EXPLANATION OF DATA

The information presented here was compiled on deaths in which the King County Medical Examiner assumed jurisdiction during the calendar year 2005. (*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. 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 2005 the King County population was estimated to be 1,808,300¹. 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 2005. 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 in 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 17% 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).

¹ State of Washington, Office of Financial Management, April 29, 2006 estimate.

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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 39% (763/1,945) of all deaths that the Medical Examiner investigated in 2005.

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 2005

The following provides a summary of the raw data from the Medical Examiner's cases for the year 2005.

In 2005 there were an estimated 12,937 deaths in King County² (0.72% of a 2005 population estimate of 1,808,300). Of these deaths, 8,527 (66%) 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 2002 of these reported deaths, of which 57 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 1,945 deaths.

Of note is the fact that the Medical Examiner declined jurisdiction in 6,525 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 <u>and</u> 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 68% (1,332/1,945) 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 2005 there were 383 such deaths, accounting for 20% (383/1,945) of the total deaths. In addition, there were 212 deaths (11%) (212/1,945) 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, 30% (53/174) 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 147 vehicle occupants who died, 52% (77/147) were wearing restraints.

In the 36 deaths involving motorcyclists, 94% (34/36) were wearing helmets. The remaining two were either not wearing helmets or represent cases in which the use of a helmet is not known.

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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 59% (47/80) of the homicides and 41% (96/233) of the suicides.

While the discussion here tends to depict the more violent types of death, the reader should be reminded that 39% (763/1,945) of Medical Examiner cases involve natural deaths. Specific discussion and presentation of relevant tables regarding 2005 cases follow this brief summary.

Table 1-1 Deaths Occurring in King County / Medical Examiner Cases / 2005

	arity / modioa	Examino Gase	,				
CASES BY MANNER OF DEATH ³		NUMBER OF KCME DEATHS	PERCENT OF KCME DEATHS				
CASES BY MANNER OF DEATH	CASES BY WANNER OF DEATH						
Accident Other	(A)	602	31.0%				
Accident Traffic	(T)	226	11.6%				
Homicide	(H)	80	4.1%				
Natural	(N)	763	39.2%				
Suicide	(S)	233	12.0%				
Undetermined 4	(U)	41	2.1%				
Total KCME general cases		1,945	100%				
Non-applicable cases where jurisdiction was assumed	5	57					
Total KCME jurisdiction cases		2,002					
Total KCME general cases		1,945					
Deaths reported to KCME but no jurisdiction was assur	med (NJA)	6,525					
All other deaths in King County not reported to KCME	4,467						
ALL KING COUNTY DEATHS ⁷	12,937	-					

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

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

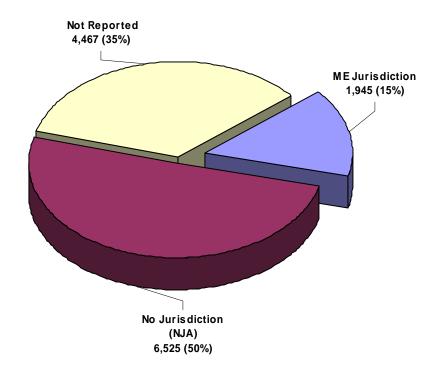
⁵ Non-applicable includes 57 non-human bones/tissue, and 13 anthropology/contract cases.

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).

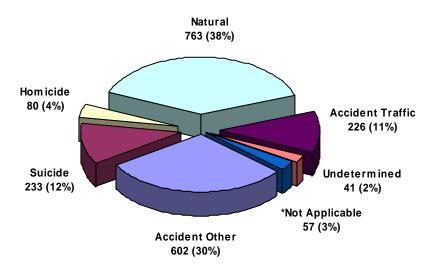
Graph 1-1 All King County Deaths with Medical Examiner Jurisdiction Shown / 2005

There were 12,937 deaths in King County in 2005.



Graph 1-2 Manner of Death for All Medical Examiner Jurisdiction Cases / 2005

Jurisdiction assumed in 2,002 cases.



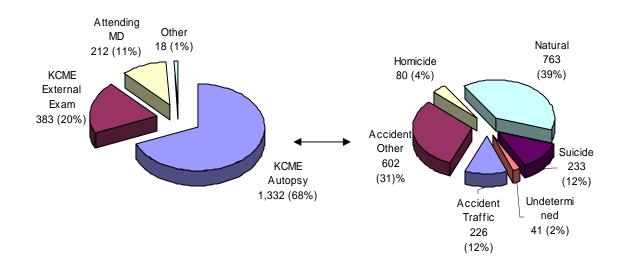
2005 MEDICAL EXAMINER CASES

⁸ This number includes 57 non-applicable cases (non-human tissue/bones and anthropology/contract cases).

Table 1-2 Method of Certification / Manner of Death / KCME / 2005

CERTIFICATION		N		_				
	Α	Т	Н	N	S	U	TOTAL	%
KCME Autopsies	387	164	77	470	197	37	1332	68%
KCME External Exams	118	61	0	168	36	0	383	20%
KCME Other	10	1	3	1	0	3	18	1%
Attending Physician	87	0	0	124	0	1	212	11%
Totals	602	226	80	763	233	41	1,945	100%

Graph 1-3 Method of Certification for all King County Medical Examiner Jurisdiction Cases / 2005

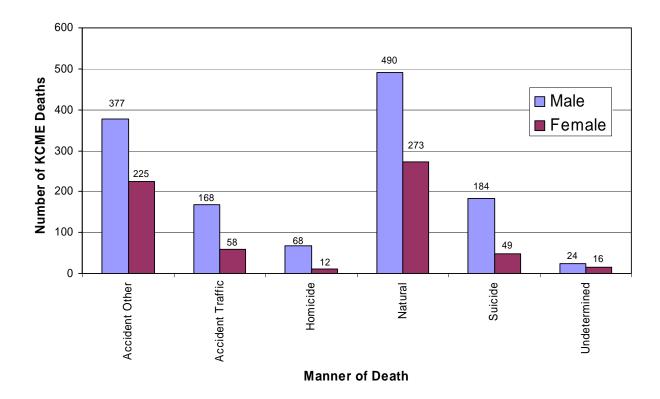


Manner of Death in 2005 King County Medical Examiner General Cases

Table 1-3 Sex / Manner of Death / King County Medical Examiner / 2005

SEX		I						
JLX	А	Т	Н	N	S	U	TOTAL	%
Male	377	168	68	490	184	24	1311	67%
Female	225	58	12	273	49	16	633	33%
Totals	602	226	80	763	233	41 ⁹	1,945 ¹⁰	100%

Graph 1-4 Sex / Manner of Death / King County Medical Examiner / 2005¹¹



⁹ Includes one fetal death of undetermined sex.

¹⁰ Includes one fetal death of undetermined sex.

¹¹ Does not include one fetal death of undetermined sex.

Table 1-4 Age / Sex / Manner of Death / King County Medical Examiner / 2005

Table 1-4				OF DEAT		<u> </u>		xammer / /	
AGE / SEX	Α	Т	Н	N	S	U	Sub- Total	TOTAL	%
Under 1 year								41	2.1%
Male	0	1	2	16	0	5	24		
Female	2	2	1	6	0	6	17		
1 - 5 years								12	0.6%
Male	5	0	0	3	0	1	9		
Female	2	0	0	1	0	0	3		
6- 12 years								7	0.4%
Male	0	3	0	1	0	0	4		
Female	2	1	0	0	0	0	3		
13-15 years								6	0.3%
Male	0	1	1	2	0	0	4		
Female	1	0	0	1	0	0	2		
16-19 years								43	2.2%
Male	3	15	6	2	7	0	33		
Female	1	2	3	3	1	0	10		
20- 29 years								166	8.5%
Male	36	42	16	9	20	2	125		
Female	11	14	0	11	4	1	41		
30- 39 years								194	10.0%
Male	45	21	12	26	36	6	146		
Female	20	2	2	16	6	2	48		
40- 49 years								303	15.6%
Male	56	32	21	76	43	3	231		
Female	24	7	3	23	14	1	72		
50- 59 years								374	19.2%
Male	79	14	5	129	37	3	267		
Female	33	6	2	47	15	4	107		
60 - 69 years								237	12.2%
Male	29	7	3	112	15	2	168		
Female	20	6	0	39	3	1	69		
70 - 79 years								233	12.0%
Male	43	17	1	67	13	2	143		
Female	33	8	0	46	3	0	90		
80 - 89 years								240	12.3%
Male	60	13	0	38	13	0	124		
Female	44	8	0	60	3	1	116		
90+ years								88	4.5%
_ Male	21	2	1	9	0	0	33		
Female	32	2	1	20	0	0	55		
Unknown								1	0.1%
_ Male	0	0	0	0	0	0	0		
Female	0	0	0	0	0	0	0		
	0	0	0	0	0	1	1		
Totals	602	226	80	763	233	41		1,945	100%

Table 1-5 Race / Sex / Manner of Death / King County Medical Examiner / 2005

RACE / SEX	Α	Т	Н	N	S	U	Sub- Total	TOTAL	%
White								1568	80.6%
Male	312	143	36	384	158	19	1052		
Female	195	44	7	216	45	9	516		
Black								206	10.6%
Male	37	13	24	64	9	3	150		
Female	16	2	2	32	2	2	56		
Asian								104	5.3%
Male	15	9	6	22	13	2	67		
Female	7	7	1	18	2	2	37		
Native American								40	2.1%
Male	9	3	2	11	0	0	25		
Female	5	2	2	6	0	0	15		
Other								26	1.3%
Male	4	0	0	9	4	0	17		
Female	2	3	0	1	0	3	9		
Unknown								1	0.1%
Male	0	0	0	0	0	0	0		
Female	0	0	0	0	0	0	0		
Unknown	0	0	0	0	0	1	1		
Totals	602	226	80	763	233	41		1,945	100%

Table 1-6 Marital Status / Sex / Manner of Death / King County Medical Examiner / 2005

MARITAL STATUS /		М	ANNER	OF DEAT					
SEX	А	Т	Н	N	S	U	Sub- Total	TOTAL	%
Never Married	161	106	45	214	93	23		642	33.0%
Male	118	82	39	155	77	14	485		
Female	43	24	6	59	16	8	156		
Unknown	0	0	0	0	0	1	1		
Married	187	71	18	188	65	10		539	27.7%
Male	129	54	15	126	52	5	381		
Female	58	17	3	62	13	5	158		
Divorced	120	31	13	213	55	8		440	22.6%
Male	72	23	11	148	43	5	302		
Female	48	8	2	65	12	3	138		
Widowed	122	17	4	109	16	0		268	13.8%
Male	49	8	3	31	9	0	100		
Female	73	9	1	78	7	0	168		
Unknown	12	1	0	39	4	0		56	2.9%
Male	9	1	0	29	3	0	42		
Female	3	0	0	10	1	0	14		
Totals	602	226	80	763	233	41		1,945	100%

Graph 1-5 Marital Status / Manner of Death / King County Medical Examiner / 2005

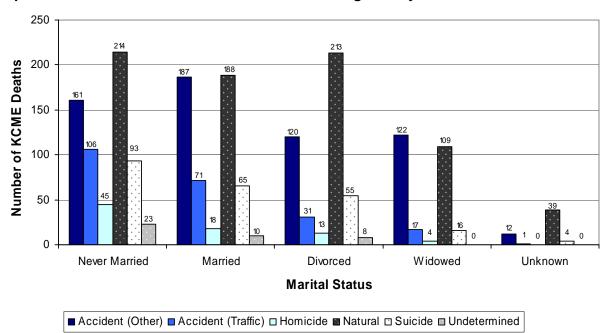
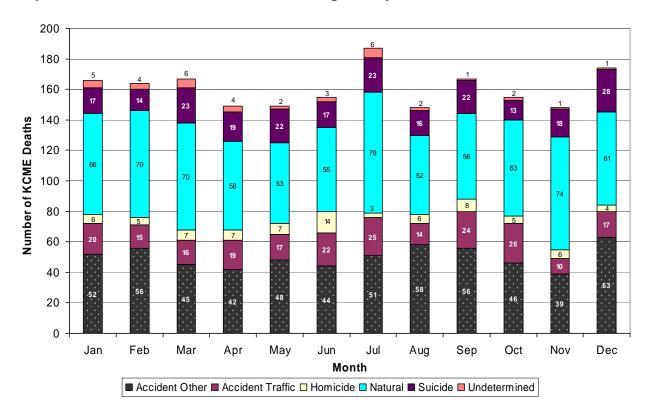


Table 1-7 Month / Manner of Death / King County Medical Examiner / 2005

MONTH	Α	Т	Н	N	S	U	Total	%
Prior to 2004	0	0	2	0	0	3	5	0.3%
2004	2	1	0	6	1	1	11	0.5%
January	52	20	6	66	17	5	166	8.5%
February	56	15	5	70	14	4	164	8.4%
March	45	16	7	70	23	6	167	8.6%
April	42	19	7	58	19	4	149	7.7%
May	48	17	7	53	22	2	149	7.7%
June	44	22	14	55	17	3	155	8.0%
July	51	25	3	79	23	6	187	9.6%
August	58	14	6	52	16	2	148	7.6%
September	56	24	8	56	22	1	167	8.6%
October	46	26	5	63	13	2	155	8.0%
November	39	10	6	74	18	1	148	7.6%
December	63	17	4	61	28	1	174	8.9%
Totals	602	226	80	763	233	41	1,945	100%

Graph 1-6 Month / Manner of Death / King County Medical Examiner / 2005



<u>Table 1-8</u> Nearest Incorporated City to the Fatal Incident / KCME / 2005 12

			MANNER OF DEATH								
CITY	А	Т	Н	S	U	TOTAL	%				
Algona	1	2	0	10	0	13	1.1%				
Auburn	31	13	1	0	1	46	3.9%				
Beaux Arts	0	0	0	0	0	0	0%				
Bellevue	26	2	3	11	0	42	3.5%				
Black Diamond	0	0	0	0	0	0	0%				
Bothell	7	0	1	2	0	10	0.8%				
Burien	9	6	6	6	3	30	2.5%				
Carnation	1	0	0	0	0	1	0.1%				
Clyde Hill	0	0	0	0	0	0	0%				
Covington	0	0	0	1	0	1	0.1%				
Des Moines	7	2	1	4	1	15	1.3%				
Duvall	2	0	0	1	0	3	0.3%				
Enumclaw	7	3	0	0	1	11	0.9%				
Fall City	0	1	0	1	0	2	0.2%				
Federal Way	21	11	7	7	0	46	3.9%				
Hunt's Point	0	0	0	0	0	0	0%				
Issaquah	10	8	1	3	0	22	1.8%				
Kenmore	3	1	1	2	2	9	0.8%				
Kent	23	11	7	14	2	57	4.8%				
Kirkland	12	1	1	6	2	22	1.8%				
Lake Forest Park	2	0	0	3	0	5	0.4%				
Maple Valley	1	5	0	1	0	7	0.6%				
Medina	5	0	0	0	0	5	0.4%				
Mercer Island	0	0	0	1	1	2	0.2%				
Milton	0	0	0	0	0	0	0%				
Newcastle	1	0	0	1	0	2	0.2%				
Normandy Park	1	0	0	0	0	1	0.1%				
North Bend	2	5	0	3	0	10	0.8%				
Pacific	2	0	0	1	0	3	0.3%				
Ravensdale	0	1	1	0	0	2	0.2%				

¹² Table does not include cases where manner of death is classified "Natural."

Table 1-8 Nearest Incorporated City to the Fatal Incident / KCME / 2005 (continued)

CITY	Α	Т	Н	S	U	Total	%
Redmond	12	3	1	6	0	22	1.8%
Renton	29	12	3	12	2	58	4.9%
Sammamish	2	2	0	0	0	4	0.3%
SeaTac	1	2	2	3	1	9	0.8%
Seattle	264	50	30	95	18	457	38.7%
Shoreline	9	2	1	5	1	18	1.5%
Skykomish	1	1	0	3	0	5	0.4%
Snoqualmie	3	3	0	0	0	6	0.5%
Tukwila	5	2	3	3	1	14	1.2%
Vashon Island	1	0	0	2	0	3	0.3%
Woodinville	3	3	0	3	0	9	0.8%
Yarrow Point	0	0	0	0	0	0	0%
Unincorporated King County	0	0	2	0	0	2	0.2%
Outside of King County	97	74	8	23	4	206	17.4%
Unknown Location	1	0	0	0	1	2	0.2%
Totals	602	226	80	233	41	1,182	100%

OUT OF COUNTY CASES IN 2005

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 2005 there were 206 deaths (17%, 206/1182) 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 Fat	tal Incide	nt Occur	red Outs	ide of Ki	ng Coun	ty / KCME / 2005
		MANN	NER OF D	EATH		
INCIDENT LOCATION	Α	Т	Н	S	U	TOTAL
Alaska	2	0	0	1	0	3
Idaho	1	1	1	0	0	3
Montana	2	1	0	1	0	4
Oregon	1	0	0	0	0	1
Other States	2	0	0	0	0	2
Washington						
Kitsap County	11	5	1	2	1	20
Pierce County	14	4	0	1	2	21
Skagit County	6	7	0	0	0	13
Snohomish County	19	15	3	9	1	47
Thurston County	4	8	0	1	0	13
Other WA Counties	31	31	3	8	0	73
Washington Sub-Total						187
Out of Country	4	2	0	0	0	6
Totals	97	74	8	23	4	206

¹³Table does not include cases where manner of death is classified as "Natural."

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