

Kent County Medical Examiner



2004 Annual Report

Office of the Medical Examiner
700 Fuller N.E.
Grand Rapids, Michigan 49503

2004 Kent County Medical Examiner Annual Report

To the Kent County Board of Commissioners,
and to the Citizens of Kent County:

The Medical Examiner staff investigates each accidental, suicidal, homicidal and unexpected natural death. The results of these investigations provide valuable information for the families of the deceased, the criminal justice system, public health personnel and other interested individuals.

In reviewing the deaths for 2004, the annual report shows a steady increase in Hispanic deaths reflecting the increasing proportion of Hispanic people in our community. African Americans and Hispanics are disproportionately reflected in the group of homicide victims. Guns continue to be the weapon of choice in our homicides, followed by knives or other sharp weapons.

Most suicides occur in the 20-44 age range. Deaths by firearm, hanging and overdose, in that order, are the three most common causes of death of our suicides.

In 2004, there was a 17 percent increase in drug deaths in Kent County from 43 in 2003 to 49. Overall, this represents a 66 percent increase since 2001, from 31 to 49. Cocaine deaths decreased from 17 in 2003, to eight in 2004. Heroin and methadone deaths increased in 2004, with heroin deaths doubling from four to eight, and methadone deaths nearly quadrupling from two to seven.

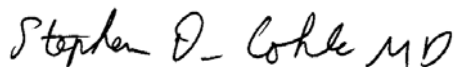
Of accidental deaths, motor vehicle fatalities and falls each accounted for approximately one-third of all deaths. Not surprisingly, the peak ages for accidental deaths were 26-44 years and over 65 years. Most of the accidental deaths in the elderly were from falls.

David A. Start, MD, Forensic Pathologist and Kent County Deputy Chief Medical Examiner, and I continue to participate on the Child Death Review Committee, which reviews deaths of children 17 and under. Accidental deaths were the largest and most significant manner for child deaths. Most of the vehicle deaths were in older children (16-18 years). Of the eight fire deaths, six had non-functional smoke detectors in the home. Of the six suffocations, five occurred in infants, four in cases in which an adult was co-sleeping with the child and another in which a child suffocated into a pillow.

I would like to thank the Kent County Board of Commissioners for their continued support of this program, which enables the Medical Examiner staff to provide this valuable and necessary service for the citizens of Kent County. I would also like to express my deepest gratitude to the staff of the Kent County Medical Examiner program who keep this program running smoothly.

I am pleased to present to you the Kent County Medical Examiner's 2004 Annual Report.

Respectively submitted,



Stephen D. Cohle, MD
Chief Medical Examiner

Office of the Kent County Medical Examiner

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Medical Examiner Personnel

Stephen D. Cohle, MD
 Chief Medical Examiner, Forensic Pathologist

Peter J. Noble
 Medical Examiner Investigator

David A. Start, MD
 Deputy Chief Medical Examiner, Forensic
 Pathologist

Theodore E. Oostendorp
 Medical Examiner Investigator

Jason S. Chatman
 Medical Examiner Investigator

Richard Washburn
 Kent County Conveyance Specialist and
 Scene Investigator

John T. Connolly
 Medical Examiner Investigator

Amy Kjaer
 Medical Examiner Support Staff

Paul R. Davison, F-ABMDI
 Medical Examiner Investigator

Carmen M. Perez
 Medical Examiner Support Staff and
 Child Death Review Coordinator

Cynthia L. Debiak, RN
 Medical Examiner Investigator

Board Certification

The American Board of Medicolegal Death Investigators (ABMDI) sets quality and process standards for death investigators. Medical examiners who pass the certification requirements of the ABMDI are designated as registered Diplomats (D-ABMDI). Medical examiners with continued time in investigation and who pass required tests are designated as certified Fellows (F-ABMDI).

Medical Examiner Program Expenditures, 2003 and 2004

	2003		2004	
	Amount	Percentage	Amount	Percentage
Medical examiner (compensation)	\$130,209	11.4%	\$147,609	13.0%
Autopsies	811,679	71.2%	774,289	68.3%
Cadaver transportation	75,271	6.6%	74,780	6.6%
Support services	37,534	3.3%	51,876	4.6%
Administration	85,000	7.5%	85,000	7.5%
Total	\$1,139,693	100.0%	\$1,133,554	100.0%
Average cost per case investigated		\$1,083		\$1,107

Medical Examiner Reportable Deaths and Autopsy

The Michigan County Medical Examiners Law, P.A. 181 of 1953, as amended, and the Michigan Public Health Code, P.A. 368 of 1978, as amended, mandates that specific types of deaths (listed below, left) be referred to the medical examiner for investigation. Medical examiner investigation of a death may also be ordered by the county's prosecuting attorney, the Michigan Attorney General or, upon the filing of a petition, signed by six (6) electors of a county. Not all deaths referred to the medical examiner for investigation necessarily result in an autopsy; however, an autopsy is generally ordered in certain circumstances (listed below, right), to determine more accurately the cause and manner of death.

Types of Deaths Reportable to the Medical Examiner, P.A. 368 of 1978

1. Sudden deaths and unexpected deaths (all deaths occurring in operating room, in recovery room, anesthesia related, natural death but not expected, occupational related deaths, subdural hematoma, intracerebral hemorrhage, etc.)*
2. Accidental deaths (motor vehicle, burns, drowning, falls, broken bones, drug overdose, drug toxicity, subdural hematoma, recent or past trauma, etc.)
3. Violent deaths (homicide, gunshot, stabbing, suicide, subdural hematoma, etc.)*
4. Suspicious circumstances surrounding a death.*
5. Deaths occurring as a result of an abortion.
6. Upon written order of the prosecuting attorney or the attorney general or upon the filing of a petition signed by six (6) electors of a county.
7. Death of a prisoner in any county or city jail who dies while so imprisoned.
8. If a fetal death occurs without medical attendance at or after the delivery.

In terms of a physician attendance: for the purposes of the medical examiner program, we consider that an investigation is required when:

- A. The deceased was last seen by a physician more than **ten (10) days before his or her death, if the cause of death appears to be other than the illness or condition for which the deceased was being treated.
- B. The attending physician cannot accurately determine the cause of death.
- C. When the deceased has not received any medical attention during the ***48 hours prior to the hour of death unless the attending physician, if any, is able to accurately determine the cause of death.

* All trauma related deaths no matter when the trauma occurred.

** The ten (10) day requirement relates solely to physician attendance.

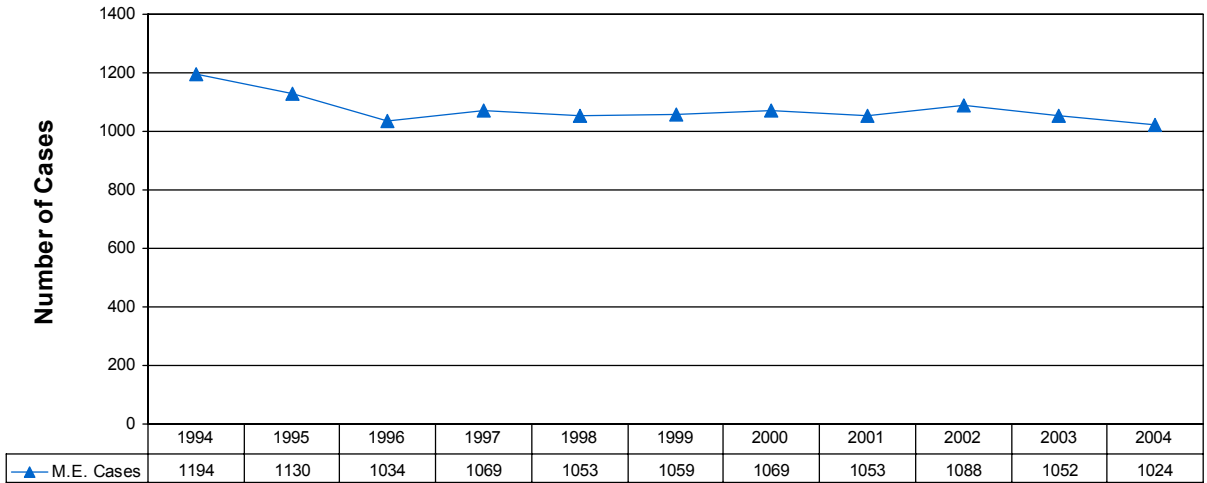
*** The 48 hour requirement triggers an investigation when there has been no medical attendance of any kind (i.e., nursing care, etc.)

Types of Medical Examiner Cases for which Autopsy is Generally Ordered

1. Sudden deaths and unexpected deaths only when in the medical examiner's judgment, sufficient medical history is not available to determine cause and manner of death.
2. Accidental deaths such as motor vehicle, burns, drowning, etc. If an individual has been hospitalized for a length of time, it is the medical examiner's decision to order an autopsy.
3. Violent deaths such as homicide, suicide, gunshot, stabbing, etc.
4. Suspicious circumstances surrounding death, including unidentified bodies.
5. Death related to an abortion.
6. Sudden infant deaths (SIDS) and deaths of children 17 and under without significant medical history.
7. Death of a prisoner imprisoned at any county or city jail.
8. In a fetal death occurring without medical attendance at or after delivery.
9. An autopsy may be ordered at the discretion of the medical examiner if the cause of death appears to be other than the illness or condition for which the deceased was being treated, or if the attending physician cannot accurately determine the cause of death.
10. Anesthesia-related and unexpected deaths of patient in health care institutions.

2004 Medical Examiner Caseload

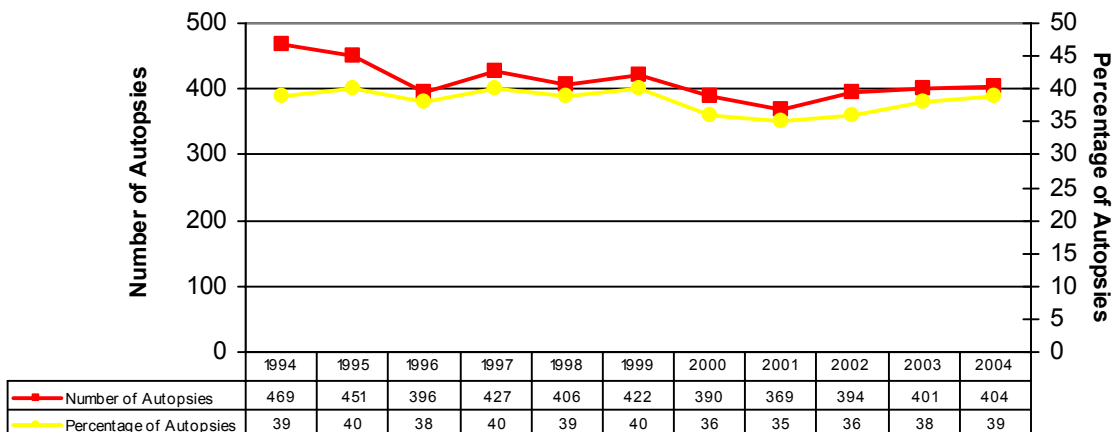
Kent County Medical Examiner Cases, 1994-2004



Total Medical Examiner Cases in 2004: 1356

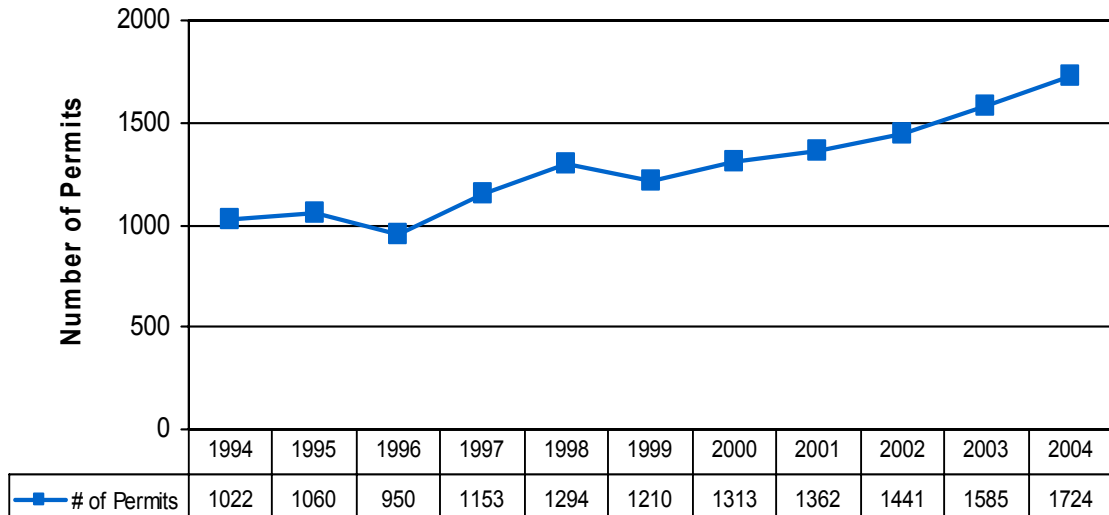
Accepted	1024	75.52%
Declined	332	24.48%

Medical Examiner Cases with Autopsies, 1994-2004



2004 Medical Examiner Caseload

Cremation Permits Issued, 1994-2004



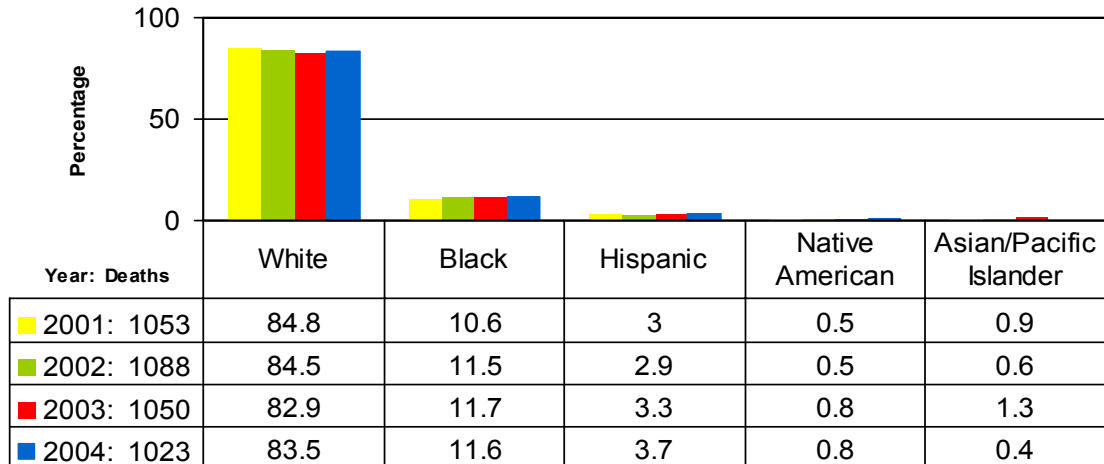
Medical Examiner Caseload by Month, 2002-2004



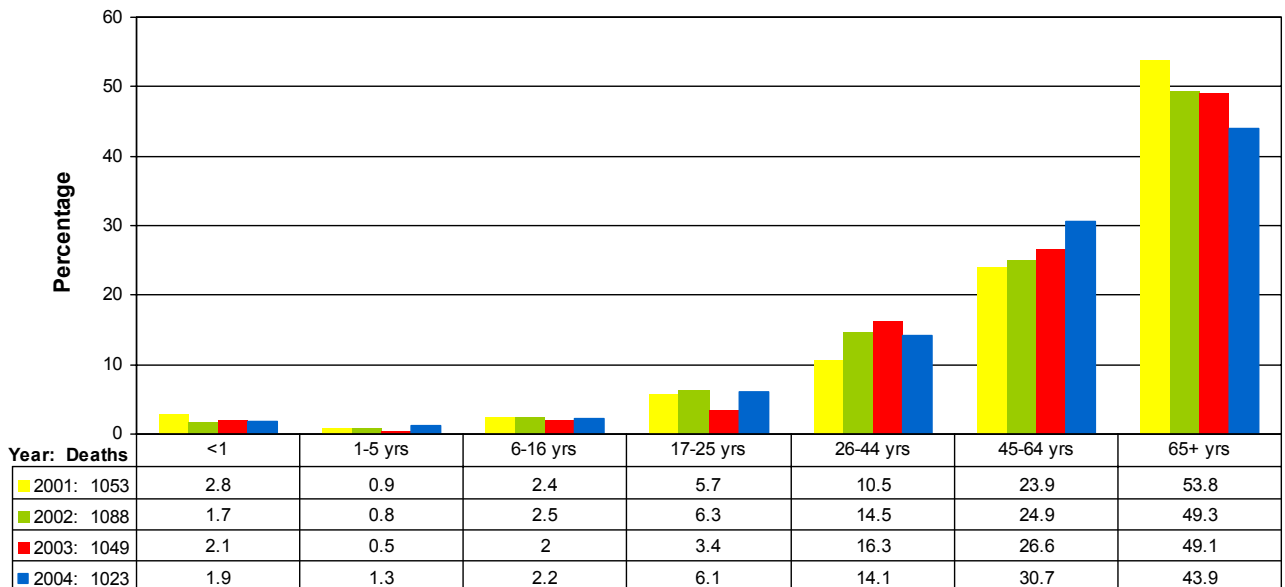
Demographics of Medical Examiner Cases

*Out of the 1024 medical examiner cases for 2004, 1 case was of animal bones. This case is not included in any of the following data for the 2004 annual report.

Medical Examiner Cases by Race/Ethnicity, 2001-2004



Medical Examiner Cases by Age at Death, 2001-2004

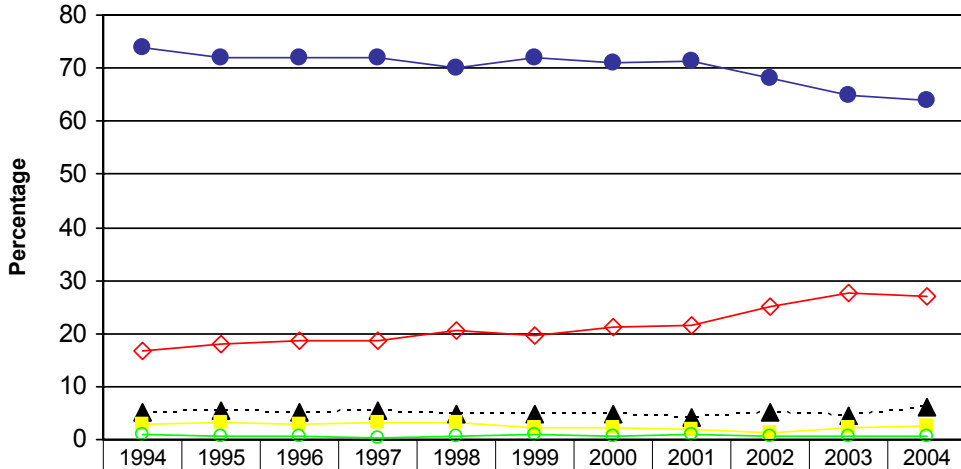


Medical Examiner Cases by Sex, 2001-2004

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
Female	39.4%	39.4%	39.5%	38.5% (394 cases)
Male	60.6%	60.6%	60.5%	61.5% (629 cases)

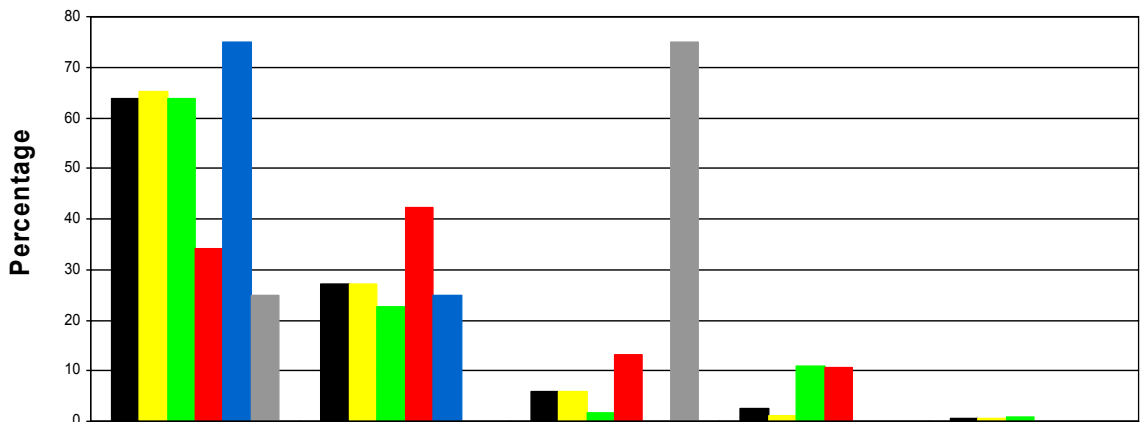
Manner of Death

Medical Examiner Cases by Manner of Death, 1994-2004



● Natural	74	72	72	72	70	72	71.1	71.4	68	65	63.8
◇ Accident	16.6	18.1	18.6	18.6	20.6	19.7	21.1	21.6	25	27.6	27.1
▲ Suicide	5	5.4	5.3	5.6	4.7	4.7	4.8	4.3	5.2	4.6	6
■ Homicide	3	3.3	3	3.3	3.3	2.1	2.2	1.8	1.2	2.1	2.5
○ Undetermined	1.1	0.8	0.8	0.4	0.8	1	0.8	0.9	0.6	0.7	0.6

Manner of Death by Race/Ethnicity, 2004



■ All cases, total: 1023	63.8	27.1	6	2.5	0.6
■ White: 854	65.2	27.2	6	1.1	0.6
■ Black: 119	63.9	22.7	1.7	10.9	0.8
■ Hispanic: 38	34.2	42.1	13.2	10.5	0
■ Native American: 8	75	25	0	0	0
■ Asian/Pacific Islander: 4	25	0	75	0	0

Manner of Death

Kent County Homicides, 2001-2004

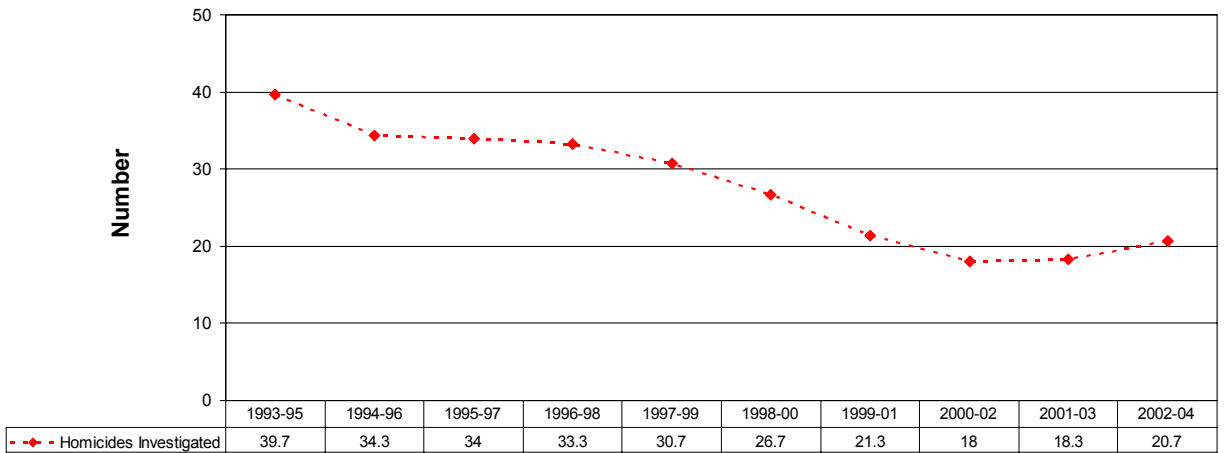
Year	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
	19	13	23	26

Homicides by Gender, 2004

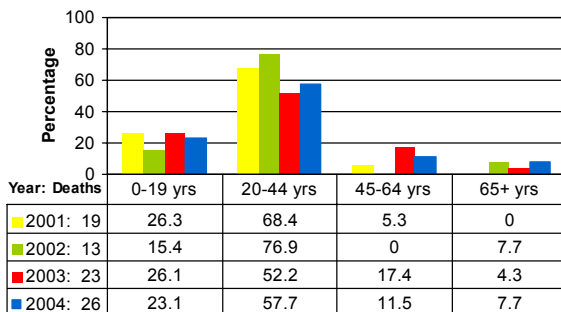
Female 8

Male 18

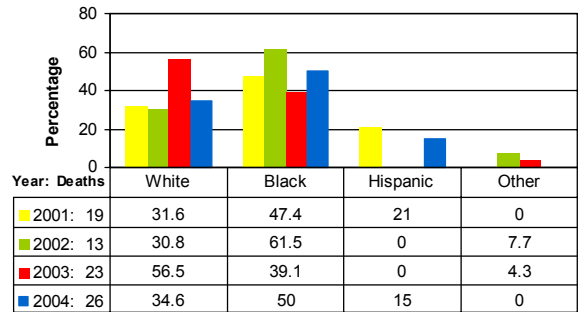
Kent County Homicides, Three-Year Moving Averages, 1993-2004



Homicides by Age, 2001-2004

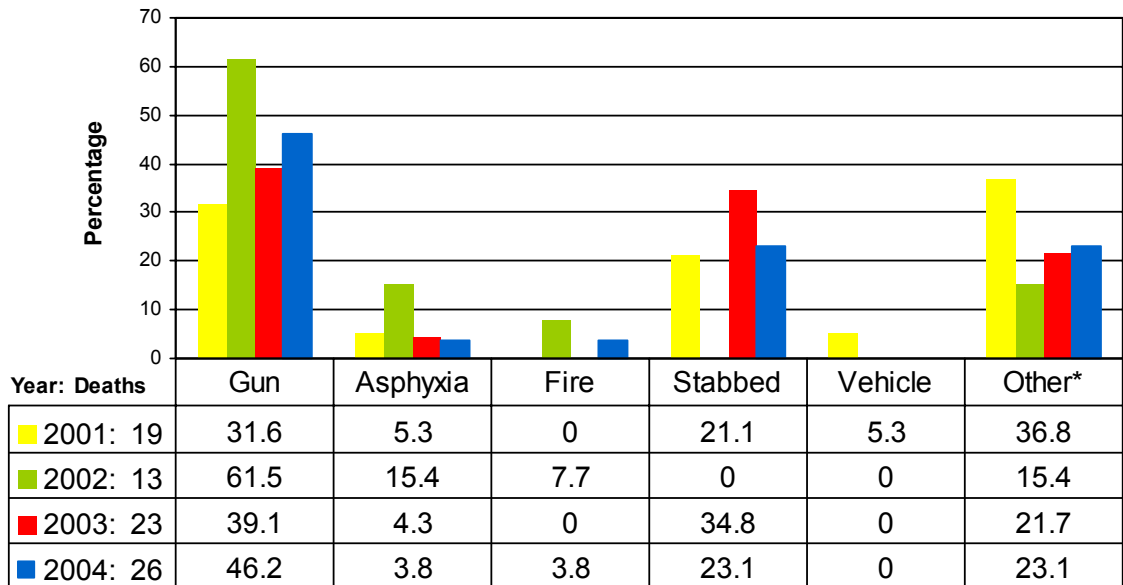


Homicides by Race, 2001-2004



Manner of Death

Homicide Cases by Method Used, 2001-2004



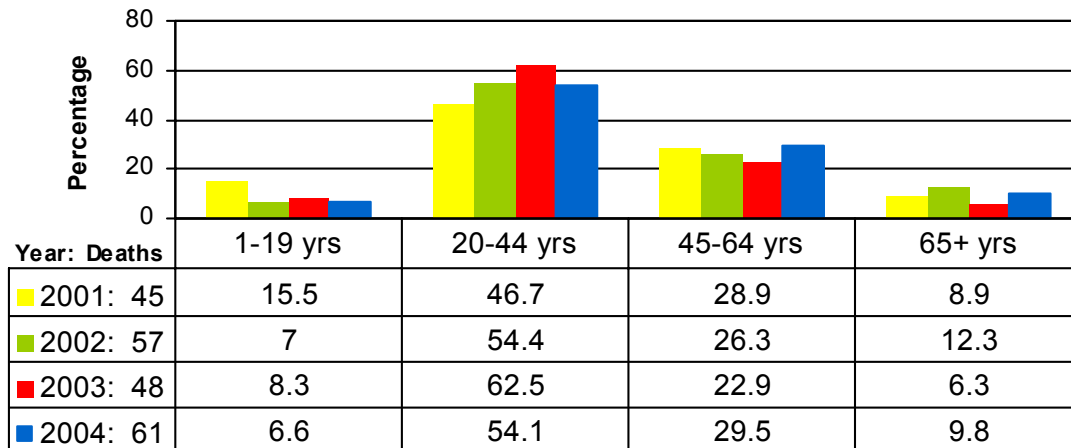
*Other is compiled of the following for 2004: physical neglect 1 (16.7%); physical abuse 1 (16.7%); assaults 4 (66.7%).

Gun Homicides by Age, 2001-2004

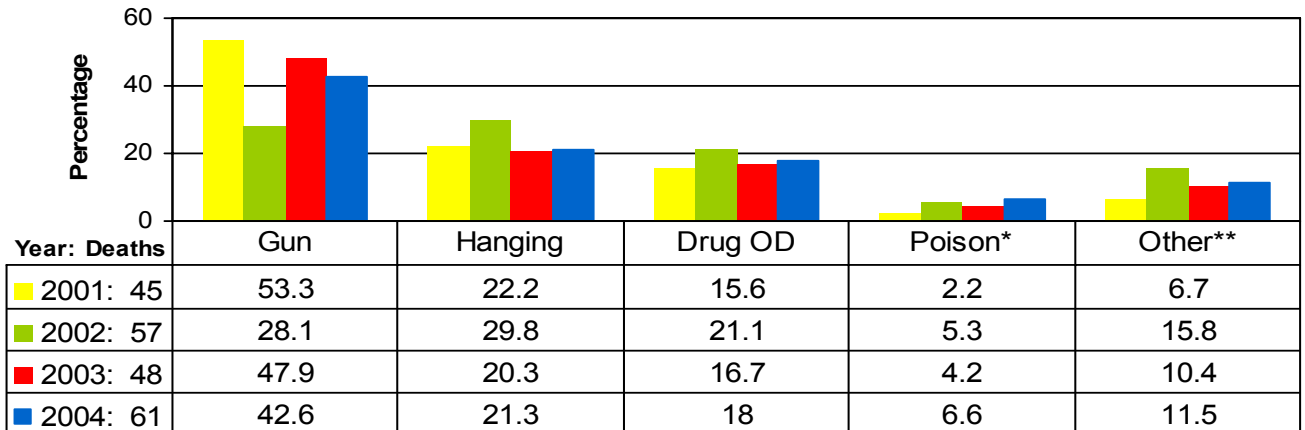
Year: Deaths	AGE			
	0-19 yrs	20-29yrs	30-39yrs	40+ yrs
2001: 6	1	3	1	1
2002: 8	1	4	1	2
2003: 9	2	4	1	2
2004: 12	2	5	3	2

Manner of Death

Suicide Cases by Age, 2001-2004



Suicide Cases by Method Used, 2001-2004



*Poison includes carbon monoxide poisoning and other chemical poisoning.

**Other includes the following for 2004: asphyxia by suffocation 2 (28.6%); drowning 1 (14.3%); fire 1 (14.3%); vehicle 2 (28.6%); indeterminate 1 (14.3%).

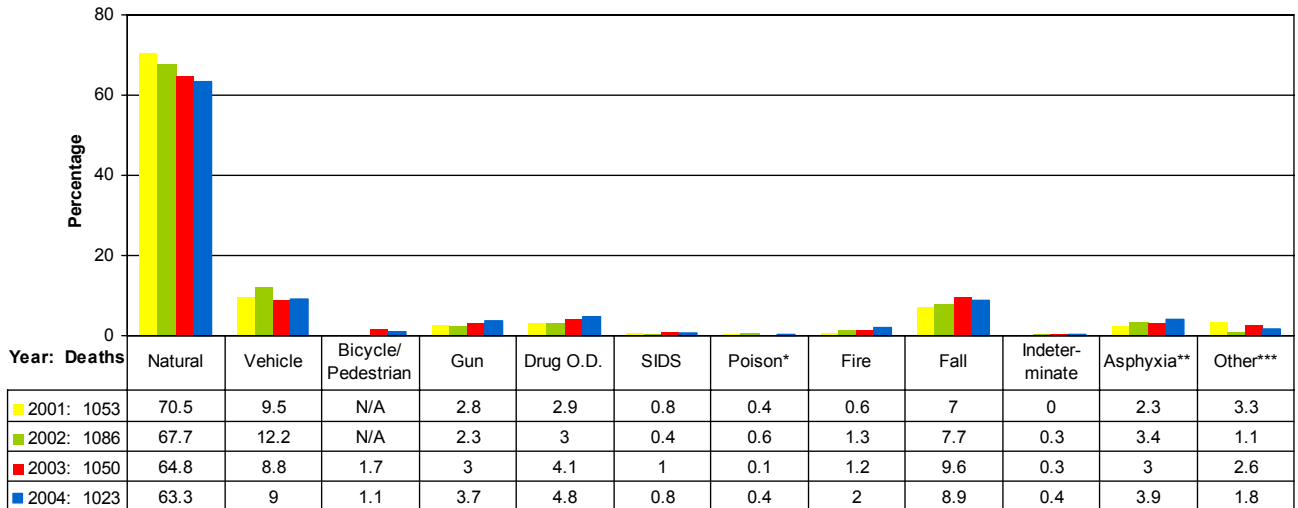
There was a total of 61 suicide deaths for 2004. Females accounted for 17 (27.9%) deaths, while males accounted for 44 (72.1%).

Suicide Cases by Race, 2001-2004

	<u>White</u>	<u>Black</u>	<u>Hispanic</u>	<u>Native American</u>	<u>Asian</u>
2001: 45	86.7%	6.7%	4.4%	0%	2.2%
2002: 57	80.7%	10.5%	8.8%	0%	0%
2003: 48	85.4%	10.4%	0%	2.1%	2.1%
2004: 61	83.6%	3.3%	8.2%	0%	4.9%

Cause of Death

Medical Examiner Cases by Cause of Death, 2001-2004

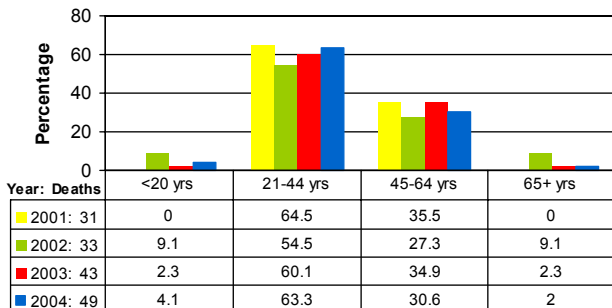


*Poison includes carbon monoxide poisoning and other chemical poisoning.

**Asphyxia includes deaths from choking, drowning, hanging, strangulation, suffocation and traumatic occurrences.

***Other is compiled of deaths from hypothermia, medical complications, physical abuse, assaults and stabbings.

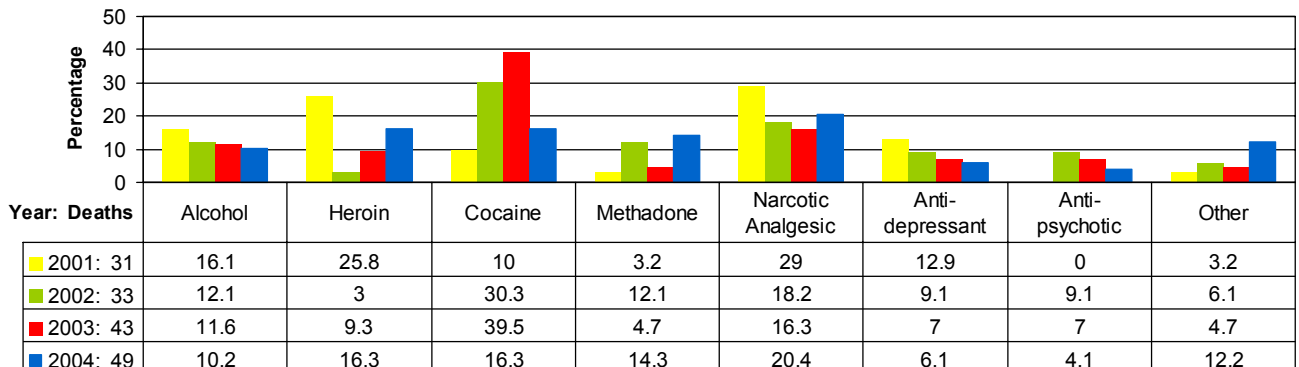
Drug Deaths by Age, 2001-2004



Drug Deaths by Gender, 2004

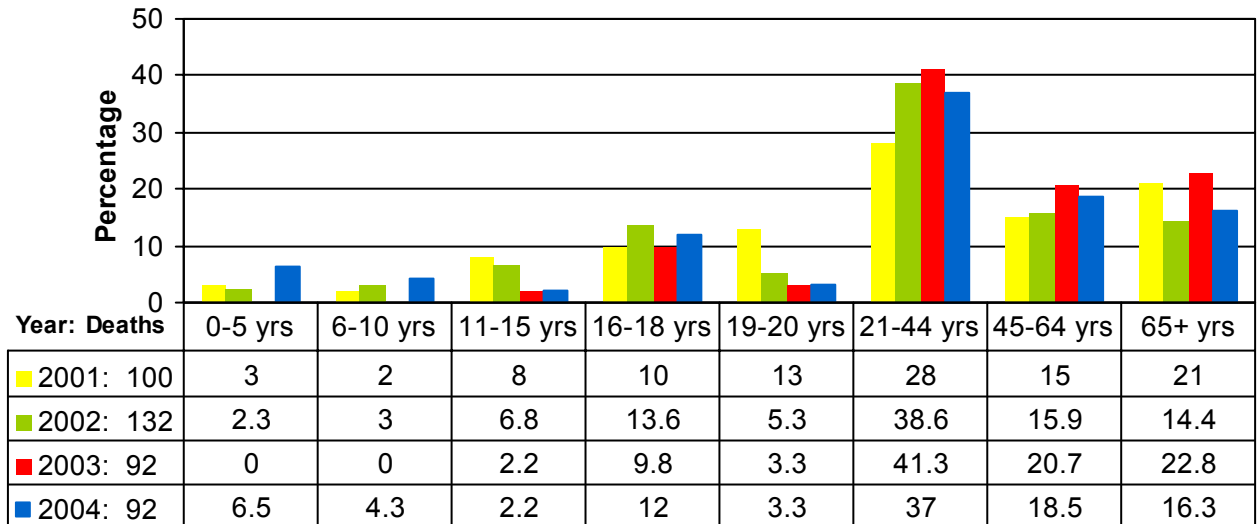
	Female (23)	Male (26)
Accident	15	23
Suicide	8	3

Drug Deaths by Drug of First Mention (on Toxicology Report), 2001-2004



Cause of Death

Vehicular Deaths by Age, 2001-2004



Of the 92 vehicle deaths for 2004, 90 were listed as accidents and 2 were listed as suicides.

Vehicular Deaths by Gender, 2001-2004

	<u>Female</u>	<u>Male</u>
2001: 100	40.0% (40)	60.0% (60)
2002: 132	31.1% (41)	68.9% (91)
2003: 92	42.4% (39)	57.6% (53)
2004: 92	34.8% (32)	65.2% (60)

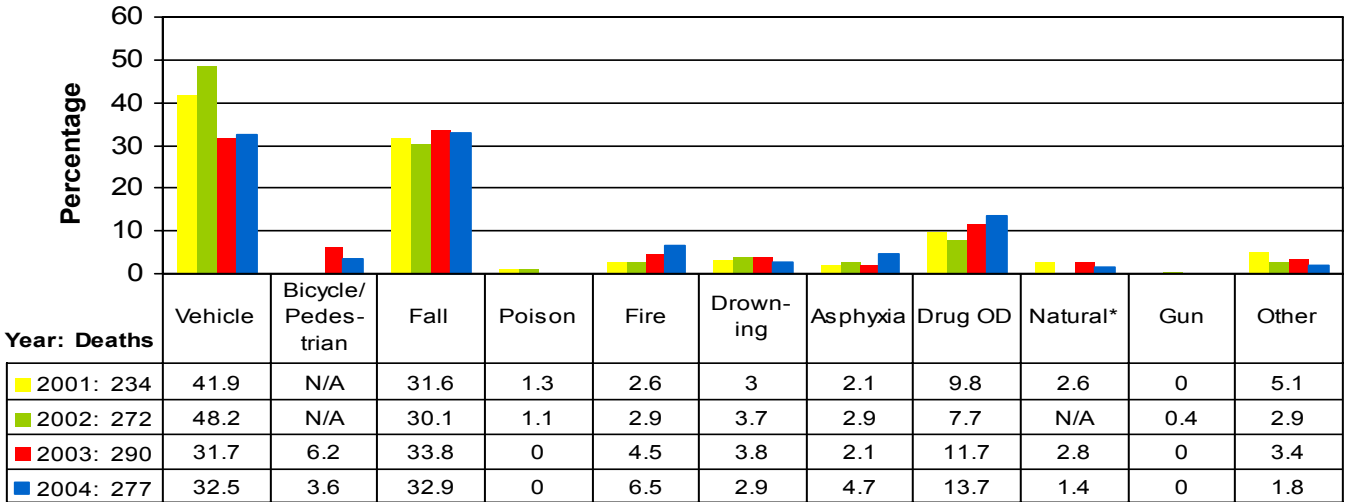
Bicycle/Pedestrian Deaths by Age, 2003-2004

	<u><20 yrs</u>	<u>21-44 yrs</u>	<u>45-64 yrs</u>	<u>65+ yrs</u>
2003: 18	4	8	3	3
2004: 11	2	5	2	2

Of the 11 bicycle/pedestrian deaths for 2004, 10 were listed as accidents and 1 as indeterminate.

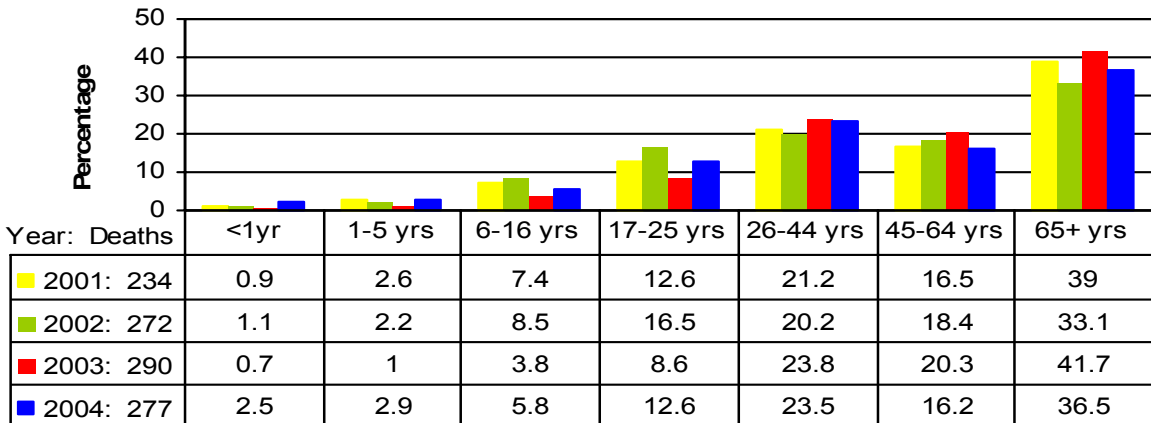
Cause of Death

Accidental Deaths by Cause, 2001-2004

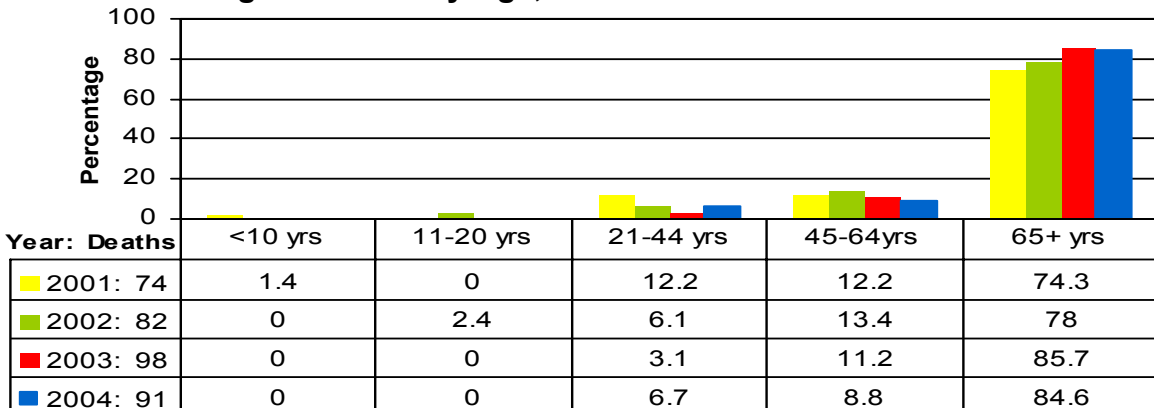


*A natural cause of death can have a contributing factor that determines the death to be accidental. There were 4 deaths that fell into this category, 3 from drug toxicity and 1 from rib fractures.

Accidental Deaths by Age, 2001-2004



Deaths Resulting from Falls by Age, 2001-2004



2004 Child Death Review Meetings

There were 43 child death cases reviewed in 2004. Of these 43 cases, 13 cases were deaths from 2003 and 30 cases were deaths from 2004.

Natural Deaths - 16

- SIDS - 8
 - Hispanic - 2
 - White - 6
- Other - 8
 - Cardiomegaly due to hypoplastic left lung
 - Histiocytoid cardiomyopathy
 - Hydranencephaly
 - Idiopathic seizure disorder
 - Myocardial infarctions
 - Prematurity
 - Spastic quadriplegic cerebral palsy
 - Viral myocarditis

Accidental Deaths – 24

- Vehicular Accidents - 8
 - Driver – 1 (Seatbelt not worn)
 - Passenger – 3 (Seatbelt worn – 2; Seatbelt not worn – 1)
 - Pedestrian – 3 (Rollerblading – no helmet, walking, playing in yard)
 - Bicyclist – 1 (No helmet)
- Drowning – 2
 - Pool – 1
 - Lake – 1
- Fire – 8
 - Smoke detector – Yes
 - Non-functional (6 fatalities)
 - Functional (2 fatalities)
- Suffocations – 6
 - Co-sleeping – 4
 - Pillow – 1
 - Sand - 1

Suicides - 1

- Gun

Homicides – 1

- Suffocation
 - Hispanic – 1

Undetermined - 1

Child Death Cases Reviewed by Year

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
Natural	19	16	13	16
Vehicular Accidents	10	20	4	8
Accidental	0	7	4	16
Suicides	3	1	3	1
Homicides	1	1	3	1
Undetermined	2	2	2	1
Total Cases	35	47	29	43

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