

***Washtenaw County
Medical Examiner
2009 Annual Report***



Office of the Medical Examiner
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Washtenaw County Medical Examiner Staff:

Medical Staff

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

Jeffrey M. Jentzen, M.D., PhD.
Deputy Medical Examiner

Administrative Staff

Diana French
Autopsy & Forensic Services Coordinator

Ann Jackson

Kristin LaMaire

Medical Examiner Investigators 2009

Nick Bailey	Sheila Briggs	Terri Bollinger
Paul Davison	Mark Deming	Mary Derioun
Diana French	Chris Heikka	Keith Johnson
Mary Kohair	Valerie Mitchell	Leslie Patterson
Roger Simpson	Paul Vaughan	

Medical Examiner Office Budget

2009: \$676,000.

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 emergency management and disaster preparedness as well as 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. The adoption of an online reporting system in 2009 enhanced communications between investigators and pathologists and made review of individual investigations readily accessible.

With the completion of the University Hospital morgue renovation in mid-year, we were able to consolidate all body storage and examinations into one location. Later in the year, we moved our offices to the University campus (North Ingalls Building), allowing us to further gather the working components of our death investigation system into one location.

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 decade. 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: Richard Fleece
Director & Public Health Officer of Washtenaw County Health Department**

It is my pleasure to report on the activities of the Washtenaw County Medical Examiner Office for the year 2009. Total case volume decreased slightly from 821 in 2008 to 783 in 2009. Case types remained unchanged.

A major improvement in the administration of the office was the implementation of the MDIlog® online death investigation computer software system. This system allows for real-time reporting of case information from the scene, assisting pathologists with valuable information from the investigation for the completion of death certificates.

In July the \$1.4 million renovation of the University Hospital morgue was completed. Washtenaw County contributed \$150,000 along with a \$93,000 Coverdell Grant to the project. The number of autopsy tables was increased from two to four with the installation of an ergonomically designed system. In addition, a special examination room and enhanced cooler/freezer were installed. Following the renovation, all medical examiner cases were performed at the UM hospital.

In October, the University Of Michigan Department of Pathology formally took responsibility for the investigative and administrative functions of the office. We are continuing the process of centralizing all medical examiner functions onsite on the UM campus. Despite the challenges of current economic environment, the medical examiner's office continues to provide high quality service to the citizens of Washtenaw County.



Renovations to the University of Michigan Autopsy and Forensic Services



A total of four autopsy work stations with mobile tables



Walk-in refrigeration unit



Walk-in freezer unit

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).

2009 Mortality Statistics

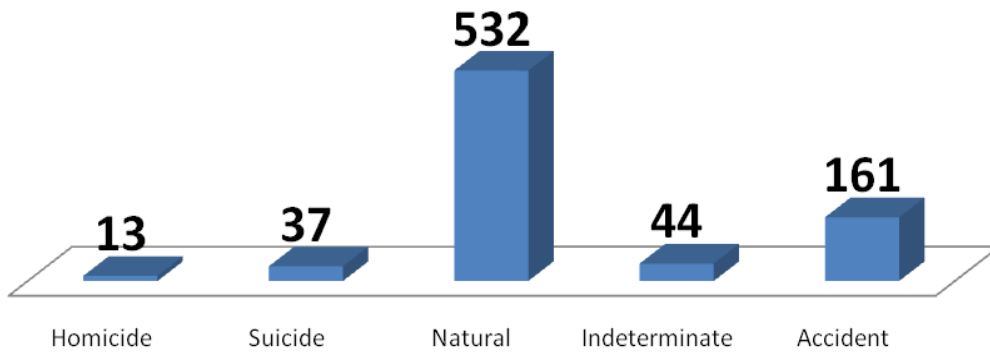
Manner of Death

Manner of death is classified into one of the five categories listed below. Indeterminate deaths are those where there is insufficient information about the circumstances surrounding the death to make a ruling.

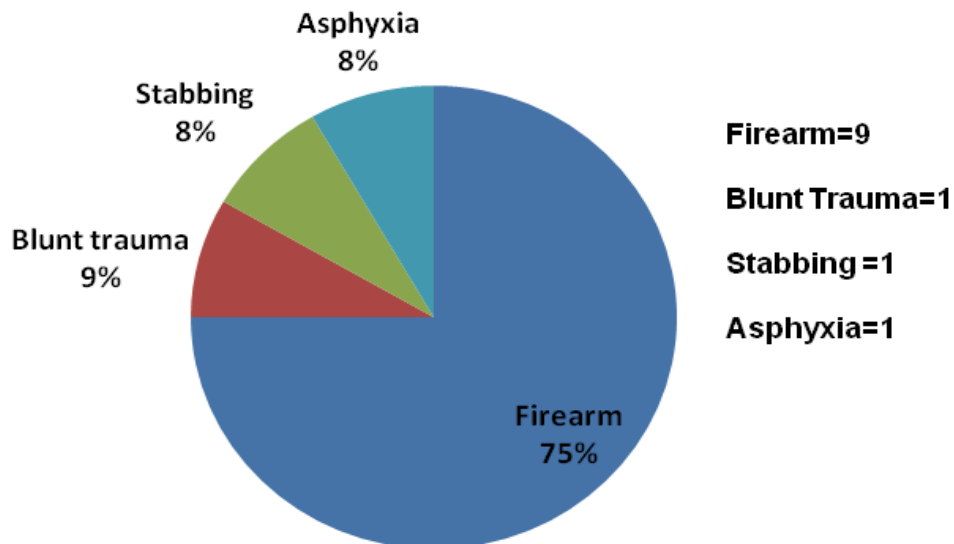
Cause of Death

Any injury or disease that produces an irreversible physiological decline.

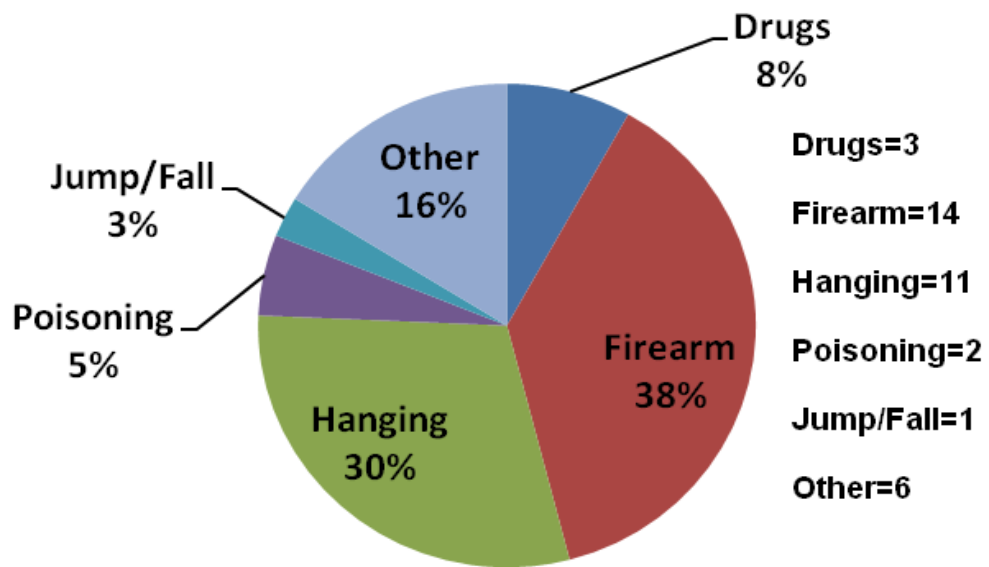
Manner of Death



Homicide Deaths=12



Suicide Deaths=37

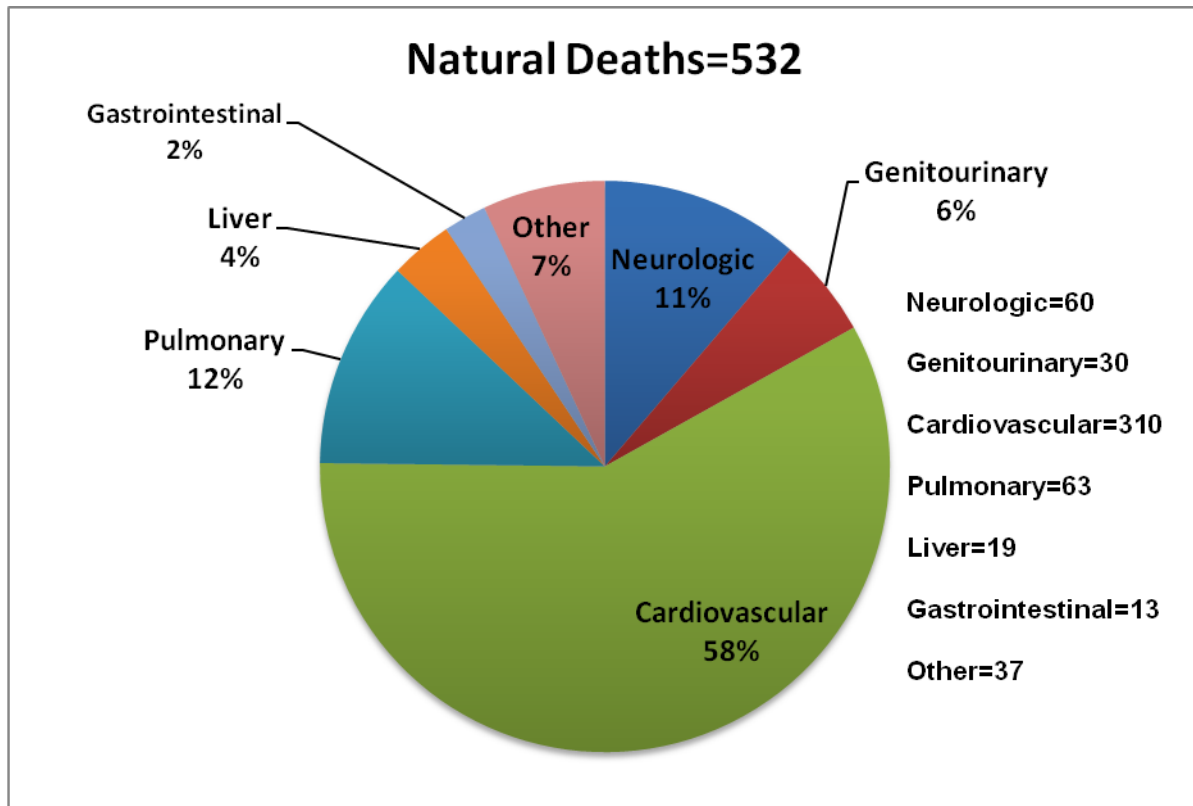


Drugs=3
Firearm=14
Hanging=11
Poisoning=2
Jump/Fall=1
Other=6

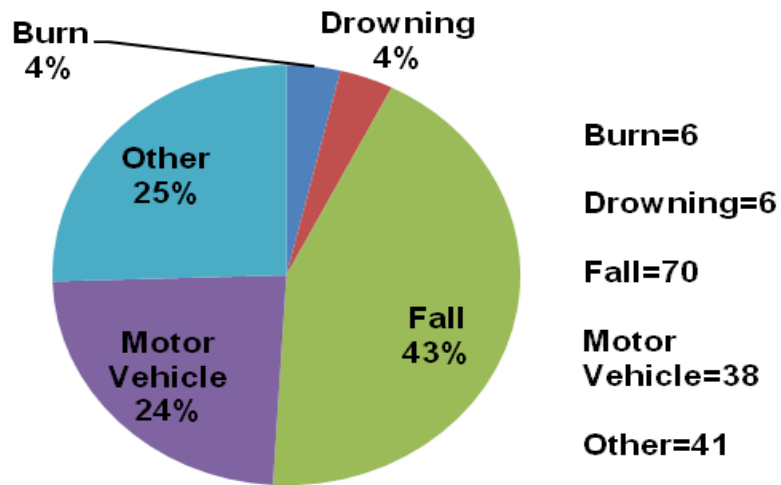
Suicide Methods Used by Age

	< 1	1-5	6-10	11-17	18-25	26-44	45-64	65+
Drugs	0	0	0	0	0	2	1	0
Firearm	0	0	0	0	2	6	4	2
Hanging	0	0	0	1	2	5	3	0
Poisoning	0	0	0	0	1	0	1	0
Jump/Fall	0	0	0	0	0	1	0	0
MVA	0	0	0	0	0	0	0	0
Other	0	0	0	0	1	2	3	0
Total	0	0	0	1	6	16	12	2

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.



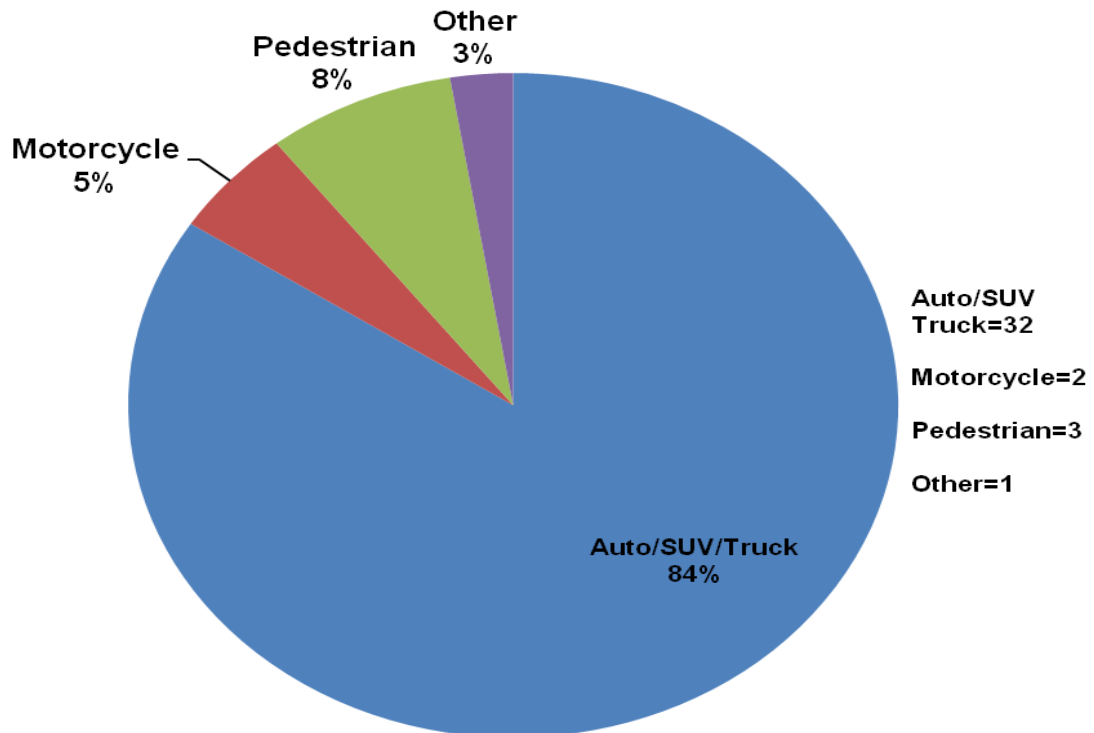
Accident Deaths=161



Cause of Death

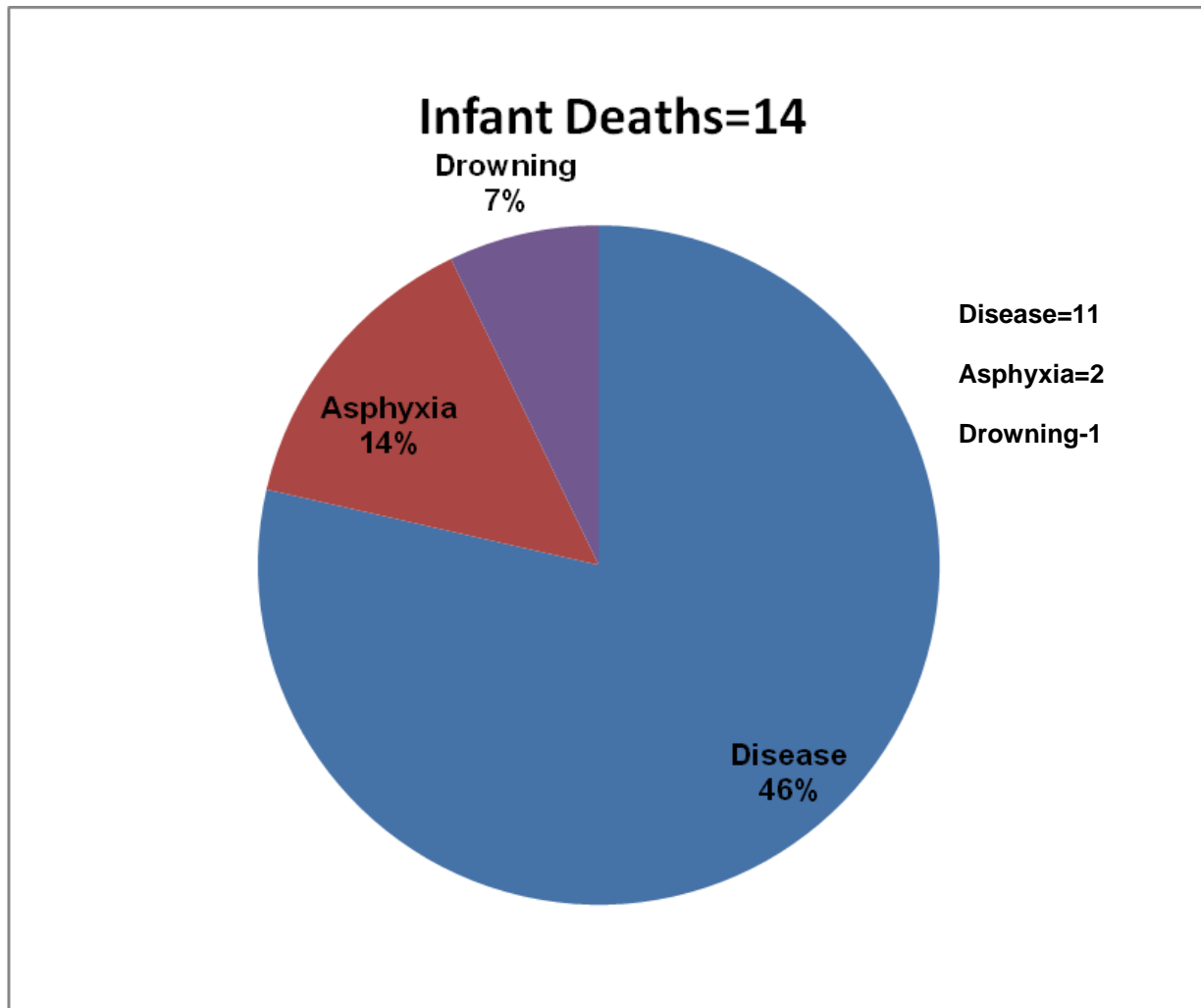
Other=therapeutic, asphyxia, suffocation, blunt trauma, drug overdose, hypothermia

Motor Vehicle Deaths (Accident)=38

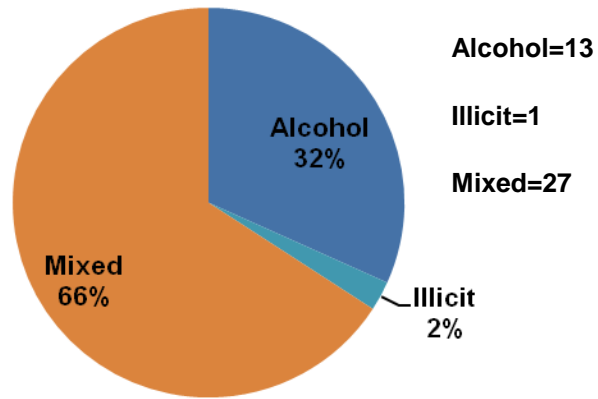


2009 INFANT DEATHS

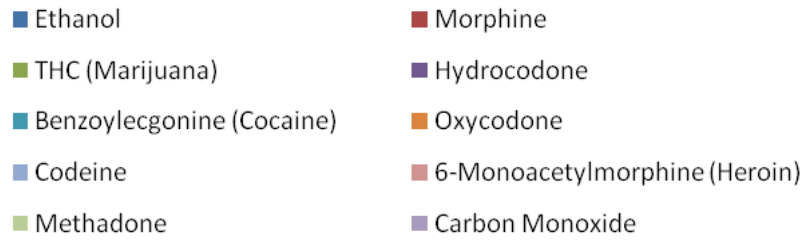
Cause of Death
(2 years of age or less)



Deaths Due to Drugs=41

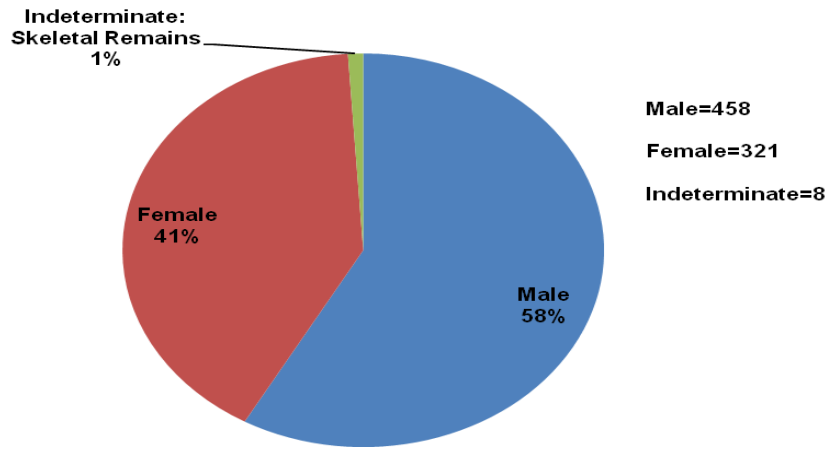


Commonly Detected Drugs

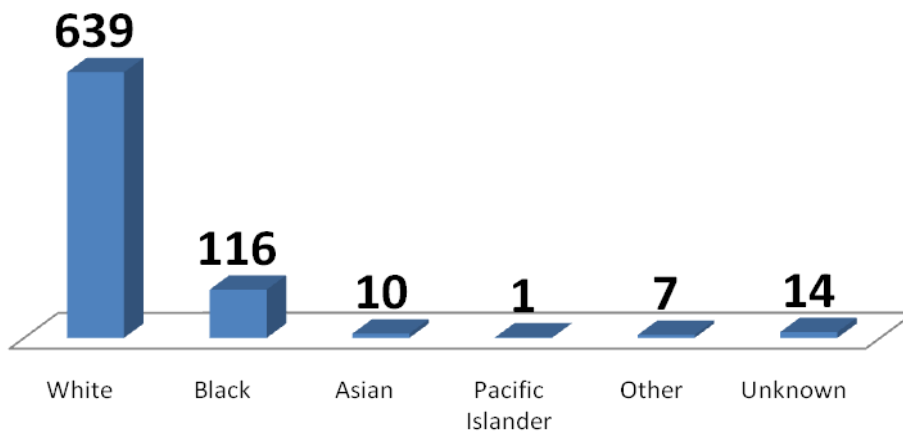


Demographic Statistics:

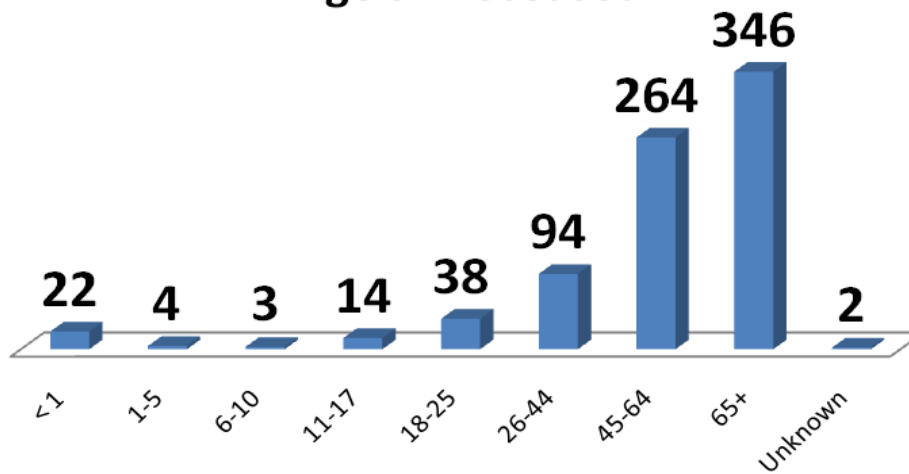
Sex of Deceased



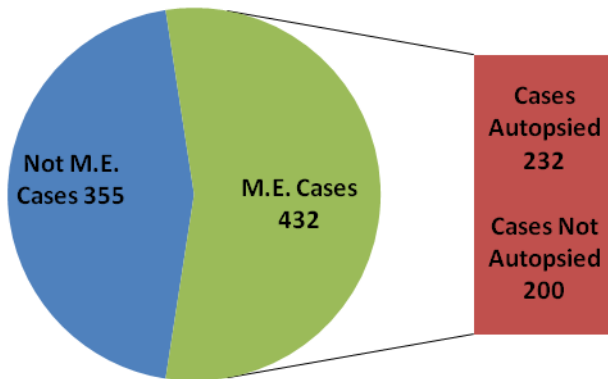
Ethnicity of Deceased



Age of Deceased



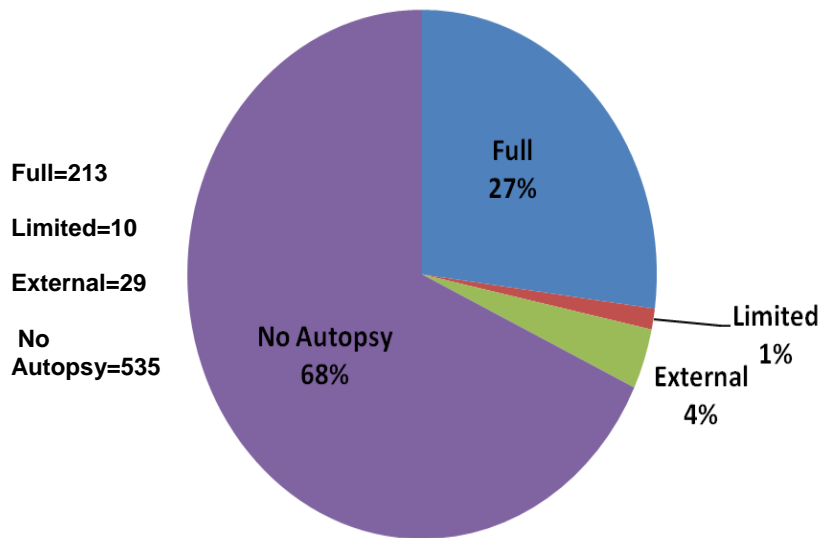
Reported Deaths=787



ME Cases Requiring Autopsies

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

Autopsy Type



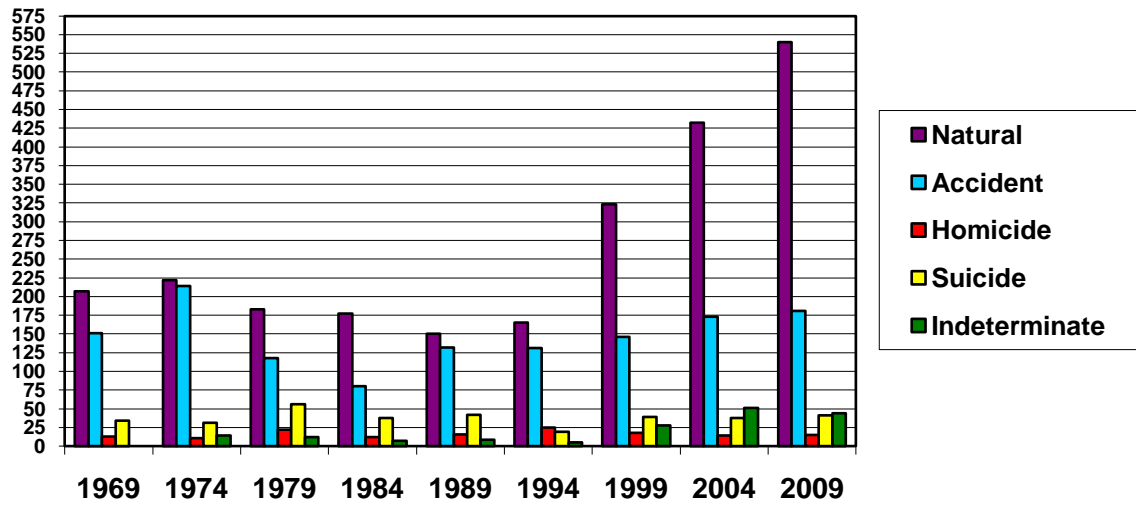
Full = Complete Autopsy

Limited = Restricted Internal Exam

External = Complete Exam of Body Surfaces

History of Medical Examiner's Office 1969 to 2009

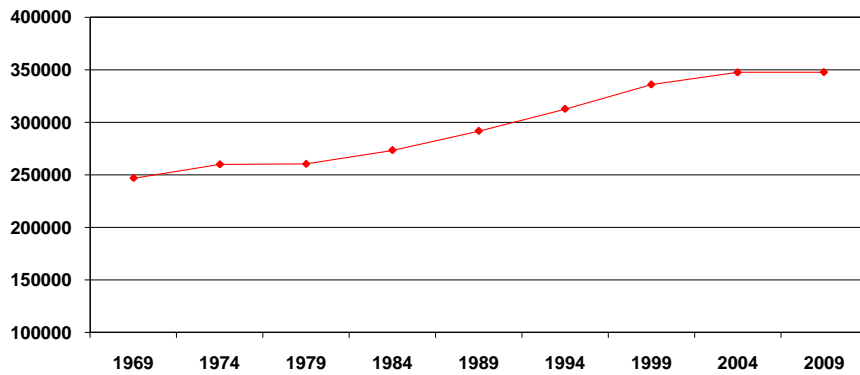
Manner of Death (Table 20)



Washtenaw County Demographics

1969 to 2009

County Population (Table 22) 2009 = 347,563 est.
 *1968 data unavailable



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

