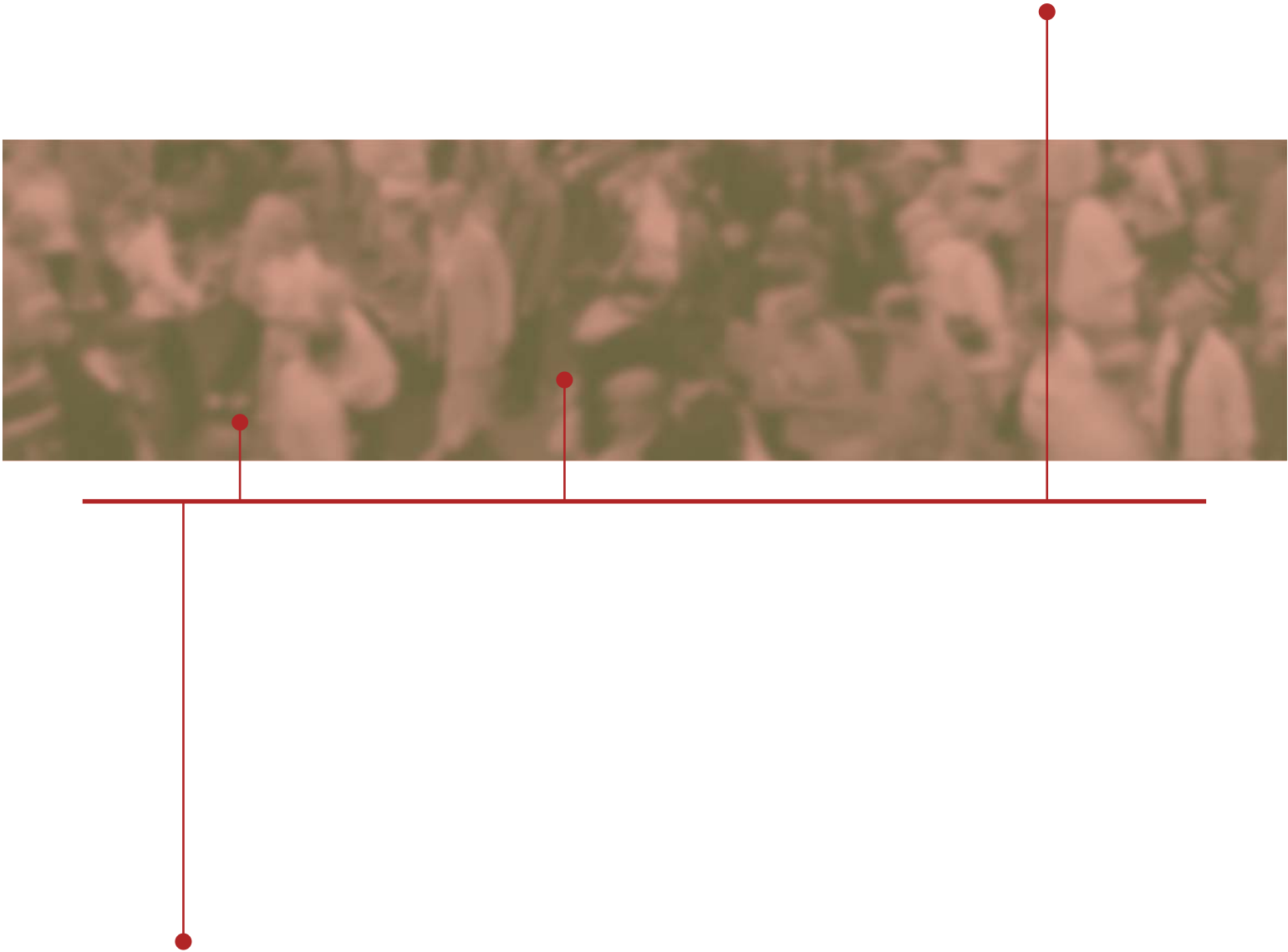


Death-related Statistics



Vital Statistics Information Box

DEATHS BY DECEDENT'S COUNTRY OF BIRTH

BRITISH COLUMBIA, 2007

Area	Province/Country	Births
Canada	Total	20,860
	British Columbia	8,134
	Saskatchewan	4,003
	Alberta	2,982
	Ontario	2,129
	Manitoba	2,125
	Quebec	685
	Nova Scotia	352
	New Brunswick	228
	Newfoundland & Labrador	131
	Prince Edward Island	36
	Yukon	31
	Northwest Territories & Nunavut	18
	Unknown Province	6
North and Central	Total	835
	United States	732
	Other North and Central American Countries	103
South America		58
Europe	Total	6,209
	England	1,995
	Other United Kingdom	824
	Germany	682
	Scandinavian Countries	523
	Italy	340
	Poland	287
	Netherlands	231
	Holland	206
	Hungary	171
	Other European Countries	950
Asia and the Middle East	Total	2,656
	China	1,038
	India	586
	Philippines	181
	Russia	167
	Hong Kong	120
	Vietnam	85
	Korea	62
	Pakistan	60
	Other Asian and Middle Eastern Countries	357
Africa	Total	169
Oceania	Total	141
	Fiji	71
	Australia	44
	Other Oceanic Countries	26
Unknown	Total	177
Total		31,105

Note: Births consist of live births only. Non-residents are excluded.

Death Introduction

In recognition of the importance of mortality statistics for health surveillance, planning and research a comprehensive array of tables is presented in this part of the report. Causes of death and/or age at death form the base of most tables because they are crucial components of health status for regional, national, and international comparisons. While other causes may have contributed to the death, the *Underlying Cause of Death* (UCOD) (see *Glossary*) is defined as the condition or injury that initiated the train of events leading directly to death, and was used for these tabulations. All causes are identified according to the World Health Organization's *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision* (ICD-10) which is a statistical coding system and the accepted international standard for mortality coding. The groups of codes used to define particular topics are noted in the tables.

Deaths – General Indicators

An overall view of the number of deaths by ICD-10 chapters by age group and gender is shown in Table 21. It provides a summary of the contribution of the 19 diagnostic categories to total deaths in BC in 2007. More detailed information for the same age groups appears in Appendix 2, which provides counts at the “3 character level”. Although the causes shown in Appendix 2 (“Detailed Cause of Death by Gender and Age”) are fairly specific, most ICD-10 codes consist of four or five characters, and are therefore even more detailed than the “roll ups” shown in Appendix 2. Neoplasms and diseases of the circulatory system accounted for most of the deaths in 2007 for both genders. Deaths in those two cause categories are further analysed in the following sections.



Vital Statistics Information Box

PLACE OF DEATH FOR DEATHS FROM NATURAL CAUSES

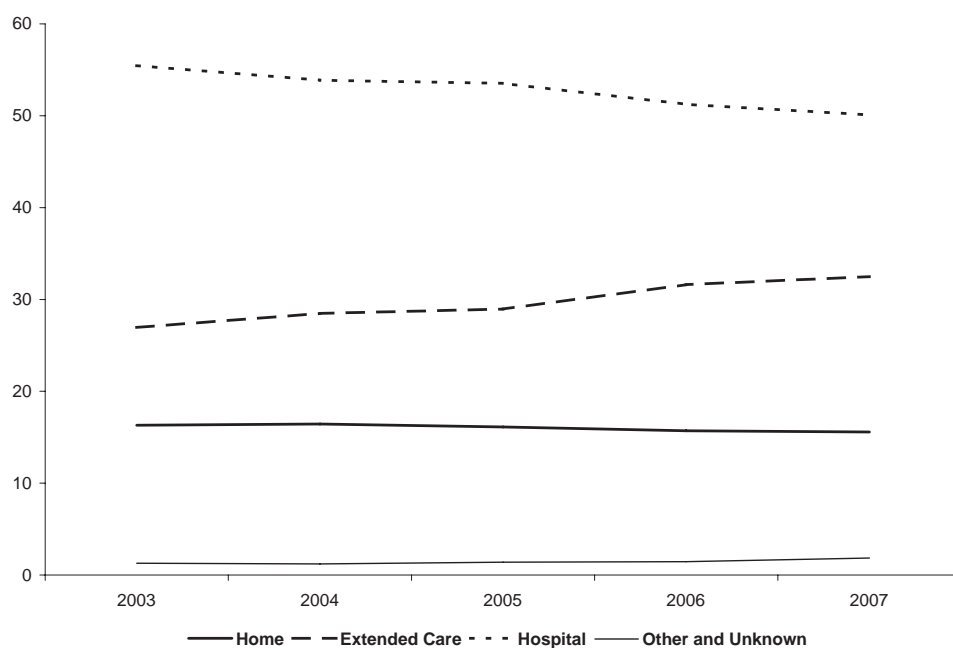
BRITISH COLUMBIA, 2003 - 2007

Deaths from natural causes in 2003 to 2007 were examined to determine the place of death. The majority of these deaths to BC residents occurred in hospital (52.8 percent over the five year period). About one in six deaths from natural causes (16.0 percent) occurred at home and almost one third (29.8 percent) occurred in extended care facilities.

Place of Death	2003		2004		2005		2006		2007		2003-2007	
	No.	%	No.	%	No.	%	No.	%	No.	%	Total	%
Home	4,439	16.3	4,573	16.4	4,534	16.1	4,515	15.7	4,610	15.6	22,671	16.0
Extended Care	7,343	27.0	7,916	28.5	8,140	28.9	9,090	31.6	9,613	32.5	42,102	29.8
Hospital	15,103	55.5	14,976	53.9	15,053	53.5	14,735	51.2	14,829	50.1	74,696	52.8
Other and Unknown	352	1.3	337	1.2	393	1.4	418	1.5	548	1.9	2,048	1.4
Total Deaths from Natural Causes	27,237	100.0	27,802	100.0	28,120	100.0	28,758	100.0	29,600	100.0	141,517	100.0

PERCENT OF DEATHS FROM NATURAL CAUSES BY PLACE OF DEATH

BRITISH COLUMBIA, 2003 - 2007



Vital Statistics Information Box

CANCER DEATHS IN BRITISH COLUMBIA, 1992 TO 2007

More British Columbians succumbed to Cancer or Malignant Neoplasms (ICD Codes C00-C97) than any other cause in 2007. The following charts illustrate the trends and changes in deaths caused by Cancer from 1992 to 2007. As illustrated, the proportion of deaths caused by specific types of Cancer has not changed substantially from 1992 to 2007. However, those dying of Cancer in 2007 are older than they were in 1992 and larger shares of them are female. The age standardized death rate has climbed, but the potential years of life lost per 10,000 standard population, PYLL Standard Rate, (PYLLSR) has fallen.

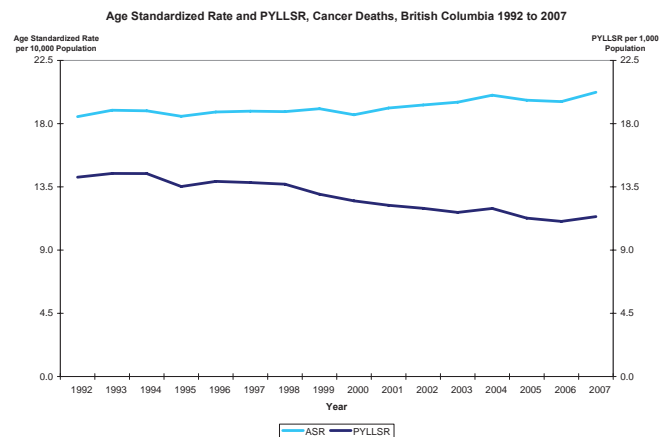
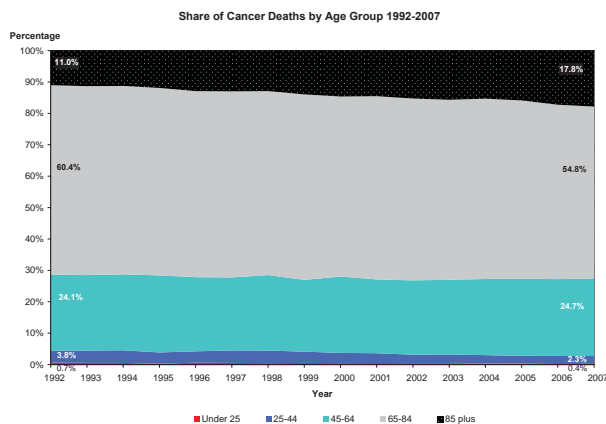
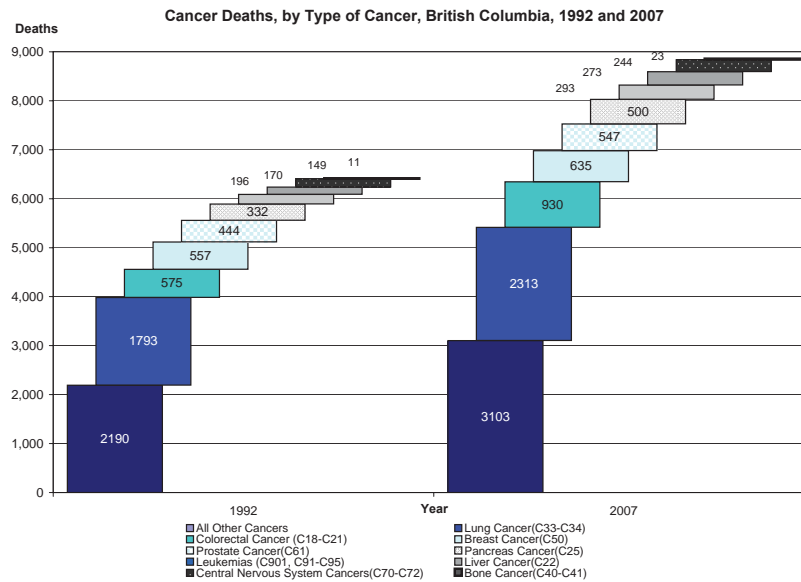


TABLE 21
CAUSES OF DEATH BY GENDER AND AGE
BRITISH COLUMBIA, 2007

ICD-10 Code(s)	Causes of Death	Gender	Age Group (in Years)										Total		
			<1	1-4	5-9	10-14	15-19	20-24	25-44	45-64	65-79	80+	Number	Percent	ASMR
A00-B99	Certain infectious and parasitic diseases	M	1	-	-	-	1	1	39	131	84	85	342	2.1	1.29
		F	1	-	1	-	-	1	13	49	50	127	242	1.6	0.69
		T	2	-	1	-	1	2	52	180	134	212	584	1.9	0.98
C00-D48	Neoplasms	M	1	3	3	2	3	8	91	1,162	2,075	1,487	4,835	30.2	18.30
		F	-	2	6	3	3	3	115	1,039	1,521	1,512	4,204	27.8	13.22
		T	1	5	9	5	6	11	206	2,201	3,596	2,999	9,039	29.1	15.45
D50-D89	Diseases of blood and blood-forming organs,certain immune mechanisms	M	-	-	-	-	-	-	1	9	9	25	44	0.3	0.16
		F	-	-	1	-	1	-	-	7	14	28	51	0.3	0.14
		T	-	-	1	-	1	-	1	16	23	53	95	0.3	0.15
E00-E90	Endocrine/nutritional/metabolic diseases	M	-	1	-	2	-	1	15	122	256	287	684	4.3	2.59
		F	-	-	-	1	1	1	7	59	171	353	593	3.9	1.64
		T	-	1	-	3	1	2	22	181	427	640	1,277	4.1	2.07
F00-F99	Mental and behavioural disorders	M	-	-	-	-	-	-	14	53	99	274	440	2.7	1.64
		F	-	-	-	-	-	-	11	20	63	572	666	4.4	1.50
		T	-	-	-	-	-	-	25	73	162	846	1,106	3.6	1.59
G00-G99	Diseases of the nervous system	M	4	1	1	1	6	5	14	80	159	274	545	3.4	2.06
		F	1	-	-	-	3	1	8	68	118	505	704	4.7	1.77
		T	5	1	1	1	9	6	22	148	277	779	1,249	4.0	1.92
H00-H59	Diseases of the eye and adnexa	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	1	-	1	0.0	+
		T	-	-	-	-	-	-	-	-	1	-	1	0.0	+
H60-H95	Diseases of the ear and mastoid process	M	1	-	-	-	-	-	-	-	-	-	1	0.0	+
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	1	-	-	-	-	-	-	-	-	-	1	0.0	+
I00-I99	Diseases of the circulatory system	M	-	-	-	-	1	5	69	658	1,483	2,467	4,683	29.3	17.46
		F	-	-	-	-	1	-	36	205	863	3,727	4,832	32.0	11.68
		T	-	-	-	-	2	5	105	863	2,346	6,194	9,515	30.6	14.36
J00-J99	Diseases of the respiratory system	M	1	-	-	1	1	5	11	146	512	963	1,640	10.2	6.13
		F	2	-	1	1	1	2	16	107	364	1,143	1,637	10.8	4.18
		T	3	-	1	2	2	7	27	253	876	2,106	3,277	10.5	5.00
K00-K93	Diseases of the digestive system	M	1	-	1	-	-	-	32	208	203	213	658	4.1	2.45
		F	-	1	1	-	1	1	13	129	157	367	670	4.4	1.86
		T	1	1	2	-	1	1	45	337	360	580	1,328	4.3	2.15
L00-L99	Diseases of the skin and subcutaneous tissue	M	-	-	-	-	-	-	1	4	7	6	18	0.1	0.07
		F	-	-	-	-	-	-	-	-	8	28	36	0.2	0.08
		T	-	-	-	-	-	-	1	4	15	34	54	0.2	0.08
M00-M99	Diseases of the musculoskeletal system and connective tissue	M	-	1	-	-	-	-	1	4	34	21	61	0.4	0.24
		F	-	-	-	-	-	-	7	20	30	75	132	0.9	0.38
		T	-	1	-	-	-	-	8	24	64	96	193	0.6	0.32
N00-N99	Diseases of the genitourinary system	M	-	-	-	-	1	1	2	29	77	247	357	2.2	1.32
		F	-	-	-	-	-	-	3	22	69	311	405	2.7	0.97
		T	-	-	-	-	1	1	5	51	146	558	762	2.4	1.11
O00-O99	Complications of pregnancy, childbirth and the puerperium	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	2	-	-	-	2	0.0	+
		T	-	-	-	-	-	-	2	-	-	-	2	0.0	+
P00-P96	Certain conditions originating in the perinatal period	M	53	-	-	-	-	-	1	-	-	-	54	0.3	0.36
		F	37	1	-	1	-	-	-	-	-	-	39	0.3	0.27
		T	90	1	-	1	-	-	1	-	-	-	93	0.3	0.32
Q00-Q99	Congenital anomalies	M	20	1	-	2	-	1	2	11	4	1	42	0.3	0.22
		F	15	2	-	1	1	1	5	6	2	7	40	0.3	0.20
		T	35	3	-	3	1	2	7	17	6	8	82	0.3	0.21
R00-R99	Symptoms, signs and ill-defined conditions, unknown causes	M	23	4	3	6	23	30	179	230	69	38	605	3.8	2.60
		F	9	6	2	-	11	17	60	98	52	82	337	2.2	1.26
		T	32	10	5	6	34	47	239	328	121	120	942	3.0	1.93
V01-Y98	External causes	M	2	1	1	4	40	78	274	317	118	161	996	6.2	4.17
		F	-	-	-	7	18	17	106	128	65	168	509	3.4	1.76
		T	2	1	1	11	58	95	380	445	183	329	1,505	4.8	2.93
All causes	PROVINCIAL TOTAL	M	107	12	9	18	76	135	746	3,164	5,189	6,549	16,005	100.0	61.06
		F	65	12	12	14	41	44	402	1,957	3,548	9,005	15,100	100.0	41.61
		T	172	24	21	32	117	179	1,148	5,121	8,737	15,554	31,105	100.0	50.55

Note: ASMR per 10,000 standard population (Canada 1991 Census). Total percentage may not add up to 100 due to rounding. + Denotes the number of cases is less than five. Non-residents are excluded. Total includes unknown gender. The output from ICD-10 mortality coding and underlying cause of death selection was modified in BC to reflect the intent of certifiers in this jurisdiction and to provide greater continuity over time. Data using the standard ICD-10 rules for such categories as pneumonia/influenza, diabetes, or cancer should not be compared to the numbers shown above.

Leading Causes of Death

Table 22 shows the 12 leading causes of death in BC. The two leftmost columns list the cause and the corresponding codes in ICD-10. For 2002-2006 period and the year 2007, the following four values are shown: number of deaths, the rank by number of deaths, the ASMR, and the rank by ASMR. The numbers demonstrate the absolute impact of each cause of death by showing how many individuals died from that cause in BC during the time period. The rows of the table are in the order of the 2007 ASMR rank. .

For 2007 the 12 leading causes of death shown in Table 22 were responsible for 84.9 percent of all deaths. The top three causes of death were the same for both time periods, not only in the rank by number of deaths, but also in ASMR rank; they are *Malignant Neoplasms*, *Cardiovascular Diseases* and *Cerebrovascular Diseases*. For 2007, these 3 leading causes account for 57.4 percent of all deaths.

Figure 35 shows the number of deaths from Table 22 in 2007 graphically. It shows clearly the impact of the top three categories, causing more than half of all deaths.

Table 23 shows the five leading causes of death in the 7 different age groupings. The leading cause of death among those under 1 year of age (infant mortality), were conditions originating in the perinatal period with a little over 50 percent of the deaths being attributable to this cause. The second most numerous causes of infant death were congenital malformations and chromosomal abnormalities. More than half of all infant deaths occurred in the first 7 days after birth and about two-thirds (66.9 percent) occurred within the first 28 days after birth (see Table 27). Males accounted 62.2 percent of the deaths among those under 1 year of age. Infant mortality is examined in more detail in the next section.

Among children 1 to 14 years old, malignant neoplasms were the most common cause of deaths for both genders. Unintentional injuries claimed more female than male lives whereas congenital malformations and chromosome abnormalities were equally distributed between both genders.

By contrast, unintentional (accidental) injuries were the leading cause of death, particularly for males, in the age groups 15-24 and 25-44. Those causes include events such as motor vehicle accidents, falls, and unintentional poisonings. A more detailed list of the included causes by ICD codes appears in Appendix 2. Counts of death due to unintentional injuries, suicide, and homicide (collectively referred to as "external causes of death") in the current year tend to underestimate the actual figures due to known delays in determining final causes of deaths. As a result it can be anticipated that these numbers will be revised upwards in subsequent annual reports.

Between 15 and 24 years of age, suicides ranked second as the leading cause of death after unintentional injuries (see also Table 35). There were substantially fewer female deaths in this age group as shown in Table 23. In the age group between 25 and 44, malignant neoplasms were second most common cause of death with female deaths outnumbering males and comprising the largest proportion of female mortality in this age group.

Malignant neoplasms were the leading cause of death for those between 45 and 64 years and they claimed a larger number of deaths for males but a greater proportion of female deaths in this age group.

Between 65 and 84 years of age, 35.5 percent of the deaths were due to malignant neoplasms, followed by cardiovascular disease which caused about 1 in 5 deaths (20.7 percent). For those 85 years and older, the relative importance of those 2 cause categories was reversed with cardiovascular disease causing about 1 in 3 deaths (29.5 percent).

Malignant neoplasms were ranked in the first 3 leading causes of death in each age group for those over 1 year of age and were the overall leading cause of death in BC in 2002 to 2006, as well as in 2007 (see Table 22 and Figure 35). Despite this, the age-standardized mortality rates for total malignant neoplasms and for lung cancer have declined over the last 2 decades (see Figures 19 and 20).

TABLE 22
TWELVE LEADING CAUSES OF DEATH
BRITISH COLUMBIA, 2002–2006 AND 2007

Cause of Death	ICD-10 Code(s)	2002–2006				2007			
		Number	Rank	ASMR	Rank	Number	Rank	ASMR	Rank
Malignant neoplasms	C00-C97	41,324	1	15.46	1	8,861	1	15.17	1
Cardiovascular disease	I00-I51	34,063	2	11.61	2	6,686	2	10.11	2
Cerebrovascular diseases	I60-I69	11,185	3	3.74	3	2,313	3	3.45	3
Chronic Pulmonary Disease	J40-J44	6,246	6	2.19	5	1,346	4	2.15	4
Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	6,697	4	2.82	4	1,079	6	2.04	5
Pneumonia/Influenza	J09-J181, J188, J189	6,553	5	2.13	6	1,275	5	1.82	6
Diabetes mellitus	E10-E14	4,839	7	1.74	7	1,020	7	1.65	7
Other diseases of digestive system	K00-K67, K80-K93	3,887	8	1.33	8	864	9	1.34	8
Vascular/senile dementia	F01, F03	3,153	10	0.99	14	895	8	1.22	9
Other disorders of the nervous system	G00-G25, G31-G99	2,996	12	1.11	10	676	11	1.12	10
Urinary system diseases	N00-N39, N990, N991, N995	3,049	11	1.02	13	747	10	1.09	11
Other diseases of the respiratory system	J00-J06, J182, J20-J39, J45-J98	2,807	13	0.97	15	656	12	1.02	12
Other causes ¹		21,420		8.27		4,687		8.40	
TOTAL (All causes of death)		148,219		53.39		31,105		50.59	

Note: ¹Other causes includes undetermined and pending.

ASMR – per 10,000 standard population (Canada 1991 Census).

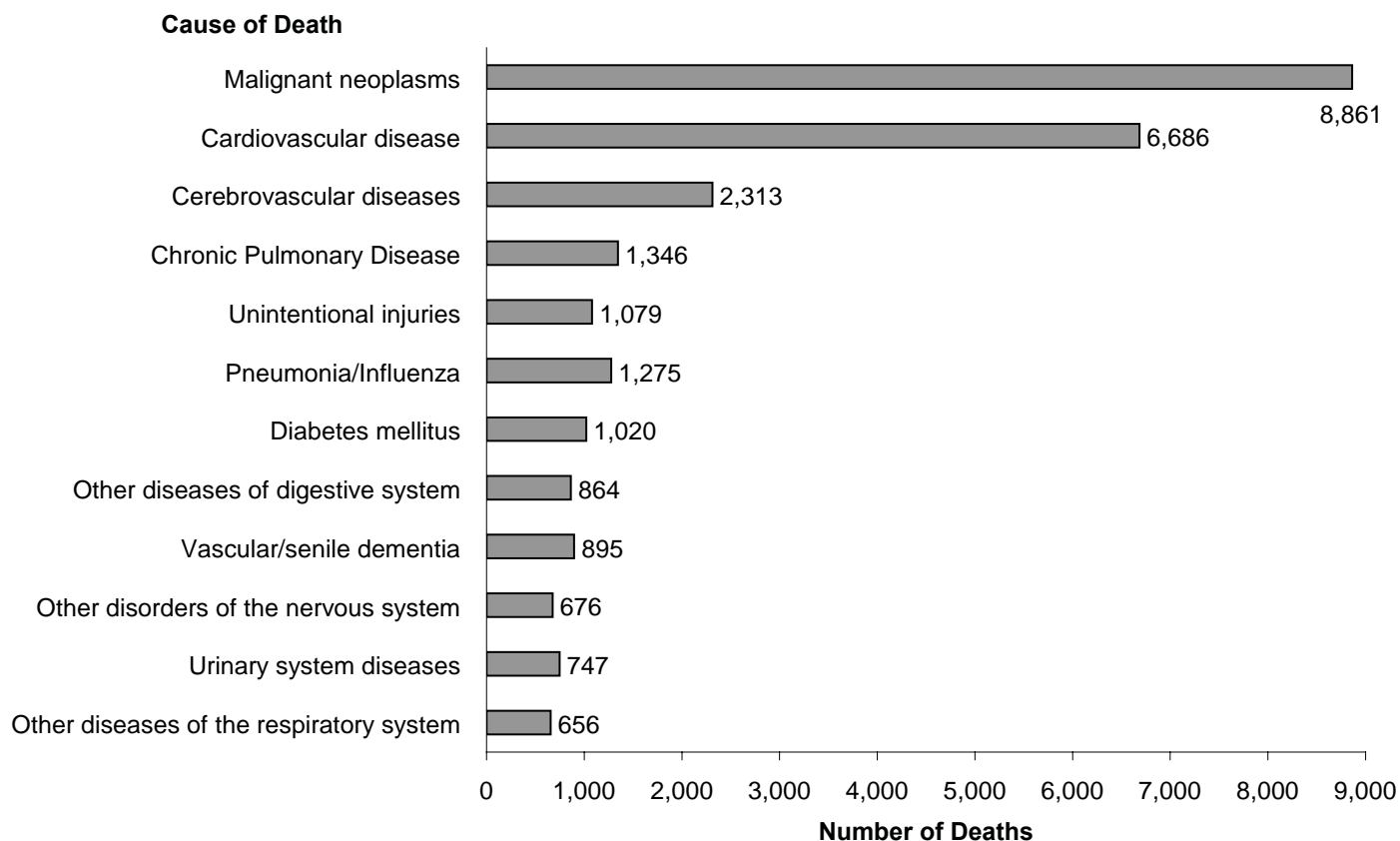
The ASMR in the current year determined the order in which the causes of death are presented.

Leading causes are ranked according to 2007 ASMR.

Non-residents are excluded. The output from ICD-10 mortality coding and underlying cause of death selection was modified in BC to reflect the intent of certifiers in this jurisdiction and to provide greater continuity over time.

Data using the standard ICD-10 rules for such categories as pneumonia/influenza, diabetes, or cancer should not be compared to the numbers shown above.

FIGURE 35
TWELVE LEADING CAUSES OF DEATH
 BRITISH COLUMBIA, 2007



Vital Statistics Information Box

AGE AT DEATH OF THE OLDEST MALE AND FEMALE BRITISH COLUMBIA, 1986-2007

Gender	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Male	105	107	111	110	113	105	111	111	109	108	108	106	109	108	109	104	104	107	106	107	105	107
Female	110	107	110	110	110	113	107	110	110	108	109	111	113	108	111	113	111	107	108	110	109	110

TABLE 23
LEADING CAUSES OF DEATH BY AGE AND GENDER
 BRITISH COLUMBIA, 2007

Cause of Death	ICD-10 Code(s)	Male		Female		Total	
		Number	Percent	Number	Percent	Number	Percent
Under 1 Year Old							
1. Certain conditions originating in the perinatal period	P00-P96	53	49.5	37	56.9	90	52.3
2. Congenital malformations and chromosome abnormalities	Q00-Q99	20	18.7	15	23.1	35	20.3
3. Sudden infant death syndrome	R95	7	6.5	4	6.2	11	6.4
4. Other disorders of the nervous system	G00-G25, G31-G99	4	3.7	1	1.5	5	2.9
5. Pneumonia/Influenza	J09-J181, J188, J189	1	0.9	2	3.1	3	1.7
Other causes ¹		22	20.6	6	9.2	28	16.3
All causes		107	100.0	65	100.0	172	100.0
1-14 Years Old							
1. Malignant neoplasms	C00-C97	8	20.5	11	28.9	19	24.7
2. Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	4	10.3	6	15.8	10	13.0
3. Congenital malformations and chromosome abnormalities	Q00-Q99	3	7.7	3	2.8	6	7.8
4. Metabolic disorders	E70-E89	3	7.7	1	2.6	4	5.2
5. Other disorders of the nervous system	G00-G25, G31-G99	3	7.7	-	-	3	3.9
Other causes ¹		18	46.2	17	44.7	35	45.5
All causes		39	100.0	38	100.0	77	100.0
15-24 Years Old							
1. Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	78	37.0	26	30.6	104	35.1
2. Suicide	X60-X84, Y870	35	16.6	8	9.4	43	14.5
3. Malignant neoplasms	C00-C97	11	5.2	6	7.1	17	5.7
4. Other disorders of the nervous system	G00-G25, G31-G99	11	5.2	4	3.7	15	5.1
5. Pneumonia/Influenza	J09-J181, J188, J189	3	1.4	3	3.5	6	2.0
Other causes ¹		73	34.6	38	44.7	111	37.5
All causes		211	100.0	85	100.0	296	100.0
25-44 Years Old							
1. Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	173	23.2	61	15.2	234	20.4
2. Malignant neoplasms	C00-C97	90	12.1	115	28.6	205	17.9
3. Suicide	X60-X84, Y870	91	12.2	40	10.0	131	11.4
4. Cardiovascular disease	I00-I51	52	7.0	22	5.5	74	6.4
5. Certain infectious and parasitic diseases	A00-B99	39	5.2	13	3.2	52	4.5
Other causes ¹		301	40.3	151	37.6	452	39.4
All causes		746	100.0	402	100.0	1,148	100.0

(concluded on next page)

Note: Order of leading causes based on total deaths in the specified age group.

¹Other causes includes undetermined and pending. Total percentage may not add up to 100 due to rounding. Non-residents are excluded. The output from ICD-10 mortality coding and underlying cause of death selection was modified in BC to reflect the intent of certifiers in this jurisdiction and to provide greater continuity over time. Data using the standard ICD-10 rules for such categories as pneumonia/influenza, diabetes, or cancer should not be compared to the numbers shown above.

TABLE 23 – *concluded*
LEADING CAUSES OF DEATH BY AGE AND GENDER
 BRITISH COLUMBIA, 2007

Cause of Death	ICD-10 Code(s)	Male		Female		Total	
		Number	Percent	Number	Percent	Number	Percent
45-64 Years Old							
1. Malignant neoplasms	C00-C97	1,150	36.3	1,035	52.9	2,185	42.7
2. Cardiovascular disease	I00-I51	513	16.2	135	6.9	648	12.7
3. Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	194	6.1	81	4.1	275	5.4
4. Diseases of liver	K70-K76	156	4.9	88	4.5	244	4.8
5. Certain infectious and parasitic diseases	A00-B99	131	4.1	49	2.5	180	3.5
Other causes¹		1,020	32.2	569	29.1	1,589	31.0
All causes		3,164	100.0	1,957	100.0	5,121	100.0
65-84 Years Old							
1. Malignant neoplasms	C00-C97	2,753	35.9	2,101	35.1	4,854	35.5
2. Cardiovascular disease	I00-I51	1,696	22.1	1,126	18.8	2,822	20.7
3. Cerebrovascular diseases	I60-I69	484	6.3	496	8.3	980	7.2
4. Chronic Pulmonary Disease	J40-J44	440	5.7	340	5.7	780	5.7
5. Diabetes mellitus	E10-E14	332	4.3	232	3.9	564	4.1
Other causes¹		1,963	25.6	1,698	28.3	3,661	26.8
All causes		7,668	100.0	5,993	100.0	13,661	100.0
85 Years and Older							
1. Cardiovascular disease	I00-I51	1,205	29.6	1,932	29.5	3,137	29.5
2. Malignant neoplasms	C00-C97	724	17.8	856	13.0	1,580	14.9
3. Cerebrovascular diseases	I60-I69	336	8.3	807	12.3	1,143	10.8
4. Pneumonia/Influenza	J09-J181, J188, J189	294	7.2	488	7.4	782	7.4
5. Vascular/senile dementia	F01, F03	188	4.6	440	6.7	628	5.9
Other causes¹		1,323	32.5	2,037	31.1	3,360	31.6
All causes		4,070	100.0	6,560	100.0	10,630	100.0

Notes for this table are on previous page.

Infant Mortality

BC had lower infant mortality rates than Canada as a whole from 1992 until 2005, the most recent year for which information on Canadian infant mortality rates is available (see Table 5). There were 172 infant deaths in BC in 2007 or 4 deaths per 1,000 live births. The rate 20 years ago was just over eight per 1,000 live births and that has progressively declined to the rates seen in the last few years.

Table 24 shows the number of infants who died in 2007 by birth weight and maternal age group. The first column has the mother's age groups ranging from less than 20 years up to 40 years or older. The infants' birth weights are grouped across the top of the table. Across the bottom and down the right side, the table shows row and column totals, percents, and rates per 1,000 live births. The difference in infant mortality rates across the 3 birth weight categories is quite distinct: for infants with birth weights of 2,500 grams or more, 1.4 per 1,000 live births in the same birth weight category died in their first year. In the 1,500-2,499 gram group the rate was 10.7 per 1,000 live births, and infants who weigh less than 1,500 grams had an infant mortality rate of 203.8 per 1,000 live births.

When these infant deaths are stratified across maternal age, the effect is not so dramatic. Although in 2007 the infant mortality rate to mothers under the age of 20 years was about 3 times the rate to older women, infant mortality was exceptionally low among teenagers in 2000 and 2006 (see Figure 15). In general, from 1986 to 2007, there has been a consistent downward trend in the infant mortality rate for all age groups.

Table 25 repeats the birth weight categories and general format shown in Table 24 but replaces maternal age groups with gestational age. Of the 172 infant deaths in 2007, only 46 were term births (37 to 41 weeks) with birth weights of 2,500 grams or more.

There was a dramatic increase in infant mortality as birth weight and gestational age decreased. More than 2 in 5 (44.8 percent) of infant deaths were extremely premature (less than 28 weeks) and with low birth weight (less than 2,500 grams). About 6 in 10 infant deaths were low birth weight (63.4 percent), more than two-thirds (69.2 percent) were premature (less than 37 weeks) and about 3 in 5 (61.6 percent) were both low birth weight and premature.

Table 26 shows infant mortality in each LHA of the infants' usual residence, for 2002-2006 and for the year 2007. The two columns on the left show the LHA number and name. The three columns for 2002-2006 show the number of infant deaths in the LHA (Observed Deaths), the ratio, and the rate of infant deaths per 1,000 live births. In this period, there were only seven LHAs with statistically significant ratios (five high and two low). For 2007, the table indicates the number of deaths in 3 age ranges, early neonatal (0 to 6 days), neonatal (0 to 27 days), and post-neonatal (28 to 364 days). The last 2 columns indicate the total number of infant deaths, and the infant death rate per 1,000 live births.

Causes of infant deaths and stillbirths are shown in Table 27. Infant death rates are per 10,000 live births and stillbirth rates are per 10,000 total births (live births plus stillbirths). More than half (57.6 percent) of infant deaths in 2007 occurred in the early neonatal period. Of those, 94.9 percent were due to congenital anomalies or perinatal conditions.

TABLE 24
**INFANT MORTALITY BY AGE OF MOTHER
 AND BIRTH WEIGHT**

BRITISH COLUMBIA, 2007

Age of Mother	Birth Weight (in Grams)				Total		
	<1500	1500-2499	2500+	N.S.	Number	Percent	Rate
<20	8	1	9	-	18	10.5	12.28
20-24	13	2	15	-	30	17.4	4.70
25-29	26	3	14	1	44	25.6	3.62
30-34	24	9	11	-	44	25.6	3.19
35-39	12	4	8	1	25	14.5	3.13
40+	4	3	1	-	8	4.7	4.60
N.S.	-	-	-	3	3	1.7	
TOTAL	87	22	58	5	172	100.0	3.95
Percent	50.6	12.8	33.7	2.9	100.0		
Rate	203.75	10.65	1.41		3.95		

Note: Infant Mortality – Age at death less than one year.

Rate per 1,000 live births in the specified age or birth weight group.

+ Denotes the number of cases is less than five.

Total percentage may not add up to 100 due to rounding.

Non-residents are excluded.

N.S. – Not stated.

TABLE 25
**INFANT MORTALITY BY GESTATIONAL AGE
 AND BIRTH WEIGHT**

BRITISH COLUMBIA, 2007

Gestational Age (In Weeks)	Birth Weight (in Grams)				Total		
	<1500	1500-2499	2500+	N.S.	Number	Percent	Rate
<20	2	-	-	-	2	1.2	+
20-27	75	-	-	-	75	43.6	401.07
28-36	9	20	12	1	42	24.4	13.63
37-41	1	2	46	1	50	29.1	1.25
42+	-	-	-	-	-	-	-
N.S.	-	-	-	3	3	1.7	
TOTAL	87	22	58	5	172	100.0	3.95
Percent	50.6	12.8	33.7	2.9	100.0		
Rate	203.75	10.65	1.41		3.95		

Note: Infant Mortality – Age at death less than one year.

Rate per 1,000 live births in the specified age or birth weight group.

+ Denotes the number of cases is less than five.

Total percentage may not add up to 100 due to rounding.

Non-residents are excluded.

N.S. – Not stated.

Local Health Area		2002-2006			2007				
		Observed Deaths	Ratio (p)	Rate	Age at Death (in Days)			Total	
					0-6	0-27	28-364	Number	Rate
001 Fernie		2	0.79	3.35	-	-	-	-	-
002 Cranbrook		2	0.42	1.80	-	-	2	2	7.91
003 Kimberley		1	0.81	3.42	-	-	-	-	-
004 Windermere		2	1.40	5.92	-	-	-	-	-
005 Creston		-	-	-	-	-	-	-	-
006 Kootenay Lake		1	1.36	5.75	-	-	-	-	-
007 Nelson		3	0.65	2.75	-	-	-	-	-
009 Castlegar		1	0.54	2.27	-	-	-	-	-
010 Arrow Lakes		-	-	-	-	-	-	-	-
011 Trail		6	2.08	8.82	-	-	-	-	-
012 Grand Forks		5	3.51*	14.88	-	1	1	2	31.75
013 Kettle Valley		-	-	-	-	-	-	-	-
014 Southern Okanagan		1	0.40	1.71	-	-	-	-	-
015 Penticton		10	1.61	6.83	-	-	-	-	-
016 Keremeos		1	1.27	5.38	-	-	-	-	-
017 Princeton		-	-	-	-	-	-	-	-
018 Golden		1	0.71	3.02	1	1	-	1	14.71
019 Revelstoke		3	1.88	7.96	-	-	1	1	14.49
020 Salmon Arm		10	2.01	8.51	2	2	-	2	8.00
021 Armstrong - Spallumcheen		-	-	-	-	-	-	-	-
022 Vernon		13	1.20	5.07	1	1	-	1	1.82
023 Central Okanagan		26	0.91	3.84	4	5	3	8	4.90
024 Kamloops		21	1.11	4.71	1	1	-	1	0.96
025 100 Mile House		1	0.49	2.07	-	-	-	-	-
026 North Thompson		1	1.07	4.55	-	-	-	-	-
027 Cariboo - Chilcotin		13	2.16*	9.17	-	-	2	2	6.47
028 Quesnel		6	1.24	5.26	1	1	1	2	7.81
029 Lillooet		-	-	-	-	1	-	1	21.74
030 South Cariboo		2	1.63	6.92	-	-	1	1	16.13
031 Merritt		-	-	-	-	-	-	-	-
032 Hope		3	1.95	8.29	-	-	-	-	-
033 Chilliwack		18	0.95	4.04	-	1	-	1	0.98
034 Abbotsford		34	0.99	4.20	7	7	-	7	4.05
035 Langley		20	0.76	3.24	3	3	2	5	3.75
037 Delta		17	0.83	3.54	-	-	1	1	1.16
038 Richmond		24	0.73	3.09	4	4	3	7	4.01
040 New Westminster		9	0.66	2.81	3	3	1	4	5.76
041 Burnaby		24	0.54*	2.29	2	2	3	5	2.15
042 Maple Ridge		13	0.69	2.92	4	5	1	6	6.39
043 Coquitlam		42	0.97	4.13	2	4	2	6	2.80
044 North Vancouver		16	0.60*	2.55	-	-	2	2	1.66
045 West Vancouver-Bowen Is.		3	0.47	1.99	1	1	-	1	3.32
046 Sunshine Coast		3	0.77	3.28	1	1	-	1	5.05
047 Powell River		2	0.67	2.82	-	-	-	-	-
048 Howe Sound		11	1.33	5.65	2	3	1	4	8.28
049 Bella Coola Valley		4	3.59	15.21	-	-	-	-	-
050 Queen Charlotte		2	1.64	6.97	-	-	-	-	-
051 Snow Country		-	-	-	1	1	-	1	200.00
052 Prince Rupert		4	1.01	4.30	-	-	1	1	5.56
053 Upper Skeena		2	1.37	5.80	-	-	-	-	-
054 Smithers		8	1.69	7.17	-	-	-	-	-
055 Burns Lake		2	1.10	4.67	-	-	1	1	10.87
056 Nechako		5	1.07	4.53	-	-	1	1	4.50
057 Prince George		24	1.08	4.57	2	2	2	4	3.67
059 Peace River South		6	1.00	4.22	-	-	-	-	-
060 Peace River North		10	0.93	3.92	5	5	-	5	8.29
061 Greater Victoria		39	1.06	4.49	7	8	3	11	6.00
062 Sooke		13	1.04	4.40	1	2	-	2	3.15
063 Saanich		14	1.62	6.86	2	2	-	2	5.38
064 Gulf Islands		3	1.67	7.06	-	-	-	-	-
065 Cowichan		15	1.46	6.19	1	1	2	3	5.39
066 Lake Cowichan		1	1.20	5.08	-	-	1	1	23.26
067 Ladysmith		9	2.91*	12.33	-	-	-	-	-
068 Nanaimo		21	1.22	5.17	4	4	2	6	6.51
069 Qualicum		2	0.41	1.76	-	-	-	-	-
070 Alberni		11	1.71	7.24	2	2	1	3	8.96
071 Courtenay		8	0.82	3.48	1	1	1	2	3.94
072 Campbell River		11	1.46	6.17	3	3	1	4	10.10
075 Mission		6	0.66	2.81	-	-	2	2	4.34
076 Agassiz - Harrison		1	0.52	2.21	1	1	-	1	10.00
077 Summerland		1	0.66	2.79	-	-	-	-	-
078 Enderby		1	0.77	3.26	-	-	-	-	-
080 Kitimat		3	1.47	6.21	-	-	-	-	-
081 Fort Nelson		-	-	-	-	-	-	-	-
083 Central Coast		4	6.69+	28.37	-	-	-	-	-
084 Vancouver Island West		1	1.89	8.00	-	-	-	-	-
085 Vancouver Island North		8	2.42*	10.24	-	-	-	-	-
087 Stikine		-	-	-	-	-	-	-	-
088 Terrace		6	1.14	4.84	1	1	1	2	8.23
092 Nisga'a		2	3.28	13.89	-	-	-	-	-
094 Telegraph Creek		1	5.90	25.00	-	-	-	-	-
161 Vancouver - City Centre		10	0.57	2.43	-	-	1	1	1.09
162 Vancouver - Downtown E.side		13	1.33	5.63	1	1	-	1	2.21
163 Vancouver - North East		33	1.42	6.01	3	3	1	4	3.55
164 Vancouver - Westside		27	1.14	4.82	-	2	2	4	3.48
165 Vancouver - Midtown		22	1.05	4.44	4	5	3	8	7.71
166 Vancouver - South		27	0.99	4.21	3	5	1	6	4.55
201 Surrey		104	1.09	4.64	17	18	3	21	4.27
202 South Surrey/White Rock		5	0.45	1.91	1	1	-	1	1.86
PROVINCIAL TOTAL		860	1.00	4.24	99	115	57	172	3.95

Notes for this table follow the map.

FIGURE 36
INFANT MORTALITY BY LOCAL HEALTH AREA
 BRITISH COLUMBIA, 2002-2006

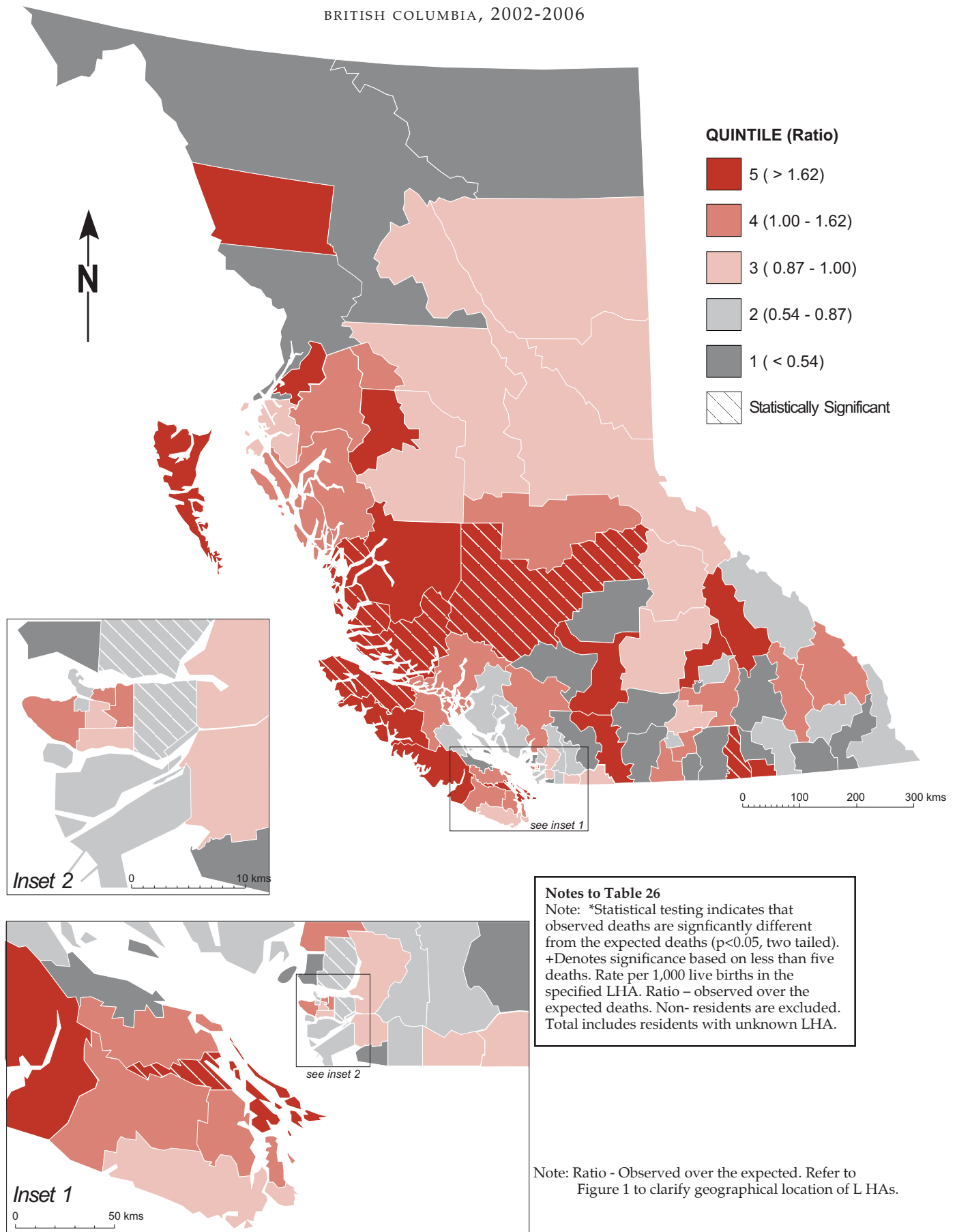


TABLE 27
SELECTED CAUSES OF INFANT DEATHS AND STILLBIRTHS
 BRITISH COLUMBIA, 2007

Cause of Death	ICD-10 Code(s)	Infant Deaths – Age Group (in Days)					Stillbirths	
		<7	7–27	28–364	Total	Rate ¹	Number	Rate ²
Congenital anomalies								
- of the nervous system	Q00-Q07	-	-	1	1	0.23	-	-
- of the eye, ear, face & neck	Q10-Q18	-	-	-	-	-	-	-
- of the heart and circulatory system	Q20-Q28	6	2	8	16	3.68	3	0.68
- of the respiratory system	Q30-Q34	3	-	1	4	0.92	-	-
- of the digestive system	Q35-Q45	-	-	-	-	-	-	-
- of the genital organs	Q50-Q56	-	-	-	-	-	-	-
- of the urinary system	Q60-Q64	1	1	-	2	0.46	-	-
- of the musculoskeletal system	Q65-Q79	3	-	1	4	0.92	1	0.23
Other and multiple system syndromes	Q80-Q89	2	-	-	2	0.46	2	0.46
Chromosomal anomalies	Q90-Q99	3	1	2	6	1.38	8	1.82
Total deaths due to congenital anomalies	Q00-Q99	18	4	13	35	8.04	14	3.19
Perinatal conditions								
Infant affected by maternal factors	P00-P04	26	-	-	26	5.97	123	28.04
Premature/postmature and fetal growth disorders	P05-P08	32	2	2	36	8.27	9	2.05
Birth trauma	P10-P15	-	-	-	-	-	-	-
Respiratory and cardiovascular disorders	P20-P29	4	1	-	5	1.15	11	2.51
Infections specific to the perinatal period	P35-P39	1	2	-	3	0.69	1	0.23
Hemorrhage and hematological disorders	P50-P61	-	-	-	-	-	2	0.46
Transitory endocrine and metabolic disorders	P70-P74	-	-	-	-	-	1	0.23
Digestive system disorders of fetus and newborn	P75-P78	1	1	4	6	1.38	-	-
Other disorders originating in the perinatal period	P80-P94, P96	12	1	1	14	3.22	123	28.04
Fetal death of unknown cause	P95	-	-	-	-	-	64	14.59
Total deaths due to perinatal conditions	P00-P96	76	7	7	90	20.68	334	76.14
Pneumonia/influenza	J09-J18.1, J18.8-J18.9	1	-	2	3	0.69	-	-
Sudden infant death syndrome (SIDS) ³	R95	-	1	10	11	2.53	-	-
Other causes ³		4	4	25	33	7.58	2	0.46
TOTAL		99	16	57	172	39.52	350	79.79
PERCENT		57.6	9.3	33.1	100.0			

Note: ¹Rate per 10,000 live births.

²Rate per 10,000 total births (live births plus stillbirths).

³ Some of the infant deaths that were still under investigation (ICD-10 code R99) may later be identified as SIDS.
 Non-residents are excluded.

Deaths Due to HIV

Mortality due to Human Immunodeficiency Virus (HIV) peaked in 1994 and has seen a general downward trend since then.

Table 28 shows the number of deaths due to HIV broken out by gender and 6 age groups from 1992 to 2007. The percentage of the total deaths in each year is shown for each age group. At the bottom of the table are counts and percentages for the entire time period. Figure 37 shows that in the period from 2002-2007 most deaths due to HIV disease in BC occurred in individuals who were between 40 and 49 years of age.

Although there were fluctuations in the yearly numbers of HIV deaths in Table 29, numbers have generally decreased each year. The Vancouver HSDA had the highest mortality rate (17.27 deaths per 100,000 population), from 1991 to 2007. In 2007 there were 42 deaths due to HIV in that area, far higher than any other HSDA.

FIGURE 37
DEATHS DUE TO HIV DISEASE BY AGE GROUP
BRITISH COLUMBIA, 2002-2007

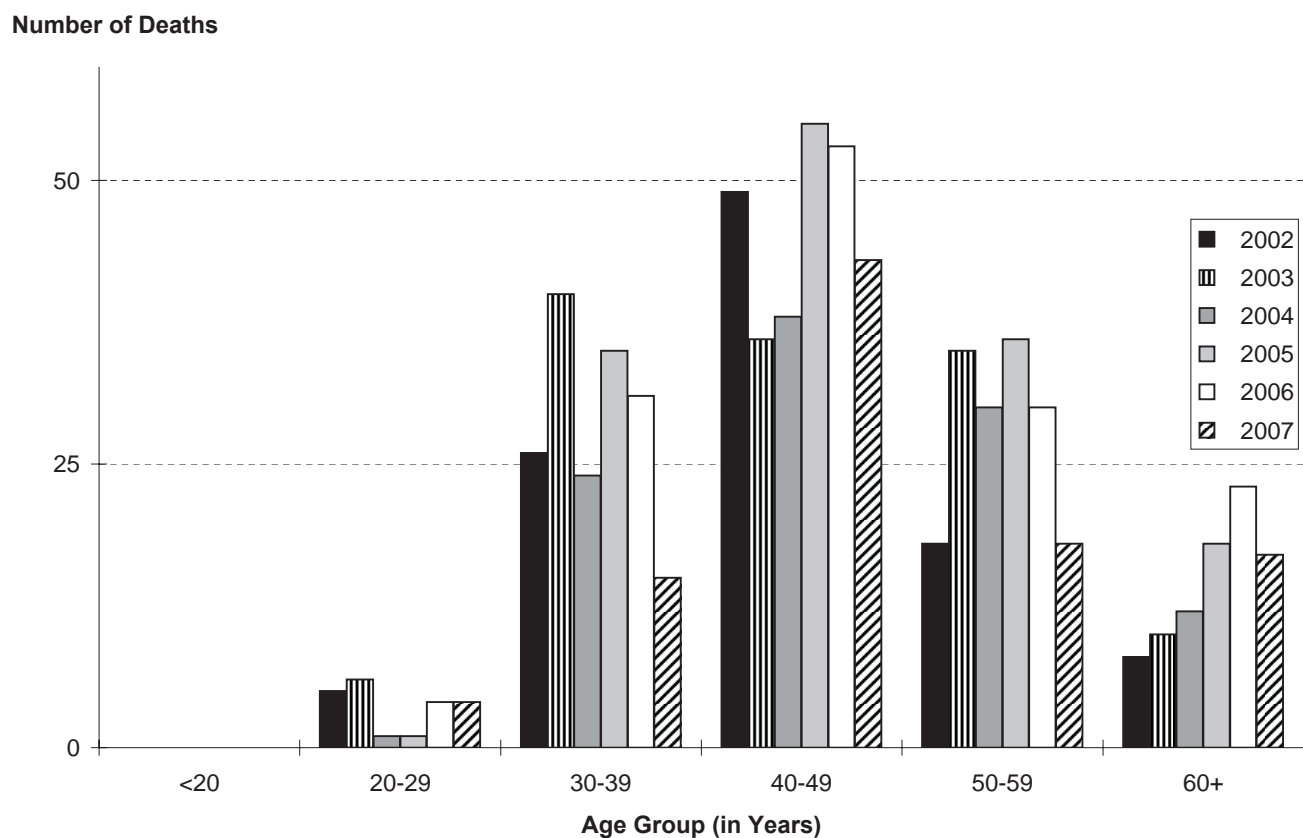


TABLE 28
DEATHS DUE TO HIV DISEASE BY
GENDER AND AGE GROUP
BRITISH COLUMBIA, 1992–2007

Year of Death	Gender	Age at Death (in Years)						Total
		<20	20–29	30–39	40–49	50–59	60+	
1992	M	-	28	101	89	22	5	245
	F	-	1	3	2	-	-	6
	T	-	29	104	91	22	5	251
	Percent	-	11.6	41.4	36.3	8.8	2.0	100.0
1993	M	-	28	114	95	34	15	286
	F	-	3	8	2	1	1	15
	T	-	31	122	97	35	16	301
	Percent	-	10.3	40.5	32.2	11.6	5.3	100.0
1994	M	-	19	147	101	29	12	308
	F	2	5	10	2	2	2	23
	T	2	24	157	103	31	14	331
	Percent	0.6	7.3	47.4	31.1	9.4	4.2	100.0
1995	M	-	17	116	103	31	9	276
	F	-	6	7	4	1	1	19
	T	-	23	123	107	32	10	295
	Percent	-	7.8	41.7	36.3	10.8	3.4	100.0
1996	M	3	9	106	73	34	10	235
	F	-	4	6	6	-	1	17
	T	3	13	112	79	34	11	252
	Percent	1.2	5.2	44.4	31.3	13.5	4.4	100.0
1997	M	-	11	40	33	11	6	101
	F	-	2	7	4	1	2	16
	T	-	13	47	37	12	8	117
	Percent	-	11.1	40.2	31.6	10.3	6.8	100.0
1998	M	-	6	32	44	7	4	93
	F	-	4	8	3	1	1	17
	T	-	10	40	47	8	5	110
	Percent	-	9.1	36.4	42.7	7.3	4.5	100.0
1999	M	1	3	37	32	13	4	90
	F	-	-	4	7	2	-	13
	T	1	3	41	39	15	4	103
	Percent	1.0	2.9	39.8	37.9	14.6	3.9	100.0
2000	M	-	5	31	31	23	8	98
	F	-	4	6	9	3	2	24
	T	-	9	37	40	26	10	122
	Percent	-	7.4	30.3	32.8	21.3	8.2	100.0
2001	M	-	-	30	33	19	9	91
	F	-	4	8	4	3	1	20
	T	-	4	38	37	22	10	111
	Percent	-	3.6	34.2	33.3	19.8	9.0	100.0
2002	M	-	4	20	37	15	8	84
	F	-	1	6	12	3	-	22
	T	-	5	26	49	18	8	106
	Percent	-	4.7	24.5	46.2	17.0	7.5	100.0
2003	M	-	2	34	26	32	10	104
	F	-	4	6	10	3	-	23
	T	-	6	40	36	35	10	127
	Percent	-	4.7	31.5	28.3	27.6	7.9	100.0
2004	M	-	-	17	30	29	10	86
	F	-	1	7	8	1	2	19
	T	-	1	24	38	30	12	105
	Percent	-	1.0	22.9	36.2	28.6	11.4	100.0
2005	M	-	1	27	43	31	18	120
	F	-	-	8	12	5	-	25
	T	-	1	35	55	36	18	145
	Percent	-	0.7	24.1	37.9	24.8	12.4	100.0
2006	M	-	2	22	42	27	20	113
	F	-	2	9	11	3	3	28
	T	-	4	31	53	30	23	141
	Percent	-	2.8	22.0	37.6	21.3	16.3	100.0
2007	M	-	1	14	33	15	14	77
	F	-	3	1	10	3	3	20
	T	-	4	15	43	18	17	97
	Percent	-	4.1	15.5	44.3	18.6	17.5	100.0
1992 - 2007	M	4	136	888	845	372	162	2,407
	F	2	44	104	106	32	19	307
	T	6	180	992	951	404	181	2,714
	Percent	0.2	6.6	36.6	35.0	14.9	6.7	100.0

Note: HIV Disease – ICD-10 codes B20–B24.

Total percentage may not add up to 100 due to rounding. Non-residents are excluded.

TABLE 29
DEATHS DUE TO HIV DISEASE BY HEALTH SERVICE DELIVERY AREA
 BRITISH COLUMBIA, 1992–2007

Health Service Delivery Area	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	1992–2007		
																	Number	Percent	Rate
11 East Kootenay	-	-	-	1	-	2	-	-	-	1	-	1	-	1	-	-	6	0.2	0.48
12 Kootenay Boundary	-	1	1	3	2	-	1	1	-	-	2	-	1	-	2	-	14	0.5	1.10
13 Okanagan	9	9	6	9	7	2	4	2	3	3	3	6	2	5	11	1	82	3.0	1.68
14 Thompson Cariboo Shuswap	3	4	3	-	3	2	2	2	2	6	2	4	6	2	4	3	48	1.8	1.42
21 Fraser East	4	6	7	6	7	1	5	3	3	2	4	1	5	6	4	1	65	2.4	1.68
22 Fraser North	15	22	25	21	15	8	6	7	11	8	10	10	8	7	10	7	190	7.0	2.30
23 Fraser South	14	12	18	17	23	6	4	11	7	11	10	8	5	12	9	13	180	6.6	1.94
31 Richmond	5	1	6	4	4	5	2	2	1	1	-	1	2	3	1	1	39	1.4	1.48
32 Vancouver	149	197	203	182	145	66	65	53	73	60	62	74	50	78	67	42	1,566	57.7	17.27
33 North Shore/ Coast Garibaldi	14	16	15	12	11	7	5	5	3	3	2	6	3	7	5	5	119	4.4	2.86
41 South Vancouver Island	20	21	28	17	21	10	10	13	7	9	3	8	9	9	16	11	212	7.8	3.90
42 Central Vancouver Island	16	6	13	14	6	4	3	4	8	4	4	4	5	6	3	6	106	3.9	2.79
43 North Vancouver Island	1	3	3	2	1	1	-	-	4	2	-	1	2	3	2	-	25	0.9	1.37
51 Northwest	1	1	-	2	1	-	-	-	-	-	-	-	1	2	-	2	10	0.4	0.74
52 Northern Interior	-	2	2	4	5	2	2	-	-	1	3	3	5	4	7	5	45	1.7	1.89
53 Northeast	-	-	1	1	-	-	1	-	-	-	1	-	1	-	-	-	5	0.2	0.49
N.S.	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	2	0.1	
PROVINCIAL TOTAL	251	301	331	295	252	117	110	103	122	111	106	127	105	145	141	97	2,714	100.0	4.25

Note: HSDA based on usual residence.

Rate per 100,000 population in specified area.

Total percentage may not add up to 100 due to rounding.

Non-residents are excluded. N.S. – Not stated.

External Causes of Death

Table 30 shows the number of deaths for males and females from “external causes” which include unintentional deaths as well as deaths due to suicide, homicide and those where intent was undetermined. Also shown are ASMRs. These rates of death per 10,000 standard population are used to compare statistics from other time periods and other jurisdictions. The *Glossary* explains ASMR and the *Methodology* section gives an example of the calculation method.

During 2007 there were 1,505 deaths due to external causes or approximately 48 external cause deaths for each 1,000 deaths in BC (see Table 30).

The break out by cause was:

- 387 were suicides
- 284 were motor vehicle accidents
- 314 were unintentional falls
- 255 were unintentional poisonings
- 33 were unintentional drownings
- 24 were homicides
- 208 were due to other external causes

More than two-thirds of deaths by external causes were males as shown in Table 30. The leading four causes of external deaths in males in 2007 (in ASMR rank order) were suicide, motor vehicle accidents, unintentional poisoning (mostly drug overdoses), and unintentional falls. For females, the leading four (in ASMR rank order) were: suicide, unintentional falls, motor vehicle accidents, and unintentional poisoning.

Table 31 shows the allocation of external death causes according to the Local Health Area where the deceased lived, not where the incident occurred. The highest ASMRs in 2007 are found in the following LHAs (with 5 or more deaths): Hope (13.96), Upper Skeena (11.34), Cariboo-Chilcotin (9.80), Vancouver Downtown-Eastside (9.26), and Salmon Arm (7.57).

Table 32 shows number of deaths from suicide classified by month of occurrence and by gender. Percentages across months are also given. In 2007 there were almost three times the number of male suicides than female suicides. The data for 2007 shows that February was the month with the fewest number of suicides (22) while July was the month with the highest number of suicides (43).

TABLE 30
EXTERNAL CAUSES OF DEATH BY GENDER
BRITISH COLUMBIA, 2007

Cause of Death	ICD-10 Code	Male		Female		Total	
		Number	ASMR	Number	ASMR	Number	ASMR
Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850	202	0.89	82	0.33	284	0.61
Other transport accidents	V01, V05-V06, V10-V11, V15-V18, V198-V199, V800-V802, V806-V809, V812-V819, V822-V829, V891, V893, V91, V93-V99, Y859	10	0.04	2	0.01	12	0.03
Accidental falls	W00-W19	152	0.57	162	0.40	314	0.47
Accident caused by machinery	W24, W28-W31	4	0.02	-	-	4	0.01
Accidental firearm discharge	W32-W34	1	0.01	2	0.01	3	0.01
Exposure to smoke, fire and flames	X00-X09	17	0.07	7	0.03	24	0.05
Accidental drowning (inc water transport)	V90, V92, W65-W74	31	0.13	2	0.01	33	0.07
Accidental poisoning	X40-X49	174	0.75	81	0.32	255	0.53
All other accidents	W20-W23, W25-W27, W35-W64, W75-W99, X10-X39, X50-X59, Y35-Y36, Y40-Y84, Y88	83	0.34	54	0.18	137	0.25
Suicide	X60-X84, Y870	283	1.19	104	0.43	387	0.80
Homicide	X85-Y09, Y871	16	0.08	8	0.04	24	0.06
External events of undetermined intent	Y10-Y34, Y872	10	0.04	4	0.01	14	0.02
Sequelae of other external causes	Y86, Y89	13	0.05	1	0.00	14	0.03
TOTAL		996	4.17	509	1.76	1,505	2.93

Note: ASMR – per 10,000 standard population (Canada 1991 Census).
Non-residents are excluded.

Local Health Area	Motor Vehicle Accidents	Other Transport Accidents	Unintentional		Fire/ Flames	Unintentional Drowning	Suicide	Homicide	Other	Total	
			Poisoning	Falls						Deaths	ASMR
001 Fernie	3	-	-	-	-	-	2	-	-	5	3.70
002 Cranbrook	3	-	4	3	1	-	-	1	3	15	4.81
003 Kimberley	3	-	-	3	-	-	-	-	1	7	5.35
004 Windermere	2	-	-	-	-	-	1	-	1	4	3.43
005 Creston	-	-	1	3	-	-	2	-	1	7	3.22
006 Kootenay Lake	1	-	-	1	-	-	1	-	1	4	8.74
007 Nelson	2	-	1	3	-	1	1	-	3	11	3.51
009 Castlegar	1	-	1	1	-	-	-	-	-	3	2.44
010 Arrow Lakes	1	-	-	-	-	-	-	-	-	1	1.52
011 Trail	1	-	3	3	-	-	2	-	2	11	3.77
012 Grand Forks	2	-	-	1	-	-	-	-	-	3	3.29
013 Kettle Valley	-	-	-	1	-	-	2	-	-	3	4.35
014 Southern Okanagan	1	-	3	2	1	-	2	-	1	10	3.34
015 Penticton	-	-	6	9	-	-	2	1	3	21	2.65
016 Keremeos	1	-	-	-	-	-	-	-	-	1	3.35
017 Princeton	-	-	1	1	-	-	-	-	1	3	2.84
018 Golden	-	-	-	-	-	-	1	-	-	1	1.54
019 Revelstoke	1	-	-	-	-	-	1	-	1	3	2.82
020 Salmon Arm	9	-	2	-	-	1	7	-	1	20	7.57
021 Armstrong - Spallumcheen	2	-	-	1	-	-	-	-	-	3	2.50
022 Vernon	6	-	1	6	-	-	9	-	2	24	3.22
023 Central Okanagan	11	2	8	26	-	1	13	-	7	68	2.86
024 Kamloops	9	1	4	5	-	-	10	-	10	39	2.99
025 100 Mile House	5	-	1	-	-	-	1	-	1	8	6.62
026 North Thompson	1	-	1	-	-	-	-	-	1	3	8.54
027 Cariboo - Chilcotin	9	-	5	-	-	-	8	-	4	26	9.80
028 Quesnel	-	-	1	2	-	-	1	-	2	6	2.43
029 Lillooet	-	-	1	-	1	-	-	-	-	2	2.94
030 South Cariboo	2	-	-	1	-	-	-	-	-	3	2.88
031 Merritt	3	-	1	2	1	-	-	-	-	7	5.04
032 Hope	1	-	1	1	2	-	2	-	2	9	13.96
033 Chilliwack	6	-	4	6	1	-	7	-	1	25	2.63
034 Abbotsford	10	-	5	9	1	-	10	-	5	40	2.65
035 Langley	5	-	7	8	-	2	9	1	2	34	2.33
037 Delta	1	-	4	6	1	-	4	1	3	20	1.61
038 Richmond	4	-	3	3	-	3	14	-	5	32	1.60
040 New Westminster	5	1	2	4	-	1	7	1	1	22	2.91
041 Burnaby	3	-	12	12	-	2	16	3	8	56	2.19
042 Maple Ridge	5	2	9	2	1	2	11	-	2	34	3.40
043 Coquitlam	12	-	6	8	2	2	9	2	3	44	2.14
044 North Vancouver	4	1	6	10	-	1	8	-	3	33	2.03
045 West Vancouver-Bowen Is.	2	-	2	2	-	-	3	-	1	10	1.30
046 Sunshine Coast	4	-	-	6	-	-	3	-	2	15	3.28
047 Powell River	-	-	2	6	-	-	2	-	2	12	4.01
048 Howe Sound	5	-	-	3	-	-	4	-	-	12	3.95
049 Bella Coola Valley	2	-	-	-	-	1	-	-	-	3	12.85
050 Queen Charlotte	1	-	-	-	-	-	1	-	-	2	4.18
051 Snow Country	-	-	-	-	-	-	-	-	-	-	-
052 Prince Rupert	-	-	-	-	1	-	3	-	1	5	3.47
053 Upper Skeena	1	-	1	1	-	-	2	-	-	5	11.34
054 Smithers	1	-	1	3	-	-	1	-	2	8	4.89
055 Burns Lake	2	-	-	1	-	-	1	1	1	6	7.36
056 Nechako	6	-	1	-	-	-	2	-	-	9	5.33
057 Prince George	8	-	6	3	1	-	8	-	9	35	3.56
059 Peace River South	-	-	-	2	-	-	4	-	-	6	2.58
060 Peace River North	9	-	2	-	-	-	3	-	2	16	5.01
061 Greater Victoria	7	1	14	39	2	2	26	2	14	107	3.30
062 Sooke	5	-	1	1	1	-	6	-	1	15	2.11
063 Saanich	6	-	1	6	-	1	3	-	2	19	1.95
064 Gulf Islands	1	-	1	1	-	-	1	1	2	7	2.45
065 Cowichan	9	-	1	2	-	2	7	-	1	22	3.93
066 Lake Cowichan	-	-	-	-	-	-	-	-	-	-	-
067 Ladysmith	1	-	-	3	1	-	-	-	-	5	2.87
068 Nanaimo	6	-	1	8	1	1	11	-	3	31	2.51
069 Qualicum	9	1	-	11	-	-	2	-	2	25	3.83
070 Alberni	9	-	6	3	-	1	7	-	-	26	7.09
071 Courtenay	2	-	6	6	-	1	7	-	2	24	3.00
072 Campbell River	2	1	5	5	1	1	3	-	3	21	3.72
075 Mission	2	-	5	2	-	-	2	1	1	13	3.00
076 Agassiz - Harrison	1	-	-	1	-	-	-	-	1	3	2.95
077 Summerland	-	-	-	4	-	-	-	-	-	4	0.91
078 Enderby	1	-	-	-	-	1	-	-	4	6	6.13
080 Kitimat	2	-	1	-	-	-	1	-	-	4	2.84
081 Fort Nelson	-	-	1	-	-	-	1	-	-	2	2.44
083 Central Coast	-	-	-	-	-	-	-	-	1	1	6.37
084 Vancouver Island West	1	-	-	-	-	-	-	-	-	1	4.11
085 Vancouver Island North	-	1	-	-	1	-	1	1	-	4	2.44
087 Stikine	-	-	-	-	-	-	-	-	-	-	-
088 Terrace	5	-	-	-	-	-	4	-	1	10	5.47
092 Nisga'a	-	-	1	-	-	-	2	-	-	3	17.60
094 Telegraph Creek	-	-	-	-	-	-	-	-	1	1	10.92
161 Vancouver - City Centre	3	-	9	3	-	1	20	-	5	41	3.09
162 Vancouver - Downtown E.side	3	-	39	5	-	1	17	-	4	69	9.26
163 Vancouver - North East	4	-	4	5	1	-	4	1	2	21	1.60
164 Vancouver - Westside	1	-	4	8	-	1	12	-	6	32	1.79
165 Vancouver - Midtown	2	-	9	5	-	1	8	1	4	30	2.96
166 Vancouver - South	3	-	2	12	-	-	10	-	2	29	1.59
201 Surrey	19	1	20	9	2	2	27	3	5	88	2.39
202 South Surrey/White Rock	4	-	2	5	-	-	5	-	2	18	2.18
PROVINCIAL TOTAL	284	12	255	314	24	33	387	24	172	1,505	2.93
PERCENT	18.9	0.8	16.9	20.9	1.6	2.2	25.7	1.6	11.4	100.0	

Notes for table follow table 32.

TABLE 32
SUICIDE DEATHS BY MONTH AND GENDER
 BRITISH COLUMBIA, 2007

Month	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
January	33	11.7	9	8.7	42	10.9
February	12	4.2	10	9.6	22	5.7
March	22	7.8	6	5.8	28	7.2
April	28	9.9	8	7.7	36	9.3
May	25	8.8	9	8.7	34	8.8
June	26	9.2	4	3.8	30	7.8
July	27	9.5	16	15.4	43	11.1
August	16	5.7	9	8.7	25	6.5
September	25	8.8	13	12.5	38	9.8
October	18	6.4	11	10.6	29	7.5
November	29	10.2	6	5.8	35	9.0
December	22	7.8	3	2.9	25	6.5
TOTAL	283	100.0	104	100.0	387	100.0

Note: Suicide Deaths – ICD-10 codes X60–X84, Y87.0.
 Total percentage may not add up to 100 due to rounding.
 Non-residents are excluded.

Notes to Table 31

Note: Based on usual residence. ASMR – rate per 10,000 standard population (Canada 1991 Census). PERCENT – Provincial total for each cause as a percent of the Provincial total for all deaths from external causes. Other is comprised of accident caused by machinery, accidental firearm discharge, all other accidents, external event of undetermined intent, and sequelae of other external causes. Total includes residents with unknown LHA.

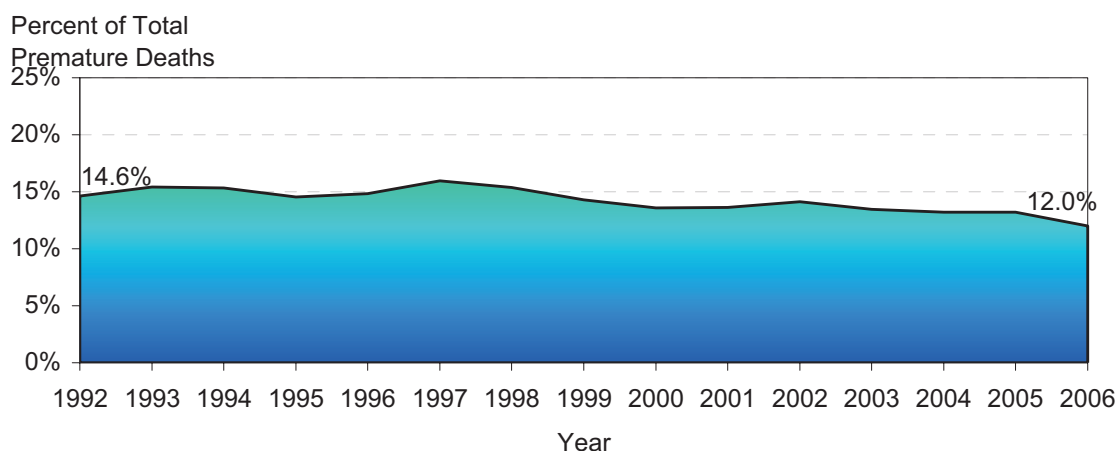


Vital Statistics Information Box

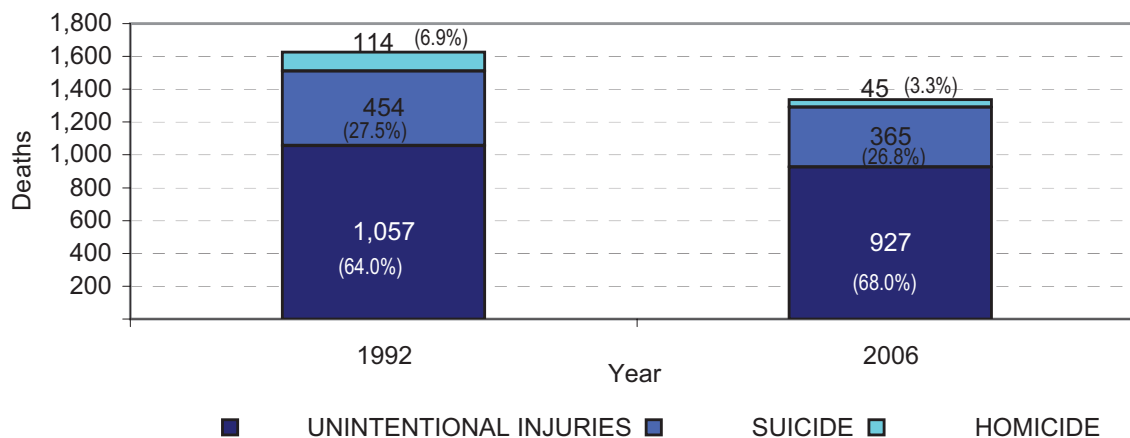
PREMATURE (<75 YEARS) EXTERNAL CAUSES OF DEATH IN BRITISH COLUMBIA, 1992 TO 2006

From 1992 to 2006, deaths among those under the age of 75 have accounted for just 41.3 percent; however, 80.1 percent from external causes were among those under the age of 75. The total number of deaths attributable to external cause has fallen from 2,027 in 1992 to 1,777 in 2006, and among those under the age of 75 the number of deaths has fallen from 1,651 to 1,363. The share of premature deaths attributable to external cause has fallen from 14.6 percent in 1992 to 12.0 percent in 2006. Unintentional injuries account for the vast majority of deaths from external causes of death with 68.0 percent external cause deaths among those under the age of 75 being from unintentional injuries.

Share of Premature Mortality Attributable to External Causes,
British Columbia 1992 to 2006



Deaths Under the Age of 75 Years due to Unintentional Injuries,
Homicide and Suicide,
British Columbia 1992 to 2006



Mortality Due to All Causes of Death

Table 33 shows the number of deaths from all causes in each LHA not only for 2007, but also for the previous 5 year period. The Standardized Mortality Ratio (SMR) columns compare the actual number of deaths in the LHA (observed) with the number that would be expected if the LHA had the same age-specific death rates as the whole province.

Table 33 also shows 95 percent confidence intervals for the SMR, which provides a measure of its variability. In 2007 and the previous 5 years, 39 LHAs had statistically significant ratios: 27 high and 12 low.

In 2007, the LHAs with the 5 highest statistically significant SMR were: Nisga'a (2.57), Vancouver Island North (1.93), Queen Charlotte (1.67), Nechako (1.56) and North Thompson (1.50).

Figure 38 shows the SMRs grouped into colour coded quintiles. The map provides an immediately apparent view of the provincial variation of SMRs. There was no particular pattern although low ratios were concentrated mostly in the southeast and southwest.

Vital Statistics Information Box

DEATHS AGED 65+ BY GENDER AND HEALTH SERVICE DELIVERY AREA BRITISH COLUMBIA, 2007

Health Service Delivery Area	Gender	Age at Death								% 65+	
		65-69	70-74	75-79	80-84	85-89	90-94	95-99	100+	Total	% 65+
11 East Kootenay	M	27	34	42	51	37	28	8	0	312	72.8%
	F	23	27	21	42	63	49	12	6	285	85.3%
12 Kootenay Boundary	M	43	47	66	64	51	30	13	0	425	73.9%
	F	25	31	41	60	72	64	19	3	376	83.8%
13 Okanagan	M	123	168	253	278	293	168	55	6	1,692	79.4%
	F	84	128	202	242	338	269	100	13	1,587	86.7%
14 Thompson Cariboo Shuswap	M	95	118	152	141	118	46	15	0	965	71.0%
	F	70	70	94	127	146	104	22	5	811	78.7%
21 Fraser East	M	71	116	163	150	167	78	21	4	1,060	72.6%
	F	58	72	101	180	190	147	55	14	993	82.3%
22 Fraser North	M	106	175	252	274	247	132	34	10	1,693	72.7%
	F	93	119	162	281	310	243	127	25	1,634	83.2%
23 Fraser South	M	166	177	258	327	315	199	50	13	2,056	73.2%
	F	116	143	242	346	420	287	134	34	2,104	81.8%
31 Richmond	M	32	41	57	81	59	33	10	0	417	75.1%
	F	24	35	43	85	114	82	36	6	492	86.4%
32 Vancouver	M	134	219	285	268	273	130	62	10	1,986	69.5%
	F	75	112	173	277	364	310	157	41	1,823	82.8%
33 North Shore/Coast Garibaldi	M	78	86	140	165	137	94	24	4	979	74.4%
	F	59	64	90	176	208	158	72	16	964	87.4%
41 South Vancouver Island	M	94	119	200	268	307	180	46	7	1,568	77.9%
	F	70	109	143	286	367	323	145	38	1,702	87.0%
42 Central Vancouver Island	M	117	136	192	224	188	104	26	1	1,312	75.3%
	F	61	106	113	176	240	166	54	10	1,121	82.6%
43 North Vancouver Island	M	62	57	87	73	60	30	6	0	509	73.7%
	F	38	34	52	51	68	56	33	8	429	79.3%
51 Northwest	M	36	36	49	32	19	6	2	1	290	62.4%
	F	21	13	19	27	38	15	7	1	206	68.4%
52 Northern Interior	M	54	70	80	58	46	26	5	5	528	65.2%
	F	27	45	49	63	68	34	14	2	423	71.4%
53 Northeast	M	18	35	22	25	18	10	2	1	205	63.9%
	F	12	15	24	26	22	10	4	2	146	78.8%
Provincial Total	M	1,256	1,634	2,299	2,479	2,335	1,294	379	62	16,005	73.3%
	F	856	1,123	1,569	2,445	3,028	2,317	991	224	15,100	83.1%

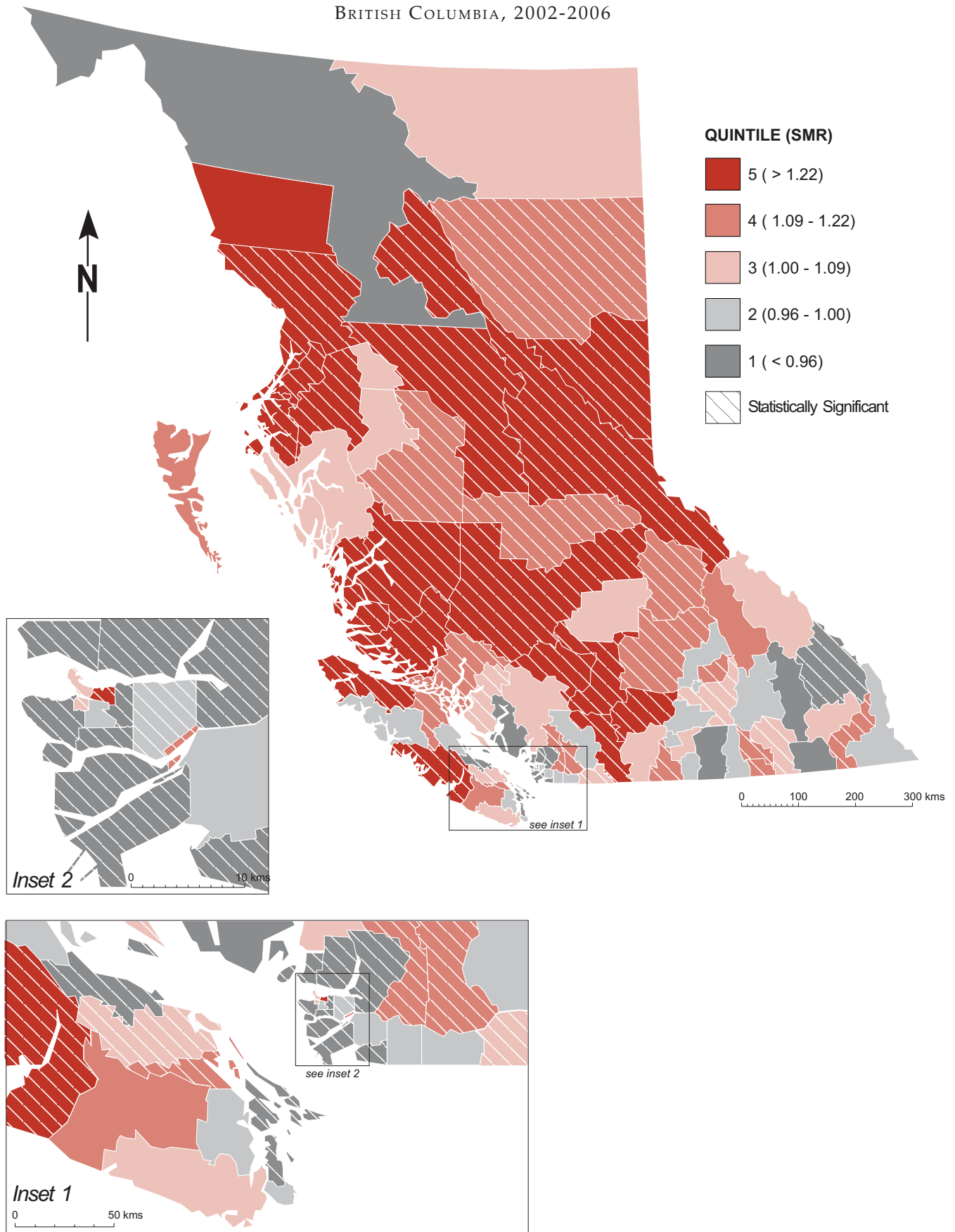
Note: %65+ is the percentage of deaths aged 65 or older out of all deaths to residents of the specified area by gender.

Provincial Total includes residents with unknown addresses.

		2002-2006			2007				
Local Health Area		Observed Deaths	SMR	(p)	Observed Deaths	Expected Deaths	SMR	(p)	95% Confidence Interval
									Lower Upper
001	Fernie	398	0.97		80	82.26	0.97		0.77 - 1.21
002	Cranbrook	970	1.11	*	219	185.40	1.18	*	1.03 - 1.35
003	Kimberley	407	1.03		61	77.67	0.79		0.60 - 1.01
004	Windermere	244	0.82	*	48	66.34	0.72	*	0.53 - 0.96
005	Creston	638	0.93		145	140.38	1.03		0.87 - 1.22
006	Kootenay Lake	137	0.87		41	32.44	1.26		0.91 - 1.71
007	Nelson	956	1.07	*	207	177.77	1.16	*	1.01 - 1.33
009	Castlegar	618	1.20	*	120	104.64	1.15		0.95 - 1.37
010	Arrow Lakes	232	1.02		50	44.56	1.12		0.83 - 1.48
011	Trail	1,074	1.16	*	241	185.01	1.30	*	1.14 - 1.48
012	Grand Forks	454	1.00		120	94.95	1.26	*	1.05 - 1.51
013	Kettle Valley	127	0.85		22	30.61	0.72		0.45 - 1.09
014	Southern Okanagan	1,276	1.01		251	255.58	0.98		0.86 - 1.11
015	Penticton	2,577	1.04		474	505.82	0.94		0.85 - 1.03
016	Keremeos	325	1.13	*	64	61.39	1.04		0.80 - 1.33
017	Princeton	257	1.07		63	51.89	1.21		0.93 - 1.55
018	Golden	177	1.04		44	36.95	1.19		0.87 - 1.60
019	Revelstoke	271	1.09		51	50.54	1.01		0.75 - 1.33
020	Salmon Arm	1,566	1.01		324	328.71	0.99		0.88 - 1.10
021	Armstrong - Spallumcheen	376	0.97		77	81.94	0.94		0.74 - 1.17
022	Vernon	2,936	1.07	*	644	578.52	1.11	*	1.03 - 1.20
023	Central Okanagan	7,070	0.99		1,482	1,515.97	0.98		0.93 - 1.03
024	Kamloops	3,991	1.16	*	814	741.43	1.10	*	1.02 - 1.18
025	100 Mile House	579	1.08		136	114.67	1.19		1.00 - 1.40
026	North Thompson	143	1.21	*	42	27.98	1.50	*	1.08 - 2.03
027	Cariboo - Chilcotin	818	1.23	*	192	144.97	1.32	*	1.14 - 1.53
028	Quesnel	819	1.18	*	177	148.01	1.20	*	1.03 - 1.39
029	Lillooet	195	1.46	*	32	27.54	1.16		0.79 - 1.64
030	South Cariboo	373	1.31	*	70	58.77	1.19		0.93 - 1.50
031	Merritt	489	1.36	*	115	77.41	1.49	*	1.23 - 1.78
032	Hope	469	1.35	*	110	74.58	1.47	*	1.21 - 1.78
033	Chilliwack	3,210	1.09	*	693	625.18	1.11	*	1.03 - 1.19
034	Abbotsford	4,469	1.01		897	911.08	0.98		0.92 - 1.05
035	Langley	4,024	1.02		898	841.46	1.07		1.00 - 1.14
037	Delta	2,967	0.96	*	613	657.55	0.93		0.86 - 1.01
038	Richmond	4,307	0.77	*	909	1,238.62	0.73	*	0.69 - 0.78
040	New Westminster	2,447	1.11	*	504	442.16	1.14	*	1.04 - 1.24
041	Burnaby	6,790	0.96	*	1,373	1,467.86	0.94	*	0.89 - 0.99
042	Maple Ridge	2,724	1.16	*	527	503.63	1.05		0.96 - 1.14
043	Coquitlam	4,661	0.95	*	923	1,055.04	0.87	*	0.82 - 0.93
044	North Vancouver	4,068	0.92	*	840	918.52	0.91	*	0.85 - 0.98
045	West Vancouver-Bowen Is.	2,337	0.83	*	457	571.54	0.80	*	0.73 - 0.88
046	Sunshine Coast	1,245	0.95		307	282.70	1.09		0.97 - 1.21
047	Powell River	963	1.09	*	192	184.50	1.04		0.90 - 1.20
048	Howe Sound	567	1.03		119	116.96	1.02		0.84 - 1.22
049	Bella Coola Valley	104	1.47	*	17	14.57	1.17		0.68 - 1.87
050	Queen Charlotte	129	1.14		41	24.49	1.67	*	1.20 - 2.27
051	Snow Country	21	1.64	*	3	3.01	1.00		0.20 - 2.91
052	Prince Rupert	452	1.24	*	98	76.33	1.28	*	1.04 - 1.56
053	Upper Skeena	121	1.08		24	23.87	1.01		0.64 - 1.50
054	Smithers	395	1.06		104	78.28	1.33	*	1.09 - 1.61
055	Burns Lake	260	1.20	*	56	45.35	1.23		0.93 - 1.60
056	Nechako	487	1.31	*	121	77.37	1.56	*	1.30 - 1.87
057	Prince George	2,561	1.23	*	597	452.54	1.32	*	1.22 - 1.43
059	Peace River South	814	1.24	*	178	138.75	1.28	*	1.10 - 1.49
060	Peace River North	685	1.18	*	153	122.17	1.25	*	1.06 - 1.47
061	Greater Victoria	10,734	0.99		2,154	2,151.18	1.00		0.96 - 1.04
062	Sooke	1,614	1.03		306	340.02	0.90		0.80 - 1.01
063	Saanich	3,062	0.83	*	665	778.74	0.85	*	0.79 - 0.92
064	Gulf Islands	640	0.76	*	145	180.05	0.81	*	0.68 - 0.95
065	Cowichan	2,200	1.02		471	460.03	1.02		0.93 - 1.12
066	Lake Cowichan	230	1.10		36	44.50	0.81		0.57 - 1.12
067	Ladysmith	927	1.11	*	217	182.35	1.19	*	1.04 - 1.36
068	Nanaimo	4,239	1.07	*	925	859.81	1.08	*	1.01 - 1.15
069	Qualicum	2,316	0.91	*	503	553.09	0.91	*	0.83 - 0.99
070	Alberni	1,365	1.23	*	281	235.36	1.19	*	1.06 - 1.34
071	Courtenay	2,428	1.01		510	525.97	0.97		0.89 - 1.06
072	Campbell River	1,370	1.12	*	314	264.71	1.19	*	1.06 - 1.32
075	Mission	1,314	1.19	*	286	233.20	1.23	*	1.09 - 1.38
076	Agassiz - Harrison	289	0.98		67	64.23	1.04		0.81 - 1.32
077	Summerland	717	0.98		139	149.93	0.93		0.78 - 1.09
078	Enderby	358	1.14	*	85	65.11	1.31	*	1.04 - 1.61
080	Kitimat	252	1.05		67	51.26	1.31	*	1.01 - 1.66
081	Fort Nelson	81	1.04		20	14.97	1.34		0.82 - 2.06
083	Central Coast	79	2.61	*	11	6.49	1.69		0.84 - 3.03
084	Vancouver Island West	47	0.99		11	10.84	1.02		0.51 - 1.82
085	Vancouver Island North	349	1.41	*	103	53.29	1.93	*	1.58 - 2.34
087	Stikine	22	0.93		4	5.11	0.78		0.21 - 2.00
088	Terrace	589	1.28	*	132	98.45	1.34	*	1.12 - 1.59
092	Nisga'a	66	1.91	*	18	7.00	2.57	*	1.52 - 4.07
094	Telegraph Creek	18	1.41		5	2.61	1.92		0.62 - 4.47
161	Vancouver - City Centre	3,184	1.08	*	634	616.19	1.03		0.95 - 1.11
162	Vancouver - Downtown E.side	2,559	1.30	*	509	402.91	1.26	*	1.16 - 1.38
163	Vancouver - North East	2,909	0.87	*	563	701.58	0.80	*	0.74 - 0.87
164	Vancouver - Westside	3,706	0.81	*	780	922.76	0.85	*	0.79 - 0.91
165	Vancouver - Midtown	2,411	0.98		487	500.96	0.97		0.89 - 1.06
166	Vancouver - South	4,123	0.84	*	831	1,008.15	0.82	*	0.77 - 0.88
201	Surrey	7,919	1.01		1,752	1,681.79	1.04		0.99 - 1.09
202	South Surrey/White Rock	4,228	0.92	*	897	954.15	0.94		0.88 - 1.00
PROVINCIAL TOTAL		148,219	1.00		31,105	31,105.00	1.00		0.99 - 1.01

Note: *Statistical testing indicates that observed deaths are significantly different from the expected deaths ($p < 0.05$, two tailed). Total includes residents with unknown LHA. Observed deaths include unknown gender.

FIGURE 38
ALL CAUSES OF DEATH BY LOCAL HEALTH AREA
 BRITISH COLUMBIA, 2002-2006



Note: Refer to Figure 1 to clarify geographical location of LHAs.

Potential Years of Life Lost

Potential Years of Life Lost (PYLL) gives an indication of “premature” death by totalling the number of years British Columbians “lost” prior to age 75 years. For example, an infant death at the age of 6 months would have lost 74.5 years of life. The upper limit of 75 is used for both genders. PYLL indicates the importance of the various causes of premature death by giving more weight to deaths that occurred at younger ages than those that occurred later in life. Bear in mind that the PYLL weighted according to age. Thus a death at a younger age contributes more to total PYLL than a death at an older age.

The tables and figures in this section portray the impact of premature mortality. The *Glossary* further defines *PYLL*. The precise calculation methods for the various indicators derived from PYLL are referenced in the tables in this section and are shown in the *Methodology* section.

Table 34 shows several PYLL based indicators for deaths of those under 75 years old contrasted with total deaths and ASMR for all ages for various causes of death. The *No. of Deaths* column shows the number of persons under 75 years of age who have died due to each cause group. Total PYLL measures the total years all decedents would have lived had they reached the age of 75. Percent of PYLL shows each disease category’s proportion of the Total PYLL for all causes. Average PYLL is the disease category’s Total PYLL divided by number of deaths. PYLLSR is the rate of PYLL per 1,000 standard population. See *PYLL Standardized Rate* in the *Glossary* and the *Methodology* section for computation details.

Because PYLL focuses on premature mortality rather than on the simple fact of death, it is useful in assessing causes of death in terms of the extent to which each contributes to reduction in lifespan. In Table 34 the column labelled Average PYLL is helpful in exploring this effect. A larger value in this column indicates a more premature death due to this category.

Motor vehicle accidents, which claim many young lives, have a high value for average PYLL at 37.2 years. Malignant neoplasms, on the other hand, although claiming many lives (4,595 under the age of 75) have a relatively low average PYLL at 12.7 years since malignant neoplasms tend to afflict older individuals more frequently.

Figure 39, by directly and visually contrasting PYLLSR and ASMR for several major causes of death, allows one to compare the profiles of the two sides of the graph, where there are significant differences in the impact of the various causes of death on PYLL and overall death rate. The clearest contrast is for external causes of death: a relatively moderate ASMR but very high PYLLSR. This clearly shows the contribution of “external causes” to premature mortality.

In Table 35, causes of death in 2007 have been ranked according to the Total PYLL for all genders in 4 age groups. The central portion of the table indicates the number of deaths and number of years lost for males, females, and both genders. The PYLL column shows all the years lost in the age group due to each cause category. PYLL % indicates the percent of all PYLL in the age group due to each cause.

Most of the PYLL under 15 years was due to conditions originating in the period around birth (see Table 35). The majority of those deaths occurred less than 7 days after birth (see Table 27) and were more frequent among males than females (see Table 21).

Motor vehicle accidents (MVA) had the highest PYLL in the age group of 15 to 24 year olds. Most of these deaths were to males and therefore the majority of the PYLL in this age group was attributable to males as shown in Table 35.

In the age group of 25 to 44 year olds, among females, malignant neoplasms were responsible for almost the same number of PYLL as all the other major causes combined. Among males, suicides accounted for the largest number of PYLL, although PYLL due to MVA and malignant neoplasms were high among males as well. Note that male deaths due to MVA were responsible for a greater number of deaths than in the 15 to 24 year age group but fewer PYLL.

Malignant neoplasms accounted for the largest share of PYLL for both genders in the 45-74 year age group (see Table 35).

Figure 40 presents the PYLLSR values from Table 35 so the gender differences are immediately apparent.

Males in the four age groups have a higher PYLL than females, although the standardized PYLL rates due to malignant neoplasms were similar in the two adult age groups.

External causes have been covered in a previous section but Table 36 presents their geographic distribution in terms of PYLL index. These causes, in general are considered to be more preventable than 'natural' causes of death and therefore attract attention because of the greater potential for their reduction.

Table 36 shows PYLL due to external causes of death by LHA for the period 2002 through 2006 and for the year 2007. It also displays the observed number of years of lost life in each LHA for both periods and, for 2007, the expected PYLL based on the age distribution in the LHA adjusted to the provincial age and gender specific rate.

The PYLL Index is the ratio of observed to expected deaths. The (p) column displays a '*' or '+' when the ratio falls outside of a 95 percent confidence interval. PYLL index is useful for comparing a region's PYLL experience to the Province. However, PYLLSR is preferred when making comparisons to other regions. See *Expected Potential Years of Life Lost* and *PYLL Index (PYLLI)* in the *Glossary* and the *Methodology* section for a computational example.

In the 5 year period, over half of the LHAs (47) had statistically significant observed versus expected deaths and 33 of those were high. Only one of the more densely populated areas in the lower mainland (Vancouver Downtown Eastside) was statistically significant and high.

Figure 41 displays BC's 89 LHAs, coloured according to their level of PYLLI for the years 2002-2006. They are grouped into quintiles, five groups from those with the lowest (dark grey) to those with the highest PYLLI values (deep red). Looking at this map, the pattern is one of an urban/rural distinction. The more urban areas, in general, are in the quintiles with lower PYLLI values.

TABLE 34
POTENTIAL YEARS OF LIFE LOST AND AGE STANDARDIZED
MORTALITY RATES BY SELECTED CAUSES OF DEATH

BRITISH COLUMBIA, 2007

Cause of Death	ICD-10 Code(s)	PYLL (Age Under 75 Years)					Mortality (All Ages)		
		No. of Deaths	Total PYLL	Percent of PYLL	Average PYLL	PYLLSR	No. of Deaths	Percent of Deaths	ASMR
Certain infectious and parasitic diseases	A00-B99	311	6,291.5	3.2	20.2	1.31	584	1.9	0.98
- HIV disease	B20-B24	96	2,590.0	1.3	27.0	0.58	97	0.3	0.19
Malignant neoplasms	C00-C97	4,595	58,267.0	30.0	12.7	11.39	8,861	28.5	15.17
- Malignant neoplasm of trachea and lung	C33-C34	1,254	13,070.0	6.7	10.4	2.45	2,313	7.4	4.04
- Malignant neoplasm of female breast	C500-C509	403	6,372.5	3.3	15.8	2.41	635	2.0	2.03
- Malignant neoplasm of colon and rectum	C18-C21	442	5,505.0	2.8	12.5	1.06	930	3.0	1.56
Endocrine nutritional and metabolic diseases	E00-E89	455	5,647.0	2.9	12.4	1.14	1,277	4.1	2.07
- Diabetes mellitus	E10-E14	348	3,930.0	2.0	11.3	0.76	1,020	3.3	1.65
Diseases of the circulatory system	I00-I99	2,125	24,632.5	12.7	11.6	4.85	9,515	30.6	14.36
- Ischemic heart diseases	I20-I25	1,159	13,022.5	6.7	11.2	2.47	4,417	14.2	6.79
- Cerebrovascular diseases	I60-I69	443	4,937.5	2.5	11.1	0.97	2,313	7.4	3.45
Diseases of the respiratory system	J00-J98, U049	738	8,181.0	4.2	11.1	1.70	3,277	10.5	5.00
- Pneumonia/Influenza (excluding hypostatic)	J09-J181, J188, J189	186	2,886.0	1.5	15.5	0.64	1,275	4.1	1.82
- Chronic Pulmonary Disease	J40-J44	386	3,155.0	1.6	8.2	0.61	1,346	4.3	2.15
Diseases of the digestive system	K00-K93	614	9,516.5	4.9	15.5	1.85	1,328	4.3	2.15
- Chronic liver disease/cirrhosis	K70, K73-74, K760-K761	325	5,657.5	2.9	17.4	1.03	380	1.2	0.66
Congenital malformations and chromosome abnormalities	Q00-Q99	69	3,771.0	1.9	54.7	1.24	82	0.3	0.21
Certain conditions originating in the perinatal period	P00-P96	93	6,882.0	3.5	74.0	2.47	93	0.3	0.32
External causes of death	V01-Y98	1,105	33,936.0	17.5	30.7	8.28	1,505	4.8	2.93
- Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850	251	9,347.0	4.8	37.2	2.32	284	0.9	0.61
- Suicide	X60-X84, Y870	357	11,037.5	5.7	30.9	2.66	387	1.2	0.80
Other causes ¹		1,578	36,825.0	19.0	23.3	8.90	4,601	14.8	7.41
All causes		11,683	193,949.5	100.0	16.6	43.12	31,105	100.0	50.59

Note: PYLL – denotes the total number of years of life lost from an established life expectancy (75 years).

PYLLSR – PYLL per 1,000 standard population (Canada 1991 Census).

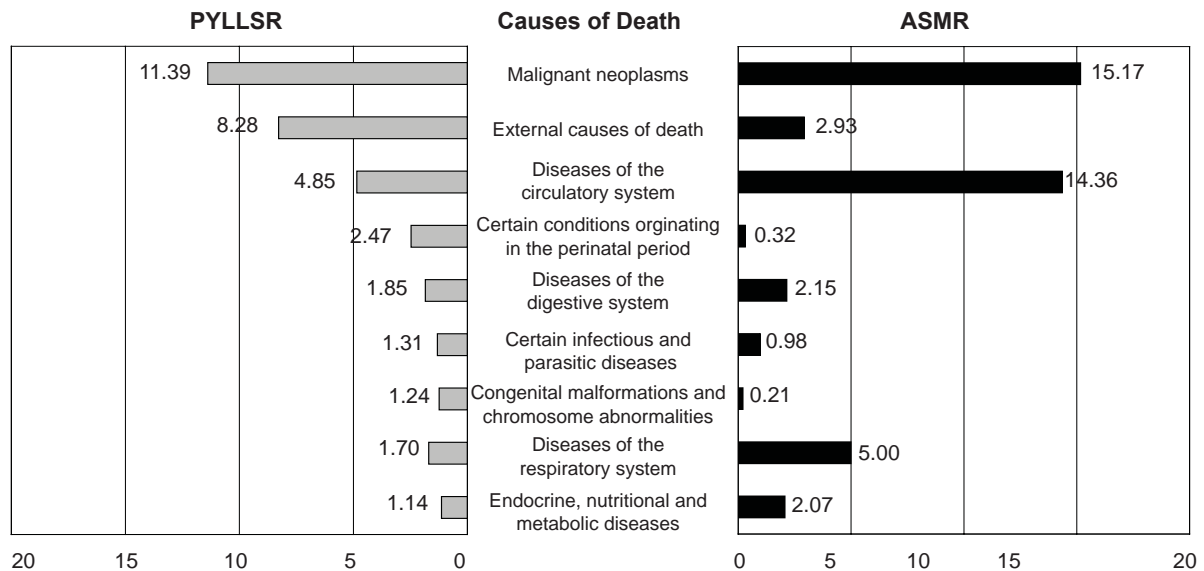
ASMR – per 10,000 standard population (Canada 1991 Census).

¹Other causes includes undetermined and pending.

Total percentage may not add up to 100 due to rounding. Non-residents are excluded.

The output from ICD-10 mortality coding and underlying cause of death selection was modified in BC to reflect the intent of certifiers in this jurisdiction and to provide greater continuity over time. Data using the standard ICD-10 rules for such categories as pneumonia/influenza, diabetes, or cancer should not be compared to the numbers shown above.

FIGURE 39
POTENTIAL YEARS OF LIFE LOST AND AGE STANDARDIZED
MORTALITY RATES BY SELECTED CAUSES OF DEATH
 BRITISH COLUMBIA, 2007



Note: PYLLSR - Potential Years of Life Lost Standardized Rate (age under 75 years) per 1,000 standard population.
 ASMR - Age Standardized Mortality Rate per 10,000 standard population.



TABLE 35
**POTENTIAL YEARS OF LIFE LOST BY AGE GROUP AND
 MAJOR CAUSES OF DEATH (AGE UNDER 75 YEARS)**

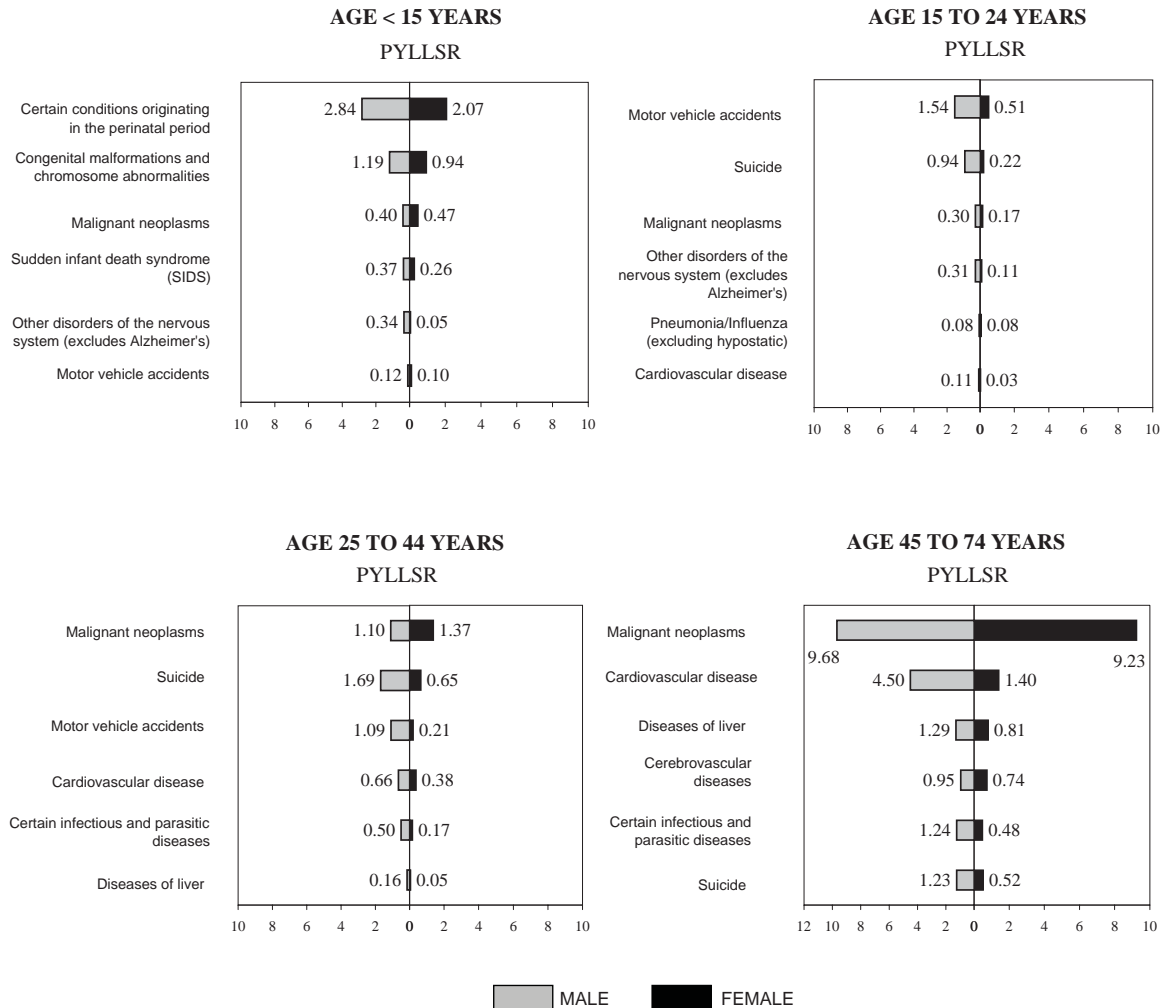
BRITISH COLUMBIA, 2007

Cause of Death	ICD-10 Code(s)	Male				Female				Total			
		Deaths	PYLL	PYLL %	PYLLSR	Deaths	PYLL	PYLL %	PYLLSR	Deaths	PYLL	PYLL %	PYLLSR
Under 15 Years Old													
Certain conditions originating in the perinatal period	P00-P96	53	3,948.5	37.4	2.84	39	2,891.0	39.1	2.07	92	6,839.5	38.1	2.45
Congenital malformations and chromosome abnormalities	Q00-Q99	23	1,687.0	16.0	1.19	18	1,324.0	17.9	0.94	41	3,011.0	16.8	1.06
Malignant neoplasms	C00-C97	9	618.0	5.8	0.40	11	736.5	10.0	0.47	20	1,354.5	7.5	0.44
Sudden infant death syndrome (SIDS)	R95	7	521.5	4.9	0.37	5	370.0	5.0	0.26	12	891.5	5.0	0.32
Other disorders of the nervous system (excl. Alzheimer's)	G00-G25, G31-G99	7	500.0	4.7	0.34	1	74.5	1.0	0.05	8	574.5	3.2	0.20
Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850	3	197.0	1.9	0.12	3	187.5	2.5	0.10	6	384.5	2.1	0.11
Other causes¹		44	3,096.0	29.3	2.07	26	1,808.0	24.5	1.20	70	4,904.0	27.3	1.64
All causes		146	10,568.0	100.0	7.33	103	7,391.5	100.0	5.11	249	17,959.5	100.0	6.22
15-24 Years Old													
Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, 820-V821, V823-V890, V892, V899, Y850	56	3,060.0	26.7	1.54	18	1,000.0	21.4	0.51	74	4,060.0	25.2	1.03
Suicide	X60-X84, Y870	35	1,872.5	16.3	0.94	8	440.0	9.4	0.22	43	2,312.5	14.3	0.58
Malignant neoplasms	C00-C97	11	592.5	5.2	0.30	6	330.0	7.1	0.17	17	922.5	5.7	0.23
Other disorders of the nervous system (excl. Alzheimer's)	G00-G25, G31-G99	11	607.5	5.3	0.31	4	225.0	4.8	0.11	15	832.5	5.2	0.21
Pneumonia/Influenza (excluding hypostatic)	J09-J181, J188, J189	3	157.5	1.4	0.08	3	162.5	3.5	0.08	6	320.0	2.0	0.08
Cardiovascular disease	I00-I51	4	215.0	1.9	0.11	1	57.5	1.2	0.03	5	272.5	1.7	0.07
Other causes¹		91	4,952.5	43.2	2.49	45	2,452.5	52.5	1.24	136	7,405.0	45.9	1.87
All causes		211	11,457.5	100.0	5.76	85	4,667.5	100.0	2.37	296	16,125.0	100.0	4.07
25-44 Years Old													
Malignant neoplasms	C00-C97	90	3,265.0	11.5	1.10	115	4,167.5	27.7	1.37	205	7,432.5	17.1	1.24
Suicide	X60-X84, Y870	91	3,607.5	12.7	1.69	40	1,535.0	10.2	0.65	131	5,142.5	11.8	1.17
Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850	60	2,390.0	8.4	1.09	22	785.0	5.2	0.21	82	3,175.0	7.3	0.65
Cardiovascular disease	I00-I51	52	1,910.0	6.7	0.66	22	850.0	5.7	0.38	74	2,760.0	6.4	0.52
Certain infectious and parasitic diseases	A00-B99	39	1,422.5	5.0	0.50	13	497.5	3.3	0.17	52	1,920.0	4.4	0.33
Diseases of liver	K70-K76	17	597.5	2.1	0.16	11	372.5	2.5	0.05	28	970.0	2.2	0.10
Other causes¹		397	15,227.5	53.6	6.59	179	6,817.5	45.4	2.73	576	22,045.0	50.7	4.65
All causes		746	28,420.0	100.0	11.79	402	15,025.0	100.0	5.56	1,148	43,445.0	100.0	8.66
45-74 Years Old													
Malignant neoplasms	C00-C97	2,364	25,580.0	35.9	9.68	1,989	22,977.5	50.9	9.23	4,353	48,557.5	41.7	9.48
Cardiovascular disease	I00-I51	1,066	11,710.0	16.4	4.50	393	3,397.5	7.5	1.40	1,459	15,107.5	13.0	2.98
Diseases of liver	K70-K76	221	3,382.5	4.7	1.29	128	1,975.0	4.4	0.81	349	5,357.5	4.6	1.05
Cerebrovascular diseases	I60-I69	237	2,467.5	3.5	0.95	183	1,612.5	3.6	0.74	420	4,080.0	3.5	0.85
Certain infectious and parasitic diseases	A00-B99	178	2,875.0	4.0	1.24	75	1,117.5	2.5	0.48	253	3,992.5	3.4	0.86
Suicide	X60-X84, Y870	133	2,517.5	3.5	1.23	48	940.0	2.1	0.52	181	3,457.5	3.0	0.87
Other causes¹		1,855	22,752.5	31.9	9.98	1,120	13,115.0	29.1	5.84	2,975	35,867.5	30.8	7.93
All causes		6,054	71,285.0	100.0	29.09	3,936	45,135.0	100.0	19.10	9,990	116,420.0	100.0	24.17

Note: PYLL – denotes the total number of years of life lost from an established life expectancy (75 years).

PYLLSR – per 1,000 standard population (Canada 1991 Census). ¹Other causes includes undetermined and pending. Causes of death are ordered by total PYLL in the age group. Total percentage may not add up to 100 due to rounding. Non-residents are excluded. The output from ICD-10 mortality coding and underlying cause of death selection was modified in BC to reflect the intent of certifiers in this jurisdiction and to provide greater continuity over time. Data using the standard ICD-10 rules for such categories as pneumonia/influenza, diabetes, or cancer should not be compared to the numbers shown above.

FIGURE 40
POTENTIAL YEARS OF LIFE LOST
STANDARDIZED RATES BY AGE GROUP AND GENDER
MAJOR CAUSES OF DEATH (AGE UNDER 75 YEARS)
 BRITISH COLUMBIA, 2007



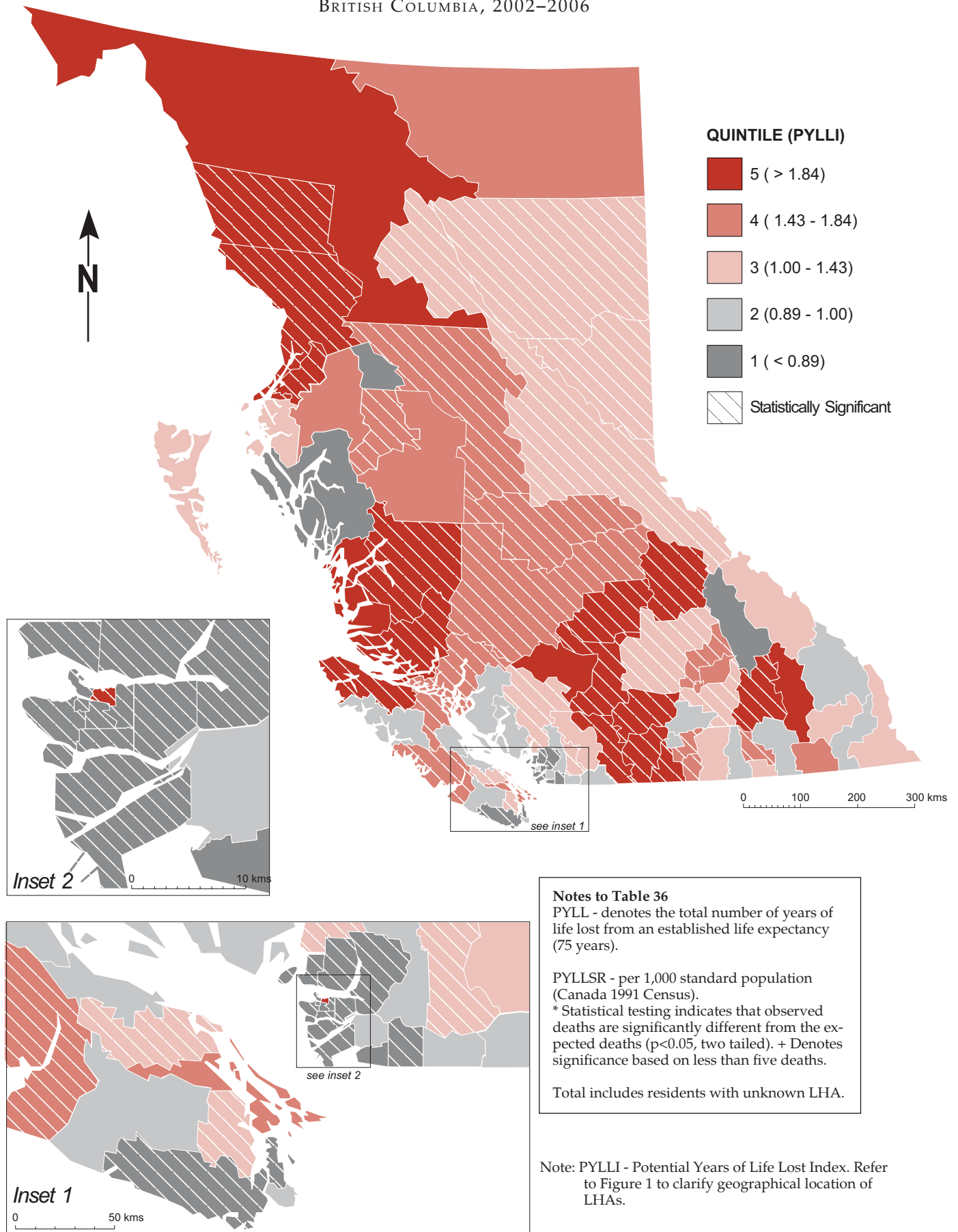
Note: Causes of death are ordered by total deaths (Table 35).
 PYLLSR-PYLL Standardized Rate per 1,000 population.

POTENTIAL YEARS OF LIFE LOST BY LOCAL HEALTH AREA
EXTERNAL CAUSES OF DEATH (AGE UNDER 75 YEARS), BRITISH COLUMBIA, 2002-2006 AND 2007

Local Health Area		2002-2006			2007						
		Observed	Observed	PYLL	Observed	Observed	Expected	PYLL	95% Confidence Limit		
		Deaths	PYLL	Index (p)	Deaths	PYLL	PYLL	Index (p)	Lower	Upper	
001	Fernie	38	1,260.0	1.38	5	212.5	119.21	1.78	0.11	-	3.46
002	Cranbrook	54	1,737.0	1.22	11	327.5	189.55	1.73	0.55	-	2.91
003	Kimberley	15	547.5	1.25	4	115.0	59.82	1.92	0.00	-	3.88
004	Windermere	21	632.5	1.20	4	115.0	77.15	1.49	0.00	-	3.17
005	Creston	28	845.0	1.45	4	100.0	79.17	1.26	0.00	-	2.87
006	Kootenay Lake	16	400.0	2.07	3	92.5	27.06	3.42	0.00	-	7.36
007	Nelson	49	1,307.5	0.93	6	205.0	190.53	1.08	0.17	-	1.98
009	Castlegar	32	1,227.0	1.71 *	2	60.0	99.40	0.60	0.00	-	1.57
010	Arrow Lakes	17	597.5	2.41 *	1	27.5	32.32	0.85	0.00	-	2.52
011	Trail	44	1,509.0	1.42	9	137.5	142.82	0.96	0.20	-	1.72
012	Grand Forks	23	572.5	1.25	3	87.5	62.00	1.41	0.00	-	3.30
013	Kettle Valley	10	250.0	1.30	2	15.0	25.39	0.59	0.00	-	1.58
014	Southern Okanagan	43	1,402.5	1.68 *	5	142.5	120.88	1.18	0.14	-	2.22
015	Penticton	102	3,498.5	1.75 *	8	185.0	285.11	0.65	0.15	-	1.15
016	Keremeos	27	887.5	3.94 *	1	37.5	31.29	1.20	0.00	-	3.55
017	Princeton	15	572.5	2.38 *	1	17.5	33.27	0.53	0.00	-	1.56
018	Golden	18	635.0	1.43	1	42.5	61.66	0.69	0.00	-	2.04
019	Revelstoke	14	405.0	0.82	2	55.0	66.50	0.83	0.00	-	1.99
020	Salmon Arm	84	2,605.0	1.59 *	18	755.0	236.79	3.19 *	1.64	-	4.74
021	Armstrong - Spallumcheen	24	805.0	1.54	2	90.0	69.14	1.30	0.00	-	3.17
022	Vernon	140	4,369.5	1.35 *	19	537.5	466.84	1.15	0.55	-	1.75
023	Central Okanagan	294	9,416.5	1.07	39	1,057.5	1,309.85	0.81	0.51	-	1.11
024	Kamloops	265	8,349.0	1.40 *	31	907.5	830.02	1.09	0.66	-	1.53
025	100 Mile House	54	1,510.0	1.93 *	7	257.5	104.21	2.47	0.53	-	4.42
026	North Thompson	17	717.5	2.93 *	3	122.5	32.29	3.79	0.00	-	8.44
027	Cariboo - Chilcotin	73	2,377.5	1.49 *	26	880.0	209.40	4.20 *	2.37	-	6.03
028	Quesnel	68	2,075.0	1.51 *	3	62.5	180.13	0.35 +	0.00	-	0.84
029	Lillooet	19	482.5	1.89	2	35.0	33.31	1.05	0.00	-	2.57
030	South Cariboo	31	767.5	1.96 *	2	80.0	52.59	1.52	0.00	-	3.82
031	Merritt	38	1,255.0	1.98 *	7	162.5	84.56	1.92	0.35	-	3.49
032	Hope	30	845.0	1.93 *	5	217.5	56.71	3.84	0.46	-	7.21
033	Chilliwack	135	4,367.5	1.05	18	475.0	604.72	0.79	0.37	-	1.20
034	Abbotsford	212	7,479.0	1.02	27	947.5	1,026.82	0.92	0.54	-	1.31
035	Langley	159	4,897.5	0.72 *	25	862.5	967.31	0.89	0.51	-	1.27
037	Delta	117	3,893.5	0.67 *	12	280.0	780.20	0.36 *	0.13	-	0.59
038	Richmond	133	4,182.0	0.39 *	26	847.0	1,474.13	0.57 *	0.32	-	0.83
040	New Westminster	118	3,520.0	0.97	18	480.0	507.23	0.95	0.45	-	1.45
041	Burnaby	237	7,617.5	0.60 *	39	1,227.5	1,769.79	0.69 *	0.45	-	0.94
042	Maple Ridge	152	5,229.5	1.05	30	925.0	712.35	1.30	0.79	-	1.81
043	Coquitlam	257	8,519.5	0.68 *	35	1,102.5	1,711.03	0.64 *	0.40	-	0.89
044	North Vancouver	146	4,921.5	0.64 *	21	704.5	1,054.41	0.67 *	0.35	-	0.98
045	West Vancouver-Bowen Is.	51	1,517.0	0.61 *	7	172.5	350.09	0.49 *	0.05	-	0.94
046	Sunshine Coast	48	1,479.5	1.06	9	267.5	202.05	1.32	0.30	-	2.34
047	Powell River	41	1,187.5	1.13	6	120.0	140.30	0.86	0.01	-	1.70
048	Howe Sound	80	2,970.0	1.39 *	10	340.0	296.10	1.15	0.38	-	1.92
049	Bella Coola Valley	23	862.5	4.57 *	2	70.0	23.01	3.04	0.00	-	7.52
050	Queen Charlotte	15	397.5	1.30	1	32.5	40.60	0.80	0.00	-	2.37
051	Snow Country	6	300.0	7.77 *	-	-	4.35	-	-	-	-
052	Prince Rupert	38	1,290.0	1.39	4	105.0	114.24	0.92	0.00	-	1.94
053	Upper Skeena	10	285.0	0.84	4	145.0	43.20	3.36	0.01	-	6.70
054	Smithers	41	1,549.5	1.54 *	5	137.5	126.87	1.08	0.00	-	2.21
055	Burns Lake	24	790.0	1.73	5	147.5	62.91	2.34	0.00	-	4.95
056	Nechako	49	1,682.5	1.78 *	9	357.5	117.79	3.04	0.89	-	5.18
057	Prince George	235	7,719.5	1.28 *	31	972.0	795.27	1.22	0.74	-	1.71
059	Peace River South	63	2,217.5	1.42 *	4	155.0	219.33	0.71	0.00	-	1.47
060	Peace River North	77	2,896.0	1.40 *	15	497.5	292.71	1.70	0.74	-	2.66
061	Greater Victoria	347	11,211.0	0.91	61	1,672.5	1,722.53	0.97	0.70	-	1.25
062	Sooke	84	2,575.0	0.76 *	13	507.5	501.92	1.01	0.41	-	1.61
063	Saanich	71	2,152.5	0.70 *	11	317.5	430.69	0.74	0.25	-	1.22
064	Gulf Islands	29	1,007.5	1.49	4	85.0	95.83	0.89	0.00	-	1.81
065	Cowichan	110	3,781.0	1.31 *	19	752.5	409.77	1.84	0.95	-	2.73
066	Lake Cowichan	9	347.5	1.03	-	-	47.66	-	-	-	-
067	Ladysmith	35	1,252.5	1.44	2	90.0	126.91	0.71	0.00	-	1.69
068	Nanaimo	203	6,738.5	1.27 *	21	692.5	756.25	0.92	0.48	-	1.35
069	Qualicum	67	1,932.5	1.00	12	415.0	281.55	1.47	0.50	-	2.45
070	Alberni	94	3,178.5	1.80 *	20	695.0	239.46	2.90 *	1.54	-	4.26
071	Courtenay	121	3,769.5	1.19	13	407.5	456.26	0.89	0.33	-	1.45
072	Campbell River	113	3,657.5	1.59 *	14	265.0	319.55	0.83	0.35	-	1.31
075	Mission	100	3,230.0	1.39 *	12	410.0	335.80	1.22	0.46	-	1.98
076	Agassiz - Harrison	20	675.0	1.43	1	32.5	62.21	0.52	0.00	-	1.55
077	Summerland	17	577.5	1.04	-	-	77.81	-	-	-	-
078	Enderby	18	660.0	1.69	5	87.5	56.38	1.55	0.00	-	3.25
080	Kitimat	21	572.5	0.86	4	115.0	82.05	1.40	0.01	-	2.79
081	Fort Nelson	18	734.5	1.70	2	55.0	57.75	0.95	0.00	-	2.29
083	Central Coast	7	247.5	2.47	1	57.5	12.22	4.71	0.00	-	13.93
084	Vancouver Island West	5	167.5	1.15	1	32.5	18.92	1.72	0.00	-	5.08
085	Vancouver Island North	40	1,611.0	2.04 *	4	120.0	97.91	1.23	0.00	-	2.54
087	Stikine	4	135.0	2.16	-	-	7.22	-	-	-	-
088	Terrace	54	1,766.5	1.44	9	347.5	159.11	2.18	0.66	-	3.71
092	Nisga'a	14	485.0	3.83 *	3	142.5	15.96	8.93	0.00	-	19.18
094	Telegraph Creek	8	305.0	7.48 *	1	57.5	5.81	9.89	0.00	-	29.28
161	Vancouver - City Centre	194	5,880.0	0.79 *	37	1,067.5	1,067.79	1.00	0.64	-	1.36
162	Vancouver - Downtown E.side	267	7,972.0	2.22 *	66	1,820.0	511.75	3.56 *	2.63	-	4.49
163	Vancouver - North East	129	4,032.5	0.66 *	14	480.0	840.50	0.57 *	0.24	-	0.90
164	Vancouver - Westside	119	3,657.5	0.46 *	20	450.0	1,084.62	0.41 *	0.21	-	0.62
165	Vancouver - Midtown	119	3,792.0	0.71 *	22	685.0	714.46	0.96	0.52	-	1.40
166	Vancouver - South	134	4,407.0	0.56 *	14	465.0	1,056.76	0.44 *	0.19	-	0.69
201	Surrey	590	20,632.0	1.01	80	2,350.0	2,913.80	0.81	0.61	-	1.00
202	South Surrey/White Rock	99	3,372.0	0.87	12	465.0	563.03	0.83	0.33	-	1.32
PROVINCIAL TOTAL		7,469	243,456.0	1.00	1,105	33,936.0	33,936.00	1.00	0.93	-	1.07

Notes for this table follow the map.

FIGURE 41
EXTERNAL CAUSES OF DEATH BY LOCAL HEALTH AREA
 BRITISH COLUMBIA, 2002–2006



Notes to Table 36

PYLL - denotes the total number of years of life lost from an established life expectancy (75 years).

PYLLSR - per 1,000 standard population (Canada 1991 Census).

* Statistical testing indicates that observed deaths are significantly different from the expected deaths ($p < 0.05$, two tailed). + Denotes significance based on less than five deaths.

Total includes residents with unknown LHA.

Note: PYLLI - Potential Years of Life Lost Index. Refer to Figure 1 to clarify geographical location of LHAs.

Medically Treatable Diseases

A list of causes has been identified where death could potentially have been avoided through appropriate and timely medical intervention and treatment. It should be noted that the causes are considered to have been amenable to medical treatment only if the death occurred to persons within specific age ranges. Please see the footnote on Table 37 for a list of the causes and ages included in this category.

There were only 145 deaths due to these causes in 2007, which represents 0.47 percent of all deaths in the province.

Table 37 indicates the number and percent of all medically treatable disease (MTD) deaths by cause for 2007 and the five-year period 2002-2006. Bacterial infections accounted for most of the deaths due to MTDs in 2007 and the previous five years. In 2007, two cause categories, *Hypertension and Hypertensive Diseases*, and *Pneumonia and Unqualified Bronchitis*, accounted for almost 2 in 5 male deaths due to MTDs (37.9 percent) and for females, about 1 in 5 (21.5 percent).

Table 38 shows the count of deaths due to MTDs organized by the LHA in which the decedent lived. For the current year, 2007, the table shows the actual number of deaths observed in the LHA and the expected deaths (calculated using the 2007 age specific death rates for MTD).

There were 8 LHAs that had no deaths due to these conditions in 2002-2006 and 42 in 2007 as shown in Table 38. Further, there were only eight LHAs in 2002-2006 that showed differences between observed and expected deaths that were statistically significant based on five or more deaths and only three LHAs with five or more deaths had a statistically significant and high ratio in 2007.

Figure 42 shows the province divided up into its 89 LHAs, with each area indicated as to whether its SMR for deaths due to MTDs was high or low on a five category scale: deep red indicates the highest SMRs and dark grey indicates the lowest. As might be expected from a table containing such low counts, this map shows no obvious geographic pattern of location of the quintiles.

TABLE 37
DEATHS DUE TO MEDICALLY TREATABLE DISEASES BY
SELECTED CAUSES AND GENDER

BRITISH COLUMBIA, 2002–2006 AND 2007

Cause of Death	ICD-10 Code(s)	2002–2006		2007					
		Number	Percent	Male		Female		Total	
				Number	Percent	Number	Percent	Number	Percent
Bacterial Infections	A00-A05, ..., M871*	266	32.6	26	39.4	15	19.0	41	28.3
Hypertension and hypertensive diseases	I10-I15	170	20.8	10	15.2	1	1.3	11	7.6
Pneumonia and unqualified bronchitis	J12-J181, J188, J189, J40	143	17.5	15	22.7	16	20.3	31	21.4
Malignant neoplasm of cervix	C53	140	17.1	-	-	36	45.6	36	24.8
Abdominal hernias, cholecystitis and cholelithiasis, appendicitis	K35-K37, K40-K46, K80, K81	30	3.7	5	7.6	3	3.8	8	5.5
Asthma	J45-J46	29	3.5	3	4.5	4	-	7	4.8
Tuberculosis	A15-A19, B90	14	1.7	4	6.1	1	-	5	3.4
Hodgkin's disease	C81	12	1.5	1	1.5	-	-	1	0.7
Chronic rheumatic heart disease	I05-I09	8	1.0	1	-	2	2.5	3	2.1
Acute respiratory infections and influenza	J00-J06, J10-J11, J20-22	4	0.5	1	-	1	-	2	-
Nutritional anemias	D50-D53	1	0.1	-	-	-	-	-	-
TOTAL		817	100.0	66	100.0	79	100.0	145	100.0

Note: Medically Treatable Diseases (MTDs) based on Charlton's definition (see Glossary).

*ICD-10 codes A00–A05, A20–A49, B95–B96, G00, H66, H70, H95.0–H95.1, I00–I01, I02.0, I02.9, L01–L08, M00, M02.8–M02.9, M46.2, M86, M87.1.

Deaths due to MTDs exclude all deaths less than age 5 years old.

Deaths due to MTDs also exclude

- deaths aged 65 or more from hypertensive disease.
- deaths aged 50 or more from pneumonia and unqualified bronchitis.
- deaths aged 65 or more from cervical cancer.
- deaths aged 65 or more from tuberculosis.
- deaths aged 50 or more from asthma.
- deaths aged 45 or more from chronic rheumatic heart disease.
- deaths aged 50 or more from acute respiratory infections and influenza.
- deaths aged 65 or more from bacterial infections.
- deaths aged 35 or more from Hodgkin's disease.
- deaths aged 65 or more from abdominal hernias, cholecystitis and cholelithiasis, appendicitis.
- deaths aged 65 or more from deficiency nutritional anemias.

Total percentage may not add up to 100 due to rounding.

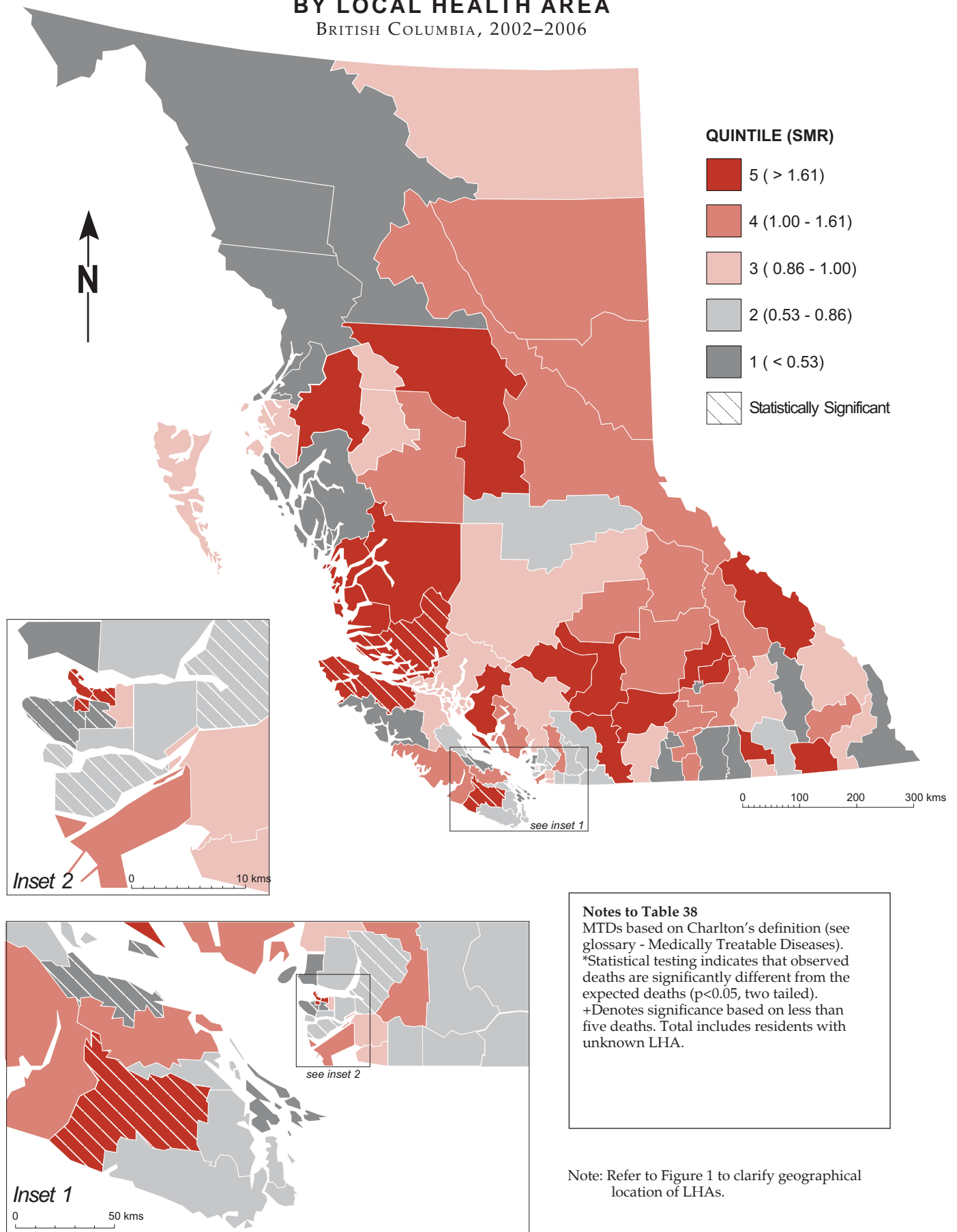
The output from ICD-10 mortality coding and underlying cause of death selection was modified in BC to reflect the intent of certifiers in this jurisdiction and to provide greater continuity over time. Data using the standard ICD-10 rules for such categories as pneumonia/influenza, diabetes, or cancer should not be compared to the numbers shown above.

STANDARDIZED MORTALITY RATIO BY LOCAL HEALTH AREA DEATHS DUE TO MEDICALLY TREATABLE DISEASES, BRITISH COLUMBIA, 2002-2006 AND 2007

Local Health Area	2002-2006		2007				95% Confidence Interval	
	Observed Deaths	SMR (p)	Observed Deaths	Expected Deaths	SMR (p)		Lower	Upper
001 Fernie	1	0.32	1	0.53	1.89		0.02	10.50
002 Cranbrook	5	0.98	1	0.87	1.14		0.01	6.37
003 Kimberley	2	1.11	-	0.30	-		-	-
004 Windermere	2	1.04	-	0.35	-		-	-
005 Creston	4	1.63	-	0.42	-		-	-
006 Kootenay Lake	-	-	-	0.15	-		-	-
007 Nelson	4	0.79	-	0.88	-		-	-
009 Castlegar	5	1.88	1	0.46	2.17		0.03	12.09
010 Arrow Lakes	1	0.91	-	0.18	-		-	-
011 Trail	4	0.99	3	0.70	4.31		0.87	12.60
012 Grand Forks	1	0.53	-	0.32	-		-	-
013 Kettle Valley	-	-	-	0.14	-		-	-
014 Southern Okanagan	6	1.59	1	0.65	1.54		0.02	8.55
015 Penticton	10	1.32	1	1.37	0.73		0.01	4.07
016 Keremeos	-	-	-	0.17	-		-	-
017 Princeton	1	0.86	-	0.20	-		-	-
018 Golden	3	2.11	-	0.25	-		-	-
019 Revelstoke	2	1.21	-	0.28	-		-	-
020 Salmon Arm	11	1.63	-	1.20	-		-	-
021 Armstrong - Spallumcheen	1	0.50	-	0.33	-		-	-
022 Vernon	16	1.33	-	2.14	-		-	-
023 Central Okanagan	36	1.16	3	5.75	0.52		0.10	1.52
024 Kamloops	26	1.23	6	3.73	1.61		0.59	3.51
025 100 Mile House	5	1.49	-	0.55	-		-	-
026 North Thompson	1	1.08	1	0.16	6.11		0.08	33.98
027 Cariboo - Chilcotin	5	0.93	-	0.92	-		-	-
028 Quesnel	3	0.62	-	0.82	-		-	-
029 Lillooet	3	3.38	-	0.15	-		-	-
030 South Cariboo	4	2.55	1	0.26	3.82		0.05	21.27
031 Merritt	4	1.76	1	0.39	2.53		0.03	14.09
032 Hope	5	2.98	-	0.28	-		-	-
033 Chilliwack	11	0.80	4	2.52	1.59		0.43	4.06
034 Abbotsford	18	0.82	1	3.96	0.25		0.00	1.41
035 Langley	19	0.84	5	4.07	1.23		0.40	2.87
037 Delta	22	1.07	2	3.48	0.57		0.06	2.07
038 Richmond	23	0.64 *	-	6.39	-		-	-
040 New Westminster	12	1.01	3	2.12	1.42		0.28	4.14
041 Burnaby	30	0.76	3	6.99	0.43		0.09	1.25
042 Maple Ridge	17	1.05	4	2.96	1.35		0.36	3.46
043 Coquitlam	24	0.60 *	5	7.07	0.71		0.23	1.65
044 North Vancouver	22	0.80	1	4.67	0.21		0.00	1.19
045 West Vancouver-Bowen Is.	5	0.46	1	1.79	0.56		0.01	3.10
046 Sunshine Coast	7	1.17	-	1.10	-		-	-
047 Powell River	7	1.63	2	0.73	2.73		0.31	9.85
048 Howe Sound	6	1.03	2	1.07	1.87		0.21	6.74
049 Bella Coola Valley	1	1.65	-	0.10	-		-	-
050 Queen Charlotte	1	0.96	1	0.18	5.54		0.07	30.84
051 Snow Country	-	-	-	0.02	-		-	-
052 Prince Rupert	3	1.02	-	0.50	-		-	-
053 Upper Skeena	1	0.98	-	0.17	-		-	-
054 Smithers	3	0.94	-	0.54	-		-	-
055 Burns Lake	2	1.33	-	0.26	-		-	-
056 Nechako	6	2.03	-	0.50	-		-	-
057 Prince George	27	1.42	4	3.29	1.22		0.33	3.12
059 Peace River South	6	1.22	1	0.90	1.11		0.01	6.20
060 Peace River North	7	1.26	2	1.02	1.96		0.22	7.08
061 Greater Victoria	35	0.86	6	7.28	0.82		0.30	1.79
062 Sooke	10	0.85	1	2.18	0.46		0.01	2.55
063 Saanich	11	0.83	1	2.23	0.45		0.01	2.50
064 Gulf Islands	1	0.29	-	0.59	-		-	-
065 Cowichan	7	0.65	2	1.89	1.06		0.12	3.81
066 Lake Cowichan	5	3.86 *	-	0.23	-		-	-
067 Ladysmith	3	0.84	-	0.65	-		-	-
068 Nanaimo	21	1.10	3	3.43	0.87		0.18	2.55
069 Qualicum	3	0.33 +	-	1.57	-		-	-
070 Alberni	8	1.23	1	1.10	0.91		0.01	5.07
071 Courtenay	8	0.64	-	2.22	-		-	-
072 Campbell River	9	1.05	1	1.51	0.66		0.01	3.68
075 Mission	4	0.54	2	1.34	1.49		0.17	5.39
076 Agassiz - Harrison	1	0.61	1	0.27	3.70		0.05	20.57
077 Summerland	1	0.44	-	0.40	-		-	-
078 Enderby	4	2.66	-	0.27	-		-	-
080 Kitimat	1	0.45	-	0.37	-		-	-
081 Fort Nelson	1	0.92	1	0.20	5.02		0.07	27.96
083 Central Coast	2	6.97	1	0.05	21.36		0.28	118.85
084 Vancouver Island West	-	-	-	0.09	-		-	-
085 Vancouver Island North	8	2.95 *	-	0.45	-		-	-
087 Stikine	-	-	-	0.04	-		-	-
088 Terrace	7	1.78	-	0.69	-		-	-
092 Nisga'a	-	-	-	0.06	-		-	-
094 Telegraph Creek	-	-	1	0.02	50.24		0.66	279.55
161 Vancouver - City Centre	35	1.76 *	9	3.71	2.43 *		1.11	4.61
162 Vancouver - Downtown E.side	46	4.20 *	13	1.96	6.64 *		3.53	11.35
163 Vancouver - North East	19	1.04	4	3.25	1.23		0.33	3.15
164 Vancouver - Westside	11	0.45 *	4	4.36	0.92		0.25	2.35
165 Vancouver - Midtown	7	0.44 *	5	2.76	1.81		0.58	4.23
166 Vancouver - South	18	0.73	4	4.28	0.93		0.25	2.39
201 Surrey	62	1.01	20	11.41	1.75 *		1.07	2.71
202 South Surrey/White Rock	14	0.88	3	2.83	1.06		0.21	3.09
PROVINCIAL TOTAL	817	1.00	145	145.00	1.00		0.84	1.18

Notes for this table follow the map.

FIGURE 42
**DEATHS DUE TO MEDICALLY TREATABLE DISEASES
 BY LOCAL HEALTH AREA**
 BRITISH COLUMBIA, 2002–2006



Notes to Table 38

MTDs based on Charlton's definition (see glossary - Medically Treatable Diseases).

*Statistical testing indicates that observed deaths are significantly different from the expected deaths ($p < 0.05$, two tailed).

+Denotes significance based on less than five deaths. Total includes residents with unknown LHA.

Note: Refer to Figure 1 to clarify geographical location of LHAs.

Alcohol-Related Deaths

Alcohol-related deaths provide information on deaths due to alcohol (directly related) as well as those where alcohol was a contributing factor (indirectly related). Alcohol-related and drug overdose deaths are the only cause of death categories that are not based entirely upon the underlying causes of death. See the *Glossary* for a further explanation of alcohol-related deaths and Table 39 for the list of causes used for deaths directly due to alcohol.

Table 39 shows the number and percent of deaths that were directly and indirectly related to alcohol in 2007 and in the 5 preceding years, while figure 43 graphically shows the pattern of alcohol-related deaths by cause. About one-fifth (22.4 percent) of the 1,993 deaths related to alcohol in 2007 were directly attributable to alcohol (447 deaths). Alcohol was a contributing factor in the remaining 77.6 percent of these deaths. The table indicates that most of the deaths directly attributable to alcohol were caused by liver disease (14.9 percent).

Table 40 shows numbers and percentages of alcohol-related deaths by age group for males, females, and the total population. All alcohol-related deaths, whether directly or indirectly related to alcohol are included in this table.

Alcohol-related deaths constitute 6.4 percent of all deaths in 2007 and 9.2 percent of all male deaths. Males died of such causes nearly three times more frequently as women in 2007.

Nearly half (44.6 percent) of all alcohol deaths were of seniors (65 or older); 40.9 percent were people between the ages of 45 and 64.

The numbers of deaths directly and indirectly related to alcohol are shown for the LHAs in Table 41.

There were 22 LHAs with at least 5 deaths where the observed values were statistically significant and above the expected values in both 2002-2006 and 2007 as shown in Table 41. There were nine LHAs with SMRs that were statistically significant and low in both time periods. The map in Figure 44 shows the SMR quintiles and statistical significance patterns in each LHA during 2002-2006.

Reports of alcohol-relatedness for deaths in 2007 are lower than in previous years. Many alcohol-related deaths are referred to the BC Coroner service for investigation. As with external causes of death, the medical coding will be incomplete until the Coroner closes the investigation. For this reason the counts are often lower in the current year and are adjusted upwards in the years that follow.

TABLE 39
ALCOHOL-RELATED DEATHS BY CAUSE
 BRITISH COLUMBIA, 2002–2006 AND 2007

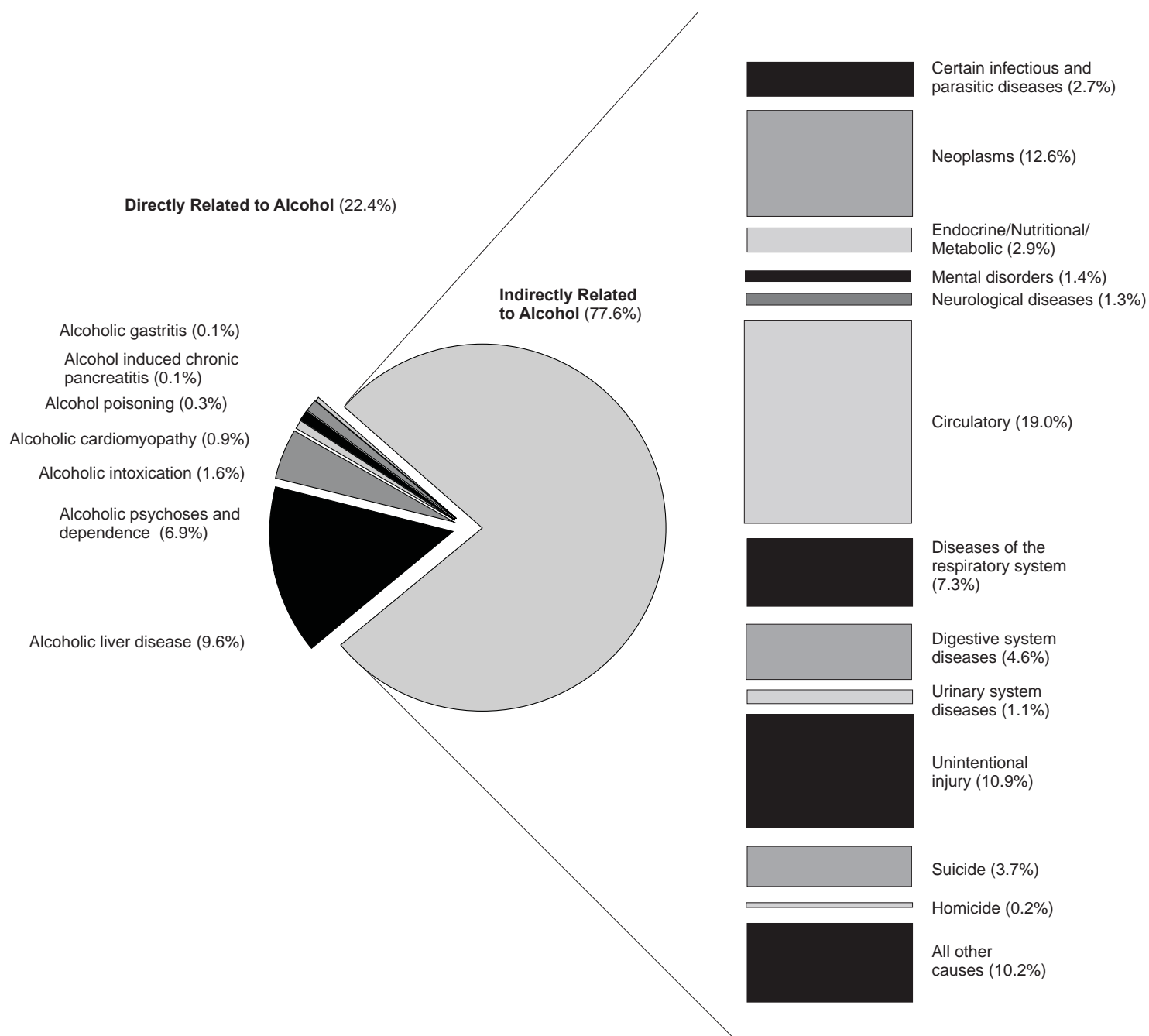
Cause of Death	ICD-10 Code(s)	Year of Death			
		2002–2006		2007	
		Number	Percent	Number	Percent
Directly Related to Alcohol					
Alcohol intoxication	F100	210	2.1	15	0.8
Alcoholic psychoses and dependence	F101-F109	518	5.3	91	4.6
Alcoholic neurological disorders	G312, G621, G721	-	-	-	-
Alcoholic cardiomyopathy	I426	81	0.8	16	0.8
Alcoholic gastritis	K292	6	0.1	3	0.2
Alcoholic liver disease	K70	888	9.0	297	14.9
Alcohol induced chronic pancreatitis	K860	13	0.1	1	0.1
Alcohol poisoning	X45, X65	67	0.7	24	1.2
Other alcohol causes	E244, O354, O993, P043, Q860, R780 T510-T512, T519	-	-	-	-
SUBTOTAL		1,783	18.2	447	22.4
Indirectly Related to Alcohol ¹					
Certain infectious and parasitic diseases	A00-B99	309	3.1	53	2.7
Neoplasms	C00-D48	1,190	12.1	251	12.6
Endocrine/Nutritional/Metabolic	E00-E243, E248-E89	277	2.8	57	2.9
Mental disorders	F00-F09, F11-F99	122	1.2	27	1.4
Neurological diseases	G00-G311, G318-G620, G622-G720, G722-G99	122	1.2	26	1.3
Circulatory	I00-I425, I427-I99	2,183	22.2	378	19.0
Diseases of the respiratory system	J00-J98, U049	667	6.8	146	7.3
Digestive system diseases	K00-K291, K293-K69, K71-K85, K861-K92	653	6.6	91	4.6
Urinary system diseases	N00-N39, N990, N991, N995	103	1.0	21	1.1
Unintentional injury	V01-X44, X46-X59, Y40-Y86, Y88	1,460	14.9	217	10.9
Suicide	X60-X64, X66-X84, Y87	578	5.9	73	3.7
Homicide	X85-Y09, Y871	59	0.6	3	0.2
All other causes		317	3.2	203	10.2
SUBTOTAL		8,040	81.8	1,546	77.6
TOTAL		9,823	100.0	1,993	100.0

Note: ¹ICD-10 codes for indirectly related to alcohol exclude the codes for directly related to alcohol and will not match the list of codes used for these categories in other tables.

Total percentage may not add up to 100 due to rounding. Non-residents are excluded.

Coding practices from 1995 to 1999 may have produced over-counting of alcohol-related mortality. With the introduction of ICD-10 in 2000, more specific codes are available. Currently produced data should not be used in combination with data produced prior to 2000. The output from ICD-10 mortality coding and underlying cause of death selection was modified in BC to reflect the intent of certifiers in this jurisdiction and to provide greater continuity over time. Data using the standard ICD-10 rules for such categories as pneumonia/influenza, diabetes, or cancer should not be compared to the numbers shown above.

FIGURE 43
ALCOHOL-RELATED DEATHS BY CAUSE
 BRITISH COLUMBIA, 2007



See Table 39 for ICD-10 codes for each category.

TABLE 40
ALCOHOL-RELATED DEATHS BY AGE AND GENDER
 BRITISH COLUMBIA, 2007

Age	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
<15	2	0.1	2	0.4	4	0.2
15-19	20	1.4	9	1.7	29	1.5
20-24	28	1.9	8	1.5	36	1.8
25-44	169	11.5	51	9.8	220	11.0
45-64	599	40.7	216	41.3	815	40.9
65-84	559	38.0	196	37.5	755	37.9
85+	93	6.3	41	7.8	134	6.7
TOTAL	1,470	100.0	523	100.0	1,993	100.0

Note: Alcohol-related deaths – see Table 39 for ICD-10 codes and Glossary for more details.

Total percentage may not add up to 100 due to rounding. Non-residents are excluded.

Coding practices from 1995 to 1999 may have produced over-counting of alcohol-related mortality.

With the introduction of ICD-10 in 2000, more specific codes are available.

Currently produced data should not be used in combination with data produced prior to 2000.



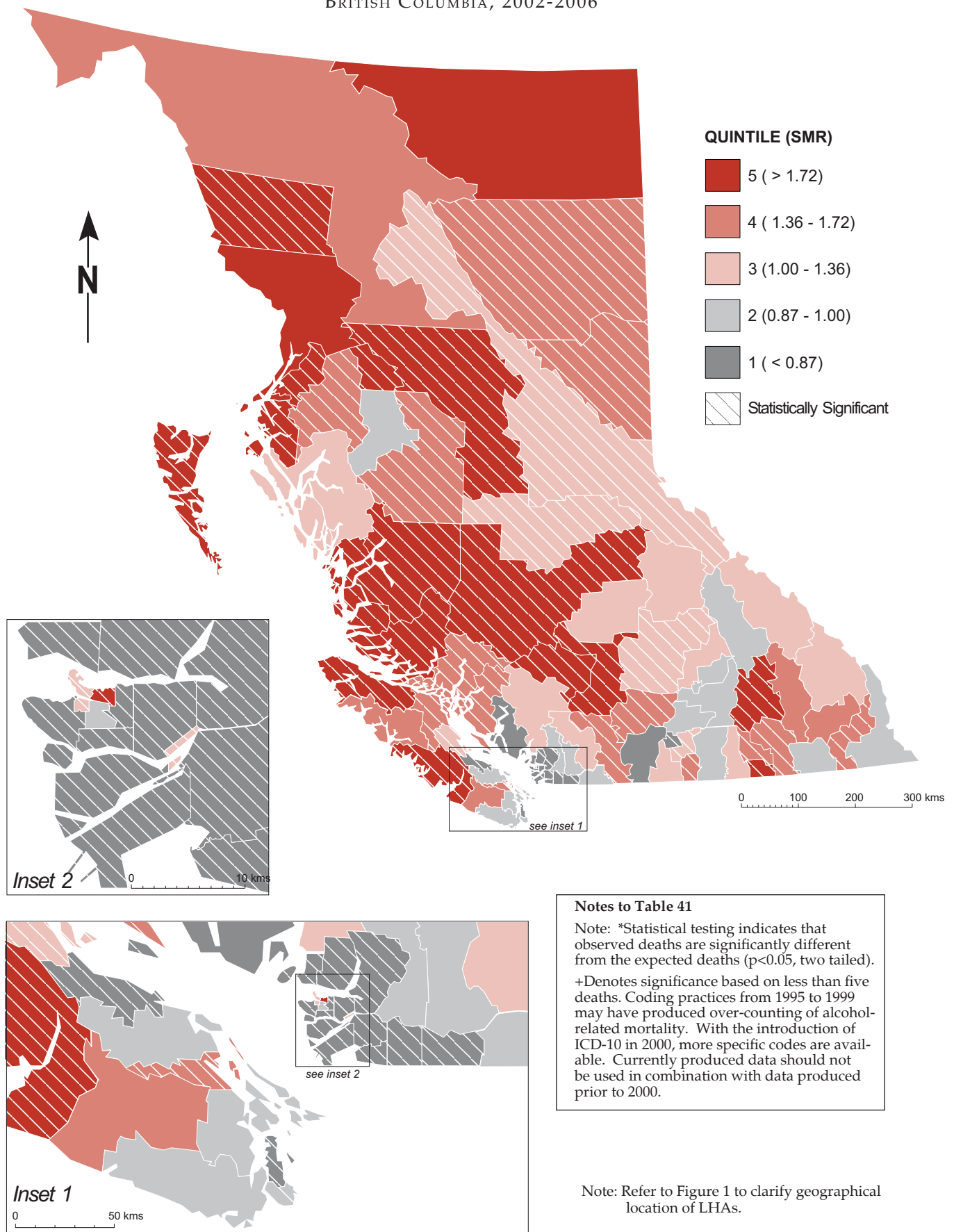
STANDARDIZED MORTALITY RATIO BY LOCAL HEALTH AREA ALCOHOL-RELATED DEATHS,
BRITISH COLUMBIA, 2002-2006 AND 2007

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Local Health Area		2002–2006			2007						
		Observed Deaths	SMR	(p)	Observed Deaths	Expected Deaths	SMR	(p)	95% Confidence Interval		
									Lower	Upper	
001	Fernie	35	1.04		9	6.54	1.38		0.63	-	2.61
002	Cranbrook	92	1.50	*	21	12.37	1.70	*	1.05	-	2.60
003	Kimberley	34	1.39		6	4.77	1.26		0.46	-	2.74
004	Windermere	28	1.20		5	4.90	1.02		0.33	-	2.38
005	Creston	43	1.09		8	7.99	1.00		0.43	-	1.97
006	Kootenay Lake	16	1.48		2	2.21	0.90		0.10	-	3.26
007	Nelson	86	1.43	*	22	11.82	1.86	*	1.17	-	2.82
009	Castlegar	55	1.65	*	6	6.75	0.89		0.32	-	1.93
010	Arrow Lakes	29	1.98	*	8	2.95	2.71	*	1.17	-	5.33
011	Trail	104	1.93	*	28	10.59	2.65	*	1.76	-	3.82
012	Grand Forks	33	1.16		11	5.74	1.92		0.95	-	3.43
013	Kettle Valley	12	1.06		2	2.33	0.86		0.10	-	3.10
014	Southern Okanagan	102	1.47	*	17	13.88	1.23		0.71	-	1.96
015	Penticton	152	1.21	*	26	25.23	1.03		0.67	-	1.51
016	Keremeos	21	1.18		6	3.64	1.65		0.60	-	3.58
017	Princeton	11	0.65		6	3.51	1.71		0.62	-	3.72
018	Golden	19	1.27		3	3.03	0.99		0.20	-	2.89
019	Revelstoke	18	0.96		4	3.66	1.09		0.29	-	2.80
020	Salmon Arm	112	1.16		27	20.10	1.34		0.88	-	1.95
021	Armstrong - Spallumcheen	27	1.07		3	5.10	0.59		0.12	-	1.72
022	Vernon	181	1.10		40	33.85	1.18		0.84	-	1.61
023	Central Okanagan	432	1.01		80	89.18	0.90		0.71	-	1.12
024	Kamloops	319	1.26	*	63	52.02	1.21		0.93	-	1.55
025	100 Mile House	53	1.24		11	8.68	1.27		0.63	-	2.27
026	North Thompson	12	1.15		6	2.27	2.64		0.96	-	5.75
027	Cariboo - Chilcotin	111	1.93	*	30	11.75	2.55	*	1.72	-	3.64
028	Quesnel	74	1.34	*	16	11.14	1.44		0.82	-	2.33
029	Lillooet	33	3.20	*	6	2.11	2.84	*	1.04	-	6.19
030	South Cariboo	57	2.71	*	10	4.27	2.34	*	1.12	-	4.31
031	Merritt	43	1.60	*	16	5.61	2.85	*	1.63	-	4.63
032	Hope	36	1.53	*	11	4.78	2.30	*	1.15	-	4.12
033	Chilliwack	162	0.88		33	37.79	0.87		0.60	-	1.23
034	Abbotsford	200	0.73	*	42	54.67	0.77		0.55	-	1.04
035	Langley	192	0.73	*	45	53.20	0.85		0.62	-	1.13
037	Delta	156	0.68	*	33	45.68	0.72		0.50	-	1.01
038	Richmond	171	0.43	*	29	82.59	0.35	*	0.24	-	0.50
040	New Westminster	182	1.34	*	40	27.09	1.48	*	1.05	-	2.01
041	Burnaby	354	0.76	*	72	93.35	0.77	*	0.60	-	0.97
042	Maple Ridge	176	1.01		32	35.85	0.89		0.61	-	1.26
043	Coquitlam	270	0.67	*	49	81.45	0.60	*	0.45	-	0.80
044	North Vancouver	190	0.62	*	31	60.04	0.52	*	0.35	-	0.73
045	West Vancouver-Bowen Is.	91	0.60	*	15	29.80	0.50	*	0.28	-	0.83
046	Sunshine Coast	71	0.86		13	17.44	0.75		0.40	-	1.27
047	Powell River	94	1.65	*	13	11.66	1.11		0.59	-	1.91
048	Howe Sound	64	1.17		19	11.06	1.72	*	1.03	-	2.68
049	Bella Coola Valley	30	4.60	*	4	1.27	3.15		0.85	-	8.05
050	Queen Charlotte	28	2.71	*	6	2.13	2.82	*	1.03	-	6.13
051	Snow Country	4	2.82		1	0.27	3.66		0.05	-	20.35
052	Prince Rupert	64	2.08	*	16	6.12	2.62	*	1.49	-	4.25
053	Upper Skeena	22	2.09	*	6	2.10	2.86	*	1.04	-	6.22
054	Smithers	29	0.90		14	6.45	2.17	*	1.19	-	3.64
055	Burns Lake	29	1.66	*	5	3.46	1.44		0.47	-	3.37
056	Nechako	65	2.02	*	15	6.33	2.37	*	1.33	-	3.91
057	Prince George	248	1.29	*	64	38.60	1.66	*	1.28	-	2.12
059	Peace River South	86	1.60	*	14	11.11	1.26		0.69	-	2.12
060	Peace River North	78	1.43	*	15	10.89	1.38		0.77	-	2.27
061	Greater Victoria	613	1.12	*	148	107.72	1.37	*	1.16	-	1.61
062	Sooke	139	1.12		24	26.02	0.92		0.59	-	1.37
063	Saanich	132	0.66	*	34	40.06	0.85		0.59	-	1.19
064	Gulf Islands	47	0.93		9	10.37	0.87		0.40	-	1.65
065	Cowichan	158	1.13		38	28.62	1.33		0.94	-	1.82
066	Lake Cowichan	25	1.54		1	3.33	0.30		0.00	-	1.67
067	Ladysmith	70	1.37	*	11	10.68	1.03		0.51	-	1.84
068	Nanaimo	275	1.10		51	51.82	0.98		0.73	-	1.29
069	Qualicum	108	0.72	*	28	31.41	0.89		0.59	-	1.29
070	Alberni	154	1.93	*	29	16.14	1.80	*	1.20	-	2.58
071	Courtenay	211	1.32	*	44	33.72	1.31		0.95	-	1.75
072	Campbell River	148	1.54	*	25	20.03	1.25		0.81	-	1.84
075	Mission	80	0.98		19	16.65	1.14		0.69	-	1.78
076	Agassiz - Harrison	29	1.31		5	4.56	1.10		0.35	-	2.56
077	Summerland	22	0.58	*	1	7.52	0.13	+	0.00	-	0.74
078	Enderby	23	1.12		7	4.26	1.64		0.66	-	3.39
080	Kitimat	27	1.16		5	4.61	1.09		0.35	-	2.53
081	Fort Nelson	16	1.74		4	1.79	2.24		0.60	-	5.72
083	Central Coast	24	8.07	*	5	0.58	8.57	*	2.76	-	20.01
084	Vancouver Island West	7	1.39		1	1.07	0.94		0.01	-	5.21
085	Vancouver Island North	65	2.47	*	14	5.25	2.67	*	1.46	-	4.47
087	Stikine	4	1.61		2	0.48	4.17		0.47	-	15.06
088	Terrace	71	1.71	*	17	8.44	2.01	*	1.17	-	3.22
092	Nisga'a	17	4.85	*	5	0.71	7.08	*	2.28	-	16.53
094	Telegraph Creek	7	6.71	*	1	0.22	4.59		0.06	-	25.54
161	Vancouver - City Centre	242	1.14	*	25	43.52	0.57	*	0.37	-	0.85
162	Vancouver - Downtown E.side	389	2.84	*	56	27.12	2.06	*	1.56	-	2.68
163	Vancouver - North East	145	0.65	*	23	44.90	0.51	*	0.32	-	0.77
164	Vancouver - Westside	128	0.46	*	31	55.04	0.56	*	0.38	-	0.80
165	Vancouver - Midtown	162	0.93		29	33.91	0.86		0.57	-	1.23
166	Vancouver - South	154	0.51	*	27	59.24	0.46	*	0.30	-	0.66
201	Surrey	544	0.85	*	102	132.66	0.77	*	0.63	-	0.93
202	South Surrey/White Rock	123	0.53	*	32	47.34	0.68	*	0.46	-	0.95
PROVINCIAL TOTAL		9,823	1.00		1,993	1,993.00	1.00		0.96	-	1.04

Notes for this table follow the map.

FIGURE 44
ALCOHOL-RELATED DEATHS BY LOCAL HEALTH AREA
 BRITISH COLUMBIA, 2002-2006



Notes to Table 41

Note: *Statistical testing indicates that observed deaths are significantly different from the expected deaths ($p < 0.05$, two tailed).

+Denotes significance based on less than five deaths. Coding practices from 1995 to 1999 may have produced over-counting of alcohol-related mortality. With the introduction of ICD-10 in 2000, more specific codes are available. Currently produced data should not be used in combination with data produced prior to 2000.

Note: Refer to Figure 1 to clarify geographical location of LHAs.

Smoking-Attributable Deaths

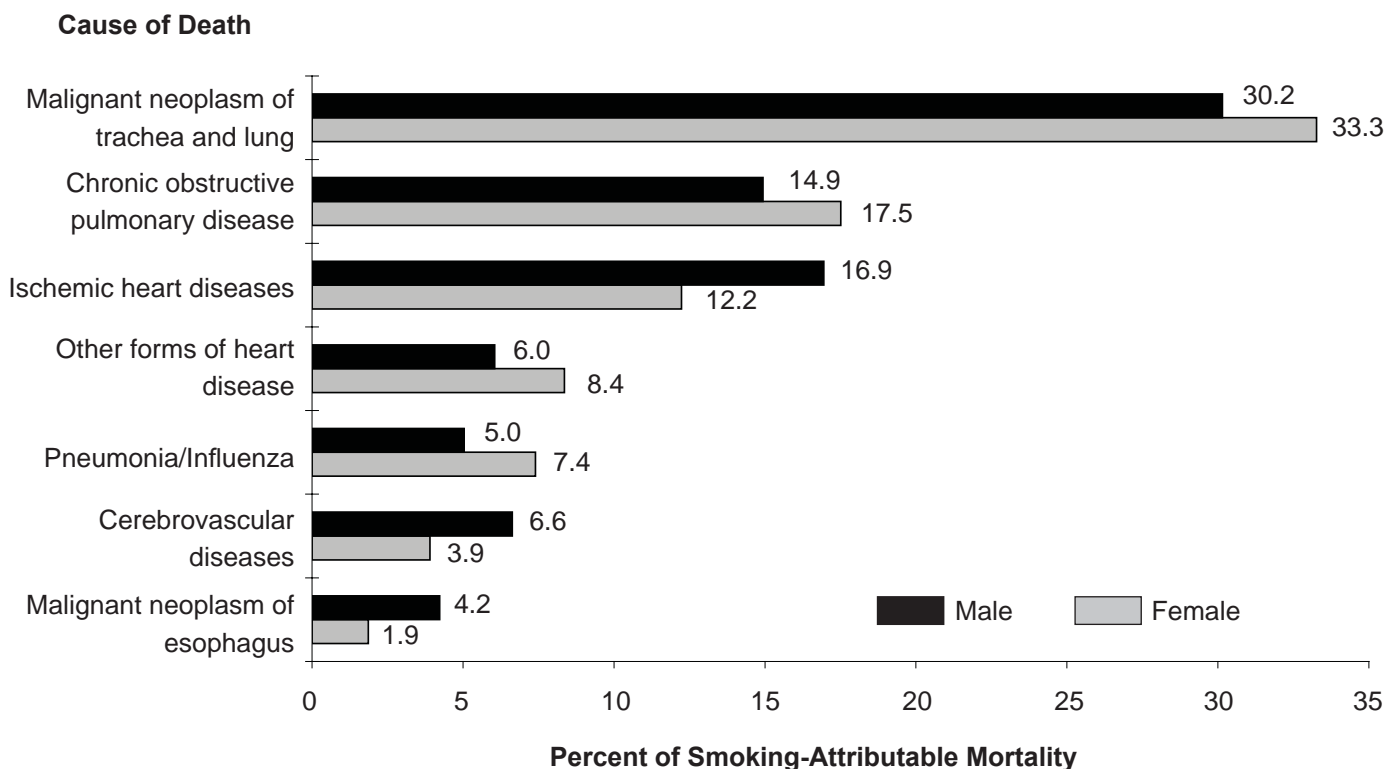
Table 42 and Figure 45 portray the number and percent of deaths in 2007 that were attributable to smoking for those 35 years old and older. The age restriction relates to the fact that smoking-attributable conditions generally become apparent over time and after several years of tobacco use. Because the decedent's smoking history is not available on the death record, the link between smoking and mortality is estimated indirectly. Research has indicated the fraction of deaths from certain diseases, like lung cancer, that are due to smoking and that fraction is then used to estimate the number of smoking attributable deaths due to those diseases. See the *Glossary* entry on *Smoking-Attributable Mortality (SAM)* for details and the *Methodology* section for the calculation formulae for these indicators.

Figure 45 shows the smoking attributable portion of each of 7 cause of death categories selected according to highest SAM number from Table 42.

Table 42 shows the number of deaths by causes and the percentage and number of those deaths that are attributed to smoking. Also shown is percentage total SAM by cause category.

In 2007, 6,138 deaths were attributed to the smoking as shown in Table 42. By far the largest contributory cause was *Malignant Neoplasms of the Trachea and Lung* (31.4 percent) followed by *Chronic Obstructive Pulmonary Disease* (16.0 percent) and *Ischemic Heart Disease* (15.1 percent).

FIGURE 45
**SMOKING-ATTRIBUTABLE MORTALITY
BY SELECTED CAUSES AND GENDER**
BRITISH COLUMBIA, 2007



Note: Ischemic heart disease includes 35-64 years and 65+ years.

Cerebrovascular disease includes 35-64 years and 65+ years.

TABLE 42
SMOKING-ATTRIBUTABLE MORTALITY
 BRITISH COLUMBIA, 2007

Cause of Death	ICD-10 Code(s)	Male				Female				Total		
		Deaths	SAM (%)	SAM		Deaths	SAM (%)	SAM		Deaths	SAM	
				Number	Percent			Number	Percent		Number	Percent
Malignant Neoplasms												
Malignant neoplasms of lip, oral cavity and pharynx	C00-C14	103	91.2	94	2.6	55	59.9	33	1.3	158	127	2.1
Malignant neoplasm of esophagus	C15	198	78.2	155	4.2	65	71.0	46	1.9	263	201	3.3
Malignant neoplasm of pancreas	C25	259	21.7	56	1.5	241	33.9	82	3.3	500	138	2.2
Malignant neoplasm of larynx	C32	36	79.7	29	0.8	7	87.2	6	0.2	43	35	0.6
Malignant neoplasm of trachea and lung	C33-C34	1,237	89.3	1,105	30.2	1,076	76.5	823	33.3	2,313	1,928	31.4
Malignant neoplasms of cervix, uterus	C53-C55	-	-	-	-	140	33.9	47	1.9	140	47	0.8
Malignant neoplasm of bladder	C67	201	44.8	90	2.5	88	37.6	33	1.3	289	123	2.0
Malignant neoplasm of kidney and other unspecified urinary organs	C64-C66, C68	131	46.8	61	1.7	59	12.4	7	0.3	190	69	1.1
SUBTOTAL*		2,165		1,590	43.4	1,731		1,078	43.6	3,896	2,668	43.5
Circulatory System Diseases												
Hypertension	I10-I13	115	24.6	28	0.8	170	16.4	28	1.1	285	56	0.9
Ischemic heart diseases :	I20-I25											
35-64 years		444	43.2	192	5.2	95	36.5	35	1.4	539	226	3.7
65+ years		2,034	21.1	429	11.7	1,836	14.6	268	10.8	3,870	697	11.4
Other forms of heart disease	I01-I09, I27, I30-I52	836	26.5	222	6.0	1,066	19.4	207	8.4	1,902	428	7.0
Cerebrovascular diseases :	I60-I69											
35-64 years		114	44.8	51	1.4	69	49.3	34	1.4	183	85	1.4
65+ years		820	23.4	192	5.2	1,303	4.8	63	2.5	2,123	254	4.1
Atherosclerosis	I70	40	55.5	22	0.6	61	31.7	19	0.8	101	42	0.7
Aortic aneurysm	I71	146	55.5	81	2.2	88	31.7	28	1.1	234	109	1.8
Other arterial diseases	I26, I28, I72-I78	90	55.5	50	1.4	112	31.7	36	1.4	202	85	1.4
SUBTOTAL*		4,639		1,267	34.6	4,800		717	29.0	9,439	1,984	32.3
Respiratory System Diseases												
Pneumonia/Influenza	J10-J181, J188, J189	564	32.7	184	5.0	696	26.3	183	7.4	1,260	367	6.0
Bronchitis, emphysema	J40-J43	80	84.7	68	1.8	73	79.2	58	2.3	153	126	2.0
Chronic obstructive pulmonary disease	J44	646	84.7	547	14.9	547	79.2	433	17.5	1,193	980	16.0
Other respiratory diseases	A15-A19, J45-J46	24	32.7	8	0.2	22	26.3	6	0.2	46	14	0.2
SUBTOTAL*		1,314		807	22.0	1,338		680	27.5	2,652	1,487	24.2
TOTAL*		8,118		3,664	100.0	7,869		2,474	100.0	15,987	6,138	100.0

Note: Deaths are the total number of deaths aged 35+ years or as specified in the diagnostic category.

SAM – derived by multiplying the SAM(%) by the number of deaths in each category.

See glossary under Smoking-Attributable Mortality Percent for a definition of the formula for SAM(%).

Non-residents are excluded.

The output from ICD-10 mortality coding and underlying cause of death selection was modified in BC to reflect the intent of certifiers in this jurisdiction and to provide greater continuity over time. Data using the standard ICD-10 rules for such categories as pneumonia/influenza, diabetes, or cancer should not be compared to the numbers shown above.

*Total and Subtotal SAM numbers may not add up due to rounding.

Drug-Induced Deaths

Drug-induced deaths are all deaths directly due to drug use, and including use of illicit or prescribed drugs. This category excludes causes indirectly related to drug use and also excludes those deaths due to alcohol or smoking. See Table 44 for a list of the drug-induced death categories.

Table 43 shows that males (206 deaths) were more likely to die of drug-induced causes than females (128 deaths). 293 of the drug-induced deaths (87.7 percent) were among individuals aged 25 to 64 years. More than half of these deaths (158) were in the 45 to 64 year age-group.

Table 44 presents drug-induced deaths by cause for 2002-2006 and 2007. About two-thirds of those deaths in 2007 (66.8 percent) and in the previous 5 years, 2002-2006 (65.7 percent) were the result of unintentional poisoning by drugs. Of the 387 suicide deaths in BC in 2007, 18.6 percent were drug-induced.

Figure 46 is a graphic presentation of the results from Table 44. In 2007, drug-induced deaths were almost all due to poisoning, either unintentional or suicide.

Table 45 shows the number of observed and expected drug-induced deaths and the ratio of observed to expected deaths (SMR) in each LHA in 2007 and in the previous 5 years. Notice that 30 LHAs had no drug-induced deaths in 2007 and 7 had no drug-induced deaths in 2002-2006. Vancouver's City Center and Vancouver's Downtown East Side were the only 2 LHAs where the observed number was statistically significant and higher than the expected number (SMR ratio) in 2007 and the previous 5 years.

Figure 47 maps the variation of SMRs in the LHAs divided into quintiles for 2002-2006.

TABLE 43
DRUG-INDUCED DEATHS BY AGE AND GENDER
BRITISH COLUMBIA, 2007

Age	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
<15	-	-	-	-	-	-
15-19	1	0.5	1	0.8	2	0.6
20-24	8	3.9	7	5.5	15	4.5
25-44	91	44.2	44	34.4	135	40.4
45-64	95	46.1	63	49.2	158	47.3
65-84	7	3.4	9	7.0	16	4.8
85+	4	1.9	4	3.1	8	2.4
TOTAL	206	100.0	128	100.0	334	100.0

Note: Excludes tobacco and alcohol.

Drug-induced deaths – see Table 44 for ICD-10 codes and Glossary for more details.

Total percentage may not add up to 100 due to rounding.

Non-residents are excluded.

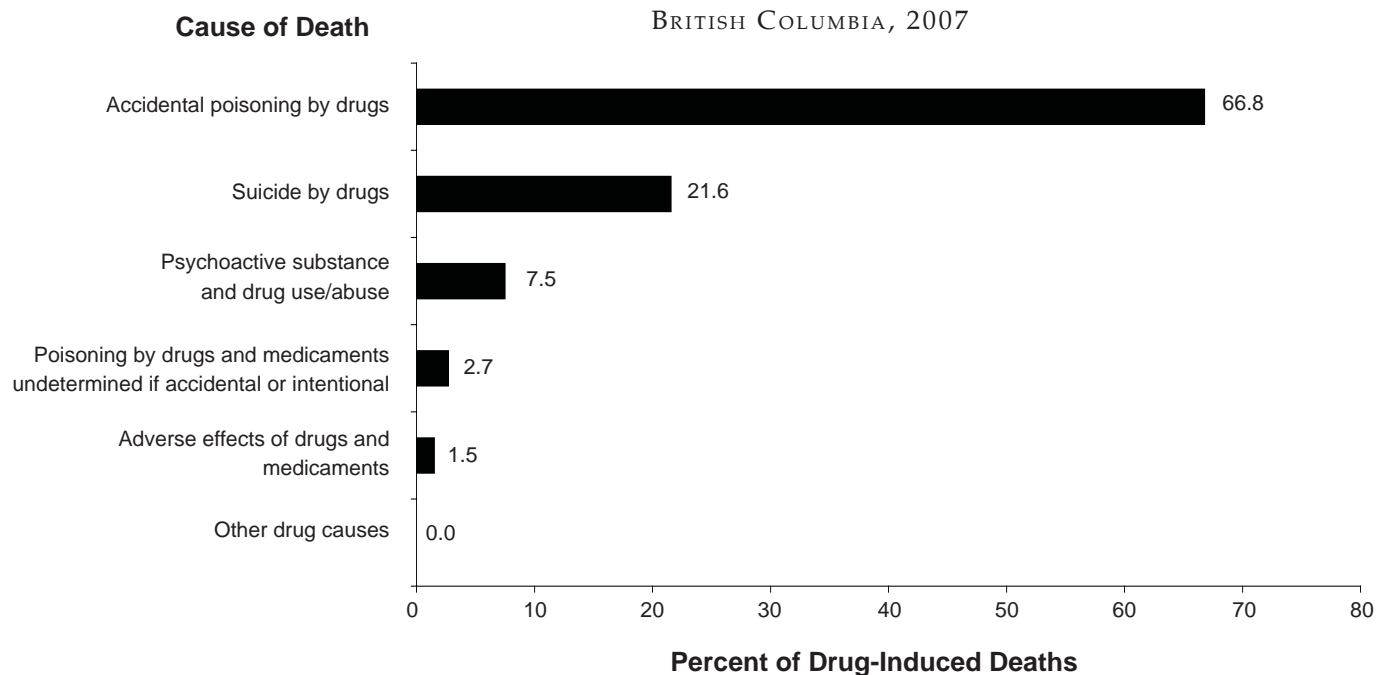
TABLE 44
DRUG-INDUCED DEATHS BY CAUSE
 BRITISH COLUMBIA, 2002–2006 AND 2007

Cause of Death	ICD-10 Code(s)	Year of Death			
		2002–2006		2007	
		Number	Percent	Number	Percent
Psychoactive substance and drug use/abuse	F11-F16, F19	113	5.5	25	7.5
Accidental poisoning by drugs	X40-X44	1,361	65.7	223	66.8
Suicide by drugs	X60-X64	508	24.5	72	21.6
Assault by drugs and medicaments	X85	3	0.1	-	-
Poisoning by drugs and medicaments undetermined if accidental or intentional	Y10-Y14	68	3.3	9	2.7
Adverse effects of drugs and medicaments	Y40-Y574, Y577-Y579, Y598, Y880	19	0.9	5	1.5
Other drug causes*		1	-	-	-
TOTAL		2,073	100.0	334	100.0

Note: Excludes tobacco and alcohol. Total percentage may not add to 100 due to rounding. Non-residents are excluded.

*ICD-10 codes D521, D590, D592, D611, D642, E032, E064, E231, E242, E273, F55, F551, G210, G211, G240, G251, G254, G256, G444, G620, G720, H263, I427, I952, J702, J703, J704, L105, L233, L244, L251, L270, L271, L432, L560, L561, L640, M022, M102, M320, M804, M814, M835, M871, N140, N141, N142, O355, P040, P041, P044, P584, P961, P962, R781, R782, R783, R784, R785, R786, R825.

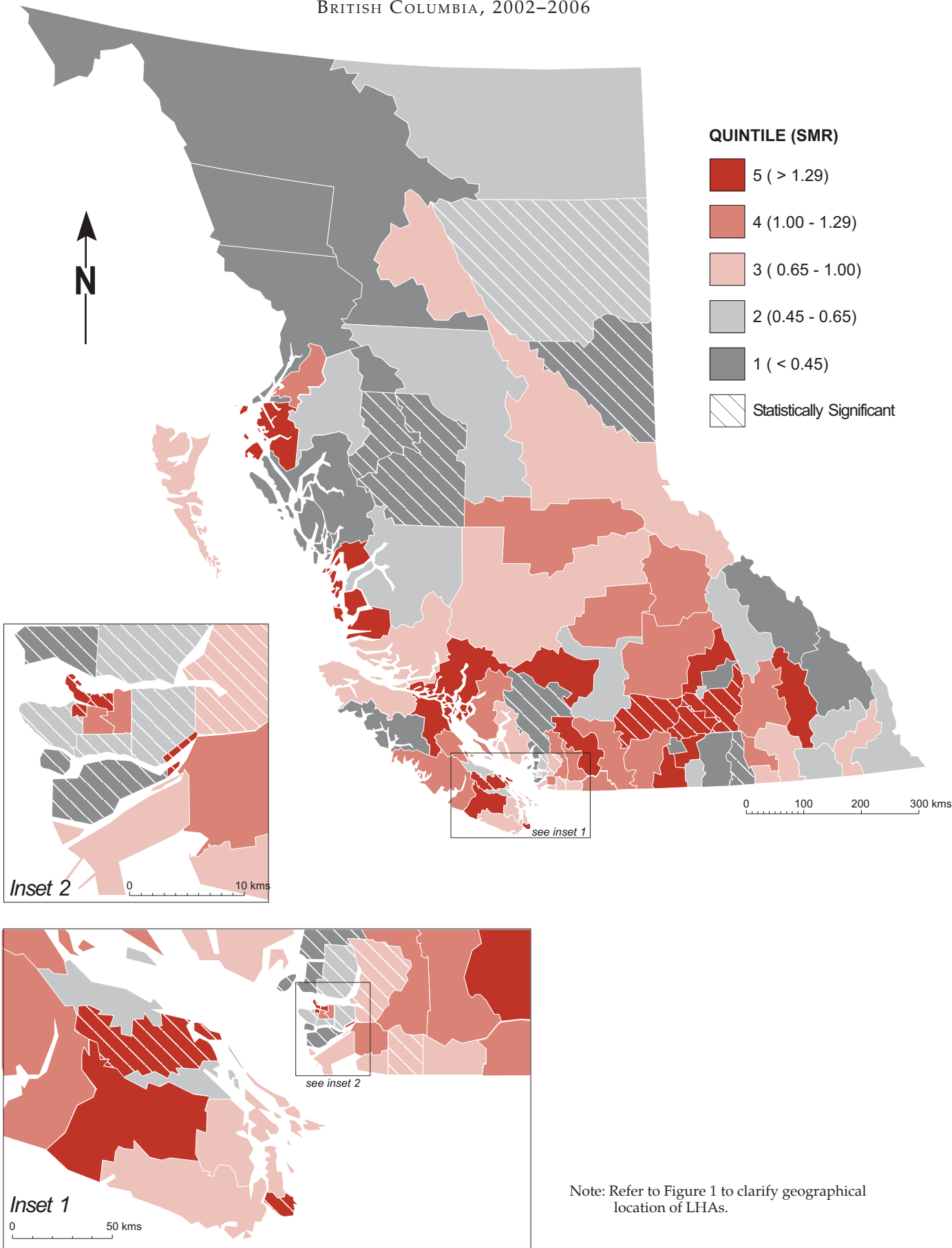
FIGURE 46
DRUG-INDUCED DEATHS BY CAUSE
 BRITISH COLUMBIA, 2007



112		2002-2006		2007				
Local Health Area		Observed Deaths	SMR (p)	Observed Deaths	Expected Deaths	SMR (p)	95% Confidence Interval	
							Lower	Upper
001	Fernie	4	0.52	-	1.20	-	-	-
002	Cranbrook	9	0.74	3	1.92	1.56	0.31	4.56
003	Kimberley	2	0.48	-	0.67	-	-	-
004	Windermere	2	0.44	-	0.78	-	-	-
005	Creston	3	0.55	1	0.91	1.09	0.01	6.09
006	Kootenay Lake	3	1.62	-	0.31	-	-	-
007	Nelson	11	0.89	1	1.98	0.51	0.01	2.81
009	Castlegar	7	1.10	2	1.02	1.95	0.22	7.05
010	Arrow Lakes	3	1.25	-	0.38	-	-	-
011	Trail	9	0.92	3	1.54	1.95	0.39	5.71
012	Grand Forks	-	*	-	0.70	-	-	-
013	Kettle Valley	-	-	-	0.30	-	-	-
014	Southern Okanagan	4	0.48	3	1.43	2.10	0.42	6.13
015	Penticton	27	1.45	6	3.13	1.91	0.70	4.17
016	Keremeos	4	1.74	-	0.38	-	-	-
017	Princeton	3	1.24	1	0.40	2.50	0.03	13.92
018	Golden	1	0.27	-	0.59	-	-	-
019	Revelstoke	2	0.48	-	0.65	-	-	-
020	Salmon Arm	21	1.38	3	2.59	1.16	0.23	3.39
021	Armstrong - Spallumcheen	3	0.65	-	0.72	-	-	-
022	Vernon	56	1.95	3	4.81	0.62	0.13	1.82
023	Central Okanagan	102	1.33	9	13.18	0.68	0.31	1.30
024	Kamloops	59	1.16	5	8.29	0.60	0.19	1.41
025	100 Mile House	8	1.10	1	1.15	0.87	0.01	4.83
026	North Thompson	2	0.93	1	0.35	2.86	0.04	15.89
027	Cariboo - Chilcotin	11	0.83	4	2.04	1.96	0.53	5.01
028	Quesnel	12	1.02	1	1.81	0.55	0.01	3.07
029	Lillooet	3	1.38	-	0.34	-	-	-
030	South Cariboo	2	0.57	-	0.57	-	-	-
031	Merritt	11	2.03	1	0.86	1.16	0.02	6.45
032	Hope	5	1.28	1	0.62	1.62	0.02	8.99
033	Chilliwack	42	1.20	6	5.83	1.03	0.38	2.24
034	Abbotsford	47	0.80	12	9.40	1.28	0.66	2.23
035	Langley	41	0.72	9	9.29	0.97	0.44	1.84
037	Delta	36	0.73	5	7.63	0.66	0.21	1.53
038	Richmond	27	0.30	9	14.51	0.62	0.28	1.18
040	New Westminster	52	1.61	4	5.14	0.78	0.21	1.99
041	Burnaby	62	0.59	18	16.77	1.07	0.64	1.70
042	Maple Ridge	40	0.95	9	6.79	1.32	0.60	2.52
043	Coquitlam	68	0.66	8	16.06	0.50	0.21	0.98
044	North Vancouver	43	0.63	8	10.50	0.76	0.33	1.50
045	West Vancouver-Bowen Is.	7	0.30	2	3.78	0.53	0.06	1.91
046	Sunshine Coast	12	0.90	-	2.32	-	-	-
047	Powell River	11	1.13	4	1.58	2.54	0.68	6.50
048	Howe Sound	7	0.42	2	2.66	0.75	0.08	2.72
049	Bella Coola Valley	1	0.65	-	0.22	-	-	-
050	Queen Charlotte	2	0.76	-	0.40	-	-	-
051	Snow Country	-	-	-	0.05	-	-	-
052	Prince Rupert	10	1.32	1	1.10	0.91	0.01	5.06
053	Upper Skeena	1	0.38	1	0.39	2.57	0.03	14.28
054	Smithers	2	0.24	-	1.20	-	-	-
055	Burns Lake	-	+	-	0.58	-	-	-
056	Nechako	4	0.53	1	1.12	0.90	0.01	4.98
057	Prince George	37	0.76	9	7.45	1.21	0.55	2.29
059	Peace River South	5	0.39	-	2.02	-	-	-
060	Peace River North	7	0.46	1	2.46	0.41	0.01	2.26
061	Greater Victoria	166	1.55	22	17.29	1.27	0.80	1.93
062	Sooke	25	0.85	2	4.93	0.41	0.05	1.47
063	Saanich	25	0.84	1	4.84	0.21	0.00	1.15
064	Gulf Islands	6	0.86	1	1.21	0.82	0.01	4.59
065	Cowichan	23	0.90	3	4.19	0.72	0.14	2.09
066	Lake Cowichan	4	1.33	-	0.50	-	-	-
067	Ladysmith	5	0.61	-	1.40	-	-	-
068	Nanaimo	61	1.31	2	7.69	0.26	0.03	0.94
069	Qualicum	11	0.56	-	3.35	-	-	-
070	Alberni	18	1.16	3	2.44	1.23	0.25	3.59
071	Courtenay	27	0.94	7	4.85	1.44	0.58	2.98
072	Campbell River	29	1.44	5	3.27	1.53	0.49	3.56
075	Mission	24	1.25	5	3.14	1.59	0.51	3.71
076	Agassiz - Harrison	7	1.74	-	0.62	-	-	-
077	Summerland	1	0.19	-	0.88	-	-	-
078	Enderby	1	0.29	1	0.59	1.70	0.02	9.43
080	Kitimat	2	0.36	1	0.82	1.22	0.02	6.79
081	Fort Nelson	2	0.62	1	0.49	2.03	0.03	11.30
083	Central Coast	1	1.30	-	0.11	-	-	-
084	Vancouver Island West	-	-	-	0.18	-	-	-
085	Vancouver Island North	5	0.76	-	0.97	-	-	-
087	Stikine	-	-	-	0.08	-	-	-
088	Terrace	6	0.60	1	1.51	0.66	0.01	3.68
092	Nisga'a	1	1.08	1	0.14	7.19	0.09	39.99
094	Telegraph Creek	-	-	-	0.05	-	-	-
161	Vancouver - City Centre	92	1.50	18	10.06	1.79	1.06	2.83
162	Vancouver - Downtown E.side	178	5.57	46	5.17	8.90	6.51	11.87
163	Vancouver - North East	48	0.96	3	7.98	0.38	0.08	1.10
164	Vancouver - Westside	35	0.53	8	10.35	0.77	0.33	1.52
165	Vancouver - Midtown	45	1.00	10	6.95	1.44	0.69	2.65
166	Vancouver - South	37	0.57	3	10.18	0.29	0.06	0.86
201	Surrey	188	1.16	26	26.62	0.98	0.64	1.43
202	South Surrey/White Rock	30	0.81	4	6.25	0.64	0.17	1.64
PROVINCIAL TOTAL		2,073	1.00	334	334.00	1.00	0.90	1.11

Note: *Statistical testing indicates that observed deaths are significantly different from the expected deaths ($p < 0.05$, two tailed).
+Denotes significance based on less than five deaths. SMR - Standardized Mortality Ratio. Total includes residents with unknown LHA.

FIGURE 47
DRUG-INDUCED DEATHS BY LOCAL HEALTH AREA
BRITISH COLUMBIA, 2002–2006



Note: Refer to Figure 1 to clarify geographical location of LHAs.

Drug Overdose Deaths

This section provides information on deaths due to unintentional poisoning by illicit/illegal drugs. These deaths are a small portion of deaths due to unintentional poisoning by drugs, and exclude accidental poisoning by drugs in therapeutic use.

Data on unintentional illicit/illegal drug deaths are retrieved from the Coroners' Medical Certificate of Death. This section only considers deaths where an overdose occurred and was determined to be the underlying cause of death. Deaths due to conditions that may arise from substance abuse, such as Hepatitis 'B' and 'C' and HIV, are excluded from consideration.

Among the substances implicated in these overdoses there are those generally referred to as "illicit drugs" – heroin, cocaine, and "psychostimulants with abuse potential" including "crystal meth" (methamphetamine hydrochloride) and "ecstasy" (methylenedioxy-methamphetamine). A more precise term for these chemicals might be "illegal" drugs as there is no medically recognized, legal use for either "ecstasy" or "crystal meth". Although both heroin and cocaine have very limited therapeutic uses, in circumstances where a fatal overdose has occurred it is almost certain that these drugs would have been obtained via illegal means.

On the other hand, where morphine is implicated, it is possible that some of the deaths involved legally obtained drugs because morphine is prescribed for chronic and/or severe pain (such as that associated with advanced cancer) and if taken improperly could result in an unintentional overdose. Unfortunately it is not always possible to differentiate whether an opiate overdose was caused by heroin or morphine, as the information received on the Coroners' final reports does not consistently differentiate. Often coroners record "morphine type" overdose, hence the label "heroin/morphine type".

Although methadone is often used legally in the treatment of opiate addiction, a number of deaths are occurring as the result of unintentional methadone overdoses. Therefore it would appear that methadone is being used in unsanctioned ways resulting in death.

Table 46 shows that deaths due to unintentional overdoses are not confined to any one area in the province. ASMRs for 2007 at the time of reporting appear to have declined in all areas except the Northern Health Authority. However, as with other externally caused deaths, reporting is often delayed due to the time required for coroners to complete and report their findings to the Agency. Therefore these results should be viewed with caution.

Table 47 and Figure 48, depict a general decline in drug overdose fatalities. The ASMR has been consistently much higher for males than for females.

TABLE 46
**ASMR FOR UNINTENTIONAL ILLICIT/ILLEGAL
OVERDOSE DEATHS BY HEALTH AUTHORITY**
BRITISH COLUMBIA, 2001–2007

Health Authority	2001	2002	2003	2004	2005	2006	2007
01 Interior	0.60	0.56	0.67	0.69	0.66	0.44	0.31
02 Fraser	0.56	0.36	0.41	0.38	0.54	0.61	0.34
03 Vancouver Coastal	0.64	0.48	0.47	0.55	0.52	0.52	0.41
04 Vancouver Island	0.65	0.72	0.65	0.72	0.55	0.60	0.27
05 Northern	0.46	0.22	0.37	0.35	0.30	0.13	0.29
PROVINCIAL TOTAL	0.59	0.46	0.50	0.52	0.53	0.52	0.34

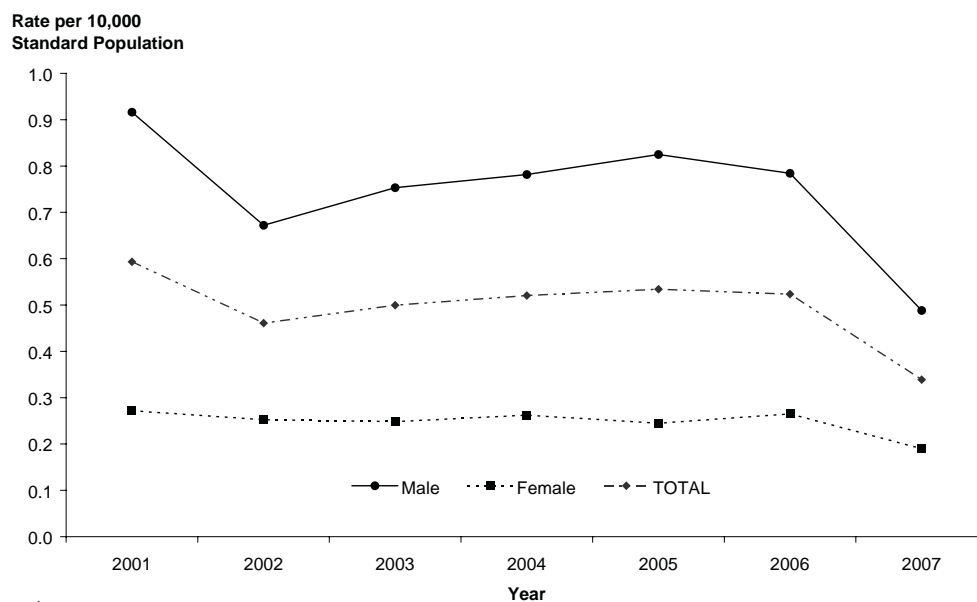
Note: Deaths that were still under investigation may later be identified as unintentional illicit/illegal.
ASMR - Age Standardized Mortality Rate per 10,000 standard population (Canada 1991 Census).
Non-residents are excluded.

TABLE 47
**ASMR FOR UNINTENTIONAL ILLICIT/ILLEGAL
OVERDOSE DEATHS BY GENDER**
BRITISH COLUMBIA, 2001–2007

Gender	2001	2002	2003	2004	2005	2006	2007
Male	0.92	0.67	0.75	0.78	0.82	0.78	0.49
Female	0.27	0.25	0.25	0.26	0.24	0.26	0.19
TOTAL	0.59	0.46	0.50	0.52	0.53	0.52	0.34

Note: Deaths that were still under investigation may later be identified as unintentional illicit/illegal overdose deaths.
ASMR - Age Standardized Mortality Rate per 10,000 standard population (Canada 1991 Census).
Non-residents are excluded.

FIGURE 48
**ASMR FOR UNINTENTIONAL ILLICIT/ILLEGAL
OVERDOSE DEATHS BY GENDER**
BRITISH COLUMBIA, 2001–2007



See Table 47 for notes.

Accidental Falls Deaths

In 2007, there were 1,505 deaths due to external causes among BC residents and of these, unintentional (accidental) deaths comprised over 71 percent (1,079) of non-natural deaths. Overall, falls were the leading cause of unintentional death, contributing almost 30 percent to this category in 2007, exceeding fatal motor vehicle incidents in number (314 vs. 284), see Table 30. However, analysis of various causes of unintentional (accidental) mortality in 2007 shows that females were far more likely to die as the result of a fall than males. Only 22 percent of unintentional deaths among males were the result of falls. That proportion rose to just over 41 percent among females.

While fatal falls occur across the lifespan of British Columbians, the elderly are far more likely to succumb to the effects of a fall.

The data discussed so far only include events where the fall was determined to be the underlying cause of death (that is – the event that was directly responsible for the individual’s demise). There are additional deaths that involve accidental falls, but where the fall was considered to be a contributing factor, not the direct cause of death.

Table 48 and Figure 49 show how age specific rates compare between the 2 categories (direct and indirect) of fall-related deaths in BC for individuals aged 60 and older. Clearly, if deaths indirectly caused by falls are included in total falls-related mortality, the extent of the lethal effect of falls among the elderly becomes far greater, and especially so for those 80 years and older.

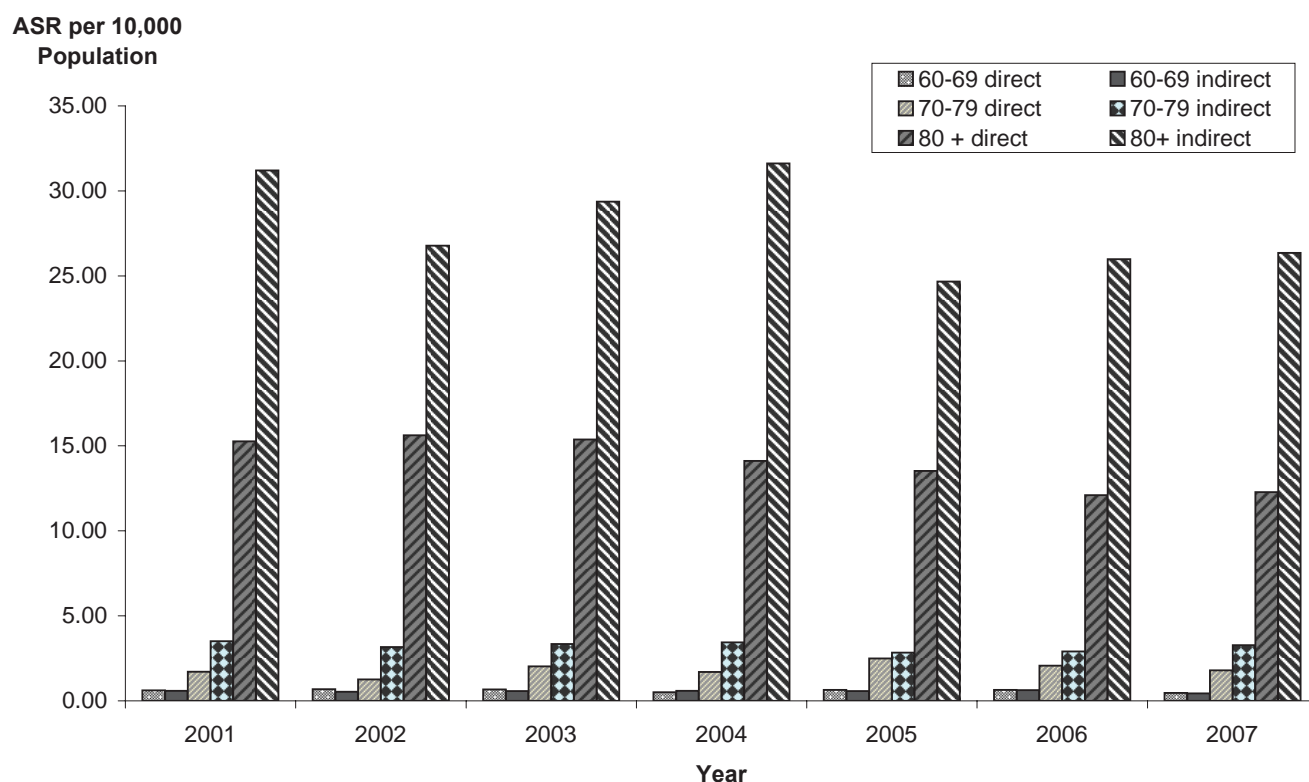
The BC Injury Research and Prevention Unit (BCIRPU) is a national leader in falls injury research and in the design and implementation of falls prevention strategies. A summary of the initiatives undertaken by the BCIRPU can be viewed at the Unit’s website: <http://www.injuryresearch.bc.ca/index.aspx> go to “Falls Prevention” in the “Injury Topics” menu.

TABLE 48
DEATHS DIRECTLY AND INDIRECTLY
DUE TO FALLS BY AGE
BRITISH COLUMBIA, 2001-2007

Cause of Death	Age (in Years)	2001		2002		2003		2004		2005		2006		2007	
		Counts	ASR	Counts	ASR	Counts	ASR	Counts	ASR	Counts	ASR	Counts	ASR	Counts	ASR
Directly due to falls															
	60-69	20	0.62	23	0.69	23	0.67	18	0.51	24	0.65	25	0.65	19	0.47
	70-79	43	1.71	32	1.26	52	2.03	44	1.70	65	2.49	55	2.07	48	1.79
	80+	208	15.27	224	15.62	231	15.38	221	14.11	220	13.53	204	12.10	223	12.78
Indirectly due to falls															
	60-69	19	0.59	18	0.54	20	0.58	21	0.59	21	0.57	24	0.63	18	0.44
	70-79	88	3.51	80	3.16	86	3.35	89	3.44	74	2.83	77	2.90	88	3.28
	80+	425	31.20	384	26.78	441	29.37	495	31.61	401	24.67	438	25.98	460	26.35

Note: ASR - Age Specific Rate per 10,000 population.

FIGURE 49
DEATHS DIRECTLY AND INDIRECTLY
DUE TO FALLS, AGES 60-80+
BRITISH COLUMBIA, 2001-2007



Burials and Cremations

Table 49 shows the method used to dispose of decedents' remains. This table covers the years from 1986 through 2007. At the beginning of this time span the ratio of cremations to burials was three to two; in 2007 it was four to one.

TABLE 49
METHOD OF DISPOSITION OF DECEDENT
BRITISH COLUMBIA, 1986–2007

Year	Burial		Cremation		Other	N.S.	Total
	Number	Percent	Number	Percent			
1986	8,204	39.0	12,686	60.4	98	20	21,009
1987	8,211	38.0	13,279	61.4	104	24	21,618
1988	8,319	37.2	13,926	62.3	96	16	22,357
1989	8,061	35.4	14,616	64.1	81	28	22,786
1990	8,208	35.1	15,088	64.4	91	28	23,415
1991	8,035	33.7	15,675	65.8	75	34	23,820
1992	7,818	32.0	16,512	67.5	97	36	24,463
1993	7,987	31.2	17,214	67.2	151	251	25,603
1994	7,710	29.8	17,888	69.3	177	55	25,830
1995	7,616	29.0	18,361	70.0	185	63	26,225
1996	7,640	27.9	19,546	71.4	193	12	27,391
1997	7,359	27.0	19,651	72.1	207	46	27,263
1998	7,197	25.9	20,377	73.3	225	9	27,808
1999	7,061	25.3	20,630	74.0	197	-	27,888
2000	6,468	23.6	20,694	75.7	187	1	27,350
2001	6,684	23.7	21,329	75.5	223	1	28,237
2002	6,541	22.8	21,978	76.5	192	3	28,714
2003	6,607	22.7	22,362	76.7	186	-	29,155
2004	6,378	21.5	23,160	77.9	184	-	29,722
2005	6,278	20.9	23,630	78.5	184	-	30,092
2006	6,356	20.8	24,014	78.6	166	-	30,536
2007	6,145	19.8	24,794	79.7	166	-	31,105

Note: Percent is based on total deaths in the specified year.
Other includes remains not recovered and donations as per will of deceased.
N.S. – Not stated.
Non-residents are excluded.

Vital Statistics Information Box

METHOD OF DISPOSITION BY DECEDENT'S LOCAL HEALTH AREA OF RESIDENCE

BRITISH COLUMBIA, 2007

Local Health Area	Burial		Cremation		Other	Total
	Number	Percent	Number	Percent		
001 Fernie	16	20.0	63	78.8	1	80
002 Cranbrook	34	15.5	185	84.5	-	219
003 Kimberley	7	11.5	54	88.5	-	61
004 Windermere	5	10.4	43	89.6	-	48
005 Creston	36	24.8	109	75.2	-	145
006 Kootenay Lake	7	17.1	34	82.9	-	41
007 Nelson	47	22.7	159	76.8	1	207
009 Castlegar	34	28.3	86	71.7	-	120
010 Arrow Lakes	6	12.0	44	88.0	-	50
011 Trail	41	17.0	199	82.6	1	241
012 Grand Forks	38	31.7	82	68.3	-	120
013 Kettle Valley	4	18.2	18	81.8	-	22
014 Southern Okanagan	54	21.5	196	78.1	1	251
015 Penticton	72	15.2	402	84.8	-	474
016 Keremeos	4	6.3	60	93.8	-	64
017 Princeton	5	7.9	58	92.1	-	63
018 Golden	7	15.9	37	84.1	-	44
019 Revelstoke	12	23.5	39	76.5	-	51
020 Salmon Arm	42	13.0	281	86.7	1	324
021 Armstrong-Spallumcheen	6	7.8	71	92.2	-	77
022 Vernon	131	20.3	512	79.5	1	644
023 Central Okanagan	257	17.3	1,223	82.5	2	1,482
024 Kamloops	116	14.3	687	84.4	11	814
025 100 Mile House	17	12.5	118	86.8	1	136
026 North Thompson	10	23.8	32	76.2	-	42
027 Cariboo-Chilcotin	47	24.5	145	75.5	-	192
028 Quesnel	42	23.7	135	76.3	-	177
029 Lillooet	11	34.4	21	65.6	-	32
030 South Cariboo	19	27.1	51	72.9	-	70
031 Merritt	20	17.4	95	82.6	-	115
032 Hope	30	27.3	80	72.7	-	110
033 Chilliwack	146	21.1	546	78.8	1	693
034 Abbotsford	268	29.9	627	69.9	2	897
035 Langley	147	16.4	750	83.5	1	898
037 Delta	81	13.2	527	86.0	5	613
038 Richmond	241	26.5	664	73.0	4	90
040 New Westminster	81	16.1	420	83.3	3	50
041 Burnaby	370	26.9	974	70.9	29	1,373
042 Maple Ridge	81	15.4	445	84.4	1	527
043 Coquitlam	158	17.1	756	81.9	9	923
044 North Vancouver	121	14.4	711	84.6	8	840
045 West Vancouver-Bowen Is.	63	13.8	391	85.6	3	457
046 Sunshine Coast	27	8.8	280	91.2	-	307
047 Powell River	22	11.5	167	87.0	3	192
048 Howe Sound	25	21.0	94	79.0	-	119
049 Bella Coola Valley	7	41.2	9	52.9	1	17
050 Queen Charlotte	22	53.7	19	46.3	-	41
051 Snow Country	-	-	3	100.0	-	3
052 Prince Rupert	32	32.7	66	67.3	-	98
053 Upper Skeena	15	62.5	9	37.5	-	24
054 Smithers	34	32.7	70	67.3	-	104
055 Burns Lake/Eutsuk	27	48.2	29	51.8	-	56
056 Nechako	50	41.3	71	58.7	-	121
057 Prince George	122	20.4	472	79.1	3	597
059 Peace River South	50	28.1	128	71.9	-	178
060 Peace River North	47	30.7	106	69.3	-	153
061 Greater Victoria	301	14.0	1,840	85.4	13	2,154
062 Sooke	38	12.4	268	87.6	-	306
063 Saanich	77	11.6	586	88.1	2	665
064 Gulf Islands	10	6.9	135	93.1	-	145
065 Cowichan	73	15.5	398	84.5	-	471
066 Lake Cowichan	5	13.9	31	86.1	-	36
067 Ladysmith	22	10.1	193	88.9	2	217
068 Nanaimo	110	11.9	815	88.1	-	925
069 Qualicum	41	8.2	462	91.8	-	503
070 Alberni	58	20.6	222	79.0	1	281
071 Courtenay	43	8.4	467	91.6	-	510
072 Campbell River	41	13.1	273	86.9	-	314
075 Mission	43	15.0	241	84.3	2	286
076 Agassiz-Harrison	22	32.8	45	67.2	-	67
077 Summerland	20	14.4	119	85.6	-	139
078 Enderby	16	18.8	69	81.2	-	85
080 Kitimat	24	35.8	43	64.2	-	67
081 Fort Nelson	9	45.0	11	55.0	-	20
083 Central Coast	7	63.6	4	36.4	-	11
084 Vancouver Island West	-	-	11	100.0	-	11
085 Vancouver Island North	26	25.2	74	71.8	3	103
087 Stikine	3	75.0	1	25.0	-	4
088 Terrace	42	31.8	90	68.2	-	132
092 Nisga'a	16	88.9	2	11.1	-	18
094 Telegraph Creek	3	60.0	2	40.0	-	5
161 Vancouver - City Centre	111	17.5	517	81.5	6	634
162 Vancouver - Downtown E.side	156	30.6	349	68.6	4	509
163 Vancouver - North East	239	42.5	309	54.9	15	563
164 Vancouver - Westside	204	26.2	575	73.7	1	780
165 Vancouver - Midtown	180	37.0	302	62.0	5	487
166 Vancouver - South	297	35.7	530	63.8	4	831
201 Surrey	364	20.8	1,379	78.7	9	1,752
202 South Surrey/White Rock	125	13.9	766	85.4	6	897
PROVINCIAL TOTAL	6,145	19.8	24,794	79.7	166	31,105

Note: Total includes residents with unknown LHA.