

Washtenaw County Medical Examiner 2004 Annual Report

Bader J. Cassin, M.D., Chief Medical Examiner

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Office of the Washtenaw County Medical Examiner

**To: Washtenaw County Board of Commissioners, and the
Citizens of Washtenaw County**

From: Bader J. Cassin, M.D., Chief Medical Examiner

The laws of the State of Michigan assign the responsibility for determining the cause and manner of unexpected deaths in each county to the medical examiner. The Washtenaw County Medical Examiner upholds these laws and accepts this responsibility with full commitment to a consistent high quality service, which is recognized as a model throughout the State of Michigan. Every reported death is investigated thoroughly, frequently with the cooperation of law enforcement agencies and health care personnel in Washtenaw County as well as around the State of Michigan. Because Washtenaw County is a principal medical referral center, our inquiries often lead necessarily to distant sources of information regarding the circumstances and causes of injury. The results of these death investigations provide valuable information, which is used in professional education and by the criminal justice system, public health departments, families of the deceased, and other concerned persons.

While the medical examiner staff of investigators, physicians and support persons is primarily concerned with the circumstances surrounding unexpected deaths, our concern for the living is reflected in our regular reviews of all childhood deaths with concerned and involved state and county agencies, as well as our reviews of all deaths of persons receiving community mental health services. Staff members likewise donate many hours to professional and local public education programs for injury investigation, treatment and prevention.

The maintenance of a properly prepared and effective death investigation system necessarily involves periodic investigator recruitment and continuing education. These regular efforts, along with the requirements of our combined investigator activities, are coordinated by our dedicated support staff.

I want to thank the Washtenaw County Board of Commissioners and the County Administration for their continued encouragement and support of this program, which enables the medical examiner staff to provide this necessary and valuable service to the citizens of Washtenaw County. I respectfully submit this annual report to demonstrate the expanding scope and sophistication of this professional and continued cost-effective service. With you, I take great pride in the development of this office during the past several years. I welcome the opportunity to discuss any aspect of this report with you.

**To: Washtenaw County Board of Commissioners, and the
Citizens of Washtenaw County**

**From: Roger D. Simpson, Vice President
Huron Valley Ambulance**

Our 2004 annual report clearly demonstrates an increase in the number of cases reported to and investigated by the Medical Examiner's office. The total number of cases reported to our office this past year exceeded all previous years to date. Unfortunately, the current financial status of the County has required that a hold be placed upon the planning and anticipated construction of our new medical examiner/morgue facility. Despite this setback, Huron Valley Ambulance remains committed to continuing our close working relationship with Washtenaw County in providing the most professional and efficient services to our citizens.

Thank you for taking the time to review our 2004 activities. Should you need further information or have any questions, please do not hesitate to contact us.

Medical Examiner Office Expenses

Fiscal Year 2004 (October 01, 2003 through September 30, 2004)

Budget (Table 1)

Budgeted Amount	\$450,707
Expenditures	\$463,500
Balance	\$-12,793

Expenses (Table 2)

	<u>Amount</u>	<u>Percentage</u>
Admin. Costs	\$48,776	11.56%
Contracts*	\$373,131	88.44%
Actual Expenses Paid	\$421,907	100.00%

*Contracts = Medical Examiner; investigators; UMMC & SJMH autopsy costs; report processing

Washtenaw County Medical Examiner Staff - 2004

Medical Staff

Bader J. Cassin, M.D., Chief Medical Examiner
J. Scott Somerset, M.D., Deputy Medical Examiner
Yung A. Chung, M.D., Deputy Medical Examiner

Administrative Staff

Roger D. Simpson, Chief Investigator
Diana French, Investigator Coordinator
Donna M. Tokarczyk, Administrative Coordinator/Medical Transcriptionist

Investigative Staff

Todd Burks, UMMC
Russell Clinard, SJMH/UMMC
Mark Deming, UMMC
Mary Derouin, SJMH
Diana French, field
Jay Hathaway, SJMH
Mary Kohair, UMMC
Bill Lambie, UMMC

Leslie Patterson, SJMH
Fred Price, SJMH
Doug Scott, field
Roger Simpson, field
Matt Snyder, UMMC
Dionne Stanchina, UMMC
Paul Vaughan, field
Allecia Wilson, UMMC

Criteria for Medical Examiner Cases

Deaths which should be reported to the medical examiner include all those which result, either directly or indirectly, from injury, whether by accident or intended, self-inflicted or caused by another person. Injury includes poisoning and drug ingestion or injection. The interval (passage of time) between the injury and the death, whether it be minutes or months, does not change the requirement for reporting the death.

Deaths due to injury include the following:

- ◆ **Alcohol intoxication**
- ◆ **Asphyxiation (smothering, hanging, strangulation)**
- ◆ **Blunt impacts (by any object)**
- ◆ **Chemical exposure, at home or in the workplace**
- ◆ **Cutting and stab wounds**
- ◆ **Drug ingestion or injection**
- ◆ **Drowning (submersion in any amount of liquid)**
- ◆ **Electrocution (by lightning or wiring)**
- ◆ **Falls from any height**
- ◆ **Fire, explosion, or exposure to heat or smoke**
- ◆ **Firearms (gunshots)**
- ◆ **Intrauterine deaths associated with maternal trauma**
- ◆ **Pedestrian impacts (by any vehicle)**
- ◆ **Vehicle crashes or rollovers (driver or passenger)**

Unexpected and unexplained deaths of persons presumed to have been in good health or for whom no history of serious medical problems or progressive primary disease is known should also be reported to the medical examiner. Deaths in this category are identified by reference to a treating physician, the presence of prescribed medication, family members or friends familiar with the person, or persons present at the time of death.

Deaths occurring in a location other than a healthcare institution (hospital, clinic, nursing care facility) where there is a physician or nurse present need not be reported to the medical examiner if history of serious disease is known. In these cases the primary care or treating physician must be able and willing to determine that the known disease(s) is the sole cause of death (and is therefore a "natural" death). Other deaths which do not need to be reported are those occurring in a residence where a physician or nurse is in attendance and know that the death has resulted from a chronic illness. The funeral director of the family's choice may be notified in these situations. Otherwise, the medical examiner must be notified of the death.

Criteria for Medical Examiner Cases (Continued)

Michigan law also requires, in the interest of public health and safety, the reporting to the medical examiner of all deaths of persons in the following circumstances:

Unexpected infant deaths: Deaths occurring during the first two years of life, without obvious serious disease being present.

Deaths while in custody: The death of any prisoner in a jail or prison, or any person in the custody of a law enforcement officer or agency, whether by known or unknown cause(s). Hospitalized prisoners are also “in custody”.

Deaths resulting from abortion: The death of any woman resulting from or following an abortion or attempted abortion, whether self-induced or otherwise.

Found bodies: Bodies (whether or not identified) found within county boundaries, which are known or suspected to have come to their death through any of the “unnatural” means described above.

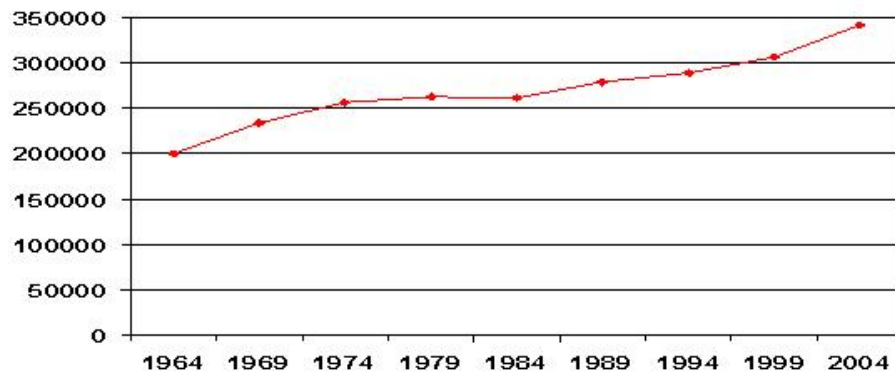
Deaths in the workplace: Deaths occurring to persons in their place of employment.

Deaths during medical procedures, whether diagnostic or therapeutic, in any location, must be reported to the medical examiner if the reason for the procedure is any of the causes listed above or if the death is unexpected and/or results from the procedure itself.

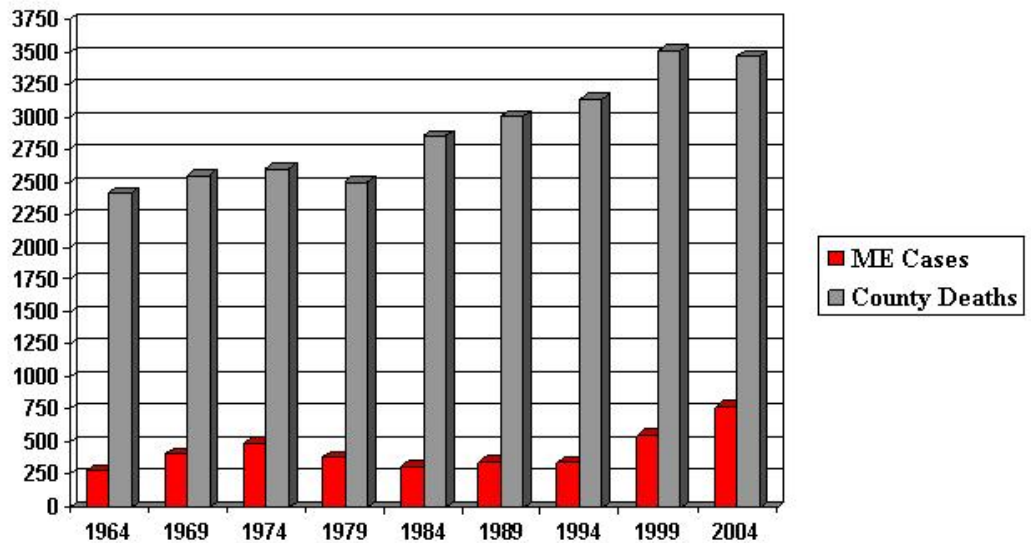
Any of the situations described above may require an autopsy as a part of the death investigation. Autopsies are done only if the information (or evidence) available is insufficient for accurate death certification (or effective prosecution).

Washtenaw County Demographics 1964 to 2004

County Population (Table 22) 2004 = 340,725 est.

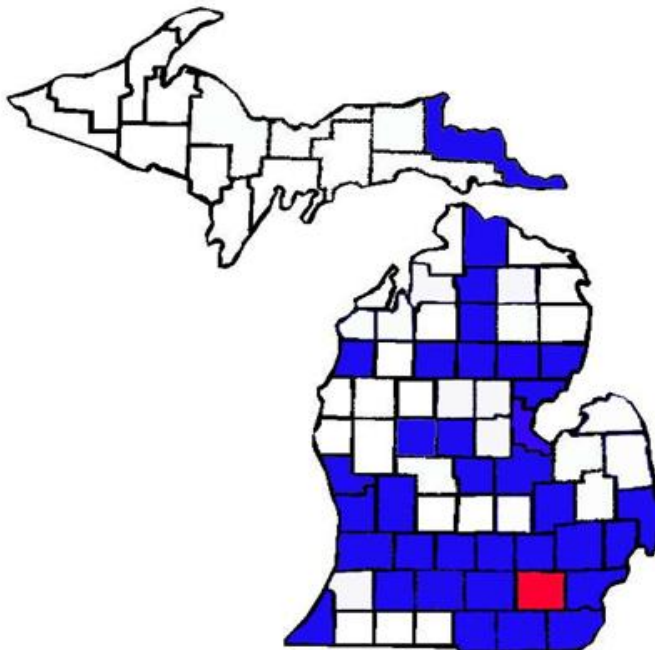


Number of Medical Examiner Cases versus Total County Deaths (Table 23)

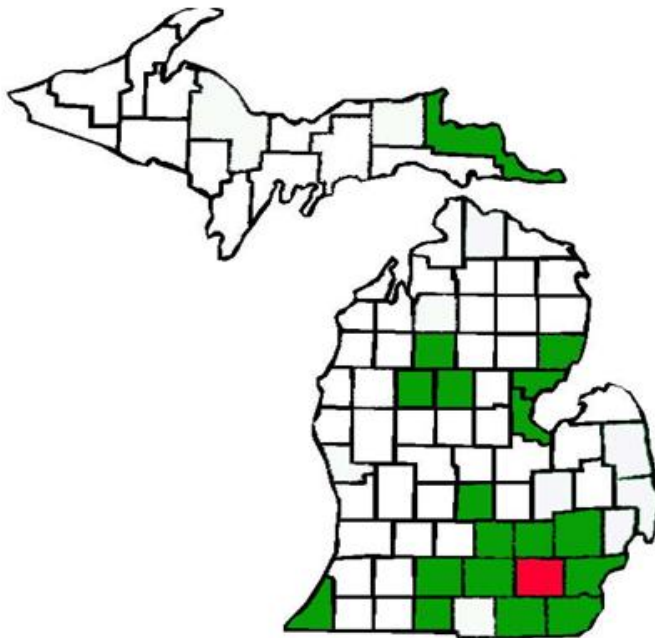


Counties Serviced by Washtenaw County

County of Residence
Residence outside of MI = 22



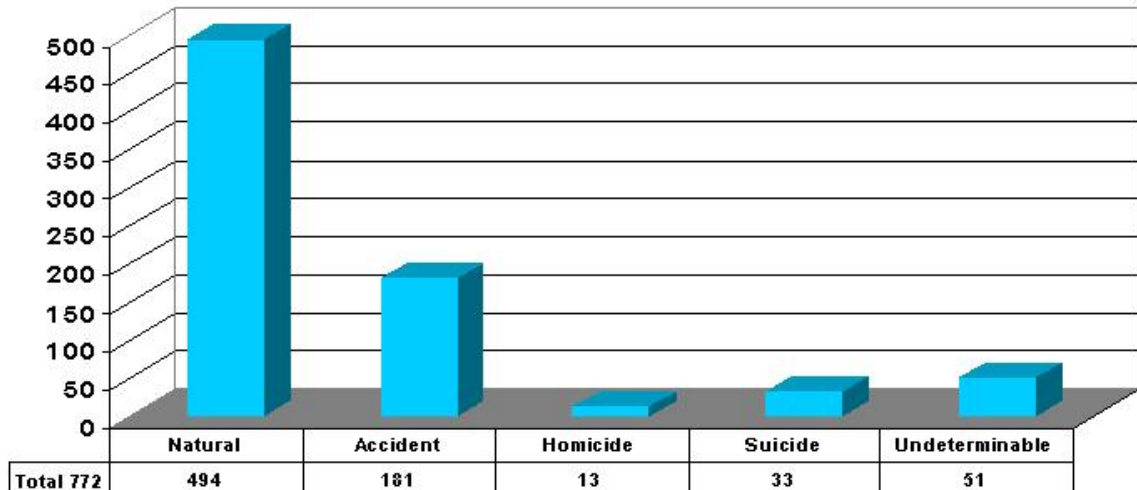
County of Injury
Injury outside of MI = 4
Location unknown = 15



2004 Mortality Statistics

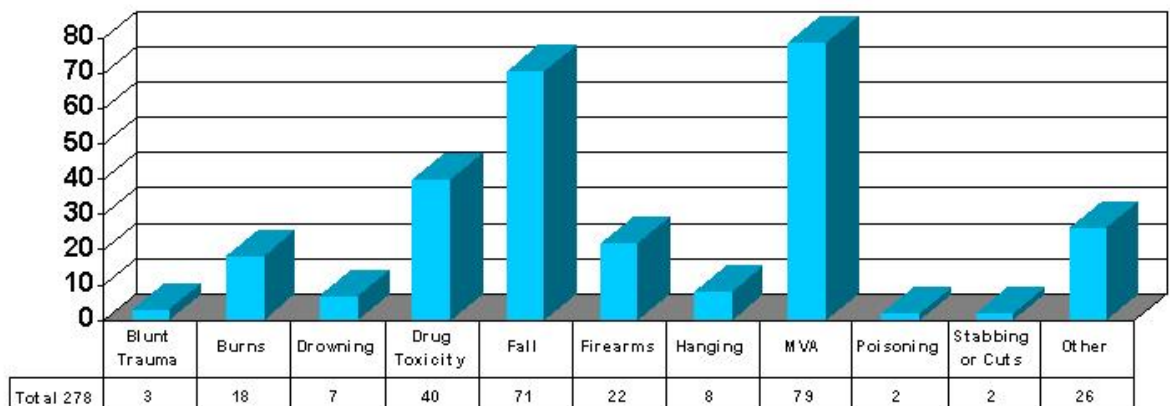
Manner of Death (Table 3)

Manner of death is classified into one of the five categories listed below. Undeterminable deaths are those deaths where there is insufficient information about the circumstances surrounding the death to make a ruling; e.g., most unwitnessed deaths due to illicit drug(s) are undeterminable.



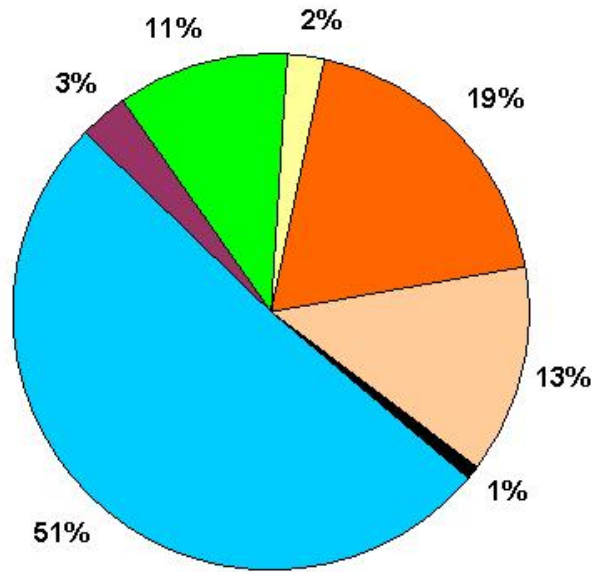
Unnatural Causes of Death (Table 4)

Other = found bones, hypo/hyperthermia, therapeutic, asphyxia, suffocation, choking



2004 Natural Deaths = 495

Table 5

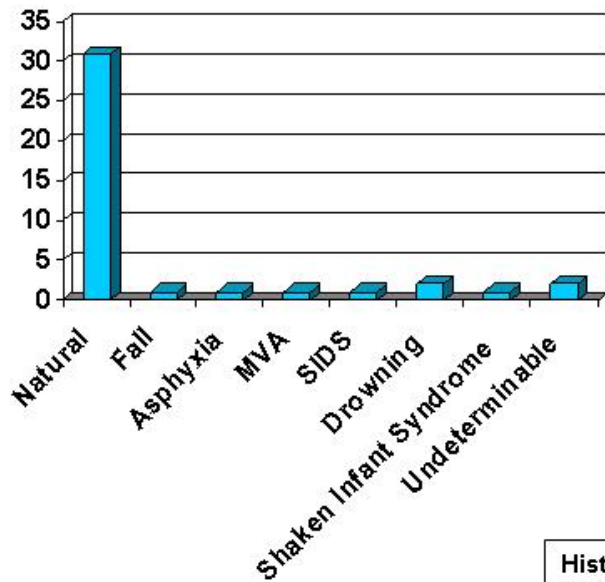


Brain Genitourinary Heart Kidney Lungs Liver Other

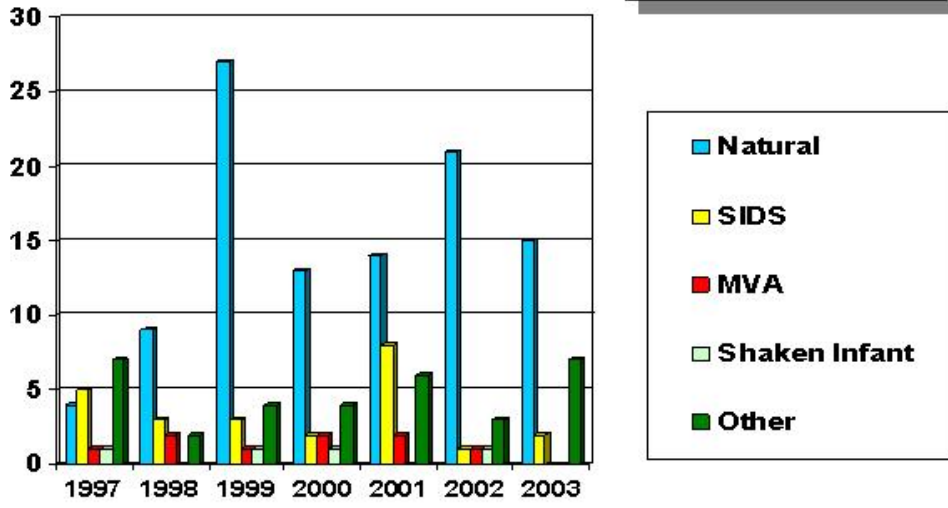
Many of the unexpected deaths reported to the medical examiner's office ultimately are determined to be natural events (i.e., due to disease). This chart exhibits the various organ systems primarily involved in the cause of death.

2004 INFANT DEATHS = 40

Cause of Death (Table 6)
 (2 years of age or less)
 Washtenaw County residents = 12



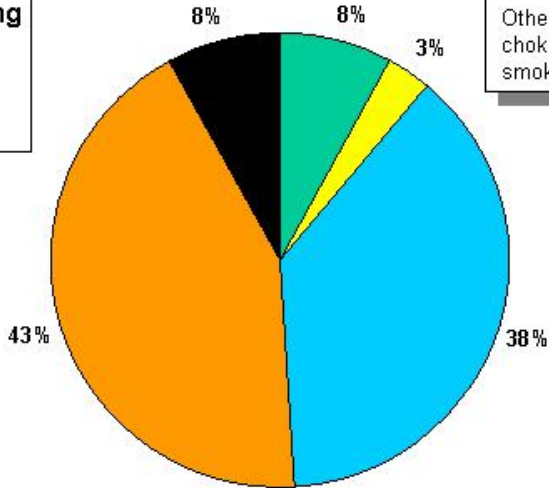
History of Infant Deaths
 (Table 7)



2004 Accidental Deaths = 181

- Burn
- Drowning
- Fall
- MVA
- Other

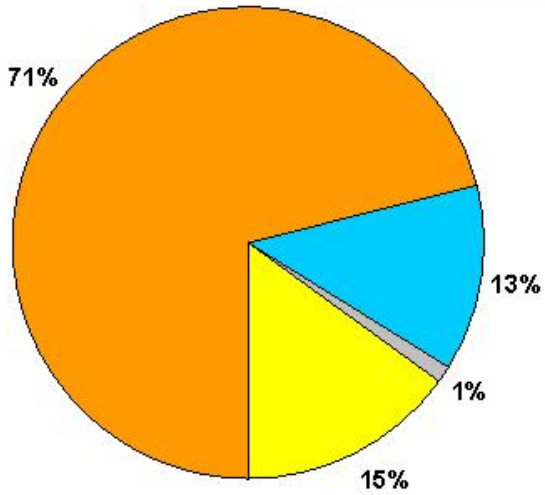
Cause of Death (Table 8)
 Other = therapeutic, asphyxia, choking, poisoning, suffocation, smoke inhalation



Explanation of Falls
 The potential for accidental falls increases with age. One-third of the trauma-related deaths are due to the injuries sustained in a fall.

- Driver:
Restrained 45%
- Passenger:
Restrained 60%
- Unknown
Driver/Passenger:
Restrained 3%
- Pedestrian

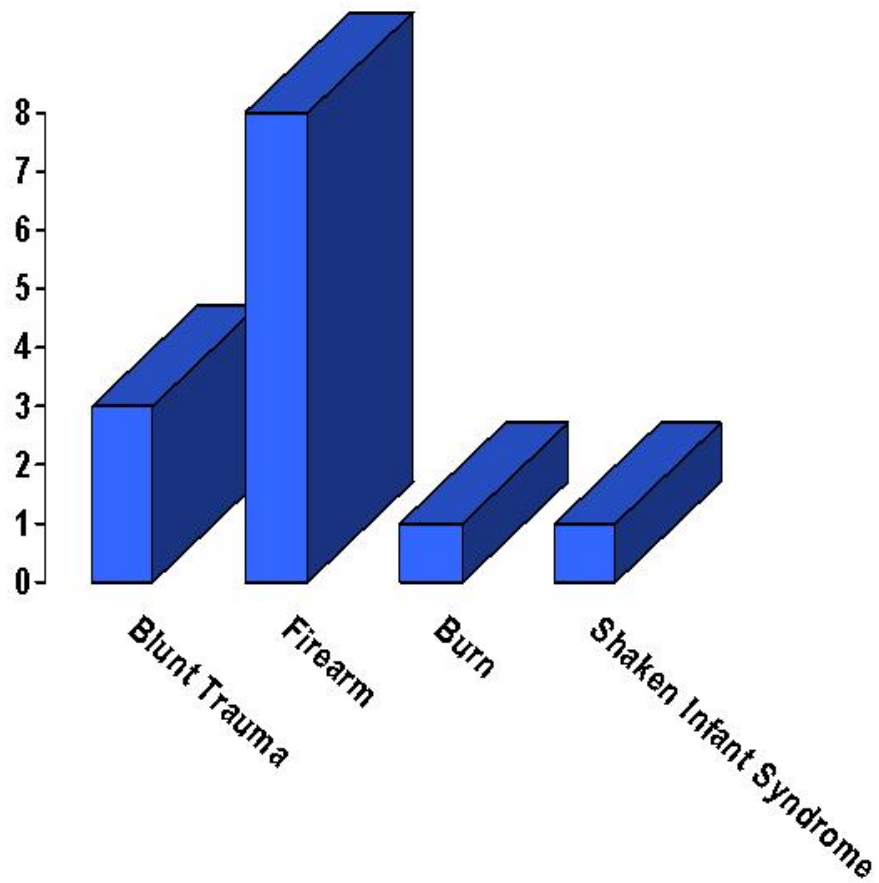
Motor Vehicle Accidents = 79
 (Table 9)



36 of the MVA's occurred in Washtenaw County

2004 Homicide Deaths = 13

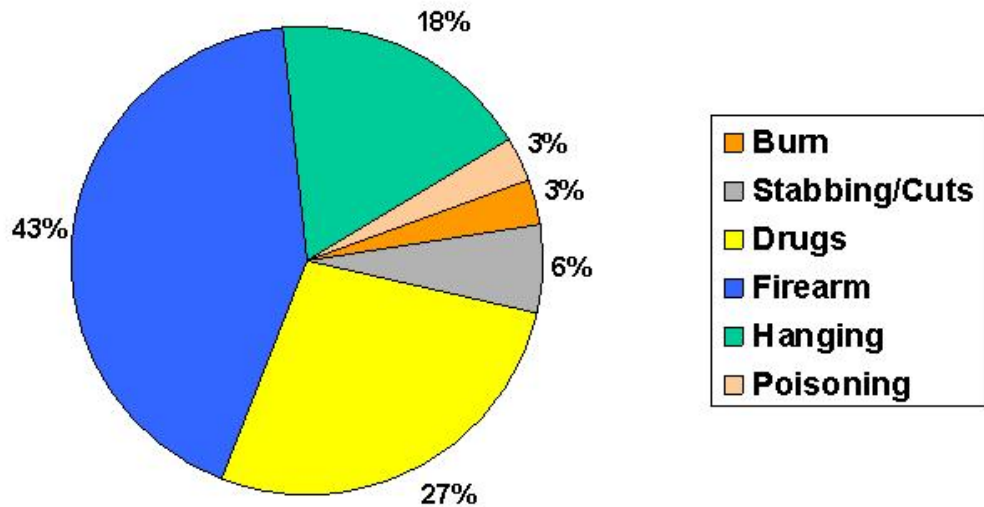
Cause of Death (Table 10)
Blunt trauma = beating
Firearm = pistol, rifle, shotgun
Burn = arson



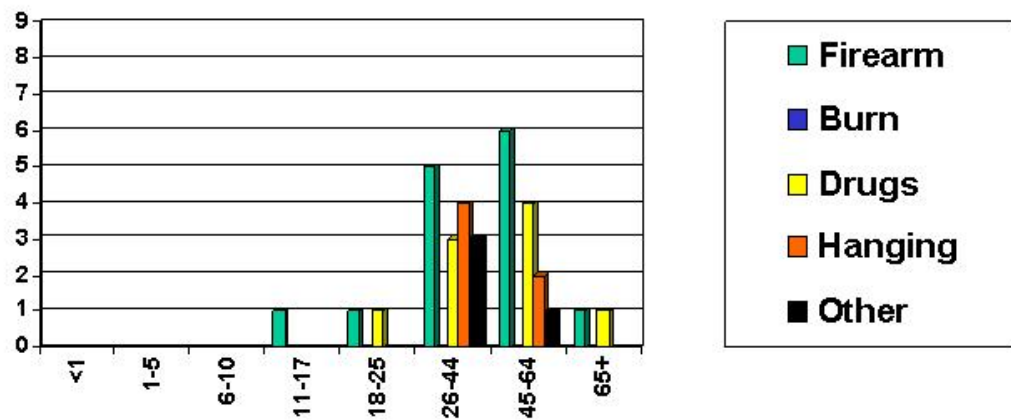
12 of the homicides occurred in Washtenaw County

2004 Suicide Deaths = 33

Cause of Death (Table 11)
 Cause of death is defined as any injury or disease that produces an irreversible physiological condition.



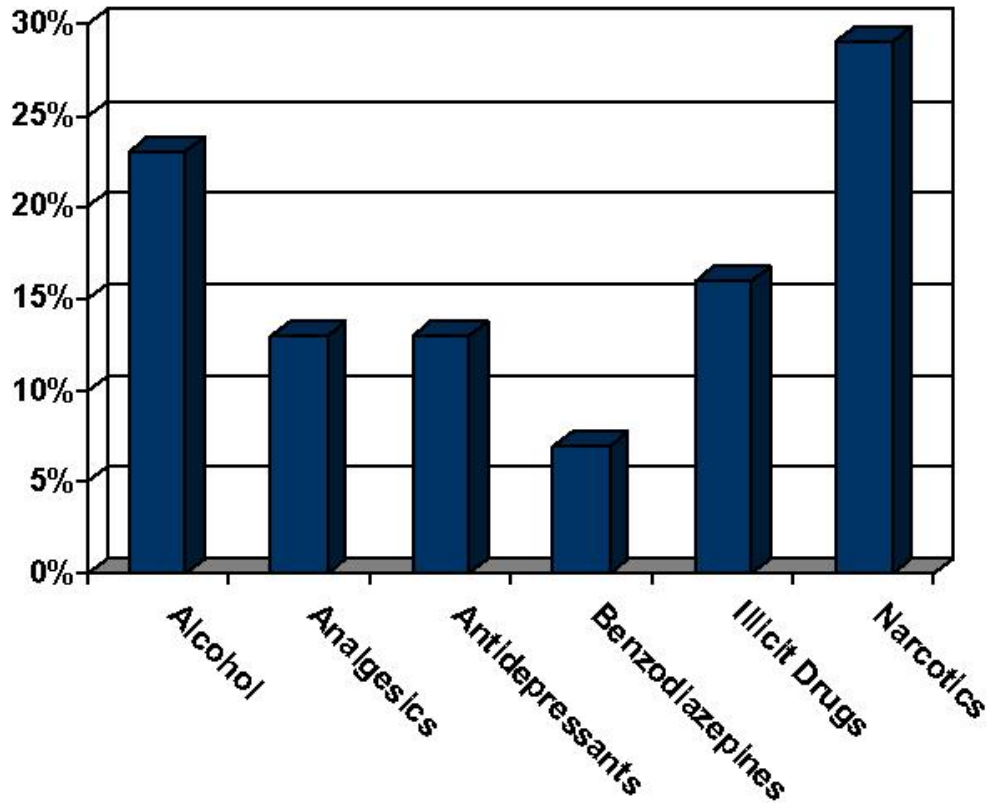
Methods Used by Age of Deceased (Table 12)
 Deaths are certified as suicide when the injury is self-inflicted and there is a clear indication of intent.



25 of the suicides originated in Washtenaw County

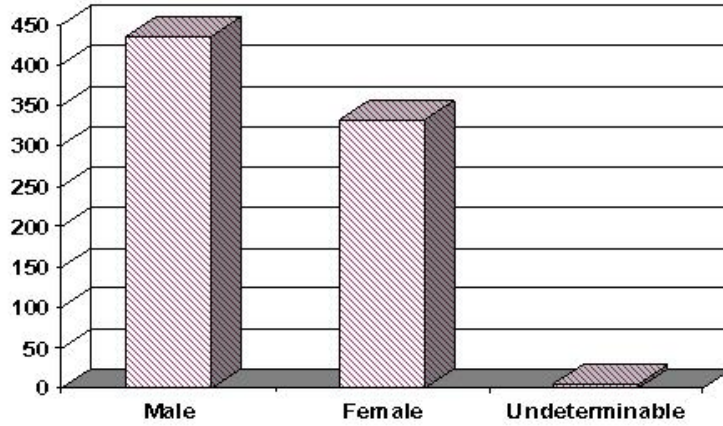
Drugs Detected from Autopsy Samples

Table 13

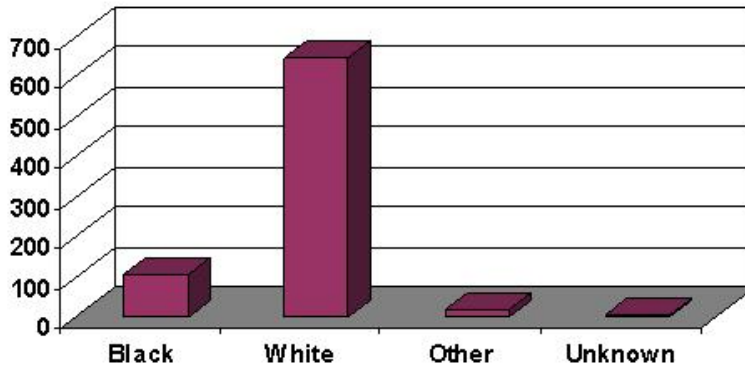


Testing for the presence of abuse and many therapeutic drugs is done in most death investigations. Deaths are attributed to a drug or combination of particular drugs if there is no other reasonable explanation.

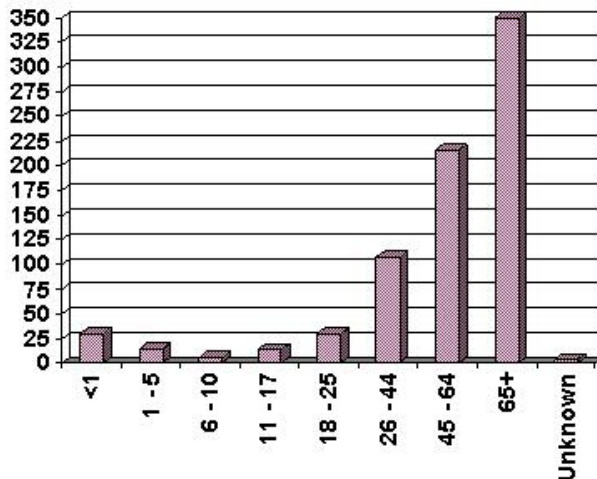
2004 Demographic Statistics



Sex of Deceased (Table 14)
 Undeterminable: skeletal remains (animal/human)

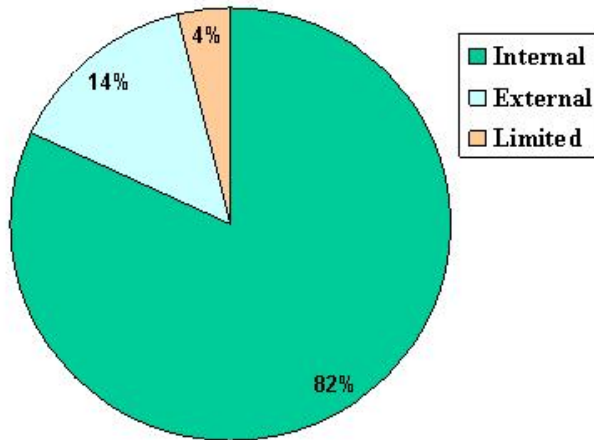


Ethnicity of Deceased (Table 15)
 Other: Asian; American/East Indian; Hispanic
 Unknown: skeletal remains (animal/human)



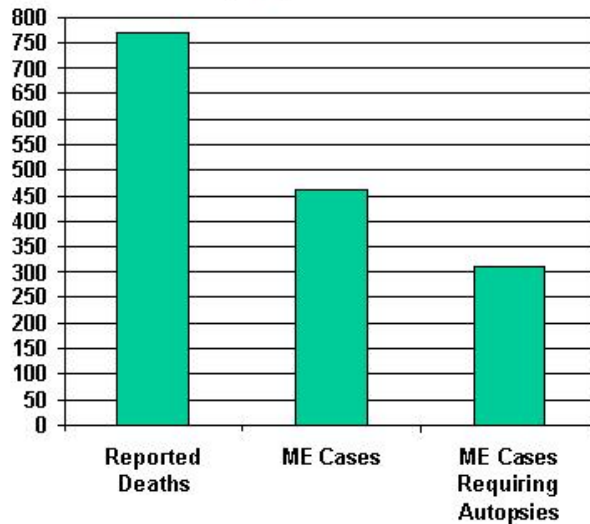
Age at Death (Table 16)
 Unknown: skeletal remains (animal/human)

2004 Medical Examiner Autopsies



Total Autopsies = 309 (Table 17)

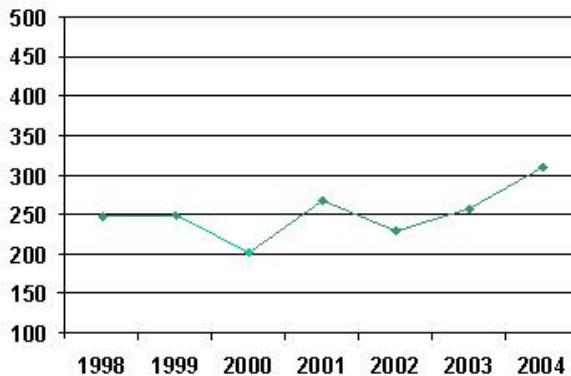
Internal = complete autopsy
 External = complete examination of body surfaces
 Limited = restricted internal examination



ME Cases Requiring Autopsies (Table 18)

Not all deaths investigated require an autopsy, often because of extensive medical history.

60% of reported deaths become ME cases and 40% of ME cases require autopsies.

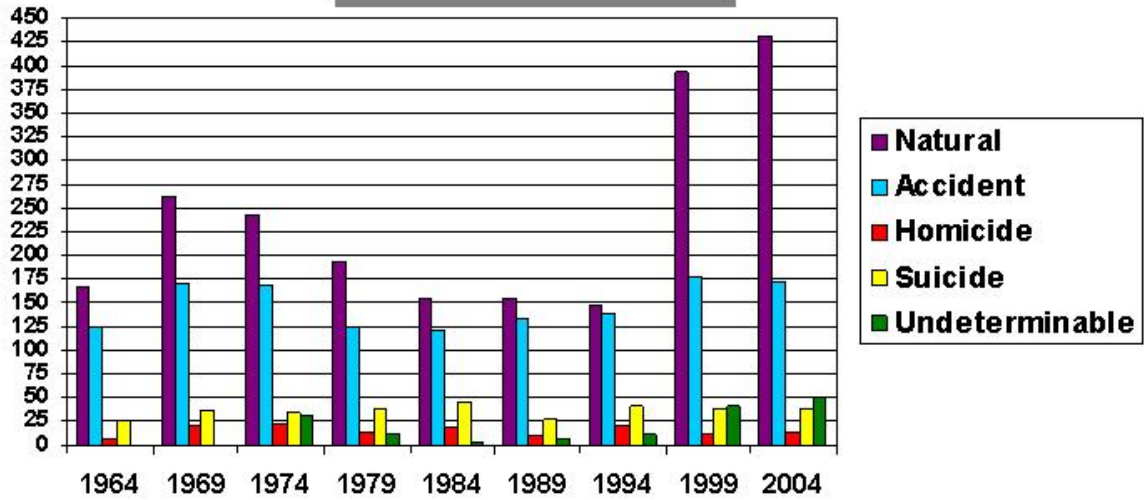


Autopsy Comparison (Table 19)

From previous years, 1998 through 2004

History of Medical Examiner's Office 1964 to 2004

Manner of Death (Table 20)



Type of Injury (Table 21)

