EXPLANATION OF DATA

The information presented here was compiled on deaths in which the King County Medical Examiner assumed jurisdiction during the calendar year 2004. (*Please refer to Page 3 which outlines 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. If the quality of life in King County is to be improved then perhaps this report can serve as a basis for change.

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 2004 the King County population was estimated to be 1,788,300[1]. Included within King County are 42 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 2004. According to 2004 Office of Financial Management (OFM) estimates, the racial distribution of King County is 77.7% White, 5.8% Black, 3.3% two or more races indicated (new category for the year 2000), 12.2% Asian (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 18% 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 41).

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[1] State of Washington, Office of Financial Management, June 30, 2004 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 comprise 41% (765/1,863) of all deaths that the Medical Examiner investigates.

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.

Those interested in obtaining more specific information should seek our assistance, as additional data are available and more specific analysis is possible. Our contact number is (206) 731-3232, extension 1.

MEDICAL EXAMINER CASES IN 2004

The following provides a summary of the raw data from the Medical Examiner's 2004 cases.

In 2004 there were an estimated 12,648 deaths in King County[2] (0.71% of a 2004 population estimate of 1,788,300). Of these deaths, 7,872 (62%) were reported to the Medical Examiner 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 1,925 of these reported deaths, of which 62 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 are excluded. The number of applicable cases used in this report is 1,863 deaths.

Of note is the fact that the Medical Examiner declined jurisdiction in 5,947 of the deaths that were reported. The Medical Examiner's Office applies a strict interpretation of the 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 63% (1,172/1,863) 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 2004 there were 415 such deaths, accounting for 22% (415/1,863) of the total deaths. In addition, there were 266 deaths (14%) (266/1,863) 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, 37% (53/145) 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 133 vehicle occupants who died, 57% (76/133) were wearing restraints.

In the 23 deaths involving motorcyclists, 87% (20/23) were wearing helmets. The remaining three were either not wearing helmets or represent cases in which the use of a helmet is not known.

[2] Death certificates filed in King County, (Vital Statistics, Public Health - Seattle & King County, 2005).

Firearms were the most frequent instrument of death in homicides and suicides, accounting for 61% (46/76) of the homicides and 42% (95/229) of the suicides.

While the discussion here tends to depict the more violent types of death, the reader should be reminded that 41% (765/1,863) of Medical Examiner cases involve natural deaths. Specific discussion and presentation of relevant tables regarding 2004 cases follow this brief summary.

Table 1-1 Deaths Occurring in King County / Medical Examiner Cases / 2004

CASES BY MANNER OF DEATH[3]		NUMBER OF KCME DEATHS	PERCENT OF KCME DEATHS
Accident Other	(A)	542	28.1%
Accident Traffic	(T)	192	10.3%
Homicide	(H)	76	4.1%
Natural	(N)	765	41.1%
Suicide	(S)	229	12.3%
Undetermined[4]	(U)	59	3.1%
Total KCME general cases		1,863	100%
Non-applicable cases where jurisdiction was assumed[5]		62	
Total KCME jurisdiction cases		1,925	
Total KCME general cases[6]		1,863	
Deaths reported to KCME but no jurisdiction was assumed (NJA)		5,947	
All other deaths in King County not reported to KCME		4,838	
ALL KING COUNTY DEATHS[7]		12,648	

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

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

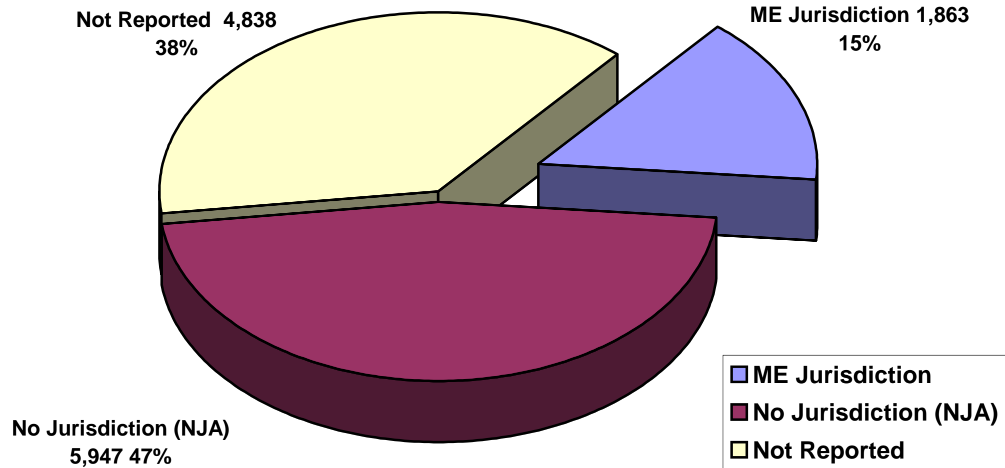
[5] Non-applicable includes 47 non-human bones/tissue, and 15 anthropology/contract cases.

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

[7] Death certificates filed in King County, (Vital Statistics, Public Health - Seattle & King County, 2005).

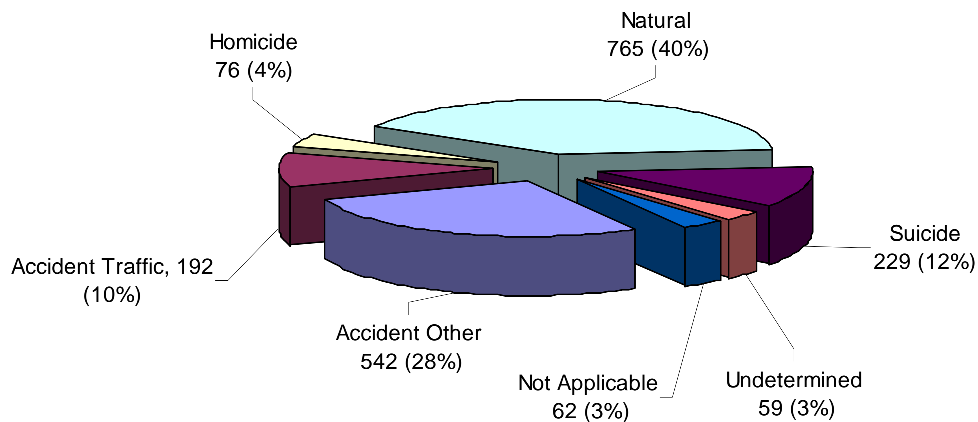
Graph 1-1 All King County Deaths with Medical Examiner Jurisdiction Shown / 2004

There were 12,648 deaths in King County in 2004.



Graph 1-2 Manner of Death for All Medical Examiner Jurisdiction Cases / 2004

Jurisdiction assumed in 1,925 cases[8].

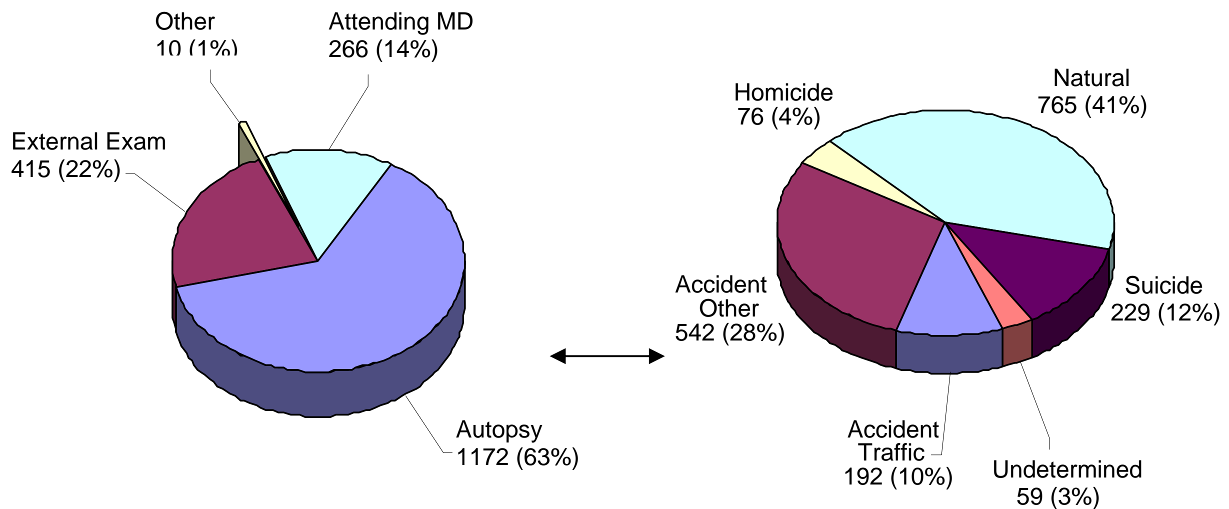


[8] This number includes 62 non-applicable cases (non-human tissue/bones and anthropology/contract cases).

Table 1-2 Method of Certification / Manner of Death / KCME / 2004

CERTIFICATION	MANNER OF DEATH						TOTAL	%
	A	T	H	N	S	U		
KCME Autopsies	324	140	74	394	185	55	1172	63%
KCME External Exams	149	51	0	171	42	2	415	22%
KCME Other	6	0	2	0	0	2	10	1%
Attending Physician	63	1	0	200	2	0	266	14%
Totals	**542**	**192**	**76**	**765**	**229**	**59**	**1,863**	100%

Graph 1-3 Method of Certification for all King County Medical Examiner Jurisdiction Cases / 2004



Manner of Death in 2004
King County Medical Examiner General Cases

Table 1-3 Sex / Manner of Death / King County Medical Examiner / 2004

SEX	MANNER OF DEATH							
	A	T	H	N	S	U	TOTAL	%
Male	341	127	59	527	179	30	1263	68%
Female	201	65	17	238	50	29	600	32%
Totals	**542**	**192**	**76**	**765**	**229**	**59**	**1,863**	100%

Graph 1-4 Sex / Manner of Death / King County Medical Examiner / 2004

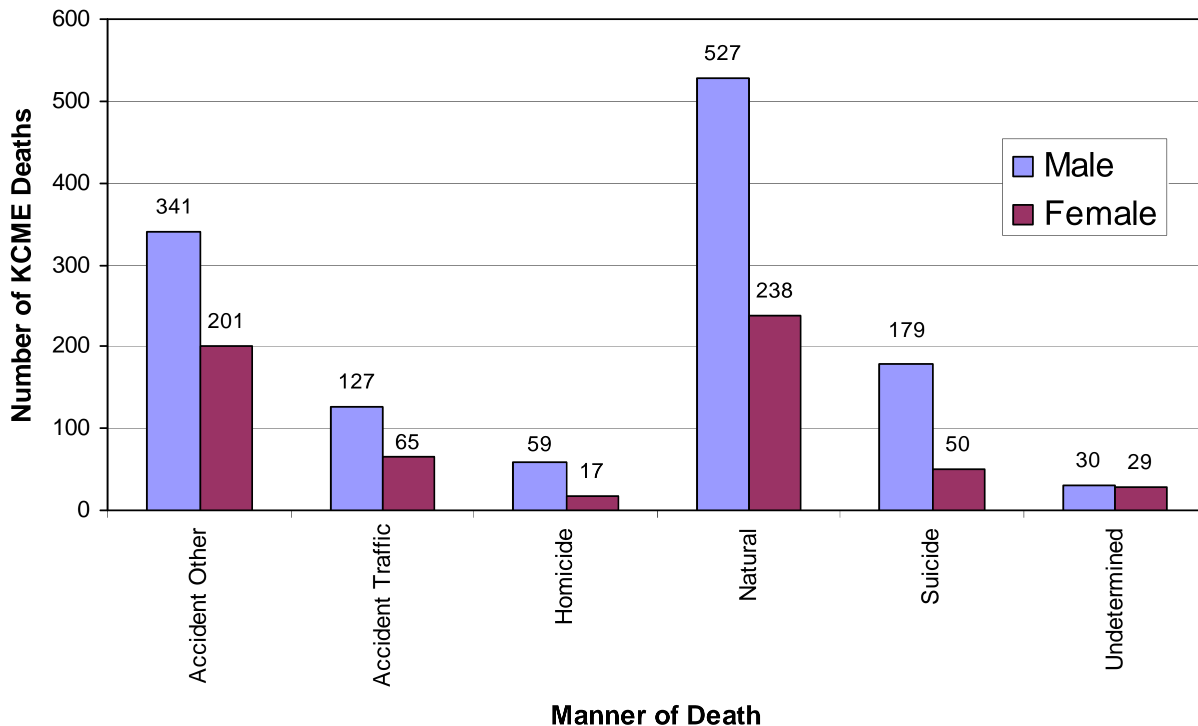


Table 1-4 Age / Sex / Manner of Death / King County Medical Examiner / 2004

	MANNER OF DEATH								
AGE / SEX	A	T	H	N	S	U	Sub-Total	TOTAL	%
Under 1 year								32	1.7%
Male	1	1	4	15	0	1	22		
Female	0	0	0	6	0	4	10		
1 - 5 years								16	0.9%
Male	4	1	1	0	0	0	6		
Female	0	2	2	6	0	0	10		
6- 12 years								5	0.3%
Male	0	1	0	2	0	0	3		
Female	1	0	1	0	0	0	2		
13-15 years								11	0.6%
Male	4	2	1	2	1	0	10		
Female	0	0	0	1	0	0	1		
16-19 years								53	2.8%
Male	7	12	7	2	4	1	33		
Female	2	9	2	3	3	1	20		
20- 29 years								182	9.8%
Male	35	42	21	12	28	2	140		
Female	4	15	4	7	9	3	42		
30- 39 years								190	10.2%
Male	37	12	9	39	36	5	138		
Female	15	9	2	12	6	8	52		
40- 49 years								324	17.4%
Male	57	20	10	92	35	12	226		
Female	29	7	3	40	12	7	98		
50- 59 years								331	17.8%
Male	60	9	5	126	36	3	239		
Female	31	4	0	43	12	2	92		
60 - 69 years								220	11.8%
Male	28	9	1	117	12	1	168		
Female	19	3	0	24	4	2	52		
70 - 79 years								217	11.6%
Male	43	7	0	72	13	3	138		
Female	26	7	1	40	4	1	79		
80 - 89 years								213	11.4%
Male	50	10	0	39	12	1	112		
Female	48	8	1	44	0	0	101		
90+ years								67	3.6%
Male	15	1	0	9	2	0	27		
Female	26	1	1	12	0	0	40		
Unknown								2	0.1%
Male	0	0	0	0	0	1	1		
Female	0	0	0	0	0	1	1		
Totals	**542**	**192**	**76**	**765**	**229**	**59**		**1,863**	**100%**

Table 1-5 Race / Sex / Manner of Death / King County Medical Examiner / 2004

RACE / SEX	MANNER OF DEATH A	T	H	N	S	U	Sub-Total	TOTAL	%
White								1551	83.3%
Male	297	110	28	437	159	20	1051		
Female	172	54	12	196	43	23	500		
Black								162	8.7%
Male	29	10	18	55	6	6	124		
Female	13	1	2	20	0	2	38		
Asian								97	5.2%
Male	8	5	9	20	11	2	55		
Female	13	8	2	15	4	0	42		
Native American								32	1.7%
Male	5	1	3	6	2	0	17		
Female	3	2	1	6	2	1	15		
Other								17	0.9%
Male	2	1	1	7	1	1	13		
Female	0	0	0	1	1	2	4		
Unknown								4	0.2%
Male	0	0	0	2	0	1	3		
Female	0	0	0	0	0	1	1		
Totals	**542**	**192**	**76**	**765**	**229**	**59**		**1,863**	**100%**

Table 1-6 Marital Status / Sex / Manner of Death / King County Medical Examiner / 2004

MARITAL STATUS / SEX	MANNER OF DEATH								
	A	T	H	N	S	U	Sub-Total	TOTAL	%
Never Married	135	96	48	236	90	25		630	33.7%
Male	*112*	*69*	*39*	*182*	*72*	*12*	*486*		
Female	*23*	*27*	*9*	*54*	*18*	*13*	*144*		
Married	163	48	15	154	69	13		462	24.8%
Male	*113*	*33*	*11*	*107*	*59*	*7*	*330*		
Female	*50*	*15*	*4*	*47*	*10*	*6*	*132*		
Divorced	121	28	9	207	53	13		431	23.1%
Male	*71*	*15*	*8*	*145*	*36*	*8*	*283*		
Female	*50*	*13*	*1*	*62*	*17*	*5*	*148*		
Widowed	116	17	3	99	11	2		248	13.3%
Male	*38*	*7*	*0*	*36*	*8*	*0*	*89*		
Female	*78*	*10*	*3*	*63*	*3*	*2*	*159*		
Unknown	7	3	1	69	7	5		92	5.1%
Male	*7*	*3*	*1*	*57*	*5*	*2*	*75*		
Female	*0*	*0*	*0*	*12*	*2*	*3*	*17*		
Totals	**542**	**192**	**76**	**765**	**229**	**59**		**1,863**	**100%**

Graph 1-5 Marital Status / Manner of Death / King County Medical Examiner / 2004

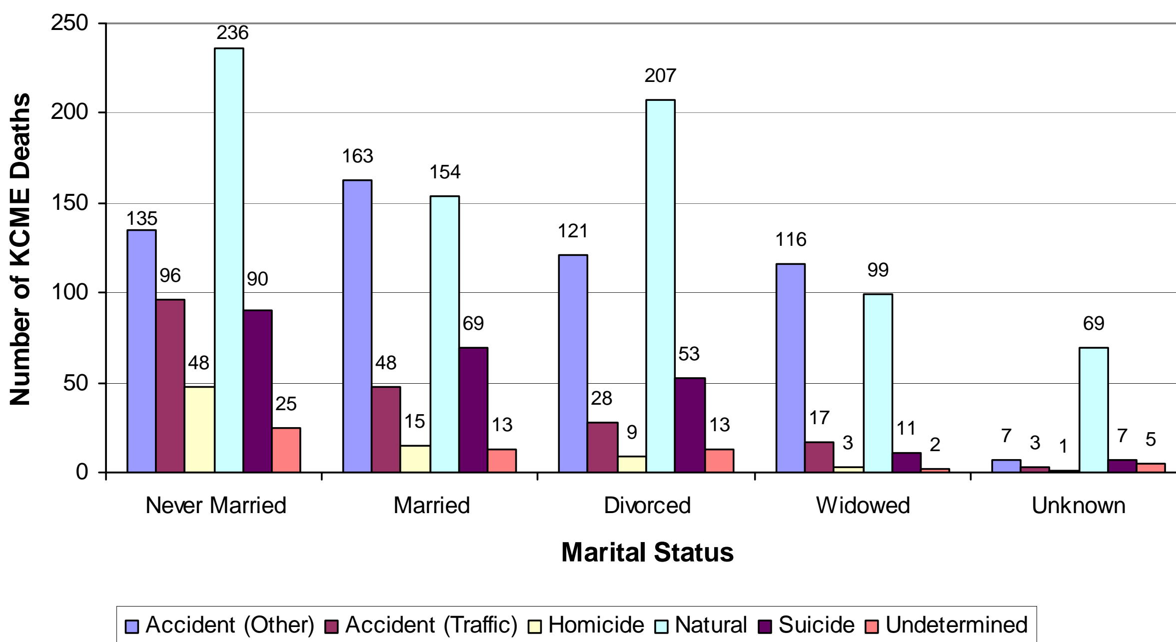


Table 1-7 Month / Manner of Death / King County Medical Examiner / 2004

	MANNER OF DEATH							
MONTH	A	T	H	N	S	U	Total	%
Prior to 2003	0	0	1	0	0	2	3	0.2%
Previous Year	3	0	0	13	2	1	19	1.0%
January	52	8	7	68	25	5	165	8.9%
February	54	8	3	81	20	2	168	9.0%
March	31	15	7	64	15	7	139	7.5%
April	42	15	8	75	15	3	158	8.5%
May	38	20	7	48	19	5	137	7.4%
June	45	18	3	70	18	3	157	8.4%
July	59	22	6	49	19	6	161	8.6%
August	39	23	4	64	20	1	151	8.1%
September	44	21	7	45	13	8	138	7.4%
October	52	17	9	66	26	2	172	9.2%
November	46	14	7	64	14	3	148	7.9%
December	36	11	5	57	22	6	137	7.4%
Unknown	1	0	2	1	1	5	10	0.5%
Totals	**542**	**192**	**76**	**765**	**229**	**59**	**1,863**	**100%**

Graph 1-6 Month / Manner of Death / King County Medical Examiner / 2004

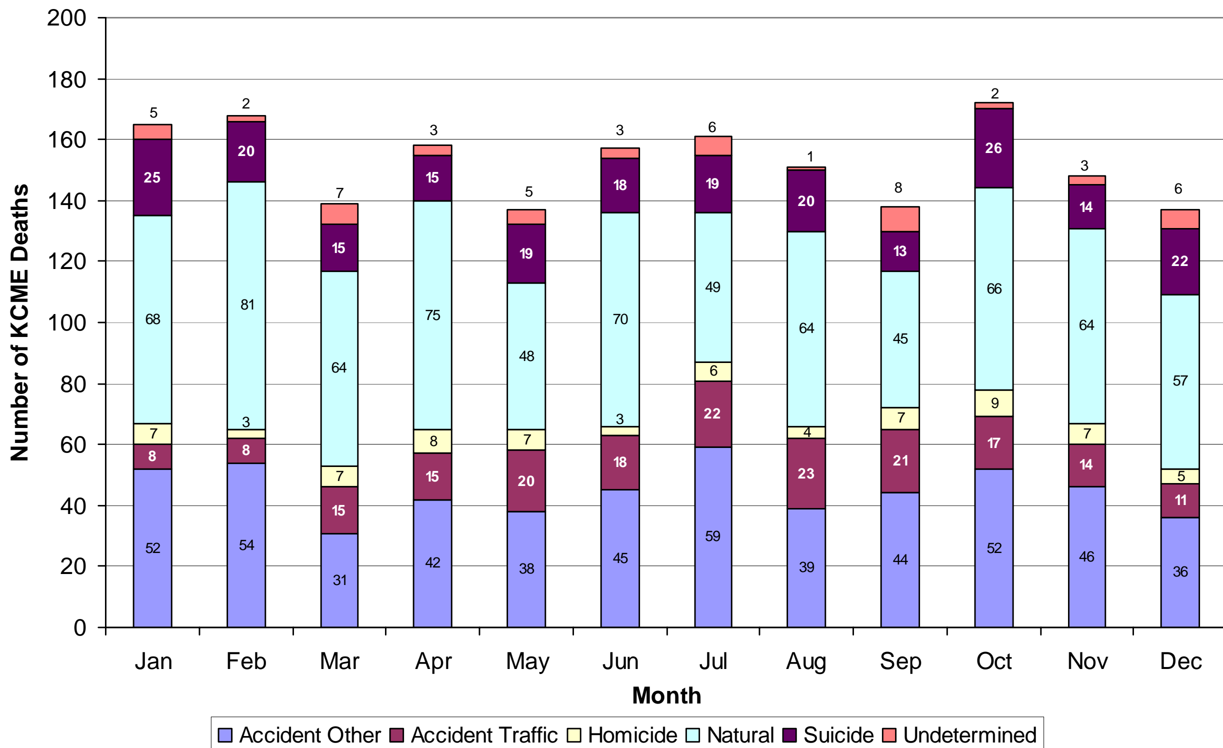


Table 1-8 Nearest Incorporated City to the Fatal Incident / KCME / 2004[9]

CITY	MANNER OF DEATH					TOTAL	%
	A	T	H	S	U		
Algona	2	0	0	0	0	2	0.2%
Auburn	19	10	2	9	3	43	3.9%
Beaux Arts	0	0	0	0	0	0	0%
Bellevue	22	2	0	10	2	36	3.3%
Black Diamond	1	0	0	0	0	1	0.1%
Bothell	3	0	0	3	1	7	0.6%
Burien	9	0	0	3	1	13	1.2%
Carnation	1	2	0	2	0	5	0.5%
Clyde Hill	0	0	0	1	0	1	0.1%
Covington	1	0	0	2	0	3	0.3%
Des Moines	7	0	1	6	0	14	1.3%
Duvall	1	2	1	4	0	8	0.7%
Enumclaw	7	9	1	4	1	22	2.0%
Fall City	1	1	0	1	0	3	0.3%
Federal Way	25	5	1	13	0	44	4.0%
Hunt's Point	0	0	0	0	0	0	0%
Issaquah	7	3	0	5	1	16	1.4%
Kenmore	8	0	1	0	0	9	0.8%
Kent	25	8	5	14	1	53	4.8%
Kirkland	20	4	1	6	0	31	2.8%
Lake Forest Park	1	0	0	2	0	3	0.3%
Maple Valley	1	4	2	0	1	8	0.7%
Medina	0	0	0	0	0	0	0%
Mercer Island	6	0	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	0	2	0	1	1	4	0.4%
North Bend	2	8	1	7	1	20	1.8%
Pacific	1	0	0	1	0	2	0.2%
Ravensdale	2	1	0	2	0	5	0.5%

[9] Table does not include cases where manner of death is classified "Natural."

Table 1-8 Nearest Incorporated City to the Fatal Incident / KCME / 2004 (continued)

	MANNER OF DEATH						
CITY	A	T	H	S	U	Total	%
Redmond	12	0	1	9	0	22	2.0%
Renton	14	9	5	11	3	42	3.8%
Sammamish	1	1	0	1	0	3	0.3%
SeaTac	8	0	1	1	0	10	0.9%
Seattle	211	49	41	87	29	417	38.0%
Shoreline	8	1	1	7	1	18	1.6%
Skykomish	0	0	0	1	0	1	0.1%
Snoqualmie	0	1	0	0	0	1	0.1%
Tukwila	4	2	1	2	1	9	0.8%
Vashon Island	2	1	0	0	1	4	0.4%
Woodinville	2	1	0	0	0	3	0.3%
Yarrow Point	0	0	0	0	0	0	0%
Unincorporated King County	1	1	0	1	0	3	0.3%
Outside of King County	104	65	8	11	8	196	17.8%
Unknown Location	2	0	2	0	3	7	0.6%
Totals	**542**	**192**	**76**	**229**	**59**	**1,098**	**100%**

OUT OF COUNTY CASES IN 2004

Within King County are several major 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 2004 there were 195 deaths (18%) where the incident (excluding "Natural" deaths) 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 / 2004[10]

	MANNER OF DEATH					
INCIDENT LOCATION	A	T	H	S	U	TOTAL
Alaska	7	2	0	0	1	10
Idaho	3	1	0	0	0	4
Montana	2	2	1	0	0	5
Oregon	1	1	0	0	0	2
Other States	1	2	0	0	0	3
Washington						
Kitsap County	12	6	0	3	1	22
Pierce County	10	5	1	2	1	19
Skagit County	8	4	0	0	0	12
Snohomish County	20	10	3	2	3	38
Thurston County	4	6	1	2	0	13
Other WA Counties	36	26	2	2	0	66
Washington Sub-Total	***908***	***57***	***7***	***11***	***5***	***170***
Out of Country	1	0	0	0	0	1
Totals	**102**	**65**	**8**	**10**	**6**	**195**

[10] Table does not include cases where manner of death is classified as "Natural."