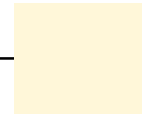




Michigan Medical Examiner Database Initiative

Annual Report

September 2004



Acknowledgements

**Michigan Department of Community Health
Bureau of Epidemiology**

**Michigan Public Health Institute
Center for Collaborative Research in Health Outcomes & Policy**

Gerry Polverento
Lynn Breer, Ph.D.
Andrea Wilkins
Amanda Carpenter

Thanks also to:

The 55 participating Medical Examiner offices in Michigan who make this report possible.



This report is prepared by the Center for Collaborative Research in Health Outcomes & Policy at the Michigan Public Health Institute with funding from the Michigan Department of Community Health, Bureau of Epidemiology, and the Centers for Disease Control and Prevention.



Table of Contents

Acknowledgements.....	i
Executive Summary	v
Introduction	1
County Participation.....	1
New Developments.....	2
Summary of Medical Examiner Data Findings.....	2
Future Efforts	12
Conclusion	12

List of Figures

Figure 1: Participation Status of Michigan Counties	1
Figure 2: 2002 & 2003 Medical Examiners' Classification of Manner of Death	4
Figure 3: 2002 & 2003 Comparison of Medical Examiners' Classification of Means of Non-natural death	7
Figure 4: 2002 Age Groups by Means of Non-natural Death	7
Figure 5: 2003 Age Groups by Means of Non-natural Death.....	8
Figure 6: Vehicles involved in fatal crashes in 2002 & 2003 combined	9
Figure 7: Type of Firearm Involved in Shooting Fatalities	10
Figure 8: Comparison of Vital Statistic and MMEDB Data on Non-natural Manners of Death	11

List of Tables

Table 1: Demographic Composition of the MMEDB	3
Table 2: 2003 Ranking of Manners of Death among Age Groups	4
Table 1: 2002 & 2003 Manners of Death by Age Group	5
Table 2: 2002 & 2003 Race/Ethnicity by Manners of Death	6

Executive Summary

The Michigan Medical Examiner Database Initiative (MMEDB) is based on the idea that Internet-based software can be utilized to enhance operations for medical examiner (ME) offices, as well as provide useful standardized data for public health surveillance. The original database went on-line in December 1997. Since the project's inception, 55 of Michigan's 83 counties have agreed to participate.

As of 2002, 43 of Michigan's 83 counties (52%) had agreed to participate¹ in the MMEDB. Extensive recruitment efforts resulted in 55 counties or 66% participating in 2003. After the most recent recruitment efforts, a total of 17 counties have declined to participate. Reasons include: not having access to a computer or the Internet, concerns about the security of the data stored on the Internet, not being able to commit to a new project, or the system not meeting the county's needs.

Within the last year several updates to the system were incorporated. Changes include:

- An administrative module allowing ME offices to track fees and charges associated with ME cases.
- Additional data elements throughout the web-based data entry application.
- New security measures added to the web application to assure its compliance with HIPAA regulations.
- The addition of an alert system that will notify local public health departments of incidences of infectious disease or bioterrorism activities.
- A new feature that allows users to query the database, via the web application, and generate reports for specific types of death as well as specific information regarding a case entered into the system.
- An updated Death Scene Investigation Report (DSIR).

As of July 2004, 6,385 cases from 2002 and 6,137 cases from 2003 have been entered in to the MMEDB. These cases represent the counties that actively entered 2002 and/or 2003 cases into the database, provided case information to CRHOP electronically, or provided case forms to be incorporated into the database by CRHOP.

Vehicle crashes were the leading means of death for cases in the database in both 2002 (24%) and 2003 (24%) closely followed by poisoning deaths in 2002 (23%) and 2003 (22%) and deaths due to firearms in 2002 (23%) and 2003 (21%). Natural was the most common manner of death among African Americans, Hispanics and Whites, followed by accidental deaths among all races except African Americans in 2003, where homicides (24%) outnumbered accidental deaths (20%). Homicides were more prevalent than suicides among Hispanics and African Americans, while suicides were more prevalent than homicides among Whites in both 2002 and 2003.

In the fall of 2004, MPHI staff will survey medical examiners, scene investigators, and data entry staff to gather feedback on the updates to the system and other suggestions for the DSIR and online system. The findings will be made available in the 2005 Annual Report. In addition, a quarterly newsletter is in development as a means to continue communication between medical examiner offices and MPHI.

¹ Participation includes the use of the Death Scene Investigation Report and/or regularly entering data into the online system or submitting data to MPHI for data entry.

The MMEDB was created by medical examiners *for* medical examiners. MPHI will continue to work with Michigan medical examiners to ensure the system continues to meet the needs of ME offices and is a useful and viable tool for local public health prevention efforts.

Introduction

The *Michigan Medical Examiner Database Initiative* (MMEDB) is a collaborative project administered by the Center for Collaborative Research in Health Outcomes & Policy (CRHOP), a program of the Michigan Public Health Institute (MPHI), and funded by the Michigan Department of Community Health and Centers for Disease Control and Prevention. The project uses Internet-based software to enhance operations for medical examiner (ME) offices and to provide standardized data for public health surveillance. Significant efforts over the past six years have resulted in the participation of 55 of Michigan's 83 counties and a database that is used by a number of agencies to contribute to public health initiatives.

County Participation

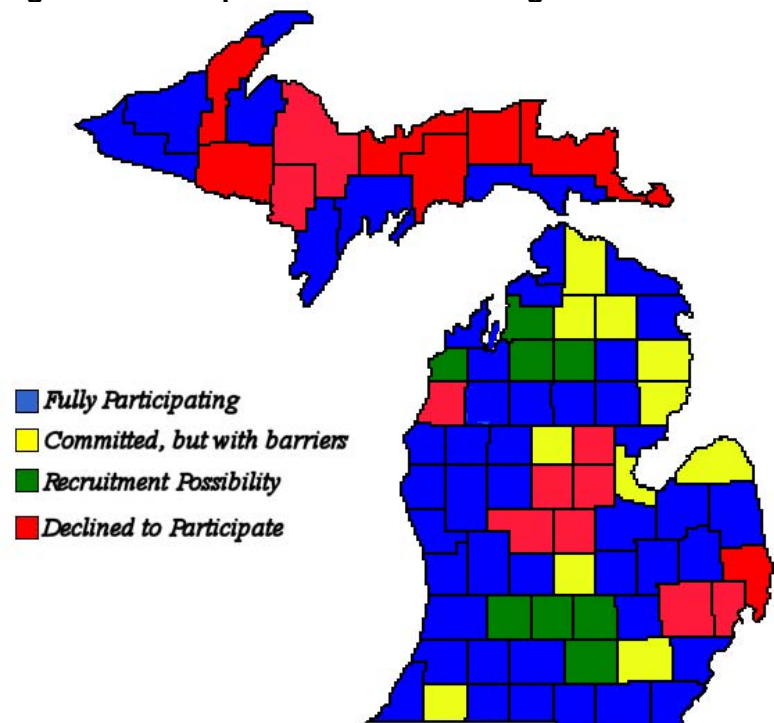
Extensive recruitment efforts have been aimed at all 83 counties. For example, during the past year, CRHOP staff visited seven counties in the Upper Peninsula to encourage involvement in the MMEDB. The recruitment trip resulted in three counties agreeing to participate, with the remaining counties electing not to participate due to limited resources (i.e., staff and time) or perceived lack of need for such a system at this time. CRHOP staff will continue to communicate with nonparticipating counties to address the barriers to participation or any other concerns.

After the most recent recruitment efforts, a total of 17 counties have declined to participate. Reasons include: not having access to a computer or the Internet, concerns about the security of the data stored on the Internet, not being able to commit to a new project, or the system not meeting the county's needs.

County participation status is depicted in Figure 1. Full participation means that counties regularly submit data into the system. A potential county is one that is interested in participating in the MMEDB, but is currently unable due to one or more barriers (e.g., limited time or staff to complete data entry, or no Internet access). CRHOP is working with these counties to overcome such limitations.

Some counties in Michigan use other software or databases to track ME cases. CRHOP has established an electronic data sharing agreement with two of these counties that allows data to be imported into the MMEDB. Counties that currently have this agreement are depicted in Figure 1 as fully participating.

Figure 1: Participation Status of Michigan Counties



New Developments

Within the last year several updates were incorporated into the system. Changes include:

- An Administrative module allowing ME offices to track fees and charges associated with ME cases.
- Additional data elements throughout the web-based data entry application.
- New security measures added to the web application to assure its compliance with HIPAA regulations.
- The addition of an alert system that will notify local public health departments of incidences of infectious disease or bioterrorism activities.
- A new feature that allows users to query the database, via the web application, and generate reports for specific types of death as well as specific information regarding a case entered into the system.
- Also, as of FY04, each user of the system has been assigned a unique user login and password.

CRHOP conducted several training sessions with counties to provide instruction on the use of the new data fields and modules and to distribute the updated DSIR.

Summary of Data Findings

As of July 2004, 6,385 cases from 2002 and 6,137 cases from 2003 have been entered into the MMEDB. These cases represent the counties that entered 2002 and/or 2003 cases into the database, provided case information to CRHOP electronically, or provided case forms to be incorporated into the database by CRHOP. Almost all participating counties utilize the database to track all ME cases, including those that are judged to be a result of natural causes, although a few counties enter only accidental deaths, suicides, and homicides. As a result, ME cases with a natural manner of death are likely underrepresented in the system. This report will focus mainly on non-natural manners of death and will include a comparison of 2002 and 2003 data.

A number of counties began participation in the MMEDB during 2002 or 2003 and either do not plan to enter retrospective data, or have not yet entered all data for the previous year into the database. Also, a few counties are simply behind on data entry and have not entered all past cases. **Please note that the data presented here are not meant to represent the State of Michigan; they represent only cases from participating counties that were entered into the database as of July 2004.** In the presentation below, a medical examiner case represents a single death. The denominator changes for each variable examined due to missing information and/or examination of a different subset of data.

Wayne County accounts for the largest number of cases from one county in the database for both 2002 and 2003 with 51.3% (n=3,277) and 46.5% (n=2,855) cases respectively. Wayne County has an electronic data sharing agreement with the MMEDB and, as a result, there is some variation in the data fields collected. Wayne County data has been converted to match data fields of the MMEDB to the greatest extent possible. Fields that could not be converted, or that were not available for incorporation into the MMEDB, were not included in the analysis. Any tables or charts that do not include Wayne County data are noted as such.

Demographic Overview

The demographic composition of cases in the database changed very little between 2002 and 2003. Males comprised approximately two-thirds of the database in both 2002 and 2003 and the mean age of decedents was 54 in both years. Sixty-four percent of decedents were White in 2002 and 67% in 2003, 34% were African American in 2002 and 31% in 2003 and 2% were Hispanic in both 2002 and 2003. Less than one percent of decedents were Asian/Pacific Islander or American Indian in 2002 and 2003.

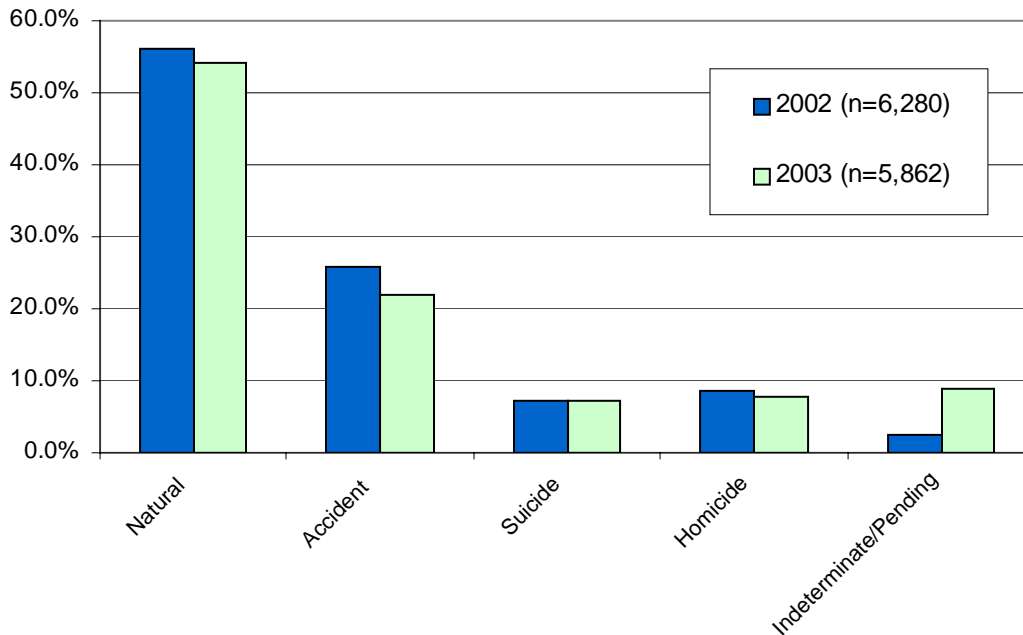
Table 1: Demographic Composition of the MMEDB

Sex	2002	2003
Male	68% (4,267)	66% (4,032)
Female	32% (2,051)	34% (2,070)
Race	2002	2003
Hispanic	2% (100)	2% (102)
White	64% (4,056)	67% (4,035)
African American	34% (2,162)	31% (1,853)
Asian/Pacific Islander	<1% (17)	<1% (30)
American Indian	<1% (44)	<1% (27)
Unknown	<1% (24)	<1% (8)
Age	2002	2003
Age Range	0-104	0-105
Mean Age	54	54

Manner of Death

There were 6,280 cases from 2002 entered into the database in which the ME classified the manner of death, and 5,862 cases from 2003. Figure 2 presents the categories of manner of death for 2002 and 2003. Natural deaths accounted for 56% (n=3,520) of all cases in the database in 2002 and 54% (n=3,181) in 2003. Non-natural deaths (accidents, suicides and homicides) accounted for 42% (n=2,610) of cases in 2002 and 37% (n=2,159) in 2003. Indeterminate or pending cases accounted for 2% (n = 150) of cases in 2002 and 9% (n=522) in 2003. The increased number of pending/indeterminate cases in 2003 may be due to the more recent nature of the cases, as they may not yet be updated in the database with conclusive findings on the manner of death. Sixty-two percent (n=1,620) of non-natural deaths were classified as accidental in 2002 and 60% (n=1,293) in 2003.

Figure 2: 2002 & 2003 Medical Examiners' Classification of Manner of Death



The ranking of manners of death were the same for 2002 and 2003. Table 2 examines the ranking of manners of death among age groups for 2003. Accidents were the leading cause of death for children zero to 15 years of age followed by natural deaths. The youngest person for whom a medical examiner classified the manner of death as suicide was 12 years old. Among zero to 15 year olds, the percent of accidents and suicides increased between 2002 and 2003 from 47% to 53%, while homicides decreased from 13% to 11% and natural deaths decreased from 39% to 31%.

The lowest proportion of deaths classified as natural occurred among the 16 to 25 year age group at 8% for both 2002 and 2003. The leading manner of death among 16 to 25 year olds was accidents at 45%. The highest percentage of homicides occurred in this age group with 33% of deaths classified in this manner.

Classification of manner of death was most evenly distributed among the 26 to 40 year age group with accidental deaths leading at 31%. Natural was the leading manner of death for the 41 through 65 age group and the over 65 age group, followed by accidents, suicides and finally homicides for both 2002 and 2003.

Table 2: 2003 Ranking of Manner of Death among Age Groups (n=5,306)

Rank	0-15 years	16-25 years	26-40 years	41-65 years	66+ years
1	Accidents 53%	Accidents 45%	Accidents 31%	Natural 68%	Natural 78%
2	Natural 31%	Homicide 33%	Natural 26%	Accident 20%	Accident 19%
3	Homicide 11%	Suicide 14%	Homicide 25%	Suicide 7%	Suicide 3%
4	Suicide 5%	Natural 8%	Suicide 18%	Homicide 5%	Homicide <1%

Table 3 examines manners of death by age group for 2002 and 2003 for cases in the MMEDB. The table shows that the greatest proportion of natural deaths, accidental deaths, and suicide deaths occurred among the 41 to 65 year age group, as well as the greatest proportion of deaths overall. The greatest proportion of homicides occurred among the 26 to 40 year age group (42% in 2002 & 43% in 2003), followed by the 16 to 25 year age group (27% in 2002 & 28% in 2003). The lowest proportion of deaths of all manners occurred among the 0 to 15 year age group with only 5% in 2002 and 3% in 2003 of all deaths in the database.

**Table 3: 2002 & 2003 Manners of Death by Age Group
(2002 n=6,124, 2003 n=5,306)**

Age Group	Year	Natural	Accident	Suicide	Homicide	All Manners
0-15 years	2002	109 3%	131 8%	4 1%	35 7%	279 5%
	2003	55 2%	94 7%	9 2%	19 4%	177 3%
16-25 years	2002	38 1%	228 14%	79 17%	147 27%	492 8%
	2003	32 1%	171 13%	51 12%	123 28%	377 7%
26-40 years	2002	290 8%	320 20%	131 29%	225 42%	966 16%
	2003	195 6%	238 19%	137 33%	188 43%	758 14%
41-65 years	2002	1690 48%	615 38%	165 36%	111 21%	2581 42%
	2003	1526 48%	454 35%	167 40%	106 24%	2253 42%
66+ years	2002	1390 40%	324 20%	75 17%	17 3%	1806 29%
	2003	1355 43%	328 26%	52 13%	6 1%	1741 33%
All Ages	2002	3,517 100%	1,618 100%	454 100%	535 100%	6,124 100%
	2003	3,163 100%	1,285 100%	416 100%	442 100%	5,306 100%

Table 4 represents Medical Examiner's classification of manner of death by race/ethnicity. Natural was the most common manner of death among African Americans, Hispanics and Whites, followed by accidental deaths among all races except African Americans in 2003, where homicides (24%) outnumbered accidental deaths (20%). Homicides were more prevalent than suicides among Hispanics and African Americans, while suicides were more prevalent than homicides among Whites in both 2002 and 2003.

**Table 4: 2002 & 2003 Race/Ethnicity by Manners of Death
(2002 n=6,114, 2003 n=5,307)**

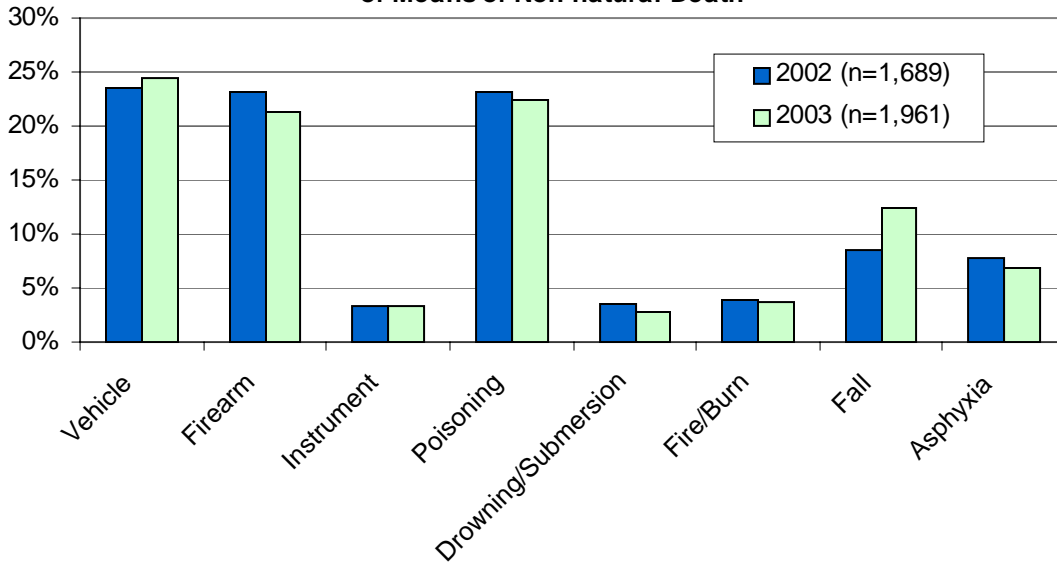
Race	Year	Natural	Accident	Suicide	Homicide	Total
Hispanic	2002	43 45%	30 31%	8 8%	15 16%	96 100%
	2003	39 44%	34 38%	5 6%	11 12%	89 100%
White	2002	2342 60%	1080 28%	379 10%	90 2%	3891 100%
	2003	2298 60%	944 23%	349 11%	72 5%	3669 100%
African American	2002	1115 53%	494 24%	61 3%	421 20%	2091 100%
	2003	792 53%	294 20%	59 4%	353 24%	1498 100%

Means of Death

The external cause of non-natural deaths is classified as the means of death. Figure 3 displays the non-natural deaths by their external cause. Data for Wayne County are included in the analysis of means of death, but are limited as follows: of the cases in the database with a non-natural manner of death (accident, suicide, homicide) from all counties excluding Wayne, 95% have a means of death specified in 2002 and 2003, but of the cases from Wayne County, only 60% in 2002 and 49% in 2003 have a means of death attributed to them². It is likely that all means of death are underrepresented, but the most substantial differences between Wayne County and the rest of the database are among deaths due to vehicle crashes and falls.

² The low percent of specified means of death in Wayne County cases is largely due to the inconsistencies among data collection forms used in the field as well as issues pertaining to the conversion of data from the Wayne County system to the MMEDB.

Figure 3: 2002 & 2003 Comparison of Medical Examiners' Classification of Means of Non-natural Death



Vehicle crashes were the leading non-natural means of death in both 2002 (23.5%) and 2003 (24.5%), closely followed by poisoning deaths in 2002 (23.2%) and 2003 (22.5%) and deaths due to firearms in 2002 (23.2%) and 2003 (21.3%). Selected means of death are broken down by age group for 2002 in Figure 4 and 2003 in Figure 5. Poisoning deaths are prevalent among the 41 to 65 year age group. Falls become a leading means of non-natural death among the older age groups, especially the 65 and older group. The general patterns of the means of death are similar between 2002 and 2003; each means will be discussed below.

Figure 4: 2002 Age Groups by Means of Non-natural Death (n=1,996)

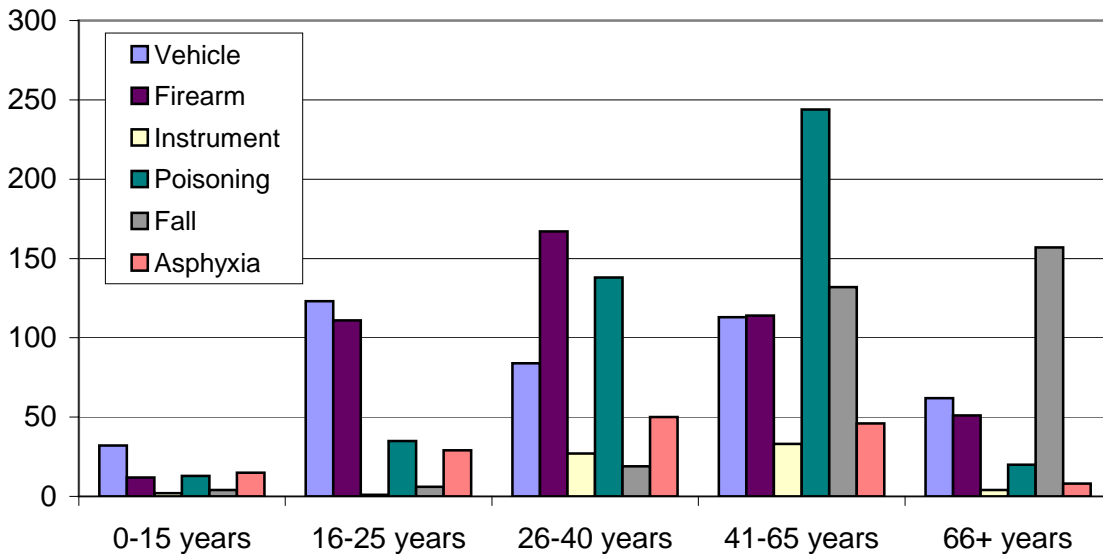
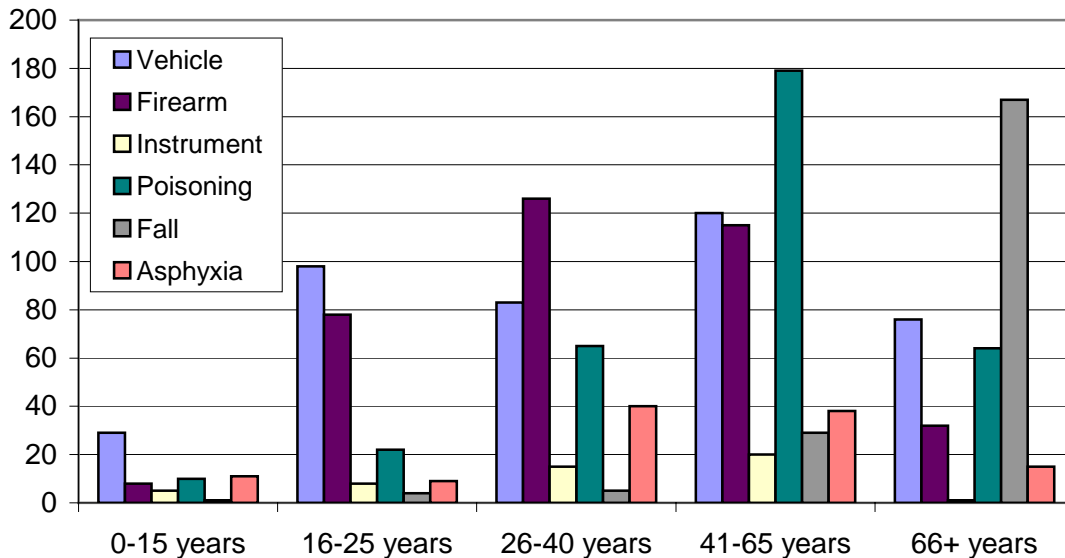


Figure 5: 2003 Age Groups by Means of Non-natural Death (n=1,578)

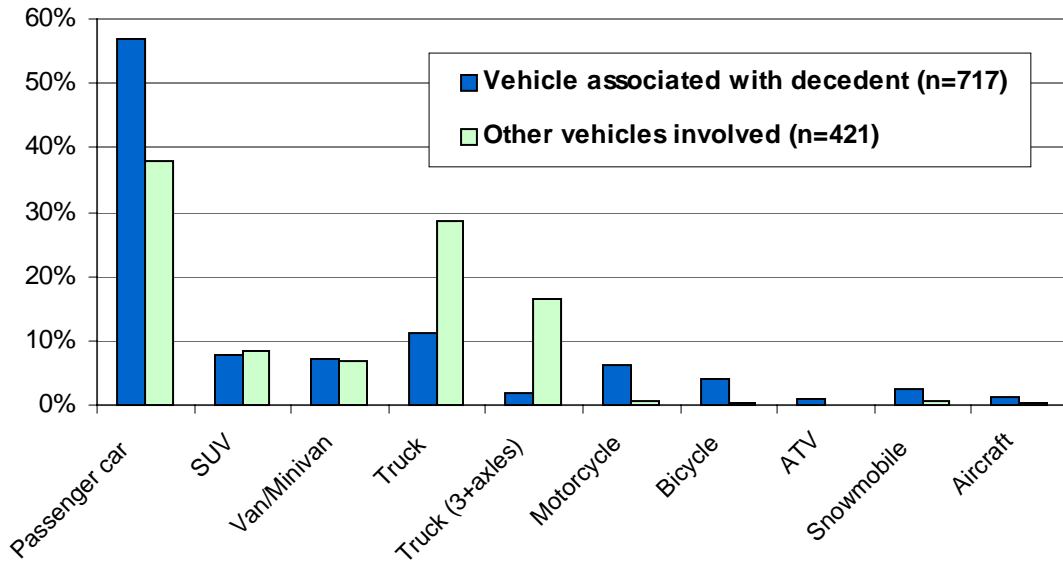


Vehicle Crashes

Age data were available for 820 cases where death was due to a fatal vehicle crash. In 2002 and 2003, fatal vehicle crashes were most common among the 16 to 25 (30% & 24%) and 41 to 65 year age groups (27% & 30%), closely followed by the 26 to 40 year age group (20% for both years). Males comprised 71% of all deaths due to vehicle crashes in 2002 and 68% in 2003. Only in the 66 and older age group did the number of female decedents (58%) outnumber male decedents (42%) in fatal vehicle crashes.

The types of vehicles involved in fatal crashes are presented in Figure 6. Data from 2002 and 2003 were combined and do not include information regarding Wayne County fatal vehicle crashes. There were few differences in car types between the two years. The blue bars show the type of vehicle the decedent was driving, or in which the decedent was a passenger. The orange bars represent the other types of vehicles that were involved in fatal crashes between two or more cars. Passenger cars were the most frequent vehicle type involved in fatal crashes, followed by two-axle trucks for both categories: vehicles associated with the decedent and other vehicles involved. Although, trucks (both two and three-axes) are more likely to be the “other vehicle involved” rather than the vehicle in which the decedent was driving or riding.

Figure 6: Vehicles involved in fatal crashes in 2002 & 2003 combined



Among the cases in the database, there were 13 pedestrians killed by vehicles in 2002 and 22 in 2003. Data regarding safety device use was entered into the system in 512 instances of fatal vehicle crashes in 2002 and 2003. In 2002, 52% of decedents were wearing a seatbelt or were in a car seat and 11% were wearing a helmet. In 2003, 48% of decedents were wearing a seatbelt or were in a car seat and 10% were wearing a helmet. Of the 512 cases for which safety device usage information was available, 27% of decedents in 2002 and 26% in 2003 were not wearing a seatbelt or a helmet or were not in a car seat.

Of the 874 total deaths due to vehicle crashes in 2002 and 2003, toxicology results were available for alcohol use in 324 cases (37%) and drug use in 275 cases (31%). Of the 324 cases for which alcohol toxicology was performed, 34% were found to be positive for alcohol use. Of the cases for which alcohol use was positive, 69% of the decedents were drivers of the vehicle, 3% were pedestrians who were hit by a vehicle and the rest were passengers in a vehicle (28%). Of the 275 cases for which drug toxicology was performed, 20% were found to be positive for drug use. Of the cases for which drug use was positive, 70% of the decedents were drivers of the vehicle, 1% were pedestrians who were hit by a vehicle and the rest were passengers in a vehicle (29%). The proportion of positive drug and alcohol use in deaths due to vehicle crashes was similar between 2002 and 2003, but the number of cases for which toxicology was done, and for which results were entered into the database, nearly doubled from 2002 (n=113) to 2003 (n=211).

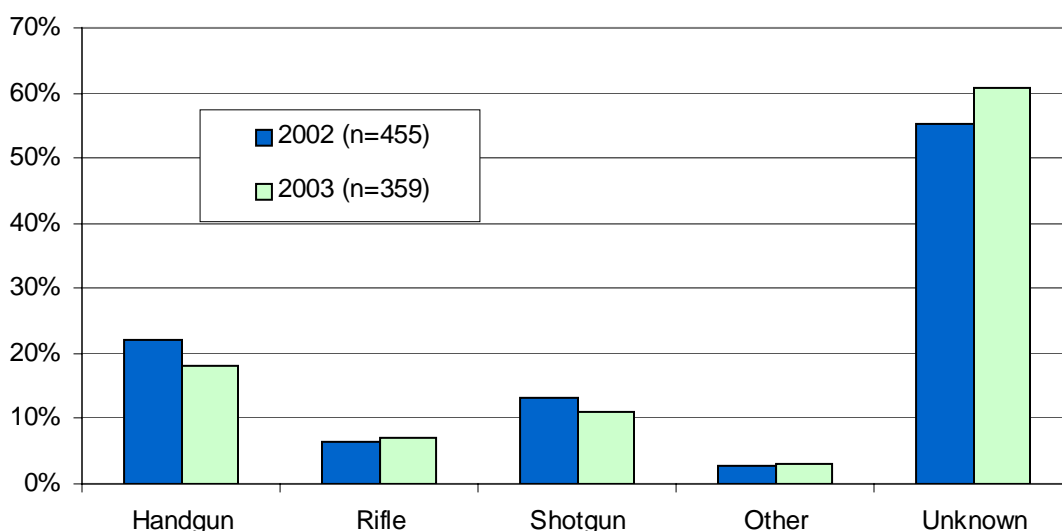
Firearms

Firearms were the means of death in 455 MMEDB cases in 2002 and 359 cases in 2003. Deaths due to firearms were most common among the 26 to 40 year old age group in both 2002 and 2003 at 37% and 35% respectively. Forty-one to 65 year olds were the second most likely age group to die due to a gunshot wound (25% & 32%) followed by 16 to 25 year olds (24% & 22%). Forty-five percent of MMEDB deaths due to gunshot wounds in 2002 were suicides, and 55% were homicides. There was one accidental firearm death in 2002. In 2003, deaths due to gunshot wounds were evenly split between suicides and homicides at 50% each. When analyzed by age group, the data show that the majority of firearm deaths for persons ages 0 to

40 were due to homicides, while the majority of firearm deaths were due to suicides in the older age groups, 41 years and above.

The type of firearm used in deaths due to a gunshot wound was recorded in the system in 204 cases (45%) in 2002 and 141 cases (39%) in 2003. Data on firearm types used is not included for Wayne County. When gun use was recorded, handguns were the most commonly used type of firearm in 2002 and 2003 followed by shotguns (see Figure 7). Eighty-five percent of the available information on the type of guns used in fatal shootings was gathered from the scene of a suicide and 15% from the scene of a homicide. This could be due to the fact that the gun is typically not left at the scene of a homicide and results of forensic testing are frequently not entered into the database.

Figure 7: Type of Firearm Involved in Shooting Fatalities



Instrument

There were 65 MMEDB deaths recorded as caused by an instrument in 2002 and 51 deaths in 2003. Deaths caused by a blunt or sharp object, such as a knife, are classified as instrument deaths. Deaths due to an instrument were most common among the 41 to 65 year age group followed by the 26 to 40 year age group in both 2002 and 2003. In 2002, 2% (n=1) of instrument deaths were accidental, 8% (n=5) were suicides and 90% (n=59) were homicides. Similarly, in 2003, 8% (n=4) of instrument deaths were accidental, 10% (n=5) were suicides and 82% (n=42) were homicides.

Poisoning

In 2002 and 2003 combined, poisoning was the third most common means of non-natural death in the database overall with 835 cases. Age data was missing for 45 cases of poisoning, but based on available numbers, poisoning was the most common means of death for the 41 to 65 year age group, accounting for 54% (n=244) of non-natural deaths within this age group in 2002 and 53% (n=179) in 2003. For poisoning deaths with a determined manner of death in 2002, 15% were classified as natural deaths, 72% as accidents, 9% as suicides and 4% as homicides. For poisoning deaths with a determined manner of death in 2003, 41% were classified as natural deaths, 46% as accidents, 11% as suicides and 2% as homicides. Although it is often

difficult to determine the true manner of poisoning deaths, especially drug overdoses, it is generally accepted that, if no other manner of death is obvious, poisoning deaths are accidental.

Falls

There were 153 deaths due to falls in 2002 and 185 deaths due to falls in 2003, not including Wayne County data. The largest proportion of fatal falls occurred in the over 65 year old age group in 2002 (49%) and in 2003 (81%) followed by the 44 to 65 year age group in 2002 (42%) and 2003 (14%). In both 2002 and 2003, falls were most often caused by tripping/slipping (63%) followed by medical conditions (16%). Only 7 falls were suicides.

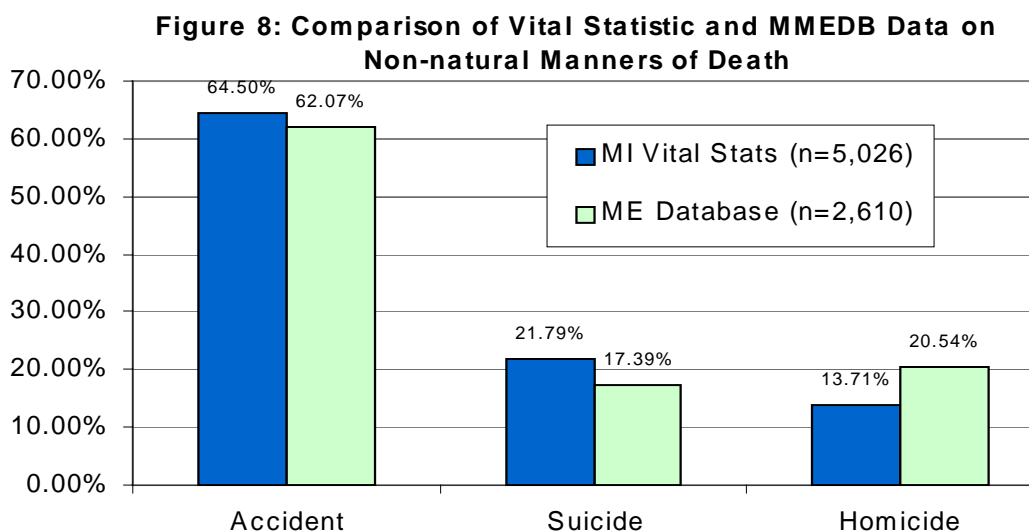
Asphyxia

There were 75 cases where asphyxia was classified as the means of death in 2002 and 75 cases in 2003, not including Wayne County data. Fifty-nine percent (n=89) of all cases of death due to asphyxia were self-induced; 88% of all self-induced asphyxia deaths were due to ligature strangulation. The second most common cause of asphyxia was due to choking on food/drink.

Non-natural manners of death compared to vital statistic data

The MMEDB contains 2002 data from 31 counties³ representing 48% of the population of Michigan based on 2000 census data. Figure 9 illustrates the comparison of vital statistic data for the State of Michigan for 2002 compared to 2002 data from the MMEDB by percent of accidental deaths, suicides and homicides.

The chart shows that the proportions of non-natural manners of death in the MMEDB are fairly representative of the proportions of non-natural deaths recorded in the State of Michigan. The lower percentage of suicides, and higher percentage of homicides in the MMEDB is most likely a result of the inclusion of Wayne County data resulting in an over representation of urban manners of death, such as homicides and accidental drug overdoses. The MMEDB team gained participation from several rural counties in 2003 and 2004 in an effort to gain accurate representation of the State.



³ Please note, this number is less than the total number of participating counties. Due to budget cuts some counties have experienced a loss in office personnel. Consequently, many counties have fallen behind in data entry. MPHI is working with counties to address this issue.

Future Efforts

In the Fall of 2004, all medical examiners and data entry staff will be asked to complete a survey. The survey will gather information on the use of the new modules and features implemented over the past year. In addition, respondents will have an opportunity to make suggestions for future improvements. The findings from this survey will be made available on the MMEDB website (<https://www.mmedb.com>) and in next year's annual report.

CRHOP staff are in the process of developing a quarterly newsletter as a means for continuing communication between medical examiners, data entry staff, scene investigators, researchers, other initiatives, and CRHOP staff. The newsletter will provide instruction for using data collection fields on the DSIR, information on upcoming meetings or conferences targeted at medical examiners and staff, and will highlight data being captured by the system.

Conclusion

Success of the MMEDB is attributable to CHROP's mission-centered philosophy and the utilization of Internet technology to provide a practical, low-maintenance tool for medical examiner offices. This enterprise is dedicated to collaboration that facilitates a common vision and resource sharing among its partnering members.

Presentation of the data illustrates the potential of the database as a research and surveillance tool. Enhancing participation and data collection consistency will help the MMEDB to move forward with its goal of impacting the fields of injury and communicable disease prevention.

The MMEDB meets the core needs of most offices because it was built by medical examiners, for medical examiners. Continuous improvements to the database, as well as ongoing outreach, demonstrate the commitment of the MMEDB to provide MEs with the most convenient and useful data management system available. Additionally, the MMEDB team aims to achieve higher levels of communication between medical examiner offices and state and local government.

The efforts of the Michigan Medical Examiners Database Initiative are guided by three principles.

- To offer Michigan Medical Examiners a software tool to help automate their offices,
- To assist the State of Michigan in establishing a set of standardized data elements collected during fatality investigations, and
- To establish a data repository that can be used by researchers and state agencies for injury and communicable disease surveillance and control.

With these principles in mind, the Michigan Medical Examiner Database Initiative's staff welcomes the opportunity to provide technical assistance to medical examiner offices as well as work with researchers and state agencies interested in health surveillance topics.

For additional information on the Michigan Medical Examiner Database Initiative, contact:

Gerry Polverento
Project Recruiter
2440 Woodlake Circle
Suite 100
Okemos, MI 48864
(517) 324-7372
gpolvere@mphi.org
www.mmedb.com