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A Profile of Adolescent Drivers Convicted of Felony Drunk Driving

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16. Abstract <p>This work was conducted to gain detailed knowledge about the characteristics of underage drinking drivers and the social events leading up to serious alcohol-involved crashes, and to determine how these factors might relate to specific countermeasures. This study investigates, in case study format, <i>all</i> underage drivers in Michigan convicted of driving under the influence of liquor and causing a death (OUIL-death) during the two years following the enactment of this felony crime. All eight underage drivers convicted of OUIL-death were selected from the Michigan Department of State driver-record data base. Information on these cases was gathered from driving, court, and arrest records. The results showed that the drivers tended not to wear safety belts, had poor driving histories, tended to get alcohol from older friends or relatives, tended to drink beer while in their vehicles, were traveling with excessive speed prior to their crash, tended to kill a friend in the crash, and tended to take little responsibility for their actions. The results show that the underage felony drunk drivers in this study fit many characteristics of other underage drinking drivers.</p>					
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INTRODUCTION

The fact that young drivers are consuming alcohol and getting in traffic crashes resulting in death and injury is well documented as a public health problem in the United States (National Highway Traffic Safety Administration, NHTSA, 1994). People 21 years old and younger in the U.S. are twice as likely to be in alcohol-related crashes than those more than 21 (Gilbert, 1994). Nationally, traffic crashes are the leading cause of death for all people between the ages of five and 29 (Baker, 1992). Many of these crashes are alcohol-related. In Michigan, underage drinking and driving contributed to 176 deaths and 4,688 severe crashes in 1991 (Streff, 1994).

Considering these crash and injury statistics, it is disheartening that relatively little is known about underage drivers involved in serious, alcohol-related crashes, in particular, crashes leading to convictions of felony drunk driving. This lack of information is not surprising, however, considering the psychological, physical, and social changes members of this age group are going through at the same time they are learning to drive. Despite the complexity of the problem, researchers have identified factors that appear to be related to the underage, alcohol-involved crash problem. These factors include inexperience with driving and with alcohol use (e.g., Eby, 1995a; Mayhew, Beirness, Donelson, & Simpson, 1987), high levels of risk taking (e.g., Bergeron & Joly, 1987; Farrow, 1987; Jessor, 1987), social antagonism (e.g., Donovan, 1993; Pelz, McDole, & Schuman, 1975), and adverse social pressures and situations (e.g., Gregersen & Berg, 1994; Streff, 1994).

Taking into account these factors and others, many countermeasures designed to reduce young people's drinking and driving have been implemented (see Waller & Waller, 1987 for a brief review). These countermeasures range from educational programs to policy changes and have met with varying levels of success. The present work was conducted to gain detailed knowledge about the characteristics of underage drinking drivers and the social events leading up to serious alcohol-involved crashes, and to determine how these factors might relate to specific countermeasures.

Table 1 shows a description of the names and abbreviations of terms used in this article. Based upon the minimum sanctioning, there are four levels of drunk driving convictions in Michigan. The least serious drunk driving offense is operating a motor vehicle while impaired (OWI). According to Michigan law, a person is presumed to be alcohol-impaired if their blood alcohol concentration (BAC) by weight of alcohol is greater than .07 percent but less than .10 percent (Michigan Department of State, 1992). Sanctioning for a first conviction for OWI includes four points on the driving record, a three-to-twelve-month license suspension with restricted driving allowed from the start of sanction and one or more of the following: a \$0 to \$300 fine, a zero-to-90-day incarceration, and/or a zero-to-45-day community-service sanction. While carrying administrative distinctions, operating a motor vehicle under the influence of liquor (OUIL), unlawful blood alcohol level (UBAL), and OUIL/UBAL are all equal in terms of minimum BAC and sanctioning. A person is presumed to be under the influence of liquor or to have an unlawful blood alcohol level when his or her BAC is at .10 percent or greater. The sanctions for a first conviction are six points on the driving record, six-to-24-months suspended-driving privileges with restricted driving allowed after the first month and one or more of the following: a fine of \$100 to \$500, zero to 90 days incarceration, and/or zero to 45 days of community service. The third most serious drunk-driving conviction is operating a motor vehicle while under the influence of alcohol and causing an incapacitating injury (OUIL-incapacitating injury). A first conviction of this felony can lead to as much as five years in prison and a fine of up to \$5,000. The most serious drunk driving crime is to be legally drunk while driving and kill someone (OUIL-death). A first conviction for this crime can result in up to 15 years in prison and a fine of \$10,000. For both felonies,¹ six points are applied to the driving record and all driving privileges are revoked. All underage drinkers (under 21 years old) convicted of OUIL-death in Michigan during the first two years of the law (1992 and 1993) are the subject of the present article.

¹The two felonies were introduced as part of a comprehensive drunk-driving policy change in Michigan (see Charney, 1991, for a review of the drunk driving package). Also included in these changes were laws that increased minimum sanctioning for existing drunk-driving laws, created swift deadlines for drunk-driving case adjudication, and eliminated certain types of appeals for driving-privilege restoration.

Table 1: List of the Names and Abbreviations Used in this Article	
Name	Abbreviation
Unlawful Blood Alcohol Level	UBAL
Operating a Vehicle Under the Influence of Liquor	OUIL
Operating a Vehicle Under the Influence of a Controlled Substance	OID
Operating a Vehicle While Impaired	OWI
Combined OUIL & UBAL	OUIL/UBAL
Operating a Vehicle Under the Influence of Liquor Causing Death	OUIL-death
Operating a Vehicle Under the Influence of Liquor Causing an Incapacitating Injury	OUIL-incapacitating injury
Michigan Secretary of State Data Base of Driver History Records	MDR

METHOD

As part of a larger study (Streff & Eby, 1994), we collected data on all OUIL-death convictions during the first two years of the law (calendar years 1992 and 1993) from the Michigan Department of State, Secretary of State data base of driver-history records (MDR). During these years there were 38 people convicted of OUIL-death. Three of these people were convicted on two counts, making 41 total OUIL-death convictions during 1992 and 1993. Records for five people were in the Court of Appeals and could not be released. Of the remaining 33 people, eight (24.2 percent) were people under the legal drinking age of 21 years old. These eight people are the focus of the present article.

For each of the eight people, complete arrest reports, crash reports, court records, and driver histories were obtained. The arrest reports, including police narratives and witness statements, provided data about the events leading up to the crash, BAC, alcohol use prior to crash, and arrest details. There is no standardized form or procedure for arrest

reports across jurisdictions in Michigan. As such, the amount of police-report narrative and investigative detail varied greatly from case to case. The crash reports provided detailed information about the crash, including a crash reconstruction, occupant safety-belt use in all vehicles, and road conditions. Because every fatal crash in Michigan must be reported using a standardized form, we have complete and consistent information on all eight crashes. The court records contained information on plea arraignments, court proceedings, and final disposition, and occasional background and home-life information. The driver-history information was taken from the MDR which contained information on previous crashes and convictions as well as current license sanctions. Driving-related substance abuse convictions are maintained in the MDR for at least ten years. Felony convictions (manslaughter, negligent homicide, felony with an auto used, felonious driving, unlawful driving away auto, murder with auto, and distributing a controlled substance) are also maintained in the MDR for ten years. All other traffic convictions stay in the MDR for seven years. Traffic crashes remain in the MDR for seven years. Information from all sources was combined to generate detailed profiles of each offender.

RESULTS

We present the results in two sections. The first section summarizes data about the eight offenders, including demographics, past driving histories, alcohol use prior to the crash, and crash information. The second section contains the detailed case histories in narrative form.

Summary Statistics

Table 2 shows gender, age, and belt use for the eight underage drivers convicted of OUIL-death in 1992 and 1993. The age category shows the age of the driver on the day of the crash. Five of the eight drivers were either 19 or 20 years old. The last category shows whether the driver was belted at the time of the crash.

Table 2: Gender, Age, and Belt Use		
Category	Percentage	Number
<u>Gender</u> Male Female	87.5 12.5	7 1
<u>Age</u> 17 18 19 20	12.5 25.0 50.0 12.5	1 2 4 1
<u>Driver Belt Use at Crash</u> Belted Not Belted Unknown	25.0 62.5 12.5	2 5 1

Table 3 shows a summary of the past driving history of the eight drivers. Since the MDR contains information over the last seven years at a minimum and the eight drivers have all been licensed for no more than five years, we were able to generate complete driving histories for each offender. The past crashes category shows the number of crashes in which the person was involved prior to the present crash. The past drunk driving convictions category shows all *prior* OWI, OUIL, UBAL, OUID, and OUIL/UBAL (see Table 1) convictions on record.

In Table 3 we introduce a new measure intended to capture documented poor driving ability. The Index of Past Driving Competence shows a composite of past traffic crashes and traffic convictions. It is calculated by summing the license sanction points for each past traffic conviction (the OUIL-death conviction is not included in the calculations and only incidents prior to the selected conviction are included). The sum of past driving conviction points is then added to the number of crashes on record, where each crash is assigned a four-point value. The resulting number is the index of past driving competence. We have separated the index into four categories: *Competent* (0 - 6 points), *Acceptable* (7 - 12 points), *Unacceptable* (13 - 18 points), and *Problem Driver* (19 or more points). The

mean index was 16.3 points (standard deviation, SD = 7.69 points) and ranged from two to 26 points. The license status at crash category shows the state of a person's driving privileges on the day of their crash.

Table 3: Past Driving Histories		
Category	Percentage	Number
<u>Past Traffic Crashes</u>		
Zero	25.0	2
One	12.5	1
Two	50.0	4
Three	12.5	1
<u>Past Drunk Driving Convictions</u>		
Zero	62.5	5
One	37.5	3
<u>Index of Past Driving Competence</u>		
Competent	12.5	1
Acceptable	12.5	1
Unacceptable	37.5	3
Problem Driver	37.5	3
<u>License Status at Crash</u>		
Valid	100	8
Suspended	0.0	0
Revoked	0.0	0

Table 4 contains data related to the offender's alcohol use prior to the crash. The first category shows the offender's relationship to the person who provided the alcohol. The next category shows the reported location where drinking last took place. If no last drinking location was available, but open intoxicants were found in the vehicle, then we list the last location as "in vehicle." Note that the last drinking location is not necessarily where the longest duration or greatest volume of drinking took place before the crash. The type-of-alcohol-consumed category indicates what was being consumed at the last drinking location. The blood-alcohol-concentration category shows the measured BAC by weight of alcohol after the crash. If both a breath test and blood test were contained in the arrest records, then the more accurate blood test is presented here. Note also that BAC varies with the time between crash and chemical test administration. Since this time varied on a case-by-case basis, the BAC values also varied on an individual basis. See the case studies for a more thorough analysis of BAC. Excluding the case for which BAC was unknown, the mean BAC was .12 percent (SD = .028). The open intoxicants in vehicle category shows the number of crashes in which an open container of alcohol was found in the vehicle, regardless of whether an arrest was made for this offense.

Table 4: Alcohol Use Prior to Crash		
Category	Percentage	Number
<u>How was alcohol obtained?</u> ²		
Older Friend	44.4	4
Parent or Other Relative	11.1	1
Stranger	11.1	1
Bartender	11.1	1
Unknown	22.2	2
<u>Last Drinking Location</u>		
In Vehicle	62.5	5
Bowling Alley	12.5	1
Residence	12.5	1
Wedding	12.5	1
<u>Type of Alcohol Consumed</u>		
Beer	62.5	5
Wine	0.0	0
Liquor	12.5	1
Beer and Liquor	25.0	2
<u>Blood Alcohol Level at Time of Crash</u>		
Unknown	12.5	1
.05-.09%	25.0	2
.10-.15%	50.0	4
.16-.20%	12.5	1
<u>Open Intoxicants Found in Vehicle?</u>		
Yes	75.0	6
No	25.0	2

² There are nine cases in this category because one person obtained alcohol from both a relative and a stranger.

Table 5 summarizes crash-specific data for the eight underage drivers in Michigan convicted of OUIL-Death in 1992 and 1993. The first category shows whether the crash occurred on a weekday or weekend. A weekend is defined as 6:00 P.M. on Friday to midnight on Sunday. The next category shows the hour of day in which the crash reportedly occurred. The next two categories show the reported number of passengers, not including the driver, in the subject's vehicle prior to the crash and the number of vehicles sustaining damage in the crash as indicated on the crash report. The roadway classification shows the type of roadway in which the crash occurred. The roadway-characteristics category indicates the roadway geometry where the crash occurred. The weather and road conditions are for the time and location of the crash. The relation-of-crash-to-roadway category shows the location where the first impact of the crash occurred as indicated on a crash report. The lighting-at-crash category indicates the most significant light condition at the time of the crash as indicated on a crash report. The estimated speed over speed limit at crash shows the approximate number of miles per hour (mph) over the speed limit the offender was traveling at the time of the crash. If a speed based upon police investigation was available, then this speed is presented here regardless of whether other speed estimates were available. If no police-based speed estimate was available, then we used the mean speed estimate of all witnesses indicating a travel speed prior to crash. For all eight crashes, the mean speed over the posted speed limit was 29.2 mph (SD = 20.2), with a low of eight mph and a high of 70 mph over the limit. The relation-of-the-killed-person-to-driver category shows whether the offender knew the person he or she killed as a result of the alcohol-involved crash. The final category shows the belt use of the people who were killed in the crashes.

Table 5: Crash Information		
Category	Percentage	Number
<u>Day of Week the Crash Occurred</u>		
Nonweekend	50.0	4
Weekend	50.0	4
<u>Time of Day Crash Occurred</u>		
6:01 P.M. - Midnight	62.5	5
12:01 A.M. - 6:00 A.M.	37.5	3
<u>Number of Passengers in Offender's Vehicle at Crash</u>		
Zero	12.5	1
One	25.0	2
Two	25.0	2
Three	25.0	2
Four	12.5	1
<u>Number of Vehicles Involved in Crash</u>		
One	62.5	5
Two	37.5	3
<u>Roadway Classification</u>		
Rural Road	62.5	5
City Road	0.0	0
Rural Highway	12.5	1
City Highway	0.0	0
Interstate	25.0	2
<u>Roadway Characteristic</u>		
Intersection	0.0	0
Curve	25.0	2
Straight road	62.5	5
Bridge Abutment	12.5	1
<u>Weather Conditions</u>		
Cloudy	37.5	3
Clear	50.0	4
Rain	0.0	0
Snow	0.0	0
Unknown	25.0	2

Table 5: Crash Information, continued		
Category	Percentage	Number
<u>Road Conditions</u>		
Dry	75.0	6
Wet	0.0	0
Snowy	0.0	0
Unknown	25.0	2
<u>Relation of Crash to Roadway</u>		
On Road	37.5	3
Median	0.0	0
Shoulder	12.5	1
Outside of Shoulder/Curb	50.0	4
<u>Lighting at Crash</u>		
Daylight	0.0	0
Dark-Lighted	12.5	1
Dark-Unlighted	62.5	5
Unknown	25.0	2
<u>MPH Over Speed Limit at Crash</u>		
0 - 10 mph	25.0	2
11 - 20 mph	12.5	1
21 - 30 mph	25.0	2
31 - 40 mph	12.5	1
41 or more mph	25.0	2
<u>Relation of Killed Person to Driver</u>		
Relative	0.0	0
Friend	75.0	6
No Relation	25.0	2
<u>Safety Belt Use of Killed Persons</u>		
Belted	0	0
Not belted	100	9

Case Studies

The case studies are organized around the fatal crash that led to the OUIL-death conviction. We first present the subject's background, including driving history, criminal history, family life, and significant developmental facts when available. We then discuss the events that led up to the crash; that is, what the subject was doing prior to the crash. The crash-information section discusses crash-relevant data, including a crash reconstruction, safety-belt use, and injury summary. Finally, each case study ends with a discussion of the disposition. Because police and court records contain differing amounts and types of information for each case, some of the cases are more detailed than others.

Case #1

Subject: White male, 18 years old, driving a pickup truck at the time of the crash.

Crash: Friday, 8:30 P.M., bridge abutment along a rural two-lane road.

Background: The subject had been in a fatal crash eight months previously in which open intoxicants were found in the vehicle. As a result of the previous crash, the subject was charged with negligent homicide and released on bond. According to his friends, after the crash he was threatening suicide. At the time of the present crash, the subject was awaiting a court appearance on the negligent homicide charge, which was to take place in three days. According to witnesses, the subject believed that he was going to beat the negligent homicide charge through a plea of insanity. On the other hand, his friends reported that he believed he would lose his license at the trial.

Witnesses said he had a reputation for being a bully and he had a "strong-minded" personality. One witness stated that he and the subject had a previous physical altercation resulting in criminal proceedings against the subject. Reportedly, the subject had a reputation for frequently getting drunk "until he had difficulty walking" and was also known for driving fast and recklessly. One witness reported that the subject bragged about taking a well-known dangerous curve at 90 mph. He was also known to regularly squeal his tires while leaving school, and one witness reported he regularly drove "about 80 mph." Prior to the present crash, the subject had convictions for disobeying a stop sign, disobeying a traffic signal, and careless driving.

Pre-crash Events: According to witnesses, the defendant was seen at school displaying a case of beer to others on the day before the present crash. On the evening of the crash the subject picked up one male friend (M1) and then two female friends (F1 and F2) around 5:00 P.M. for a double date. F1 was the subject's girlfriend. F2 stated that the two males had already been drinking when they picked her up. The four drove around in the country for the next two and one half hours drinking an unknown amount of beer. The subject was reported to be driving fast and recklessly. They stopped several times so the subject could urinate. F2 stated that during one of these stops, the subject said he didn't care if he died and wanted to die before age of 25. During another stop M1 reportedly spoke with the subject outside of the vehicle about his driving habits and offered to drive. While they were talking, F1 and F2 hid the remaining beer behind the seat of the pickup truck so the subject, "could not drink any more alcohol." In order to "show" M1 he could drive safely, the subject proceeded down the road at a low rate of speed but then resumed speeding. F2 stated that the subject had five or six beers during the three-hour period preceding the crash.

At about 7:40 P.M., F2 asked the subject to stop at a friend's house, which he did. F2 asked her friend if she could stay there because she was, "afraid to death to ride with (the subject) any more." The friend's parents offered to take her home. F2 stated that even if her friend had not been home, she would have solicited her friend's parents help directly. F2's boyfriend (M1) reportedly wanted to stay with F2 but decided to stay with the subject "to look after him." The subject left the residence driving his pickup truck with M1 and F1 as passengers. After departing the subject reportedly stated, once again, that he didn't care if he died.

Around 8:00 P.M. the trio picked up another male passenger (M2) and drove around for a short time along a rural road looking for an alleged party. Finding the party not yet started, they went to M2's parents' 80-acre property to get some firewood for the party. Reportedly, the subject was still driving recklessly. The four decided to go into town and buy refreshments before heading back to the party. The crash occurred on the way into town.

Crash information: According to the crash report, the vehicle being driven by the subject ran off the roadway striking a steel bridge abutment causing the vehicle to overturn. All four vehicle occupants were ejected from the vehicle. None were wearing safety belts. The subject's girlfriend (F1) died at the scene of head trauma. The other three occupants received varying degrees of injury. Open beer bottles and beer cans were found in and around the vehicle. The subject told police he was

traveling 40 mph in a 55 mph zone but his passengers stated he was traveling 60 to 70 mph at the time of the crash.

Postcrash information: According to police reports, at the hospital four hours after the crash, the subject refused to speak with law enforcement without an attorney. Noticing signs of alcohol use by the subject, law enforcement requested a search warrant to obtain medical records of BAC for evidentiary purposes. Neither the result of this request nor the BAC were contained in police records. Two weeks after the crash, the subject was arrested and charged with OUIL-death and negligent homicide. Because he was in violation of the bond from the previous arrest, the subject was *not* allowed to post bond for this arrest. The subject was convicted by jury of OUIL-death and sentenced to 3.5 to 15 years in prison. The negligent homicide charge was dropped by the jury. There were no fines assessed but restitution of \$4,262 was awarded to the family of the deceased. All driving privileges were revoked. The outcome of the previous negligent homicide charge is unknown.

Case #2

Subject: White female, age 18, driving a passenger car at the time of the crash.

Crash: Friday, 10:00 P.M., straight section of four-lane interstate.

Background: According to a sentencing memorandum written by the subject's attorney to the judge, the subject's father was a violent alcoholic. The parents divorced when the subject was 10 years old and the father died one month after the divorce from unspecified complications caused by alcohol abuse. Reportedly, the subject was also abused sexually by her maternal grandfather until age 16 when unspecified psychosomatic symptoms began to manifest themselves. After the sexual abuse was disclosed, the grandfather was institutionalized and the subject sought counseling. In the two years following the disclosure, the subject experienced stress-related hair loss that resulted in her having to wear a wig. Reportedly, the subject began drinking at the age of 14. On the day of the crash, the subject had had two previous crashes, two convictions for speeding, and one conviction for no proof of insurance.

Pre-crash Events: The subject attended a wedding of a family member in a city approximately 100 miles from her home. At the reception there was an open bar and the subject was reportedly served beer without any proof of age requested. The subject, with a family member, left at approximately 10:00 P.M. for home. The crash occurred approximately half way between the wedding and the subject's home.

Crash Information: According to police records, the subject and her passenger were talking and she failed to notice a slow-moving vehicle in the same lane. The subject's vehicle rear-ended the second vehicle causing it to flip and roll several times. The subject and her passenger, both of whom were belted, received moderate injuries. In the second vehicle, the driver and the passenger, both of whom were belted, sustained serious injuries. A third passenger was thrown from the vehicle and killed. This passenger was not belted. No evidence of alcohol was found at the crash scene. Police investigators determined that the subject's vehicle was traveling 73 mph in a 65 mph zone at the time of impact.

Postcrash Events: According to police records, while at the hospital the subject gave permission for blood to be drawn three hours after the crash. Her BAC was later determined to be .13 percent. The same night, she was arrested for OUIL-death. While awaiting adjudication, she voluntarily entered an inpatient substance-abuse program where she received counseling for 212 days. The subject pled no contest to the OUIL-death charge and was sentenced to one year incarceration with credit given for the 212 days spent in alcohol abuse treatment. The subject was also placed on five years of probation with six months on in-home electronic tether after release from jail, given indefinite revocation of driving privileges, was fined \$600, and ordered to pay restitution if any. The subject was later charged with OUIL-incapacitating injury and felonious driving because of a crash-related long-term disability to another occupant in the second vehicle. These charges are pending.

Case #3

Subject 3: White male, 19 years old, driving a passenger car at the time of the crash.

Crash: Wednesday, 11:30 P.M., a rural two-lane road.

Background: According to witness statements, two weeks before the present crash the subject was involved in a hit-and-run crash in which he was intoxicated. For unknown reasons, the subject was never charged. The subject's documented crash history shows that he had been in two previous crashes, one of which resulted in an injury. His traffic history shows convictions for speeding (two), driving left of center, failing to stop or identify after a personal injury accident, and failing to show proof of insurance.

Pre-crash Information: The subject obtained a fifth of vodka from an unspecified source to celebrate with a friend (M1) during the friend's shore-leave from the Navy. At about 4:30 P.M. the subject arrived home from work where M1 was waiting for him. They left and picked up the subject's girlfriend (F1) and returned to the subject's house. Between about 5:30 P.M. and 10:30 P.M. the

three reportedly drank the fifth of vodka. At approximately 10:30 P.M. they dropped off F1 at her home and proceeded to a gas station. At the station they called a female who was a friend of M1. They were told to call her back later. The subject and M1 decided to drive around for a while until they could call back. While driving around they were involved in the crash.

Crash Information: According to the police report, the subject was traveling 75 to 100 mph (in a 65 mph zone) and failed to negotiate a curve. The vehicle went through a fence, into a ditch, back through the fence, and then struck a mailbox, utility guide wires, several trees, and another fence before stopping. M1, who was not wearing a safety belt, was thrown from the vehicle where he died of head trauma. The subject, who was belted, received moderate injuries. An open beer bottle, still cold with condensation, was found outside of the vehicle. The driver fled the crash scene on foot to his mother's house one quarter of a mile away. The subject's mother returned to the crash scene where emergency personnel had already arrived. She told law enforcement at the scene that her son had been drinking, was in need of medical attention, and that he was at her house. The police and emergency personnel found the subject on his mother's living room floor complaining of a back injury.

Postcrash Information: At the hospital, three hours after the crash, the subject agreed to a blood test which later showed a BAC .10 percent. Several days after the crash the subject was arrested and charged with OUIL-death to which he eventually pled no contest. At his sentencing he received one year of incarceration, fines and costs of \$600 (plus possible restitution), five years of probation, revoked driving privileges, and mandatory substance-abuse counseling.

Case #4

Subject: White male, age 19, driving a passenger car at the time of crash.

Crash: Saturday, 11:12 P.M., straight section of a rural two-lane highway.

Background: According to court records, at the time of the crash the subject was awaiting adjudication on criminal charges of breaking and entering with intent, assault with intent to rob while unarmed, and habitual felony offender. The subject had no prior traffic convictions but had been involved in three previous crashes that resulted in a total of five injuries.

Pre-crash Events: Prior to the crash, the subject and two male friends (M1 and M2) were drinking whiskey and beer in the subject's vehicle. The whiskey was purchased by an over-21-year-old friend who was later arrested for supplying liquor to minors. The subject, M1, and M2 picked up a

fourth male friend (M3) at a pool hall at approximately 10:30 P.M. M3, who was reportedly a nondrinker, knew that the other three had been drinking. He stated that he decided to go with them, despite the drinking, because they were going to visit a mutual friend in a nearby hospital. Once in the vehicle, the subject, M1, and M2 were drinking and trying to get M3 to join them. According to M3, the subject was speeding and trying to get his car to 120 mph. The three passengers told him to slow down, but the subject turned up the radio and continued driving at a high rate of speed. When M3, who was sitting in the backseat, again told the subject to slow down, the subject "flipped him off" in the rearview mirror. The crash occurred soon after.

Crash Information: According to police investigators, while traveling at least 104 mph, the subject lost control of his vehicle, crossed the center line, and struck another vehicle head-on. The subject, M1, and M3 all received moderate injuries. M2, the other back seat passenger, was killed. None of the occupants in the subject's car were belted. Both occupants of the other vehicle sustained minor injuries. The subject attempted to flee the crash scene by running to a nearby friend's house. Law enforcement saw him enter the house. The police requested to be let in and found the subject hiding in one of the bedrooms lying face down between a bed and a wall.

Postcrash Information: According to the police report, after the subject was apprehended, he was given field sobriety tests and read his chemical rights. He agreed to a blood test which was taken at the scene by a medical technician. His BAC was .12 percent. He was arrested and eventually charged with OUIL-death, fleeing the scene of a serious personal-injury accident, and habitual felony offender (second offense). The subject pled guilty to OUIL-death, and the other charges were dismissed. He was sentenced to ten to 15 years incarceration, was ordered to pay restitution if any, and his driving privileges were revoked. On the same day as the OUIL-death conviction, the subject was convicted of breaking and entering with intent, assault with intent to rob while unarmed, and habitual felony offender. For these convictions, he was sentenced to 14 to 22.5 years incarceration *consecutive* with the sentence for OUIL-death. As such, the subject's total minimum incarceration on all convictions was 24 years.

Case #5

Subject: White male, 20 years old, driving a pickup truck at the time of the crash.

Crash: Wednesday, 10:00 P.M., four-lane interstate.

Background: The subject's driving history showed that he had two past crashes resulting in one injury. The subject also had traffic convictions for speeding (three), OWI, failure to stop or identify after a serious property-damage accident, and for careless driving.

Pre-crash Events: According to police records, the subject woke up at 4:00 A.M. and worked from 6:00 A.M. to 3:30 P.M.. After work he drove to a bowling alley located approximately 60 miles from his home to participate in a bowling league. During the bowling league the subject was served beer without being asked for proof of age. The subject said he had consumed "a few more drinks than he should have" during the four hours of the bowling league. Prior to leaving the bowling alley, a friend of the subject suggested a new route to take back home. The subject, by himself, drove the new route home but got lost about half way there. Reportedly, other vehicles had been flashing their brights at the subject when he passed them on the road. It is unknown whether this was because he was speeding, had his own brights on, or was having difficulty keeping his vehicle in the lane.

Crash Information: The subject, while traveling 80 to 85 mph in a 65 mph zone, rear-ended another vehicle causing it to swerve into a grassy median and overturn. The only occupant of the second vehicle was thrown from the car and died of multiple trauma. This person had not been wearing a safety belt. The airbag in the subject's car inflated at impact and he received only minor injuries. His belt use was unknown. He immediately pulled his car over and waited for help. No open intoxicants were found in the vehicle.

Postcrash Information: While at the hospital one hour after the crash, the subject consented to a blood test which later revealed he had a blood alcohol concentration of .12 percent. He was arrested the same night for manslaughter. Eventually, the charge was changed to OUIL-death. He pled no contest to OUIL-death and received a sentence of 3 to 15 years incarceration, community service in a trauma center if granted parole, revoked driving privileges, and an order to complete a mental health treatment program.

Case #6

Subject: White male, 19 years old, driving a passenger car at the time of crash.

Crash: Tuesday, 3:30 A.M., a rural two-lane road.

Background: The subject had no past traffic crashes. He did, however, have traffic convictions for driving while unlicensed or license not valid, disobeying a stop sign, speeding (three), failing to display a valid license, failing to yield, violating terms of a restricted license (three), and careless driving.

Pre-crash Events: According to police reports, at around 7:00 P.M. the subject went over to a male friend's house (M1) where he met three other male friends (M2, M3, and M4) who were already located. After they all put in money, M2, the only one in the group of legal drinking age, went with M3 to a 7-11 store and purchased two twelve-packs of beer. The five friends consumed the beer over the next two hours. They again collected money and M2 went and purchased another case of beer. Reportedly, over the next two hours they drank most of the second case. The subject then called his sister to come and pick up himself and M1 and bring them back to his mother's house, which she did.

Back at his mother's house, the subject argued loudly with his mother about her reluctance to allow him borrow her car so that he could go and pick up a female friend (F1). Reportedly, the mother's reluctance was based upon the fact that she knew her son had been drinking. According to M1, after the argument the subject appeared with a pile of clothes in his hands because "he was going to move out." The subject left the residence. M1 talked with the subject outside of the house and convinced him to not leave. The subject went back into the house and returned a short time later with the keys to his mother's car. She had agreed to let him take her car on the condition that M1, and not her son, drove. The two left with M1 driving at 12:15 A.M. heading over to F1's house.

After stopping back at M1's house to pick up beer, they arrived at F1's house at 1:30 A.M. F1 got into the backseat while M1 drove and the subject sat in the front passenger seat. After driving around for a while, the subject got into the back seat with F1 for unspecified reasons. At about 2:15, M1 stopped the vehicle and got into the backseat with F1 while the subject began driving. After driving around some more, the subject announced that he was taking F1 back home. On the way to her house, he was traveling at a rate of speed that was high enough to elicit concern from the two backseat passengers. The crash occurred soon afterwards.

Crash Information: According to police reports, while traveling approximately 125 mph in a 55 mph zone, the subject lost control of his mother's vehicle, causing it to overturn. All three occupants, none of whom were belted, were thrown from the vehicle. F1 died of multiple trauma at the scene. The subject and M1 both sustained serious injuries. Despite his injuries, the subject left the crash scene to find help. He pounded on a door about one-quarter of a mile from the crash and asked for help. The dwelling occupants called police. When police arrived, they found empty beer cans in the vehicle.

Postcrash Information: According to the police report, a search warrant to seize blood from the subject was requested and granted by a district court magistrate. The subject's blood was drawn about three and one-half hours after the crash. The subsequent analysis of the blood revealed a BAC of .08 percent. He was arrested for negligent homicide and later charged with OUIL-death and manslaughter with a motor vehicle. While awaiting adjudication on the OUIL-death charge, the subject was again arrested and convicted of drunk driving (OUIL). The subject pled no contest to OUIL-death and was sentenced to incarceration for three to 15 years and his driving privileges were revoked.

Case #7

Subject: White male, 17 years of age, driving a passenger car at the time of the crash.

Crash: Monday, 1:30 A.M., a rural two-lane road.

Background: According to court records, the subject had juvenile criminal convictions for retail fraud, receiving and concealing stolen property over \$100, larceny for \$100 or less, felony possession of a Molotov cocktail or other explosive device, and minor in possession of alcohol and tobacco. The subject had no previous crashes and prior to the present crash he had traffic convictions for driving while unlicensed and unlawful rider of a motorcycle or moped.

Pre-crash Events: According to witness statements, the subject and one male friend (M1) and two female friends (F1 and F2) went to an acquaintance's apartment to ask if he would buy them beer, since he was of legal drinking age. He agreed and bought them two cases of beer. The subject then went back to his house while the other three went to pick up a third female (F3) at her workplace. Reportedly, the subject left his parent's house at 9:00 P.M. to go meet F1, F2, F3 and M1 at F3's house. The five snuck an unknown amount of beer into the house and drank it in F3's room while she was getting ready to go out. At about 9:30 the five left for a gas station with the

males in one car and the females in another. The two cases of beer were in the female's car. In the gas station parking lot, the females reportedly drank one case while the males drank what was left of the second. At about 10:45, the five friends decided to go to a residence where a party was rumored to be occurring. On the way to the residence, F3 reported that the subject had been "driving like a maniac." At the residence they discovered that there was no party. The females, separating from the males, left for another friend's house. At about 11:15 the subject and M1 left for a different residence where another party was reported. Again, at the next residence there was no party. The subject and M1, however, picked up another male friend (M2) who was looking for the same party. M2 brought a six-pack of beer into the subject's car.

The three friends drove around for the next hour. At 12:05 A.M. they were pulled over by law enforcement because the subject's vehicle matched a description of a vehicle used for some larcenies. The officer that pulled the vehicle over recognized the subject from previous contacts. The officer searched the vehicle trunk while the three remained in the car. Finding nothing in the trunk and detecting no alcohol, the officer released them.

At approximately 12:30 A.M., M1 knocked on the door of a residence to talk with his girlfriend who was spending the night there. He had fought with her earlier in the evening. The owner of the house told him she would not awaken the female and that he should leave. At about 12:45, the subject went back to the same residence and told the owner that it "was an emergency" and he needed to speak with M1's girlfriend. The owner woke up her daughter's friend and she came outside. M1 and his girlfriend then talked for a short while, apparently making up from the earlier argument. After about ten minutes, the owner of the house asked the girlfriend to come back into the house and for the males to leave, which they did.

The subject, M1, and M2 then drove to F1's house to see if she was there. F1 was just getting home with F2 when the males arrived at about 1:00 A.M. Both females decided to go out with the males. F1 left a note for her parent's that she was "going across the street to watch movies" in case they were to awaken wondering where she was. The five left the residence and drove around drinking more beer. Reportedly, the subject was "showing off" while driving the car and all occupants were telling him to slow down. The crash occurred soon after.

Crash Information: According to police reports, the subject was traveling at least 80 mph in a 55 mph zone and lost control of the vehicle. The car went into a ditch and overturned. All five occupants, none of whom were wearing safety belts, were ejected from the vehicle. Both M1 and M2 died at the scene of severe trauma. The subject, F1, and F2 all received serious injuries. Seven empty beer cans and an empty twelve-pack beer package were found around the vehicle after the crash.

Postcrash Events: According to police records, a search warrant to seize blood from the subject was requested and granted. Approximately three hours after the crash, blood was drawn from the subject. Analysis of the blood revealed a BAC of .09 percent. (Chemical analysis from the autopsied victims revealed a BAC of .07 percent for M1 and .18 percent for M2.) In an interview with law enforcement, the subject indicated that M1 had "grabbed the steering wheel" causing the accident. In a separate interview several days later, the subject's older sister said that she had gone to the crash scene and an "old lady" had told her that she saw the crash and that someone had clearly grabbed the steering wheel. Law enforcement, however, could not locate this woman and other witnesses at the scene stated that there was no such woman. The subject was arrested and charged with two counts of OUIL-death. In lieu of incarceration while awaiting adjudication, he was placed on a 24-hour electronic in-home tether and required to attend an outpatient alcohol treatment program. He did not, however, comply with the requirements and was placed in a juvenile home, for which his parents had to pay \$700. Eventually, the subject was tried in an adult court where he pled guilty to both OUIL-death counts. He was sentenced to incarceration for 5 to 15 years for each count with the sentences running concurrently. His driving privileges were revoked.

Case #8

Subject: White male, 19 years of age, driving a passenger car at the time of the crash.

Crash: Saturday, 12:30 A.M., a rural two-lane road.

Background: Prior to the present crash, the subject had been involved in two previous crashes, neither of which resulted in injury. Further, he had previous traffic convictions for driving without a proper license, disobeying a stop sign, speeding, and OWI.

Pre-crash Events: According to the arrest report, the subject and two male friends (M1 and M2) spent six or seven hours decorating for M2's graduation party at the residence of M2's sister. At the sister's house was, the subject, M1, M2, M2's sister and her boyfriend, and M2's parents. Beer and liquor were being "distributed freely." Reportedly, the subject, M1, and M2 finished one half-quart

of whiskey by taking shots of it. The subject reportedly also had consumed 12 to 15 beers prior to the crash and had been smoking marijuana. Later, the three left and approached an unknown male in the parking lot of a convenience store and asked him to purchase a case of beer for them. The man agreed and bought them the beer while keeping \$5.00 for himself. They then drove around for a while before crashing.

Crash Information: According to police records, the subject was traveling about 78 mph in a 40 mph zone and purposely veered onto the shoulder of the oncoming traffic lane as they approached a curve. The subject, however, was not able to negotiate the curve and ran into a ditch on the left side of the roadway. His vehicle continued along the ditch, struck two trees, and pivoted 80 degrees. M2 died immediately of head trauma while the subject and M1 received moderate injuries. None were thrown from the vehicle and none were wearing safety belts.

After the crash, the subject and M1 climbed over the body of M2 to exit the vehicle. The two pulled M2 out of the vehicle and laid him next to the car. M1 then pulled a case of beer out the car and threw it into woods next to the roadway. He then ran to a relative's house about one-quarter of a mile away to get help while the subject attempted to resuscitate M2. Unopened beer cans were found in the woods and in the subject's car. Further, law enforcement found a plastic bag containing marijuana next to the car. The subject stated that the marijuana was his.

Postcrash Information: According to police reports, the subject submitted to a breath test at the scene which indicated a BAC of .15 percent. Four hours later he submitted to a blood test which revealed a BAC of .17 percent. (The autopsy showed that M2 had a BAC of .14 percent at the time of death). The subject was arrested and charged with OUIL- death. He eventually pled no contest to the charge. He was sentenced to one year of incarceration, three years of probation, and mandatory completion of an inpatient substance abuse treatment program. He was given financial sanctions totaling \$780 and required to pay restitution if there was any. His driving privileges were revoked.

DISCUSSION

The main purpose of this study was to investigate, in detail, factors related to underage drivers getting into alcohol-involved crashes that led to convictions of felony drunk driving in Michigan. The analysis showed, as expected, that males were vastly overrepresented in the OUIL-death offender group. This result is consistent with the gender effect observed for all drunk-driving convictions in Michigan (Streff & Eby, 1994; Eby, 1995b). These offenders also tended not to wear safety belts. Excluding the one case for which safety belt use was unknown, only two of the seven drivers (28.6 percent) were belted at the time of their crash. This is less than one-half the 64.4 percent statewide safety-belt-use rate for Michigan in 1993 (Streff, Eby, Molnar, Joksch, & Wallace, 1993) and is consistent with other work showing that drunk drivers tend not to wear safety belts (Foss, Beirness, & Sprattler, 1994).

The analysis also revealed that the drivers had extremely poor driving records in their short histories of driving. Not including the crash in this study that led to the OUIL-death conviction, five of the eight drivers had been involved in at least *two* prior crashes. Despite the fact that previous work has downplayed the predictive value of previous crashes for later drunk driving (e.g., Bergeron & Joly, 1987), the present results argue strongly that past crashes are related to subsequent OUIL-death convictions for underage drivers. Further, three of the eight drivers (37.5 percent) were drunk-driving recidivists, showing that the sanctions they received for their earlier drunk-driving conviction were not of sufficient value to deter further drinking and driving. When all traffic convictions and crashes were considered, the Index of Past Driving Competence showed that offenders averaged nearly 17 points, a value that classified them solidly as having "unacceptable" competence in driving. Given these poor driving histories, it is surprising that every driver possessed a valid license at the time of his or her crash. The fact that the driving histories are consistently poor suggests that drunk driving countermeasures based upon past crash and conviction history might be effective in deterring drivers like those in this study. On the other hand, these results suggest that some of the people in the study exhibit sociopathic traits; namely, their blatant disregard of law and other people. As such, it is possible that

these people cannot be influenced by the specific or general deterrence of drunk-driving laws.

The alcohol-use summary showed that most drivers obtained alcohol from an older friend or relative who either purchased or provided the alcohol for them. These results are in agreement with other work (Wagennar, Finnegan, Wolfson, Anstine, Williams, & Perry, 1993) that has found that youths have easy access to alcohol through older friends and relatives who considered themselves to be "returning a favor." In that study, Wagennar et al. (1993) report that 92 percent of students surveyed indicated that it was easy to obtain alcohol at parties, while eighty percent indicated that they had easy access to alcohol at home. This apparent social acceptability of youth drinking is one example of where youth drunk-driving interventions might be focused: that is, stronger enforcement of existing laws against contributing to delinquency and an education effort aimed at changing the social acceptability of buying, or otherwise providing, alcohol to minors.

The analysis of alcohol use also showed that nearly every driver was consuming alcohol in the vehicle prior to the crash, with open containers of alcohol found in 75 percent of the crashes. The data showed that beer was the preferred beverage, in agreement with the results of several studies (Berger & Snortum, 1985; Eby, 1995b; Perrine, 1975). Of the eight subjects in the study, seven consumed beer or a combination of beer and liquor. None reported drinking wine. The blood alcohol concentration of drivers tended to be between .10 and .15 percent. This BAC is lower than that typically found for drunk drivers in Michigan (Eby, 1995b) and for older drivers convicted of OUIL-death (Streff & Eby, 1994; Eby, Streff, & Hopp, 1995). These results further support the contention that inexperience with the effects of alcohol plays a significant role in crashes.

The analysis of crash information showed that crashes were distributed equally among weekend and week days and tended to occur after 6:00 P.M. and before midnight. This is inconsistent with the time when drunk driving arrests tend to occur in Michigan, where a large majority of the arrests occur on the weekend and after midnight (Streff &

Eby, 1994; Eby, 1995b). This finding has important implications for licensing restrictions that might be placed on the underage driver in, for example, a graduated licensing program. A common restriction placed on young drivers is a midnight (or 1:00 A.M.) to 6:00 A.M. driving curfew (see, e.g., NHTSA, 1989). Such a curfew would not have been effective for this group of drivers.

The drivers, on average, had two passengers in their vehicles at the time of their crash. Thus, in all but one crash, the potential for adverse social situations or peer pressure was present. In many of the case-study narratives, adverse social pressures are clearly evident. This finding suggests that parents and licensing agencies should consider restricting the number of passengers a young driver may carry. Drunk driving enforcement programs should also target vehicles that contain multiple passengers.

In general, the crashes occurred on relatively safe sections of roadways. That is, most crashes occurred on straight, rural roadways during dry weather conditions and involved a single vehicle. Since there were no indications of catastrophic vehicle failure, these results indicate that driver error was the cause of the crashes. This conclusion is bolstered by the fact that drivers, on average, were traveling nearly 30 mph over the posted speed limit. The fact that all of these drivers were speeding is not surprising since excessive speed is one of the most frequently cited contributing factors in fatal-crash reports for younger drivers (Streff, 1994).

Collectively, the poor driving histories, low belt use, frequency of in-vehicle drinking, and excessive speeds suggest that these drivers fit many of the known characteristics for young drinking drivers. They may be higher risk takers than others, may be less inhibited about drinking and driving, may intentionally engage in dangerous driving, may overestimate their driving skill, and are inexperienced with the effects of alcohol on their ability to function (Bergeron & Joly, 1987; Bierness, Foss, & Voas, 1993; Farrow, 1985, 1987; Gregersen & Berg, 1994; Mayhew et al., 1987; Streff, 1994; Waller & Waller, 1987). The case-study narratives showed that these young drivers as a group tended not to take

responsibility for their actions. In the majority of cases studied, the driver either fled the crash scene, had past convictions for leaving a crash scene, attempted to blame the crash on a deceased passenger, attempted to conceal evidence of alcohol use, or were awaiting adjudication on a previous alcohol-involved fatal crash.

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