

CAPABILITIES AND REQUIREMENTS
FOR BLOOD ALCOHOL TESTING
OF MICHIGAN TRAFFIC FATALITIES

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(The findings, conclusions, and recommendations contained herein are solely those of the authors and no endorsement of the Office of Highway Safety Planning is implied)

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THE STUDY: ITS CONCLUSIONS AND ITS RECOMMENDATIONS

Introduction

This study analyzes how the state of Michigan conforms to Highway Safety Program Standard 4.4.8, ALCOHOL IN RELATION TO HIGHWAY SAFETY, which was issued 27 June, 1967 by the National Highway Safety Bureau under the authority of the National Highway Safety Act of 1966. The focus here is on paragraph III, section (a) of the alcohol standard which requires all alcohol programs to comply with the following: "To the extent practicable, there are quantitative tests for alcohol [which should be performed] on the bodies of all drivers and adult pedestrians who die within four hours of a traffic accident." This part of the standard is considered essential to any strategies for devising and implementing effective countermeasure programs directed toward the drinking driver.

Despite well-executed nation-wide and county-wide studies by Borckenstein, Filkins, Haddon, Selzer, and others, demonstrating a high rate of alcohol involvement for drivers in all types of crashes, the nature and extent of alcohol involvement throughout an entire state, such as Michigan, is still unknown.

Two serious consequences of this ignorance result. The first is that local officials are unaware of the extent of alcohol involvement in their own jurisdictions, even though research evidence indicates involvement is widespread beyond just the large metropolitan areas; consequently these officials cannot begin to implement local countermeasure programs.

The second consequence is that, at present, the effectiveness of alcohol-related countermeasure programs cannot be directly determined; the base-line data against which comparisons could be made do not exist either for localities or for the state.

Furthermore, within the state of Michigan there are 83 semiautonomous countries. Many of them have adopted the medical examiner system, but quite a few others still operate under the coroner system. Therefore, it can be

assumed that among the counties there are many policy and procedural variations that could affect their ability to meet the Highway Safety Program standard.

During the course of this study, the Michigan legislature enacted a law requiring all counties to adopt the medical examiner system not later than when the term expires for present coroners; in most cases this term will extend through 1972. The need to consider the consequences of this new law is obvious.

In particular, it is essential to have a clear, state-wide picture of how medical examiners and coroners presently function, because these officials play a key role in implementing action required by the standard. It is also important to have an indication of how the counties are progressing toward program objectives. Otherwise the broad tests for alcohol usage and, later, measures devised to counter alcohol abuse cannot be implemented intelligently.

In relation to studies on alcoholism and alcoholism countermeasures, Highway Safety Program Standard 4.4.8 entails four recognizable steps or procedures: (1) obtaining a blood sample from the subject of interest, (2) chemically analyzing the blood alcohol content of the sample, (3) making a scientific data analysis of all reported Blood Alcohol Content (BAC) analyses, (4) distributing the results of the data analysis to those needing it to implement countermeasure programs. The crux of this study is to determine if and how these four component procedures are being executed throughout the state of Michigan.

Method Of Approach

The study commenced with a literature search designed to determine what both the federal program regarding blood sampling of traffic fatalities and the Michigan state program, if one existed, required, implied, or had as their objectives. The legal and administrative authority for these programs was sought through a review of federal and state laws and administrative directives.

To obtain data for analyzing county operating

procedures, a questionnaire was mailed to all listed county medical examiners and coroners. While trying to identify existing county programs, the questionnaire asked for the numbers of traffic fatalities, ensuing autopsies, and blood alcohol analyses obtained during a two-and-one-half-year period. Comments regarding policies, procedures, and problems encountered during the operation of the county program for obtaining and analyzing blood samples were also requested.

Medical examiners, coroners, county prosecutors, police and sheriff's department personnel, and safety council members were then interviewed, either in person or by telephone, in order to obtain a more personal and informal account of the environmental factors and problems surrounding program implementations. These interviews also clarified why some of the addressees had not responded to the written questionnaire.

Michigan state government personnel, university researchers in pathology, public health, and law, and traffic court judges were also informally interviewed to obtain their experiences and observations regarding the program. Programs in other states were examined briefly to determine what significant or valuable features could be adopted by the Michigan program.

Based on the findings, conclusions were drawn regarding the status of the program in Michigan. Recommendations were then prepared regarding legislative, administrative, and financial requirements for the implementation or improvement of a state-wide program fully in keeping with Highway Safety Program Standard 4.4.8.

Overall Findings

Existing Michigan State Programs

At present, no state agency has sole responsibility for devising, implementing, and supervising a complete and coordinated program for obtaining and chemically analyzing blood samples from drivers and pedestrians killed in Michigan traffic accidents. No state law specifically requires, allows, or prohibits blood sampling for such a program.

The Michigan State Police and the Crime Detection Division of the State Department of Public Health encourage and abet blood sampling by providing certain services, technical instructions, and free laboratory analyses.

However, except for an Attorney General's adverse opinion in 1960 stating that coroners could not draw blood from traffic fatalities to aid a state agency in a survey, no state agency has issued instructions, advice, or information to medical examiners, coroners, prosecutors, sheriffs, police, or other county officials regarding their authority or responsibilities in any program for obtaining blood samples. In short, the state of Michigan has established no official program for always obtaining and analyzing blood samples from driver and pedestrian traffic fatalities.

Existing County Programs

Among Michigan's 83 semiautonomous counties, existing programs for obtaining and analyzing blood samples from traffic fatalities are based on each county's own concepts, initiative, and enthusiasm. As might be expected, county programs range in quality and effectiveness from excellent to nonexistent, depending on county resources, ability, and attitudes, both public and official. The basic objective of most county programs is to obtain evidence for possible legal action—not to gather data for studies of highway safety or alcoholism.

Major Assets

As evidenced by existing county programs, these major assets exist for building and implementing a state-wide program:

- a. The potentials for a broad alcoholism program in Public Acts 22 and 92
- b. The highly efficient State Police who generate most of the blood samples now obtained throughout the state, except in Wayne County
- c. State Police data processing facilities which could be used to process and analyze all reported BAC analyses
- d. The professionally outstanding Crime Detection Division of the State Public Health Laboratories which now provides free of charge, blood sampling kits, technical instructions, and BAC analysis services
- e. The Wayne County Forensic Laboratory
- f. Many other fine private, hospital, and university laboratory facilities
- g. Dedicated medical examiners, pathologists, coroners, and morticians throughout Michigan who want to be part of a state program
- h. Model county programs, such as those in Wayne, Oakland, Kent, and Lapeer Counties, on which to build

Major Liabilities

As are the present county programs, any state program would be hampered by:

- a. Public and official unawareness of, indifference to, or misunderstanding of the purpose of the program
- b. No authoritative state-wide supervision, training, and guidance for medical examiners, coroners, prosecutors, police, and others involved in the program regarding their responsibilities and functions
- c. Legal uncertainties and fears of personal liability or inconvenience (real or imagined) surrounding the taking of blood samples
- d. Insufficient professional and technical personnel and facilities in rural, up-state counties.
- e. Lack of well-defined, standardized procedures for obtaining blood, for delivering blood to laboratories for analysis, for centralizing filing of all BAC analysis reports, for data analysis, and for distributing results to program workers and researchers

Conclusions

1. Michigan does not now have a program for sampling and chemically analyzing blood from drivers and pedestrians killed in traffic accidents, as required by Highway Safety Program Standard 4.4.8, ALCOHOL IN RELATION TO HIGHWAY SAFETY.
2. Instead, Michigan has a bag of assorted county programs for obtaining and analyzing blood samples, the best of which is in Wayne County.
3. In none of these programs, nor at the state level, is there provision for data analysis and distribution of results, both of which are integral components of Standard 4.4.8. Present programs are directed toward gathering evidence for possible legal action rather than developing information for highway safety and alcoholism programs.
4. Michigan presently has sufficient capabilities and resources within its State Police, Department of Public Health, county programs, Medical Examiner and Alcoholism legislation, and a wide range of professional and technical talent, both public and private, to meet the requirements of Standard 4.4.8 within a relatively short time.
5. Considering all these factors, Michigan can best develop both a program for blood sampling and analysis, and the performance criteria called for by Standard 4.4.8 within an overall public health program, rather than as a somewhat limited highway safety program.
6. Before a Michigan program can be implemented, overall responsibility, including that for development and supervision, must be placed in one state agency, which logically is the Department of Public Health.
7. Creating the Office of State Chief Medical Examiner to carry out the program for blood sampling and analysis would considerably increase program cohesion and performance.
8. In order to obtain full cooperation and efficient operation, some legal ambiguities and fears must be resolved, either by an opinion from the Attorney General or by limited, but specific legislation to ensure that blood sampling can and will be done to the extent required.
9. A fundamental and continuing requirement for successful program performance is the establishment of a state-wide, officially-sponsored, education, training, and information disseminating service to ensure that all officials, members of supporting agencies, and the general public understand the program, its objectives, and the duties and functions of those involved.

Recommendations

Policy

Conceive of the program prescribed by National Highway Safety Program Standard 4.4.8, ALCOHOL IN RELATION TO HIGHWAY SAFETY, to obtain and analyze blood samples from traffic fatalities as an essential element of a state-wide public health program, rather than as being within the restricted realm of highway safety.

Design the program to take maximum advantage of the broad authority granted the State Director of Public Health in Public Act 22, 1968, Public Health-Alcoholism, and to medical examiners in Public Act 92, 1969, County Medical Examiners.

In defining program objectives and requirements, anticipate eventual public health programs for drug addiction, air pollution, toxics, and other factors which may contribute to the physiological deterioration of driver and pedestrian performance.

Support Requirements

Resolve ambiguities and fears which might bar full cooperation and efficient operation by obtaining an Attorney General's opinion that existing laws authorize blood sampling of all accident fatalities as part of the Alcoholism Program.

Augment the Public Health Crime Detection Laboratory's capabilities for performing BAC analyses by increasing staff and plant equipment, and by contracting for approved county, hospital, and private laboratory facilities as required.

Establish within the Department of Public Health (or Office of Chief Medical Examiner) a research facility to analyze data and distribute pertinent findings to all public health and highway safety officials and other potential information users.

Legislation Requirements by Priority

Enact a statute requiring that a blood sample be obtained in the case of all violent or accidental deaths and specifying that medical technicians, nurses, licensed morticians, and other indicated persons may draw the sample.

Amend the Public Health laws to allow courts to accept in evidence by deposition or affidavit the findings of a BAC analysis, except when a court deems additional expert testimony is necessary.

Amend the statute prohibiting mutilation and dismemberment of dead bodies to exempt the taking of a blood sample.

Create by law the Office of State Chief Medical Examiner.

Amend the Medical Examiner Laws to require an

autopsy of all who die accidentally or while unattended by a physician, as is now required in Wayne County.

Administration

Assign responsibility for state-wide program planning, coordination, and supervision to the State Director of Public Health.

Contingent upon the creation of an Office of State Chief Medical Examiner, assign responsibility for operational direction of the program to the State Chief Medical Examiner, or to a Deputy Director of Public Health.

Make use of the State Advisory Board of Alcoholism, the State Safety Commission, the Office of Highway Safety Planning, and the Alcohol and Road Safety Advisory Committee for advising, assigning, and coordinating interagency responsibilities and functions.

Implementation

Train and direct all police agencies in the state to request officially qualified persons to take blood samples and deliver them to predetermined laboratories by the most expeditious method available as a routine step during the investigation of any fatal accident.

Supply all police with blood sampling kits for use by persons officially qualified to draw blood samples.

Employ and train medical technicians, nurses, and licensed morticians to supplement the presently qualified medical examiners and pathologists to take police-requested blood samples.

Have each county's chief medical examiner determine, and then inform all concerned, where and by whom the blood samples in that county will be analyzed.

Arrange for all laboratories which perform BAC analyses on blood taken from traffic fatalities to send a copy of the report to the State Department of Public Health.

Use the Michigan State Police computer facilities to process and analyze all BAC reports.

Education and Training

Under the auspices of the governor, and under the supervision of the Director of Public Health, with all state agencies participating, inaugurate a state-wide educational, training, and information disseminating service to provide the public with information about the program and guarantee continuing and efficient performance of all persons involved in its operation.

Action on this Report

Office of Highway Safety Planning should distribute copies to all affected individuals and agencies within the state of Michigan.

LEGAL BASIS FOR BLOOD ALCOHOL TESTING

Federal Law and Blood Alcohol Tests

In 1966, Congress enacted Public Law 89-564, known as The National Highway Safety Act of 1966, to provide for a coordinated nationwide Highway Safety Program and, through financial assistance to the states, to accelerate the implementation of state highway safety programs[1]. The National Highway Safety Act of 1966 requires that each state have a highway safety program, approved by the Secretary of Transportation, to reduce traffic accidents and the resulting deaths, injuries, and property damage. Each state program must meet the uniform highway safety standards promulgated by the Secretary of Transportation and be evaluated in terms of established performance criteria. The law further directs that, among other things, these uniform standards shall include, but not be limited to, provisions for accident investigations to determine the probable causes of accidents, injuries, and deaths, as well as standards to improve driver and pedestrian performance.

Federal Highway Safety Standards Relating to Blood Alcohol Tests

Within the powers outlined in the National Highway Safety Act of 1966, on 27 June 1967, the Secretary of Transportation issued an initial series of standards for state highway safety programs [2]. One of these Highway Safety Program standards is 4.4.8, ALCOHOL IN RELATION TO HIGHWAY SAFETY. Standard 4.4.8 requires that each state, in cooperation with its political subdivisions, develop and implement a program to achieve a reduction in traffic accidents caused in whole or in part by persons driving under the influence of alcohol.

Standard 4.4.8 is an outgrowth of the deep concern about and the overwhelming evidence on the relationship between alcohol and motor vehicle accidents presented during the numerous committee hearings held prior to the passage of the National Highway Safety Act of 1966 [3]. Although many witnesses were able to show the causal relationship between alcohol and highway accidents and

most of the states had taken cognizance of the problem by issuing laws controlling those who drive under the influence of intoxicating beverages, it was also shown that basic data on the role of alcohol in highway accidents was lacking and there was little or no uniformity among the states on existing laws, law enforcement, or controls affecting those who are found to drive under the influence of alcohol.

In recognition of these problems, Highway Safety Program Standard 4.4.8 directs each state program at least to include specific chemical testing procedures for determining blood alcohol content, and to set the legal definition of driver intoxication at a blood alcohol concentration not higher than 0.10 percent W/V [4]. Standard 4.4.8 also requires the state program to provide that any person arrested for operating a motor vehicle while intoxicated or under the influence of alcohol be deemed to have given his prior consent to a chemical test of his blood, breath, or urine for the purpose of determining the alcohol content of his blood. This is known as the "implied consent" law.

Most relevant to our discussion, however, is paragraph III of Standard 4.4.8 which reads: "To the extent practicable, there are qualitative tests for alcohol [which should be performed]: (a) on the bodies of all drivers and adult pedestrians who die within four hours after a traffic accident."

The reasoning behind this section of the standard again derives from the National Highway Safety Act of 1966 which calls for, among other things, alcohol content tests both on accident fatalities and drivers who survive fatal accidents. Such tests are needed to provide information on the seriousness of alcohol abuse in each jurisdiction and to establish base lines or starting points for allocating resources and measuring the success of control efforts [5].

In gathering the necessary basic data, Standard 4.4.8 also requires that the state establish appropriate procedures for: (1) specifying qualifications for personnel who administer chemical tests to determine blood, breath, and other body-alcohol concentration, (2) outlining specimen selection, collection, handling, and analysis, (3) reporting

and tabulating results. The standard also requires the state to periodically evaluate the program.

It should be noted that Standard 4.4.8, like the other highway safety standards, specifies what is to be done, rather than how it is to be done, or who is to do it. In this way, the federal government has given the states a free hand to apply and develop methods of reducing traffic accidents and accident results that are most adaptable to or consistent with individual circumstances, existing state or local laws, or unique jurisdictional requirements for new laws. Thus the states themselves evaluate state adherence to or conformity with the standards in terms of the performance criteria.

Standard 4.4.8 also relates to and is ancillary to Highway Safety Program Standard 4.4.6, CODES AND LAWS. This latter standard requires that a state (1) achieve uniform rules of the road in all of its jurisdictions, (2) have a plan for the adoption of motor vehicle laws and codes consistent with those of its neighbor states, and (3) develop and implement a program for achieving state-wide uniform rules of the road based on the Uniform Vehicle Code adopted by the National Committee on Uniform Traffic Laws and Ordinances [4]. The Uniform Vehicle Code, as revised in 1968 [6], includes implied consent to chemical tests for alcohol upon arrest for driving under the influence as called for by Standard 4.4.8 and also calls for mandatory revocation of the driver's license if the person arrested refuses to submit to a chemical test. Also Section 6-205.1 (b) of The Uniform Vehicle Code calls for *presumption of no withdrawal of consent to submit to a chemical test for alcohol by a person killed or rendered unconscious or in any condition rendering him incapable of refusal as a result of a traffic accident.*

Summary

The Federal Highway Safety Act of 1966, as implemented by National Highway Safety Standard 4.4.8, ALCOHOL IN RELATION TO HIGHWAY SAFETY and collaterally by National Highway Safety Standard 4.4.6, CODES AND LAWS, clearly requires that each state have a working program which at least provides that: (1) to the extent practicable, a blood specimen is taken from the bodies of all drivers and adult pedestrians who die within four hours of a traffic accident, (2) the blood specimen is chemically analyzed following proper scientific procedures, (3) the findings are properly reported and further analyzed, and (4) the resultant data is analyzed and disseminated.

Laws of The State of Michigan and Blood Alcohol Tests

Michigan statutory law does not specifically provide for handling highway traffic accident fatalities. Historically, such procedures have been derived or inferred from statutes relating to the responsibilities and functions of coroners and the handling of dead bodies in general [7].

Consequently, it is important to understand the coroner's position.

By tradition, a coroner is a public officer of a county or city, charged with certain public duties, which include holding inquests.

In Michigan counties populated by fewer than 250,000 people, eligibility for the job of coroner demands only that one be a qualified elector of the county in which election is sought [7]. In counties with populations of 250,000 or more, the coroner must be a physician or surgeon, properly licensed under the laws of Michigan, who has practiced his profession for at least five years.

Under Michigan statutes, coroners view all dead bodies and, when circumstances require, conduct inquests before six-man juries upon the bodies of persons supposed to have died unexpectedly, or by violence, or without medical attendance [7]. A coroner must hold an inquest upon petition of any five citizens of the county or by written order from the prosecutor or the Attorney General. Normally an inquest is ordered only when there is suspicion that the deceased met death as a result of foul play or through a criminal act.

Inquests are usually limited to physically examining the body and the environment in which it was found, plus taking testimony from available witnesses. Autopsies or even blood samplings are not done unless the coroner's jury is unable to come to an agreement or unless they are ordered by the prosecutor. Under the coroner system there is no assurance of a complete examination of the bodies of all traffic accident fatalities by means of autopsies or blood samplings. Even in terms of accomplishing its main purpose, the detection of homicides, the coroner system is considered scientifically inadequate and outmoded, and a factor that possibly allows crimes to remain undetected.

Michigan first started to discontinue the coroner system in 1945 with Public Act 143, which authorized counties with populations not less than 30,000 and not more than 1,500,000 to abolish the office of coroner and transfer the duties to a duly appointed health officer [8]. A few counties adopted this system. Later, Public Act 181 of 1953, County Medical Examiners, authorized counties to abolish the office of coroner and appoint a county medical examiner [7]. Under this law, county medical examiners, and any deputy medical examiners that are appointed, must be licensed physicians. Their duties require them to make examinations "upon such bodies of such persons only as who were supposed to come to their death by violence; whose death was unexpected; who died without medical attention up to a time 36 hours prior to the hour of death unless the attending physician, if any, was able to determine accurately the cause of death...." After being notified that a body meeting any of these conditions has been found, after examining the body either at the supposed scene of death or where it was found, and after considering the surrounding circumstances, the county medical examiner may deem a further examination necessary and cause the body to be removed to a suitable morgue where he can perform an autopsy. Like the coroner, the medical examiner must conduct an

investigation upon written order from the prosecutor or the Attorney General, or upon petition of six county electors.

The extent of autopsy is not specified by statute; presumably that and whether a blood sample is obtained are left to his discretion. Likewise, whether or not the body of a traffic fatality is autopsied or subjected to blood sampling appears, under the law, also to be at the discretion of the county medical examiner.

Normally medical examiners do not hold inquests, that being a function of a judge or a justice of the peace under the medical examiner system, but in 1968 the Michigan County Medical Examiner Law was amended to require medical examiners to hold inquests upon written order of a prosecutor or the Attorney General.

In July of 1969, while this study was in progress, the Michigan legislature passed Public Act 92, County Medical Examiners, which requires all counties to immediately abolish the office of coroner and create the office of county medical examiner (See Appendix A). However, counties having coroners when this act became effective, could let their coroners complete the term for which they were elected. The terms of most such coroners will extend through 1972.

The full title of Public Act 92 reads:

An act relative to investigations in certain instances of the causes of death within this state due to violence, negligence, or other act of omission of a criminal nature, *or to protect public health*; to provide for the taking of statements from injured persons under certain circumstances; to abolish the office of coroner and to create the office of county medical examiner in certain counties; to prescribe the powers and duties of county medical examiners; to prescribe penalties for violations of the provisions of this act; and to prescribe a referendum thereon.

Except for the italicized words, this title is exactly the same as the full title of Public Act 181, 1953, County Medical Examiners, which established the medical examiner system on an optional basis. This will be commented on later.

The new law requires that in counties populated by 50,000 or more persons, the county medical examiner and deputy medical examiner must be physicians licensed to practice in Michigan. In counties with a population of less than 50,000, deputy examiners must be physicians, dentists, registered nurses, or morticians licensed to practice in the state. The law also states that the county medical examiner shall be in charge of the Office of the County Medical Examiner and promulgate operating rules for this office and, further, that he may delegate any functions of his office to a duly appointed deputy medical examiner if that deputy is a licensed physician. If the deputy examiner is not a licensed physician his functions are limited by law.

The new act amends Section 2 of Public Act 181, 1963, to now read:

The county medical examiner or the deputy county medical examiner shall *make investigations as to the cause and manner of death in all cases of persons who have come to their death by violence; whose death was unexpected; or without medical attendance*

during the 48 hours prior to the hour of death unless the attending physician, if any, is able to determine accurately the cause of death....

This appears to mean that medical examiners now must make broad investigations into the causes of all violent deaths.

Under the new act Section 5 now reads, in part: the county medical examiner may perform or direct to be performed an autopsy and shall then and there carefully deduce the cause and have reduced to writing every fact and circumstance tending to show the condition of body and cause and manner of death, together with the names and addresses of any person present at the autopsy, which record he shall subscribe. *The county medical examiner may conduct an autopsy whenever he determines that an autopsy reasonably appears to be required for certain provisions of law....*

The foregoing italicized sentence, newly added, will be discussed later.

In the late 1950s, before the age of Federal Highway Safety Programs, a few people, including members of the Michigan State Safety Commission, aware of the relationship between the drinking of alcohol and highway traffic fatalities, hoped to alert the public to the situation. These people also believed that to determine the exact cause of death, the broad context of Michigan statutes had always allowed a coroner or medical examiner to exercise his discretion and arrange to have a properly qualified person take a blood sample from a traffic fatality..

Compared to the number today, in the late 1950s even fewer government officials and members of the public knew or took cognizance of the role of alcohol in traffic accidents. Far too many were more concerned about having someone in the family officially exposed as a drunkard, even when his condition had already become public knowledge. Therefore the whole concept of blood sampling was opposed. Many coroner-morticians were caught in the middle: If they did not take blood samples, they faced the criticism of both highway safety enthusiasts and advocates of alcoholism programs for not performing their duty; if they took blood samples, they alienated some of their clients and lost funerals to their competitors.

In 1960, to resolve the matter, the Attorney General was asked a direct question: "Does a county coroner have the power or authority to take blood samples from deceased persons for the purpose of aiding the State Safety Commission to make an analysis of the relationship between the drinking of alcoholic beverages and highway accidents?" (See Appendix B)

The Attorney General replied that nowhere in any of the statutes applying to coroner's powers and authorities can be found any authority for a coroner to take a blood sample from a dead body to aid a state agency with a survey it is taking. In this same opinion, however, the Attorney General pointed out that without holding an inquest, a coroner does have the power to order that someone competent take an alcohol sample from a deceased in order to fully determine the cause and circumstances of a violent or accidental death. Unfortunately, this opinion seems to

have hampered rather than aided the obtaining of blood samples.

In 1968, the Michigan state legislature enacted Public Act 22, Public Health and Alcoholism. The full title reads:

An act to protect the public health; to define alcoholism; to authorize educational and preventative programs concerned with alcoholism and programs for the treatment and rehabilitation of alcoholics; to define the duties of the Department of Public Health; to establish a state advisory board on alcoholism and define its policies and duties; and to repeal certain acts and parts of acts (See Appendix C).

Section 1 (b) of Act 22, in defining alcoholics, includes those persons who "while habitually under the influence of alcoholic beverages *endanger public health, morals, safety and the welfare of the public.*"

When the previously cited portions of Public Act 22, County Medical Examiners, passed in 1969, and Public Act 92, Public Health and Alcoholism, passed in 1968, are compared, they can be seen to mutually support the state's efforts to reduce both alcoholism and highway accidents. Public Act 22 enjoins all other agencies, whether they are private or organs of state or local governments, to cooperate with the Director of the Department of Public Health in the Public Health Alcoholism Program. In addition, it authorizes the Director of Public Health *to contract with other governmental agencies to perform portions of the programs.* Public Act 92 significantly expands the functions and responsibilities of medical examiners investigating deaths due to violence, *beyond the historic limits of determining whether a crime was committed into the broad area of protecting public health.*

In view of the provisions of Public Acts 22 and 92, the 1960 opinion of the Attorney General regarding the authority of a coroner to take blood samples from dead bodies for other state agencies appears no longer relevant. Rather, when these two laws, are jointly applied it appears

that in Michigan blood samples can legally be taken from traffic fatalities by a large group of specialists, *including coroners and morticians*, providing the Director of Public Health considers such blood samples necessary for the proper implementation of the program required for controlling alcoholism.

Taking blood samples from persons killed in traffic accidents thus appears to be most appropriate as part of a state public health program, under the Director of the State Department of Public Health, rather than as part of a somewhat restricted state highway safety program.

Adapting, wherever possible, to existing laws and situations should avert much of any legal controversy that might arise and enable the state of Michigan to meet the requirements of Highway Safety Program Standard 4.4.8. Results of the program could then be analyzed on the basis of established performance criteria considered within the context of the laws and circumstances of the state and the localities, as intended by the National Highway Safety Act of 1966.

Summary

There is no Michigan law specifically requiring that blood samples be taken from traffic fatalities. However, in the laws which established county medical examiner systems and the state public health alcoholism program there appears some legal basis for regularly obtaining blood samples from the bodies of persons who died in traffic accidents. A program to take and analyze these samples could best be promulgated within an overall public health program to combat alcoholism. At the same time, such a program would enable the state of Michigan to meet the requirements and performance criteria of National Highway Safety Program Standard 4.4.8.

WHAT THE STATE OF MICHIGAN IS DOING ABOUT ALCOHOL TESTING

Michigan State Programs

Michigan presently has no organized program for analyzing the alcohol content of blood sampled from traffic fatalities, although the National Highway Safety Program Standard on Alcohol in Relation to Highway Safety specifically requires such a program, and state laws relating to alcoholism and county medical examiner systems imply authority for one.

The Office of Highway Safety Planning, which is responsible to the Governor for coordinating national highway safety programs, is obviously concerned.

The major reasons for the current lack of a positive state program appear to be: (1) there is no general awareness of the need for a program, (2) neither in the 1953 nor in the 1969 County Medical Examiner Acts was a state Office of Medical Examiner provided to coordinate and supervise any of the county medical examiner systems they established, and (3) the State Department of Public Health, although responsible for state-wide public health activities, appears to have no authority over or responsibility for medical examiners. Indeed, discussions with many medical examiners verified that they never receive instructions or advice regarding either their general responsibilities and functions as examiners, or the specific purpose and methods of obtaining blood samples. Quite a few medical examiners had not seen or were not familiar with the content of Public Acts 22 and 92 until informed during the course of this study.

Therefore, because no state agency has initiated a formal program or issued directives which could be construed as establishing operating requirements or providing general guidance, whatever county or city programs exist for taking blood samples from traffic fatalities are the result of local concepts and initiative. Furthermore, there is not even any requirement nor program for submitting progress reports or even the results of BAC analyses to any state agency.

State Facilities

The State Department of Public Health maintains extensive modern laboratories which include a Crime Detection Division, staffed by highly competent personnel and equipped to make toxicological, pesticidal, and criminological analyses. This Crime Detection Division serves all law enforcement agencies within the state, and at the request of all police, prosecutors, coroners, and medical examiners, chemically analyzes, on a no-cost basis, the alcohol content of blood or urine samples from living persons or dead bodies.

The Crime Detection Division is considered one of the outstanding crime laboratories in the nation. Nevertheless, it has difficulty recruiting, training, and retaining personnel of a sufficiently high caliber, because all federal and state police agencies compete for the few available crime-laboratory specialists. Among recent recruits, two came from the Army Military Police Crime Detection Laboratories, and a third had been a high school chemistry teacher. Despite their education and practical experience, these three had to be taught the Crime Laboratory's procedures and how to testify in court under rigorous cross examination.

The laboratory's current heavy work load hampers the training of personnel in the use of some of the more advanced equipment for scientific crime detection. Since requests for all kinds of analyses have increased 45 percent in the past year, efficiency demands that blood alcohol content analyses now be done in batches on Mondays and Fridays. Consequently those who submit blood samples normally receive the results of the BAC analysis approximately 10 days later.

In addition to staffing and work-load problems, the Crime Detection Division has found some client agencies still use an outdated request form that does not even have a place to indicate whether the blood came from a living or

dead person. The current form provides a place for such information, but senders sometimes fail to fill it in. Occasionally a sender even omits his name and return address. Except for a few "write-ins," there is generally no information about why the blood sample was taken, and whether it is from an accident, homicide, or other victim of a violent death.

To a limited extent one might be able to determine which of the analyzed samples came from traffic fatalities and whether they were listed as drivers, passengers, or pedestrians. The Crime Detection Division's file copies of the results of all of their BAC analyses would be used. One could plod through these reports, which are filed by name of the blood source, to identify the requesting agencies and, if they were police departments, try to find out from them the status of the deceased. Obviously this would not be a very efficient study technique.

Requests for BAC analyses average about 120 per month. Subsequent court appearances by laboratory chemists average about five per month. This means approximately five man-days per week are spent away from the laboratory testifying in court.

Much time-consuming legalistic maneuvering surrounds the court testimony of a laboratory expert witness. Often after long hours of waiting he takes the stand but is not cross-examined. Later, the defense counsel will apologize for his having been summoned, explaining that the defense had not requested his appearance, and implying that the prosecutor summoned him unnecessarily. However, if the prosecutor does not have the expert witness present in court, the defense counsel will immediately object, saying that an unsubstantiated BAC analysis report is unacceptable, that the prosecutor has not adequately prepared his case, and that the defense should not be subjected to delay or postponement.

These legalistic tactics, which appear not to serve the cause of justice, yet demand an inordinate amount of time from laboratory personnel, could be eliminated by means of an affidavit or deposition to cover the BAC analysis in lieu of a court appearance, except in those special cases where a judge decides expert testimony presented in person is necessary. In the past, attempts to pass legislation allowing acceptance of expert witness depositions in district court trials have died in the House Judiciary Committee.

To facilitate the delivery of blood or urine samples to the laboratory, the Crime Detection Division furnishes, free of charge to all potential users, small kits containing written instructions for drawing blood, preserving the specimen, and protecting it against contamination, as well as a request form for BAC analysis, and a canister in which to mail the sample.

State Procedures

By far the greatest impetus at the state level for obtaining blood samples for BAC analysis from living and dead victims of traffic accidents comes from the Michigan State Police. Well-trained and highly motivated, they

appreciate the role of alcohol in traffic accidents, and diligently try to obtain blood samples, succeeding in getting the cooperation of citizens and county or local officials.

Therefore, the State Police prefer to have the blood drawn at a hospital or morgue where it can be witnessed by a trooper who usually receives the sample in a kit he provided. He then takes or sends it to the Crime Detection Laboratory in Lansing.

The State Police Records Center in Lansing receives a copy of any BAC analysis report prepared by the Crime Detection Division at the request of any State Police component, as well as copies of those BAC analysis reports prepared by all other laboratories at State Police request. These reports are filed manually, by name, and usually cross-referenced to the computerized accident report. Although it is not computerized for ready analysis, this file, maintained by the Michigan State Police, is the closest thing to a central repository of state-wide BAC analysis reports.

Unfortunately, however, there remain an unknown number of BAC analysis reports, listed by name only, in the files of the Crime Detection Division but not in the central file. These reports were prepared at the request of sheriff's departments, local police, county prosecutors, and possibly medical examiners and coroners. In addition, as will be shown later, there are many other reports, prepared by private laboratories and by county or city hospital laboratories at the request of other than the Michigan State Police, which do not enter a central file. Thus it can be seen that a state-operated central filing system which contains BAC analysis reports on all Michigan traffic fatalities does not exist. Such a central system, preferably in a computerized form, is required by Highway Safety Program Standard 4.4.8.

Adequate, centrally-located facilities do exist for receiving and entering these reports into a computer. The Department of State and the State Police each have computer and data processing facilities in Lansing which could be used to rapidly compare driver records, traffic violations, and other violations of the law with the BAC analysis reports obtained from the Department of Public Health Crime Detection Laboratory or other laboratories engaged in BAC analysis.

Summary

Aside from federal standards and existing state legislation that might be of some assistance, Michigan currently has no state-planned and state-directed program for obtaining blood samples in the case of fatal traffic accidents. Also in Michigan the laws fail to provide centralized supervision and guidance for county medical examiner systems. Therefore, counties and cities that have a program, organize and execute it on their own initiative.

At the state level, the chief impetus for obtaining blood samples comes from the Michigan State Police, who diligently request them in accidents they investigate, and the Crime Detection Division of the State Public Health

Laboratories, which provides kits for delivering blood samples to the laboratory for free analysis.

The State Police maintain, in manual file, a large portion of the BAC analysis reports now being prepared, but many other reports prepared for other police departments and agencies, or done by other laboratories, are scattered and unidentifiable.

The Crime Detection Division Laboratory, although well

staffed and equipped for doing a reasonable number of BAC analyses, is reaching the saturation point because of other responsibilities that it must also meet; it urgently needs augmentation of its facilities.

Adequate facilities which also could be used for computerizing and electronically processing BAC analysis reports already exist within the Michigan State Police and Department of State.

ANALYSIS OF COUNTY PROGRAMS

Policy Regarding Blood Sampling

Because each county is free to establish its own policy there is, as could be expected, a wide range of policies and procedures regarding the taking of blood samples from traffic fatalities.

At one end of the spectrum is Wayne County, with the largest population of any county in the state, a well-established medical examiner system, and the vast medical facilities existing in metropolitan Detroit. By law the body of anyone who dies in Wayne County while not under a physician's care automatically goes to the morgue for autopsy. Blood samples are obtained from almost 100 percent of the traffic fatalities, and they are analyzed at the county Forensic Laboratory.

At the other end of the spectrum is Keweenaw County, smallest in population, situated in economically depressed Copper Country. Although under the coroner system, the county presently has no coroner and relies on adjacent counties for medical services. Blood from the few traffic fatalities occurring each year is sampled only when the prosecutor orders it to gain otherwise unattainable evidence for a case being tried.

In addition to Wayne County, 16 counties claim to routinely sample blood from all traffic fatalities. But in two other counties, interviewees said blood sampling is never done under any circumstances. Another two counties report that it is done only when the presence of alcohol is suggested, such as by odor, bottles, or beer cans. Two more say it is done only when there is positive evidence of the presence of alcohol and legal action, criminal or civil, is possible against survivors whose defense involves the physical or mental condition of a deceased driver.

In 38 counties a blood sample is taken from the deceased if there is the least suspicion of the presence of alcohol at the time of the accident. In another eight counties, before a blood sample is taken, there must be a suspicion of the presence of alcohol plus the possibility of

legal action against survivors. In 14 counties a blood sample is taken from the deceased only when legal action against survivors is likely.

Even under the broadest policy, however, other conditions often must exist before blood samples are taken. For example, in nearly all counties nothing is drawn unless the investigating police, especially the Michigan State Police, request a blood sample. Some sheriff's departments exhibit equal diligence, but the local police, except in largely urban counties, usually make little or no attempt to obtain blood samples. The medical examiners or the coroners of 32 counties have authority to respond to police requests as they see fit, and some even take or order a blood sample without waiting for a police request.

In approximately 23 counties nothing is done without the county prosecutor's order or approval. Reasons for this requirement vary: The prosecutor may be the policy maker, the controller of the purse strings, or the provider of legal sanction in cases where the medical examiner's or the coroner's right to obtain a blood sample might be challenged. In 10 counties blood sampling is done only as part of an autopsy, an assumed guarantee against legal liability.

The determining factor in approximately half of Michigan's counties is whether the consent of the next of kin for drawing a blood sample or doing an autopsy can be obtained. It is difficult to determine the exact number of counties having this policy requirement because of the many ways it applies; that is whether the consent must be positive and/or written, whether it can be circumvented by using a prosecutor's order or through inability to locate the next of kin, or whether the sample can be obtained under other pretexts. Neither the medical examiner system nor the coroner system guarantees consistency in the requirement or concern for getting the consent of the next of kin. For example, some medical examiners will not take a blood sample without first getting consent, while some mortician-coroners, unconcernedly, never ask for it.

Procedures for Obtaining the Samples

In most counties the blood sample is obtained either at the receiving hospital or at the morgue. But in approximately 33 largely rural counties, which have mortician-coroners, the sample usually is obtained at a funeral home. In only five counties, and only under limited conditions, is a blood sample obtained at the scene of the accident.

Most medical examiners and mortician-coroners agree that obtaining a blood sample at the accident scene is difficult or impossible because of the condition of the deceased or a lack of necessary equipment. After death the veins rapidly collapse and are difficult to tap. Many medical examiners and morticians prefer to use a spinal tap needle and go directly into the heart. All prefer to draw the sample under good working conditions and to do it properly.

In those 33 counties under the medical examiner system, medical examiners and deputy medical examiners may, of course, draw the blood sample. In 36 other counties the coroners usually take the sample. In 23 counties contract pathologists obtain the sample at a morgue or hospital. Coroners who are not physicians or who are morticians but prefer not to draw blood themselves usually get contract pathologists to do it. In five counties the medical examiner or the coroner requests licensed morticians to obtain the blood sample before beginning embalming. Medical technicians or nurses appear not to draw blood samples. In one county, interviewees said that investigating police occasionally drew the sample.

Except for Wayne County, which uses its own Forensic Laboratory, the several counties using the Young Laboratory in Saginaw, and the two counties that claim they never take blood samples, all other counties send all or most of their blood samples to the State Public Health Crime Detection Laboratory. The sample, sealed in the free container, is mailed or hand-carried to Lansing by the investigating police. Counties complain because it can take two to three weeks to get the BAC analysis report from Lansing.

BAC Analysis Reports

In all counties the investigating police, state, county, or local, receive the BAC analysis report, either directly from whatever laboratory made the analysis or via the medical examiner or coroner. In about 50 counties the medical examiner or coroner receives a copy of the report. In 27 counties the prosecutor also receives a copy. In only eight counties does a copy go to the county or local health department.

Just as at the state level, the filing and availability of county BAC analysis reports is unsatisfactory. In 41 counties it was found that the reports are scattered among the medical examiner's or coroner's office, the prosecutor's office, police headquarters, and the health department. In only 14 counties do medical examiners or coroners seem to have a complete file. In seven counties the prosecutor supposedly keeps the report copies. At the county level the

investigating police retain complete files only of the BAC analysis reports they requested. Prosecutors generally only retain reports pertaining to cases likely to be prosecuted, and after a case is tried they dispose of them. Several prosecutors said lack of clerical help, funds, or space amid already over-crowded files of other reports prevented them from maintaining any more of these records.

Many county medical examiners and coroners who claim to have complete files of BAC analysis and autopsy reports have them indiscriminately stacked along with those pertaining to persons who have died of causes other than traffic accidents. Apparently this is why they were unable to respond to our original request for data on completed BAC analyses.

In summary, there is no complete and readily accessible file of all the BAC analysis reports for traffic accident deaths during the past several years.

Major Impediments to Drawing Blood Samples

In March 1960, the legal counsel for the Michigan Funeral Director's Association warned members that if a funeral director removed blood from a body in his possession for any reason other than embalming, regardless of whether directed to do so by public officials, he would be liable for committing a felony under Michigan law [9]. The Michigan statute that he allegedly would be violating is one that makes it a felony for any person to "mutilate, deface, remove, or carry away any portion of the dead body of any person, whether in their charge for burial or otherwise [7]."

In September 1960, the Attorney General rendered his previously cited opinion that coroners, although they could order a blood sample for the purpose of establishing cause of death, they could not have a blood sample taken from a traffic fatality to assist a state agency with a survey.

At present, in at least 33 counties the legality of drawing blood from traffic fatalities is questioned; consequently there is a strong deterrent to obtaining samples. Many mortician-coroners dare not draw a blood sample or order one drawn. Even in some counties under the medical examiner system there are rather general legalistic doubts and fears. Some medical examiners, particularly older doctors, believe their sole legal function is to determine whether or not a homicide has been committed. If this can be determined by outward examination of the body they believe it is illegal to do an autopsy or draw blood, especially if either action is ordered for any other purpose. Naturally, many coroners interpret the coroner law in the same way.

In the same 33 counties civil suits by the next of kin for doing an autopsy or drawing blood without permission are also feared. Therefore, even medical examiners and coroners who believe they will not be criminally liable try to obtain consent of the next of kin for a blood sample or an autopsy so they will not be liable for a civil suit. They may use arguments such as needing to determine whether the deceased died of a coronary, or needing evidence to prosecute someone who provided juveniles with alcohol

before the crash or to settle a claim for double indemnity insurance. Mortician-coroners seem to be more persuasive than medical examiners in obtaining consent. Fear of legal action or inability to get consent of next of kin causes some medical examiners and coroners to resort to ordering an autopsy on suspicion of foul play, or requesting a prosecutor's order or that someone else, usually a pathologist, obtain the blood sample.

Even when there is no fear of legal liability, many country-doctor medical examiners or mortician-coroners insist on obtaining consent of the next of kin in order to avoid local hostility and loss of their private practice to competition. However when relatives know that alcohol was involved they frequently fight disclosure of that fact, even when the deceased was a known alcoholic.

In 24 counties, nonconsent of the next of kin halts all attempts to obtain a blood sample. However, medical examiners and even coroners in about 40 counties believe that the laws allow blood sampling and they fear no legal liability.

Some medical examiners believe in always doing autopsies in order to identify other possible causes of traffic fatalities, such as drugs, carbon monoxide, coronary attacks, or other physiological conditions that could affect driver performance. Mortician-coroners who operate ambulance services and have responded to many accident calls, understand the influence of alcohol and consequently favor the blood sampling program.

In four counties, reluctance to spend time testifying in court discourages medical examiners and pathologists from obtaining blood samples unless urged to do so by the police. The director of at least one hospital will not permit staff physicians and pathologists to draw blood, unless ordered by the prosecutor, lest the staff lose time testifying in court. Four counties appears numerically insignificant until one notes that all four contain large urban areas where backlogs of court cases and unpredictable trial schedules are common. Many medical examiners and pathologists said that they, as well as chemists and other technicians, ought to be able to sign depositions or affidavits regarding BAC analyses rather than testify in person, except in such special cases as homicides or when the presiding judge determines that additional testimony is necessary.

In most rural counties, however, court cases are few, the pace of life is slower and prosecutors, judges, and medical examiners or coroners function more informally and cooperatively. They also know that sending blood samples to the Crime Detection Laboratory for analysis not only saves the county money but guarantees that state personnel will do any required testifying.

While in 11 counties lack of trained personnel was cited, in 6 counties lack of funds was said to impede the obtaining of blood samples. Some rural counties have no, or very few, doctors and must rely on doctors and hospitals in adjacent counties.

Generally, doctors do not like being medical examiners. The usual \$15 fee for viewing a body at an accident is not worth their being called out at late hours or irregular times

when they would be distracted from their normal medical work. Most doctors become medical examiners or deputies strictly as a public service and only for a limited time. Most coroners are morticians, and therefore are technically qualified to take blood samples. However, some coroners also work as taxi-cab drivers, dry-cleaner operators, factory workers, or farmers and, therefore, are not technically qualified to draw blood samples. Frequently they order one drawn after it is too late.

Medical examiners and pathologists believe blood sampling does not have to be done exclusively by them, and that the personnel shortage could be overcome by greater use of properly licensed morticians, nurses, and hospital technicians.

In theory, the cost of the county's obtaining blood samples is insignificant. Medical examiners and coroners automatically collect a fee just for viewing a dead body. The Public Health Department Crime Detection Division, as was discussed earlier, provides free kits for mailing blood samples to the laboratory and free BAC analyses. However, those counties which, for reasons already discussed, require that blood sampling be done only as part of an autopsy find that money is a problem. With the cost of an autopsy averaging \$150 and most rural counties operating on limited budgets, boards of supervisors oppose spending money for autopsies unless they are absolutely essential. When a county remote from Lansing urgently needs a BAC analysis, particularly for a criminal investigation, it hires a nearby contract pathologist who sometimes is located in an adjacent state and who charges \$15 to \$20. Thus, shortage of funds can deter routine blood sampling at the county level.

Approximately 10 counties that try to sample blood from every traffic fatality point out that this is not always possible. The victim may not die immediately, and with the passage of time, his blood alcohol content lowers or becomes insignificant. The patient may have been given blood transfusions or special medication which makes blood sampling after death impractical or worthless. However, this situation seems to be covered in Highway Safety Program Standard 4.4.8 by the phrase "to the extent practicable."

Approximately 33 counties indicate a popular dislike for, or no appreciation of, the purpose of the program for taking blood samples. This is understandable in terms of Michigan's governmental and political structure. The 83 semiautonomous, geographically separated counties have varying populations, economic problems, and social conditions. Rural and isolated counties tend to resist programs and procedures imposed by outsiders. Based on observations made during this study, many state laws and statutes are neither uniformly interpreted nor consistently enforced.

In some of the rural, sparsely-populated counties, medical examiners, coroners, and the local police do not request blood samples from a traffic fatality when "everyone knows he was a drunkard." This non-appreciation of the fact that statistical data is required for

state public health purposes reflects the public's need for more education.

Local mores on drinking and the attitudes of religious and temperance groups directly affect the zeal with which county officials promote a program for obtaining blood samples from traffic fatalities and the way the public understands or accepts such a program.

Some prosecutors, intent on achieving political goals through the most conventional methods, are more concerned about their image with the voters than with legal uncertainties or the problems of alcoholism, especially in "hard drinking" counties. Several medical examiners and coroners recounted instances of prosecutors either refusing to prosecute for drunk driving or reducing the charge. Discouraged by lack of support, local police in these areas have stopped using the breathalyzer; some could not understand why blood samples from dead drivers should be tested. Certain pathologists, long familiar with the problem of alcohol and driving, suggested enough was already known so taking blood samples should no longer be necessary. Complaints heard and observations made in 47 counties, i.e. more than half of the 83 Michigan counties, emphasize that inadequate central state administration is the most serious impediment to obtaining blood samples in all fatal traffic accidents. This accounts for the many contradictory interpretations of existing laws, the concern about the legality of taking blood samples, and much of the opposition and apathy toward the program.

A recurring complaint of medical examiners and coroners is that, once having assumed the job, they could find no person or literature to advise them on medico-legal procedures, to explain their duties, or to give them even a hint of the problems that they would sometimes face. When they exchange notes at conventions of funeral directors, coroners learn that the legal advice they receive from various county prosecutors is contradictory. Some county prosecutors have told coroners and medical examiners that drawing blood samples, except when it is ordered to obtain evidence, is illegal. Other prosecutors have advised that it is perfectly legal and part of their job. Many deputy medical examiners say they have no idea of what liabilities threaten. Some county prosecutors even admit that they do not understand the laws affecting blood sampling.

More important, many of these county officials said they had never been told what the blood-sampling program is all about. Although they know the role of alcohol in many highway accidents and want to see something done to keep it under control, they do not see the purpose of routine blood sampling. Some said they provide the blood sample only because the State Police ask for it, but they have no idea why the police want it. Very few county officials are aware of the content of Public Acts 22 and 92 regarding the Public Health-Alcohol Program and the County Medical Examiner System. Many asked why the Attorney General, the Director of Public Health, the Director of State Police, or others have not held symposias or meetings to explain the program and to provide more detailed administrative guidance on what was expected of each element of county

government. Others pleaded for instruction manuals, guidance circulars, or newsletters. (For comments representative of the views held by many of the coroners, medical examiners, prosecutors, and pathologists interviewed see Appendix E.)

Undoubtedly, county officials and citizens, many of whom now are hostile to the program, would be more cooperative if they truly understood it.

Program Requirements for Ensuring Compliance with Standard 4.4.8

Interviewees in at least 33 counties said they believe additional state laws, or at least clarification of present laws, are needed before blood samples will be taken from traffic fatalities in accordance with Standard 4.4.8.

New laws or modifications of laws suggested by prosecutors, medical examiners, coroners, and police officials included:

- a. Mandatory autopsy of the body of any person meeting death by accident.
- b. To the extent practicable, mandatory blood sampling and analysis of all traffic fatalities.
- c. Amendment of the state statute relating to mutilation and dismemberment of dead bodies to specifically exempt taking a blood sample.
- d. Amendment of Public Act 92, County Medical Examiners, to define under what conditions a blood sample may be taken in lieu of an autopsy, and to list persons authorized to do it, to include nurses, medical technicians, and licensed morticians.
- e. Statutory provision for admitting in evidence an affidavit or deposition concerning the drawing and chemical analysis of blood samples in lieu of court appearance of persons in (d) except for unusual cases when the presiding judge deems the presence of expert witnesses necessary.

On the other hand, many county officials said that if laws are adequate for Michigan to fulfill the requirements of Standard 4.4.8 the Attorney General should clearly state that they are and widely publicize that fact so that all doubts will be settled once and for all. Officials in 56 counties indicated better administrative guidance from the state, including state-standardized procedures, or, better yet, centralized state control of the program, is needed. Priority should be given to a state-authorized instruction manual which outlines the functions and responsibilities of affected county officials and describes procedures for obtaining and reporting analyses of blood samples.

Changes in administrative procedures suggested by many of those interviewed include:

- a. Expanding the accident investigation form to indicate if and when a blood sample was taken from a deceased; whether a traffic fatality was a driver, pedestrian, or passenger, who is sending the sample for analysis and where he is sending it from.
- b. Expanding the BAC analyses request form to indicate whether the blood source was alive or dead;

when, where, and, in broad terms, how the person died (e.g. automobile accident, drowning, fall).

c. Expand the death certificate form to indicate whether a blood sampling or autopsy was performed.

d. Require that a copy of all BAC analysis reports involving traffic fatalities prepared by other laboratories be forwarded to the State Department of Public Health.

e. Expand the State Department of Health Crime Detection Laboratory and provide more rapid service by creating regional sections.

f. Establish within the State Department of Health a training program for personnel involved in drawing blood samples.

g. Reimburse counties for autopsies and blood samplings done on traffic fatalities.

Many county medical examiners and pathologists strongly recommended legislation to establish the Office of State Chief Medical Examiner to supervise this program and all aspects of forensic medicine. Establishing regional offices of the State Chief Medical Examiner, staffed and equipped to support rural areas, and making deputy medical examiners part of the State Medical Examiner System were also recommended.

Finally, while 74 counties indicated a need, it can be assumed all 83 counties felt a need for a state-conducted educational program to tell all the people of Michigan the purpose and objectives of the program for taking blood samples and to ensure that all state and county officials understand their responsibilities and functions in this program.

HOW SOME STATES HANDLE THE LEGAL ASPECTS OF BLOOD SAMPLING

General

Robert L. Donigan in his book, **Chemical Tests and the Law** [10] states that there have been numerous appellate court decisions involving the admissibility of evidence relating to chemical tests on bodily substances taken from motorists or pedestrians killed in traffic accidents. While most have been civil cases, quite a few have been criminal cases. The courts have ruled that in both kinds of cases the results of a chemical test to determine the blood alcohol content of the deceased is admissible in evidence.

The basis for both these criminal and civil court rulings is that dead bodies have no constitutional rights protecting against unreasonable search and seizure, self-incrimination, or invasion of privacy. All these rights died with the person [11]. Furthermore, no one, regardless of relationship, has a constitutional right with respect to the body of another person.

The question occasionally raised, however, is whether any one has the authority to take the blood sample in the first place. Logically, if medical examiners and coroners are to determine the true cause of death, it would seem that they have the same right to have pathologists determine the influence of alcohol on persons killed in traffic accidents as they have to order chemical tests in any other case of death by violence or poisoning.

Why then do legal doubts and fears persist regarding the obtaining of blood samples? The answer involves two rather complicated factors. Firstly, all states have some sort of statute prohibiting the mutilation or dismemberment of dead bodies. Secondly, the courts have ruled that the next of kin, or whoever has custodial rights to the body for burial purposes, also have a quasi-property right which includes the right to ensure a decent burial [12].

Therefore, the argument goes, regardless of the admissibility in evidence of the results of an autopsy or blood analysis, no one may do an autopsy or take a blood

sample without being criminally liable for mutilation of a dead body unless the law specifically authorized him to do it, and unless he is authorized under legally specified circumstances.

It is because of an apparent lack of specificity in Michigan laws that some coroners and medical examiners are afraid to take blood samples from traffic fatalities.

Assuming there was no criminal liability involved there still is the possibility of a civil suit (such as for emotional injury) against the agency or individual who without getting consent ordered or performed the autopsy or took the blood sample in violation of the quasi-property rights of relatives [10].

Therefore, fear of being sued or fear of hurting one's private practice has caused some Michigan coroners and medical examiners to avoid doing, or arranging for, blood samples or autopsies on traffic fatalities.

An obvious question is whether anyone in Michigan ever has faced legal action for such actions. From discussions with faculty members of the University of Michigan's Law School and Medical School it was learned there have, indeed, been cases in Michigan where doctors have been sued for causing emotional injury on the basis of having performed an autopsy without consent of the next of kin [8]. However, there are no known cases of successful suit for having taken a blood sample. Members of the Law Faculty believe it would be almost impossible to prove emotional injury, because a blood drawing is always done as part of the embalming. Also, the cost of suing on such shaky grounds is considered a major deterrent.

According to the Insurance Institute for Highway Safety, only 11 states fulfill the portion of Highway Safety Program Standard 4.4.8 requiring that blood samples be taken from traffic fatalities [13]. The laws of three of these states, New Mexico, Utah, and Maryland, were reviewed to learn by what legal authority blood sampling is accomplished.

New Mexico

In March of 1969, New Mexico enacted an amendment to the coroner laws which reads:

In those cases where the death results from a motor vehicle accident on a public highway, and the coroner performs or causes to be performed a test or tests to determine the alcohol content of the deceased's blood, a copy of this report shall be sent to the planning division of the State Highway Department for said department's use only for statistical purposes. The copy of the report sent to the planning division of the State Highway Department of the results shall not contain any identification of the deceased and shall not be subject to judicial process [14].

New Mexico coroners are physicians, so presumably there should be no trouble getting the desired blood samples for statistical studies.

However, the State Traffic Safety Director has advised that they are having some problems with this law: (1) coroners are not required to take blood samples; (2) although the highway department's copy of the report is not subject to judicial process, the coroner's copy is; (3) there is no law to permit a coroner's report to be accepted in court in lieu of his personal testimony; (4) to avoid being called to testify, coroners are obtaining few blood samples.

Utah

In early 1969, the State of Utah enacted a Public Health Law which, among other things, specifically provided for collecting blood samples for chemical analysis from all drivers and pedestrians killed in traffic accidents [15]. However, the Utah law specifies that anonymity of the blood source shall be preserved and the results of analysis shall be for statistical purposes only, thus ruling out any possibility of results being used as a basis for legal action, settlement of insurance claims, or claims of emotional injury, etc. The pertinent sections of the Utah law are:

26-15-4 State department of health—Powers and duties—The state department of health shall have and exercise the following powers and duties in addition to all other powers and duties imposed on it by law: (22) To establish, maintain and enforce a procedure requiring that the bodies of adult pedestrians and all drivers of motor vehicles killed in highway accidents be examined for the presence and concentration of alcohol; to provide the commissioner of public safety with statistics reflecting the results of the examinations on a monthly basis; to provide adequate safeguards so that information derived from the examinations be used for no other purpose than the compilation of statistics authorized herein.

26-15-4 Division of health—Powers and duties—The division of health shall have and exercise the following powers and duties in addition to all other powers and duties imposed on it by law:

(1) To exercise all the administrative authority

heretofore vested in the state board of health, and the state department of health.

(2) To establish, maintain and enforce a procedure requiring that the blood of adult pedestrians and all drivers of motor vehicles killed in highway accidents be examined for the presence and concentration of alcohol; to provide the commissioner of public safety with statistics reflecting the results of the examinations on a monthly basis; to provide adequate safeguards so that information derived from the examinations is used for no other purpose than the compilation of statistics authorized herein.

Responsibility for carrying out the Utah program for blood sampling was assigned to the State Chief Medical Examiner, whose office is within the Division of Health. Exercising his authority, he requested all Utah funeral directors to obtain a blood sample from any driver or adult pedestrian killed in a motor vehicle accident before embalming, and, using the special containers it furnishes, send the sample to the Health Division. However, to preserve the anonymity required by law, funeral directors must include only the following data regarding the deceased; date of birth, sex, date and county of death, and whether driver or pedestrian. By no means is the name and address of the funeral director to be revealed.

Utah recently prepared the first quarterly report covering the results of this program. (Among other interesting information presented was the high incidence of drugs, such as aspirin and tranquilizers, found in fatalities.)

However, there is one flaw in this system—dependence on the funeral director's cooperation. To determine which of them are negligent, either in drawing samples or in sending them in, would be difficult.

Maryland

Under a very broad Post Mortem Examiner's Law, the state of Maryland has an extensive medical examiner system, including a Chief Medical Examiner, a supporting staff, and state-appointed deputy medical examiners for each county [16]. Each deputy medical examiner has the power to deputize any other physicians he may need to assist him. Costs of autopsies or other examinations deemed necessary or desirable are paid for by the state out of revenues from the Racing Commission!

Maryland medical examiners are given wide latitude to investigate deaths. For example, consider the first regulation:

Regulation 1. Definitions. When used in these regulations, the term "Medical Examiner case" means any death which is the result, wholly or in part, of a casualty or accident, homicide, poisoning, suicide, criminal abortion, rape, therapeutic misadventure, drowning, or a death of a suspicious or unusual nature, or of an apparently healthy person.

Section 8 reads in part:

The Chief Medical Examiner, or in case of his absence or inability, an Assistant Medical Examiner, and the Deputy Medical Examiners, shall promptly deliver to

the State's Attorney of Baltimore City, or the State's Attorney of the county, as the case may be, copies of all records relating to every death in which, in the judgment of such Medical Examiner, further investigation may be deemed advisable. The State's Attorney of Baltimore City, or the State's Attorney of any county, may obtain from the office of the Chief Medical Examiner, or of the Deputy Medical Examiners, as the case may be, copies of such records or other information which he may deem necessary. The records of the office of the Chief Medical Examiner, and of the several Deputy Medical Examiners, made by themselves or by any one under their direction or supervision, or transcripts thereof certified by such Medical Examiner, shall be received as competent evidence in any Court in this State of the matters and facts therein contained. A reasonable fee shall be charged for filing insurance blanks, etc., and all such fees collected by the Chief Medical Examiner and Assistant Medical Examiners shall be paid into the City Treasury of Baltimore City on or before the tenth day of each month, but the Deputy Medical Examiners of the respective counties shall be permitted to retain the fees collected by them. The records which shall be admissible as evidence under this section shall be records of the results of views and examinations of or autopsies upon the bodies of deceased persons by such Medical Examiner, or by any one under his direct supervision or control, and

shall not include statements made by witnesses or other persons.

Then, to ensure that medical examiners and pathologists do not waste hours testifying, Section 9 of the Maryland law reads:

9. The Chief Medical Examiner, the Assistant Medical Examiners and the Deputy Medical Examiners, shall have the power to administer oaths and affirmations, and take affidavits and make examinations as to any matter within the jurisdiction of their respective offices, but said Chief Medical Examiner, Assistant Medical Examiners and Deputy Medical Examiners shall not have the power to be required to summon a Jury of Inquisition.

Summary

Other states also have encountered legal and practical problems regarding blood sampling. They have dealt with these problems by enacting two types of legislation:

- a. Guarantee of anonymity of deceased to eliminate any possible subsequent legal action.
- b. Creation of a complete medical examiner system which grants broad authority to determine the causes of accidental deaths.

The second approach is by far superior in facilitating the processes of blood sampling. In addition, the Maryland laws eliminate the problem of unnecessary court appearances.

PROGRAM COST ESTIMATES

General

From the foregoing discussions it is obvious that an acceptable state program for obtaining blood samples from traffic fatalities, transferring samples to a laboratory, chemically determining the alcohol content of samples, and collating and interpreting the results of all such chemical analyses will involve many persons throughout the state.

However, the necessary persons will not make the program expensive. Most of the relatively simple, required tasks are within the duties of existing offices and operating personnel. Thus there is no need to extensively augment the staffs of state agencies. While operating costs will not be high, starting the program will require careful coordination and training.

Initial Starting Costs

Some implementation costs are likely to be encountered by certain state agencies, such as the Department of Public Health, State Police, and possibly the Attorney General. These minimal costs, being an integral part of current departmental operations, can best be determined by each department concerned.

Some other costs for starting the program can be envisioned. As was discussed earlier, an educational period is essential for all persons and agencies involved. This phase will require some additional staffing and materials. Writing, publishing, and distributing a suitable information brochure throughout the state should not cost more than \$10,000. During the first year, consulting services to help certain counties start the program probably would require approximately \$20,000.

Direct Costs

One direct operating cost will be the additional manpower and materials needed for chemical analysis.

Assuming it will continue to provide this service, the Public Health Crime Detection Laboratory must be augmented by at least one laboratory technician/analyst, probably at \$12,000 per year, and additional clerical services equivalent to about \$2,000 per year.

To perform the necessary data analysis and to distribute the results to users, the Department of Public Health will require the additional time of an analyst, amounting to one-quarter man a year, at about \$3,000 per year, plus clerical support for coding, punching, and preparing the machine processing, equivalent to \$9,000 per year. It is assumed that existing computing facilities, either within the State Police or the Department of State, will be available on a cost-free basis for the minor computation required. These direct costs of operating the program are not high.

Indirect Costs

The indirect costs of the additional work implied in collecting blood samples and delivering them to the laboratory also should be reasonable.

However some indirect costs cannot be determined at present. These include the man-hours lost to production when operating personnel (police officers and chemical analysts) testify in court, and the court-regulated fees that may be allowed deputy medical examiners and other expert witnesses for testifying. Furthermore, the program could incur costly failures if, as discussed in previous chapters, many essential people refrain from taking blood samples because of the inconvenience of testifying.

To understand these indirect operating costs, consider, for example, that the Crime Detection Laboratory now loses about five man-days per month due to testifying in court. If we assume this amount doubled to 10 days per month and consider the mean cost of a man-day (salary and overhead) at \$80.00, annual costs would be \$9600. Then adding annual court fees of \$10,400 paid to other expert witnesses (deputy medical examiners, nongovernment

analysts) involved in blood sampling, a fair estimate of these indirect costs would be approximately \$20,000 per year.

However, making it possible for medical examiners, coroners, technicians, laboratory analysts, and policemen to testify through affidavit, rather than in person, when blood sampling results in a court case could reduce these indirect operating costs to an insignificant level and greatly ensure program success.

Summary

The first-year costs of a state program for analyzing blood samples from traffic fatalities would be reasonable.

The estimated expenses are as follows:

Initial Starting Costs (one-time cost)	\$30,000
Direct Costs	26,000
Indirect Costs	20,000
Total First-Year Costs	\$76,000

In subsequent years, particularly if a legal device were obtained to reduce to a minimum the court appearances of expert witnesses, annual costs would be small. In fact, the costs of the program appear insignificant if compared to the value this program has in helping to alleviate the problems of alcoholism, especially as they relate to highway safety.

APPENDICES

Appendix A

COUNTY MEDICAL EXAMINERS

(Caption editorially supplied)

P.A. 1969, No. 92, Eff. July 24, 1969

AN ACT to amend the title and sections 1 to 8,10,12 and 13a of Act No. 181 of the Public Acts of 1953, entitled "An act relative to investigations in certain instances of the causes of death within this state due to violence, negligence or other act or omission of a criminal nature; to provide for the taking of statements from injured persons under certain circumstances; to abolish the office of coroner and to create the office of county medical examiner in certain counties; to prescribe the powers and duties of county medical examiners; to prescribe penalties for violations of the provisions of this act; and to prescribe a referendum thereon," section 1 as amended by Act No. 49 of the Public Acts of 1959, section 7 as amended by Act No. 274 of the Public Acts of 1968 and section 13a as added by Act No. 225 of the Public Acts of 1959, being sections 52.201 to 52.208, 52.210, 52.212 and 52.213a of the Compiled Laws of 1948; to add sections 1a to 1f, 13b, 13c and 16; and to repeal certain acts and parts of acts.

The People of the State of Michigan enact:

Section 1. The title and sections 1 to 8, 10, 12 and 13a of Act No. 181 of the Public Acts of 1953, section 1 as amended by Act No. 49 of the Public Acts of 1959, section 7 as amended by Act No. 274 of the Public Acts of 1968 and section 13a as added by Act No. 225 of the Public Acts of 1959, being sections 52.201 to 52.208, 52.210, 52.212 and 52.213a of the Compiled Laws of 1948, are amended and sections 1a to 1f, 13b, 13c and 16 are added to read as follows:

TITLE

An act relative to investigations in certain instances of the causes of death within this state due to violence, negligence or other act or omission of a criminal nature or to protect public health; to provide for the taking of statements from injured persons under certain circumstances; to abolish the office of coroner and to create the office of county medical examiner in certain counties; to prescribe the powers and duties of county medical examiners; to prescribe penalties for violations of the provisions of this act; and to prescribe a referendum thereon.

Sec. 1. The board of supervisors of each county of this state shall by resolution abolish the office of coroner, and appoint a county medical examiner to hold office for a period of 4 years. Should the office of county medical examiner become vacant before the expiration of the term of office, the board of supervisors may appoint a successor

to complete the term of office. In counties having a civil service system, the appointment and tenure of the medical examiner shall be made in accordance with the provisions thereof. County medical examiners shall be physicians licensed to practice within the state and shall be residents of the county for which they are appointed or of a neighboring county. Two or more adjoining counties, by resolution of the respective boards of supervisors thereof, may enter into common agreement to employ the same person to act as medical examiner for all of the counties.

Sec. 1a. (1) The board of supervisors may appoint as a deputy county medical examiner any person meeting the qualifications as required by this section and approved by the county medical examiner.

(2) In counties now or hereafter having a population of 50,000 or more, deputy county medical examiners shall be physicians licensed to practice within this state.

(3) In counties now or hereafter having 50,000 population or less, deputy county medical examiners shall only be physicians, dentists, registered nurses or morticians licensed to practice in this state.

Sec. 1b. Deputy county medical examiners shall be residents of the county from which they are appointed.

Sec. 1c. The county medical examiner shall be in charge of the office of the county medical examiner and may promulgate rules relative to the conduct of his office. The county medical examiner may delegate any functions of his office to a duly appointed deputy county medical examiner if the deputy county medical examiner is a licensed physician. If the deputy county medical examiner is not a licensed physician, his functions shall be limited as provided by law.

Sec. 1d. In counties having a civil service system the county medical examiner shall appoint the deputy medical examiners.

Sec. 1e. The compensation of the county medical examiners and deputy county medical examiners shall be such as is appropriated by the county board of supervisors. The county medical examiner and deputy county medical examiners shall receive, in addition to compensation, their actual and necessary traveling and other expenses, within the appropriation made therefor by the county board of supervisors.

Sec. 1f. The county board of supervisors shall remove from office any county medical examiner or upon request of the county medical examiner any deputy county medical examiner, after hearing, who fails to discharge properly the duties of his office. In counties having a civil service system, the removal of the county medical examiner shall be made in accordance with the provisions of the civil service system.

Sec. 2. County medical examiners or deputy county medical examiners shall make investigations as to the cause and manner of death in all cases of persons who have come to their death by violence; or whose death was unexpected; or without medical attendance during the 48 hours prior to

the hour of death unless the attending physician, if any, is able to determine accurately the cause of death; or as the result of an abortion, whether self-induced or otherwise. If any prisoner in any county or city jail dies while so imprisoned, the county medical examiner, upon being notified of the death of the prisoner, shall make an examination upon the body of the deceased prisoner.

Sec. 3. Any physician and any person in charge of any hospital or institution, or any person who shall have first knowledge of the death of any person who shall have died suddenly, unexpectedly, accidentally, violently, or as the result of any suspicious circumstances, or without medical attendance during the 48 hours prior to the hour of death unless the attending physician, if any, is able to determine accurately the cause of death, or in any case of death due to what is commonly known as an abortion, whether self-induced or otherwise, shall notify the county medical examiner or his deputy immediately of the death.

Sec. 4. It shall be unlawful for any funeral director, embalmer or other person to remove the body from the place where death occurred, or to prepare the body for burial or shipment, when such funeral director, embalmer or other person knows or upon reasonable investigation should know that death may have occurred in a manner as indicated in section 3, without first notifying the county medical examiner or his deputy and receiving permission to remove, prepare for burial or ship such body. Any person who violates the provisions of this section is guilty of a misdemeanor and may be imprisoned not exceeding 1 year, or fined not exceeding \$500.00, or both.

Sec. 5. When a county medical examiner has notice that there has been found or is lying within his county or district the body of a person who is supposed to have come to his death in a manner as indicated in section 3, he shall forthwith repair to the place where such body lies and take charge of same; and if, on view thereof and personal inquiry into the cause and manner of the death, he deems a further examination necessary, the county medical examiner or his deputy may cause such dead body to be removed to the public morgue. If there be no public morgue, then the body may be removed to such private morgue as the county medical examiner has designated. The county medical examiner may perform or direct to be performed an autopsy and shall then and there carefully reduce or cause to be reduced to writing every fact and circumstance tending to show the condition of the body and the cause and manner of death, together with the names and addresses of any persons present at the autopsy, which record he shall subscribe. The county medical examiner may conduct an autopsy whenever he determines that an autopsy reasonably appears to be required pursuant to the provisions of law. After the county medical examiner or his deputy has made diligent effort to locate and notify the next of kin, he may order and conduct the autopsy with or without the consent of the next of kin of the deceased. The county medical examiner or his deputy shall keep a written record of such efforts to locate and notify the next of kin for a period of 1 year from the date of the autopsy. Such county medical examiner shall, after any required

examination or autopsy, promptly deliver or return such body to the relatives or representatives of the deceased or, if there are no relatives or representatives known to the examiner, he may cause the body to be decently buried, except that such examiner may retain, as long as may be necessary, any portion of such body believed by him to be necessary for the detection of any crime.

Sec. 6. If the body of a deceased person has been removed to a private morgue for examination upon the order of the medical examiner, the keeper of such morgue shall be allowed compensation for his services as the county medical examiner deems reasonable. Compensation is to be paid out of the county treasury on the order of the examiner. Any expense incurred under the provisions of this act shall be within the appropriations made therefor by the county board of supervisors.

Sec. 7. Upon the written order of the prosecuting attorney or the attorney general or upon the filing of a petition signed by 6 electors of a county, the county medical examiner or deputy shall conduct an investigation, as provided in section 5, of the circumstances surrounding any death believed to have occurred in the county. Upon determination of the prosecuting attorney or upon the determination of the examiner an inquest shall be held by a district court judge or a municipal court judge.

Sec. 8. In all cases arising under the provisions of this act, in the absence of next of kin of the deceased person, the senior police officer being concerned with the matter, and in the absence of police, the county medical examiner or his deputy, shall take possession of all property of value found upon the person of the deceased, make an exact inventory report thereof and shall deliver the property, unless required as evidence, to the person entitled to the custody or possession of the body. If the personal property of value is not claimed by the person entitled to the custody or possession of the body of the decedent within 60 days, the property shall be turned over to an administrator or other personal representatives of the decedent's estate to be disposed of according to law; or, if required as evidence, the property within 60 days after the termination of any proceeding or appeal period therefrom permitted by law shall be turned over to the person entitled to the custody or possession of the body, or to an administrator or other personal representative of the decedent's estate. Nothing in this section shall affect the powers and duties of a public administrator.

Sec. 10. No funeral director, embalmer or any other person shall remove the body of any person deceased to a crematory or remove for the purpose of cremation such dead body from the county in which death occurred without the signed permit of the medical examiner for such county or his deputy. Any person who violates the provisions of this section is guilty of a misdemeanor and shall be imprisoned not more than 1 year, or fined not more than \$500.00, or both.

Sec. 12. Any and all medical examiners or their deputies may be required to testify in behalf of the state in any matter arising as the result of any investigation required under this act, and shall testify in behalf of the state and

shall receive such actual and necessary expenses as the court shall allow.

Sec. 13a. The powers and duties vested by law in the office of coroner are transferred to and vested in the county medical examiners and their deputies as provided herein. The office of coroner, as provided for in sections 86 and 87 of chapter 14 of the revised statutes of 1846, as amended, being sections 52.86 and 52.87 of the Compiled Laws of 1948, shall be abolished, and whenever reference thereto is made in any law of this state, reference shall be deemed to be intended to be made to the medical examiners created by this act, insofar as consistent with the provisions of this act. Any hearing or other proceeding pending before any coroner shall not be abated but shall be deemed to be transferred to the medical examiner of the proper county and shall be conducted and determined by such examiner in accordance with provisions of law.

Sec. 13b. All records, files and other papers belonging to any coroner in any such county shall be turned over to the county medical examiner of the proper county and shall be continued as a part of the records and files of the county medical examiner.

Sec. 13c. Any county having a county health officer appointed under the provisions of Act No. 306 of the Public Acts of 1927, as amended, being sections 327.201 to 327.208a of the Compiled Laws of 1948, may designate the county health officer as medical examiner.

Sec. 16. In all counties having a coroner upon the effective date of this amendatory act, the coroner may complete the term for which he was elected.

Section 2. Sections 9, 14 and 15 of Act No. 181 of the Public Acts of 1953, being sections 52.209, 52.214 and 52.215 of the Compiled Laws of 1948, are repealed.

Appendix B

Extract of the Biennial Report of The Attorney General of the State of Michigan

COUNTIES: Coroner—Authority to make blood analysis

County coroner may not take a blood sample or cause to be taken a blood sample from a deceased person for the purpose of assisting a state agency in making an analysis of the relationship between drinking of alcoholic beverages and highway accidents.

No. 3522

September 12, 1960

Mr. Gerald W. Shipman, Executive Secretary
Michigan State Safety Commission
136 Stevens T. Mason Building
Lansing, Michigan

By Assistant Attorney General Cohen

You have requested the opinion of the Attorney General regarding the following questions:

1. Does a county coroner have the power or authority to take blood samples from deceased persons for the purpose of aiding the State Safety Commission to make an analysis of the relationship between the drinking of alcoholic beverages and highway accidents?
2. Must a county coroner have a signed consent from the next of kin in order to take such a blood sample for this purpose?

In view of our opinion in this matter it will not be necessary to answer the second question.

The powers and duties of a coroner are set forth in the following Michigan statutes: M.S.A. §§ 28.1169 - 28.1191¹ and M.S.A. § 14.228.²

Sections 28.1169-28.1191 are concerned primarily with the duties and powers of the coroner in regard to the convening and holding of inquests. A coroner appears from these statutes to have the following powers insofar as holding an inquest is concerned.

1. Outside the limits of incorporated cities, he may hold an inquest in cases where persons have come to their death suddenly or by violence only upon the petition of (a) five citizens, (b) at the direction of the prosecuting attorney of the county in which the coroner holds office, (c) at the direction of the Attorney General.

2. Within the limits of incorporated cities the coroner may hold an inquest in cases where a person has come to his death suddenly or by violence whenever in his judgment such an inquest shall be necessary.

Pursuant to the holding of an inquest, the coroner may require the attendance of a competent physician or surgeon for the purpose of making a post-mortem examination and of testifying as to the result of the same. He may also employ chemists in certain types of cases where necessary.³

Thus it appears that in cases where an inquest is properly called, a coroner could request a doctor to take a blood sample, but only for a legitimate purpose of such an inquest; i.e.: to determine the means by which the deceased came to his death.

There is no authority to convene an inquest for the purpose of obtaining blood samples for a survey being conducted by the State Safety Commission, this being a purpose not contemplated by the statutes involved. Further, should such a blood sample be taken pursuant to a proper object of the inquest, such blood sample can be used only for the purposes of the inquest itself, and not for any purposes of the State Safety Commission.

Therefore, the question narrows down to whether or not a coroner may take a blood sample from a deceased for the purposes enumerated without the convening of an inquest. M.S.A. § 4.228 gives to the coroner the power and authority in cases of death occurring without medical attendance to *investigate* or hold an inquest as the circumstances require so that he may properly certify as to the cause of death. The statute also states that if he finds such death was the result of violence, the coroner shall

certify whether it was apparently accidental, suicidal or homicidal.

It appears, therefore, that as a result of this statute, a coroner may investigate a death without the necessity of holding an inquest where such death occurs without medical attendance. However, the statute specifically sets forth that the coroner may investigate so that he may certify as to the cause of such death. This is the only purpose for which the coroner is authorized to conduct such an investigation that can be discovered from the statute.

It is conceivable that under this power a coroner might order a blood sample taken from the deceased by one competent to take such a sample pursuant to this investigative power inasmuch as a blood sample might be helpful in determining the cause of death and how the death occurred. However, as set forth above, such a blood sample can be taken only for the purposes set forth in this statute. Nowhere in any of the statutes cited applying to the powers and authorities of coroners can be found any authority for a coroner to take blood samples from a dead body for the purpose of aiding a state agency in taking a survey. A coroner, of course, can only act within the powers and authority granted to him by state statutes and such reasonable powers as may be inferred therefrom.

Therefore, it is my opinion that under the statutes of the State of Michigan a coroner has no authority or power, implied or otherwise, authorizing or empowering him to take a blood sample from a deceased person for the purpose of aiding the State Safety Commission in making the survey in question.

PAUL L. ADAMS
Attorney General

¹C.L. 48 §§ 773.1-773.23; P.A. 1927, Act No. 175, as amended, Chapter XIII, §§ 1,2,4,11,12,13,14,15,19,21.

²C.L. § 326.8, Act 343, 1925, as amended, Section 8.

³M.S.A. § 28.1181.

Appendix C

Public Health – Alcoholism (Caption editorially supplied)

P.A. 1968, No. 22, Eff. May 17, 1968

AN ACT to protect the public health; to define alcoholism; to authorize educational and preventive programs concerned with alcoholism and programs for the treatment and rehabilitation of alcoholics; to define the duties of the department of public health; to establish a state advisory board of alcoholism and define its powers and duties; and to repeal certain acts and parts of acts.

The People of the State of Michigan enact:

Sec. 1. As used in this act:

(a) "Alcoholism" means a chronic and progressive illness, characterized by an excessive and uncontrolled drinking of alcoholic beverages, and as a public health problem affecting the general welfare and economy of the state.

(b) "Alcoholics" means persons who habitually use alcoholic beverages to the extent that they have lost the power of self-control with respect to the use of such beverages, or while habitually under the influence of alcoholic beverages endanger public health, morals, safety or the welfare of the public.

(c) "Director" means director of the department of public health.

Sec. 2. (1) There is created an alcoholism program within the state department of public health. The director, with the advice and counsel of the state advisory board of alcoholism, is authorized to develop and carry out programs concerned with education about and prevention of alcoholism and the diagnosis, treatment and rehabilitation of alcoholics, and to make such rules in accordance with provisions of Act No. 88 of the Public Acts of 1943, as amended, being sections 24.71 to 24.80 of the Compiled Laws of 1948, and subject to Act No. 197 of the Public Acts of 1952, as amended, being sections 24.101 to 24.110 of the Compiled Laws of 1948, as shall be instrumental in carrying out the purposes of this act. These programs shall include, but shall not be limited to: the promotion, support or conduct of studies or research on the consumption of alcoholic beverages and on alcoholism and the relation thereof to the health and welfare of the people of the state; the promotion, support or conduct of programs concerned with education about the use of alcoholic beverages, and the prevention of alcoholism, and the promotion, support or conduct of programs for the diagnosis, treatment and rehabilitation of patients with alcoholism; the development of standards and the provision of consultation for local alcoholism programs, and the recognition or approval of such local programs as meet the standards; the promotion, support or conduct of training of personnel to increase the effectiveness of state or local alcoholism programs; the development or purchase and the distribution of educational and informational material; the promotion and establishment of cooperative relationships or programs with boards, hospitals, clinics, social agencies, health agencies, law enforcement agencies, educational and research organizations, and other related groups; the cooperation with the department of state in designing and carrying out programs for determining the relationship between the consumption of alcohol and motor vehicle accidents and for developing and implementing the corrective procedures indicated: the development of cooperative programs with the state departments of education, mental health and social services, so that resources available to those departments may be coordinated with those of the department of public health for an overall approach to the

problem; and the cooperation with and assistance to the state department of education in promoting and encouraging the teaching in the schools of this state factual information relating to alcoholism and the use of alcoholic beverages.

(2) The director may contract with approval local health units, other agencies of government, nonprofit corporations and individuals for the carrying out of any or all of these responsibilities.

Sec. 3. There is created within the state department of public health a state advisory board of alcoholism, which shall consist of 7 members to be appointed by the governor with the advice and consent of the senate, for terms of 3 years each. Three members of the board shall be licensed physicians in the state, and 1 of such physicians shall be a qualified psychiatrist. Four members of the board shall be appointed to represent the general public and shall be from any of the following fields: sociology, social work, health administration, education, labor, industry, finance, government, law and related fields; but no more than 1 from any one of these fields. In the first instance, the board shall consist of the members of the state board of alcoholism created by section 47a of Act No. 8 of the Public Acts of the Extra Session of 1933, as amended, being section 436.47a of the Compiled Laws of 1948, each of whom is authorized to continue uninterruptedly the term to which he was previously appointed and 2 members appointed by the governor. Members of the board shall be entitled to \$35.00 per diem for not more than 12 days per annum, for time spent in performance of official duties, and shall be entitled to actual and necessary traveling and other expenses. The board shall organize and annually elect a chairman. The director, or his designee, shall act as secretary. The board shall meet on the call of the director or on the petition of a majority of the members, and shall meet at least quarterly. The board shall advise the director on broad policies and goals for the alcoholism program including the definition of the problems of alcoholism, and other health-related problems associated with the consumption of alcohol with which the state should concern itself, and on methods of evaluating the effectiveness of state and local programs; and assist in interpreting the alcoholism program, including its strengths, weaknesses, and needs to the governor, the legislature and the public.

Sec. 4. The department of public health, as the alcoholism agency of the state, shall cooperate with agencies of the federal government and receive and use federal funds for any purposes set out in this act.

Sec. 5. The department of public health may accept, receive and administer and expend any money, material or other gifts or grants of any description. Any money or grants made under this section shall be deposited with the state treasurer and shall be credited to the department of public health alcoholism program fund, and shall be expended by the department for the purpose or purposes specified or contemplated by the gifts or grants.

Sec. 6. Section 47a of Act No. 8 of the Public Acts of the Extra Session of 1933, as amended, being section 436.47a of the Compiled Laws of 1948, is repealed.

Appendix D

EXTRACTS OF MICHIGAN COMPILED LAWS – ANNOTATED

P.A. 1919, No. 345, Eff. Aug 14

AN ACT to define the qualifications of coroners in counties having a population of 250,000 inhabitants and upwards; to provide for deputy coroners and assistants; to prescribe their powers and duties; to fix their compensation, or to provide for the fixing thereof; to provide a penalty for non-fulfillment of duty in such counties and to repeal all general, special and local acts contravening the provisions of this act.

The People of the State of Michigan enact:

52.111 Coroners in counties of 250,000 population; qualifications

Sec. 1. No person shall hereafter be eligible to serve as coroner or deputy coroner in and for counties having a population of 250,000 inhabitants and upwards who shall not be at the time of his election or appointment a physician or surgeon registered under the laws of the state of Michigan, and a graduate of a regularly incorporated medical college, and who shall not have practiced the profession of physician or surgeon for at least 5 years.

326.8 Death without medical attendance; inquest; certificate

Sec. 8.. In case of any death occurring without medical attendance it shall be the duty of the undertaker or person acting as such to notify 1 of the county coroners, or a justice of the peace acting as coroner, who shall investigate or hold an inquest as the circumstances require and shall certify as to the cause of such death on the death certificate and shall sign the same officially as coroner or acting coroner. If such death was the result of violence, the said coroner, or justice of the peace acting as such, shall state the cause of the violence and whether or not it was apparently accidental, suicidal or homicidal and shall furnish such further information as may be required by the state commissioner of health.

Historical Note

Source:

P.A. 1925, No. 343, § 8, Eff. Aug. 27.
P.A. 1927, No. 125, Imd. Eff. May 9.
C.L. 1929, § 6580.

52.141 Coroner, abolition of office in certain counties, transfer to health officer

P.A. 1953, No. 181, Eff. Jan. 1, 1954

Sec. 1., Boards of supervisors in counties in this state now or hereafter having not less than 30,000 nor more than 1,500,000 population, and having a health officer appointed under the provisions of Act No. 306 of the Public Acts of 1927, as amended, being sections 327.201 to 327.208a of the Compiled Laws of 1948, may abolish the office of coroner provided for in sections 52.86 and 52.87 of the Compiled Laws of 1948 and transfer the duties of the coroner to the health officer appointed under Act No. 306 of the Public Acts of 1927, as amended. As amended P.A. 1960, No. 95, § 1, Eff. Aug. 17; P.A. 1963, No. 80, § 1, Eff. Sept. 6.

Source:

P.A. 1945, No. 143, § 1, Eff. Sept. 6.

Title 28 – Crimes
CHAPTER XXVI

DEAD HUMAN BODIES

§28.357] Disinterment and mutilation of dead human bodies.

Sec. 160. Any person, not being lawfully authorized so to do, who shall wilfully dig up, disinter, remove or convey away any human body, or the remains thereof, from the place where such body may be interred or deposited, or who shall knowingly aid in such disinterment, removal or conveying away, or who shall mutilate, deface, remove or carry away any portion of the dead body of any person, whether in their charge for burial or otherwise, whenever such mutilation, defacement, removal or carrying away is not necessary in any proper operation in embalming such body or for the purpose of a post-mortem examination, and every person accessory thereto, either before or after the fact, shall be guilty of a felony, punishable by imprisonment in the state prison not more than ten [10] years, or by fine of not more than five thousand [5,000] dollars: Provided, That this section shall not be construed to prohibit the digging up, disinterment, removal or carrying away for scientific purposes of the remains of prehistoric persons or of the aboriginal inhabitants of this country by representatives or employes of established scientific institutions or societies, having the consent in writing of the owner of the land from which such remains may be disinterred, removed or carried away. (CL '48, § 750.160.)

COUNTY MEDICAL EXAMINERS

Caption editorially supplied
Library References

M.L.P. Counties § 41.

AN ACT relative to investigations in certain instances of the causes of death within this state due to violence, negligence or other act or omission of a criminal nature; to provide for the taking of statements from injured persons under certain circumstances; to abolish the office of coroner and to create the office of county medical examiner in certain counties; to prescribe the powers and duties of county medical examiners; to prescribe penalties for violations of the provisions of this act; and to prescribe a referendum thereon.

The People of the State of Michigan enact:

52.201. , County medical examiners; appointment, qualifications, deputies, compensation, expenses, removal

Sec. 1. The board of supervisors of each county of this state may by resolution abolish the office of coroner, and appoint a county medical examiner to hold office for a period of 3 years. In counties having a civil service system, the appointment and tenure of the medical examiner shall be made in accordance with the provisions thereof. County medical examiners shall be physicians licensed to practice within the state and shall be residents of the county for which they are appointed or of an adjoining county. The board of supervisors may appoint such deputy county medical examiners, who shall have the same qualifications as the county medical examiner, as are necessary. In counties having a civil service system the county medical examiner shall appoint the deputy medical examiners, whose appointment and tenure shall be in accordance with the provisions of the county civil service system. The compensation of the county medical examiners and deputy county medical examiners shall be such as shall be appropriated by the county board of supervisors. The county medical examiner and deputy county medical examiners shall receive, in addition to compensation, their actual and necessary traveling and other expenses, such expenses to be within the appropriation made therefor by the county board of supervisors. The county board of supervisors shall remove from office any county medical examiner or deputy county medical examiner, after hearing, who fails to discharge properly the duties of his office. In counties having a civil service system, the removal of the county medical examiner and the deputy medical examiners shall be made in accordance with the provisions of the civil service system. P.A. 1953, No. 181, § 1, Eff. Jan. 1, 1954, as amended P.A. 1959, No. 49, § 1, Eff. March 19, 1960.

52.202 Death by violence; examinations; prisoners

Sec. 2. County medical examiners and deputy county medical examiners shall make examinations as hereafter provided upon bodies of such persons only as are supposed to have come to their death by violence; or whose death

was unexpected; or without medical attendance up to a time 36 hours prior to the hour of death unless the attending physician, if any, is able to determine accurately the cause of death; or as the result of an abortion, whether self-induced or otherwise; or, in case any prisoner in any county or city jail dies while so imprisoned, it shall be the duty of the county medical examiner of the county in which such county or city jail is situated, upon being notified of the death of such prisoner, to make an examination upon the body of such deceased prisoner. P.A. 1953, No. 181, §2, Eff. Jan. 1, 1954.

52.205 Removal of body to morgue; autopsy; delivery to relatives; burial

Sec. 5. When a county medical examiner has notice that there has been found or is lying within his county or district the body of a person who is supposed to have come to his death in a manner as indicated in section 3,¹ he shall forthwith repair to the place where such body lies and take charge of same; and if, on view thereof and personal inquiry into the cause and manner of the death, he deems a further examination necessary, the county medical examiner may cause such dead body to be removed to the public morgue. If there be no public morgue, then the body may be removed to such private morgue as the medical examiner may deem proper. The county medical examiner may there perform an autopsy and shall then and there carefully reduce or cause to be reduced to writing every fact and circumstance tending to show the condition of the body and the cause and manner of death, together with the names and addresses of any persons present at the autopsy, which record he shall subscribe. Such county medical examiner shall, after any required examination or autopsy, promptly deliver or return such body to the relatives or representatives of the deceased or, if there are no relatives or representatives known to the examiner, he may cause the body to be decently buried, except that such examiner may retain, as long as may be necessary, any portion of such body believed by him to be necessary for the detection of any crime. P.A. 1953, No. 181, §5, Eff. Jan. 1, 1954.

52.207 County medical examiner; investigation of death

Sec. 7. Upon the written order of the prosecuting attorney or the attorney general or upon the filing of a petition signed by 6 electors of a county, the county medical examiner or deputy shall conduct an investigation, as provided in section 5,¹ of the circumstances surrounding any death believed to have occurred in said county. P.A. 1953, No. 181, §7, Eff. Jan. 1, 1954, as amended P.A. 1959, No. 222, §1, Eff. March 19, 1960.

¹Section 52.2005.

52.211 Record of view and autopsy; reports

Sec. 11. Medical examiners shall keep a record of all views of bodies found dead, together with their views and

autopsy reports. P.A. 1953, No. 181, §11, Eff. Jan. 1, 1954.

52.212 Testimony

Sec. 12. Any and all medical examiners may be required to testify in behalf of the state in any matter arising as the result of any investigation required under this act, and shall testify in behalf of the state without compensation other than actual and necessary expenses. P.A. 1953, No. 181, §12, Eff. Jan. 1, 1954.

52.213 Powers and duties transferred; office abolished; hearings

Sec. 13. In counties having a medical examiner under the provisions of this act, the powers and duties vested by law in the office of coroner are hereby transferred to and vested in the county medical examiners and their deputies. In such counties immediately upon the taking effect of this act, the office of coroner shall be abolished, and whenever reference thereto is made in any law of this state, reference shall be deemed to be intended to be made to the medical examiners created by this act, insofar as consistent with the provisions of this act. Any hearing or other proceeding pending before any coroner shall not be abated but shall be deemed to be transferred to the medical examiner of the proper county and shall be conducted and determined by such examiner in accordance with the provisions of law.

All records, files and other papers belonging to any coroner in any such county shall be turned over to the county medical examiner of the proper county and shall be continued as a part of the records and files of said county medical examiner. P.A. 1953, No. 181, §13, Eff. Jan. 1, 1954.

Notes of Decisions

In general 1
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1. In general

Provision of this section transferring to the county medical examiner and his deputies the duties vested by law in the office of coroner, does not carry with it the obligation of furnishing a bond and therefore no official bond or surety bond is required to be furnished by the county medical examiners or their deputies. Op. Atty. Gen. 1955-56, No. 1954, p. 95.

2. Powers and duties transferred

Act respecting the transfer of powers and duties of the office of coroner to the county medical examiner and stating in following sentence that whenever reference is made in "any law of this state" reference shall be deemed to be intended to be made to the medical examiners created

by the act, insofar as consistent with the provisions of the act, manifests the legislative intent that the first two sentences are to be construed together and hence the act extends investigative power only, as defined in sections 1-12, to the medical examiner of Wayne county. *Lipiec v. Zawadzki* (1956) 77 N.W. 2d 763, 346 Mich. 197.

Under paragraphs of the Act transferring the powers and duties of the office of coroner to the county medical examiner, final sentence that any proceeding pending before any coroner shall not be abated but shall be transferred to the medical examiner and shall be conducted by the examiner in accordance with the law does not affect the construction that the act extends investigative power only, as defined in sections 1-12, to the medical examiner of Wayne county. *Id.*

3. Inquests

The Act respecting the transfer of the powers and duties of the office of coroner to the county medical examiners manifests the legislative intent to eliminate the coroner's inquest in counties where the electorate decides by the act of 1953 to accept the principle of pathological investigation in lieu of coroner-jury inquisition. *Lipiec v. Zawadzki* (1956) 77 N.W. 2d 763, 346 Mich. 197.

Act No. 274
Public Acts of 1968
Approved by Governor
July 1, 1968

Section 1. Section 7 of Act No. 181 of the Public Acts of 1953, as amended by Act No. 222 or the Public Acts of 1959, being section 52.207 of the Compiled Laws of 1948, is amended to read as follows:

Sec. 7. Upon the written order of the prosecuting attorney or the attorney general or upon the filing of a petition signed by 6 electors of a county, the county medical examiner or deputy shall conduct an investigation, as provided in section 5, of the circumstances surrounding any death believed to have occurred in the county. Upon the written order of the prosecuting attorney or the attorney general the examiner or deputy or a municipal court judge shall hold an inquest in the same manner as provided by law for the holding of an inquest by a coroner.

Appendix E

COMMENTS REPRESENTATIVE OF ATTITUDES TOWARD BLOOD SAMPLING

A doctor-coroner: The very active sheriff's department usually hears of traffic accidents sooner than the state police. Therefore, the state police seldom investigate even those accidents on the state trunk lines.

Taking blood samples is done at the request of the

police. Normally they request same only when there is a possibility of legal action against survivors.

Of three recent fatal accidents, two were single-car accidents in which a lone driver ran off the road and struck a tree. Both drivers were women. One was known to be a nondrinker, and the other was an eighteen-year-old married woman who had just obtained a license. From neither was a blood sample taken.

In single-car, lone-driver accidents, even where drinking is suspected, we assume they did no damage to anybody but themselves so why take a blood sample.

However, the third fatal accident involved a pedestrian who attempted to walk across a four-lane, divided road on a rainy night and was struck by a motorist. The pedestrian had come from a nearby tavern, and the motorist seemingly had done all he could to stop and avoid hitting the pedestrian. On the other hand there seemed to be no reason for the pedestrian to be crossing the highway. Therefore, a blood sample was taken to protect the driver against possible legal action by the pedestrian's next of kin.

A mortician-coroner: Policy is to take blood samples only when requested by the investigating police. I do not take the blood sample myself. I request a pathologist to do it for me. The blood drawing is always done at the hospital, never at the morgue.

Usually, only the State Police Department asks for a blood sample. It investigates 50 percent of the fatal traffic accidents, so I estimate about 50 percent of the fatalities are subjected to a BAC analysis.

The blood sample goes to Lansing for analysis. The Public Health Lab in Lansing isn't always happy with the way the local pathologist packs and sends the sampling.

I try to obtain consent of the next of kin before taking a blood sample. However, if consent is not given the blood drawing is made, if it seems logical, particularly if the police push their request.

There is no program in autopsies. However, they are seldom performed on traffic fatalities primarily because of the cost.

The county prosecutor has left the decision on taking blood samples to the coroner.

There is no central file of the BAC analysis reports. Copies of the reports go to who requested the analysis be made, i.e. the police, the pathologist, or the coroner.

My term expires in 1972 unless sooner relieved by a medical examiner (which I'm all for and would like to see happen in six months). There should be state-sponsored orientation programs to properly advise coroners and medical examiners on their medico-legal authority, functions, and responsibilities. As coroner I have always been in doubt as to legal liability for drawing blood or ordering autopsies on traffic fatalities.

A medical examiner: Often at the scene of a multiple-injury accident the major problem is to give survivors emergency aid and get them to a hospital. Several weeks ago an accident involving four persons had me busy, but all four survived. By the time I got home I was too exhausted to remember whether there had been any

fatalities. If there had been, I would not have thought of drawing blood unless a policeman had asked me.

A medical examiner—public health officer: The prosecutor has ruled that blood sampling of traffic fatalities may be done only when an autopsy is performed. To do otherwise is violation of Michigan statutes prohibiting mutilation or dismemberment of dead bodies.

Autopsies are performed on traffic fatalities only after the police have requested same and the county prosecutor has approved, because autopsies cost \$200 and the Board of Supervisors objects to spending the money.

We need a new law or a clarification of present laws regarding the drawing of blood samples. A system authorizing morticians to take the sample is preferred.

A chief medical examiner: Michigan law needs to be clarified regarding the legal liability of funeral directors, medical examiners, or coroners, when taking blood alcohol samples. To draw blood now is allowed only as part of a complete autopsy. Most county budgets do not permit many autopsies.

The primary function of the medical examiner is to discover homicides—not to do research or even to determine other causes of death.

A mortician-coroner: After examining the body at the scene, I send it to the morgue where, in the presence of a policeman, I draw the sample; note the time, the name, and the complaint number; seal it in the kit provided by the State Department of Public Health; give it to the policeman who delivers it to Lansing for analysis. Usually the policemen who investigated the accident are the witnesses. However, when they must remain at the scene, a local policeman witnesses the blood sampling.

We obtain blood samples from approximately 90 percent of all fatalities. The other 10 percent are those who die in the hospital or who are children.

Cooperation with the city and state police in taking blood samples is excellent. However, the sheriff's department is inactive and rather indifferent.

I make no attempt to obtain consent of the next of kin. The prosecutor said it was not necessary.

A mortician-coroner: If the state police request a blood sample from an accident victim, I get it. They take the sample to Lansing. If anyone else asks, including the county sheriff or the city police, I would not do it without obtaining consent of the next of kin. They probably would not give it.

Very few traffic accidents occur in the county anyway. Nearly all of them occur on the state highway, so they are a state police responsibility.

A county medical examiner: We had no data to augment the questionnaire. In spite of considerable drunk driving the county has a low fatal accident record, although I can't understand why.

The last accident occurred a year ago on Main Street. It was a single-car, lone-driver, ran-off-the-road accident. The driver was known to have been in a tavern a short time previous to the accident and was a known drunkard. Because no one else was involved, the city police did not request a blood sample.

If the state police requested a blood sample as a result of a fatal accident on the state highway I would get one.

I am all for drawing blood samples, but I am very discouraged by the county law enforcement situation. The county prosecutor seems reluctant to prosecute anybody for drunk driving. None of the police, including the state police, get any cooperation in making drunk driving arrests. The prosecutor reduces the charge or does not prosecute. As a result, many of the police have given up, including using the breathalyzer to prove drunkenness.

There should be a state-sponsored series of symposia to bring together the Bar Association and the Medical Association for information talks and to educate all on their responsibilities regarding the alcoholism program and law enforcement.

A mortician-coroner: Blood samples are taken at the request of the investigating police who ask for them only if there is a suspicion of the presence of alcohol or when there are unexplained circumstances surrounding certain accidents. Fortunately, the county accident fatality rate has been low. The state police and the county sheriff make most requests. Not many come from local police.

The other coroner operates a taxi service and an ambulance service, but is not trained or equipped for his coroner duties. Once, in response to the sheriff's request for a blood sample, he took it after the body had been embalmed. Of course it was hopelessly contaminated.

There should be some education program to overcome public indifference and some modification to state laws to give the police more authority in obtaining blood samples.

A mortician-coroner: As coroner, an undertaker, and operator of a private ambulance service I'm aware of the role of alcohol, not only in traffic accidents, but in many other accidents. I take the initiative in getting a blood sample wherever possible. I don't hesitate to order an autopsy if I suspect something other than alcohol, such as a heart attack, is the cause of the accident.

I don't get a blood sample from all bodies. Occasionally the person dies at the hospital or an undertaker will start sampling in the presence of a policeman, but occasionally I do it without any witnesses. Blood samples go to Lansing for analysis.

I do not get the consent of the next of kin. I believe it is not required.

So far, the Board of Supervisors has not objected to the cost of autopsies.

The other coroner may not operate with the same zeal. We do not have assigned areas but respond to accidents anywhere in the county. We maintain separate records.

A mortician-coroner: In every case I try to get a blood sample from the victim, even if the police do not request it. I usually draw the blood myself and feel that as coroner I am legally covered. Occasionally, I ask other morticians to draw the blood, and if they refuse, I do it myself.

I do not try to get consent of next of kin, feeling it is not required. All samples go to Lansing for analysis. I send a copy of the BAC analysis report to the investigating police and retain one for my files.

A mortician-coroner: Because of location, those killed in

other counties often end up in our hospitals and are reflected in accident rates. How can the BAC analysis of these victims be statistically equated?

Blood drawing is considered a limited autopsy, therefore requires signed authorization to proceed.

County records do not show whether the victim was a driver or passenger. This has to be determined from news or police reports.

When private interest in an autopsy prevails, the attending physician gets the autopsy report and the medical examiner does not. Hence certain private cases may be excluded from county summary reports.

A pathologist: Medico-legal investigative procedures in Michigan, particularly in rural areas, are rather casual. Each county system is independent. There are no channels of communication or authority. Physicians are not too enthusiastic about medico-legal work and may not cooperate in furnishing additional details.

Difficulties often occur when a BAC analysis is attempted without an autopsy. Some system should be developed wherein morticians could contribute.

An assistant prosecutor: The Prosecutor's Office is kept informed on all fatal traffic accidents. However, the drawing of blood samples, except in cases of suspected homicides, is the coroner's decision. No records of blood drawings or BAC reports are kept in the Prosecutor's Office.

A medical examiner: Blood samples are drawn only on written order of the county prosecutor. The medical examiner maintains all the records and all BAC analysis reports.

A health officer-coroner-M.D.: Blood samples are drawn whenever the police suspect the presence of alcohol, which is in almost all cases.

Now most accident victims are autopsied, because in several court cases both the prosecutor and the county health officer were accused of not providing sufficient evidence. They will be asking the county supervisors for much more money for autopsies.

There should be more guidance in medico-legal procedures. The Attorney General should conduct briefings or seminars for all county medical examiners regarding their authority and functions.

A chief medical examiner: A written directive has gone to all deputy medical examiners to draw blood samples from all accident victims regardless of the cause of the accident and to carry with them the necessary equipment. Samples go to the Department of Public Health Crime Lab in Lansing.

Blood may be drawn at the accident scene, at the hospital, or at the morgue.

The records are maintained by the medical examiner. The analysis reports go to the police concerned.

State laws are adequate and there is no need for additional guidance. Obtaining consent of the next of kin is not required. There are few complaints about having to testify in court as a of taking blood samples.

A mortician-coroner: Blood samples are not taken from traffic fatalities under any circumstances. The county

prosecutor advised both coroners that it is illegal for coroners to do it regardless of who requested it.

A medical examiner-pathologist: The information wanted in the questionnaire is not available in his office. The various police departments have all records.

Blood samples are taken from traffic fatalities at the request of the investigating police when the presence of alcohol is suspected. The police are quite suspicious. The rate of frequency varies with each police department.

The county medical examiner system is a rather loose-knit organization. Practically all doctors in the county are deputy medical examiners. However, some serve reluctantly and object to being called into court as witnesses. He is a pathologist, and was designated chief medical examiner because no one else was available. He has no time to do all that is required and is not trained in all phases of medico-legal work.

He doesn't ask for consent of next of kin either for autopsies of blood samplings. Occasionally a deputy medical examiner or the police will. They need instruction manuals, standardized and well organized reporting forms, and a central filing system. A state chief medical examiner could do what the counties cannot do because of loose organization, lack of funds, and insufficient trained personnel.

A member of a sheriff's department: Some hospitals won't cooperate in drawing blood samples because they don't want the hospital staff to do anything which might involve testifying in court.

When deputy medical examiners declare the victims dead at the accident scene the police try to send the deceased to hospitals where there is no trouble obtaining a blood sample.

To ensure no break in the so-called chain of evidence, the police who witness and receive the blood sample personally deliver it to the Lab in Lansing.

A mortician-coroner: Some form of deposition in lieu of a court appearance would help materially in getting better cooperation from medical examiners, coroners, and chemists. Also much better guidance, coordination, and centralized control of records is necessary. For example, the form which accompanies submission of blood samples to the Public Health Lab, does not indicate the cause of death and other vital information.

A medical examiner: An autopsy is done routinely on everyone who meets death by violence, including traffic accidents.

Not only the role of alcohol but also coronary attacks should be identified. Any of three pathologists do the autopsies. The Board of Supervisors willingly provides the money. As part of the autopsy, blood samples are drawn and sent to the Public Health Lab in Lansing. Blood samples are obtained in almost 100 percent of the cases.

We spend little time testifying in court. Most lawyers in the county accept the autopsy report or the BAC analysis report without verbal testimony.

A medical examiner: Usually autopsies are performed in multiple-car accidents. For single-car, lone-driver, ran-off-the-road accidents, the Board of Supervisors

opposes spending money on autopsies. However, blood samples are taken in nearly all cases. They don't get 100 percent samplings, but not for lack of trying.

Morticians have been directed to draw blood in the presence of the investigating police before beginning embalming, if the deputy medical examiner hasn't time to do it.

The chief medical examiner reviews and retains copies of all medical examiner reports. These reports indicate whether or not a blood sample was drawn. BAC analysis reports are kept by the police who requested them, so there is no county central repository.

Next of kin are not even consulted. Most of them never know that a blood sample was taken.

A medical examiner: There is no need of additional laws or further administrative guidance, but there is need for an educational program to give the public better understanding of the purpose of the program and to convince them that the results of BAC analysis are not available to just anybody.

A mortician-coroner: Policy regarding taking blood samples is very specific—never without written permission of the next of kin unless the prosecutor orders it be done.

Normally, the state police request the blood sample, and they are unhappy because they get so few; but the five dollar coroner's fee for covering fatal traffic accidents is not worth the risk.

Getting permission of the next of kin is very difficult, especially when they suspect that alcohol is involved.

The prosecutor is cooperative and anxious to push the program for obtaining blood samples and sometimes orders an autopsy or blood sample in order to determine the presence of alcohol, but people give him a rough time for doing it.

Most of the accidents involve nonresidents but even then no blood sample is taken without permission of the next of kin.

Alcohol is certainly involved in most of these fatal accidents and the public's attitude in the county is discouraging. More education is needed.

A deputy medical examiner: There is no set policy regarding taking blood samples from traffic fatalities, because of the loose organization of the county medical examiner system.

The Board of Supervisors wants every doctor in the county to be a deputy medical examiner, but the medical examiner wants to limit the deputy examiners to those who would be willing to serve and to assign them on an area basis throughout the county in order to provide better coverage.

He himself has never taken a blood sample. He knows some deputy medical examiners have taken samples at the request of the state police.

Some doctors are reluctant to become involved because of fear of being sued by the next of kin. Most doctors in the county favor the program because they know the relationship between accidents and alcohol, but they would like better clarification of their legal status when taking blood samples.

A mortician-coroner: The county does not have many fatal accidents. As coroner, he covers them all. He does not take any blood samples himself but has them taken by a local doctor.

The blood sample is taken at the request of the state police who send it to Lansing for analysis, but a blood sample is never taken without consent of the next of kin. Yet they obtain blood samples in 50 percent of their fatal accidents.

Except for accidents in town, the state police investigate all accidents.

The law should be expanded or clarified to ensure that a blood sample can be taken from any fatal—accident victim without the consent of the next of kin.

A mortician-coroner: Absolutely no sampling is done without consent of the next of kin, regardless who asks or orders it, and then only as part of any autopsy. A pathologist does it and the sample goes to Lansing. Policy is based on fear of a suit.

Appendix F

PERSONS WHO CONTRIBUTED TO THE STUDY

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REFERENCES

1. U.S. 89th Congress. *Public Law 89-564, Highway Safety*. Washington, D.C. Sept. 9, 1966.
2. U.S. Department of Transportation, National Highway Safety Bureau. *Highway Safety Program Standards*. Washington, D.C. June 27, 1967.
3. U.S. 89th Congress, Second Session. *Report No. 1700, House of Representatives*. Page 26. Washington, D.C. July 15, 1966.
4. U.S. Department of Transportation, National Highway Safety Bureau. *Report on the Highway Safety Program Standards*. Washington, D.C. 1968.
5. U.S. Department of Transportation, National Highway Safety Bureau. *Highway Safety Program Manual. Vol. 8 – Alcohol in Relation to Highway Safety*. Washington, D.C. 1968.
6. National Committee on Uniform Traffic Laws and Ordinances. *Uniform Vehicle Code and Model Traffic Ordinance. Revised* Washington, D.C. 1968.
7. *Michigan Compiled Laws. Annotated* West Publishing Co., St. Paul, Minn. 1967 (Updated).
8. *Michigan Law and Practice Encyclopedia*. Chapt.1, Pp. 128-129. West Publishing Co., St. Paul, Minn. 1955-1959 (Updated).
9. "Taking of Blood Sample at Request of Public Officials Commits a Felony," *Michigan Funeral Director*. Vol. 26, No. 3, Page 53. March 1961.
10. Donigan, Robert L. *Chemical Tests and the Law*. Traffic Institute of Northwestern University, Evanston, Ill. 1966.
11. Ordowski, James E. "Recent Decisions." *University of Detroit Law Journal*. Vol. 34, Pp. 438-440. Detroit, Mich. 1957.
12. Mack, William, and Kiser, Donald J. *Corpus Juris Secundum – Dead Bodies*. Vol 25A, Page 48. American Law Book Co. Brooklyn, N.Y. 1958 (Updated).
13. Insurance Institute for Highway Safety. *Legislative Review – 1970*. Washington, D.C. Sept. 1, 1969.
14. *Laws of the State of New Mexico*. Chapt. 36, Sect. I. Santa Fe, N.Mex. 1969.
15. "Public Health Code." Utah Compiled Laws. Salt Lake City, Ut. 1969.
16. State of Maryland, Department of Post Mortem Examiners. *Maryland Post Mortem Examiners Law*. Baltimore, Md. 1969.
17. State of Michigan, Office of Attorney General. *The Biennial Report of The Attorney General of the State of Michigan*. Vol. II, Opinion No. 3522. Lansing, Mich. 1960.
18. National Municipal League. *A Model State Medico-Legal Investigation System*. New York, N.Y. 1966.
19. Engelke, Otto K., M.D. *Washtenaw County Medical Examiner Procedure Manual*. 1st ed. Office of the Chief Medical Examiner, Ann Arbor, Mich. July 1963.

