



King County Medical Examiner's Office

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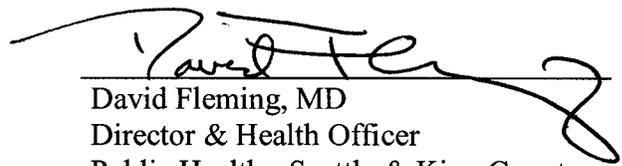
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Public Health 
Seattle & King County

DEDICATION

We recognize that each case in this report represents the death of a person whose absence is grieved by friends and relatives. To those people who have suffered the loss of a friend or relative, we dedicate this report.



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FOREWORD

The King County Medical Examiner's Office serves the community by investigating sudden, unexpected, violent, suspicious, or 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 which 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 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 dimension of the Medical Examiner's function is designed to isolate and identify causes of sudden, unexpected death. When an infectious agent or poison 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. In this era of concern about bioterrorism, the Medical Examiner provides an important level of surveillance for such possibilities.

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. In this way, 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.

DESCRIPTION AND PURPOSE
of the
Public Health – Seattle & King County
Medical Examiner's Office

In 1968, the 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 within the Prevention Division of Public Health – Seattle & King County. Although the Department of Public Health is a combined City-County department, 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 concerned with 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 when indicated, 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 thirty-six 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 other institution 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 thought to be associated with, or resulting from, the decedent's occupation, including chronic occupational disease such as asbestosis and black lung. (6) Death of the mother caused by known or

- suspected abortion. (7) Death from apparent natural causes during the course of a criminal act, e.g., a victim collapses during a robbery. (8) Death that occurs within one year following an accident, even if the accident is not thought to have contributed to the cause of death. (9) 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
of the
Public Health – Seattle & King County
Medical Examiner's Office

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, 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 information presented here was compiled on deaths in which the King County Medical Examiner assumed jurisdiction during the calendar year 2007. (*Please refer to Pages 2 and 3 which outline this jurisdictional definition.*) This report emphasizes the role of alcohol, drugs, and firearm use in violent deaths. Health agencies, safety councils and lawmakers may find these statistics useful in understanding the most frequent causes of violent death in King County, which may help them in making policy decisions that impact the quality of life in King County.

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 2007 the King County population was estimated to be 1,861,300¹. 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.

This report summarizes demographics from individual cases in which the Medical Examiner assumed jurisdiction, and presents them in aggregate form. The location (Nearest Incorporated City to the Fatal Incident, Table 1-8, page 17) 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, sex, age, etc., have been selected as those most likely to assist and interest individuals using this data in assembling a profile of death statistics on deaths examined by the Medical Examiner's Office for 2007. According to 2007 Office of Financial Management (OFM) estimates, the racial distribution of King County is 76.2% White, 6.0% African American, 3.4% two or more races indicated (new category in the year 2000), 13.4% Asian/Pacific Is. (including Hawaiian and other Pacific Islanders), and 1.0% Native American. 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. The main reason for this is that, as emphasized in Table 1-9 on page 19, in 20% 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 43).

¹State of Washington, Office of Financial Management, April 1, 2008 estimate.

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.

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. Data are presented which highlights deaths due to drugs, firearms, and 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 are 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 42% (863/2,072) of all deaths that the Medical Examiner investigated in 2007.

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 2007

The following provides a summary of the raw data from the Medical Examiner's cases for the year 2007.

In 2007 there were an estimated 13,046 deaths which occurred in King County² (0.70% of a 2008 population estimate of 1,861,300). Of these deaths, 8,873 (68%) 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 medicolegal investigators, the Medical Examiner's Office assumed jurisdiction in 2,123 of these reported deaths, of which 51 were either ultimately found to be non-human remains or were anthropology or contract cases. Throughout the discussion of data that follows, except where stated, the non-human, anthropology, and contract cases (cases in which autopsy and/or anthropology cases are examined for other counties or agencies) are excluded. The number of applicable cases used in this report is 2,072 deaths.

Of note is the fact that the Medical Examiner declined jurisdiction in 6,750 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 66% (1,367/2,072) 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 2007 there were 444 such deaths, accounting for 21% (444/2,072) of the total deaths. In addition, there were 261 deaths (13%) (261/2,072) 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, 32% (45/140) 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 101 vehicle occupants who died, 50% (51/101) were wearing restraints.

In the 28 deaths involving motorcyclists, 26 (93%) were wearing helmets.

²Death certificates filed in King County, Vital Statistics, Public Health - Seattle & King County, August, 2008.

Firearms were the most frequent instrument of death in homicides and suicides, accounting for 72% (55/76) of the homicides and 42% (93/223) of the suicides.

While the discussion here tends to depict the more violent types of death, the reader should be reminded that 42% (863/2,072) of Medical Examiner cases involve natural deaths. Specific discussion and presentation of relevant tables regarding 2007 cases follow this brief summary.

Table 1-1 Deaths Occurring in King County / Medical Examiner Cases / 2007

| CASES BY MANNER OF DEATH ³ | NUMBER OF KCME DEATHS | PERCENT OF KCME DEATHS |
|--|-----------------------------|------------------------------|
| Accident Other (A) | 687 | 33.2% |
| Accident Traffic (T) | 170 | 8.2% |
| Homicide (H) | 76 | 3.7% |
| Natural (N) | 863 | 41.6% |
| Suicide (S) | 223 | 10.8% |
| Undetermined ⁴ (U) | 53 | 2.5% |
| Total KCME general cases | 2,072 | 100% |
| Non-applicable cases where jurisdiction was assumed ⁵ | 51 | |
| Total KCME jurisdiction cases | 2,123 | |
| Total KCME general cases ⁶ | 2,072 | |
| Deaths reported to KCME but no jurisdiction was assumed (NJA) | 6,750 | |
| All other deaths in King County not reported to KCME | 4,224 | |
| ALL KING COUNTY DEATHS⁷ | 13,046 | |

³The letters following each manner of death will be used in most tables throughout this report.

⁴Includes six fetal deaths, which, according to Washington State death certification procedures, are not assigned a manner of death.

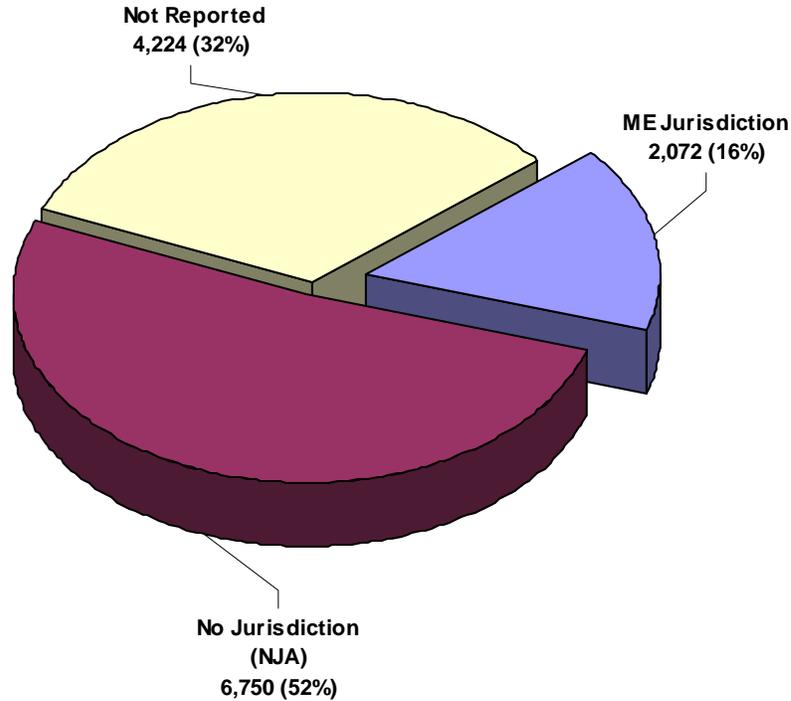
⁵Non-applicable includes 37 non-human bones/tissue, and 14 anthropology/contract cases.

⁶This is the total number of cases that will be referred to throughout this report unless otherwise noted.

⁷Death certificates filed in King County, Vital Statistics, Public Health - Seattle & King County, August, 2008.

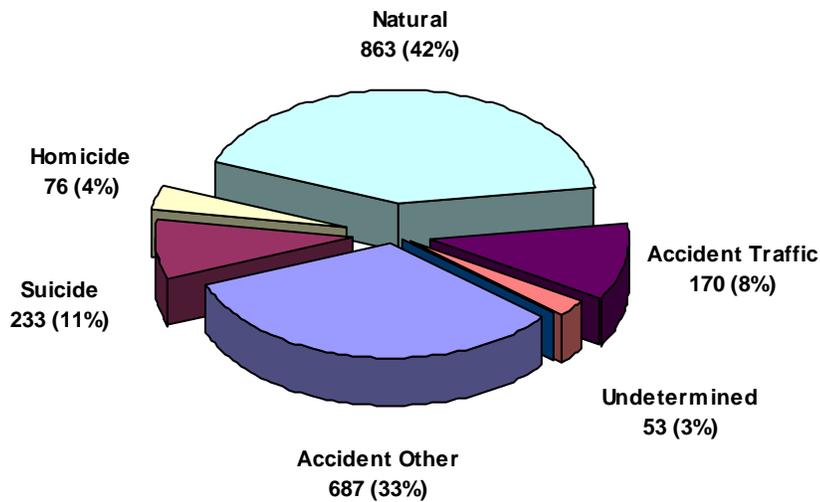
Graph 1-1 All King County Deaths with Medical Examiner Jurisdiction Shown / 2007

There were 13,046 deaths in King County in 2007.



Graph 1-2 Manner of Death for All Medical Examiner Jurisdiction Cases / 2007

Jurisdiction assumed in 2,072 cases⁸.

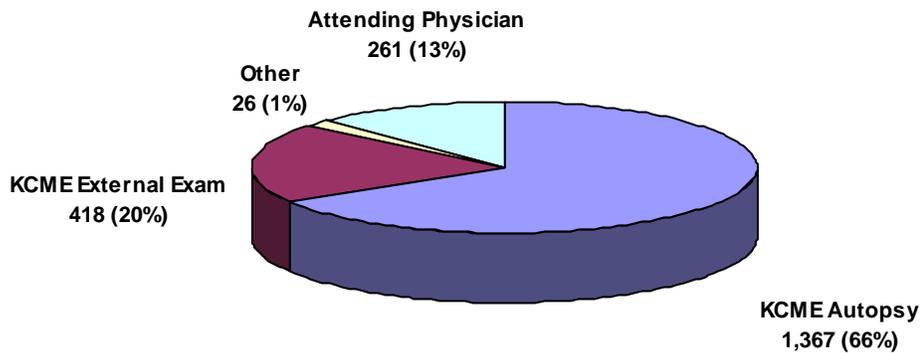


⁸This number does not include 51 non-applicable cases (non-human tissue/bones and anthropology/contract cases).

Table 1-2 Method of Certification / Manner of Death / KCME / 2007

| CERTIFICATION | MANNER OF DEATH | | | | | | TOTAL | % |
|---------------------|-----------------|------------|----------------|------------|------------|-----------|--------------|-------------|
| | A | T | H | N | S | U | | |
| KCME Autopsies | 414 | 114 | 70 | 521 | 198 | 50 | 1367 | 66% |
| KCME External Exams | 169 | 53 | 0 | 171 | 24 | 1 | 418 | 20% |
| KCME Other | 14 | 1 | 5 ⁹ | 3 | 1 | 2 | 26 | 1% |
| Attending Physician | 90 | 2 | 1 | 168 | 0 | 0 | 261 | 13 % |
| Totals | 687 | 170 | 76 | 863 | 223 | 53 | 2,072 | 100% |

Graph 1-3 Method of Certification for all King County Medical Examiner Jurisdiction Cases / 2007



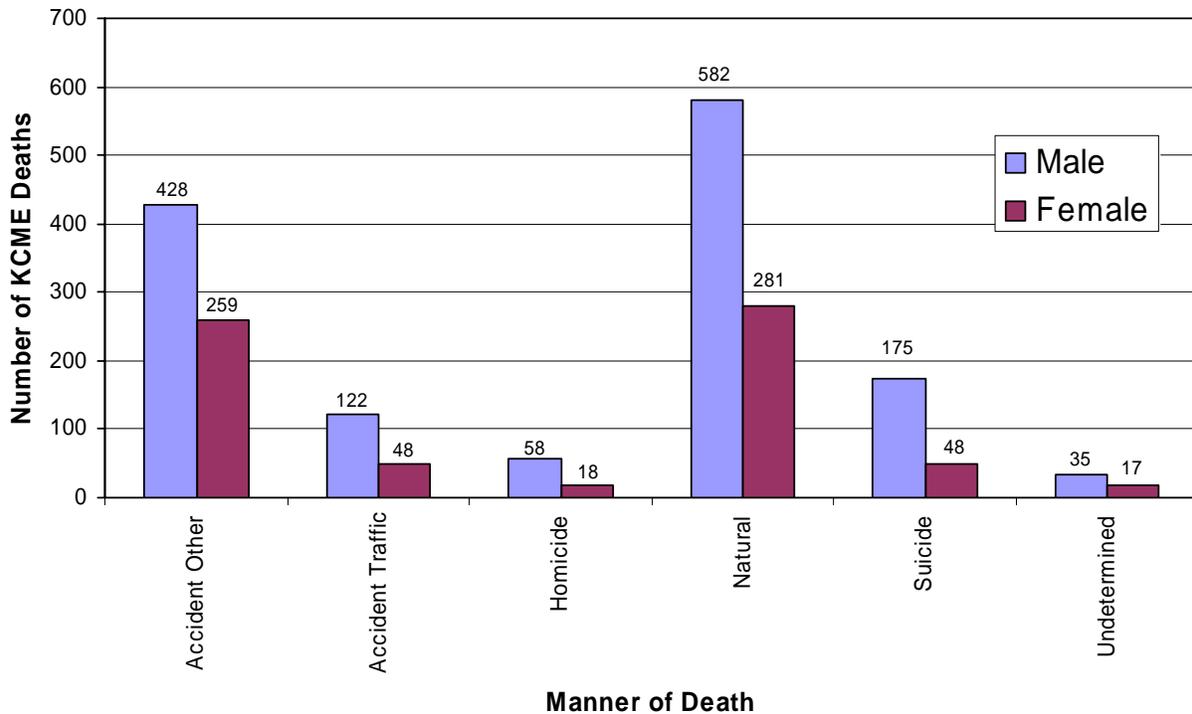
⁹The remains of five (5) victims whose deaths were classified as Homicide were returned to the county(s) where the original injuries occurred. Because Harborview Medical Center is a regional trauma center, the King County Medical Examiner's Office often receives victims of violence from surrounding counties. By prior agreement, the remains of some of these victims are returned to the originating county for autopsy by the Medical Examiner of record.

Manner of Death in 2007 King County Medical Examiner General Cases

Table 1-3 Sex / Manner of Death / King County Medical Examiner / 2007

| SEX | MANNER OF DEATH | | | | | | TOTAL | % |
|---------------|-----------------|------------|-----------|------------|------------|------------------------|--------------|-------------|
| | A | T | H | N | S | U | | |
| Male | 428 | 122 | 58 | 582 | 175 | 35 | 1400 | 68% |
| Female | 259 | 48 | 18 | 281 | 48 | 17 | 671 | 32% |
| Totals | 687 | 170 | 76 | 863 | 223 | 53¹⁰ | 2,072 | 100% |

Graph 1-4 Sex / Manner of Death / King County Medical Examiner / 2007¹¹



¹⁰Total includes one death of undetermined sex.

¹¹Total includes one death of undetermined sex.

Table 1-4 Age / Sex / Manner of Death / King County Medical Examiner / 2007

| AGE / SEX | MANNER OF DEATH | | | | | | Sub-Total | TOTAL | % |
|----------------|-----------------|------------|-----------|------------|------------|-----------|-----------|--------------|-------------|
| | A | T | H | N | S | U | | | |
| Under 1 year | 3 | 1 | 2 | 13 | 0 | 9 | | 28 | 1.4% |
| <i>Male</i> | 1 | 0 | 1 | 5 | 0 | 6 | 13 | | |
| <i>Female</i> | 2 | 1 | 1 | 8 | 0 | 3 | 15 | | |
| 1 - 5 years | 6 | 0 | 3 | 6 | 0 | 0 | | 15 | 0.7% |
| <i>Male</i> | 4 | 0 | 1 | 4 | 0 | 0 | 9 | | |
| <i>Female</i> | 2 | 0 | 2 | 2 | 0 | 0 | 6 | | |
| 6- 12 years | 4 | 0 | 0 | 4 | 0 | 0 | | 8 | 0.4% |
| <i>Male</i> | 2 | 0 | 0 | 2 | 0 | 0 | 4 | | |
| <i>Female</i> | 2 | 0 | 0 | 2 | 0 | 0 | 4 | | |
| 13-15 years | 1 | 5 | 0 | 0 | 0 | 0 | | 6 | 0.3% |
| <i>Male</i> | 1 | 4 | 0 | 0 | 0 | 0 | 5 | | |
| <i>Female</i> | 0 | 1 | 0 | 0 | 0 | 0 | 1 | | |
| 16-19 years | 11 | 15 | 4 | 2 | 5 | 1 | | 38 | 1.8% |
| <i>Male</i> | 9 | 10 | 4 | 2 | 4 | 0 | 29 | | |
| <i>Female</i> | 2 | 5 | 0 | 0 | 1 | 1 | 9 | | |
| 20- 29 years | 60 | 41 | 20 | 20 | 36 | 7 | | 184 | 8.9% |
| <i>Male</i> | 45 | 33 | 17 | 12 | 31 | 6 | 144 | | |
| <i>Female</i> | 15 | 8 | 3 | 8 | 5 | 1 | 40 | | |
| 30- 39 years | 51 | 23 | 23 | 45 | 33 | 9 | | 184 | 8.9% |
| <i>Male</i> | 34 | 20 | 17 | 34 | 25 | 7 | 137 | | |
| <i>Female</i> | 17 | 3 | 6 | 11 | 8 | 2 | 47 | | |
| 40- 49 years | 114 | 23 | 7 | 127 | 64 | 11 | | 346 | 16.7% |
| <i>Male</i> | 83 | 16 | 6 | 93 | 46 | 8 | 252 | | |
| <i>Female</i> | 31 | 7 | 1 | 34 | 18 | 3 | 94 | | |
| 50- 59 years | 114 | 18 | 9 | 239 | 42 | 9 | | 431 | 20.8% |
| <i>Male</i> | 70 | 15 | 7 | 178 | 34 | 5 | 309 | | |
| <i>Female</i> | 44 | 3 | 2 | 61 | 8 | 4 | 122 | | |
| 60 - 69 years | 54 | 13 | 4 | 172 | 17 | 3 | | 263 | 12.7% |
| <i>Male</i> | 35 | 6 | 3 | 120 | 13 | 1 | 178 | | |
| <i>Female</i> | 19 | 7 | 1 | 52 | 4 | 2 | 85 | | |
| 70 - 79 years | 75 | 14 | 2 | 106 | 15 | 0 | | 212 | 10.2% |
| <i>Male</i> | 43 | 7 | 1 | 75 | 14 | 0 | 140 | | |
| <i>Female</i> | 32 | 7 | 1 | 31 | 1 | 0 | 72 | | |
| 80 - 89 years | 123 | 12 | 1 | 88 | 10 | 2 | | 236 | 11.4% |
| <i>Male</i> | 70 | 7 | 1 | 45 | 7 | 1 | 131 | | |
| <i>Female</i> | 53 | 5 | 0 | 43 | 3 | 1 | 105 | | |
| 90+ years | 71 | 5 | 1 | 41 | 1 | 0 | | 119 | 5.7% |
| <i>Male</i> | 31 | 4 | 0 | 12 | 1 | 0 | 48 | | |
| <i>Female</i> | 40 | 1 | 1 | 29 | 0 | 0 | 71 | | |
| Unknown | 0 | 0 | 0 | 0 | 0 | 2 | | 2 | 0.1% |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 1 | 1 | | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| <i>Unknown</i> | 0 | 0 | 0 | 0 | 0 | 1 | 1 | | |
| Totals | 687 | 170 | 76 | 863 | 223 | 53 | | 2,072 | 100% |

Table 1-5 Race / Sex / Manner of Death / King County Medical Examiner / 2007¹²

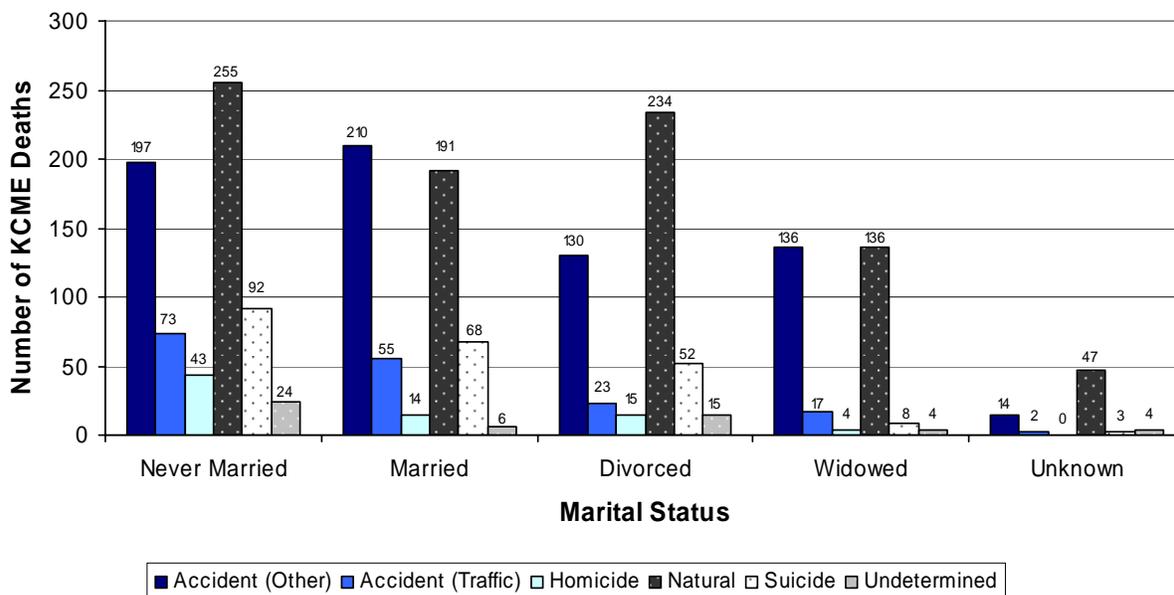
| RACE / SEX | MANNER OF DEATH | | | | | | Sub-Total | TOTAL | % |
|-------------------|-----------------|------------|-----------|------------|------------|-----------|-----------|--------------|-------------|
| | A | T | H | N | S | U | | | |
| White | 580 | 143 | 47 | 703 | 195 | 39 | | 1707 | 82.4% |
| <i>Male</i> | 372 | 103 | 34 | 480 | 152 | 28 | 1169 | | |
| <i>Female</i> | 208 | 40 | 13 | 223 | 43 | 11 | 538 | | |
| African American | 52 | 8 | 21 | 97 | 11 | 8 | | 197 | 9.5% |
| <i>Male</i> | 28 | 6 | 18 | 67 | 10 | 5 | 134 | | |
| <i>Female</i> | 24 | 2 | 3 | 30 | 1 | 3 | 63 | | |
| Asian/Pacific Is. | 39 | 9 | 6 | 48 | 15 | 3 | | 120 | 5.8% |
| <i>Male</i> | 22 | 6 | 5 | 26 | 11 | 1 | 71 | | |
| <i>Female</i> | 17 | 3 | 1 | 22 | 4 | 2 | 49 | | |
| Native American | 15 | 10 | 2 | 14 | 2 | 1 | | 44 | 2.1% |
| <i>Male</i> | 6 | 7 | 1 | 8 | 2 | 1 | 25 | | |
| <i>Female</i> | 9 | 3 | 1 | 6 | 0 | 0 | 19 | | |
| Other | 1 | 0 | 0 | 1 | 0 | 1 | | 3 | 0.1% |
| <i>Male</i> | 0 | 0 | 0 | 1 | 0 | 0 | 1 | | |
| <i>Female</i> | 1 | 0 | 0 | 0 | 0 | 1 | 2 | | |
| Unknown | 0 | 0 | 0 | 0 | 0 | 1 | | 1 | 0.1% |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| <i>Unknown</i> | 0 | 0 | 0 | 0 | 0 | 1 | 1 | | |
| Totals | 687 | 170 | 76 | 863 | 223 | 53 | | 2,072 | 100% |

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

Table 1-6 Marital Status / Sex / Manner of Death / King County Medical Examiner / 2007¹³

| MARITAL STATUS / SEX | MANNER OF DEATH | | | | | | Sub-Total | TOTAL | % |
|----------------------|-----------------|------------|-----------|------------|------------|-----------|-----------|--------------|-------------|
| | A | T | H | N | S | U | | | |
| Never Married | 197 | 73 | 43 | 255 | 92 | 24 | | 684 | 33% |
| Male | 146 | 55 | 35 | 182 | 75 | 19 | 512 | | |
| Female | 51 | 18 | 8 | 73 | 17 | 5 | 172 | | |
| Married | 210 | 55 | 14 | 191 | 68 | 6 | | 544 | 26% |
| Male | 144 | 41 | 10 | 148 | 51 | 4 | 398 | | |
| Female | 66 | 14 | 4 | 43 | 17 | 2 | 146 | | |
| Divorced | 130 | 23 | 15 | 234 | 52 | 15 | | 469 | 23% |
| Male | 79 | 15 | 12 | 163 | 38 | 8 | 315 | | |
| Female | 51 | 8 | 3 | 71 | 14 | 7 | 154 | | |
| Widowed | 136 | 17 | 4 | 136 | 8 | 4 | | 305 | 15% |
| Male | 49 | 9 | 1 | 52 | 8 | 2 | 121 | | |
| Female | 87 | 8 | 3 | 84 | 0 | 2 | 184 | | |
| Unknown | 14 | 2 | 0 | 47 | 3 | 4 | | 70 | 3% |
| Male | 10 | 2 | 0 | 37 | 3 | 2 | 54 | | |
| Female | 4 | 0 | 0 | 10 | 0 | 1 | 15 | | |
| Unknown | 0 | 0 | 0 | 0 | 0 | 1 | 1 | | |
| Totals | 687 | 170 | 76 | 863 | 223 | 53 | | 2,072 | 100% |

Graph 1-5 Marital Status / Manner of Death / King County Medical Examiner / 2007

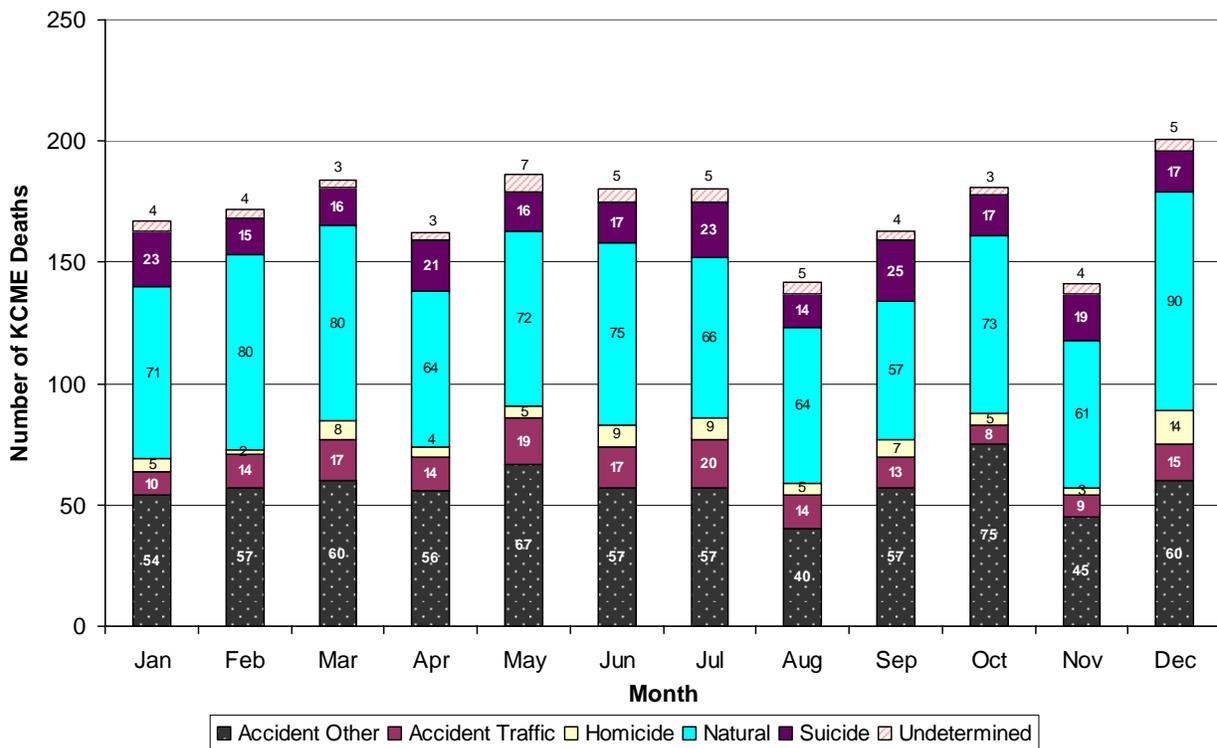


¹³A = Accident (Non-Traffic), T = Traffic, H = Homicide, N = Natural, S = Suicide, U = Undetermined.

Table 1-7 Month / Manner of Death / King County Medical Examiner / 2007¹⁴

| MONTH | MANNER OF DEATH | | | | | | Total | % |
|---------------|-----------------|------------|-----------|------------|------------|-----------|--------------|-------------|
| | A | T | H | N | S | U | | |
| Prior to 2006 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0.1% |
| 2006 | 2 | 0 | 0 | 10 | 0 | 0 | 12 | 0.6% |
| January | 54 | 10 | 5 | 71 | 23 | 4 | 167 | 8.1% |
| February | 57 | 14 | 2 | 80 | 15 | 4 | 172 | 8.3% |
| March | 60 | 17 | 8 | 80 | 16 | 3 | 184 | 8.9% |
| April | 56 | 14 | 4 | 64 | 21 | 3 | 162 | 7.8% |
| May | 67 | 19 | 5 | 72 | 16 | 7 | 186 | 9.0% |
| June | 57 | 17 | 9 | 75 | 17 | 5 | 180 | 8.6% |
| July | 57 | 20 | 9 | 66 | 23 | 5 | 180 | 8.6% |
| August | 40 | 14 | 5 | 64 | 14 | 5 | 142 | 6.9% |
| September | 57 | 13 | 7 | 57 | 25 | 4 | 163 | 7.9% |
| October | 75 | 8 | 5 | 73 | 17 | 3 | 181 | 8.7% |
| November | 45 | 9 | 3 | 61 | 19 | 4 | 141 | 6.8% |
| December | 60 | 15 | 14 | 90 | 17 | 5 | 201 | 9.7% |
| Totals | 687 | 170 | 76 | 863 | 223 | 53 | 2,072 | 100% |

Graph 1-6 Month / Manner of Death / King County Medical Examiner / 2007



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

Table 1-8 Location of the Fatal Incident / KCME / 2007¹⁵

| CITY | MANNER OF DEATH | | | | | TOTAL | % |
|------------------|-----------------|---|---|----|---|-------|------|
| | A | T | H | S | U | | |
| Algona | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Auburn | 28 | 8 | 1 | 5 | 3 | 45 | 3.7% |
| Beaux Arts | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Bellevue | 20 | 2 | 1 | 19 | 1 | 43 | 3.5% |
| Black Diamond | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Bothell | 6 | 1 | 0 | 1 | 0 | 8 | 0.7% |
| Burien | 8 | 2 | 1 | 5 | 0 | 16 | 1.3% |
| Carnation | 1 | 0 | 6 | 0 | 0 | 7 | 0.6% |
| Clyde Hill | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Covington | 1 | 0 | 0 | 2 | 0 | 3 | 0.3% |
| Des Moines | 7 | 2 | 3 | 1 | 2 | 15 | 1.2% |
| Duvall | 1 | 0 | 0 | 0 | 0 | 1 | 0.1% |
| Enumclaw | 4 | 5 | 0 | 3 | 0 | 12 | 1.0% |
| Federal Way | 22 | 4 | 4 | 9 | 3 | 42 | 3.4% |
| Hunt's Point | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Issaquah | 7 | 2 | 0 | 2 | 0 | 11 | 0.9% |
| Kenmore | 7 | 4 | 0 | 3 | 0 | 14 | 1.2% |
| Kent | 21 | 6 | 8 | 15 | 2 | 52 | 4.3% |
| Kirkland | 20 | 3 | 0 | 8 | 2 | 33 | 2.7% |
| Lake Forest Park | 3 | 0 | 0 | 1 | 0 | 4 | 0.3% |
| Maple Valley | 3 | 3 | 1 | 4 | 0 | 11 | 0.9% |
| Medina | 1 | 0 | 0 | 0 | 0 | 1 | 0.1% |
| Mercer Island | 5 | 1 | 0 | 2 | 0 | 8 | 0.7% |
| Milton | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Newcastle | 1 | 0 | 0 | 0 | 0 | 1 | 0.1% |
| Normandy Park | 1 | 0 | 0 | 0 | 0 | 1 | 0.1% |
| North Bend | 5 | 0 | 0 | 2 | 1 | 8 | 0.7% |
| Pacific | 1 | 1 | 0 | 0 | 1 | 3 | 0.3% |

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

Table 1-8 Location of the Fatal Incident / KCME / 2007¹⁶ (continued)

| CITY | MANNER OF DEATH | | | | | Total | % |
|-------------------------------|-----------------|------------|-----------|------------|-----------|--------------|-------------|
| | A | T | H | S | U | | |
| Redmond | 10 | 4 | 0 | 7 | 1 | 22 | 1.8% |
| Renton | 26 | 9 | 1 | 10 | 3 | 49 | 4.0% |
| Sammamish | 3 | 0 | 0 | 2 | 0 | 5 | 0.4% |
| SeaTac | 4 | 1 | 1 | 7 | 0 | 13 | 1.1% |
| Seattle | 291 | 29 | 29 | 83 | 28 | 460 | 38.0% |
| Shoreline | 16 | 0 | 2 | 6 | 1 | 25 | 2.1% |
| Skykomish | 0 | 2 | 0 | 0 | 0 | 2 | 0.2% |
| Snoqualmie | 3 | 0 | 0 | 3 | 0 | 6 | 0.5% |
| Tukwila | 7 | 2 | 1 | 4 | 3 | 17 | 1.4% |
| Woodinville | 7 | 0 | 0 | 0 | 0 | 7 | 0.6% |
| Yarrow Point | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Unincorporated King County | | | | | | | |
| Fall City | 4 | 1 | 0 | 3 | 0 | 8 | 0.7% |
| Ravensdale | 1 | 1 | 0 | 0 | 0 | 2 | 0.2% |
| Vashon Island | 2 | 1 | 1 | 2 | 0 | 6 | 0.5% |
| Other | 0 | 4 | 6 | 0 | 1 | 11 | 0.9% |
| Outside of King County | 133 | 71 | 10 | 14 | 1 | 229 | 18.9% |
| Unknown Location | 7 | 1 | 0 | 0 | 0 | 8 | 0.7% |
| Totals | 687 | 170 | 76 | 223 | 53 | 1,209 | 100% |

¹⁶A = Accident (Non-Traffic), T = Traffic, H = Homicide, N = Natural, S = Suicide, U = Undetermined.

OUT OF COUNTY CASES IN 2007

King County is home to many hospitals and a major trauma center that serve 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. In 2007 there were 236 deaths (20%, 236/1,209) where the incident (excluding deaths classified as “Natural”) occurred out of county. Table 1-9 displays these deaths by incident location and manner.

Table 1-9 Fatal Incident Occurred Outside of King County / KCME / 2007¹⁷

| INCIDENT LOCATION | MANNER OF DEATH | | | | | TOTAL |
|----------------------|-----------------|-----------|-----------|-----------|----------|------------|
| | A | T | H | S | U | |
| Alaska | 10 | 2 | 0 | 0 | 0 | 12 |
| Idaho | 2 | 1 | 0 | 1 | 0 | 4 |
| Montana | 2 | 3 | 0 | 0 | 0 | 5 |
| Oregon | 0 | 0 | 0 | 0 | 0 | 0 |
| Other States | 3 | 0 | 1 | 0 | 0 | 4 |
| Washington | | | | | | |
| Kitsap County | 12 | 7 | 0 | 0 | 0 | 19 |
| Pierce County | 12 | 5 | 0 | 3 | 1 | 21 |
| Skagit County | 5 | 0 | 1 | 1 | 0 | 7 |
| Snohomish County | 28 | 15 | 4 | 1 | 0 | 48 |
| Thurston County | 7 | 9 | 0 | 0 | 0 | 16 |
| Other WA Counties | 49 | 28 | 3 | 8 | 0 | 88 |
| Washington Sub-Total | 113 | 64 | 8 | 13 | 1 | 199 |
| Out of Country | 3 | 1 | 1 | 0 | 0 | 5 |
| Unknown | 6 | 1 | 0 | 0 | 0 | 7 |
| Totals | 139 | 72 | 10 | 14 | 1 | 236 |

¹⁷Table does not include cases where manner of death is classified as “Natural”. A = Accident (Non-Traffic), T = Traffic, H = Homicide, N = Natural, 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.

Approximately 68% (8,822/13,046¹) of the deaths that occurred in 2007 in King County were reported to the Medical Examiner. The Medical Examiner's Office, however, did not assume responsibility for certification in all of these deaths. In about 77% (6,750/8,822) of these 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. Thus, the Medical Examiner assumed jurisdiction in 16% (2,072/13,046) of deaths that occurred in King County in 2007².

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 2007 data is provided in separate sections for each manner of death (Accident, Homicide, Natural, Suicide, Traffic, and Undetermined).

¹Death certificates filed in King County, (Vital Statistics, Public Health - Seattle & King County, April, 2008).

²Does not include non-human remains or anthropology/contract cases.

Table 2-1 Comparison of Manners of Death / KCME / 1998 - 2007

| MANNER OF DEATH | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Accident (Other) | 422 | 404 | 441 | 417 | 472 | 485 | 542 | 602 | 721 | 687 |
| Accident (Traffic) | 199 | 200 | 203 | 220 | 203 | 179 | 192 | 226 | 211 | 170 |
| Homicide | 90 | 89 | 73 | 74 | 93 | 93 | 76 | 80 | 91 | 76 |
| Natural | 530 | 511 | 522 | 619 | 661 | 770 | 765 | 763 | 752 | 863 |
| Suicide | 202 | 221 | 178 | 185 | 200 | 217 | 229 | 233 | 227 | 223 |
| Undetermined | 63 | 44 | 90 | 63 | 55 | 71 | 59 | 41 | 53 | 53 |
| Totals | 1,506 | 1,469 | 1,507 | 1,578 | 1,684 | 1,815 | 1,863 | 1,945 | 2,055 | 2,072 |

Table 2-2 Comparison of Manners of Death as Percentage of Total Annual Medical Examiner Cases / KCME / 1998 - 2007

| MANNER OF DEATH | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | % | % | % | % | % | % | % | % | % | % |
| Accident (Other) | 28.0 | 27.5 | 29.3 | 26.5 | 28.0 | 26.8 | 29.1 | 31.0 | 35.1 | 33.1 |
| Accident (Traffic) | 13.2 | 13.6 | 13.5 | 13.9 | 12.1 | 9.9 | 10.3 | 11.6 | 10.3 | 8.2 |
| Homicide | 6.0 | 6.1 | 4.8 | 4.7 | 5.5 | 5.1 | 4.1 | 4.1 | 4.4 | 3.7 |
| Natural | 35.2 | 34.8 | 34.6 | 39.2 | 39.3 | 42.4 | 41.0 | 39.2 | 36.6 | 41.7 |
| Suicide | 13.4 | 15.0 | 11.8 | 11.7 | 11.9 | 11.9 | 12.3 | 12.0 | 11.0 | 10.8 |
| Undetermined | 4.2 | 3.0 | 6.0 | 4.0 | 3.2 | 3.9 | 3.2 | 2.1 | 2.6 | 2.5 |
| Totals | 1,506 | 1,469 | 1,507 | 1,578 | 1,684 | 1,815 | 1,863 | 1,945 | 2,055 | 2,072 |

Graph 2-1 Comparison of Manners of Death / King County Medical Examiner / 1998 - 2007

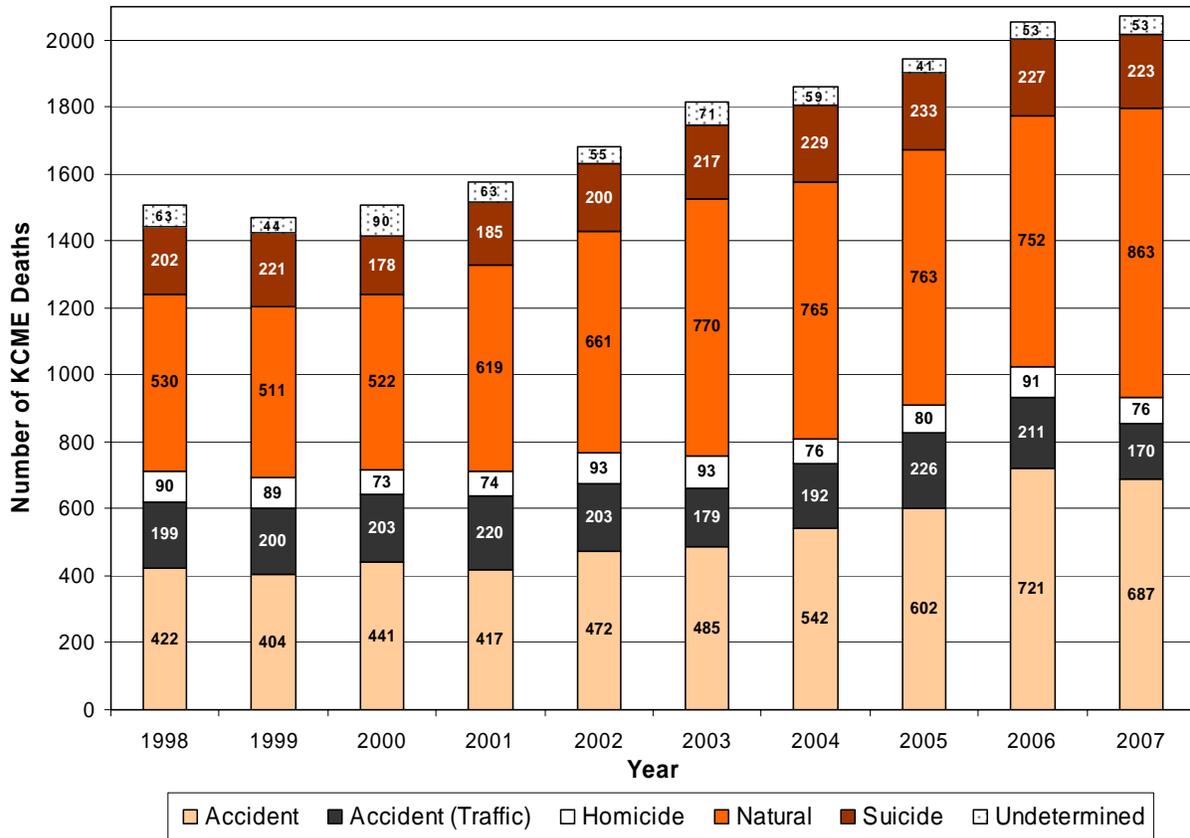


Table 2-3 Ten-Year Perspective of Homicidal Methods / KCME / 1998 - 2007

| METHOD USED | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Blunt Force (#) | 10 | 9 | 12 | 14 | 14 | 14 | 10 | 12 | 16 | 9 |
| Blunt Force (%) | 11% | 10% | 16% | 19% | 15% | 15% | 13% | 15% | 18% | 12% |
| Firearms (#) | 55 | 52 | 39 | 43 | 53 | 52 | 46 | 47 | 52 | 55 |
| Firearms (%) | 61% | 58% | 53% | 58% | 57% | 56% | 61% | 59% | 57% | 72% |
| Hom. Violence (#) | 0 | 0 | 0 | 0 | 2 | 3 | 3 | 2 | 0 | 0 |
| Hom. Violence (%) | 0% | 0% | 0% | 0% | 2% | 3% | 4% | 3% | 0% | 0% |
| Stabbing (#) | 15 | 19 | 16 | 8 | 17 | 16 | 10 | 14 | 14 | 12 |
| Stabbing (%) | 16% | 21% | 22% | 11% | 18% | 17% | 13% | 17% | 15% | 16% |
| Strangulation (#) | 5 | 3 | 2 | 3 | 3 | 5 | 1 | 4 | 1 | 0 |
| Strangulation (%) | 6% | 3% | 3% | 4% | 3% | 6% | 1% | 5% | 1% | 0% |
| Other (#) | 5 | 6 | 4 | 6 | 4 | 3 | 6 | 1 | 8 | 0 |
| Other (%) | 6% | 7% | 6% | 8% | 5% | 3% | 8% | 1% | 9% | 0% |
| Totals | 90 | 89 | 73 | 74 | 93 | 93 | 76 | 80 | 91 | 76 |

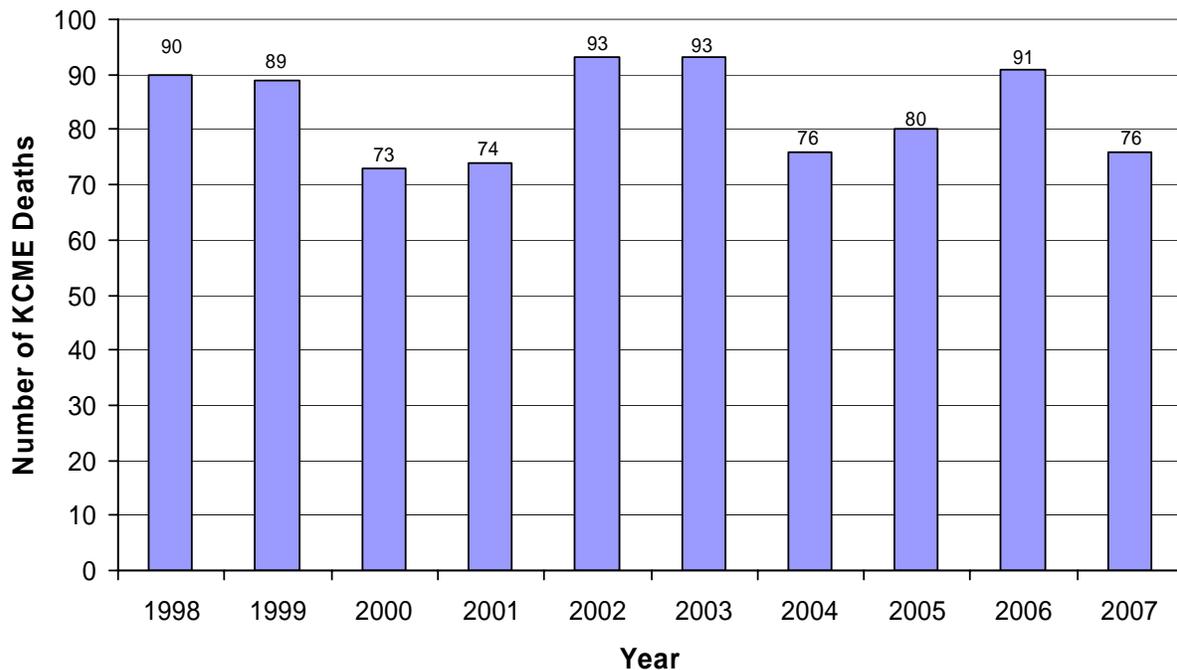
Graph 2-2 Homicide Deaths / King County Medical Examiner / 1998 - 2007

Table 2-4 Ten Year Perspective of Suicidal Injury Modes / KCME / 1998 - 2007

| INJURY MODE | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Asphyxia / Plastic Bag | 6 | 2 | 6 | 9 | 5 | 8 | 7 | 5 | 11 | 3 |
| Burns / Fire / Heat | 1 | 3 | 1 | 1 | 2 | 1 | 1 | 3 | 3 | 1 |
| Carbon Monoxide | 14 | 11 | 5 | 9 | 17 | 12 | 8 | 13 | 11 | 17 |
| Drowning | 3 | 2 | 0 | 1 | 2 | 4 | 5 | 0 | 1 | 3 |
| Drugs / Poisons | 29 | 35 | 31 | 21 | 23 | 35 | 41 | 39 | 36 | 36 |
| Firearms | 95 | 106 | 87 | 85 | 98 | 101 | 95 | 96 | 98 | 93 |
| Hanging | 37 | 39 | 31 | 38 | 32 | 36 | 44 | 42 | 31 | 43 |
| Incised Wounds / Stabbing | 3 | 7 | 7 | 9 | 4 | 6 | 8 | 9 | 5 | 4 |
| Jumped | 9 | 15 | 8 | 11 | 14 | 11 | 15 | 22 | 26 | 22 |
| Other | 5 | 1 | 2 | 1 | 3 | 3 | 5 | 4 | 5 | 1 |
| Totals | 202 | 221 | 178 | 185 | 200 | 217 | 229 | 233 | 227 | 223 |

Graph 2-3 Suicide Deaths / King County Medical Examiner / 1998 – 2007

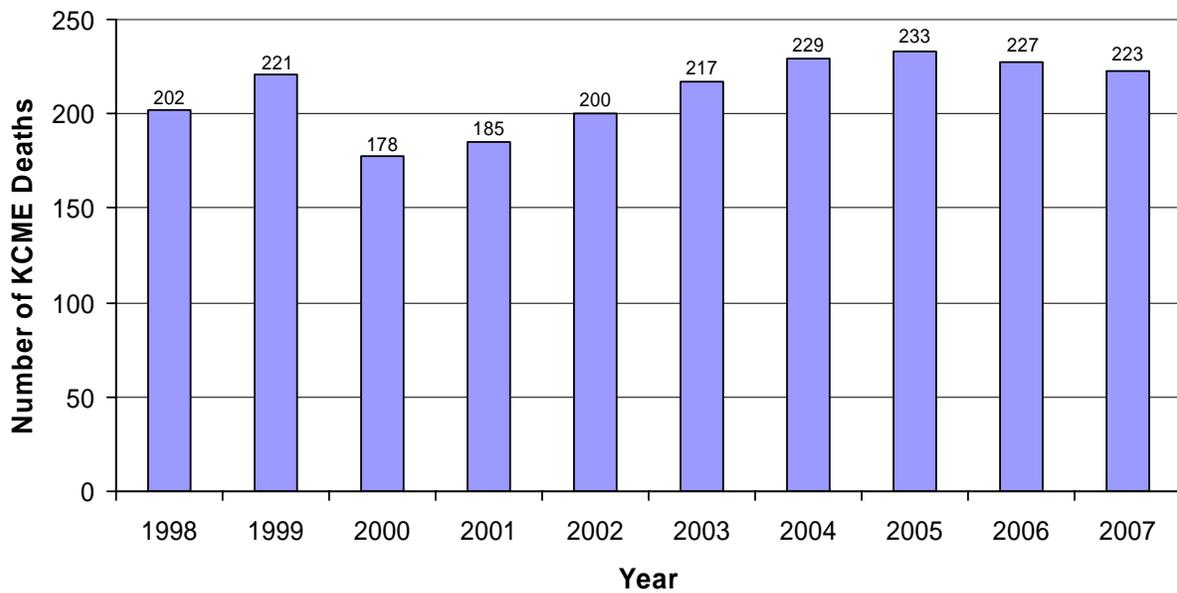


Table 2-5 Traffic Fatality Circumstances / KCME / 1998 - 2007

| CIRCUMSTANCES | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Vehicle Driver | 85 | 97 | 90 | 93 | 99 | 75 | 78 | 99 | 92 | 71 |
| Vehicle Passenger | 47 | 47 | 52 | 56 | 46 | 36 | 54 | 47 | 44 | 29 |
| Vehicle (Undetermined) | 0 | 0 | 2 | 2 | 1 | 2 | 1 | 1 | 5 | 1 |
| Bicyclist | 6 | 6 | 8 | 7 | 3 | 3 | 5 | 6 | 8 | 7 |
| Motorcycle Driver | 18 | 17 | 9 | 21 | 17 | 21 | 23 | 33 | 27 | 26 |
| Motorcycle Passenger | 2 | 1 | 4 | 0 | 0 | 3 | 0 | 3 | 1 | 2 |
| Pedestrian | 40 | 32 | 32 | 40 | 34 | 38 | 30 | 36 | 33 | 31 |
| Other | 1 | 0 | 6 | 1 | 3 | 1 | 1 | 1 | 1 | 3 |
| Totals | 199 | 200 | 203 | 220 | 203 | 179 | 192 | 226 | 211 | 170 |

Graph 2-4 Traffic Fatalities / King County Medical Examiner / 1998 – 2007

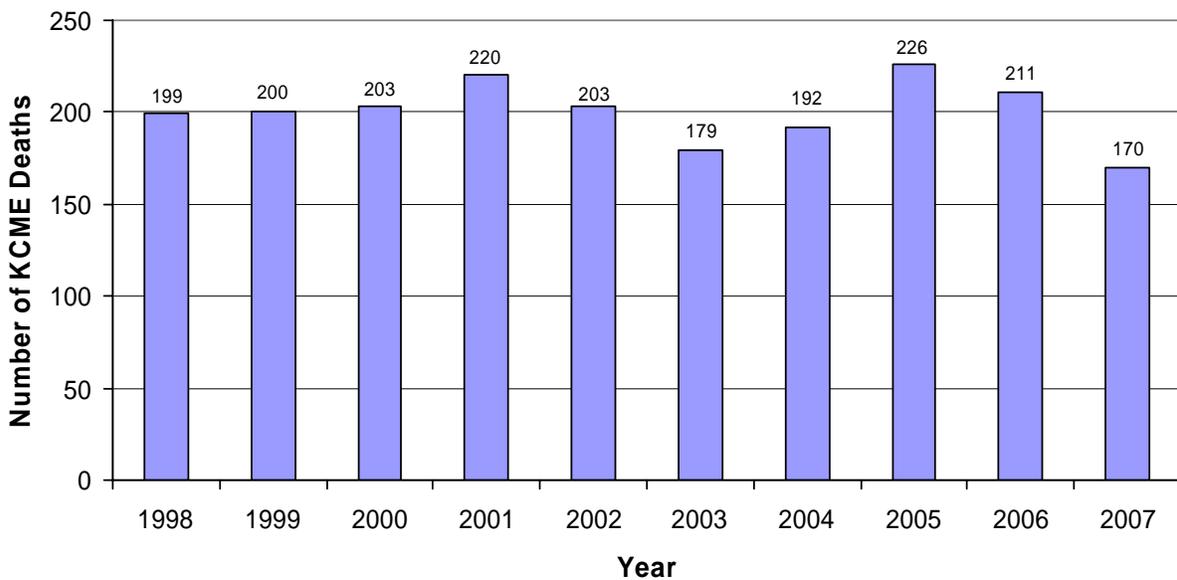
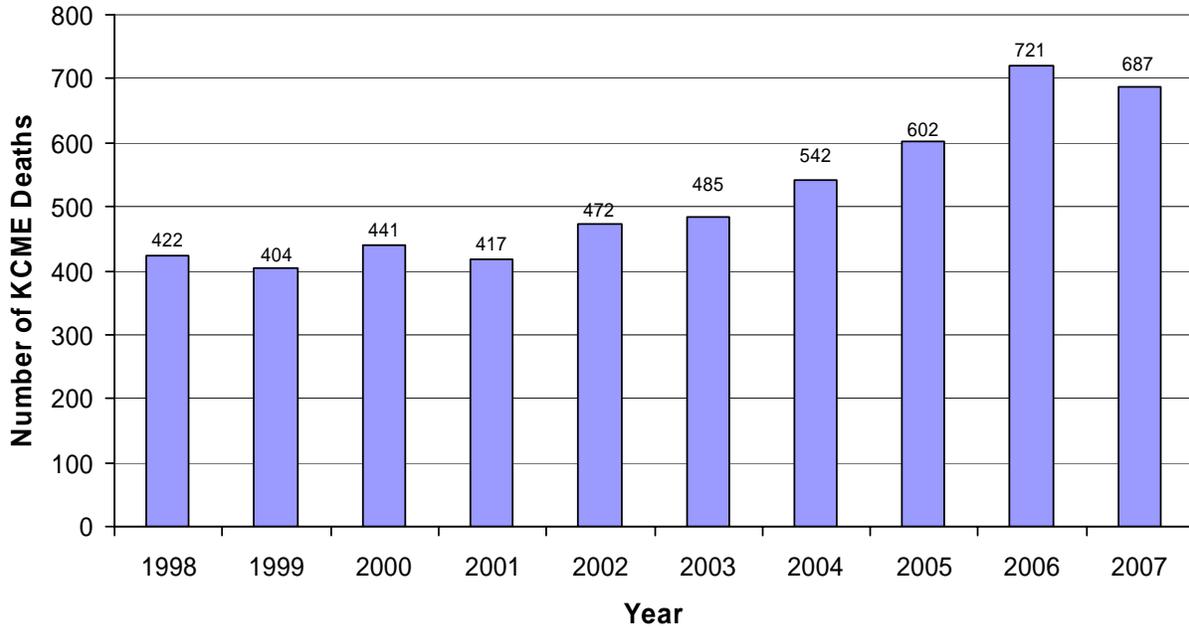


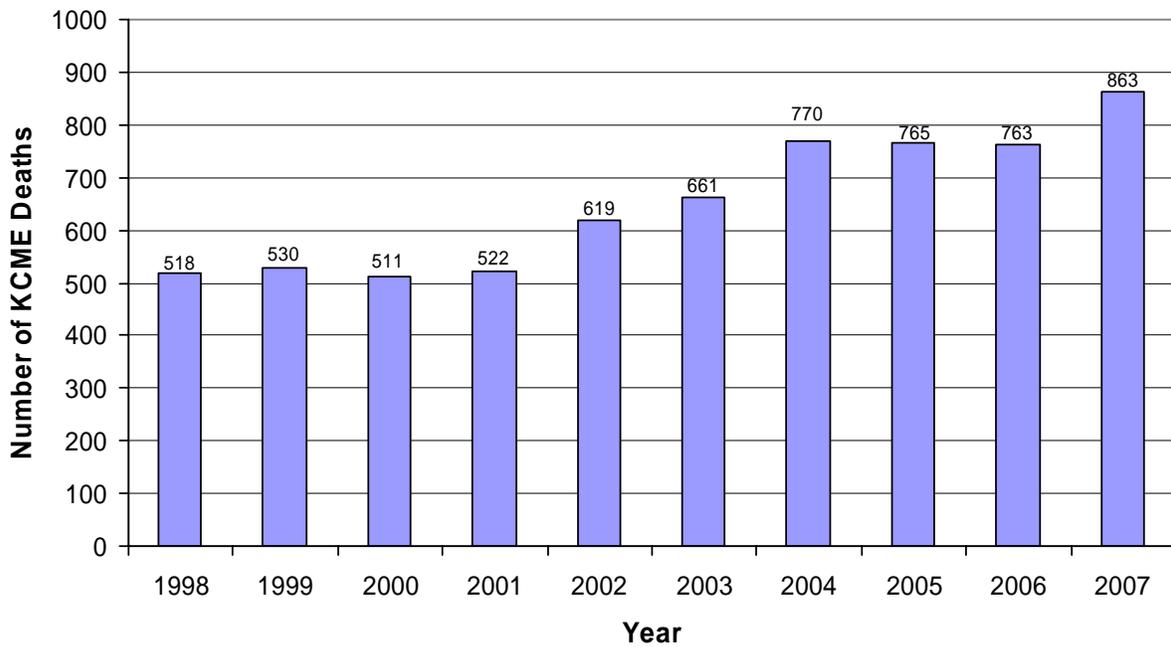
Table 2-6 Ten Year Perspective of Non-Traffic Accidental Death Circumstances / KCME / 1998 - 2007

| CIRCUMSTANCES | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Aircraft | 1 | 3 | 3 | 1 | 0 | 0 | 2 | 3 | 3 | 11 |
| Asphyxia | 11 | 7 | 7 | 10 | 7 | 4 | 2 | 9 | 12 | 11 |
| Aspiration | 4 | 1 | 7 | 5 | 5 | 9 | 8 | 10 | 9 | 5 |
| Blunt Force / Crushing | 8 | 0 | 11 | 7 | 12 | 9 | 8 | 10 | 4 | 10 |
| Burns / Fire | 25 | 25 | 23 | 29 | 22 | 19 | 24 | 26 | 23 | 23 |
| Carbon Monoxide | 0 | 0 | 1 | 5 | 0 | 1 | 3 | 4 | 8 | 3 |
| Complication of Therapy | 10 | 11 | 16 | 17 | 24 | 22 | 18 | 45 | 31 | 40 |
| Drowning | 24 | 23 | 23 | 35 | 32 | 27 | 17 | 19 | 30 | 23 |
| Drugs / Poisons | 179 | 164 | 177 | 122 | 173 | 160 | 211 | 216 | 262 | 247 |
| Electrocution | 1 | 0 | 3 | 1 | 2 | 0 | 2 | 1 | 2 | 1 |
| Explosion | 2 | 2 | 0 | 1 | 0 | 0 | 4 | 1 | 1 | 2 |
| Fall | 138 | 147 | 149 | 157 | 171 | 207 | 213 | 230 | 308 | 292 |
| Firearms | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 1 |
| Hanging | 0 | 0 | 4 | 0 | 1 | 0 | 2 | 2 | 0 | 0 |
| Hypothermia | 5 | 0 | 0 | 8 | 6 | 2 | 2 | 4 | 4 | 3 |
| Struck by Object | 6 | 6 | 2 | 5 | 2 | 8 | 7 | 1 | 8 | 5 |
| Struck by Train | 1 | 0 | 4 | 3 | 2 | 0 | 3 | 1 | 0 | 1 |
| Vehicular Non-Traffic | 3 | 8 | 6 | 6 | 8 | 14 | 10 | 8 | 9 | 7 |
| Other | 5 | 7 | 5 | 5 | 5 | 2 | 5 | 10 | 7 | 2 |
| Totals | 422 | 404 | 441 | 417 | 472 | 485 | 542 | 602 | 721 | 687 |

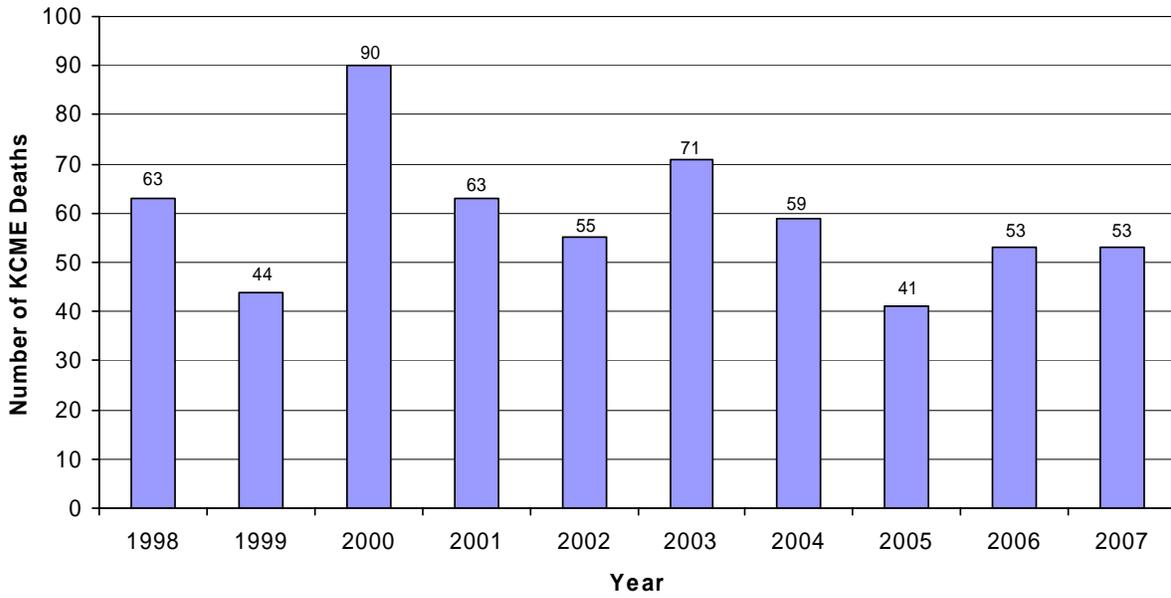
Graph 2-5 Accidental Deaths / King County Medical Examiner / 1998 – 2007



Graph 2-6 Natural Deaths / King County Medical Examiner / 1998 – 2007



Graph 2-7 Deaths of Undetermined Manner / King County Medical Examiner / 1998 – 2007



Manner: ACCIDENT

The Medical Examiner certified 687 deaths as non-traffic accidents for the calendar year 2007. The largest group of accidental deaths was those who died as a result of a fall, 43% (292/687). Of the 292 deaths attributed to injury sustained in falls, 80% (233/292) occurred in the age group 70 years and over. A large percentage of these falls 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 36% (247/687). By age, the largest percentage of these accidental drug deaths, 30% (73/247), occurred among adults between 40-49 years. The second largest group, 28% (69/247), included adults between the ages of 50-59. Seventeen percent (42/247) were adults between 30-39 years of age. There were six accidental drug deaths of children between the ages of 16-19 years, and there were no accidental drug deaths of children or infants less than 15 years of age.

The 2007 drug rate number (247) represents a 6% decrease compared to the 262 accidental drug deaths in 2006. A more detailed discussion of these deaths is presented in the section "Death Due to Drugs and Poisons" on page 83 and 84.

Twenty-three (23) deaths resulted from fire or thermal injury, the same as in 2006 when there was also 23. Of the 23 fire-related deaths, 57% (13/23) 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 23 drowning deaths in 2007, as compared to 30 in 2006, 19 in 2005, 17 in 2004, 27 in 2003, and 32 in 2002.

A comment is necessary to clarify the cause of death listed as "aspiration." This type of death results from a person choking on a foreign object, often a bolus of food while eating. In 2007 there were five (5) deaths due to aspiration of a foreign body compared to nine (9) in 2006, ten (10) in 2005, eight (8) in 2004, nine (9) in 2003, and five (5) in 2002.

Of the 687 accidental deaths in 2007, 20% (139/687) 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 jurisdiction.

A special subset of deaths designated "Complication of Therapy" has been incorporated in the statistical analyses of Accidental deaths. This category 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 deaths or accidents. As such, this category of deaths warrants special mention because of an apparent upward trend in incidence and increased public interest. A Complication of Therapy is defined as a death that arises as a predictable consequence of appropriate medical therapy. Circumstances 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, etc.

For example, the manner of death in the case of a person with no known drug allergies and a minor infection who is administered an appropriate dose of penicillin but subsequently develops a fatal allergic reaction to the drug and dies would be Complication of Therapy. Contrast this example with the case of a hospital patient who is written a proper prescription for a heart medication but is administered an overdose of the medication by a healthcare provider, and 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 ten (10) in 1997 to 40 in 2007 (see table on p. 27, Ten Year Perspective of Non-Traffic Accidental Death Circumstances) 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.

For 2007, there were 40 deaths classified as Complication of Therapy. Graph 3-4 shows the Complication of Therapy deaths by general category and Graph 3-5 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 Complications of Therapy over the last ten years but the most important factor is probably the 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 be resulting in a greater percentage of these cases being reported to the medical examiner.

Graph 3-1 Circumstances of Accidental Death / King County Medical Examiner / 2007

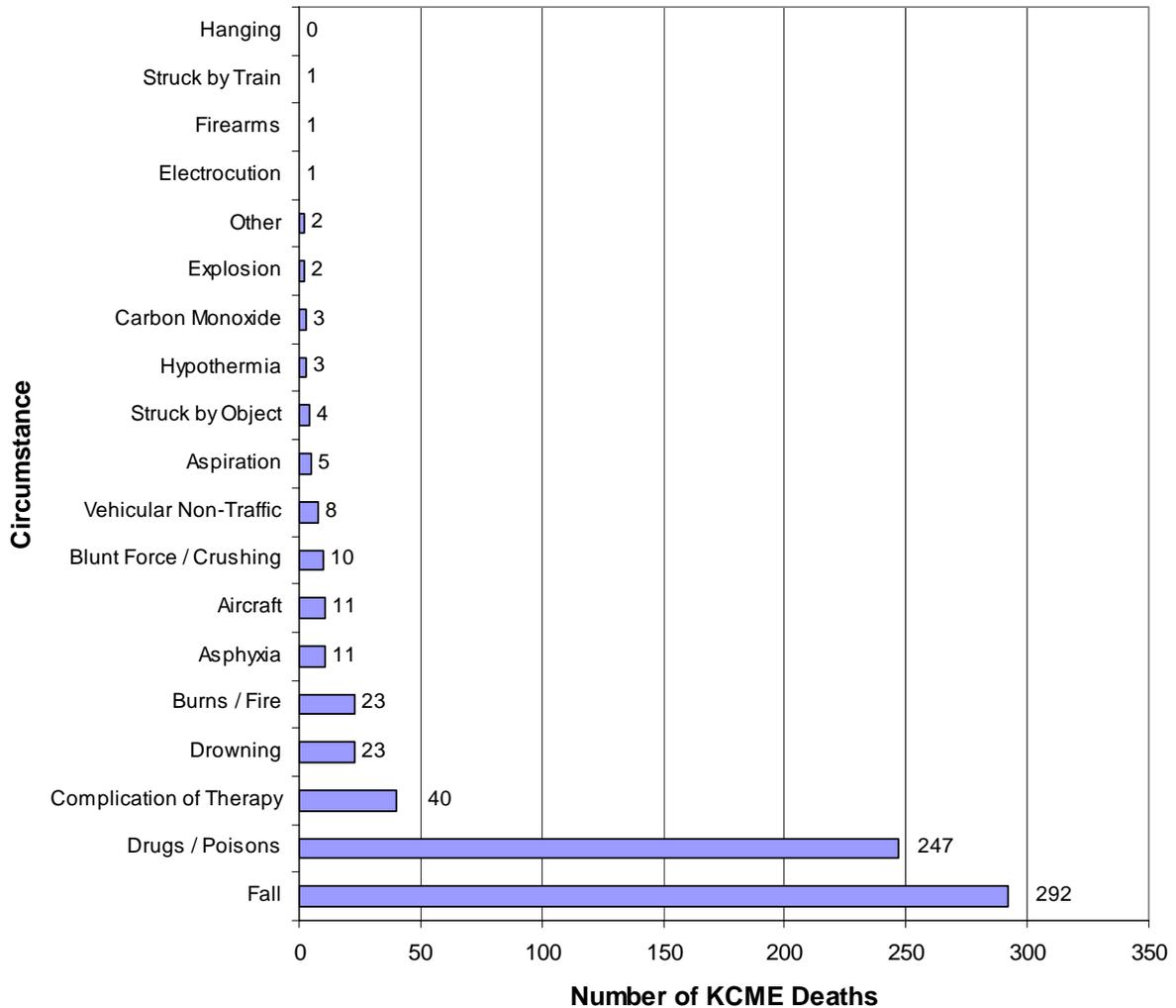


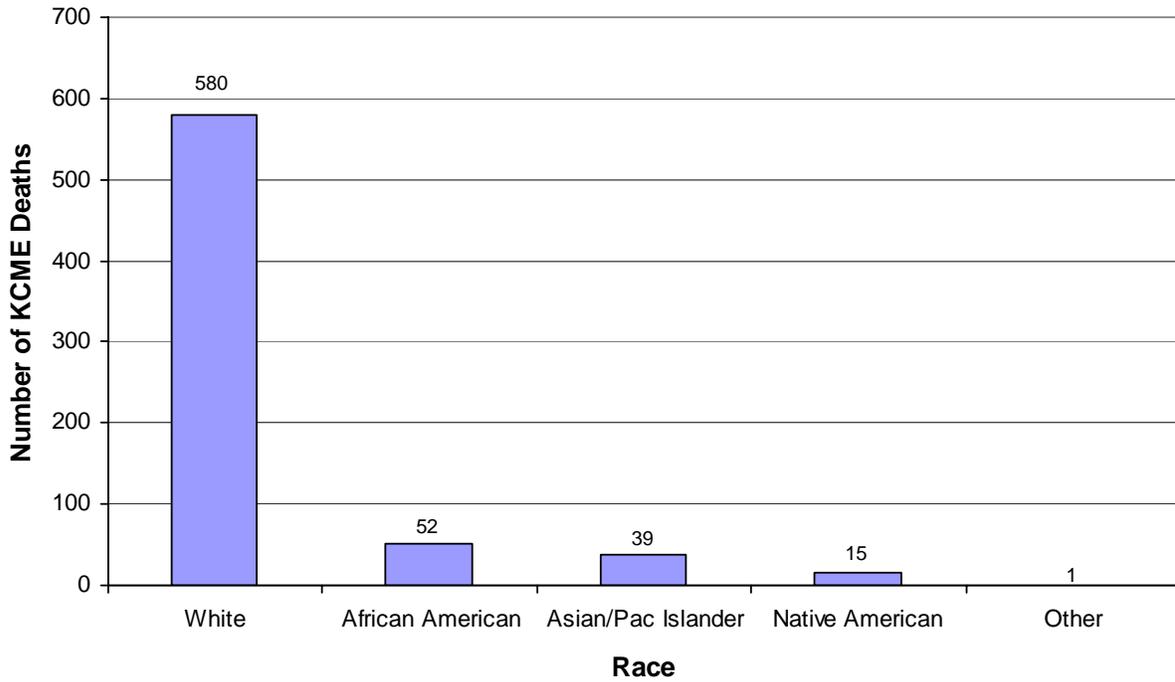
Table 3-1 Circumstances of Accidental Death / Race / Sex / KCME / 2007

| CIRCUMSTANCES / SEX | RACE | | | | | SUB TOTAL | TOTAL |
|---|-------|------------|------------------|--------------------|-----------|--------------|-------|
| | WHITE | AF AMER | ASIAN/ PAC IS | NATIVE AMERICAN | OTHE R | | |
| Aircraft | 11 | 0 | 0 | 0 | 0 | | 11 |
| <i>Male</i> | 8 | 0 | 0 | 0 | 0 | 8 | |
| <i>Female</i> | 3 | 0 | 0 | 0 | 0 | 3 | |
| Asphyxia (compressional / positional / mechanical) | 7 | 1 | 3 | 0 | 0 | | 11 |
| <i>Male</i> | 5 | 0 | 3 | 0 | 0 | 8 | |
| <i>Female</i> | 2 | 1 | 0 | 0 | 0 | 3 | |
| Aspiration | 3 | 0 | 2 | 0 | 0 | | 5 |
| <i>Male</i> | 1 | 0 | 1 | 0 | 0 | 2 | |
| <i>Female</i> | 2 | 0 | 1 | 0 | 0 | 3 | |
| Blunt Force / Crushing | 10 | 0 | 0 | 0 | 0 | | 10 |
| <i>Male</i> | 10 | 0 | 0 | 0 | 0 | 10 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Burns / Fire | 17 | 2 | 3 | 1 | 0 | | 23 |
| <i>Male</i> | 10 | 0 | 1 | 0 | 0 | 11 | |
| <i>Female</i> | 7 | 2 | 2 | 1 | 0 | 12 | |
| Carbon Monoxide | 3 | 0 | 0 | 0 | 0 | | 3 |
| <i>Male</i> | 3 | 0 | 0 | 0 | 0 | 3 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Complication of Therapy | 34 | 2 | 2 | 1 | 1 | | 40 |
| <i>Male</i> | 16 | 2 | 1 | 0 | 0 | 19 | |
| <i>Female</i> | 18 | 0 | 1 | 1 | 1 | 21 | |
| Drowning | 19 | 2 | 2 | 0 | 0 | | 23 |
| <i>Male</i> | 15 | 1 | 1 | 0 | 0 | 17 | |
| <i>Female</i> | 4 | 1 | 1 | 0 | 0 | 6 | |
| Drugs / Poisons | 187 | 39 | 10 | 11 | 0 | | 247 |
| <i>Male</i> | 129 | 21 | 7 | 4 | 0 | 161 | |
| <i>Female</i> | 58 | 18 | 3 | 7 | 0 | 86 | |
| Electrocution | 1 | 0 | 0 | 0 | 0 | | 1 |
| <i>Male</i> | 1 | 0 | 0 | 0 | 0 | 1 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Explosion | 2 | 0 | 0 | 0 | 0 | | 2 |
| <i>Male</i> | 2 | 0 | 0 | 0 | 0 | 2 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Fall | 269 | 4 | 17 | 2 | 0 | | 292 |
| <i>Male</i> | 160 | 3 | 8 | 2 | 0 | 173 | |
| <i>Female</i> | 109 | 1 | 9 | 0 | 0 | 119 | |

Table 3-1 Circumstances of Accidental Death / Race / Sex / KCME / 2007 (continued)

| CIRCUMSTANCES / SEX | RACE | | | | | SUB TOTAL | TOTAL |
|-----------------------|------------|------------|------------------|--------------------|-----------|--------------|------------|
| | WHITE | AF AMER | ASIAN/ PAC IS | NATIVE AMERICAN | OTHE R | | |
| Firearms | 1 | 0 | 0 | 0 | 0 | | 1 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 1 | 0 | 0 | 0 | 0 | 1 | |
| Hanging | 0 | 0 | 0 | 0 | 0 | | 0 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Hypothermia | 2 | 1 | 0 | 0 | 0 | | 3 |
| <i>Male</i> | 1 | 0 | 0 | 0 | 0 | 1 | |
| <i>Female</i> | 1 | 1 | 0 | 0 | 0 | 2 | |
| Struck by Object | 3 | 1 | 0 | 0 | 0 | | 4 |
| <i>Male</i> | 3 | 1 | 0 | 0 | 0 | 4 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Struck by Train | 1 | 0 | 0 | 0 | 0 | | 1 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 1 | 0 | 0 | 0 | 0 | 1 | |
| Vehicular Non-Traffic | 8 | 0 | 0 | 0 | 0 | | 8 |
| <i>Male</i> | 6 | 0 | 0 | 0 | 0 | 6 | |
| <i>Female</i> | 2 | 0 | 0 | 0 | 0 | 2 | |
| Other | 2 | 0 | 0 | 0 | 0 | | 2 |
| <i>Male</i> | 2 | 0 | 0 | 0 | 0 | 2 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Totals | 580 | 52 | 39 | 15 | 1 | | 687 |
| Percent | 84.4% | 7.6% | 5.7% | 2.2% | 0.1% | | 100% |

Graph 3-2 Accidental Deaths / Race / King County Medical Examiner / 2007



Graph 3-3 Accidental Deaths / Age Group / King County Medical Examiner / 2007

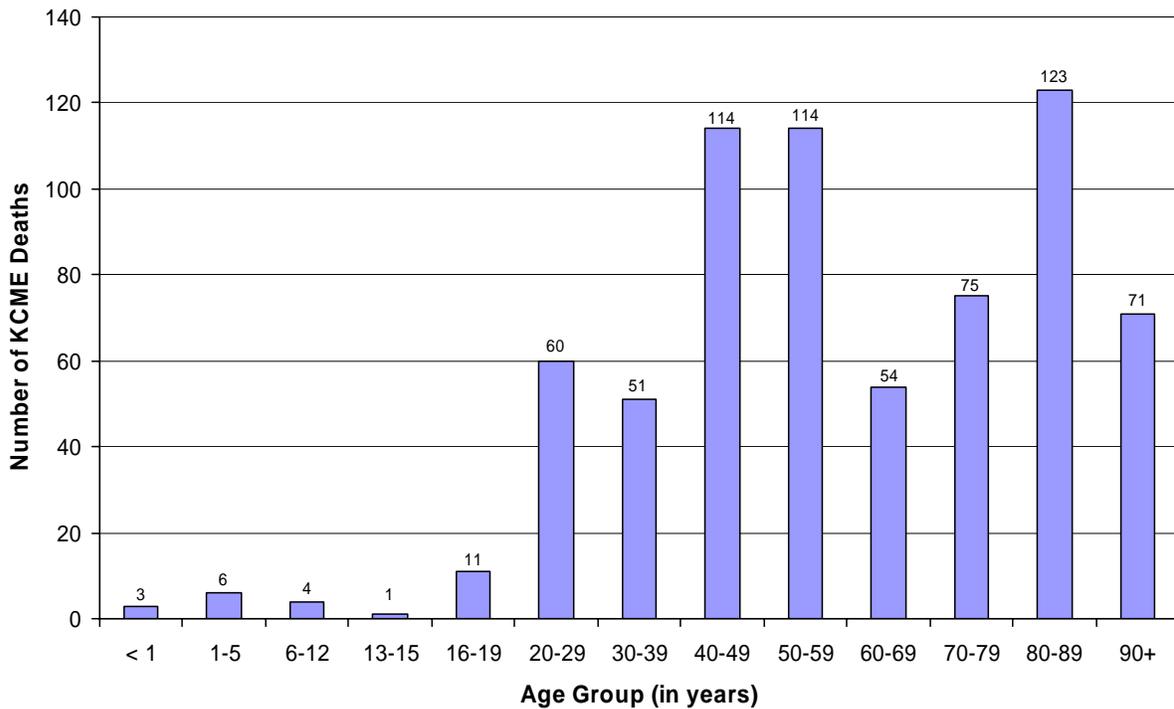


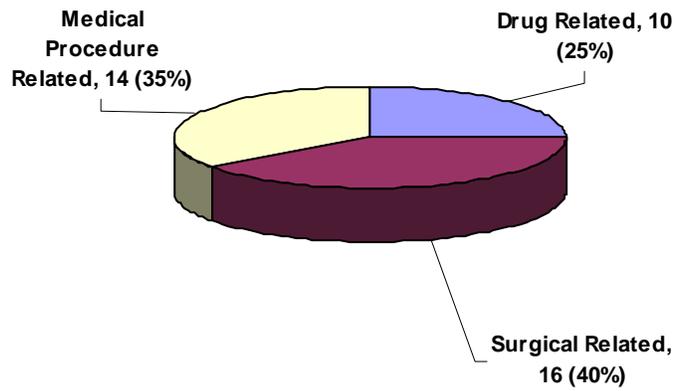
Table 3-2 Circumstances of Accidental Death / Age / Sex / KCME / 2007

| CIRCUMSTANCES / SEX | 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 | 1 | 0 | 0 | 0 | 7 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | | 11 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 5 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 8 | |
| <i>Female</i> | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | |
| Asphyxia (compress/positional/mech) | 2 | 0 | 0 | 0 | 0 | 1 | 3 | 1 | 3 | 1 | 0 | 0 | 0 | | 11 |
| <i>Male</i> | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 3 | 1 | 0 | 0 | 0 | 8 | |
| <i>Female</i> | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | |
| Aspiration | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 2 | 0 | | 5 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 3 | |
| Blunt Force / Crushing | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 5 | 2 | 1 | 1 | 0 | 0 | | 10 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 5 | 2 | 1 | 1 | 0 | 0 | 10 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Burns / Fire | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 4 | 2 | 4 | 5 | 2 | 1 | | 23 |
| <i>Male</i> | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 3 | 0 | 2 | 2 | 1 | 0 | 11 | |
| <i>Female</i> | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 1 | 1 | 12 | |
| Carbon Monoxide | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | | 3 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 3 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Complication of Therapy | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 6 | 9 | 9 | 9 | 3 | 0 | | 40 |
| <i>Male</i> | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 3 | 6 | 2 | 5 | 1 | 0 | 19 | |
| <i>Female</i> | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 3 | 7 | 4 | 2 | 0 | 21 | |
| Drowning | 0 | 1 | 1 | 0 | 4 | 4 | 2 | 5 | 2 | 2 | 0 | 2 | 0 | | 23 |
| <i>Male</i> | 0 | 1 | 0 | 0 | 4 | 2 | 2 | 4 | 1 | 2 | 0 | 1 | 0 | 17 | |
| <i>Female</i> | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 6 | |
| Drugs / Poisons | 0 | 0 | 0 | 0 | 6 | 41 | 42 | 73 | 69 | 10 | 5 | 1 | 0 | | 247 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 5 | 30 | 28 | 49 | 39 | 7 | 3 | 0 | 0 | 161 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 1 | 11 | 14 | 24 | 30 | 3 | 2 | 1 | 0 | 86 | |
| Electrocution | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 1 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Explosion | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | | 2 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Fall | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 15 | 21 | 19 | 53 | 11 0 | 70 | | 292 |
| <i>Male</i> | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 14 | 16 | 13 | 31 | 64 | 31 | 173 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 6 | 22 | 46 | 39 | 119 | |

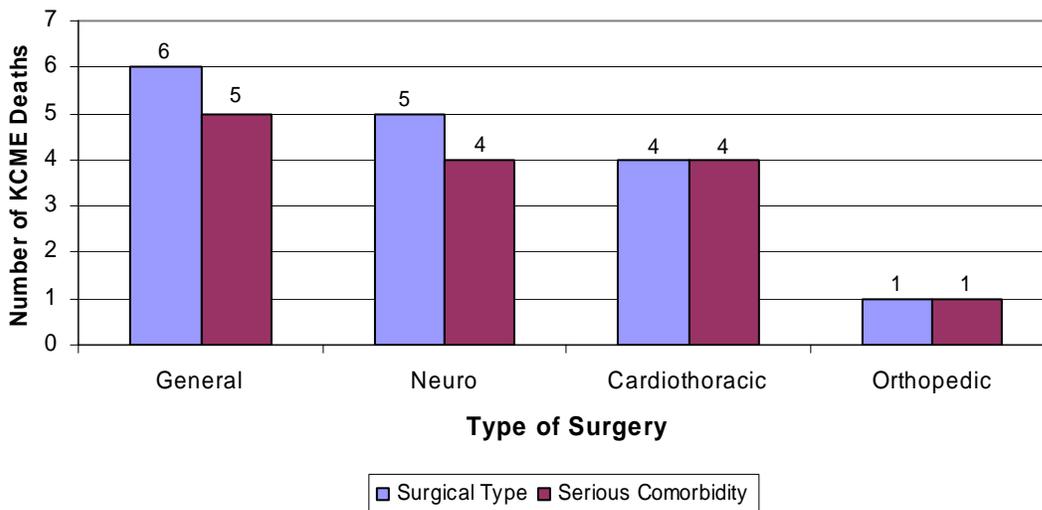
Table 3-2 Circumstances of Accidental Death / Age / Sex / KCME / 2007 (continued)

| Circumstance / Sex | 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 + | | |
| Firearms | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| Hanging | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Hypothermia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 3 | |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | |
| Struck by Object | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 4 | |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 4 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Struck by Train | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| Vehicular Non-Traffic | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 1 | 0 | 8 | |
| <i>Male</i> | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 1 | 0 | 6 | |
| <i>Female</i> | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | |
| Other | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Totals | 3 | 6 | 4 | 1 | 11 | 60 | 51 | 114 | 114 | 54 | 75 | 123 | 71 | 687 | |
| Percent | 0.4 | 0.9 | 0.6 | 0.1 | 1.6 | 8.8 | 7.4 | 16.6 | 16.6 | 7.9 | 10.9 | 17.9 | 10.3 | 100% | |

Graph 3-4 Complication of Therapy / General Categories / KCME / 2007



Graph 3-5 Complication of Therapy¹ / Surgical Injuries / KCME / 2007



¹Serious comorbidity indicates coexisting natural disease serious enough to contribute to death.

Table 3-3 Circumstances of Accidental Death / Sex / KCME / 2007

| CIRCUMSTANCES | SEX | | TOTAL |
|--|------------|------------|------------|
| | MALE | FEMALE | |
| Aircraft | 8 | 3 | 11 |
| Asphyxia (compressional / positional / mechanical) | 8 | 3 | 11 |
| Aspiration | 2 | 3 | 5 |
| Blunt Force / Crushing | 10 | 0 | 10 |
| Burns / Fire | 11 | 12 | 23 |
| Carbon Monoxide | 3 | 0 | 3 |
| Complication of Therapy | 19 | 21 | 40 |
| Drowning | 17 | 6 | 23 |
| Drugs / Poisons | 161 | 86 | 247 |
| Electrocution | 1 | 0 | 1 |
| Explosion | 2 | 0 | 2 |
| Fall | 173 | 119 | 292 |
| Firearms | 0 | 1 | 1 |
| Hanging | 0 | 0 | 0 |
| Hypothermia | 1 | 2 | 3 |
| Struck by Object | 4 | 0 | 4 |
| Struck by Train | 0 | 1 | 1 |
| Vehicular Non-Traffic | 6 | 2 | 8 |
| Other | 2 | 0 | 2 |
| Totals | 428 | 259 | 687 |
| Percent | 62% | 38% | 100% |

Table 3-4 Circumstances of Accidental Death / Blood Alcohol Results / KCME / 2007

| CIRCUMSTANCES | TESTED | | NOT TESTED | TOTAL |
|---|-----------------|-----------------|------------|------------|
| | TESTED POSITIVE | TESTED NEGATIVE | | |
| Aircraft | 0 | 0 | 11 | 11 |
| Asphyxia (compressional/ positional / mechanical) | 0 | 10 | 1 | 11 |
| Aspiration | 0 | 3 | 2 | 5 |
| Blunt Force / Crushing | 0 | 7 | 3 | 10 |
| Burns / Fire | 3 | 15 | 5 | 23 |
| Carbon Monoxide | 1 | 1 | 1 | 3 |
| Complication of Therapy | 0 | 26 | 14 | 40 |
| Drowning | 5 | 16 | 2 | 23 |
| Drugs / Poisons | 70 | 158 | 19 | 247 |
| Electrocution | 0 | 1 | 0 | 1 |
| Explosion | 0 | 0 | 2 | 2 |
| Fall | 11 | 109 | 172 | 292 |
| Firearms | 0 | 1 | 0 | 1 |
| Hanging | - | - | - | 0 |
| Hypothermia | 1 | 2 | 0 | 3 |
| Struck by Object | 0 | 4 | 0 | 4 |
| Struck by Train | 0 | 1 | 0 | 1 |
| Vehicular Non-Traffic | 1 | 5 | 2 | 8 |
| Other | 0 | 1 | 1 | 2 |
| Totals | 92 | 360 | 235 | 687 |
| Percent | 14% | 52% | 34% | 100% |

Manner: 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. During 2007, the Medical Examiner classified 76 deaths as homicide. This number represents 4% (76/2,072) of the Medical Examiner death investigations for the calendar year 2007. Of these 76 homicides, 66 (87%) were the result of incidents that occurred within King County. For comparison, there were 91 homicides investigated in 2006, of which 77 (85%) were incidents in King County. In 2005, 72 of 80 (90%) of the homicides occurred in King County.

The data reflect the weapons or mechanisms responsible for the homicidal deaths in 2007. Firearms were responsible for 72% (55/76), compared to 2006, when 57% (52/91) were due to firearms. Stabbing by a knife or other sharp-edged instrument caused sixteen percent (12/76) of deaths of homicide victims. Blunt force injuries were responsible for twelve percent (9/76) of the 2007 homicide deaths. There were no deaths due to strangulation/asphyxia, homicidal violence or other means.

In 2007, there were five homicide victims under five years of age. There were no homicide victims between 6 - 15 years of age. Four homicide victims were between the ages of 16 and 19 years.

Examining the racial distribution of victims of homicide, 28% (21/76) of the victims were African American, compared to 2006, when 24% (22/91) of the victims were African American. Whites, while representing 76% of the population, made up 62% (47/76) of the homicide victims. The remaining 11% of homicide victims (8/76) included Asian/Pacific Islanders and Native American. As indicated on page 5, in 20% 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 19).

Males comprised 76% (58/76) and women 24% (18/76) of the homicide victims in 2007. The majority of victims, 66% (50/76), were between the ages of 20 and 49 years. Young people, 19 years old and under, comprised 12% (9/76) of the homicide victims. For comparison, this younger age group represented 16% (15/91) in the year 2006. Eighty-seven percent (66/76) of the victims were tested for the presence of alcohol. Of those tested 35% (23/66) showed alcohol present at the time of death.

Of the 76 homicidal deaths in 2007, 87% (66/76) of the fatal incidents occurred within King County, and of these deaths, 29 (44%) occurred within the city limits of Seattle. In 10 of the 76 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 / King County Medical Examiner / 2007

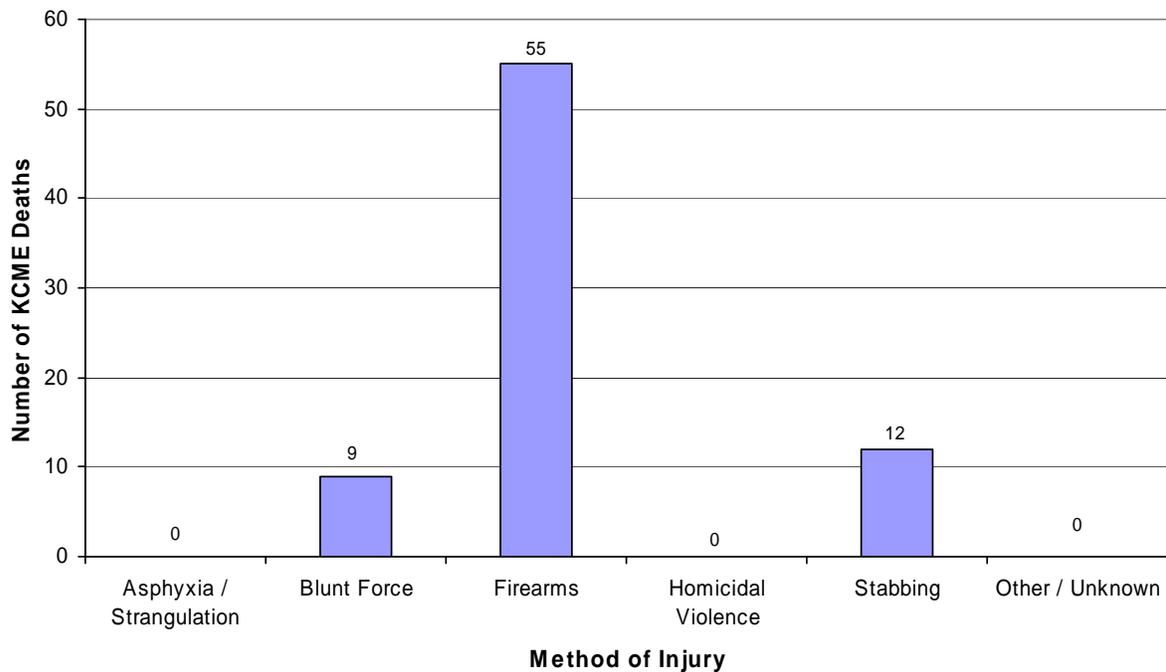


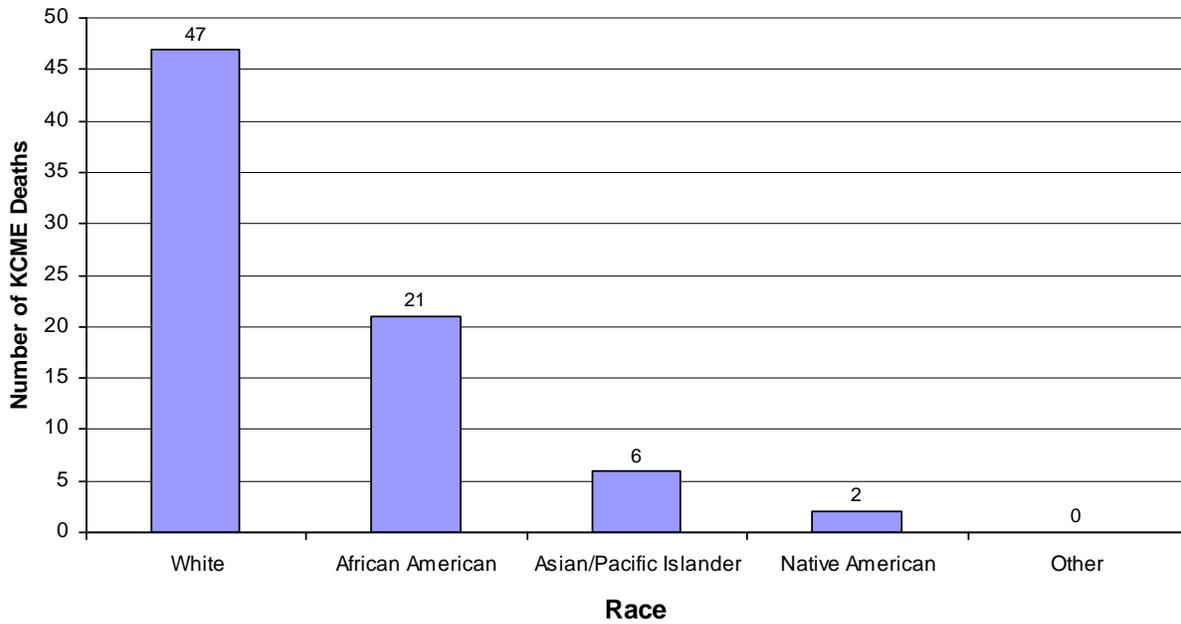
Table 4-1 Homicide Methods / Race / Sex / King County Medical Examiner / 2007

| CIRCUMSTANCES / SEX | RACE | | | | | SUB TOTAL | TOTAL |
|-----------------------------|-----------|------------|------------------|--------------------|----------|--------------|-----------|
| | WHITE | AF AMER | ASIAN/ PAC IS | NATIVE AMERICAN | OTHER | | |
| Asphyxia / Strangulation | 0 | 0 | 0 | 0 | 0 | | 0 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Blunt Force | 7 | 2 | 0 | 0 | 0 | | 9 |
| <i>Male</i> | 4 | 1 | 0 | 0 | 0 | 5 | |
| <i>Female</i> | 3 | 1 | 0 | 0 | 0 | 4 | |
| Firearms | 34 | 15 | 5 | 1 | 0 | | 55 |
| <i>Male</i> | 27 | 14 | 5 | 0 | 0 | 46 | |
| <i>Female</i> | 7 | 1 | 0 | 1 | 0 | 9 | |
| Homicidal Violence | 0 | 0 | 0 | 0 | 0 | | 0 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Stabbing | 6 | 4 | 1 | 1 | 0 | | 12 |
| <i>Male</i> | 3 | 3 | 0 | 1 | 0 | 7 | |
| <i>Female</i> | 3 | 1 | 1 | 0 | 0 | 5 | |
| Other / Unknown | 0 | 0 | 0 | 0 | 0 | | 0 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Totals | 47 | 21 | 6 | 2 | 0 | | 76 |
| Percent | 62% | 27% | 8% | 3% | 0% | | 100% |

Table 4-2 Homicide Methods / Age / Sex / King County Medical Examiner / 2007

| METHOD / SEX | 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 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Blunt Force | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 1 | 0 | | 9 |
| <i>Male</i> | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 5 | |
| <i>Female</i> | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | |
| Firearms | 0 | 2 | 0 | 0 | 3 | 17 | 18 | 5 | 6 | 3 | 0 | 0 | 1 | | 55 |
| <i>Male</i> | 0 | 1 | 0 | 0 | 3 | 15 | 15 | 5 | 5 | 2 | 0 | 0 | 0 | 46 | |
| <i>Female</i> | 0 | 1 | 0 | 0 | 0 | 2 | 3 | 0 | 1 | 1 | 0 | 0 | 1 | 9 | |
| Homicidal Violence | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Stabbing | 0 | 0 | 0 | 0 | 1 | 3 | 4 | 1 | 1 | 0 | 2 | 0 | 0 | | 12 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 7 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 5 | |
| Other / Unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Totals | 2 | 3 | 0 | 0 | 4 | 20 | 23 | 7 | 9 | 4 | 2 | 1 | 1 | | 76 |
| Percent | 3% | 4% | 0% | 0% | 5% | 27% | 30% | 9% | 12% | 5% | 3% | 1% | 1% | | 100% |

Graph 4-2 Homicide Deaths / Race / King County Medical Examiner / 2007



Graph 4-3 Homicide Deaths / Age Group / King County Medical Examiner / 2007

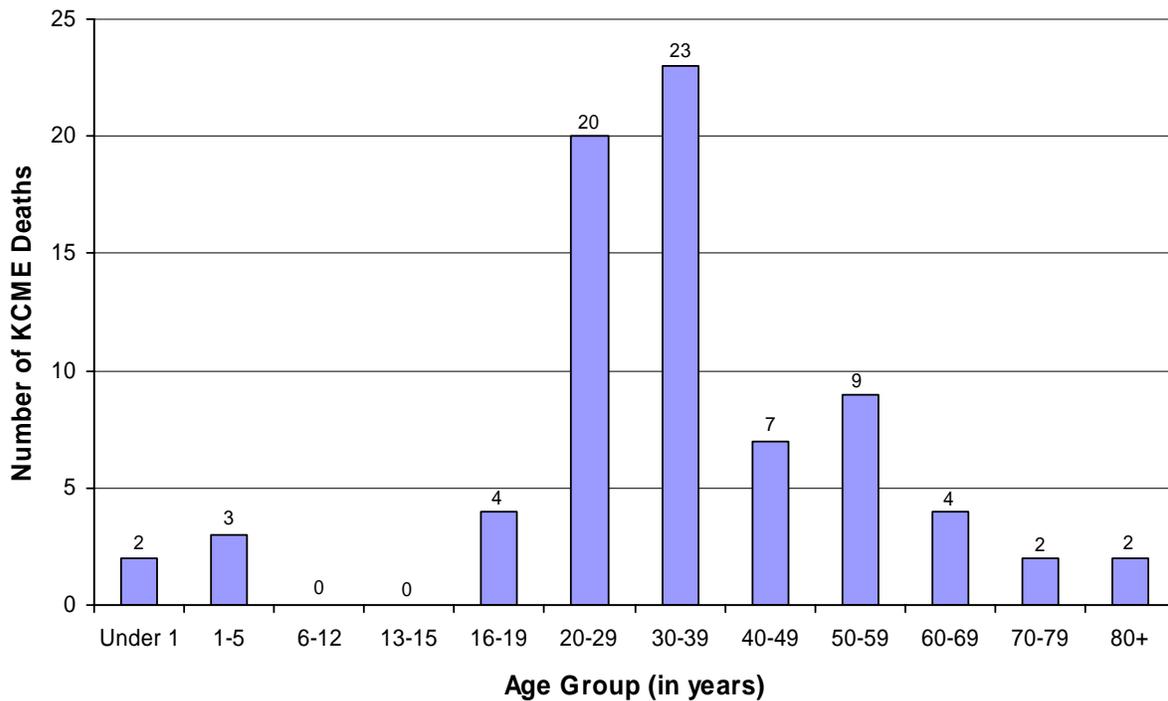


Table 4-3 Homicide Deaths / Age / Race / Sex / King County Medical Examiner / 2007

| METHOD | | AGE | | | | | | SUB TOTAL | TOTAL | |
|---------------|------------------|----------|----------------|----------------|----------------|----------------|-----------|--------------|-----------|----|
| | | < 16 | 16 to 19 | 20 to 29 | 30 to 39 | 40 to 49 | 50+ | | | |
| Blunt Force | White | 2 | 0 | 0 | 1 | 1 | 3 | 4 | 7 | |
| | <i>Male</i> | 1 | 0 | 0 | 0 | 1 | 2 | | | |
| | <i>Female</i> | 1 | 0 | 0 | 1 | 0 | 1 | 3 | | |
| | African Amer. | 1 | 0 | 0 | 0 | 0 | 1 | 1 | | |
| | <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 1 | | | |
| | <i>Female</i> | 1 | 0 | 0 | 0 | 0 | 0 | | | 1 |
| Firearms | White | 2 | 2 | 8 | 9 | 5 | 8 | 27 | 34 | |
| | <i>Male</i> | 1 | 2 | 7 | 7 | 5 | 5 | | | |
| | <i>Female</i> | 1 | 0 | 1 | 2 | 0 | 3 | | | 7 |
| | African Amer. | 0 | 1 | 5 | 7 | 0 | 2 | 14 | | 15 |
| | <i>Male</i> | 0 | 1 | 5 | 6 | 0 | 2 | | | |
| | <i>Female</i> | 0 | 0 | 0 | 1 | 0 | 0 | | | |
| | Asian/Pac Is. | 0 | 0 | 3 | 2 | 0 | 0 | 5 | | 5 |
| | <i>Male</i> | 0 | 0 | 3 | 2 | 0 | 0 | | | |
| | <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | Nat. American | 0 | 0 | 1 | 0 | 0 | 0 | 0 | | 1 |
| | <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | <i>Female</i> | 0 | 0 | 1 | 0 | 0 | 0 | | | |
| Stabbing | White | 0 | 1 | 1 | 2 | 1 | 1 | 3 | 6 | |
| | <i>Male</i> | 0 | 1 | 0 | 1 | 0 | 1 | | | |
| | <i>Female</i> | 0 | 0 | 1 | 1 | 1 | 0 | | | 3 |
| | African Amer. | 0 | 0 | 1 | 2 | 0 | 1 | 3 | | 4 |
| | <i>Male</i> | 0 | 0 | 1 | 1 | 0 | 1 | | | |
| | <i>Female</i> | 0 | 0 | 0 | 1 | 0 | 0 | | | |
| | Asian/Pac Is. | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | 1 |
| | <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 1 | | | |
| | Nat. American | 0 | 0 | 1 | 0 | 0 | 0 | 1 | | 1 |
| | <i>Male</i> | 0 | 0 | 1 | 0 | 0 | 0 | | | |
| | <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| TOTALS | | 5 | 4 | 20 | 23 | 7 | 17 | | 76 | |

Table 4-4 Homicide Methods / Sex / King County Medical Examiner / 2007

| METHOD | SEX | | TOTAL |
|--------------------------|-----------|-----------|-----------|
| | MALE | FEMALE | |
| Asphyxia / Strangulation | - | - | 0 |
| Blunt Force | 5 | 4 | 9 |
| Firearms | 46 | 9 | 55 |
| Homicidal Violence | - | - | 0 |
| Stabbing | 7 | 5 | 12 |
| Other / Unknown | - | - | 0 |
| Totals | 58 | 18 | 76 |
| Percent | 76% | 24% | 100% |

Table 4-5 Homicide Methods / Blood Alcohol Results / KCME / 2007

| METHOD | TESTED | | NOT TESTED | TOTAL |
|--------------------------|-----------|-----------|------------|-----------|
| | POSITIVE | NEGATIVE | | |
| Asphyxia / Strangulation | - | - | - | 0 |
| Blunt Force | 2 | 3 | 4 | 9 |
| Firearms | 17 | 34 | 4 | 55 |
| Homicidal Violence | - | - | - | 0 |
| Stabbing | 4 | 6 | 2 | 12 |
| Other / Unknown | - | - | - | 0 |
| Totals | 23 | 43 | 10 | 76 |
| Percent | 30% | 57% | 13% | 100% |

Manner: NATURAL

The Medical Examiner assumes jurisdiction over deaths that are classified as 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 2007, the King County Medical Examiner assumed jurisdiction over 863 deaths attributed to natural causes, representing 42% (863/2,072) of the cases investigated. The King County Medical Examiner certified 81% (695/863) of these deaths; attending physicians who had knowledge of the decedent's medical condition certified 19% (168/863). 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. That physician would then be contacted to certify the death. The King County Medical Examiner performed autopsies in 75% (521/695) of the deaths certified as natural, which included autopsies performed in all 13 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.

The data presented in this section are derived from the 863 natural deaths in which the King County Medical Examiner assumed jurisdiction. 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."

Table 5-1 Disease Processes Causing Natural Deaths / KCME / 2007

| NUMBER OF DEATHS | DISEASE DESCRIPTION |
|------------------|--|
| | CARDIOVASCULAR |
| 5 | Aortic Aneurysm |
| 9 | Aortic Dissection |
| 22 | Arteriosclerotic Cardiovascular Disease (ASCVD) |
| 4 | Bacterial Endocarditis |
| 9 | Cardiac dysrhythmia |
| 23 | Cardiomyopathy |
| 2 | Congenital Heart Disease |
| 1 | Congestive Heart Failure |
| 59 | Hypertensive ASCVD / Hypertensive Heart Disease |
| 2 | Myocarditis |
| 135 | Probable Arteriosclerotic Cardiovascular Disease |
| 6 | Valvular Heart Disease |
| 3 | Other |
| 487 | TOTAL CARDIOVASCULAR |
| | CENTRAL NERVOUS SYSTEM |
| 19 | Epilepsy (idiopathic & other non-traumatic etiologies) |
| 8 | Infarct |
| 5 | Meningitis |
| 16 | Spontaneous Intracerebral Hemorrhage |
| 3 | Spontaneous Rupture of Aneurysm |
| 4 | Other |
| 55 | TOTAL CENTRAL NERVOUS SYSTEM |
| | ENDOCRINE |
| 13 | Diabetic Ketoacidosis |
| 10 | Diabetes Mellitus |
| 1 | Pancreatitis |
| 0 | Other |
| 24 | TOTAL ENDOCRINE |
| | GASTROINTESTINAL |
| 2 | Bacterial Peritonitis |
| 10 | Gastrointestinal Hemorrhage |
| 1 | Obstruction |
| 9 | Perforating Ulcer |
| 4 | Other |
| 26 | TOTAL GASTROINTESTINAL |

Table 5-1 Disease Processes Causing Natural Deaths / KCME / 2007 (continued)

| NUMBER OF DEATHS | DISEASE DESCRIPTION |
|------------------|---|
| | HEPATIC |
| 10 | Cirrhosis |
| 1 | Fatty Liver |
| 9 | Hepatitis |
| 1 | Other |
| 21 | TOTAL HEPATIC |
| | MALIGNANCY |
| 3 | Breast |
| 2 | Colon |
| 19 | Lung |
| 5 | Pancreas |
| 4 | Prostate |
| 0 | Rectum |
| 21 | Other |
| 54 | TOTAL MALIGNANCY |
| | OTHER PROCESSES |
| 44 | Chronic Ethanolism (Alcoholism) |
| 5 | Chronic Renal Disease |
| 8 | HIV / AIDS |
| 3 | Infection |
| 0 | Labor / Delivery / Prematurity |
| 6 | Necrotizing fasciitis |
| 4 | No Anatomic or Toxicological Cause of Death |
| 15 | Sepsis |
| 20 | Other |
| 105 | TOTAL OTHER PROCESSES |
| | RESPIRATORY |
| 5 | Asthma |
| 20 | Chronic Obstructive Pulmonary Disease |
| 31 | Pneumonia |
| 14 | Pulmonary Thromboembolus |
| 8 | Other |
| 78 | TOTAL RESPIRATORY |

Table 5-1 Disease Processes Causing Natural Deaths / KCME / 2007 (continued)

| NUMBER OF DEATHS | DISEASE DESCRIPTION |
|------------------|--|
| | SUDDEN INFANT DEATH SYNDROME (SIDS) |
| 13 | SIDS |
| 376 | TOTAL Non-Cardiovascular Cause of Death |
| 487 | TOTAL Cardiovascular Cause of Death |
| 863 | Total NATURAL DEATHS under KCMEO Jurisdiction, 2007 |

Graph 5-1 Deaths due to Natural Causes / King County Medical Examiner / 2007

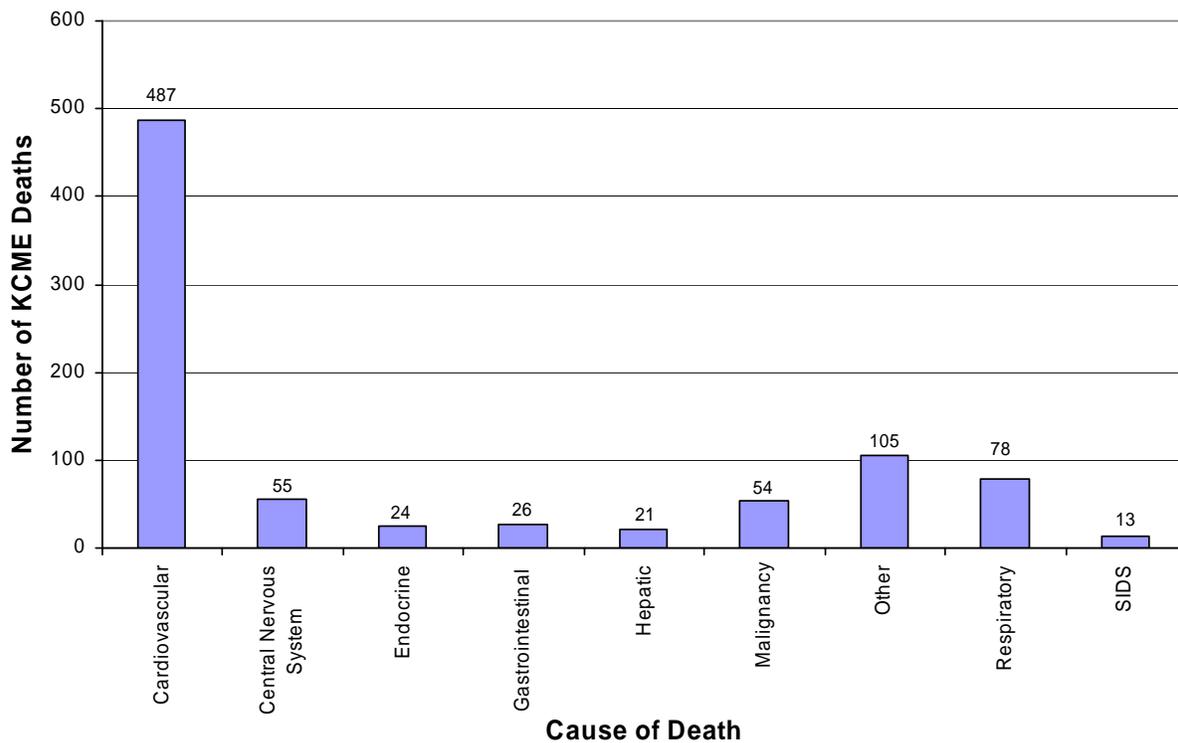
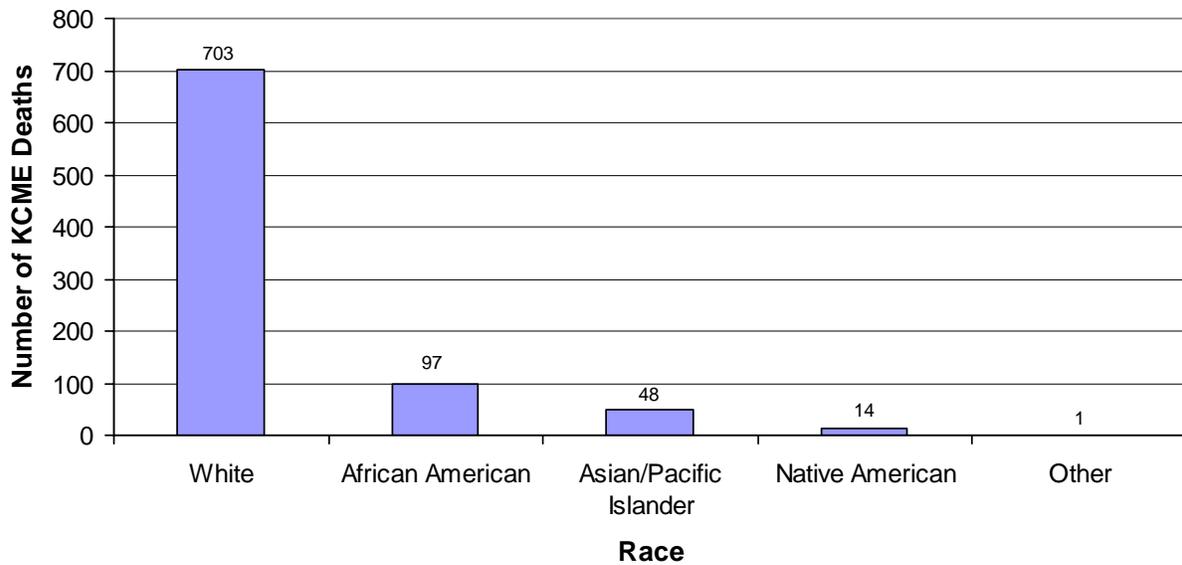


Table 5-2 Natural Deaths / Race / Sex / King County Medical Examiner / 2007

| DISEASE PROCESS / SEX | RACE | | | | | SUB TOTAL | TOTAL |
|--------------------------|------------|------------|------------------|--------------------|----------|--------------|------------|
| | WHITE | AF AMER | ASIAN/ PAC IS | NATIVE AMERICAN | OTHER | | |
| Cardiovascular | 402 | 50 | 27 | 8 | 0 | | 487 |
| <i>Male</i> | 279 | 37 | 15 | 4 | 0 | 335 | |
| <i>Female</i> | 123 | 13 | 12 | 4 | 0 | 152 | |
| Central Nervous | 37 | 11 | 5 | 2 | 0 | | 55 |
| <i>Male</i> | 25 | 7 | 2 | 1 | 0 | 35 | |
| <i>Female</i> | 12 | 4 | 3 | 1 | 0 | 20 | |
| Endocrine | 18 | 6 | 0 | 0 | 0 | | 24 |
| <i>Male</i> | 12 | 3 | 0 | 0 | 0 | 15 | |
| <i>Female</i> | 6 | 3 | 0 | 0 | 0 | 9 | |
| Gastrointestinal | 23 | 1 | 2 | 0 | 0 | | 26 |
| <i>Male</i> | 11 | 1 | 1 | 0 | 0 | 13 | |
| <i>Female</i> | 12 | 0 | 1 | 0 | 0 | 13 | |
| Hepatic | 18 | 2 | 0 | 1 | 0 | | 21 |
| <i>Male</i> | 12 | 2 | 0 | 1 | 0 | 15 | |
| <i>Female</i> | 6 | 0 | 0 | 0 | 0 | 6 | |
| Malignancy | 40 | 6 | 6 | 1 | 1 | | 54 |
| <i>Male</i> | 29 | 5 | 3 | 1 | 1 | 39 | |
| <i>Female</i> | 11 | 1 | 3 | 0 | 0 | 15 | |
| Other | 92 | 11 | 1 | 1 | 0 | | 105 |
| <i>Male</i> | 59 | 6 | 1 | 1 | 0 | 67 | |
| <i>Female</i> | 33 | 5 | 0 | 0 | 0 | 38 | |
| Respiratory | 66 | 7 | 5 | 0 | 0 | | 78 |
| <i>Male</i> | 50 | 5 | 3 | 0 | 0 | 58 | |
| <i>Female</i> | 16 | 2 | 2 | 0 | 0 | 20 | |
| SIDS | 7 | 3 | 2 | 1 | 0 | | 13 |
| <i>Male</i> | 3 | 1 | 1 | 0 | 0 | 5 | |
| <i>Female</i> | 4 | 2 | 1 | 1 | 0 | 8 | |
| Totals | 703 | 97 | 48 | 14 | 1 | | 863 |
| Percent | 81.5% | 11.2% | 5.6% | 1.6% | 0.1% | | 100% |

Graph 5-2 Natural Deaths / Race / King County Medical Examiner / 2007



Graph 5-3 Natural Deaths / Age Group / King County Medical Examiner / 2007

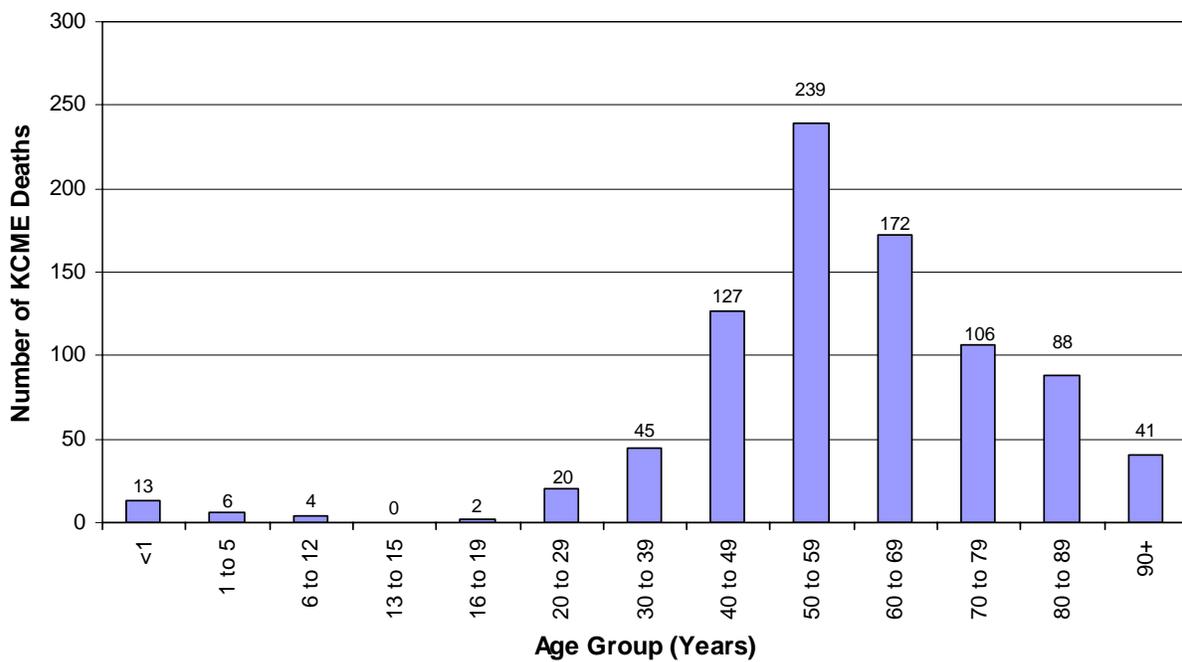


Table 5-3 Natural Deaths / Age / Sex / King County Medical Examiner / 2007

| DISEASE PROCESS/ SEX | 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 + | | |
| Cardiovascular | 0 | 0 | 1 | 0 | 0 | 6 | 15 | 60 | 130 | 110 | 73 | 63 | 29 | | 487 |
| <i>Male</i> | 0 | 0 | 1 | 0 | 0 | 5 | 12 | 44 | 110 | 75 | 48 | 34 | 6 | 335 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 16 | 20 | 35 | 25 | 29 | 23 | 152 | |
| Central Nervous | 0 | 1 | 1 | 0 | 1 | 6 | 9 | 9 | 7 | 7 | 7 | 7 | 0 | | 55 |
| <i>Male</i> | 0 | 0 | 1 | 0 | 1 | 3 | 8 | 5 | 4 | 7 | 5 | 1 | 0 | 35 | |
| <i>Female</i> | 0 | 1 | 0 | 0 | 0 | 3 | 1 | 4 | 3 | 0 | 2 | 6 | 0 | 20 | |
| Endocrine | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 6 | 8 | 3 | 2 | 1 | 1 | | 24 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 5 | 5 | 1 | 2 | 0 | 1 | 15 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 3 | 2 | 0 | 1 | 0 | 9 | |
| Gastrointestinal | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 13 | 4 | 2 | 1 | 0 | | 26 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 7 | 2 | 2 | 0 | 0 | 13 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 6 | 2 | 0 | 1 | 0 | 13 | |
| Hepatic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 14 | 5 | 0 | 0 | 0 | | 21 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 9 | 4 | 0 | 0 | 0 | 15 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 0 | 0 | 0 | 6 | |
| Malignancy | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 8 | 18 | 14 | 7 | 4 | 1 | | 54 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 6 | 12 | 9 | 5 | 4 | 1 | 39 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 5 | 2 | 0 | 0 | 15 | |
| Other | 0 | 3 | 2 | 0 | 0 | 3 | 13 | 27 | 29 | 13 | 5 | 4 | 6 | | 105 |
| <i>Male</i> | 0 | 3 | 0 | 0 | 0 | 1 | 10 | 21 | 17 | 8 | 5 | 1 | 1 | 67 | |
| <i>Female</i> | 0 | 0 | 2 | 0 | 0 | 2 | 3 | 6 | 12 | 5 | 0 | 3 | 5 | 38 | |
| Respiratory | 0 | 2 | 0 | 0 | 1 | 1 | 6 | 10 | 20 | 16 | 10 | 8 | 4 | | 78 |
| <i>Male</i> | 0 | 1 | 0 | 0 | 1 | 1 | 3 | 8 | 14 | 14 | 8 | 5 | 3 | 58 | |
| <i>Female</i> | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 2 | 6 | 2 | 2 | 3 | 1 | 20 | |
| SIDS | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 13 |
| <i>Male</i> | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | |
| <i>Female</i> | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | |
| Totals | 13 | 6 | 4 | 0 | 2 | 20 | 45 | 127 | 239 | 172 | 106 | 88 | 41 | | 863 |
| Percent | 1.5 | 0.7 | 0.5 | 0 | 0.2 | 2.3 | 5.2 | 14.7 | 27.7 | 19.9 | 12.3 | 10.2 | 4.8 | | 100% |

Table 5-4 Natural Deaths / Sex / King County Medical Examiner / 2007

| CIRCUMSTANCES | SEX | | TOTAL |
|------------------|------------|------------|------------|
| | MALE | FEMALE | |
| Cardiovascular | 335 | 152 | 487 |
| Central Nervous | 35 | 20 | 55 |
| Endocrine | 15 | 9 | 24 |
| Gastrointestinal | 13 | 13 | 26 |
| Hepatic | 15 | 6 | 21 |
| Malignancy | 39 | 15 | 54 |
| Other | 67 | 38 | 105 |
| Respiratory | 58 | 20 | 78 |
| SIDS | 5 | 8 | 13 |
| Totals | 582 | 281 | 863 |
| Percent | 67% | 33% | 100% |

Table 5-5 Natural Deaths / Blood Alcohol / King County Medical Examiner / 2007

| METHOD | TESTED | | NOT | TOTAL |
|------------------------|-----------|------------|------------|------------|
| | POSITIVE | NEGATIVE | TESTED | |
| Cardiovascular | 54 | 294 | 139 | 487 |
| Central Nervous System | 3 | 29 | 23 | 55 |
| Endocrine | 3 | 12 | 9 | 24 |
| Gastrointestinal | 5 | 16 | 5 | 26 |
| Hepatic | 3 | 5 | 13 | 21 |
| Malignancy | 3 | 15 | 36 | 54 |
| Other Processes | 14 | 48 | 43 | 105 |
| Respiratory | 5 | 42 | 31 | 78 |
| SIDS | 0 | 12 | 1 | 13 |
| Totals | 90 | 473 | 300 | 863 |
| Percent | 10% | 55% | 35% | 100% |

Manner: SUICIDE

Suicides are those 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 2007 there were 223 suicides, accounting for 11% (223/2,072) of the deaths that the King County Medical Examiner's Office investigated.

Firearms were responsible for forty-two percent (42%, 93/223) of the 2007 suicide deaths. The number of gunshot suicides (93) in 2007 is less than in both 2006 and 2005 when there were 98 and 96, respectively. Hanging accounted for 19% (43/223) of suicidal deaths, while jumping from a height accounted for 10% (22/223). Drugs and poisons accounted for 16% (36/223) of all suicides, while carbon monoxide caused death in 8% (17/223) of the cases. More information regarding drug caused deaths is presented in the section "Deaths Due to Drugs & Poisons" beginning on page 83.

Blood alcohol tests were performed in 96% (215/223) of suicidal deaths and were positive in 30% (65/215) of cases tested.

Suicides in the age group 60 years and older represented 19% (43/223) of all suicides in 2007.

Firearms were the primary method of committing suicide for all ages except 19 years and younger and the 30 – 39 age group in 2007. In the 19 years and younger age group, hanging was the primary method of committing suicide (60%, 3/5). In the 30 – 39 group, drugs/poisons and hanging were the predominate methods with each accounting for 27% (9/33) of the deaths.

In 2007, there were four deaths due to drugs and/or poisons by adults 60 years of age and over. In 2007, there were no suicides attributed to drugs and/or poisons among youths 19 years and younger. This compares to 2006 when there also were none.

In 2007, there were five suicides among persons 19 years and younger (2% of all suicides, 5/223), which is less than 2006 when there were eleven suicides in this age group (11/233, 5%). Hanging was the primary method of death (60%, 3/5) for suicide among youth 19 years and younger.

Graph 6-1 Suicide Injury Methods / King County Medical Examiner / 2007

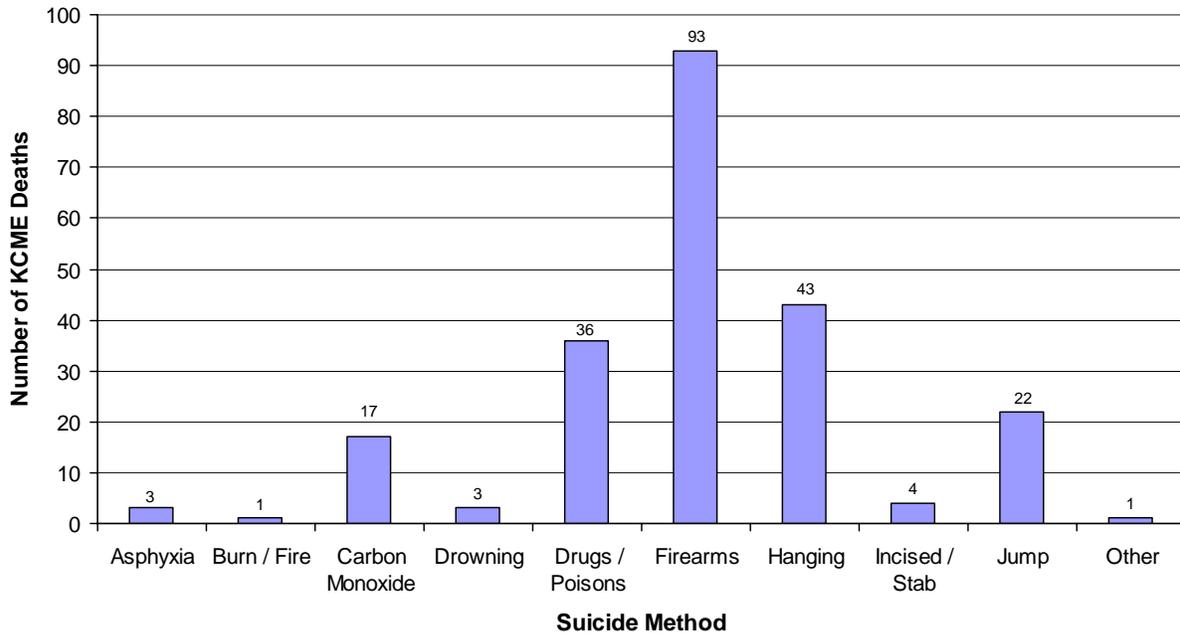
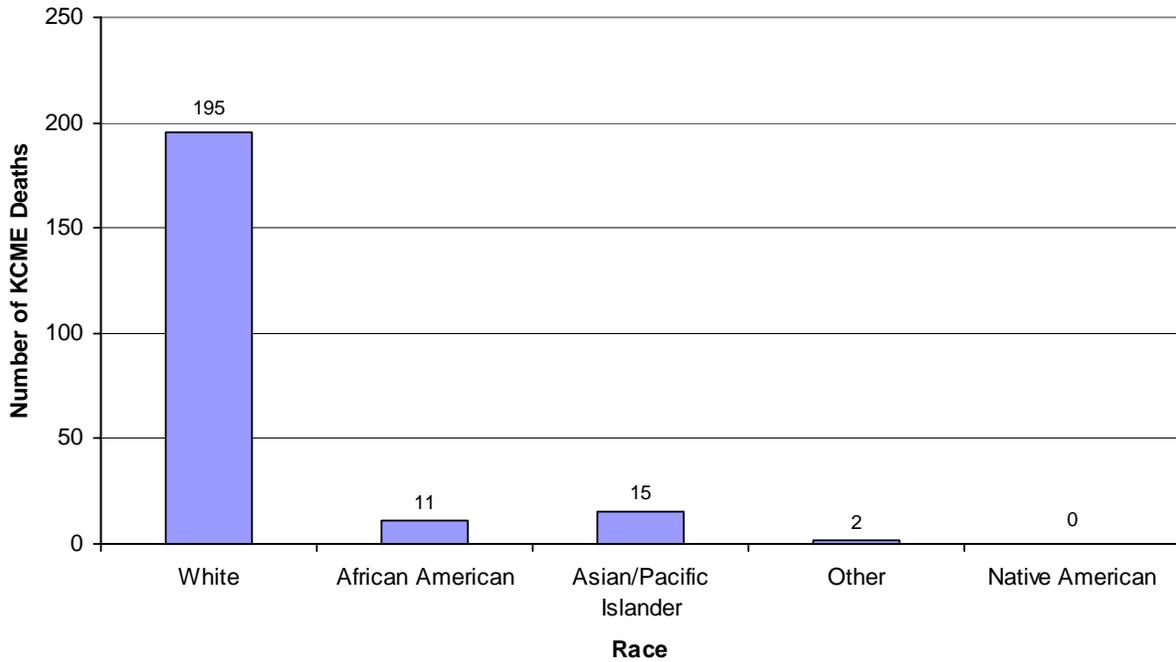


Table 6-1 Suicide Injury Methods / Race / Sex / King County Medical Examiner / 2007

| CIRCUMSTANCES / SEX | RACE | | | | | SUB TOTAL | TOTAL |
|-------------------------|------------|------------|------------------|--------------------|-----------|--------------|------------|
| | WHITE | AF AMER | ASIAN/ PAC IS | NATIVE AMERICAN | OTHE R | | |
| Asphyxia | 3 | 0 | 0 | 0 | 0 | | 3 |
| <i>Male</i> | 3 | 0 | 0 | 0 | 0 | 3 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Burns/ Fire | 1 | 0 | 0 | 0 | 0 | | 1 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 1 | 0 | 0 | 0 | 0 | 1 | |
| Carbon Monoxide | 13 | 2 | 2 | 0 | 0 | | 17 |
| <i>Male</i> | 10 | 2 | 0 | 0 | 0 | 12 | |
| <i>Female</i> | 3 | 0 | 2 | 0 | 0 | 5 | |
| Drowning | 3 | 0 | 0 | 0 | 0 | | 3 |
| <i>Male</i> | 3 | 0 | 0 | 0 | 0 | 3 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Drugs / Poisons | 29 | 3 | 3 | 1 | 0 | | 36 |
| <i>Male</i> | 12 | 2 | 2 | 1 | 0 | 17 | |
| <i>Female</i> | 17 | 1 | 1 | 0 | 0 | 19 | |
| Firearms | 84 | 4 | 4 | 1 | 0 | | 93 |
| <i>Male</i> | 75 | 4 | 4 | 1 | 0 | 84 | |
| <i>Female</i> | 9 | 0 | 0 | 0 | 0 | 9 | |
| Hanging | 38 | 1 | 4 | 0 | 0 | | 43 |
| <i>Male</i> | 28 | 1 | 3 | 0 | 0 | 32 | |
| <i>Female</i> | 10 | 0 | 1 | 0 | 0 | 11 | |
| Incised / Stab Wound(s) | 3 | 0 | 1 | 0 | 0 | | 4 |
| <i>Male</i> | 2 | 0 | 1 | 0 | 0 | 3 | |
| <i>Female</i> | 1 | 0 | 0 | 0 | 0 | 1 | |
| Jumping | 20 | 1 | 1 | 0 | 0 | | 22 |
| <i>Male</i> | 18 | 1 | 1 | 0 | 0 | 20 | |
| <i>Female</i> | 2 | 0 | 0 | 0 | 0 | 2 | |
| Other | 1 | 0 | 0 | 0 | 0 | | 1 |
| <i>Male</i> | 1 | 0 | 0 | 0 | 0 | 1 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Totals | 195 | 11 | 15 | 2 | 0 | | 223 |
| Percent | 87% | 5% | 7% | 1% | 0% | | 100% |

Graph 6-2 Suicide Deaths / Race / King County Medical Examiner / 2007



Graph 6-3 Suicide Deaths / Age Group / King County Medical Examiner / 2007

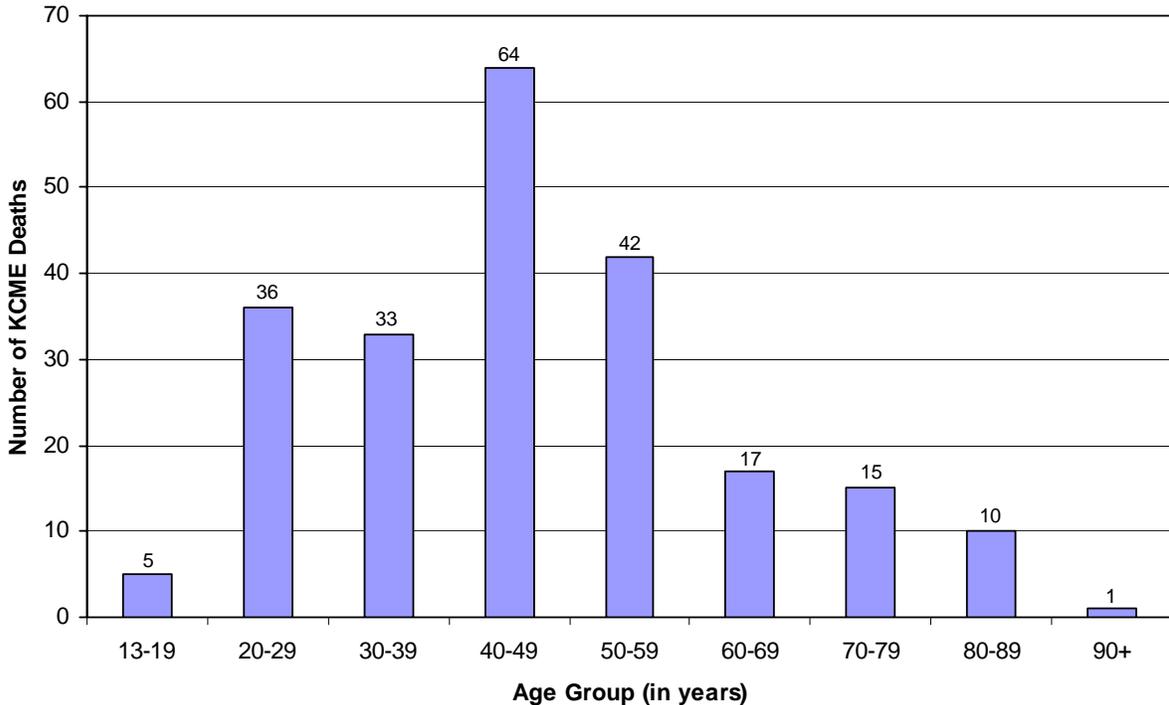


Table 6-2 Suicide Injury Methods / Age / Sex / King County Medical Examiner / 2007

| INJURY METHOD/ SEX | AGE GROUP (YEARS) | | | | | | | | | SUB TOTAL | TOTAL |
|----------------------------|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------|----------|--------------|------------|
| | 13 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 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | | 3 |
| <i>Male</i> | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 3 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Burns/ Fire | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 1 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| Carbon Monoxide | 0 | 2 | 3 | 6 | 6 | 0 | 0 | 0 | 0 | | 17 |
| <i>Male</i> | 0 | 1 | 2 | 4 | 5 | 0 | 0 | 0 | 0 | 12 | |
| <i>Female</i> | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 5 | |
| Drowning | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | | 3 |
| <i>Male</i> | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Drugs / Poisons | 0 | 2 | 9 | 14 | 7 | 1 | 1 | 2 | 0 | | 36 |
| <i>Male</i> | 0 | 1 | 3 | 8 | 5 | 0 | 0 | 0 | 0 | 17 | |
| <i>Female</i> | 0 | 1 | 6 | 6 | 2 | 1 | 1 | 2 | 0 | 19 | |
| Firearms | 1 | 18 | 8 | 18 | 17 | 11 | 13 | 7 | 0 | | 93 |
| <i>Male</i> | 0 | 17 | 8 | 15 | 16 | 9 | 13 | 6 | 0 | 84 | |
| <i>Female</i> | 1 | 1 | 0 | 3 | 1 | 2 | 0 | 1 | 0 | 9 | |
| Hanging | 3 | 6 | 9 | 16 | 6 | 3 | 0 | 0 | 0 | | 43 |
| <i>Male</i> | 3 | 6 | 8 | 10 | 3 | 2 | 0 | 0 | 0 | 32 | |
| <i>Female</i> | 0 | 0 | 1 | 6 | 3 | 1 | 0 | 0 | 0 | 11 | |
| Incised / Stab Wound(s) | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | | 4 |
| <i>Male</i> | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | |
| <i>Female</i> | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| Jumping | 1 | 6 | 2 | 5 | 4 | 2 | 1 | 1 | 0 | | 22 |
| <i>Male</i> | 1 | 5 | 2 | 5 | 3 | 2 | 1 | 1 | 0 | 20 | |
| <i>Female</i> | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | |
| Other | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | | 1 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Totals | 5 | 36 | 33 | 64 | 42 | 17 | 15 | 10 | 1 | | 223 |
| Percent | 2% | 16% | 14% | 29% | 19% | 8% | 7% | 4.6% | 0.4% | | 100% |

Table 6-3 Suicide Injury Methods / Sex / King County Medical Examiner / 2007

| INJURY METHOD | SEX | | TOTAL |
|-------------------------|------------|-----------|------------|
| | MALE | FEMALE | |
| Asphyxia | 3 | 0 | 3 |
| Burns/ Fire | 0 | 1 | 1 |
| Carbon Monoxide | 12 | 5 | 17 |
| Drowning | 3 | 0 | 3 |
| Drugs / Poisons | 17 | 19 | 36 |
| Firearms | 84 | 9 | 93 |
| Hanging | 32 | 11 | 43 |
| Incised / Stab Wound(s) | 3 | 1 | 4 |
| Jumping | 20 | 2 | 22 |
| Other | 1 | 0 | 1 |
| Totals | 175 | 48 | 223 |
| Percent | 78% | 22% | 100% |

Table 6-4 Suicide Injury Methods / Marital Status / Sex / KCME / 2007

| CIRCUMSTANCES / SEX | MARITAL STATUS | | | | | Sub Total | Total |
|-------------------------|----------------|-----------|-----------|----------|----------|-----------|------------|
| | Single | Married | Divorced | Widowed | Unknown | | |
| Asphyxia | 2 | 0 | 0 | 1 | 0 | | 3 |
| <i>Male</i> | 2 | 0 | 0 | 1 | 0 | 3 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Burns/ Fire | 0 | 1 | 0 | 0 | 0 | | 1 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 1 | 0 | 0 | 0 | 1 | |
| Carbon Monoxide | 8 | 5 | 4 | 0 | 0 | | 17 |
| <i>Male</i> | 6 | 3 | 3 | 0 | 0 | 12 | |
| <i>Female</i> | 2 | 2 | 1 | 0 | 0 | 5 | |
| Drowning | 3 | 0 | 0 | 0 | 0 | | 3 |
| <i>Male</i> | 3 | 0 | 0 | 0 | 0 | 3 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Drugs / Poisons | 14 | 14 | 8 | 0 | 0 | | 36 |
| <i>Male</i> | 8 | 3 | 6 | 0 | 0 | 17 | |
| <i>Female</i> | 6 | 11 | 2 | 0 | 0 | 19 | |
| Firearms | 31 | 33 | 22 | 7 | 0 | | 93 |
| <i>Male</i> | 26 | 33 | 18 | 7 | 0 | 84 | |
| <i>Female</i> | 5 | 0 | 4 | 0 | 0 | 9 | |
| Hanging | 17 | 11 | 15 | 0 | 0 | | 43 |
| <i>Male</i> | 15 | 9 | 8 | 0 | 0 | 32 | |
| <i>Female</i> | 2 | 2 | 7 | 0 | 0 | 11 | |
| Incised / Stab Wound(s) | 3 | 1 | 0 | 0 | 0 | | 4 |
| <i>Male</i> | 2 | 1 | 0 | 0 | 0 | 3 | |
| <i>Female</i> | 1 | 0 | 0 | 0 | 0 | 1 | |
| Jumping | 14 | 3 | 3 | 0 | 2 | | 22 |
| <i>Male</i> | 13 | 2 | 3 | 0 | 2 | 20 | |
| <i>Female</i> | 1 | 1 | 0 | 0 | 0 | 2 | |
| Other | 0 | 0 | 0 | 1 | 0 | | 1 |
| <i>Male</i> | 0 | 0 | 0 | 1 | 0 | 1 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Totals | 92 | 68 | 52 | 8 | 3 | | 223 |
| Percent | 41% | 31% | 23% | 4% | 1% | | 100% |

Table 6-5 Suicide Injury Methods / Blood Alcohol / KCME / 2007

| METHOD | TESTED | | NOT TESTED | TOTAL |
|-------------------------|-----------|------------|------------|------------|
| | POSITIVE | NEGATIVE | | |
| Asphyxia | 1 | 2 | 0 | 3 |
| Burns/ Fire | 0 | 1 | 0 | 1 |
| Carbon Monoxide | 6 | 11 | 0 | 17 |
| Drowning | 1 | 2 | 0 | 3 |
| Drugs / Poisons | 6 | 29 | 1 | 36 |
| Firearms | 32 | 59 | 2 | 93 |
| Hanging | 14 | 26 | 3 | 43 |
| Incised / Stab Wound(s) | 2 | 1 | 1 | 4 |
| Jumping | 3 | 19 | 0 | 22 |
| Other | 0 | 0 | 1 | 1 |
| Totals | 65 | 150 | 8 | 223 |
| Percent | 29% | 67% | 4% | 100% |

Manner: TRAFFIC

During the calendar year 2007, the Medical Examiner's Office participated in the investigation of 170 traffic fatalities. There were 98 traffic deaths where the collision occurred in King County, compared to 144 in 2006, 152 in 2005, 127 in 2004, 112 in 2003 and 121 in 2002. In 2007, 42% (72/170) 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 death occurred in King County, it came under the jurisdiction of the King County Medical Examiner. The 2007 rate is higher than in previous years: 32% (67/211) in 2006, 33% (74/226) in 2005, 34% (65/192) in 2004, 37% (67/179) in 2003 and 40% (82/203) in 2002. Although these deaths are classified "accident" for death certification purposes, the more accurate term is "motor vehicle collision".

In 2007, 41% (70/170) of the traffic fatalities were motor vehicle drivers. Teenage drivers (16-19 years of age) were 9% (6/70) of the driver deaths in 2007 compared to 17% (16/92) in 2006, 5% (5/99) in 2005, 4% (3/78) in 2004, 15% (11/76) in 2003 and 9% (9/100) in 2002. By age, 24% percent of vehicle driver deaths (17/70) were people between the ages of 20 and 29. Seventeen percent of driver deaths (12/70) were adults between the ages of 30 and 39. Ten percent (7/70) were adults between the ages of 40 and 49. Male drivers represented 79% (55/70) of driver deaths as compared to 21% for female drivers (15/70).

Of the 170 traffic fatalities in 2007, 30 were motor vehicle passengers, representing 18% of the total (30/170). In 2007, teenagers (13-19 years old) accounted for 8 motor vehicle passenger deaths. There was one passenger death of an infant (less than one year of age), no deaths of children 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 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 metabolize¹. Therefore, blood alcohol figures presented in this report are not a total description of the role of alcohol in traffic collisions. In 30% (21/70) of drivers tested, blood ethanol was present. In 14 vehicle driver deaths, no alcohol determination was performed. Passenger fatalities showed the presence of alcohol in 23% (7/30) of victims tested.

¹See "Explanation of Data" for criteria for blood alcohol testing, page 6.

Of cases in which restraint status was known, 41% (26/63) of drivers in vehicle deaths were not restrained. This is higher than in the previous 5 years, except for 2002: 35% (29/84) in 2006, 37% (32/87) in 2005, 37% (25/68) in 2004, 37% (18/49) in 2003 and 43% (30/69) in 2002. Of the vehicle drivers who died at the scene of the collision and who tested positive for blood alcohol, 70% (7/10) were unrestrained.

Motorcycle riders accounted for 17% (28/170) of traffic fatalities. In 2007, there were 26 motorcycle driver fatalities and two motorcycle passenger fatalities. All 26 of the motorcycle driver deaths were male. Of the 28 motorcycle fatalities, 93% (26/28) of the motorcyclists were wearing a helmet; in one case, the motorcycle driver was not wearing a helmet, and in one case, the use of a helmet was unknown. Twenty-five of the motorcyclist fatalities were tested for the presence of blood alcohol. Ten, or 40% (10/25), had a detectable amount of alcohol at the time of autopsy.

Pedestrians constituted 18% (31/170) of traffic fatalities. The majority of pedestrian deaths, 68% (21/31), were male. Of the pedestrian fatalities that were tested, 25% (6/24) had detectable amounts of alcohol present in their blood at the time of death.

There were seven bicyclist deaths in 2007. Two riders were wearing a helmet, four riders were not wearing helmets, and helmet use by the other one bicyclist is not known.

Graph 7-1 Traffic Fatality Circumstances / King County Medical Examiner / 2007

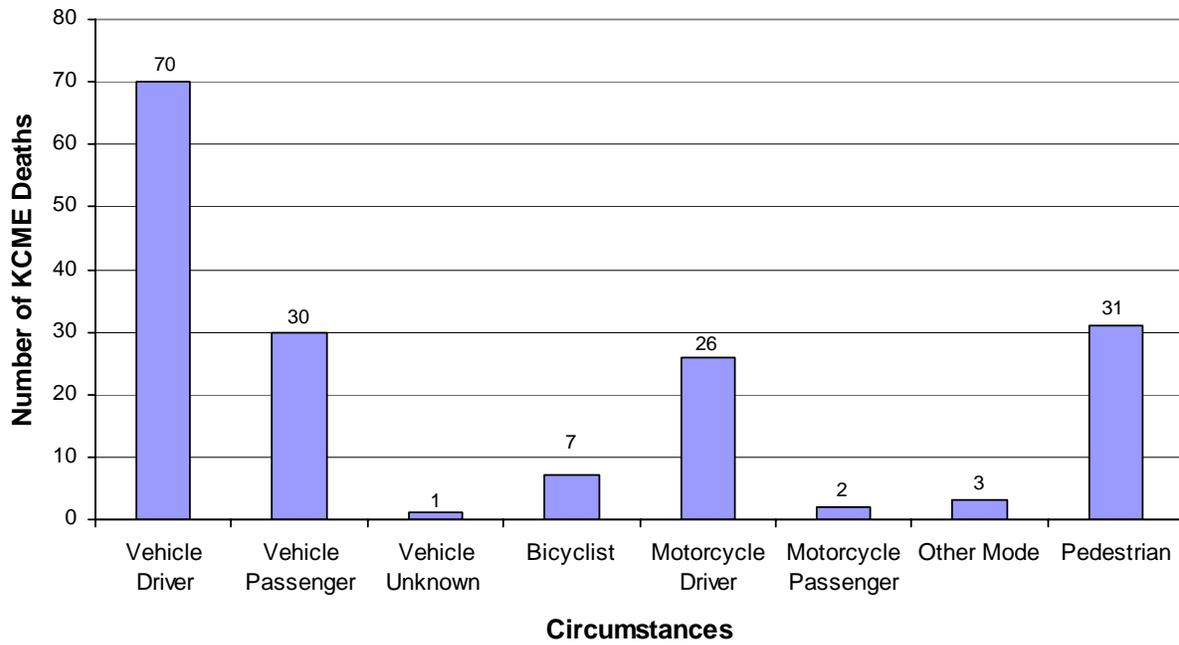
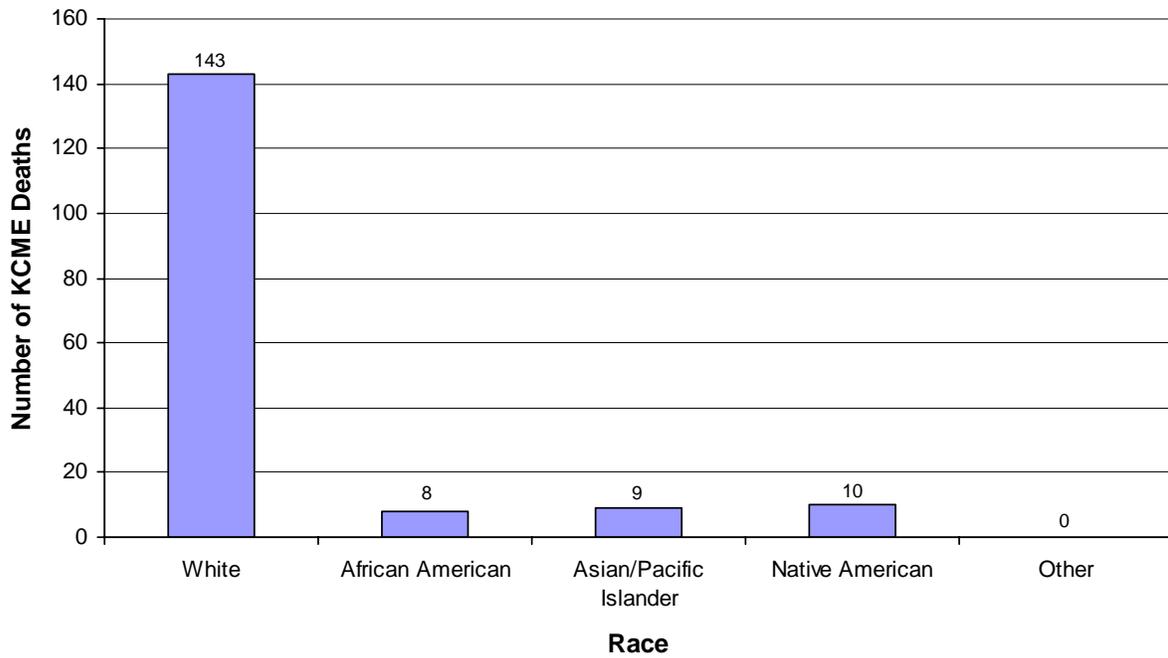


Table 7-1 Traffic Fatality Circumstances / Race / Sex / KCME / 2007

| CIRCUMSTANCES / SEX | RACE | | | | | SUB TOTAL | TOTAL |
|----------------------|------------|------------|------------------|--------------------|----------|--------------|------------|
| | WHITE | AF AMER | ASIAN/ PAC IS | NATIVE AMERICAN | OTHER | | |
| Vehicle Driver | 59 | 3 | 3 | 5 | 0 | | 70 |
| <i>Male</i> | 46 | 3 | 2 | 4 | 0 | 55 | |
| <i>Female</i> | 13 | 0 | 1 | 1 | 0 | 15 | |
| Vehicle Passenger | 21 | 2 | 3 | 4 | 0 | | 30 |
| <i>Male</i> | 8 | 0 | 2 | 2 | 0 | 12 | |
| <i>Female</i> | 13 | 2 | 1 | 2 | 0 | 18 | |
| Vehicle Unknown | 1 | 0 | 0 | 0 | 0 | | 1 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 1 | 0 | 0 | 0 | 0 | 1 | |
| Bicycle | 5 | 1 | 1 | 0 | 0 | | 7 |
| <i>Male</i> | 3 | 1 | 1 | 0 | 0 | 5 | |
| <i>Female</i> | 2 | 0 | 0 | 0 | 0 | 2 | |
| Motorcycle Driver | 24 | 2 | 0 | 0 | 0 | | 26 |
| <i>Male</i> | 24 | 2 | 0 | 0 | 0 | 26 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Motorcycle Passenger | 2 | 0 | 0 | 0 | 0 | | 2 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 2 | 0 | 0 | 0 | 0 | 2 | |
| Other Mode | 3 | 0 | 0 | 0 | 0 | | 3 |
| <i>Male</i> | 3 | 0 | 0 | 0 | 0 | 3 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| Pedestrian | 28 | 0 | 2 | 1 | 0 | | 31 |
| <i>Male</i> | 19 | 0 | 1 | 1 | 0 | 21 | |
| <i>Female</i> | 9 | 0 | 1 | 0 | 0 | 10 | |
| Totals | 143 | 8 | 9 | 10 | 0 | | 170 |
| Percent | 84.1% | 4.7% | 5.3% | 5.9% | 0% | | 100% |

Graph 7-2 Traffic Fatalities / Race / King County Medical Examiner / 2007



Graph 7-3 Traffic Fatalities / Age / King County Medical Examiner / 2007

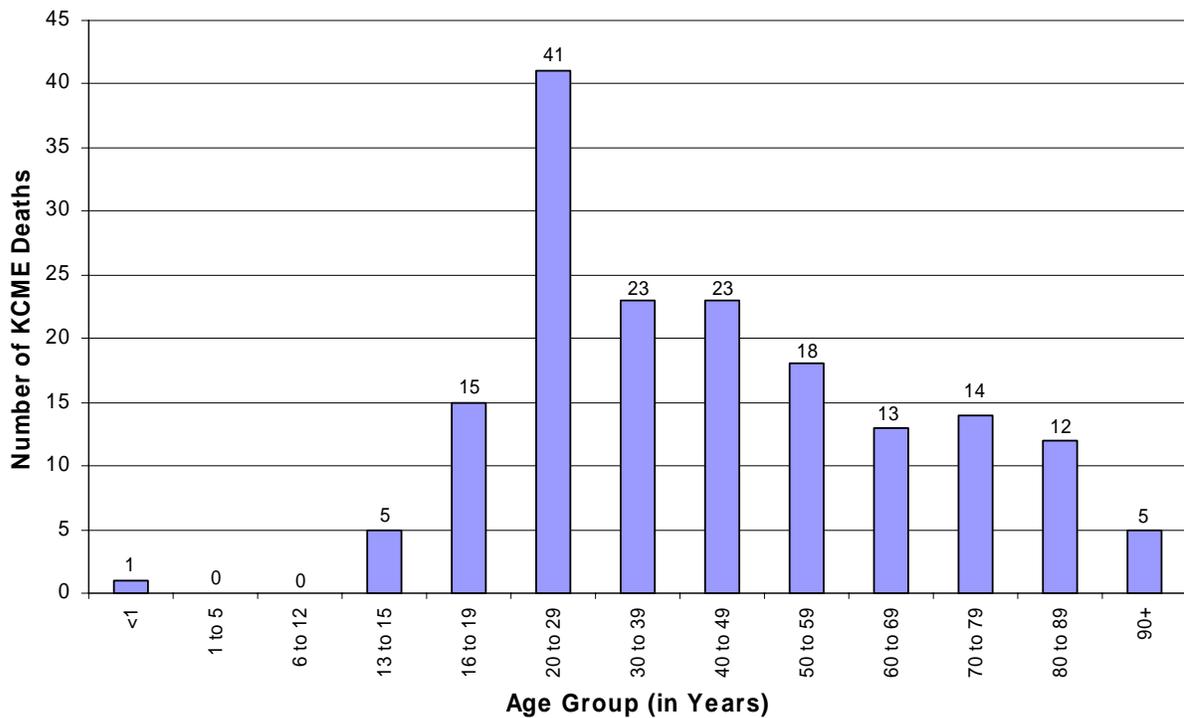


Table 7-2 Traffic Fatality Circumstances / Age / Sex / KCME / 2007

| Circumstances / Sex | 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 + | | |
| Vehicle Driver | 0 | 0 | 0 | 0 | 6 | 17 | 12 | 7 | 11 | 3 | 5 | 6 | 3 | | 70 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 6 | 16 | 9 | 4 | 9 | 2 | 3 | 4 | 2 | 55 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 15 | |
| Vehicle Passenger | 1 | 0 | 0 | 3 | 5 | 7 | 4 | 2 | 0 | 3 | 2 | 2 | 1 | | 30 |
| <i>Male</i> | 0 | 0 | 0 | 2 | 1 | 3 | 4 | 0 | 0 | 0 | 1 | 0 | 1 | 12 | |
| <i>Female</i> | 1 | 0 | 0 | 1 | 4 | 4 | 0 | 2 | 0 | 3 | 1 | 2 | 0 | 18 | |
| Vehicle Unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | | 1 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| Bicyclist | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | | 7 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 5 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| Motorcycle Driver | 0 | 0 | 0 | 0 | 0 | 10 | 4 | 6 | 4 | 1 | 1 | 0 | 0 | | 26 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 10 | 4 | 6 | 4 | 1 | 1 | 0 | 0 | 26 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Motorcycle Passenger | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | | 2 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | |
| Other Mode | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | | 3 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 3 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Pedestrian | 0 | 0 | 0 | 2 | 1 | 4 | 3 | 4 | 3 | 5 | 5 | 4 | 0 | | 31 |
| <i>Male</i> | 0 | 0 | 0 | 2 | 1 | 3 | 3 | 3 | 2 | 3 | 1 | 3 | 0 | 21 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 4 | 1 | 0 | 10 | |
| Totals | 1 | 0 | 0 | 5 | 15 | 41 | 23 | 23 | 18 | 13 | 14 | 12 | 5 | | 170 |
| Percent | 0.6 | 0 | 0 | 2.9 | 8.9 | 24.1 | 13.5 | 13.5 | 10.6 | 7.7 | 8.2 | 7.1 | 2.9 | | 100% |

Table 7-3 Traffic Fatality Circumstances / Sex / King County Medical Examiner / 2007

| CIRCUMSTANCES | SEX | | TOTAL |
|----------------------|------------|-----------|------------|
| | MALE | FEMALE | |
| Vehicle Driver | 55 | 15 | 70 |
| Vehicle Passenger | 12 | 18 | 30 |
| Vehicle Unknown | 0 | 1 | 1 |
| Bicyclist | 5 | 2 | 7 |
| Motorcycle Driver | 26 | 0 | 26 |
| Motorcycle Passenger | 0 | 2 | 2 |
| Other Mode | 3 | 0 | 3 |
| Pedestrian | 21 | 10 | 31 |
| Totals | 122 | 48 | 170 |
| Percent | 72% | 28% | 100% |

Table 7-4 Traffic Fatality Circumstances / Use of Restraint / Helmet / KCME / 2007²

| CIRCUMSTANCES | Used Safety Device | No Safety Device Used | Unknown | TOTAL |
|----------------------|--------------------|-----------------------|-----------|------------|
| | | | | |
| Vehicle Passenger | 14 | 13 | 3 | 30 |
| Vehicle Unknown | 0 | 0 | 1 | 1 |
| Bicyclist | 2 | 4 | 1 | 7 |
| Motorcycle Driver | 24 | 1 | 1 | 26 |
| Motorcycle Passenger | 2 | 0 | 0 | 2 |
| Other Mode | 0 | 2 | 1 | 3 |
| Totals | 79 | 46 | 14 | 139 |
| Percent | 57% | 33% | 10% | 100% |

²Does not include pedestrian deaths.

Table 7-5 Traffic Fatality Circumstances / Blood Alcohol / KCME / 2007

| CIRCUMSTANCES | TESTED | | NOT TESTED | TOTAL |
|----------------------|-----------|-----------|------------|------------|
| | POSITIVE | NEGATIVE | | |
| Vehicle Driver | 21 | 35 | 14 | 70 |
| Vehicle Passenger | 7 | 19 | 4 | 30 |
| Vehicle Unknown | 0 | 1 | 0 | 1 |
| Bicyclist | 0 | 6 | 1 | 7 |
| Motorcycle Driver | 9 | 14 | 3 | 26 |
| Motorcycle Passenger | 1 | 1 | 0 | 2 |
| Other Mode | 1 | 1 | 1 | 3 |
| Pedestrian | 6 | 18 | 7 | 31 |
| Totals | 45 | 95 | 30 | 170 |
| Percent | 26% | 56% | 18% | 100% |

Table 7-6 Blood Alcohol Levels of Traffic Fatalities who died AT THE SCENE of the Collision / King County Medical Examiner / 2007

| CIRCUMSTANCES | BLOOD ALCOHOL LEVEL (G%) | | | | | TOTAL |
|----------------------|--------------------------|----------|----------|----------|----------|-----------|
| | NONE | .01-.09 | .10-.19 | .20-.29 | .30+ | |
| Vehicle Driver | 9 | 2 | 2 | 6 | 1 | 20 |
| Vehicle Passenger | 8 | 3 | 2 | 1 | 0 | 14 |
| Vehicle Unknown | 0 | 0 | 0 | 0 | 0 | 0 |
| Bicyclist | 1 | 0 | 0 | 0 | 0 | 1 |
| Motorcycle Driver | 6 | 0 | 0 | 1 | 0 | 7 |
| Motorcycle Passenger | 1 | 1 | 0 | 0 | 0 | 2 |
| Other Mode | 0 | 0 | 0 | 0 | 0 | 0 |
| Pedestrian | 7 | 1 | 0 | 0 | 0 | 8 |
| Totals | 32 | 7 | 4 | 8 | 1 | 52 |
| Percent | 62% | 13% | 8% | 15% | 2% | 100% |

Graph 7-4 Blood Alcohol Levels of Traffic Fatalities who Died AT THE SCENE / King County Medical Examiner / 2007

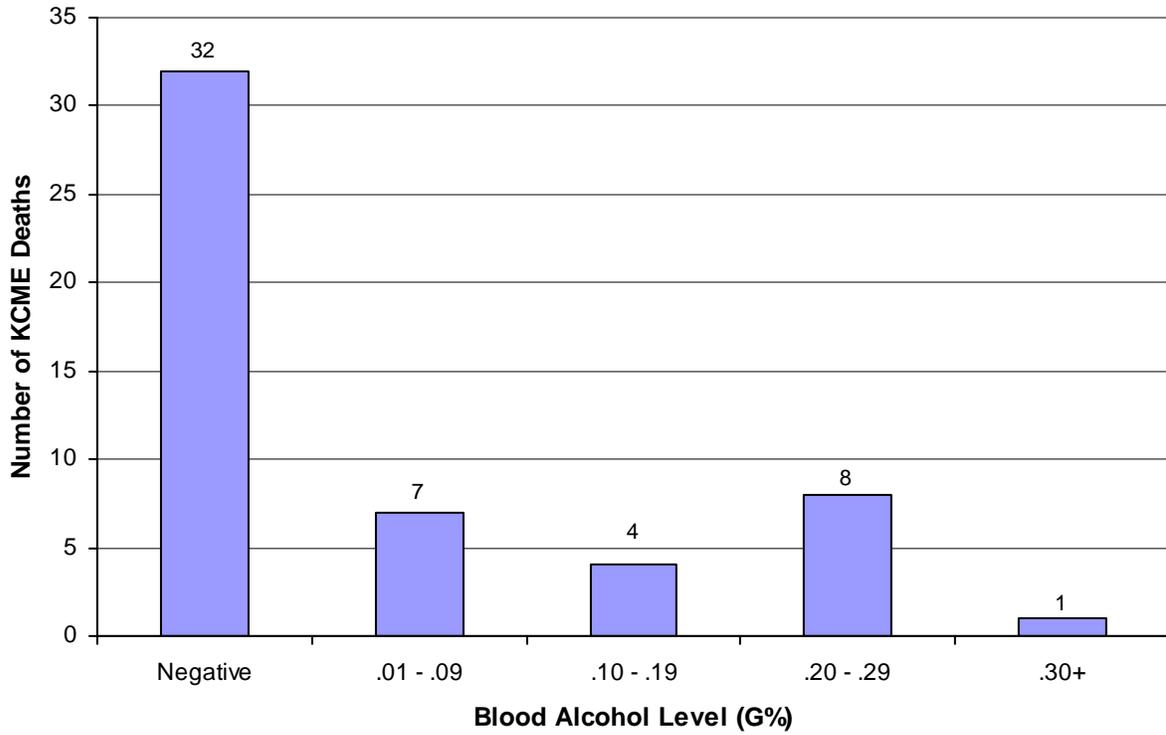
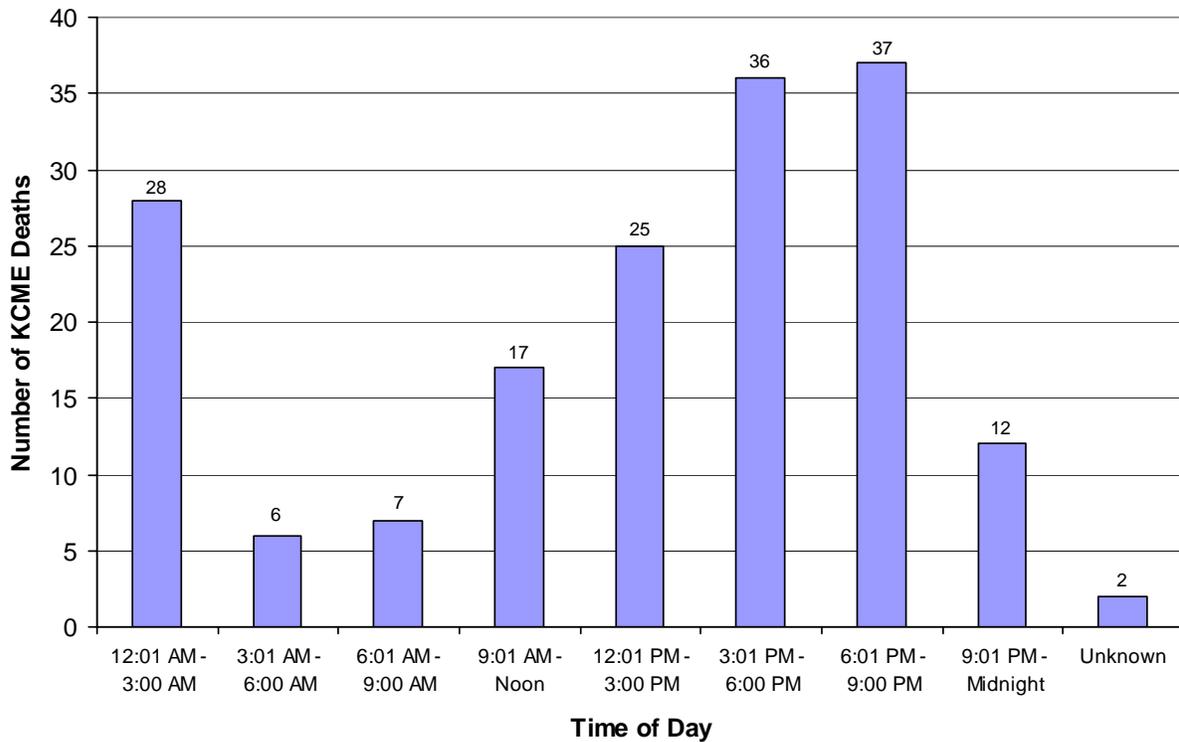


Table 7-7 Time of Fatal Traffic Collision / King County Medical Examiner / 2007

| TIME OF DAY | TOTAL | PERCENT |
|--------------------|------------|-------------|
| 12:01 AM - 3:00 AM | 28 | 16.5% |
| 3:01 AM - 6:00 AM | 6 | 3.5% |
| 6:01 AM - 9:00 AM | 7 | 4.1% |
| 9:01 AM - Noon | 17 | 10.0% |
| 12:01 PM - 3:00 PM | 25 | 14.7% |
| 3:01 PM - 6:00 PM | 36 | 21.2% |
| 6:01 PM - 9:00 PM | 37 | 21.7% |
| 9:01 PM -Midnight | 12 | 7.1% |
| Unknown | 2 | 1.2% |
| TOTALS | 170 | 100% |

Graph 7-5 Time of Fatal Traffic Collision / King County Medical Examiner / 2007



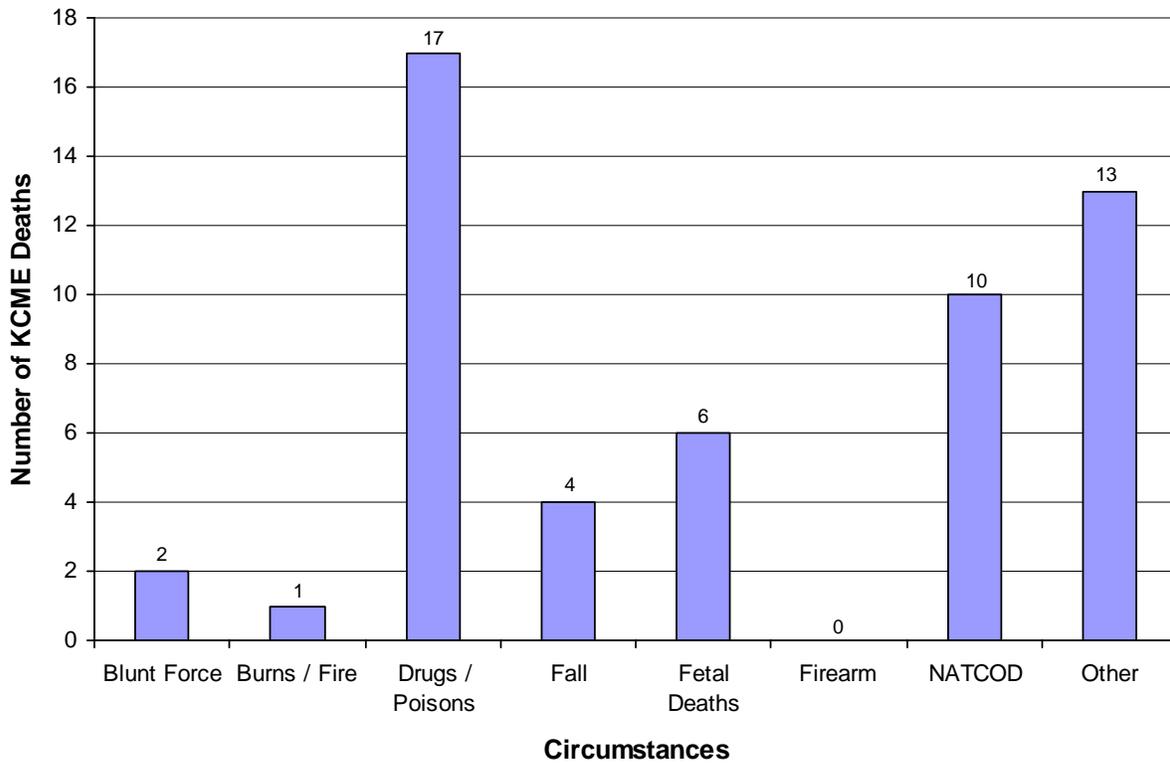
Manner: UNDETERMINED

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 existed 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 53 deaths with manner undetermined, accounting for three percent (53/2,072) of the deaths investigated for the calendar year 2007. Drugs and poisons caused 17 or 32%, of these 53 deaths of undetermined manner. For a more detailed review of drug-caused deaths in 2007, see the discussion in the section on Drugs and Poisons on pages 83 and 84.

The 53 deaths that were classified as Undetermined for 2007 include six 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. The Medical Examiner assumed jurisdiction over six fetal deaths in 2007, including one that was related to maternal methamphetamine use and one that was related to maternal cocaine use.

Graph 8-1 Undetermined Manner of Death¹ / King County Medical Examiner / 2007



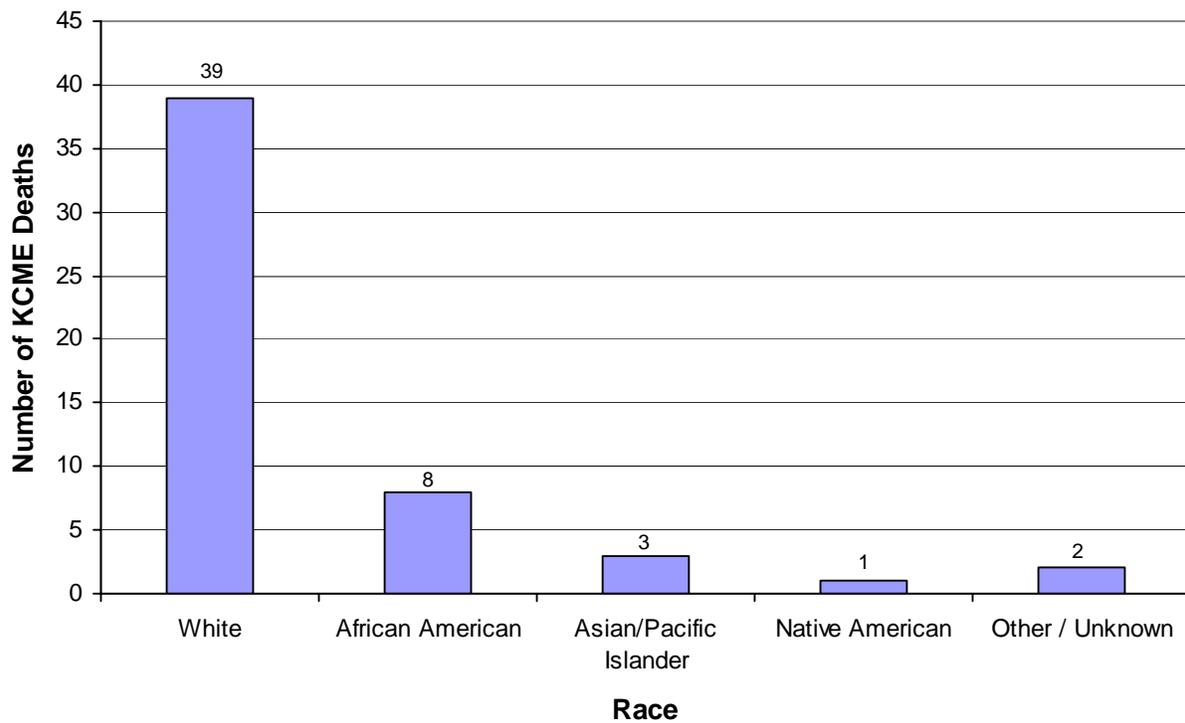
¹NATCOD is an abbreviation for “no anatomic or toxicological cause of death,” and refers to deaths in which full autopsies and toxicological analyses (if relevant) fail to identify an adequate cause of death.

Table 8-1 Undetermined Manner of Death / Race / Sex / KCME / 2007

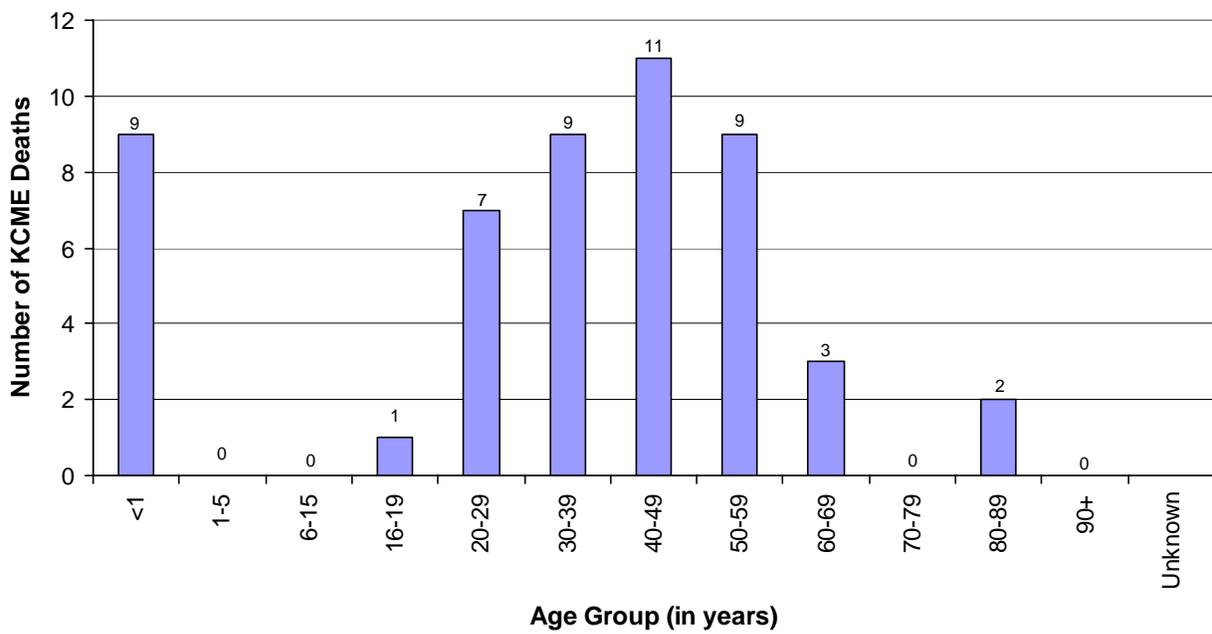
| CIRCUMSTANCES / SEX | RACE | | | | | SUB TOTAL | TOTAL |
|---|-----------|------------|-------------------|--------------------|----------------|--------------|-----------|
| | WHITE | AF AMER | ASIAN / PAC IS | NATIVE AMERICAN | OTHER / UNK | | |
| Blunt Force | 1 | 1 | 0 | 0 | 0 | | 2 |
| <i>Male</i> | 1 | 0 | 0 | 0 | 0 | 1 | |
| <i>Female</i> | 0 | 1 | 0 | 0 | 0 | 1 | |
| Burns / Fire | 1 | 0 | 0 | 0 | 0 | | 1 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 1 | 0 | 0 | 0 | 0 | 1 | |
| Drugs / Poisons | 15 | 2 | 0 | 0 | 0 | | 17 |
| <i>Male</i> | 12 | 1 | 0 | 0 | 0 | 13 | |
| <i>Female</i> | 3 | 1 | 0 | 0 | 0 | 4 | |
| Fall | 3 | 0 | 0 | 1 | 0 | | 4 |
| <i>Male</i> | 2 | 0 | 0 | 1 | 0 | 3 | |
| <i>Female</i> | 1 | 0 | 0 | 0 | 0 | 1 | |
| Fetal Deaths ² | 4 | 1 | 0 | 0 | 1 | | 6 |
| <i>Male</i> | 3 | 1 | 0 | 0 | 0 | 4 | |
| <i>Female</i> | 1 | 0 | 0 | 0 | 1 | 2 | |
| Firearms | 0 | 0 | 0 | 0 | 0 | | 0 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | |
| No Anatomic or Toxicological Cause of Death | 7 | 1 | 2 | 0 | 0 | | 10 |
| <i>Male</i> | 4 | 1 | 0 | 0 | 0 | 5 | |
| <i>Female</i> | 3 | 0 | 2 | 0 | 0 | 5 | |
| Other | 8 | 3 | 1 | 0 | 1 | | 13 |
| <i>Male</i> | 6 | 2 | 1 | 0 | 0 | 9 | |
| <i>Female</i> | 2 | 1 | 0 | 0 | 0 | 3 | |
| <i>Unknown</i> | 0 | 0 | 0 | 0 | 1 | 1 | |
| Totals | 39 | 8 | 3 | 1 | 2 | | 53 |
| Percent | 73% | 15% | 6% | 2% | 4% | | 100% |

²Includes two fetal deaths related to maternal drug use. These deaths are included in the Drugs & Poisons chapter.

Graph 8-2 Undetermined Manner / Race / King County Medical Examiner / 2007



Graph 8-3 Undetermined Manner / Age Group / King County Medical Examiner / 2007³



³Does not include two cases of undetermined age.

Table 8-2 Undetermined Circumstances / Age / Sex / KCME / 2007

| INJURY METHOD / SEX | AGE GROUP (YEARS) | | | | | | | | | | | SUB TOTAL | TOTAL | |
|--|-------------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|-------|-----------|
| | <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 + |
| Blunt Force | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | | 2 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| Burns / Fire | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | | 1 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| Drugs / Poisons | 1 | 0 | 0 | 1 | 3 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | | 17 |
| <i>Male</i> | 1 | 0 | 0 | 0 | 2 | 4 | 3 | 3 | 0 | 0 | 0 | 0 | 13 | |
| <i>Female</i> | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 4 | |
| Fall | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | | 4 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | |
| Fetal Deaths | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 6 |
| <i>Male</i> | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | |
| <i>Female</i> | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| Firearms | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| No anatomic or toxicological cause of death ⁴ | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 3 | 1 | 0 | 0 | 0 | | 10 |
| <i>Male</i> ⁵ | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 1 | 0 | 0 | 0 | 5 | |
| Other ⁶ | 2 | 0 | 0 | 0 | 2 | 0 | 5 | 1 | 1 | 0 | 1 | 0 | | 13 |
| <i>Male</i> | 1 | 0 | 0 | 0 | 2 | 0 | 3 | 1 | 1 | 0 | 1 | 0 | 9 | |
| <i>Female</i> | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 3 | |
| Totals ⁷ | 9 | 0 | 0 | 1 | 7 | 9 | 11 | 9 | 3 | 0 | 2 | 0 | | 53 |
| Percent | 17 | 0 | 0 | 2 | 13 | 17 | 21 | 17 | 6 | 0 | 4 | 0 | | 100% |

⁴Includes one male of undetermined age.⁵Includes one male of undetermined age.⁶Includes one decedent of undetermined age/sex.⁷Total includes two cases of undetermined age.

Table 8-3 Undetermined Manner / Sex / King County Medical Examiner / 2007

| INJURY METHOD | SEX | | TOTAL |
|---|-----------|-----------|-----------|
| | MALE | FEMALE | |
| Blunt Force | 1 | 1 | 2 |
| Burns / Fire | 0 | 1 | 1 |
| Drugs / Poisons | 13 | 4 | 17 |
| Fall | 3 | 1 | 4 |
| Fetal Deaths | 4 | 2 | 6 |
| Firearms | 0 | 0 | 0 |
| No Anatomic or Toxicologic Cause of Death | 5 | 5 | 10 |
| Other ⁸ | 9 | 3 | 12 |
| Totals | 35 | 17 | 52 |
| Percent | 67% | 33% | 100% |

Table 8-4 Undetermined Manner / Blood Alcohol / King County Medical Examiner / 2007

| METHOD | TESTED | | NOT | TOTAL |
|---|-----------|-----------|-----------|-----------|
| | POSITIVE | NEGATIVE | TESTED | |
| Blunt Force | 1 | 0 | 1 | 2 |
| Burns / Fire | 1 | 0 | 0 | 1 |
| Drugs / Poisons | 7 | 7 | 3 | 17 |
| Fall | 3 | 1 | 0 | 4 |
| Fetal Deaths | 0 | 3 | 3 | 6 |
| Firearms | 0 | 0 | 0 | 0 |
| No Anatomic or Toxicologic Cause of Death | 2 | 5 | 3 | 10 |
| Other | 3 | 8 | 2 | 13 |
| Totals | 17 | 24 | 12 | 53 |
| Percent | 32% | 45% | 23% | 100% |

⁸Does not include one death of undetermined sex.

DEATHS DUE TO DRUGS & POISONS: 2007

In 2007, drugs and poisons caused 302 deaths (excluding 20 deaths due to carbon monoxide). This comprised approximately 15% of all deaths investigated (302/2,072). The total number of drug-caused deaths has decreased compared to 2006 figures when there were 313 drug deaths. In 2005 there were 273 drug-caused deaths, in 2004 there were 278, in 2003 there were 220, and in 2002 there were 216. In 2007, deaths due to drugs and poisons comprised 31% (302/963) of all suicides, accidents and undetermined deaths combined.

Of the drug/poison deaths in 2007, a single drug or poison caused 28% of the deaths (85/302), and drugs or poisons in combination caused 72% (217/302) of the deaths. Multiple drug intoxication continued to cause the majority of drug deaths in 2007 (68% in 2006, 71% in 2005, 71% in 2004, 72% in 2003, and 65% in 2002). Table 9-3 displays the specific drugs that caused death in 2007. Because of their prevalence, ethanol, cocaine (a stimulant), and opiates¹ (a narcotic) are identified as separate drug categories. Data on deaths involving methadone, oxycodone, and methamphetamine are also shown in detail.

The manners of “accident,” “suicide,” and “undetermined” are represented in the deaths due to drugs and poisons. There were no homicidal deaths in 2007 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 involved another person's actions. In the year 2007, drugs and poisons caused 19 deaths of undetermined manner, compared to 14 in 2006, 18 in 2005, 26 in 2004, 32 in 2003, and 20 in 2002. Of the 19 undetermined drug related deaths in 2007, two were fetal deaths; one fetal death was associated with maternal methamphetamine use and one fetal death was associated with maternal cocaine use.

In 2007, drugs/poisons caused 36 suicides, as compared to 36 in 2006, 39 in 2005, 41 in 2004, 29 in 2003, and 23 in 2002.

Drugs/poisons caused 247 accidental overdoses in 2007 compared to 262 in 2006, 216 in 2005, 211 in 2004, 159 in 2003, and 173 in 2002. In 2007, accidental drug deaths comprised 36% (247/687) of all accidental deaths.

¹When 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, much more likely, heroin.

Ethanol (alcohol) is also a drug to be critically examined for its contribution to the circumstances surrounding death. In 2007, nine accidental deaths were attributed to acute ethanol intoxication where ethanol was the single substance used. There were 61 deaths where ethanol, in combination with other drugs, was the cause of death. Blood alcohol (ethanol) tests were performed in 76% (914/1,209) 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 26% (242/914) of non-natural deaths where tests were performed.

Blood alcohol tests are performed on most persons who die within 24 hours of the incident. It should be noted that in many cases of traffic and homicide deaths, persons responsible for the death other than the decedent were under the influence of alcohol. The blood alcohol data are presented to show the levels of alcohol among those that died, but does not reflect the presence of alcohol among all parties involved.

Table 9-1 Blood Alcohol Testing / Manner / King County Medical Examiner / 2007

| Test Results | ACCIDENT | TRAFFIC | HOMICIDE | NATURAL | SUICIDE | UNDETERMINED | TOTAL |
|-----------------|------------|------------|-----------|------------|------------|--------------|--------------|
| Tested | 452 | 140 | 66 | 563 | 215 | 41 | 1477 |
| <i>Positive</i> | 92 | 45 | 23 | 90 | 65 | 17 | 332 |
| <i>Negative</i> | 360 | 95 | 43 | 473 | 150 | 24 | 1145 |
| Not Tested | 235 | 30 | 10 | 300 | 8 | 12 | 595 |
| Totals | 687 | 170 | 76 | 863 | 223 | 53 | 2,072 |

Table 9-2 Blood Alcohol Testing / Percentage / Manner / KCME / 2007

| Test Results | ACCIDENT | TRAFFIC | HOMICIDE | NATURAL | SUICIDE | UNDETERMINED | TOTAL |
|-----------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|
| Tested | 66% | 82% | 87% | 65% | 96% | 77% | 71% |
| <i>Positive</i> | 20% | 32% | 35% | 16% | 30% | 41% | 22% |
| <i>Negative</i> | 80% | 68% | 65% | 84% | 70% | 59% | 78% |
| Not Tested | 34% | 18% | 13% | 35% | 4% | 23% | 29% |
| Totals | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

Table 9-3

2007 Drug & Poison Caused Deaths¹

| Drug Name | Total Deaths out of 2,072 Cases in which Drug was Present | Overdose Deaths (289) – Drug Present | | | | | | Overdose Deaths (289) – Drug Causing | | | | | |
|---------------------------------|---|--------------------------------------|--|--|----------|---------|--------------|--------------------------------------|-------------------------------------|--------------------------------------|----------|---------|--------------|
| | | 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 | In which a Single Drug Caused Death | In which Multiple Drugs Caused Death | Accident | Suicide | Undetermined |
| Acetaminophen | 94 | 55 | 8 | 47 | 36 | 18 | 1 | 29 | 4 | 25 | 14 | 13 | 2 |
| Alprazolam | 36 | 21 | 2 | 19 | 15 | 6 | 0 | 17 | 0 | 17 | 12 | 5 | 0 |
| Amantadine | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Amitriptyline | 20 | 14 | 1 | 13 | 12 | 2 | 0 | 13 | 1 | 12 | 11 | 2 | 0 |
| Amphetamine | 35 | 12 | 6 | 6 | 10 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Antipyrene | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arsenic | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bromodiphenhydramine | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bupivacaine | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Buprenorphine | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| Bupropion | 19 | 12 | 3 | 9 | 9 | 3 | 0 | 6 | 0 | 6 | 4 | 2 | 0 |
| Buspirone | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| Butabarbital | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| Butalbital | 4 | 2 | 0 | 2 | 0 | 2 | 0 | 3 | 0 | 3 | 0 | 2 | 1 |
| Cadmium | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cannabinoids / THC ² | 172 | 62 | 20 | 42 | 54 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carbamazepine | 10 | 5 | 0 | 5 | 3 | 2 | 0 | 4 | 0 | 4 | 3 | 1 | 0 |
| Carbon Monoxide ³ | 23 | 19 | 1 | 18 | 2 | 17 | 0 | 20 | 19 | 1 | 3 | 17 | 0 |
| Carisoprodol | 10 | 7 | 0 | 7 | 4 | 3 | 0 | 6 | 0 | 6 | 3 | 3 | 0 |
| Chlordiazepoxide | 9 | 3 | 1 | 2 | 2 | 1 | 0 | 2 | 0 | 2 | 2 | 0 | 0 |
| Chlorpheniramine | 7 | 2 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 |
| Citalopram | 69 | 35 | 2 | 33 | 27 | 8 | 0 | 29 | 0 | 29 | 23 | 6 | 0 |
| Clomipramine | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| Clonazepam | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 2 | 0 | 2 | 1 | 0 | 1 |
| Clozapine | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |

Table 9-3

2007 Drug & Poison Caused Deaths, page 2

| Drug Name | Total Deaths out of 2,072 Cases in which Drug was Present | Overdose Deaths (289) | | | | | | Overdose Deaths (289) | | | | | |
|-------------------------|---|---------------------------|--|--|----------|---------|--------------|----------------------------|-------------------------------------|--------------------------------------|----------|---------|--------------|
| | | 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 | In which a Single Drug Caused Death | In which Multiple Drugs Caused Death | Accident | Suicide | Undetermined |
| Cocaine ⁴ | 120 | 96 | 20 | 76 | 93 | 0 | 3 | 89 | 19 | 70 | 86 | 0 | 3 |
| Codeine ⁵ | 57 | 44 | 6 | 38 | 39 | 5 | 0 | 5 | 0 | 5 | 1 | 4 | 0 |
| Cyanide | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 |
| Cyclobenzaprine | 16 | 7 | 0 | 7 | 6 | 1 | 0 | 4 | 0 | 4 | 3 | 1 | 0 |
| Desipramine | 5 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| Dextromethorphan | 31 | 17 | 3 | 14 | 14 | 3 | 0 | 7 | 0 | 7 | 7 | 0 | 0 |
| Diazepam | 80 | 32 | 3 | 29 | 27 | 5 | 0 | 17 | 0 | 17 | 14 | 3 | 0 |
| Diltiazem | 15 | 6 | 2 | 4 | 5 | 1 | 0 | 4 | 0 | 4 | 3 | 1 | 0 |
| Diphenhydramine | 73 | 39 | 35 | 4 | 26 | 10 | 3 | 32 | 0 | 32 | 22 | 7 | 3 |
| Doxepin | 8 | 4 | 0 | 4 | 4 | 0 | 0 | 3 | 0 | 3 | 3 | 0 | 0 |
| Doxylamine | 11 | 4 | 1 | 3 | 2 | 2 | 0 | 3 | 0 | 3 | 2 | 1 | 0 |
| Ethanol (Ethyl Alcohol) | 332 | 84 | 15 | 69 | 71 | 6 | 7 | 70 | 9 | 61 | 64 | 3 | 3 |
| Ethylene Glycol | 2 | 2 | 2 | 0 | 0 | 2 | 0 | 2 | 2 | 0 | 0 | 2 | 0 |
| Fentanyl | 8 | 4 | 0 | 4 | 3 | 0 | 1 | 6 | 1 | 5 | 5 | 0 | 1 |
| Fluoxetine | 21 | 13 | 2 | 11 | 8 | 4 | 1 | 11 | 0 | 11 | 8 | 2 | 1 |
| Gabapentin | 21 | 14 | 1 | 13 | 12 | 1 | 1 | 13 | 0 | 13 | 11 | 2 | 0 |
| GHB | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Haloperidol | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hydrocodone | 54 | 25 | 0 | 25 | 16 | 8 | 1 | 23 | 0 | 23 | 15 | 7 | 1 |
| Hydromorphone | 36 | 17 | 2 | 15 | 14 | 2 | 1 | 14 | 2 | 12 | 12 | 1 | 1 |
| Hydroxyzine | 4 | 4 | 0 | 4 | 3 | 1 | 0 | 2 | 0 | 2 | 2 | 0 | 0 |
| Ibuprofen | 24 | 13 | 1 | 12 | 11 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| Imipramine | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Isopropanol | 40 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ketamine | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 9-3

2007 Drug & Poison Caused Deaths, page 3

| Drug Name | Total Deaths out of 2,072 Cases in which Drug was Present | Overdose Deaths (289) | | | | | | Overdose Deaths (289) | | | | | |
|---------------------------------|---|---------------------------|--|--|----------|---------|--------------|----------------------------|-------------------------------------|--------------------------------------|----------|---------|--------------|
| | | 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 | In which a Single Drug Caused Death | In which Multiple Drugs Caused Death | Accident | Suicide | Undetermined |
| Ketorolac | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lamotrigine | 10 | 5 | 1 | 4 | 3 | 1 | 1 | 4 | 0 | 4 | 2 | 1 | 1 |
| Lead | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Levetiracetam | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| Lithium | 5 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| Loperamide | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lorazepam | 26 | 12 | 3 | 9 | 6 | 6 | 0 | 9 | 0 | 9 | 4 | 5 | 0 |
| MDA | 2 | 3 | 0 | 3 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MDMA | 3 | 3 | 0 | 3 | 2 | 1 | 0 | 2 | 0 | 2 | 1 | 1 | 0 |
| Meperidine | 3 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| Meprobamate | 15 | 8 | 1 | 7 | 5 | 3 | 0 | 2 | 0 | 2 | 1 | 1 | 0 |
| Mercury | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mesoridazine | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| Methadone | 113 | 82 | 7 | 75 | 75 | 3 | 4 | 84 | 7 | 77 | 77 | 3 | 4 |
| Methamphetamine | 44 | 20 | 9 | 11 | 17 | 2 | 1 | 21 | 9 | 12 | 19 | 1 | 1 |
| Methanol | 4 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Methocarbamol | 5 | 5 | 0 | 5 | 3 | 2 | 0 | 6 | 0 | 6 | 3 | 2 | 1 |
| Methylphenidate | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Midazolam | 18 | 2 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mirtazepine | 12 | 6 | 0 | 6 | 6 | 0 | 0 | 4 | 0 | 4 | 4 | 0 | 0 |
| Monoacetylmorphine ⁶ | 26 | 26 | 6 | 20 | 26 | 0 | 0 | 29 | 6 | 23 | 29 | 0 | 0 |
| Morphine ⁷ | 192 | 85 | 11 | 74 | 81 | 4 | 0 | 83 | 11 | 72 | 80 | 3 | 0 |
| Nortriptyline ⁸ | 26 | 16 | 1 | 15 | 13 | 3 | 0 | 3 | 0 | 3 | 3 | 0 | 0 |
| Olanzapine | 5 | 4 | 0 | 4 | 1 | 2 | 1 | 4 | 0 | 4 | 1 | 2 | 1 |
| Oxazepam | 5 | 2 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |

Table 9-3

2007 Drug & Poison Caused Deaths, page 4

| Drug Name | Total Deaths out of 2,072 Cases in which Drug was Present | Overdose Deaths (289) | | | | | | Overdose Deaths (289) | | | | | |
|-------------------|---|---------------------------|--|--|----------|---------|--------------|----------------------------|-------------------------------------|--------------------------------------|----------|---------|--------------|
| | | 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 | In which a Single Drug Caused Death | In which Multiple Drugs Caused Death | Accident | Suicide | Undetermined |
| Oxcarbazepine | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oxycodone | 79 | 49 | 9 | 40 | 41 | 8 | 0 | 51 | 10 | 41 | 42 | 8 | 1 |
| Paroxetine | 10 | 8 | 0 | 8 | 8 | 0 | 0 | 8 | 0 | 8 | 8 | 0 | 0 |
| Phenobarbital | 9 | 2 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| Phenytoin | 12 | 2 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| Promethazine | 15 | 9 | 0 | 9 | 9 | 0 | 0 | 10 | 0 | 10 | 10 | 0 | 0 |
| Propoxyphene | 7 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| Pseudoephedrine | 3 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Quetiapine | 14 | 9 | 2 | 7 | 5 | 4 | 0 | 7 | 0 | 7 | 4 | 3 | 0 |
| Quinine/Quinidine | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Salicylates | 7 | 3 | 2 | 1 | 0 | 3 | 0 | 4 | 3 | 1 | 0 | 3 | 1 |
| Sertraline | 18 | 12 | 1 | 11 | 11 | 1 | 0 | 10 | 0 | 10 | 9 | 1 | 0 |
| Temazepam | 7 | 5 | 0 | 5 | 4 | 1 | 0 | 3 | 0 | 3 | 2 | 1 | 0 |
| Toluene | 2 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| Topiramate | 9 | 8 | 0 | 8 | 5 | 2 | 1 | 8 | 0 | 8 | 5 | 2 | 1 |
| Tramadol | 10 | 2 | 1 | 1 | 1 | 0 | 1 | 2 | 1 | 1 | 1 | 0 | 1 |
| Trazodone | 29 | 14 | 1 | 13 | 13 | 1 | 0 | 9 | 0 | 9 | 8 | 1 | 0 |
| Valproic Acid | 8 | 5 | 1 | 4 | 3 | 1 | 1 | 4 | 1 | 3 | 3 | 1 | 0 |
| Venlafaxine | 16 | 8 | 1 | 7 | 5 | 2 | 1 | 8 | 0 | 8 | 6 | 1 | 1 |
| Zalepon | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| Zolpidem | 17 | 11 | 1 | 10 | 4 | 7 | 0 | 9 | 0 | 9 | 3 | 6 | 0 |
| Zonisamide | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| Zopiclone | 2 | 2 | 0 | 2 | 1 | 1 | 0 | 2 | 0 | 2 | 1 | 1 | 0 |
| ZPP | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

¹Table 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 Listed Drug Caused Death” is greater than the column that lists “In which Listed 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 thirteen 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 two delayed overdose deaths of methamphetamine, two delayed overdose deaths of acetaminophen and nine delayed overdose deaths of the following drugs: (1) acetaminophen, butalbital, methocarbamol and guaifenesin; (2) cocaine; (3) cyclosporin; (4) ethanol alone; (5) ethanol and benzodiazepines; (6) ethanol, methadone & cocaine; (7) lithium; (8) oxycodone; and (9) salicylate.

²Cannabinoids 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.

³Carbon monoxide fatalities are listed if the level of carboxyhemoglobin was 10% or greater. Suicides due to intentional inhalation of carbon monoxide accounted for 17 of the carbon monoxide deaths. In 13 of the 17 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 deaths. Both of the accidental carbon monoxide deaths were attributed solely to inhalation of carbon monoxide; other drugs may have been present, but they did not contribute to the death. Other sources of carbon monoxide included in this table are four fire fatalities. There were no undetermined deaths due to carbon monoxide in 2007.

⁴Includes benzoylecgonine.

⁵Out of the 44 overdose deaths involving codeine, in 37 cases, the source of the drug was likely small quantities of codeine present in heroin used by illicit drug users. In six (6) cases the source of the drug was pharmaceutical codeine. The source of the codeine in one (1) case was unknown.

⁶Monoacetylmorphine (MAM), otherwise known as diacetylmorphine, is the first breakdown product of heroin. 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.

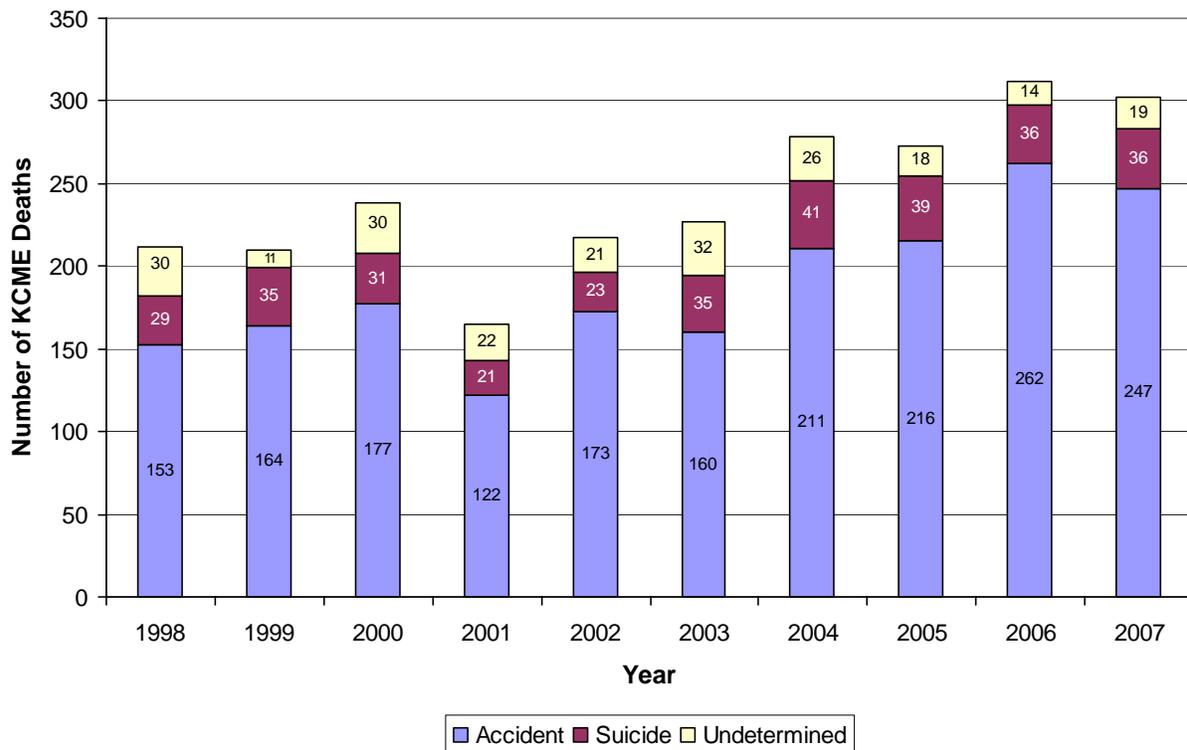
⁷There were 85 overdose deaths involving morphine. In 58 of these cases, the source of the drug was likely the morphine derived from heroin preparations used by illicit drug users. In 20 of these cases the source of the morphine was likely pharmaceutical morphine, and in seven (7) of these cases the source of the morphine was not known.

⁸In two (2) of the 16 total cases, nortriptyline was present without the presence of amitriptyline, indicating that the source of the drug was, in fact, nortriptyline. In the other 14 cases, amitriptyline was also present, indicating that the nortriptyline was present due to the breakdown of amitriptyline. There were a total of three nortriptyline overdose deaths; all accidental multiple drug overdoses.

Table 9-4 Total Overdose Deaths / Accident, Suicide, Undetermined / King County Medical Examiner / 1998 - 2007⁹

| OVERDOSE DEATHS | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Accident | 153 | 164 | 177 | 122 | 173 | 160 | 211 | 216 | 262 | 247 |
| Suicide | 29 | 35 | 31 | 21 | 23 | 35 | 41 | 39 | 36 | 36 |
| Undetermined | 30 | 11 | 30 | 22 | 21 | 32 | 26 | 18 | 14 | 19 |
| Totals | 212 | 210 | 238 | 165 | 217 | 227 | 278 | 273 | 312 | 302 |

Graph 9-1 Drug & Poison Caused Deaths / Accident, Suicide, Undetermined / King County Medical Examiner / 1998 - 2007

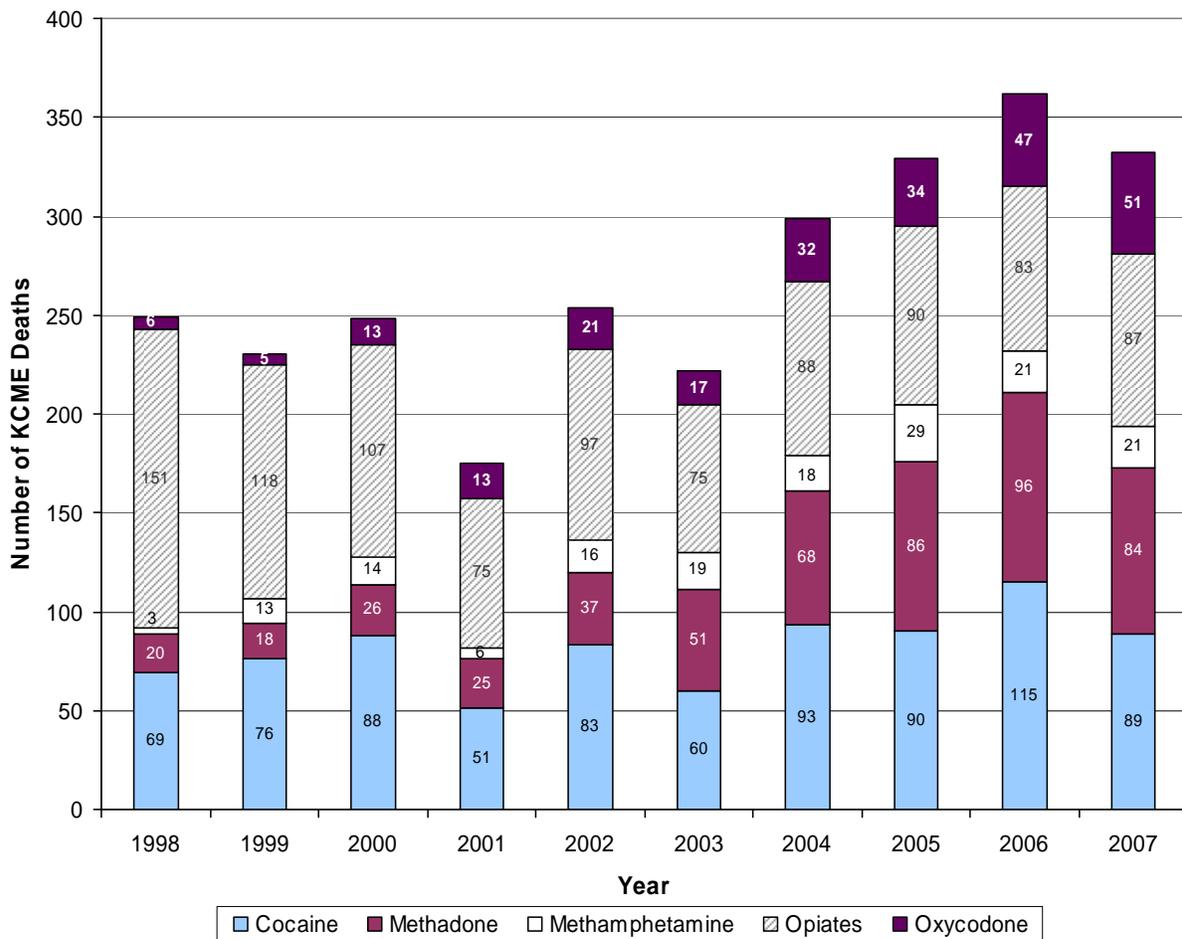


⁹ Includes all deaths classified as overdose, regardless of whether lab samples were available for analysis.

Table 9-5 Overdose Deaths Caused by Cocaine, Methadone, Opiates, Methamphetamine, or Oxycodone¹⁰ / KCME / 1998 - 2007

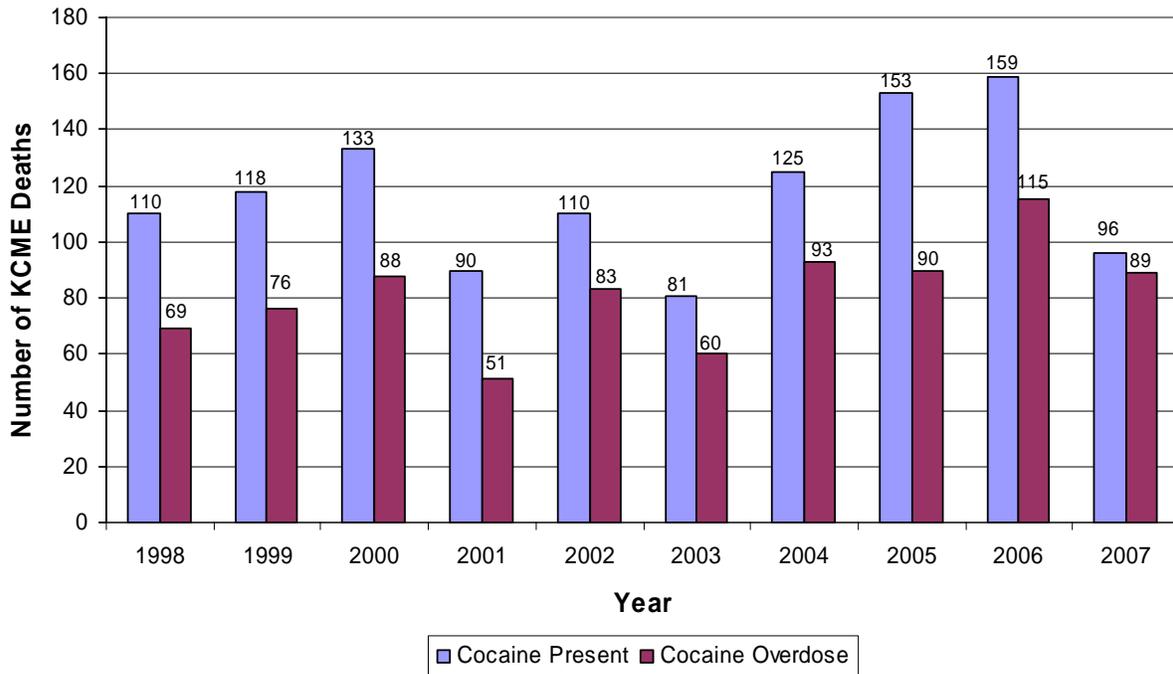
| DRUG | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-----------------|------|------|------|------|------|------|------|------|------|------|
| Cocaine | 69 | 76 | 88 | 51 | 83 | 60 | 93 | 90 | 115 | 89 |
| Methadone | 20 | 18 | 26 | 25 | 37 | 51 | 68 | 86 | 96 | 84 |
| Methamphetamine | 3 | 13 | 14 | 6 | 16 | 19 | 18 | 29 | 21 | 21 |
| Opiates | 151 | 118 | 107 | 75 | 97 | 75 | 88 | 90 | 83 | 87 |
| Oxycodone | 6 | 5 | 13 | 18 | 21 | 17 | 32 | 34 | 47 | 51 |

Graph 9-2 Overdose Deaths Caused by Cocaine, Methadone, Opiates, Methamphetamine, or Oxycodone / KCME / 1998 – 2007

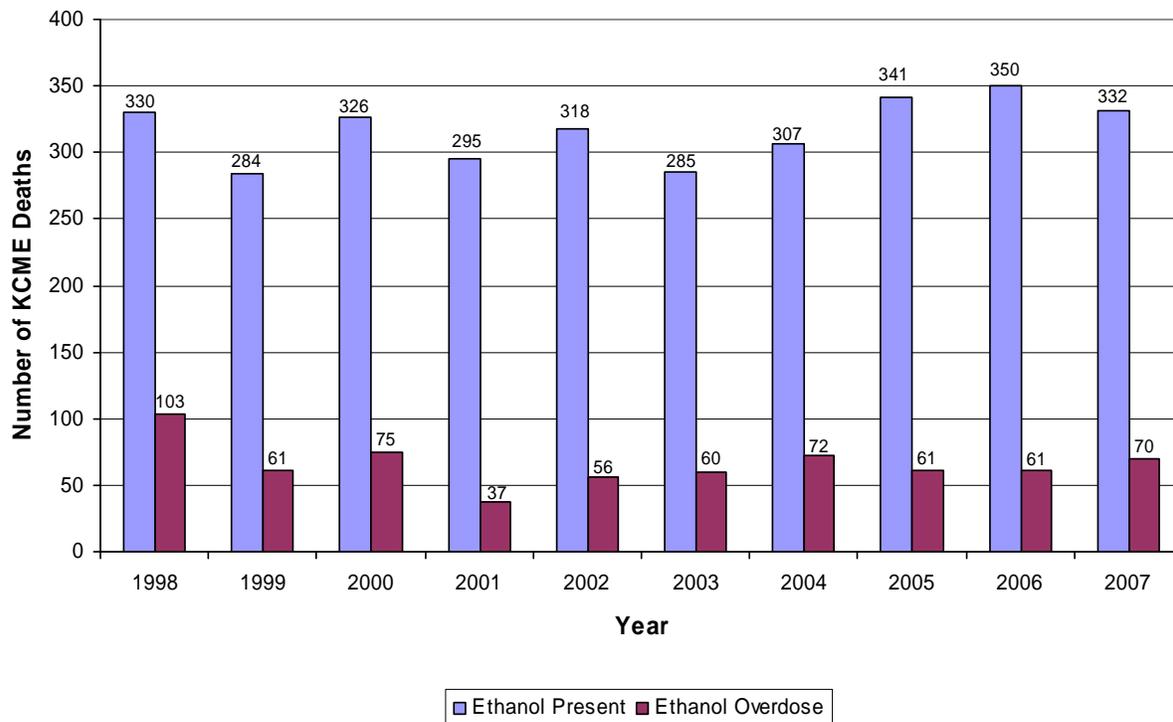


¹⁰ In this context, “caused by” refers to single or multiple drug overdoses in which the drug was listed on the death certificate.

Graph 9-3 Cocaine Involved Deaths¹¹ / King County Medical Examiner / 1998 - 2007

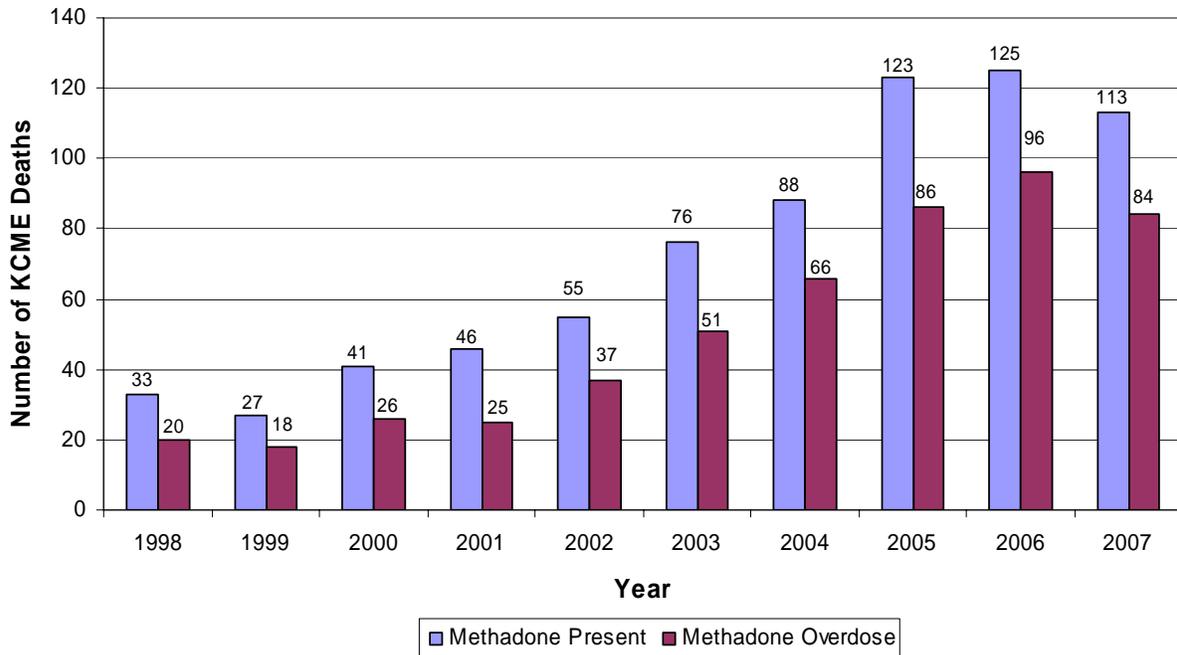


Graph 9-4 Ethanol Involved Deaths / King County Medical Examiner / 1998 - 2007

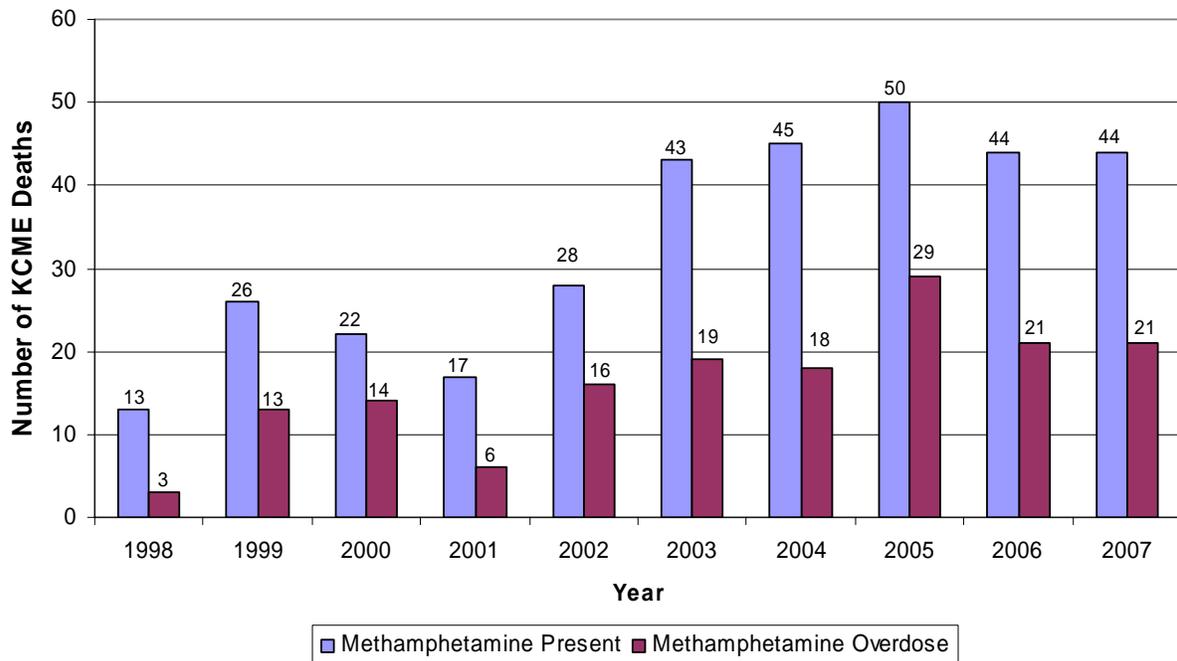


¹¹ In Graphs 9-3, 9-4, 9-5 and 9-6, “overdose” refers to deaths due to the listed drug or ethanol in single or multiple drug overdose deaths where the listed drug or ethanol was listed on the death certificate.

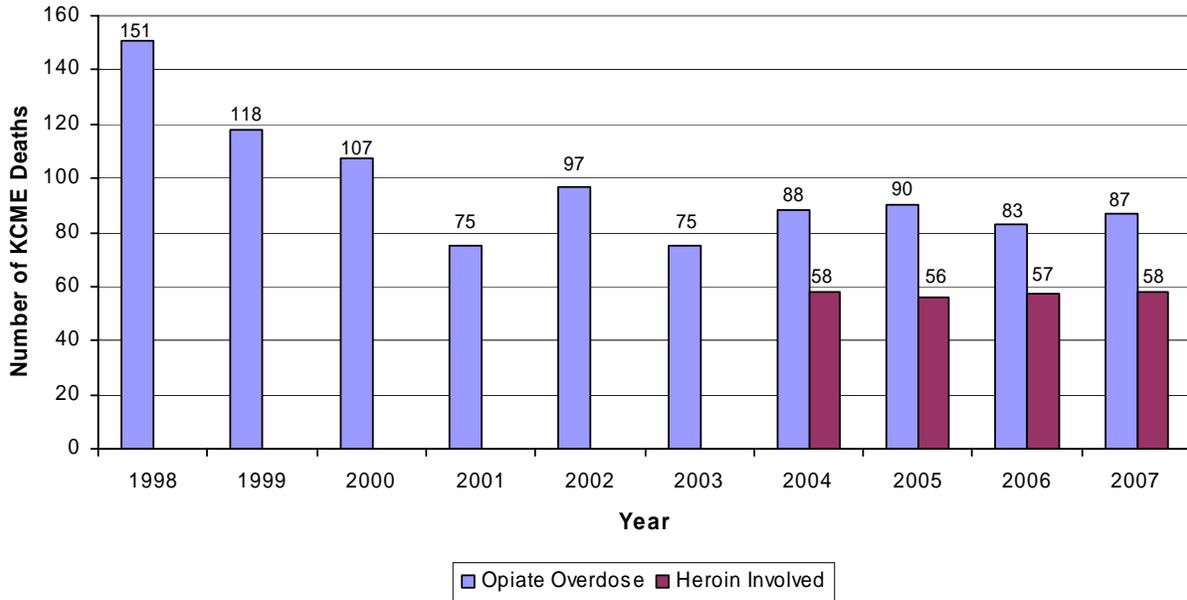
Graph 9-5 Methadone Involved Deaths / King County Medical Examiner / 1998 - 2007



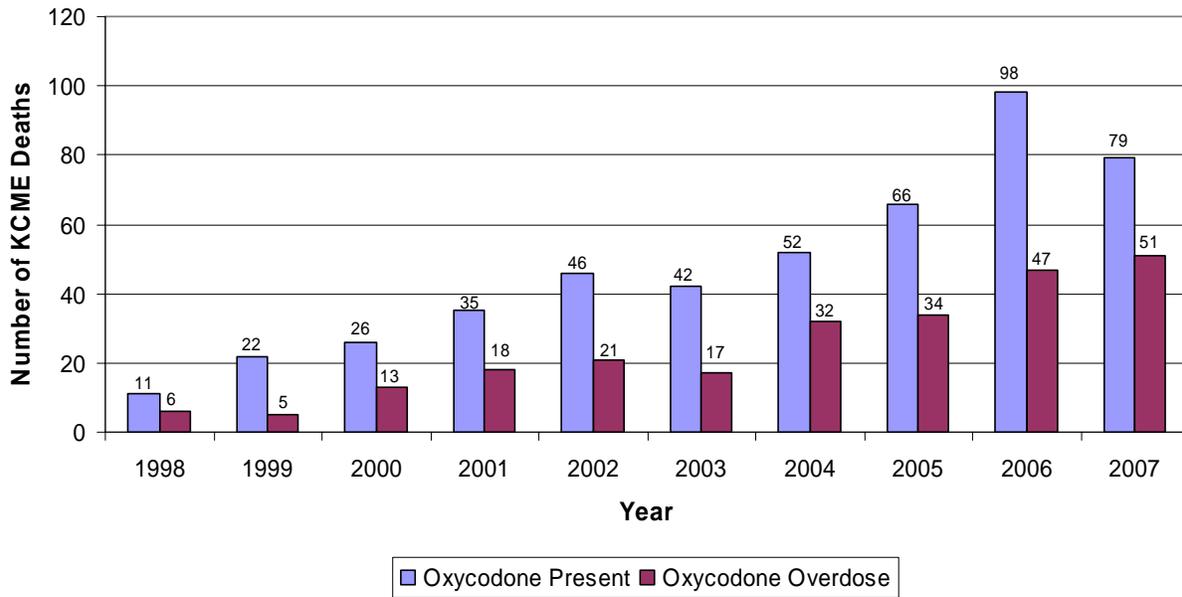
Graph 9-6 Methamphetamine Involved Deaths / KCME / 1998 – 2007



Graph 9-7 Opiate Overdose Deaths & Heroin-Related Deaths / KCME / 1998 - 2007¹²



Graph 9-8 Oxycodone Involved Deaths / King County Medical Examiner / 1998 - 2007



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 / King County Medical Examiner / 1998 – 2007

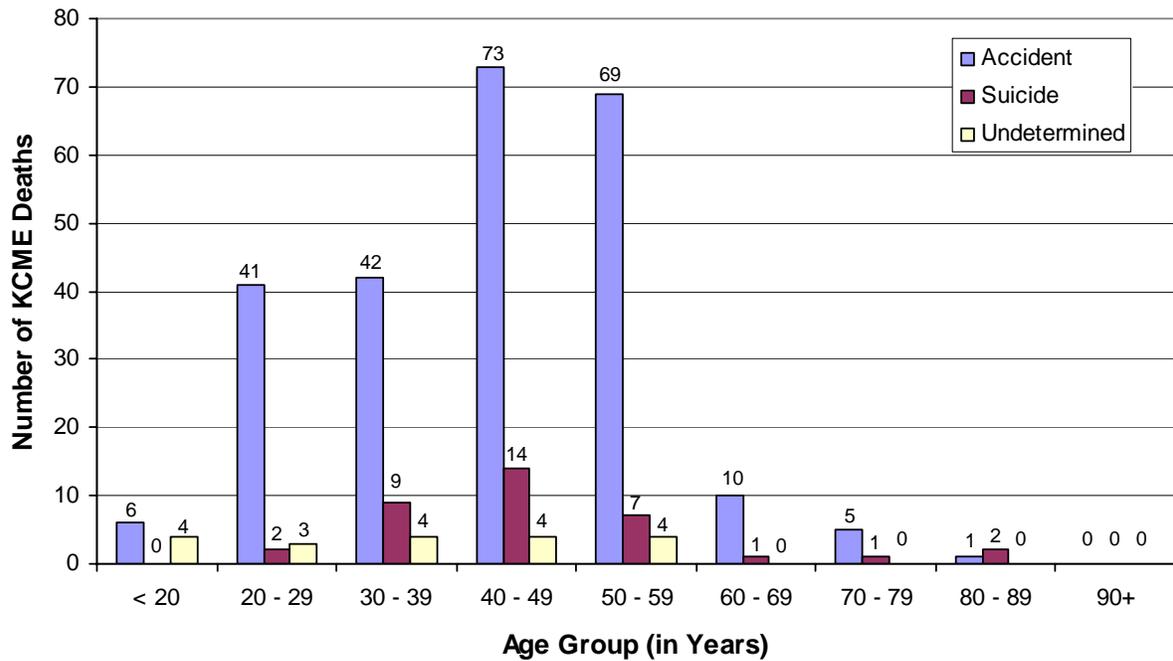


Table 9-6 Drug / Poison Deaths / Age / King County Medical Examiner / 2007

| AGE GROUP (YEARS) / SEX | MANNER OF DEATH | | | SUB- TOTAL | TOTAL |
|----------------------------|-----------------|-----------|--------------|---------------|------------|
| | ACCIDENT | SUICIDE | UNDETERMINED | | |
| <20 | 6 | 0 | 4 | | 10 |
| <i>Male</i> | 5 | 0 | 1 | 6 | |
| <i>Female</i> | 1 | 0 | 3 | 4 | |
| 20-29 | 41 | 2 | 3 | | 46 |
| <i>Male</i> | 30 | 1 | 2 | 33 | |
| <i>Female</i> | 11 | 1 | 1 | 13 | |
| 30-39 | 42 | 9 | 4 | | 55 |
| <i>Male</i> | 28 | 3 | 4 | 35 | |
| <i>Female</i> | 14 | 6 | 0 | 20 | |
| 40-49 | 73 | 14 | 4 | | 91 |
| <i>Male</i> | 49 | 8 | 3 | 60 | |
| <i>Female</i> | 24 | 6 | 1 | 31 | |
| 50-59 | 69 | 7 | 4 | | 80 |
| <i>Male</i> | 39 | 5 | 3 | 47 | |
| <i>Female</i> | 30 | 2 | 1 | 33 | |
| 60-69 | 10 | 1 | 0 | | 11 |
| <i>Male</i> | 7 | 0 | 0 | 7 | |
| <i>Female</i> | 3 | 1 | 0 | 4 | |
| 70-79 | 5 | 1 | 0 | | 6 |
| <i>Male</i> | 3 | 0 | 0 | 3 | |
| <i>Female</i> | 2 | 1 | 0 | 3 | |
| 80-89 | 1 | 2 | 0 | | 3 |
| <i>Male</i> | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 1 | 2 | 0 | 3 | |
| 90+ | 0 | 0 | 0 | | 0 |
| <i>Male</i> | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | |
| Totals | 247 | 36 | 19 | | 302 |

DEATHS DUE TO FIREARMS: 2007

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 2007, the Medical Examiner investigated 149 firearm deaths. In 2006, firearms caused 153 deaths; in 2005, firearms caused 146 deaths; in 2004 firearms caused 144 deaths; in 2003 firearms caused 155 deaths; and in 2002 firearms caused 153 deaths. Of the 149 firearm deaths in 2007, 55 (37%) were homicides and 93 (62%) were suicides. One firearm death was classified as accidental in 2007. In 2006 there were no firearms deaths classified as accidental. In 2005 firearms caused two accidental deaths; in both 2004 and 2003 firearms caused one accidental death, and in 2002 there were no accidental firearms deaths. In 2007, there were no firearms deaths that were classified as undetermined. This compares to three in 2006, one in 2005, two in 2004, one in 2003, and two in 2002.

In 2007, gunshot wounds were the leading cause of death for homicides and suicides. Gunshot deaths comprised 72% (55/76) of homicides, compared to 57% (52/91) in 2006, 59% (47/80) in 2005, 61% (46/76) in 2004, 56% in 2003 (52/93) and 58% in 2002 (53/92). In 2007, suicides by firearms represented 42% (93/223) of suicide deaths compared to 43% (98/227) in 2006, 41% (96/233) in 2005, 42% (95/229) in 2004, 47% in 2003 (101/217), and 49% (98/200) in 2002.

In 2007, of the 55 gunshot homicide victims, 9% (5/55) were 19 years old and younger - a decrease from 2006 when 13% of gunshot homicide victims were 19 years old and younger. It is estimated that a disproportionate number of gunshot homicide victims were African American (27%, 15/55) compared to the percentage of African Americans in the general population. (See discussions on pages 5 and 43.) Of the 15 African American gunshot homicide victims, 33% (5/15) were males between 20 and 29 years of age and 47% (7/15) were males between 30 and 39 years of age. In comparison, 62% (34/55) of the homicide gunshot victims were White. Of the 34 White homicide victims, 24% (8/34) were males between 20 and 29 years old.

Firearms were also the most common mode of committing suicide (42%, 93/223) in 2007. Of the 93 gunshot suicide victims, 90% (84/93) were White and 90% (84/93) were males. One of the gunshot suicide victims was 19 years old and under (1%, 1/93). Twenty-six (28%, 26/93) of the gunshot suicide victims were between the ages of 20 and 39 years of age, 35 (38%, 35/93) were between 40 and 59 years, and 31 (33%, 31/93) were 60 years and older.

Table 10-1 Firearm Deaths / Manner / Age / Sex / King County Medical Examiner / 2007

| AGE GROUP / SEX | MANNER OF DEATH | | | | SUB TOTAL | TOTAL |
|-----------------|-----------------|-----------|-----------|----------|--------------|------------|
| | A | H | S | U | | |
| <13 years | 0 | 2 | 0 | 0 | | 2 |
| <i>Male</i> | 0 | 1 | 0 | 0 | 1 | |
| <i>Female</i> | 0 | 1 | 0 | 0 | 1 | |
| 13-15 years | 0 | 0 | 0 | 0 | | 0 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | |
| 16-19 years | 0 | 3 | 1 | 0 | | 4 |
| <i>Male</i> | 0 | 3 | 0 | 0 | 3 | |
| <i>Female</i> | 0 | 0 | 1 | 0 | 1 | |
| 20-29 years | 0 | 17 | 18 | 0 | | 35 |
| <i>Male</i> | 0 | 15 | 17 | 0 | 32 | |
| <i>Female</i> | 0 | 2 | 1 | 0 | 3 | |
| 30-39 years | 0 | 18 | 8 | 0 | | 26 |
| <i>Male</i> | 0 | 15 | 8 | 0 | 23 | |
| <i>Female</i> | 0 | 3 | 0 | 0 | 3 | |
| 40-49 years | 1 | 5 | 18 | 0 | | 24 |
| <i>Male</i> | 0 | 5 | 15 | 0 | 20 | |
| <i>Female</i> | 1 | 0 | 3 | 0 | 4 | |
| 50-59 years | 0 | 6 | 17 | 0 | | 23 |
| <i>Male</i> | 0 | 5 | 16 | 0 | 21 | |
| <i>Female</i> | 0 | 1 | 1 | 0 | 2 | |
| 60-69 years | 0 | 3 | 11 | 0 | | 14 |
| <i>Male</i> | 0 | 2 | 9 | 0 | 11 | |
| <i>Female</i> | 0 | 1 | 2 | 0 | 3 | |
| 70-79 years | 0 | 0 | 13 | 0 | | 13 |
| <i>Male</i> | 0 | 0 | 13 | 0 | 13 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | |
| 80-89 years | 0 | 0 | 7 | 0 | | 7 |
| <i>Male</i> | 0 | 0 | 6 | 0 | 6 | |
| <i>Female</i> | 0 | 0 | 1 | 0 | 1 | |
| 90+ | 0 | 1 | 0 | 0 | | 1 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 1 | 0 | 0 | 1 | |
| Totals | 1 | 55 | 93 | 0 | | 149 |
| Percent | 0.7% | 36.9% | 62.4% | 0% | | 100% |

Graph 10-1 Firearm Deaths / Manner / Age Group / King County Medical Examiner / 2007

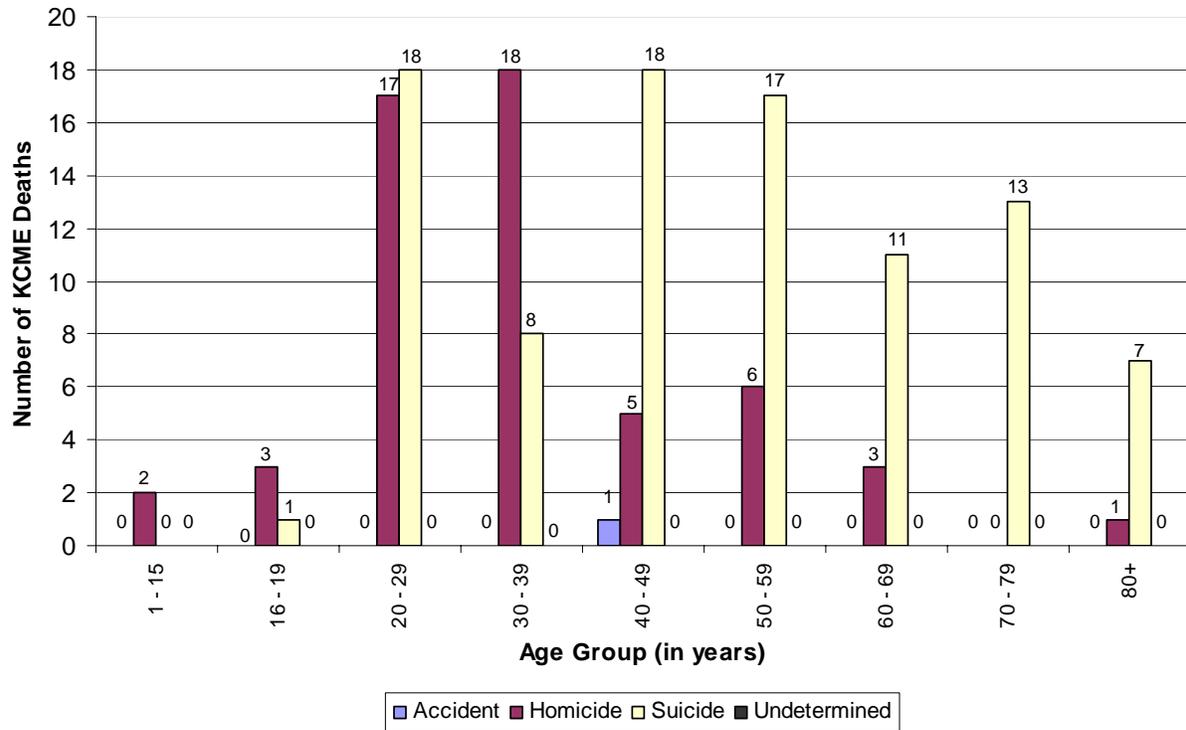


Table 10-2 Firearm Deaths / Manner / Race / Sex / KCME / 2007

| RACE / SEX | MANNER OF DEATH | | | | SUB- | |
|------------------------|-----------------|-----------|-----------|----------|-------|------------|
| | A | H | S | U | TOTAL | TOTAL |
| Asian/Pacific Islander | 0 | 5 | 4 | 0 | | 9 |
| <i>Male</i> | 0 | 5 | 4 | 0 | 9 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | |
| African American | 0 | 15 | 4 | 0 | | 19 |
| <i>Male</i> | 0 | 14 | 4 | 0 | 18 | |
| <i>Female</i> | 0 | 1 | 0 | 0 | 1 | |
| Native American | 0 | 1 | 1 | 0 | | 2 |
| <i>Male</i> | 0 | 0 | 1 | 0 | 1 | |
| <i>Female</i> | 0 | 1 | 0 | 0 | 1 | |
| White | 1 | 34 | 84 | 0 | | 119 |
| <i>Male</i> | 0 | 27 | 75 | 0 | 102 | |
| <i>Female</i> | 1 | 7 | 9 | 0 | 17 | |
| Other | 0 | 0 | 0 | 0 | | 0 |
| <i>Male</i> | 0 | 0 | 0 | 0 | 0 | |
| <i>Female</i> | 0 | 0 | 0 | 0 | 0 | |
| Totals | 1 | 55 | 93 | 0 | | 149 |

CAUSES OF DEATH IN CHILDREN AND YOUTH

In 2007, the King County Medical Examiner's Office investigated 89 deaths of children and youth ages 19 years or younger, which represented 4% (89/2,072) of the total deaths investigated. Of these deaths, 28% (25/89) were natural, 28% (25/89) were accidents (non-traffic), 10% (9/89) were homicides, 24% (21/89) were traffic related, 6% (5/89) were suicides, and 5% (4/89) were classified as manner undermined. 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 25 natural deaths of children and youth investigated by the Medical Examiner, 52% (13/25) were of infants less than one year of age. Of these 13 infants who died of natural causes, all 13 were due to Sudden Infant Death Syndrome (SIDS). The alternative designation "Sudden Unexplained Infant Death" (SUID) is not used in King County in 2007.

There were 25 children and youth whose deaths were classified as accidental, excluding traffic-related accidents. Another 21 children and youths died in traffic related accidents.

There were nine homicides among children and youth. Of these nine homicide victims, four were teenagers (13 - 19 years of age), three were children 1 to 12 years of age, and two were children less 1 year of age. Forty-four percent (4/9) of the children and youth homicide victims died by firearms.

There were five youth suicides, all between the ages of 13 and 19 years. Males comprised 80% (4/5) of the victims. Regarding the methods used to commit suicide by youth, one was by firearm, three were by hanging, and one was by jumping.

Twenty-one (21) children and youth (19 years and under) died in traffic-related accidents, of whom 20 (95%) were teenagers. There were seven motor vehicle driver deaths and eight motor vehicle passenger deaths among teenagers. There was one teenage bicycle death, one teenage motorcycle death, and three teenage pedestrian deaths in 2007. Of the 15 children and youths who died in motor vehicles, six were known to be restrained, six were found not to be wearing any restraint, and it was unknown or undeterminable if the remaining three were using seatbelts or any other restraint device.

The following tables list the causes of death among children and youth for all manners in three age groups: less than 1 year, 1-12 years and 13-19 years.

Graph 11-1 Causes of Death in Children & Youth / King County Medical Examiner / 2007

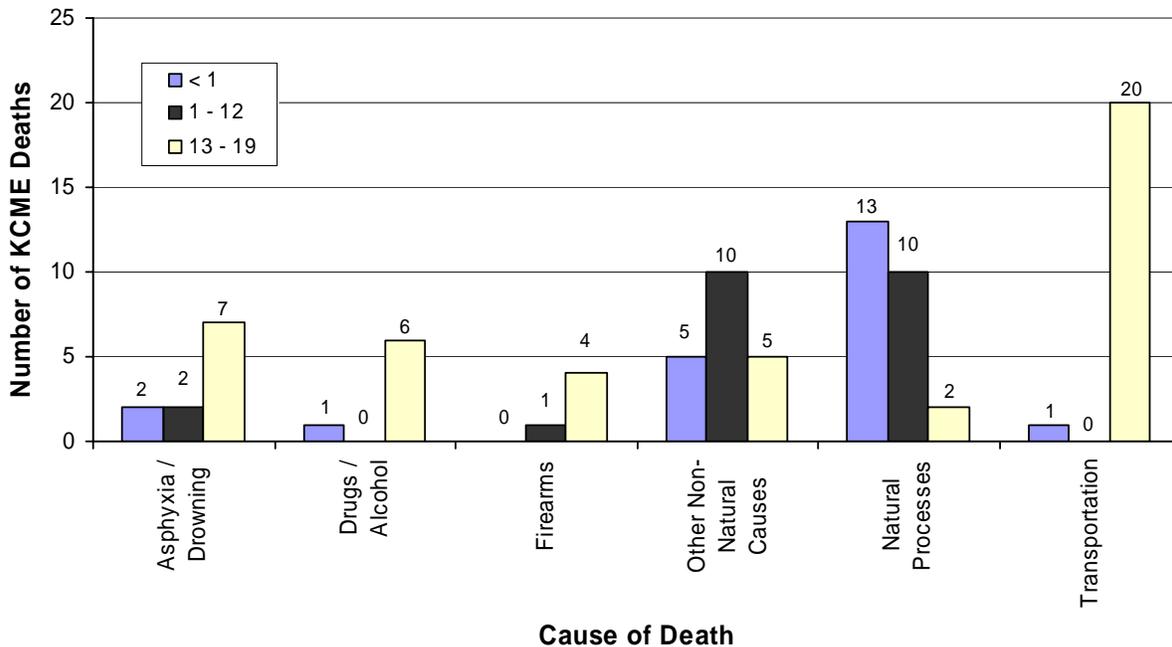


Table 11-1 Causes of Death: Children Under 1 Year of Age / KCME / 2007

| CIRCUMSTANCES | MANNER OF DEATH | | | | | | SUB | |
|-------------------------|-----------------|----------|----------|----------|----------|-----------|-------|-----------|
| | A | H | S | T | U | N | TOTAL | TOTAL |
| Miscellaneous | 3 | 2 | 0 | 1 | 3 | 0 | | 9 |
| Asphyxia | 2 | 0 | 0 | 0 | 0 | 0 | 2 | |
| Aspiration | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Blunt Force / Crushing | 0 | 2 | 0 | 0 | 0 | 0 | 2 | |
| Burns / Fire | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Drugs | 0 | 0 | 0 | 0 | 1 | 0 | 1 | |
| Homicidal Violence | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Motor Vehicle Passenger | 0 | 0 | 0 | 1 | 0 | 0 | 1 | |
| Other | 1 | 0 | 0 | 0 | 2 | 0 | 3 | |
| SIDS | 0 | 0 | 0 | 0 | 0 | 13 | 13 | |
| Other Natural Disease | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |
| Totals | 3 | 2 | 0 | 1 | 3 | 13 | | 22 |

Table 11-2 Causes of Death: Children 1 to 12 Years of Age / KCME / 2007

| CIRCUMSTANCES | MANNER OF DEATH | | | | | | SUB | |
|--------------------------------|-----------------|----------|----------|----------|----------|-----------|-------|-----------|
| | A | H | S | T | U | N | TOTAL | TOTAL |
| Asphyxia | 2 | 0 | 0 | 0 | 0 | 0 | | 2 |
| <i>Carbon Monoxide</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Drowning</i> | 2 | 0 | 0 | 0 | 0 | 0 | 2 | |
| <i>Hanging</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Mechanical</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Other</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Positional</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Miscellaneous | 6 | 0 | 0 | 0 | 0 | 0 | | 6 |
| <i>Aircraft</i> | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| <i>Complication of Therapy</i> | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| <i>Drugs</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Fall</i> | 2 | 0 | 0 | 0 | 0 | 0 | 2 | |
| <i>Fire / Explosion</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Hyperthermia</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Jump</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Non Traffic -Vehicle</i> | 2 | 0 | 0 | 0 | 0 | 0 | 2 | |
| <i>Other</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Physical Trauma | 0 | 3 | 0 | 0 | 0 | 0 | | 5 |
| <i>Abuse</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Blunt Force / Crushing</i> | 0 | 2 | 0 | 0 | 0 | 0 | 2 | |
| <i>Burns / Fire</i> | 2 | 0 | 0 | 0 | 0 | 0 | 2 | |
| <i>Firearms</i> | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| <i>Incised / Stab Wound(s)</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Transportation Related | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |
| <i>Bicycle</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Motor Vehicle Passenger</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Motorcycle</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Pedestrian</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Natural Disease | 0 | 0 | 0 | 0 | 0 | 10 | | 10 |
| Totals | 10 | 3 | 0 | 0 | 0 | 10 | | 23 |

Table 11-3 Causes of Death: Children 13 to 19 Years of Age / KCME / 2007

| CIRCUMSTANCES | MANNER OF DEATH | | | | | | SUB | |
|--------------------------------|-----------------|----------|----------|-----------|----------|----------|-------|-----------|
| | A | H | S | T | U | N | TOTAL | TOTAL |
| Asphyxia | 4 | 0 | 3 | 0 | 0 | 0 | | 7 |
| <i>Carbon Monoxide</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Drowning</i> | 4 | 0 | 0 | 0 | 0 | 0 | 4 | |
| <i>Hanging</i> | 0 | 0 | 3 | 0 | 0 | 0 | 3 | |
| <i>Smothering</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Positional</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Other</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Drugs / Alcohol | 6 | 0 | 0 | 0 | 1 | 0 | | 7 |
| Miscellaneous | 1 | 0 | 1 | 0 | 0 | 0 | | 2 |
| <i>Complication of Therapy</i> | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| <i>Fall</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Jump</i> | 0 | 0 | 1 | 0 | 0 | 0 | 1 | |
| <i>Non-Traffic Vehicular</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Other</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Physical Trauma | 1 | 4 | 1 | 0 | 0 | 0 | | 6 |
| <i>Blunt Force / Crushing</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Burns / Fire</i> | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| <i>Firearms</i> | 0 | 3 | 1 | 0 | 0 | 0 | 4 | |
| <i>Homicidal Violence</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| <i>Incised / Stab Wound(s)</i> | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| <i>Strangulation</i> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Transportation Related | 0 | 0 | 0 | 20 | 0 | 0 | | 20 |
| <i>Bicycle</i> | 0 | 0 | 0 | 1 | 0 | 0 | 1 | |
| <i>Motor Vehicle Driver</i> | 0 | 0 | 0 | 8 | 0 | 0 | 8 | |
| <i>Motor Vehicle Passenger</i> | 0 | 0 | 0 | 7 | 0 | 0 | 7 | |
| <i>Motorcycle</i> | 0 | 0 | 0 | 1 | 0 | 0 | 1 | |
| <i>Pedestrian</i> | 0 | 0 | 0 | 3 | 0 | 0 | 3 | |
| Natural Disease | 0 | 0 | 0 | 0 | 0 | 2 | | 2 |
| Totals | 12 | 4 | 5 | 20 | 1 | 2 | | 44 |

ORGAN DONATION

Although the King County Medical Examiner's Office does not approach families for donation of organs and tissue from decedents, the office realizes the tremendous need of this life-saving activity and cooperates fully with organ and tissue procurement agencies for this purpose. 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 2007, the King County Medical Examiner's Office was notified of 28 deaths that were eligible for organ donation in King County. The KCMEO gave full release on 27 of these deaths and partial release for one. Altogether, there were 108 organs transplanted from King County Medical Examiner cases. The number of specific organs transplanted in 2007 is shown in Table 12-1¹.

Table 12-1 Organs Transplanted / KCME / 2007

| ORGAN | # Transplanted |
|------------------|----------------|
| Heart | 13 |
| Intestine | 2 |
| Kidney (Left) | 23 |
| Kidney (Right) | 23 |
| Kidneys (Enbloc) | 6 |
| Liver (Whole) | 20 |
| Lungs (Enbloc) | 12 |
| Pancreas (Whole) | 9 |
| Total | 108 |

¹Data for Table 12-1 were provided by the organ procurement agency, LifeCenter Northwest.

MEDICAL EXAMINER ACTIVITY

The staff members 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 death scenes, 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 the family 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 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. The Chief Medical Examiner provides expert medical consultation and testimony in cases involving non-fatal 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-related deaths are reported to the Drug Abuse Warning Network (DAWN).

Medical Examiner investigations require frequent contact between the Medical Examiner's Office and various media personnel. 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 analyzes 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 2007, 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, M.D., Ph.D.

Academic Appointment:

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

Preceptorships & Faculty Positions:

- University of Washington School of Medicine, medical students, pathology residents, and physician assistant (MEDEX) students
- University of Washington School of Nursing, graduate students in Forensic Nursing
- Course Director and Faculty, "Problems in Forensic Pathology", King County Medical Examiner's Office, accredited by the University of Washington Office for Continuing Medical Education
- Faculty, Certificate Program in Forensics, University of Washington Extension

Associations, Committees and Boards:

- Member, American Medical Association
- Member, Washington State Medical Association
- Member, American Academy of Forensic Sciences
 - Best Resident Paper Award Committee
- Member, National Association of Medical Examiners
 - International Relationships Ad hoc Committee
 - Forensic Pathology Fellowship Training Subcommittee
- Advisory Board, University of Washington Certificate Program in Forensics
- Community Advisory Board, University of Washington School of Nursing, Advanced Practice Forensic Nurse Specialist Program

- King County Child Death Review Committee
- King County Elder Abuse Council
- Member, Disaster Mortuary Operations Response Team, Region 10
- Member, Washington Association of Coroners and Medical Examiners

Professional Meetings, Trainings & Certifications:

- American Academy of Forensic Sciences Annual Meeting, San Antonio, TX, February 19-24
- National Disaster Medical System, National Conference, Nashville, TN, March 19-21
- Workplace Violence Prevention Program, Employment Law Learning Technologies, April 6
- Indo-Pacific Association of Law, Medicine and Science, 9th International Congress, Colombo, Sri Lanka, July 22-27
- Tuberculosis/Bloodborne Pathogen Training, Public Health – Seattle & King County, August 14
- Domestic Violence in the Workplace Training, September 11
- Pandemic Flu Mass Fatality Tabletop Exercise, September 28
- HIPAA Compliance, Healthcare Compliance Certification Board, November 29
- Continuing Medical Education, 44 hours of American Medical Association, Category 1, Physicians Recognition Award for “Problems in Forensic Pathology”, January – December, 2007

Scientific Presentations:

- Comparison of wound severity between center fire rifle projectiles and shotgun slugs. Park JH and Harruff RC. Proceedings of the American Academy of Forensic Sciences Annual Meeting, San Antonio, TX, February 19-24
- Death from truck tire servicing: a report of three cases and a review of the literature. Cho P, Fusaro A, Harruff RC. Proceedings of the American Academy of Forensic Sciences Annual Meeting, San Antonio, TX, February 19-24
- Geographical factors in carbon monoxide poisonings. Indo-Pacific Association of Law, Medicine and Science, 9th International Congress, Colombo, Sri Lanka, July 22-27
- Expanding role of the medical examiner. Indo-Pacific Association of Law, Medicine and Science, 9th International Congress, Colombo, Sri Lanka, July 22-27

Scientific Publications:

- Necrotizing fasciitis: manifestations, microbiology and connection with black tar heroin. Dunbar, NM, Harruff, RC. *Journal of Forensic Sciences* 2007; 52(4):920-3
- Incidence and significance of upper body cyanosis in nontraumatic cardiac arrest. Swoboda BD, Eisenberg MS, Harruff RC, Fligner CL. *Prehospital Emergency Care* 2007; 11(2):207-9

Local and Regional Educational Presentations:

- The Death Scene and Autopsy
Deputy Prosecuting Attorneys
King County Prosecuting Attorney's Office
Seattle, WA January 20
- Sudden Unexplained Infant Death – New Investigative Techniques
15th Annual Children's Justice Conference
Washington State Convention and Trade Center
Seattle, WA March 26-27
- Automobile Accident Reconstruction
Certificate Program in Forensics
University of Washington
Seattle, WA April 16
- Infant Deaths
Certificate Program in Forensics
University of Washington
Seattle, WA April 16
- Basic Death Investigation
Forensic Sciences Courses
Seattle University
Seattle, WA April 17
- Pattern Injuries and Strangulation
Core Training for Sexual Assault Nurse Examiners
Harborview Center for Sexual Assault and Traumatic Stress
University of Washington
Seattle, WA April 25
- Mass Disaster Preparedness
Seattle King County Dental Society Forensic Committee
Seattle, WA May 30
- Investigation of Infant Deaths
Child Care Health Program
Public Health – Seattle & King County
Seattle, WA June 6
- Investigation of Infant Deaths
Pathology Residency Program
University of Washington School of Medicine
Seattle, WA August 16
- Strangulation in Domestic Violence
King County Prosecuting Attorney's Office
Domestic Violence Section
Seattle, WA September 17
- Vulnerable Adult Death Investigations, Making the Case for Justice:
Investigation and Prevention of Crimes against Elders & Vulnerable Adults
Bellevue, WA September 27

- Child Death Investigations
Violent Crimes Investigation Conference
Regional Justice Training Center
Burien, WA October 3
- Postmortem Changes in Death Investigation
Airlift Northwest Fall Conference 2007
Seattle, WA October 6
- Pattern Injuries and Strangulation
Core Training for Sexual Assault Nurse Examiners
Harborview Center for Sexual Assault and Traumatic Stress
Seattle, WA October 10
- Occupant Kinematics and Mechanism of Injury
Collision Reconstruction Course
Washington State Patrol
Shelton, WA October 25
- Forensic Death Investigation
Forensics Course
The Overlake School
Redmond, WA November 7

J. Matthew Lacy, MD, Associate Medical Examiner

Associations, Committees and Boards:

- Associate Member, American Academy of Forensic Scientists
- Fellow, College of American Pathologists
- Member, National Association of Medical Examiners
- Member, Washington Association of Coroners and Medical Examiners

Preceptorship:

- Clinical Instructor, Department of Pathology, University of Washington School of Medicine

Scientific Publications:

- *Case Report of a Multidrug Intoxication Fatality Involving GHB.*
Poster: International Association of Forensic Toxicologists, T2007 Conference.
Akins BE, Miranda E, Lacy JM, Gordon AM, Logan BK.
Seattle, WA August
- *Suicidal Drug Ingestion Involving Zaleplon*
Poster: International Association of Forensic Toxicologists, T2007 Conference.
Swenson, S, Lacy JM, Gordon AM, Logan BK.
Seattle, WA August

Local and Regional Educational Presentations:

- Testimony before WA State Senate Judiciary Committee
Medical aspects of strangulation; in support of domestic violence legislation
Olympia, WA February 21
- Testimony before WA State House Committee on Emergency Preparedness
Medical aspects of strangulation; in support of domestic violence legislation
Olympia, WA February 26
- Homicide Investigation
KCMEO Advisory Committee Meeting
Presenter & Facilitator
Seattle Police Training Facility
Seattle, WA March 20
- Natural Deaths
UW Extension Program in Forensics
University of Washington
Seattle, WA April 9
- The Public Health Role of the Medical Examiner
Forensic Nursing Conference Keynote Address
Shoreline Conference Center
Shoreline, WA April 11
- Death Certification
KCMEO Advisory Committee Meeting
Seattle Police Training Facility
Seattle, WA May 22
- Autopsy Case of Cryptococcus gatti Infection
University of Washington Department of Neurology
Harborview Medical Center
Seattle, WA July 12
- Sharp Force Injury and Gunshot Wounds
UW Anatomic Pathology Residency Core Lecture Series
University of Washington Medical Center
Seattle, WA August 7
- Poster Presentations
Society of Forensic Toxicologists Annual Meeting
Seattle, WA August 29
- Bronchogenic Cyst
Chief of Medicine Rounds
Harborview Medical Center
Seattle, WA August 28

Aldo Fusaro, DO, Associate Medical Examiner***Academic Appointment***

- Clinical Instructor (in application), Department of Pathology, University of Washington School of Medicine

Preceptorship:

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

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
- Fellow, College of American Pathologists
- Fellow, American Society of Clinical Pathologists
- Advisory Committee, King County Medical Examiner's Office
- Advisory Committee, Washington State Department of Health Mass Fatality Planning Committee

Professional Meetings, Trainings & Certifications:

- National Association of Medical Examiners, Annual Meeting, Savannah, GA, October 13-17
- Annual Blood Borne Pathogens Training, Public Health – Seattle & King County, October
- Health Information Privacy & Security Training, Public Health – Seattle & King County, December

Scientific Presentations:

- Death from truck tire servicing: a report of three cases and a review of the literature. Cho P, Fusaro A, Harruff RC. Proceedings of the American Academy of Forensic Sciences Annual Meeting, San Antonio, TX, February 19-24
- Negligible Carboxyhemoglobin Levels in Deaths Likely Due to Carbon Monoxide. Platform Presentation. National Association of Medical Examiners Annual Meeting, Savannah, GA, October 13-17

Local and Regional Educational Presentations:

- Homicide Processing
 - KCMEO Advisory Committee Meeting
 - Seattle Police Training Facility
 - Seattle, WA March 21
- Excited Delirium
 - KCMEO Advisory Committee Meeting
 - Seattle Police Training Facility
 - Seattle, WA May 22
- Forensic Pathology In-Service Review

University of Washington
Department of Pathology
Seattle, WA August 7

- Exposure Control During Traumatic Recovery Incidents
King County Search & Rescue
Bellevue, WA November

Katherine Taylor, Ph.D., Forensic Anthropologist

Associations, Committees and Boards:

- Member, Missing Persons Task Force, Washington Association of Counties
- Board Member, SIDS Foundation of Washington
- Board Member, Department of Criminal Justice Advisory Board, Seattle University
- Member, American Board of Medicolegal Death Investigators
- Fellow, American Academy of Forensic Sciences

Local and Regional Educational Presentations:

- Outdoor Crime Scenes and Determination of Human v. Non-Human Skeletal Remains
Association of Crime Scene Responders Annual Conference
Tacoma, WA January 23
- Outdoor Crime Scenes and Evidence Collection
King County Search Dog Responders
Renton, WA March 7
- Mass Fatality Investigations
Washington State Department of Public Health
Olympia, WA March 8
- Panel Member of “Green River Investigations Round Table”
Academy of Criminal Justice Sciences Annual Meeting
University of Washington
Seattle, WA March 16
- Mock Expert Witness
Seattle University School of Law
Seattle, WA March 21
- Outdoor Crime Scenes and Determination of Human v. Non-Human Skeletal Remains
WA State Search & Rescue Annual Conference
Crystal Mountain, WA May 18
- Investigating Missing Persons & Unidentified Bodies
Presented with Detective Tina Drain, Seattle Police Department
Washington Association of Coroners & Medical Examiners
Lake Chelan, WA June 17-19
- Discovery & Recovery of Human Remains
Washington Violent Crime Investigators Association
Ravensdale, WA July 16-20
- Processing Buried Body Scenes

Presented with the King County Sheriff's Office
Kootenai County Search & Rescue
Coeur D'Alene, ID August 24-25

- Determination of Human v. Non-Human Skeletal Remains
Violent Crimes Investigations Conference
Seattle, WA October 2
- Forensic Anthropology
Bellevue Community College Forensic Anthropology Class
Bellevue, WA December 5

Greg Hewett, Mdiv., Program Manager IV

Associations, Committees and Boards

- Member, Seattle University Advisory Committee, Criminal Justice Program
- Member, Washington Association of Coroners & Medical Examiners
- Washington State Registered Counselor

Local and Regional Educational Presentations:

- Role & Responsibility of the King County Medical Examiner's Office
Co-presenter with Al Noriega, Lead Investigator
King County Medical Examiner's Office
Seattle, WA March 14
- Role & Responsibility of the King County Medical Examiner's Office
Co-presenter with Al Noriega, Lead Investigator
Seattle University
Seattle, WA April 11

Al Noriega, Lead Forensic Medical Investigator

Associations, Committees and Boards:

- Diplomate, American Board of Medicolegal Death Investigators
- Member, Washington Association of Coroners and Medical Examiners
- Member, Seattle University Advisory Committee, Criminal Justice Program

Local and Regional Educational Presentations:

- Role & Responsibility of the King County Medical Examiner's Office
Co-presenter with KCMEO Dr. Patrick Cho
Careers in Forensics, University of Washington Career Discovery Week
University of Washington
Seattle, WA January 25
- Basic Forensic Death Investigation for Law Enforcement / Firefighters
Co-presenter with King County Sheriff's Detectives Christina Bartlett & Mike Mellis
Shoreline Fire Department Headquarters
Shoreline, WA February 19, 26 & 30

- Role & Responsibility of the King County Medical Examiner's Office
Co-presenter with KCMEO Program Manager Greg Hewett
2007 Academy of Criminal Justice Sciences Conference
King County Medical Examiner's Office
Seattle, WA March 14
- Role & Responsibility of the King County Medical Examiner's Office
5th Annual Palliative Care Conference Research & Training
Harborview Medical Center
Seattle, WA March 29
- Role & Responsibility of the King County Medical Examiner's Office
Co-presenter with KCMEO Program Manager Greg Hewett
Seattle University
Seattle, WA April 11
- Basic Forensic Death Investigation for Law Enforcement
Fife Police Department Headquarters
Fife, WA May 1
- Role & Responsibility of the King County Medical Examiner's Office
Seattle Police North Precinct Advisory Council
Seattle, WA August 1

Nathan Geerdes, D-ABMDI, BA Psychology, Medicolegal Death Investigator

Associations:

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

Local and Regional Educational Presentations:

- The Role & Responsibility of the Medical Examiner's Office
King County Medical Examiner's Office
Seattle University
Seattle, WA January 17
- The Role & Responsibility of the Medical Examiner's Office
King County Medical Examiner's Office
Seattle University
Seattle, WA April 11

Lauren Brill, BA Sociology, Medicolegal Death Investigator

Local and Regional Educational Presentation:

- Nomenclature of Sharp Force Weapons
Weekly Problems in Forensic Pathology Conference
King County Medical Examiner's Office
Seattle, WA April 30

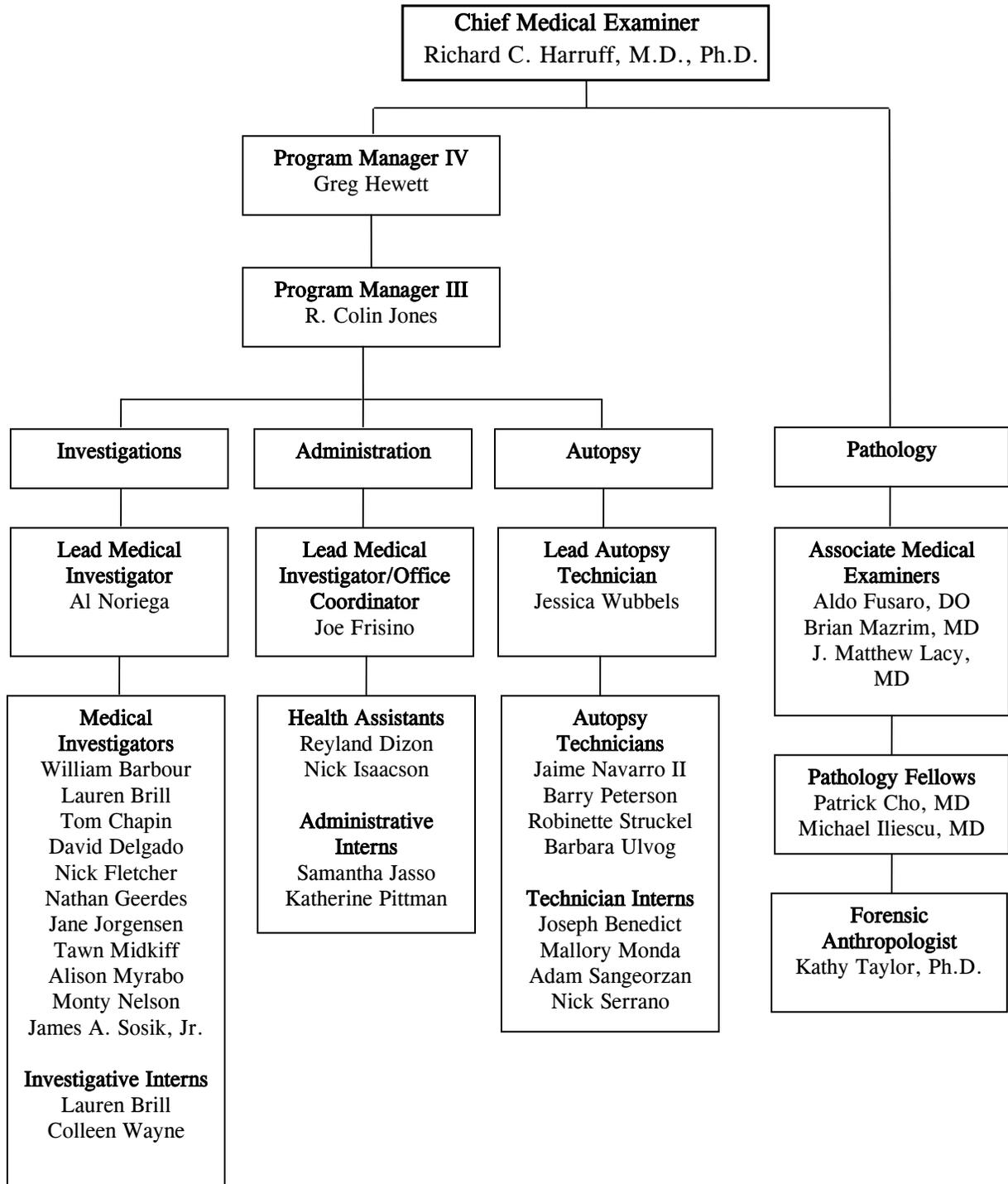
Table 13-1 **Weekly Variation of Deaths Investigated by the King County Medical Examiner's Office**

| | TOTAL |
|------------------------------|-------|
| Number of weeks studied | 52 |
| Mean number of cases assumed | 40 |
| Maximum in any one week | 57 |
| Minimum in any one week | 23 |

Table 13-2 **Weekly Variation of Autopsies Performed by the King County Medical Examiner's Office**

| | TOTAL |
|--------------------------|-------|
| Number of weeks studied | 52 |
| Mean number of autopsies | 26 |
| Maximum in any one week | 37 |
| Minimum in any one week | 15 |

Organization of the King County Medical Examiner's Office 2007



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.
- 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.
- 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.

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

²Ibid, p. 3.

| | |
|---------------------------------|---|
| 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. |
| 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: Complication Of Therapy | Death that arises as a predictable consequence of appropriate medical therapy. Although this is a manner of death for death certification purposes, Complication of Therapy statistics are included under the Manner "Accident" in this report. |
| Manner: Undetermined | Manner assigned when there is insufficient evidence or information, especially about intent, to assign a specific manner. |
| 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. |
| 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. |
| Race: | The racial categories used in this report are: White; African American; Native American; Asian/Pacific Islander; and Other. |