3	1.4	+0.1
Race (2-year average): <sup>b</sup>																			
White	—	1.2	1.3	1.6	2.3	2.8	3.0	2.8	2.6	2.5	2.5	2.4	2.2	1.9	1.8	1.9	1.7	1.6	-0.1
African American	—	0.7	0.7	0.7	0.6	0.6	0.5	0.7	0.8	0.8	0.8	0.8	0.9	1.0	1.0	0.9	0.9	0.8	-0.1
Hispanic	—	3.1	4.0	4.5	4.7	4.8	4.3	5.2	5.9	4.7	4.2	4.1	3.8	3.6	3.6	3.5	3.8	3.5	-0.3

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-26**  
**Cocaine: Trends in Annual Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007– 2008	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	change	
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100		
Total	2.2	1.9	2.1	2.8	3.5	4.2	4.7	4.7	4.9	4.4	3.6	4.0	3.3	3.7	3.5	3.2	3.4	3.0	-0.5	
Gender:																				
Male	2.2	2.0	2.5	3.1	3.5	4.5	4.7	4.9	5.2	4.7	3.8	4.2	3.3	3.9	3.6	3.2	3.6	3.0	-0.5	
Female	2.2	1.7	1.6	2.5	3.3	4.0	4.6	4.4	4.6	4.1	3.2	3.9	3.2	3.4	3.3	3.1	3.3	2.8	-0.5	
College Plans:																				
None or under 4 years	4.7	4.0	5.1	6.6	7.2	10.0	10.4	10.7	11.6	9.7	9.1	10.1	8.3	9.4	8.8	9.0	8.6	8.7	+0.1	
Complete 4 years	1.7	1.4	1.4	2.0	2.8	3.2	3.7	3.6	3.8	3.5	2.7	3.1	2.4	2.9	2.8	2.4	2.8	2.2	-0.6	
Region:																				
Northeast	1.5	1.0	2.0	2.4	2.5	3.0	3.0	4.9	4.6	3.1	2.3	2.4	3.1	3.4	3.6	2.5	2.9	2.0	-0.9	
Midwest	1.7	1.7	1.4	2.2	2.9	4.1	4.0	3.7	4.4	4.6	3.4	3.6	2.7	3.2	3.4	3.2	3.6	2.5	-1.1	
South	2.0	1.8	1.9	2.6	3.5	4.2	5.4	4.3	5.2	4.2	3.8	3.8	3.5	3.5	2.9	3.2	3.5	3.5	0.0	
West	3.6	3.2	3.7	4.7	5.3	5.9	6.4	6.4	5.3	5.7	4.9	6.5	3.7	4.8	4.4	3.8	3.6	3.3	-0.2	
Population Density:																				
Large MSA	1.9	1.6	1.6	2.3	3.4	3.8	4.5	4.3	4.1	4.3	3.2	3.6	2.5	3.3	3.3	2.8	3.3	2.8	-0.5	
Other MSA	2.7	2.1	2.3	3.1	3.5	4.7	4.3	4.7	5.1	4.2	3.7	4.4	3.2	3.8	3.4	3.2	3.4	3.3	0.0	
Non-MSA	1.6	1.7	2.1	2.7	3.6	3.7	5.7	5.2	5.4	4.7	3.8	3.8	4.6	3.9	3.8	3.8	3.7	2.4	-1.3	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	3.3	3.5	3.2	3.8	5.3	7.4	6.3	8.1	8.2	7.7	5.6	7.9	7.0	6.5	5.3	6.5	6.4	6.8	+0.3	
2.5–3.0	2.4	1.7	2.2	2.9	4.3	4.5	5.0	5.5	5.9	5.4	5.2	4.8	3.9	4.2	4.6	4.1	3.9	3.5	-0.4	
3.5–4.0	2.4	2.1	2.5	3.2	3.7	4.3	5.4	4.4	4.7	4.4	2.9	3.8	3.4	4.0	3.4	2.9	3.5	2.7	-0.8	
4.5–5.0	1.6	1.4	1.6	2.1	2.6	3.4	3.7	3.5	3.9	3.2	2.7	2.4	2.2	3.0	2.8	2.0	2.5	2.2	-0.3	
5.5–6.0 (High)	1.9	1.5	1.1	1.9	1.9	3.4	3.3	3.2	3.9	2.9	2.0	3.2	1.6	1.8	2.4	3.0	2.5	1.6	-0.8	
Race (2-year average): <sup>b</sup>																				
White	—	2.1	2.0	2.2	3.0	3.8	4.4	4.7	4.9	4.7	3.9	3.9	3.9	3.7	3.7	3.5	3.5	3.2	-0.2	
African American	—	0.6	0.6	1.0	0.9	0.7	0.8	1.0	0.9	0.6	0.8	1.0	0.9	0.8	1.0	1.0	0.8	0.8	0.0	
Hispanic	—	3.7	3.7	4.9	5.5	7.0	8.5	8.3	8.2	8.0	6.6	6.0	6.1	5.8	6.4	5.9	4.9	5.2	+0.3	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-27**  
**Cocaine: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
<i>Approximate wtd. N =</i>	9,400	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	5.6	6.0	7.2	9.0	12.0	12.3	12.4	11.5	11.4	11.6	13.1	12.7	10.3	7.9	6.5	5.3	3.5
Gender:																	
Male	7.5	7.5	9.3	11.4	14.6	14.8	13.8	13.1	13.2	13.8	14.8	14.3	11.3	9.1	8.1	6.6	4.1
Female	3.9	4.4	4.9	6.5	9.3	9.8	10.4	9.6	9.3	9.1	11.2	10.9	9.2	6.5	4.9	3.8	2.6
College Plans:																	
None or under 4 years	—	6.6	8.1	9.5	13.7	13.2	12.4	12.5	12.2	13.2	14.7	15.7	12.4	9.7	9.3	7.8	4.9
Complete 4 years	—	5.0	5.5	7.7	9.5	10.8	11.5	9.9	9.9	9.7	11.4	10.4	9.0	6.7	5.3	4.1	2.8
Region:																	
Northeast	5.3	6.6	7.9	11.8	13.8	14.2	16.8	16.9	15.2	19.5	20.8	17.9	13.3	9.1	7.3	6.5	3.8
Midwest	5.1	5.5	6.3	8.5	10.5	10.9	9.4	9.0	8.0	5.8	8.2	10.1	7.5	6.1	5.3	4.1	3.2
South	5.4	5.1	6.0	6.8	8.5	7.8	6.8	6.3	7.7	7.7	7.5	7.1	7.0	6.2	6.0	4.8	3.0
West	7.8	7.9	10.2	10.7	18.6	20.6	22.1	17.9	19.2	19.3	19.7	20.0	16.4	12.1	8.5	6.6	4.4
Population Density:																	
Large MSA	7.3	8.6	8.6	12.3	16.6	18.7	17.5	17.2	16.9	16.8	18.8	18.8	12.9	9.3	6.4	5.6	4.1
Other MSA	5.9	5.8	7.3	8.9	11.7	11.3	11.5	10.1	11.2	11.0	12.4	12.0	10.1	8.5	7.1	5.4	3.7
Non-MSA	4.3	4.3	5.8	6.4	8.9	8.9	9.4	8.5	7.3	8.3	9.2	9.0	8.1	5.3	5.4	4.8	2.5
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	4.5	5.3	5.5	6.3	8.4	9.0	8.3	7.6	9.0	9.4	12.0	10.5	8.7	7.6	6.7	4.7	3.5
2.5–3.0	4.6	6.1	6.8	8.7	11.1	11.2	10.5	11.0	9.8	10.9	12.7	12.9	9.9	7.4	6.4	5.6	3.8
3.5–4.0	4.5	5.9	7.2	9.0	13.2	13.3	13.3	12.5	11.7	12.2	14.0	13.6	11.2	7.2	6.4	5.6	3.7
4.5–5.0	6.3	7.6	8.1	10.4	14.0	13.6	14.9	13.6	13.1	12.2	13.7	12.2	10.0	8.7	7.1	4.4	3.1
5.5–6.0 (High)	5.2	7.1	9.5	11.6	15.2	16.3	16.2	13.8	15.1	13.4	11.9	12.5	10.8	8.1	5.8	5.5	2.4
Race (2-year average): <sup>b</sup>																	
White	—	—	6.5	8.3	10.9	12.8	13.0	12.6	11.8	11.9	13.0	13.5	12.0	9.6	7.6	6.3	4.6
African American	—	—	4.8	4.6	4.6	5.2	4.8	5.2	7.2	6.3	5.3	5.8	4.8	3.8	2.9	1.7	1.5
Hispanic	—	—	7.2	7.5	8.9	11.2	12.4	12.1	11.4	13.3	16.3	16.7	14.0	9.9	7.8	7.4	6.1

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

(Table continued on next page.)

**TABLE D-27 (cont.)**  
**Cocaine: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																	2007– 2008 change	
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>		
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	3.1	3.3	3.6	4.0	4.9	5.5	5.7	6.2	5.0	4.8	5.0	4.8	5.3	5.1	5.7	5.2	4.4	-0.8	
Gender:																			
Male	3.7	4.0	4.5	4.8	6.0	6.6	6.8	7.3	5.8	5.4	5.9	5.9	6.5	5.8	6.0	5.9	5.2	-0.7	
Female	2.4	2.3	2.8	3.1	3.5	4.2	4.5	5.0	3.9	4.1	4.0	3.7	4.1	4.2	5.2	4.4	3.5	-0.9	
College Plans:																			
None or under 4 years	5.1	4.5	5.3	5.6	7.5	8.1	9.7	9.1	7.1	8.2	8.6	6.0	8.3	7.5	8.1	8.8	7.4	-1.4	
Complete 4 years	2.4	2.8	3.0	3.4	4.0	4.4	4.5	5.4	4.2	3.7	3.9	4.2	4.3	4.4	5.1	4.4	3.6	-0.8	
Region:																			
Northeast	2.8	3.1	3.1	3.8	5.5	6.6	5.9	4.3	4.1	4.8	5.0	5.2	5.0	4.7	6.7	6.0	4.5	-1.6	
Midwest	2.5	2.4	3.7	3.4	3.8	4.7	5.8	6.2	4.8	5.7	5.2	3.9	4.2	5.0	4.2	5.0	3.2	-1.7	
South	3.2	3.1	3.4	3.6	4.6	4.8	5.8	6.9	4.7	3.9	5.0	4.7	5.4	5.3	6.4	5.2	4.8	-0.4	
West	4.3	4.9	4.5	5.8	6.1	6.8	5.4	6.9	6.3	5.0	4.6	5.8	7.0	5.0	5.5	4.8	4.9	+0.1	
Population Density:																			
Large MSA	3.6	2.7	3.3	4.4	4.8	4.7	5.4	5.0	4.1	4.3	4.1	3.8	4.7	5.2	7.4	5.0	4.4	-0.6	
Other MSA	3.3	3.9	4.1	3.9	4.9	5.6	5.8	6.6	4.9	5.0	5.4	5.7	5.8	5.2	4.8	5.4	4.3	-1.1	
Non-MSA	2.4	2.7	3.2	3.9	4.9	6.0	6.0	6.9	6.1	5.2	5.3	4.6	5.0	4.7	4.9	5.3	4.5	-0.7	
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	3.9	3.5	4.1	4.8	5.3	6.5	6.9	9.0	6.2	5.7	6.6	4.8	7.3	4.3	6.1	6.2	4.7	-1.5	
2.5–3.0	3.3	3.0	4.0	3.9	5.0	5.5	6.3	6.0	4.6	6.0	5.3	4.1	5.2	6.6	6.3	5.9	4.0	-1.9 s	
3.5–4.0	3.0	3.8	3.8	4.2	5.0	5.6	6.0	6.8	5.0	4.8	5.3	5.2	5.3	5.2	5.7	5.5	4.9	-0.6	
4.5–5.0	2.9	3.0	3.1	3.7	4.8	5.2	5.0	5.4	5.3	4.4	4.2	4.7	5.2	4.3	5.1	4.9	4.0	-0.9	
5.5–6.0 (High)	2.6	2.4	3.3	3.4	4.3	4.4	4.4	5.2	3.9	2.6	4.3	4.4	4.3	4.1	5.7	4.0	4.1	+0.1	
Race (2-year average): <sup>b</sup>																			
White	3.3	3.1	3.5	4.0	4.5	5.5	6.3	6.7	6.2	5.5	5.7	5.6	5.6	5.6	5.8	6.1	5.6	-0.5	
African American	1.2	0.8	0.9	1.0	0.8	0.9	0.9	0.9	1.0	1.0	0.9	1.1	1.2	1.2	1.6	1.3	0.8	-0.5	
Hispanic	5.2	5.8	5.4	5.5	7.3	7.6	6.7	7.5	7.6	6.1	5.5	4.9	5.5	6.2	6.5	6.0	4.7	-1.2	

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-28**  
**Crack: Trends in Annual Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007– 2008
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	change
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700	
Total	0.7	0.9	1.0	1.3	1.6	1.8	1.7	2.1	1.8	1.8	1.7	1.6	1.6	1.3	1.4	1.3	1.3	1.1	-0.2
Gender:																			
Male	0.8	0.9	1.1	1.3	1.5	1.7	1.8	2.1	1.8	1.7	1.6	1.6	1.3	1.1	1.3	1.2	1.2	1.0	-0.2
Female	0.5	0.9	0.9	1.2	1.6	1.9	1.5	2.1	1.8	1.8	1.8	1.6	1.7	1.5	1.5	1.3	1.5	1.2	-0.2
College Plans:																			
None or under 4 years	2.0	2.9	3.4	4.6	4.2	4.9	4.7	7.5	5.3	5.2	4.4	5.7	5.8	4.9	3.3	4.4	4.1	4.3	+0.2
Complete 4 years	0.4	0.6	0.6	0.8	1.3	1.3	1.3	1.5	1.4	1.4	1.4	1.2	1.1	1.0	1.2	1.0	1.1	0.8	-0.2
Region:																			
Northeast	0.5	0.4	0.4	1.4	1.4	1.7	1.6	1.2	1.5	1.2	1.2	1.2	1.3	1.2	0.9	0.9	0.8	0.8	0.0
Midwest	0.6	1.0	0.8	0.9	1.4	1.9	1.6	1.9	1.9	1.9	1.7	1.5	1.3	1.2	1.4	0.7	1.1	1.2	+0.1
South	0.7	1.0	1.2	1.6	1.4	1.7	1.4	2.5	1.9	1.4	2.0	1.7	1.8	1.3	1.5	1.8	1.5	1.2	-0.3
West	0.8	1.3	1.4	1.3	2.3	2.1	2.3	2.6	1.8	2.9	1.7	2.0	1.8	1.8	1.6	1.3	1.8	1.2	-0.6 s
Population Density:																			
Large MSA	0.5	0.8	0.7	1.3	1.5	1.8	1.5	1.6	1.2	1.6	1.4	1.5	1.2	1.5	1.5	1.3	1.1	1.4	+0.2
Other MSA	0.7	1.1	1.2	1.5	1.7	2.0	1.8	2.2	2.0	1.8	1.8	1.6	1.7	1.3	1.3	1.1	1.6	1.0	-0.5 s
Non-MSA	0.8	0.8	0.9	1.0	1.4	1.7	1.7	2.6	2.1	2.0	1.8	1.8	1.7	1.2	1.4	1.6	1.2	1.0	-0.3
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	1.7	2.2	1.8	2.8	3.0	2.7	3.0	5.0	3.6	3.7	3.2	3.1	3.3	2.2	3.1	3.0	2.9	2.8	-0.1
2.5–3.0	0.7	0.8	1.0	1.4	1.2	2.1	2.0	2.2	2.0	2.1	1.8	2.1	1.7	1.7	1.8	1.5	1.4	1.6	+0.2
3.5–4.0	0.4	0.7	1.2	0.9	1.7	2.0	1.4	2.1	2.0	1.8	1.3	1.4	1.6	1.3	1.6	1.2	1.3	0.8	-0.5
4.5–5.0	0.4	0.6	0.5	1.1	1.3	1.5	1.5	1.6	1.0	1.0	1.5	1.2	1.0	1.1	0.9	0.9	0.9	0.7	-0.2
5.5–6.0 (High)	0.8	1.0	0.6	1.4	1.6	1.5	1.5	1.6	1.9	1.8	1.3	1.3	1.3	1.0	0.6	1.0	1.0	0.9	-0.1
Race (2-year average): <sup>b</sup>																			
White	—	0.7	0.8	1.0	1.4	1.7	1.7	1.7	1.8	1.7	1.7	1.5	1.5	1.3	1.2	1.1	1.0	1.0	-0.1
African American	—	0.4	0.4	0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.6	0.7	0.8	0.8	0.6	0.6	0.5	0.0
Hispanic	—	1.9	2.0	2.1	2.7	3.0	2.8	3.6	3.9	2.9	2.6	2.7	2.8	2.6	2.5	2.6	2.7	2.5	-0.2

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-29**  
**Crack: Trends in Annual Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007– 2008
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	change
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100	
Total	0.9	0.9	1.1	1.4	1.8	2.1	2.2	2.5	2.4	2.2	1.8	2.3	1.6	1.7	1.7	1.3	1.3	1.3	-0.1
Gender:																			
Male	0.9	0.9	1.3	1.6	1.9	2.1	2.3	2.7	2.5	2.3	1.9	2.5	1.6	1.8	1.6	1.3	1.5	1.3	-0.2
Female	0.8	0.9	0.7	1.0	1.6	2.1	2.2	2.2	2.3	2.1	1.7	2.2	1.6	1.5	1.7	1.2	1.1	1.2	+0.1
College Plans:																			
None or under 4 years	2.4	2.1	2.7	3.4	3.7	5.0	4.9	6.0	5.5	5.2	4.7	5.6	4.5	4.6	4.8	3.7	3.8	3.9	+0.1
Complete 4 years	0.6	0.6	0.7	0.9	1.5	1.5	1.8	1.9	1.8	1.7	1.4	1.8	1.1	1.2	1.3	1.0	1.0	0.9	0.0
Region:																			
Northeast	0.5	0.4	1.1	1.4	1.1	1.4	1.5	2.6	2.5	1.7	1.0	1.4	1.3	1.4	1.8	0.9	1.1	1.0	-0.1
Midwest	0.9	0.9	0.8	1.0	1.5	2.2	2.1	2.1	2.1	1.8	1.8	2.2	1.4	1.5	1.4	1.3	1.1	1.1	0.0
South	1.0	0.8	0.9	1.3	1.9	2.0	2.0	1.9	2.0	1.9	1.7	1.7	1.7	1.4	1.3	1.2	1.4	1.1	-0.3
West	1.1	1.4	1.7	1.9	2.8	2.8	3.8	3.9	3.2	3.8	3.3	4.4	2.0	2.6	2.5	1.7	1.6	1.8	+0.2
Population Density:																			
Large MSA	0.9	0.8	0.7	0.9	1.9	1.7	2.3	2.2	2.2	2.4	1.9	2.2	1.2	1.5	1.8	1.3	1.3	1.1	-0.2
Other MSA	0.9	0.9	1.1	1.5	1.6	2.4	1.7	2.4	2.3	2.0	1.8	2.5	1.7	1.8	1.5	1.1	1.3	1.4	+0.1
Non-MSA	0.9	0.9	1.2	1.6	2.3	1.9	3.3	3.1	2.8	2.5	1.8	2.2	2.1	1.7	1.9	1.6	1.3	1.2	-0.2
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	1.3	1.7	1.8	1.9	3.0	3.9	3.4	4.5	3.4	4.8	3.0	3.9	2.9	3.5	2.6	3.9	3.8	3.3	-0.5
2.5–3.0	1.0	0.8	1.0	1.1	2.4	2.5	2.4	3.1	2.9	2.9	2.5	2.6	1.8	1.9	2.5	1.6	1.6	1.3	-0.2
3.5–4.0	0.9	1.0	1.4	1.5	1.7	1.9	2.6	2.0	2.5	2.2	1.4	2.2	1.6	1.6	1.4	1.0	0.9	1.1	+0.1
4.5–5.0	0.7	0.6	0.7	1.0	1.3	1.4	1.8	2.0	1.9	1.1	1.6	1.4	1.3	1.4	1.3	0.8	0.9	1.0	+0.1
5.5–6.0 (High)	0.7	0.9	0.5	1.1	1.1	1.8	1.2	1.8	1.8	1.4	1.2	2.2	0.8	0.8	1.0	1.0	0.7	0.7	0.0
Race (2-year average): <sup>b</sup>																			
White	—	0.9	0.9	1.1	1.5	1.9	2.2	2.3	2.4	2.2	1.8	2.0	2.0	1.6	1.5	1.4	1.2	1.1	-0.1
African American	—	0.3	0.4	0.8	0.6	0.4	0.4	0.5	0.5	0.5	0.7	0.8	0.6	0.4	0.6	0.6	0.5	0.5	+0.1
Hispanic	—	1.5	1.7	1.9	2.5	3.7	3.7	4.1	4.4	4.0	3.7	3.6	3.5	3.1	3.6	3.1	2.3	2.4	+0.1

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-30**  
**Crack: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
<i>Approximate wtd. N =</i>	—	—	—	—	—	—	—	—	—	—	—	15,200	16,300	16,300	16,700	15,200	15,000
Total	—	—	—	—	—	—	—	—	—	—	—	4.1	3.9	3.1	3.1	1.9	1.5
Gender:																	
Male	—	—	—	—	—	—	—	—	—	—	—	4.2	4.6	4.0	4.3	2.3	1.8
Female	—	—	—	—	—	—	—	—	—	—	—	3.6	3.0	2.0	1.8	1.4	1.0
College Plans:																	
None or under 4 years	—	—	—	—	—	—	—	—	—	—	—	5.2	5.1	4.1	3.8	3.5	2.3
Complete 4 years	—	—	—	—	—	—	—	—	—	—	—	2.8	2.7	2.3	2.7	1.2	1.1
Region:																	
Northeast	—	—	—	—	—	—	—	—	—	—	—	6.0	4.0	2.3	3.3	2.0	1.3
Midwest	—	—	—	—	—	—	—	—	—	—	—	3.1	3.5	2.4	2.2	1.6	1.5
South	—	—	—	—	—	—	—	—	—	—	—	1.6	2.8	2.6	3.3	1.8	1.2
West	—	—	—	—	—	—	—	—	—	—	—	7.5	6.1	5.6	3.8	2.7	1.8
Population Density:																	
Large MSA	—	—	—	—	—	—	—	—	—	—	—	5.9	4.7	3.9	3.4	1.6	1.2
Other MSA	—	—	—	—	—	—	—	—	—	—	—	3.5	3.5	3.2	3.3	2.0	1.7
Non-MSA	—	—	—	—	—	—	—	—	—	—	—	3.5	3.7	2.0	2.2	2.0	1.2
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	—	—	—	—	—	—	—	—	—	—	—	1.2	3.6	3.3	3.1	2.2	1.6
2.5–3.0	—	—	—	—	—	—	—	—	—	—	—	5.3	4.2	2.6	3.1	2.2	1.5
3.5–4.0	—	—	—	—	—	—	—	—	—	—	—	4.0	4.0	3.4	2.8	1.8	1.7
4.5–5.0	—	—	—	—	—	—	—	—	—	—	—	2.9	3.4	3.1	2.6	1.1	0.9
5.5–6.0 (High)	—	—	—	—	—	—	—	—	—	—	—	3.7	2.4	2.1	3.7	1.8	1.1
Race (2-year average): <sup>b</sup>																	
White	—	—	—	—	—	—	—	—	—	—	—	—	3.8	3.4	3.1	2.1	1.6
African American	—	—	—	—	—	—	—	—	—	—	—	—	1.9	2.5	2.0	1.3	1.0
Hispanic	—	—	—	—	—	—	—	—	—	—	—	—	5.5	3.7	3.2	4.2	3.4

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of five forms in 1986;  $N$  is one fifth of  $N$  indicated in Table D-109. Data based on two forms in 1987–1989;  $N$  is two fifths of  $N$  indicated in 1987–1988 and two sixths of  $N$  indicated in 1989 in Table D-109. Data based on six forms beginning in 1990.

(Table continued on next page.)

**TABLE D-30 (cont.)**  
**Crack: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																	2007– 2008 change	
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>		
<i>Approximate wtd. N =</i>	<i>15,800</i>	<i>16,300</i>	<i>15,400</i>	<i>15,400</i>	<i>14,300</i>	<i>15,400</i>	<i>15,200</i>	<i>13,600</i>	<i>12,800</i>	<i>12,800</i>	<i>12,900</i>	<i>14,600</i>	<i>14,600</i>	<i>14,700</i>	<i>14,200</i>	<i>14,500</i>	<i>14,000</i>		
Total	1.5	1.5	1.9	2.1	2.1	2.4	2.5	2.7	2.2	2.1	2.3	2.2	2.3	1.9	2.1	1.9	1.6	-0.4 s	
Gender:																			
Male	1.7	1.9	2.4	2.5	2.6	3.0	3.1	2.9	2.5	2.4	2.6	2.3	2.5	2.2	2.1	2.1	1.7	-0.3	
Female	1.0	1.1	1.3	1.5	1.6	1.8	2.0	2.2	1.7	1.8	1.8	1.9	1.9	1.6	1.9	1.7	1.3	-0.4	
College Plans:																			
None or under 4 years	2.6	2.7	3.3	3.0	4.0	4.3	4.6	5.0	3.5	4.4	4.5	2.7	3.9	3.4	3.5	3.7	3.3	-0.3	
Complete 4 years	1.0	1.2	1.4	1.7	1.6	1.7	1.9	1.9	1.7	1.5	1.7	1.8	1.7	1.6	1.7	1.5	1.1	-0.4 s	
Region:																			
Northeast	1.3	1.2	1.5	1.6	2.1	2.6	3.0	2.4	1.8	2.0	2.0	2.0	1.7	1.5	2.5	2.1	1.8	-0.3	
Midwest	1.4	1.3	2.2	2.0	2.3	2.2	2.6	2.8	2.0	2.6	2.6	1.9	2.1	2.3	1.5	1.7	1.3	-0.5	
South	1.2	1.5	1.6	1.7	1.7	1.8	2.0	2.3	1.8	1.2	1.9	2.0	2.2	1.8	2.1	2.2	1.6	-0.6	
West	2.1	2.1	2.3	3.5	2.6	3.4	3.2	3.4	3.2	3.0	2.8	3.0	3.3	2.3	2.2	1.6	1.7	+0.1	
Population Density:																			
Large MSA	1.3	1.3	1.5	2.0	2.1	2.2	2.5	2.0	1.8	1.5	1.6	1.8	2.0	1.7	2.6	1.9	1.3	-0.5	
Other MSA	1.6	1.8	2.1	2.1	1.9	2.3	2.4	2.5	2.1	2.2	2.4	2.3	2.2	1.8	1.7	1.9	1.6	-0.3	
Non-MSA	1.3	1.4	1.9	2.1	2.5	2.8	2.9	3.6	2.8	2.8	2.8	2.4	2.8	2.5	2.0	2.0	1.6	-0.4	
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	1.9	2.6	2.7	3.4	3.4	3.6	3.9	3.2	2.8	3.8	4.8	2.5	3.3	2.3	3.6	3.6	2.1	-1.5	
2.5–3.0	1.9	1.6	2.2	2.3	2.4	2.5	2.8	2.8	2.1	2.6	2.2	1.6	2.9	2.4	2.4	2.2	1.4	-0.8 s	
3.5–4.0	1.3	1.5	1.8	1.7	2.2	2.0	2.4	3.0	2.2	1.8	2.3	2.3	1.9	2.0	2.0	1.9	1.6	-0.3	
4.5–5.0	1.0	1.4	1.1	1.9	1.6	2.5	2.1	2.2	1.8	1.9	1.7	2.2	1.8	1.5	1.8	1.7	1.4	-0.3	
5.5–6.0 (High)	0.8	1.0	1.8	1.5	1.6	1.8	2.1	1.6	2.2	1.2	1.5	1.9	1.7	1.5	1.2	1.0	1.3	+0.2	
Race (2-year average): <sup>b</sup>																			
White	1.3	1.3	1.6	1.9	2.0	2.2	2.6	2.8	2.5	2.2	2.3	2.2	2.2	2.1	1.9	2.0	1.8	-0.2	
African American	0.6	0.6	0.9	1.0	0.7	0.5	0.3	0.4	0.5	0.5	0.7	1.2	1.3	0.9	1.0	1.0	0.9	-0.1	
Hispanic	2.7	2.5	2.4	3.1	4.1	4.2	3.9	3.5	3.4	3.1	3.1	2.9	3.0	3.1	3.1	2.7	2.0	-0.7	

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.



**TABLE D-31**  
**Other Cocaine: Trends in Annual Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007– 2008 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700	
Total	1.0	1.2	1.3	1.7	2.1	2.5	2.2	2.4	2.3	1.9	1.9	1.8	1.6	1.6	1.7	1.6	1.5	1.4	-0.1
Gender:																			
Male	1.1	1.2	1.5	1.7	2.0	2.2	2.5	2.3	2.3	1.9	1.8	1.7	1.5	1.3	1.5	1.4	1.3	1.4	+0.1
Female	0.8	1.2	1.2	1.8	2.2	2.6	1.9	2.4	2.2	1.8	2.0	1.9	1.6	1.8	1.8	1.7	1.6	1.4	-0.2
College Plans:																			
None or under 4 years	2.7	4.2	4.1	5.6	5.9	6.6	6.0	7.7	7.1	6.1	5.3	6.4	5.0	5.4	4.5	5.7	5.7	5.5	-0.2
Complete 4 years	0.6	0.7	0.9	1.2	1.6	1.8	1.7	1.8	1.7	1.4	1.5	1.3	1.2	1.1	1.4	1.2	1.1	1.1	0.0
Region:																			
Northeast	1.2	0.7	0.9	1.9	1.8	2.1	1.6	1.4	1.7	1.1	1.6	1.2	1.0	1.6	1.5	1.0	1.0	0.9	-0.2
Midwest	0.6	1.0	0.7	0.9	2.0	2.4	2.0	1.9	2.2	2.3	1.6	1.8	1.7	1.1	1.3	1.1	1.3	1.5	+0.2
South	1.0	1.5	1.6	2.0	2.0	2.3	2.1	3.1	2.6	1.7	2.4	2.1	1.9	1.7	1.9	2.3	1.8	1.8	0.0
West	1.3	1.5	2.1	2.0	2.7	3.1	2.9	2.5	2.2	2.5	1.7	1.9	1.6	1.8	1.8	1.5	1.5	1.3	-0.3
Population Density:																			
Large MSA	0.9	1.1	1.0	1.6	2.0	2.5	1.7	1.8	1.8	1.6	1.6	1.4	1.2	1.7	1.6	1.5	1.5	1.5	0.0
Other MSA	0.9	1.4	1.8	2.1	2.1	2.6	2.2	2.5	2.3	1.8	2.2	1.8	1.6	1.6	1.7	1.6	1.5	1.4	-0.2
Non-MSA	1.1	0.9	0.7	1.2	2.2	2.2	2.5	2.8	2.8	2.5	1.6	2.3	2.2	1.3	1.7	1.7	1.5	1.4	0.0
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	2.1	2.7	2.2	3.1	4.3	3.2	3.5	4.7	5.1	4.2	3.7	2.8	2.9	3.1	2.9	3.6	3.1	3.0	-0.2
2.5–3.0	1.2	1.1	1.5	2.0	2.0	2.6	2.4	2.5	2.8	2.1	1.9	2.3	1.8	1.9	2.2	1.7	1.6	1.8	+0.2
3.5–4.0	0.6	1.0	1.5	1.9	2.2	2.8	2.1	2.4	2.3	1.9	1.8	1.9	1.6	1.5	2.0	1.7	1.4	1.7	+0.2
4.5–5.0	0.6	0.8	0.8	1.1	1.6	2.4	1.9	1.8	1.3	1.4	1.6	1.6	1.1	1.3	1.2	1.2	1.0	0.8	-0.2
5.5–6.0 (High)	1.0	1.2	0.8	1.2	2.0	1.9	1.7	1.8	1.8	1.3	1.1	0.8	1.5	0.9	0.9	0.9	0.9	1.1	+0.2
Race (2-year average): <sup>b</sup>																			
White	—	0.9	1.0	1.2	1.8	2.4	2.5	2.2	2.1	1.9	1.8	1.8	1.8	1.5	1.4	1.5	1.3	1.2	-0.1
African American	—	0.6	0.5	0.6	0.5	0.4	0.3	0.5	0.7	0.6	0.5	0.5	0.6	0.8	0.9	0.7	0.6	0.6	0.0
Hispanic	—	2.6	3.3	4.0	4.3	4.1	3.3	4.0	4.9	3.9	3.2	3.1	2.7	2.8	2.9	2.8	3.1	2.8	-0.3

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-32**  
**Other Cocaine: Trends in Annual Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007– 2008 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100		
Total	2.1	1.7	1.8	2.4	3.0	3.5	4.1	4.0	4.4	3.8	3.0	3.4	2.8	3.3	3.0	2.9	3.1	2.6	-0.5	
Gender:																				
Male	2.0	1.9	2.2	2.7	3.1	3.7	4.1	4.1	4.6	4.2	3.3	3.6	2.9	3.6	3.3	3.0	3.2	2.7	-0.5	
Female	2.1	1.5	1.4	2.1	2.9	3.3	4.0	3.8	4.1	3.4	2.6	3.3	2.7	3.0	2.7	2.8	2.9	2.4	-0.5	
College Plans:																				
None or under 4 years	4.4	3.3	4.5	5.9	6.3	8.4	9.0	9.3	10.5	8.3	8.2	8.7	7.3	8.3	8.1	8.3	7.5	7.8	+0.3	
Complete 4 years	1.6	1.3	1.3	1.7	2.5	2.7	3.2	3.0	3.4	3.0	2.1	2.6	2.1	2.6	2.3	2.2	2.5	1.8	-0.6	
Region:																				
Northeast	1.3	1.0	1.8	2.0	2.2	2.2	2.5	4.3	4.1	2.5	2.0	1.8	2.7	3.2	3.0	2.5	2.5	1.7	-0.8	
Midwest	1.6	1.3	1.3	1.8	2.5	3.4	3.4	3.1	3.9	4.0	3.0	3.2	2.3	3.0	3.0	2.8	3.3	2.2	-1.1	
South	1.9	1.6	1.7	2.2	2.9	3.5	4.8	3.7	4.7	3.9	3.2	3.3	3.1	3.2	2.6	2.9	3.3	3.2	-0.1	
West	3.4	3.1	3.2	4.3	4.8	5.2	5.3	5.2	4.6	4.6	3.9	5.5	3.2	4.1	3.6	3.5	3.0	2.7	-0.3	
Population Density:																				
Large MSA	1.6	1.5	1.4	1.9	2.8	3.3	3.9	3.8	3.7	3.7	2.5	3.1	2.2	2.9	2.7	2.6	3.1	2.4	-0.7	
Other MSA	2.6	2.0	2.0	2.7	3.1	3.9	3.8	4.0	4.5	3.7	3.2	3.7	2.8	3.4	3.1	3.0	2.9	2.9	0.0	
Non-MSA	1.4	1.4	1.9	2.5	3.1	3.2	4.9	4.2	4.8	4.0	3.2	3.3	4.1	3.6	3.3	3.4	3.3	2.0	-1.3	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	3.1	2.7	2.7	3.1	5.0	6.1	5.5	6.7	7.6	6.3	4.8	7.1	6.4	5.7	4.5	5.6	5.1	5.9	+0.8	
2.5–3.0	2.2	1.6	2.0	2.6	3.6	3.6	4.3	4.5	5.1	4.4	4.5	3.9	3.5	3.7	4.0	3.7	3.3	3.1	-0.3	
3.5–4.0	2.2	2.0	2.2	2.7	3.3	3.8	4.6	4.0	4.2	4.0	2.5	3.2	2.9	3.7	3.0	2.8	3.2	2.4	-0.8	
4.5–5.0	1.6	1.3	1.4	1.8	2.2	3.0	3.3	3.0	3.5	3.0	2.2	2.0	1.8	2.8	2.4	1.8	2.4	1.9	-0.5	
5.5–6.0 (High)	1.8	1.3	0.9	1.6	1.7	2.8	2.9	2.5	3.5	2.7	1.4	2.7	1.2	1.6	2.1	2.8	2.4	1.3	-1.1	
Race (2-year average): <sup>b</sup>																				
White	—	1.9	1.8	1.9	2.6	3.2	3.7	4.1	4.3	4.1	3.4	3.3	3.4	3.4	3.3	3.2	3.2	2.8	-0.3	
African American	—	0.5	0.5	0.9	0.8	0.6	0.6	0.9	0.8	0.5	0.5	0.7	0.7	0.7	0.8	0.9	0.6	0.7	0.0	
Hispanic	—	3.4	3.4	4.6	5.2	6.1	7.5	7.0	6.8	7.1	5.6	5.0	5.2	5.1	5.4	5.0	4.5	4.6	+0.1	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-33**  
**Other Cocaine: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

		Percentage who used in last 12 months																
		1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
<i>Approximate wtd. N =</i>		—	—	—	—	—	—	—	—	—	—	—	—	16,300	16,300	16,700	15,200	15,000
Total		—	—	—	—	—	—	—	—	—	—	—	—	9.8	7.4	5.2	4.6	3.2
Gender:																		
Male		—	—	—	—	—	—	—	—	—	—	—	—	10.1	8.0	6.5	5.8	3.7
Female		—	—	—	—	—	—	—	—	—	—	—	—	9.1	6.2	4.0	3.2	2.4
College Plans:																		
None or under 4 years		—	—	—	—	—	—	—	—	—	—	—	—	9.8	6.0	7.3	6.3	4.0
Complete 4 years		—	—	—	—	—	—	—	—	—	—	—	—	8.3	6.7	4.2	3.7	2.8
Region:																		
Northeast		—	—	—	—	—	—	—	—	—	—	—	—	12.9	7.0	4.9	5.6	3.4
Midwest		—	—	—	—	—	—	—	—	—	—	—	—	8.2	5.6	4.8	3.7	2.9
South		—	—	—	—	—	—	—	—	—	—	—	—	5.8	5.8	4.6	4.1	2.8
West		—	—	—	—	—	—	—	—	—	—	—	—	15.3	13.4	7.5	6.1	3.9
Population Density:																		
Large MSA		—	—	—	—	—	—	—	—	—	—	—	—	13.3	9.8	5.6	5.0	3.7
Other MSA		—	—	—	—	—	—	—	—	—	—	—	—	8.9	7.8	5.4	4.7	3.3
Non-MSA		—	—	—	—	—	—	—	—	—	—	—	—	8.0	4.5	4.4	4.1	2.5
Parental Education: <sup>a</sup>																		
1.0–2.0 (Low)		—	—	—	—	—	—	—	—	—	—	—	—	5.3	4.9	3.3	3.4	3.5
2.5–3.0		—	—	—	—	—	—	—	—	—	—	—	—	10.5	6.5	4.6	5.0	3.5
3.5–4.0		—	—	—	—	—	—	—	—	—	—	—	—	10.5	7.2	5.1	4.7	3.2
4.5–5.0		—	—	—	—	—	—	—	—	—	—	—	—	9.0	7.7	6.1	4.1	2.7
5.5–6.0 (High)		—	—	—	—	—	—	—	—	—	—	—	—	9.7	9.0	6.5	5.4	2.4
Race (2-year average): <sup>b</sup>																		
White		—	—	—	—	—	—	—	—	—	—	—	—	—	9.3	7.0	5.3	4.2
African American		—	—	—	—	—	—	—	—	—	—	—	—	—	2.8	1.4	0.7	1.0
Hispanic		—	—	—	—	—	—	—	—	—	—	—	—	—	6.3	5.1	5.1	5.0

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table. Data based on one form in 1987–1989;  $N$  is one fifth of  $N$

indicated in 1987–1988 and one sixth of  $N$  indicated in 1989 in Table D-109. Data based on four of six forms beginning in 1990;  $N$  is four sixths of  $N$  indicated in Table D-109.

(Table continued on next page.)

**TABLE D-33 (cont.)**  
**Other Cocaine: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																	2007– 2008 change	
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	2.6	2.9	3.0	3.4	4.2	5.0	4.9	5.8	4.5	4.4	4.4	4.2	4.7	4.5	5.2	4.5	4.0	-0.5	
Gender:																			
Male	3.1	3.7	3.7	4.0	4.9	5.7	5.6	7.1	5.5	4.9	5.0	5.4	5.8	5.4	5.7	4.8	4.8	0.0	
Female	2.0	2.0	2.3	2.5	3.2	4.0	3.9	4.2	3.4	3.7	3.7	2.9	3.5	3.6	4.4	3.9	3.1	-0.8	
College Plans:																			
None or under 4 years	4.0	3.9	4.3	4.5	5.7	7.0	8.9	7.6	6.7	7.4	7.1	4.8	6.8	6.7	6.9	7.7	6.8	-1.0	
Complete 4 years	2.0	2.5	2.5	2.9	3.5	4.1	3.5	5.2	3.7	3.4	3.4	3.8	3.9	3.9	4.7	3.6	3.1	-0.4	
Region:																			
Northeast	2.8	2.3	2.8	4.2	5.2	5.9	4.7	4.1	3.7	4.4	4.3	5.3	4.4	4.3	6.2	5.3	4.4	-0.9	
Midwest	2.2	2.3	3.5	2.7	3.2	4.1	5.3	5.7	4.5	5.6	4.8	3.2	3.9	4.2	3.6	4.4	3.4	-1.1	
South	2.5	2.6	2.6	3.1	4.2	4.6	4.9	6.6	4.0	3.9	4.4	4.1	4.9	4.7	5.8	4.5	4.2	-0.3	
West	3.1	4.6	3.5	4.0	4.5	6.2	4.4	6.1	5.9	3.5	3.9	4.7	5.8	4.7	5.1	3.8	4.1	+0.3	
Population Density:																			
Large MSA	3.1	2.6	2.6	3.7	3.9	4.2	4.8	4.8	3.7	4.1	3.5	3.0	3.9	4.6	7.2	4.3	4.1	-0.2	
Other MSA	2.5	3.6	3.5	3.3	4.4	5.2	4.9	6.0	4.5	4.3	4.7	5.3	5.4	4.7	4.4	4.6	3.9	-0.7	
Non-MSA	2.3	2.0	2.6	3.1	4.2	5.6	4.9	6.7	5.4	5.0	4.9	3.9	4.2	4.0	3.8	4.6	4.2	-0.4	
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	3.7	3.9	2.7	2.9	5.2	6.4	5.5	7.4	5.4	3.7	5.1	4.1	6.3	4.1	4.6	5.2	3.0	-2.3	
2.5–3.0	2.3	2.3	3.2	3.4	3.8	4.9	5.3	5.0	3.8	5.6	4.7	3.4	3.6	5.5	5.5	5.0	3.8	-1.1	
3.5–4.0	2.6	3.3	3.4	3.6	4.6	4.9	5.3	6.9	4.7	4.7	4.9	4.6	5.1	4.7	5.2	4.5	4.6	+0.1	
4.5–5.0	2.3	2.9	2.6	3.2	3.9	4.4	4.2	5.5	4.5	3.9	3.4	4.3	5.1	4.2	4.6	4.3	3.5	-0.8	
5.5–6.0 (High)	2.0	1.7	3.1	2.7	3.8	4.8	3.5	3.6	4.2	2.2	3.9	3.8	3.7	3.7	5.9	3.7	4.2	+0.5	
Race (2-year average): <sup>b</sup>																			
White	2.9	2.6	2.9	3.3	3.9	5.0	5.6	6.0	5.7	5.0	5.1	4.9	4.8	4.9	5.2	5.5	5.2	-0.3	
African American	1.0	0.7	0.8	0.8	0.7	0.7	0.6	0.8	1.0	0.9	0.8	1.0	1.1	1.2	1.4	1.2	0.7	-0.5	
Hispanic	4.3	5.1	5.1	4.0	5.6	6.9	6.0	5.8	6.6	5.8	4.7	3.9	4.8	5.8	5.7	4.8	3.7	-1.1	

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-34**  
**Heroin: Trends in Annual Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007– 2008 change	
	1991	1992	1993	1994	1995 <sup>a</sup>	1996 <sup>a</sup>	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		
Total	0.7	0.7	0.7	1.2	1.4	1.6	1.3	1.3	1.4	1.1	1.0	0.9	0.9	1.0	0.8	0.8	0.8	0.9	0.0	
Gender:																				
Male	0.9	0.8	0.8	1.3	1.6	1.5	1.4	1.5	1.4	1.0	1.0	0.8	0.8	0.9	0.8	0.6	0.8	0.9	0.9	+0.2
Female	0.5	0.7	0.5	0.9	1.2	1.5	1.1	1.1	1.3	1.2	1.0	1.0	0.9	1.0	0.8	0.9	0.9	0.7	0.7	-0.1
College Plans:																				
None or under 4 years	2.1	2.7	2.0	3.9	4.4	4.1	3.4	5.0	3.7	3.5	3.1	2.9	3.1	4.2	2.3	3.0	3.7	3.5	3.5	-0.1
Complete 4 years	0.4	0.4	0.5	0.7	1.0	1.1	1.1	0.9	1.1	0.8	0.8	0.7	0.6	0.6	0.6	0.6	0.5	0.6	0.6	+0.1
Region:																				
Northeast	0.5	0.6	0.7	1.3	1.4	1.8	1.1	1.1	1.3	1.1	1.1	0.8	0.7	1.1	0.7	0.4	0.5	0.7	0.7	+0.2
Midwest	0.4	0.8	0.5	1.1	1.4	1.6	1.4	1.3	1.6	1.4	1.0	1.0	1.0	0.8	0.5	0.7	0.8	1.0	1.0	+0.2
South	0.8	0.7	0.7	1.1	1.5	1.4	1.2	1.4	1.4	0.7	1.2	1.0	1.0	0.9	1.0	0.9	0.8	0.8	0.8	0.0
West	1.0	0.7	1.1	1.1	1.2	1.6	1.4	1.3	1.2	1.4	0.7	1.0	0.9	1.2	0.8	0.9	1.0	0.9	0.9	-0.1
Population Density:																				
Large MSA	0.5	0.7	0.7	1.2	1.2	1.4	1.0	1.0	1.3	1.0	0.9	0.7	0.8	1.2	0.6	0.7	0.5	1.2	1.2	+0.6 ss
Other MSA	0.7	0.8	0.9	1.2	1.5	1.7	1.3	1.3	1.4	1.1	1.0	1.0	0.9	1.0	0.8	0.9	0.9	0.8	0.8	-0.1
Non-MSA	0.8	0.7	0.4	1.0	1.5	1.5	1.5	1.6	1.5	1.0	1.1	1.1	1.2	0.6	1.0	0.8	1.0	0.6	0.6	-0.4
Parental Education: <sup>b</sup>																				
1.0–2.0 (Low)	1.5	1.4	0.8	2.0	2.6	2.0	2.3	3.5	2.8	1.7	2.6	1.2	2.1	1.9	0.5	1.8	1.9	2.3	2.3	+0.4
2.5–3.0	0.9	0.7	0.6	1.1	1.0	1.7	1.4	1.2	1.4	1.5	1.1	1.3	1.0	1.1	1.3	0.8	0.8	1.0	1.0	+0.1
3.5–4.0	0.6	0.6	0.7	1.3	1.6	1.7	1.0	1.1	1.2	0.7	1.0	0.9	0.8	1.0	1.0	0.8	0.6	0.7	0.7	+0.1
4.5–5.0	0.4	0.5	0.8	0.8	1.2	1.4	1.1	1.1	1.1	0.8	0.6	0.8	0.6	0.7	0.5	0.6	0.9	0.4	0.4	-0.5 s
5.5–6.0 (High)	0.5	0.8	0.6	1.3	1.6	1.0	1.5	1.4	1.8	1.0	0.8	0.6	0.7	0.6	0.4	0.4	0.4	1.2	1.2	+0.7 s
Race (2-year average): <sup>c</sup>																				
White	—	0.6	0.6	0.8	1.2	1.6	1.6	1.3	1.2	1.2	1.0	1.0	0.9	0.9	0.8	0.7	0.7	0.8	0.8	0.0
African American	—	0.4	0.3	0.6	0.7	0.5	0.4	0.5	0.7	0.5	0.6	0.6	0.5	0.7	0.5	0.4	0.4	0.4	0.4	0.0
Hispanic	—	1.4	1.4	1.5	1.8	2.1	1.7	1.7	2.2	2.0	1.4	1.2	1.4	1.7	1.5	1.1	1.2	1.3	1.3	+0.1

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>In 1995, the heroin question was changed in half of the forms. Separate questions were asked for use with and without injection. In 1996, the remaining forms were changed. Data presented here represent the combined data from all forms.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-35**  
**Heroin: Trends in Annual Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007–	
	1991	1992	1993	1994	1995 <sup>a</sup>	1996 <sup>a</sup>	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008	change
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100		
Total	0.5	0.6	0.7	0.9	1.1	1.2	1.4	1.4	1.4	1.4	0.9	1.1	0.7	0.9	0.9	0.9	0.8	0.8	0.0	
Gender:																				
Male	0.7	0.8	0.9	1.0	1.3	1.5	1.6	1.7	1.7	1.5	1.0	1.3	0.8	1.0	1.1	0.9	0.9	1.0	+0.2	
Female	0.4	0.4	0.4	0.8	0.8	0.9	1.3	1.1	1.2	1.2	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.6	-0.2	
College Plans:																				
None or under 4 years	1.4	1.4	1.9	2.0	2.2	2.4	2.9	2.7	3.4	3.8	2.5	2.7	2.0	2.8	3.2	2.7	2.0	2.5	+0.5	
Complete 4 years	0.3	0.4	0.4	0.7	0.9	1.0	1.2	1.2	1.1	1.0	0.7	0.8	0.5	0.6	0.6	0.6	0.7	0.6	-0.1	
Region:																				
Northeast	0.4	0.6	0.6	0.6	0.9	0.9	1.3	1.8	1.9	1.5	1.0	0.9	0.6	1.1	1.3	0.9	1.1	0.7	-0.3	
Midwest	0.6	0.6	0.8	0.9	1.0	1.5	1.5	1.4	1.3	1.6	1.1	1.2	0.7	0.7	1.0	0.9	0.7	1.0	+0.2	
South	0.6	0.5	0.6	1.0	1.3	1.4	1.5	1.3	1.4	1.5	0.9	0.8	0.9	1.0	0.8	0.9	0.8	0.9	+0.1	
West	0.4	0.8	0.5	1.2	1.0	1.0	1.3	1.1	1.1	0.7	0.7	1.4	0.7	0.8	0.8	0.7	0.9	0.7	-0.2	
Population Density:																				
Large MSA	0.6	0.6	0.7	0.8	1.0	1.1	1.6	1.2	1.2	1.8	0.9	0.9	0.6	0.9	0.8	0.7	0.9	0.6	-0.3	
Other MSA	0.5	0.6	0.6	0.9	1.0	1.3	1.3	1.5	1.4	1.2	1.0	1.0	0.8	0.9	1.0	0.9	0.8	0.8	0.0	
Non-MSA	0.4	0.6	0.7	1.0	1.3	1.2	1.6	1.5	1.6	1.2	0.9	1.4	0.9	0.7	0.9	1.0	0.7	1.1	+0.4	
Parental Education: <sup>b</sup>																				
1.0–2.0 (Low)	0.4	0.5	1.2	1.3	1.8	1.0	1.3	1.7	2.4	1.3	1.1	2.0	1.1	1.5	1.7	1.4	1.8	1.9	+0.1	
2.5–3.0	0.8	0.7	0.7	0.8	1.0	1.2	1.3	1.2	1.5	1.7	1.3	0.8	0.8	1.0	1.2	0.9	0.8	0.5	-0.3	
3.5–4.0	0.5	0.6	0.8	0.9	1.2	1.3	1.6	1.6	1.2	1.5	0.6	1.1	0.7	0.8	0.8	0.6	0.8	1.1	+0.3	
4.5–5.0	0.4	0.5	0.3	0.9	0.9	1.1	1.5	1.3	1.4	1.3	0.8	0.7	0.6	0.7	0.8	0.7	0.7	0.6	-0.1	
5.5–6.0 (High)	0.4	0.5	0.8	0.9	0.9	1.5	1.1	1.3	1.2	1.1	0.9	1.6	0.3	0.5	0.6	1.2	0.5	0.6	+0.1	
Race (2-year average): <sup>c</sup>																				
White	—	0.6	0.7	0.8	1.0	1.2	1.4	1.4	1.5	1.5	1.2	1.0	0.9	0.8	0.9	1.0	0.8	0.7	-0.1	
African American	—	0.3	0.4	0.6	0.6	0.2	0.2	0.4	0.5	0.5	0.5	0.3	0.3	0.4	0.6	0.6	0.4	0.5	+0.1	
Hispanic	—	0.7	0.7	0.7	1.0	1.0	1.3	1.6	1.7	1.4	1.4	1.1	1.1	1.2	1.2	1.2	1.0	1.0	0.0	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>In 1995, the heroin question was changed in half of the forms. Separate questions were asked for use with and without injection. In 1996, the remaining forms were changed. Data presented here represent the combined data from all forms.

<sup>b</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-36**  
**Heroin: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	<i>9,400</i>	<i>15,400</i>	<i>17,100</i>	<i>17,800</i>	<i>15,500</i>	<i>15,900</i>	<i>17,500</i>	<i>17,700</i>	<i>16,300</i>	<i>15,900</i>	<i>16,000</i>	<i>15,200</i>	<i>16,300</i>	<i>16,300</i>	<i>16,700</i>	<i>15,200</i>	<i>15,000</i>
Total	1.0	0.8	0.8	0.8	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.6	0.5	0.4
Gender:																	
Male	1.2	1.0	1.2	1.1	0.6	0.6	0.6	0.8	0.7	0.7	0.8	0.7	0.7	0.7	0.9	0.6	0.6
Female	0.8	0.5	0.4	0.6	0.3	0.4	0.3	0.4	0.4	0.3	0.3	0.2	0.3	0.3	0.4	0.3	0.3
College Plans:																	
None or under 4 years	—	0.9	1.1	1.0	0.7	0.6	0.5	0.7	0.9	0.6	0.7	0.8	0.5	0.8	0.9	0.6	0.5
Complete 4 years	—	0.6	0.5	0.6	0.3	0.3	0.5	0.4	0.3	0.4	0.5	0.4	0.4	0.3	0.5	0.4	0.4
Region:																	
Northeast	1.1	0.7	0.7	0.6	0.6	0.5	0.5	0.9	0.6	0.6	0.8	0.7	0.6	0.5	0.9	0.8	0.2
Midwest	1.3	1.0	1.0	0.8	0.5	0.7	0.6	0.5	0.4	0.6	0.6	0.4	0.6	0.3	0.6	0.3	0.8
South	0.9	0.7	0.9	1.1	0.6	0.3	0.5	0.5	0.7	0.5	0.6	0.5	0.4	0.5	0.6	0.5	0.4
West	0.7	0.6	0.5	0.8	0.2	0.4	0.5	0.3	0.5	0.4	0.3	0.5	0.5	0.7	0.7	0.3	0.3
Population Density:																	
Large MSA	1.3	1.0	0.5	0.7	0.4	0.3	0.3	0.7	0.6	0.6	0.7	0.7	0.3	0.4	0.5	0.4	0.4
Other MSA	0.9	1.0	0.8	0.8	0.6	0.5	0.5	0.4	0.4	0.4	0.7	0.4	0.6	0.5	0.7	0.5	0.4
Non-MSA	1.0	0.4	1.1	1.0	0.5	0.6	0.7	0.6	0.7	0.7	0.4	0.5	0.5	0.5	0.8	0.5	0.6
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	1.2	0.8	0.8	0.8	0.6	0.6	0.4	0.4	0.5	0.6	0.8	0.9	0.5	0.5	0.9	0.8	0.5
2.5–3.0	0.8	0.9	0.8	0.9	0.5	0.6	0.6	0.7	0.6	0.5	0.5	0.4	0.4	0.7	0.7	0.4	0.4
3.5–4.0	0.6	0.8	0.9	0.7	0.4	0.4	0.5	0.3	0.5	0.5	0.5	0.5	0.6	0.4	0.6	0.4	0.4
4.5–5.0	1.2	1.4	0.6	0.9	0.6	0.4	0.3	0.6	0.4	0.4	0.7	0.3	0.3	0.3	0.6	0.4	0.6
5.5–6.0 (High)	1.2	0.6	1.1	1.0	0.8	0.4	0.7	1.1	0.8	0.5	0.6	0.5	0.7	0.4	0.4	0.5	0.5
Race (2-year average): <sup>b</sup>																	
White	—	—	0.8	0.8	0.6	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.6	0.5
African American	—	—	0.6	0.6	0.5	0.5	0.6	0.7	0.6	0.4	0.5	0.5	0.5	0.7	0.6	0.3	0.2
Hispanic	—	—	1.2	2.0	1.7	0.4	0.3	0.4	0.6	1.1	1.0	0.9	0.9	0.5	0.5	0.6	0.6

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

(Table continued on next page.)

**TABLE D-36 (cont.)**  
**Heroin: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																	2007– 2008 change	
	1992	1993	1994	1995 <sup>c</sup>	1996 <sup>c</sup>	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	0.6	0.5	0.6	1.1	1.0	1.2	1.0	1.1	1.5	0.9	1.0	0.8	0.9	0.8	0.8	0.9	0.7	-0.2	
Gender:																			
Male	0.8	0.7	0.8	1.4	1.3	1.5	1.4	1.4	1.7	1.3	1.1	0.8	1.2	1.2	1.0	1.2	1.0	-0.2	
Female	0.3	0.3	0.4	0.8	0.7	0.9	0.7	0.8	1.2	0.6	0.8	0.5	0.4	0.5	0.4	0.6	0.4	-0.2	
College Plans:																			
None or under 4 years	0.9	1.0	1.1	1.5	1.8	1.8	1.7	1.3	2.2	1.3	2.3	0.9	1.6	1.8	1.3	2.2	1.4	-0.7	
Complete 4 years	0.5	0.4	0.5	0.9	0.8	1.0	0.8	1.0	1.1	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.5	-0.2	
Region:																			
Northeast	0.5	0.9	0.7	1.0	1.6	1.7	1.3	1.2	1.0	1.2	1.2	0.8	0.9	1.0	1.1	1.1	0.7	-0.5	
Midwest	0.6	0.5	0.9	0.7	0.7	0.9	1.0	0.9	1.4	1.3	1.0	0.6	0.6	0.8	0.4	0.8	0.6	-0.3	
South	0.6	0.4	0.6	1.4	1.0	1.1	1.1	1.3	1.6	0.6	1.2	1.0	1.0	0.9	0.8	0.9	0.7	-0.2	
West	0.8	0.5	0.4	1.0	0.9	1.2	0.6	0.9	1.8	0.8	0.5	0.5	0.9	0.7	0.7	0.9	1.0	+0.1	
Population Density:																			
Large MSA	0.4	0.6	0.4	1.4	1.1	1.1	0.9	0.8	1.9	1.1	1.0	0.7	0.8	0.8	1.0	0.9	0.9	0.0	
Other MSA	0.7	0.5	0.8	0.9	1.1	1.3	1.3	1.3	1.3	0.8	1.0	0.8	1.0	0.9	0.6	0.9	0.8	-0.1	
Non-MSA	0.7	0.5	0.5	1.0	0.9	1.0	0.6	1.0	1.3	0.9	1.1	0.9	0.6	0.8	0.6	1.0	0.5	-0.5 s	
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	0.7	0.3	0.9	1.8	1.1	2.1	1.2	2.3	2.3	1.3	2.1	1.1	1.4	1.0	1.2	1.7	1.3	-0.4	
2.5–3.0	0.6	0.4	0.8	1.1	0.9	1.0	1.0	0.9	1.6	0.5	1.0	0.7	0.9	1.2	0.9	1.0	0.5	-0.5 s	
3.5–4.0	0.6	0.6	0.4	0.9	1.1	1.2	1.2	1.0	1.3	1.0	0.9	0.8	0.7	0.8	0.7	0.8	0.9	+0.1	
4.5–5.0	0.7	0.7	0.3	1.1	1.0	1.1	1.0	1.1	1.5	1.0	0.7	0.6	0.9	0.5	0.5	0.9	0.5	-0.4	
5.5–6.0 (High)	0.3	0.4	0.9	1.0	0.8	1.1	0.7	1.1	1.1	0.8	1.0	0.6	0.6	0.8	0.7	0.5	0.7	+0.2	
Race (2-year average): <sup>b</sup>																			
White	0.5	0.5	0.5	0.8	1.0	1.2	1.2	1.1	1.3	1.3	1.0	0.8	0.7	0.7	0.7	0.9	0.9	0.0	
African American	0.5	0.4	0.3	0.4	0.5	0.5	0.4	0.3	0.5	0.4	0.5	0.7	0.7	0.8	0.7	0.5	0.4	-0.1	
Hispanic	0.9	0.7	0.5	1.2	1.5	1.1	0.8	1.0	2.0	1.6	0.8	0.8	1.0	1.3	1.2	1.1	0.9	-0.2	

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

<sup>c</sup>In 1995, the heroin question was changed in half of the forms. Separate questions were asked for use with and without injection. Data presented here represent the combined data from all forms.



**TABLE D-37**  
**Heroin with a Needle: Trends in Annual Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007–
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008
<i>Approximate wtd. N =</i>	—	—	—	—	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700	
Total	—	—	—	—	0.9	1.0	0.8	0.8	0.9	0.6	0.7	0.6	0.6	0.7	0.6	0.5	0.6	0.5	0.0
Gender:																			
Male	—	—	—	—	1.2	1.0	0.8	1.0	1.0	0.7	0.7	0.6	0.7	0.7	0.6	0.4	0.5	0.6	+0.1
Female	—	—	—	—	0.5	1.0	0.7	0.7	0.8	0.6	0.7	0.6	0.5	0.7	0.6	0.6	0.5	0.4	-0.1
College Plans:																			
None or under 4 years	—	—	—	—	3.2	3.1	2.0	3.1	2.2	2.1	2.2	1.9	2.0	3.1	1.5	2.1	2.7	2.1	-0.6
Complete 4 years	—	—	—	—	0.6	0.7	0.6	0.6	0.7	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.3	0.4	+0.1
Region:																			
Northeast	—	—	—	—	0.8	1.3	0.5	0.6	1.0	0.8	0.9	0.6	0.4	0.7	0.4	0.3	0.4	0.5	+0.1
Midwest	—	—	—	—	0.9	1.1	0.7	0.9	1.2	0.9	0.7	0.8	0.6	0.6	0.3	0.4	0.6	0.5	0.0
South	—	—	—	—	0.8	0.9	0.8	1.0	0.9	0.3	0.9	0.6	0.7	0.6	0.8	0.6	0.6	0.5	-0.1
West	—	—	—	—	1.0	1.0	1.0	0.8	0.7	0.8	0.3	0.6	0.7	0.9	0.6	0.7	0.6	0.6	0.0
Population Density:																			
Large MSA	—	—	—	—	0.9	0.7	0.6	0.8	0.8	0.7	0.7	0.4	0.5	1.0	0.3	0.5	0.3	0.7	+0.3 s
Other MSA	—	—	—	—	0.9	1.2	0.8	0.8	0.9	0.6	0.6	0.7	0.6	0.7	0.7	0.6	0.6	0.5	-0.1
Non-MSA	—	—	—	—	0.9	1.1	0.9	1.1	1.1	0.7	1.0	0.8	0.9	0.5	0.7	0.4	0.7	0.3	-0.3
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	—	—	—	—	1.3	0.9	1.5	2.3	2.0	1.2	2.0	1.1	1.6	1.6	0.3	1.4	1.3	1.6	+0.3
2.5–3.0	—	—	—	—	0.5	1.2	0.8	0.8	0.9	0.5	0.7	0.9	0.6	0.8	1.0	0.5	0.6	0.5	-0.1
3.5–4.0	—	—	—	—	0.8	1.2	0.6	0.6	0.9	0.4	0.6	0.6	0.4	0.7	0.7	0.4	0.3	0.4	+0.1
4.5–5.0	—	—	—	—	1.0	0.8	0.7	0.7	0.5	0.4	0.5	0.5	0.5	0.6	0.3	0.4	0.6	0.3	-0.2
5.5–6.0 (High)	—	—	—	—	1.0	0.6	0.9	0.9	1.2	0.9	0.7	0.4	0.5	0.5	0.3	0.2	0.3	0.7	+0.4
Race (2-year average): <sup>b</sup>																			
White	—	—	—	—	—	1.1	1.0	0.7	0.8	0.7	0.6	0.7	0.6	0.6	0.5	0.4	0.5	0.5	0.0
African American	—	—	—	—	—	0.3	0.2	0.3	0.4	0.3	0.5	0.5	0.4	0.5	0.4	0.3	0.2	0.2	0.0
Hispanic	—	—	—	—	—	1.1	1.0	1.1	1.5	1.2	0.8	0.7	0.9	1.3	1.1	0.9	0.9	1.0	0.0

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of two forms in 1995; N is one half of N indicated in Table D-107.

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-38**  
**Heroin with a Needle: Trends in Annual Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007– 2008
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	change
<i>Approximate wtd. N =</i>	—	—	—	—	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100	
Total	—	—	—	—	0.6	0.7	0.7	0.8	0.6	0.5	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.0
Gender:																			
Male	—	—	—	—	0.8	0.8	0.9	1.0	0.8	0.6	0.5	0.6	0.5	0.6	0.6	0.6	0.5	0.6	+0.1
Female	—	—	—	—	0.4	0.4	0.5	0.5	0.5	0.4	0.3	0.4	0.4	0.3	0.4	0.4	0.5	0.4	-0.1
College Plans:																			
None or under 4 years	—	—	—	—	1.6	1.4	1.5	1.6	1.7	1.7	1.4	1.5	1.4	1.6	1.6	1.3	1.3	1.7	+0.4
Complete 4 years	—	—	—	—	0.4	0.5	0.6	0.6	0.5	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.3	-0.1
Region:																			
Northeast	—	—	—	—	0.5	0.3	0.6	0.8	0.7	0.5	0.5	0.4	0.4	0.5	0.6	0.6	0.6	0.4	-0.2
Midwest	—	—	—	—	0.6	1.0	0.8	0.9	0.7	0.5	0.5	0.6	0.5	0.4	0.5	0.5	0.4	0.5	+0.1
South	—	—	—	—	0.6	0.7	0.8	0.8	0.6	0.6	0.3	0.5	0.5	0.5	0.4	0.6	0.4	0.6	+0.2
West	—	—	—	—	0.5	0.5	0.6	0.6	0.6	0.4	0.5	0.8	0.5	0.5	0.6	0.3	0.6	0.5	-0.2
Population Density:																			
Large MSA	—	—	—	—	0.5	0.5	0.6	0.7	0.6	0.6	0.4	0.5	0.4	0.5	0.4	0.4	0.5	0.4	-0.1
Other MSA	—	—	—	—	0.5	0.7	0.6	0.7	0.5	0.4	0.5	0.4	0.4	0.5	0.6	0.5	0.5	0.5	0.0
Non-MSA	—	—	—	—	0.8	0.8	1.1	1.0	1.0	0.6	0.4	1.0	0.6	0.3	0.5	0.7	0.4	0.7	+0.2
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	—	—	—	—	1.6	0.6	0.7	1.3	1.2	1.0	0.5	1.2	0.8	1.0	1.4	1.0	1.3	1.7	+0.4
2.5–3.0	—	—	—	—	0.5	0.8	0.6	0.6	0.7	0.8	0.7	0.3	0.4	0.5	0.6	0.5	0.5	0.2	-0.3
3.5–4.0	—	—	—	—	0.7	0.7	0.9	0.9	0.6	0.5	0.2	0.6	0.5	0.4	0.4	0.4	0.4	0.5	+0.1
4.5–5.0	—	—	—	—	0.4	0.5	0.7	0.6	0.6	0.3	0.3	0.3	0.5	0.3	0.4	0.3	0.5	0.3	-0.2
5.5–6.0 (High)	—	—	—	—	0.3	0.6	0.7	0.8	0.6	0.3	0.5	1.1	0.2	0.3	0.3	1.0	0.2	0.3	+0.1
Race (2-year average): <sup>b</sup>																			
White	—	—	—	—	—	0.6	0.7	0.7	0.6	0.5	0.4	0.5	0.5	0.4	0.4	0.5	0.4	0.4	-0.1
African American	—	—	—	—	—	0.1	0.1	0.3	0.3	0.3	0.3	0.2	0.1	0.2	0.5	0.4	0.2	0.4	+0.1
Hispanic	—	—	—	—	—	0.6	0.6	0.8	1.0	0.9	0.9	0.7	0.7	0.8	0.8	0.8	0.6	0.7	+0.1

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of two forms in 1995;  $N$  is one half of  $N$  indicated in Table D-108.

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-39**  
**Heroin with a Needle: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																2007–	
	1975– 1979	1980– 1989	1990– 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 change
<i>Approximate wtd. N =</i>	—	—	—	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	—	—	—	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.0
Gender:																		
Male	—	—	—	0.7	0.9	0.9	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.7	0.5	0.6	+0.1
Female	—	—	—	0.3	0.1	0.2	0.3	0.2	0.2	0.1	0.2	0.3	0.1	0.3	0.3	0.1	0.1	0.0
College Plans:																		
None or under 4 years	—	—	—	0.9	1.2	0.9	0.8	0.5	1.0	0.7	0.9	0.4	1.0	0.9	1.0	1.0	1.0	0.0
Complete 4 years	—	—	—	0.4	0.4	0.4	0.3	0.4	0.2	0.2	0.3	0.4	0.2	0.4	0.3	0.2	0.2	0.0
Region:																		
Northeast	—	—	—	0.4	0.6	0.6	0.7	0.3	0.2	0.7	0.6	0.6	0.6	0.6	0.8	0.7	0.3	-0.4
Midwest	—	—	—	0.5	0.4	0.8	0.4	0.5	0.4	0.2	0.6	0.3	0.2	0.7	0.1	0.1	0.3	+0.3
South	—	—	—	0.4	0.6	0.3	0.5	0.4	0.8	0.1	0.3	0.6	0.4	0.4	0.6	0.4	0.3	-0.1
West	—	—	—	0.8	0.5	0.5	0.1	0.3	0.1	0.4	0.2	0.2	0.5	0.3	0.3	0.2	0.5	+0.2
Population Density:																		
Large MSA	—	—	—	0.6	0.7	0.3	0.3	0.4	0.8	0.4	0.5	0.5	0.6	0.4	0.7	0.6	0.2	-0.3
Other MSA	—	—	—	0.4	0.5	0.6	0.5	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.4	0.2	0.5	+0.3 s
Non-MSA	—	—	—	0.6	0.3	0.7	0.5	0.6	0.3	0.2	0.5	0.4	0.2	0.5	0.4	0.4	0.2	-0.2
Parental Education: <sup>a</sup>																		
1.0–2.0 (Low)	—	—	—	0.7	0.9	1.8	0.8	1.5	1.2	0.7	0.8	0.5	0.2	0.8	1.0	1.0	0.9	-0.1
2.5–3.0	—	—	—	0.6	0.5	0.4	0.5	0.1	0.4	0.3	0.4	0.7	0.6	0.5	0.5	0.4	0.3	-0.1
3.5–4.0	—	—	—	0.2	0.3	0.3	0.4	0.5	0.2	0.1	0.5	0.3	0.3	0.4	0.5	0.2	0.4	+0.2
4.5–5.0	—	—	—	0.5	0.7	0.6	0.4	0.3	0.4	0.4	0.2	0.4	0.4	0.3	0.2	0.2	0.3	0.0
5.5–6.0 (High)	—	—	—	0.6	0.5	0.5	0.2	0.4	0.2	0.3	0.2	0.3	0.4	0.4	0.6	0.3	0.2	-0.1
Race (2-year average): <sup>b</sup>																		
White	—	—	—	—	0.4	0.5	0.5	0.4	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.0
African American	—	—	—	—	0.2	0.5	0.4	0.2	0.5	0.4	0.2	0.4	0.5	0.6	0.7	0.4	0.3	-0.1
Hispanic	—	—	—	—	1.0	0.7	0.5	0.6	1.0	0.6	0.4	0.6	0.7	0.8	0.9	0.7	0.4	-0.3

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on three of six forms; N is three sixths of N indicated in Table D-109.

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-40**  
**Heroin without a Needle: Trends in Annual Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007– 2008 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	—	—	—	—	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700	
Total	—	—	—	—	0.8	1.0	0.8	0.8	0.9	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	+0.1
Gender:																			
Male	—	—	—	—	1.0	0.9	0.9	0.9	0.8	0.5	0.6	0.6	0.6	0.4	0.4	0.5	0.4	0.6	+0.1
Female	—	—	—	—	0.6	0.9	0.7	0.8	0.8	0.8	0.6	0.7	0.6	0.7	0.5	0.6	0.5	0.6	+0.1
College Plans:																			
None or under 4 years	—	—	—	—	3.2	2.1	2.2	3.4	2.7	2.4	1.9	1.7	2.3	2.5	1.6	2.3	1.9	2.6	+0.7
Complete 4 years	—	—	—	—	0.5	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.4	+0.1
Region:																			
Northeast	—	—	—	—	0.9	1.1	0.8	0.7	0.7	0.6	0.7	0.3	0.5	0.6	0.5	0.2	0.2	0.4	+0.2
Midwest	—	—	—	—	1.0	1.0	0.9	0.9	1.0	0.8	0.6	0.7	0.8	0.4	0.3	0.7	0.5	0.8	+0.3
South	—	—	—	—	0.8	0.8	0.7	0.9	0.9	0.5	0.6	0.7	0.7	0.6	0.6	0.6	0.4	0.7	+0.3
West	—	—	—	—	0.7	1.1	1.1	0.9	0.9	0.8	0.5	0.7	0.5	0.7	0.4	0.5	0.7	0.5	-0.2
Population Density:																			
Large MSA	—	—	—	—	0.9	1.0	0.6	0.5	0.8	0.7	0.5	0.6	0.6	0.7	0.4	0.4	0.3	0.8	+0.5 ss
Other MSA	—	—	—	—	0.8	1.0	0.9	1.0	0.8	0.8	0.8	0.5	0.6	0.6	0.5	0.5	0.5	0.5	+0.1
Non-MSA	—	—	—	—	0.9	0.9	1.0	1.0	1.1	0.5	0.4	0.8	0.7	0.3	0.6	0.7	0.7	0.4	-0.3
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	—	—	—	—	1.9	1.5	1.3	2.4	1.7	1.1	1.3	0.5	1.4	1.5	0.2	1.4	1.0	1.6	+0.6
2.5–3.0	—	—	—	—	0.7	0.9	1.1	0.7	1.0	1.3	0.6	0.8	0.6	0.6	0.9	0.6	0.4	0.8	+0.4
3.5–4.0	—	—	—	—	0.5	1.2	0.5	0.8	0.6	0.5	0.6	0.6	0.7	0.6	0.5	0.6	0.3	0.4	+0.1
4.5–5.0	—	—	—	—	0.8	0.8	0.8	0.6	0.8	0.5	0.5	0.6	0.4	0.4	0.3	0.4	0.7	0.3	-0.3
5.5–6.0 (High)	—	—	—	—	0.7	0.8	1.0	1.1	1.1	0.3	0.4	0.4	0.5	0.3	0.1	0.3	0.3	0.8	+0.5 s
Race (2-year average): <sup>b</sup>																			
White	—	—	—	—	—	1.0	1.0	0.8	0.8	0.8	0.7	0.6	0.6	0.5	0.4	0.5	0.5	0.5	0.0
African American	—	—	—	—	—	0.2	0.2	0.4	0.5	0.3	0.3	0.3	0.3	0.5	0.4	0.3	0.3	0.3	0.0
Hispanic	—	—	—	—	—	1.5	1.2	1.1	1.4	1.1	0.8	1.0	1.0	1.0	0.9	0.6	0.7	0.8	+0.1

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of two forms in 1995; N is one half of N indicated in Table D-107.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-41**  
**Heroin without a Needle: Trends in Annual Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007– 2008 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	—	—	—	—	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100	
Total	—	—	—	—	0.8	0.9	1.1	1.0	1.1	1.1	0.7	0.8	0.5	0.7	0.7	0.6	0.6	0.6	0.0
Gender:																			
Male	—	—	—	—	0.9	1.1	1.2	1.2	1.3	1.1	0.8	0.9	0.6	0.8	0.7	0.6	0.6	0.8	+0.2
Female	—	—	—	—	0.7	0.7	1.0	0.8	1.0	1.0	0.6	0.6	0.4	0.5	0.6	0.6	0.5	0.4	-0.1
College Plans:																			
None or under 4 years	—	—	—	—	1.7	1.8	2.1	1.8	2.5	2.7	1.7	2.2	1.4	2.2	2.3	2.0	1.1	1.6	+0.5
Complete 4 years	—	—	—	—	0.6	0.7	1.0	0.9	0.8	0.8	0.5	0.6	0.4	0.5	0.4	0.4	0.5	0.4	0.0
Region:																			
Northeast	—	—	—	—	0.5	0.7	1.0	1.4	1.6	1.2	0.8	0.7	0.4	0.9	0.9	0.8	0.7	0.6	-0.2
Midwest	—	—	—	—	0.5	0.8	1.2	0.7	1.0	1.2	0.8	0.9	0.5	0.5	0.8	0.6	0.5	0.8	+0.3
South	—	—	—	—	1.1	1.1	1.2	1.0	1.0	1.3	0.7	0.5	0.7	0.7	0.6	0.6	0.6	0.6	0.0
West	—	—	—	—	0.9	0.9	1.0	0.8	0.8	0.5	0.5	1.2	0.4	0.5	0.5	0.5	0.5	0.4	-0.1
Population Density:																			
Large MSA	—	—	—	—	0.9	0.9	1.3	0.8	0.9	1.5	0.8	0.6	0.4	0.6	0.7	0.5	0.7	0.5	-0.2
Other MSA	—	—	—	—	0.7	1.0	1.0	1.1	1.2	1.0	0.7	0.8	0.6	0.8	0.7	0.6	0.5	0.6	+0.1
Non-MSA	—	—	—	—	0.9	0.7	1.1	1.0	1.2	0.9	0.7	1.0	0.6	0.5	0.6	0.8	0.6	0.8	+0.2
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	—	—	—	—	1.7	0.8	0.9	1.2	1.8	1.1	0.9	1.5	0.9	1.0	1.1	1.2	0.9	1.1	+0.2
2.5–3.0	—	—	—	—	0.6	0.7	1.0	1.0	1.1	1.1	0.9	0.7	0.7	0.7	0.9	0.6	0.6	0.4	-0.2
3.5–4.0	—	—	—	—	0.9	1.0	1.3	1.2	0.9	1.3	0.5	0.8	0.4	0.7	0.6	0.5	0.6	0.8	+0.2
4.5–5.0	—	—	—	—	0.5	0.8	1.1	1.0	1.0	1.0	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.0
5.5–6.0 (High)	—	—	—	—	0.9	1.1	1.0	0.7	1.1	1.1	0.6	1.1	0.1	0.4	0.5	0.4	0.3	0.4	+0.1
Race (2-year average): <sup>b</sup>																			
White	—	—	—	—	—	0.9	1.0	1.1	1.1	1.2	1.0	0.8	0.7	0.6	0.7	0.7	0.5	0.5	-0.1
African American	—	—	—	—	—	0.1	0.1	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.4	+0.1
Hispanic	—	—	—	—	—	0.8	1.1	1.4	1.3	0.9	0.8	0.8	0.8	0.9	1.0	0.9	0.8	0.7	-0.1

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of two forms in 1995; N is one half of N indicated in Table D-108.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-42**  
**Heroin without a Needle: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																	2007– 2008 change
	1975– 1979	1980– 1989	1990– 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	—	—	—	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	—	—	—	1.0	1.0	1.2	0.8	1.0	1.6	0.8	0.8	0.8	0.7	0.8	0.6	1.0	0.5	-0.5 ss
Gender:																		
Male	—	—	—	1.4	1.3	1.4	1.0	1.3	1.8	1.3	0.9	0.9	0.9	1.1	0.8	1.2	0.7	-0.6 s
Female	—	—	—	0.7	0.7	0.9	0.7	0.8	1.5	0.4	0.7	0.7	0.4	0.5	0.3	0.6	0.3	-0.3
College Plans:																		
None or under 4 years	—	—	—	1.4	1.7	1.6	1.3	1.5	2.7	1.3	2.2	0.8	1.5	1.7	1.2	2.6	1.0	-1.5 s
Complete 4 years	—	—	—	0.9	0.8	1.0	0.6	1.0	1.3	0.7	0.4	0.7	0.4	0.6	0.4	0.7	0.3	-0.3 s
Region:																		
Northeast	—	—	—	0.9	1.9	1.9	1.1	1.3	0.9	1.3	1.1	0.6	1.1	1.1	1.0	1.1	0.7	-0.4
Midwest	—	—	—	0.7	0.5	1.0	0.6	0.7	1.6	1.1	0.9	0.7	0.4	0.7	0.2	0.9	0.3	-0.6
South	—	—	—	1.4	0.9	1.1	1.1	1.2	1.8	0.3	0.9	1.2	0.5	0.7	0.7	1.0	0.3	-0.6 s
West	—	—	—	0.8	0.7	0.6	0.3	1.0	2.0	0.9	0.4	0.3	1.0	0.7	0.6	0.9	0.8	-0.1
Population Density:																		
Large MSA	—	—	—	1.3	1.1	1.2	0.9	0.9	2.5	1.0	0.6	0.8	0.8	0.7	0.8	0.9	0.5	-0.4
Other MSA	—	—	—	0.8	1.2	1.1	0.9	1.2	1.2	0.8	1.1	0.7	0.9	0.7	0.4	0.9	0.6	-0.3
Non-MSA	—	—	—	1.0	0.4	1.2	0.4	0.8	1.4	0.7	0.6	1.0	0.2	1.0	0.5	1.2	0.3	-0.9 s
Parental Education: <sup>a</sup>																		
1.0–2.0 (Low)	—	—	—	1.0	0.8	1.7	0.5	2.0	2.7	1.5	1.8	1.0	1.1	1.1	1.2	2.2	0.7	-1.5
2.5–3.0	—	—	—	1.1	0.6	0.8	1.1	1.1	1.8	0.5	0.9	0.9	0.8	1.0	0.5	0.9	0.5	-0.4
3.5–4.0	—	—	—	0.9	1.1	1.3	0.9	0.8	1.7	0.8	1.0	0.7	0.6	0.9	0.5	0.8	0.3	-0.5 s
4.5–5.0	—	—	—	1.2	1.2	1.2	0.8	1.1	1.6	1.1	0.2	0.8	0.7	0.5	0.4	0.8	0.6	-0.3
5.5–6.0 (High)	—	—	—	0.6	1.0	1.0	0.5	1.0	0.6	0.8	0.8	0.7	0.3	0.5	0.7	0.7	0.6	-0.1
Race (2-year average): <sup>b</sup>																		
White	—	—	—	—	1.1	1.3	1.2	1.1	1.4	1.3	1.0	0.8	0.7	0.6	0.6	0.8	0.8	0.0
African American	—	—	—	—	0.2	0.3	0.3	0.1	0.4	0.4	0.4	0.6	0.7	0.5	0.4	0.4	0.4	0.0
Hispanic	—	—	—	—	0.9	0.6	0.4	0.6	1.8	1.3	0.5	0.7	0.7	0.9	1.0	1.1	0.7	-0.3

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on three of six forms; N is three sixths of N indicated in Table D-109.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-43**  
**Narcotics other than Heroin:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	9,400	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	5.7	5.7	6.4	6.0	6.2	6.3	5.9	5.3	5.1	5.2	5.9	5.2	5.3	4.6	4.4	4.5	3.5
Gender:																	
Male	6.6	6.8	7.3	6.9	7.3	7.1	6.5	6.0	6.0	6.2	6.8	5.9	5.6	5.1	4.9	5.0	3.9
Female	4.8	4.7	5.4	5.1	5.1	5.4	5.3	4.6	4.2	4.2	5.1	4.6	4.9	4.1	3.8	3.9	3.1
College Plans:																	
None or under 4 years	—	6.8	8.0	6.8	7.3	7.4	7.2	6.1	6.1	6.1	6.6	6.7	6.1	4.8	5.3	5.7	3.8
Complete 4 years	—	4.6	4.7	4.9	5.0	5.1	4.8	4.6	4.3	4.3	5.4	4.3	4.8	4.6	3.9	4.0	3.5
Region:																	
Northeast	6.1	6.5	6.6	6.8	7.0	5.7	7.2	5.6	5.6	6.7	7.3	5.7	6.0	3.7	4.7	4.1	3.2
Midwest	6.2	6.2	7.5	6.7	6.1	7.6	6.2	5.5	5.3	4.8	6.3	5.8	5.2	4.4	5.7	4.6	4.2
South	4.9	5.0	5.2	4.5	5.2	5.0	4.1	4.5	4.4	4.5	3.8	4.2	4.3	4.7	3.2	4.1	2.7
West	5.4	5.0	6.0	6.7	7.1	6.8	7.2	6.2	5.2	5.3	7.1	5.4	6.1	5.7	4.9	5.3	4.4
Population Density:																	
Large MSA	7.3	6.7	6.7	6.9	7.3	6.9	6.9	5.2	6.0	5.2	6.0	4.8	5.2	4.0	4.1	3.8	3.3
Other MSA	5.5	6.1	6.3	5.9	6.3	7.0	6.3	5.7	5.3	5.1	6.4	5.6	5.3	5.2	4.9	4.6	3.9
Non-MSA	4.8	4.6	6.2	5.4	5.3	4.8	4.8	4.9	4.1	5.2	5.2	5.0	5.2	4.4	3.8	4.8	3.1
Parental Education: <sup>b</sup>																	
1.0–2.0 (Low)	5.4	5.0	5.1	5.0	5.2	5.2	4.8	4.8	4.8	4.7	4.5	4.7	4.1	3.9	3.6	3.8	3.8
2.5–3.0	5.1	5.9	6.4	6.2	5.9	5.8	5.6	4.9	5.0	5.2	5.5	5.0	4.4	4.3	4.0	4.1	3.2
3.5–4.0	4.2	6.3	6.7	6.0	6.3	6.9	6.6	5.2	4.5	5.1	6.5	6.0	5.6	4.3	4.6	4.6	3.7
4.5–5.0	6.4	6.3	6.6	6.4	6.7	7.0	6.3	6.4	6.0	5.6	6.4	4.8	5.4	5.4	4.2	4.7	3.6
5.5–6.0 (High)	6.5	6.5	7.9	6.1	7.8	6.8	6.8	7.1	5.3	4.9	6.8	5.4	7.8	5.6	6.4	5.7	4.1
Race (2-year average): <sup>c</sup>																	
White	—	—	6.6	6.7	6.6	6.8	6.7	6.2	5.8	5.7	6.3	6.3	6.0	5.8	5.3	5.2	4.7
African American	—	—	2.2	2.0	1.8	1.7	1.9	1.8	1.7	1.6	1.6	1.7	1.6	1.5	1.5	1.4	1.1
Hispanic	—	—	3.8	3.5	3.5	3.7	4.3	4.1	4.0	4.2	3.6	3.0	2.4	2.2	2.5	2.4	2.3

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* “‡” indicates some change in the question. See relevant footnote. See relevant figure to assess the impact of the wording changes.

Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

(Table continued on next page.)

**TABLE D-43 (cont.)**

**Narcotics other than Heroin:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																	2007– 2008
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002<sup>d</sup></u>	<u>2003<sup>d</sup></u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007<sup>e</sup></u>	<u>2008</u>	change
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	3.3	3.6	3.8	4.7	5.4	6.2	6.3	6.7	7.0	6.7‡	9.4	9.3	9.5	9.0	9.0	9.2	9.1	0.0
Gender:																		
Male	3.3	3.6	4.3	5.6	6.4	7.1	7.4	8.2	8.0	8.0‡	11.6	10.7	10.9	10.7	10.3	10.9	10.6	-0.2
Female	3.3	3.3	3.4	3.8	4.4	5.4	5.1	5.2	5.9	5.6‡	7.4	7.8	8.1	7.4	7.8	7.6	7.9	+0.3
College Plans:																		
None or under 4 years	4.3	4.2	4.9	5.6	7.0	8.2	8.4	7.0	7.8	7.5‡	12.4	12.3	12.4	12.2	12.4	12.9	13.1	+0.2
Complete 4 years	3.0	3.3	3.5	4.4	4.9	5.7	5.5	6.6	6.6	6.4‡	8.8	8.4	8.7	8.3	8.1	8.3	8.3	0.0
Region:																		
Northeast	3.7	4.6	3.5	4.3	6.1	7.8	6.5	6.2	6.7	7.2‡	10.6	9.3	9.9	8.3	10.1	9.3	9.7	+0.4
Midwest	3.6	3.2	4.7	5.2	6.0	6.1	6.5	7.5	7.2	7.8‡	8.8	9.1	8.7	10.7	9.9	10.5	10.0	-0.5
South	2.7	3.2	3.8	4.5	5.1	6.1	6.5	7.5	6.6	5.7‡	9.3	8.0	9.1	8.6	7.9	8.3	8.3	0.0
West	3.5	4.0	3.1	4.7	4.1	4.7	5.2	4.7	7.5	6.5‡	9.5	11.4	11.1	8.3	8.9	9.2	9.0	-0.3
Population Density:																		
Large MSA	3.5	3.1	4.1	4.8	4.6	4.6	5.2	5.4	7.0	8.4‡	8.9	7.4	8.1	8.4	8.1	7.9	7.9	0.0
Other MSA	3.1	3.7	3.7	4.7	5.4	7.2	6.8	7.4	7.2	5.6‡	10.3	10.3	10.7	9.3	9.0	9.3	9.0	-0.3
Non-MSA	3.6	3.7	3.6	4.7	6.0	6.0	6.5	6.8	6.6	6.9‡	8.5	9.7	8.9	9.1	10.4	10.7	10.7	0.0
Parental Education: <sup>b</sup>																		
1.0–2.0 (Low)	3.5	3.8	3.0	4.0	4.5	4.7	4.7	4.6	4.6	5.1‡	6.2	7.9	6.8	5.2	6.1	7.1	7.1	0.0
2.5–3.0	3.5	2.9	3.8	4.2	5.6	5.3	5.9	5.9	6.4	6.4‡	8.9	9.3	8.8	9.5	9.5	8.8	9.2	+0.4
3.5–4.0	3.2	3.7	3.4	4.4	5.5	6.5	6.8	7.2	7.3	7.1‡	10.4	9.8	10.8	10.5	10.3	9.5	9.9	+0.4
4.5–5.0	3.4	3.7	4.3	5.5	5.4	6.8	6.2	7.4	7.9	7.0‡	10.3	9.5	10.5	9.3	9.1	9.9	9.0	-0.9
5.5–6.0 (High)	3.2	4.5	4.8	5.5	5.6	7.6	6.6	7.4	7.5	7.0‡	8.7	8.8	8.8	7.6	8.0	9.5	9.7	+0.2
Race (2-year average): <sup>c</sup>																		
White	4.1	4.1	4.3	5.0	5.9	7.1	7.6	7.7	8.3	8.5	10.3‡	10.2 <sup>c</sup>	11.2	11.2	11.2	11.5	11.7	+0.2
African American	0.9	1.0	1.5	1.4	1.2	1.8	2.4	2.0	1.7	1.8	1.9‡	2.1 <sup>c</sup>	2.7	2.5	2.4	2.6	2.7	+0.2
Hispanic	2.1	2.3	2.2	2.5	3.7	3.1	2.8	3.6	4.6	4.5	4.3‡	5.2 <sup>c</sup>	5.5	5.3	5.0	4.5	4.2	-0.4

<sup>a</sup>Only drug use not under a doctor's orders is included here.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. The 2003 data comprise half of the 2002 sample data double-weighted and all of the 2003 sample data. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

<sup>d</sup>In 2002 the question text was changed in half of the questionnaire forms. In the list of examples of narcotics other than heroin, Talwin, laudanum, and paregoric were replaced with Vicodin, OxyContin, and Percocet. The 2002 data presented here are based on the changed forms only; *N* is one half of *N* indicated. In 2003 the remaining forms were changed to the new wording. Beginning in 2003, the data are based on all forms.

<sup>e</sup>In 2007, for the list of narcotics other than heroin, Dilaudid was replaced with Ultram.



**TABLE D-44**  
**OxyContin: Trends in Annual Prevalence of Use by Subgroups in Grades 8 and 10**

	Percentage who used in last 12 months																			
	8th Graders									10th Graders										
	1991– 1999	2000– 2001	2002	2003	2004	2005	2006	2007	2008	2007– 2008 change	1991– 1999	2000– 2001	2002	2003	2004	2005	2006	2007	2008	2007– 2008 change
<i>Approximate wtd. N =</i>	—	—	15,100	16,500	17,000	16,800	16,500	16,100	15,700		—	—	14,300	15,800	16,400	16,200	16,200	16,100	15,100	
Total	—	—	1.3	1.7	1.7	1.8	2.6	1.8	2.1	+0.3	—	—	3.0	3.6	3.5	3.2	3.8	3.9	3.6	-0.3
Gender:																				
Male	—	—	1.9	1.6	1.8	1.9	2.8	1.7	2.3	+0.6	—	—	3.6	4.3	3.8	3.4	3.7	4.2	3.8	-0.4
Female	—	—	0.9	1.7	1.6	1.7	2.2	2.0	1.8	-0.2	—	—	2.4	2.9	3.1	3.0	4.0	3.5	3.5	0.0
College Plans:																				
None or under 4 years	—	—	4.3	7.5	6.9	6.8	8.8	5.1	6.1	+1.0	—	—	6.5	10.8	7.2	8.0	11.0	8.8	10.2	+1.5
Complete 4 years	—	—	1.0	1.1	1.2	1.2	1.9	1.5	1.8	+0.3	—	—	2.5	2.5	3.0	2.6	2.9	3.2	2.9	-0.3
Region:																				
Northeast	—	—	1.0	1.2	1.1	1.7	1.6	1.1	0.8	-0.3	—	—	3.6	3.7	4.6	3.8	3.1	2.8	3.2	+0.4
Midwest	—	—	1.7	1.7	1.3	2.4	3.2	2.0	1.4	-0.6	—	—	2.1	2.9	2.5	3.5	4.1	4.3	3.9	-0.4
South	—	—	1.5	2.1	2.2	2.0	2.4	2.0	2.9	+0.9	—	—	3.7	4.2	4.8	3.6	4.4	4.7	4.1	-0.5
West	—	—	0.9	1.3	1.8	1.0	3.1	1.6	2.3	+0.7	—	—	2.6	3.5	1.9	1.6	3.3	3.3	3.0	-0.3
Population Density:																				
Large MSA	—	—	1.2	1.1	0.9	1.1	1.3	0.9	1.7	+0.7	—	—	2.0	2.3	2.1	2.8	3.4	3.5	2.5	-1.0
Other MSA	—	—	1.4	1.7	2.6	2.3	3.1	2.2	2.2	0.0	—	—	3.3	3.6	3.7	2.7	3.3	3.5	4.1	+0.6
Non-MSA	—	—	1.5	2.5	1.1	1.8	3.2	2.3	2.6	+0.3	—	—	3.7	5.7	5.1	4.9	5.8	5.4	4.1	-1.3
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	—	—	2.9	4.0	3.5	3.7	3.6	2.0	4.0	+2.0	—	—	6.5	5.9	3.7	3.3	6.9	3.9	3.1	-0.8
2.5–3.0	—	—	2.0	2.3	2.1	2.9	3.4	2.2	2.3	0.0	—	—	3.8	3.9	4.0	4.8	5.3	5.9	5.1	-0.8
3.5–4.0	—	—	1.0	1.9	2.2	2.5	2.4	2.2	2.3	+0.1	—	—	2.0	4.1	4.1	3.0	4.3	3.5	3.6	+0.1
4.5–5.0	—	—	0.9	0.7	1.3	0.7	2.0	1.6	1.7	+0.1	—	—	1.7	2.9	2.6	2.6	2.3	3.4	3.2	-0.2
5.5–6.0 (High)	—	—	1.3	1.6	0.7	0.8	2.2	0.8	1.7	+0.9	—	—	4.4	2.8	2.8	2.6	2.4	2.8	3.5	+0.7
Race (2-year average): <sup>b</sup>																				
White	—	—	—	1.6	1.7	1.7	2.3	2.5	2.3	-0.2	—	—	—	3.6	4.1	4.1	4.1	4.6	4.7	+0.1
African American	—	—	—	0.9	0.6	1.0	1.4	1.2	1.4	+0.2	—	—	—	2.3	2.0	1.1	1.5	1.8	1.5	-0.3
Hispanic	—	—	—	1.3	2.8	2.6	2.4	2.3	1.5	-0.7	—	—	—	2.5	2.9	2.3	1.8	1.9	1.8	-0.1

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available. Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding. See Tables D-107 and D-108 for the number of subgroup cases.

See appendix B for definition of variables in table. Data based on one of four forms;  $N$  is one third of  $N$  indicated in Tables D-107 and D-108.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-45**  
**OxyContin: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months											2007– 2008 change
	1975– 1979	1980– 1989	1990– 1999	2000– 2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	—	—	—	—	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	—	—	—	—	4.0	4.5	5.0	5.5	4.3	5.2	4.7	-0.5
Gender:												
Male	—	—	—	—	5.6	6.2	6.1	7.4	5.3	6.3	5.3	-1.0
Female	—	—	—	—	2.6	2.8	3.4	3.5	2.9	4.0	4.0	0.0
College Plans:												
None or under 4 years	—	—	—	—	7.0	8.8	8.2	9.9	7.4	7.8	7.6	-0.2
Complete 4 years	—	—	—	—	3.2	3.1	3.8	4.3	3.3	4.5	4.1	-0.5
Region:												
Northeast	—	—	—	—	5.0	5.5	4.6	6.0	5.5	5.5	4.6	-0.9
Midwest	—	—	—	—	5.0	4.5	4.2	6.0	4.3	5.1	4.4	-0.6
South	—	—	—	—	3.6	4.0	5.9	6.3	4.0	5.2	4.9	-0.2
West	—	—	—	—	2.6	4.4	4.7	3.0	3.6	5.1	4.9	-0.2
Population Density:												
Large MSA	—	—	—	—	3.7	2.8	4.6	4.8	4.4	4.2	3.9	-0.3
Other MSA	—	—	—	—	3.8	5.3	5.2	5.1	3.6	5.4	5.0	-0.4
Non-MSA	—	—	—	—	4.7	5.2	4.9	7.1	5.4	6.2	5.1	-1.1
Parental Education: <sup>a</sup>												
1.0–2.0 (Low)	—	—	—	—	6.3	6.9	3.7	5.5	4.2	4.4	3.8	-0.6
2.5–3.0	—	—	—	—	5.3	6.8	4.8	6.3	4.4	5.6	4.5	-1.1
3.5–4.0	—	—	—	—	3.9	3.4	6.5	6.3	5.1	5.0	6.0	+1.0
4.5–5.0	—	—	—	—	2.2	3.6	3.1	4.2	3.4	5.3	4.3	-1.0
5.5–6.0 (High)	—	—	—	—	4.0	2.5	4.3	4.8	3.5	4.3	3.8	-0.5
Race (2-year average): <sup>b</sup>												
White	—	—	—	—	—	4.7	5.1	5.8	5.4	5.5	6.0	+0.5
African American	—	—	—	—	—	2.5	2.4	2.0	2.2	2.4	2.1	-0.3
Hispanic	—	—	—	—	—	2.5	2.2	3.0	3.7	3.2	2.1	-1.1

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . "—" indicates data not available. Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding. See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table. Data based on two of six forms in 2002–2005;  $N$  is two sixths of  $N$  indicated in Table D-109. Data based on three of six forms beginning in 2006;  $N$  is three sixths of  $N$  indicated in Table D-109.

**Caution: Limited sample sizes (see "Notes" above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-46**  
**Vicodin: Trends in Annual Prevalence of Use by Subgroups in Grades 8 and 10**

	Percentage who used in last 12 months																			
	8th Graders										10th Graders									
	1991– 1999	2000– 2001	2002	2003	2004	2005	2006	2007	2008	2007– 2008 change	1991– 1999	2000– 2001	2002	2003	2004	2005	2006	2007	2008	2007– 2008 change
<i>Approximate wtd. N =</i>	—	—	15,100	16,500	17,000	16,800	16,500	16,100	15,700		—	—	14,300	15,800	16,400	16,200	16,200	16,100	15,100	
Total	—	—	2.5	2.8	2.5	2.6	3.0	2.7	2.9	+0.2	—	—	6.9	7.2	6.2	5.9	7.0	7.2	6.7	-0.5
Gender:																				
Male	—	—	2.7	2.8	2.4	2.9	2.6	2.1	2.9	+0.8	—	—	7.4	8.4	6.2	5.5	7.0	7.5	7.1	-0.4
Female	—	—	2.4	2.8	2.6	2.2	3.4	3.2	2.7	-0.5	—	—	6.1	6.1	6.0	6.2	6.9	6.8	6.4	-0.5
College Plans:																				
None or under 4 years	—	—	5.9	6.3	7.1	7.3	9.5	8.1	7.0	-1.1	—	—	13.4	15.8	11.6	13.2	17.2	15.2	16.5	+1.3
Complete 4 years	—	—	2.1	2.4	2.0	1.9	2.4	2.1	2.5	+0.4	—	—	5.7	5.8	5.4	4.8	5.6	6.1	5.6	-0.4
Region:																				
Northeast	—	—	1.5	1.1	1.0	1.5	1.9	1.4	1.0	-0.4	—	—	6.2	5.6	6.4	5.7	4.9	6.5	5.3	-1.2
Midwest	—	—	3.3	3.9	3.2	3.3	3.9	3.6	3.1	-0.5	—	—	7.2	9.4	6.4	7.1	8.7	8.8	8.4	-0.4
South	—	—	2.5	2.1	2.1	2.3	2.2	2.1	2.9	+0.8	—	—	5.3	5.0	5.0	5.0	4.2	4.5	5.2	+0.7
West	—	—	2.6	4.2	3.6	3.1	4.4	3.5	3.7	+0.2	—	—	10.0	9.1	7.1	5.8	11.1	9.4	7.9	-1.5
Population Density:																				
Large MSA	—	—	2.6	2.4	1.8	2.5	2.4	1.6	2.7	+1.1	—	—	5.7	7.1	4.8	6.5	6.1	6.8	6.2	-0.6
Other MSA	—	—	3.0	3.1	3.0	2.6	3.3	3.4	3.0	-0.4	—	—	7.9	6.4	6.9	5.3	7.6	7.2	6.7	-0.6
Non-MSA	—	—	1.6	2.5	2.4	2.6	3.3	2.8	2.8	0.0	—	—	6.2	9.2	6.4	6.3	6.9	7.8	7.6	-0.2
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	—	—	3.3	3.3	4.9	3.9	4.8	3.1	3.4	+0.3	—	—	6.1	6.4	6.4	4.9	7.6	6.5	6.3	-0.2
2.5–3.0	—	—	3.9	3.4	4.1	3.8	4.0	3.0	3.3	+0.3	—	—	8.0	8.3	8.2	7.7	8.0	8.6	7.5	-1.1
3.5–4.0	—	—	3.4	2.9	3.2	2.9	2.7	3.1	2.8	-0.3	—	—	7.5	8.5	6.2	6.8	8.1	8.2	7.9	-0.2
4.5–5.0	—	—	1.4	2.1	1.1	1.9	2.6	2.4	3.2	+0.8	—	—	5.7	6.3	5.1	5.0	5.6	7.0	6.0	-1.0
5.5–6.0 (High)	—	—	1.3	2.1	0.9	1.6	2.2	1.8	2.3	+0.6	—	—	6.6	5.6	5.0	4.6	6.3	4.7	5.7	+0.9
Race (2-year average): <sup>b</sup>																				
White	—	—	—	3.0	2.7	2.4	2.9	3.2	3.2	0.0	—	—	—	8.0	7.6	7.1	7.4	8.3	8.5	+0.2
African American	—	—	—	1.4	1.4	1.6	1.7	1.6	1.6	0.0	—	—	—	3.1	3.0	1.6	2.2	2.4	2.2	-0.3
Hispanic	—	—	—	2.1	3.3	3.6	2.8	2.6	2.1	-0.4	—	—	—	6.5	6.0	4.8	4.4	4.2	4.1	-0.1

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available. Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding. See Tables D-107 and D-108 for the number of subgroup cases.

See appendix B for definition of variables in table. Data based on one of four forms;  $N$  is one third of  $N$  indicated in Tables D-107 and D-108.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-47**  
**Vicodin: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months											2007– 2008 change
	1975– 1979	1980– 1989	1990– 1999	2000– 2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	—	—	—	—	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	—	—	—	—	9.6	10.5	9.3	9.5	9.7	9.6	9.7	+0.1
Gender:												
Male	—	—	—	—	12.0	13.0	10.7	11.9	10.9	10.9	10.6	-0.2
Female	—	—	—	—	7.5	8.1	7.6	7.2	8.7	8.1	8.9	+0.8
College Plans:												
None or under 4 years	—	—	—	—	13.0	14.7	11.6	14.3	11.8	13.2	15.0	+1.8
Complete 4 years	—	—	—	—	8.4	9.1	8.3	8.4	9.1	8.5	8.5	0.0
Region:												
Northeast	—	—	—	—	8.1	9.4	9.1	8.8	10.8	9.3	9.9	+0.6
Midwest	—	—	—	—	11.6	13.2	8.4	12.4	12.0	14.1	11.7	-2.4
South	—	—	—	—	8.1	6.1	7.0	7.8	6.9	6.3	7.3	+1.0
West	—	—	—	—	10.9	16.3	15.4	9.3	11.2	10.9	11.1	+0.2
Population Density:												
Large MSA	—	—	—	—	9.7	7.3	8.3	8.9	10.4	9.1	8.4	-0.8
Other MSA	—	—	—	—	10.6	12.2	10.9	9.3	9.4	9.3	10.0	+0.7
Non-MSA	—	—	—	—	7.8	11.4	7.2	10.6	9.5	10.7	10.5	-0.2
Parental Education: <sup>a</sup>												
1.0–2.0 (Low)	—	—	—	—	12.1	9.4	7.8	7.8	7.9	6.3	7.8	+1.5
2.5–3.0	—	—	—	—	9.6	10.8	8.8	10.5	9.3	10.2	10.5	+0.4
3.5–4.0	—	—	—	—	9.5	12.0	10.1	10.0	11.6	9.9	11.2	+1.3
4.5–5.0	—	—	—	—	9.9	9.7	8.4	9.0	8.6	10.5	8.8	-1.7
5.5–6.0 (High)	—	—	—	—	8.6	8.8	10.1	8.9	10.4	7.9	8.8	+0.8
Race (2-year average): <sup>b</sup>												
White	—	—	—	—	—	11.7	11.2	10.5	11.3	11.5	11.6	+0.1
African American	—	—	—	—	—	3.3	3.1	3.3	3.7	3.3	3.6	+0.3
Hispanic	—	—	—	—	—	7.1	7.2	7.7	6.5	5.7	4.9	-0.8

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available. Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding. See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table. Data based on two of six forms in 2002–2005;  $N$  is two sixths of  $N$  indicated in Table D-109. Data based on three of six forms beginning in 2006;  $N$  is three sixths of  $N$  indicated in Table D-109.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-48**  
**Amphetamines:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007– 2008 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		
Total	6.2	6.5	7.2	7.9	8.7	9.1	8.1	7.2	6.9	6.5	6.7	5.5	5.5	4.9	4.9	4.7	4.2	4.5	+0.3	
Gender:																				
Male	5.5	5.2	5.6	6.5	7.0	6.7	6.6	5.6	5.6	5.1	5.7	4.8	4.4	3.7	3.5	3.5	3.3	3.5	+0.1	
Female	6.9	7.9	8.8	9.3	10.3	11.3	9.6	8.7	8.2	7.7	7.5	6.2	6.5	6.1	6.2	5.7	4.9	5.5	+0.6	
College Plans:																				
None or under 4 years	11.6	12.9	14.6	14.5	17.1	15.5	14.1	15.4	14.0	14.2	12.0	12.2	12.4	8.9	11.2	10.7	10.0	12.4	+2.4	
Complete 4 years	5.4	5.7	6.3	7.0	7.6	8.3	7.5	6.3	6.2	5.7	6.1	4.8	4.8	4.5	4.3	4.1	3.6	3.8	+0.2	
Region:																				
Northeast	5.1	4.3	5.9	6.9	7.3	7.6	6.5	5.5	5.6	5.0	5.5	3.4	4.1	2.8	3.5	2.2	2.6	2.6	+0.1	
Midwest	7.1	8.0	7.3	7.8	10.6	10.8	9.3	7.2	8.3	7.8	7.1	5.9	5.9	5.1	5.0	5.3	4.8	5.1	+0.3	
South	6.1	6.6	7.3	8.3	8.6	8.7	8.1	8.4	7.5	7.0	8.1	6.7	6.4	5.7	5.8	5.6	4.6	5.5	+0.8	
West	6.0	6.6	8.6	8.4	7.9	9.1	8.3	6.7	5.4	5.4	4.6	4.7	4.6	4.9	4.6	4.3	3.7	3.8	+0.1	
Population Density:																				
Large MSA	5.8	4.8	5.6	6.6	7.2	7.9	6.4	5.4	5.2	5.2	5.0	4.2	3.9	4.0	3.6	3.9	3.4	4.1	+0.8	
Other MSA	6.2	7.5	8.2	8.8	8.9	10.0	8.1	7.4	6.8	6.4	7.6	5.9	5.5	5.4	5.8	4.8	4.6	4.8	+0.2	
Non-MSA	6.7	7.0	7.5	7.5	10.1	8.9	9.9	8.8	9.3	8.5	6.9	6.3	7.5	5.0	5.2	5.4	4.4	4.4	0.0	
Parental Education: <sup>b</sup>																				
1.0–2.0 (Low)	8.3	8.4	10.2	11.2	11.8	10.1	9.6	11.2	8.9	9.7	7.4	6.3	8.4	9.7	8.3	6.5	7.3	7.9	+0.5	
2.5–3.0	6.6	7.3	8.2	9.0	10.6	9.9	9.2	8.1	7.8	8.1	8.2	7.3	7.4	5.2	6.6	6.0	4.9	6.0	+1.2	
3.5–4.0	6.7	7.4	7.8	8.5	10.1	10.3	8.9	7.7	8.2	6.8	7.8	5.7	5.9	5.6	5.6	5.0	4.5	5.4	+0.9	
4.5–5.0	5.3	5.5	6.4	6.6	6.8	8.6	7.5	6.2	5.6	5.2	5.9	4.9	4.3	4.2	3.7	4.2	2.9	3.2	+0.4	
5.5–6.0 (High)	5.7	5.4	5.3	5.7	6.4	8.7	7.3	6.4	5.8	5.2	4.5	4.3	3.9	3.5	3.1	3.6	3.5	3.4	-0.1	
Race (2-year average): <sup>c</sup>																				
White	—	6.8	7.4	8.1	9.3	10.2	9.9	9.0	8.4	8.0	7.8	7.2	6.4	5.9	5.4	5.3	4.9	4.9	0.0	
African American	—	3.3	3.4	3.9	3.9	3.4	3.0	2.8	2.7	2.4	2.3	2.7	2.5	2.1	2.2	2.0	1.7	1.8	+0.1	
Hispanic	—	7.2	7.7	8.6	8.7	8.6	8.1	7.2	7.0	6.8	6.6	5.9	5.0	5.4	5.3	4.5	3.9	4.0	+0.1	

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Only drug use not under a doctor's orders is included here.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-49**  
**Amphetamines:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007– 2008 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100		
Total	8.2	8.2	9.6	10.2	11.9	12.4	12.1	10.7	10.4	11.1	11.7	10.7	9.0	8.5	7.8	7.9	8.0	6.4	-1.6 ss	
Gender:																				
Male	7.0	7.0	8.2	8.6	9.6	10.5	10.3	9.0	9.2	10.3	10.6	9.6	7.8	7.3	6.6	6.7	7.4	5.8	-1.5 s	
Female	9.3	9.3	10.9	11.7	14.1	14.2	13.9	12.3	11.5	11.8	12.7	11.8	10.1	9.6	9.0	8.9	8.7	6.9	-1.8 s	
College Plans:																				
None or under 4 years	13.4	14.4	15.5	16.6	19.9	20.3	19.3	17.9	16.3	18.2	20.4	17.5	15.7	14.8	13.7	14.8	15.4	12.5	-2.9 s	
Complete 4 years	7.1	6.9	8.4	8.9	10.6	11.1	10.9	9.5	9.5	10.0	10.3	9.7	7.9	7.6	7.0	7.0	7.1	5.6	-1.5 ss	
Region:																				
Northeast	6.1	5.4	7.8	8.7	9.8	11.5	10.7	11.0	12.1	9.8	10.5	9.3	7.4	8.5	7.4	6.7	7.3	4.2	-3.1 ss	
Midwest	10.3	9.4	9.5	10.5	13.3	14.0	11.0	9.8	10.3	11.1	10.7	10.4	9.7	8.2	8.5	8.7	8.7	7.3	-1.4	
South	8.1	8.7	10.9	11.2	12.8	12.6	14.2	12.6	10.8	12.0	14.0	12.2	10.2	9.6	8.6	8.5	8.1	6.8	-1.3	
West	7.7	8.4	9.5	9.4	10.6	10.6	11.1	8.5	8.2	10.9	9.9	9.6	8.1	7.3	5.8	7.1	7.7	6.6	-1.1	
Population Density:																				
Large MSA	7.5	6.7	7.6	8.0	9.2	10.5	9.9	8.9	9.3	10.7	9.8	9.8	6.2	6.2	6.5	6.8	7.5	5.4	-2.0 s	
Other MSA	7.9	8.0	9.5	10.8	12.8	12.8	11.5	10.3	10.6	9.9	11.1	11.0	9.5	9.6	8.0	8.3	8.0	6.6	-1.3	
Non-MSA	9.3	10.0	11.6	11.2	13.3	13.7	15.5	13.8	11.5	13.6	15.1	11.2	12.2	9.2	9.0	8.7	9.0	7.2	-1.7	
Parental Education: <sup>b</sup>																				
1.0–2.0 (Low)	10.0	11.9	12.3	10.8	14.3	15.1	12.2	12.6	10.7	13.3	12.3	13.1	10.9	9.2	8.9	9.3	7.9	7.8	-0.1	
2.5–3.0	9.7	8.9	10.5	11.6	14.2	13.0	14.1	12.8	11.3	12.9	13.6	12.8	11.2	9.9	8.9	9.0	10.2	7.6	-2.6 ss	
3.5–4.0	7.9	8.4	10.5	11.1	12.4	14.1	13.5	11.1	11.2	12.2	12.6	11.1	9.9	10.1	8.1	9.1	8.9	7.7	-1.2	
4.5–5.0	7.4	6.6	7.5	8.9	10.7	10.7	10.6	9.0	9.8	9.7	10.5	9.5	7.6	7.2	7.4	6.6	6.9	5.4	-1.5 s	
5.5–6.0 (High)	6.9	6.9	8.3	7.3	8.8	10.1	9.2	9.4	9.8	8.8	9.2	8.1	6.4	6.3	6.6	6.8	6.0	4.3	-1.7	
Race (2-year average): <sup>c</sup>																				
White	—	9.4	10.1	11.0	12.4	13.9	14.2	13.6	12.6	12.7	13.4	13.4	12.2	10.6	9.5	9.2	9.4	8.7	-0.7	
African American	—	2.8	3.0	4.0	4.0	3.4	3.1	2.9	2.8	2.5	2.9	3.5	2.8	2.7	3.0	2.8	2.3	2.3	0.0	
Hispanic	—	6.2	7.0	7.7	8.9	10.3	9.8	8.9	8.8	9.1	8.3	7.9	7.7	7.3	7.3	6.3	5.8	6.0	+0.2	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Only drug use not under a doctor's orders is included here.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-50**  
**Amphetamines:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	9,400	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	16.2	15.8	16.3	17.1	18.3	20.8	26.0	20.3	17.9	17.7	15.8	13.4	12.2	10.9	10.8	9.1	8.2
Gender:																	
Male	15.6	15.8	16.0	16.9	18.4	19.7	24.8	19.6	17.2	16.8	14.9	12.7	11.8	10.8	11.1	9.4	8.3
Female	16.5	15.4	16.4	17.1	17.8	21.8	26.9	20.3	17.9	18.2	16.4	13.8	12.4	10.9	10.5	8.6	7.9
College Plans:																	
None or under 4 years	—	19.3	20.5	20.0	21.8	25.8	30.9	23.7	20.9	22.2	19.7	17.7	16.0	13.9	15.1	12.6	11.0
Complete 4 years	—	11.9	11.5	13.7	14.5	16.5	22.3	16.8	14.5	14.2	13.3	10.9	10.2	9.5	9.1	7.4	7.0
Region:																	
Northeast	16.5	14.7	16.8	19.6	22.0	22.0	28.8	21.5	17.9	19.0	16.8	12.6	10.4	8.4	9.0	6.3	6.5
Midwest	18.7	17.8	19.0	18.2	18.3	22.2	30.1	24.1	20.4	20.3	17.3	15.2	13.5	12.2	13.3	10.7	10.1
South	12.6	13.7	13.2	14.0	14.0	17.7	19.6	16.4	15.4	15.1	12.8	11.5	11.5	10.8	9.9	8.9	7.9
West	18.5	17.2	16.0	17.8	20.7	22.1	26.6	18.7	18.2	16.9	17.3	15.0	13.4	11.8	11.1	10.2	7.8
Population Density:																	
Large MSA	19.6	15.4	15.3	17.7	19.5	21.9	28.0	21.6	18.1	17.7	15.0	11.2	10.9	8.8	7.1	6.5	6.2
Other MSA	15.5	16.3	17.1	17.5	18.9	20.8	25.5	20.7	19.6	17.1	15.7	14.2	11.9	11.9	11.4	9.6	8.4
Non-MSA	14.8	15.4	15.9	16.0	16.6	19.9	25.1	18.8	15.6	18.5	16.6	14.1	14.0	11.3	13.3	10.6	9.5
Parental Education: <sup>b</sup>																	
1.0–2.0 (Low)	15.7	13.4	14.5	14.9	16.0	19.1	22.3	18.7	15.7	17.1	14.5	11.9	11.9	9.8	10.4	7.6	9.5
2.5–3.0	16.7	16.9	17.4	17.3	18.4	22.2	26.7	21.9	19.6	19.2	17.0	15.2	13.3	11.1	11.7	9.7	9.1
3.5–4.0	14.9	16.6	16.1	18.2	19.6	21.5	26.9	21.7	19.4	18.5	17.2	14.3	12.6	11.8	12.3	10.6	8.9
4.5–5.0	14.5	16.8	15.9	16.9	17.1	20.0	26.2	19.1	18.9	15.9	15.1	12.0	11.7	10.3	9.4	8.1	6.5
5.5–6.0 (High)	12.0	14.6	16.0	17.2	20.4	17.9	26.8	20.5	16.1	14.0	10.9	10.1	10.4	10.0	9.1	7.3	5.7
Race (2-year average): <sup>c</sup>																	
White	—	—	17.3	18.2	19.2	21.3	26.4	23.6	22.3	20.5	18.9	16.4	14.3	13.0	12.4	11.4	9.8
African American	—	—	5.3	4.7	4.2	5.3	5.8	6.0	5.7	4.7	4.3	4.0	3.8	3.9	3.6	3.1	2.7
Hispanic	—	—	12.3	12.2	12.8	14.5	17.5	12.3	11.5	13.2	14.6	10.8	8.7	9.6	9.0	7.0	6.1

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

(Table continued on next page.)

**TABLE D-50 (cont.)**  
**Amphetamines:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																	2007– 2008 change	
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	7.1	8.4	9.4	9.3	9.5	10.2	10.1	10.2	10.5	10.9	11.1	9.9	10.0	8.6	8.1	7.5	6.8	-0.7	
Gender:																			
Male	7.2	8.2	9.2	9.5	9.6	10.1	10.3	10.6	10.4	10.9	11.3	9.8	9.9	9.1	7.4	7.4	6.5	-0.9	
Female	6.9	8.5	9.4	8.9	8.8	10.2	9.8	9.6	10.5	10.6	10.7	9.5	9.9	7.9	8.5	7.3	6.8	-0.4	
College Plans:																			
None or under 4 years	9.7	11.0	13.4	12.3	12.8	14.1	13.6	12.7	13.9	14.4	14.8	14.4	13.3	11.5	10.6	10.3	10.7	+0.4	
Complete 4 years	6.1	7.6	8.0	8.3	8.4	8.9	9.0	9.5	9.6	9.8	10.1	8.4	8.9	7.8	7.5	6.7	5.7	-1.0	
Region:																			
Northeast	6.2	8.1	7.4	9.6	10.4	11.1	9.0	9.9	10.6	12.0	11.5	9.7	9.5	7.4	8.5	7.5	6.5	-0.9	
Midwest	8.4	8.9	12.0	9.5	10.0	10.8	11.0	10.5	10.4	12.7	11.3	10.3	10.2	10.3	7.6	8.2	6.9	-1.3	
South	6.7	8.3	9.0	9.2	9.1	9.8	10.4	10.8	10.2	9.5	11.7	9.7	10.3	9.4	8.8	7.9	7.1	-0.9	
West	6.9	8.3	8.4	8.9	8.3	9.1	9.6	8.8	10.9	9.7	9.6	9.7	9.5	6.1	7.0	5.8	6.3	+0.6	
Population Density:																			
Large MSA	6.0	6.5	7.8	9.1	7.9	8.9	9.0	7.0	8.3	10.6	10.7	7.5	8.0	7.8	8.7	6.7	6.2	-0.6	
Other MSA	6.7	8.5	9.4	8.5	8.9	9.5	9.9	10.8	10.9	10.8	11.0	10.5	10.6	8.9	7.6	7.4	6.7	-0.7	
Non-MSA	9.0	9.8	10.9	10.8	11.9	13.0	12.2	12.4	12.4	11.4	12.1	11.7	11.1	8.9	8.2	8.6	7.5	-1.1	
Parental Education: <sup>b</sup>																			
1.0–2.0 (Low)	7.0	9.0	10.4	9.9	8.1	9.8	9.7	9.9	11.0	8.9	8.1	10.6	7.5	6.1	8.2	7.5	7.3	-0.2	
2.5–3.0	7.7	8.6	10.3	9.9	10.5	10.3	10.6	11.3	11.0	12.2	11.4	9.9	11.0	9.2	8.2	7.6	7.3	-0.3	
3.5–4.0	7.7	9.1	9.4	9.1	9.3	10.8	11.4	10.8	10.6	11.6	12.3	10.7	12.3	9.5	8.9	7.6	6.5	-1.1	
4.5–5.0	6.3	8.0	9.5	9.2	8.9	9.4	9.4	9.7	10.3	10.7	11.1	9.4	8.2	8.5	7.8	7.4	6.2	-1.2	
5.5–6.0 (High)	5.8	7.6	7.1	8.1	9.1	10.2	8.7	8.4	10.2	8.7	10.2	7.7	8.4	7.4	7.0	7.1	7.1	0.0	
Race (2-year average): <sup>c</sup>																			
White	8.8	9.0	10.4	10.7	10.5	11.4	12.1	11.9	11.9	12.6	13.2	12.4	11.6	11.0	9.9	9.3	8.7	-0.7	
African American	2.2	2.3	3.4	3.4	2.9	2.8	2.8	2.5	2.6	3.0	2.9	2.8	2.4	2.4	2.6	2.5	2.2	-0.3	
Hispanic	6.0	6.2	6.4	7.1	7.8	7.3	7.0	7.6	9.2	9.2	7.9	6.8	7.0	6.7	6.4	5.8	4.7	-1.1	

<sup>a</sup>Beginning in 1982, the question about amphetamine use was revised to get respondents to exclude the inappropriate reporting of nonprescription amphetamines. The prevalence rate dropped slightly as a result of this methodological change. (In 1982 and 1983, the data are based on three of the five questionnaire forms.) Only drug use not under a doctor's orders is included here.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.



**TABLE D-51**  
**Ritalin: Trends in Annual Prevalence of Use by Subgroups in Grades 8 and 10**

	Percentage who used in last 12 months																			
	8th Graders									10th Graders										
	1991– 2000	2001	2002	2003	2004	2005	2006	2007	2008	2007– 2008 change	1991– 2000	2001	2002	2003	2004	2005	2006	2007	2008	2007– 2008 change
<i>Approximate wtd. N =</i>	—	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		—	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100	
Total	—	2.9	2.8	2.6	2.5	2.4	2.6	2.1	1.6	-0.4	—	4.8	4.8	4.1	3.4	3.4	3.6	2.8	2.9	+0.2
Gender:																				
Male	—	3.2	3.2	2.9	2.6	2.4	2.7	1.9	1.5	-0.4	—	5.2	4.9	4.2	3.6	3.2	3.7	2.6	3.0	+0.4
Female	—	2.6	2.5	2.3	2.4	2.4	2.5	2.3	1.5	-0.8	—	4.3	4.6	3.8	3.0	3.5	3.7	2.9	2.9	0.0
College Plans:																				
None or under 4 years	—	8.1	7.7	6.8	8.8	7.5	9.0	4.2	5.7	+1.5	—	7.2	10.2	11.0	5.5	6.7	9.1	6.0	8.6	+2.5
Complete 4 years	—	2.4	2.2	2.1	1.8	1.8	1.9	1.8	1.2	-0.5	—	4.3	3.8	2.9	3.0	2.9	2.8	2.3	2.3	-0.1
Region:																				
Northeast	—	1.5	2.8	1.7	1.6	2.0	2.0	0.9	0.4	-0.5	—	5.5	3.6	3.8	4.5	4.1	3.0	2.8	3.3	+0.5
Midwest	—	3.0	3.0	2.9	2.4	1.9	3.2	2.4	2.0	-0.3	—	4.6	4.8	4.2	2.7	4.8	4.0	3.6	3.1	-0.5
South	—	3.5	2.8	2.9	3.0	3.0	2.5	2.5	2.2	-0.4	—	5.3	5.2	4.2	3.8	3.0	3.4	3.0	3.0	0.0
West	—	2.9	2.5	2.2	2.5	2.1	2.7	1.6	1.2	-0.4	—	3.1	5.1	3.9	2.4	1.4	4.2	1.6	2.4	+0.8
Population Density:																				
Large MSA	—	2.2	2.3	2.3	1.7	1.5	2.3	1.2	1.1	0.0	—	4.3	3.6	4.0	2.6	4.0	2.8	2.9	2.0	-0.9
Other MSA	—	2.9	3.1	2.8	3.0	3.4	3.0	2.7	1.8	-0.8	—	4.6	5.8	3.7	3.6	3.3	4.1	2.5	3.3	+0.8
Non-MSA	—	3.5	2.8	2.4	2.4	1.7	2.3	2.0	1.9	-0.2	—	5.8	4.3	5.1	3.7	2.8	3.7	3.0	3.5	+0.4
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	—	4.8	5.3	2.5	4.2	5.2	6.5	1.9	4.4	+2.4	—	5.0	7.7	4.2	4.8	3.3	3.9	3.9	2.8	-1.0
2.5–3.0	—	3.3	4.0	2.8	2.9	2.7	3.1	2.3	2.2	-0.2	—	5.4	5.9	5.0	3.4	4.4	3.8	3.2	2.9	-0.3
3.5–4.0	—	3.5	3.3	3.3	2.7	2.7	2.6	2.4	1.7	-0.7	—	5.0	4.2	4.1	3.0	2.6	3.6	2.7	2.9	+0.2
4.5–5.0	—	2.4	1.5	1.8	2.1	1.5	2.0	1.8	1.0	-0.8	—	4.2	3.6	3.7	2.9	4.0	3.4	2.6	3.4	+0.7
5.5–6.0 (High)	—	2.1	1.7	2.1	1.9	1.6	1.2	1.8	0.7	-1.0	—	4.6	4.7	3.3	3.7	2.8	4.0	2.2	2.8	+0.6
Race (2-year average): <sup>b</sup>																				
White	—	—	3.0	2.8	2.7	2.5	2.6	2.4	1.9	-0.5	—	—	5.5	4.8	4.1	3.9	3.9	3.7	3.5	-0.1
African American	—	—	1.0	1.3	1.5	1.6	1.8	1.8	1.8	0.0	—	—	1.8	2.5	1.9	1.0	1.5	1.7	1.4	-0.3
Hispanic	—	—	3.8	2.7	2.5	3.3	3.1	2.8	2.1	-0.8	—	—	3.1	4.4	3.6	2.2	2.1	1.9	1.6	-0.3

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available. Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding. See Tables D-107 and D-108 for the number of subgroup cases.

See appendix B for definition of variables in table. Data based on one of four forms;  $N$  is one third of  $N$  indicated in Tables D-107 and D-108.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-52**  
**Ritalin: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months												2007– 2008 change
	1975– 1979	1980– 1989	1990– 1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	—	—	—	—	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	—	—	—	—	5.1	4.0	4.0	5.1	4.4	4.4	3.8	3.4	-0.4
Gender:													
Male	—	—	—	—	6.0	5.1	5.5	6.0	5.4	4.5	3.6	3.7	0.0
Female	—	—	—	—	4.1	2.8	2.6	4.0	3.3	3.8	3.5	2.9	-0.6
College Plans:													
None or under 4 years	—	—	—	—	6.4	7.7	4.4	6.8	5.3	5.3	5.6	4.2	-1.3
Complete 4 years	—	—	—	—	4.7	3.0	3.7	4.4	4.1	4.0	3.3	3.2	-0.1
Region:													
Northeast	—	—	—	—	4.7	4.5	4.6	4.1	4.7	6.1	4.1	4.2	+0.1
Midwest	—	—	—	—	7.4	5.4	3.8	6.0	5.3	3.8	5.2	3.4	-1.8
South	—	—	—	—	4.1	3.4	3.5	4.7	4.6	4.3	3.0	3.4	+0.4
West	—	—	—	—	3.8	2.6	4.4	5.5	2.7	3.8	3.5	2.8	-0.7
Population Density:													
Large MSA	—	—	—	—	7.2	3.9	3.2	4.2	4.1	5.4	4.0	4.1	+0.1
Other MSA	—	—	—	—	3.7	4.0	5.1	5.6	5.1	3.9	3.4	3.5	0.0
Non-MSA	—	—	—	—	5.4	4.0	2.9	4.9	3.4	3.8	4.2	2.4	-1.8
Parental Education: <sup>a</sup>													
1.0–2.0 (Low)	—	—	—	—	5.6	5.3	3.1	5.2	5.5	5.2	2.1	2.0	0.0
2.5–3.0	—	—	—	—	4.5	4.2	3.7	4.2	4.2	3.6	4.1	3.4	-0.8
3.5–4.0	—	—	—	—	5.0	3.9	4.8	6.3	4.1	4.6	3.5	3.6	+0.1
4.5–5.0	—	—	—	—	4.7	3.5	3.5	4.6	3.9	4.7	4.7	3.1	-1.6
5.5–6.0 (High)	—	—	—	—	6.6	3.9	4.0	4.5	6.0	4.6	2.7	4.5	+1.7
Race (2-year average): <sup>b</sup>													
White	—	—	—	—	—	5.4	4.6	5.2	5.3	4.9	4.9	4.3	-0.6
African American	—	—	—	—	—	0.8	1.2	1.2	2.0	2.3	1.8	1.5	-0.3
Hispanic	—	—	—	—	—	3.1	3.3	3.6	3.6	3.9	2.7	1.5	-1.2

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table. Data based on two of six forms;  $N$  is two sixths of  $N$  indicated in Table D-109.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-53**  
**Methamphetamine: Trends in Annual Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007–
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008
<i>Approximate wtd. N =</i>	—	—	—	—	—	—	—	—	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700	
Total	—	—	—	—	—	—	—	—	3.2	2.5	2.8	2.2	2.5	1.5	1.8	1.8	1.1	1.2	+0.1
Gender:																			
Male	—	—	—	—	—	—	—	—	3.1	2.2	2.5	2.0	2.0	1.1	1.7	1.4	0.7	0.9	+0.2
Female	—	—	—	—	—	—	—	—	3.2	2.8	3.0	2.4	3.0	1.7	1.9	2.3	1.5	1.5	0.0
College Plans:																			
None or under 4 years	—	—	—	—	—	—	—	—	7.4	6.8	6.6	6.6	7.9	6.6	6.8	6.3	3.2	3.8	+0.6
Complete 4 years	—	—	—	—	—	—	—	—	2.7	2.0	2.3	1.7	2.0	1.0	1.2	1.3	0.9	1.0	0.0
Region:																			
Northeast	—	—	—	—	—	—	—	—	1.6	2.0	1.2	0.8	1.7	1.0	0.6	0.7	0.5	0.8	+0.2
Midwest	—	—	—	—	—	—	—	—	4.4	3.0	3.2	2.5	3.5	2.1	2.0	1.7	1.5	1.6	+0.1
South	—	—	—	—	—	—	—	—	3.4	2.4	3.4	2.8	2.4	1.4	2.0	1.6	1.1	1.4	+0.3
West	—	—	—	—	—	—	—	—	2.8	2.5	2.4	2.0	2.4	1.6	2.1	3.1	1.2	1.0	-0.2
Population Density:																			
Large MSA	—	—	—	—	—	—	—	—	2.2	2.1	1.6	1.3	2.0	1.5	1.3	1.5	0.4	0.7	+0.3
Other MSA	—	—	—	—	—	—	—	—	3.6	2.6	3.4	2.5	2.4	1.7	2.0	2.1	1.4	1.5	+0.1
Non-MSA	—	—	—	—	—	—	—	—	3.5	3.0	2.8	2.7	3.4	1.2	2.1	1.8	1.6	1.4	-0.2
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	—	—	—	—	—	—	—	—	6.3	5.0	4.4	4.3	4.2	4.4	4.1	3.9	1.9	2.1	+0.2
2.5–3.0	—	—	—	—	—	—	—	—	4.3	3.1	4.0	3.0	3.4	1.3	1.5	1.8	1.4	1.7	+0.3
3.5–4.0	—	—	—	—	—	—	—	—	3.3	2.4	3.0	2.0	2.5	1.8	2.9	2.2	1.2	1.3	+0.1
4.5–5.0	—	—	—	—	—	—	—	—	1.9	1.3	1.6	1.9	1.6	1.0	0.9	1.2	0.9	0.9	0.0
5.5–6.0 (High)	—	—	—	—	—	—	—	—	3.2	2.2	1.2	1.1	2.3	0.9	0.7	1.7	0.8	1.1	+0.3
Race (2-year average): <sup>b</sup>																			
White	—	—	—	—	—	—	—	—	—	3.2	3.1	2.8	2.7	2.2	1.6	1.6	1.4	1.1	-0.3
African American	—	—	—	—	—	—	—	—	—	1.1	0.8	0.6	0.8	0.6	0.5	0.8	0.6	0.5	0.0
Hispanic	—	—	—	—	—	—	—	—	—	4.0	3.3	3.2	3.2	3.0	2.8	2.8	2.3	1.7	-0.6

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available. Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding. See Table D-107 for the number of subgroup cases.

See appendix B for definition of variables in table. Data based on one of four forms; *N* is one third of *N* indicated in Table D-107.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-54**  
**Methamphetamine: Trends in Annual Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007–
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008
<i>Approximate wtd. N =</i>	—	—	—	—	—	—	—	—	14,000	13,600	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100	
Total	—	—	—	—	—	—	—	—	4.6	4.0	3.7	3.9	3.3	3.0	2.9	1.8	1.6	1.5	-0.1
Gender:																			
Male	—	—	—	—	—	—	—	—	4.5	4.5	3.8	3.9	3.0	2.7	2.6	1.7	1.4	1.4	0.0
Female	—	—	—	—	—	—	—	—	4.7	3.6	3.5	3.6	3.7	3.3	3.0	2.0	1.8	1.6	-0.2
College Plans:																			
None or under 4 years	—	—	—	—	—	—	—	—	9.1	8.8	7.0	9.1	9.4	6.0	7.3	5.8	3.9	3.6	-0.4
Complete 4 years	—	—	—	—	—	—	—	—	3.9	3.3	3.1	3.0	2.3	2.6	2.2	1.3	1.2	1.2	0.0
Region:																			
Northeast	—	—	—	—	—	—	—	—	5.1	4.1	2.3	1.5	2.1	2.5	3.0	1.5	1.4	0.5	-0.9
Midwest	—	—	—	—	—	—	—	—	4.6	4.0	3.8	3.0	3.4	2.2	3.4	1.7	0.9	1.4	+0.5
South	—	—	—	—	—	—	—	—	4.0	3.8	4.0	4.6	3.8	2.9	2.2	2.3	1.9	1.9	0.0
West	—	—	—	—	—	—	—	—	5.1	4.4	4.6	5.8	3.8	4.7	3.0	1.7	2.3	1.8	-0.4
Population Density:																			
Large MSA	—	—	—	—	—	—	—	—	3.8	4.4	4.0	3.1	2.3	2.7	2.9	2.2	1.7	1.2	-0.5
Other MSA	—	—	—	—	—	—	—	—	4.8	3.4	3.6	4.4	3.8	3.4	3.0	1.5	1.5	1.8	+0.3
Non-MSA	—	—	—	—	—	—	—	—	5.2	4.8	3.6	3.7	3.7	2.5	2.5	2.1	1.8	1.3	-0.5
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	—	—	—	—	—	—	—	—	7.2	7.0	5.6	6.2	7.3	4.5	4.2	3.8	3.8	2.6	-1.2
2.5–3.0	—	—	—	—	—	—	—	—	4.2	4.3	4.6	4.9	4.1	3.7	3.8	2.7	1.6	2.3	+0.7
3.5–4.0	—	—	—	—	—	—	—	—	4.8	4.3	3.2	3.7	3.2	3.3	2.0	1.4	1.7	1.0	-0.8
4.5–5.0	—	—	—	—	—	—	—	—	4.8	3.5	3.6	2.4	2.2	2.3	3.2	1.4	1.0	1.6	+0.5
5.5–6.0 (High)	—	—	—	—	—	—	—	—	3.3	3.5	2.5	4.0	2.1	1.7	1.3	1.3	1.0	0.6	-0.5
Race (2-year average): <sup>b</sup>																			
White	—	—	—	—	—	—	—	—	—	4.7	4.1	4.1	4.2	3.4	2.9	2.4	1.8	1.6	-0.3
African American	—	—	—	—	—	—	—	—	—	0.4	1.0	1.1	0.6	0.8	1.1	1.0	0.8	0.5	-0.3
Hispanic	—	—	—	—	—	—	—	—	—	3.9	3.0	4.4	4.6	4.6	5.0	3.3	1.9	2.3	+0.4

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available. Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding. See Table D-108 for the number of subgroup cases.

See appendix B for definition of variables in table. Data based on one of four forms; N is one third of N indicated in Table D-108.

**Caution: Limited sample sizes (see "Notes" above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-55**  
**Methamphetamine: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months													2007– 2008 change
	1975– 1979	1980– 1989	1990– 1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	—	—	—	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	—	—	—	4.7	4.3	3.9	3.6	3.2	3.4	2.5	2.5	1.7	1.2	-0.5
Gender:														
Male	—	—	—	5.0	4.4	4.3	4.3	3.6	3.7	2.7	2.0	1.8	1.8	0.0
Female	—	—	—	4.5	4.2	3.4	3.0	2.9	3.1	2.3	3.0	1.6	0.7	-0.9 s
College Plans:														
None or under 4 years	—	—	—	6.8	6.2	6.9	6.5	5.8	6.7	4.9	3.7	3.9	1.9	-2.0 s
Complete 4 years	—	—	—	4.0	3.8	3.2	2.7	2.4	2.4	2.0	2.1	1.2	1.0	-0.2
Region:														
Northeast	—	—	—	3.1	4.5	3.4	1.6	1.8	1.3	0.6	1.4	1.4	1.1	-0.3
Midwest	—	—	—	5.1	4.1	4.7	4.5	4.2	3.3	4.4	1.2	1.2	0.8	-0.4
South	—	—	—	3.9	3.7	3.4	3.0	2.8	4.0	2.2	3.1	2.1	1.2	-1.0 s
West	—	—	—	7.1	5.4	4.4	5.4	4.0	4.9	2.7	3.8	1.5	1.9	+0.4
Population Density:														
Large MSA	—	—	—	4.2	3.6	2.7	2.1	1.8	2.8	1.5	3.4	1.3	1.3	0.0
Other MSA	—	—	—	4.0	4.9	4.0	4.4	3.0	2.6	2.4	2.0	1.7	1.2	-0.6
Non-MSA	—	—	—	6.4	4.3	5.3	4.1	5.3	5.5	4.1	2.0	2.2	1.3	-0.9
Parental Education: <sup>a</sup>														
1.0–2.0 (Low)	—	—	—	6.0	7.7	5.0	3.5	4.3	5.5	4.0	2.7	3.1	1.6	-1.5
2.5–3.0	—	—	—	4.8	3.5	4.8	4.9	3.6	4.1	3.0	2.4	2.2	0.6	-1.5 s
3.5–4.0	—	—	—	5.2	3.9	3.8	3.8	3.6	3.1	3.0	2.9	1.4	1.3	-0.1
4.5–5.0	—	—	—	3.7	4.2	3.1	2.9	2.9	2.8	2.1	2.2	1.7	0.8	-0.9
5.5–6.0 (High)	—	—	—	4.2	5.5	3.2	3.1	1.0	3.0	1.2	1.2	0.8	1.6	+0.8
Race (2-year average): <sup>b</sup>														
White	—	—	—	—	4.9	4.6	4.2	3.5	3.5	3.3	2.6	2.1	1.5	-0.6
African American	—	—	—	—	1.1	1.0	0.5	1.4	1.8	0.7	0.4	0.7	1.1	+0.4
Hispanic	—	—	—	—	4.9	4.6	3.9	3.4	3.4	3.4	3.7	2.7	1.1	-1.7

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table. Data based on two of six forms; *N* is two sixths of *N* indicated in Table D-109.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-56**  
**Crystal Methamphetamine (Ice): Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																				2007– 2008 change
	1975– 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	—	15,200	15,000	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	—	1.3	1.4	1.3	1.7	1.8	2.4	2.8	2.3	3.0	1.9	2.2	2.5	3.1	2.0	2.1	2.3	1.9	1.6	1.1	-0.6 s
Gender:																					
Male	—	1.5	1.9	1.5	1.9	2.2	2.6	3.9	2.6	3.9	2.2	2.5	2.7	3.5	2.5	2.6	2.5	1.5	1.8	1.4	-0.4
Female	—	1.0	0.9	1.0	1.2	1.3	2.1	1.7	2.1	2.1	1.6	1.9	2.1	2.5	1.5	1.6	2.0	2.2	1.4	0.7	-0.7 s
College Plans:																					
None or under 4 years	—	1.4	1.9	2.2	2.6	2.4	4.3	5.1	3.8	5.0	2.3	3.8	4.2	4.8	2.6	4.4	4.2	3.5	3.7	1.7	-2.0 s
Complete 4 years	—	1.2	1.2	1.0	1.4	1.5	1.8	2.1	1.9	2.4	1.8	1.7	2.0	2.6	1.9	1.5	1.8	1.3	1.2	0.8	-0.4
Region:																					
Northeast	—	1.6	1.1	0.9	1.1	0.9	1.4	3.2	2.8	2.6	1.0	1.0	1.9	2.6	1.3	0.9	1.2	1.0	1.1	1.4	+0.4
Midwest	—	1.1	1.4	1.1	1.5	2.3	2.2	2.1	1.9	2.7	1.7	2.8	2.1	2.0	1.0	1.8	2.2	1.0	1.5	0.5	-0.9 s
South	—	0.5	1.0	1.0	1.2	1.2	1.8	2.0	1.6	3.1	2.3	2.0	1.7	3.5	2.3	2.3	2.7	2.9	1.7	0.9	-0.9 s
West	—	2.5	2.2	2.6	3.2	2.8	4.7	4.9	3.7	3.4	2.5	2.9	4.7	4.0	3.4	3.5	3.1	1.9	2.1	1.7	-0.4
Population Density:																					
Large MSA	—	1.2	1.3	1.5	2.2	2.0	3.0	4.6	2.9	2.5	1.6	2.3	2.7	2.2	1.9	2.3	2.1	2.2	1.3	0.6	-0.7
Other MSA	—	1.3	1.7	1.3	1.7	1.8	2.0	2.0	2.0	3.3	2.1	1.7	2.3	3.6	2.0	1.4	2.3	1.5	1.7	1.2	-0.5
Non-MSA	—	1.2	0.8	1.2	1.2	1.6	2.3	2.6	2.1	2.8	2.0	3.0	2.5	3.2	2.1	3.2	2.7	2.1	1.9	1.3	-0.6
Parental Education: <sup>a</sup>																					
1.0–2.0 (Low)	—	1.1	1.0	0.9	1.6	1.0	3.2	3.4	2.2	2.8	3.6	3.2	5.9	3.7	3.7	4.0	2.6	4.2	3.2	1.4	-1.8
2.5–3.0	—	1.4	1.1	1.1	1.2	3.0	2.6	3.0	2.5	3.2	1.3	1.7	2.4	3.6	1.7	2.7	2.6	2.6	2.1	0.6	-1.5 s
3.5–4.0	—	1.4	1.2	1.5	2.3	1.6	1.9	2.6	2.2	3.6	2.5	1.9	2.8	2.4	2.2	2.4	3.1	1.4	1.4	1.0	-0.4
4.5–5.0	—	1.2	1.8	1.4	1.8	1.3	2.5	2.9	2.9	2.6	1.3	2.8	1.5	2.8	1.5	1.0	1.4	1.0	1.5	0.7	-0.8
5.5–6.0 (High)	—	1.1	1.0	1.4	1.3	1.0	2.2	2.5	1.4	1.9	2.1	1.3	2.0	2.8	1.8	0.9	1.1	1.4	0.8	1.2	+0.4
Race (2-year average): <sup>b</sup>																					
White	—	—	1.3	1.3	1.5	1.7	2.0	2.5	2.6	2.9	2.8	2.3	2.4	2.6	2.3	2.0	2.0	1.9	1.7	1.3	-0.4
African American	—	—	0.8	1.0	0.8	0.5	0.5	0.3	0.5	1.0	0.7	0.7	1.1	1.6	1.4	0.7	1.0	1.0	0.6	0.6	0.0
Hispanic	—	—	1.3	1.8	2.3	2.1	2.7	4.0	2.8	1.7	1.7	2.4	3.4	3.6	2.5	2.6	3.4	3.3	2.9	1.8	-1.1

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table. Data based on two of six forms; N is two sixths of N indicated in Table D-109.

**Caution: Limited sample sizes (see "Notes" above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-57**  
**Sedatives (Barbiturates):<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	9,400	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	10.7	9.6	9.3	8.1	7.5	6.8	6.6	5.5	5.2	4.9	4.6	4.2	3.6	3.2	3.3	3.4	3.4
Gender:																	
Male	12.3	9.9	10.2	8.4	7.6	7.3	7.2	5.9	5.9	5.5	5.2	4.7	4.0	3.4	3.5	3.8	3.4
Female	9.9	9.2	8.4	7.7	7.0	6.0	5.8	5.0	4.2	4.0	3.9	3.8	3.2	3.0	3.0	3.0	3.2
College Plans:																	
None or under 4 years	—	11.6	11.4	9.1	9.3	9.0	8.1	7.4	6.7	6.2	6.2	6.1	4.7	4.1	4.8	4.7	4.3
Complete 4 years	—	7.3	6.8	6.8	5.2	4.8	5.1	3.8	3.8	3.7	3.6	3.0	3.0	2.7	2.5	2.8	2.9
Region:																	
Northeast	11.5	10.4	9.2	9.6	9.6	6.9	6.8	5.6	4.7	5.1	5.3	5.2	4.2	2.5	3.2	2.9	2.8
Midwest	12.8	10.4	10.7	7.9	6.9	7.3	7.5	5.4	6.1	4.9	4.9	4.2	3.3	2.5	3.2	3.5	3.5
South	9.9	9.7	9.3	7.8	7.3	7.0	5.5	6.3	5.2	5.2	4.2	4.1	3.7	4.1	3.7	4.0	3.6
West	10.0	6.7	6.6	6.6	5.7	5.2	6.5	3.9	4.0	4.2	4.1	3.3	3.2	3.2	2.7	2.9	3.3
Population Density:																	
Large MSA	11.1	10.2	8.1	8.1	8.3	6.6	6.9	5.3	5.2	4.4	4.4	3.7	3.3	2.8	2.6	2.6	2.4
Other MSA	11.3	9.8	9.9	8.2	7.3	6.5	6.4	5.7	5.3	4.9	4.2	4.4	3.6	3.4	3.1	3.6	3.9
Non-MSA	9.8	9.0	9.5	8.1	7.0	7.2	6.6	5.5	5.0	5.5	5.4	4.5	3.9	3.2	4.4	3.9	3.3
Parental Education: <sup>b</sup>																	
1.0–2.0 (Low)	10.3	9.1	8.0	7.5	7.8	8.0	6.5	5.8	6.1	4.7	5.0	4.8	3.8	4.3	4.1	3.1	3.6
2.5–3.0	10.3	10.2	10.3	8.2	7.3	7.2	6.5	5.7	5.7	5.2	5.3	4.6	3.6	3.1	3.4	3.7	3.7
3.5–4.0	9.5	9.6	9.0	8.3	7.4	6.3	6.5	5.1	4.6	5.0	4.4	4.4	3.2	2.9	3.2	3.9	3.0
4.5–5.0	10.7	10.1	9.1	7.8	6.6	5.9	6.4	5.0	4.4	4.3	4.1	3.3	3.9	3.3	2.8	3.1	3.3
5.5–6.0 (High)	9.0	10.3	8.3	8.0	7.2	5.4	6.8	5.8	3.7	4.0	3.1	3.4	3.6	3.1	3.4	2.9	3.6
Race (2-year average): <sup>c</sup>																	
White	—	—	10.2	9.3	8.2	7.5	7.2	6.5	5.8	5.5	5.1	4.7	4.2	3.7	3.5	3.7	3.8
African American	—	—	3.3	3.2	2.6	2.5	2.4	2.0	1.7	1.6	1.6	1.6	1.7	1.5	1.1	1.1	1.2
Hispanic	—	—	7.4	5.8	5.8	5.8	5.7	5.1	4.1	4.4	4.6	3.6	2.8	2.8	3.2	2.8	2.4

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

(Table continued on next page.)

**TABLE D-57 (cont.)**  
**Sedatives (Barbiturates):<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																	2007– 2008 change	
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	2.8	3.4	4.1	4.7	4.9	5.1	5.5	5.8	6.2	5.7	6.7	6.0	6.5	7.2	6.6	6.2	5.8	-0.4	
Gender:																			
Male	2.9	3.4	4.3	5.1	5.2	5.3	6.3	6.3	6.9	6.3	7.4	6.7	7.0	7.7	6.4	6.3	5.9	-0.4	
Female	2.6	3.3	3.8	4.2	4.4	4.8	4.8	5.3	5.4	5.1	5.9	5.4	6.0	6.6	6.7	6.2	5.7	-0.5	
College Plans:																			
None or under 4 years	3.9	3.8	5.4	5.9	6.7	6.6	6.9	7.0	7.0	7.1	9.8	9.6	9.3	10.7	10.0	8.2	8.9	+0.7	
Complete 4 years	2.3	3.2	3.7	4.4	4.3	4.6	5.1	5.5	6.0	5.4	6.0	5.1	5.6	6.3	5.7	5.7	5.2	-0.6	
Region:																			
Northeast	2.7	3.5	4.0	4.1	5.6	5.7	5.5	4.7	5.6	5.3	5.9	4.8	5.4	5.7	5.7	5.5	5.1	-0.4	
Midwest	2.7	3.5	4.1	4.5	4.9	4.4	4.8	6.0	5.2	5.6	6.4	5.1	5.9	7.5	6.2	5.9	5.7	-0.3	
South	3.0	3.6	4.8	5.3	5.4	5.8	6.8	6.8	7.5	6.1	8.4	7.1	7.8	8.5	7.5	7.2	6.8	-0.4	
West	2.5	2.7	2.8	4.3	3.3	4.2	4.2	4.9	5.7	5.6	5.1	6.5	6.3	5.9	6.2	5.4	5.0	-0.4	
Population Density:																			
Large MSA	2.4	2.6	3.6	4.1	3.6	4.2	4.6	3.7	5.1	5.9	6.5	4.2	5.5	6.1	6.6	5.7	4.3	-1.4	
Other MSA	2.6	3.1	4.3	4.9	5.4	5.0	5.6	6.2	6.6	6.1	6.7	6.6	7.1	7.5	6.6	6.3	6.2	-0.1	
Non-MSA	3.4	4.3	4.1	5.0	5.4	6.4	6.8	7.4	6.8	4.9	7.0	7.4	6.6	7.8	6.6	6.9	6.7	-0.2	
Parental Education: <sup>b</sup>																			
1.0–2.0 (Low)	3.9	3.8	4.5	4.9	4.8	4.3	6.4	7.5	5.2	6.3	5.1	6.7	6.6	6.2	7.3	6.3	6.0	-0.2	
2.5–3.0	2.4	3.6	4.5	5.2	4.9	4.9	6.3	6.2	7.1	5.3	7.1	6.5	7.0	8.1	6.5	5.7	6.3	+0.6	
3.5–4.0	2.8	2.8	4.0	4.6	4.9	6.0	5.6	6.4	5.8	6.1	7.7	7.2	8.0	7.7	7.3	6.5	6.2	-0.3	
4.5–5.0	2.9	3.4	4.0	4.4	5.0	5.1	5.0	5.0	6.7	5.9	6.3	4.7	5.1	7.0	6.2	7.0	5.0	-2.0 ss	
5.5–6.0 (High)	2.4	3.8	3.6	4.1	4.6	4.6	5.0	5.1	5.5	5.8	6.6	4.3	5.5	6.3	6.0	5.3	5.4	+0.1	
Race (2-year average): <sup>c</sup>																			
White	3.5	3.6	4.3	4.9	5.4	5.9	6.5	6.7	6.9	7.0	7.5	7.6	7.4	7.9	7.9	7.5	7.3	-0.2	
African American	1.1	1.0	1.5	1.6	1.1	1.0	1.4	1.4	1.3	1.5	1.4	1.7	2.4	2.6	2.5	2.5	2.2	-0.3	
Hispanic	2.2	1.9	2.6	3.5	4.0	3.7	3.3	4.0	5.1	4.7	4.5	4.1	4.7	5.8	5.8	5.2	4.3	-0.9	

<sup>a</sup>Only drug use not under a doctor's orders is included here.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.



**TABLE D-58**  
**Tranquilizers:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007– 2008 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001 <sup>b</sup>	2002 <sup>b</sup>	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		
Total	1.8	2.0	2.1	2.4	2.7	3.3	2.9	2.6	2.5	2.6†	2.8	2.6	2.7	2.5	2.8	2.6	2.4	2.4	0.0	
Gender:																				
Male	1.5	1.6	1.8	1.9	2.0	2.3	2.6	2.3	2.1	2.1†	2.5	2.2	2.2	1.9	2.1	2.2	1.6	1.7	+0.1	
Female	2.1	2.3	2.4	2.8	3.3	4.0	3.2	3.0	2.9	3.1†	2.9	2.8	3.0	3.2	3.4	2.9	3.1	3.2	0.0	
College Plans:																				
None or under 4 years	3.9	4.9	3.6	5.1	5.9	6.4	5.8	6.4	5.8	6.8†	5.8	6.5	6.3	6.2	6.9	6.0	6.8	5.9	-0.9	
Complete 4 years	1.5	1.5	1.9	2.0	2.3	2.8	2.6	2.2	2.0	2.2†	2.5	2.1	2.3	2.1	2.4	2.3	2.0	2.2	+0.2	
Region:																				
Northeast	1.0	1.6	1.7	2.5	2.3	2.7	2.5	2.0	2.3	2.2†	2.0	1.8	1.9	1.7	1.6	1.3	1.4	1.6	+0.2	
Midwest	1.4	1.9	1.3	1.7	2.6	3.5	2.4	2.6	2.6	2.2†	2.2	2.4	2.2	2.1	2.8	2.4	2.8	2.5	-0.3	
South	2.6	2.5	2.4	2.6	3.0	3.7	3.3	3.2	2.8	3.2†	3.4	3.4	3.5	3.4	3.7	3.6	2.9	3.3	+0.3	
West	1.8	1.6	3.0	2.7	2.4	2.9	3.0	2.3	1.9	2.5†	3.2	1.9	2.6	2.2	2.2	2.1	1.9	1.8	-0.1	
Population Density:																				
Large MSA	1.8	2.1	1.7	2.5	1.8	3.2	2.1	1.9	1.8	2.5†	2.8	2.0	1.8	1.8	2.0	1.9	1.9	1.8	-0.1	
Other MSA	1.7	1.8	2.5	2.6	3.2	3.4	3.2	2.6	2.4	2.7†	3.1	2.7	2.9	3.1	3.1	2.6	2.8	2.8	0.0	
Non-MSA	2.2	2.2	1.6	1.9	2.6	3.1	3.2	3.6	3.4	2.7†	2.3	2.9	3.4	2.4	3.4	3.5	2.4	2.6	+0.2	
Parental Education: <sup>c</sup>																				
1.0–2.0 (Low)	3.6	3.8	2.5	3.2	3.9	4.9	4.3	5.5	5.0	5.6†	3.7	5.0	3.9	4.7	5.0	5.1	5.2	4.7	-0.5	
2.5–3.0	1.6	2.1	2.5	2.6	2.7	3.5	3.1	2.8	3.3	3.6†	3.7	3.6	3.5	2.8	4.3	3.2	3.3	3.0	-0.3	
3.5–4.0	2.0	2.2	2.1	2.6	3.2	3.9	3.2	2.7	2.1	2.6†	2.7	2.2	2.8	3.0	3.3	3.1	2.9	2.5	-0.4	
4.5–5.0	1.4	0.9	1.8	2.0	2.2	2.8	2.4	2.4	1.7	1.4†	2.7	2.0	2.1	2.0	1.3	1.7	1.3	2.1	+0.8 s	
5.5–6.0 (High)	1.8	1.9	1.7	2.1	1.6	2.7	2.7	2.1	1.9	2.2†	2.1	1.6	1.6	1.7	2.0	1.8	1.0	1.7	+0.7	
Race (2-year average): <sup>d</sup>																				
White	—	2.0	2.0	2.2	2.7	3.2	3.4	3.1	2.9	3.0	3.0†	3.0 <sup>e</sup>	2.8	2.8	2.9	3.0	2.7	2.6	-0.1	
African American	—	0.9	1.1	1.2	1.2	1.3	1.2	0.9	0.7	0.5	0.5†	0.6 <sup>e</sup>	1.0	1.2	1.0	0.8	0.9	0.9	+0.1	
Hispanic	—	2.7	3.1	3.4	3.3	3.5	3.5	3.4	3.5	3.5	3.6†	3.8 <sup>e</sup>	3.4	3.4	3.5	3.0	2.9	2.9	0.0	

(Table continued on next page.)

**TABLE D-58 (cont.)**  
**Tranquilizers:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 8**

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* "‡" indicates some change in the question. See relevant footnote. See relevant figure to assess the impact of the wording changes.

Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

"—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Only drug use not under a doctor's orders is included here.

<sup>b</sup>In 2001, for the tranquilizer list of examples, Miltown was replaced with Xanax. The 2001 data are based on the changed forms only; *N* is one half of *N* indicated. In 2002 the remaining forms were changed. Beginning in 2002, the data are based on all forms. Data for any illicit drug other than marijuana and hallucinogens are also affected by these changes and have been treated in a parallel manner.

<sup>c</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>d</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

<sup>e</sup>Due to changes in the question wording in half of the questionnaire forms in 2001, the 2002 entry comprises half of the 2001 sample data double-weighted (the half with the new version of the question) and all of the 2002 sample data.

**TABLE D-59**  
**Tranquilizers:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007– 2008 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001 <sup>b</sup>	2002 <sup>b</sup>	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100		
Total	3.2	3.5	3.3	3.3	4.0	4.6	4.9	5.1	5.4	5.6‡	7.3	6.3	5.3	5.1	4.8	5.2	5.3	4.6	-0.7	
Gender:																				
Male	2.5	2.7	3.2	3.0	4.0	4.3	4.7	4.7	5.2	5.8‡	7.9	5.7	4.7	4.7	4.3	5.0	4.6	4.1	-0.5	
Female	3.8	4.3	3.2	3.6	4.0	4.9	5.2	5.4	5.4	5.5‡	6.8	6.9	5.8	5.5	5.3	5.3	6.0	5.0	-1.0 s	
College Plans:																				
None or under 4 years	5.0	6.0	5.8	6.0	7.4	9.4	8.6	8.3	8.6	10.0‡	13.5	11.6	9.2	9.6	9.6	10.2	9.9	9.6	-0.3	
Complete 4 years	2.8	3.1	2.7	2.8	3.4	3.8	4.3	4.5	4.8	4.9‡	6.4	5.5	4.7	4.5	4.2	4.5	4.7	3.9	-0.7 s	
Region:																				
Northeast	2.7	2.8	3.4	2.8	2.6	3.9	3.6	5.7	5.5	3.9‡	6.2	4.6	4.3	5.0	5.0	3.8	4.1	2.8	-1.2	
Midwest	2.4	3.0	2.5	2.6	3.2	4.4	3.7	3.4	4.6	5.4‡	5.6	5.5	4.5	3.5	3.3	4.2	5.3	4.7	-0.6	
South	4.2	4.5	3.9	4.2	5.1	5.7	7.3	6.6	6.0	6.9‡	9.6	8.1	7.5	7.3	6.6	6.9	6.5	6.2	-0.3	
West	2.9	3.2	3.2	3.6	4.3	3.6	3.7	4.1	4.9	5.4‡	6.7	5.8	4.1	4.1	3.8	5.3	4.7	3.7	-0.9	
Population Density:																				
Large MSA	3.2	3.3	2.7	2.6	3.2	4.2	3.9	4.1	5.0	5.5‡	5.8	5.1	3.9	3.2	3.5	4.4	4.1	3.3	-0.8	
Other MSA	3.0	3.8	3.3	3.9	4.1	4.6	4.4	5.2	5.5	5.4‡	7.0	6.8	5.8	5.7	5.4	5.3	5.8	5.2	-0.5	
Non-MSA	3.5	3.3	3.6	3.0	4.7	5.2	7.0	6.0	5.6	6.1‡	9.9	6.7	6.4	6.4	5.3	6.3	6.0	5.1	-1.0	
Parental Education: <sup>c</sup>																				
1.0–2.0 (Low)	3.3	5.3	4.8	4.2	5.0	5.9	4.7	6.5	5.0	8.2‡	7.6	7.1	7.5	5.8	5.2	6.6	5.5	5.4	-0.1	
2.5–3.0	3.6	3.5	3.1	3.3	4.5	5.2	5.3	6.3	5.9	6.2‡	7.9	7.5	7.3	5.6	5.7	6.2	6.4	5.9	-0.5	
3.5–4.0	3.2	3.4	3.5	3.4	4.3	5.0	5.5	4.9	5.2	5.6‡	8.1	6.7	5.7	5.7	5.4	5.6	5.7	5.2	-0.6	
4.5–5.0	2.5	3.9	2.9	2.9	3.5	4.1	4.2	4.5	5.7	5.2‡	6.7	5.8	4.1	4.6	4.0	4.3	4.9	3.5	-1.4 s	
5.5–6.0 (High)	3.5	2.3	3.1	3.4	3.2	3.6	4.4	4.0	5.3	4.7‡	6.9	4.6	3.4	4.1	4.0	4.3	3.9	3.6	-0.3	
Race (2-year average): <sup>d</sup>																				
White	—	4.0	3.8	3.6	4.1	4.9	5.6	6.0	6.1	6.4	7.0‡	7.6 <sup>e</sup>	7.4	6.5	6.0	6.0	6.2	6.1	-0.2	
African American	—	0.9	0.9	0.9	0.8	0.7	0.9	1.0	1.2	1.1	1.5‡	1.5 <sup>e</sup>	1.3	1.3	1.3	1.6	1.3	1.0	-0.3	
Hispanic	—	2.9	3.3	3.1	3.1	3.4	3.5	3.5	3.7	4.0	4.0‡	4.3 <sup>e</sup>	4.4	4.5	4.3	3.8	3.3	3.5	+0.2	

(Table continued on next page.)

**TABLE D-59 (cont.)**  
**Tranquilizers:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 10**

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* "‡" indicates some change in the question. See relevant footnote. See relevant figure to assess the impact of the wording changes.

Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

"—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Only drug use not under a doctor's orders is included here.

<sup>b</sup>In 2001, for the tranquilizer list of examples, Miltown was replaced with Xanax. The 2001 data are based on the changed forms only; *N* is one half of *N* indicated. In 2002 the remaining forms were changed. Beginning in 2002, the data are based on all forms. Data for any illicit drug other than marijuana and hallucinogens are also affected by these changes and have been treated in a parallel manner.

<sup>c</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>d</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

<sup>e</sup>Due to changes in the question wording in half of the questionnaire forms in 2001, the 2002 entry comprises half of the 2001 sample data double-weighted (the half with the new version of the question) and all of the 2002 sample data.

**TABLE D-60**  
**Tranquilizers:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
<i>Approximate wtd. N =</i>	9,400	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	10.6	10.3	10.8	9.9	9.6	8.7	8.0	7.0	6.9	6.1	6.1	5.8	5.5	4.8	3.8	3.5	3.6
Gender:																	
Male	10.0	9.4	10.2	9.7	9.9	9.0	8.0	6.9	7.0	6.3	6.4	5.9	5.2	4.7	4.0	3.5	3.5
Female	11.1	11.0	11.4	10.1	9.3	8.5	7.7	7.1	6.7	5.8	5.7	5.8	5.8	4.8	3.5	3.5	3.6
College Plans:																	
None or under 4 years	—	11.5	12.3	11.1	11.0	10.7	9.4	8.0	8.0	7.4	6.8	7.2	6.7	5.1	4.8	4.3	4.2
Complete 4 years	—	8.9	9.0	8.6	8.1	7.2	6.9	6.3	5.8	5.2	5.5	5.1	4.9	4.6	3.3	3.2	3.4
Region:																	
Northeast	9.2	9.7	10.4	10.9	11.5	8.6	8.3	7.8	6.8	6.8	7.1	6.4	6.9	4.5	3.7	2.9	3.0
Midwest	10.6	10.1	11.0	8.8	7.5	8.2	7.8	6.2	6.8	5.6	6.0	5.5	4.5	3.7	3.1	2.9	3.0
South	11.3	11.7	11.4	10.5	10.4	9.5	7.8	7.4	7.4	6.9	5.9	6.3	5.7	6.0	4.4	4.3	4.0
West	11.7	8.5	9.6	8.9	9.4	8.6	8.0	6.4	6.2	4.9	5.3	4.8	5.2	4.4	3.4	3.9	4.4
Population Density:																	
Large MSA	11.2	9.6	9.6	10.3	9.9	8.7	8.3	7.0	7.0	5.4	5.8	5.3	5.8	4.7	3.1	3.6	2.5
Other MSA	11.0	11.3	11.4	10.1	10.2	9.3	8.1	7.2	7.2	6.1	6.0	5.7	5.6	5.0	3.5	3.7	4.1
Non-MSA	9.9	9.5	11.0	9.2	8.7	8.0	7.5	6.8	6.5	6.8	6.5	6.4	5.2	4.5	4.9	3.3	3.7
Parental Education: <sup>b</sup>																	
1.0–2.0 (Low)	—	11.2	10.1	9.4	9.4	9.1	7.8	7.1	6.1	6.0	6.5	5.3	6.7	5.7	3.9	3.6	4.0
2.5–3.0	—	9.8	10.3	11.5	10.1	8.8	9.1	8.0	7.3	7.2	6.5	6.2	5.8	5.4	4.6	3.9	3.6
3.5–4.0	—	9.8	11.2	11.1	9.5	10.4	8.9	8.3	6.7	6.9	5.8	6.4	6.5	5.3	4.5	3.4	3.1
4.5–5.0	—	11.3	11.7	11.4	10.5	10.0	8.1	7.4	7.6	6.6	5.8	6.3	4.7	5.9	5.5	3.8	3.9
5.5–6.0 (High)	—	9.3	12.0	10.1	11.0	11.4	10.3	9.1	7.6	7.1	6.3	5.5	5.4	5.4	5.6	4.9	4.0
Race (2-year average): <sup>c</sup>																	
White	—	—	11.4	11.1	10.5	9.9	9.1	8.3	7.8	7.3	6.8	6.6	6.3	5.9	5.0	4.2	4.1
African American	—	—	4.3	4.2	3.6	3.1	3.0	2.5	2.3	2.1	1.7	1.7	2.0	2.0	1.2	0.7	0.9
Hispanic	—	—	8.4	8.2	7.4	6.4	5.7	5.8	5.1	5.3	5.0	4.4	3.7	2.5	1.6	1.9	2.7

Source. The Monitoring the Future study, the University of Michigan.

Notes. "‡" indicates some change in the question. See relevant footnote. See relevant figure to assess the impact of the wording changes.

Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

(Table continued on next page.)

**TABLE D-60 (cont.)**  
**Tranquilizers:<sup>a</sup> Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																	2007–	
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001 <sup>d</sup>	2002 <sup>d</sup>	2003	2004	2005	2006	2007 <sup>e</sup>	2008	change	
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	2.8	3.5	3.7	4.4	4.6	4.7	5.5	5.8	5.7‡	6.9	7.7	6.7	7.3	6.8	6.6	6.2	6.2	0.0	
Gender:																			
Male	2.7	3.5	4.0	4.7	5.0	5.4	6.3	6.9	6.4‡	7.9	8.4	6.9	8.0	7.2	7.1	6.9	6.8	-0.1	
Female	3.0	3.3	3.5	4.1	4.0	3.9	4.7	4.8	4.9‡	5.8	6.9	6.3	6.5	6.2	6.1	5.4	5.7	+0.3	
College Plans:																			
None or under 4 years	3.9	3.9	4.5	5.6	5.6	6.2	6.8	6.4	6.7‡	7.6	9.9	9.6	9.1	10.3	8.5	9.1	9.3	+0.2	
Complete 4 years	2.5	3.3	3.5	4.1	4.2	4.0	5.1	5.6	5.2‡	6.7	7.1	6.0	6.8	5.9	6.0	5.5	5.5	0.0	
Region:																			
Northeast	3.0	3.7	3.5	3.9	4.8	5.3	4.9	5.6	5.2‡	5.7	6.8	5.4	6.5	5.7	7.2	5.9	5.3	-0.6	
Midwest	2.3	2.8	3.1	4.0	4.4	3.5	3.7	5.1	4.7‡	8.1	6.5	5.5	6.2	7.0	5.8	6.4	5.2	-1.2	
South	3.5	4.2	4.8	5.0	5.3	5.4	7.5	7.6	6.7‡	7.4	10.4	8.5	9.0	8.3	7.6	7.0	7.8	+0.8	
West	2.3	3.0	2.8	4.3	3.0	4.3	4.4	3.9	5.6‡	5.5	5.8	6.6	7.0	4.9	5.3	4.7	5.5	+0.9	
Population Density:																			
Large MSA	2.9	2.9	3.9	4.0	3.7	4.2	4.8	4.0	4.7‡	7.9	7.8	4.7	5.5	5.5	6.5	5.9	5.2	-0.7	
Other MSA	2.7	3.6	3.7	4.5	4.9	4.8	5.7	6.6	6.2‡	6.4	8.2	7.8	8.5	7.4	6.6	6.4	6.6	+0.3	
Non-MSA	3.1	3.7	3.5	4.8	4.7	5.1	5.9	6.5	6.0‡	6.7	6.8	7.4	7.3	7.1	6.9	6.2	6.5	+0.2	
Parental Education: <sup>b</sup>																			
1.0–2.0 (Low)	3.9	3.3	4.2	3.9	4.2	3.9	6.4	5.2	6.4‡	5.4	5.2	7.1	5.0	4.3	5.7	6.0	5.9	-0.1	
2.5–3.0	2.8	3.3	3.5	4.7	4.0	4.3	5.2	6.2	5.3‡	6.7	7.9	6.5	7.9	7.7	6.9	6.5	5.5	-1.0	
3.5–4.0	2.7	3.5	3.6	4.3	4.7	4.6	6.0	6.4	5.6‡	7.7	8.4	7.6	9.0	7.3	6.9	6.4	7.4	+0.9	
4.5–5.0	3.0	3.4	3.7	4.5	4.6	5.4	4.9	5.4	5.9‡	7.4	7.9	5.9	7.1	6.8	6.6	6.3	5.7	-0.7	
5.5–6.0 (High)	2.2	4.2	4.2	4.1	5.3	5.1	5.5	5.6	5.8‡	6.0	7.9	6.2	5.4	5.9	6.4	5.5	6.0	+0.5	
Race (2-year average): <sup>c</sup>																			
White	3.7	3.7	4.2	4.6	5.1	5.5	6.2	6.8	6.9	7.7‡	9.2 <sup>f</sup>	8.7	8.4	8.6	8.2	7.9	7.9	0.0	
African American	1.3	1.0	1.1	1.2	0.9	0.8	1.0	1.0	0.7	0.6‡	1.1 <sup>f</sup>	1.3	1.7	1.9	1.6	1.3	1.0	-0.2	
Hispanic	2.4	2.0	2.4	3.5	4.3	3.8	3.3	3.5	4.3	3.9‡	4.1 <sup>f</sup>	4.5	4.5	4.3	4.3	4.5	4.2	-0.2	

<sup>a</sup>Only drug use not under a doctor's orders is included here.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

<sup>d</sup>In 2001, for the tranquilizer list of examples, Miltown was replaced with Xanax. The 2001 data are based on the changed forms only; *N* is one half of *N* indicated. In 2002 the remaining forms were changed. Beginning in 2002, the data are based on all forms. Data for any illicit drug other than marijuana and hallucinogens are also affected by these changes and have been treated in a parallel manner.

<sup>e</sup>In 2007, for the list of tranquilizers, Equanil and meprobamate were replaced with Soma while Atarax, Tranxene, and Vistaril were replaced with Ativan and Klonopin.

<sup>f</sup>Due to changes in the question wording in half of the questionnaire forms in 2001, the 2002 entry comprises half of the 2001 sample data double-weighted (the half with the new version of the question) and all of the 2002 sample data.

**TABLE D-61**  
**Over-the-Counter Cough/Cold Medicines: Trends in Annual Prevalence of Use**  
**by Subgroups in Grades 8, 10, and 12**

	Percentage who used in last 12 months														
	8th Graders					10th Graders					12th Graders				
	1991– 2005	2006	2007	2008	2007– 2008 change	1991– 2005	2006	2007	2008	2007– 2008 change	1991– 2005	2006	2007	2008	2007– 2008 change
<i>Approximate wtd. N =</i>	—	5,500	5,400	5,200		—	5,400	5,400	5,000		—	4,700	4,800	4,700	
Total	—	4.2	4.0	3.6	-0.5	—	5.3	5.4	5.3	-0.1	—	6.9	5.8	5.5	-0.3
Gender:															
Male	—	3.4	3.1	2.7	-0.4	—	5.1	4.6	4.9	+0.3	—	7.6	5.9	6.3	+0.4
Female	—	4.7	5.0	4.3	-0.6	—	5.5	6.3	5.7	-0.6	—	5.9	5.1	4.7	-0.3
College Plans:															
None or under 4 years	—	11.9	8.0	7.1	-0.8	—	9.9	9.7	11.3	+1.5	—	8.9	8.3	7.6	-0.7
Complete 4 years	—	3.4	3.6	3.3	-0.3	—	4.6	4.8	4.6	-0.2	—	6.2	5.2	4.9	-0.3
Region:															
Northeast	—	3.4	2.4	2.5	+0.1	—	4.1	5.8	3.5	-2.3 s	—	5.9	7.8	4.4	-3.3 s
Midwest	—	4.5	4.0	3.8	-0.2	—	4.3	5.4	5.4	0.0	—	6.6	6.8	4.4	-2.5 s
South	—	4.2	4.8	4.1	-0.7	—	6.3	5.9	6.6	+0.8	—	7.6	5.2	6.7	+1.5
West	—	4.4	3.6	3.3	-0.4	—	6.0	4.7	4.8	+0.1	—	6.7	4.2	5.8	+1.5
Population Density:															
Large MSA	—	3.5	2.7	3.1	+0.3	—	4.3	4.7	4.3	-0.4	—	7.6	5.4	4.9	-0.5
Other MSA	—	4.4	4.8	3.5	-1.2	—	5.5	5.6	6.2	+0.6	—	6.0	5.9	5.5	-0.5
Non-MSA	—	4.6	4.2	4.3	+0.1	—	6.3	6.3	4.7	-1.6	—	7.5	6.1	6.4	+0.2
Parental Education: <sup>a</sup>															
1.0–2.0 (Low)	—	6.2	5.7	4.8	-0.9	—	5.1	6.4	6.8	+0.4	—	7.7	7.2	6.8	-0.4
2.5–3.0	—	5.1	4.5	4.4	-0.1	—	6.2	7.4	5.9	-1.5	—	6.2	6.7	5.0	-1.7
3.5–4.0	—	4.4	5.4	3.8	-1.6	—	6.2	6.0	5.0	-1.0	—	7.7	4.6	6.3	+1.7
4.5–5.0	—	3.8	3.4	3.4	0.0	—	4.1	4.5	5.6	+1.0	—	6.7	6.8	4.8	-2.0
5.5–6.0 (High)	—	3.0	2.0	2.5	+0.5	—	5.1	3.0	3.9	+0.9	—	4.9	4.0	4.4	+0.4
Race (2-year average): <sup>b</sup>															
White	—	—	4.5	4.1	-0.3	—	—	6.0	6.2	+0.3	—	—	6.3	5.8	-0.5
African American	—	—	2.2	2.3	+0.2	—	—	3.9	3.1	-0.7	—	—	5.0	4.2	-0.8
Hispanic	—	—	4.4	3.8	-0.6	—	—	3.2	4.0	+0.7	—	—	7.9	6.0	-1.9

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Tables D-107 through D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-62**  
**Rohypnol: Trends in Annual Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007– 2008
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	change
<i>Approximate wtd. N =</i>	—	—	—	—	—	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700	
Total	—	—	—	—	—	1.0	0.8	0.8	0.5	0.5	0.7	0.3	0.5	0.6	0.7	0.5	0.7	0.5	-0.2
Gender:																			
Male	—	—	—	—	—	1.1	0.7	0.8	0.6	0.5	0.6	0.2	0.4	0.5	0.7	0.7	0.6	0.6	0.0
Female	—	—	—	—	—	1.0	0.9	0.9	0.2	0.6	0.7	0.2	0.4	0.7	0.7	0.4	0.7	0.3	-0.3
College Plans:																			
None or under 4 years	—	—	—	—	—	2.5	1.5	3.0	0.9	2.2	2.0	1.0	1.3	2.4	1.8	1.1	3.3	2.6	-0.7
Complete 4 years	—	—	—	—	—	0.8	0.7	0.6	0.4	0.4	0.5	0.2	0.4	0.4	0.6	0.5	0.4	0.3	-0.1
Region:																			
Northeast	—	—	—	—	—	0.9	0.3	0.9	0.3	0.6	0.9	0.2	0.2	0.3	0.6	1.4	0.1	0.0	-0.1
Midwest	—	—	—	—	—	0.9	0.8	0.8	0.3	0.4	1.0	0.4	0.2	0.8	0.6	0.0	0.8	0.7	-0.2
South	—	—	—	—	—	1.3	1.1	0.9	0.7	0.9	0.6	0.4	0.6	0.5	0.5	0.6	0.7	0.6	-0.1
West	—	—	—	—	—	1.0	0.7	0.8	0.5	*	0.4	0.1	0.7	0.7	1.1	0.2	0.8	0.5	-0.3
Population Density:																			
Large MSA	—	—	—	—	—	1.2	0.8	0.7	0.4	0.9	1.2	0.1	0.1	0.5	0.4	0.6	0.4	0.6	+0.2
Other MSA	—	—	—	—	—	1.1	0.9	1.0	0.6	0.5	0.5	0.3	0.4	0.8	0.7	0.5	0.8	0.5	-0.3
Non-MSA	—	—	—	—	—	0.8	0.7	0.8	0.3	0.2	0.4	0.5	1.0	0.3	1.0	0.5	0.8	0.4	-0.5
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	—	—	—	—	—	2.0	2.1	2.2	0.2	0.9	1.3	0.9	1.8	2.4	0.6	0.7	0.5	0.7	+0.1
2.5–3.0	—	—	—	—	—	1.1	1.1	0.8	0.3	0.8	0.3	0.0	0.9	0.1	1.3	0.1	0.5	0.5	-0.1
3.5–4.0	—	—	—	—	—	1.2	0.7	0.9	0.6	0.2	1.2	0.2	0.1	0.2	0.4	0.7	0.7	0.7	0.0
4.5–5.0	—	—	—	—	—	0.8	0.6	0.6	0.5	0.4	0.7	0.6	0.4	0.6	0.9	0.1	0.9	0.2	-0.7
5.5–6.0 (High)	—	—	—	—	—	0.8	0.5	0.9	0.7	0.9	0.2	0.2	0.0	0.1	0.5	1.5	0.4	0.3	-0.1
Race (2-year average): <sup>b</sup>																			
White	—	—	—	—	—	—	0.9	0.8	0.7	0.5	0.6	0.5	0.4	0.4	0.5	0.5	0.4	0.5	+0.1
African American	—	—	—	—	—	—	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.9	0.7	0.2	0.2	0.2	+0.1
Hispanic	—	—	—	—	—	—	1.4	1.5	1.5	0.6	0.9	0.8	0.4	1.0	0.8	0.6	1.1	1.0	-0.1

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available. “\*” indicates less than 0.05% but greater than 0%.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table. Data based on one of two forms in 1996;  $N$  is one half of  $N$  indicated in Table D-107.

Data based on three of four forms in 1997–1998;  $N$  is two thirds of  $N$  indicated in Table D-107. Data based on two of four forms in 1999–2001;  $N$  is one third of  $N$  indicated in Table D-107.

Data based on one of four forms beginning in 2002;  $N$  is one sixth of  $N$  indicated in Table D-107.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.



**TABLE D-63**  
**Rohypnol: Trends in Annual Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007– 2008
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	change
<i>Approximate wtd. N =</i>	—	—	—	—	—	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100	
Total	—	—	—	—	—	1.1	1.3	1.2	1.0	0.8	1.0	0.7	0.6	0.7	0.5	0.5	0.7	0.4	-0.3
Gender:																			
Male	—	—	—	—	—	1.1	1.4	1.4	1.2	1.0	1.1	0.4	0.7	0.8	0.3	0.4	0.7	0.3	-0.4
Female	—	—	—	—	—	1.1	1.1	1.1	0.9	0.6	0.9	0.9	0.6	0.6	0.6	0.7	0.7	0.6	-0.2
College Plans:																			
None or under 4 years	—	—	—	—	—	2.9	2.7	2.9	2.8	1.4	2.8	0.5	0.3	1.4	1.6	1.5	1.4	0.5	-0.8
Complete 4 years	—	—	—	—	—	0.8	1.1	0.9	0.8	0.6	0.7	0.7	0.6	0.6	0.3	0.4	0.6	0.4	-0.2
Region:																			
Northeast	—	—	—	—	—	0.6	0.7	0.9	0.4	0.6	0.9	0.4	1.0	0.8	0.7	0.3	0.5	0.7	+0.2
Midwest	—	—	—	—	—	0.5	0.8	1.0	0.9	0.4	0.9	0.3	0.2	0.3	0.2	1.0	1.4	0.2	-1.2 s
South	—	—	—	—	—	1.9	2.4	2.0	1.8	1.2	1.0	0.4	0.8	0.9	0.7	0.7	0.5	0.4	0.0
West	—	—	—	—	—	1.1	0.6	0.5	0.6	0.7	1.3	2.0	0.4	0.9	0.2	0.0	0.4	0.4	0.0
Population Density:																			
Large MSA	—	—	—	—	—	1.1	1.3	1.3	0.9	0.9	1.2	0.7	0.3	0.6	0.3	0.2	0.7	0.1	-0.6
Other MSA	—	—	—	—	—	1.4	1.3	1.3	1.3	0.9	0.8	0.9	0.4	0.7	0.5	0.7	0.6	0.7	+0.1
Non-MSA	—	—	—	—	—	0.6	1.3	1.0	0.7	0.5	1.2	0.3	1.5	0.8	0.5	0.8	0.9	0.3	-0.5
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	—	—	—	—	—	1.7	1.3	1.7	1.2	1.3	2.3	0.4	1.3	0.4	1.1	1.4	0.4	1.2	+0.7
2.5–3.0	—	—	—	—	—	1.0	1.1	1.6	1.6	0.5	1.1	0.9	0.7	0.4	0.5	0.3	0.6	0.3	-0.3
3.5–4.0	—	—	—	—	—	1.5	1.6	1.0	0.8	0.8	0.7	1.0	0.9	1.0	0.4	0.7	0.5	0.5	0.0
4.5–5.0	—	—	—	—	—	0.7	1.5	0.9	0.6	0.7	1.1	0.7	0.2	0.6	0.6	0.3	0.6	0.2	-0.3
5.5–6.0 (High)	—	—	—	—	—	1.1	0.8	1.3	1.1	0.8	0.3	0.2	0.4	1.0	0.0	0.0	1.1	0.6	-0.4
Race (2-year average): <sup>b</sup>																			
White	—	—	—	—	—	—	1.4	1.5	1.5	1.0	1.0	1.0	0.6	0.9	0.8	0.5	0.6	0.5	0.0
African American	—	—	—	—	—	—	0.1	0.1	0.1	0.1	0.2	0.3	0.1	0.2	0.4	0.3	0.0	0.0	0.0
Hispanic	—	—	—	—	—	—	1.0	1.2	1.1	0.7	0.9	1.0	0.7	0.3	0.2	0.6	0.8	0.6	-0.3

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table. Data based on one of two forms in 1996;  $N$  is one half of  $N$  indicated in Table D-108.

Data based on three of four forms in 1997–1998;  $N$  is two thirds of  $N$  indicated in Table D-108. Data based on two of four forms in 1999–2001;  $N$  is one third of  $N$  indicated in Table D-108.

Data based on one of four forms beginning in 2002;  $N$  is one sixth of  $N$  indicated in Table D-108.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-64**  
**Rohypnol: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																2007– 2008 change
	1975– 1979	1980– 1989	1990– 1995	1996	1997	1998	1999	2000	2001	2002 <sup>a</sup>	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	—	—	—	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	—	—	—	1.1	1.2	1.4	1.0	0.8	0.9‡	1.6	1.3	1.6	1.2	1.1	1.0	1.3	+0.3
Gender:																	
Male	—	—	—	1.8	1.2	1.7	1.0	0.8	1.1‡	2.3	2.0	2.3	1.5	1.3	0.9	1.5	+0.5
Female	—	—	—	0.3	1.1	1.1	1.0	0.7	0.6‡	1.0	0.5	0.7	0.8	0.5	0.7	0.8	+0.2
College Plans:																	
None or under 4 years	—	—	—	1.4	0.5	1.8	1.0	0.1	1.2‡	2.5	2.1	3.0	2.4	1.6	1.8	2.3	+0.4
Complete 4 years	—	—	—	0.8	1.3	1.3	1.0	0.9	0.8‡	1.4	0.9	1.0	0.9	0.8	0.7	1.0	+0.3
Region:																	
Northeast	—	—	—	0.9	0.6	1.2	0.8	0.3	1.7‡	1.2	1.4	0.8	1.1	1.3	1.7	0.8	-0.9
Midwest	—	—	—	1.0	0.5	1.0	0.8	0.9	0.5‡	1.8	1.2	1.3	1.7	0.8	0.9	1.0	0.0
South	—	—	—	1.8	2.2	2.6	1.6	1.3	1.0‡	1.5	1.4	2.1	1.3	1.3	1.0	2.0	+1.0 s
West	—	—	—	0.1	0.8	0.0	0.2	0.1	0.8‡	2.0	1.1	1.8	0.6	1.3	0.5	0.9	+0.4
Population Density:																	
Large MSA	—	—	—	1.3	0.9	0.8	0.3	0.3	1.0‡	1.6	1.1	1.8	1.4	1.2	1.0	0.6	-0.4
Other MSA	—	—	—	1.3	1.5	2.2	1.4	1.1	1.2‡	2.0	1.7	1.6	1.2	1.0	1.1	1.8	+0.7
Non-MSA	—	—	—	0.7	0.7	0.6	0.9	0.7	0.3‡	1.1	0.9	1.2	1.1	1.4	0.8	1.0	+0.2
Parental Education: <sup>b</sup>																	
1.0–2.0 (Low)	—	—	—	1.6	0.4	0.6	4.7	0.0	4.2‡	3.7	2.8	3.4	3.9	1.2	1.3	1.6	+0.3
2.5–3.0	—	—	—	0.5	0.6	1.0	0.3	0.4	0.4‡	2.9	1.8	1.8	1.2	1.2	0.8	1.7	+0.9
3.5–4.0	—	—	—	0.8	1.4	1.1	1.1	1.5	0.8‡	0.8	1.2	1.5	1.4	1.0	0.5	1.3	+0.8
4.5–5.0	—	—	—	0.9	1.7	2.7	0.3	0.6	0.8‡	1.6	0.9	0.6	0.3	1.2	1.4	0.7	-0.6
5.5–6.0 (High)	—	—	—	1.8	1.7	1.4	0.7	0.0	0.2‡	0.8	0.2	1.5	0.9	0.7	0.9	0.6	-0.3
Race (2-year average): <sup>c</sup>																	
White	—	—	—	—	1.2	1.6	1.5	0.9	0.8‡	—	1.5	1.3	1.1	0.9	0.7	0.9	+0.1
African American	—	—	—	—	0.1	0.0	0.2	0.4	0.2‡	—	0.8	1.2	1.7	1.3	1.6	2.1	+0.6
Hispanic	—	—	—	—	2.0	1.3	1.0	0.6	1.3‡	—	1.6	1.7	1.9	2.1	1.5	0.8	-0.6

(Table continued on next page.)

**TABLE D-64 (cont.)**  
**Rohypnol: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* “‡” indicates some change in the question. See relevant footnote. See relevant figure to assess the impact of the wording changes.

Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

“—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of six forms in 1996–2001; *N* is one sixth of *N* indicated in Table D-109. Data based on two of six forms beginning in 2002; *N* is two sixths of *N* indicated in Table D-109.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>The 2001 and 2002 data are not comparable due to changes in the questionnaire forms.

<sup>b</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-65**  
**Alcohol: Trends in 30-Day Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 30 days																		2007– 2008	
	1991	1992	1993 <sup>a</sup>	1994 <sup>a</sup>	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004 <sup>a</sup>	2005 <sup>a</sup>	2006	2007	2008	change	
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		
Total	25.1	26.1‡	24.3	25.5	24.6	26.2	24.5	23.0	24.0	22.4	21.5	19.6	19.7	18.6	17.1	17.2	15.9	15.9	+0.1	
Gender:																				
Male	26.3	26.3‡	25.3	26.5	25.0	26.6	25.2	24.0	24.8	22.5	22.3	19.1	19.4	17.9	16.2	16.3	15.6	15.4	-0.2	
Female	23.8	25.9‡	23.7	24.7	24.0	25.8	23.9	21.9	23.3	22.0	20.6	20.0	19.8	19.0	17.9	17.6	16.0	16.4	+0.4	
College Plans:																				
None or under 4 years	37.2	39.6‡	41.1	41.4	40.0	41.7	40.2	41.2	41.6	38.3	37.0	35.3	35.3	32.6	32.6	30.8	33.5	30.4	-3.1	
Complete 4 years	23.1	24.2‡	22.2	23.6	22.6	24.0	22.8	21.0	22.0	20.4	19.7	18.2	18.1	17.2	15.5	15.8	14.3	14.7	+0.4	
Region:																				
Northeast	24.3	23.8‡	21.0	25.4	24.1	26.9	24.8	21.2	25.7	25.6	23.3	19.3	18.4	18.0	14.5	16.9	12.9	15.9	+3.0	
Midwest	26.6	28.3‡	24.7	24.2	24.7	26.9	22.8	23.9	25.7	24.1	21.2	19.1	21.9	19.3	16.9	17.0	15.5	16.1	+0.6	
South	25.1	26.8‡	25.4	25.6	25.5	26.3	26.4	23.8	24.4	20.9	22.8	21.6	20.8	18.8	19.0	18.5	17.1	18.2	+1.0	
West	23.1	23.5‡	25.6	27.2	23.1	24.8	22.7	22.2	19.8	20.2	18.1	17.0	16.0	17.9	16.4	15.3	15.9	12.6	-3.3 s	
Population Density:																				
Large MSA	25.4	27.4‡	21.2	23.8	22.3	24.9	23.1	21.4	21.7	21.2	19.4	17.4	18.2	18.1	17.2	16.6	14.8	15.2	+0.3	
Other MSA	24.3	26.1‡	26.0	27.4	25.3	27.4	24.9	22.4	23.4	21.3	21.5	20.1	19.4	19.1	17.9	17.4	16.1	16.3	+0.2	
Non-MSA	26.2	24.2‡	24.9	23.8	26.0	25.7	25.4	26.0	28.1	26.1	24.1	21.4	22.3	18.1	15.6	17.5	16.8	16.2	-0.5	
Parental Education: <sup>b</sup>																				
1.0–2.0 (Low)	30.7	32.8‡	28.0	33.5	30.8	28.1	29.7	28.9	30.7	30.2	28.5	27.6	25.5	24.2	23.8	24.1	26.1	25.5	-0.6	
2.5–3.0	27.0	27.2‡	28.0	27.4	27.8	30.1	26.2	26.5	27.9	26.3	27.0	23.2	24.0	22.1	20.4	20.0	20.3	19.3	-1.0	
3.5–4.0	25.1	26.3‡	25.9	26.7	26.8	27.6	27.8	24.5	25.2	23.0	23.3	21.2	22.0	20.0	18.8	19.0	16.9	16.8	-0.2	
4.5–5.0	22.8	24.6‡	20.6	22.6	21.0	25.0	22.6	20.2	20.4	18.4	17.2	17.0	16.0	16.3	14.6	13.9	11.6	13.4	+1.9	
5.5–6.0 (High)	24.0	25.2‡	22.3	23.6	20.5	21.5	20.5	21.3	22.1	19.0	16.4	15.1	15.7	15.8	13.1	13.8	11.2	11.5	+0.3	
Race (2-year average): <sup>c</sup>																				
White	—	26.6	27.1‡	25.3	25.4	26.6	26.7	24.8	24.7	24.7	23.2	21.5	20.1	19.2	17.9	16.9	15.6	15.2	-0.4	
African American	—	18.6	19.7‡	19.4	18.7	18.1	17.9	16.1	16.1	16.0	15.0	14.8	15.5	16.2	14.9	13.1	12.3	12.9	+0.6	
Hispanic	—	31.0	32.3‡	33.5	32.4	29.7	29.8	29.5	29.0	26.7	25.7	26.5	25.3	23.5	20.6	21.2	23.0	21.5	-1.5	

Source. The Monitoring the Future study, the University of Michigan.

Notes. "‡" indicates some change in the question. See relevant footnote. See relevant figure to assess the impact of the wording changes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available. Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding. See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>In 1993, the question text was changed slightly in one form to indicate that a "drink" meant "more than a few sips." The 1993 data are based on the changed form only; *N* is one half of *N* indicated. In 1994 the question text was changed in the remaining form. Beginning in 1994, the data are based on all forms. In 2004, the question text was changed slightly in half of the forms. An examination of the data did not show any effect from the wording change. The remaining forms were changed in 2005.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-66**  
**Alcohol: Trends in 30-Day Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 30 days																		2007– 2008	
	1991	1992	1993 <sup>a</sup>	1994 <sup>a</sup>	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004 <sup>a</sup>	2005 <sup>a</sup>	2006	2007	2008	change	
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100		
Total	42.8	39.9‡	38.2	39.2	38.8	40.4	40.1	38.8	40.0	41.0	39.0	35.4	35.4	35.2	33.2	33.8	33.4	28.8	-4.7 sss	
Gender:																				
Male	45.5	41.6‡	40.6	43.5	39.7	42.6	42.5	40.0	42.3	43.3	41.1	35.3	35.3	36.3	32.8	33.8	33.4	28.6	-4.9 sss	
Female	40.2	38.3‡	35.6	34.8	37.8	38.3	37.9	37.7	38.1	38.6	36.8	35.7	35.3	34.0	33.6	33.8	33.3	29.0	-4.3 sss	
College Plans:																				
None or under 4 years	53.6	49.5‡	48.6	52.0	52.2	53.3	51.6	52.4	53.7	53.9	52.2	47.1	46.6	47.5	44.9	44.8	47.4	44.6	-2.8	
Complete 4 years	40.6	37.9‡	36.1	36.4	36.4	38.3	38.1	36.5	37.9	39.1	36.8	33.5	33.6	33.6	31.6	32.5	31.7	26.9	-4.8 sss	
Region:																				
Northeast	48.0	42.3‡	42.4	37.4	38.3	41.4	41.1	41.6	44.8	42.0	37.8	36.3	38.7	40.4	37.0	35.7	36.2	31.4	-4.7 s	
Midwest	43.5	40.3‡	37.4	39.6	38.9	39.1	38.6	37.6	40.9	42.5	41.0	35.7	34.4	30.9	31.9	33.7	34.4	29.5	-4.9 s	
South	41.7	38.2‡	38.0	40.5	39.4	41.7	40.8	39.9	38.8	39.1	38.3	33.7	34.8	36.4	33.4	32.8	31.2	29.0	-2.2	
West	39.6	39.8‡	35.6	38.2	38.0	38.9	39.9	35.5	36.1	41.1	38.2	37.2	34.1	33.7	30.7	33.9	32.9	25.9	-7.1 sss	
Population Density:																				
Large MSA	43.6	40.4‡	39.0	36.3	34.6	37.9	37.8	34.2	39.7	42.4	37.6	32.0	33.1	32.0	31.1	32.5	31.8	27.4	-4.4 s	
Other MSA	41.4	38.6‡	36.2	40.1	39.9	41.0	40.2	39.0	39.7	39.3	38.3	35.2	35.6	37.0	34.4	34.5	33.3	28.7	-4.6 ss	
Non-MSA	44.8	41.9‡	41.3	40.6	41.3	42.1	42.6	43.7	41.0	42.4	41.8	40.4	38.3	35.8	33.5	34.4	36.2	31.1	-5.1 s	
Parental Education: <sup>b</sup>																				
1.0–2.0 (Low)	42.1	40.4‡	37.5	38.6	43.5	43.2	39.2	39.9	40.6	41.1	38.6	38.2	38.4	38.6	36.5	33.1	36.5	35.5	-1.1	
2.5–3.0	43.9	40.9‡	40.6	41.5	42.3	42.6	41.1	41.2	42.3	42.8	41.4	38.0	37.4	38.5	36.0	38.0	37.0	30.9	-6.1 sss	
3.5–4.0	44.2	40.0‡	38.0	40.6	38.8	42.2	41.6	40.1	40.2	42.8	41.0	36.4	36.6	37.5	33.5	35.6	35.6	30.4	-5.2 sss	
4.5–5.0	40.7	39.4‡	36.2	37.7	37.9	37.8	39.3	36.9	38.7	40.2	37.0	33.7	32.7	32.6	31.8	32.0	31.5	25.9	-5.6 sss	
5.5–6.0 (High)	44.9	41.7‡	39.3	35.4	34.3	39.6	38.9	37.0	40.9	39.0	37.1	32.0	34.1	32.4	31.8	31.7	28.8	26.2	-2.6	
Race (2-year average): <sup>c</sup>																				
White	—	44.1	43.1‡	40.4	41.0	42.2	43.0	42.7	43.0	43.9	42.7	40.0	38.7	37.8	37.0	36.3	35.9	33.3	-2.6 s	
African American	—	30.2	29.3‡	29.7	28.0	23.9	24.6	25.1	24.4	24.7	25.3	24.3	23.7	24.6	23.0	21.5	21.7	20.6	-1.0	
Hispanic	—	41.0	39.9‡	37.7	40.5	44.0	42.8	39.4	39.6	40.5	40.2	37.9	37.1	39.5	38.2	36.1	34.8	33.7	-1.0	

Source. The Monitoring the Future study, the University of Michigan.

Notes. "‡" indicates some change in the question. See relevant footnote. See relevant figure to assess the impact of the wording changes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available. Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding. See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>In 1993, the question text was changed slightly in one form to indicate that a "drink" meant "more than a few sips." The 1993 data are based on the changed form only; *N* is one half of *N* indicated. In 1994 the question text was changed in the remaining form. Beginning in 1994, the data are based on all forms. In 2004, the question text was changed slightly in half of the forms. An examination of the data did not show any effect from the wording change. The remaining forms were changed in 2005.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-67**  
**Alcohol: Trends in 30-Day Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 30 days																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	9,400	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	68.2	68.3	71.2	72.1	71.8	72.0	70.7	69.7	69.4	67.2	65.9	65.3	66.4	63.9	60.0	57.1	54.0
Gender:																	
Male	75.0	74.5	77.8	77.5	76.7	77.4	75.7	74.1	74.4	71.4	69.8	69.0	69.9	68.0	65.1	61.3	58.4
Female	62.2	61.8	65.0	67.1	67.0	66.8	65.7	65.4	64.3	62.8	62.1	61.9	63.1	59.9	54.9	52.3	49.0
College Plans:																	
None or under 4 years	—	69.9	72.8	72.7	72.2	73.5	72.1	71.6	70.5	69.0	67.9	66.6	68.6	65.0	61.6	58.7	57.1
Complete 4 years	—	66.5	69.4	71.6	71.4	70.8	70.0	68.6	68.1	65.7	64.6	64.8	65.7	63.6	59.1	56.4	52.7
Region:																	
Northeast	76.9	75.7	76.6	78.0	81.1	79.4	80.4	76.7	74.4	73.6	72.3	67.6	69.1	66.7	61.7	65.3	59.6
Midwest	71.1	73.2	76.4	77.2	73.9	75.1	73.6	75.0	74.4	70.6	66.8	71.3	70.7	67.9	65.9	61.5	59.7
South	62.8	60.2	64.7	67.0	65.7	65.5	62.9	61.3	64.3	62.1	60.0	58.2	60.7	58.6	55.1	51.0	49.1
West	60.0	62.2	64.4	63.1	65.5	67.6	65.3	63.8	62.9	63.6	66.2	64.5	66.7	65.0	59.3	51.6	49.7
Population Density:																	
Large MSA	75.3	72.6	74.0	75.5	77.3	78.0	75.5	72.9	69.2	66.6	67.4	66.2	66.3	63.8	56.9	59.2	52.9
Other MSA	68.5	67.0	72.0	72.7	72.0	70.8	69.1	69.3	69.8	66.2	65.1	64.8	66.9	64.1	60.7	57.4	55.7
Non-MSA	63.2	66.5	67.8	68.4	67.3	69.0	68.9	67.6	69.0	69.0	65.9	65.2	65.5	63.8	61.7	54.4	52.0
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	58.7	62.5	62.0	62.7	64.6	65.9	62.1	61.3	61.2	58.1	58.7	56.1	56.3	54.5	47.8	47.2	49.9
2.5–3.0	70.0	71.4	72.5	71.9	71.1	72.0	70.7	69.4	69.2	67.4	65.9	65.3	67.0	64.6	59.7	57.2	53.3
3.5–4.0	69.2	67.9	73.5	75.0	74.6	73.3	71.5	72.7	70.4	69.6	66.9	66.7	67.2	64.3	62.9	57.7	54.3
4.5–5.0	69.6	71.3	74.5	77.0	76.0	74.4	73.1	74.5	73.1	69.3	68.9	68.0	68.8	66.0	62.1	60.8	54.8
5.5–6.0 (High)	67.3	72.5	77.1	79.2	75.9	77.2	77.4	74.1	75.0	70.3	67.9	69.9	70.5	67.3	62.2	60.8	58.0
Race (2-year average): <sup>b</sup>																	
White	—	—	72.8	75.0	75.3	75.4	75.4	74.6	73.9	72.8	71.2	70.2	71.0	70.6	67.3	63.8	60.0
African American	—	—	49.5	48.7	47.2	47.6	46.7	46.0	47.7	45.5	42.8	42.1	39.4	39.8	39.5	35.8	33.7
Hispanic	—	—	63.0	64.5	63.8	63.6	62.0	60.3	59.1	59.7	58.1	56.3	57.2	57.8	52.9	49.1	51.5

Source. The Monitoring the Future study, the University of Michigan.

Notes. "‡" indicates some change in the question. See relevant footnote. See relevant figure to assess the impact of the wording changes.

Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

(Table continued on next page.)

**TABLE D-67 (cont.)**  
**Alcohol: Trends in 30-Day Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 30 days																	2007– 2008
	1992	1993 <sup>c</sup>	1994 <sup>c</sup>	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004 <sup>c</sup>	2005 <sup>c</sup>	2006	2007	2008	change
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	51.3‡	48.6	50.1	51.3	50.8	52.7	52.0	51.0	50.0	49.8	48.6	47.5	48.0	47.0	45.3	44.4	43.1	-1.3
Gender:																		
Male	55.8‡	54.2	55.5	55.7	54.8	56.2	57.3	55.3	54.0	54.7	52.3	51.7	51.1	50.7	47.3	47.1	45.8	-1.3
Female	46.8‡	43.4	45.2	47.0	46.9	48.9	46.9	46.8	46.1	45.1	45.1	43.8	45.1	43.3	43.0	41.4	40.9	-0.6
College Plans:																		
None or under 4 years	54.9‡	52.4	53.6	55.9	54.8	56.1	56.0	55.2	54.3	55.5	53.0	55.4	52.1	52.8	54.0	48.6	49.7	+1.1
Complete 4 years	50.0‡	47.4	48.9	49.6	49.3	51.4	50.9	49.8	48.3	47.9	47.4	45.2	47.0	45.5	43.2	43.3	41.7	-1.6
Region:																		
Northeast	51.5‡	56.1	53.1	55.0	56.5	56.7	56.2	57.2	58.0	54.3	50.9	51.6	53.9	54.5	52.4	51.8	49.1	-2.7
Midwest	58.0‡	51.6	53.8	55.3	51.5	51.5	51.9	51.1	52.3	54.5	52.1	50.8	49.5	48.0	46.3	47.9	42.8	-5.1 s
South	48.1‡	47.7	49.2	50.6	51.1	51.1	51.4	49.5	44.9	45.9	46.8	43.0	43.5	43.9	43.2	43.1	42.9	-0.2
West	46.7‡	39.8	44.2	43.2	42.1	52.7	49.2	47.8	48.3	44.9	45.0	47.0	47.3	43.6	41.3	36.6	39.2	+2.6
Population Density:																		
Large MSA	49.0‡	50.6	49.5	50.6	51.6	51.1	49.1	48.9	51.2	49.7	50.3	43.0	44.1	46.6	47.6	47.1	46.1	-1.1
Other MSA	50.8‡	47.1	49.2	50.6	50.1	53.4	53.9	52.8	48.8	49.6	48.8	49.6	51.7	47.6	43.9	42.1	40.4	-1.6
Non-MSA	54.1‡	49.8	52.5	53.4	51.4	52.9	51.6	50.1	50.8	50.0	45.9	49.6	45.5	46.1	44.7	45.2	45.8	+0.5
Parental Education: <sup>a</sup>																		
1.0–2.0 (Low)	45.6‡	36.6	43.5	45.9	41.2	43.8	43.8	46.8	43.4	42.9	42.2	43.6	42.1	38.2	44.4	38.3	41.4	+3.1
2.5–3.0	52.3‡	49.0	49.9	52.0	48.2	51.0	50.1	50.5	50.0	49.0	47.9	47.8	46.8	47.8	46.7	46.0	42.4	-3.6 s
3.5–4.0	51.2‡	51.2	50.1	50.6	51.4	52.1	55.6	51.1	51.3	51.4	50.9	47.9	52.4	47.8	46.3	43.6	43.2	-0.4
4.5–5.0	51.0‡	49.8	52.6	51.8	53.6	55.3	52.4	50.2	48.1	51.5	48.9	47.5	47.7	50.2	42.9	45.0	43.9	-1.1
5.5–6.0 (High)	55.7‡	53.2	52.2	55.1	54.2	57.4	54.7	56.0	54.0	49.5	51.1	49.3	47.4	46.0	48.2	47.6	45.9	-1.7
Race (2-year average): <sup>b</sup>																		
White	56.8	55.6‡	54.0	54.5	54.8	56.4	57.7	56.3	55.1	55.3	54.0	52.3	52.2	52.3	50.7	49.3	48.6	-0.6
African American	31.7	32.4‡	33.8	35.2	36.5	34.3	33.3	32.2	30.0	29.4	30.1	29.9	29.2	29.0	29.2	28.7	28.6	-0.1
Hispanic	53.8	50.5‡	45.9	48.7	47.5	48.2	49.8	50.2	51.2	48.9	47.5	46.4	45.4	43.3	43.4	41.4	38.9	-2.5

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

<sup>c</sup>In 1993, the question text was changed slightly in three of six forms to indicate that a "drink" meant "more than a few sips." The 1993 data are based on the changed forms only; *N* is three sixths of *N* indicated. In 1994 the question text was changed in the remaining forms. Beginning in 1994, the data are based on all six forms. In 2004 the question text was changed slightly in half of the forms. An examination of the data did not show any effect from the wording change. The remaining forms were changed in 2005.

**TABLE D-68**  
**Been Drunk: Trends in 30-Day Prevalence by Subgroups in Grade 8**

	Percentage who had been drunk in last 30 days																		2007– 2008 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		
Total	7.6	7.5	7.8	8.7	8.3	9.6	8.2	8.4	9.4	8.3	7.7	6.7	6.7	6.2	6.0	6.2	5.5	5.4	-0.1	
Gender:																				
Male	8.4	7.4	7.8	9.0	8.2	9.7	8.4	8.5	10.2	8.2	7.8	7.1	6.6	5.8	5.9	6.1	5.3	5.3	-0.1	
Female	7.0	7.6	7.8	8.3	8.2	9.5	7.9	8.2	8.6	8.1	7.4	6.3	6.8	6.6	6.2	6.2	5.6	5.4	-0.1	
College Plans:																				
None or under 4 years	15.8	17.2	18.4	20.0	17.2	19.3	18.7	21.4	22.4	18.9	18.9	15.5	17.0	16.1	15.7	15.4	16.3	14.9	-1.4	
Complete 4 years	6.4	6.1	6.4	7.3	7.3	8.2	7.1	6.9	8.0	7.0	6.5	5.9	5.7	5.2	5.1	5.4	4.6	4.6	+0.1	
Region:																				
Northeast	5.7	6.4	6.2	8.2	8.2	9.7	7.9	6.9	9.4	8.3	8.0	5.3	4.9	4.8	4.2	5.8	3.5	4.5	+1.0	
Midwest	7.7	7.6	7.3	8.3	8.3	10.2	8.2	10.4	11.6	9.7	8.2	7.0	8.1	6.8	6.2	6.3	5.7	5.3	-0.4	
South	8.8	8.2	8.3	8.8	8.4	9.1	8.3	7.8	9.5	7.4	8.1	7.6	7.2	6.4	7.1	6.9	6.1	6.8	+0.7	
West	7.3	6.9	9.4	9.6	8.2	9.8	8.3	8.3	6.6	8.1	6.0	5.9	6.0	6.4	5.8	5.2	5.7	4.2	-1.5	
Population Density:																				
Large MSA	7.4	7.0	6.0	7.6	7.2	8.9	6.7	6.9	7.8	7.1	6.3	5.2	5.6	5.4	5.4	5.1	4.8	5.4	+0.6	
Other MSA	7.3	7.4	8.4	9.7	8.9	9.9	8.6	7.5	8.4	7.2	7.9	7.3	6.8	6.5	6.1	6.4	5.6	5.2	-0.3	
Non-MSA	8.4	8.2	8.8	7.9	8.6	10.0	9.2	11.7	13.3	12.0	8.9	7.3	8.1	6.5	6.9	7.5	6.4	5.9	-0.5	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	13.4	11.0	10.4	12.5	13.1	11.1	11.5	13.1	14.5	14.0	12.1	10.5	13.4	10.0	9.3	9.4	10.6	10.1	-0.5	
2.5–3.0	9.2	8.8	9.2	9.3	9.6	11.9	9.3	9.5	11.7	10.5	9.7	8.5	9.4	7.4	8.4	7.9	7.9	7.4	-0.5	
3.5–4.0	6.9	7.6	8.5	9.3	9.4	10.4	10.2	9.1	9.9	8.0	8.7	6.7	7.1	6.8	6.7	7.1	6.0	5.8	-0.2	
4.5–5.0	6.1	6.5	5.9	7.5	6.4	8.7	6.7	7.0	6.9	5.6	5.7	5.5	4.5	5.0	4.6	4.4	3.1	3.7	+0.5	
5.5–6.0 (High)	6.8	4.9	6.7	7.6	6.0	7.1	5.8	6.9	8.7	7.1	4.6	4.8	4.2	4.4	3.5	4.6	3.1	3.3	+0.2	
Race (2-year average): <sup>b</sup>																				
White	—	7.7	7.8	8.4	8.9	9.7	9.7	9.1	9.8	10.0	9.0	8.0	7.2	6.8	6.6	6.4	5.9	5.5	-0.3	
African American	—	5.4	5.1	5.6	5.6	5.5	4.6	3.9	4.9	4.7	4.0	4.0	4.2	4.1	3.8	3.6	3.7	3.8	0.0	
Hispanic	—	9.9	9.9	10.8	10.8	10.8	10.4	9.8	9.9	8.5	7.8	8.4	8.5	8.1	7.0	7.2	7.4	6.7	-0.7	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.



**TABLE D-69**  
**Been Drunk: Trends in 30-Day Prevalence by Subgroups in Grade 10**

	Percentage who had been drunk in last 30 days																		2007– 2008	
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>change</u>	
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100		
Total	20.5	18.1	19.8	20.3	20.8	21.3	22.4	21.1	22.5	23.5	21.9	18.3	18.2	18.5	17.6	18.8	18.1	14.4	-3.7 sss	
Gender:																				
Male	22.3	18.6	21.4	23.2	21.9	23.0	24.6	22.3	25.4	26.2	24.2	19.3	18.8	20.2	18.2	19.1	18.9	14.6	-4.3 sss	
Female	18.7	17.5	18.1	17.2	19.6	19.8	20.2	19.9	19.8	20.9	19.7	17.4	17.7	17.0	16.8	18.4	17.4	14.3	-3.1 ss	
College Plans:																				
None or under 4 years	29.5	26.3	29.0	31.1	31.4	32.0	35.5	33.5	34.6	35.1	34.8	27.4	27.4	27.5	27.8	29.0	28.9	25.2	-3.7	
Complete 4 years	18.6	16.4	17.9	18.0	19.0	19.7	20.3	19.1	20.7	21.8	19.8	16.8	16.9	17.4	16.3	17.5	16.8	13.2	-3.6 sss	
Region:																				
Northeast	23.9	18.8	20.0	19.0	19.5	22.4	21.9	23.1	25.8	22.8	19.9	18.1	20.3	22.4	20.5	20.4	20.5	15.3	-5.2 ss	
Midwest	21.8	18.9	20.1	21.0	22.6	22.0	23.3	21.8	26.0	27.6	24.0	18.7	18.8	16.6	17.4	19.8	19.6	16.0	-3.6 s	
South	19.2	16.8	19.8	20.9	20.9	21.4	22.0	21.9	20.3	21.4	21.5	17.5	17.6	18.7	17.2	17.6	16.3	14.9	-1.4	
West	18.2	18.3	19.0	19.5	19.5	19.3	22.6	17.0	19.0	22.4	21.2	19.5	16.5	16.7	15.2	17.9	16.9	11.8	-5.1 sss	
Population Density:																				
Large MSA	20.6	17.6	17.6	16.1	18.2	19.6	20.7	17.2	21.6	23.4	19.5	16.5	15.7	15.1	16.2	17.7	16.3	12.7	-3.7 ss	
Other MSA	20.1	17.3	18.2	21.7	21.8	21.9	21.8	21.2	22.7	22.5	21.6	18.0	18.6	20.5	18.3	19.0	18.5	14.8	-3.7 ss	
Non-MSA	21.1	19.9	24.7	21.8	21.8	22.4	25.5	25.4	23.4	25.4	25.3	21.4	21.4	19.0	17.8	20.0	20.0	16.4	-3.6	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	20.9	18.2	22.2	20.0	23.4	22.1	19.7	20.1	21.8	21.3	22.0	17.3	19.0	17.7	15.8	18.4	17.7	16.9	-0.7	
2.5–3.0	22.5	18.5	21.4	21.2	22.9	23.4	22.5	23.3	23.4	24.5	22.6	19.9	18.9	21.0	19.4	21.6	19.9	15.0	-5.0 sss	
3.5–4.0	20.4	19.4	19.4	22.1	21.4	22.1	24.1	21.3	23.3	24.5	22.8	19.5	19.3	18.9	17.5	19.9	19.1	15.7	-3.4 ss	
4.5–5.0	19.7	17.1	18.2	18.7	19.7	19.5	22.3	20.2	21.7	24.1	21.4	17.4	17.5	17.3	17.5	17.4	16.8	13.3	-3.5 ss	
5.5–6.0 (High)	20.6	18.5	18.6	17.9	17.9	22.3	22.4	20.4	24.0	23.1	21.5	16.8	17.7	19.3	17.0	17.6	17.7	14.2	-3.6 s	
Race (2-year average): <sup>b</sup>																				
White	—	21.6	20.8	22.0	22.7	23.7	25.0	25.5	25.7	26.7	25.8	23.2	21.9	21.7	21.0	20.9	21.3	19.2	-2.1	
African American	—	9.4	10.3	10.1	9.8	8.5	8.6	8.8	7.6	8.6	9.5	8.6	8.0	8.3	8.0	7.8	8.3	8.0	-0.3	
Hispanic	—	16.2	15.9	17.0	18.6	20.1	19.5	18.0	17.8	18.0	18.7	17.4	15.7	17.0	17.3	16.6	15.0	14.0	-0.9	

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-70**  
**Been Drunk: Trends in 30-Day Prevalence by Subgroups in Grade 12**

	Percentage who had been drunk in last 30 days																		2007–		
	1975–	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	change
<i>Approximate wtd. N =</i>	—	15,000	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	—	31.6	29.9	28.9	30.8	33.2	31.3	34.2	32.9	32.9	32.3	32.7	30.3	30.9	32.5	30.2	30.0	28.7	27.6	27.6	-1.1
Gender:																					
Male	—	37.1	35.2	34.5	34.5	37.8	35.4	39.2	39.0	37.9	38.4	37.0	34.3	34.9	36.0	33.6	32.9	31.7	29.2	29.2	-2.5
Female	—	25.4	24.5	23.5	26.8	28.8	27.3	29.1	26.6	27.7	26.7	28.4	26.9	26.9	29.0	26.4	26.3	25.7	26.2	26.2	+0.5
College Plans:																					
None or under 4 years	—	32.2	31.4	32.6	32.2	37.6	31.4	38.1	33.7	36.1	35.0	36.3	31.7	37.6	34.7	34.3	37.2	30.6	32.0	32.0	+1.4
Complete 4 years	—	30.9	29.2	27.4	29.4	31.4	31.0	32.3	32.0	31.7	30.6	31.3	29.3	28.7	31.2	28.5	27.6	28.2	26.4	26.4	-1.8
Region:																					
Northeast	—	36.4	30.0	35.0	35.2	35.5	37.2	35.9	35.6	37.5	39.3	33.9	33.6	35.4	38.1	38.7	37.9	32.6	31.1	31.1	-1.5
Midwest	—	37.2	38.2	32.5	34.1	38.2	31.5	33.7	34.8	33.4	34.8	39.2	35.0	34.9	34.2	31.3	32.2	32.0	31.2	31.2	-0.8
South	—	26.5	25.2	26.4	29.1	31.2	31.0	34.5	30.1	30.8	26.5	28.8	28.4	25.9	29.3	26.9	27.4	26.5	25.5	25.5	-0.9
West	—	28.5	26.6	23.2	25.4	27.1	24.7	32.7	33.5	32.2	32.8	28.8	25.0	30.1	29.5	26.5	25.2	26.0	24.1	24.1	-1.9
Population Density:																					
Large MSA	—	30.4	26.1	29.4	28.7	32.0	31.5	31.5	32.2	29.2	30.5	30.6	32.9	25.4	27.4	28.2	30.4	29.8	31.4	31.4	+1.6
Other MSA	—	33.5	29.8	26.9	29.9	31.7	33.0	33.7	34.0	35.4	34.5	31.7	29.1	33.5	37.3	31.5	29.0	27.6	25.0	25.0	-2.6
Non-MSA	—	29.4	33.7	32.0	34.4	36.9	28.2	38.2	31.4	32.5	30.5	36.7	29.2	33.2	29.1	29.9	31.4	29.4	28.8	28.8	-0.5
Parental Education: <sup>a</sup>																					
1.0–2.0 (Low)	—	20.4	20.5	23.6	25.7	25.4	18.8	23.7	24.6	20.8	28.4	22.2	20.0	25.6	25.5	22.0	27.7	19.7	26.7	26.7	+7.0
2.5–3.0	—	30.2	30.0	26.4	30.3	30.0	27.4	31.5	28.0	30.5	33.1	32.2	27.0	28.7	32.3	29.9	29.5	31.6	25.3	25.3	-6.3 s
3.5–4.0	—	31.0	31.3	29.2	29.9	34.4	31.1	32.7	34.1	34.0	31.2	32.0	32.4	30.6	35.1	31.3	31.0	26.8	28.2	28.2	+1.4
4.5–5.0	—	34.4	29.4	32.8	33.5	36.5	35.8	37.7	36.0	32.8	31.9	36.1	31.0	33.3	33.7	31.3	29.7	28.4	30.0	30.0	+1.6
5.5–6.0 (High)	—	40.5	34.3	30.4	30.7	34.9	34.6	39.8	39.9	40.6	35.5	33.6	34.5	33.4	32.6	32.2	30.1	33.0	27.8	27.8	-5.2
Race (2-year average): <sup>b</sup>																					
White	—	—	34.7	33.6	34.0	36.4	36.6	37.7	39.3	37.8	37.0	37.7	36.6	35.6	36.4	36.5	35.2	33.7	32.7	32.7	-1.0
African American	—	—	11.0	12.5	14.1	13.2	13.0	13.8	13.8	14.9	14.9	12.0	12.1	11.7	14.3	15.4	13.5	14.6	14.8	14.8	+0.2
Hispanic	—	—	27.2	24.8	23.0	24.2	26.2	26.9	25.9	27.5	29.8	25.5	23.5	23.9	24.1	22.2	23.1	24.0	22.2	22.2	-1.8

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

“—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on two of six forms; *N* is two sixths of *N* indicated in Table D-109.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-71**

**Alcohol: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Subgroups in Grade 8**

	Percentage reporting 5+ drinks in a row on one or more occasions																		2007– 2008 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		
Total	10.9	11.3	11.3	12.1	12.3	13.3	12.3	11.5	13.1	11.7	11.0	10.3	9.8	9.4	8.4	8.7	8.3	8.1	-0.2	
Gender:																				
Male	12.1	11.6	12.4	13.2	12.5	14.1	13.0	12.1	14.0	11.7	11.5	10.4	10.2	8.8	8.2	8.6	8.2	8.1	-0.1	
Female	9.6	10.8	10.3	11.1	12.1	12.4	11.5	10.8	12.0	11.3	10.2	10.0	9.4	9.9	8.6	8.5	8.2	8.0	-0.2	
College Plans:																				
None or under 4 years	21.1	23.0	25.7	25.3	25.0	26.1	26.5	26.7	30.2	25.0	24.7	24.7	23.2	21.2	21.0	19.3	21.5	21.3	-0.1	
Complete 4 years	9.3	9.7	9.4	10.5	10.8	11.3	10.7	9.8	11.2	10.1	9.4	9.0	8.4	8.2	7.2	7.6	7.1	7.0	-0.1	
Region:																				
Northeast	8.6	8.8	8.1	10.9	11.1	12.8	10.9	9.7	12.4	11.5	10.5	8.4	7.8	8.1	6.0	7.8	5.6	7.1	+1.6	
Midwest	11.5	12.5	10.9	11.5	12.2	13.5	12.0	12.4	15.5	13.2	10.8	10.5	10.8	10.1	8.7	8.8	7.5	8.2	+0.7	
South	11.9	12.3	12.9	12.4	13.0	13.7	13.2	11.9	13.3	11.0	12.5	11.4	10.6	9.6	9.8	9.7	9.4	9.7	+0.3	
West	10.2	10.4	12.8	13.8	12.3	12.9	12.3	11.6	10.3	10.9	9.0	9.9	9.0	9.5	8.0	7.6	8.9	6.3	-2.6 s	
Population Density:																				
Large MSA	10.6	10.4	8.6	10.4	10.3	12.2	11.3	10.1	11.0	10.6	9.2	8.3	8.8	8.7	8.0	8.1	7.4	8.1	+0.7	
Other MSA	10.5	11.7	12.3	13.1	12.2	13.7	12.1	10.9	12.1	10.5	11.0	10.8	8.9	9.3	8.3	8.3	8.5	7.9	-0.6	
Non-MSA	12.0	11.7	12.9	12.1	15.0	14.2	13.9	14.3	17.4	15.3	13.1	11.8	12.9	10.5	9.2	10.2	9.2	8.4	-0.9	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	18.3	17.8	16.3	16.8	20.1	16.9	17.6	16.5	20.8	18.9	16.5	16.6	16.3	14.9	14.4	13.3	15.5	17.0	+1.5	
2.5–3.0	12.6	13.4	13.3	14.2	14.8	15.4	13.5	13.8	17.0	15.3	14.3	12.8	13.5	12.1	10.7	10.6	10.5	10.5	-0.1	
3.5–4.0	10.7	11.3	11.5	12.5	13.3	14.3	14.2	12.4	14.0	11.0	11.7	11.1	10.5	10.0	9.4	9.9	9.2	7.9	-1.3	
4.5–5.0	8.8	8.7	8.5	10.3	9.3	11.1	10.3	9.3	9.5	8.2	8.1	7.9	6.7	8.0	6.4	6.7	5.5	5.7	+0.2	
5.5–6.0 (High)	8.8	8.4	8.9	9.1	8.7	10.7	9.0	9.4	9.2	9.5	6.6	7.3	6.8	6.2	5.0	5.9	5.0	4.7	-0.3	
Race (2-year average): <sup>b</sup>																				
White	—	11.2	10.9	11.1	12.1	13.2	13.3	12.3	12.6	13.0	11.9	10.9	10.0	9.6	9.0	8.4	8.0	7.8	-0.2	
African American	—	6.5	7.6	8.6	8.3	8.0	7.5	6.9	7.7	7.3	6.4	7.1	7.5	6.9	6.1	5.7	5.6	5.7	+0.1	
Hispanic	—	16.5	17.7	18.9	18.4	17.5	17.4	16.9	17.4	16.0	14.4	14.4	13.8	13.2	12.1	11.6	12.5	12.3	-0.2	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

The 1991–2007 estimates for five or more drinks in a row differ slightly from some previous reports due to an error in the data editing process prior to 2008.

The revised estimates average about 2 percentage points lower than the estimates previously reported. Those previous overestimates have been corrected in this table.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-72**  
**Alcohol: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Subgroups in Grade 10**

	Percentage reporting 5+ drinks in a row on one or more occasions																		2007– 2008 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100		
Total	21.0	19.1	21.0	21.9	22.0	22.8	23.1	22.4	23.5	24.1	22.8	20.3	20.0	19.9	19.0	19.9	19.6	16.0	-3.7 sss	
Gender:																				
Male	24.1	21.5	24.1	26.4	24.1	25.1	26.3	24.7	27.4	27.6	26.1	21.6	21.1	21.6	19.9	21.0	20.9	16.6	-4.4 sss	
Female	18.1	17.0	17.7	17.3	19.7	20.4	20.1	20.4	20.0	20.6	19.7	19.0	19.0	18.1	17.9	18.9	18.3	15.4	-3.0 ss	
College Plans:																				
None or under 4 years	30.5	28.6	31.8	34.1	34.5	35.7	36.9	35.7	36.5	36.7	37.2	31.0	31.5	29.6	31.3	30.8	30.7	29.1	-1.6	
Complete 4 years	19.1	17.2	18.8	19.3	19.8	20.7	20.8	20.2	21.5	22.2	20.5	18.5	18.2	18.6	17.3	18.6	18.2	14.4	-3.9 sss	
Region:																				
Northeast	23.7	18.0	21.1	19.9	20.3	22.3	21.8	24.1	26.0	23.8	20.7	19.5	21.5	23.8	21.0	21.2	20.4	16.8	-3.6	
Midwest	21.7	19.8	22.0	23.0	23.3	23.4	22.4	22.2	25.0	26.2	24.8	20.3	19.9	16.7	18.8	20.0	20.7	16.5	-4.2 s	
South	20.8	18.9	20.4	22.9	22.4	23.5	23.4	23.1	22.1	22.5	22.1	19.7	19.1	20.1	18.6	19.1	18.4	16.3	-2.1	
West	18.6	19.8	20.0	20.4	21.1	21.4	25.3	19.9	21.7	24.6	23.1	22.2	20.1	19.6	17.6	20.1	19.5	14.4	-5.1 ss	
Population Density:																				
Large MSA	20.2	17.5	19.1	17.6	18.4	20.5	20.4	18.3	22.4	24.0	20.8	17.6	18.0	16.9	17.4	19.2	17.9	14.5	-3.4 s	
Other MSA	20.4	18.1	19.2	22.7	22.1	23.0	22.9	22.0	22.7	23.4	21.7	20.4	19.9	21.6	19.4	19.7	19.6	16.0	-3.6 ss	
Non-MSA	22.9	22.8	25.8	24.6	25.9	25.3	26.6	28.0	26.7	25.7	27.2	23.8	23.4	20.1	20.3	21.9	22.5	18.1	-4.4 s	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	23.2	23.0	24.3	22.6	26.7	24.7	22.7	24.1	25.2	24.7	23.0	23.9	24.4	23.0	21.0	19.8	22.0	20.6	-1.3	
2.5–3.0	23.8	20.0	23.4	23.4	24.7	25.5	23.5	25.5	26.3	27.0	24.6	22.5	21.8	21.9	21.3	22.8	22.6	17.8	-4.8 sss	
3.5–4.0	19.9	19.2	20.6	23.3	22.8	23.7	24.6	22.8	23.6	23.8	24.2	20.7	20.5	20.4	18.9	21.2	20.7	16.6	-4.2 sss	
4.5–5.0	19.3	18.1	18.6	20.2	20.2	20.3	21.6	20.1	21.3	23.3	21.5	17.7	17.8	18.2	17.9	18.1	17.7	14.7	-3.0 ss	
5.5–6.0 (High)	20.9	18.4	18.9	18.5	17.3	22.4	22.4	20.1	23.6	23.1	21.2	18.7	18.4	19.0	17.9	19.0	17.2	12.8	-4.4 ss	
Race (2-year average): <sup>b</sup>																				
White	—	21.6	21.4	22.9	23.8	24.5	25.2	25.3	25.4	26.2	25.6	23.6	22.5	22.2	21.8	21.7	21.8	19.7	-2.1	
African American	—	12.3	11.9	11.8	11.1	9.4	10.0	10.6	10.7	10.8	10.3	10.0	9.8	9.7	9.1	9.1	10.0	9.8	-0.2	
Hispanic	—	20.3	20.5	20.9	23.3	25.7	24.4	23.6	24.4	25.1	24.8	23.3	22.9	23.3	22.4	21.2	20.1	19.6	-0.5	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

The 1991–2007 estimates for five or more drinks in a row differ slightly from some previous reports due to an error in the data editing process prior to 2008.

The revised estimates average about 2 percentage points lower than the estimates previously reported. Those previous overestimates have been corrected in this table.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-73**  
**Alcohol: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Subgroups in Grade 12**

	Percentage reporting 5+ drinks in a row on one or more occasions																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	9,400	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	36.8	37.1	39.4	40.3	41.2	41.2	41.4	40.5	40.8	38.7	36.7	36.8	37.5	34.7	33.0	32.2	29.8
Gender:																	
Male	49.0	47.9	50.0	51.4	51.9	52.1	51.6	49.8	50.4	47.5	45.3	46.1	46.1	43.0	41.2	39.1	37.8
Female	26.4	25.9	29.3	29.6	30.9	30.5	30.8	31.1	31.0	29.6	28.2	28.1	29.2	26.5	24.9	24.4	21.2
College Plans:																	
None or under 4 years	—	41.8	44.7	44.3	44.5	46.3	46.7	45.7	44.9	43.5	41.6	41.3	42.7	38.5	38.2	35.8	34.4
Complete 4 years	—	31.5	33.9	35.9	37.7	36.9	37.4	36.5	37.2	34.6	33.0	34.1	35.0	32.8	30.5	30.3	27.9
Region:																	
Northeast	43.0	40.8	40.0	43.5	47.4	48.0	49.3	43.3	42.2	42.9	42.4	37.1	37.2	34.3	33.3	37.2	33.4
Midwest	40.6	42.8	44.5	45.3	44.8	45.4	44.9	47.9	47.2	44.3	39.7	42.6	43.5	39.9	40.4	37.9	34.6
South	32.1	30.8	36.3	36.4	36.7	34.4	34.7	34.6	37.6	33.5	29.7	31.7	33.4	30.4	28.5	27.2	26.3
West	29.0	32.8	34.2	33.3	34.0	36.0	35.6	32.5	33.3	34.5	36.1	35.9	36.6	35.4	30.8	26.3	26.3
Population Density:																	
Large MSA	37.9	37.0	38.1	39.5	42.2	44.8	43.4	40.9	38.8	37.9	37.6	36.4	34.8	32.5	28.8	34.5	28.6
Other MSA	36.1	36.8	39.5	40.1	40.8	38.9	39.5	39.7	41.0	37.3	35.4	35.5	38.6	35.3	33.7	31.8	30.1
Non-MSA	36.9	38.0	40.5	41.3	40.9	41.4	42.2	41.3	42.0	41.2	37.6	39.1	38.3	35.9	35.8	30.6	30.4
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	31.6	34.1	35.6	36.3	36.0	37.0	37.0	35.3	37.2	34.8	31.8	31.7	33.9	30.7	25.4	25.3	26.8
2.5–3.0	37.5	41.1	41.8	40.9	42.3	43.3	43.2	41.4	41.2	39.8	38.2	37.9	38.9	35.7	34.0	32.7	29.9
3.5–4.0	35.1	36.4	39.5	41.3	41.4	42.1	42.4	42.4	40.9	39.3	36.9	37.9	38.3	34.7	34.3	32.0	30.4
4.5–5.0	34.4	36.9	37.2	42.4	43.8	40.8	40.8	41.9	41.9	38.6	37.1	37.1	37.2	35.1	34.2	34.5	29.9
5.5–6.0 (High)	29.9	34.5	41.1	37.2	41.9	38.5	39.3	40.9	42.1	38.2	34.9	36.7	37.2	34.7	31.8	34.1	30.6
Race (2-year average): <sup>b</sup>																	
White	—	—	40.5	42.4	43.5	44.3	44.9	44.9	44.5	43.6	41.5	40.3	40.9	40.0	37.9	36.6	34.6
African American	—	—	19.0	19.3	18.9	17.7	17.1	17.1	18.3	17.2	15.7	16.4	15.8	15.2	15.7	14.4	11.7
Hispanic	—	—	36.4	37.2	33.6	33.1	34.8	32.9	32.5	33.0	31.7	30.8	33.0	33.7	28.8	25.6	27.9

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

(Table continued on next page.)

**TABLE D-73 (cont.)**  
**Alcohol: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Subgroups in Grade 12**

	Percentage reporting 5+ drinks in a row on one or more occasions																	2007– 2008
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005<sup>c</sup></u>	<u>2006<sup>c</sup></u>	<u>2007</u>	<u>2008</u>	<u>change</u>
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	27.9	27.5	28.2	29.8	30.2	31.3	31.5	30.8	30.0	29.7	28.6	27.9	29.2	27.1	25.4	25.9	24.6	-1.3
Gender:																		
Male	35.6	34.6	37.0	36.9	37.0	37.9	39.2	38.1	36.7	36.0	34.2	34.2	34.3	32.6	28.9	30.7	28.4	-2.2
Female	20.3	20.7	20.2	23.0	23.5	24.4	24.0	23.6	23.5	23.7	23.0	22.1	24.2	21.6	21.5	21.5	21.3	-0.2
College Plans:																		
None or under 4 years	32.8	32.7	34.0	35.2	33.9	36.2	36.3	35.4	35.7	35.9	34.0	34.5	34.6	34.3	32.3	30.8	31.5	+0.8
Complete 4 years	26.0	25.8	26.3	27.8	28.8	29.5	30.0	29.5	27.6	27.8	27.2	25.9	27.6	25.1	23.7	24.7	23.2	-1.4
Region:																		
Northeast	25.8	30.3	29.2	31.2	33.7	33.5	33.5	33.7	35.1	31.8	30.7	30.9	33.2	32.2	30.9	29.7	27.3	-2.3
Midwest	34.6	30.1	31.9	34.3	31.5	31.6	32.6	31.6	33.9	34.5	33.4	32.5	30.2	29.1	26.5	28.9	25.2	-3.7
South	24.7	27.1	26.9	28.6	30.2	30.6	30.7	30.0	24.9	26.6	26.8	23.7	26.1	24.2	23.9	25.4	24.7	-0.7
West	26.0	22.0	24.5	24.2	24.0	29.6	29.5	28.6	29.3	26.0	23.9	26.5	28.6	24.5	22.0	20.5	21.9	+1.3
Population Density:																		
Large MSA	25.5	27.6	26.8	28.3	29.8	29.9	27.9	27.1	29.7	29.0	29.9	23.3	25.5	26.5	26.6	28.0	25.8	-2.2
Other MSA	27.0	26.5	27.1	28.4	30.3	31.1	33.1	32.2	29.3	29.0	28.0	29.8	31.9	27.4	25.0	24.2	22.5	-1.7
Non-MSA	31.9	29.2	31.5	34.0	30.5	33.2	32.4	32.4	31.7	31.9	28.2	30.5	28.2	27.0	24.5	26.4	28.1	+1.7
Parental Education: <sup>a</sup>																		
1.0–2.0 (Low)	23.4	21.9	24.0	26.6	24.8	22.6	26.3	27.4	25.1	24.8	22.2	23.5	22.9	19.4	25.4	20.4	21.3	+1.0
2.5–3.0	28.1	27.6	28.5	31.2	28.6	30.4	30.3	30.8	29.2	30.2	28.5	27.6	28.8	28.3	25.8	27.3	23.0	-4.3 ss
3.5–4.0	27.9	28.4	28.4	29.5	29.8	31.0	33.2	30.5	30.5	30.3	28.6	28.4	30.9	27.6	26.5	24.8	25.1	+0.3
4.5–5.0	28.1	28.4	29.3	29.9	32.4	32.4	32.3	30.6	29.9	30.9	30.9	28.6	30.5	29.4	24.0	27.5	26.2	-1.3
5.5–6.0 (High)	30.4	29.0	29.0	30.7	33.1	34.9	32.4	34.2	32.7	28.6	30.6	28.7	27.8	25.2	26.3	27.1	26.4	-0.7
Race (2-year average): <sup>b</sup>																		
White	32.1	31.3	31.5	32.3	33.4	35.1	36.4	35.7	34.6	34.5	33.7	32.4	32.5	32.5	30.4	29.7	29.9	+0.2
African American	11.3	12.6	14.4	14.9	15.3	13.4	12.3	12.3	11.5	11.8	11.5	10.8	11.4	11.3	11.4	11.5	10.9	-0.5
Hispanic	31.1	27.2	24.3	26.6	27.1	27.6	28.1	29.3	31.0	28.4	26.4	25.9	26.0	23.9	23.3	22.5	21.5	-1.1

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

<sup>c</sup>Due to a coding error, previously released versions of this table contained values that were slightly off for 2005 and 2006. These have been corrected here.

**TABLE D-74**  
**Beer: Trends in 30-Day Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 30 days																		2007– 2008
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>change</u>
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700	
Total	16.2	16.9	17.4	18.3	18.8	18.4	16.7	16.2	16.6	15.2	15.0	12.3	12.0	14.4	12.8	12.5	12.2	11.8	-0.3
Gender:																			
Male	19.1	18.6	19.1	21.2	20.4	19.9	18.6	17.7	19.4	16.8	16.5	12.2	12.4	14.0	12.9	13.0	11.3	12.3	+1.0
Female	13.5	15.3	16.1	16.0	17.0	17.1	14.6	14.7	14.1	13.5	13.6	12.2	11.4	14.6	12.9	11.9	12.2	11.2	-1.1
College Plans:																			
None or under 4 years	26.4	27.7	32.2	32.8	36.0	33.0	33.9	32.6	35.5	29.6	32.9	27.4	28.7	26.4	26.3	24.7	27.3	30.5	+3.2
Complete 4 years	14.6	15.4	15.6	16.6	16.8	16.3	14.6	14.4	14.3	13.8	12.9	11.1	10.2	13.1	11.5	11.4	10.8	10.3	-0.4
Region:																			
Northeast	14.0	14.0	14.9	18.6	19.3	21.7	18.4	14.7	18.5	14.2	18.7	10.8	12.3	15.1	11.4	11.4	9.5	10.4	+0.9
Midwest	16.4	18.0	16.7	18.0	17.4	19.3	16.8	18.4	17.5	17.0	13.2	10.2	14.0	15.9	11.4	13.2	10.6	12.5	+1.9
South	17.8	18.5	19.1	18.2	20.1	16.6	15.5	16.1	17.2	14.2	14.3	14.0	11.4	14.4	15.0	13.3	14.0	14.1	+0.1
West	14.9	15.1	18.0	18.8	17.6	17.8	17.2	15.1	12.6	15.7	15.3	13.9	10.3	12.2	11.4	11.4	12.0	8.9	-3.1
Population Density:																			
Large MSA	15.0	18.7	15.1	15.2	12.0	16.2	15.0	13.8	14.3	14.0	12.0	11.5	11.0	14.2	11.4	11.9	10.3	13.0	+2.7
Other MSA	16.1	16.8	17.6	19.4	19.1	19.6	15.9	14.3	16.5	14.1	15.5	12.4	11.9	13.9	13.6	12.1	12.3	11.3	-1.0
Non-MSA	17.8	15.4	19.8	18.3	21.8	18.8	19.6	22.7	19.4	18.8	17.2	13.2	13.5	15.6	13.1	14.3	14.6	11.3	-3.3
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	22.0	22.5	21.5	24.4	23.9	19.7	21.6	21.9	25.4	23.2	21.3	24.1	17.1	23.7	22.6	17.3	21.0	21.3	+0.3
2.5–3.0	18.2	18.4	19.5	19.7	22.8	21.3	21.2	17.4	19.7	20.7	18.4	14.8	15.1	17.8	15.8	16.8	19.5	16.7	-2.8
3.5–4.0	15.7	18.0	19.4	19.7	19.6	20.2	18.5	17.9	16.9	13.5	18.1	13.5	14.3	15.0	13.9	13.6	10.6	13.1	+2.5
4.5–5.0	14.4	13.4	14.9	15.3	15.6	17.8	12.7	12.6	12.3	12.0	10.0	8.4	7.4	11.9	11.2	9.4	9.3	8.8	-0.5
5.5–6.0 (High)	13.5	14.6	14.4	17.2	14.2	13.2	14.1	17.0	16.0	11.4	9.7	10.3	10.2	13.3	6.7	9.3	6.7	7.0	+0.3
Race (2-year average): <sup>b</sup>																			
White	—	16.7	17.6	17.9	19.0	19.7	18.8	17.4	17.4	16.8	15.5	13.5	12.0	13.5	14.0	12.7	11.5	11.5	0.0
African American	—	12.6	13.0	15.8	14.5	11.1	9.7	8.1	9.7	9.7	7.9	7.2	7.5	8.1	7.6	8.5	9.0	7.4	-1.7
Hispanic	—	23.9	24.2	22.2	23.3	23.7	21.8	19.9	19.5	19.8	20.7	21.8	19.6	18.4	18.3	17.1	17.8	17.8	0.0

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of two forms in 1991–1996;  $N$  is one half of  $N$  indicated in Table D-107. Data based on one of four forms beginning in 1997;  $N$  is one third of  $N$  indicated in Table D-107.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-75**  
**Beer: Trends in 30-Day Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 30 days																	2007– 2008 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100	
Total	31.1	28.9	28.7	30.2	29.9	30.5	30.4	28.3	29.5	30.6	28.0	24.6	23.2	26.5	24.8	26.8	24.4	22.4	-2.0
Gender:																			
Male	37.6	33.1	33.3	37.3	33.5	34.7	34.1	32.5	35.4	35.4	33.7	28.7	27.9	30.7	26.5	29.2	26.8	24.5	-2.3
Female	25.2	25.1	24.2	23.3	26.2	26.7	27.1	24.3	23.8	25.6	22.9	20.9	19.3	22.3	23.1	24.0	21.8	20.6	-1.2
College Plans:																			
None or under 4 years	39.4	37.5	37.4	41.4	41.9	44.8	43.8	40.5	43.7	42.7	42.3	37.2	30.3	36.4	36.4	39.2	39.2	38.1	-1.1
Complete 4 years	29.4	27.2	26.9	28.0	27.8	28.1	28.2	26.1	27.0	28.6	25.9	22.7	22.2	25.1	23.2	25.2	22.6	20.4	-2.2
Region:																			
Northeast	37.1	29.4	32.0	31.9	31.7	33.1	33.2	31.0	34.7	31.7	27.0	23.8	25.6	30.4	25.2	31.4	27.3	24.9	-2.4
Midwest	31.7	29.4	29.1	31.6	31.1	30.4	30.1	27.8	29.8	33.1	29.0	25.6	23.3	22.1	26.2	25.5	24.7	23.0	-1.7
South	29.4	28.4	26.6	29.5	29.4	30.6	28.5	27.2	27.8	27.1	26.6	22.6	21.9	27.2	23.6	25.0	21.2	22.7	+1.5
West	28.4	28.8	28.7	27.5	27.3	28.1	31.1	28.1	26.6	32.6	30.6	27.6	22.6	27.0	24.4	27.2	25.8	19.7	-6.1 ss
Population Density:																			
Large MSA	31.0	30.1	28.8	28.9	23.9	28.9	28.8	24.3	29.3	30.1	25.5	22.5	21.6	23.4	21.8	25.5	24.6	21.7	-3.0
Other MSA	28.9	27.4	26.4	30.8	30.3	30.1	31.2	28.9	29.4	29.8	26.2	24.7	22.9	27.0	25.2	27.5	22.4	21.8	-0.6
Non-MSA	35.2	30.8	32.8	30.0	32.2	33.0	30.5	31.4	30.0	32.7	34.4	27.1	26.1	29.3	27.9	27.3	28.7	24.8	-3.8
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	33.5	27.7	33.3	30.0	34.0	28.9	28.6	29.3	26.5	26.7	26.7	22.4	26.3	28.7	28.9	27.8	28.9	29.2	+0.3
2.5–3.0	32.0	30.3	28.4	31.1	33.0	31.1	30.3	30.9	32.3	30.8	27.2	28.6	24.1	30.3	29.1	30.7	29.7	25.7	-3.9
3.5–4.0	31.4	29.9	29.0	31.3	30.1	30.9	31.3	30.0	29.5	32.3	29.0	25.1	24.3	26.2	23.8	28.4	25.4	23.5	-1.9
4.5–5.0	29.9	27.7	28.0	30.3	28.5	29.0	31.4	25.0	27.4	32.4	27.7	22.7	21.9	26.4	24.4	23.4	21.5	20.6	-0.8
5.5–6.0 (High)	30.7	27.4	28.1	27.1	26.5	33.7	30.7	26.5	31.1	28.7	30.4	21.9	21.0	24.2	21.7	26.0	20.5	17.3	-3.1
Race (2-year average): <sup>b</sup>																			
White	—	31.7	30.2	31.1	32.1	32.5	32.4	31.9	32.2	33.1	31.7	28.7	27.0	27.5	28.2	28.4	27.8	25.3	-2.6 s
African American	—	20.9	20.3	19.0	18.8	15.9	15.6	13.1	10.0	13.5	14.8	11.6	10.2	11.3	12.5	11.9	9.7	10.0	+0.3
Hispanic	—	32.2	29.6	29.3	31.2	31.9	31.3	29.8	28.3	28.9	30.7	28.6	25.1	27.8	31.3	30.7	29.3	28.2	-1.1

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of two forms in 1991–1996; *N* is one half of *N* indicated in Table D-108. Data based on one of four forms beginning in 1997; *N* is one third of *N* indicated in Table D-108.

**Caution: Limited sample sizes (see "Notes" above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.



**TABLE D-76**  
**Beer: Trends in 30-Day Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 30 days																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	—	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	—	59.8	62.1	62.3	63.7	62.9	62.7	60.3	61.7	59.5	56.7	55.5	56.2	53.3	51.4	47.2	47.2
Gender:																	
Male	—	68.6	73.1	73.0	74.0	74.3	71.4	68.3	69.7	67.4	64.5	64.3	64.9	61.8	59.7	55.7	55.3
Female	—	51.3	52.8	52.7	54.5	52.4	53.9	52.7	54.0	51.8	49.4	47.9	48.1	46.3	43.4	38.0	39.3
College Plans:																	
None or under 4 years	—	62.1	64.6	65.2	65.7	68.3	65.0	64.6	62.4	62.7	59.8	54.2	58.2	57.3	55.5	46.5	52.4
Complete 4 years	—	57.6	60.3	59.5	61.6	58.4	61.0	57.4	61.1	57.4	55.1	55.7	55.1	51.8	49.4	47.5	45.2
Region:																	
Northeast	—	64.9	65.9	64.7	71.9	67.6	67.1	65.7	68.3	62.6	64.4	51.5	56.8	54.8	54.2	52.7	49.5
Midwest	—	65.4	66.9	68.3	66.1	64.9	67.5	66.1	66.6	66.8	57.4	66.3	61.4	59.8	58.5	50.3	53.5
South	—	53.2	55.3	58.4	59.2	60.3	57.5	53.0	56.5	53.7	51.0	48.6	52.1	47.6	46.1	42.0	41.1
West	—	52.8	59.4	54.2	56.1	57.7	56.9	52.8	53.8	55.3	56.4	54.4	54.8	52.7	48.5	45.4	46.0
Population Density:																	
Large MSA	—	62.5	64.2	62.8	65.3	67.7	63.8	63.3	63.1	58.8	56.0	55.1	56.9	52.6	50.1	52.3	44.4
Other MSA	—	58.6	62.0	62.4	62.3	62.1	61.9	58.6	59.4	56.6	56.8	55.1	56.4	53.0	51.6	47.3	47.6
Non-MSA	—	59.3	60.7	61.7	64.4	60.5	63.0	60.0	63.6	63.7	57.3	56.3	55.4	54.3	52.1	42.4	48.8
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	—	58.5	48.3	54.6	52.9	55.9	54.7	56.8	58.8	51.1	52.2	46.8	55.8	47.1	45.3	42.2	48.1
2.5–3.0	—	62.7	64.8	63.6	64.5	66.1	65.4	58.5	59.8	62.4	56.8	54.6	53.6	51.9	52.4	47.5	46.7
3.5–4.0	—	58.4	66.0	62.7	67.1	64.4	64.0	63.9	62.3	61.2	57.9	56.0	56.0	51.5	52.2	45.8	48.4
4.5–5.0	—	62.6	64.4	64.7	68.4	58.4	60.1	60.0	66.2	61.9	60.5	57.6	59.9	58.2	51.4	49.3	46.4
5.5–6.0 (High)	—	64.1	69.3	68.3	63.6	69.3	68.9	68.3	65.9	54.2	55.4	62.5	57.7	57.4	53.2	53.4	46.1
Race (2-year average): <sup>b</sup>																	
White	—	—	63.8	65.2	65.9	66.3	66.3	65.4	64.6	64.6	62.2	59.9	59.6	59.1	57.0	54.1	51.6
African American	—	—	38.7	36.4	37.4	38.7	38.8	37.2	39.2	36.9	33.1	32.7	28.6	30.3	32.6	28.4	25.3
Hispanic	—	—	52.7	54.3	52.3	52.5	47.7	47.5	43.4	40.7	46.5	50.9	55.4	49.2	40.4	36.6	40.3

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table. Data based on one of five forms in 1976–1988;  $N$  is one fifth of  $N$  indicated in Table D-109. Data based on one of six forms beginning in 1989;  $N$  is one sixth of  $N$  indicated in Table D-109.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

(Table continued on next page.)

**TABLE D-76 (cont.)**  
**Beer: Trends in 30-Day Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 30 days																	2007– 2008	
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	change	
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	42.0	43.4	42.6	44.9	46.9	44.4	45.6	42.7	42.7	41.5	39.7	37.8	38.3	38.0	35.5	36.6	33.7	-2.9	
Gender:																			
Male	50.1	50.0	51.2	53.0	53.5	49.7	55.0	48.2	51.7	50.9	44.3	44.5	44.1	47.3	39.7	43.7	40.7	-3.0	
Female	34.6	37.2	35.6	37.4	40.2	39.9	37.0	36.9	33.9	32.1	34.4	31.7	32.1	30.4	31.1	29.3	27.7	-1.6	
College Plans:																			
None or under 4 years	48.8	48.2	47.1	50.1	46.2	44.6	49.6	47.5	42.4	54.1	45.7	39.4	44.0	45.1	46.2	39.0	43.7	+4.7	
Complete 4 years	39.9	41.5	41.6	42.8	47.0	44.4	44.4	41.7	42.4	38.4	37.9	37.2	36.6	36.6	33.4	35.7	31.7	-4.1	
Region:																			
Northeast	40.8	47.0	43.3	47.0	56.9	47.5	52.6	54.3	48.9	47.2	43.4	41.9	42.6	41.3	42.9	44.1	39.7	-4.4	
Midwest	49.1	46.3	48.0	49.7	48.1	43.3	44.6	45.4	47.6	48.1	42.9	43.1	41.4	40.5	35.8	39.2	32.7	-6.4	
South	39.5	43.0	40.4	43.8	44.4	43.3	43.2	36.6	35.1	33.6	35.1	32.0	34.2	33.8	34.2	34.2	33.4	-0.8	
West	36.7	37.0	38.2	37.8	38.8	44.5	45.5	40.2	43.5	39.9	39.8	36.9	36.1	38.8	31.3	31.7	31.8	+0.1	
Population Density:																			
Large MSA	42.3	44.0	42.8	45.9	49.1	45.5	42.1	39.9	45.2	38.0	40.5	36.3	34.2	37.9	35.1	40.7	36.9	-3.8	
Other MSA	40.3	42.0	39.4	43.7	46.9	45.0	47.6	42.8	40.7	42.6	38.8	38.9	38.9	38.4	37.2	32.8	31.5	-1.3	
Non-MSA	45.1	45.3	47.6	46.0	45.3	41.9	45.6	45.4	43.2	43.3	40.5	37.5	41.4	37.1	33.0	38.2	35.0	-3.2	
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	36.6	41.1	37.0	43.1	31.2	30.4	37.0	35.4	37.2	39.1	41.6	30.9	34.1	32.9	27.5	32.8	28.5	-4.3	
2.5–3.0	41.4	43.7	44.4	44.0	42.4	41.5	42.8	43.0	37.4	48.0	36.6	36.2	38.0	35.8	38.1	35.2	34.7	-0.4	
3.5–4.0	40.7	44.4	42.2	42.8	48.2	46.3	48.9	42.5	45.1	35.8	40.9	39.9	43.0	38.4	35.7	36.8	30.9	-5.9	
4.5–5.0	43.8	41.9	41.1	47.1	47.1	47.7	48.9	40.0	43.9	43.6	39.9	38.4	36.1	42.4	35.3	39.4	33.8	-5.5	
5.5–6.0 (High)	47.0	47.7	46.6	49.6	58.0	49.9	44.5	51.8	52.0	42.3	45.2	41.4	38.7	37.6	38.4	38.8	43.1	+4.3	
Race (2-year average): <sup>b</sup>																			
White	48.3	46.0	46.5	47.8	50.1	50.7	49.9	47.7	45.8	46.7	45.4	43.1	42.1	42.3	41.8	41.0	39.7	-1.3	
African American	24.2	28.0	29.9	25.6	28.4	25.5	22.8	22.3	21.7	20.6	16.9	14.0	15.7	18.0	14.8	13.6	14.6	+1.0	
Hispanic	44.7	39.8	40.5	41.7	41.3	39.8	39.0	43.6	45.3	42.6	40.8	37.2	36.7	39.2	35.4	32.7	31.2	-1.5	

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-77**  
**Beer: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Subgroups in Grade 8**

	Percentage reporting 5+ drinks in a row on one or more occasions																		2007– 2008 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		
Total	7.2	7.3	8.2	8.5	8.5	9.2	7.6	8.0	8.3	7.5	8.1	6.1	5.5	6.8	5.8	5.5	5.4	5.1	-0.3	
Gender:																				
Male	9.2	8.9	9.4	10.6	9.8	10.1	9.2	10.0	10.5	8.8	9.4	6.5	5.8	6.4	5.5	5.9	5.5	6.0	+0.5	
Female	5.2	5.9	7.1	6.7	7.4	8.2	6.0	6.3	6.2	6.3	7.0	5.5	5.1	6.9	6.2	4.9	4.8	4.3	-0.4	
College Plans:																				
None or under 4 years	15.4	18.2	18.4	20.7	17.5	19.7	22.0	21.6	24.8	21.9	25.4	19.0	17.5	19.0	16.7	13.9	15.3	19.2	+4.0	
Complete 4 years	5.9	5.8	6.9	7.1	7.5	7.6	6.0	6.6	6.2	6.1	6.3	5.0	4.2	5.5	4.9	4.7	4.4	4.1	-0.3	
Region:																				
Northeast	4.8	5.5	5.8	8.1	9.3	10.7	7.6	6.6	9.1	5.7	9.4	3.5	5.6	6.5	3.7	4.1	4.8	5.3	+0.5	
Midwest	6.9	7.0	7.6	8.8	8.0	9.2	8.4	10.0	9.3	8.9	7.8	5.6	7.0	8.3	4.7	5.9	3.6	4.6	+1.0	
South	8.9	9.0	9.4	8.1	8.8	8.4	6.9	8.0	8.9	7.1	7.9	6.7	5.1	6.4	7.4	6.3	6.6	6.2	-0.4	
West	7.0	6.7	9.2	9.1	8.1	9.2	7.9	7.1	5.3	8.0	7.9	8.4	4.2	6.0	6.0	4.9	5.4	3.9	-1.5	
Population Density:																				
Large MSA	6.6	7.4	6.1	6.9	5.3	8.5	5.6	6.7	6.2	6.0	5.4	5.0	4.2	5.6	4.9	4.1	4.5	5.6	+1.1	
Other MSA	7.0	7.6	8.2	9.1	8.8	9.3	7.4	6.6	8.6	6.4	8.4	6.0	5.3	6.4	6.0	5.4	5.2	4.7	-0.5	
Non-MSA	8.4	6.8	10.7	8.4	9.8	9.8	9.6	12.3	10.2	11.5	10.5	7.7	7.3	8.9	6.6	7.8	6.9	5.2	-1.7	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	12.6	12.5	11.0	11.6	12.5	12.8	9.8	12.6	17.9	14.8	11.5	11.2	9.4	11.9	14.0	8.9	11.6	11.3	-0.2	
2.5–3.0	7.7	8.9	9.9	9.3	10.2	10.7	10.1	8.0	9.8	10.9	10.0	8.1	7.2	8.8	8.1	7.1	8.8	8.8	0.0	
3.5–4.0	7.8	7.0	7.9	9.0	9.8	10.1	8.3	9.0	10.4	6.6	9.1	6.8	6.0	7.9	5.3	5.4	4.8	5.7	+0.9	
4.5–5.0	5.0	4.5	7.3	6.8	6.1	7.5	5.3	5.9	3.9	5.0	5.1	3.7	3.5	5.3	4.3	4.3	3.4	2.5	-0.9	
5.5–6.0 (High)	6.2	6.0	6.2	8.4	5.9	6.7	5.7	8.7	6.1	4.3	5.3	4.8	4.1	4.7	2.4	4.7	2.1	2.3	+0.3	
Race (2-year average): <sup>b</sup>																				
White	—	7.0	7.6	8.0	8.7	9.2	8.6	7.9	8.3	8.3	7.7	6.7	5.7	6.1	5.9	5.2	4.9	4.8	0.0	
African American	—	5.2	5.1	7.2	6.4	4.9	4.4	3.6	4.7	4.9	4.0	3.2	3.0	3.6	3.1	2.7	2.6	2.4	-0.2	
Hispanic	—	12.7	13.2	12.1	11.6	12.7	12.3	10.5	10.2	9.8	12.3	13.2	10.3	9.1	10.0	9.0	9.0	9.0	0.0	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of two forms in 1991–1996;  $N$  is one half of  $N$  indicated in Table D-107. Data based on one of four forms beginning in 1997;  $N$  is one third of  $N$  indicated in Table D-107.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-78**  
**Beer: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Subgroups in Grade 10**

	Percentage reporting 5+ drinks in a row on one or more occasions																		2007– 2008 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100		
Total	16.4	15.1	16.1	17.0	17.1	17.9	17.6	16.0	18.1	17.5	16.3	14.1	13.8	13.6	13.1	14.5	13.7	10.8	-2.8 ss	
Gender:																				
Male	21.7	18.9	20.4	23.0	21.1	22.5	21.2	20.7	24.0	22.5	22.2	16.7	18.3	17.1	15.2	16.3	16.5	12.8	-3.6 s	
Female	11.7	11.7	11.8	11.1	13.1	13.7	14.4	11.8	12.5	12.7	11.2	11.7	9.9	10.4	10.8	12.3	10.7	9.2	-1.5	
College Plans:																				
None or under 4 years	25.4	22.8	25.4	26.6	28.2	30.7	31.6	26.1	29.9	26.8	31.2	26.2	22.7	20.5	23.0	26.1	26.4	21.2	-5.2	
Complete 4 years	14.5	13.5	14.2	15.0	15.3	15.8	15.4	14.2	16.2	15.9	14.1	12.2	12.6	12.7	11.8	12.8	12.3	9.6	-2.7 s	
Region:																				
Northeast	19.0	14.6	17.1	18.4	17.4	19.9	17.5	18.8	21.5	16.4	15.2	12.6	16.4	16.9	15.2	17.7	14.7	12.0	-2.7	
Midwest	16.5	16.7	17.3	18.2	18.3	18.8	18.4	16.3	18.3	20.9	16.4	14.9	13.5	10.9	14.6	14.8	14.2	11.2	-3.0	
South	15.4	13.9	14.9	16.9	16.9	17.7	16.6	15.4	17.5	15.7	15.9	13.2	12.4	12.8	10.8	12.7	12.5	11.3	-1.2	
West	15.9	15.5	15.2	13.5	15.5	15.1	18.3	14.0	15.5	16.9	18.3	16.0	14.0	15.0	12.4	13.7	13.9	9.0	-4.8 sss	
Population Density:																				
Large MSA	16.0	14.8	15.2	14.5	12.7	16.4	15.9	12.8	18.0	16.9	13.0	12.0	13.0	11.5	10.6	13.3	12.7	10.2	-2.6	
Other MSA	15.8	13.9	13.9	17.0	17.2	17.6	17.6	15.9	17.3	16.3	15.7	13.5	13.1	14.4	13.8	15.3	12.5	10.9	-1.6	
Non-MSA	17.9	17.7	20.9	18.7	19.6	20.1	19.1	19.6	20.1	20.1	21.2	18.1	17.0	14.7	14.6	14.1	17.8	11.7	-6.1 s	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	21.3	15.6	18.9	19.2	20.3	20.5	18.1	12.8	14.2	16.7	17.9	13.8	19.0	14.1	15.1	16.4	19.2	15.1	-4.1	
2.5–3.0	18.5	16.6	15.3	18.5	19.7	18.8	18.0	19.0	20.5	16.5	15.9	15.8	14.8	17.1	16.3	17.8	18.1	13.2	-4.9 s	
3.5–4.0	15.0	15.6	16.5	16.7	17.4	18.5	18.9	15.8	17.6	17.9	17.8	14.4	13.7	13.9	13.6	14.5	13.9	10.9	-3.0	
4.5–5.0	15.1	14.0	16.3	16.8	16.0	15.9	16.5	14.9	17.3	19.0	14.3	12.5	13.1	12.0	11.6	12.3	11.0	9.5	-1.6	
5.5–6.0 (High)	15.4	13.1	15.3	14.5	13.8	18.3	16.1	16.2	19.3	16.8	17.5	13.1	11.8	13.7	11.3	14.3	10.6	7.6	-3.1	
Race (2-year average): <sup>b</sup>																				
White	—	16.7	16.4	17.4	18.1	19.0	19.3	18.6	19.7	19.9	18.1	16.5	16.1	15.5	15.1	15.8	15.7	13.7	-2.0	
African American	—	9.8	10.1	9.3	8.7	6.5	6.6	5.5	4.0	6.2	6.8	6.1	4.7	4.1	4.2	3.8	3.7	3.7	0.0	
Hispanic	—	17.2	16.1	16.8	18.6	19.7	19.5	16.9	14.8	17.5	20.3	17.5	16.2	17.5	16.5	16.0	16.6	15.7	-0.9	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of two forms in 1991–1996; *N* is one half of *N* indicated in Table D-108. Data based on one of four forms beginning in 1997; *N* is one third of *N* indicated in Table D-108.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-79**  
**Beer: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Subgroups in Grade 12**

Percentage reporting 5+ drinks in a row on one or more occasions																	
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	—	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	—	33.0	35.1	35.4	36.4	36.6	38.0	37.6	38.1	36.2	32.0	33.1	33.8	31.0	31.3	27.0	28.5
Gender:																	
Male	—	45.6	49.0	49.8	50.6	51.1	49.4	48.5	49.8	47.7	42.6	45.4	45.4	41.5	39.5	37.1	37.0
Female	—	21.4	23.5	22.6	24.2	23.9	26.5	27.3	27.4	25.0	22.4	22.4	23.1	22.2	23.8	16.5	20.1
College Plans:																	
None or under 4 years	—	37.7	39.2	41.6	39.5	43.5	42.8	42.1	43.1	41.2	35.5	36.1	37.8	36.9	37.7	29.0	35.1
Complete 4 years	—	27.8	31.0	29.4	33.3	30.9	34.2	34.2	34.3	33.6	29.8	30.8	31.7	28.4	28.5	26.0	26.0
Region:																	
Northeast	—	39.0	35.3	36.5	41.9	41.4	42.1	40.0	37.9	39.8	35.5	32.6	32.1	32.7	32.1	27.4	27.8
Midwest	—	35.8	37.6	39.9	39.0	42.3	43.6	45.3	45.1	43.7	34.2	40.8	41.3	38.5	38.2	31.4	34.7
South	—	26.6	33.9	31.8	34.0	30.5	33.9	31.7	35.1	31.5	26.6	29.4	30.7	25.7	27.5	23.8	24.2
West	—	31.0	31.6	32.0	28.3	31.1	28.5	28.1	31.3	29.4	33.8	27.5	29.8	28.5	27.4	25.1	27.3
Population Density:																	
Large MSA	—	32.8	34.4	34.4	35.0	40.9	38.9	36.2	37.4	34.5	31.2	33.9	32.3	29.6	27.3	32.0	24.7
Other MSA	—	33.9	35.4	35.7	36.3	33.9	37.7	36.6	36.6	33.2	30.2	31.5	34.5	30.9	32.3	26.9	28.8
Non-MSA	—	32.1	35.2	35.7	37.6	37.0	37.6	39.8	40.6	41.4	35.1	35.0	33.9	32.6	32.9	22.6	31.0
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	—	30.7	31.9	33.6	32.8	31.1	32.3	35.0	38.4	26.8	27.4	28.5	32.9	31.3	26.9	28.1	34.9
2.5–3.0	—	37.5	36.4	37.8	38.0	38.8	42.9	37.5	37.4	39.2	33.6	34.2	34.3	31.0	32.2	26.7	29.2
3.5–4.0	—	32.9	34.8	34.4	36.5	37.6	39.2	41.6	39.1	37.1	32.1	32.9	34.9	29.4	32.8	24.9	29.4
4.5–5.0	—	33.9	34.1	36.2	38.2	36.0	31.7	35.3	39.1	39.9	35.9	34.4	34.7	32.8	31.2	27.7	26.2
5.5–6.0 (High)	—	27.2	38.0	28.7	35.5	37.6	38.5	38.9	36.5	30.2	27.4	33.8	29.7	31.4	26.5	32.3	25.7
Race (2-year average): <sup>b</sup>																	
White	—	—	35.5	36.8	37.6	38.5	40.1	40.9	40.8	40.0	37.1	35.3	35.8	35.2	34.4	32.5	30.6
African American	—	—	18.8	19.5	19.4	17.7	16.4	16.9	18.1	18.9	15.5	13.2	13.6	16.1	18.5	13.5	10.2
Hispanic	—	—	34.4	33.5	31.5	32.7	30.8	27.6	27.9	27.4	24.6	29.4	32.8	27.5	22.0	20.6	23.8

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table. Data based on one of five forms in 1976–1988;  $N$  is one fifth of  $N$  indicated in Table D-109. Data based on one of six forms beginning in 1989;  $N$  is one sixth of  $N$  indicated in Table D-109.

**Caution: Limited sample sizes (see "Notes" above). Use caution in interpreting subgroup trends.**

(Table continued on next page.)

**TABLE D-79 (cont.)**  
**Beer: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Subgroups in Grade 12**

	Percentage reporting 5+ drinks in a row on one or more occasions																	2007– 2008
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>change</u>
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	25.4	25.5	24.6	27.6	29.2	26.7	28.5	25.6	27.5	26.7	26.1	21.4	23.7	22.4	21.4	22.0	20.9	-1.1
Gender:																		
Male	34.0	34.2	35.7	36.5	38.7	32.9	39.3	34.7	38.2	35.9	33.7	31.1	32.1	30.9	26.9	27.7	27.7	0.0
Female	17.6	18.1	15.5	19.5	19.2	21.2	19.5	17.0	17.6	18.0	18.2	12.9	15.6	15.3	16.2	16.1	15.1	-1.0
College Plans:																		
None or under 4 years	32.8	30.2	29.6	32.7	29.4	29.0	39.7	29.5	31.0	40.5	37.0	24.9	32.0	28.9	31.5	24.2	30.9	+6.7
Complete 4 years	23.3	23.8	23.4	25.4	28.8	26.2	25.1	24.7	26.0	23.3	22.9	20.3	21.5	21.1	19.0	21.2	18.7	-2.5
Region:																		
Northeast	25.7	28.5	23.4	30.5	35.4	32.0	34.2	33.0	32.7	26.5	28.6	27.1	26.1	25.8	25.9	29.5	23.7	-5.7
Midwest	32.5	27.6	28.3	30.2	29.9	25.7	31.4	28.9	32.4	33.9	28.9	24.8	26.2	26.2	22.1	24.3	21.0	-3.3
South	22.9	25.2	24.8	27.2	27.5	24.1	25.5	21.3	20.0	19.7	22.4	16.8	21.8	20.2	20.6	18.8	21.1	+2.3
West	18.4	20.8	19.7	21.8	24.6	27.6	25.6	22.8	29.4	27.9	26.3	19.2	20.9	18.0	18.1	18.6	18.7	+0.1
Population Density:																		
Large MSA	26.0	23.8	23.6	26.9	32.4	26.2	24.4	21.3	29.8	23.4	25.7	18.9	20.9	21.4	21.2	25.1	22.7	-2.4
Other MSA	24.2	24.8	22.6	26.7	29.3	27.9	30.3	26.8	26.1	26.7	25.2	22.9	22.9	23.7	21.2	19.0	18.8	-0.2
Non-MSA	27.2	28.1	28.7	30.0	26.6	25.0	29.5	28.1	27.4	30.2	28.1	21.7	28.2	21.0	22.1	23.3	23.4	+0.1
Parental Education: <sup>a</sup>																		
1.0–2.0 (Low)	23.4	27.3	23.7	28.9	23.8	18.7	23.5	22.1	16.8	28.2	32.0	20.1	18.5	17.0	19.3	21.5	14.0	-7.5
2.5–3.0	26.6	26.1	25.3	27.6	25.0	26.0	26.5	27.7	24.3	31.9	24.5	22.9	27.0	21.3	23.2	23.1	20.4	-2.7
3.5–4.0	25.2	26.6	24.2	25.6	29.3	28.3	31.9	26.5	29.1	21.4	27.4	20.5	26.3	23.0	23.9	21.1	19.8	-1.3
4.5–5.0	23.9	24.1	24.1	27.6	28.1	29.1	29.3	24.2	28.7	28.7	24.4	23.3	20.9	25.5	19.6	24.2	21.1	-3.1
5.5–6.0 (High)	26.9	26.1	26.0	32.2	41.0	28.3	27.6	24.3	35.1	28.0	27.3	19.0	20.2	21.8	19.3	21.0	27.6	+6.6
Race (2-year average): <sup>b</sup>																		
White	29.6	27.6	27.3	29.0	31.3	31.4	31.3	30.0	28.8	31.0	30.2	26.4	25.3	26.1	25.8	25.8	25.3	-0.5
African American	13.1	15.5	15.4	12.6	14.6	13.3	11.7	10.6	9.9	9.1	7.6	6.1	9.3	11.2	7.1	5.0	5.7	+0.7
Hispanic	27.2	24.8	24.9	23.8	26.1	26.0	24.4	27.5	29.0	27.1	24.7	21.6	20.0	19.7	19.8	19.8	17.5	-2.4

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-80**  
**Liquor: Trends in 30-Day Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 30 days																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	—	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	—	44.1	45.0	48.2	47.3	47.9	44.6	45.2	46.4	42.3	40.0	41.0	39.0	35.6	35.7	30.8	31.3
Gender:																	
Male	—	44.4	44.7	48.9	48.5	48.8	45.3	45.2	48.8	43.3	40.3	43.7	42.8	38.5	39.6	36.9	34.9
Female	—	43.8	45.3	47.6	46.6	47.4	44.3	45.1	43.7	40.8	39.5	38.6	35.4	33.6	32.1	24.6	28.0
College Plans:																	
None or under 4 years	—	44.6	47.8	49.3	46.1	51.4	46.9	47.5	47.4	44.6	41.0	38.9	39.4	36.8	38.1	30.6	37.0
Complete 4 years	—	43.8	42.5	47.7	48.5	45.1	43.0	43.6	45.3	40.6	39.6	41.8	39.0	35.0	35.0	30.4	29.0
Region:																	
Northeast	—	52.5	47.4	47.8	56.7	53.2	49.5	50.8	50.8	46.4	42.1	37.2	43.3	36.1	40.3	34.5	36.6
Midwest	—	47.0	49.7	53.7	45.4	46.5	47.2	49.1	50.5	45.6	40.1	49.8	42.2	42.2	40.5	31.0	33.5
South	—	37.6	39.8	46.0	43.6	48.5	38.8	38.7	43.3	38.5	37.1	35.9	34.6	30.4	33.0	29.6	28.1
West	—	38.3	41.3	42.0	45.0	42.9	43.2	40.0	38.4	39.6	42.1	39.6	37.4	35.0	30.0	28.5	29.0
Population Density:																	
Large MSA	—	47.3	45.4	49.3	52.0	51.7	44.4	48.5	48.1	40.8	37.7	41.2	39.9	36.0	36.4	33.8	30.4
Other MSA	—	44.7	46.0	48.3	47.1	48.4	45.9	45.6	45.5	40.9	39.3	39.9	40.5	36.3	33.5	31.1	33.1
Non-MSA	—	41.4	43.3	47.2	44.1	44.8	43.2	42.1	46.1	45.1	42.6	42.4	35.5	34.0	40.3	27.7	29.1
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	—	40.8	38.2	37.3	38.2	44.2	43.1	40.3	41.6	33.1	36.2	36.1	32.2	33.5	32.1	25.7	29.7
2.5–3.0	—	46.7	45.9	49.8	46.6	47.8	43.5	44.8	44.7	46.3	37.9	38.1	36.0	34.6	32.1	29.5	32.6
3.5–4.0	—	44.7	47.3	51.9	51.7	47.5	46.6	48.0	46.5	42.0	39.2	42.3	38.2	33.1	38.3	31.6	33.6
4.5–5.0	—	47.9	45.6	49.1	51.7	48.7	40.7	43.6	50.0	44.9	48.0	43.9	43.4	38.7	36.9	34.2	27.4
5.5–6.0 (High)	—	46.6	53.4	54.2	49.3	53.4	53.8	54.2	55.2	40.4	40.9	47.4	45.7	39.4	37.7	33.8	33.5
Race (2-year average): <sup>b</sup>																	
White	—	—	47.5	49.5	50.3	50.1	48.9	48.2	49.0	47.3	44.1	43.5	43.4	41.1	39.8	37.7	35.0
African American	—	—	21.2	19.9	23.3	27.5	25.1	21.5	25.3	23.7	18.5	17.4	15.0	16.0	16.8	14.4	14.1
Hispanic	—	—	47.7	48.8	43.3	47.2	45.6	41.2	35.6	35.4	42.1	40.4	36.9	31.6	24.6	21.0	23.2

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table. Data based on one of five forms in 1976–1988;  $N$  is one fifth of  $N$  indicated in Table D-109. Data based on one of six forms beginning in 1989;  $N$  is one sixth of  $N$  indicated in Table D-109.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

(Table continued on next page.)

**TABLE D-80 (cont.)**  
**Liquor: Trends in 30-Day Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 30 days																	2007– 2008
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>change</u>
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	28.6	31.4	28.0	34.3	34.7	34.6	37.3	34.3	36.0	35.1	36.0	34.3	35.6	36.4	34.2	34.1	32.4	-1.7
Gender:																		
Male	32.0	36.4	32.8	38.2	36.4	36.3	41.2	38.0	41.7	35.6	37.9	36.1	39.3	38.4	33.7	36.2	33.8	-2.4
Female	25.9	27.3	23.2	30.9	32.6	33.4	33.3	30.0	30.7	33.7	33.8	32.9	32.2	34.9	33.9	31.4	30.7	-0.6
College Plans:																		
None or under 4 years	31.9	37.3	28.3	36.8	35.8	34.2	38.3	35.0	38.1	40.4	42.5	36.9	40.3	42.6	39.7	37.5	38.0	+0.5
Complete 4 years	27.4	29.9	28.1	33.4	34.1	34.9	36.6	33.9	35.0	33.6	34.2	33.6	34.3	35.5	33.0	33.5	31.4	-2.1
Region:																		
Northeast	25.8	32.4	25.9	37.7	40.9	36.6	46.3	39.8	40.9	40.8	41.4	35.8	41.1	41.9	40.0	41.2	37.1	-4.2
Midwest	33.5	32.1	29.0	35.4	36.2	35.2	36.6	33.7	40.5	37.4	39.6	37.4	35.4	39.3	35.2	38.1	33.4	-4.7
South	27.1	34.7	28.1	34.9	33.6	32.9	33.9	32.1	28.3	31.7	32.9	30.7	33.3	33.7	32.5	30.6	32.2	+1.6
West	26.3	24.0	28.2	28.7	27.8	35.1	37.2	34.5	38.5	33.3	31.8	35.4	33.8	32.3	30.9	29.8	28.7	-1.1
Population Density:																		
Large MSA	29.8	32.2	30.3	33.3	30.6	36.0	37.2	34.5	41.1	36.0	37.5	32.4	30.1	36.2	34.4	37.4	37.1	-0.3
Other MSA	27.4	30.4	26.5	34.9	38.0	34.6	38.9	34.9	33.8	35.4	37.0	35.6	37.7	37.8	36.3	31.7	29.2	-2.5
Non-MSA	30.0	32.7	28.1	34.3	32.4	33.4	33.9	33.3	34.0	33.9	32.3	34.3	37.4	34.2	30.2	34.1	34.1	-0.1
Parental Education: <sup>a</sup>																		
1.0–2.0 (Low)	25.4	29.1	23.6	26.8	24.7	27.7	33.5	35.3	30.8	28.2	29.4	27.6	29.5	30.9	30.2	27.1	33.3	+6.2
2.5–3.0	29.9	29.4	28.2	34.8	37.5	31.8	33.5	33.7	28.7	36.3	33.5	35.2	34.0	33.0	36.7	33.7	30.8	-2.9
3.5–4.0	29.0	34.1	25.8	32.4	34.7	36.4	40.6	32.7	40.0	35.4	37.3	35.7	38.2	33.8	34.7	33.2	33.1	-0.1
4.5–5.0	25.9	32.2	29.3	35.7	30.1	35.8	38.2	33.4	35.2	38.3	38.2	36.5	36.4	43.3	33.8	37.3	30.3	-7.0
5.5–6.0 (High)	33.1	29.9	32.0	41.1	42.1	40.4	38.3	40.8	47.8	34.5	38.8	33.0	36.6	38.4	35.9	39.4	37.5	-1.9
Race (2-year average): <sup>b</sup>																		
White	32.9	32.5	32.6	34.1	37.2	38.5	39.5	37.6	37.2	38.8	38.9	37.8	37.8	39.8	39.5	37.5	35.2	-2.3
African American	15.1	17.5	17.1	17.9	24.9	20.4	17.6	21.5	22.2	22.1	22.0	23.0	23.7	25.3	23.0	21.6	23.7	+2.1
Hispanic	29.2	28.9	26.3	27.4	29.4	28.1	31.7	36.6	36.3	36.0	36.3	33.3	29.6	30.2	28.4	27.5	29.3	+1.8

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.



**TABLE D-81**  
**Liquor: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Subgroups in Grade 12**

	Percentage reporting 5+ drinks in a row on one or more occasions																
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
<i>Approximate wtd. N =</i>	—	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	—	19.8	19.9	22.0	22.8	23.0	21.3	23.8	22.0	21.3	19.6	21.4	20.5	18.2	20.0	16.8	17.4
Gender:																	
Male	—	23.3	21.1	24.4	26.3	26.1	23.0	25.8	26.4	24.6	20.9	24.7	25.0	20.3	24.5	20.7	20.5
Female	—	16.1	18.5	19.6	19.8	20.2	19.7	21.9	17.8	18.2	18.2	18.6	16.2	16.6	15.7	12.8	14.4
College Plans:																	
None or under 4 years	—	23.8	23.4	26.7	24.2	26.5	26.4	26.9	25.7	24.7	22.0	24.0	24.5	20.7	23.7	17.3	21.7
Complete 4 years	—	15.8	16.8	17.9	21.5	19.7	18.0	21.8	19.2	19.2	18.4	19.9	18.6	17.2	18.6	16.4	15.8
Region:																	
Northeast	—	24.9	20.2	21.8	28.8	27.2	25.0	26.1	24.7	24.9	23.8	20.1	22.3	17.4	23.7	18.0	21.3
Midwest	—	22.1	23.3	24.0	23.0	23.7	22.9	27.5	24.0	24.1	19.3	25.9	21.9	23.1	21.4	17.7	19.0
South	—	16.0	16.4	22.5	20.6	22.1	18.0	19.6	20.7	20.2	17.0	19.1	18.7	15.2	18.6	15.4	15.3
West	—	14.8	19.2	16.2	18.5	18.2	19.2	20.1	17.0	15.3	19.8	19.6	19.6	17.2	17.5	16.5	15.2
Population Density:																	
Large MSA	—	20.3	18.3	20.5	22.6	22.8	22.6	26.1	24.3	21.1	18.7	21.7	20.3	16.8	18.4	17.9	16.4
Other MSA	—	19.9	21.8	21.4	23.4	23.9	20.7	22.2	21.8	20.1	19.6	19.7	20.8	19.8	19.1	16.4	17.5
Non-MSA	—	19.4	18.8	23.8	22.3	22.1	21.2	24.1	20.5	23.0	20.2	23.9	20.2	16.6	23.7	16.8	18.1
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	—	22.0	18.1	20.9	19.1	22.0	24.3	21.0	21.5	21.0	19.6	19.0	20.6	19.9	17.6	18.0	19.9
2.5–3.0	—	22.8	20.4	23.7	23.6	23.9	21.3	24.7	23.6	25.5	20.4	24.2	21.2	21.6	18.1	16.4	18.1
3.5–4.0	—	17.4	21.5	22.0	22.9	20.5	24.9	25.2	19.9	19.7	18.1	20.1	18.1	15.7	23.2	15.0	18.6
4.5–5.0	—	18.0	16.7	18.6	24.7	24.8	14.7	21.3	22.6	20.0	20.2	20.4	21.8	16.7	20.9	18.5	16.4
5.5–6.0 (High)	—	14.0	24.9	22.5	23.2	23.6	19.5	28.1	20.4	17.5	20.6	22.0	22.2	16.4	16.3	19.4	13.3
Race (2-year average): <sup>b</sup>																	
White	—	—	20.5	22.1	23.6	24.1	23.3	24.2	24.5	23.0	22.0	22.0	22.6	21.3	21.0	20.7	19.0
African American	—	—	10.5	7.7	8.4	11.1	10.6	8.6	10.9	11.2	8.0	7.5	6.2	7.2	10.4	9.6	6.8
Hispanic	—	—	25.5	26.8	25.9	22.9	25.3	26.7	24.5	21.4	20.9	20.8	21.9	19.0	14.6	11.9	13.4

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of five forms in 1976–1988;  $N$  is one fifth of  $N$  indicated in Table D-109. Data based on one of six forms beginning in 1989;  $N$  is one sixth of  $N$  indicated in Table D-109.

**Caution:** Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.

(Table continued on next page.)

**TABLE D-81 (cont.)**  
**Liquor: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Subgroups in Grade 12**

	Percentage reporting 5+ drinks in a row on one or more occasions																	2007– 2008 change
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	16.0	18.2	17.1	20.2	21.6	21.1	23.6	22.3	23.8	22.7	25.6	21.1	23.8	25.0	23.3	22.9	22.1	-0.8
Gender:																		
Male	20.0	24.6	22.4	24.7	24.6	23.9	27.3	27.6	30.8	26.4	27.2	24.1	29.2	28.5	24.7	24.4	24.0	-0.4
Female	12.6	13.2	12.6	16.2	17.7	18.7	20.0	16.1	17.4	18.8	23.6	18.9	18.2	22.0	22.0	21.5	20.3	-1.2
College Plans:																		
None or under 4 years	21.4	24.6	19.1	22.5	21.1	23.4	31.2	23.2	26.4	29.2	31.9	23.0	29.2	32.6	27.1	26.5	29.3	+2.7
Complete 4 years	14.1	16.5	16.6	19.2	21.4	20.6	21.7	21.9	22.9	20.7	23.7	20.5	22.1	23.7	22.6	22.1	20.5	-1.6
Region:																		
Northeast	14.8	15.1	14.2	19.2	25.4	24.6	29.8	25.5	24.7	27.9	27.8	23.5	28.2	28.7	29.0	31.2	23.2	-8.0
Midwest	19.0	18.9	17.7	21.5	22.0	20.6	23.6	19.9	29.7	21.5	28.1	24.8	23.4	28.3	26.2	26.7	23.4	-3.3
South	15.5	21.7	17.6	21.8	21.9	20.0	21.7	21.7	17.4	20.4	24.3	17.4	21.6	22.8	20.5	19.0	21.2	+2.2
West	13.7	13.6	18.0	16.4	16.3	20.5	22.3	23.6	26.1	24.3	22.7	20.7	23.4	21.2	19.8	19.0	21.3	+2.3
Population Density:																		
Large MSA	15.6	16.8	16.1	19.3	19.5	23.0	23.9	21.4	26.6	23.6	25.8	20.0	20.7	25.3	22.6	26.0	24.0	-2.0
Other MSA	15.2	17.3	16.3	20.3	24.9	21.3	25.1	22.8	21.7	22.2	26.3	21.9	24.6	26.2	25.0	21.4	20.3	-1.1
Non-MSA	17.9	20.7	19.5	21.1	17.7	18.7	20.3	22.2	24.1	22.6	24.0	21.2	25.5	22.5	21.0	21.6	23.8	+2.2
Parental Education: <sup>a</sup>																		
1.0–2.0 (Low)	15.9	20.7	14.4	15.2	14.7	16.7	23.9	25.5	24.4	15.2	18.4	17.9	17.8	18.5	19.1	18.8	16.9	-1.9
2.5–3.0	17.9	18.3	18.5	19.7	22.1	18.3	21.3	20.7	17.8	25.4	24.2	24.2	25.9	22.1	22.7	22.0	20.1	-1.9
3.5–4.0	15.9	19.7	16.2	20.7	20.4	23.3	25.4	23.6	25.8	21.8	24.4	21.1	26.2	23.5	26.1	24.3	22.8	-1.4
4.5–5.0	13.5	17.4	17.7	21.6	18.0	22.2	24.3	20.6	24.5	24.9	29.0	21.0	22.2	29.8	24.5	24.1	22.0	-2.1
5.5–6.0 (High)	16.5	16.0	18.8	22.0	31.3	23.5	23.0	22.8	30.4	22.4	31.0	21.0	20.3	28.7	20.3	24.1	25.5	+1.4
Race (2-year average): <sup>b</sup>																		
White	18.0	18.7	19.4	20.4	22.3	23.4	24.7	24.4	24.3	25.3	26.3	25.4	24.6	26.9	27.5	25.8	23.9	-1.9
African American	7.1	8.9	9.5	11.3	15.4	12.5	9.9	10.4	10.2	12.8	14.6	14.9	15.8	17.2	14.9	13.7	17.1	+3.4
Hispanic	19.4	18.1	16.8	18.1	18.9	20.0	22.2	24.3	25.2	24.0	24.0	21.1	18.9	20.6	18.4	17.6	19.1	+1.5

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-82**  
**Wine: Trends in 30-Day Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 30 days																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988<sup>a</sup></u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	—	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	—	34.5	37.4	37.7	36.6	39.5	36.6	37.8	36.0	34.1	36.0	34.5	33.5	22.7	19.7	14.7	16.1
Gender:																	
Male	—	34.1	35.5	34.8	33.9	38.1	35.3	35.6	33.8	30.3	34.2	30.8	29.3	20.7	18.9	16.1	16.9
Female	—	34.5	39.1	40.2	39.0	41.1	38.2	39.9	37.7	38.1	37.4	38.1	37.1	24.3	20.4	13.5	15.5
College Plans:																	
None or under 4 years	—	31.5	33.1	33.8	33.8	37.1	32.8	36.3	34.5	33.7	34.6	31.5	28.2	19.7	18.6	11.9	16.1
Complete 4 years	—	38.0	41.4	41.5	38.5	41.0	39.1	39.5	37.2	34.0	37.3	36.2	35.7	24.0	20.5	16.0	16.4
Region:																	
Northeast	—	45.2	42.6	47.5	45.3	48.0	51.6	51.4	46.0	41.5	43.9	32.0	35.6	27.7	22.1	15.0	22.1
Midwest	—	33.8	36.3	40.8	33.8	36.6	38.5	38.9	36.0	34.3	34.1	41.0	34.0	23.0	23.7	13.4	17.3
South	—	27.5	34.2	30.2	30.8	34.8	26.3	27.7	30.9	29.5	30.7	28.1	31.7	18.9	17.4	14.5	11.8
West	—	34.0	38.1	32.7	40.8	42.4	31.6	32.5	32.4	34.7	38.4	38.1	33.8	24.5	16.0	16.9	16.2
Population Density:																	
Large MSA	—	46.6	47.0	45.6	44.2	46.9	46.0	46.3	45.0	36.7	40.7	36.6	35.3	27.6	20.6	15.3	13.9
Other MSA	—	33.0	36.5	36.8	36.0	42.1	34.6	36.6	32.4	34.0	36.4	36.0	34.9	22.0	20.5	16.8	17.8
Non-MSA	—	28.0	31.4	32.8	31.9	31.0	32.4	32.8	33.8	32.3	31.7	30.7	29.2	19.3	16.7	9.9	15.1
Parental Education: <sup>b</sup>																	
1.0–2.0 (Low)	—	33.4	30.1	32.3	31.4	28.0	28.0	30.2	26.6	28.3	28.6	28.0	23.9	16.4	19.0	9.5	10.8
2.5–3.0	—	33.8	32.8	35.3	33.0	38.0	33.2	33.8	35.3	34.0	32.4	31.3	30.7	17.8	15.6	12.4	16.0
3.5–4.0	—	36.9	42.0	40.2	38.2	39.6	37.2	42.0	32.9	35.9	36.9	37.1	31.5	23.4	18.8	14.2	16.4
4.5–5.0	—	39.6	42.5	40.8	43.6	45.2	41.5	43.4	46.1	37.1	43.1	36.3	39.7	26.5	24.1	18.9	17.5
5.5–6.0 (High)	—	48.4	57.3	49.8	46.7	51.7	52.9	47.5	43.2	33.9	42.6	40.1	40.9	31.4	23.5	19.3	19.4
Race (2-year average): <sup>c</sup>																	
White	—	—	35.9	38.1	38.1	39.2	40.2	39.6	38.4	36.5	36.7	37.1	35.7	29.9	23.0	18.6	16.6
African American	—	—	36.2	30.8	27.4	27.9	24.9	26.0	28.9	24.4	21.3	21.0	21.8	18.4	15.0	11.2	10.2
Hispanic	—	—	42.9	38.5	30.0	31.0	27.3	26.8	28.3	30.9	37.0	37.4	33.0	22.2	15.0	14.2	10.9

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of five forms in 1976–1988;  $N$  is one fifth of  $N$  indicated in Table D-109. Data based on one of six forms beginning in 1989;  $N$  is one sixth of  $N$  indicated in Table D-109.

**Caution: Limited sample sizes (see "Notes" above). Use caution in interpreting subgroup trends.**

(Table continued on next page.)

**TABLE D-82 (cont.)**  
**Wine: Trends in 30-Day Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 30 days																	2007– 2008 change	
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	16.9	14.9	14.2	14.3	18.3	17.0	16.0	15.8	16.2	14.1	13.4	13.4	13.9	14.4	12.6	14.1	14.0	0.0	
Gender:																			
Male	17.2	15.9	13.8	13.2	18.1	16.7	17.4	17.6	17.7	12.8	13.2	13.9	13.8	13.8	11.6	12.1	13.4	+1.3	
Female	16.6	13.9	14.3	15.3	18.2	17.3	15.0	14.4	15.0	15.5	13.2	13.5	14.1	15.1	13.6	15.3	14.4	-0.9	
College Plans:																			
None or under 4 years	12.6	16.5	11.7	10.6	14.5	14.2	19.0	11.9	12.0	15.9	11.7	13.8	12.7	14.4	13.9	13.1	17.3	+4.2	
Complete 4 years	18.4	14.4	14.8	15.3	19.3	18.0	15.3	16.8	17.1	13.3	13.7	13.5	14.5	14.3	11.9	14.4	13.4	-0.9	
Region:																			
Northeast	18.5	15.2	15.9	14.2	23.4	19.4	18.7	23.5	20.8	19.2	17.3	12.5	18.2	15.2	13.9	17.6	17.0	-0.6	
Midwest	21.9	14.0	14.3	14.3	13.1	14.2	17.7	16.2	11.9	13.5	14.9	13.5	13.0	15.3	13.9	14.1	13.9	-0.2	
South	11.0	16.7	13.0	15.9	20.0	17.7	13.8	14.6	17.2	13.9	12.7	14.0	12.6	13.4	12.1	13.9	13.3	-0.6	
West	18.3	13.0	15.0	11.6	16.8	17.1	15.9	11.2	15.9	11.3	9.8	13.5	12.8	14.1	10.7	11.5	13.3	+1.9	
Population Density:																			
Large MSA	17.0	20.0	16.8	14.8	19.5	18.2	19.5	17.4	20.4	16.7	17.2	11.1	12.5	16.9	15.0	16.7	18.8	+2.1	
Other MSA	19.0	15.0	14.4	15.1	18.6	18.2	15.9	16.5	14.6	11.5	11.8	15.0	15.4	14.0	12.8	13.5	13.0	-0.5	
Non-MSA	12.6	11.3	11.3	12.4	16.6	13.6	12.3	13.3	14.2	15.6	11.9	13.5	12.8	12.2	8.9	11.3	11.0	-0.2	
Parental Education: <sup>b</sup>																			
1.0–2.0 (Low)	11.7	14.3	9.8	13.5	9.7	13.1	14.6	16.7	19.7	12.3	14.8	9.4	12.8	10.9	4.0	9.9	11.3	+1.4	
2.5–3.0	13.9	12.1	13.6	10.2	15.2	13.8	10.2	10.5	10.4	13.6	8.6	13.1	10.9	13.4	10.6	9.0	11.9	+2.9	
3.5–4.0	15.4	14.3	11.7	10.5	17.9	15.7	15.1	11.5	14.6	10.2	13.1	13.1	15.6	12.2	11.4	15.3	13.3	-2.0	
4.5–5.0	19.2	17.7	14.6	18.1	18.0	18.0	20.8	19.6	16.2	19.1	15.4	15.5	14.1	16.8	15.5	16.4	13.7	-2.8	
5.5–6.0 (High)	27.1	16.5	23.8	24.9	27.2	29.1	20.0	29.8	29.1	16.7	19.0	15.8	18.3	18.2	18.4	19.9	17.2	-2.7	
Race (2-year average): <sup>c</sup>																			
White	17.4	16.2	14.4	14.4	16.8	19.3	18.1	16.6	16.4	15.9	15.2	14.5	14.7	15.5	15.6	15.4	14.3	-1.1	
African American	11.7	14.5	17.6	13.6	12.8	11.1	9.9	9.3	9.5	10.9	8.5	8.0	7.9	7.8	6.1	6.5	11.2	+4.7	
Hispanic	14.9	14.3	14.2	15.0	13.8	13.5	13.4	16.4	17.9	12.9	9.4	12.2	13.5	13.1	10.5	11.0	15.7	+4.7	

<sup>a</sup>In the 1988 questionnaires, a question on the use of wine coolers was added. This change may account for the discontinuity between the 1987 and 1988 use rates for wine.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-83**  
**Wine: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Subgroups in Grade 12**

	Percentage reporting 5+ drinks in a row on one or more occasions																
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 <sup>a</sup>	1989	1990	1991
<i>Approximate wtd. N =</i>	—	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	—	12.5	13.1	13.5	12.9	13.2	13.0	14.9	14.3	13.0	12.8	13.8	12.7	7.8	6.8	4.9	5.8
Gender:																	
Male	—	14.5	13.9	14.3	13.9	13.3	12.2	12.6	14.4	12.6	12.9	12.4	12.3	7.8	6.1	5.5	7.1
Female	—	10.4	12.1	12.8	12.0	12.8	13.5	16.8	13.9	13.1	12.5	14.6	12.8	7.7	7.3	4.3	4.6
College Plans:																	
None or under 4 years	—	14.1	14.6	14.6	14.8	15.3	13.2	16.1	15.7	14.4	13.9	14.6	13.7	9.5	9.0	5.1	8.0
Complete 4 years	—	10.4	11.6	12.7	11.4	11.3	12.6	13.9	13.2	11.9	11.9	13.3	12.0	7.1	6.0	4.9	5.3
Region:																	
Northeast	—	14.8	14.8	15.0	16.4	18.2	17.9	18.3	19.1	16.9	15.7	11.5	10.7	8.1	7.4	3.6	7.1
Midwest	—	13.8	12.9	15.4	12.6	12.2	13.9	16.0	13.6	14.1	12.3	17.2	13.5	7.8	6.9	3.9	5.6
South	—	10.1	11.8	11.7	11.8	11.6	10.0	12.4	12.5	11.0	10.9	12.9	13.1	6.8	6.7	5.4	5.1
West	—	10.8	13.4	10.9	10.4	11.6	9.8	12.0	13.1	10.9	13.3	12.2	13.2	9.5	6.3	7.0	6.0
Population Density:																	
Large MSA	—	17.0	14.9	14.7	14.3	14.9	16.8	17.9	17.1	14.1	14.0	13.5	11.0	9.7	6.1	4.4	5.3
Other MSA	—	11.4	13.0	12.5	11.8	13.2	11.6	13.3	12.6	12.4	13.7	13.8	13.6	7.8	8.0	4.9	6.5
Non-MSA	—	10.7	11.8	14.0	13.1	12.0	11.8	14.7	14.4	13.0	10.6	13.9	12.9	6.0	4.8	5.2	4.9
Parental Education: <sup>b</sup>																	
1.0–2.0 (Low)	—	14.0	16.4	14.9	12.7	10.2	13.7	15.7	12.1	12.8	11.9	14.7	12.2	8.2	8.3	4.6	5.7
2.5–3.0	—	13.4	12.0	13.7	12.4	15.4	13.1	12.1	16.8	14.6	12.1	13.6	13.0	7.2	6.2	5.4	6.8
3.5–4.0	—	11.7	14.0	12.2	10.3	13.0	13.4	16.7	12.4	15.0	13.1	14.9	12.1	7.5	6.3	5.4	6.5
4.5–5.0	—	12.4	9.4	12.9	16.5	12.7	11.2	14.9	14.4	10.2	13.4	12.2	13.3	7.7	8.0	4.3	4.9
5.5–6.0 (High)	—	14.4	15.4	15.0	16.5	12.0	14.2	21.2	12.5	7.7	14.5	12.9	12.3	9.5	5.0	4.4	3.5
Race (2-year average): <sup>c</sup>																	
White	—	—	12.0	13.1	13.4	13.1	13.4	14.4	14.8	13.8	13.3	13.6	13.4	10.4	7.5	6.0	5.3
African American	—	—	16.7	12.6	10.8	10.4	9.0	10.0	11.4	10.1	8.3	8.3	7.6	8.3	7.8	4.7	5.1
Hispanic	—	—	19.3	14.7	9.7	9.5	15.3	15.1	15.8	14.3	13.4	16.1	14.7	8.4	5.1	6.4	4.3

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of five forms in 1976–1988;  $N$  is one fifth of  $N$  indicated in Table D-109. Data based on one of six forms beginning in 1989;  $N$  is one sixth of  $N$  indicated in Table D-109.

**Caution:** Limited sample sizes (see "Notes" above). Use caution in interpreting subgroup trends.

(Table continued on next page.)

**TABLE D-83 (cont.)**  
**Wine: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Subgroups in Grade 12**

	Percentage reporting 5+ drinks in a row on one or more occasions																	2007– 2008 change
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	5.7	5.8	4.9	5.8	7.0	6.4	6.4	5.0	5.4	5.9	4.7	5.0	4.9	5.4	4.4	5.1	5.0	-0.1
Gender:																		
Male	6.5	7.2	4.9	6.1	8.3	6.9	6.9	6.5	7.3	5.8	4.6	5.7	6.2	5.1	4.9	4.7	4.8	+0.1
Female	4.5	4.4	4.9	5.6	5.7	6.1	5.8	3.8	3.6	5.3	4.1	4.3	3.5	5.6	4.1	5.6	5.1	-0.5
College Plans:																		
None or under 4 years	6.7	8.3	4.0	6.1	5.7	8.7	9.6	5.0	4.2	7.8	6.4	7.0	5.2	7.1	6.0	5.4	7.7	+2.3
Complete 4 years	5.4	5.1	5.3	5.4	7.2	5.7	5.5	5.1	5.6	5.2	4.1	4.5	4.8	4.8	4.0	5.1	4.3	-0.8
Region:																		
Northeast	4.5	3.4	4.2	5.9	10.2	6.6	8.0	5.4	5.9	8.3	5.3	4.1	4.6	5.2	5.6	8.3	4.2	-4.1 s
Midwest	7.2	4.6	4.6	6.3	5.7	5.5	6.4	6.4	5.3	4.5	4.6	5.5	5.1	6.1	5.0	4.9	6.2	+1.3
South	4.1	8.2	4.7	6.9	6.7	7.2	5.7	5.0	5.2	5.8	3.9	5.4	4.9	5.1	3.6	4.4	4.7	+0.3
West	7.1	5.3	6.5	3.0	6.1	6.3	6.5	3.2	5.5	6.1	5.8	4.5	4.9	5.3	4.1	4.1	4.8	+0.7
Population Density:																		
Large MSA	6.1	5.4	4.7	5.6	9.6	7.3	6.6	5.3	6.7	5.5	5.4	4.1	5.3	5.8	5.3	6.4	4.2	-2.2
Other MSA	5.8	6.8	6.2	5.4	7.0	6.4	6.6	4.2	5.4	5.4	3.2	5.0	4.6	5.3	3.9	5.3	5.4	0.0
Non-MSA	5.1	4.5	3.2	6.6	4.9	5.6	5.8	6.2	3.9	7.0	6.7	5.9	5.0	5.2	4.1	2.9	5.2	+2.2
Parental Education: <sup>b</sup>																		
1.0–2.0 (Low)	8.0	12.4	4.9	6.1	4.2	5.2	10.7	8.2	11.3	8.0	8.2	6.8	6.4	5.6	4.3	2.3	5.1	+2.8
2.5–3.0	4.8	5.3	3.8	5.6	6.5	6.8	6.0	3.5	3.7	5.6	4.6	6.6	4.4	5.3	2.8	3.1	5.2	+2.1
3.5–4.0	4.1	4.3	5.5	4.2	7.1	4.8	5.7	4.1	5.3	4.7	4.5	4.6	6.5	4.6	3.6	6.5	5.2	-1.3
4.5–5.0	6.1	6.0	3.7	5.6	4.4	8.1	7.6	4.7	4.8	7.2	4.4	4.1	4.1	4.7	5.2	5.3	3.9	-1.4
5.5–6.0 (High)	8.3	4.4	8.4	11.1	13.0	8.2	4.5	8.8	6.5	5.5	4.4	4.2	4.2	8.1	7.3	7.5	4.5	-3.0
Race (2-year average): <sup>c</sup>																		
White	5.5	5.0	4.8	5.2	6.2	6.9	6.5	5.4	4.7	4.8	4.9	5.0	4.9	5.1	5.2	5.2	4.9	-0.3
African American	5.1	7.6	7.5	4.0	4.9	5.1	5.3	4.5	5.2	6.5	5.0	4.3	3.5	2.3	1.7	2.6	3.8	+1.2
Hispanic	7.5	7.8	7.2	7.3	7.6	7.6	7.1	7.8	7.8	7.8	4.7	3.5	5.2	5.0	3.9	4.4	5.6	+1.2

<sup>a</sup>In the 1988 questionnaires, a question on the use of wine coolers was added. This change may account for the discontinuity between the 1987 and 1988 use rates for wine.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-84**  
**Wine Coolers: Trends in 30-Day Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 30 days																	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	—	—	—	—	—
Total	14.8	15.1	16.1	15.9	15.3	17.5	15.9	15.6	16.5	14.8	15.3	12.9	12.4	—	—	—	—	—
Gender:																		
Male	14.7	13.8	16.2	15.8	14.6	16.1	14.5	15.4	16.7	13.4	14.2	11.9	10.2	—	—	—	—	—
Female	14.6	16.2	16.0	16.2	15.6	18.7	16.9	15.8	16.3	15.9	15.9	13.3	14.3	—	—	—	—	—
College Plans:																		
None or under 4 years	21.2	23.9	30.6	28.1	25.3	28.7	32.1	27.3	31.9	28.5	31.6	21.1	24.2	—	—	—	—	—
Complete 4 years	13.7	14.0	14.3	14.5	14.1	15.7	14.0	14.3	14.7	13.3	13.4	12.2	11.1	—	—	—	—	—
Region:																		
Northeast	9.8	11.5	12.7	15.8	15.0	17.7	14.5	15.7	15.4	13.5	17.7	11.8	10.9	—	—	—	—	—
Midwest	14.5	14.6	15.7	15.0	13.9	18.5	16.1	16.2	17.6	17.0	14.8	12.1	15.5	—	—	—	—	—
South	17.4	18.1	17.8	16.7	17.0	17.5	16.6	16.2	18.6	14.6	16.8	15.0	12.7	—	—	—	—	—
West	14.8	14.2	17.3	15.9	13.9	16.0	15.3	14.0	12.7	13.3	11.4	11.3	8.9	—	—	—	—	—
Population Density:																		
Large MSA	14.1	16.4	12.7	14.4	11.1	16.5	14.1	14.0	14.0	12.9	12.3	12.1	10.4	—	—	—	—	—
Other MSA	14.6	15.4	17.4	17.8	16.1	18.2	15.7	15.4	16.8	14.5	15.4	12.7	12.3	—	—	—	—	—
Non-MSA	15.8	13.4	17.3	13.2	15.8	17.3	17.9	17.6	18.9	17.5	18.3	14.4	14.7	—	—	—	—	—
Parental Education: <sup>a</sup>																		
1.0–2.0 (Low)	19.3	18.7	18.5	21.1	20.4	21.7	22.2	20.7	30.2	22.1	25.1	22.8	18.2	—	—	—	—	—
2.5–3.0	16.9	16.6	19.9	17.7	17.6	20.2	19.2	17.8	19.7	18.1	19.7	14.3	15.4	—	—	—	—	—
3.5–4.0	12.9	16.8	17.2	18.4	15.7	18.4	16.8	16.6	17.5	14.3	19.6	15.7	15.8	—	—	—	—	—
4.5–5.0	13.9	11.8	13.5	12.0	12.5	15.4	11.9	13.6	13.1	11.8	9.0	9.8	8.1	—	—	—	—	—
5.5–6.0 (High)	13.5	12.5	11.9	14.7	13.2	13.8	13.5	14.2	11.4	12.1	8.2	9.0	8.7	—	—	—	—	—
Race (2-year average): <sup>b</sup>																		
White	—	14.4	15.1	15.1	14.9	16.4	16.5	15.4	16.0	15.9	15.0	14.0	12.6	—	—	—	—	—
African American	—	13.7	13.3	14.4	12.7	12.2	14.7	12.8	12.8	13.1	12.0	9.8	9.6	—	—	—	—	—
Hispanic	—	21.9	23.2	23.4	24.4	22.9	21.3	21.2	22.4	21.1	18.5	18.9	18.8	—	—	—	—	—

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of two forms in 1991–1996;  $N$  is one half of  $N$  indicated in Table D-107. Data based on one of four forms beginning in 1997;  $N$  is one third of  $N$  indicated in Table D-107.

The category of wine coolers was dropped from the 8th- and 10th-grade questionnaires in 2004 to make space for a more general class of flavored alcoholic beverages.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

**TABLE D-85**  
**Wine Coolers: Trends in 30-Day Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 30 days																	
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	—	—	—	—	—
Total	24.0	21.5	22.5	21.8	20.8	22.8	22.1	20.9	22.1	21.2	20.8	18.9	17.2	—	—	—	—	—
Gender:																		
Male	23.9	19.8	20.5	21.9	19.4	21.8	20.6	19.0	20.5	19.6	19.8	16.0	14.8	—	—	—	—	—
Female	24.1	22.9	24.3	21.6	21.9	23.6	23.4	22.0	23.4	22.6	21.7	21.6	19.5	—	—	—	—	—
College Plans:																		
None or under 4 years	31.1	26.7	27.6	28.4	28.9	33.0	28.4	29.3	33.4	32.6	31.6	30.2	23.8	—	—	—	—	—
Complete 4 years	22.5	20.5	21.4	20.4	19.4	21.0	21.1	19.3	20.3	19.5	19.1	17.2	16.2	—	—	—	—	—
Region:																		
Northeast	23.2	19.0	24.1	21.6	18.5	20.3	21.0	19.1	21.7	18.8	21.5	18.1	18.7	—	—	—	—	—
Midwest	23.0	20.2	20.4	21.6	20.6	21.9	20.9	19.1	21.1	20.6	20.2	19.2	15.3	—	—	—	—	—
South	26.0	23.3	23.6	23.0	22.9	25.0	23.4	22.5	24.0	23.3	21.4	17.7	16.9	—	—	—	—	—
West	23.0	22.7	23.0	20.2	19.2	22.3	22.4	22.0	20.3	20.7	19.6	21.5	18.2	—	—	—	—	—
Population Density:																		
Large MSA	23.1	21.6	21.5	21.2	16.4	19.3	20.2	16.9	23.1	19.8	19.9	17.4	17.0	—	—	—	—	—
Other MSA	23.8	22.3	22.4	22.6	20.7	23.7	22.2	21.9	21.3	19.7	19.7	18.7	16.4	—	—	—	—	—
Non-MSA	25.1	20.0	23.6	20.4	23.7	24.6	23.8	23.2	22.6	25.6	23.7	21.2	19.5	—	—	—	—	—
Parental Education: <sup>a</sup>																		
1.0–2.0 (Low)	25.9	24.4	27.4	24.4	27.7	25.4	21.1	22.6	26.3	23.8	22.2	20.3	23.4	—	—	—	—	—
2.5–3.0	26.8	21.3	22.3	22.4	23.8	25.5	24.3	25.4	25.1	24.2	22.7	22.5	19.8	—	—	—	—	—
3.5–4.0	24.8	22.5	22.5	22.3	22.1	23.7	23.6	22.0	22.3	23.6	22.2	19.1	17.5	—	—	—	—	—
4.5–5.0	21.8	20.6	21.9	21.4	19.1	19.9	21.2	15.6	17.5	19.4	17.7	18.2	15.4	—	—	—	—	—
5.5–6.0 (High)	20.7	20.5	20.2	17.8	14.5	21.3	18.5	18.5	21.2	14.2	20.3	13.7	13.3	—	—	—	—	—
Race (2-year average): <sup>b</sup>																		
White	—	23.0	21.9	22.1	21.2	21.7	22.6	21.7	21.6	21.9	21.2	20.3	18.1	—	—	—	—	—
African American	—	19.9	19.3	20.6	20.0	16.6	16.1	17.6	17.0	18.1	18.3	15.3	15.2	—	—	—	—	—
Hispanic	—	26.3	26.2	24.7	24.9	28.1	28.0	24.1	24.5	25.2	24.5	22.3	21.7	—	—	—	—	—

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of two forms in 1991–1996;  $N$  is one half of  $N$  indicated in Table D-108. Data based on one of four forms beginning in 1997;  $N$  is one third of  $N$  indicated in Table D-108.

The category of wine coolers was dropped from the 8th- and 10th-grade questionnaires in 2004 to make space for a more general class of flavored alcoholic beverages.

**Caution: Limited sample sizes (see "Notes" above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.



**TABLE D-86**  
**Wine Coolers: Trends in 30-Day Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 30 days																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	16,300	16,700	15,200	15,000
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	36.6	29.4	26.2	24.3
Gender:																	
Male	—	—	—	—	—	—	—	—	—	—	—	—	—	30.8	25.5	22.7	22.1
Female	—	—	—	—	—	—	—	—	—	—	—	—	—	41.5	33.6	29.8	26.3
College Plans:																	
None or under 4 years	—	—	—	—	—	—	—	—	—	—	—	—	—	38.2	30.9	29.2	29.3
Complete 4 years	—	—	—	—	—	—	—	—	—	—	—	—	—	35.9	28.6	24.9	22.8
Region:																	
Northeast	—	—	—	—	—	—	—	—	—	—	—	—	—	33.8	29.6	29.2	21.0
Midwest	—	—	—	—	—	—	—	—	—	—	—	—	—	37.9	33.0	28.6	26.1
South	—	—	—	—	—	—	—	—	—	—	—	—	—	33.6	25.7	22.9	23.1
West	—	—	—	—	—	—	—	—	—	—	—	—	—	42.7	31.3	24.7	26.3
Population Density:																	
Large MSA	—	—	—	—	—	—	—	—	—	—	—	—	—	37.7	28.6	25.9	20.9
Other MSA	—	—	—	—	—	—	—	—	—	—	—	—	—	37.1	31.1	28.7	28.1
Non-MSA	—	—	—	—	—	—	—	—	—	—	—	—	—	34.6	26.4	21.1	20.6
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	—	—	—	—	—	—	—	—	—	—	—	—	—	28.8	27.7	22.9	24.0
2.5–3.0	—	—	—	—	—	—	—	—	—	—	—	—	—	37.8	31.9	28.1	25.4
3.5–4.0	—	—	—	—	—	—	—	—	—	—	—	—	—	38.5	31.2	27.1	27.2
4.5–5.0	—	—	—	—	—	—	—	—	—	—	—	—	—	35.6	27.6	27.6	22.1
5.5–6.0 (High)	—	—	—	—	—	—	—	—	—	—	—	—	—	36.9	23.5	21.5	18.0
Race (2-year average): <sup>b</sup>																	
White	—	—	—	—	—	—	—	—	—	—	—	—	—	—	35.4	29.6	26.7
African American	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25.3	21.7	20.9
Hispanic	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.2	23.3	22.3

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of five forms in 1988;  $N$  is one fifth of  $N$  indicated in Table D-109. Data based on one of six forms beginning in 1989;  $N$  is one sixth of  $N$  indicated in Table D-109.

**Caution:** Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.

(Table continued on next page.)

**TABLE D-86 (cont.)**  
**Wine Coolers: Trends in 30-Day Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 30 days																	2007– 2008 change	
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>		
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	21.9	19.4	22.2	20.6	20.7	20.7	20.1	18.4	17.6	19.0	19.3	14.6	14.4	14.1	13.3	12.7	12.8	+0.2	
Gender:																			
Male	19.1	15.1	16.9	15.5	17.7	15.9	15.0	15.6	15.6	14.1	12.0	9.4	11.2	8.7	9.2	9.2	8.3	-0.9	
Female	24.3	22.8	26.4	25.1	23.6	24.4	23.5	20.6	19.5	22.2	24.2	18.9	17.2	18.7	17.1	16.1	16.6	+0.5	
College Plans:																			
None or under 4 years	21.9	20.5	22.8	22.7	20.0	17.8	21.8	22.8	21.2	23.1	21.8	17.2	16.7	18.6	17.5	18.0	16.8	-1.2	
Complete 4 years	22.0	19.2	22.3	19.8	20.9	21.6	19.6	17.3	16.1	17.7	18.8	14.0	13.7	13.2	12.3	11.5	12.0	+0.4	
Region:																			
Northeast	19.6	18.9	15.4	14.6	21.1	17.2	20.8	22.1	19.1	18.4	17.8	15.9	14.7	17.3	13.3	15.2	11.7	-3.5	
Midwest	23.7	19.4	26.0	19.8	20.9	21.5	18.6	19.2	18.3	19.5	20.9	15.5	11.0	13.7	13.2	11.9	12.3	+0.4	
South	21.3	20.6	23.4	24.1	23.2	22.9	20.6	18.7	16.8	19.7	20.6	13.9	16.7	13.5	14.6	13.0	15.1	+2.1	
West	22.2	17.8	19.8	20.4	14.9	18.9	20.4	13.7	16.7	17.5	16.6	13.1	14.6	12.7	10.9	10.9	10.8	0.0	
Population Density:																			
Large MSA	21.2	20.4	21.2	20.7	22.7	23.9	22.5	14.7	19.8	18.1	20.5	12.8	14.2	13.5	10.7	11.9	11.4	-0.5	
Other MSA	21.0	19.0	23.3	19.8	19.3	19.1	19.4	17.5	15.0	18.5	18.4	13.7	13.8	13.2	14.4	12.6	12.8	+0.2	
Non-MSA	24.1	19.4	21.3	21.8	21.6	20.1	18.7	23.4	19.4	20.6	19.4	18.0	15.6	16.7	14.7	13.9	14.3	+0.4	
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	25.7	20.8	23.5	21.1	18.2	13.2	19.8	19.0	24.8	19.3	18.4	13.7	21.3	15.6	12.8	18.4	17.3	-1.1	
2.5–3.0	21.2	17.1	26.4	20.4	26.8	20.0	21.4	23.2	16.3	22.8	19.6	18.1	17.2	19.8	15.6	13.1	12.8	-0.3	
3.5–4.0	22.9	24.4	20.9	22.0	19.5	23.0	23.3	17.3	21.8	18.5	17.8	14.7	16.4	12.6	15.3	13.5	12.3	-1.2	
4.5–5.0	18.0	17.2	22.8	21.0	17.0	21.4	17.9	14.3	13.6	19.0	19.4	12.4	9.1	13.6	12.7	10.8	11.1	+0.3	
5.5–6.0 (High)	24.5	16.4	14.6	16.7	20.8	21.0	16.6	19.9	16.8	14.6	23.5	10.1	13.3	9.8	9.8	11.7	12.5	+0.8	
Race (2-year average): <sup>b</sup>																			
White	23.7	21.3	21.5	21.9	20.8	21.2	21.0	19.6	18.0	18.2	19.7	16.8	13.1	13.6	14.6	13.1	11.4	-1.7	
African American	18.2	17.6	18.3	17.6	22.1	21.1	18.4	15.5	12.4	17.0	17.0	15.8	19.4	18.4	10.9	11.8	16.8	+5.0	
Hispanic	26.7	22.9	22.9	26.0	22.0	19.8	18.2	17.4	20.7	20.0	16.7	16.0	19.7	19.4	13.8	13.0	12.9	-0.2	

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-87**  
**Wine Coolers: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Subgroups in Grade 12**

	Percentage reporting 5+ drinks in a row on one or more occasions																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	16,300	16,700	15,200	15,000
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	13.9	12.4	10.5	10.2
Gender:																	
Male	—	—	—	—	—	—	—	—	—	—	—	—	—	12.1	11.3	9.9	10.0
Female	—	—	—	—	—	—	—	—	—	—	—	—	—	15.1	13.5	11.3	10.2
College Plans:																	
None or under 4 years	—	—	—	—	—	—	—	—	—	—	—	—	—	17.7	16.2	14.2	13.5
Complete 4 years	—	—	—	—	—	—	—	—	—	—	—	—	—	12.5	10.7	9.0	9.2
Region:																	
Northeast	—	—	—	—	—	—	—	—	—	—	—	—	—	14.7	14.3	10.0	7.6
Midwest	—	—	—	—	—	—	—	—	—	—	—	—	—	14.2	13.1	12.0	10.9
South	—	—	—	—	—	—	—	—	—	—	—	—	—	11.2	11.2	9.3	8.8
West	—	—	—	—	—	—	—	—	—	—	—	—	—	17.4	12.0	11.0	13.2
Population Density:																	
Large MSA	—	—	—	—	—	—	—	—	—	—	—	—	—	14.2	11.7	10.0	7.9
Other MSA	—	—	—	—	—	—	—	—	—	—	—	—	—	15.6	12.4	11.0	12.4
Non-MSA	—	—	—	—	—	—	—	—	—	—	—	—	—	10.7	13.3	9.9	8.2
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	—	—	—	—	—	—	—	—	—	—	—	—	—	13.9	9.2	10.7	12.5
2.5–3.0	—	—	—	—	—	—	—	—	—	—	—	—	—	16.6	13.8	13.3	10.9
3.5–4.0	—	—	—	—	—	—	—	—	—	—	—	—	—	13.6	14.9	9.3	12.0
4.5–5.0	—	—	—	—	—	—	—	—	—	—	—	—	—	11.7	10.5	11.3	9.2
5.5–6.0 (High)	—	—	—	—	—	—	—	—	—	—	—	—	—	11.4	7.4	6.3	3.7
Race (2-year average): <sup>b</sup>																	
White	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.6	12.3	10.7
African American	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	9.9	9.2
Hispanic	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.5	6.0	9.8

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of five forms in 1988;  $N$  is one fifth of  $N$  indicated in Table D-109. Data based on one of six forms beginning in 1989;  $N$  is one sixth of  $N$  indicated in Table D-109.

**Caution:** Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.

(Table continued on next page.)

**TABLE D-87 (cont.)**  
**Wine Coolers: Trends in 2-Week Prevalence of 5 or More Drinks in a Row by Subgroups in Grade 12**

	Percentage reporting 5+ drinks in a row on one or more occasions																	2007– 2008 change	
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>		
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	10.4	8.5	8.9	9.0	8.4	9.4	9.5	7.7	8.8	9.7	10.0	7.1	7.5	7.2	7.1	5.8	7.3	+1.5	
Gender:																			
Male	10.2	7.3	7.4	6.7	6.9	6.7	7.0	7.0	9.4	6.2	7.2	5.4	7.5	4.2	6.1	4.8	4.5	-0.3	
Female	10.3	9.5	10.0	10.8	9.7	11.3	11.0	7.8	8.4	11.4	11.4	8.2	8.0	9.7	8.0	7.0	9.6	+2.6	
College Plans:																			
None or under 4 years	11.1	10.8	10.9	12.1	8.8	10.1	9.9	10.2	12.1	14.8	13.7	8.9	10.8	11.4	11.9	11.1	8.2	-2.9	
Complete 4 years	10.1	8.0	8.6	8.0	8.3	9.2	9.5	7.0	7.4	8.2	9.2	6.7	6.8	6.2	6.0	4.7	7.0	+2.4 ss	
Region:																			
Northeast	8.8	6.5	5.5	5.5	9.8	8.2	9.6	8.9	10.1	10.2	9.8	8.0	7.5	10.7	6.9	6.1	7.4	+1.3	
Midwest	12.0	8.0	9.9	7.0	9.2	9.7	7.3	7.0	10.8	8.9	12.0	8.8	6.4	6.6	7.3	6.0	8.1	+2.1	
South	10.3	11.1	9.3	11.5	8.7	9.7	10.5	8.8	5.9	10.9	9.6	6.7	8.6	6.6	8.3	5.7	8.4	+2.7 s	
West	9.7	6.2	10.0	10.4	4.8	9.7	10.2	5.6	10.1	8.4	8.4	5.0	7.1	5.7	5.1	5.5	4.6	-0.9	
Population Density:																			
Large MSA	11.8	7.9	8.5	11.1	8.8	10.8	12.1	7.5	11.1	10.6	9.6	6.8	7.2	7.0	6.4	5.3	6.3	+1.0	
Other MSA	9.2	8.7	8.8	7.5	8.3	9.5	8.7	6.5	8.1	8.2	9.9	6.3	7.0	7.4	6.6	6.4	6.7	+0.3	
Non-MSA	11.7	8.6	9.6	9.1	8.2	7.8	7.9	9.7	7.4	11.3	10.7	8.9	8.9	7.1	9.1	5.3	9.4	+4.1 ss	
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	13.1	12.2	11.4	11.7	9.6	6.8	13.2	8.3	16.8	14.1	14.6	9.3	11.9	8.3	12.0	8.8	9.1	+0.3	
2.5–3.0	9.5	6.9	10.4	9.5	11.4	9.8	11.0	9.2	8.8	12.6	9.9	9.4	9.5	9.9	8.2	8.1	8.0	-0.1	
3.5–4.0	11.1	11.1	8.8	8.5	6.8	10.6	9.9	7.7	8.8	7.3	9.9	6.1	9.1	6.2	7.4	5.6	6.8	+1.3	
4.5–5.0	8.8	7.4	9.2	9.2	7.2	8.6	7.7	7.2	8.6	10.7	10.7	5.9	4.2	6.8	7.4	4.7	5.5	+0.8	
5.5–6.0 (High)	10.6	5.6	4.8	7.5	7.7	9.5	7.9	5.8	7.0	6.1	8.0	5.9	5.5	5.2	3.4	4.1	8.3	+4.3 s	
Race (2-year average): <sup>b</sup>																			
White	10.3	9.5	8.6	8.6	8.1	8.7	8.8	7.6	7.6	8.9	10.2	8.4	6.4	6.9	7.5	6.4	5.4	-1.0	
African American	8.7	8.6	8.6	7.5	10.4	10.0	9.2	6.9	4.2	9.6	10.0	7.8	11.7	10.5	4.6	4.9	6.6	+1.7	
Hispanic	14.5	13.5	13.1	13.9	11.1	9.8	12.0	12.6	13.2	11.5	9.1	9.3	10.6	9.4	8.0	7.9	8.1	+0.2	

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-88**  
**Flavored Alcoholic Beverages: Trends in 30-Day Prevalence of Use by Subgroups**  
**in Grades 8, 10, and 12**

	Percentage who used in last 30 days																				
	8th Graders							10th Graders							12th Graders						
	1991– 2003	2004	2005	2006	2007	2008	2007– 2008 change	1991– 2003	2004	2005	2006	2007	2008	2007– 2008 change	1991– 2003	2004	2005	2006	2007	2008	2007– 2008 change
<i>Approximate wtd. N =</i>	—	17,000	16,800	16,500	16,100	15,700		—	16,400	16,200	16,200	16,100	15,100		—	14,600	14,700	14,200	14,500	14,000	
Total	—	14.6	12.9	13.1	12.2	10.2	-2.0 ss	—	25.1	23.1	24.7	21.8	20.2	-1.6	—	31.1	30.5	29.3	29.1	27.4	-1.8
Gender:																					
Male	—	12.7	11.4	10.8	10.4	9.2	-1.2	—	24.5	20.3	22.4	18.8	17.0	-1.8	—	28.9	28.3	26.0	25.4	25.8	+0.4
Female	—	16.3	14.4	15.3	13.4	10.9	-2.5 s	—	25.6	25.8	26.9	24.7	22.9	-1.8	—	33.2	33.2	32.3	32.8	29.0	-3.8
College Plans:																					
None or under 4 years	—	28.1	24.9	25.9	23.8	24.0	+0.2	—	32.5	33.8	37.2	32.0	29.1	-2.9	—	34.7	34.2	32.9	37.0	29.0	-8.0 s
Complete 4 years	—	13.3	11.8	11.8	11.1	9.0	-2.1 ss	—	24.2	21.7	23.1	20.6	19.1	-1.5	—	30.3	29.6	28.7	27.5	26.9	-0.6
Region:																					
Northeast	—	14.9	11.0	12.2	9.7	9.2	-0.5	—	26.6	22.4	26.3	23.2	22.2	-1.0	—	33.5	38.1	29.4	36.0	33.5	-2.5
Midwest	—	16.2	12.6	12.9	12.0	10.5	-1.5	—	22.5	23.4	23.5	21.2	20.0	-1.2	—	35.3	33.4	32.2	28.5	25.8	-2.8
South	—	15.1	14.6	14.3	14.0	12.6	-1.3	—	25.6	23.7	24.5	20.0	20.3	+0.4	—	25.9	25.9	27.0	28.8	26.9	-1.9
West	—	11.7	11.9	12.0	10.9	7.2	-3.7 ss	—	26.5	22.5	25.4	23.6	19.0	-4.6 s	—	32.1	27.9	29.9	24.9	25.8	+0.9
Population Density:																					
Large MSA	—	14.4	11.5	12.6	10.6	11.1	+0.5	—	22.4	22.0	23.1	21.5	19.0	-2.5	—	27.0	29.9	32.3	30.8	28.7	-2.0
Other MSA	—	14.2	14.0	13.0	12.4	9.7	-2.8 ss	—	26.1	23.1	25.5	21.4	20.9	-0.6	—	33.4	29.9	27.7	27.8	25.8	-1.9
Non-MSA	—	15.6	12.8	13.9	14.2	10.2	-4.1 s	—	26.5	24.4	25.5	23.0	20.5	-2.5	—	30.9	32.2	28.5	29.5	29.1	-0.4
Parental Education: <sup>a</sup>																					
1.0–2.0 (Low)	—	19.5	19.5	18.7	21.1	19.3	-1.8	—	27.3	24.9	25.8	25.5	21.8	-3.8	—	28.5	22.2	30.3	34.0	24.9	-9.1
2.5–3.0	—	17.5	18.0	18.7	17.5	14.4	-3.1	—	30.5	28.1	27.9	25.8	23.4	-2.4	—	31.0	33.3	30.6	32.4	28.3	-4.1
3.5–4.0	—	17.8	16.2	13.4	12.3	11.7	-0.6	—	25.0	23.6	28.5	23.1	21.2	-1.9	—	33.6	31.7	30.9	29.9	28.4	-1.5
4.5–5.0	—	11.8	10.3	8.5	9.8	7.2	-2.6 s	—	24.9	22.6	19.9	19.7	19.0	-0.7	—	29.4	30.2	28.8	27.6	27.6	+0.1
5.5–6.0 (High)	—	11.5	7.3	9.9	7.1	6.5	-0.6	—	20.8	17.3	23.7	16.9	16.2	-0.7	—	29.8	30.2	26.4	25.3	26.6	+1.3
Race (2-year average): <sup>b</sup>																					
White	—	—	13.8	12.6	12.1	11.1	-1.1	—	—	25.7	25.1	24.0	21.8	-2.2	—	—	33.3	31.4	30.6	31.1	+0.5
African American	—	—	12.0	11.0	10.1	9.2	-0.9	—	—	16.1	15.5	15.9	15.2	-0.7	—	—	17.1	20.9	21.6	19.8	-1.8
Hispanic	—	—	17.0	17.6	16.7	13.9	-2.8	—	—	29.0	28.6	26.1	23.1	-2.9	—	—	28.6	32.2	34.5	26.2	-8.3 s

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. “—” indicates data not available. Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding. See Tables D-107 through D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

Data for 8th and 10th graders based on one of four forms; N is one third of N indicated in Tables D-107 and D-108. Data for 12th graders based on one of six forms; N is one sixth of N indicated in Table D-109.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-89**  
**Cigarettes: Trends in 30-Day Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 30 days																		2007– 2008 change	
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>		
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		
Total	14.3	15.5	16.7	18.6	19.1	21.0	19.4	19.1	17.5	14.6	12.2	10.7	10.2	9.2	9.3	8.7	7.1	6.8	-0.2	
Gender:																				
Male	15.5	14.9	17.2	19.3	18.8	20.6	19.1	18.0	16.7	14.3	12.2	11.0	9.6	8.3	8.7	8.1	7.5	6.7	-0.7	
Female	13.1	15.9	16.3	17.9	19.0	21.1	19.5	19.8	17.7	14.7	12.0	10.4	10.6	9.9	9.7	8.9	6.4	6.7	+0.3	
College Plans:																				
None or under 4 years	29.2	31.9	34.1	36.6	36.5	39.2	40.0	40.1	40.3	34.7	30.0	29.3	27.8	25.6	26.7	23.2	23.9	21.1	-2.7	
Complete 4 years	11.8	13.1	14.3	16.1	16.8	18.2	16.9	16.5	14.5	12.2	10.0	8.9	8.3	7.4	7.4	7.1	5.4	5.5	+0.1	
Region:																				
Northeast	13.7	14.4	15.0	17.8	18.6	22.1	18.0	15.6	15.7	13.7	11.4	9.1	7.7	7.2	7.8	6.7	3.7	5.9	+2.2	
Midwest	15.5	16.5	16.3	18.5	20.9	23.2	20.0	22.3	21.3	17.1	12.0	11.0	12.2	10.8	9.5	9.3	7.8	8.1	+0.2	
South	15.7	17.0	18.2	19.5	19.4	21.1	21.0	21.1	18.7	14.7	14.3	13.0	11.7	10.3	11.6	10.9	8.6	7.7	-0.9	
West	10.0	12.2	16.4	18.0	16.5	17.1	17.1	15.1	12.1	12.2	9.3	7.5	7.0	7.4	6.3	5.7	5.8	5.2	-0.6	
Population Density:																				
Large MSA	12.8	15.0	14.1	15.5	16.5	19.4	15.8	16.4	12.7	12.1	9.3	7.5	7.7	7.7	6.7	6.4	4.7	5.2	+0.5	
Other MSA	14.9	15.3	17.8	20.7	19.4	21.4	19.7	17.7	16.0	13.1	11.6	10.6	9.8	8.9	9.8	8.8	7.6	7.5	0.0	
Non-MSA	14.8	16.4	17.9	17.8	21.5	22.1	22.8	24.8	26.1	21.1	16.9	14.9	14.4	11.6	11.8	11.6	9.5	7.9	-1.6	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	26.2	24.1	23.3	26.1	25.3	26.5	26.9	26.7	26.6	22.0	20.3	20.3	17.5	15.8	16.6	14.7	13.8	12.1	-1.7	
2.5–3.0	16.4	16.9	19.8	20.6	22.7	24.4	22.4	23.9	23.5	19.6	16.4	14.5	14.8	12.2	13.4	12.5	10.2	8.7	-1.5	
3.5–4.0	13.9	14.9	17.4	20.1	20.8	21.4	20.9	21.4	17.0	14.7	12.6	10.5	9.6	9.6	10.5	8.8	7.8	7.3	-0.6	
4.5–5.0	10.1	13.3	12.5	14.9	14.9	18.4	16.2	14.2	12.3	10.2	8.3	7.8	6.7	6.7	5.9	5.5	3.9	4.7	+0.8	
5.5–6.0 (High)	11.3	11.5	13.3	15.1	14.5	17.3	15.3	13.8	12.2	9.8	6.9	5.8	6.0	5.2	4.3	4.8	2.4	4.1	+1.8 s	
Race (2-year average): <sup>b</sup>																				
White	—	16.2	17.8	18.9	20.7	22.7	22.8	21.5	20.1	17.7	14.7	12.0	10.9	10.0	9.4	9.3	8.1	7.2	-0.9	
African American	—	5.3	6.6	8.7	8.9	9.6	10.9	10.6	10.7	9.6	8.2	7.7	6.9	6.9	7.1	6.0	5.1	4.6	-0.5	
Hispanic	—	16.7	18.3	21.3	21.6	19.6	19.1	20.1	20.5	16.6	13.0	12.8	11.9	10.1	9.0	8.8	8.0	7.0	-1.0	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-90**  
**Cigarettes: Trends in 30-Day Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 30 days																	2007– 2008 change	
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100	
Total	20.8	21.5	24.7	25.4	27.9	30.4	29.8	27.6	25.7	23.9	21.3	17.7	16.7	16.0	14.9	14.5	14.0	12.3	-1.7 s
Gender:																			
Male	20.8	20.6	24.6	26.6	27.7	30.1	28.2	26.2	25.2	23.8	20.9	16.7	16.2	16.2	14.5	13.4	14.6	12.7	-1.9 s
Female	20.7	22.2	24.5	23.9	27.9	30.8	31.1	29.1	25.8	23.6	21.5	18.6	17.0	15.7	15.1	15.5	13.3	11.9	-1.4
College Plans:																			
None or under 4 years	36.5	35.0	41.9	42.2	46.3	46.2	47.2	45.2	44.0	38.6	38.1	33.3	33.0	33.1	29.4	32.7	30.1	30.1	-0.1
Complete 4 years	17.3	18.6	21.0	21.7	24.7	27.8	26.8	24.5	22.7	21.5	18.5	15.1	14.0	13.6	12.9	12.1	11.8	10.0	-1.9 ss
Region:																			
Northeast	22.4	21.9	27.1	24.5	27.8	31.7	29.3	30.1	28.0	23.9	18.1	15.9	16.6	16.6	14.9	11.8	13.1	10.1	-3.0
Midwest	22.9	24.3	26.0	28.8	30.1	32.5	31.7	29.5	30.2	27.1	24.2	19.2	18.4	14.6	16.2	18.1	17.1	14.5	-2.6
South	21.2	19.8	24.0	25.7	30.8	33.4	32.2	29.8	26.3	25.5	23.5	19.6	18.2	20.4	16.4	15.6	14.4	14.0	-0.4
West	16.7	20.2	21.2	20.1	19.6	20.8	23.2	19.6	17.5	16.8	15.0	14.1	12.5	10.9	10.9	10.9	11.1	9.6	-1.6
Population Density:																			
Large MSA	19.7	21.6	22.5	22.3	23.3	26.2	26.6	22.5	22.9	23.1	17.3	14.2	13.1	12.0	11.7	11.5	12.1	10.3	-1.8
Other MSA	20.3	20.3	23.8	26.3	28.9	31.1	28.9	26.6	25.0	21.3	20.5	17.6	16.6	16.6	14.7	13.3	13.9	12.3	-1.7
Non-MSA	22.7	23.7	28.2	26.7	31.3	33.9	34.9	35.7	30.4	29.4	27.6	22.6	22.4	20.4	19.8	22.4	17.2	15.4	-1.9
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	23.5	28.4	29.5	26.4	30.9	28.7	28.2	28.0	30.5	29.3	22.5	21.4	23.4	19.3	16.4	20.4	17.5	15.7	-1.8
2.5–3.0	24.1	23.3	28.0	29.1	33.2	33.8	33.2	33.0	29.6	26.8	25.7	22.4	21.2	19.9	19.7	19.7	18.4	15.8	-2.6
3.5–4.0	20.4	20.6	24.8	26.0	27.8	31.6	30.9	27.3	26.0	25.3	21.1	17.4	16.2	17.8	15.7	15.5	14.7	13.9	-0.8
4.5–5.0	18.5	19.5	20.1	22.6	25.9	28.7	28.5	25.7	22.4	21.2	18.9	15.1	13.4	12.6	12.5	10.8	11.3	9.6	-1.7
5.5–6.0 (High)	18.5	18.9	21.4	20.7	21.8	27.8	24.6	22.5	21.4	19.1	17.1	12.7	11.6	10.8	10.8	10.0	9.7	7.8	-2.0
Race (2-year average): <sup>b</sup>																			
White	—	24.1	26.0	27.8	29.7	32.9	34.4	33.2	30.8	28.2	25.7	22.4	20.0	18.7	17.6	16.6	16.2	15.1	-1.0
African American	—	6.6	7.5	9.8	11.5	12.2	12.8	13.7	12.5	11.1	11.1	9.8	8.9	9.2	8.7	8.0	7.1	6.5	-0.7
Hispanic	—	18.3	20.5	19.4	21.4	23.7	23.0	21.3	21.1	19.6	16.8	14.3	13.2	13.9	13.5	12.1	10.5	11.1	+0.6

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-91**  
**Cigarettes: Trends in 30-Day Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 30 days																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	9,400	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	36.7	38.8	38.4	36.7	34.4	30.5	29.4	30.0	30.3	29.3	30.1	29.6	29.4	28.7	28.6	29.4	28.3
Gender:																	
Male	37.2	37.7	36.6	34.5	31.2	26.8	26.5	26.8	28.0	25.9	28.2	27.9	27.0	28.0	27.7	29.1	29.0
Female	35.9	39.1	39.6	38.1	37.1	33.4	31.6	32.6	31.6	31.9	31.4	30.6	31.4	28.9	29.0	29.2	27.5
College Plans:																	
None or under 4 years	—	46.3	46.2	44.6	43.0	39.6	38.1	38.7	38.0	37.9	40.5	38.5	39.7	37.5	38.0	37.5	38.1
Complete 4 years	—	29.8	29.4	27.4	26.0	22.3	22.3	22.1	23.3	22.7	22.8	24.0	24.3	24.4	24.1	25.4	24.2
Region:																	
Northeast	40.1	41.8	43.0	40.6	37.0	34.1	31.5	32.1	34.6	33.5	34.2	35.2	34.1	31.2	29.4	31.9	30.5
Midwest	39.5	41.3	40.5	39.0	36.6	31.5	32.4	33.5	33.2	31.4	34.1	32.5	31.7	31.1	34.9	34.0	34.6
South	36.2	39.1	37.6	35.7	35.4	31.8	28.9	29.4	28.7	28.6	25.6	26.1	26.0	28.0	26.4	26.1	25.4
West	26.3	28.3	27.7	27.3	24.8	21.2	21.8	20.4	21.8	22.9	26.3	23.3	26.6	23.9	22.7	25.1	23.2
Population Density:																	
Large MSA	39.7	40.4	40.9	37.5	33.4	31.2	30.6	32.1	30.8	31.3	31.9	30.8	29.3	26.9	25.9	27.9	26.2
Other MSA	35.1	35.9	36.1	34.3	33.5	29.7	27.4	27.8	29.1	28.2	28.5	28.0	28.2	28.3	28.2	29.6	29.3
Non-MSA	36.7	40.9	39.2	39.4	36.4	30.9	30.9	31.2	31.5	29.3	30.8	31.0	31.8	31.4	32.2	30.4	28.6
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	37.2	43.2	39.6	38.1	38.1	32.7	32.5	32.6	32.7	33.6	32.3	28.6	28.8	28.1	25.4	26.3	31.3
2.5–3.0	37.0	41.2	40.8	39.3	35.9	34.2	31.7	32.0	32.2	31.8	32.3	32.3	31.4	29.9	30.8	30.8	28.7
3.5–4.0	31.9	35.3	37.3	34.0	33.3	28.0	28.2	29.0	28.0	28.1	29.7	29.7	28.8	27.8	29.4	29.3	28.4
4.5–5.0	32.3	35.0	33.0	32.6	30.1	25.7	26.0	25.5	27.8	25.2	27.7	26.4	27.6	28.6	27.0	29.1	26.9
5.5–6.0 (High)	26.8	30.8	32.8	31.9	29.6	24.0	22.5	25.1	25.5	23.7	22.6	26.7	29.3	27.8	26.3	28.6	27.1
Race (2-year average): <sup>b</sup>																	
White	—	—	38.3	37.6	36.0	33.0	30.5	30.7	31.3	31.2	31.3	31.9	32.1	32.2	32.2	32.3	32.2
African American	—	—	36.7	32.7	30.2	26.8	23.7	21.8	21.2	19.3	18.1	16.9	14.2	13.3	12.6	12.2	10.6
Hispanic	—	—	35.7	32.8	26.8	22.6	23.2	24.7	24.7	25.3	25.5	23.7	22.7	21.9	20.6	21.7	24.0

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

(Table continued on next page.)



**TABLE D-91 (cont.)**  
**Cigarettes: Trends in 30-Day Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 30 days																	2007– 2008 change	
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	27.8	29.9	31.2	33.5	34.0	36.5	35.1	34.6	31.4	29.5	26.7	24.4	25.0	23.2	21.6	21.6	20.4	-1.2	
Gender:																			
Male	29.2	30.7	32.9	34.5	34.9	37.3	36.3	35.4	32.8	29.7	27.4	26.2	25.3	24.8	22.4	23.1	21.5	-1.5	
Female	26.1	28.7	29.2	32.0	32.4	35.2	33.3	33.5	29.7	28.7	25.5	22.1	24.1	20.7	20.1	19.6	19.1	-0.6	
College Plans:																			
None or under 4 years	38.6	37.3	40.9	43.5	45.0	45.7	46.7	44.9	43.6	40.8	37.5	36.2	36.8	34.8	32.9	32.4	32.4	0.0	
Complete 4 years	23.8	27.3	28.0	29.9	30.8	33.1	31.3	31.4	27.3	25.9	23.6	20.8	21.6	20.0	18.6	19.0	17.6	-1.4	
Region:																			
Northeast	29.6	34.2	33.2	34.4	38.5	40.6	35.9	34.2	33.1	30.3	27.3	25.0	25.9	22.0	23.1	23.8	19.7	-4.0	
Midwest	31.7	33.2	36.2	37.8	37.7	39.3	40.0	37.8	35.6	35.9	31.7	27.3	28.3	26.8	23.6	24.7	22.1	-2.7	
South	26.4	29.0	30.7	33.5	33.2	35.0	34.3	36.2	29.6	25.9	27.2	24.3	24.6	24.6	23.2	21.9	22.4	+0.5	
West	22.8	22.9	24.0	26.5	24.4	30.5	29.1	27.6	28.1	25.2	19.4	20.7	20.1	17.5	15.0	15.8	15.8	0.0	
Population Density:																			
Large MSA	25.6	29.5	29.0	33.9	32.1	34.9	32.9	30.0	27.4	27.3	24.8	18.9	20.8	20.8	20.7	19.9	18.8	-1.1	
Other MSA	26.9	29.8	31.1	31.7	32.6	35.7	34.2	35.0	31.5	28.2	26.2	25.1	26.3	22.6	20.3	20.8	19.5	-1.3	
Non-MSA	31.5	30.3	33.8	36.2	38.2	40.0	39.7	38.7	36.3	34.3	30.1	30.4	27.6	27.4	25.3	25.9	24.3	-1.6	
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	27.1	26.5	26.2	31.2	31.5	31.2	32.3	33.0	31.3	24.8	20.9	23.5	21.0	19.1	21.1	20.5	18.5	-2.0	
2.5–3.0	30.3	30.4	32.8	35.0	35.5	36.5	36.0	37.3	32.2	31.5	28.9	27.0	28.7	27.3	24.7	24.7	22.4	-2.4	
3.5–4.0	27.8	29.9	31.4	33.2	33.2	35.6	36.7	35.0	32.8	30.3	28.6	24.3	26.3	24.8	22.9	21.6	21.3	-0.3	
4.5–5.0	25.8	30.1	32.0	32.6	34.5	37.5	34.2	32.4	30.2	29.3	25.0	22.6	23.8	21.8	19.2	20.5	18.6	-1.9	
5.5–6.0 (High)	25.5	30.5	30.4	34.0	32.9	38.5	33.1	34.4	27.4	25.0	25.3	21.0	19.9	18.0	17.4	18.4	19.2	+0.8	
Race (2-year average): <sup>b</sup>																			
White	31.8	33.2	35.2	36.6	38.1	40.7	41.7	40.1	37.9	35.3	32.5	29.4	28.2	27.6	25.9	24.9	24.7	-0.3	
African American	8.7	9.5	10.9	12.9	14.2	14.3	14.9	14.9	14.3	13.3	12.1	10.0	10.1	10.7	10.5	10.8	10.3	-0.5	
Hispanic	25.0	24.2	23.6	25.1	25.4	25.9	26.6	27.3	27.7	23.8	21.3	19.0	18.5	17.1	16.0	15.3	15.0	-0.3	

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-92**  
**Cigarettes: Trends in 30-Day Prevalence of Daily Use by Subgroups in Grade 8**

	Percentage who used daily in last 30 days																		2007– 2008 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700	
Total	7.2	7.0	8.3	8.8	9.3	10.4	9.0	8.8	8.1	7.4	5.5	5.1	4.5	4.4	4.0	4.0	3.0	3.1	0.0
Gender:																			
Male	8.1	6.9	8.8	9.5	9.2	10.5	9.0	8.1	7.4	7.0	5.9	5.4	4.4	4.3	3.9	4.0	3.4	3.2	-0.2
Female	6.2	7.2	7.8	8.0	9.2	10.1	8.7	9.0	8.4	7.5	4.9	4.9	4.5	4.3	4.0	3.8	2.6	2.9	+0.3
College Plans:																			
None or under 4 years	18.5	20.1	21.5	22.6	22.5	26.0	25.4	25.2	25.2	21.7	17.7	17.1	16.1	15.4	14.4	13.2	12.3	10.8	-1.5
Complete 4 years	5.3	5.1	6.4	6.8	7.5	8.0	6.9	6.6	5.9	5.6	3.9	3.9	3.2	3.1	2.9	2.9	2.2	2.3	+0.2
Region:																			
Northeast	7.2	7.1	7.1	8.6	9.2	11.0	8.8	6.1	7.2	6.9	6.1	3.7	2.9	3.3	3.2	3.0	1.7	2.4	+0.7
Midwest	7.8	7.6	8.5	9.4	11.0	12.4	10.3	11.2	11.5	9.0	6.4	5.7	5.5	5.7	4.8	4.7	3.8	3.9	+0.1
South	7.9	7.8	9.3	9.4	9.4	10.4	9.5	10.2	8.5	7.8	6.1	6.6	5.7	4.7	5.0	5.3	3.8	3.7	0.0
West	4.6	4.8	7.4	7.4	7.0	7.5	6.8	5.8	3.8	4.9	2.6	2.9	2.4	3.3	2.4	1.8	1.9	2.0	0.0
Population Density:																			
Large MSA	6.3	6.3	5.7	6.6	7.6	9.5	7.0	6.7	5.4	5.6	4.1	3.2	3.0	3.5	2.3	2.3	1.6	2.2	+0.6
Other MSA	7.7	7.2	9.1	9.5	9.3	10.2	8.7	7.9	7.4	6.3	5.4	5.1	4.3	4.1	4.1	4.1	3.1	3.3	+0.1
Non-MSA	7.3	7.8	10.1	9.6	11.1	11.8	11.7	12.7	12.7	11.8	7.2	7.6	7.0	5.9	6.2	6.3	5.0	4.2	-0.8
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	15.9	11.9	12.7	13.0	15.8	13.6	14.3	13.0	14.7	13.1	11.1	10.6	9.1	10.1	7.8	7.3	5.5	5.4	-0.1
2.5–3.0	8.6	8.4	9.7	11.3	11.3	14.0	11.7	12.0	11.4	11.3	7.5	7.1	6.6	5.6	6.3	6.6	4.9	4.4	-0.5
3.5–4.0	6.5	6.9	8.5	8.9	9.4	10.1	9.2	9.7	8.1	6.7	5.1	5.4	4.4	4.2	4.3	3.8	3.6	3.0	-0.6
4.5–5.0	4.0	5.2	5.9	6.1	7.2	7.6	6.8	5.7	4.6	3.9	3.0	3.3	2.6	2.8	2.2	2.1	1.5	1.9	+0.4
5.5–6.0 (High)	4.9	4.2	6.3	5.8	5.7	7.4	5.5	5.2	5.1	4.1	3.1	2.1	2.1	1.9	1.4	1.8	0.7	1.9	+1.2 s
Race (2-year average): <sup>b</sup>																			
White	—	7.7	8.8	9.7	10.5	11.7	11.4	10.4	9.7	9.0	7.5	6.0	5.3	4.7	4.6	4.6	3.9	3.3	-0.5
African American	—	1.4	1.8	2.6	2.8	3.2	3.7	3.8	3.8	3.2	2.8	2.8	2.9	2.7	2.1	1.9	2.1	1.9	-0.2
Hispanic	—	7.3	7.2	9.0	9.2	8.0	8.1	8.4	8.5	7.1	5.0	4.4	3.7	3.5	3.1	2.8	2.8	2.5	-0.3

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-93**  
**Cigarettes: Trends in 30-Day Prevalence of Daily Use by Subgroups in Grade 10**

	Percentage who used daily in last 30 days																		2007– 2008 change	
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>		
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100		
Total	12.6	12.3	14.2	14.6	16.3	18.3	18.0	15.8	15.9	14.0	12.2	10.1	8.9	8.3	7.5	7.6	7.2	5.9	-1.3 s	
Gender:																				
Male	12.4	12.1	13.8	15.2	16.3	18.1	17.2	14.7	15.6	13.7	12.4	9.4	8.6	8.2	7.2	6.9	7.7	6.2	-1.5 s	
Female	12.5	12.4	14.3	13.7	16.1	18.6	18.5	16.8	15.9	14.1	11.9	10.8	9.0	8.2	7.7	8.1	6.6	5.5	-1.1	
College Plans:																				
None or under 4 years	25.7	25.5	28.9	28.9	32.7	34.3	35.4	31.7	32.1	28.8	27.3	22.9	22.1	21.4	19.2	21.7	18.9	17.9	-1.0	
Complete 4 years	9.6	9.5	11.0	11.5	13.3	15.5	15.0	12.9	13.2	11.6	9.6	7.9	6.7	6.4	5.9	5.6	5.6	4.3	-1.4 ss	
Region:																				
Northeast	14.3	13.1	16.3	14.1	15.8	18.8	18.0	18.7	17.7	14.1	11.0	8.3	8.6	8.5	7.6	6.2	6.8	5.3	-1.5	
Midwest	14.3	14.3	15.1	16.9	17.6	20.6	19.5	17.3	19.6	16.3	13.2	11.5	10.2	7.4	8.6	10.3	10.0	7.6	-2.4	
South	12.8	11.4	13.9	15.5	19.3	20.5	20.5	17.1	16.3	15.7	14.3	11.3	10.1	11.0	8.8	8.4	7.2	6.9	-0.3	
West	9.1	10.7	10.9	9.7	9.4	10.7	11.1	8.8	9.1	7.8	7.0	7.8	6.0	5.2	4.0	4.2	4.7	3.4	-1.3	
Population Density:																				
Large MSA	12.3	11.7	12.3	12.0	12.6	15.3	15.7	12.2	13.2	13.8	9.6	7.4	6.1	5.6	5.5	5.4	5.7	4.3	-1.4	
Other MSA	11.7	11.6	13.6	15.5	17.5	18.8	16.9	15.1	15.5	12.1	11.6	10.4	8.7	8.1	7.0	6.7	7.2	6.2	-1.0	
Non-MSA	14.3	14.5	16.9	15.5	18.4	20.8	22.5	21.1	19.7	17.5	16.3	13.1	13.7	12.3	11.4	13.2	9.6	7.5	-2.1	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	16.0	17.8	19.3	15.5	20.0	19.3	17.7	17.4	20.1	18.9	12.9	14.1	15.3	11.4	9.9	12.5	9.8	7.6	-2.2	
2.5–3.0	15.5	13.9	16.9	17.6	21.6	23.1	22.1	21.3	19.1	17.6	16.2	14.7	12.7	11.5	11.1	11.9	10.8	8.7	-2.1 s	
3.5–4.0	12.0	11.8	13.6	15.9	17.0	19.4	18.9	14.9	16.6	14.2	12.2	10.0	8.8	9.3	7.9	7.8	7.2	6.7	-0.5	
4.5–5.0	10.6	10.5	10.7	11.5	12.6	14.8	15.6	12.9	13.0	11.5	9.7	6.8	5.8	5.4	5.2	4.4	5.5	3.8	-1.7 ss	
5.5–6.0 (High)	9.6	9.0	10.5	9.6	10.3	13.6	12.0	11.1	11.2	9.8	8.3	6.4	4.5	4.2	4.4	4.3	3.5	3.0	-0.5	
Race (2-year average): <sup>b</sup>																				
White	—	14.5	15.3	16.5	17.6	20.0	21.4	20.3	19.1	17.7	15.5	13.3	11.4	10.0	9.1	8.7	8.8	8.0	-0.8	
African American	—	2.8	3.1	3.8	4.7	5.1	5.6	5.8	5.3	5.2	5.2	5.0	4.3	4.4	3.9	3.3	3.2	3.0	-0.2	
Hispanic	—	8.4	8.9	8.1	9.9	11.6	10.8	9.4	9.1	8.8	7.4	6.4	6.0	6.0	5.9	5.3	3.8	3.8	0.0	

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-94**  
**Cigarettes: Trends in 30-Day Prevalence of Daily Use by Subgroups in Grade 12**

	Percentage who used daily in last 30 days																
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
<i>Approximate wtd. N =</i>	9,400	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	26.9	28.8	28.8	27.5	25.4	21.3	20.3	21.1	21.2	18.7	19.5	18.7	18.7	18.1	18.9	19.1	18.5
Gender:																	
Male	26.9	28.0	27.1	26.0	22.3	18.5	18.1	18.2	19.2	16.0	17.8	16.9	16.4	17.4	17.9	18.6	18.8
Female	26.4	28.8	30.0	28.3	27.8	23.5	21.7	23.2	22.2	20.5	20.6	19.8	20.6	18.1	19.4	19.3	17.9
College Plans:																	
None or under 4 years	—	36.5	37.2	35.2	33.8	29.7	29.3	29.5	29.3	27.2	29.6	28.2	29.0	27.4	27.9	28.3	28.4
Complete 4 years	—	19.8	19.3	18.3	17.0	13.8	12.9	13.2	13.8	11.9	12.4	12.8	13.3	13.4	14.6	14.7	14.1
Region:																	
Northeast	31.4	32.3	33.8	32.5	28.6	24.1	23.3	23.4	26.1	23.6	24.9	24.9	24.8	21.4	21.3	22.8	20.9
Midwest	28.6	30.2	29.4	28.6	27.0	22.0	23.0	24.0	23.4	20.4	22.4	19.9	20.3	19.0	23.0	22.2	23.0
South	26.2	29.1	28.7	26.4	25.8	22.6	19.1	20.2	19.4	17.7	16.0	15.8	15.7	17.7	17.1	16.5	16.4
West	17.3	19.4	19.2	19.1	17.0	14.0	13.1	12.7	13.0	12.4	14.2	13.4	14.9	14.0	13.8	14.8	13.9
Population Density:																	
Large MSA	30.8	30.4	30.9	29.2	24.5	21.6	21.9	23.5	22.1	21.5	21.9	20.6	20.3	18.0	16.7	19.0	16.7
Other MSA	25.6	27.1	27.2	25.7	25.0	21.3	19.0	19.3	20.2	17.4	17.7	17.0	17.6	17.7	19.0	19.0	19.0
Non-MSA	25.8	29.5	29.1	28.7	26.5	21.2	20.7	21.3	21.7	18.2	19.9	19.8	19.3	18.8	20.9	19.5	19.0
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	27.2	32.7	29.6	28.6	29.1	23.7	24.1	24.6	24.0	23.2	22.7	20.4	19.7	19.2	17.1	16.7	21.2
2.5–3.0	27.2	31.3	31.5	30.3	26.5	24.7	22.5	23.1	23.2	21.5	21.8	21.4	21.1	19.6	21.5	21.0	19.8
3.5–4.0	22.1	25.8	28.1	24.8	24.5	19.4	19.0	19.7	18.8	16.4	19.3	19.4	17.8	17.5	19.0	19.3	18.5
4.5–5.0	22.9	24.5	23.7	23.2	21.2	16.6	16.1	16.8	17.5	14.1	16.0	13.9	16.5	16.5	17.2	18.3	16.2
5.5–6.0 (High)	17.4	22.8	21.7	22.8	20.6	15.0	13.9	14.5	17.2	14.1	11.2	13.6	16.6	15.1	15.8	16.5	16.1
Race (2-year average): <sup>b</sup>																	
White	—	—	28.9	28.3	26.9	23.9	21.4	21.6	22.1	21.0	20.4	20.6	20.5	20.6	21.1	21.8	21.5
African American	—	—	24.9	22.7	20.9	17.4	14.6	13.1	12.5	10.7	9.9	9.4	7.9	7.3	6.4	5.8	5.1
Hispanic	—	—	22.6	20.4	15.8	12.8	13.6	14.3	14.9	13.9	11.8	11.3	11.0	10.9	10.8	10.9	11.5

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

(Table continued on next page.)

**TABLE D-94 (cont.)**  
**Cigarettes: Trends in 30-Day Prevalence of Daily Use by Subgroups in Grade 12**

	Percentage who used daily in last 30 days																	2007– 2008 change	
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	17.2	19.0	19.4	21.6	22.2	24.6	22.4	23.1	20.6	19.0	16.9	15.8	15.6	13.6	12.2	12.3	11.4	-0.9	
Gender:																			
Male	17.2	19.4	20.4	21.7	22.2	24.8	22.7	23.6	20.9	18.4	17.2	17.0	15.4	14.6	12.0	13.0	12.0	-1.0	
Female	16.7	18.2	18.1	20.8	21.8	23.6	21.5	22.2	19.7	18.9	16.1	14.0	15.0	11.9	11.8	11.2	10.6	-0.6	
College Plans:																			
None or under 4 years	28.1	27.8	29.8	33.7	33.2	35.6	34.6	34.2	31.7	30.1	27.6	27.9	26.9	24.9	22.8	22.5	21.1	-1.4	
Complete 4 years	12.9	15.9	15.7	17.4	18.9	20.6	18.4	19.5	16.6	15.5	13.8	12.1	12.2	10.5	9.4	9.9	9.0	-0.9	
Region:																			
Northeast	19.4	23.5	21.3	22.5	27.0	29.4	23.4	23.2	22.8	21.9	18.4	16.4	16.2	13.3	14.3	14.3	11.3	-2.9	
Midwest	19.0	21.3	23.8	25.7	26.1	28.0	27.8	25.9	23.6	25.2	22.5	18.2	18.5	16.3	13.2	14.5	12.9	-1.6	
South	16.7	18.5	19.3	21.7	20.5	22.6	21.8	24.2	19.4	15.5	16.6	16.3	15.8	15.4	13.3	12.9	13.1	+0.3	
West	13.3	13.0	12.4	14.5	13.8	17.5	15.5	17.3	16.9	13.4	9.5	11.8	10.1	7.6	7.0	7.4	7.0	-0.4	
Population Density:																			
Large MSA	16.6	17.3	17.7	21.3	20.7	23.7	20.6	18.6	16.7	17.4	15.0	11.5	12.6	11.4	10.3	10.3	8.9	-1.4	
Other MSA	15.9	19.7	19.2	19.9	21.9	23.9	21.2	22.8	21.1	17.5	16.7	15.9	16.1	12.7	11.5	11.7	11.2	-0.5	
Non-MSA	20.3	19.2	21.6	24.8	24.1	26.8	27.2	28.5	24.5	23.9	19.8	21.4	18.0	18.2	16.2	16.6	14.8	-1.8	
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	16.5	17.6	16.9	21.3	21.1	21.9	21.7	23.8	22.8	16.4	12.4	15.1	14.2	11.7	11.4	14.6	11.9	-2.7	
2.5–3.0	20.4	20.2	22.4	24.6	24.4	26.0	24.7	26.9	22.9	21.9	19.8	18.3	19.4	18.3	16.1	15.1	13.4	-1.7	
3.5–4.0	16.9	18.9	18.9	21.6	21.2	23.8	23.8	23.6	21.2	19.9	19.1	16.5	16.3	14.4	12.3	12.3	12.5	+0.2	
4.5–5.0	15.0	18.9	18.7	19.7	22.4	24.9	20.6	20.6	18.6	17.9	14.1	13.0	13.7	11.7	10.4	11.2	9.0	-2.2 s	
5.5–6.0 (High)	12.8	16.6	17.3	18.5	20.0	22.9	17.4	19.0	15.2	13.4	14.3	11.3	10.3	8.1	8.3	7.4	9.1	+1.7	
Race (2-year average): <sup>b</sup>																			
White	20.5	21.4	22.9	23.9	25.4	27.8	28.3	26.9	25.7	23.8	21.8	19.5	18.3	17.1	15.3	14.5	14.3	-0.2	
African American	4.2	4.1	4.9	6.1	7.0	7.2	7.4	7.7	8.0	7.5	6.4	5.4	5.2	5.6	5.7	5.8	5.8	-0.1	
Hispanic	12.5	11.8	10.6	11.6	12.9	14.0	13.6	14.0	15.7	12.0	9.2	8.0	8.2	7.7	7.0	6.6	6.7	0.0	

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-95**  
**Cigarettes: Trends in 30-Day Prevalence of Use of Half Pack a Day or More**  
**by Subgroups in Grade 8**

	Percentage who used half pack a day or more in last 30 days																		2007– 2008 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700	
Total	3.1	2.9	3.5	3.6	3.4	4.3	3.5	3.6	3.3	2.8	2.3	2.1	1.8	1.7	1.7	1.5	1.1	1.2	0.0
Gender:																			
Male	3.7	3.1	4.3	4.2	3.7	4.7	3.7	3.5	3.1	2.8	2.6	2.4	1.8	1.7	2.0	1.7	1.3	1.4	+0.1
Female	2.4	2.7	2.7	2.9	3.2	3.7	3.1	3.3	3.3	2.6	2.0	1.9	1.7	1.7	1.3	1.3	0.8	0.9	+0.1
College Plans:																			
None or under 4 years	10.1	10.8	11.9	11.7	11.4	13.5	11.6	13.8	13.4	10.3	9.8	8.4	7.5	7.4	7.7	5.8	4.7	4.7	0.0
Complete 4 years	1.9	1.7	2.2	2.4	2.3	2.8	2.4	2.2	2.0	1.8	1.4	1.5	1.2	1.1	1.0	1.1	0.7	0.8	+0.1
Region:																			
Northeast	3.3	2.8	2.7	3.7	3.7	4.1	3.7	2.1	3.1	3.3	2.6	1.7	1.0	1.4	1.4	1.2	0.8	0.9	+0.1
Midwest	3.3	3.2	3.5	3.9	4.4	5.3	4.1	4.6	5.7	3.4	3.1	2.7	2.1	2.3	2.2	1.9	1.2	1.6	+0.4
South	3.4	3.3	4.6	3.9	3.6	4.5	3.7	4.8	2.9	2.8	2.7	2.5	2.6	1.8	1.9	2.1	1.3	1.3	+0.1
West	1.9	2.0	2.2	2.6	1.8	2.7	2.2	1.6	1.2	1.3	0.7	0.9	0.8	1.2	0.9	0.6	0.9	0.6	-0.2
Population Density:																			
Large MSA	2.4	2.3	2.1	3.0	2.5	3.7	2.7	2.3	1.8	2.1	1.5	1.3	1.0	1.3	1.0	0.9	0.7	0.7	0.0
Other MSA	3.3	3.2	3.7	3.9	3.6	3.8	3.2	3.2	2.8	2.2	2.1	2.2	1.7	1.6	1.5	1.6	1.1	1.3	+0.1
Non-MSA	3.4	3.3	5.0	3.7	4.3	5.8	4.8	5.6	5.9	4.6	3.9	3.1	3.1	2.4	2.9	2.3	1.7	1.6	-0.1
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	7.9	6.5	6.4	5.1	8.2	6.5	6.4	6.2	6.2	7.1	5.2	4.6	3.7	5.6	2.9	3.6	1.9	2.5	+0.6
2.5–3.0	3.7	3.4	3.9	4.9	4.1	6.4	4.8	5.2	4.8	3.8	3.6	2.8	2.9	2.1	2.8	2.4	2.0	1.5	-0.5
3.5–4.0	2.5	2.6	3.6	3.4	3.6	3.2	3.5	3.7	3.4	2.3	2.0	2.2	1.8	1.5	1.9	1.3	1.3	1.0	-0.3
4.5–5.0	1.6	1.8	2.3	2.6	2.0	2.8	2.2	2.0	1.5	1.4	0.9	1.2	0.7	0.8	0.6	1.0	0.5	0.7	+0.2
5.5–6.0 (High)	1.8	1.5	2.2	2.2	1.5	2.7	1.8	2.1	1.8	1.5	1.4	1.1	0.9	0.6	0.5	0.6	0.2	0.9	+0.6 s
Race (2-year average): <sup>b</sup>																			
White	—	3.3	3.8	4.2	4.2	4.6	4.6	4.2	4.0	3.6	3.2	2.8	2.3	1.9	1.9	1.9	1.5	1.2	-0.3
African American	—	0.4	0.7	1.0	0.9	1.3	1.4	1.2	1.3	1.0	1.1	1.1	1.2	1.1	0.9	0.8	0.9	0.8	-0.1
Hispanic	—	2.7	2.5	3.1	3.3	2.7	2.4	2.8	3.0	2.3	1.4	1.3	1.5	1.4	1.1	0.7	0.9	0.9	0.0

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-96**  
**Cigarettes: Trends in 30-Day Prevalence of Use of Half Pack a Day or More**  
**by Subgroups in Grade 10**

	Percentage who used half pack a day or more in last 30 days																	2007– 2008 change		
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>		
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100		
Total	6.5	6.0	7.0	7.6	8.3	9.4	8.6	7.9	7.6	6.2	5.5	4.4	4.1	3.3	3.1	3.3	2.7	2.0	-0.7 s	
Gender:																				
Male	6.9	6.5	7.8	8.2	8.7	9.9	8.9	8.1	7.8	6.7	6.0	4.1	4.3	3.5	2.9	3.1	2.9	2.4	-0.5	
Female	6.0	5.1	6.2	6.7	7.7	9.0	8.2	7.8	7.3	5.6	5.1	4.6	3.8	2.9	3.2	3.3	2.5	1.7	-0.8 s	
College Plans:																				
None or under 4 years	15.9	15.3	18.5	18.5	20.9	22.4	22.0	20.6	18.9	16.0	16.0	11.5	12.3	10.8	9.4	12.0	8.1	7.8	-0.3	
Complete 4 years	4.4	4.0	4.6	5.2	6.1	7.1	6.3	5.6	5.7	4.5	3.8	3.1	2.8	2.2	2.2	2.1	2.0	1.3	-0.7 ss	
Region:																				
Northeast	7.8	5.9	8.5	7.8	7.7	9.1	8.8	10.0	9.1	6.0	5.0	3.7	4.6	3.6	3.4	3.2	2.5	1.2	-1.3 s	
Midwest	7.1	7.3	7.7	8.3	9.5	10.9	9.3	9.1	9.9	8.1	6.0	4.8	5.0	3.0	3.3	4.5	4.2	3.3	-0.9	
South	7.2	5.5	7.1	8.7	10.3	11.0	10.2	8.9	7.8	7.1	6.5	5.5	4.5	4.3	3.7	3.6	2.8	2.6	-0.2	
West	4.0	5.0	4.3	4.2	3.4	5.0	4.4	3.0	3.0	2.2	3.3	2.5	2.3	1.8	1.7	1.3	1.3	0.7	-0.6	
Population Density:																				
Large MSA	6.9	5.2	5.9	5.8	6.0	7.6	6.6	5.8	6.0	5.7	4.8	3.0	2.3	1.9	2.3	1.8	2.0	1.1	-0.9 s	
Other MSA	5.8	5.8	6.7	8.5	9.2	9.5	8.0	7.7	7.6	5.6	5.0	4.7	4.0	3.3	2.6	3.0	2.7	2.2	-0.5	
Non-MSA	7.6	6.9	8.7	7.8	9.2	11.5	12.0	11.0	9.4	7.8	7.5	5.7	7.3	5.2	5.4	6.3	4.0	3.1	-0.9	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	9.9	10.7	10.8	8.1	12.0	12.1	10.8	9.0	11.3	10.7	7.6	7.4	8.6	6.6	4.6	7.1	4.9	3.4	-1.5	
2.5–3.0	8.9	6.9	8.5	10.1	12.2	13.1	11.4	11.6	10.4	8.5	8.3	7.0	6.3	5.3	4.9	5.6	4.5	3.2	-1.3	
3.5–4.0	5.8	5.4	7.3	8.0	8.6	10.2	8.8	7.4	7.4	5.9	5.3	4.0	4.2	3.8	3.2	3.1	2.6	2.4	-0.3	
4.5–5.0	4.7	4.7	4.3	5.4	5.0	6.2	6.5	5.9	5.5	4.3	3.9	2.4	2.2	1.4	1.8	1.5	1.6	1.1	-0.5	
5.5–6.0 (High)	4.5	3.7	3.9	4.0	4.0	5.7	4.8	5.4	4.5	3.6	2.6	2.0	1.4	1.0	1.6	1.6	1.2	0.7	-0.5	
Race (2-year average): <sup>b</sup>																				
White	—	7.4	7.7	8.6	9.3	10.5	11.0	10.4	9.9	8.5	7.1	6.2	5.5	4.7	3.9	3.8	3.8	3.2	-0.6	
African American	—	0.8	0.6	1.2	1.8	1.6	1.7	1.8	1.5	1.9	1.7	1.2	1.0	1.0	1.2	1.3	1.2	0.9	-0.2	
Hispanic	—	3.0	3.0	2.6	3.4	4.3	3.3	3.0	3.1	2.9	2.7	2.2	1.8	1.5	1.9	2.0	1.0	0.9	-0.1	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. “—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-97**  
**Cigarettes: Trends in 30-Day Prevalence of Use of Half Pack a Day or More**  
**by Subgroups in Grade 12**

	Percentage who used half pack a day or more in last 30 days																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
<i>Approximate wtd. N =</i>	9,400	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Total	17.9	19.2	19.4	18.8	16.5	14.3	13.5	14.2	13.8	12.3	12.5	11.4	11.4	10.6	11.2	11.3	10.7
Gender:																	
Male	19.6	19.9	19.7	18.9	15.4	13.5	12.8	13.1	13.1	11.0	12.3	10.7	10.1	11.1	11.2	11.6	11.6
Female	16.1	18.0	18.9	18.0	17.1	14.7	13.8	14.7	13.6	12.8	12.0	11.6	12.5	9.7	10.7	10.8	9.5
College Plans:																	
None or under 4 years	—	25.5	26.9	25.5	23.3	21.2	20.8	21.0	20.9	19.6	20.7	19.2	19.5	18.4	18.6	19.2	18.7
Complete 4 years	—	11.9	11.2	11.1	9.8	8.2	7.5	7.8	7.6	6.5	6.5	6.4	7.2	6.8	7.5	7.5	7.1
Region:																	
Northeast	22.0	22.5	24.2	23.6	19.8	17.0	16.6	15.6	16.6	17.4	17.0	15.6	16.5	13.1	13.6	13.8	12.9
Midwest	18.8	20.3	20.3	19.8	17.4	15.4	16.0	17.3	17.1	13.0	14.9	12.3	12.3	11.5	14.2	13.7	14.1
South	16.8	19.0	18.5	17.0	16.1	14.5	12.0	13.3	12.4	11.3	9.7	10.0	9.4	10.1	9.7	9.4	8.9
West	11.3	12.4	11.5	12.2	10.8	8.3	7.3	7.1	6.4	7.4	7.6	6.5	8.1	7.7	6.9	8.3	7.2
Population Density:																	
Large MSA	21.7	20.1	20.4	19.7	16.2	14.8	15.4	15.9	14.1	14.8	14.4	12.2	13.1	10.8	10.1	11.2	10.2
Other MSA	17.4	18.9	18.8	17.9	16.5	13.8	12.4	12.9	13.5	11.4	11.0	9.6	10.0	10.4	11.2	11.0	10.7
Non-MSA	15.9	19.0	19.5	19.3	16.7	14.7	13.6	14.2	14.0	11.5	12.9	13.3	12.5	10.7	12.1	12.1	11.1
Parental Education: <sup>a</sup>																	
1.0–2.0 (Low)	18.6	21.3	20.0	19.2	19.5	16.3	16.0	17.1	17.1	16.4	16.1	15.6	13.8	11.2	11.5	10.2	12.5
2.5–3.0	17.7	21.4	22.2	21.0	17.6	16.8	15.6	15.9	15.2	14.8	14.2	13.3	13.9	12.4	13.5	13.4	12.4
3.5–4.0	13.9	17.4	18.3	16.9	15.2	12.8	12.5	13.3	11.9	10.5	12.0	11.0	10.5	10.3	10.7	11.6	10.7
4.5–5.0	15.9	15.9	14.8	15.4	12.6	10.3	10.1	10.1	10.5	8.0	9.5	6.8	8.9	8.6	9.2	10.2	7.9
5.5–6.0 (High)	9.1	15.9	14.6	14.5	13.6	9.8	8.8	9.3	9.3	7.9	5.4	7.4	8.4	8.3	8.4	7.9	9.0
Race (2-year average): <sup>b</sup>																	
White	—	—	20.3	20.2	18.6	16.4	15.0	15.1	15.2	14.2	13.6	13.1	12.9	12.9	12.9	13.3	13.1
African American	—	—	10.7	9.7	9.1	7.1	5.8	5.4	4.9	4.1	3.9	3.6	2.9	2.3	1.9	1.8	1.8
Hispanic	—	—	11.3	9.0	6.4	5.6	6.1	5.6	5.9	6.1	5.3	5.0	4.1	3.5	4.2	4.2	4.0

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

(Table continued on next page.)



**TABLE D-97 (cont.)**  
**Cigarettes: Trends in 30-Day Prevalence of Use of Half Pack a Day or More**  
**by Subgroups in Grade 12**

	Percentage who used half pack a day or more in last 30 days																	2007– 2008 change	
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	10.0	10.9	11.2	12.4	13.0	14.3	12.6	13.2	11.3	10.3	9.1	8.4	8.0	6.9	5.9	5.7	5.4	-0.2	
Gender:																			
Male	10.4	11.6	12.7	13.2	13.6	15.5	13.5	14.5	11.4	10.2	10.0	9.5	8.0	8.0	6.2	6.4	6.1	-0.3	
Female	9.2	9.9	9.5	11.1	12.0	12.6	11.1	11.5	10.8	10.2	7.9	6.6	7.5	5.3	5.2	4.7	4.6	-0.1	
College Plans:																			
None or under 4 years	19.1	18.7	19.6	22.6	23.1	23.5	23.7	23.2	20.3	19.3	17.5	17.2	16.0	15.2	13.0	12.5	11.9	-0.7	
Complete 4 years	6.5	8.1	8.2	8.9	10.0	11.0	8.9	10.1	8.1	7.6	6.7	5.5	5.6	4.6	3.9	4.0	3.8	-0.2	
Region:																			
Northeast	11.1	14.7	12.2	13.4	17.0	19.4	13.6	13.4	13.6	12.3	10.9	8.7	9.0	7.5	7.9	6.1	5.5	-0.7	
Midwest	11.0	12.5	15.3	14.2	15.1	16.9	16.8	15.0	13.7	14.8	13.6	10.1	8.8	8.7	6.7	7.2	6.6	-0.7	
South	10.2	10.4	10.8	12.6	12.0	12.3	11.8	13.9	10.6	7.6	8.6	8.9	8.9	7.6	6.0	6.4	6.5	+0.1	
West	6.8	6.0	5.9	8.4	6.5	8.2	7.5	9.0	7.5	6.6	3.1	5.0	4.1	3.1	2.9	2.5	2.6	0.0	
Population Density:																			
Large MSA	9.9	9.1	10.2	12.3	11.6	12.8	11.0	9.6	8.2	9.4	7.6	5.4	6.0	5.2	4.8	4.2	3.4	-0.7	
Other MSA	8.4	11.2	10.5	11.1	12.8	14.3	11.7	12.6	11.6	9.4	8.7	8.4	8.2	6.3	5.0	5.3	5.3	0.0	
Non-MSA	13.1	11.7	13.7	14.7	14.4	16.0	16.5	18.0	14.5	13.3	11.9	12.2	10.0	10.4	9.2	8.8	8.2	-0.5	
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	11.0	10.7	9.5	13.5	13.6	11.9	12.5	15.0	16.1	10.8	7.4	8.7	8.6	6.8	5.4	7.5	6.8	-0.8	
2.5–3.0	12.7	12.5	13.7	15.1	14.8	16.4	14.9	16.6	13.8	12.5	12.0	10.5	10.9	10.0	8.4	7.6	6.9	-0.7	
3.5–4.0	9.6	10.4	11.0	12.7	12.3	13.9	13.8	13.1	10.7	10.6	10.3	8.7	8.2	7.2	5.8	5.6	6.0	+0.4	
4.5–5.0	8.1	10.0	10.4	9.8	12.6	14.5	10.3	10.7	9.3	9.2	6.8	5.7	6.1	5.1	4.6	4.7	3.7	-1.1	
5.5–6.0 (High)	5.7	8.3	8.8	9.1	10.8	11.2	7.4	9.5	7.1	6.2	5.4	4.9	4.7	3.2	3.3	2.7	3.5	+0.7	
Race (2-year average): <sup>b</sup>																			
White	12.3	12.8	13.7	14.2	15.2	16.9	16.9	15.9	15.1	13.6	12.4	10.9	10.0	9.1	7.9	7.1	7.1	-0.1	
African American	1.8	1.5	1.7	2.2	2.5	2.8	2.5	2.4	2.6	2.4	2.1	1.7	1.6	1.8	2.1	2.4	2.2	-0.1	
Hispanic	4.6	4.5	4.0	4.1	5.3	5.8	5.2	5.8	7.0	5.3	3.8	3.0	2.9	2.9	2.6	2.5	2.1	-0.4	

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-98**  
**Smokeless Tobacco: Trends in 30-Day Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 30 days																		2007– 2008 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		
Total	6.9	7.0	6.6	7.7	7.1	7.1	5.5	4.8	4.5	4.2	4.0	3.3	4.1	4.1	3.3	3.7	3.2	3.5	+0.3	
Gender:																				
Male	12.7	12.5	10.9	12.8	11.8	11.4	9.9	8.1	6.9	6.7	6.9	5.4	6.7	6.4	5.3	5.3	4.7	5.5	+0.8	
Female	1.4	2.0	2.7	2.4	2.9	2.9	1.5	1.5	2.1	1.8	1.4	1.3	1.8	1.7	1.5	2.1	1.7	1.5	-0.2	
College Plans:																				
None or under 4 years	12.7	17.1	15.5	16.7	15.4	16.4	12.6	13.9	13.2	11.4	14.6	10.2	12.8	12.3	10.8	11.3	8.9	12.7	+3.8	
Complete 4 years	6.1	5.5	5.3	6.5	6.0	5.6	4.6	3.8	3.5	3.4	2.9	2.6	3.3	3.2	2.4	2.9	2.7	2.7	0.0	
Region:																				
Northeast	5.0	4.9	3.4	6.1	5.4	4.9	3.2	2.7	2.5	2.7	3.7	2.7	3.1	3.4	1.4	2.9	1.5	2.5	+0.9	
Midwest	7.1	7.5	7.2	7.1	7.6	8.3	6.8	4.3	5.3	4.8	4.0	3.9	3.5	4.2	3.2	4.0	2.9	3.4	+0.5	
South	9.5	9.3	8.0	9.9	8.7	8.1	6.7	6.9	5.9	5.8	5.4	4.1	5.9	5.5	5.3	4.6	4.1	5.2	+1.1	
West	3.5	4.4	6.3	6.0	5.0	5.9	4.1	3.9	2.9	1.9	2.1	1.5	2.5	2.0	1.4	2.2	2.8	1.8	-1.0	
Population Density:																				
Large MSA	4.8	4.2	3.3	4.6	4.1	4.2	3.6	2.9	1.8	2.4	2.4	1.5	2.6	1.9	1.3	1.9	1.9	2.8	+0.8	
Other MSA	6.2	6.9	6.8	6.4	6.7	7.1	4.7	4.1	3.9	3.9	3.5	2.9	3.7	3.6	2.8	3.1	3.1	3.1	0.0	
Non-MSA	10.4	10.3	9.9	13.0	11.2	10.6	9.0	8.5	8.9	7.0	7.0	6.2	6.9	7.7	7.0	7.1	5.3	5.4	+0.1	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	11.4	7.8	9.4	8.9	10.6	6.3	8.3	5.4	6.6	7.4	5.0	4.5	6.8	6.9	5.7	5.9	4.9	5.4	+0.5	
2.5–3.0	8.4	8.5	7.5	8.4	9.9	8.8	6.0	5.1	5.7	5.2	5.4	5.1	5.1	6.0	4.9	3.9	3.7	5.1	+1.3	
3.5–4.0	6.7	7.0	7.5	8.7	7.0	7.2	6.5	5.9	4.5	4.5	3.7	3.2	4.1	3.5	3.1	3.7	3.1	3.8	+0.6	
4.5–5.0	4.8	7.0	5.2	6.1	5.0	6.8	4.8	4.4	3.3	2.9	2.5	2.4	3.1	3.2	2.4	3.1	2.5	2.4	-0.1	
5.5–6.0 (High)	6.1	4.6	4.9	6.8	5.8	5.9	3.7	3.9	3.1	3.0	4.2	2.5	2.7	2.9	1.8	3.4	2.3	2.3	+0.1	
Race (2-year average): <sup>b</sup>																				
White	—	8.3	8.0	8.1	8.9	8.8	7.6	6.1	5.4	5.2	4.8	4.1	3.9	4.4	4.2	3.7	3.8	3.9	+0.1	
African American	—	1.8	2.7	3.2	2.6	2.2	2.6	2.3	2.3	2.7	2.2	1.6	2.7	3.0	2.0	2.1	2.3	2.4	+0.1	
Hispanic	—	4.2	4.0	5.0	5.7	5.2	4.6	4.5	4.6	3.7	3.3	4.0	4.7	4.0	2.6	3.1	2.9	2.4	-0.5	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of two forms in 1991–1996 and on two of four forms beginning in 1997;  $N$  is one half of  $N$  indicated in Table D-107.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-99**  
**Smokeless Tobacco: Trends in 30-Day Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 30 days																		2007– 2008 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100	
Total	10.0	9.6	10.4	10.5	9.7	8.6	8.9	7.5	6.5	6.1	6.9	6.1	5.3	4.9	5.6	5.7	6.1	5.0	-1.1
Gender:																			
Male	18.7	18.1	19.3	19.2	17.2	15.0	14.9	13.8	12.2	11.4	12.7	9.9	9.6	9.0	9.7	10.2	10.2	8.2	-2.1 s
Female	1.3	1.8	2.0	2.1	2.1	2.3	2.7	1.7	1.3	1.3	1.6	2.1	1.3	1.0	1.6	1.2	2.0	2.0	0.0
College Plans:																			
None or under 4 years	16.9	17.5	20.2	19.9	20.3	16.3	18.5	17.8	13.2	13.9	16.0	13.6	13.0	12.2	13.3	14.9	14.0	14.6	+0.6
Complete 4 years	8.4	8.0	8.4	8.5	7.8	7.2	7.2	5.7	5.4	4.8	5.4	4.8	4.1	3.9	4.5	4.5	5.0	3.8	-1.2
Region:																			
Northeast	8.6	5.3	8.0	9.0	7.6	6.8	9.3	6.5	5.2	4.6	4.9	4.7	4.5	5.1	4.6	4.5	5.9	3.3	-2.6
Midwest	11.0	9.6	10.0	10.0	11.0	9.5	7.1	7.9	8.1	6.2	7.0	4.8	4.9	3.7	5.7	7.5	6.3	7.2	+0.9
South	11.6	11.4	11.8	11.7	10.9	10.2	10.2	9.5	7.9	7.7	9.6	8.3	7.5	7.3	7.0	6.0	8.3	6.5	-1.8
West	7.8	10.9	11.1	10.9	7.7	6.0	8.2	4.6	4.0	4.5	3.0	5.1	3.5	3.0	4.5	4.1	3.3	2.2	-1.1
Population Density:																			
Large MSA	5.9	6.4	6.5	6.2	5.9	5.5	4.2	3.7	4.6	5.6	4.1	4.5	3.7	3.0	3.2	3.9	4.1	3.4	-0.7
Other MSA	9.2	9.3	10.1	10.9	9.2	8.4	8.3	5.7	5.3	4.3	5.7	6.1	4.8	4.3	5.3	5.3	5.8	4.4	-1.5
Non-MSA	14.7	13.3	14.1	13.9	15.0	12.2	14.7	15.1	11.3	9.8	12.5	8.2	9.2	9.0	9.4	9.6	9.9	8.7	-1.1
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	6.6	10.1	10.9	9.4	9.6	8.1	9.0	6.8	7.2	7.4	6.9	6.7	7.4	3.7	4.4	7.4	6.1	5.0	-1.1
2.5–3.0	12.1	11.0	12.2	12.5	10.4	9.7	9.4	8.2	7.0	6.4	8.9	8.1	5.0	5.8	6.7	7.1	6.9	6.5	-0.4
3.5–4.0	10.6	10.5	10.9	10.2	10.9	8.3	10.3	8.6	7.3	6.3	7.1	5.5	4.9	5.2	6.0	5.7	6.4	5.4	-1.0
4.5–5.0	9.3	7.6	9.9	9.8	9.8	8.5	7.2	6.9	6.1	6.2	5.7	5.4	5.7	4.4	5.6	4.9	6.1	4.6	-1.5
5.5–6.0 (High)	8.6	8.1	7.0	8.9	6.0	7.7	8.3	5.2	4.8	4.0	4.8	5.2	4.3	4.4	3.8	5.3	4.8	2.9	-1.8
Race (2-year average): <sup>b</sup>																			
White	—	11.4	12.0	12.5	12.0	11.0	10.4	10.0	8.7	7.5	7.5	7.8	6.9	6.1	6.6	6.9	7.3	7.3	0.0
African American	—	2.9	2.3	2.3	2.5	2.5	2.8	2.3	1.6	2.0	3.2	2.6	2.5	2.7	2.5	3.2	3.3	2.8	-0.5
Hispanic	—	6.2	6.1	4.3	3.6	4.0	4.6	4.8	4.8	4.5	4.0	4.0	4.1	3.3	3.1	3.4	2.7	2.6	-0.1

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of two forms in 1991–1996 and on two of four forms beginning in 1997; N is one half of N indicated in Table D-108.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-100**  
**Smokeless Tobacco: Trends in 30-Day Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 30 days																
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 <sup>a</sup>	1991 <sup>a</sup>
<i>Approximate wtd. N =</i>	—	—	—	—	—	—	—	—	—	—	—	15,200	16,300	16,300	16,700	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	11.5	11.3	10.3	8.4	—	—
Gender:																	
Male	—	—	—	—	—	—	—	—	—	—	—	22.3	22.8	19.9	15.9	—	—
Female	—	—	—	—	—	—	—	—	—	—	—	1.6	0.7	1.7	1.2	—	—
College Plans:																	
None or under 4 years	—	—	—	—	—	—	—	—	—	—	—	14.5	15.5	13.1	9.6	—	—
Complete 4 years	—	—	—	—	—	—	—	—	—	—	—	9.8	9.0	8.8	7.7	—	—
Region:																	
Northeast	—	—	—	—	—	—	—	—	—	—	—	9.5	7.3	5.9	5.0	—	—
Midwest	—	—	—	—	—	—	—	—	—	—	—	13.5	11.3	10.8	8.3	—	—
South	—	—	—	—	—	—	—	—	—	—	—	12.2	13.7	12.1	9.8	—	—
West	—	—	—	—	—	—	—	—	—	—	—	9.3	11.7	10.9	9.1	—	—
Population Density:																	
Large MSA	—	—	—	—	—	—	—	—	—	—	—	9.0	6.4	7.7	6.8	—	—
Other MSA	—	—	—	—	—	—	—	—	—	—	—	8.9	10.5	8.5	7.6	—	—
Non-MSA	—	—	—	—	—	—	—	—	—	—	—	17.1	17.5	16.1	11.7	—	—
Parental Education: <sup>b</sup>																	
1.0–2.0 (Low)	—	—	—	—	—	—	—	—	—	—	—	8.6	11.7	10.7	5.3	—	—
2.5–3.0	—	—	—	—	—	—	—	—	—	—	—	14.4	11.5	10.7	7.0	—	—
3.5–4.0	—	—	—	—	—	—	—	—	—	—	—	11.5	12.1	10.6	9.0	—	—
4.5–5.0	—	—	—	—	—	—	—	—	—	—	—	10.4	11.7	11.8	10.2	—	—
5.5–6.0 (High)	—	—	—	—	—	—	—	—	—	—	—	7.7	8.1	7.2	8.4	—	—
Race (2-year average): <sup>c</sup>																	
White	—	—	—	—	—	—	—	—	—	—	—	—	12.9	12.0	10.6	—	—
African American	—	—	—	—	—	—	—	—	—	—	—	—	2.1	4.5	4.5	—	—
Hispanic	—	—	—	—	—	—	—	—	—	—	—	—	4.4	5.2	5.1	—	—

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ .

“—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of six forms;  $N$  is one sixth of  $N$  indicated in Table D-109.

**Caution:** Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.

(Table continued on next page.)

**TABLE D-100 (cont.)**  
**Smokeless Tobacco: Trends in 30-Day Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 30 days																	2007– 2008 change	
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>		
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	11.4	10.7	11.1	12.2	9.8	9.7	8.8	8.4	7.6	7.8	6.5	6.7	6.7	7.6	6.1	6.6	6.5	-0.1	
Gender:																			
Male	20.8	19.7	20.3	23.6	19.5	18.7	15.6	15.5	14.4	14.2	12.2	12.5	12.2	12.7	11.0	11.9	11.8	0.0	
Female	2.0	2.3	2.6	1.8	1.1	1.2	1.5	1.3	1.3	1.6	1.2	1.0	1.6	1.9	1.5	1.2	1.0	-0.3	
College Plans:																			
None or under 4 years	18.0	14.9	15.8	18.7	17.6	16.9	14.3	10.5	15.8	13.0	10.8	12.8	11.9	15.2	13.4	11.7	12.4	+0.6	
Complete 4 years	9.4	9.4	9.3	9.9	7.6	7.4	7.1	7.6	5.4	6.1	4.8	4.8	4.9	5.4	4.1	5.3	5.0	-0.3	
Region:																			
Northeast	8.2	9.6	12.0	9.6	8.4	6.9	2.6	4.3	5.3	5.4	5.3	6.3	5.1	8.0	5.3	5.3	7.5	+2.2	
Midwest	12.3	13.6	14.7	16.7	12.6	13.4	11.8	8.9	11.1	9.9	7.8	5.7	7.4	10.5	7.0	9.1	7.2	-1.9	
South	12.5	11.1	9.7	11.9	9.2	9.0	10.5	10.7	7.3	8.5	7.9	7.9	8.4	7.5	7.5	7.9	6.1	-1.8	
West	11.1	7.0	8.5	8.6	8.5	9.1	7.3	7.0	6.3	6.2	3.9	6.0	4.3	4.0	3.4	2.8	5.6	+2.8	
Population Density:																			
Large MSA	5.9	7.1	7.5	12.5	8.6	6.5	4.7	4.9	4.2	4.4	3.4	3.4	3.8	4.3	4.8	3.9	2.6	-1.4	
Other MSA	11.1	9.9	11.3	9.5	7.4	7.4	7.7	8.5	7.9	8.0	5.7	6.9	5.6	7.8	4.6	6.8	6.2	-0.6	
Non-MSA	16.9	15.0	14.7	16.7	15.3	17.9	16.1	11.7	11.4	11.5	11.9	10.4	12.1	11.3	10.9	10.1	11.8	+1.7	
Parental Education: <sup>b</sup>																			
1.0–2.0 (Low)	14.9	7.0	12.3	9.8	6.3	5.8	6.1	5.4	4.3	6.3	4.1	9.3	6.1	5.3	4.9	5.3	3.4	-2.0	
2.5–3.0	12.4	11.6	12.9	11.5	10.4	10.7	9.0	9.1	9.9	7.5	5.6	5.9	8.8	9.7	8.0	9.8	7.2	-2.6	
3.5–4.0	12.4	10.8	9.8	12.8	9.1	10.4	9.8	8.8	8.9	8.6	7.4	6.5	4.6	7.8	6.4	5.3	6.8	+1.6	
4.5–5.0	8.0	13.3	11.1	12.8	11.4	9.1	9.6	8.5	6.2	6.2	7.3	7.6	7.9	8.0	6.1	6.6	6.5	-0.1	
5.5–6.0 (High)	10.6	7.8	10.2	11.6	8.1	9.9	7.4	7.9	5.7	10.3	4.6	6.2	5.4	3.7	3.5	5.8	6.3	+0.5	
Race (2-year average): <sup>c</sup>																			
White	—	13.8	13.8	13.8	13.0	12.2	11.8	11.0	10.5	10.3	9.7	8.5	8.2	8.7	8.8	8.3	8.6	+0.3	
African American	—	2.0	1.9	2.1	2.7	2.2	1.4	1.5	1.5	1.2	1.0	1.0	0.6	0.3	0.5	1.8	2.0	+0.2	
Hispanic	—	6.0	5.4	7.6	8.1	5.3	4.3	3.9	3.8	3.2	2.6	3.1	3.9	4.9	3.8	2.7	2.3	-0.3	

<sup>a</sup>Prevalence of smokeless tobacco use was not asked of 12th graders in 1990 and 1991. Prior to 1990 the prevalence-of-use question on smokeless tobacco was located near the end of one 12th-grade questionnaire form, whereas after 1991 the question was placed earlier and in a different form. This shift could explain the discontinuities between the corresponding data.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-101**  
**Smokeless Tobacco: Trends in 30-Day Prevalence of Daily Use by Subgroups in Grade 8**

	Percentage who used daily in last 30 days																		2007– 2008 change	
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>		
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700		
Total	1.6	1.8	1.5	1.9	1.2	1.5	1.0	1.0	0.9	0.9	1.2	0.8	0.8	1.0	0.7	0.7	0.8	0.8	-0.1	
Gender:																				
Male	3.1	3.4	2.9	3.2	2.2	2.9	1.7	1.8	1.6	1.5	2.5	1.5	1.4	1.7	1.2	1.1	1.6	1.2	-0.4	
Female	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.1	0.2	0.2	0.3	0.2	0.3	0.1	0.4	+0.2	
College Plans:																				
None or under 4 years	4.1	5.6	4.4	5.4	3.5	5.1	3.6	6.1	3.8	2.7	4.5	4.5	4.0	3.8	2.4	4.0	3.2	5.0	+1.8	
Complete 4 years	1.2	1.2	1.1	1.4	0.9	1.0	0.6	0.5	0.5	0.7	0.9	0.5	0.5	0.7	0.5	0.4	0.6	0.4	-0.2	
Region:																				
Northeast	1.2	0.9	0.6	0.8	0.6	0.8	0.6	0.4	0.1	0.4	0.7	0.6	0.8	1.0	0.1	0.6	0.2	0.9	+0.7	
Midwest	1.5	1.6	1.6	1.4	1.1	2.0	1.2	1.3	0.9	1.3	1.1	1.1	0.6	0.6	0.3	0.5	0.5	0.4	-0.1	
South	2.4	3.0	2.2	3.3	1.8	2.0	1.5	1.3	1.6	1.3	2.1	1.0	1.3	1.7	1.4	1.1	1.5	1.3	-0.2	
West	0.6	0.8	1.0	0.9	0.8	0.8	0.2	0.7	0.3	0.2	0.1	0.2	0.2	0.3	0.2	0.4	0.4	0.3	-0.1	
Population Density:																				
Large MSA	0.5	0.6	0.7	0.7	0.4	0.4	0.5	0.4	0.3	0.2	0.3	0.4	0.7	0.4	*	0.3	0.4	0.4	0.0	
Other MSA	1.2	1.9	1.5	1.0	0.9	1.2	0.8	0.6	0.8	0.8	0.8	0.6	0.6	0.6	0.5	0.6	0.7	0.7	-0.1	
Non-MSA	3.3	2.8	2.5	4.6	2.6	3.4	1.6	2.6	1.8	2.0	2.9	1.8	1.5	2.6	1.9	1.6	1.7	1.5	-0.2	
Parental Education: <sup>a</sup>																				
1.0–2.0 (Low)	2.8	3.5	2.0	3.0	2.2	1.5	3.2	2.6	0.9	1.4	1.8	2.2	1.8	2.8	1.4	1.3	1.9	1.5	-0.4	
2.5–3.0	2.2	2.6	1.9	2.7	1.7	3.1	1.1	1.5	1.6	1.4	2.1	1.0	1.0	1.1	0.5	0.9	1.0	1.3	+0.3	
3.5–4.0	1.4	1.2	1.8	1.9	1.2	1.7	0.9	1.3	0.8	1.3	0.3	1.0	0.8	0.8	0.8	0.7	0.8	0.8	0.0	
4.5–5.0	0.8	1.3	1.1	1.1	0.9	0.3	0.8	0.5	0.5	0.4	0.5	0.3	0.2	0.7	0.8	0.6	0.6	0.3	-0.3	
5.5–6.0 (High)	1.0	0.9	0.6	0.7	0.8	0.8	0.4	0.5	0.4	0.4	1.7	0.9	1.1	0.8	0.4	0.5	0.5	0.6	+0.2	
Race (2-year average): <sup>b</sup>																				
White	—	2.0	2.0	2.0	1.9	1.7	1.5	1.2	1.1	1.1	1.2	1.0	0.7	0.9	0.9	0.7	0.9	0.9	0.0	
African American	—	0.3	0.4	0.7	0.6	0.4	0.5	0.4	0.4	0.4	0.5	0.5	0.6	0.5	0.2	0.5	0.5	0.7	+0.3	
Hispanic	—	0.8	0.9	0.9	0.7	1.1	0.9	0.8	1.0	0.8	0.8	0.8	0.9	0.9	0.4	0.5	0.5	0.4	-0.1	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

“—” indicates data not available. “\*” indicates less than 0.05% but greater than 0%.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of two forms in 1991–1996 and on two of four forms beginning in 1997; N is one half of N indicated in Table D-107.

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-102**  
**Smokeless Tobacco: Trends in 30-Day Prevalence of Daily Use by Subgroups in Grade 10**

	Percentage who used daily in last 30 days																		2007– 2008 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100	
Total	3.3	3.0	3.3	3.0	2.7	2.2	2.2	2.2	1.5	1.9	2.2	1.7	1.8	1.6	1.9	1.7	1.6	1.4	-0.2
Gender:																			
Male	6.3	6.3	6.4	5.9	5.2	4.2	4.0	4.3	3.2	3.9	4.5	3.0	3.7	3.0	3.4	3.3	2.9	2.6	-0.2
Female	0.2	0.1	0.3	0.2	0.2	0.2	0.3	0.3	0.1	0.2	0.3	0.2	0.1	0.2	0.3	*	0.3	0.3	0.0
College Plans:																			
None or under 4 years	7.6	8.5	8.8	6.5	7.8	5.4	6.3	6.4	3.6	5.9	6.6	4.6	4.8	5.0	5.4	6.8	4.4	6.2	+1.8
Complete 4 years	2.3	1.9	2.2	2.2	1.9	1.6	1.5	1.5	1.2	1.2	1.5	1.0	1.3	1.1	1.3	1.0	1.2	0.8	-0.3
Region:																			
Northeast	1.8	1.0	1.7	3.0	2.0	1.3	1.5	1.2	1.2	0.9	1.1	0.8	1.6	2.1	1.3	0.8	1.4	0.5	-0.9
Midwest	3.1	2.9	2.5	2.4	2.5	2.1	1.4	2.1	2.0	2.1	2.1	1.3	1.3	0.8	1.7	2.2	1.6	2.4	+0.8
South	4.7	4.5	5.2	3.3	4.1	3.3	3.5	3.8	2.0	2.8	3.6	2.6	3.0	2.6	2.8	2.3	2.6	2.1	-0.5
West	2.7	2.9	3.1	3.6	1.1	1.0	1.7	0.8	0.7	1.0	0.9	1.1	0.8	0.6	1.2	0.9	0.4	0.2	-0.2
Population Density:																			
Large MSA	1.5	1.6	1.1	1.0	1.5	0.6	0.8	1.0	0.8	1.6	0.8	1.3	1.2	0.8	0.8	1.1	1.0	0.7	-0.3
Other MSA	3.1	2.8	3.2	3.5	2.3	2.3	1.7	1.5	1.0	1.0	1.7	1.4	1.5	1.3	1.4	1.4	1.5	1.1	-0.4
Non-MSA	5.0	4.9	5.3	4.2	4.9	3.6	4.6	5.0	3.5	3.8	5.0	2.6	3.5	3.4	4.2	3.2	2.6	3.2	+0.6
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	2.5	3.9	4.1	3.2	3.6	1.7	3.8	2.6	1.7	2.4	3.8	1.7	1.7	1.5	2.0	3.6	2.0	1.0	-1.0
2.5–3.0	4.8	5.0	4.3	3.8	3.4	3.4	2.0	2.8	1.7	2.3	3.2	1.2	2.1	1.8	2.6	2.9	2.1	1.7	-0.4
3.5–4.0	3.3	2.8	3.1	3.0	2.8	1.4	2.4	2.7	1.6	1.6	1.5	2.0	1.9	2.4	2.0	1.3	1.6	1.9	+0.3
4.5–5.0	2.5	1.7	2.5	2.7	2.9	2.3	1.7	1.8	1.6	1.9	1.9	1.5	1.7	0.7	1.7	1.1	1.4	1.3	0.0
5.5–6.0 (High)	2.5	1.6	2.7	1.7	1.0	1.4	1.9	0.7	0.8	0.8	1.9	1.3	1.4	0.9	1.2	1.3	1.1	0.1	-1.1 s
Race (2-year average): <sup>b</sup>																			
White	—	3.8	3.9	3.8	3.3	2.9	2.5	2.7	2.4	2.1	2.4	2.3	2.1	2.1	2.1	2.2	2.1	2.1	0.0
African American	—	0.5	0.4	0.6	0.5	0.4	0.4	0.4	0.3	0.4	0.9	0.8	0.4	0.6	0.8	0.8	0.6	0.4	-0.2
Hispanic	—	1.1	1.0	0.8	1.2	1.2	1.3	1.3	0.8	0.8	1.0	0.5	0.4	0.9	1.0	0.7	0.3	0.2	-0.1

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

“—” indicates data not available. “\*” indicates less than 0.05% but greater than 0%.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of two forms in 1991–1996 and on two of four forms beginning in 1997; *N* is one half of *N* indicated in Table D-108.

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-103**  
**Smokeless Tobacco: Trends in 30-Day Prevalence of Daily Use by Subgroups in Grade 12**

	Percentage who used daily in last 30 days																
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 <sup>a</sup>	1991 <sup>a</sup>
<i>Approximate wtd. N =</i>	—	—	—	—	—	—	—	—	—	—	—	15,200	16,300	16,300	16,700	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	4.7	5.1	4.3	3.3	—	—
Gender:																	
Male	—	—	—	—	—	—	—	—	—	—	—	10.0	10.7	8.6	6.8	—	—
Female	—	—	—	—	—	—	—	—	—	—	—	0.1	0.1	0.5	0.0	—	—
College Plans:																	
None or under 4 years	—	—	—	—	—	—	—	—	—	—	—	7.1	7.8	5.8	4.2	—	—
Complete 4 years	—	—	—	—	—	—	—	—	—	—	—	3.3	3.7	3.5	2.7	—	—
Region:																	
Northeast	—	—	—	—	—	—	—	—	—	—	—	4.6	2.1	2.3	1.3	—	—
Midwest	—	—	—	—	—	—	—	—	—	—	—	4.5	4.5	3.5	2.2	—	—
South	—	—	—	—	—	—	—	—	—	—	—	6.1	7.4	6.3	4.2	—	—
West	—	—	—	—	—	—	—	—	—	—	—	2.9	5.5	4.0	4.9	—	—
Population Density:																	
Large MSA	—	—	—	—	—	—	—	—	—	—	—	3.4	3.3	3.0	3.0	—	—
Other MSA	—	—	—	—	—	—	—	—	—	—	—	3.3	4.3	2.5	2.8	—	—
Non-MSA	—	—	—	—	—	—	—	—	—	—	—	7.8	8.5	8.9	4.6	—	—
Parental Education: <sup>b</sup>																	
1.0–2.0 (Low)	—	—	—	—	—	—	—	—	—	—	—	1.9	5.6	5.3	1.8	—	—
2.5–3.0	—	—	—	—	—	—	—	—	—	—	—	7.6	6.9	3.2	3.9	—	—
3.5–4.0	—	—	—	—	—	—	—	—	—	—	—	3.5	4.7	5.4	3.1	—	—
4.5–5.0	—	—	—	—	—	—	—	—	—	—	—	3.9	5.0	4.7	4.6	—	—
5.5–6.0 (High)	—	—	—	—	—	—	—	—	—	—	—	3.3	2.1	3.5	1.2	—	—
Race (2-year average): <sup>c</sup>																	
White	—	—	—	—	—	—	—	—	—	—	—	—	5.8	5.4	4.5	—	—
African American	—	—	—	—	—	—	—	—	—	—	—	—	0.6	1.0	0.5	—	—
Hispanic	—	—	—	—	—	—	—	—	—	—	—	—	0.8	2.1	2.1	—	—

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

“—” indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of six forms; *N* is one sixth of *N* indicated in Table D-109.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

(Table continued on next page.)



**TABLE D-103 (cont.)**  
**Smokeless Tobacco: Trends in 30-Day Prevalence of Daily Use by Subgroups in Grade 12**

	Percentage who used daily in last 30 days																	2007– 2008 change	
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
<i>Approximate wtd. N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000		
Total	4.3	3.3	3.9	3.6	3.3	4.4	3.2	2.9	3.2	2.8	2.0	2.2	2.8	2.5	2.2	2.8	2.7	-0.1	
Gender:																			
Male	7.8	6.4	7.2	7.2	7.1	8.6	6.0	5.7	6.5	5.6	4.3	4.6	5.6	4.7	4.3	5.6	5.6	0.0	
Female	0.5	0.4	0.3	0.1	0.1	0.2	0.0	0.0	0.4	0.3	0.0	0.0	0.2	0.2	0.1	0.2	0.0	-0.2	
College Plans:																			
None or under 4 years	7.4	4.3	6.6	6.5	6.8	9.1	6.5	3.4	7.9	4.7	2.4	5.3	5.0	7.1	6.1	5.3	6.6	+1.3	
Complete 4 years	3.3	3.1	2.8	2.7	2.6	2.7	2.3	2.6	2.0	2.1	1.4	1.4	2.0	1.5	1.2	2.1	1.9	-0.3	
Region:																			
Northeast	1.8	1.9	4.5	2.2	3.2	3.5	0.5	1.0	1.3	1.5	1.6	2.7	1.9	2.1	1.9	1.9	1.8	-0.1	
Midwest	4.0	4.4	4.7	4.9	4.1	7.0	4.0	3.4	5.0	2.8	2.2	1.1	3.0	3.8	2.1	3.9	3.1	-0.7	
South	5.4	4.0	3.5	4.2	3.1	3.6	4.6	4.0	4.0	3.8	2.4	2.6	3.7	2.7	3.0	4.2	2.7	-1.5	
West	5.1	1.7	3.2	1.6	2.9	3.0	1.8	1.9	1.6	2.6	1.3	2.2	1.7	1.0	1.0	0.1	3.0	+2.9	
Population Density:																			
Large MSA	2.0	1.7	2.0	2.1	2.6	3.3	0.9	0.5	0.9	1.4	0.4	0.5	0.8	1.0	1.4	1.6	0.5	-1.1	
Other MSA	4.2	3.0	3.6	3.2	1.9	3.3	2.4	3.1	3.7	2.6	2.0	2.2	2.2	2.4	1.6	2.4	2.1	-0.3	
Non-MSA	6.5	5.2	6.7	5.8	6.7	7.7	7.6	4.9	5.3	5.0	3.8	4.2	6.2	4.8	4.4	5.8	6.8	+1.0	
Parental Education: <sup>b</sup>																			
1.0–2.0 (Low)	6.7	3.9	6.6	2.7	2.2	1.3	2.2	2.1	2.9	4.0	2.2	4.9	3.0	2.2	1.3	2.5	0.7	-1.8	
2.5–3.0	4.8	3.5	3.8	4.7	3.6	5.8	5.2	3.7	4.2	3.2	1.7	1.4	4.2	3.5	3.3	3.8	3.4	-0.3	
3.5–4.0	5.2	3.3	3.3	2.9	3.6	3.7	2.6	3.5	3.9	2.8	2.1	2.0	2.0	3.7	1.7	2.7	2.9	+0.2	
4.5–5.0	2.4	3.7	3.9	3.5	4.6	3.9	3.0	1.9	2.1	2.7	2.4	2.8	2.6	1.8	2.6	3.1	2.7	-0.4	
5.5–6.0 (High)	2.6	1.8	2.7	2.7	1.1	5.0	2.5	2.1	2.5	2.5	0.2	1.8	1.9	0.4	1.3	1.8	2.2	+0.4	
Race (2-year average): <sup>c</sup>																			
White	—	4.8	4.7	4.6	4.1	5.0	5.2	4.3	4.3	4.4	3.5	2.9	3.2	3.5	3.4	3.4	3.8	+0.4	
African American	—	0.3	0.7	0.6	0.3	0.2	0.0	0.0	0.1	0.2	0.1	0.0	0.0	0.0	0.2	0.8	0.9	0.0	
Hispanic	—	1.6	0.7	1.2	2.2	1.9	0.8	0.4	0.9	0.6	0.3	0.7	1.1	0.7	0.4	0.7	0.6	0.0	

<sup>a</sup>Prevalence of smokeless tobacco use was not asked of 12th graders in 1990 and 1991. Prior to 1990 the prevalence-of-use question on smokeless tobacco was located near the end of one 12th-grade questionnaire form, whereas after 1991 the question was placed earlier and in a different form. This shift could explain the discontinuities between the corresponding data.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>c</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-104**  
**Steroids: Trends in Annual Prevalence of Use by Subgroups in Grade 8**

	Percentage who used in last 12 months																		2007–
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008
<i>Approximate wtd. N =</i>	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700	
Total	1.0	1.1	0.9	1.2	1.0	0.9	1.0	1.2	1.7	1.7	1.6	1.5	1.4	1.1	1.1	0.9	0.8	0.9	+0.1
Gender:																			
Male	1.8	1.7	1.4	1.8	1.3	1.1	1.3	1.6	2.5	2.2	2.3	1.8	1.8	1.3	1.2	1.2	1.1	1.2	0.0
Female	0.3	0.5	0.3	0.6	0.8	0.7	0.7	0.7	0.9	1.0	1.0	1.2	1.1	1.0	0.9	0.6	0.4	0.5	+0.1
College Plans:																			
None or under 4 years	2.2	2.4	2.2	2.5	2.2	1.5	2.4	2.8	4.0	3.6	3.1	3.6	2.7	3.2	2.4	2.4	2.7	2.3	-0.4
Complete 4 years	0.8	0.9	0.7	1.0	0.9	0.8	0.8	1.0	1.4	1.5	1.5	1.3	1.3	0.9	0.9	0.7	0.6	0.8	+0.2
Region:																			
Northeast	0.7	1.1	0.6	1.0	1.0	1.1	1.0	1.1	1.6	1.7	1.8	1.2	1.1	0.8	0.6	0.6	0.5	0.8	+0.2
Midwest	1.1	1.2	1.0	1.0	1.1	0.8	1.0	1.2	1.6	1.8	1.7	1.6	1.7	1.2	1.1	0.8	0.7	0.9	+0.2
South	1.2	1.1	1.0	1.6	1.1	0.9	0.9	1.4	1.9	1.8	1.9	1.9	1.6	1.3	1.3	1.1	1.0	1.1	+0.2
West	0.7	0.9	0.7	1.0	1.0	0.8	1.1	0.9	1.4	1.3	0.9	1.2	1.2	1.0	1.0	0.7	0.8	0.6	-0.1
Population Density:																			
Large MSA	0.8	1.0	0.8	0.9	0.9	0.8	0.9	1.0	1.3	1.6	1.6	1.1	1.0	1.0	0.8	0.8	0.7	0.8	+0.1
Other MSA	1.2	1.2	0.9	1.2	1.2	0.9	0.9	1.2	1.9	1.5	1.7	1.6	1.5	1.1	1.1	0.8	0.8	0.9	+0.1
Non-MSA	1.0	0.9	0.9	1.5	0.9	0.9	1.2	1.4	1.7	2.0	1.6	2.1	1.8	1.3	1.3	1.2	1.0	1.0	0.0
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	1.8	1.2	1.2	1.6	1.3	0.9	1.4	1.7	2.2	2.5	2.0	1.8	1.3	1.5	2.1	1.0	1.7	1.7	0.0
2.5–3.0	1.1	1.2	0.8	1.6	1.3	0.7	0.9	1.1	1.9	2.1	1.6	1.7	1.9	1.4	1.0	0.9	0.9	1.0	0.0
3.5–4.0	1.0	1.0	1.1	1.3	0.8	0.9	1.2	1.4	1.6	1.3	1.9	1.9	1.6	1.0	1.1	1.0	0.8	1.0	+0.2
4.5–5.0	0.7	0.9	0.8	0.8	0.8	1.2	0.9	1.1	1.4	1.6	1.5	1.0	1.3	1.2	1.1	0.7	0.4	0.7	+0.3
5.5–6.0 (High)	1.0	1.3	0.6	0.9	1.5	0.9	1.2	1.1	2.0	1.6	1.7	1.6	1.0	0.7	0.7	1.1	0.8	0.8	0.0
Race (2-year average): <sup>b</sup>																			
White	—	1.1	1.0	1.0	1.1	0.9	0.9	1.1	1.5	1.9	1.8	1.7	1.6	1.3	1.0	0.9	0.8	0.8	0.0
African American	—	0.7	0.6	0.8	0.9	0.7	0.6	0.7	0.8	0.7	0.8	1.2	1.2	0.9	0.9	0.8	0.8	0.7	-0.1
Hispanic	—	1.2	1.1	1.1	1.3	1.5	1.4	1.4	1.8	1.8	1.5	1.5	1.7	1.7	1.2	0.9	0.7	0.7	0.0

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-107 for the number of subgroup cases. See appendix B for definition of variables in table.

In 2006 and 2008, the question text was changed slightly in half of the questionnaire forms. An examination of the data did not show any effect from the wording changes.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-105**  
**Steroids: Trends in Annual Prevalence of Use by Subgroups in Grade 10**

	Percentage who used in last 12 months																		2007– 2008
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	change
<i>Approximate wtd. N =</i>	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100	
Total	1.1	1.1	1.0	1.1	1.2	1.2	1.2	1.2	1.7	2.2	2.1	2.2	1.7	1.5	1.3	1.2	1.1	0.9	-0.1
Gender:																			
Male	1.9	1.9	1.7	1.9	2.0	1.7	1.8	1.9	2.8	3.6	3.3	3.2	2.3	2.3	1.8	1.9	1.7	1.4	-0.3
Female	0.3	0.3	0.3	0.4	0.5	0.6	0.6	0.6	0.7	0.8	1.0	1.2	1.1	0.9	0.7	0.5	0.4	0.5	0.0
College Plans:																			
None or under 4 years	1.7	1.3	1.9	2.1	2.1	2.1	2.4	1.9	2.6	3.6	3.2	3.0	2.7	2.9	1.9	2.3	1.9	2.6	+0.7
Complete 4 years	0.9	1.0	0.8	0.9	1.1	1.0	1.0	1.1	1.6	1.9	1.9	2.1	1.5	1.4	1.2	1.1	0.9	0.7	-0.2
Region:																			
Northeast	1.2	0.9	1.0	1.0	1.1	1.0	0.9	1.4	2.0	1.8	1.9	2.0	1.9	1.4	1.5	0.9	1.1	0.8	-0.3
Midwest	1.0	1.1	1.2	1.1	1.2	1.4	1.2	1.1	1.8	2.1	1.5	1.8	1.9	1.4	1.2	1.2	1.2	1.0	-0.1
South	1.0	1.2	1.0	1.3	1.3	1.4	1.4	1.4	1.7	2.5	2.5	2.5	1.5	1.9	1.5	1.6	1.3	1.0	-0.3
West	1.0	1.2	0.8	1.1	1.3	0.6	1.3	0.9	1.4	2.1	2.3	2.4	1.4	1.4	0.9	0.9	0.7	0.8	+0.1
Population Density:																			
Large MSA	1.5	0.9	0.8	0.8	0.8	0.8	1.0	0.8	1.2	2.3	1.9	2.1	1.4	1.2	0.9	1.0	0.8	0.7	-0.2
Other MSA	1.0	1.0	0.9	1.1	1.4	1.2	1.2	1.3	1.9	2.0	2.0	2.3	1.5	1.5	1.4	1.3	1.1	1.0	-0.1
Non-MSA	0.8	1.4	1.4	1.5	1.4	1.5	1.5	1.5	2.0	2.5	2.4	2.1	2.6	2.1	1.5	1.4	1.3	1.1	-0.2
Parental Education: <sup>a</sup>																			
1.0–2.0 (Low)	0.7	0.9	1.5	1.8	1.2	1.7	1.7	1.3	1.2	2.3	1.6	1.6	1.9	1.5	1.8	1.4	1.0	1.5	+0.5
2.5–3.0	1.3	1.1	1.0	0.9	1.1	0.7	1.1	1.1	1.7	2.2	2.1	2.0	1.9	1.8	1.2	1.5	1.4	1.0	-0.4
3.5–4.0	1.0	1.2	1.1	0.8	1.6	1.2	1.4	1.7	2.0	2.0	2.3	2.8	1.9	1.7	1.0	1.3	1.0	0.9	-0.1
4.5–5.0	0.9	1.0	0.8	1.4	1.1	1.2	1.0	0.9	1.5	2.4	2.0	2.0	1.6	1.5	1.5	0.9	1.1	0.8	-0.3
5.5–6.0 (High)	1.2	1.4	1.1	1.1	1.0	1.1	1.1	1.1	2.4	2.2	2.1	3.0	1.3	1.2	1.3	1.4	0.9	1.0	+0.1
Race (2-year average): <sup>b</sup>																			
White	—	1.0	1.0	1.0	1.2	1.3	1.3	1.3	1.5	2.1	2.3	2.4	2.3	1.8	1.6	1.3	1.2	1.0	-0.2
African American	—	0.7	0.8	0.8	0.7	0.7	0.5	0.5	0.7	1.2	1.6	1.2	0.8	0.7	0.9	1.1	0.9	0.8	0.0
Hispanic	—	1.2	1.4	1.3	0.9	1.1	1.2	1.2	1.5	1.8	2.1	2.1	1.8	1.6	1.3	1.0	0.7	1.1	+0.4

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . "—" indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

See Table D-108 for the number of subgroup cases. See appendix B for definition of variables in table.

In 2006 and 2008, the question text was changed slightly in half of the questionnaire forms. An examination of the data did not show any effect from the wording changes.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-106**  
**Steroids: Trends in Annual Prevalence of Use by Subgroups in Grade 12**

	Percentage who used in last 12 months																				2007– 2008 change	
	1975– 1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007		2008
<i>Approximate wtd. N =</i>	—	16,700	15,200	15,000	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	—	1.9	1.7	1.4	1.1	1.2	1.3	1.5	1.4	1.4	1.7	1.8	1.7	2.4	2.5	2.1	2.5	1.5	1.8	1.4	1.5	+0.1
Gender:																						
Male	—	2.8	2.6	2.4	2.1	2.5	2.1	2.4	2.2	2.5	2.8	3.1	2.5	3.8	3.8	3.2	3.3	2.6	2.7	2.3	2.5	+0.3
Female	—	0.9	0.3	0.2	0.1	0.1	0.5	0.6	0.4	0.5	0.3	0.6	0.9	1.1	1.3	1.1	1.7	0.4	0.7	0.6	0.4	-0.2
College Plans:																						
None or under 4 years	—	2.3	2.2	2.1	2.1	2.0	1.9	2.0	2.3	2.3	2.1	3.6	2.0	4.6	4.1	2.6	2.8	2.1	2.7	2.1	3.1	+1.0
Complete 4 years	—	1.6	1.3	1.2	0.8	0.9	1.1	1.2	1.1	1.2	1.4	1.3	1.6	1.8	2.0	2.0	2.4	1.2	1.5	1.3	1.1	-0.2
Region:																						
Northeast	—	2.0	1.3	1.2	0.6	1.5	1.5	1.6	1.3	2.1	0.9	1.3	1.9	4.5	2.1	3.0	3.8	1.6	2.0	1.6	2.2	+0.6
Midwest	—	1.5	1.3	1.4	1.4	0.8	2.2	1.5	2.1	2.1	2.3	1.6	2.3	1.7	2.8	1.8	2.4	1.6	1.5	1.3	1.7	+0.3
South	—	2.1	2.2	1.7	0.6	1.6	1.0	1.7	1.3	0.5	1.6	2.6	1.5	2.1	2.5	1.8	2.2	1.6	2.0	2.0	1.4	-0.5
West	—	1.9	1.7	1.0	2.3	1.1	0.8	1.0	0.3	1.6	1.7	1.2	1.1	2.1	2.4	2.2	2.0	1.0	1.5	0.5	0.9	+0.4
Population Density:																						
Large MSA	—	1.6	1.3	1.1	1.0	0.7	1.1	1.4	1.3	0.8	2.1	1.3	1.7	1.9	2.0	2.1	2.6	1.4	1.6	1.0	0.9	-0.2
Other MSA	—	2.3	1.5	1.4	1.4	0.9	1.5	1.3	1.3	1.7	1.5	2.0	2.0	2.9	3.0	2.1	2.9	1.4	1.6	1.5	1.4	-0.1
Non-MSA	—	1.1	2.4	1.6	0.8	2.2	1.3	2.1	1.5	1.6	1.6	1.9	1.2	2.0	2.1	2.3	1.8	1.7	2.2	1.9	2.4	+0.4
Parental Education: <sup>a</sup>																						
1.0–2.0 (Low)	—	0.6	1.1	2.0	2.1	1.1	2.8	1.1	1.5	3.4	3.0	1.5	1.3	2.1	3.6	2.9	4.9	2.1	2.8	3.0	2.1	-0.9
2.5–3.0	—	2.1	2.0	0.6	0.9	1.3	1.7	1.3	1.9	1.4	1.4	0.8	1.6	3.2	3.0	1.3	2.9	1.3	1.8	1.6	1.6	0.0
3.5–4.0	—	2.6	2.3	1.6	1.3	1.5	1.1	1.1	1.3	1.1	1.1	2.5	1.9	1.9	2.8	2.7	2.5	1.7	1.7	1.1	1.3	+0.2
4.5–5.0	—	1.3	1.1	1.6	0.9	1.3	0.6	2.0	1.1	1.2	1.9	2.2	1.4	1.9	2.3	2.3	1.8	1.3	1.3	1.1	1.4	+0.2
5.5–6.0 (High)	—	2.1	1.0	0.5	0.8	0.8	1.2	1.4	1.1	1.3	1.5	1.1	2.4	2.2	1.0	1.4	2.4	1.2	1.5	1.5	1.5	0.0
Race (2-year average): <sup>b</sup>																						
White	—	—	1.6	1.3	1.3	1.2	1.1	1.4	1.3	1.2	1.5	1.7	1.8	2.1	2.5	2.4	2.4	2.1	1.6	1.5	1.5	0.0
African American	—	—	1.8	1.2	0.5	1.1	1.8	1.2	1.4	1.5	0.9	0.7	1.0	1.2	1.0	1.1	1.3	1.6	1.7	1.6	1.4	-0.1
Hispanic	—	—	2.3	3.3	1.8	0.9	1.7	1.3	0.6	1.6	2.4	2.9	2.4	2.1	2.2	1.8	2.4	2.0	2.3	2.3	1.3	-1.0

*Source.* The Monitoring the Future study, the University of Michigan.

*Notes.* Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . “—” indicates data not available. Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding. See Table D-109 for the number of subgroup cases. See appendix B for definition of variables in table.

Data based on one of six forms in 1989–1990;  $N$  is one sixth of  $N$  indicated in Table D-109. Data based on two of six forms in 1991–2005;  $N$  is two sixths of  $N$  indicated in Table D-109. Data based on three of six forms beginning in 2006;  $N$  is three sixths of  $N$  indicated in Table D-109. In 2006, the question text was changed slightly in one of the questionnaire forms. In 2008, the question text was changed slightly in two of the questionnaire forms. An examination of the data did not show any effect from the wording changes.

**Caution: Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Parental education is an average score of mother’s education and father’s education. See appendix B for details.

<sup>b</sup>To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-107**  
**Approximate Weighted Ns by Subgroups in Grade 8**

	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Total	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700
Gender:																		
Male	8,600	8,800	8,600	8,300	8,100	8,400	8,600	8,600	7,800	7,900	7,500	7,000	7,600	8,100	8,000	7,800	7,800	7,600
Female	8,600	9,300	9,200	8,600	8,700	8,800	9,300	8,900	8,400	8,300	8,300	7,600	8,400	8,500	8,400	8,200	7,900	7,600
College Plans:																		
None or under 4 years	2,300	2,400	2,100	2,000	1,900	2,200	1,900	1,800	1,700	1,600	1,600	1,300	1,600	1,600	1,600	1,500	1,300	1,200
Complete 4 years	14,600	15,400	15,400	14,700	14,800	14,800	15,800	15,600	14,500	14,500	14,100	13,400	14,500	15,000	14,800	14,600	14,400	14,000
Region:																		
Northeast	3,000	3,700	3,900	3,400	3,100	3,200	3,400	3,300	3,000	2,800	2,900	2,800	3,200	3,200	3,200	2,900	2,400	2,600
Midwest	5,300	5,300	4,700	4,200	4,300	4,600	4,100	4,300	4,200	4,300	4,000	4,000	4,100	4,000	3,700	3,500	3,600	3,400
South	6,300	6,200	6,400	6,300	6,600	6,300	7,200	6,600	6,100	6,300	5,900	5,400	6,300	6,300	6,300	6,300	6,400	5,600
West	2,900	3,400	3,300	3,400	3,500	3,700	3,900	3,900	3,400	3,300	3,400	2,900	2,900	3,500	3,600	3,800	3,700	4,100
Population Density:																		
Large MSA	4,500	5,700	5,500	4,400	5,200	5,200	5,000	4,800	4,800	4,900	4,700	4,500	4,900	5,000	5,400	5,400	5,000	5,100
Other MSA	8,400	8,300	8,800	8,300	7,800	8,400	9,000	8,800	7,900	7,900	7,500	6,900	7,700	7,900	7,400	7,300	7,800	7,500
Non-MSA	4,600	4,600	4,000	4,600	4,500	4,200	4,600	4,500	4,000	3,900	4,000	3,700	3,900	4,100	4,000	3,800	3,300	3,100
Parental Education:																		
1.0–2.0 (Low)	1,400	1,700	1,700	1,600	1,500	1,500	1,500	1,300	1,300	1,300	1,300	1,100	1,100	1,200	1,400	1,400	1,400	1,300
2.5–3.0	4,400	4,600	4,500	4,100	3,900	4,300	4,000	3,900	3,800	3,700	3,400	3,200	3,400	3,400	3,400	3,300	3,100	2,800
3.5–4.0	4,100	4,300	4,300	4,200	4,000	4,100	4,300	4,100	3,800	3,900	4,000	3,500	3,700	4,000	3,700	3,800	3,700	3,500
4.5–5.0	4,100	4,100	4,100	3,900	3,900	3,900	4,500	4,500	4,000	3,900	3,900	3,800	4,200	4,300	4,200	4,000	3,900	4,100
5.5–6.0 (High)	2,200	2,300	2,300	2,200	2,300	2,200	2,600	2,700	2,200	2,200	2,100	2,100	2,400	2,500	2,600	2,300	2,300	2,300
Race (2-year average): <sup>a</sup>																		
White	—	21,900	22,000	20,900	19,800	20,200	21,400	21,300	19,800	18,900	18,600	17,600	18,400	20,400	20,500	19,500	18,300	17,300
African American	—	4,200	4,800	5,500	5,600	5,300	4,700	4,900	5,000	4,800	4,500	4,500	4,400	3,900	3,800	4,000	3,900	4,000
Hispanic	—	3,400	3,600	4,000	4,000	4,000	4,200	4,100	4,100	4,000	4,100	3,900	3,400	3,200	3,600	4,700	5,400	5,100

Source. The Monitoring the Future study, the University of Michigan.

Notes. “—” indicates data not available. See appendix B for definition of variables in table.

**Caution:** The Ns in this table are based on the entire sample at each grade level. Some drug use questions are asked only in some of the questionnaire forms rather than in all, in which case these Ns need to be adjusted appropriately. Look under “Notes” in each table to see if only a fraction of the sample was asked about that drug. If there is no such indication, that means the entire sample received the question.

<sup>a</sup>Ns for each racial subgroup represent the combination of the specified year and the previous year. Data have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-108**  
**Approximate Weighted Ns by Subgroups in Grade 10**

	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Total	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100
Gender:																		
Male	7,200	7,000	7,300	7,700	8,300	7,500	7,400	7,100	6,300	6,800	6,600	6,900	7,500	7,900	7,900	7,900	7,800	7,000
Female	7,400	7,400	7,800	7,900	8,400	7,800	7,800	7,700	7,000	7,200	7,100	7,100	8,000	8,300	8,000	8,000	7,900	7,700
College Plans:																		
None or under 4 years	2,600	2,400	2,500	2,700	2,500	2,300	2,200	2,200	1,900	1,900	1,900	2,000	2,100	1,900	1,800	1,800	1,800	1,600
Complete 4 years	11,900	12,000	12,400	12,800	14,200	13,000	13,000	12,500	11,500	12,100	11,900	12,100	13,400	14,300	14,100	14,100	14,000	13,200
Region:																		
Northeast	2,700	3,000	2,900	3,100	3,300	3,100	3,300	3,100	3,000	2,800	2,700	2,600	3,400	3,600	3,500	3,200	3,200	2,800
Midwest	3,700	3,800	4,800	4,700	4,400	3,900	3,900	3,600	3,100	3,700	4,100	3,700	4,000	4,600	4,500	4,300	3,900	3,600
South	4,900	5,000	4,900	5,200	6,100	5,600	5,500	5,200	4,700	5,000	5,000	5,100	4,900	4,900	5,000	5,300	5,100	4,800
West	3,500	3,000	2,700	2,800	3,200	3,000	2,800	3,100	2,800	2,800	2,200	2,900	3,500	3,300	3,200	3,400	3,900	3,900
Population Density:																		
Large MSA	3,400	3,700	3,500	4,100	4,700	4,300	4,300	4,300	3,700	4,000	3,900	4,300	4,900	5,000	4,900	5,100	5,200	4,700
Other MSA	7,400	7,300	7,600	7,500	8,200	7,500	7,300	7,000	6,700	6,700	6,700	6,800	7,800	7,800	7,600	7,900	7,600	7,300
Non-MSA	4,000	3,800	4,200	4,200	4,100	3,800	3,900	3,700	3,200	3,600	3,400	3,200	3,100	3,600	3,700	3,200	3,300	3,100
Parental Education:																		
1.0–2.0 (Low)	1,300	1,300	1,300	1,300	1,200	1,100	1,300	1,300	1,100	1,200	1,200	1,300	1,200	1,300	1,100	1,100	1,200	1,300
2.5–3.0	3,900	3,900	4,100	4,100	4,100	3,600	3,700	3,700	3,200	3,200	3,200	3,300	3,500	3,400	3,200	3,200	3,300	3,000
3.5–4.0	3,900	3,900	4,100	4,300	4,600	4,300	4,100	4,000	3,600	3,700	3,700	3,700	4,200	4,200	4,100	4,300	4,400	3,800
4.5–5.0	3,500	3,400	3,500	3,700	4,000	3,900	3,700	3,500	3,300	3,500	3,400	3,500	3,900	4,300	4,400	4,500	4,300	4,000
5.5–6.0 (High)	1,800	1,700	1,700	1,800	2,300	1,900	1,900	1,800	1,700	1,900	1,800	1,700	2,100	2,400	2,400	2,300	2,100	2,000
Race (2-year average): <sup>a</sup>																		
White	—	19,600	20,700	22,000	22,900	22,400	20,900	19,800	18,400	18,200	18,600	18,000	18,500	19,900	20,400	21,100	20,800	18,300
African American	—	3,900	3,600	3,300	3,300	3,100	3,200	3,600	3,600	3,100	2,800	3,400	4,600	4,600	4,300	3,900	3,400	3,600
Hispanic	—	2,600	2,700	2,800	2,900	3,000	3,200	3,500	3,200	3,100	3,400	3,600	3,600	3,500	3,500	3,300	3,800	4,500

Source. The Monitoring the Future study, the University of Michigan.

Notes. “—” indicates data not available. See appendix B for definition of variables in table.

**Caution:** The Ns in this table are based on the entire sample at each grade level. Some drug use questions are asked only in some of the questionnaire forms rather than in all, in which case these Ns need to be adjusted appropriately. Look under “Notes” in each table to see if only a fraction of the sample was asked about that drug. If there is no such indication, that means the entire sample received the question.

<sup>a</sup>Ns for each racial subgroup represent the combination of the specified year and the previous year. Data have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

**TABLE D-109**  
**Approximate Weighted Ns by Subgroups in Grade 12**

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total	9,400	15,400	17,100	17,800	15,500	15,900	17,500	17,700	16,300	15,900	16,000	15,200	16,300	16,300	16,700	15,200	15,000
Gender:																	
Male	4,300	6,900	7,100	8,500	7,500	7,500	8,400	8,500	7,800	7,600	7,600	7,100	7,700	7,700	8,000	7,700	7,400
Female	5,200	7,000	7,600	9,000	8,000	7,800	8,600	8,600	8,000	7,800	8,000	7,700	8,200	8,200	8,300	7,100	7,200
College Plans:																	
None or under 4 years	—	6,500	6,700	8,100	6,800	6,300	6,700	7,200	6,300	5,900	5,600	5,100	5,000	4,700	4,800	4,200	4,000
Complete 4 years	—	6,800	7,200	8,600	8,000	8,500	9,700	9,200	8,800	8,900	9,300	9,100	10,300	10,600	11,000	10,100	10,300
Region:																	
Northeast	2,200	3,400	3,700	4,400	3,800	3,600	4,100	4,600	3,900	3,200	3,700	3,600	3,500	3,200	3,200	3,300	2,800
Midwest	2,900	4,500	4,600	5,200	4,800	4,700	5,300	5,200	4,600	4,500	4,400	4,300	4,400	4,300	4,500	4,200	4,000
South	3,000	4,300	4,600	6,000	4,800	4,800	5,300	5,300	5,200	5,300	4,900	4,700	5,200	5,600	6,100	5,000	5,100
West	1,400	2,200	2,200	2,500	2,600	2,700	2,800	2,600	2,600	2,900	3,000	2,600	3,200	3,200	2,900	2,700	3,100
Population Density:																	
Large MSA	2,100	3,700	4,000	4,600	4,000	3,900	4,500	4,800	4,200	4,100	4,200	3,700	4,200	4,400	4,000	3,800	3,600
Other MSA	4,000	5,700	6,200	8,000	6,800	6,700	7,100	7,300	6,800	6,900	6,900	7,000	8,000	7,700	8,800	7,700	7,200
Non-MSA	3,400	5,000	4,900	5,500	5,200	5,200	5,900	5,600	5,300	4,900	4,900	4,500	4,100	4,200	3,900	3,700	4,200
Parental Education:																	
1.0–2.0 (Low)	1,700	2,200	2,600	3,100	2,500	2,300	2,400	2,700	2,200	1,900	1,800	1,800	1,700	1,600	1,700	1,600	1,500
2.5–3.0	3,000	4,300	5,400	6,200	5,600	5,300	5,800	5,900	5,500	5,100	5,100	4,600	4,500	4,500	4,600	4,300	4,100
3.5–4.0	1,600	2,500	3,200	4,000	3,600	3,600	4,200	4,200	3,900	4,000	4,000	3,800	4,300	4,400	4,500	4,100	4,200
4.5–5.0	1,100	1,600	2,200	2,800	2,600	2,700	3,100	2,900	2,800	2,900	3,000	2,900	3,400	3,500	3,500	3,100	3,100
5.5–6.0 (High)	440	710	1,100	1,200	1,200	1,300	1,500	1,300	1,200	1,400	1,500	1,500	1,800	1,900	1,700	1,600	1,500
Race (2-year average): <sup>a</sup>																	
White	—	—	23,400	26,500	27,500	25,600	26,300	27,300	26,200	24,700	24,200	23,600	23,800	24,200	24,000	23,400	21,900
African American	—	—	3,300	3,700	3,500	3,500	4,000	4,000	3,900	4,000	4,000	3,500	3,200	3,600	3,900	3,500	3,200
Hispanic	—	—	890	1,000	940	740	930	1,300	1,300	1,200	1,200	1,500	1,900	2,100	2,400	2,500	2,400

Source. The Monitoring the Future study, the University of Michigan.

Notes. “—” indicates data not available. See appendix B for definition of variables in table.

**Caution:** The Ns in this table are based on the entire sample at each grade level. Some drug use questions are asked only in some of the questionnaire forms rather than in all, in which case these Ns need to be adjusted appropriately. Look under “Notes” in each table to see if only a fraction of the sample was asked about that drug.

If there is no such indication, that means the entire sample received the question.

<sup>a</sup>Ns for each racial subgroup represent the combination of the specified year and the previous year. Data have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.

(Table continued on next page.)

**TABLE D-109 (cont.)**  
**Approximate Weighted Ns by Subgroups in Grade 12**

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000
Gender:																	
Male	7,400	7,500	6,900	7,200	6,700	7,100	7,100	6,300	5,800	5,800	5,800	6,600	6,800	6,800	6,600	6,500	6,400
Female	7,900	8,200	8,000	7,800	7,100	7,700	7,500	6,700	6,400	6,500	6,600	7,400	7,200	7,300	7,100	7,400	6,900
College Plans:																	
None or under 4 years	3,700	3,700	3,400	3,300	2,600	3,200	3,100	2,800	2,600	2,500	2,400	2,800	2,800	2,600	2,500	2,400	2,300
Complete 4 years	11,200	11,600	11,100	11,200	10,800	11,000	11,100	10,200	9,300	9,600	9,700	11,100	11,000	11,300	11,000	11,300	10,800
Region:																	
Northeast	2,800	2,700	2,700	2,800	3,000	3,300	2,800	2,500	2,500	2,400	2,500	3,100	3,100	2,900	2,600	2,700	2,400
Midwest	4,400	4,600	4,000	4,300	3,800	4,100	3,800	3,600	3,100	3,700	3,300	3,600	3,800	3,600	3,500	3,200	3,500
South	5,600	5,800	5,700	5,400	5,100	5,300	5,700	4,900	4,500	4,100	4,300	4,900	5,000	5,200	5,200	5,500	5,000
West	3,000	3,200	3,000	2,900	2,400	2,700	2,900	2,600	2,700	2,600	2,800	3,000	2,700	3,000	2,900	3,100	3,100
Population Density:																	
Large MSA	3,600	3,700	4,300	4,400	3,400	4,100	4,300	3,800	3,800	3,800	4,000	4,600	4,200	4,300	4,700	4,700	3,700
Other MSA	8,200	7,800	7,100	7,000	7,000	7,500	7,500	6,200	5,800	5,800	5,900	6,500	6,800	7,000	6,200	6,600	7,100
Non-MSA	4,000	4,800	4,000	4,000	3,900	3,800	3,400	3,600	3,200	3,200	3,000	3,500	3,600	3,400	3,300	3,200	3,200
Parental Education:																	
1.0–2.0 (Low)	1,400	1,600	1,400	1,200	1,100	1,300	1,200	960	860	1,000	980	1,200	1,000	1,100	1,100	1,100	1,200
2.5–3.0	4,100	4,300	3,700	3,700	3,300	3,600	3,700	3,200	3,000	2,900	2,800	3,400	3,400	3,200	3,100	3,200	3,000
3.5–4.0	4,600	4,500	4,300	4,400	3,800	4,100	4,300	3,900	3,600	3,600	3,800	4,200	4,000	3,900	4,000	4,200	3,900
4.5–5.0	3,400	3,600	3,500	3,700	3,500	3,500	3,300	3,200	3,100	3,200	3,100	3,400	3,600	3,600	3,600	3,600	3,500
5.5–6.0 (High)	1,700	1,700	1,800	1,800	2,100	2,100	2,000	1,800	1,600	1,600	1,500	1,800	2,000	2,100	1,900	1,800	1,700
Race (2-year average): <sup>a</sup>																	
White	21,500	22,000	21,800	21,600	20,700	19,800	20,200	19,500	17,700	16,200	16,300	17,800	19,600	19,600	18,600	18,200	17,300
African American	3,900	4,200	3,600	3,300	3,200	3,600	3,700	3,400	3,300	3,100	2,900	3,000	3,200	3,000	3,000	3,200	3,500
Hispanic	2,600	2,900	3,100	2,700	2,600	2,800	3,000	2,500	2,200	2,600	3,100	3,100	2,800	2,900	3,500	3,700	4,000

Source. The Monitoring the Future study, the University of Michigan.

Notes. “—” indicates data not available. See appendix B for definition of variables in table.

**Caution:** The Ns in this table are based on the entire sample at each grade level. Some drug use questions are asked only in some of the questionnaire forms rather than in all, in which case these Ns need to be adjusted appropriately. Look under “Notes” in each table to see if only a fraction of the sample was asked about that drug.

If there is no such indication, that means the entire sample received the question.

<sup>a</sup>Ns for each racial subgroup represent the combination of the specified year and the previous year. Data have been combined to increase subgroup sample sizes and thus provide more stable estimates. For the data beginning in 2005, see the race/ethnicity note at the end of appendix D.



## **A Note about the Two-Year-Average Race/Ethnicity Data for 2005 and 2006**

In the original race/ethnicity question, which was used from the inception of the study through 2004, respondents were asked to select the *one* race/ethnicity category that they thought best described them. In 2005 the race/ethnicity question was changed in half of the questionnaire forms to conform more closely with the Office of Management and Budget guidelines. For the revised Monitoring the Future question, respondents were given a list of race/ethnicity options and instructed to mark *all* of them that applied. An examination of the data showed a very low occurrence of respondents (about 6% in 2005) selecting

In 2005, to enable the combination of the data from the original question and the revised question, the following method was used. For the original version of the question, respondents were assigned to the racial/ethnic group specified in their response. For the revised 2005 questions, those checking only White and no other racial/ethnic group were categorized as White; those checking African American and no other racial/ethnic group were categorized as African American; and those checking one or more of the four

The prevalence-of-use data presented in appendix D for the three largest racial/ethnic groups are based on two-year moving averages, so as to moderate random fluctuations. The 2005 race/ethnicity entries are, therefore, based on both the 2004 and 2005 data combined. Most of the entries for 2005 are based on 2004 and 2005 data derived from the original question combined with 2005 data derived from the new race/ethnicity question. In 2006 the race/ethnicity question was revised in the remaining forms. For the 2006 two-year moving averages, most of the entries are based on 2005 data derived from the original question combined with 2005 and 2006 data derived from the revised question. (Note that, because some drug use questions occur only in a few forms, there is some variation in the version of the race/ethnicity question upon which the 2005 data are based. Based on the analyses that we have examined, we do not think that these different permutations make

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