King County Medical Examiner's Office Annual Report 2012

KING COUNTY MEDICAL EXAMINER
KCME

Public Health
Seattle & King County

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2012 Annual Report

DEDICATION

We recognize that each case in this report represents the death of a person whose absence is grieved by friends and relatives. These deaths also represent a loss to our community. As those responsible for investigating these deaths, we dedicate this report to the memory of those lost and to those who have suffered the loss of a friend or relative.

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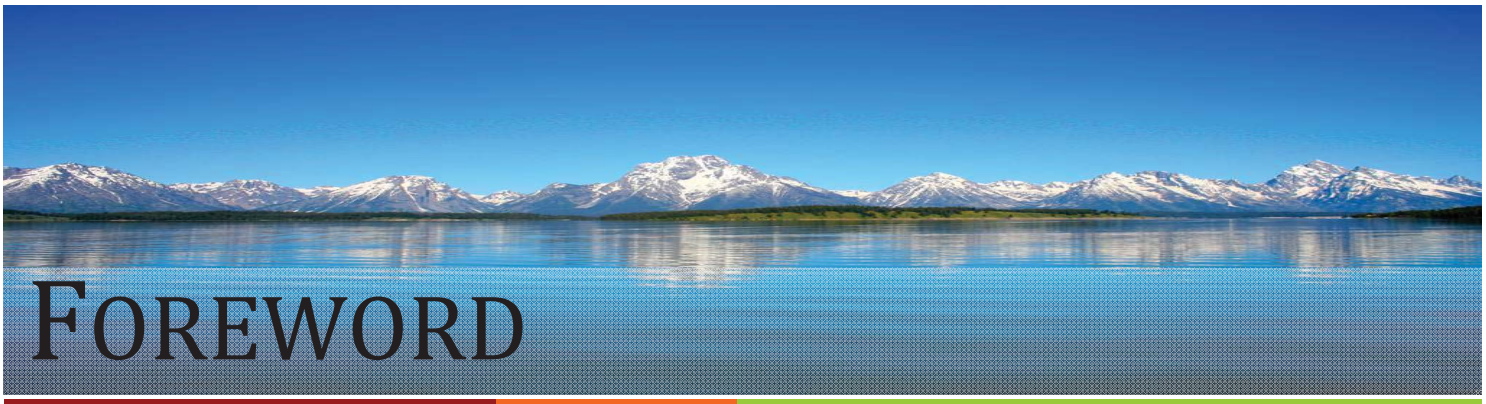


FOREWORD

The King County Medical Examiner's Office serves the community by investigating sudden, unexpected, violent, suspicious, and unnatural deaths. Medical Examiner staff recognize the tragedy surrounding an untimely death and perform investigations, in part, to assist the grieving family. A complete investigation provides for the quick settling of estates and insurance claims, as well as for implementing civil and criminal actions. Questions that seem irrelevant in the initial hours after death can become significant in the following months. The surviving family, friends, and general public can have the assurance that the Medical Examiner conducted a comprehensive investigation.

When a death occurs on the job or is work-related, the King County Medical Examiner's Office immediately forwards the results of its investigation to the Washington State Department of Labor and Industries so that the family can gain the full benefit of the findings. Private insurance companies also routinely use the findings to settle claims. Whenever a consumer product is implicated in a death, the King County Medical Examiner's Office notifies the Consumer Product Safety Commission to ensure that the product is studied and the necessary steps are taken to protect the public.

The public health role of the Medical Examiner is to isolate and identify the causes of sudden, unexpected death that might affect more than one person. When an infectious agent or toxin is implicated in a death, the Medical Examiner's Office notifies the family and contacts of the deceased so they may receive any needed medical treatment. Trends in injury and violence are monitored. In this era of concern about emergency response and bioterrorism, the Medical Examiner provides an important level of preparedness and surveillance.

Civil or criminal judicial proceedings frequently require the medical investigation of violent death. Thus, the King County Medical Examiner's Office conducts a prompt medical investigation to provide the criminal justice system with medical information and evidence required for adjudication. Although criminal death investigations constitute a small portion of deaths investigated by the Medical Examiner, these deaths are studied in great detail because of the issues and legal consequences involved. The King County Medical Examiner's Office provides the criminal justice system the best support that medical science can provide.

In summary, the King County Medical Examiner's Office provides expert medical evaluation and extensive services related to the investigation of deaths that are of concern to the health, safety, and welfare of the community.

EXECUTIVE SUMMARY

The Medical Examiner's Office 2012 Annual Report reflects the activities in investigating jurisdictional deaths in King County. The mission of the King County Medical Examiner's Office (KCMEO) is to investigate sudden, unexpected and unnatural deaths in King County with the highest level of professionalism, compassion and efficiency, and to provide a resource for improving the health and safety of the community.

This annual report presents detailed analyses of the different manners of deaths, as well as trends in homicides, traffic fatalities, and drug overdose deaths. While the report tends to depict the more violent types of deaths, it is worth noting that nearly 42% of Medical Examiner cases were classified as natural deaths.

A few selected findings are highlighted below:

- In 2012, there were an estimated 13,594 deaths in King County. Of those deaths, 10,869 (80%) were reported to the Medical Examiner's Office. Deaths occurring in a hospital setting from a known natural disease process are not required to be reported to the Medical Examiner's Office. The Medical Examiner's Office assumed jurisdiction over 2,170 deaths; the number of applicable cases used in this report is 2,104 deaths once non-human remains and contract anthropology cases for other jurisdictions are removed.

- The Medical Examiner's Office performed autopsies in 62% of those jurisdictional deaths (1,298/2,104). In 2012, those jurisdictional deaths included: 69 homicides, 281 suicides, 131 traffic deaths, 670 accidental deaths, 873 natural deaths and 80 deaths due to undetermined causes.

- Of the 16 natural deaths of children and youth investigated by the Medical Examiner, 44% (7/16) were of infants less than one year of age. Of those 7 infants who died of natural causes, 4 were due to Sudden Infant Death Syndrome (SIDS). In addition, 10 infant deaths were classified as "Sudden Unexplained Infant Death" (SUID), manner undetermined, due to the inability to exclude external factors that might have contributed to the death.

- Several factors appear repeatedly in unnatural deaths. Of all traffic fatalities in which tests were performed, 33% tested positive for the presence of alcohol in the blood. Firearms were the most frequent instrument of death in homicides (68%) and suicides (42%).

- Males comprised 71% (49/69) and women 29% (20/69) of the homicide victims in 2012. The majority of victims, 62% (43/69), were between the age 20 and 49. The number of homicide victims 19 years old and under increased slightly. In 2012 they accounted for 16% (11/69) of the homicide victims, compared to 2011 when this younger age group represented 15% (8/54) of all homicide victims. 99% (68/69) of the victims were tested for

the presence of alcohol. Of those tested 41% (28/68) showed alcohol present at the time of death.

- In 2012, there were 47 firearm homicide victims, 15% (7/47) were 19 years old and younger - an increase from 2011 when 14% of firearm homicide victims were 19 years old and younger. In 2012, there was a disproportionate number of firearm homicide victims that were African American (40%, 19/47) when compared to the percentage of African Americans in King County's population (6.3%) (see discussions on pages 8 and 44.) Of the 19 African American firearm homicide victims, 42% (8/19) were males 29 years old and younger. In comparison, 45% (22/49) of the homicide firearm victims were White. Of the 22 White firearm homicide victims, 23% (5/22) were males 29 years old and younger.

- For King County in 2012, drugs and poisons caused 298 deaths, approximately 14% of all deaths investigated (298/2,104). The total number of drug-caused deaths increased compared to 2011 when there were 268 drug deaths. In 2012, deaths due to drugs and poisons comprised 32% (298/931) of all suicidal, accidental and undetermined deaths combined.

- In 2012 the King County Medical Examiner's Office maintained accreditation by the National Association of Medical Examiners. This is the national professional organization of physician medical examiners, medicolegal death investigators and death investigation system administrators who perform the official duties of the medicolegal investigation of deaths in the United States.

Description and purpose

In 1969, the King County Home Rule Charter abolished the King County Office of the Coroner, which was replaced with the King County Medical Examiner's Office. The Medical Examiner's Office is a part of the Prevention Division of Public Health – Seattle & King County. The King County Medical Examiner's Office is funded by King County and operates under the direction of the King County Executive.

The Chief Medical Examiner is a physician trained and certified in forensic pathology - the branch of medicine devoted to the scientific investigation of sudden, unexpected, violent, suspicious, or unnatural deaths. There are four sections under the Chief Medical Examiner's direction: Forensic Pathology, Scene Investigation, Autopsy Support and Administrative Support. The duties of these four sections include the performance of autopsies, certification of death, field investigation of scene and circumstances of death, identification of the deceased, notification of next-of-kin, and control and disposition of the deceased's personal property.

Deaths that come under the jurisdiction of the Medical Examiner are defined by state statute (RCW 68.50) and include, but are not limited to, the following circumstances:

1. *Persons who die suddenly when in apparent good health and without medical attendance within 36 hours preceding death.* This category is reserved for the following situations: (1) Sudden death of an individual with no known natural cause for the death. (2) Death during an acute or unexplained rapidly fatal illness, for which a reasonable natural cause has not been established. (3) Death of an individual who was not under the care of a physician. (4) Death of a person in a nursing home or care facility where medical treatment is not provided by a licensed physician.

2. *Circumstances which indicate death was caused in part or entirely by unnatural or unlawful means*. This category includes but is not limited to: (1) Drowning, suffocation, smothering, burns, electrocution, lightning, radiation, chemical or thermal injury, starvation, environmental exposure, or neglect. (2) Unexpected death during, associated with, or as a result of diagnostic or therapeutic procedures. (3) All deaths in the operating room whether due to surgical or anesthetic procedures. (4) Narcotics or other drugs including alcohol or toxic agents, or toxic exposure. (5) Death of the mother caused by known or suspected abortion. (6) Death from apparent natural causes during the course of a criminal act, e.g., a victim collapses during a robbery. (7) Death that occurs within one year following an accident, even if the accident is not thought to have contributed to the cause of death. (8) Death following all injury-producing accidents, if recovery was considered incomplete or if the accident is thought to have contributed to the cause of death (regardless of the interval between the accident and death).

3. *Suspicious circumstances.* This category includes, but is not limited to, deaths under the following circumstances: (1) Deaths resulting from apparent homicide or suicide. (2) Hanging, gunshot wounds, stabs, cuts, strangulation, etc. (3) Alleged rape, carnal knowledge, or sodomy. (4) Death during the course of, or precipitated by, a criminal act. (5) Death that occurs while in a jail or prison, or while in custody of law enforcement or other non-medical public institutions.

4. *Unknown or obscure causes.* This category includes: (1) Bodies that are found dead. (2) Death during or following an unexplained coma.

5. *Deaths caused by any violence whatsoever, when the injury was the primary cause or a contributory factor in the death.* This category includes, but is not limited to: (1) Injury of any type, including falls. (2) Any death due to or contributed to by any type of physical trauma.

6. *Contagious disease.* This category includes only those deaths wherein the diagnosis is undetermined and the suspected cause of death is a contagious disease which may be a public health hazard.

7. Unclaimed bodies. *This category is limited to deaths where no next of kin or other legally responsible representatives can be identified for disposition of the body.*

8. Premature and stillborn infants. *This category includes only those stillborn or premature infants whose birth was precipitated by maternal injury or drug use, criminal or medical negligence, or abortion under unlawful circumstances.*

Mission Statement

The mission of the King County Medical Examiner's Office (KCMEO) is to investigate sudden, unexpected and unnatural deaths in King County with the highest level of professionalism, compassion and efficiency and to provide a resource for improving the health and safety of the community consistent with the general mission of Public Health.

To achieve this mission, the KCMEO will:

- Coordinate investigative efforts with law enforcement, hospitals, and other agencies in a professional and courteous manner.
- Treat decedents and their effects with dignity and respect, and without discrimination.
- Conduct investigations and autopsies professionally, scientifically, and conscientiously; and complete reports expeditiously with regard for the concerns of family members, criminal justice, and public health and safety.
- Provide compassion, courtesy, and honest information to family members and, with sensitivity for cultural differences, make appropriate efforts in assisting with their grief, medical and legal questions, disposition of decedents and effects, and other settlements.
- Collect, compile, and disseminate information regarding deaths in a manner consistent with the laws of Washington state and consistent with the mission of Public Health.
- Provide medical and scientific testimony in court and in deposition as well as medicolegal consultation for prosecuting attorneys, defense attorneys, and attorneys representing surviving family members.
- Promote and advance, through education and research, the sciences and practices of death investigation, pathology, and anthropology within KCMEO and in collaboration with educational institutions.
- Promote and maintain an emotionally and physically healthy and safe working environment for KCMEO employees, following Public Health policies for standards of conduct, management, and support for employee diversity, training, and development.
- Expand communication throughout Public Health and the community at large regarding the roles, responsibilities, and objectives of KCMEO.

Explanation of data

The Medical Examiner serves the geographic area that includes all 2,130 square miles of King County, bounded by Pierce County to the south, Snohomish County to the north, Kittitas and Chelan Counties to the east, and Puget Sound to the west. In 2010, the King County population was estimated to be 1,942,600.[1] Included within King County are 39 cities and towns including Seattle, the state's largest city. Mercer Island, Vashon Island, two major airports and several colleges and universities are all in the geographic area served by the Medical Examiner's Office. In King County more than 20 hospitals and a major trauma center serve the entire Pacific Northwest region.

The KCMEO assumes jurisdiction of deaths occurring in King County that include both King County residents and nonresidents. King County residents who die in other counties do not fall under KCMEO jurisdiction. For data on deaths of King County residents, along with other health indicators, please see Public Health–Seattle & King County Community Health Indicators online at: www.kingcounty.gov/healthservices/health/data/chi.

This report summarizes demographics from individual cases in which the Medical Examiner assumed jurisdiction and presents them in aggregate form. Table 1-8 (Nearest Incorporated City to the Fatal Incident) on pages 21 and 22 represents the location of the incident to the nearest city, not the residential address of the individual. Each manner (category) of death is subdivided into the various sub-groupings (methods) appropriate to that manner, which together form a more detailed description of the cause and manner of death.

The variables displayed in the tables such as race, Gender, age, etc., have been selected as those most likely to assist and interest individuals using this data in assembling a profile of statistics on deaths examined by the Medical Examiner's Office for 2012. The Washington State Office of Financial Management estimates the racial distribution of King County to be 74.7% White, 6.3% African American, 3.6% Two or More Races, 14.4% Asian/Pacific Islander (including Hawaiian and other Pacific Islanders), and 1% American Indian/Alaska Native.[2] Information on Hispanic ethnicity of the decedent is not available for every case, and will not be presented in this report.

Medical Examiner figures cannot be directly compared to the racial distribution of King County residents. This is because as mentioned above and emphasized in Table 1-9 on page 22, in 6% of the Medical Examiner cases the incident leading to death occurred outside of King County and the decedent likely was not a resident of King County. However, as a rough estimate, the only manner of death that varies from the racial distribution of the county by a large percentage is Homicide (see discussion on page 44).

Age groups are divided into youth and adult. The youth groups are infants (newborn to 11 months), toddlers (1-5 years), grade school (6-12 years), junior high (13-15 years), and high school (16-19 years). Adult age groups are in corresponding decades with the last being 90 years old or older.

[1] State of Washington, Office of Financial Management, 2011 estimate.

[2] State of Washington, Office of Financial Management, 2010 estimate. (latest figures available)

Blood alcohol (ethanol) data included here represent the blood level at the time of death. Alcohol is metabolized at a rate of 0.015 to 0.018 grams percent per hour. Thus, if there is a significant survival interval, the blood alcohol at the time of death will be lower than at the time of incident. Consequently, blood alcohol tests are not performed in cases where death occurs more than 24 hours after the fatal injury. For these reasons, an unknown number of cases not tested or showing no blood alcohol may actually have had a measurable alcohol concentration at the time of the incident.

Three sections are included that review specific issues: deaths due to drugs, deaths due to firearms, and deaths among children and youth. The firearm data pertain to the victim because data relating to the shooter are not included in the Medical Examiner's investigation. On deaths among children and youth, the analysis focuses on violent, non-natural causes of death.

Data on natural deaths is included. However, these deaths due to natural causes are not representative of all natural deaths in King County. Natural deaths that the Medical Examiner investigates are those that occur suddenly and unexpectedly with no physician in attendance, or under suspicious circumstances. Such natural deaths comprised 41% (873/2,104) of all deaths that the Medical Examiner's Office investigated in 2012.

The "undetermined" category includes deaths in which the manner could not be clearly determined. In some cases, serious doubt existed as to whether the injury occurred with intent or as a result of an accident. In others, lack of witnesses or prolonged time between death and discovery precluded the accurate determination of the circumstances surrounding death. Moreover, it may be difficult to assess street drug or medication overdose deaths as showing enough features to reasonably determine the manner of death. Also included in the undetermined category are fetal deaths, which, according to the State of Washington death certification guidelines, are not assigned a manner of death.

Those interested in obtaining more specific information and data from the King County Medical Examiner's Office should contact 206-731-3232, extension 1.

Medical Examiner cases in 2012

The following provides a summary of the raw data from the Medical Examiner's cases for the year 2012. Ten-year trends are shown beginning on page 23.

In 2012, there were an estimated 13,594 deaths that occurred in King County (0.70% of a 2011 population estimate of 1,942,600).[3] A total of 10,869 (80%, 10,869/13,594) were reported to the Medical Examiner's Office by medical and law enforcement personnel. Based on analysis of the scene and circumstances of death and the decedent's medical history gathered by the forensic medicolegal death investigators, the Medical Examiner's Office assumed jurisdiction in 2,170 of these reported deaths, of which 66 were either ultimately found to be non-human remains or contract cases (i.e., cases in which autopsy and/or anthropology cases are examined for other counties or agencies). Throughout the report, except where stated, the non-human, anthropology, and contract cases are excluded. Thus, the Medical Examiner assumed jurisdiction in 15% (2,104/13,594) of deaths that occurred in King County in 2012.[4]

In approximately 83% (8,765/10,869) of the reported deaths, the Medical Examiner did not assume jurisdiction and perform an investigation; instead a "No Jurisdiction Assumed" (NJA) number was assigned. In such instances a physician with knowledge and awareness of the decedent's state of health certified the death. These are primarily natural deaths, with a predominance of individuals in nursing homes with a known fatal disease process. Of note is the fact that the Medical Examiner declined jurisdiction in 8,765 of the deaths that were reported. The Medical Examiner's Office applies a strict interpretation of its governing legislative language "persons who die suddenly when in apparent good health and without medical attendance within thirty-six hours preceding death" (RCW 68.50). The Medical Examiner assumes jurisdiction only if both conditions (lack of medical care and apparent good health) apply, and there is no attending outside physician with sufficient knowledge of the individual's natural disease condition to certify the death.

The Medical Examiner's Office performed autopsies in 62% (1,298/2,104) of the cases in which jurisdiction was assumed. Autopsies by a Medical Examiner pathologist were not performed in deaths where scene, circumstances, medical history, and external examination of the body provided sufficient information for death certification. In 2012, there were 415 such deaths, accounting for 20% (415/2,104) of the total deaths. In addition, there were 364 deaths, (17% 364/2,104) certified by attending private physicians after review by and consultation with the Medical Examiner.

Several factors appear repeatedly in the unnatural deaths. Of all traffic fatalities in which tests were performed, 33% (34/102) tested positive for presence of alcohol (ethanol) in the blood. In recognition of the importance of safety devices in traffic accidents, Medical Examiner data indicate that of the 63 vehicle occupants who died, 56% (35/63) were wearing seatbelt restraints.

In the 24 deaths involving motorcyclists, 17 (71% 17/24) were wearing helmets.

[3]Death certificates filed in King County, Vital Statistics, Public Health - Seattle & King County, March, 2011.

[4]Does not include non-human remains or anthropology/contract cases.

Firearms were the most frequent instrument of death in homicides and suicides, accounting for 68% (47/69) of the homicides and 42% (119/281) of the suicides.

While the discussion here tends to depict the more violent types of death, the reader should be reminded that 42% (873/2,104) of Medical Examiner cases involve natural deaths. Specific discussion and presentation of relevant tables regarding 2012 cases follow this brief summary.

Table 1-1 Deaths Occurring in King County / Medical Examiner Cases / 2012

CASES BY MANNER OF DEATH[5]		NUMBER OF KCME DEATHS	PERCENT OF KCME DEATHS
Accident Other	(A)	670	32%
Accident Traffic	(T)	131	6%
Homicide	(H)	69	3%
Natural	(N)	873	42%
Suicide	(S)	281	13%
Undetermined[6]	(U)	80	4%
Total KCME general cases		2,104	
Non-applicable cases where jurisdiction was assumed		66	
Total KCME jurisdiction cases		2,170	
Total KCME general cases[7]		2,104	
Deaths reported to KCME but no jurisdiction was assumed (NJA)		8,765	
All other deaths in King County not reported to KCME		2,725	
ALL KING COUNTY DEATHS[8]		13,594	

[5]The letters following each manner of death will be used in most tables throughout this report.

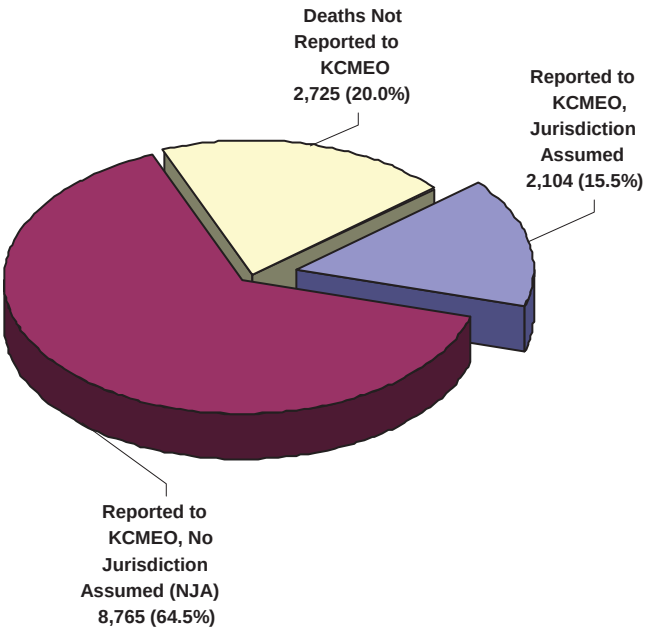
[6]Includes five fetal deaths, which according to Washington State death certification procedures, are not assigned a manner of death.

[7]This is the total number of cases that will be referred to throughout this report unless otherwise noted.

[8]Death certificates filed in King County, Vital Statistics, Public Health - Seattle & King County, May 2012

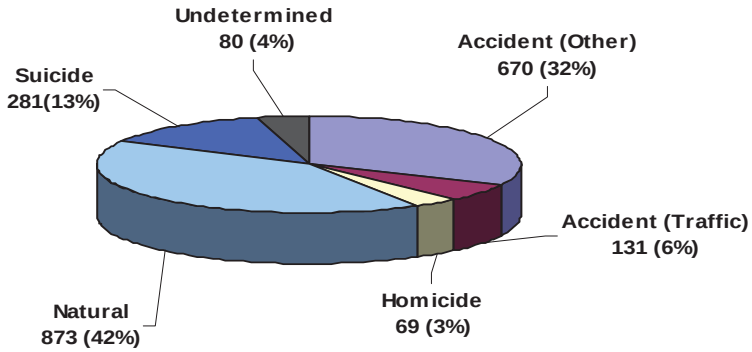
Graph 1-1 All King County Deaths with Medical Examiner Jurisdiction Shown / 2012

Total Deaths in King County, 2012: 13,594



Graph 1-2 Manner of Death for All Medical Examiner Jurisdiction Cases / 2012

Jurisdiction assumed in 2,104 cases.[9]



[9]This number does not include 76 non-applicable cases (non-human tissue/bones and anthropology/contract cases).

Graph 1-3 Method of Certification for all King County Medical Examiner Jurisdiction Cases / 2012

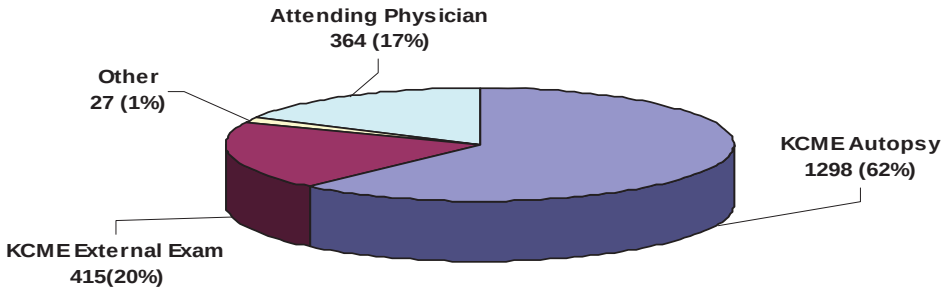


Table 1-2 Method of Certification / Manner of Death / KCME / 2012

CERTIFICATION	MANNER OF DEATH						TOTAL	%
	A	T	H	N	S	U		
KCME Autopsies	361	86	67	468	242	74	1298	62%
KCME External Exams	185	36	0	155	38	1	415	20%
KCME Other	2	1	2	17	1	4	27	1%
Attending Physician	122	8	0	233	0	1	364	17%
Totals	**670**	**131**	**69**	**873**	**281**	**80**	**2,104**	100%

Manner of Death in 2012

King County Medical Examiner's Office General Cases

Graph 1-4 Gender / Manner of Death / KCME / 2012

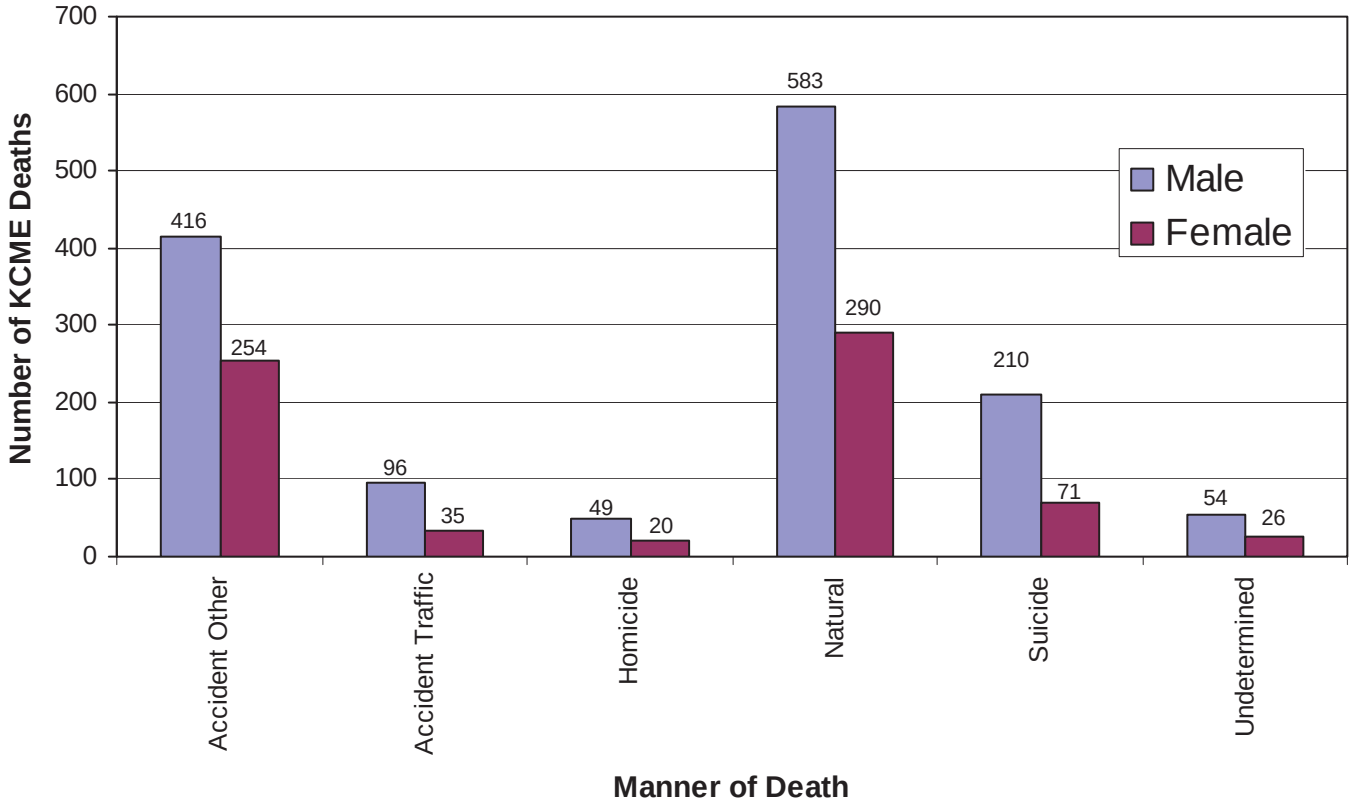


Table 1-3 Gender / Manner of Death / KCME / 2012

GENDER	MANNER OF DEATH						TOTAL	%
	A	T	H	N	S	U		
Male	416	96	49	583	210	54	1408	67%
Female	254	35	20	290	71	26	696	33%
Totals	**670**	**131**	**69**	**873**	**281**	**80**	**2104**	100%

Table 1-4 Age / Gender / Manner of Death / KCME / 2012

AGE / GENDER	MANNER OF DEATH A	T	H	N	S	U	Sub-Total	TOTAL	%
Under 1 year	2	0	1	10	0	17		30	1.4%
Male	*2*	*0*	*0*	*4*	*0*	*11*	*17*		
Female	*0*	*0*	*1*	*6*	*0*	*6*	*13*		
1-5 years	5	1	0	3	0	1		10	0.5%
Male	*0*	*0*	*0*	*2*	*0*	*0*	*2*		
Female	*5*	*1*	*0*	*1*	*0*	*1*	*8*		
6-12 years	4	1	1	2	1	0		9	0.4%
Male	*4*	*1*	*0*	*0*	*1*	*0*	*6*		
Female	*0*	*0*	*1*	*2*	*0*	*0*	*3*		
13-15 years	4	2	2	0	10	0		18	0.8%
Male	*3*	*0*	*2*	*0*	*9*	*0*	*14*		
Female	*1*	*2*	*0*	*1*	*0*	*0*	*4*		
16-19 years	13	6	7	1	7	1		35	1.7%
Male	*11*	*5*	*2*	*0*	*2*	*0*	*20*		
Female	*2*	*1*	*5*	*1*	*5*	*1*	*15*		
20-29 years	54	23	18	17	48	10		170	8.1%
Male	*33*	*19*	*13*	*7*	*39*	*7*	*118*		
Female	*11*	*4*	*5*	*10*	*9*	*3*	*42*		
30-39 years	64	19	14	51	35	9		192	9.1%
Male	*50*	*14*	*11*	*28*	*27*	*7*	*137*		
Female	*14*	*5*	*3*	*23*	*8*	*2*	*55*		
40-49 years	75	14	15	102	65	12		283	13.5%
Male	*54*	*11*	*14*	*73*	*45*	*6*	*203*		
Female	*21*	*3*	*1*	*29*	*20*	*6*	*80*		
50-59 years	102	22	7	218	57	18		424	20.1%
Male	*58*	*15*	*5*	*158*	*39*	*16*	*291*		
Female	*44*	*7*	*2*	*60*	*18*	*2*	*133*		
60-69 years	76	13	1	226	27	8		351	16.7%
Male	*52*	*11*	*0*	*164*	*19*	*5*	*251*		
Female	*24*	*2*	*1*	*62*	*8*	*3*	*100*		
70-79 years	61	11	3	123	15	1		214	10.2%
Male	*38*	*8*	*2*	*86*	*14*	*1*	*149*		
Female	*23*	*3*	*1*	*37*	*1*	*0*	*65*		
80-89 years	125	14	0	81	14	2		236	11.2%
Male	*62*	*9*	*0*	*36*	*14*	*1*	*122*		
Female	*63*	*5*	*0*	*45*	*0*	*1*	*114*		
90+years	85	5	0	39	2	1		132	6.3%
Male	*39*	*3*	*0*	*14*	*1*	*0*	*67*		
Female	*46*	*2*	*0*	*15*	*1*	*1*	*65*		
Totals	**670**	**131**	**69**	**873**	**281**	**80**		**2,104**	**100%**

Table 1-5 Race / Gender / Manner of Death / KCME / 2012[10]

	MANNER OF DEATH								
RACE / GENDER	A	T	H	N	S	U	Sub-Total	TOTAL	%
White	582	105	36	729	245	63		1,760	83.7%
Male	*357*	*75*	*23*	*490*	*187*	*43*	*1,175*		
Female	*225*	*30*	*13*	*239*	*58*	*20*	*585*		
African American	33	9	23	80	12	7		164	7.8%
Male	*24*	*8*	*20*	*54*	*8*	*6*	*120*		
Female	*9*	*1*	*3*	*26*	*4*	*1*	*44*		
Asian/Pacific Is.	40	7	5	50	19	4		125	5.9%
Male	*25*	*4*	*4*	*33*	*12*	*3*	*81*		
Female	*15*	*3*	*1*	*27*	*7*	*1*	*44*		
American Indian / Alaska Native	12	7	3	10	5	3		40	1.9%
Male	*7*	*6*	*1*	*4*	*3*	*2*	*23*		
Female	*5*	*1*	*2*	*6*	*2*	*1*	*17*		
Other	3	3	2	4	0	3		15	0.7%
Male	*3*	*3*	*1*	*2*	*0*	*0*	*9*		
Female	*0*	*0*	*1*	*2*	*0*	*3*	*6*		
Totals	**670**	**131**	**69**	**873**	**281**	**80**		**2,104**	**100%**

[10] A = Accident (Non-Traffic), T = Traffic, H = Homicide, N = Natural, S = Suicide, U = Undetermined.

Graph 1-5 Marital Status / Manner of Death / KCME / 2012

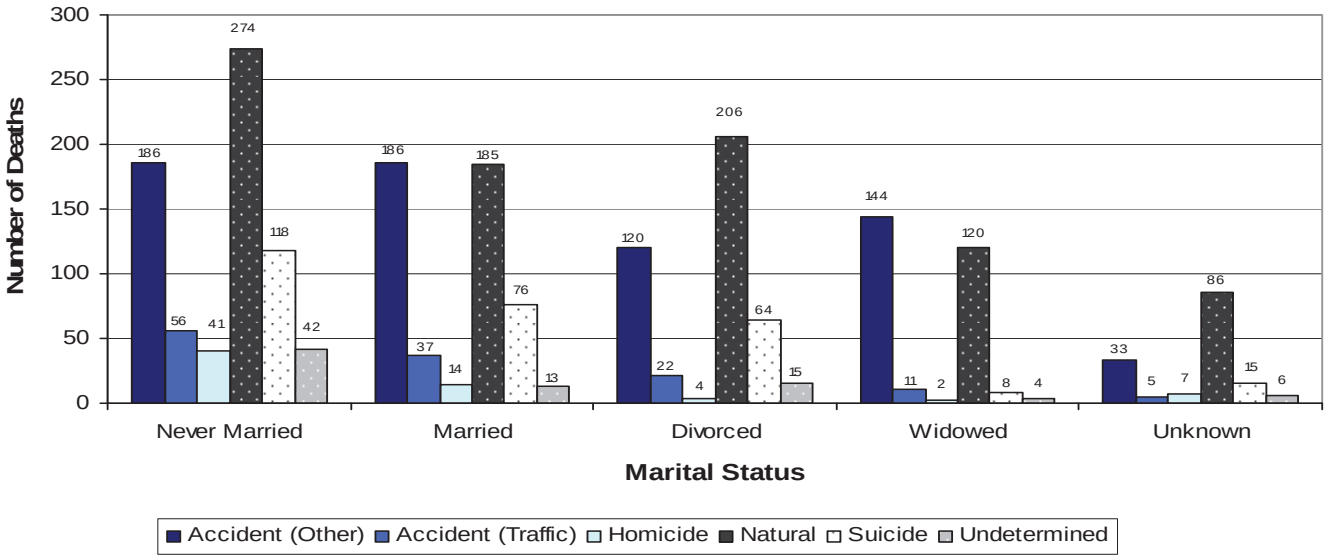


Table 1-6 Marital Status / Gender / Manner of Death / KCME / 2012[11]

MARITAL STATUS / GENDER	MANNER OF DEATH								
	A	T	H	N	S	U	Sub-Total	TOTAL	%
Never Married	186	56	41	274	118	42		717	34.1%
Male	*142*	*41*	*28*	*201*	*92*	*30*	*534*		
Female	*44*	*15*	*13*	*73*	*26*	*12*	*183*		
Married	186	37	14	185	76	13		511	24.3%
Male	*136*	*30*	*10*	*133*	*57*	*9*	*395*		
Female	*50*	*7*	*4*	*52*	*19*	*4*	*136*		
Divorced	120	22	4	206	64	15		431	20.5%
Male	*73*	*17*	*3*	*130*	*44*	*9*	*276*		
Female	*47*	*5*	*1*	*76*	*20*	*6*	*155*		
Widowed	144	11	2	120	8	4		289	13.7%
47	*47*	*4*	*2*	*49*	*6*	*2*	*110*		
Female	*97*	*7*	*0*	*71*	*2*	*2*	*179*		
Unknown	33	5	7	86	15	6		152	7.2%
Male	*17*	*4*	*5*	*68*	*11*	*4*	*109*		
Female	*16*	*1*	*2*	*18*	*4*	*6*	*43*		
Domestic Partner	1	0	1	2	0	0		4	0.2%
Male	*1*	*0*	*1*	*2*	*0*	*0*	*4*		
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*		
Totals	**670**	**131**	**69**	**872**	**281**	**80**		**2,104**	**100%**

[11]A = Accident (Non-Traffic), T = Traffic, H = Homicide, N = Natural, S = Suicide, U = Undetermined.

Graph 1-6 Month / Manner of Death / KCME / 2012

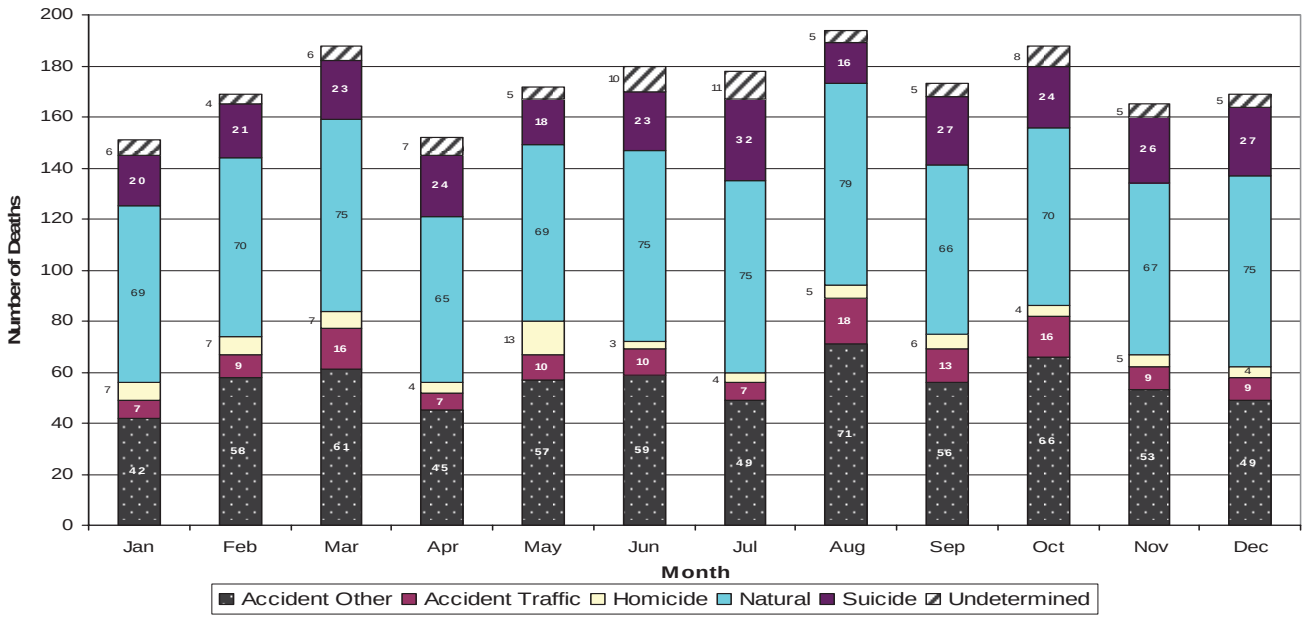


Table 1-7 Month / Manner of Death / KCME / 2012[12]

	MANNER OF DEATH							
MONTH	A	T	H	N	S	U	Total	%
Prior to 2011	0	0	0	1	0	3	4	0.2%
2011	4	0	0	17	0	0	21	1.0%
January	42	7	7	69	20	6	151	7.2%
February	58	9	7	70	21	4	169	8.0%
March	61	16	7	75	23	6	188	8.9%
April	45	7	4	65	24	7	152	7.2%
May	57	10	13	69	18	5	172	8.2%
June	59	10	3	75	23	10	180	8.6%
July	49	7	4	75	32	11	178	8.5%
August	71	18	5	79	16	5	194	9.2%
September	56	13	6	66	27	5	173	8.2%
October	66	16	4	70	24	8	188	8.9%
November	53	9	5	67	26	5	165	7.9%
December	49	9	4	75	27	5	169	8.0%
Totals	**670**	**13**	**69**	**873**	**281**	**80**	**2,104**	**100%**

[12]A = Accident (Non-Traffic), T = Traffic, H = Homicide, N = Natural, S = Suicide, U = Undetermined.

Table 1-8 Nearest Incorporated City to the Fatal Incident / KCME / 2012[13]

	MANNER OF DEATH						
CITY	A	T	H	S	U	TOTAL	%
Algona	1	0	6	3	0	10	0.8%
Auburn	29	2	0	20	3	54	4.4%
Beaux Arts	0	0	0	0	0	0	0%
Bellevue	20	5	2	10	3	40	3.3%
Black Diamond	0	0	0	3	0	3	0.2%
Bothell	7	1	0	5	0	13	1.1%
Burien	9	0	1	3	0	13	1.1%
Carnation	4	0	0	0	0	4	0.3%
Clyde Hill	0	1	0	0	0	1	0.1%
Covington	0	0	1	0	0	1	0.1%
Des Moines	8	3	0	2	3	16	1.3%
Duvall	2	1	0	1	0	4	0.3%
Enumclaw	2	7	0	1	0	10	0.8%
Federal Way	29	5	4	12	2	52	4.2%
Hunts Point	0	0	0	0	0	0	0%
Issaquah	16	0	0	8	0	24	2%
Kenmore	10	2	0	4	1	17	1.4%
Kent	27	9	2	15	0	53	4.3%
Kirkland	19	5	0	12	3	39	3.2%
Lake Forest Park	3	0	0	2	0	5	0.4%
Maple Valley	6	1	0	2	0	9	0.7%
Medina	0	0	0	0	0	0	0%
Mercer Island	5	0	0	2	0	7	0.6%
Milton	0	0	0	0	0	0	0%
Newcastle	1	0	0	0	0	1	0.1%
Normandy Park	3	0	0	0	0	3	0.2%
North Bend	6	1	3	5	0	15	1.2%
Pacific	1	0	1	1	0	3	0.2%

[13] Table does not include cases where manner of death is classified "Natural". A = Accident (Non-Traffic), T = Traffic, H = Homicide, S = Suicide, U = Undetermined.

Table 1-8 Nearest Incorporated City to the Fatal Incident / KCME / 2012[14] (continued)

	MANNER OF DEATH						
CITY	A	T	H	S	U	Total	%
Redmond	14	4	1	4	0	23	1.9%
Renton	20	4	2	12	4	42	3.4%
Sammamish	7	0	0	5	1	13	1.1%
SeaTac	6	2	1	6	4	19	1.5%
Seattle	268	35	29	117	34	483	39.2%
Shoreline	15	1	3	3	0	22	1.8%
Skykomish	5	0	0	0	0	5	0.4%^
Snoqualmie	1	1	0	2	0	4	0.3%
Tukwila	5	5	3	6	5	24	2%
Woodinville	2	0	0	2	0	4	0.3%
Yarrow Point	0	0	0	0	0	0	0%
Unincorporated King County	1	0	0	0	0	1	0.1%
Fall City	2	1	1	2	0	6	0.5%
Ravensdale	3	1	0	0	0	4	0.3%
Vashon Island	2	0	0	2	0	4	0.3%
Outside of King County	108	31	7	8	13	167	13.6%
Unknown Location	3	3	2	1	4	13	1.0%
Totals	**670**	**131**	**69**	**281**	**80**	**1,231**	**100%**

[14] A = Accident (Non-Traffic), T = Traffic, H = Homicide, S = Suicide, U = Undetermined.

Out of County Cases 2012

King County is home to many hospitals and a major trauma center that serves the entire Pacific Northwest and the western United States. Consequently, there are numerous deaths each year where the incident leading to death occurred outside of King County. However, because the death occurred within King County, it comes under the jurisdiction of the King County Medical Examiner's Office. In 2012, there were 180 deaths (15%, 180/1,231) where the incident (excluding deaths classified as "Natural") occurred out of county or where the incident location was unknown. Table 1-9 displays these deaths by incident location and manner.

Table 1-9 Fatal Incident Occurred Outside of King County / KCME / 2012[15]

	MANNER OF DEATH					
INCIDENT LOCATION	A	T	H	S	U	TOTAL
Alaska	7	0	0	0	1	8
Montana	2	1	0	0	0	3
Idaho	1	1	0	1	0	3
Oregon	0	0	0	0	0	0
Other States	3	1	1	0	0	5
Washington						
Island County	3	0	2	1	0	6
Kitsap County	8	6	0	1	0	15
Pierce County	9	2	2	1	2	16
Skagit County	9	2	0	0	0	11
Snohomish County	35	8	0	0	3	46
Thurston County	2	2	0	1	0	5
Other WA Counties	28	8	2	3	7	48
Washington Sub-Total	***94***	***28***	***6***	***7***	***12***	***147***
Out of Country	1	0	0	0	0	1
Unknown	3	3	2	1	4	13
Totals	**111**	**34**	**9**	**9**	**17**	**180**

[15]Table does not include cases where manner of death is classified as "Natural." A = Accident (Non-Traffic), T = Traffic, H = Homicide, S = Suicide, U = Undetermined.

Ten-year perspective

This section provides a ten-year perspective on deaths that the Medical Examiner investigated and variation in data from year to year.

The tables on the following pages attempt to give a perspective on the types of deaths that the Medical Examiner investigates. The tables display data by category and year and provide trends over time. More detailed analysis of 2012 data is provided in separate sections for each manner of death (Accident, Homicide, Natural, Suicide, Traffic, and Undetermined).

Table 2-1

Comparison of Manners of Death / KCME / 2003 - 2012

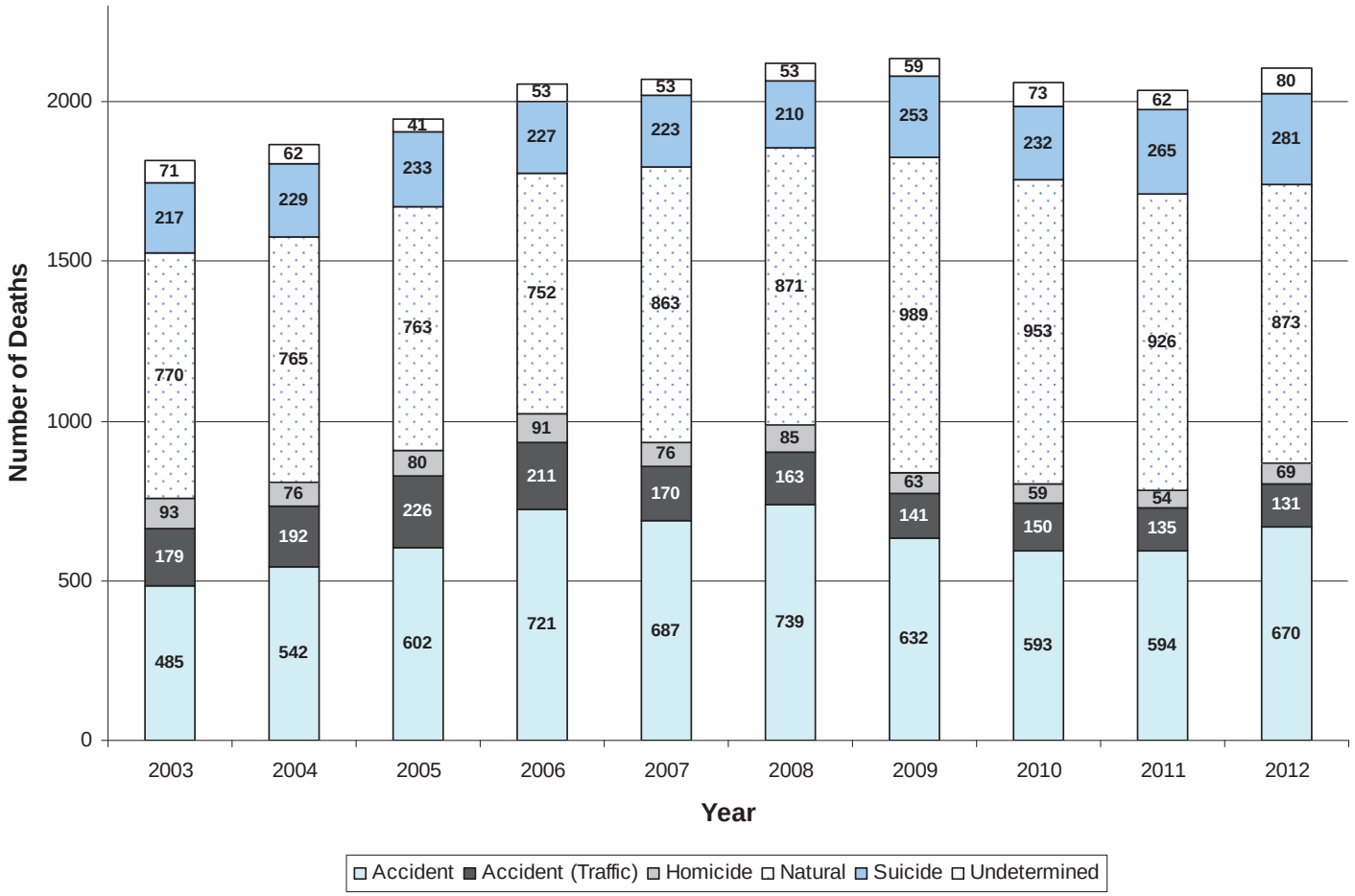
MANNER OF DEATH	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Accident (Other)	485	542	602	721	687	739	632	593	594	670
Accident (Traffic)	179	192	226	211	170	163	141	150	135	131
Homicide	93	76	80	91	76	85	63	59	54	69
Natural	770	765	763	752	863	871	989	953	926	873
Suicide	217	229	233	227	223	210	253	232	265	281
Undetermined	71	62	41	53	53	53	59	73	62	80
Totals	**1,815**	**1,866**	**1,945**	**2,055**	**2,072**	**2,121**	**2,137**	**2,060**	**2,036**	**2,104**

Table 2-2

Comparison of Manners of Death as Percentage of Total Annual Medical Examiner Cases / KCME / 2003 – 2012

MANNER OF DEATH	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
	%	%	%	%	%	%	%	%	%	%
Accident (Other)	26.8	29.0	31.0	35.1	33.1	34.8	29.6	28.8	29.2	31.8
Accident (Traffic)	9.9	10.3	11.6	10.3	8.2	7.7	6.6	7.3	6.6	6.2
Homicide	5.1	4.1	4.1	4.4	3.7	4.0	2.9	2.9	2.7	3.3
Natural	42.4	41.0	39.2	36.6	41.7	41.1	46.3	46.3	45.5	41.5
Suicide	11.9	12.3	12.0	11.0	10.8	9.9	11.8	11.2	13	13.4
Undetermined	3.9	3.3	2.1	2.6	2.5	2.5	2.8	3.5	3	3.8
Totals	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Graph 2-1 Comparison of Manners of Death / KCME / 2003 - 2012



Graph 2-2 Homicide Deaths / KCME / 2003 - 2012

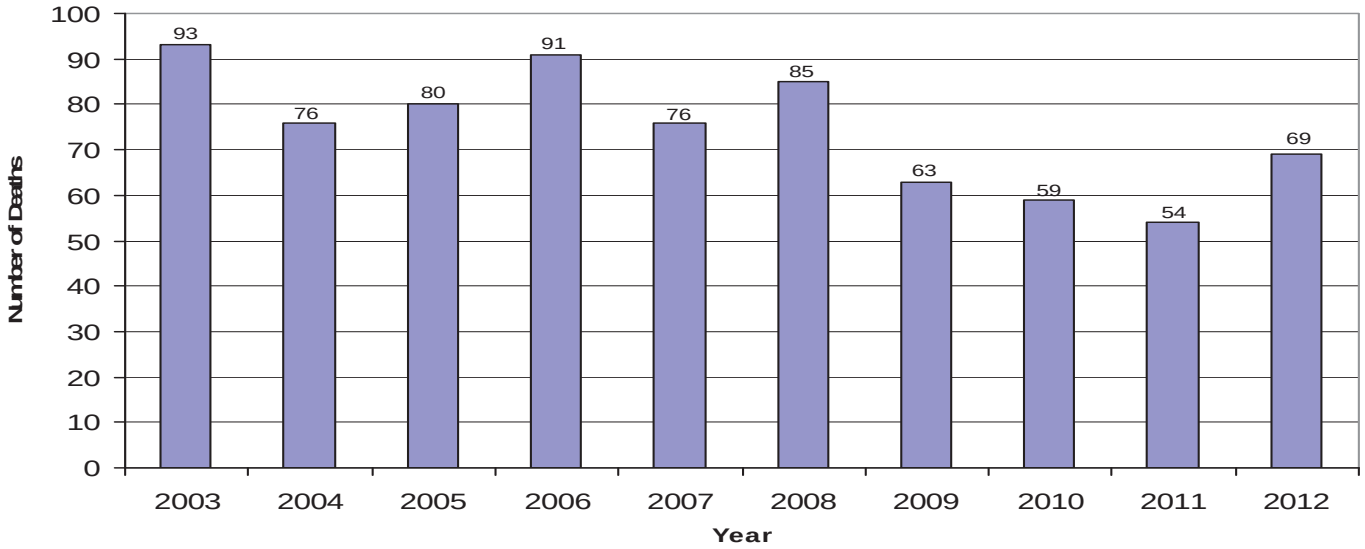


Table 2-3 Ten-Year Perspective of Homicidal Methods / KCME / 2003 – 2012

METHOD USED	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Blunt Force (#)	14	10	12	16	9	16	5	11	6	6
Blunt Force (%)	15%	13%	15%	18%	12%	19%	8%	18%	11%	9%
Firearms (#)	52	46	47	52	55	45	41	39	35	47
Firearms (%)	56%	61%	59%	57%	72%	53%	65%	66%	65%	68%
Hom. Violence (#)	3	3	2	0	0	0	0	1	1	3
Hom. Violence (%)	3%	4%	3%	0%	0%	0%	0%	2%	2%	4%
Stabbing (#)	16	10	14	14	12	12	11	2	9	13
Stabbing (%)	17%	13%	17%	15%	16%	14%	17%	4%	16%	19%
Strangulation (#)	5	1	4	1	0	4	3	1	2	0
Strangulation (%)	6%	1%	5%	1%	0%	5%	5%	2%	4%	0%
Other (#)	3	6	1	8	0	8	3	5	1	0
Other (%)	3%	8%	1%	9%	0%	9%	5%	8%	2%	0%
Totals	**93**	**76**	**80**	**91**	**76**	**85**	**63**	**59**	**54**	**69**

Graph 2-3 Suicide Deaths /KCME / 2003 – 2012

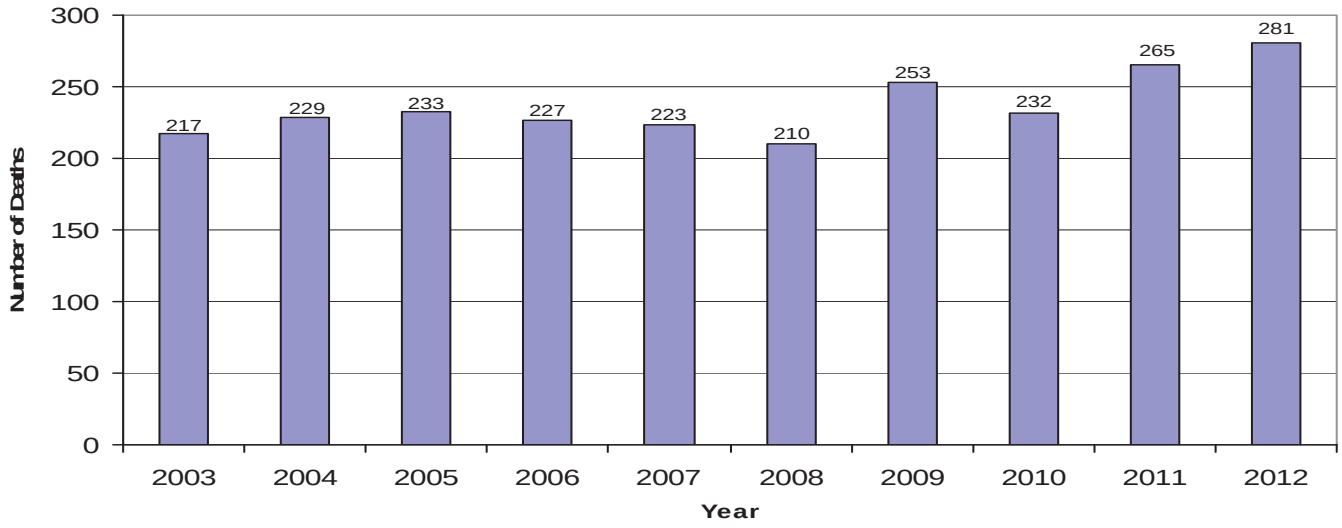


Table 2-4 Ten Year Perspective of Suicidal Injury Modes / KCME / 2003 - 2012

INJURY MODE	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Asphyxia / Plastic Bag	8	7	5	11	3	8	8	13	15	21
Burns / Fire	1	1	3	3	1	3	2	2	1	2
Carbon Monoxide	12	8	13	11	17	4	14	4	7	9
Drowning	4	5	0	1	3	3	7	3	5	7
Drugs / Poisons	35	41	39	36	36	29	29	43	41	42
Firearms	101	95	96	98	93	93	100	92	116	119
Hanging	36	44	42	31	43	48	60	44	48	48
Incised Wounds / Stabbing	6	8	9	5	4	5	8	7	12	8
Jumped	11	15	22	26	22	13	20	21	19	24
Other	3	5	4	5	1	4	5	3	1	1
Totals	**217**	**229**	**233**	**227**	**223**	**210**	**253**	**232**	**265**	**281**

Graph 2-4 Traffic Fatalities / KCME / 2003 – 2012

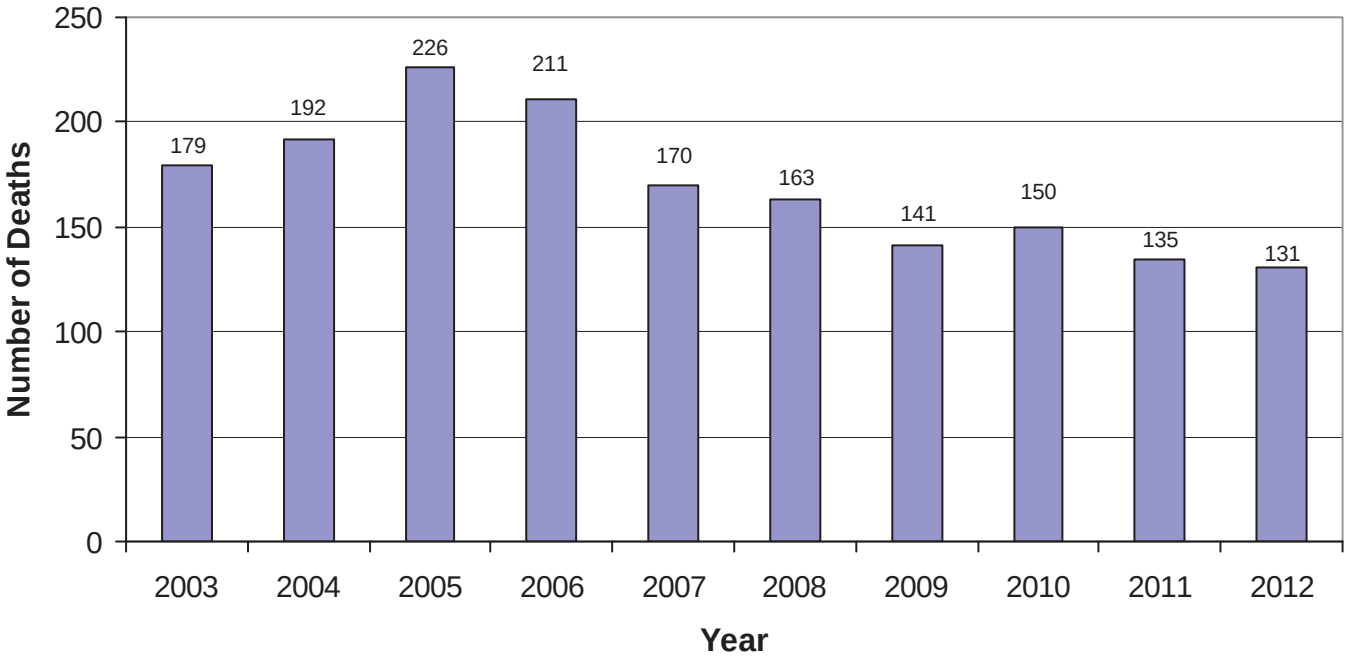


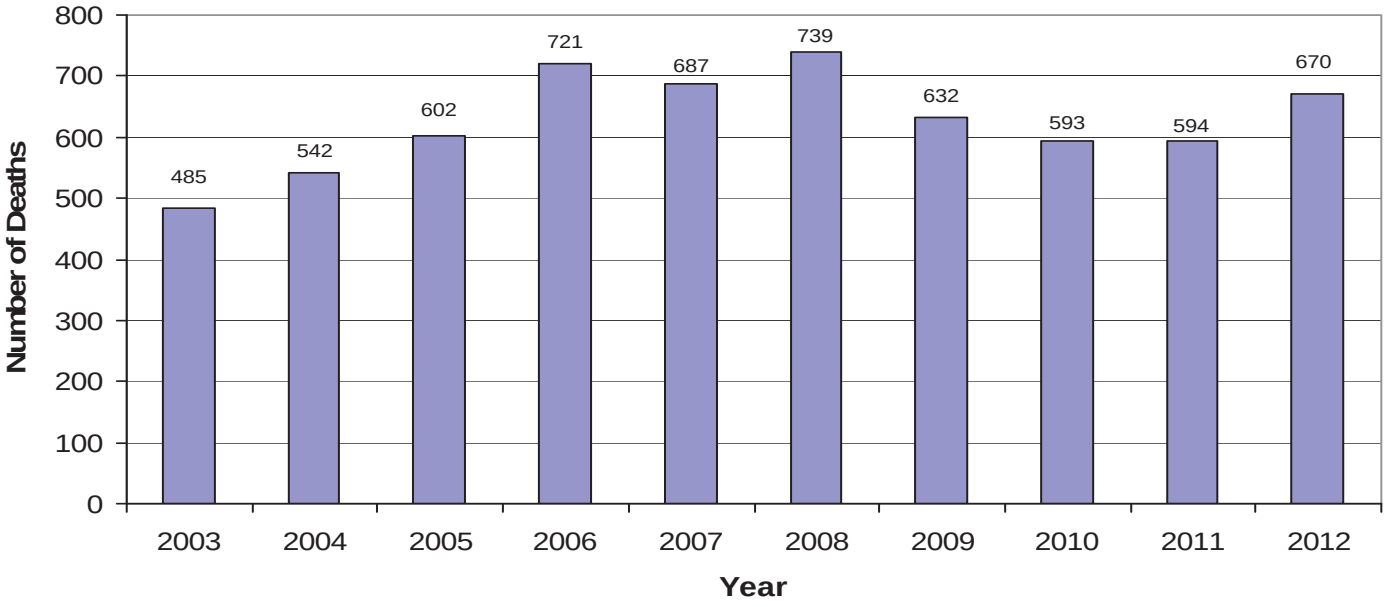
Table 2-5 Traffic Fatality Circumstances / KCME / 2003 - 2012

CIRCUMSTANCES	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Vehicle Driver	75	78	99	92	71	71	51	69	55	47
Vehicle Passenger	36	54	47	44	29	24	28	27	22	16
Vehicle Unknown Position	2	1	1	5	1	4	0	0	3	4
Bicyclist	3	5	6	8	7	4	12	3	8	5
Motorcycle Driver	21	23	33	27	26	28	18	24	26	24
Motorcycle Passenger	3	0	3	1	2	1	1	0	1	1
Pedestrian	38	30	36	33	31	26	29	27	17	33
Other	1	1	1	1	3	5	2	0	3	1
Totals	**179**	**192**	**226**	**211**	**170**	**163**	**141**	**150**	**135**	**131**

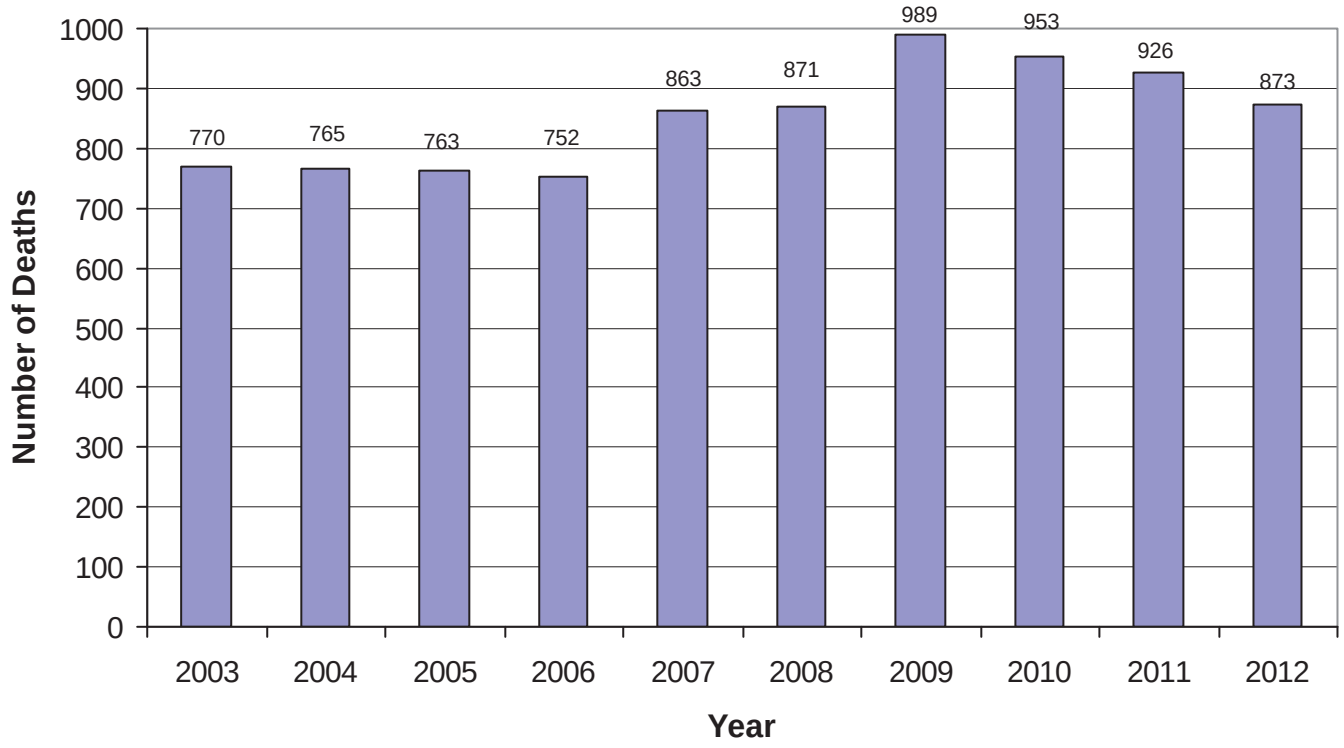
Table 2-6 **Ten Year Perspective of Non-Traffic Accidental Death Circumstances / KCME / 2003 - 2012**

CIRCUMSTANCES	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Aircraft	0	2	3	3	11	1	0	0	1	3
Asphyxia	4	2	9	12	11	14	10	5	6	7
Aspiration	9	8	10	9	5	10	7	6	7	15
Blunt Force / Crushing	9	8	10	4	10	10	6	5	11	20
Burns / Fire	19	24	26	23	23	13	15	29	18	26
Carbon Monoxide	1	3	4	8	3	4	4	2	3	0
Drowning	27	17	19	30	23	23	17	11	21	24
Drugs / Poisons	160	211	216	262	247	232	233	214	203	230
Electrocution	0	2	1	2	1	1	2	2	1	1
Explosion	0	4	1	1	2	0	0	3	0	0
Fall	207	213	230	308	292	323	309	291	291	314
Firearms	1	1	2	0	1	1	1	1	0	2
Hanging	0	2	2	0	0	1	1	1	2	4
Hypothermia	2	2	4	4	3	4	7	4	7	6
Struck by Object	8	7	1	8	5	2	4	4	3	2
Struck by Train	0	3	1	0	1	3	2	0	6	2
Vehicular Non-Traffic	14	10	8	9	7	10	5	2	4	4
Other	2	5	10	7	2	6	9	13	10	10
Totals	**485**	**542**	**602**	**721**	**687**	**739**	**632**	**593**	**594**	**670**

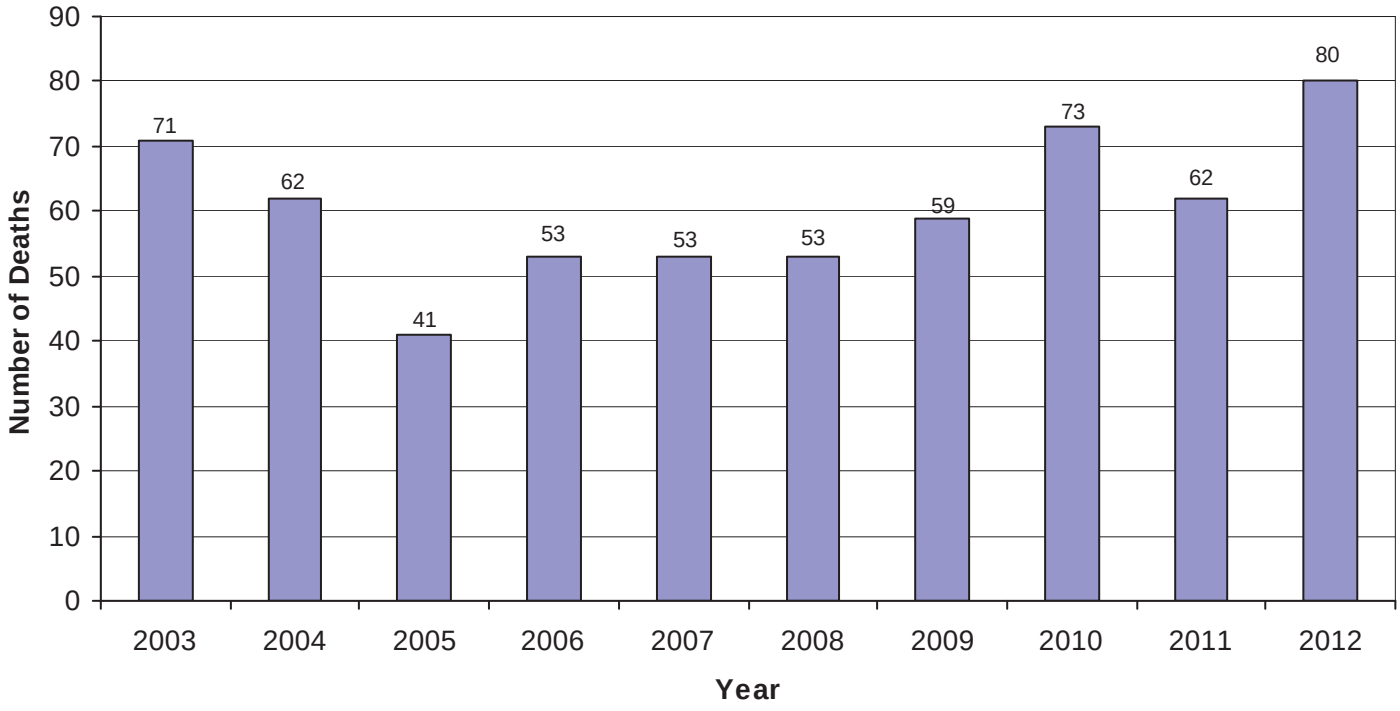
Graph 2-5 Accidental Deaths / KCME / 2003 – 2012



Graph 2-6 Natural Deaths / KCME / 2003 – 2012



Graph 2-7 Deaths of Undetermined Manner / KCME / 2003 – 2012



Manner of death: Accident

The Medical Examiner certified 670 deaths as non-traffic accidents for the calendar year 2012. The largest group of accidental deaths was those who died as a result of a fall, 47% (314/670). Of the 314 deaths attributed to injury sustained in falls, 75% (236/314) occurred in the age group 70 years and over. A large percentage were ground-level falls in elderly individuals, which resulted in fractures leading to complications such as pneumonia.

The second largest group of non-traffic accidental deaths was individuals who died as a result of accidental overdoses of drugs and/or poisons, representing 34% (227/670). There were four accidental drug deaths of children between the ages of 16-19 years, and there were no deaths of a child less than 15 years of age.

The 2012 drug rate number (227) represents an equal percentage compared to the 203 accidental drug deaths in 2011. A more detailed discussion of these deaths is presented in the section "Death Due to Drugs and Poisons" on pages 89 and 90. Note that the number of accidental drug-related deaths included in the accidental category does not include three deaths (all three carbon monoxide deaths) that are included in the Death Due to Drugs and Poisons Chapter. They are included in the drug-related deaths because drug intoxication (carbon monoxide) was listed as the cause of death on the death certificate. In this chapter carbon monoxide is treated as it's own category separate from the accidental drug-related deaths.

In 2012, 26 deaths resulted from fire or thermal injury, an increase from 2011 when there were 18. Of the 26 fire-related deaths, 58% (15/26) were the result of accidents that occurred outside of King County. The injured were transported to Harborview Medical Center's Burn Intensive Care Unit where they died.

Another category of accidental deaths worthy of comment is death resulting from drowning. There were 24 drowning deaths in 2012, as compared to 21 in 2011.

Aspiration is a type of death that results from a person choking on a foreign object, often a bolus of food while eating. In 2012, there were fifteen deaths due to aspiration of a foreign body, compared to seven in 2011. One of the aspiration deaths was in a child under the age of 5, one child between the ages of 16 and 19, and the rest were in adults over the age of 30.

Of the 670 accidental deaths in 2012, 17% (116/670) were the result of incidents which occurred outside of King County, but the death took place within King County. These deaths were the result of the injured being transported from outside King County to medical facilities within King County where they died. Since these deaths occurred in King County, they fall under King County Medical Examiner's Office jurisdiction.

Sixty percent (403/670) of the victims were tested for the presence of alcohol. Of those tested, 26% (104/403) showed alcohol present at the time of death.

Graph 3-1 Circumstances of Accidental Death / KCME / 2012

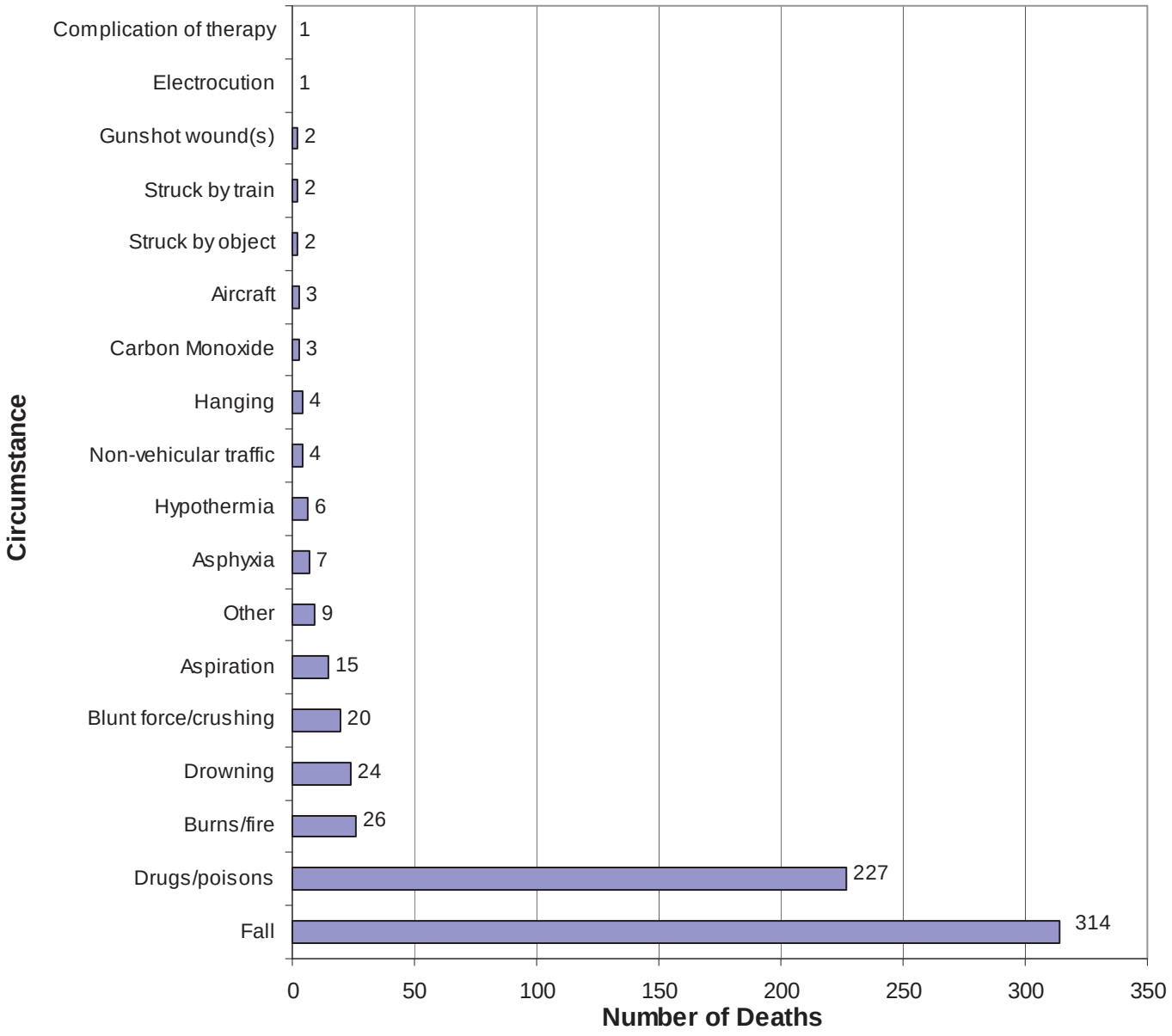


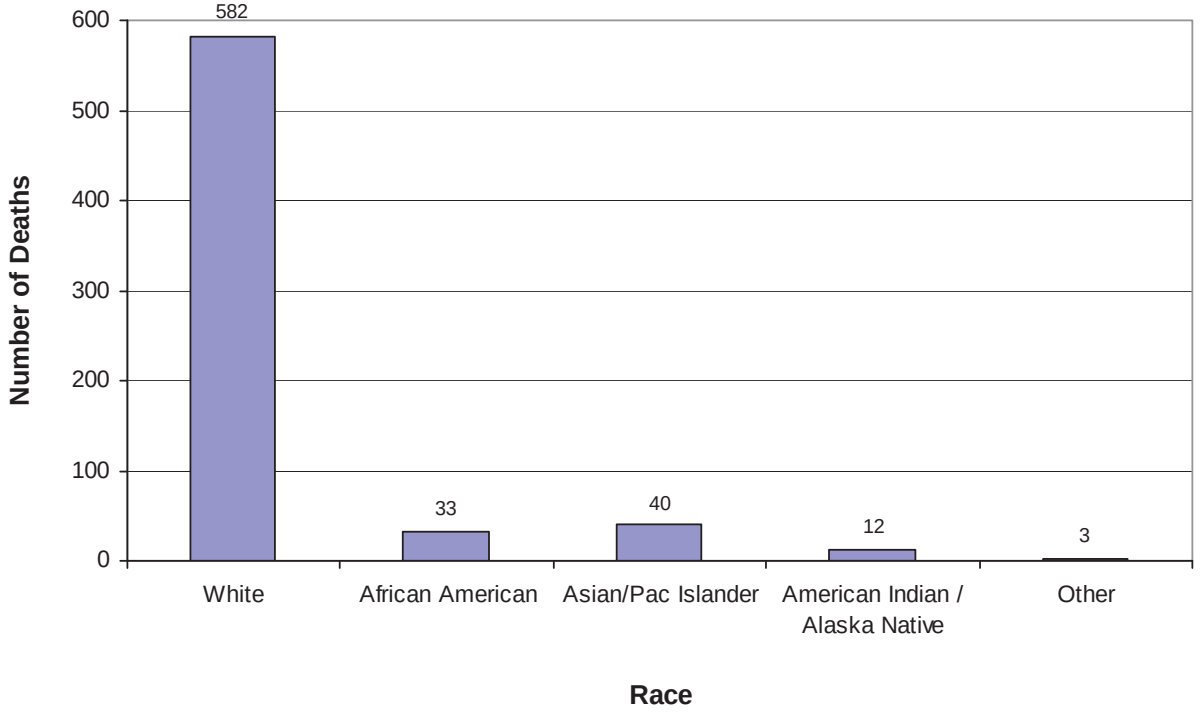
Table 3-1 Circumstances of Accidental Death / Race / Gender / KCME / 2012

CIRCUMSTANCES / GENDER	RACE					SUB-TOTAL	TOTAL
	WHITE	AFRICAN AMER	ASIAN/ PAC IS	AM INDIAN / AK NATIVE	OTHER		
Aircraft	3	0	0	0	0		3
Male	*2*	*0*	*0*	*0*	*0*	*2*	
Female	*1*	*0*	*0*	*0*	*0*	*1*	
Asphyxia: compressional / positional / mechanical	5	0	1	0	1		7
Male	*5*	*0*	*1*	*0*	*1*	*7*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	
Aspiration	12	2	1	0	0		15
Male	*6*	*1*	*0*	*0*	*0*	*7*	
Female	*6*	*1*	*1*	*0*	*0*	*8*	
Blunt Force / Crushing	19	0	1	0	0		20
Male	*12*	*0*	*1*	*0*	*0*	*13*	
Female	*7*	*0*	*0*	*0*	*0*	*7*	
Burns / Fire	25	0	0	1	0		26
Male	*15*	*0*	*0*	*1*	*0*	*16*	
Female	*10*	*0*	*0*	*0*	*0*	*10*	
Carbon Monoxide	3	0	0	0	0		3
Male	*3*	*0*	*0*	*0*	*0*	*3*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	
Complication of Therapy	1	0	0	0	0		1
Male	*0*	*0*	*0*	*0*	*0*	*0*	
Female	*1*	*0*	*0*	*0*	*0*	*1*	
Drowning	17	3	3	0	1		24
Male	*13*	*3*	*2*	*0*	*1*	*19*	
Female	*4*	*0*	*1*	*0*	*0*	*5*	
Drugs / Poisons	193	18	7	8	1		227
Male	*132*	*12*	*6*	*4*	*1*	*158*	
Female	*61*	*6*	*1*	*4*	*0*	*72*	
Electrocution	1	0	0	0	0		1
Male	*1*	*0*	*0*	*0*	*0*	*1*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	

Table 3-1 **Circumstances of Accidental Death / Race / Gender / KCME / 2012** (continued)

CIRCUMSTANCES / GENDER	RACE					SUB-TOTAL	TOTAL
	WHITE	AFRICAN AMER	ASIAN/ PAC IS	AM INDIAN /AK NATIVE	OTHER		
Fall	278	8	25	3	0		314
Male	*151*	*7*	*14*	*2*	*0*	*174*	
Female	*127*	*1*	*11*	*1*	*0*	*140*	
Gunshot wound(s)	2	0	0	0	0		2
Male	1	0	0	0	0	1	
Female	1	0	0	0	0	1	
Hanging	4	0	0	0	0		4
Male	*3*	*0*	*0*	*0*	*0*	*3*	
Female	*1*	*0*	*0*	*0*	*0*	*1*	
Hypothermia	5	0	1	0	0		6
Male	*3*	*0*	*0*	*0*	*0*	*3*	
Female	*2*	*0*	*1*	*0*	*0*	*3*	
Non-Traffic Vehicular	*3*	*0*	*1*	*0*	*0*		*4*
Male	*3*	*0*	*1*	*0*	*0*	*4*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	
Struck by Object	2	0	0	0	0		2
Male	*0*	*0*	*0*	*0*	*0*	*0*	
Female	*2*	*0*	*0*	*0*	*0*	*2*	
Struck by Train	1	1	0	0	0		*2*
Male	*0*	*1*	*0*	*0*	*0*	*1*	
Female	*1*	*0*	*0*	*0*	*0*	*1*	
Other	8	1	0	0	0		9
Male	*7*	*0*	*0*	*0*	*0*	*7*	
Female	*1*	*1*	*0*	*0*	*0*	*2*	
Totals	**582**	**33**	**40**	**12**	**3**		**670**
Percent	87%	4.9%	6%	1.7%	.4%		100%

Graph 3-2 Accidental Deaths / Race / KCME / 2012



Graph 3-3 Accidental Deaths / Age Group / KCME / 2012

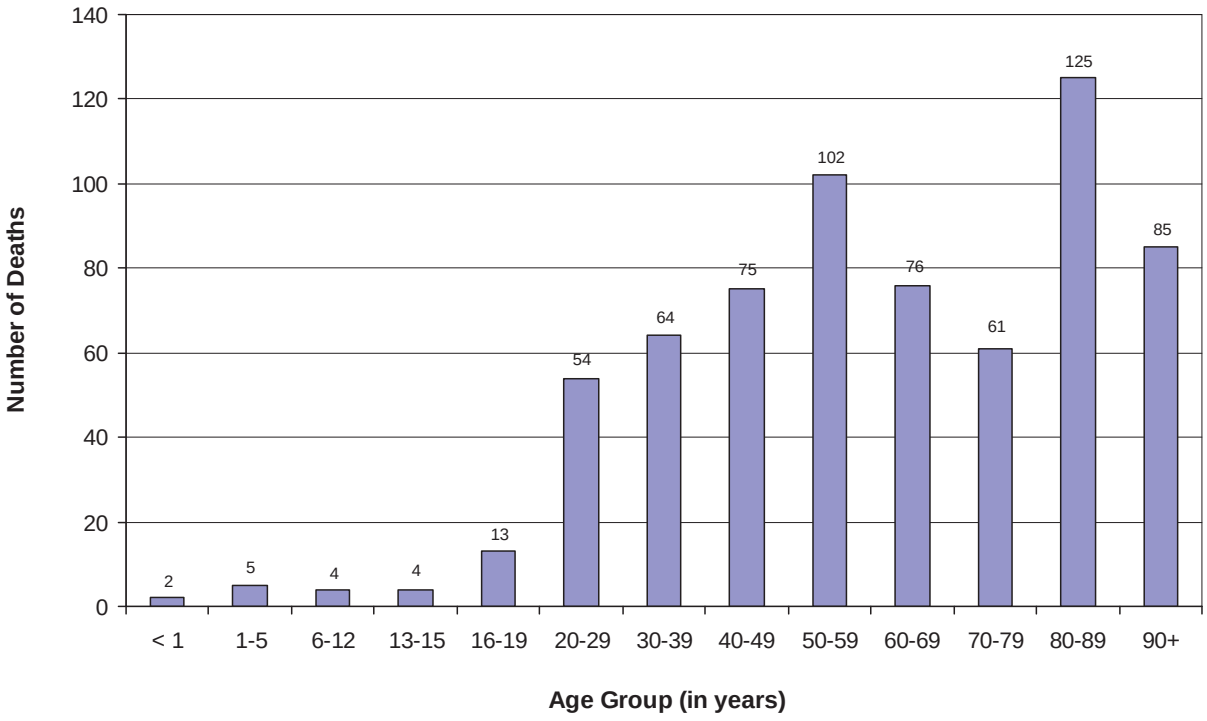


Table 3-2 Circumstances of Accidental Death / Age / Gender / KCME / 2012

CIRCUMSTANCES / GENDER	AGE GROUP (YEARS)													SUB-TOTAL	TOTAL
	< 1	1 to 5	6 to 12	13 to 15	16 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 +		
Aircraft	0	0	0	0	0	1	2	0	0	0	0	0	0		3
Male	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*2*	
Female	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	
Asphyxia compressional / positional / mechanical	2	0	0	0	0	1	3	0	0	1	0	0	0		7
Male	*2*	*0*	*0*	*0*	*0*	*1*	*3*	*0*	*0*	*1*	*0*	*0*	*0*	*7*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Aspiration	0	1	0	0	1	0	2	0	1	3	4	2	1		15
Male	*0*	*0*	*0*	*0*	*1*	*0*	*2*	*0*	*0*	*1*	*2*	*1*	*0*	*7*	
Female	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*2*	*2*	*1*	*1*	*8*	
Blunt Force / Crushing	0	1	0	0	1	3	1	3	1	5	1	4	0		20
Male	*0*	*0*	*0*	*0*	*0*	*3*	*1*	*2*	*0*	*5*	*0*	*2*	*0*	*13*	
Female	*0*	*1*	*0*	*0*	*1*	*0*	*0*	*1*	*1*	*0*	*1*	*2*	*0*	*7*	
Burns / Fire	0	0	0	0	2	0	2	2	6	7	6	1	0		26
Male	*0*	*0*	*0*	*0*	*2*	*0*	*1*	*2*	*2*	*6*	*2*	*1*	*0*	*16*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*4*	*1*	*4*	*0*	*0*	*10*	
Carbon Monoxide	0	0	0	0	0	1	1	0	1	0	0	0	0		3
Male	*0*	*0*	*0*	*0*	*0*	*1*	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*3*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Complication of Therapy	0	0	0	1	0	0	0	0	0	0	0	0	0		1
Male	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Female	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	
Drowning	0	1	1	2	2	5	3	1	3	5	1	0	0		24
Male	*0*	*0*	*1*	*2*	*2*	*4*	*3*	*0*	*2*	*4*	*1*	*0*	*0*	*19*	
Female	*0*	*1*	*0*	*0*	*0*	*1*	*0*	*1*	*1*	*1*	*0*	*0*	*0*	*5*	
Drugs / Poisons	0	0	0	0	4	39	42	60	60	16	3	1	2		227
Male	*0*	*0*	*0*	*0*	*3*	*31*	*29*	*42*	*33*	*12*	*3*	*1*	*1*	*158*	
Female	*0*	*0*	*0*	*0*	*1*	*8*	*13*	*18*	*27*	*4*	*0*	*0*	*1*	*72*	
Electrocution	0	0	0	0	0	0	1	0	0	0	0	0	0		1
Male	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Fall	0	0	1	0	3	2	3	8	24	37	42	112	82		314
Male	*0*	*0*	*1*	*0*	*3*	*1*	*3*	*7*	*16*	*23*	*28*	*54*	*38*	*174*	
Female	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*1*	*8*	*14*	*14*	*58*	*44*	*140*	
Gunshot wound(s)	0	0	0	0	0	0	0	0	1	1	0	0	0		2
Male	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
Female	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
Hanging	0	1	2	1	0	0	0	0	0	0	0	0	0		4
Male	*0*	*0*	*2*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*3*	
Female	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	

Hypothermia	0	0	0	0	0	0	1	0	3	0	1	1	0		6
Male	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*2*	*0*	*0*	*0*	*0*	*3*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*1*	*1*	*0*	*3*	
Non-traffic Vehicular	0	0	0	0	0	0	0	0	0	0	2	2	0		4
Male	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*2*	*0*	*4*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Struck by Object	0	0	0	0	0	0	0	0	0	1	1	0	0		2
Male	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*1*	*0*	*0*	*2*	
Struck by Train	0	0	0	0	0	1	0	0	0	0	0	1	0		2
Male	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*1*	
Other	0	1	0	0	0	1	3	0	2	1	0	1	0		9
Male	*0*	*0*	*0*	*0*	*0*	*1*	*3*	*0*	*1*	*1*	*0*	*1*	*0*	*7*	
Female	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*2*	
Totals	**2**	**5**	**4**	**4**	**13**	**54**	**64**	**75**	**102**	**76**	**61**	**125**	**85**		**670**
Percent	.3	.7	.6	.6	2	8	9.5	11	15	11.3	9	19	13		100%

Table 3-3 Circumstances of Accidental Death / Gender / KCME / 2012

CIRCUMSTANCES	GENDER		TOTAL
	MALE	FEMALE	
Aircraft	2	1	3
Asphyxia (compressional / positional / mechanical)	7	0	7
Aspiration	7	8	15
Blunt Force / Crushing	13	7	20
Burns / Fire	16	10	26
Carbon Monoxide	3	0	3
Complication of Therapy	0	1	1
Drowning	19	5	24
Drugs / Poisons	155	72	227
Electrocution	1	0	1
Fall	174	140	314
Gunshot wound(s)	1	1	2
Hanging	3	1	4
Hypothermia	3	3	6
Non-traffic Vehicular	4	0	4
Struck by Object	0	2	2
Struck by Train	1	1	2
Other	7	2	9
Totals	**416**	**254**	**670**
Percent	62%	38%	100%

Table 3-4 Circumstances of Accidental Death / Blood Alcohol Results / KCME / 2012

CIRCUMSTANCES	TESTED		NOT TESTED	TOTAL
	TESTED POSITIVE	TESTED NEGATIVE		
Aircraft	3	0	0	3
Asphyxia (compressional/ positional / mechanical)	0	6	1	7
Aspiration	0	12	3	15
Blunt Force / Crushing	1	12	7	20
Burns / Fire	7	11	8	26
Carbon Monoxide	0	2	1	3
Complication of Therapy	0	1	0	1
Drowning	7	14	3	24
Drugs / Poisons	72	144	10	227
Electrocution	0	1	0	1
Fall	11	78	225	314
Gunshot wound(s)	0	1	1	2
Hanging	0	4	0	4
Hypothermia	2	3	1	6
Non-traffic Vehicular	0	2	2	4
Struck by Object	0	2	0	2
Struck by Train	0	2	0	2
Other	1	4	5	9
Totals	**104**	**299**	**267**	**670**
Percent	15.5	44.5	40	100%

Manner of death: Homicide

The Medical Examiner classifies a death as a homicide when the death results from injuries inflicted by another person. In this context, the word homicide does not necessarily imply the existence of criminal intent behind the action of the other person. This is reflected in the fact that the prosecuting attorney may either charge the person responsible for the injuries with murder or manslaughter, or decline to file charges. In 2012, the Medical Examiner classified 69 deaths as homicide. This number represents 3.3% (69/2,104) of the Medical Examiner death investigations for the calendar year 2012. Of these 69 homicides, 60 (87%, 60/69) were the result of incidents that occurred within King County. For comparison, there were 54 homicides investigated in 2011, of which 49 (91%, 49/54) were incidents in King County.

The data reflect the weapons or mechanisms responsible for the homicidal deaths in 2012. Firearms were responsible for 68% (47/69), compared to 2011, when 65% (35/54) were due to firearms. Stabbing by a knife or other sharp-edged instrument caused 19% (13/69) of deaths of homicide victims. Blunt force injuries were responsible for 9% (6/69) of the 2012 homicide deaths. There were no deaths due to strangulation/asphyxia, one death due to homicidal violence and no deaths due to other means. The term "homicidal violence" is used when circumstances indicate that death was due to homicide, but the exact cause of death is not determined, for example, in a decomposed body. There were 3 such deaths in 2012.

In 2012, there was one homicide victim under five years of age. There were three homicide victims between 6 - 15 years of age. Seven homicide victims were between the ages of 16 and 19 years.

Examining the racial distribution of victims of homicide, 33% (23/69) of the victims were African American, compared to 2011, when 15% (8/54) of the victims were African American. Whites, while representing 74.7% of the population, made up 52% (36/69) of the homicide victims. The remaining 15% of homicide victims (10/69) included Asian/Pacific Islanders (5/69) Native Americans/AK Natives (3/69) and other (1/69). As indicated on pages 9 and 23, in 9% of the Medical Examiner cases the incident leading to death occurred outside of King County and the decedent was likely not a resident of King County. Therefore, Medical Examiner figures cannot be directly compared to the racial distribution of King County residents (refer to Table 1-9 on page 23.)

Males comprised 71% (49/69) and women 29% (20/69) of the homicide victims in 2012. The majority of victims, 62% (43/69), were between the ages of 20 and 49 years. Young people, 19 years old and under, comprised 16% (11/69) of the homicide victims. For comparison, this younger age group represented 15% (8/54) in the year 2011. Ninety-nine percent (68/69) of the victims were tested for the presence of alcohol. Of those tested 41% (28/69) showed alcohol present at the time of death.

Of the 69 homicide deaths in 2012, 60 (87%, 60/69) of the fatal incidents occurred within King County, and of these deaths, 24 (40%, 24/60) occurred within the city limits of Seattle. In 9 of the 69 homicidal deaths, the incident occurred outside of King County, but death occurred within King County.

The relationship of victim to assailant was not tabulated as part of this report. In order to investigate such associations, additional review of police records would be necessary.

Graph 4-1 Homicide Injury Methods / KCME / 2012

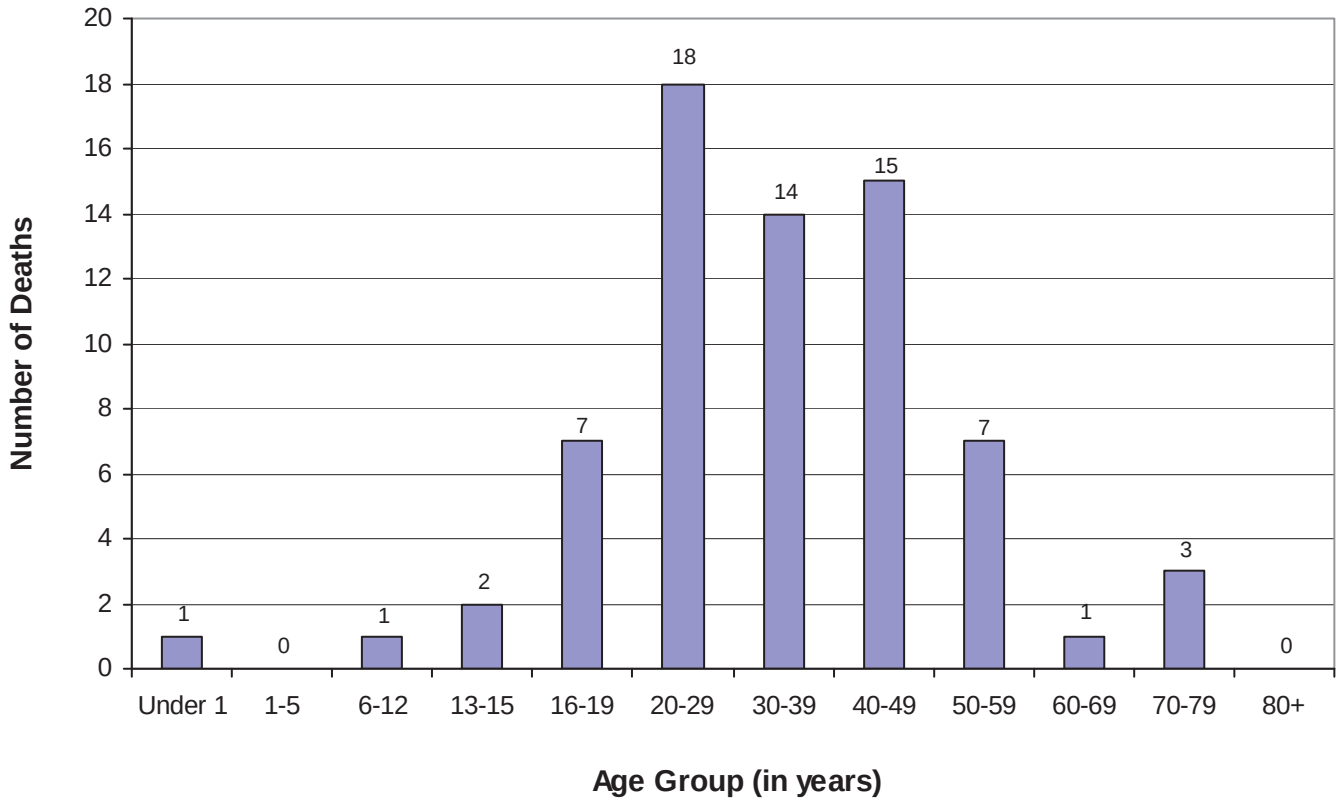


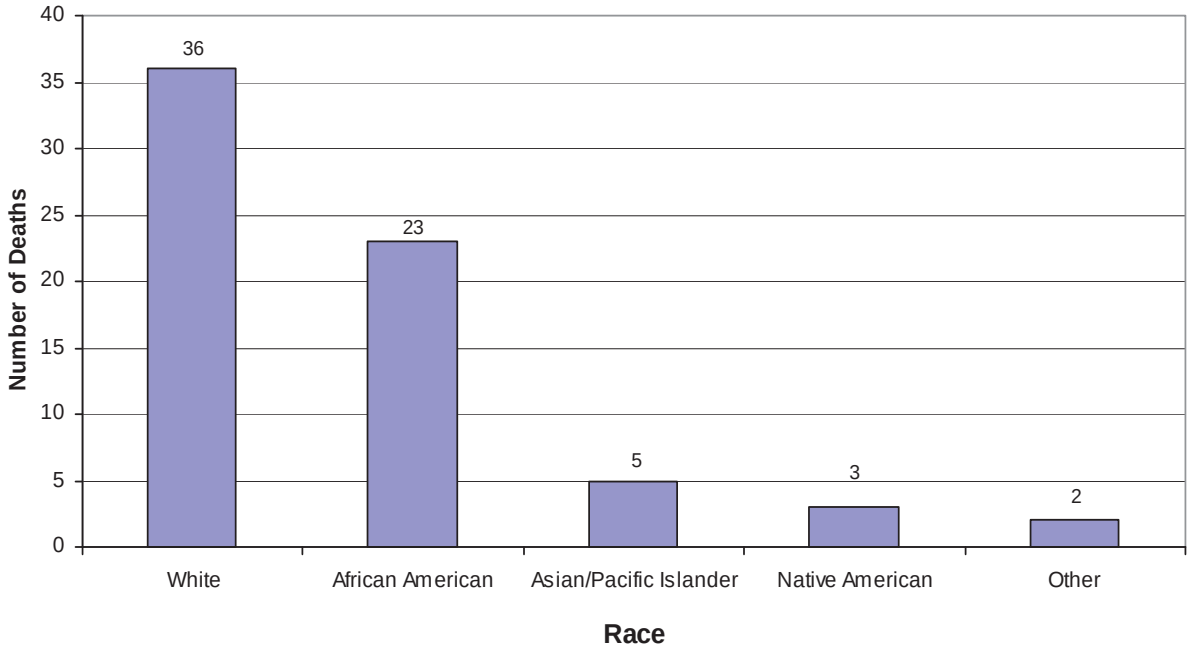
Table 4-1 Homicide Methods / Race / Gender / KCME / 2012

CIRCUMSTANCES / GENDER	RACE					SUB-TOTAL	TOTAL
	WHITE	AFRICAN AMER	ASIAN/ PAC IS	AM INDIAN/ AK NATIVE	OTHER		
Asphyxia / Strangulation	0	0	0	0	0		0
Male	*0*	*0*	*0*	*0*	*0*	*0*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	
Blunt Force	4	1	1	0	0		6
Male	*3*	*0*	*1*	*0*	*0*	*4*	
Female	*1*	*1*	*0*	*0*	*0*	*2*	
Firearms	22	19	4	2	0		47
Male	*16*	*17*	*3*	*0*	*0*	*36*	
Female	*6*	*2*	*1*	*2*	*0*	*11*	
Homicidal Violence	2	0	0	0	1		3
Male	*0*	*0*	*0*	*0*	*0*	*0*	
Female	*2*	*0*	*0*	*0*	*1*	*3*	
Stabbing	8	3	0	1	1		13
Male	*4*	*3*	*0*	*1*	*1*	*9*	
Female	*4*	*0*	*0*	*0*	*0*	*4*	
Other / Unknown	0	0	0	0	0		0
Male	*0*	*0*	*0*	*0*	*0*	*0*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	
Totals	**36**	**23**	**5**	**3**	**2**		**69**
Percent	52.2	33.3	7.2	4.3	3		100%

Table 4-2 Homicide Methods / Age / Gender / KCME / 2012

METHOD / GENDER	AGE GROUP (YEARS)													SUB-TOTAL	TOTAL
	< 1	**1 to 5**	**6 to 12**	**13 to 15**	**16 to 19**	**20 to 29**	**30 to 39**	**40 to 49**	**50 to 59**	**60 to 69**	**70 to 79**	**80 to 89**	**90 +**		
Asphyxia / Strangulation	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Male	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Blunt Force	1	0	0	0	0	1	2	2	0	0	0	0	0		6
Male	*0*	*0*	*0*	*0*	*0*	*1*	*1*	*2*	*0*	*0*	*0*	*0*	*0*	*4*	
Female	*1*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*2*	
Firearms	0	0	1	1	5	12	9	12	5	0	2	0	0		47
Male	*0*	*0*	*0*	*1*	*2*	*8*	*8*	*11*	*4*	*0*	*2*	*0*	*0*	*36*	
Female	*0*	*0*	*1*	*0*	*3*	*4*	*1*	*1*	*1*	*0*	*0*	*0*	*0*	*11*	
Homicidal Violence	0	0	0	0	1	0	0	0	1	0	1	0	0		3
Male	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Female	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*1*	*0*	*1*	*0*	*0*	*3*	
Stabbing	0	0	0	1	1	5	3	1	1	1	0	0	0		13
Male	*0*	*0*	*0*	*1*	*0*	*4*	*2*	*1*	*1*	*0*	*0*	*0*	*0*	*9*	
Female	*0*	*0*	*0*	*0*	*1*	*1*	*1*	*0*	*0*	*1*	*0*	*0*	*0*	*4*	
Other / Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Male	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Totals	**1**	**0**	**1**	**2**	**7**	**18**	**14**	**15**	**7**	**1**	**3**	**0**	**0**		**69**
Percent	1.4	0	1.4	3	10	26	20.3	22	10	1.4	4.5	0	0		100%

Graph 4-2 Homicide Deaths / Race / KCME / 2012



Graph 4-3 Homicide Deaths / Age Group / KCME / 2012

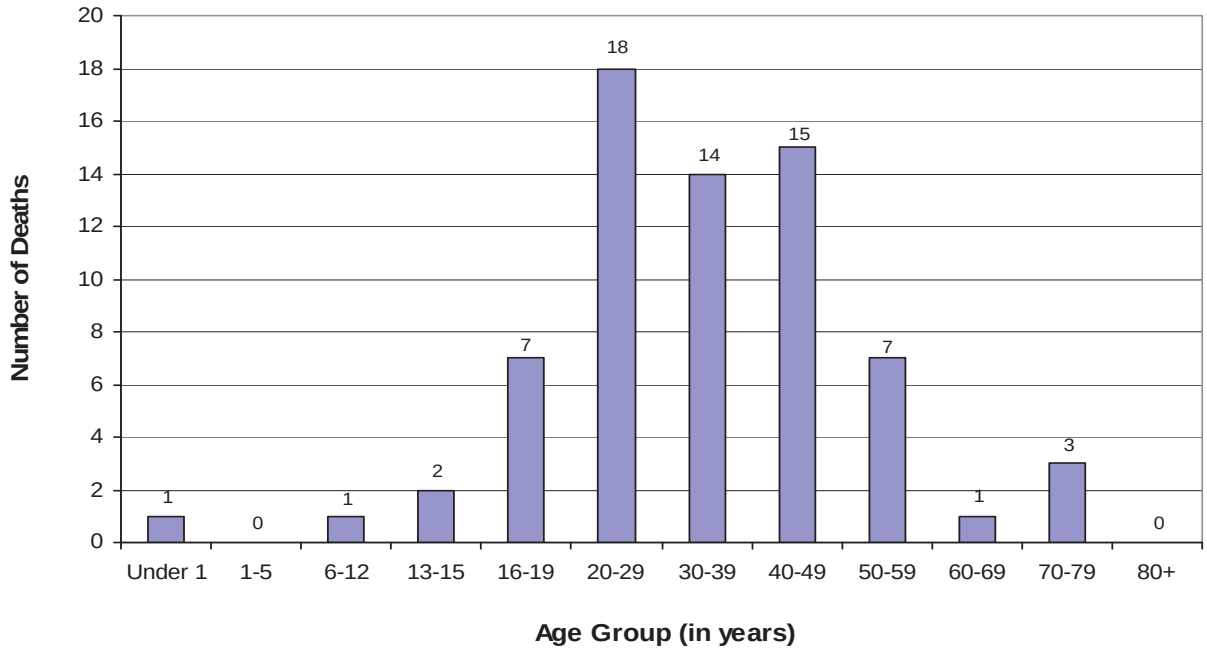


Table 4-3 Homicide Deaths / Age / Race / Gender / KCME / 2012

METHOD		< 16	16 to 19	20 to 29	30 to 39	40 to 49	50+	SUB-TOTAL	TOTAL
Blunt Force	White	0	0	1	1	2	0		4
	Male	*0*	*0*	*1*	*0*	*2*	*0*	*3*	
	Female	*0*	*0*	*0*	*1*	*0*	*0*	*1*	
	African Am.	1	0	0	0	0	0		1
	Male	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	Female	*1*	*0*	*0*	*0*	*0*	*0*	*1*	
	Asian/Pac Is.	0	0	0	1	0	0		1
	Male	*0*	*0*	*0*	*1*	*0*	*0*	*1*	
	Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Firearms	White	2	2	2	4	7	5		22
	Male	*1*	*1*	*1*	*3*	*6*	*4*	*16*	
	Female	*1*	*1*	*1*	*1*	*1*	*1*	*6*	
	African Am.	0	3	5	5	4	2		19
	Male	*0*	*1*	*5*	*5*	*4*	*2*	*17*	
	Female	*0*	*2*	*0*	*0*	*0*	*0*	*2*	
	Asian/Pac Is.	0	0	3	0	1	0		4
	Male	*0*	*0*	*2*	*0*	*1*	*0*	*3*	
	Female	*0*	*0*	*1*	*0*	*0*	*0*	*1*	
	Am. Indian / AK Native	0	0	2	0	0	0		2
	Male	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	Female	*0*	*0*	*2*	*0*	*0*	*0*	*2*	
Homicidal/ Violence	White	0	0	0	0	0	2		2
	Male	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	Female	*0*	*0*	*0*	*0*	*0*	*2*	*2*	
	Other	0	1	0	0	0	0		1
	Male	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	Female	*0*	*1*	*0*	*0*	*0*	*0*	*1*	
Stabbing	White	1	1	3	2	0	1		8
	Male	*1*	*0*	*2*	*1*	*0*	*0*	*4*	
	Female	*0*	*1*	*1*	*1*	*0*	*1*	*4*	
	Black	0	0	0	1	1	1		3
	Male	*0*	*0*	*0*	*1*	*1*	*1*	*3*	
	Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	Am. Indian / AK Native	*0*	*0*	*1*	*0*	*0*	*0*		1
	Male	*0*	*0*	*1*	*0*	*0*	*0*	*1*	
	Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
	Other	*0*	*0*	*1*	*0*	*0*	*0*		1
	Male	*0*	*0*	*1*	*0*	*0*	*0*	*1*	
	Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Totals		**4**	**7**	**18**	**14**	**15**	**11**		**69**

Table 4-4 Homicide Methods / Gender / KCME / 2012

METHOD	Gender MALE	FEMALE	TOTAL
Asphyxia / Strangulation	0	0	0
Blunt Force	4	2	6
Firearms	36	11	47
Homicidal Violence	0	3	3
Stabbing	9	4	13
Other / Unknown	0	0	0
Totals	**49**	**20**	**69**
Percent	71	29	100%

Table 4-5 Homicide Methods / Blood Alcohol Results / KCME / 2012

METHOD	TESTED POSITIVE	NEGATIVE	NOT TESTED	TOTAL
Asphyxia / Strangulation	0	0	0	0
Blunt Force	3	3	0	6
Firearms	20	26	1	47
Homicidal Violence	0	3	0	3
Stabbing	5	8	0	13
Other / Unknown	0	0	0	0
Totals	**28**	**40**	**1**	**69**
Percent	40.5	58	1.5	100%

Manner of death: Natural

The Medical Examiner assumes jurisdiction over deaths that are determined to be natural due to the sudden and unexpected nature of the death in an apparently healthy individual, when there is no physician who has knowledge or awareness of the decedent's condition, when there is no next of kin to make disposition, or when there are suspicious circumstances surrounding the death. In these situations, the Medical Examiner becomes responsible for certification of death. It should be stressed that the natural deaths the Medical Examiner investigates may not be representative of all natural deaths in the general population, due to the possibility that jurisdictional considerations introduce significant bias.

In 2012, the King County Medical Examiner's Office assumed jurisdiction over 873 deaths attributed to natural causes, representing 41% (873/2104) of the cases investigated. The King County Medical Examiner certified 73% (641/873) of these deaths; attending physicians who had knowledge of the decedent's medical condition certified 27% (232/873). It should be noted that when a death is initially reported, there may be no evidence of an attending physician. A thorough scene investigation often reveals that the deceased did, in fact, have a physician with knowledge of the decedent's medical condition. In that case, this physician would then be contacted to certify the death.

The King County Medical Examiner performed autopsies in 73% (468/641) of the deaths certified as natural, which included autopsies performed in 100% (4/4) of deaths classified as Sudden Infant Death Syndrome (SIDS). In this context, it is important to recognize that there are changes occurring in the classification of sudden infant deaths. The term "Sudden Unexplained Infant Death" (SUID) is used by some as an alternative to SIDS. Whatever the designation, it is important to recognize that an autopsy is performed on all sudden infant deaths.

Cardiovascular disease accounted for the greatest proportion of natural deaths. Most deaths in which an autopsy was not performed were certified as due to "probable arteriosclerotic cardiovascular disease."

A special subset of deaths designated "Complication of Therapy" has been incorporated in the statistical analyses of natural deaths. Complication of Therapy is defined as a death that arises as a predictable consequence of appropriate medical therapy. Previously, these deaths were classified separately and included in the Accident chapter. Complication of Therapy is not an official manner of death recognized by state or federal standards of death certification. It is, however, a useful category that includes deaths resulting from medical therapy or surgical procedures that are not easily classified as either natural or accidental deaths. As such, this category of deaths warrants special mention because of an apparent upward trend in incidence and increased public interest. A Deaths that are excluded from this category include falls and mechanical injuries in hospitals, inadvertent misadministration of drugs, wrong-sided surgeries, and wholly unexpected procedure-related injuries, all of which are more appropriately classified as manner Accident.

As an example, a patient who dies after an operation for colon cancer in whom there is an infection complicating the colectomy, the death would be classified as Complication of Therapy, manner Natural. Contrast this example with the case of a hospital patient for whom a proper prescription for a heart medication is written, but is given an unintentional overdose of the medication. In this second case, the manner of death would be Accident, not Complication of Therapy.

It is important to note that the classification of a death as a Complication of Therapy is a non-judgmental means by which the inherent risk of medical therapies can be recognized and tracked. By no means is Complication of Therapy synonymous with malpractice or negligence.

Complication of Therapy deaths have increased in the previous ten years, from 17 in 2001 to 27 in 2012 and can be divided into three general categories: drug-related, consequence of medical procedure, and consequence of surgery. Drug-related includes anaphylactic/allergic reaction, hemorrhagic complications of anticoagulants, anesthesia related events, and other adverse drug reactions. Consequence of medical procedure refers to complications from procedures that are therapeutic or diagnostic, but do not meet the criteria for surgery, such as placement of catheters, penetration of body cavities by needles, or manipulation of body regions, etc. Consequence of surgery refers to direct anatomic damage during a procedure and usually involves a diseased organ system, such as perforation of a viscus or vessel or hemorrhagic complications of surgery.

Graph 5-4 shows the Complication of Therapy deaths by general category and Graph 5-5 further divides the general category of surgical injury into "type of surgery" and "comorbidity." (Comorbidity is defined as the coexistence of natural disease serious enough to be listed on the death certificate as a contributing condition.)

There may be multiple reasons for this apparent upward trend in the incidence of Complication of Therapy over the last ten years, but one of the most important factors is probably the increased rate at which non-natural deaths are reported to the KCMEO. The Medical Examiner is dependent on clinical providers to report deaths that may have been a consequence of medical therapy.

Recognition of the importance of identifying and reporting these deaths by the medical community has surged since the Institute of Medicine of the National Academy of Sciences published a report in 1999 that estimated that up to 98,000 preventable deaths may occur each year in the United States due to medical errors. The subsequent public interest and efforts by the healthcare system to address issues of patient safety may contribute to a greater percentage of these cases being reported to the Medical Examiner.

Table 5-1	Disease Processes Causing Natural Deaths / KCME / 2012
NUMBER OF DEATHS	DISEASE DESCRIPTION
	CARDIOVASCULAR
3	Aortic aneurysm
6	Aortic dissection
80	Arteriosclerotic cardiovascular disease (ASCVD)
10	Bacterial endocarditis
6	Cardiac dysrhythmia
23	Cardiomyopathy
4	Congenital heart disease
4	Congestive heart failure
160	Hypertensive ASCVD / Hypertensive heart disease
1	Myocarditis
135	Probable arteriosclerotic cardiovascular disease
7	Valvular heart disease
3	Other
442	TOTAL CARDIOVASCULAR
	CENTRAL NERVOUS SYSTEM
12	Epilepsy (idiopathic & other non-traumatic etiologies)
4	Infarct
2	Meningitis
6	Spontaneous intracerebral hemorrhage
12	Spontaneous rupture of aneurysm
24	Other
60	TOTAL CENTRAL NERVOUS SYSTEM
	COMPLICATION OF THERAPY (COT)
5	Drug Related COT
8	Procedure Related COT
14	Surgery Related COT
27	TOTAL COMPLICATION OF THERAPY
	ENDOCRINE
11	Diabetic ketoacidosis
12	Diabetes mellitus
1	Disease of blood or blood-forming organ
4	Pancreatitis
9	Other
37	TOTAL ENDOCRINE

Table 5-1	Disease Processes Causing Natural Deaths / KCME / 2012
NUMBER OF DEATHS	DISEASE DESCRIPTION
	GASTROINTESTINAL
1	Bacterial peritonitis
6	Gastrointestinal hemorrhage
5	Perforating ulcer
6	Other
18	TOTAL GASTROINTESTINAL
	HEPATIC
25	Cirrhosis
3	Cirrhosis and fatty liver
1	Fatty liver
5	Hepatitis
2	Other
36	TOTAL HEPATIC
	MALIGNANCY
2	Breast
5	Colon
20	Lung
6	Pancreas
1	Prostate
25	Other
59	TOTAL MALIGNANCY
	RESPIRATORY
2	Asthma
24	Chronic obstructive pulmonary disease
29	Pneumonia
13	Pulmonary thromboembolus
3	Other
71	TOTAL RESPIRATORY
	SUDDEN INFANT DEATH SYNDROME
4	SIDS

Table 5-1	**Disease Processes Causing Natural Deaths / KCME / 2012** (continued)
NUMBER OF DEATHS	DISEASE DESCRIPTION
	OTHER PROCESSES
52	Chronic ethanolism (alcoholism)
1	Chronic renal disease
1	Genetic
1	HIV / AIDS
17	Infection
2	Morbid obesity
5	Necrotizing fasciitis
8	No anatomic or toxicological cause of death
12	Sepsis
20	Other
119	TOTAL OTHER PROCESSES
431	TOTAL Non-Cardiovascular Cause of Death
442	TOTAL Cardiovascular Cause of Death
873	**Total NATURAL DEATHS under KCMEO Jurisdiction, 2012**

Graph 5-1 Deaths due to Natural Causes / KCME / 2012

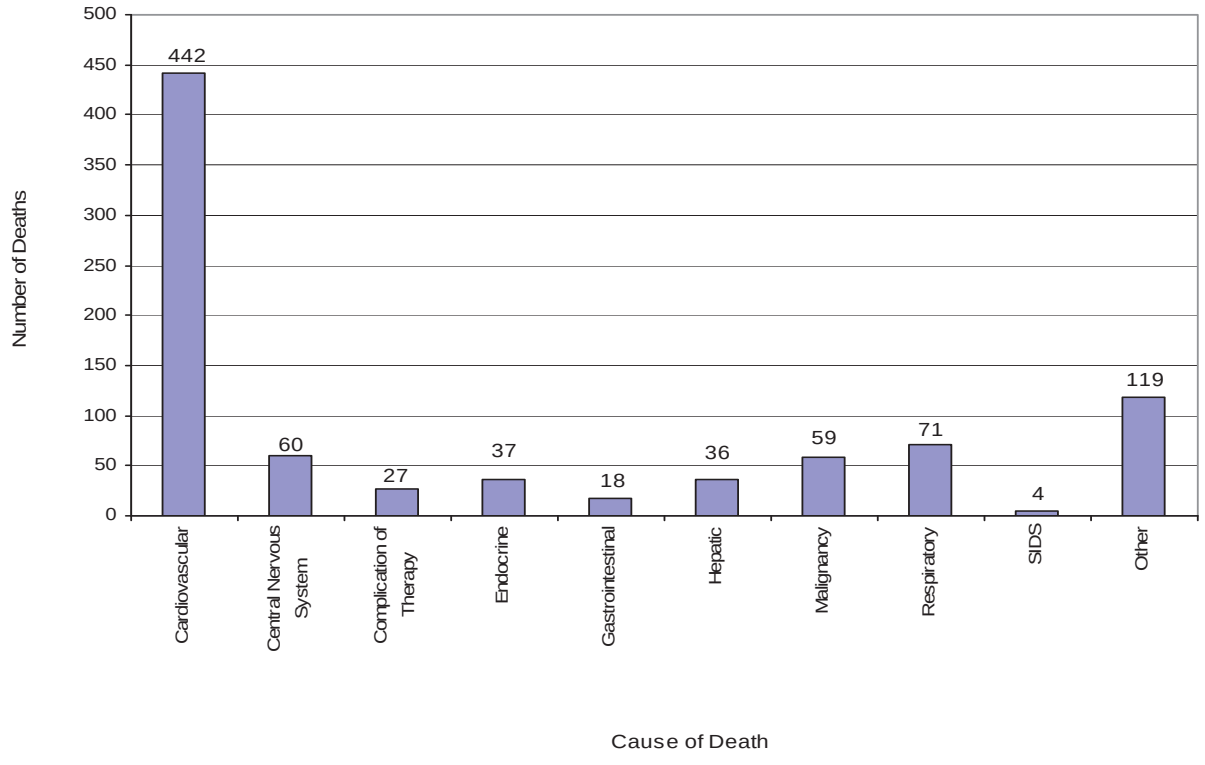
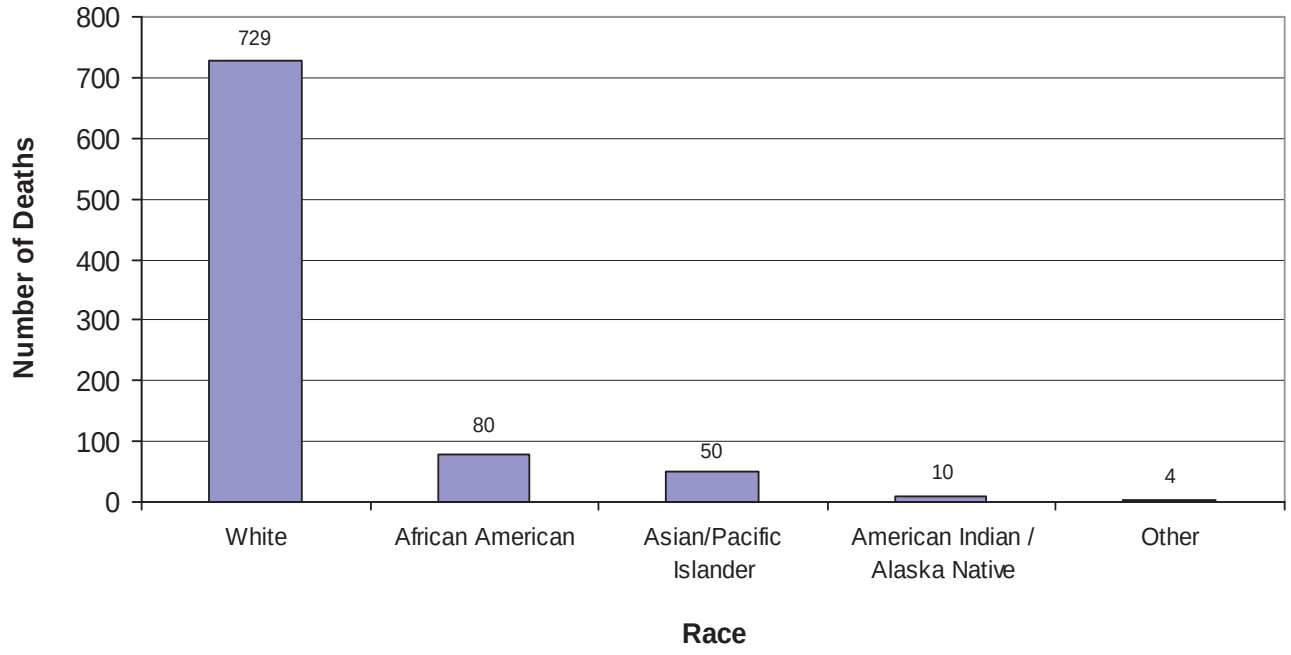


Table 5-2 **Natural Deaths / Race / Gender / KCME / 2012**

DISEASE PROCESS / GENDER	RACE					SUB-TOTAL	TOTAL
	WHITE	AFRIC AMER	ASIAN/ PAC IS	AM INDIAN /AK NATIVE	OTHER		
Cardiovascular	375	35	26	4	2		442
Male	*259*	*31*	*19*	*2*	*2*	*313*	
Female	*116*	*4*	*7*	*2*	*0*	*129*	
Central Nervous	47	8	5	0	0		60
Male	*30*	*3*	*5*	*0*	*0*	*38*	
Female	*17*	*5*	*0*	*0*	*0*	*22*	
Complication of Therapy	21	3	3	0	0		27
Male	*7*	*1*	*1*	*0*	*0*	*9*	
Female	*14*	*2*	*2*	*0*	*0*	*18*	
Endocrine	28	6	1	1	0		36
Male	*19*	*1*	*1*	*1*	*0*	*22*	
Female	*9*	*5*	*0*	*0*	*0*	*14*	
Gastrointestinal	15	2	1	0	0		18
Male	*9*	*2*	*0*	*0*	*0*	*11*	
Female	*6*	*0*	*1*	*0*	*0*	*7*	
Hepatic	33	0	1	1	1		36
Male	*26*	*0*	*1*	*0*	*0*	*27*	
Female	*7*	*0*	*0*	*1*	*1*	*9*	
Malignancy	50	5	4	0	0	37	59
Male	*32*	*3*	*2*	*0*	*0*	*37*	
Female	*18*	*2*	*2*	*0*	*0*	*22*	
Respiratory	58	6	4	2	1		71
Male	*39*	*3*	*2*	*1*	*0*	*45*	
Female	*19*	*3*	*2*	*1*	*1*	*26*	
SIDS	4	0	0	0	0		4
Male	*1*	*0*	*0*	*0*	*0*	*1*	
Female	*3*	*0*	*0*	*0*	*0*	*3*	
Other	97	15	5	2	0		119
Male	*67*	*10*	*2*	*0*	*0*	*79*	
Female	*30*	*5*	*3*	*2*	*0*	*40*	
Totals	**729**	**80**	**50**	**10**	**4**		**873**
Percent	83.5	9	6	1	.5		

Graph 5-2 Natural Deaths / Race / KCME / 2012



Graph 5-3 Natural Deaths / Age Group / KCME / 2012

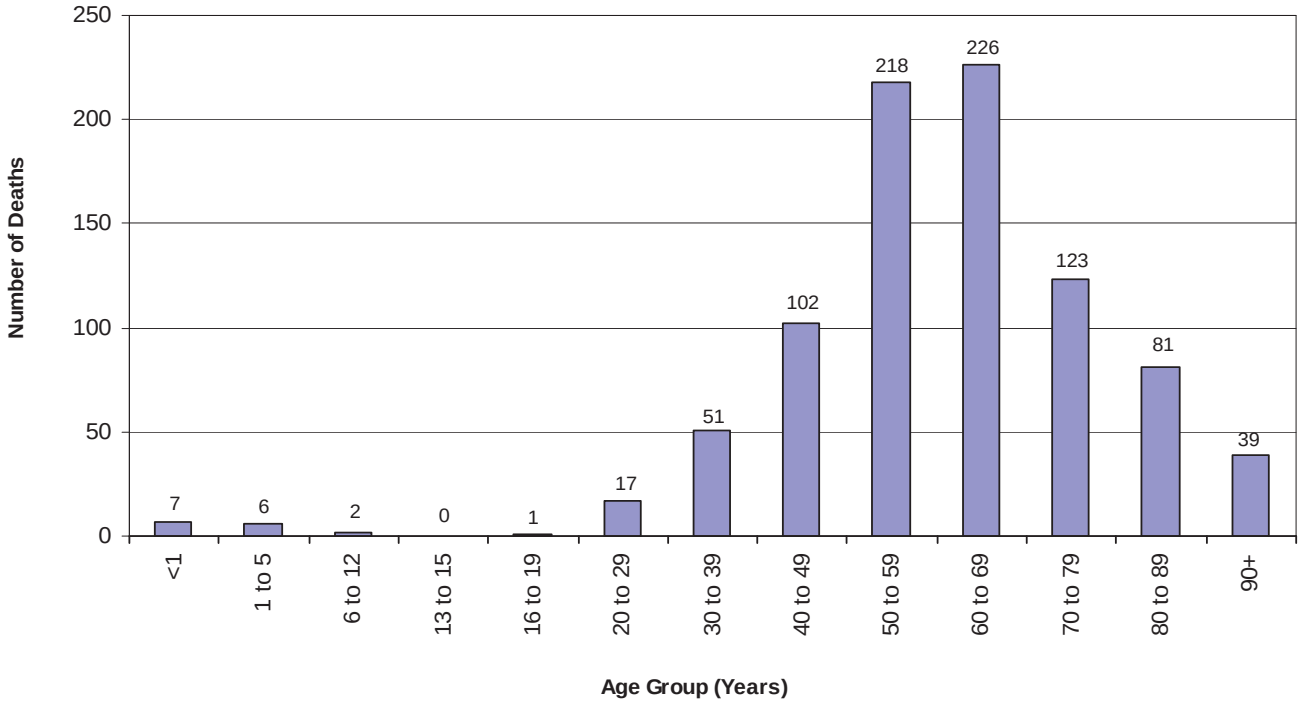


Table 5-3 **Natural Deaths / Age / Gender / KCME / 2012**

DISEASE PROCESS/ GENDER	AGE GROUP (YEARS) < 1	1 to 5	6 to 12	13 to 15	16 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 +	SUB-TOTAL	TOTAL
Cardiovascular	0	0	1	0	1	7	18	40	104	131	68	53	19		442
Male	*0*	*0*	*0*	*0*	*1*	*4*	*8*	*28*	*83*	*103*	*50*	*24*	*12*	*313*	
Female	*0*	*0*	*1*	*0*	*0*	*3*	*10*	*12*	*21*	*28*	*18*	*29*	*7*	*129*	
Central Nervous	0	2	0	0	0	2	6	12	14	6	6	5	7		60
Male	*0*	*2*	*0*	*0*	*0*	*0*	*2*	*8*	*7*	*4*	*6*	*5*	*4*	*38*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*1*	*2*	*1*	*6*	*6*	*0*	*18*	
Complication of Therapy	0	0	1	0	0	0	2	4	2	2	8	7	1		27
Male	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*3*	*0*	*1*	*2*	*1*	*1*	*9*	
Female	*0*	*0*	*1*	*0*	*0*	*0*	*1*	*1*	*2*	*1*	*6*	*6*	*0*	*18*	
Endocrine	0	0	0	0	0	1	3	8	14	6	5	0	0		37
Male	*0*	*0*	*0*	*0*	*0*	*0*	*3*	*6*	*9*	*2*	*3*	*0*	*0*	*23*	
Female	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*2*	*5*	*4*	*2*	*0*	*0*	*14*	
Gastrointestinal	1	0	0	0	0	0	0	3	9	3	2	0	0		18
Male	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*2*	*6*	*0*	*2*	*0*	*0*	*11*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*3*	*3*	*0*	*0*	*0*	*7*	
Hepatic	0	0	0	0	0	0	2	8	16	8	2	0	0		36
Male	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*7*	*11*	*6*	*2*	*0*	*0*	*27*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*1*	*5*	*2*	*0*	*0*	*0*	*9*	
Malignancy	0	0	0	0	0	0	1	1	12	27	11	3	4		59
Male	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*7*	*20*	*7*	*1*	*2*	*37*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*1*	*5*	*7*	*4*	*2*	*2*	*22*	
Respiratory	0	1	0	0	0	1	7	8	11	20	12	6	5		71
Male	*0*	*0*	*0*	*0*	*0*	*0*	*5*	*5*	*8*	*13*	*6*	*4*	*4*	*45*	
Female	*0*	*1*	*0*	*0*	*0*	*1*	*2*	*3*	*3*	*7*	*6*	*2*	*1*	*26*	
SIDS	4	0	0	0	0	0	0	0	0	0	0	0	0		4
Male	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	
Female	*3*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*3*	
Other	2	2	1	0	0	6	14	18	36	23	9	7	3		119
Male	*0*	*2*	*0*	*0*	*0*	*3*	*9*	*14*	*27*	*15*	*8*	*1*	*1*	*79*	
Female	*2*	*0*	*1*	*0*	*0*	*3*	*5*	*4*	*9*	*8*	*1*	*6*	*2*	*40*	
Totals	**7**	**6**	**2**	**0**	**1**	**17**	**50**	**102**	**219**	**226**	**123**	**81**	**39**		**873**
Percent	.8	.7	.2	0	.1	2	5.8	11.7	25	26	14	9.2	4.5		**100%**

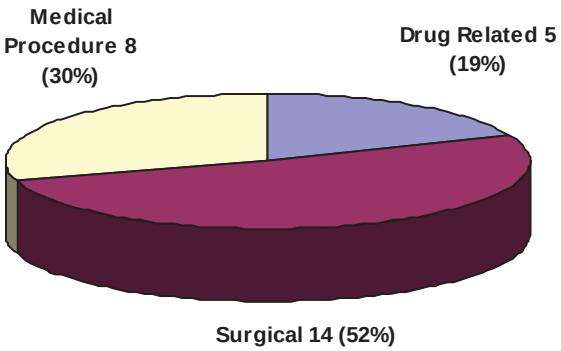
Table 5-4 **Natural Deaths / Gender / KCME / 2012**

CIRCUMSTANCES	GENDER		TOTAL
	MALE	FEMALE	
Cardiovascular	313	129	442
Central Nervous	38	22	60
Complication of Therapy	9	18	27
Endocrine	23	14	37
Gastrointestinal	11	7	18
Hepatic	27	9	36
Malignancy	37	22	59
Respiratory	45	26	71
SIDS	1	3	4
Other	79	40	119
Totals	**583**	**290**	**873**
Percent	67%	33%	100%

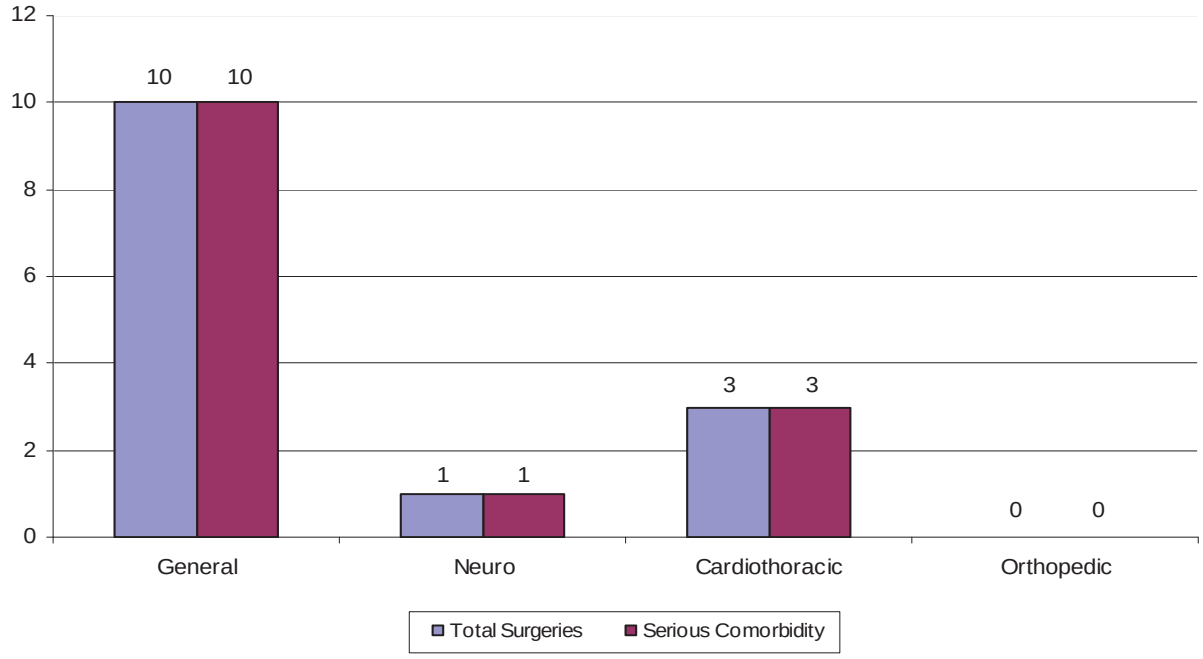
Table 5-5 **Natural Deaths / Blood Alcohol Results / KCME / 2012**

METHOD	TESTED		NOT TESTED	TOTAL
	POSITIVE	NEGATIVE		
Cardiovascular	47	240	155	442
Central Nervous System	3	25	32	60
Complication of Therapy	0	0	27	27
Endocrine	1	19	17	37
Gastrointestinal	4	11	3	18
Hepatic	10	11	15	36
Malignancy	3	16	40	59
Respiratory	0	26	45	71
SIDS	0	2	2	4
Other	1	10	108	119
Totals	**69**	**360**	**444**	**873**
Percent	8%	41%	51%	100%

Graph 5-4 Complication of Therapy / General Categories / KCME / 2012



Graph 5-5 Complication of Therapy[16] / Surgical Injuries / KCME / 2012



[16]Serious co-morbidity indicates coexisting natural disease serious enough to contribute to death.

Manner of death: Suicide

Suicides are deaths caused by self-inflicted injuries with evidence of intent to end one's life. Evidence of intent includes an explicit expression, such as a suicide note or verbal threat, or an act constituting implicit intent, such as deliberately placing a gun to one's head or rigging a vehicle's exhaust. In 2012, there were 281 suicides, accounting for 13% (281/2,104) of the deaths that the King County Medical Examiner's Office investigated.

In 2012, there were eighteen suicides among persons 19 years and younger (6.4% of all suicides, 18/281), which is higher than in 2011 when there were eleven suicides in this age group. Suicides in the age group 60 years and older represented 21% (58/281) of all suicides in 2012.

Firearms were responsible for 42% (119/281) of the 2012 suicide deaths. The number of gunshot suicides (119/281) in 2012 is three more than in 2011 when there were 116. Hanging accounted for 17% (48/281) of suicidal deaths, while jumping from a height accounted for 8.5% (24/281). Drugs and poisons accounted for 15% (42/281) of all suicides, while carbon monoxide caused death in 3% (9/281) of the cases. More information regarding drug-caused deaths is presented in the section "Deaths Due to Drugs & Poisons" beginning on page 89.

Firearms were the primary method of committing suicide for all age groups over the age of 20. In the 19 years and younger age group, firearms represented 39% (7/18) of the deaths while hanging represented 50% (9/18) of the deaths

Blood alcohol tests were performed in 98% (275/281) of suicidal deaths and were positive in 32% (89/281) of cases tested.

.In 2012, there were ten deaths due to drugs and/or poisons by adults 60 years of age and over. In 2012, there were no suicides attributed to drugs and/or poisons among youths 19 years and younger. In 2011, there were also no deaths from drug and/or poisons in this age group.

The Washington Death with Dignity Act, Initiative 1000, codified as RCW 70.245, passed on November 4, 2008 and took effect on March 5, 2012. This act allows terminally ill adults seeking to end their life to request lethal doses of medication from medical and osteopathic physicians. These terminally ill patients must be Washington state residents who have less than six months to live.[17]

As provided in the act, "the patient's death certificate…shall list the underlying terminal disease as the cause of death." The act also states that, "Actions taken in accordance with this chapter do not, for any purpose, constitute suicide, assisted suicide, mercy killing, or homicide, under the law." Given these instructions, the King County Medical Examiner's Office has no involvement in these cases and collects no statistics on the number of deaths where an individual has utilized their rights under the provisions of this act. Statistics are kept and released annually by the Washington State Department of Health.

[17] Washington State Department of Health website: http://www.doh.wa.gov/dwda

Graph 6-1 Suicide Injury Methods / KCME / 2012

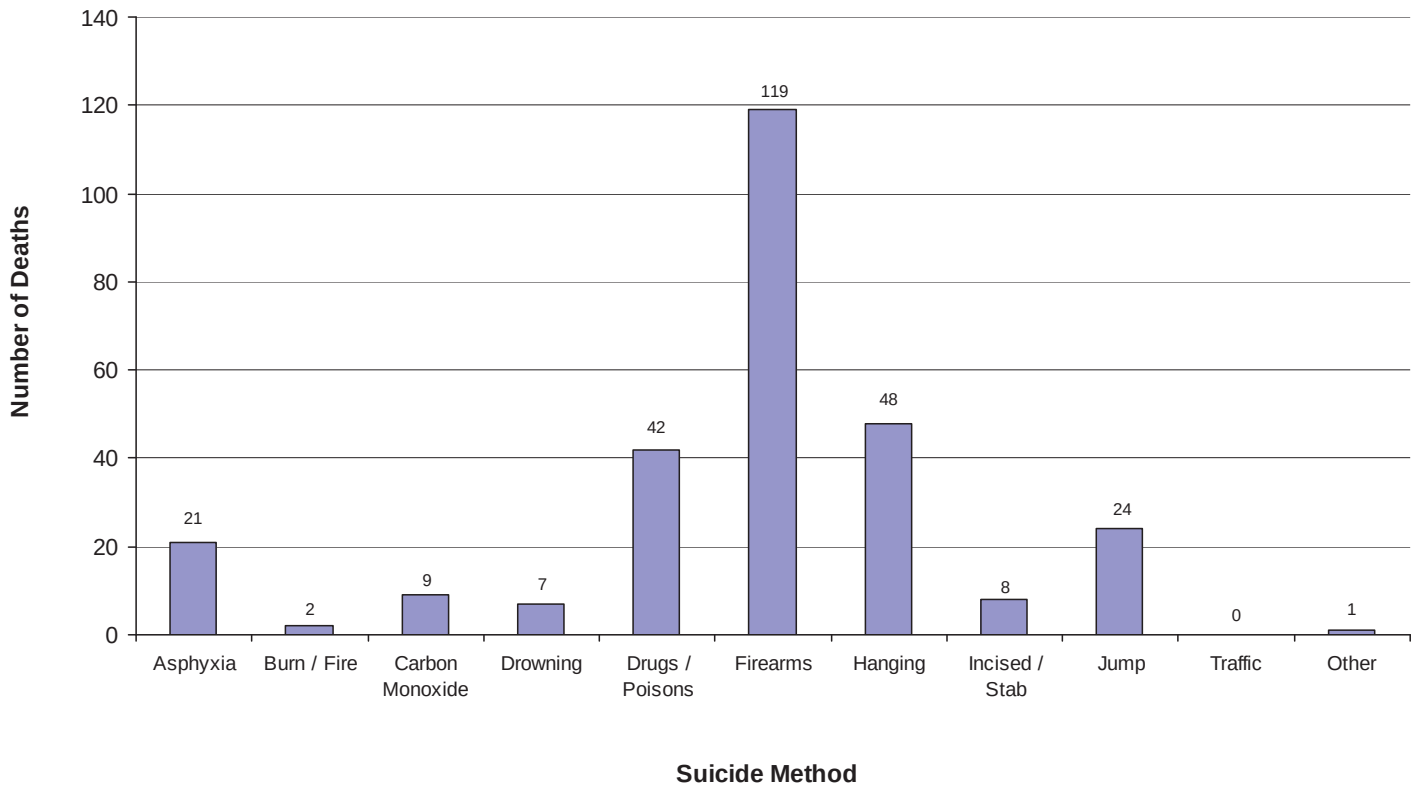
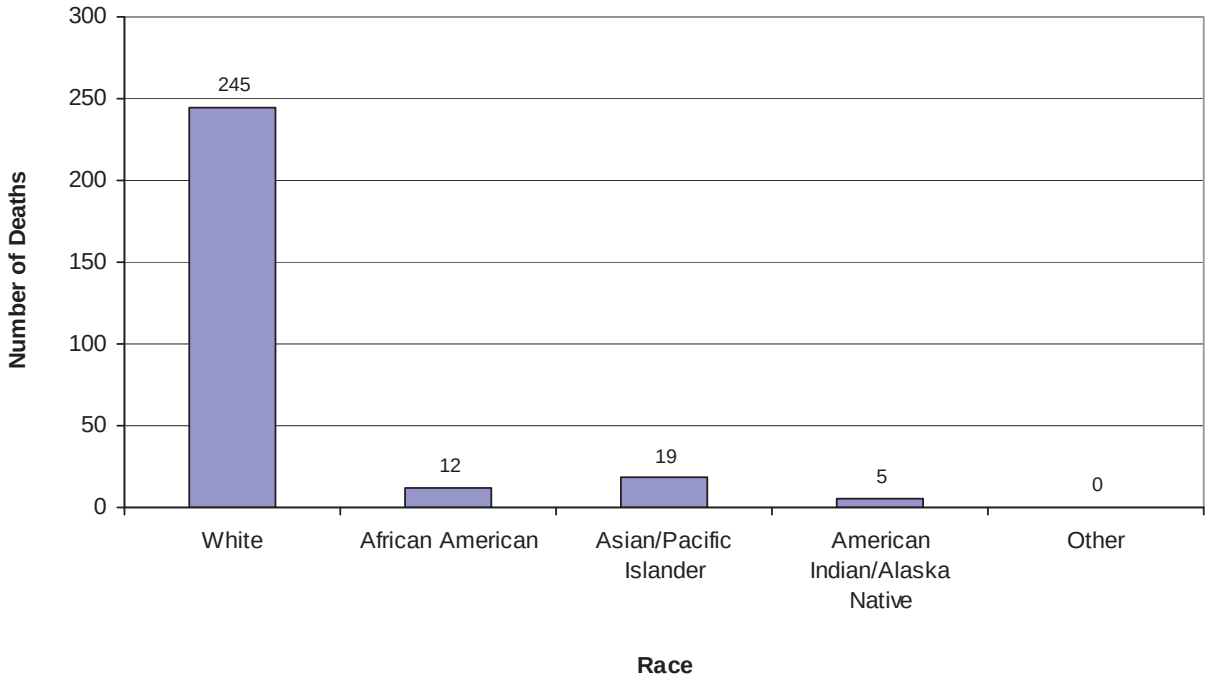


Table 6-1 **Suicide Injury Methods / Race / Gender / KCME / 2012**

CIRCUMSTANCES / GENDER	RACE					SUB-TOTAL	TOTAL
	WHITE	AFRIC AMER	ASIAN/ PAC IS	AM INDIAN/ AK NATIVE	OTHER		
Asphyxia	19	2	0	0	0		21
Male	*15*	*1*	*0*	*0*	*0*	*16*	
Female	*4*	*1*	*0*	*0*	*0*	*5*	
Burns / Fire	1	0	1	0	0		2
Male	*1*	*0*	*1*	*0*	*0*	*2*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	
Carbon Monoxide	6	2	1	0	0		9
Male	*6*	*1*	*0*	*0*	*0*	*7*	
Female	*0*	*1*	*1*	*0*	*0*	*2*	
Drowning	6	0	1	0	0		7
Male	*6*	*0*	*0*	*0*	*0*	*6*	
Female	*0*	*0*	*1*	*0*	*0*	*1*	
Drugs / Poisons	39	0	2	1	0		42
Male	*13*	*0*	*1*	*0*	*0*	*14*	
Female	*26*	*0*	*1*	*1*	*0*	*28*	
Firearms	105	6	5	3	0		119
Male	*93*	*4*	*5*	*3*	*0*	*105*	
Female	*12*	*2*	*0*	*0*	*0*	*14*	
Hanging	41	1	6	0	0		48
Male	*31*	*1*	*2*	*0*	*0*	*34*	
Female	*10*	*0*	*4*	*0*	*0*	*14*	
Incised / Stab Wound(s)	6	0	2	0	0		8
Male	*3*	*0*	*2*	*0*	*0*	*5*	
Female	*3*	*0*	*0*	*0*	*0*	*3*	
Jumping	21	1	1	1	0		24
Male	*18*	*1*	*1*	*0*	*0*	*20*	
Female	*3*	*0*	*0*	*1*	*0*	*4*	
Other	1	0	0	0	0		1
Male	*1*	*0*	*0*	*0*	*0*	*1*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	
Traffic	0	0	0	0	0		0
Male	*0*	*0*	*0*	*0*	*0*	*0*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	
Totals	**245**	**12**	**19**	**5**	**0**		**281**
Percent	87%	4%	7%	2%	0%		100%

Graph 6-2 Suicide Deaths / Race / KCME / 2012



Graph 6-3 Suicide Deaths / Age Group / KCME / 2012

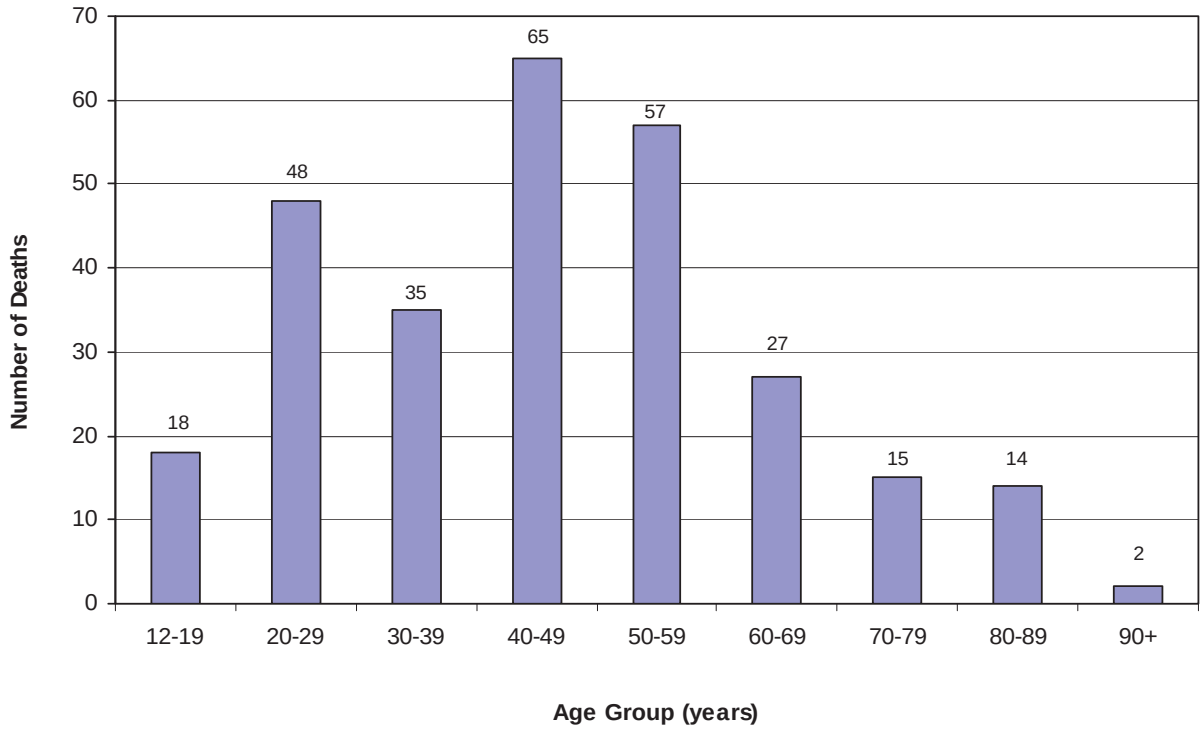


Table 6-2 **Suicide Injury Methods / Age / Gender / KCME / 2012**

INJURY METHOD/ GENDER	AGE GROUP (YEARS) 12 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 +	SUB-TOTAL	TOTAL
Asphyxia	1	4	1	6	7	1	0	1	0		21
Male	*0*	*4*	*1*	*4*	*6*	*0*	*0*	*1*	*0*	*16*	
Female	*1*	*0*	*0*	*2*	*1*	*1*	*0*	*0*	*0*	*5*	
Burns / Fire	0	1	0	1	0	0	0	0	0		2
Male	*0*	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*2*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Carbon Monoxide	0	1	1	3	2	2	0	0	0		9
Male	*0*	*1*	*1*	*1*	*2*	*2*	*0*	*0*	*0*	*7*	
Female	*0*	*0*	*0*	*2*	*0*	*0*	*0*	*0*	*0*	*2*	
Drowning	0	3	3	0	0	0	0	0	1		7
Male	*0*	*2*	*3*	*0*	*0*	*0*	*0*	*0*	*1*	*6*	
Female	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	
Drugs / Poisons	0	2	5	11	14	5	4	0	1		42
Male	*0*	*0*	*1*	*4*	*4*	*2*	*3*	*0*	*0*	*14*	
Female	*0*	*2*	*4*	*7*	*10*	*3*	*1*	*0*	*1*	*28*	
Firearms	7	22	15	20	21	15	9	10	0		119
Male	*6*	*19*	*13*	*17*	*19*	*12*	*9*	*10*	*0*	105	
Female	*1*	*3*	*2*	*3*	*2*	*3*	*0*	*0*	*0*	*14*	
Hanging	9	5	6	19	4	4	1	0	0		48
Male	*6*	*3*	*4*	*14*	*3*	*3*	*1*	*0*	*0*	*34*	
Female	*3*	*2*	*2*	*5*	*1*	*1*	*0*	*0*	*0*	*14*	
Incised / Stab Wound(s)	0	0	1	3	3	0	0	1	0		8
Male	*0*	*0*	*1*	*2*	*1*	*0*	*0*	*1*	*0*	*5*	
Female	*0*	*0*	*0*	*1*	*2*	*0*	*0*	*0*	*0*	*3*	
Jumping	1	10	2	2	6	0	1	2	0		24
Male	*0*	*9*	*2*	*2*	*4*	*0*	*1*	*2*	*0*	*20*	
Female	*1*	*1*	*0*	*0*	*2*	*0*	*0*	*0*	*0*	*4*	
Other	0	0	1	0	0	0	0	0	0		1
Male	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Traffic	0	0	0	0	0	0	0	0	0		0
Male	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Totals	**18**	**48**	**35**	**65**	**57**	**27**	**15**	**14**	**2**		**281**
Percent	6.4	17.1	12.5	23.1	20.3	9.6	5.3	5	.7		100%

Table 6-3 **Suicide Injury Methods / Gender / KCME / 2012**

INJURY METHOD	GENDER		TOTAL
	MALE	FEMALE	
Asphyxia	16	5	21
Burns/ Fire	2	0	2
Carbon Monoxide	7	2	9
Drowning	6	1	7
Drugs / Poisons	14	28	42
Firearms	105	14	119
Hanging	34	14	48
Incised / Stab Wound(s)	5	3	8
Jumping	20	4	24
Other	1	0	1
Traffic	0	0	0
Totals	**210**	**71**	**281**
Percent	74.7%	25.3%	100%

Table 6-4 Suicide Injury Methods / Marital Status / Gender / KCME / 2012

CIRCUMSTANCES / GENDER	MARITAL STATUS						
	Never Married	Married	Divorced	Widowed	Unknown	Sub-Total	Total
Asphyxia	14	2	4	0	1		21
Male	*11*	*1*	*3*	*0*	*1*	*16*	
Female	*3*	*1*	*1*	*0*	*0*	*5*	
Burns/ Fire	1	1	0	0	0		2
Male	*1*	*1*	*0*	*0*	*0*	*2*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	
Carbon Monoxide	3	3	2	1	0		9
Male	*3*	*3*	*1*	*0*	*0*	*7*	
Female	*0*	*0*	*1*	*1*	*0*	*2*	
Drowning	4	0	1	0	2		7
Male	*3*	*0*	*1*	*0*	*2*	*6*	
Female	*1*	*0*	*0*	*0*	*0*	*1*	
Drugs / Poisons	11	11	14	2	4		42
Male	*5*	*2*	*5*	*1*	*1*	*14*	
Female	*6*	*9*	*9*	*1*	*3*	*28*	
Firearms	42	38	33	3	3		119
Male	*38*	*34*	*27*	*3*	*3*	*105*	
Female	*4*	*4*	*6*	*0*	*0*	*14*	
Hanging	27	12	6	0	3		48
Male	*19*	*8*	*4*	*0*	*3*	*34*	
Female	*8*	*4*	*2*	*0*	*0*	*14*	
Incised / Stab Wound(s)	2	6	0	0	0		8
Male	*2*	*3*	*0*	*0*	*0*	*5*	
Female	*0*	*3*	*0*	*0*	*0*	*3*	
Jumping	10	*6*	4	2	2		24
Male	*9*	*5*	*3*	*2*	*1*	*20*	
Female	*1*	*1*	*1*	*0*	*1*	*4*	
Other	1	0	0	0	0		1
Male	*1*	*0*	*0*	*0*	*0*	*0*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	
Traffic	0	0	0	0	0		0
Male	*0*	*0*	*0*	*0*	*0*	*0*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	
Totals	**118**	**76**	**64**	**8**	**15**		**281**
Percent	42%	27%	23%	3%	5%		100%

Table 6-5 Suicide Injury Methods / Blood Alcohol / KCME / 2012

METHOD	TESTED		NOT TESTED	TOTAL
	POSITIVE	NEGATIVE		
Asphyxia	6	5	0	21
Burns/ Fire	1	0	1	2
Carbon Monoxide	4	5	0	9
Drowning	4	3	0	7
Drugs / Poisons	11	29	2	42
Firearms	42	74	3	119
Hanging	14	33	1	48
Incised / Stab Wound(s)	1	7	0	8
Jumping	6	18	0	24
Other	0	1	0	1
Traffic	0	0	0	0
Totals	**89**	**185**	**7**	**281**
Percent	32%	66%	2%	100%

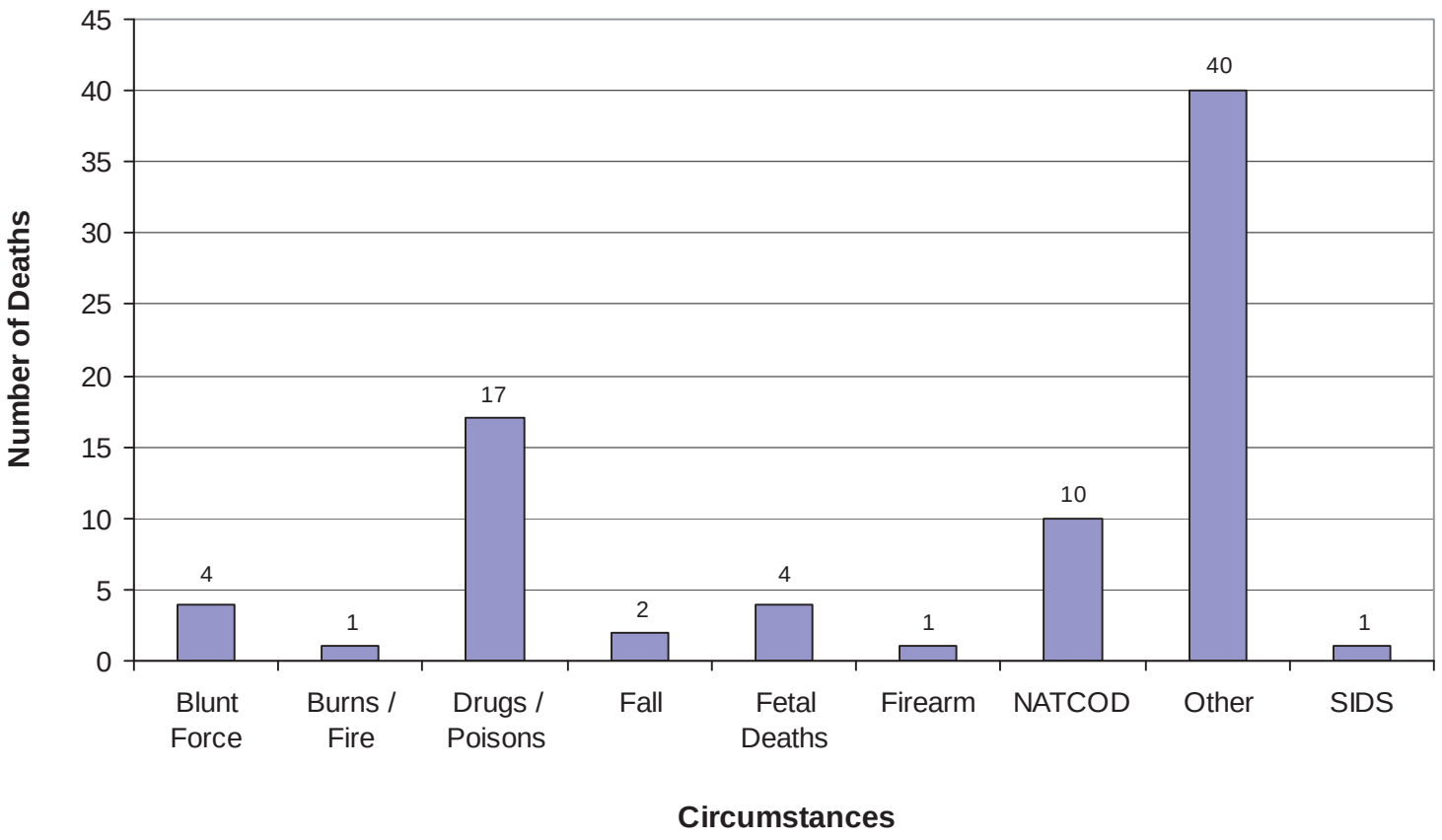
Manner of death: Undetermined

The King County Medical Examiner's Office certifies a manner of death as undetermined when available information regarding the circumstances of death is insufficient to classify the death into one of the specific manners of natural or unnatural (Accident, Homicide or Suicide) death. In some cases, serious doubt exists as to whether an injury occurred with intent or as a result of an accident. Information concerning the circumstances may be lacking due to the absence of background information or witnesses, or because of a lengthy delay between death and discovery of the body. Moreover, it may be difficult to assess street drug or medication overdose deaths as showing enough features to reasonably determine the manner of death. If an extensive investigation and autopsy cannot clarify the circumstances, the death is classified undetermined.

The King County Medical Examiner's Office certified 80 deaths with manner undetermined, accounting for 4% (80/2104) of the deaths investigated in 2012. Drugs and poisons caused 21% (17/80) of the deaths classified as undetermined. For a more detailed review of drug-caused deaths in 2012, see the discussion in the section on Drugs and Poisons on pages 89 and 90.

The 80 deaths that were classified as undetermined for 2012 included four fetal deaths, which, in accordance with the Washington State Department of Health - Center for Health Statistics Fetal Death Certification Guidelines, are not assigned a manner of death. Fetal death certificates must be issued for every fetus of 20 weeks or more gestation. Of the four fetal deaths in 2012, one was related to maternal drug abuse.

Graph 7-1 Undetermined Manner of Death[18] / KCME / 2012

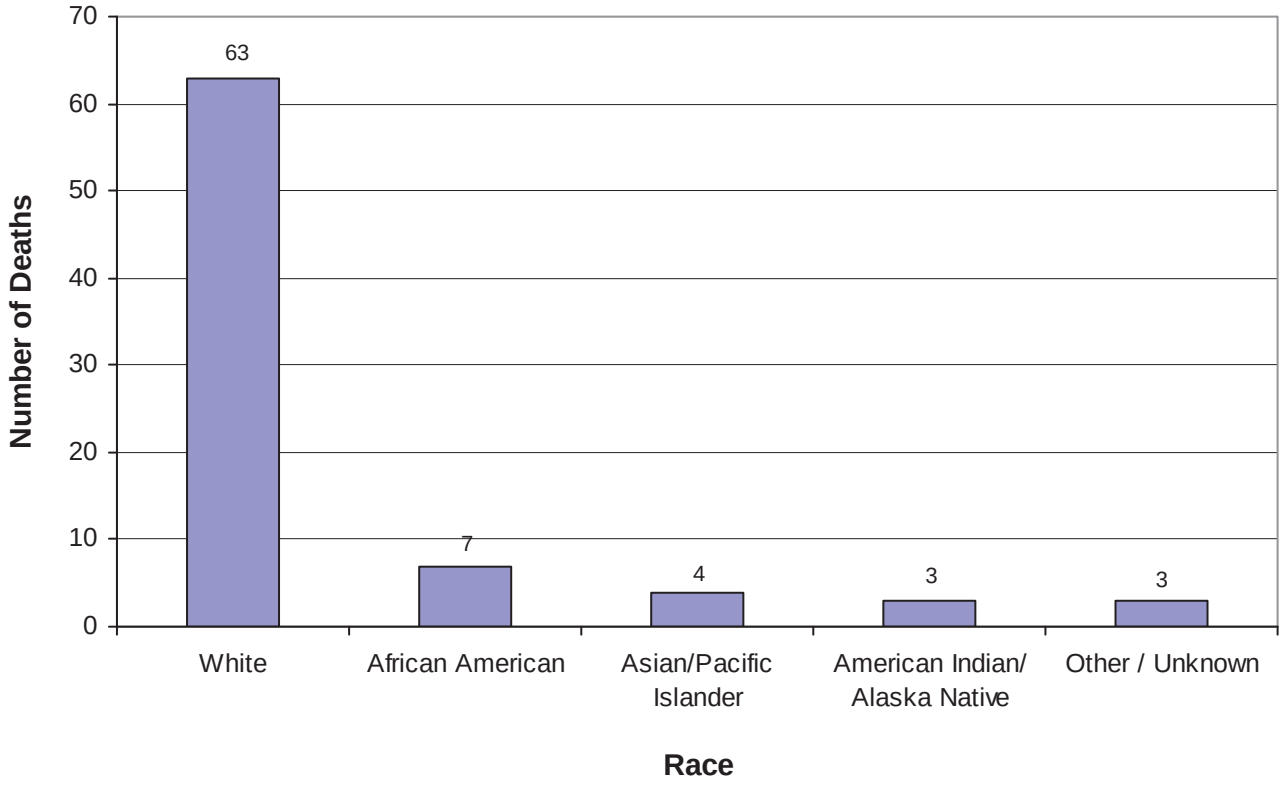


[18]NATCOD is an abbreviation for "no anatomic or toxicological cause of death," and refers to deaths in which full autopsies and toxicological analyses (if relevant) fail to identify an adequate cause of death.

Table 7-1 Undetermined Manner of Death / Race / Gender / KCME / 2012

CIRCUMSTANCES / GENDER	RACE					SUB-TOTAL	TOTAL
	WHITE	AFRIC AMER	ASIAN/ PAC IS	AM INDIAN/ AK NATIVE	OTHER / UNK		
Blunt Force	2	1	0	1	0		4
Male	*2*	*1*	*0*	*1*	*0*	*4*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	
Burns / Fire	1	0	0	0	0		1
Male	*1*	*0*	*0*	*0*	*0*	*1*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	
Drugs / Poisons	16	0	1	0	0		17
Male	*8*	*0*	*1*	*0*	*0*	*9*	
Female	*8*	*0*	*0*	*0*	*0*	*8*	
Fall	2	0	0	0	0		2
Male	*1*	*0*	*0*	*0*	*0*	*1*	
Female	*1*	*0*	*0*	*0*	*0*	*1*	
Fetal Deaths	4	0	0	0	0		4
Male	*3*	*0*	*0*	*0*	*0*	*3*	
Female	*1*	*0*	*0*	*0*	*0*	*1*	
Unknown	*0*	*0*	*0*	*0*	*0*	*0*	
Firearms	1	0	0	0	0		1
Male	*1*	*0*	*0*	*0*	*0*	*0*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	
No Anatomic or Toxicological Cause of Death	*9*	*0*	*0*	*1*	*0*		*10*
Male	*7*	*0*	*0*	*0*	*0*	*7*	
Female	*2*	*0*	*0*	*1*	*0*	*3*	
Other	27	6	3	1	3		40
Male	*20*	*5*	*2*	*1*	*0*	*28*	
Female	*7*	*1*	*1*	*0*	*3*	*12*	
SIDS	1	0	0	0	0		1
Male	*0*	*0*	*0*	*0*	*0*	*0*	
Female	*1*	*0*	*0*	*0*	*0*	*1*	
Totals	**63**	**7**	**4**	**3**	**3**		**80**
Percent	78.7	8.8	5	3.75	3.75		100%

Graph 7-2 Undetermined Manner / Race / KCME / 2012



Graph 7-3 Undetermined Manner / Age Group / KCME / 2012

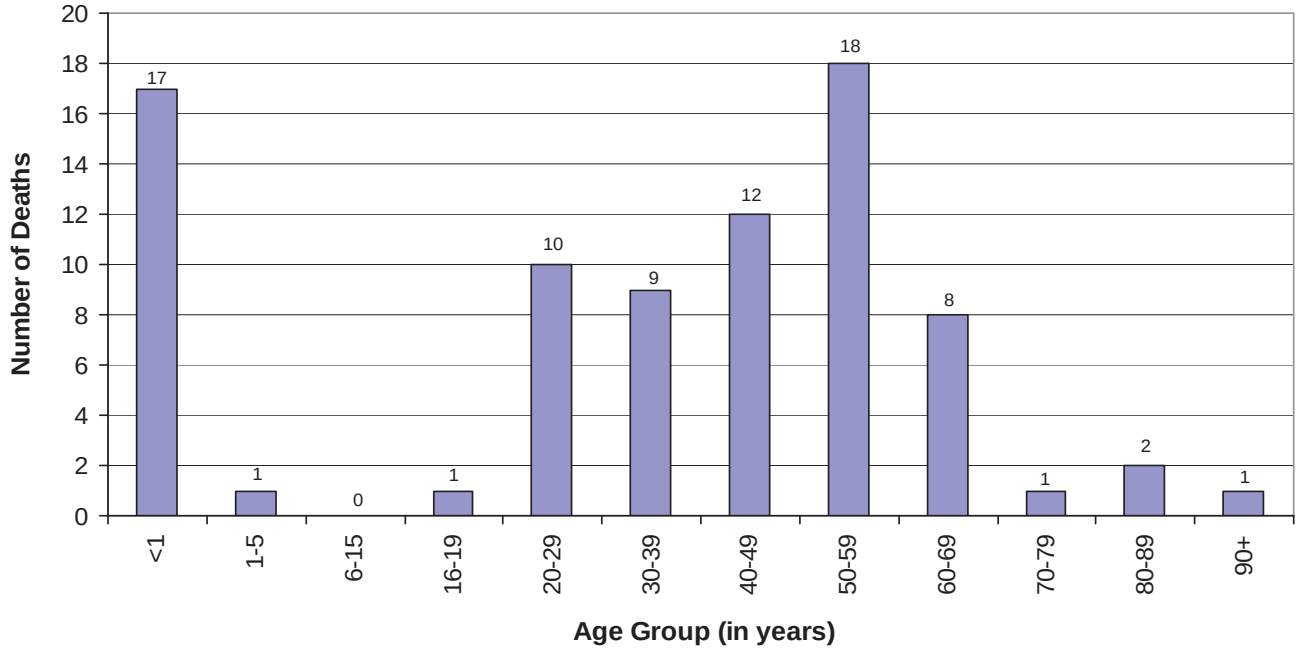


Table 7-2 Undetermined Circumstances / Age / Gender / KCME / 2012

INJURY METHOD / GENDER	AGE GROUP (YEARS) <1	1 to 5	6 to 15	16 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70 to 79	80 to 89	90 +	SUB-TOTAL	TOTAL
Blunt Force	0	0	0	0	0	0	1	3	0	0	0	0		4
Male	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*3*	*0*	*0*	*0*	*0*	*4*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Burns / Fire	0	0	0	0	0	0	0	1	0	0	0	0		1
Male	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*1*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Drugs / Poisons	1	0	0	0	1	2	5	5	2	1	0	0		17
Male	*0*	*0*	*0*	*0*	*1*	*1*	*1*	*4*	*1*	*1*	*0*	*0*	*9*	
Female	*1*	*0*	*0*	*0*	*0*	*1*	*4*	*1*	*1*	*0*	*0*	*0*	*8*	
Fall	0	0	0	0	1	0	0	1	0	0	0	0		2
Male	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*1*	
Female	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	
Fetal Deaths	4	0	0	0	0	0	0	0	0	0	0	0		4
Male	*3*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	3	
Female	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	1	
Unknown	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0	
Firearms	0	0	0	0	0	0	0	0	0	0	1	0		1
Male	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*1*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
No anatomic or toxicological cause of death	0	0	0	0	0	3	3	2	2	0	0	0		10
Male	*0*	*0*	*0*	*0*	*0*	*2*	*3*	*1*	*1*	*0*	*0*	*0*	*7*	
Female	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*1*	*1*	*0*	*0*	*0*	*3*	
Other	11	1	0	1	8	4	3	6	4	0	1	1		40
Male	*8*	*0*	*0*	*0*	*6*	*4*	*1*	*6*	*3*	*0*	*0*	*0*	*28*	
Female	*3*	*1*	*0*	*1*	*2*	*0*	*2*	*0*	*1*	*0*	*1*	*1*	*12*	
SIDS	1	0	0	0	0	0	0	0	0	0	0	0		1
Male	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	0	
Female	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	1	
Totals	**17**	**1**	**0**	**1**	**10**	**9**	**12**	**18**	**8**	**1**	**2**	**1**		**80**
Percent	21	1.3	0	1.3	12.5	11.3	15	22.5	10	1.3	2.5	1.3		100%

Table 7-3 **Undetermined Manner / Gender / KCME / 2012**

INJURY METHOD	GENDER		TOTAL
	MALE	FEMALE	
Blunt Force	4	0	4
Burns / Fire	1	0	1
Drugs / Poisons	9	8	17
Fall	1	1	2
Fetal Deaths	3	1	4
Firearms	1	0	1
No Anatomic or Toxicological Cause of Death	7	3	10
Other	28	12	40
SIDS	0	1	1
Totals	**54**	**26**	**80**
Percent	67.5	32.5	100%

Table 7-4 **Undetermined Manner / Blood Alcohol Results / KCME / 2012**

METHOD	TESTED		NOT TESTED	TOTAL
	POSITIVE	NEGATIVE		
Blunt Force	2	2	0	4
Burns / Fire	1	0	0	1
Drugs / Poisons	1	13	3	17
Fall	1	1	0	2
Fetal Deaths	0	0	4	4
Firearms	0	0	1	1
No Anatomic or Toxicological Cause of Death	2	5	3	10
Other	8	25	7	40
SIDS	0	1	0	1
Totals	**15**	**47**	**18**	**80**
Percent	18.8	58.7	22.5	100%

Traffic deaths

During the calendar year 2012, the Medical Examiner's Office participated in the investigation of 131 traffic fatalities. In 74% (97/131) of the traffic deaths, the collisions occurred in King County, compared to 61% (83/135) of the collisions in 2011. In 2012, 26% (34/131) of the traffic deaths that the Medical Examiner investigated were the result of collisions that occurred outside of King County, with the injured transported to hospitals in King County, primarily Harborview Medical Center. Because the deaths occurred in King County, it falls under the jurisdiction of the King County Medical Examiner. Although these deaths are classified "Accident" for death certification purposes, the more accurate term is "motor vehicle collision."

In 2012, 36% (47/131) of the traffic fatalities were motor vehicle drivers. Teenage drivers (16-19 years of age) were 9% (4/47) of the driver deaths in 2012 and 7% (4/55) in 2011. By age, 17% of vehicle driver deaths (8/47) were people between the ages of 20 and 29. Thirteen percent of driver deaths (6/47) were adults between the ages of 30 and 39. Eleven percent (5/47) were adults between the ages of 40 and 49. Male drivers represented 70% (33/47) of driver deaths and female drivers represented 30% of driver deaths (14/47).

Of the 131 traffic fatalities in 2012, 16 were motor vehicle passengers, representing 12% of the total (16/131). In 2012, teenagers (13-19 years old) accounted for 1 motor vehicle passenger death. There were no passenger deaths of infants (less than one year of age), 1 vehicle passenger death of a child between the ages of 1-5 years, and no deaths of children between the ages of 6-12 years.

Blood ethanol (alcohol) statistics are presented to describe the role of alcohol in traffic deaths. However, it should be noted that in many cases someone other than the person who died was under the influence of alcohol and was directly responsible for the accident. The Medical Examiner determines the blood alcohol levels of persons who die, not of everyone involved in the incident. In addition, blood alcohol is not tested in persons who die after surviving more than 24 hours, because in those deaths the alcohol has had time to metabolize.[19] Therefore, blood alcohol figures presented in this report are not a total description of the role of alcohol in traffic collisions.

Of cases in which seatbelt restraint status was known, 26% (10/38) of drivers in vehicle deaths were not restrained. The figures for drivers not wearing seatbelts for the previous three years are: 33% (13/39) in 2011, 35% (23/65) in 2010, and 32% (15/47) in 2009.

Motorcycle riders accounted for 19% (25/131) of traffic fatalities. In 2012, there were 24 motorcycle driver fatalities and 1 motorcycle passenger fatality. Twenty-three of the motorcycle driver deaths were male and one was female. Of the 25 motorcycle fatalities, 72% (18/25) of the motorcyclists were wearing a helmet; in four cases, it was unknown if the motorcycle driver was wearing a helmet. Twenty-two of the motorcyclist fatalities were tested for the presence of blood alcohol. Thirteen, or 59% (13/22), had a detectable amount of alcohol at the time of autopsy.

[19] See "Explanation of Data" for criteria for blood alcohol testing, page 6.

Pedestrians constituted 25% (33/131) of traffic fatalities. The majority of pedestrian deaths, 76% (25/33), were male. Of the pedestrian fatalities that were tested, 20% (5/25) had detectable amounts of alcohol present in their blood at the time of death.

There were five bicyclist deaths in 2012; 2 riders were wearing helmets, 1 was not wearing a helmet, and it is unknown if 2 were wearing a helmet or not. Of the bicyclist fatalities that were tested, none had a detectable amount of alcohol present in his/her blood at the time of death.

Graph 8-1 Traffic Fatality Circumstances / KCME / 2012

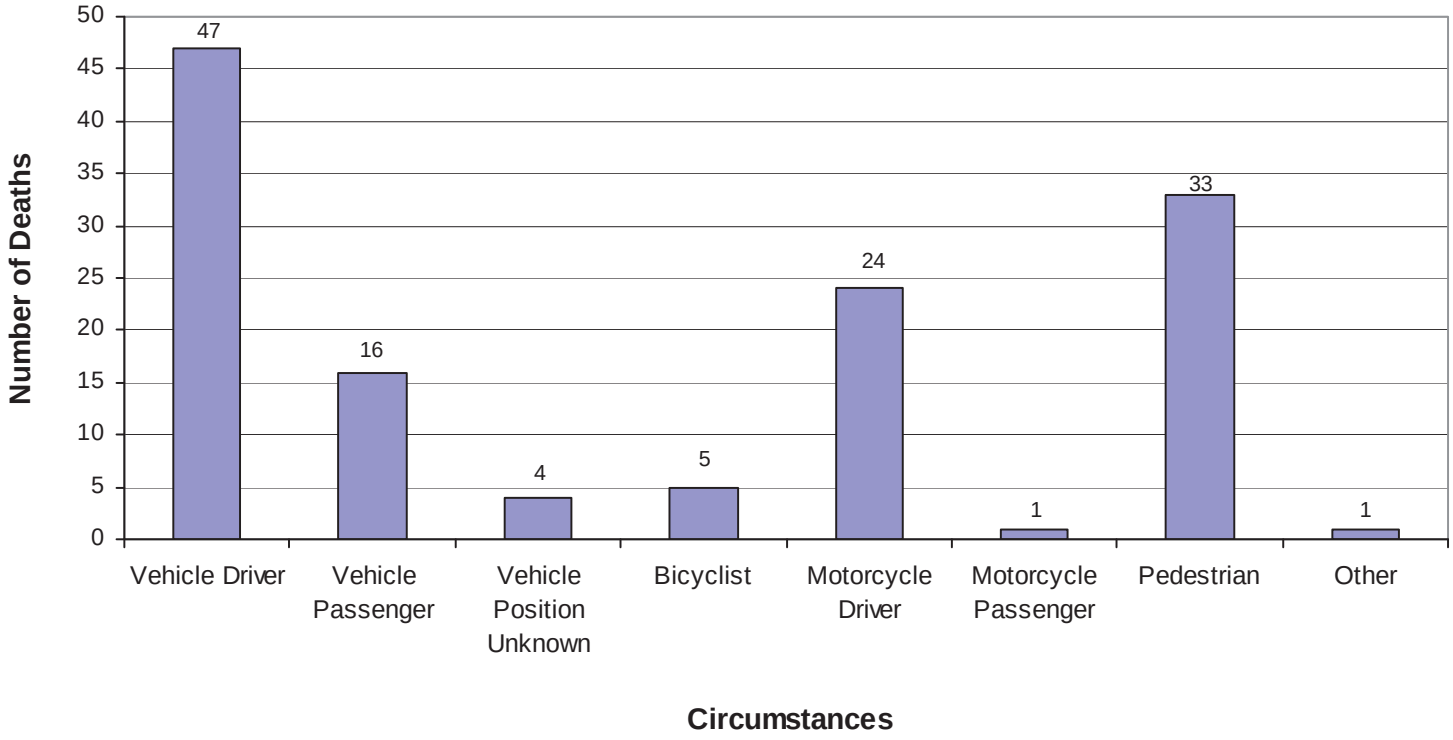
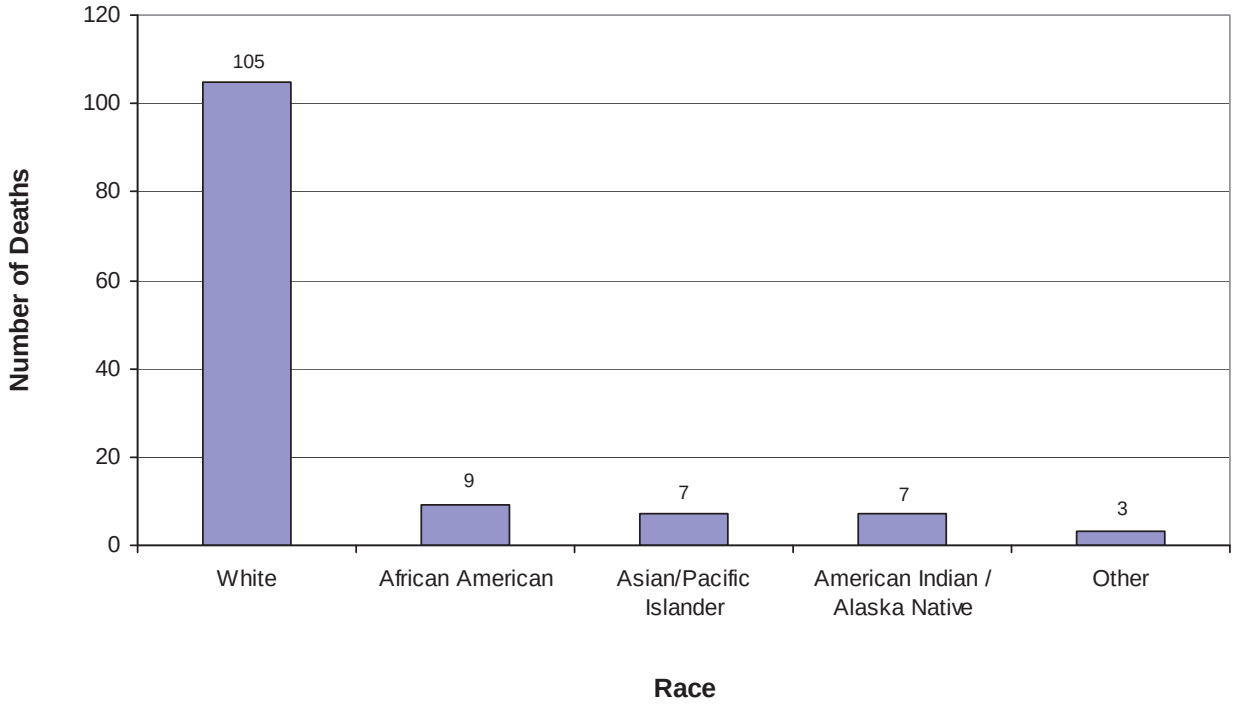


Table 8-1 Traffic Fatality Circumstances / Race / Gender / KCME / 2012

CIRCUMSTANCES / GENDER	RACE					SUB-TOTAL	TOTAL
	WHITE	AFRICAN AMER	ASIAN/ PAC IS	AM INDIAN /AK NATIVE	OTHER		
Vehicle Driver	42	3	1	1	0		47
Male	*28*	*3*	*1*	*1*	*0*	*33*	
Female	*14*	*0*	*0*	*0*	*0*	*14*	
Vehicle Passenger	12	1	0	3	0		16
Male	*4*	*1*	*0*	*2*	*0*	*7*	
Female	*8*	*0*	*0*	*1*	*0*	*9*	
Vehicle Unknown Position	1	3	0	0	0		4
Male	*0*	*2*	*0*	*0*	*0*	*2*	
Female	*1*	*1*	*0*	*0*	*0*	*2*	
Bicycle	3	0	0	0	2		5
Male	*3*	*0*	*0*	*0*	*2*	*5*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	
Motorcycle Driver	22	0	0	1	1		24
Male	*21*	*0*	*0*	*1*	*1*	*23*	
Female	*1*	*0*	*0*	*0*	*0*	*1*	
Motorcycle Passenger	1	0	0	0	0		1
Male	*0*	*0*	*0*	*0*	*0*	*0*	
Female	*1*	*0*	*0*	*0*	*0*	*1*	
Pedestrian	23	2	6	2	0		33
Male	*18*	*2*	*3*	*2*	*0*	*25*	
Female	*5*	*0*	*3*	*0*	*0*	*8*	
Other	1	0	0	0	0		1
Male	*1*	*0*	*0*	*0*	*0*	*1*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	
Totals	**105**	**9**	**7**	**7**	**3**		**131**
Percent	80%	7%	5%	5%	3%		100%

Graph 8-2 Traffic Fatalities / Race / KCME / 2012



Graph 8-3 Traffic Fatalities / Age / KCME / 2012

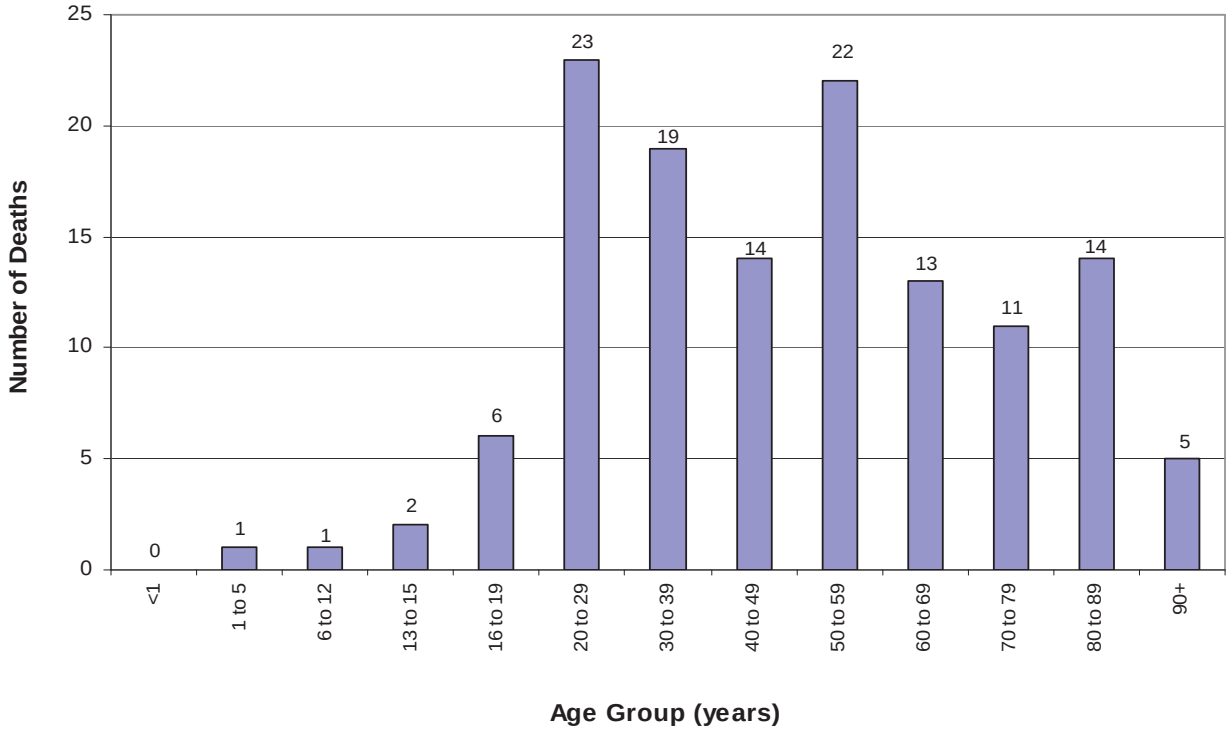


Table 8-2 **Traffic Fatality Circumstances / Age / Gender / KCME / 2012**

Circumstances/Gender	AGE GROUP (YEARS)														
	< 1	**1** to **5**	**6** to **12**	**13** to **15**	**16** to **19**	**20** to **29**	**30** to **39**	**40** to **49**	**50** to **59**	**60** to **69**	**70** to **79**	**80** to **89**	**90 +**	SUB-TOTAL	TOTAL
Vehicle Driver	0	0	0	0	4	8	6	5	8	5	5	2	4		47
Male	*0*	*0*	*0*	*0*	*3*	*5*	*5*	*4*	*4*	*4*	*4*	*2*	*2*	*33*	
Female	*0*	*0*	*0*	*0*	*1*	*3*	*1*	*1*	*4*	*1*	*1*	*0*	*2*	*14*	
Vehicle Passenger	0	1	0	1	0	4	2	0	2	1	3	2	0		16
Male	*0*	*0*	*0*	*0*	*0*	*4*	*0*	*0*	*1*	*0*	*1*	*1*	*0*	*7*	
Female	*0*	*1*	*0*	*1*	*0*	*0*	*2*	*0*	*1*	*1*	*2*	*1*	*0*	*9*	
Vehicle Position Unknown	0	0	0	0	0	0	2	1	1	0	0	0	0		4
	0	*0*	*0*	*0*	*0*	*0*	*1*	*1*	*0*	*0*	*0*	*0*	*0*	*2*	
	0	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*1*	*0*	*0*	*0*	*0*	*2*	
Bicyclist	0	0	1	0	1	0	0	1	0	2	0	0	0		5
Male	*0*	*0*	*1*	*0*	*1*	*0*	*0*	*1*	*0*	*2*	*0*	*0*	*0*	*5*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Motorcycle Driver	0	0	0	0	0	9	7	2	4	2	0	0	0		24
Male	*0*	*0*	*0*	*0*	*0*	*9*	*7*	*1*	*4*	*2*	*0*	*0*	*0*	*23*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*1*	
Motorcycle Passenger	0	0	0	0	0	0	1	0	0	0	0	0	0		1
Male	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	
Pedestrian	0	0	0	1	1	1	1	5	7	3	3	10	1		33
Male	*0*	*0*	*0*	*0*	*1*	*0*	*1*	*4*	*6*	*3*	*3*	*6*	*1*	*25*	
Female	*0*	*0*	*0*	*1*	*0*	*1*	*0*	*1*	*1*	*0*	*0*	*4*	*0*	*8*	
Other	0	0	0	0	0	1	0	0	0	0	0	0	0		1
Male	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	
Female	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Totals	**0**	**1**	**1**	**2**	**6**	**23**	**19**	**14**	**22**	**13**	**11**	**14**	**5**		**131**
Percent	0	.8	.8	1.5	4.5	17.6	14.5	10.7	16.8	10	8.4	10.6	3.8		100%

Table 8-3 Traffic Fatality Circumstances / Gender / KCME / 2012

CIRCUMSTANCES	GENDER		TOTAL
	MALE	FEMALE	
Vehicle Driver	33	14	47
Vehicle Passenger	7	9	16
Vehicle Position Unknown	2	2	4
Bicyclist	5	0	5
Motorcycle Driver	23	1	24
Motorcycle Passenger	0	1	1
Pedestrian	25	8	33
Other Mode	1	0	1
Totals	**96**	**35**	**131**
Percent	73%	27%	100%

Table 8-4 Traffic Fatality Circumstances / Use of Restraint / Helmet / KCME / 2012[2]

CIRCUMSTANCES	Used Safety Device	No Safety Device Used	Unknown	TOTAL
Vehicle Driver	28	10	9	47
Vehicle Passenger	7	5	4	16
Bicyclist	2	1	2	5
Motorcycle Driver	17	3	4	24
Motorcycle Passenger	1	0	0	1
Totals	**55**	**19**	**19**	**93**
Percent	59.2%	20.4%	20.4%	100%

[2]Does not include vehicle position unknown, pedestrian or other traffic modes of deaths.

Table 8-5 Traffic Fatality Circumstances / Blood Alcohol Results / KCME / 2012

CIRCUMSTANCES	TESTED		NOT TESTED	TOTAL
	POSITIVE	NEGATIVE		
Vehicle Driver	11	27	9	47
Vehicle Passenger	3	9	4	16
Vehicle Position Unknown	2	0	2	4
Bicyclist	0	2	3	5
Motorcycle Driver	12	9	3	24
Motorcycle Passenger	1	0	0	1
Pedestrian	5	20	8	33
Other Mode	0	1	0	1
Totals	**34**	**68**	**29**	**131**
Percent	26%	52%	22%	100%

Table 8-6 Blood Alcohol Levels of Traffic Fatalities who Died at the Scene of the Collision / KCME / 2012

CIRCUMSTANCES	BLOOD ALCOHOL LEVEL (g/100mL)					TOTAL
	NONE	.01-.09	.10-.19	.20-.29	.30+	
Vehicle Driver	8	1	1	3	0	13
Vehicle Passenger	2	0	0	2	0	4
Bicyclist	0	0	0	0	0	0
Motorcycle Driver	5	1	2	3	0	11
Pedestrian	7	0	1	0	0	8
Totals	**22**	**2**	**4**	**8**	**0**	**36**
Percent	61%	6%	11%	22%	0%	100%

Graph 8-4 Blood Alcohol Levels of Traffic Fatalities who Died at the Scene

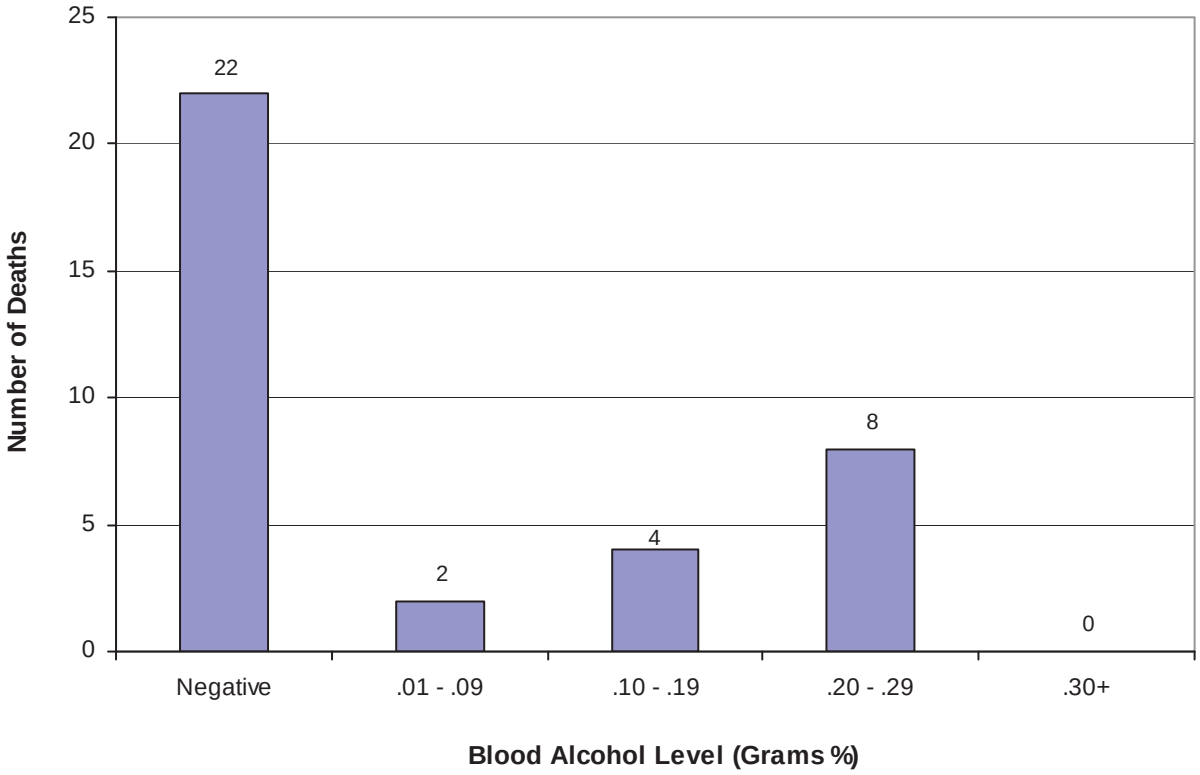
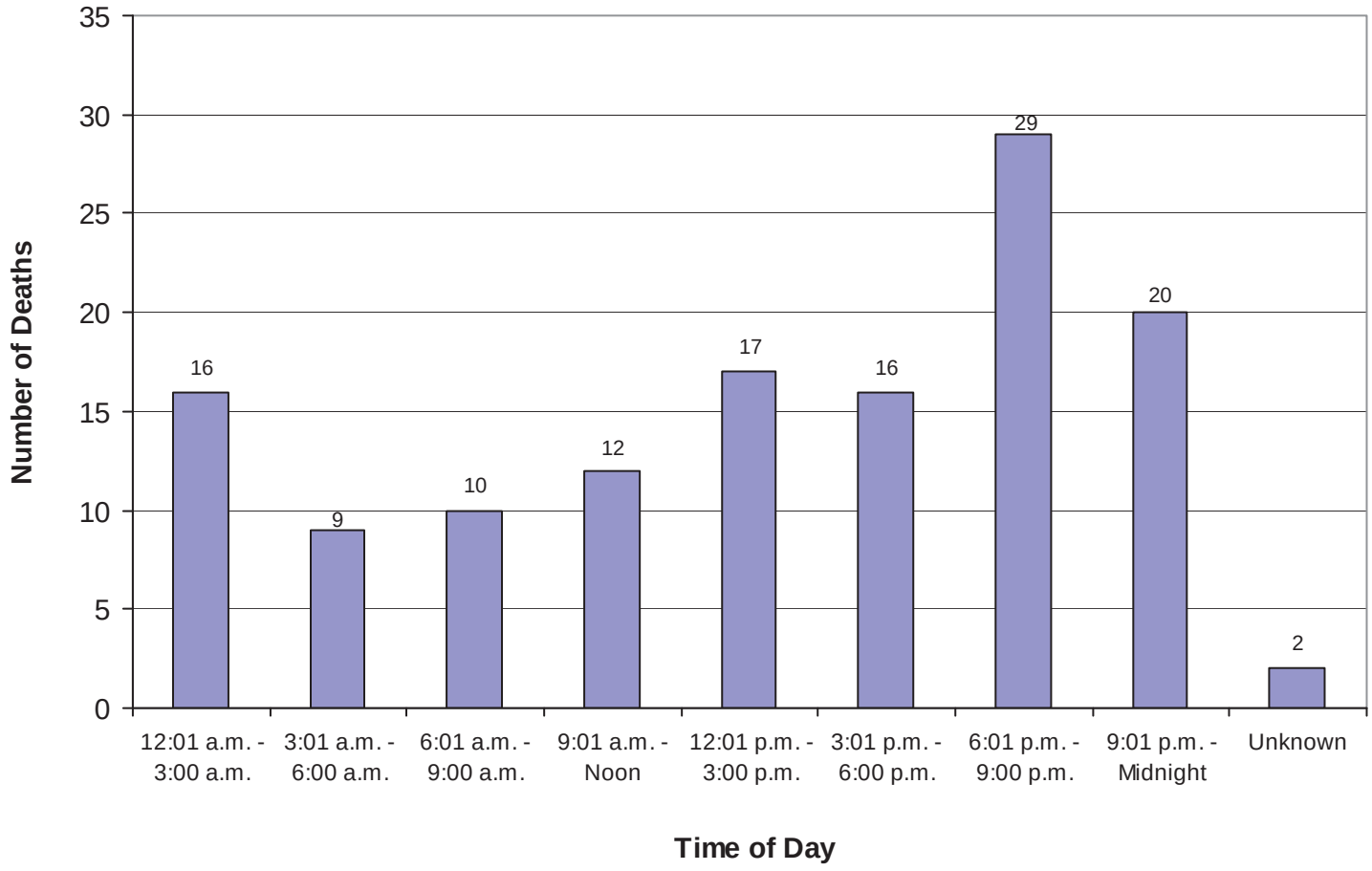


Table 8-7 **Time of Fatal Traffic Collision / KCME / 2012**

TIME OF DAY	TOTAL	PERCENT
12:01 a.m. - 3:00 a.m.	16	12%
3:01 a.m. - 6:00 a.m.	9	7%
6:01 a.m. - 9:00 a.m.	10	8%
9:01 a.m. - Noon	12	9%
12:01 p.m. - 3:00 p.m.	17	13%
3:01 p.m. - 6:00 p.m.	16	12%
6:01 p.m. - 9:00 p.m.	29	22%
9:01 p.m. - Midnight	20	15%
Unknown	2	2%
TOTALS	**131**	100%

Graph 8-5 **Time of Fatal Traffic Collision / KCME / 2012**



Deaths due to drugs and poisons

In 2011, it was reported in the *National Vital Statistics Report* that preliminary cause of death information from 2009 shows drug-induced deaths were the leading cause of accidental deaths of Americans. This was the first time drug-induced deaths had surpassed motor vehicle accidents as the number one cause of accidental deaths.[20]

For King County in 2012, drugs and poisons caused 298 deaths, approximately 14% of all deaths investigated (298/2,104). The total number of drug-caused deaths increased compared to 2011 when there were 268 drug deaths. In 2012, deaths due to drugs and poisons comprised 29% (298/1031) of all suicidal, accidental and undetermined deaths combined.

For the purpose of this section, the term "overdose" is used to describe a death caused by a single drug or multiple drugs in combination. Multiple drug intoxication continued to cause the majority of drug deaths in 2012. Of the drug/poison deaths in 2012, a single drug or poison caused 38% of the drug related deaths (112/298), and drugs or poisons in combination caused 62% (186/298.) Multiple drug intoxication caused 67% of the drug/poison deaths in 2011. Table 9-3 displays the specific drugs that caused death in 2012. Because of their prevalence, ethanol, cocaine (a stimulant), and opiates[21] are identified as separate drug categories. Data on deaths involving methadone, oxycodone, and methamphetamine are also shown in detail.

Deaths due to drugs and poisons are represented in the manners of accident, suicide, and undetermined. There were no deaths classified as homicide in 2012 in which drugs or poisons were the primary cause of the death, although the victim may have been under the influence of drugs at the time of the fatal incident.

The classification of undetermined manner is used when the circumstances surrounding the drug death does not allow clarification of whether the fatal intoxication was intentional, unintentional ("recreational"), or due to another person's actions. In the year 2012, drugs and poisons caused 17 deaths of undetermined manner, compared to 15 in 2011. Of the 17 undetermined drug related deaths in 2012, 1 was a fetal death attributed to maternal methamphetamine use.

In 2012, drugs/poisons caused 51 suicides, as compared to 48 in 2011.

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[20] Kenneth D. Kochanek, M.A.; Jiaquan Xu, M.D.; Sherry L. Murphy, B.S.; Arialdi M. Miniño M.P.H.; and Hsiang-Ching Kung, Ph.D., Division of Vital Statistics "Deaths: Preliminary Data 2009," National Vital Statistics Report Volume 59 Number 4 (March 2011)

[21] When the term "opiate" is used in this section, the drug detected by analysis is a derivative of opium, usually morphine, the source of which is either pharmaceutical morphine or heroin. The term opioid refers to the general class of drugs, often called narcotics that interact with the opioid receptor. For example, Oxycodone, and methadone are "opioids" but in this section are not "opiates."

Drugs/poisons caused 230 accidental overdose deaths in 2012 compared to 205 in 2011. In 2012, accidental drug deaths comprised 34% (230/670) of all accidental deaths.

Ethanol (alcohol) is also a drug to be critically examined for its role in the circumstances surrounding death. In 2012, 13 accidental deaths were attributed to acute ethanol intoxication where ethanol was the single substance used. Fifty-four (54) people died in 2012 where ethanol, in combination with other drugs, was the cause of death. Blood alcohol (ethanol) tests were performed in 75% (920/1231) of non-natural deaths. Blood alcohol tests are only performed when death occurs within 24 hours of the initial injury/event, or, in hospital deaths, when an admission blood sample is available for testing. Positive blood alcohol levels were detected in 30% (275/920) of non-natural deaths where tests were performed.

Table 9-1 Blood Alcohol Testing / Manner / KCME / 2012

Test Results	ACCIDENT	TRAFFIC	HOMICIDE	NATURAL	SUICIDE	UNDETER-MINED	TOTAL
Tested	406	103	69	495	274	62	1409
Positive	*107*	*36*	*28*	*97*	*89*	*15*	*372*
Negative	*299*	*67*	*41*	*398*	*185*	*47*	*1037*
Not Tested	264	28	0	378	7	18	695
Totals	**670**	**131**	**69**	**873**	**281**	**80**	**2104**

Table 9-2 Blood Alcohol Testing / Percentage / Manner / KCME / 2012

Test Results	ACCIDENT	TRAFFIC	HOMICIDE	NATURAL	SUICIDE	UNDETER-MINED	TOTAL
Tested	61%	79%	100%	57%	98%	78%	67%
Positive	*26%*	*35%*	*41%*	*20%*	*32%*	*24%*	*26%*
Negative	*74%*	*65%*	*59%*	*80%*	*68%*	*76%*	*74%*
Not Tested	39%	21%	0%	43%	2%	22%	33%
Totals	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Table 9-3 2012 Drug & Poison Caused Deaths[1]

		Overdose Deaths (298) – Drug Present						Overdose Deaths (298) – Drug Causing					
Drug Name	**Total deaths out of 2,104 cases in which drug was present**	In which drug was present	Single drug OD in which drug was present	Multiple drug OD in which drug was present	Accident	Suicide	Undetermined	In which drug caused death	OD in which a single drug caused death	OD in which multiple drugs caused death	Accident	Suicide	Undetermined
Acetaminophen	14	12	1	11	5	6	1	7	1	6	1	6	0
Alprazolam	48	36	1	35	30	4	2	35	0	35	30	3	2
Amitriptyline	14	7	0	7	4	3	0	6	0	6	3	3	0
Amobarbital	1	1	0	1	1	0	0	1	0	1	1	0	0
Amphetamine	62	39	19	20	35	0	4	2	0	2	1	0	1
Bupropion	8	3	0	3	1	2	0	3	0	3	1	2	0
Butalbital	7	5	1	4	1	4	0	3	0	3	1	2	0
Cannabinoids / THC[2]	105	24	12	12	21	3	0	0	0	0	0	0	0
Carbamazepine	3	0	0	0	0	0	0	0	0	0	0	0	0
Carbon Monoxide[3]	31	10	10	0	2	8	0	10	10	0	2	8	0
Carisoprodol	3	0	0	0	0	0	0	0	0	0	0	0	0
Chlordiazepoxide	5	3	0	3	3	0	0	3	0	3	3	0	0
Chloroethane	1	1	1	0	1	0	0	1	1	0	1	0	0
Chlorpheniramine	3	1	0	1	1	0	0	0	0	0	0	0	0
Clonidine	0	0	0	0	0	0	0	0	0	0	0	0	0
Citalopram	54	20	1	19	15	3	2	19	0	19	14	3	2
Clomipramine	1	0	0	0	0	0	0	0	0	0	0	0	0
Clonazepam	6	4	0	4	3	1	0	4	0	4	3	1	0
Clozapine	1	1	0	1	0	0	1	1	0	1	0	0	1
Cocaine[4]	69	48	9	39	48	0	0	46	9	37	46	0	0
Codeine[5]	30	26	5	21	24	2	0	2	0	2	0	2	0
Cyanide	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyclobenzaprine	19	13	0	13	6	7	0	11	0	11	4	7	0
Desipramine	0	0	0	0	0	0	0	0	0	0	0	0	0
Dextromethorphan	8	3	1	2	2	1	0	2	0	2	1	0	1
Acetaminophen	14	12	1	11	5	6	1	7	1	6	1	6	0

Table 9-3 **2012 Drug & Poison Caused Deaths,** page 2

		Overdose Deaths (298) – Drug Present						Overdose Deaths (298) – Drug Causing					
Drug Name	**Total deaths out of 2,104 cases in which drug was present**	In which drug was present	Single drug OD in which drug was present	Multiple drug OD in which drug was present	Accident	Suicide	Undetermined	In which drug caused death	OD in which a single drug caused death	OD in which multiple drugs caused death	Accident	Suicide	Undetermined
Diazepam	54	25	4	21	18	7	0	21	0	21	16	5	0
Diltiazem	2	1	0	1	0	1	0	1	0	1	0	1	0
Diphenhydramine	48	19	2	17	10	5	4	16	1	15	8	5	3
Doxepin	11	3	0	3	3	0	0	3	0	3	3	0	0
Doxylamine	9	3	0	3	1	0	2	3	0	3	1	0	2
Estazolam	1	1	0	1	0	1	0	1	0	1	0	1	0
Ethanol - Ethyl Alcohol	372	84	20	64	53	10	1	67	13	54	56	10	1
Ethylene Glycol	4	4	4	0	0	2	2	4	4	0	0	2	2
Fentanyl	19	13	2	11	9	3	1	12	1	11	9	2	1
Fluoxetine	21	9	1	8	5	2	1	8	0	8	5	2	1
Gabapentin	2	2	0	2	1	1	0	2	0	2	1	1	0
Gamma hydroxybutyrate	1	1	0	1	1	0	0	1	0	1	1	0	0
Hydrocodone	31	7	0	7	5	1	1	6	0	6	4	1	1
Hydromorphone	28	9	1	8	4	3	2	8	0	8	3	3	2
Hydroxyzine	1	0	0	0	0	0	0	0	0	0	0	0	0
Ibuprofen	1	1	0	1	1	0	0	0	0	0	0	0	0
Isopropanol	13	1	1	0	1	0	0	1	1	0	1	0	0
Ketamine	2	1	0	1	1	0	0	1	0	1	1	0	0
Lamotrigine	9	5	0	5	2	3	0	5	0	5	2	3	0
Levetiracetum	3	1	1	0	0	1	0	0	0	0	0	0	0
Lidocaine	10	2	0	2	2	0	0	0	0	0	0	0	0
Lorazepam	20	7	0	7	4	2	1	7	0	7	4	1	1
MDMA	1	0	0	0	0	0	0	0	0	0	0	0	0
Meperidine	1	0	0	0	0	0	0	0	0	0	0	0	0
Meprobamate	5	2	1	1	1	1	0	1	0	1	1	0	0
Methadone	91	56	12	44	48	3	5	56	12	44	48	3	5

Table 9-3 **2012 Drug & Poison Caused Deaths,** page 3

		Overdose Deaths (298) – Drug Present						Overdose Deaths (298) – Drug Causing					
Drug Name	**Total deaths out of 2,104 cases in which drug was present**	In which drug was present	Single drug OD in which drug was present	Multiple drug OD in which drug was present	Accident	Suicide	Undetermined	In which drug caused death	OD in which a single drug caused death	OD in which multiple drugs caused death	Accident	Suicide	Undetermined
Methamphetamine	64	40	19	21	67	0	3	39	19	20	36	0	3
Metoprolol	1	1	0	1	0	1	0	1	0	1	0	1	0
Methocarbamol	2	2	0	2	1	1	0	2	0	2	1	1	0
Metoclopramide	3	2	0	2	0	2	0	1	0	1	0	1	0
Midazolam	29	5	3	2	5	0	0	1	0	1	1	0	0
Mirtazapine	10	4	0	4	3	1	0	4	0	4	3	1	0
Monoacetylmorphine[6]	34	33	9	24	33	0	0	0	0	0	0	0	0
Morphine[7]	165	100	25	75	94	6	0	15	4	11	11	4	0
Nortriptyline[8]	20	12	0	12	8	4	0	2	0	2	1	1	0
Olanzapine	2	1	0	1	0	1	0	1	0	1	0	1	0
Opiate[9]	104	103	26	77	97	5	1	103	26	77	97	5	1
Oxazepam	10	6	0	6	3	3	0	2	0	2	2	0	0
Oxcarbazepine	1	1	0	1	0	1	0	1	0	1	0	1	0
Oxycodone	72	36	5	31	26	10	0	36	5	31	26	10	0
Paroxetine	6	5	0	5	4	1	0	5	0	5	4	1	0
Phenobarbital	11	2	0	2	2	0	0	2	0	2	2	0	0
Phenytoin	2	1	1	0	0	1	0	1	1	0	0	1	0
Propoxyphene	1	1	0	1	1	0	0	1	0	1	1	0	0
Quetiapine	15	7	0	7	4	3	0	7	0	7	4	3	0
Sertraline	11	6	0	6	4	2	0	6	0	6	4	2	0
Secobarbital	2	2	0	2	2	0	0	2	0	2	2	0	0
Temazepam	15	8	0	8	4	4	0	5	0	5	4	1	0
Topiramate	6	2	0	2	1	1	0	2	0	2	1	1	0
Tramadol	10	5	0	5	3	2	0	5	0	5	3	2	0
Trazodone	34	19	0	19	9	9	1	17	0	17	7	9	1
Venlafaxine	16	8	0	8	3	4	1	8	0	8	3	4	1
Verapamil	1	1	0	1	0	1	0	1	0	1	0	1	0
Zolpidem	25	9	0	9	5	3	1	9	0	9	5	3	1

Table 9-3 2012 Drug & Poison Caused Deaths, page 4

[1]Table 9-3 is constructed on the basis of finding each of the listed drugs by laboratory analysis of the decedent's blood. The first column represents the total number of cases in which the specific drug was detected, regardless of cause and manner of death. The rest of the columns represent only drug overdose deaths and are divided into two parts. The part that lists "Drug Present" represents the number of cases in drug overdose deaths in which the drug was present in quantifiable amounts. The other part that lists "Drug Causing" represents the number of drug overdose deaths in which the specific drug caused or contributed to death in the opinion of the certifying Medical Examiner, i.e., the drug was included on the death certificate. In many cases, the numbers in the first part are more than those in the second part because the drug, although present, was not considered to contribute significantly to death, i.e., the drug was not listed on the death certificate even though it was detected in the decedent. In a few cases, the column that lists "In which drug caused death" is greater than the column that lists "In which drug was present," because the drug was detected but not in quantifiable levels, and the certifying Medical Examiner considered the drug to have contributed to death. Furthermore, there were ten additional cases of drug overdose deaths in which no sample was available for analysis. All of these cases represent deaths due to anoxic brain injury that occurred in a hospital after the admission blood sample had been discarded, precluding a confirmatory laboratory analysis. These cases were certified on the basis of the medical records rather than laboratory analysis. These cases included delayed overdose deaths of the following drugs: (1) cocaine; (2) acetaminophen; (3) opiate (probable heroin and methamphetamines; (4) opiate (unknown source) and benzodiazepines (specific medication unknown); (5) opiate (probable heroin); (6) acetaminophen; (7) cocaine, opiate (probable heroin) methamphetamine, and amphetamine; (8) nortriptyline; (9) opiate (pharmaceutical), benzodiazepine (specific medication unknown, and probable ethanol, (10) ethylene glycol

[2]Cannabinoids are listed if they were found at any level in blood or urine, not necessarily in quantified levels. Cannabinoids in levels typically found are not considered lethal agents and, therefore, there are no instances of single drug overdose deaths involving cannabinoids or THC. Although cannabinoids/THC were not considered contributory to death, they were detected in overdose deaths as listed.

[3]Carbon monoxide fatalities are listed in the first column (Total deaths out of 2,104 cases in which drug was present) if the level of carboxyhemoglobin was 5% or greater. The rest of the columns represent only drug overdose deaths and are divided into two parts, "Drug Present" and "Drug Causing". Suicides due to intentional inhalation of carbon monoxide accounted for eight of the carbon monoxide deaths. In two of the eight carbon monoxide suicides, other drugs may have been present, but they did not contribute to the death. Accidental deaths due to inhalation of carbon monoxide accounted for two of the carbon monoxide overdose deaths. Both of the accidental carbon monoxide overdose deaths were attributed solely to inhalation of carbon monoxide. There were no undetermined deaths due solely to inhalation of carbon monoxide. Other sources of carbon monoxide included in this table are 9 accidental residential fire fatalities and one traffic accidents with vehicle fire. There were no homicidal deaths due to carbon monoxide in 2012.

[4]Includes benzoylecgonine.

[5]Out of the 26 overdose deaths involving codeine, in 24 cases, the source of the drug was likely small quantities of codeine present in heroin used by illicit drug users. In one case the source of the drug was likely pharmaceutical codeine and one case was from an unknown source.

[6] Monoacetylmorphine (MAM) is a principal toxicological marker for heroin. It is the first breakdown product of heroin, which is diacetylmorphine.. The presence of MAM, therefore, proves the source of opiate to be heroin. However, the absence of MAM does not imply that the source of the opiate was not heroin.

[7]There were 100 overdose deaths involving morphine. In 79 of these cases, the source of the drug was likely the morphine derived from heroin preparations used by illicit drug users. In 15 of these cases the source of the morphine was likely pharmaceutical morphine, and in 9 of these cases the source of the morphine was not known.

[8]In 5 of the 12 total cases, nortriptyline was present without the presence of amitriptyline, indicating that the source of the drug was, in fact, nortriptyline. In the other 7 cases, amitriptyline was also present, indicating that the nortriptyline was present due to the breakdown of amitriptyline. There were a total of 5 nortriptyline overdose deaths; 4 accidental multiple drug overdoses and 1 multiple drug overdose suicide.

[9] As used in this section opiate refers to a naturally occurring drug within the opium poppy or a simple derivative. The two opiates of concern are heroin and pharmaceutical morphine. Toxicological analysis detects only morphine and cannot differentiate heroin and pharmaceutical morphine as the likely source of the opiate. To make this distinction, toxicological markers such as monoacetylmorphine (see foot note 6) and low levels of codeine, as well as evidence collected from the scene and circumstances of death, were used to separate the 103 opiate deaths into 3 categories as follow; 1) 79 cases where opiate source was heroin or likely heroin; 2) 15 cases where the opiate source was probably pharmaceutical morphine; and 3) 9 cases where the opiate source was unknown.

Graph 9-2 Drug & Poison Caused Deaths / Accident, Suicide, Undetermined / KCME / 2003- 2012

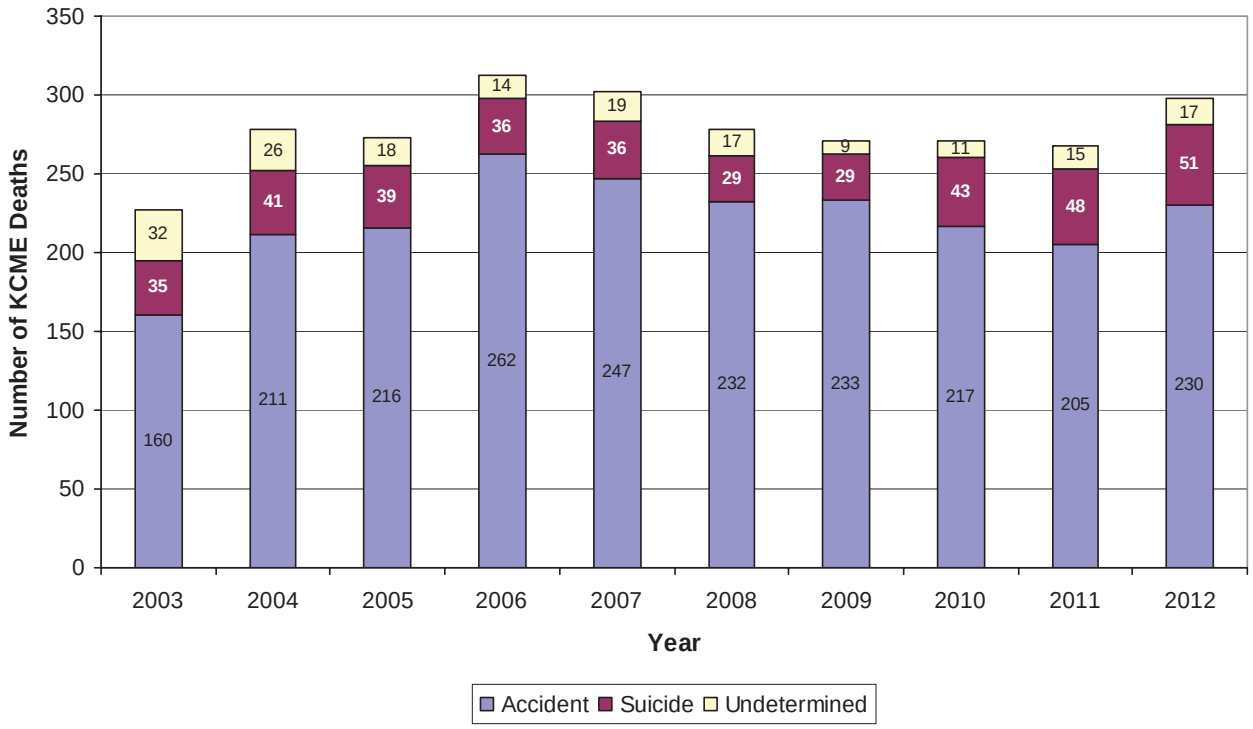


Table 9-4 Total Overdose Deaths / Accident, Suicide, Undetermined / 2003 – 2012[9]

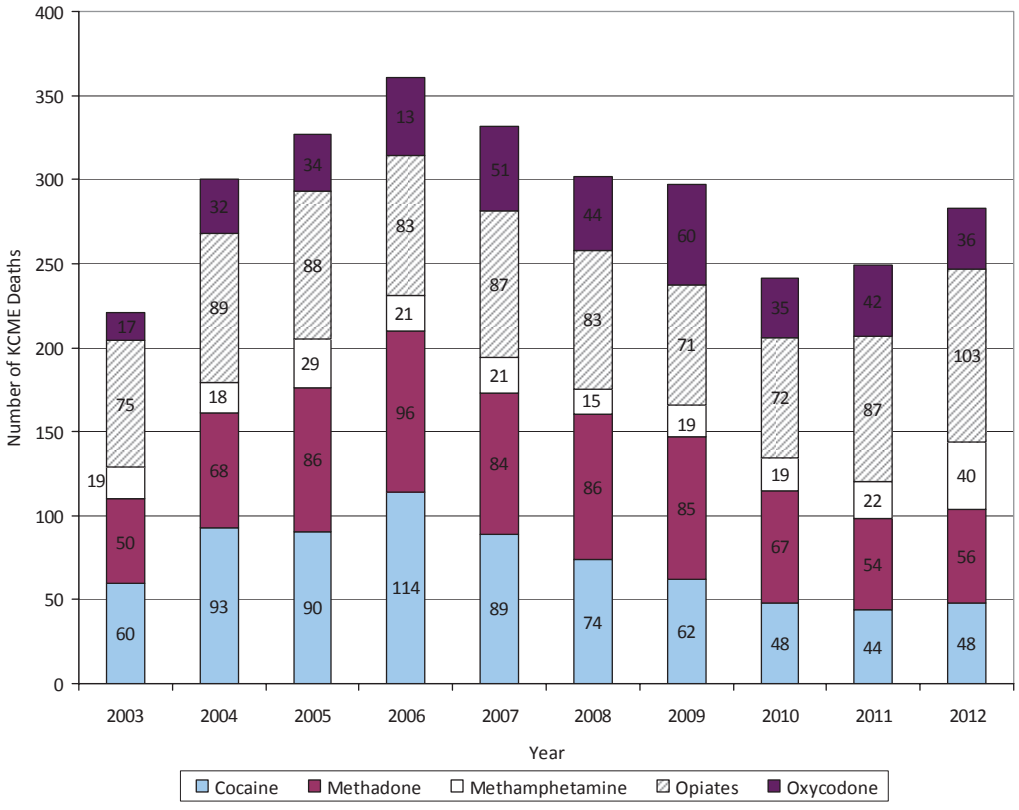
Overdose Deaths	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Accident	160	211	216	262	247	232	233	217	205	230
Suicide	35	41	39	36	36	29	29	43	48	51
Undetermined	32	26	18	14	19	17	9	11	15	17
Totals	**227**	**278**	**273**	**312**	**302**	**278**	**271**	**271**	**268**	**298**

[9] Includes all deaths classified as overdose, regardless of whether lab samples were available for analysis.

Table 9-5 **Overdose Deaths Caused by Cocaine, Methadone, Opiates, Methamphetamine, or Oxycodone[10] / KCME / 2003 - 2012**

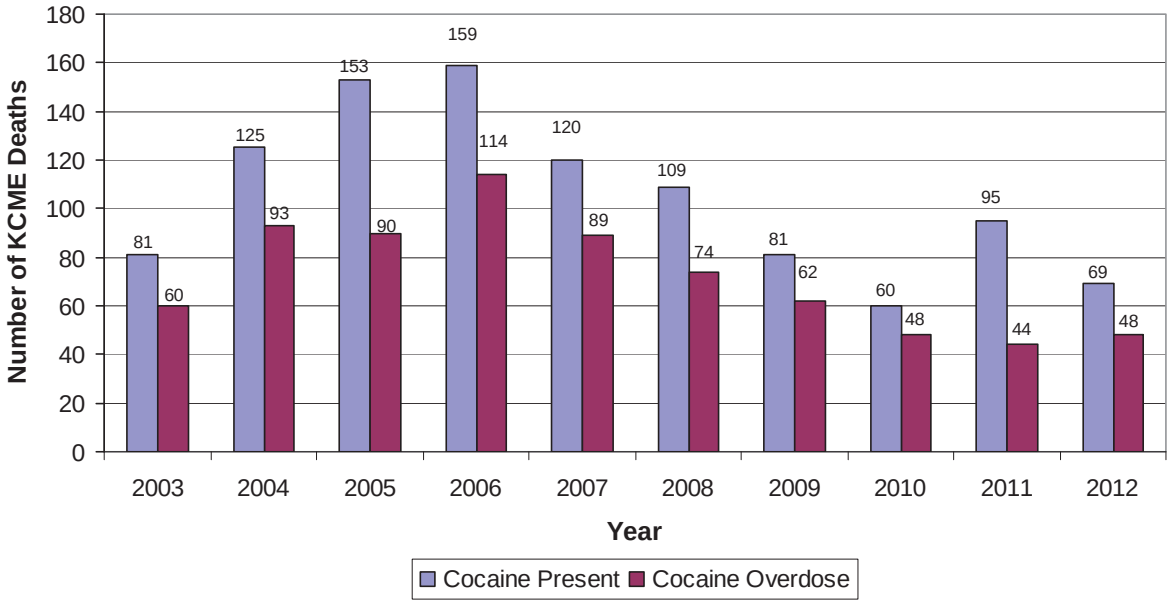
DRUG	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cocaine	60	93	90	114	89	74	62	48	44	48
Methadone	51	68	86	96	84	86	85	67	54	56
Methamphetamine	19	18	29	21	21	15	19	19	22	40
Opiates	75	89	88	83	87	83	71	72	87	103
Oxycodone	17	32	34	47	51	44	60	35	42	36

Graph 9-2 Drug & Poison Caused Deaths / Accident, Suicide, Undetermined / KCME / 2003 - 2012

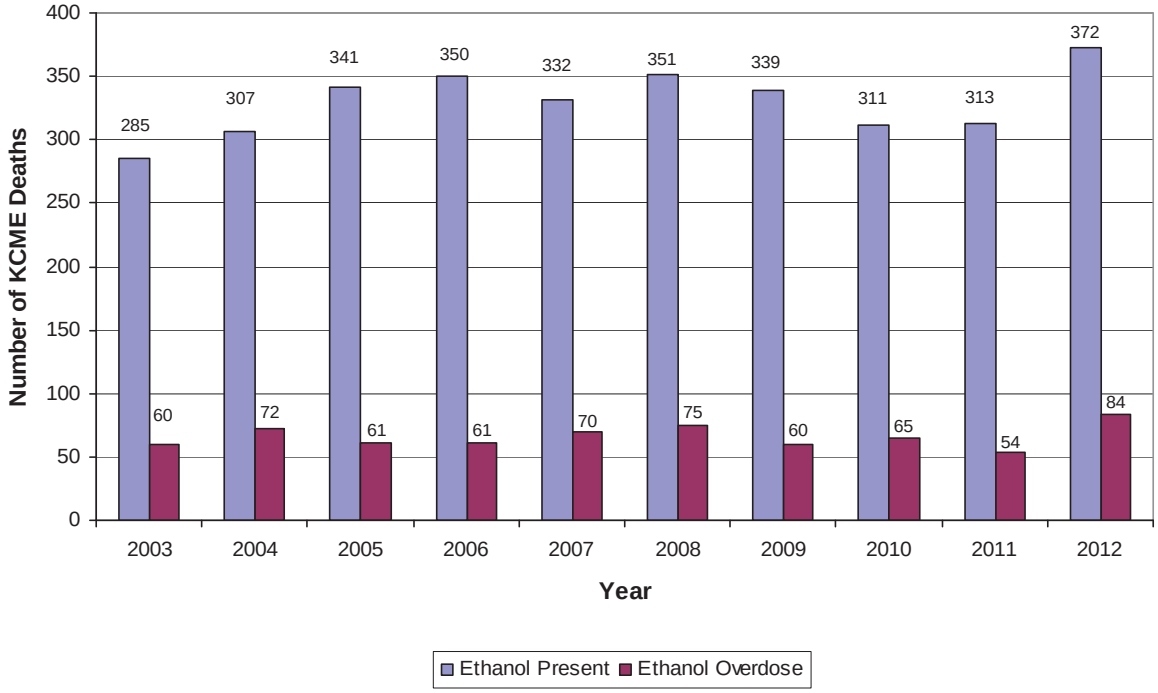


[10] In this context, "caused by" refers to single or multiple drug overdoses in which the drug was listed on the death certificate.

Graph 9-3 Cocaine Involved Deaths[11] / KCME / 2003 – 2012

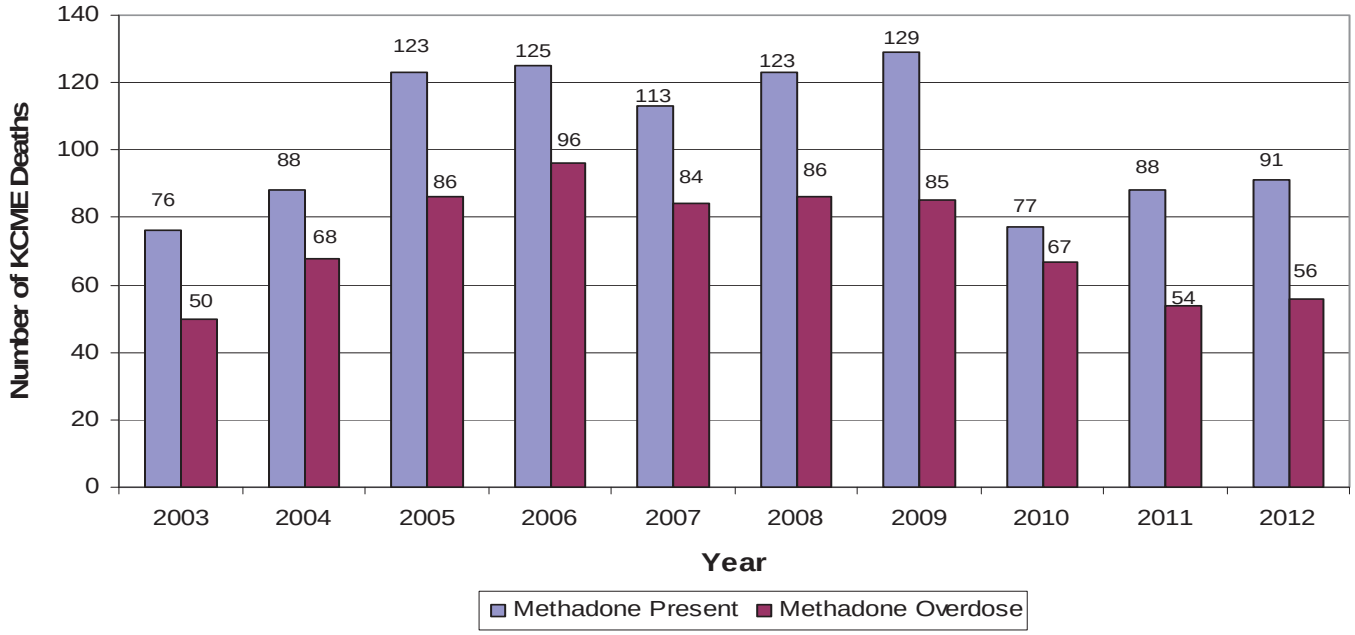


Graph 9-4 Ethanol Involved Deaths / KCME/ 2003– 2012

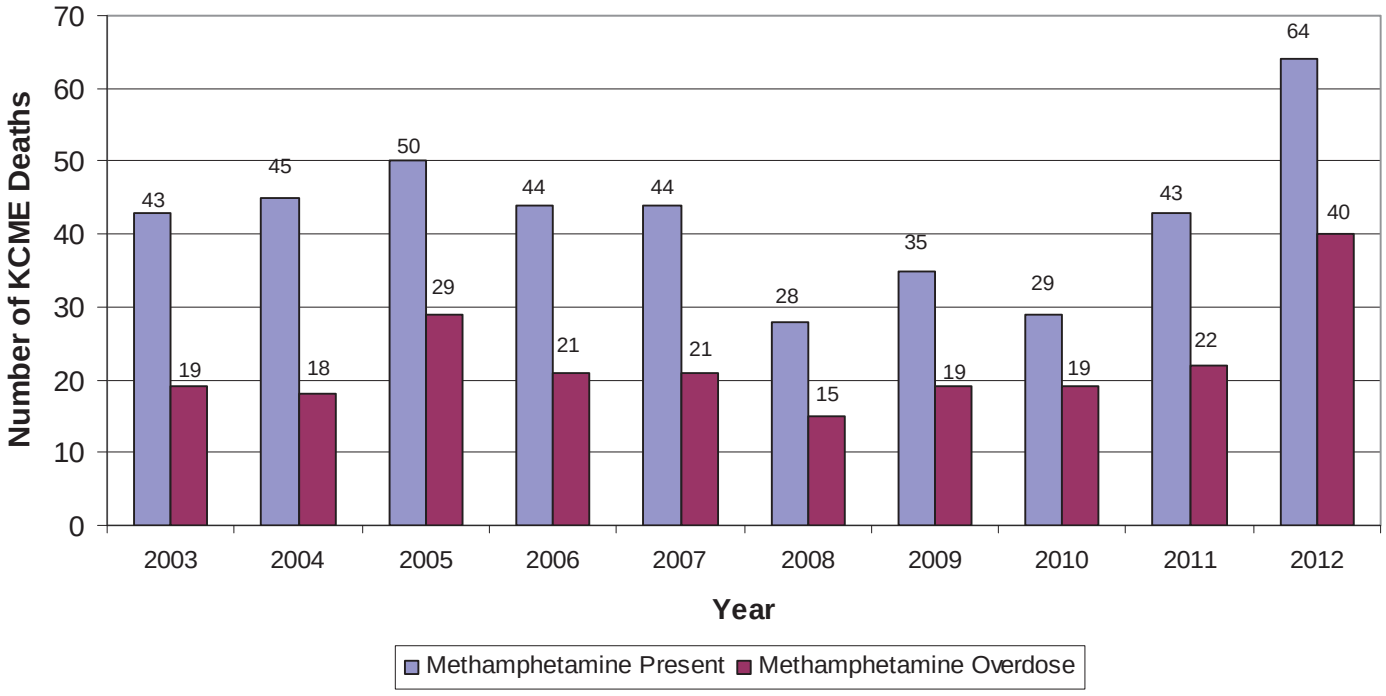


[11]In Graphs 9-3, 9-4, 9-5 and 9-6, "overdose" refers to deaths due to the listed drug or ethanol in single or multiple drug overdose deaths where the listed drug or ethanol was listed on the death certificate.

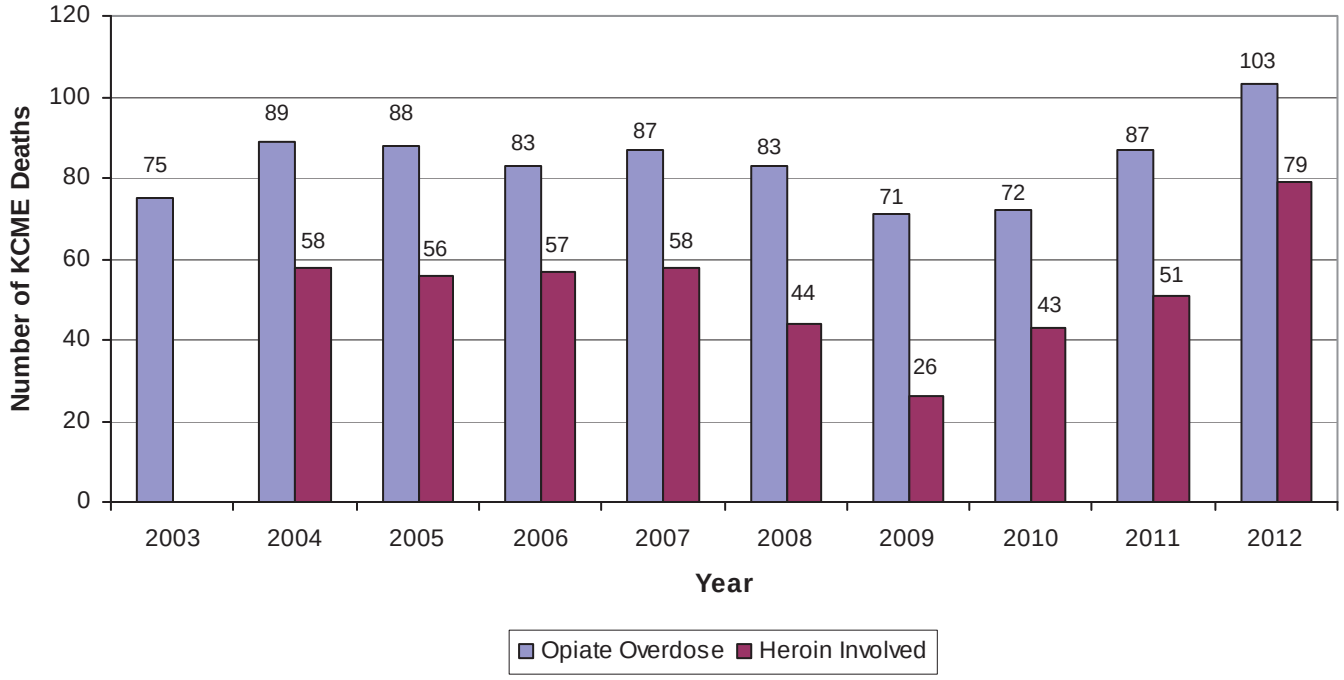
Graph 9-5 Methadone Involved Deaths / KCME / 2003 - 2012



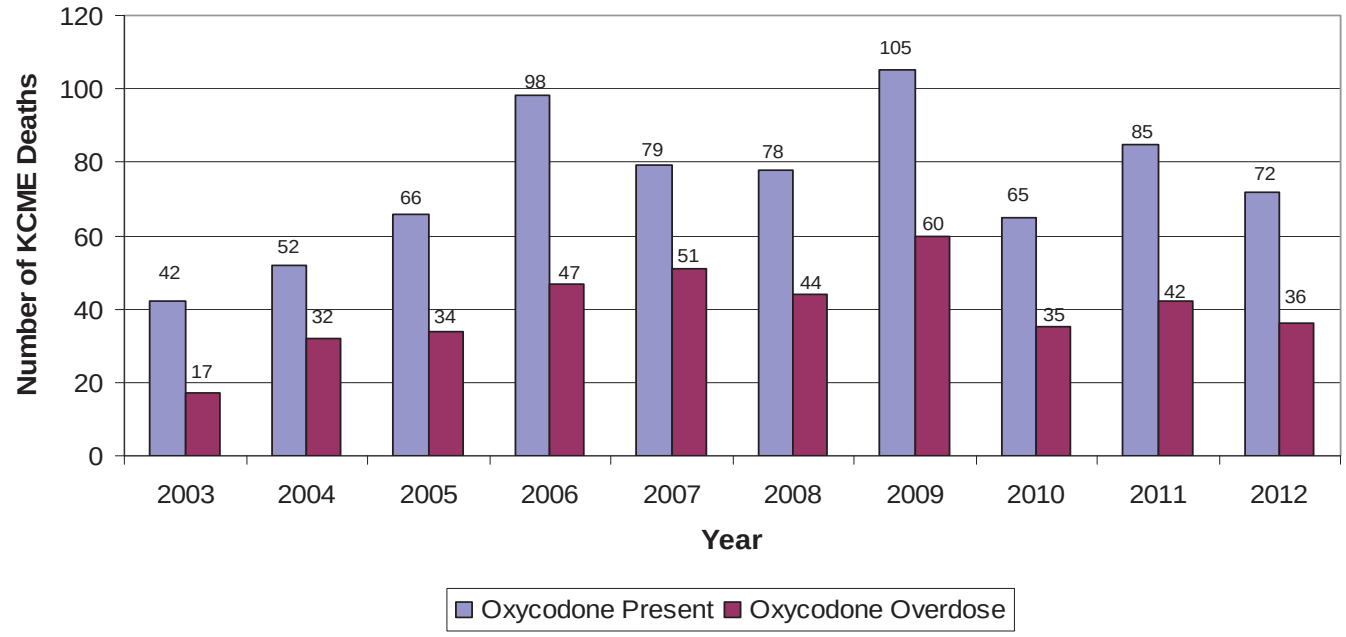
Graph 9-6 Methamphetamine Involved Deaths / KCME / 2003 – 2012



Graph 9-7 Opiate Overdose Deaths & Heroin-Related Deaths / KCME / 2003 - 2012[12]



Graph 9-8 Oxycodone Involved Deaths / KCME / 2003 - 2012



[12]In 2004, the King County Medical Examiner's Office began collecting data on probable heroin overdoses based on a combination of scene, circumstances, and toxicology results.

Graph 9-9 Drug / Poison Deaths / Age / KCME / 2003 – 2012

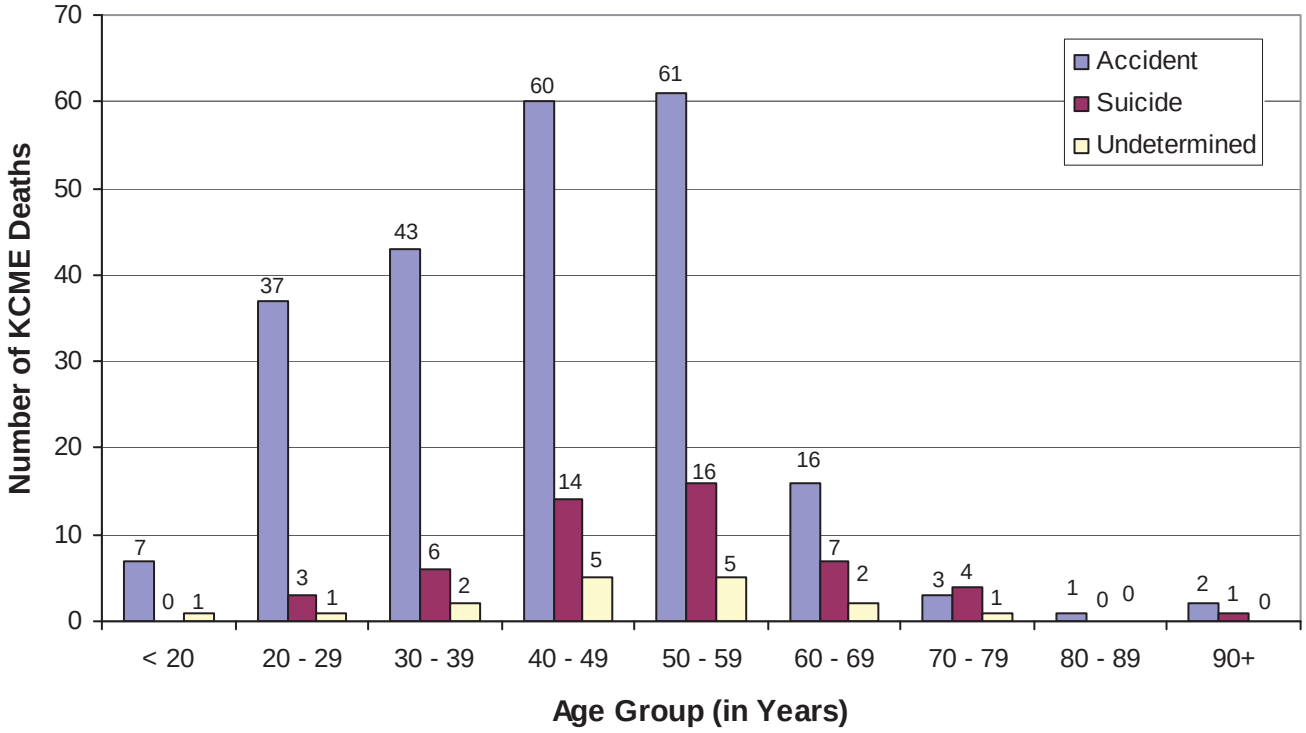


Table 9-6 **Drug / Poison Deaths / Age / KCME / 2012**

AGE GROUP (YEARS) / GENDER	MANNER OF DEATH			SUB-TOTAL	TOTAL
	ACCIDENT	SUICIDE	UNDETERMINED		
<20	7	0	1		37
Male	*5*	*2*	*0*	*5*	
Female	*2*	*0*	*1*	*3*	
20-29	37	3	1		41
Male	*29*	*1*	*1*	*31*	
Female	*8*	*2*	*0*	*10*	
30-39	43	6	2		
Male	*42*	*5*	*1*	*48*	
Female	*18*	*9*	*4*	*31*	
40-49	60	14	5		79
Male	*42*	*5*	*1*	*48*	
Female	*18*	*9*	*4*	*31*	
50-59	61	16	5		82
Male	*34*	*6*	*4*	*44*	
Female	*27*	*10*	*1*	*38*	
60-69	16	7	2		25
Male	*12*	*4*	*1*	*17*	
Female	*4*	*3*	*1*	*8*	
70-79	3	4	1		8
Male	*3*	*3*	*1*	*7*	
Female	*0*	*1*	*0*	*1*	
80-89	1	0	0		1
Male	*1*	*0*	*0*	*1*	
Female	*0*	*0*	*0*	*0*	
90+	2	1	0		3
Male	*1*	*0*	*0*	*1*	
Female	*1*	*1*	*0*	*2*	
Totals	**230**	**51**	**17**		**298**

Deaths due to firearms

The Medical Examiner is responsible for investigating all deaths due to firearms that occur in King County. Medical Examiner data relate primarily to the victim because information regarding the weapon and the shooter is often unknown. The following data are specific to the victims of firearm deaths.

In 2012, the Medical Examiner investigated 169 firearm deaths. In 2011, firearms caused 154 deaths. Of the 169 firearm deaths in 2012, 47 (28%) were homicides and 119 (70%) were suicides. Two firearm deaths were classified as accidents in 2012. In 2011, there were no firearm deaths classified as accidents. In 2012, there were two firearm deaths that were classified as undetermined; there were three in 2011.

In 2012, gunshot wounds were the leading cause of death for homicides and suicides. Firearm deaths comprised 68% (47/69) of homicides, compared to 65% (35/54) in 2011. In 2012, suicides by firearms represented 42% (119/281) of suicide deaths compared to 44% (116/265) in 2011.

In 2012, of the 47 firearm homicide victims, 15% (7/47) were 19 years old and younger – an increase from 2011 when 14% of firearm homicide victims were 19 years old and younger. In 2012, it is estimated that a disproportionate number of firearm homicide victims were African American (40%, 19/47) compared to the percentage of African Americans in the general population (see discussions on pages 8 and 44). Of the 19 African American firearm homicide victims, three were males 19 years old and younger and five were males between 20 and 29 years of age. In comparison, 47% (22/47) of the homicide firearm victims were white. Of the 22 white homicide victims, 9% (2/22) were males between 20 and 29 years old.

Of the 119 firearm suicide victims in 2012, 88% (105/119) were white and 78% (93/119) were males. Seven of the firearm suicide victims were 19 years old and under (6%, 7/119). Thirty-one (31%, 37/119) of the gunshot suicide victims were between the ages of 20 and 39 years of age, 41 (34%, 41/119) were between 40 and 59 years, and 34 (29%, 34/119) were 60 years and older.

Table 10-1 Firearm Deaths / Manner / Age / Gender / KCME / 2012

AGE GROUP / GENDER	MANNER OF DEATH				SUB-TOTAL	TOTAL
	A	H	S	U		
<13 years	0	1	0	0		1
Male	*0*	*0*	*0*	*0*	*0*	
Female	*0*	*1*	*0*	*0*	*1*	
13-15 years	0	1	4	0		5
Male	*0*	*1*	*4*	*0*	*5*	
Female	*0*	*0*	*0*	*0*	*0*	
16-19 years	0	5	3	0		8
Male	*0*	*2*	*2*	*0*	*4*	
Female	*0*	*3*	*1*	*0*	*4*	
20-29 years	0	12	22	0		34
Male	*0*	*8*	*19*	*0*	*27*	
Female	*0*	*4*	*3*	*0*	*7*	
30-39 years	0	9	15	0		24
Male	*0*	*8*	*18*	*0*	*21*	
Female	*0*	*1*	*2*	*0*	*3*	
40-49 years	0	12	20	0		32
Male	*0*	*11*	*17*	*0*	*28*	
Female	*0*	*1*	*3*	*0*	*4*	
50-59 years	1	5	21	0		27
Male	*1*	*4*	*19*	*0*	*24*	
Female	*0*	*1*	*2*	*0*	*3*	
60-69 years	1	0	15	0		16
Male	*0*	*0*	*12*	*0*	*12*	
Female	*1*	*0*	*3*	*0*	*4*	
70-79 years	0	2	9	0		11
Male	*0*	*2*	*9*	*0*	*11*	
Female	*0*	*0*	*0*	*0*	*0*	
80-89 years	0	0	10	1		11
Male	*0*	*0*	*10*	*1*	*11*	
Female	*0*	*0*	*0*	*0*	*0*	
90+	0	0	0	0		0
Male	*0*	*0*	*0*	*0*	*0*	
Female	*0*	*0*	*0*	*0*	*0*	
Totals	**1**	**47**	**119**	**1**		**169**
Percent	1%	28%	70%	1%		

Graph 10-1 Firearm Deaths / Manner / Age Group / KCME / 2012

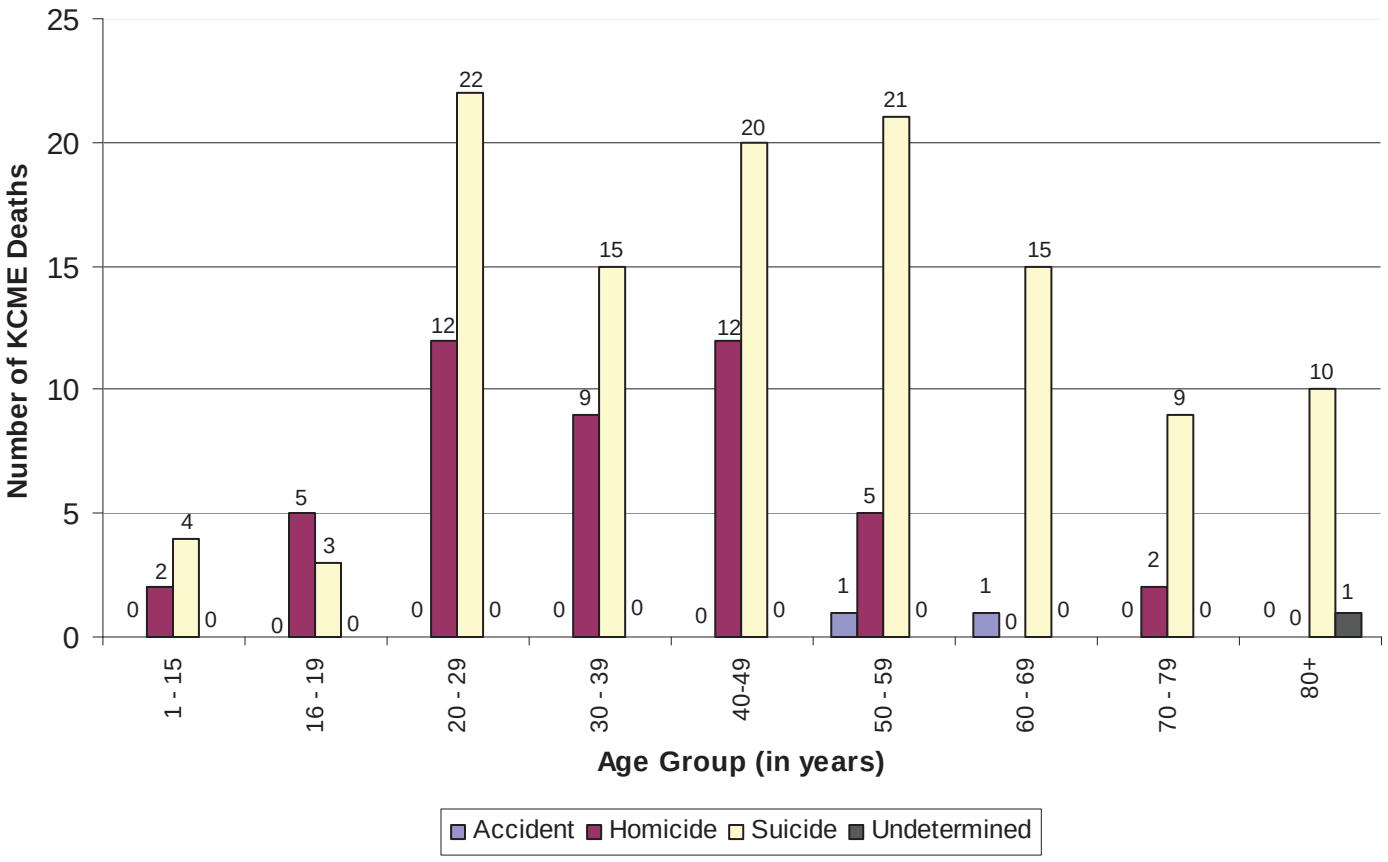


Table 10-2 Firearm Deaths / Manner / Race / Gender / KCME / 2012

RACE / GENDER	MANNER OF DEATH				SUB-TOTAL	TOTAL
	A	H	S	U		
Asian/Pacific Islander	0	4	5	0		9
Male	*0*	*3*	*5*	*0*	*8*	
Female	*0*	*1*	*0*	*0*	*1*	
African American	0	19	6	0		25
Male	*0*	*17*	*4*	*1*	*21*	
Female	*0*	*2*	*2*	*0*	*4*	
Am Indian / AK Native	0	2	3	0		5
Male	*0*	*0*	*3*	*0*	*3*	
Female	*0*	*2*	*0*	*0*	*2*	
White	2	22	105	1		130
Male	*1*	*16*	*93*	*1*	*111*	
Female	*1*	*6*	*12*	*0*	*19*	
Other	0	0	0	0		0
Male	*0*	*0*	*0*	*0*	*0*	
Female	*0*	*0*	*0*	*0*	*0*	
Totals	**2**	**47**	**119**	**1**		**169**

Causes of death in children and youth

In 2012, the King County Medical Examiner's Office investigated 97 deaths of children and youth ages 19 years or younger, which represented 5% (97/2,104) of the total deaths investigated. Of these deaths, 16% (16/97) were natural, 29% (28/97) were accidental (non-traffic), 11% (11/97) were homicides, 10% (10/97) were traffic-related, 19% (18/97) were suicides, and 14% (14/97) were classified as manner undetermined. In addition to investigating childhood deaths, the King County Medical Examiner participates in Child Death Review, a process which discusses these deaths in detail and formulates prevention strategies.

Of the 16 natural deaths of children and youth investigated by the Medical Examiner, 44% (7/16) were of infants less than one year of age. Of these 7 infants who died of natural causes, 4 were due to Sudden Infant Death Syndrome (SIDS). In addition, 10 infant deaths were classified as "Sudden Unexplained Infant Death" (SUID), manner undetermined, due to the inability to exclude if external factors contributed to death.

There were 11 homicides among children and youth. Of these 11 homicide victims, 9 were teenagers (13 - 19 years of age), 1 was a child (one to 12 years of age), and 1 was an infant less than one year of age. Homicides as a result of gun shot wounds accounted for 64 percent (7/11) of the children and youth homicide victims.

There were 18 youth suicides, with the majority, 17, being between the ages of 12 and 19 years. 1 suicide occurred in the age group of 1 – 12 years of age. Males comprised 67% (12/18) of the victims. Regarding the methods used to commit suicide by youth, 7 were by firearm, 9 were by hanging, 1 was from jumping and 1 was from placing a plastic bag over the head.

10 children and youth (19 years and under) died in traffic-related accidents, of whom 8 (80%) were teenagers 13 – 19 years of age. There were 4 motor vehicle driver deaths, 2 motor vehicle passenger deaths, 2 pedestrian deaths and 2 bicyclist deaths. Of the 6 children and youth who died in motor vehicles, 5 were known to be restrained, 1 was restraint unknown.

The following tables list the causes of death among children and youth for all manners in three age groups: less than one year, one -12 years and 13-19 years.

Graph 11-1 Causes of Death in Children & Youth / KCME / 2012

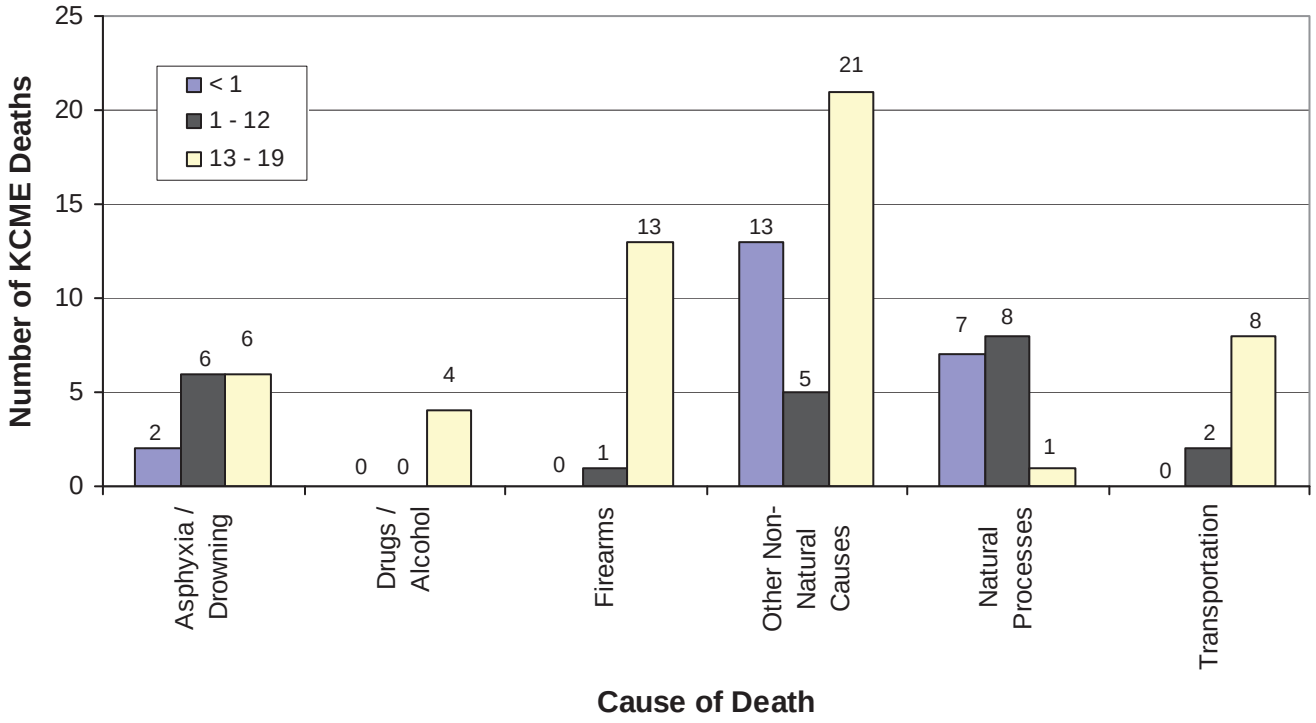


Table 11-1 Causes of Death: Children Under 1 Year of Age / KCME / 2012

CIRCUMSTANCES	MANNER OF DEATH A	H	S	T	U	N	SUB-TOTAL	TOTAL
Miscellaneous								22
Asphyxia	*2*	*0*	*0*	*0*	*0*	*0*	*2*	
Drowning	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Prematurity	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Other	*0*	*1*	*0*	*0*	*0*	*1*	*2*	
SIDS	*0*	*0*	*0*	*0*	*12*[22]	*4*	*16*	
Other Natural Disease	0	0	0	0	0	2		
Totals	**2**	**1**	**0**	**0**	**12**	**7**		**22**

[22] Includes 10 cases classified as Sudden Unexplained Infant death with the possibility of bed sharing listed as a significant condition contributing to the cause of death.

Table 11-2 Causes of Death: Children 1 to 12 Years of Age / KCME / 2012

CIRCUMSTANCES	MANNER OF DEATH A	H	S	T	U	N	SUB-TOTAL	TOTAL
Asphyxia	6	0	1	0	0	0		7
Carbon Monoxide	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Drowning	*2*	*0*	*0*	*0*	*0*	*0*	*2*	
Hanging	*3*	*0*	*1*	*0*	*0*	*0*	*4*	
Mechanical	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Other	*1*	*0*	*0*	*0*	*0*	*0*	*1*	
Positional	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Miscellaneous	2	0	0	0	1	0		3
Complication of Therapy	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Drugs / Poisons	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Fall	*1*	*0*	*0*	*0*	*0*	*0*	*1*	
Fire / Explosion	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Hyperthermia	*1*	*0*	*0*	*0*	*0*	*0*	*1*	
Jump	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Non Traffic -Vehicle	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Other	*0*	*0*	*0*	*0*	*1*	*0*	*1*	
Physical Trauma	1	1	0	0	0	0		2
Abuse	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Blunt Force / Crushing	*1*	*0*	*0*	*0*	*0*	*0*	*1*	
Burns / Fire	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Firearms	*0*	*1*	*0*	*0*	*0*	*0*	*1*	
Incised / Stab Wound(s)	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Other	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Transportation Related	0	0	0	2	0	0		2
Bicycle	*0*	*0*	*0*	*1*	*0*	*0*	*1*	
Motor Vehicle Driver	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Motor Vehicle Passenger	*0*	*0*	*0*	*1*	*0*	*0*	*1*	
Sled	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Pedestrian	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Natural Disease	0	0	0	0	0	8		8
Totals	**9**	**1**	**1**	**2**	**1**	**8**		**22**

Table 11-3 Causes of Death: Children 13 to 19 Years of Age / KCME / 2012

CIRCUMSTANCES	MANNER OF DEATH A	H	S	T	U	N	SUB-TOTAL	TOTAL
Asphyxia	6	0	9	0	0	0		15
Carbon Monoxide	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Drowning	*4*	*0*	*0*	*0*	*0*	*0*	*4*	
Hanging	*1*	*0*	*8*	*0*	*0*	*0*	*9*	
Smothering	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Positional	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Other	*1*	*0*	*1*	*0*	*0*	*0*	*2*	
Drugs / Alcohol	4	0	0	0	0	0		4
Miscellaneous	4	0	1	0	1	0		6
Complication of Therapy	*1*	*0*	*0*	*0*	*0*	*0*	*1*	
Fall	*3*	*0*	*0*	*0*	*0*	*0*	*3*	
Jump	*0*	*0*	*1*	*0*	*0*	*0*	*1*	
Non-Traffic Vehicular	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Other	*0*	*0*	*0*	*0*	*1*	*0*	*1*	
Physical Trauma	3	9	7	0	0	0	0	19
Blunt Force / Crushing	*1*	*0*	*0*	*0*	*0*	*0*	*1*	
Burns / Fire	*2*	*0*	*0*	*0*	*0*	*0*	*2*	
Firearms	*0*	*6*	*7*	*0*	*0*	*0*	*13*	
Homicidal Violence	*0*	*1*	*0*	*0*	*0*	*0*	*1*	
Incised / Stab Wound(s)	*0*	*2*	*0*	*0*	*0*	*0*	*2*	
Strangulation	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Transportation Related	0	0	0	8	0	0		8
Bicycle	*0*	*0*	*0*	*1*	*0*	*0*	*1*	
Motor Vehicle Driver	*0*	*0*	*0*	*4*	*0*	*0*	*4*	
Motor Vehicle Passenger	*0*	*0*	*0*	*1*	*0*	*0*	*1*	
Motorcycle	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Pedestrian	*0*	*0*	*0*	*2*	*0*	*0*	*2*	
Other	*0*	*0*	*0*	*0*	*0*	*0*	*0*	
Natural Disease	0	0	0	0	0	1		1
Totals	**17**	**9**	**17**	**8**	**1**	**1**		**53**

Organ donation

Although the King County Medical Examiner's Office does not approach families for donation of organs and tissue from decedents, we recognize the tremendous need for this life-saving activity and cooperate fully with organ and tissue procurement agencies. It is the philosophy of the King County Medical Examiner's Office that all requests for organ and/or tissue donation be given high priority for approval. In practice, the procurement agency contacts the KCMEO with information regarding a potential donor and the specific organs or tissue requested. The Medical Examiner then evaluates the request to determine if the donation would significantly affect the postmortem examination. In the great majority of cases, examinations can be conducted so that donations do not interfere with certification of death or collection of evidence. In this way, the King County Medical Examiner's Office works to maximize the donation of organs and tissue that go directly to save lives.

In 2012, the King County Medical Examiner's Office was notified of 70 deaths that were eligible for organ donation in King County. The KCMEO gave release on 43 of these deaths while the remaining 27 were determined to be non-jurisdictional and therefore not requiring medical examiner's approval. Altogether, there were 172 organs donated for transplant from the 70 cases referred to the King County Medical Examiner. The number of specific organs transplanted in 2012 is shown in Table 12-1. Note: this number is different from the overall total as 11 organs not suitable for transplant were used to assist in transplant research. In addition to the living organs listed in Table 12-1 that were donated in 2012, the KCMEO approved the donation of skin, bone, cartilage, heart valves, corneas and other tissues through the tissue procurement agency, Northwest Tissue Service. Altogether, there were 75 donors who, on average, were able to provide over 50 donations each (3,750) to tissue transplant recipients.

Table 12-1 Organs Transplanted / KCME / 2012

ORGAN	# Transplanted
Heart	19
Intestine	1
Kidney	84
Liver	36
Lung	15
Pancreas	6
Total	**161**

Disposition review

All deaths covered under RCW 68.50.010 are required by law to be reported to the Medical Examiner, however in the past these deaths have not always been reported in a timely manner. For some of these deaths, a complete investigation is not possible because the body was cremated prior to the death being reported to the Medical Examiner.

Beginning January 1, 2008, the King County Council authorized the Medical Examiner's Office to review the death certificates of all decedents to be cremated in order to rule out the need for additional investigation and ensure the proper determination of cause and manner of death.

In 2012, the Medical Examiner's Office handled 10,325 cremation review requests. In 79 cases the Medical Examiner took jurisdiction to investigate further and determine correct cause and manner of death. Without this cremation review, these cases would not have been seen and the correct determination of death missed.

Beginning January 1, 2012, the King County Council authorized the Medical Examiner's Office to review the death certificates of all decedents to be buried in order to rule out the need for additional investigation and ensure the proper determination of cause and manner of death.

In 2012, the Medical Examiner's Office handled 3,338 burial review requests. In 27 cases the Medical Examiner took jurisdiction to investigate further and determine correct cause and manner of death. Without this burial review, these cases would not have been seen and the correct determination of death missed.

Medical Examiner activity

The staff of the Medical Examiner's Office are involved in a wide variety of activities commensurate with the mission of the office including responding to and investigating the scene of death, performing postmortem examinations, certifying the cause and manner of death, and providing information and assistance to families. Investigators, who are familiar with the emotional trauma of an unexpected death, communicate directly with families as do the Medical Examiner pathologists, who review their findings with the families in order to clarify the many questions that accompany a sudden loss of life. The office also provides referrals to grief support services.

In all cases investigated by the Medical Examiner, it is essential that the decedent's identity is established and the next-of-kin is located and notified regarding the death. In addition, property belonging to the decedent must be controlled and released according to legal requirements. In most cases these issues are resolved expeditiously. In certain cases, identification requires additional effort in locating dental, medical or police records. Some individuals may have died leaving no next-of-kin or next-of-kin far removed. Ensuring that all leads have been exhausted in pursuit of next-of-kin can be a very time consuming but ultimately a rewarding effort.

The postmortem examination on each decedent includes the preservation of various body fluids and tissues for microscopic and toxicologic analysis. Photographs are taken of the external and internal portions of the examination, which are available for review at a later date if needed. Photographic documentation is also an essential item in those cases where the pathologist must provide court testimony. Forensic Anthropology is another important activity necessary to resolve skeletal cases and difficult identification issues.

Medical Examiner pathologists and investigators provide testimony in court and at depositions. Staff participates in meetings with police, medical professionals, and attorneys. A recent addition to the duties of the Chief Medical Examiner is expert medical consultation and testimony in cases involving nonfatal domestic violence assaults.

Autopsy reports and related data from individual investigations are provided to law enforcement agencies, prosecuting attorneys and many other agencies including Labor and Industries, the Drug Enforcement Administration, and the Consumer Product Safety Commission. Drug deaths are reported to the Drug Abuse Warning Network (DAWN).

In 2003, the Medical Examiner's Office created a student internship program that provides educational opportunities for students interested in forensic autopsy and death investigation. Through this program, numerous interns have obtained full-time careers in death investigation, both at the KCMEO and in other area medical examiner's offices.

Medical Examiner investigations require frequent contact between the Medical Examiner's Office and the news media. Staff members are skilled in responding to the media inquiries that occur daily. The Medical Examiner pathologists and other staff participate in a variety of medical conferences, and provide information on a regular basis to law enforcement and to medical personnel on various aspects regarding the role and function of the Medical Examiner's Office.

The data collected and presented in this and other Medical Examiner annual reports also provide baseline information for further analysis. Medical Examiner staff analyze data to study relevant death investigation topics that have applications in such fields as law enforcement, medicine, law, social sciences, and injury prevention. Examples include infant mortality, teenage suicide, child abuse, law enforcement restraint, investigation of vehicular traffic accidents, and investigation of therapeutic complication deaths. In addition, the office participates in teaching medical students, pathology residents, emergency medical service, and law enforcement personnel.

In 2012, staff participated as speakers at universities, conferences, and training seminars for law enforcement, medical, legal, and social service personnel in the following presentations and lectures:

Richard C. Harruff, MD, PhD, Chief Medical Examiner

Academic Appointment

- Clinical Associate Professor, Department of Pathology, University of Washington School of Medicine

Preceptorships & Faculty Positions

- King County Medical Examiner's Office Fellowship Training Program in Forensic Pathology.
- University of Washington School of Medicine medical students and pathology residents.
- Course Director and Faculty, "Problems in Forensic Pathology", King County Medical Examiner's Office.

Professional Organizations

- American Medical Association
- American Academy of Forensic Sciences
- National Association of Medical Examiners
- Disaster Mortuary Operations Response Team, Region 10

Conferences attended

- Drowning Death Investigation and Prevention. Seattle Children's Hospital, February 29.
- International Mass Fatality Management Conference. New York City, April 25-29.
- Washington Prescription Monitoring Program. Webinar, May 25.

- 2012 Integrated Training – Region 10 Disaster Mortuary Operational Response Team, National Disaster Medical System, and Fatality Search and Recovery Team, Washington Air National Guard, Camp Murray, Washington, September 8 and 9.
- National Association of Medical Examiners Annual Meeting, Baltimore, Maryland October 4-9.

Scientific Presentations

- Harruff RC, Fusaro A, Banta-Green C. Methodology to improve the accuracy of certifying opioid deaths. National Association of Medical Examiners Annual Meeting, Baltimore, Maryland, October 8.
- Tserng J, Williams T, Harruff RC. Occupational and non-occupational logging fatatlities, King County, Washington, 1994-2011 (poster presentation),. National Association of Medical Examiners Annual Meeting, Baltimore, Maryland, October 7.

Scientific Publications

- Petersen TH, Williams T, Nuwayhid N, Harruff R. Postmortem detection of isopropanol in ketoacidosis. Journal of Forensic Sciences 2012 May 57(3): 674-678.
- Analysis of 101 vehicle fire fatalities. Harruff RC, Lubin M, Academic Forensic Pathology 2012 June 2(2): 165-175.
- Peliosis hepatis presenting as liver rupture in a vulnerable adult: a case report. Buelow B, Otjen J, Sabath AP, Harruff RC. American Journal of Forensic Medicine and Pathology 2012 Dec 33(4): 307-10.

Educational Presentations

- Forensic pathology: Infant death investigation and traffic fatalities. University of Washington Extension: Continuing Education Course in Medicolegal Death Investigation, Seattle, Washington, February 22.
- Postmortem changes. University of Washington and Harborview Medical Center Paramedic Training, Seattle Washington, March 6.
- Introduction to the King County Medical Examiner's Office. University of Washington and Harborview Medical Center Paramedic Training, Seattle, Washington, March 12.
- Gunshot wounds. 2012 Forensic Roundup. King County Office of the Public Defender, Seattle, Washington, March 16.
- Investigation of elder neglect deaths. Criminal Neglect of Elders – Training for Detectives, Washington State Crimal Justice Training Center, Burien, Washington, April 3.
- Medicolegal investigation of traffic fatalities. Seattle Police Department Technical Collision Investigators Course, Seattle, Washington, April 17.
- Introduction to the King County Medical Examiner's Office. University of Washington Private Investigators Course, Seattle, Washington, May 4.

- Issues and gaps in systemic response to suspicious deaths of older adults in King Count. King County Elder Abuse Council, Seattle, Washington, May 8.
- Medicolegal investigation of deaths in infants and young children. 2012 Children's Justice Conference, Seattle, Washington, May 15.
- Strangulation and pattern injuries. Harborview Center for Sexual Assault and Traumatic Stress, Sexual Assault Nurse Examiner Training, Seattle, Washington, June 6.
- What is SUID? Sudden and unexplained Infant Death Scene Investigation: Improving the Coordinated Agency Community Response, Washington State Criminal Justice Training Center, Burien, Washington, June 7.
- Review of domestic violence homicides in King County. Domestic Violence Initiative, King County Prosecuting Attorney's Office, Seattle, Washington, July 10.
- Death certification – in-service for hospice providers. Evergreen Hospice Care Center, Kirkland, Washington, July 17.
- Introduction to mass fatality management. Public Health Medical Reserve Corps Training, King County Medical Examiner's Office, Seattle, Washington, July 25.
- Mass fatality management: from field to morgue. 2012 Integrated Training – Region 10 Disaster Mortuary Operational Response Team, National Disaster Medical System, and Fatality Search and Recovery Team, Washington Air National Guard, Camp Murray, Washington, September 8.
- Medical Knowledge and knowledge of forensic pathology. Basic Death Investigation Course, Washington State Patrol, Shelton, Washington, October 18.
- Strangulation injuries in assaults. Core Training for Sexual Assault Nurse Examiners, Covington, Washington, November 9.

Miscellaneous activities

- Legislative testimony in Olympia, Washington, in support of Forensic Anthropology funding bill, January 31.
- Tour and discussion of administration and construction of King County Medical Examiner's Office, For visiting Chief Medical Examiner and delegates of Singapore Office of Medical Examiner, May 18.

Aldo Fusaro, DO, Associate Medical Examiner

Academic Appointment

- Clinical Assistant Professor, Department of Pathology, University of Washington School of Medicine.

Preceptorships

- University of Washington School of Medicine, medical students and pathology residents.

- King County Medical Examiner's Office, forensic pathology fellow trainer.

Associations, Committees and Boards

- Member, American Medical Association.
- Member, Washington Association of Coroners and Medical Examiners.
- Member, Washington State Medical Association.
- Member, National Association of Medical Examiners.
    - Membership Committee
    - Alternate Delegate to the American Medical Association
- Fellow, College of American Pathologists
- Fellow, American College of Clinical Pathologists
- Advisory Committee, King County Medical Examiner's Office
- Child Death Review Committee, King County Medical Examiner's Office
- Elder Death Review Committee, King County Medical Examiner's Office
- Quality Improvement Subcommittee, King County Medical Examiner's Office
- Multiple Fatality Incident Preparedness Team, Public Health – Seattle & King County

Professional Meetings, Trainings and Certifications

- Forensic Investigations Council Meetings, January, March, April, September.
- Annual Blood Borne Pathogens Training, Public Health - Seattle & King County, September.
- Health Information Privacy and Security Training, Public Health - Seattle & King County, December.

Local and Regional Educational Presentations

- Natural Deaths. Introduction to the Forensic Sciences. University of Washington Continuing Education – Seattle, Washington – February.

- Forensic Pathology In-Service Review (2), February and March.

- Prosector, Eyeball Dissection, Science Fair. Cougar Ridge Elementary School, Bellevue, Washington, March.

- Panel Discussant, Myth Busting: Does the Autopsy Tell it All? Children's Justice Conference, Seattle, Washington, May.

- Basic Homicide Investigation. Washington State Attorney General's Office, Regional Justice Training Center, Burien, Washington, May.

- Case Studies in Forensic Pathology. Eastside Preparatory School, Kirkland, Washington, May.
- Heart Dissection Demonstration. Eastside Preparatory School, Kirkland, Washington, September.

- Childbirth and Early Parenting Education In-service. Evergreen Medical Center, Kirkland, Washington, October.

- Functions of a Medical Examiner's Office. Lake Washington Institute of Technology, Class of Restorative Arts, Kirkland, Washington, December

Micheline Lubin, MD, Associate Medical Examiner

Academic Appointment

- Clinical Assistant Professor, Department of Pathology, University of Washington School of Medicine.

Preceptorships

- University of Washington School of Medicine, medical students and pathology residents.
- King County Medical Examiner's Office, forensic pathology fellowship faculty.

Associations, Committees and Boards

- Member, American College of Physicians.
- Member, College of American Pathologist.
- Child Death Review Committee, King County Medical Examiner's Office.
- Elder Death Review Committee, King County Medical Examiner's Office.
- Thesis Advisory Committee, Seattle University Criminal Justice Master's Program.

Educational Presentation

- Traffic Conference. King County Medical Examiner's Office. Every other month.
- Case Review Conference. King County Medical Examiner's Office. Two months per year.
- Mock expert witness. Seattle University Law School, October 29.

Jennifer Tserng, MD, Assistant Medical Examiner

Associations, Committees and Boards

- Member, National Association of Medical Examiners
- Member, Washington Association of Coroners and Medical Examiners
- Member, American Academy of Forensic Sciences
- Member, hiring team for the Lead Investigator position, King County Medical Examiner's Office.

- Member, hiring team of the Investigator II position, King County Medical Examiner's Office.

Educational Presentations

- "Logging Fatalities in King County 1994-2012. King County Medical Examiner's Office Conference, Seattle, Washington, April 18.
- "Check Samples". Moderator at King County Medical Examiner's Conference, Seattle, Washington, June 6.
- "Case Review". Moderator at King County Medical Examiner's Conference, Seattle, Washington, July 25.
- "The Pathology of Cardiac Hypertrophy". Moderator at King County Medical Examiner's Office Journal Club, Seattle, Washington, March 2.
- "Sudden Unexpected Infant Deaths: Sleep Environment and Circumstances". Moderator at King County Medical Examiner's Office Journal Club, Seattle, Washington May 4.
- "Occupational and Nonoccupational Logging Fatalities in King County, Washington, 1994-2012" (poster presentation). Annual meeting of the National Association of Medical Examiners, Baltimore, Maryland, October.

Miscellaneous Activities

- Participated in Harborview Medical Center's General Surgery Morbidity and Mortality Conference, February 3.
- Participated in prosecutor boot camp with the Washington Association of Prosecuting Attorneys – training held at the Washington State Criminal Justice Training Commission, March 15.
- Completed the Fellow Forensic In-Service Examination, May.
- Regular participant in Childhood and Elder Death Review processes.
- Completed online training for the "Forensic Sciences: An Overview for Medicolegal Death Investigators" through the National Forensic Science Technology Center Online Learning System, July.
- Attended onsite training for Medicolegal Death Investigation Course at National Forensic Sciences Training Center in Largo, Florida, September 5-6.
- Attended training for the Disaster Mortuary Operational Response Team Region X at Camp Murray in Fort Lewis, Washington, September 8-9.

Katherine Taylor, PhD, Forensic Anthropologist

Academic Affiliation

- University of Washington Department of Anthropology: Affiliate Faculty
- Seattle University Department of Criminal Justice: Adjunct Faculty

Associations, Committees and Boards

- Member, Seattle University Criminal Justice Advisory Board
- Member, Society of Forensic Anthropologist
- Member, Bellevue College Criminal Justice Advisory Board
- Fellow, American Academy of Forensic Sciences

Educational Presentations

- Determination of Postmortem Interval, Human versus Nonhuman Remains, and Processing Outdoor Body Recovery Scenes Basic Crime Scene class for law enforcement – Criminal Justice Training Commission. Burien, WA – March 7.

- "Planning for a Mass Fatality Event", Presented with Ashley Kolberg, Partners in Preparedness Conference, Tacoma, Washington, April 10.

- "The Effects of Starvation and Malnutrition". A workshop presented as part of the Children's Justice Conference, Seattle Washington, May 15.

- "Determination of Postmortem Interval, Human versus Nonhuman remains, and Processing Outdoor Body Recovery Scenes:, Basic Crime Scene class for law enforcement. Criminal Justice Training Commission, Burien, Washington, June 14.

- "Outdoor Scene and Body Recovery": A two day workshop for law enforcement sponsored by the State of Alaska Medical Examiner's Office, Anchorage, Alaska, July 23-24.

- "Discovery and Recovery of Human Remains:. Four day workshop for law enforcement sponsored by the Washington State Attorney General's Office and King County Sheriff's Office, Ravensdale, Washington, August 13-16.

- "Death Investigation in Washington State:. Crime Scene Investigation Class sponsored by the Federal Bureau of Investigation, Burien, Washington, October 3.

- "Determination of Postmortem Interval, Human versus Nonhuman Remains, and Processing Outdoor Body Recovery Scenes:, Basic Crime Scene class for law enforcement. Criminal Justice Training Commission, Burien, Washington, December 5.

Greg Hewett, Mdiv, Administrator

Associations, Committees & Boards

- Member, Seattle University Advisory Committee, Criminal Justice Program
- Member, Washington Association of Coroners and Medical Examiners

Educational Presentation

- Group Health staff training. Reporting and risk management requests. Seattle, Washington, April 6.

- Volunteer Surge Team Role in a Multiple Fatality Incident. Public Health Reserve Corps Training, Medical Examiner's Office, Seattle, Washington, September 5.

Nathan Geerdes, BA, D-ABMDI, Medicolegal Investigator I

Association

- Diplomate, American Board of Medicolegal Death Investigators
- Member, Washington Associations of Coroners and Medical Examiners

Educational Presentation

- The Role & Responsibility of the King County Medical Examiner's Office. Seattle University, January 26.

William Barbour, BS, D-ABMDI, Medicolegal Investigator I

Associations

- Diplomate, American Board of Medicolegal Death Investigators
- Member, Washington Associations of Coroners & Medical Examiners

Educational Presentations

- Role and Responsibility of the King County Medical Examiner's Office
  Seattle University - KCMEO - Seattle, WA January 24
  Seattle University - KCMEO - Seattle, WA – January 31
  Everest College - KCMEO - Seattle, WA – February 7

Jessica Mahowald, BS, Lead Forensic Autopsy Technician

Associations

- Member, Washington Associations of Coroners and Medical Examiners

Educational Presentations

- Autopsy volunteer training. Public Health Reserve Corps Training, King County Medical Examiner's Office, Seattle, Washington, September 5.
- Autopsy volunteer Training. Public Health Reserve Corps Training, King County Medical Examiner's Office, Seattle, Washington, October 24.

Barry Peterson, Forensic Autopsy Technician

Associations

- Member, Washington Associations of Coroners and Medical Examiners

Educational Presentations

- Autopsy volunteer training. Public Health Reserve Corps Training, King County Medical Examiner's Office, Seattle, Washington, September 5.
- Autopsy volunteer Training. Public Health Reserve Corps Training, King County Medical Examiner's Office, Seattle, Washington, October 24.

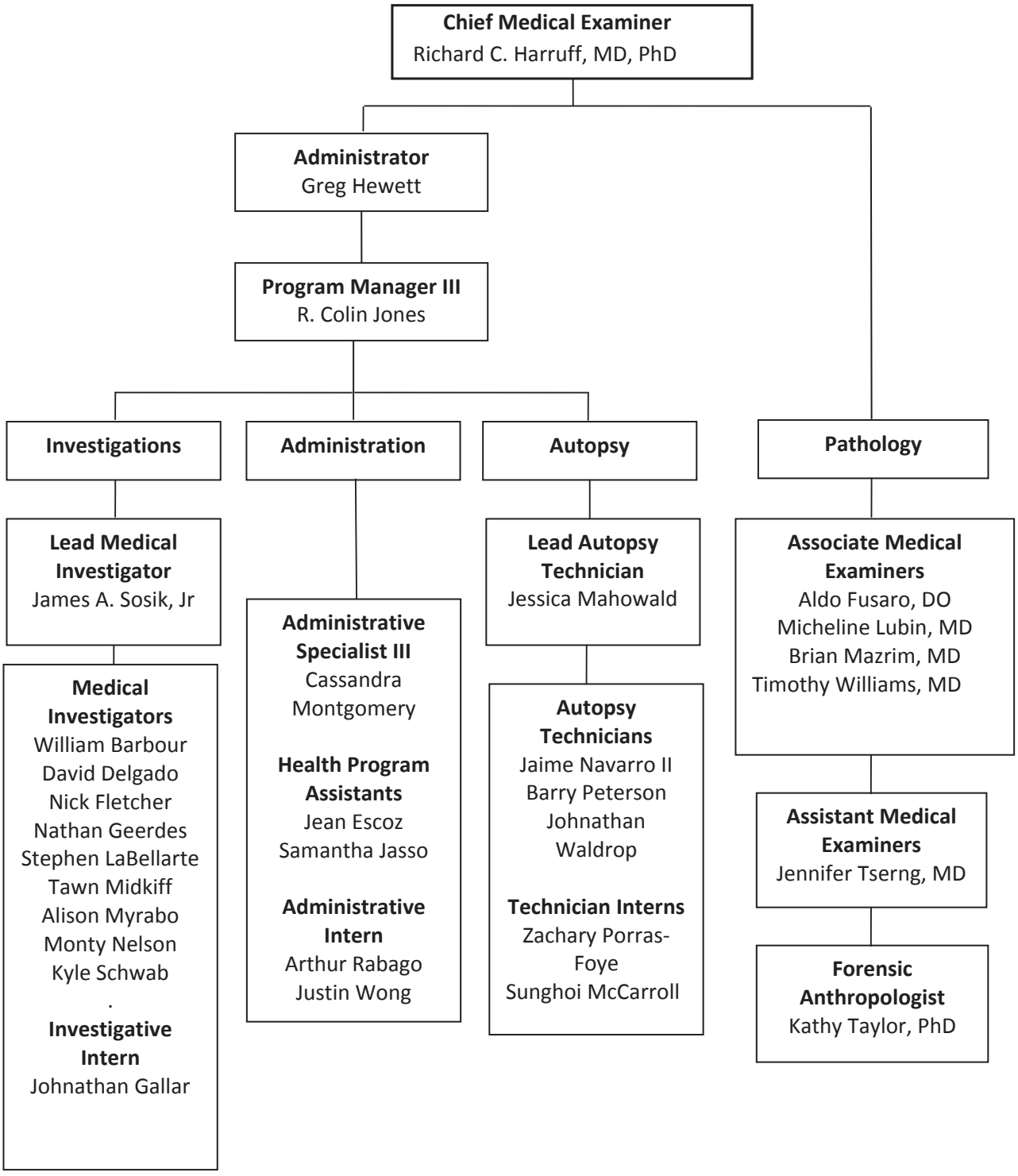
Table 14-1 Weekly Variation of Deaths Investigated by the King County Medical Examiner's Office

	TOTAL
Number of weeks studied	52
Mean number of ME jurisdiction cases per week	39
Maximum ME jurisdiction cases in any one week	54
Minimum ME jurisdiction cases in any one week	24

Table 14-2 Weekly Variation of Autopsies Investigated by the King County Medical Examiner's Office

	TOTAL
Number of weeks studied	52
Mean number of autopsies performed per week	23
Maximum # autopsies performed in any one week	33
Minimum # autopsies performed in any one week	13

Organization of the King County Medical Examiner's Office 2012



Glossary of Terms

Blood alcohol level:

The concentration of ethanol (alcohol) found in blood following ingestion. Measured in grams per 100 ml of blood or grams %. In the State of Washington, 0.08 grams % is considered the legally intoxicated level while driving.

Cause of Death:

Any injury or disease that produces a physiological derangement in the body that results in the death of an individual.[1]

Drug:

Therapeutic drug: A substance, other than food, used in the prevention, diagnosis, alleviation, treatment, or cure of disease.

Recreational drug: A drug used non-medically for personal stimulation/depression/euphoria.

Drug-caused death:

Death directly caused by a drug or drugs in combination with each other or with alcohol.

Fetal Death:

Category of deaths that occur within the uterus. The Medical Examiner assumes jurisdiction over fetal deaths that meet the criteria specified in RCW 68.50. See pages 2 - 3 of this report for details.

Jurisdiction:

The jurisdiction of the Medical Examiner extends to all reportable deaths occurring within the boundaries of King County, whether or not the incident leading to the death (such as an accident) occurred within the county. Reportable deaths are defined by RCW 68.50, as explained in the "Description and Purpose" section of this report. Not all natural deaths reported fall within the jurisdiction of the Medical Examiner.

[1]DiMaio, Vincent J. & DiMaio, Dominick. Forensic Pathology, Second Edition. CRC Press, 2001.

Manner of Death:

A classification of the way in which the events preceding death were causal factors in the death. The manner of death as determined by the forensic pathologist is an opinion based on the known facts concerning the circumstances leading up to and surrounding the death, in conjunction with autopsy findings and laboratory tests. [2]

Manner: Accident

Death other than natural, where there is no evidence of intent, i.e., unintentional. In this report, traffic accidents are classified separately.

Manner: Homicide

Death resulting from intentional harm (explicit or implicit) of one person by another, including actions of grossly reckless behavior.

Manner: Natural

Death caused solely by disease. If natural death is hastened by injury (such as a fall or drowning in a bathtub), the manner of death is classified other than natural. The Natural category includes complication of therapy deaths.

Manner: Suicide

Death as a result of a purposeful action with intent (explicit or implicit) to end one's own life.

Manner: Traffic

Unintentional deaths of drivers, passengers, and pedestrians involving motor vehicles on public roadways. Accidents involving motor vehicles on private property (such as driveways) are not included in this category and are classified non-traffic, vehicular accidents.

Manner: Undetermined

Manner assigned when there is insufficient evidence or information**,** especially about intent, to assign a specific manner.

2Ibid, p. 3.

Opiate:

Any preparation or derivative of opium, including heroin, morphine or codeine. In this report "opiate deaths" most likely refer to heroin caused deaths.

Poison:

Any substance, either taken internally or applied externally, that is injurious to health or dangerous to life, and with no medicinal benefit.

Race:

The racial categories used in this report are: White, African American, American Indian/Alaska Native, Asian/Pacific Islander, and Other.