Death-related Statistics

Deaths by Decedent's Place of Birth

British Columbia, 2010

Area	Province/Country	Deaths
Canada	**Total**	**20,885**
	British Columbia	8,413
	Saskatchewan	3,860
	Alberta	2,904
	Ontario	2,244
	Manitoba	1,966
	Quebec	705
	Nova Scotia	348
	New Brunswick	220
	Newfoundland & Labrador	124
	Yukon	45
	Prince Edward Island	41
	Northwest Territories & Nunavut	12
	Nunavut	2
	Unknown Province	1
North and Central America	**Total**	**807**
	United States	707
	Other North and Central American countries	100
South America	**Total**	**85**
Europe	**Total**	**6,245**
	United kingdom	2,663
	Germany	697
	Netherlands	436
	Scandinavian countries	351
	Italy	327
	Poland	316
	Hungary	164
	Russia	141
	Republic of Ireland	140
	Austria	114
	Other European countries	896
Asia and the Middle East	**Total**	**2,556**
	China	1,016
	India	647
	Philippines	205
	Hong Kong	168
	Vietnam	93
	South Korea	73
	Iran	62
	Pakistan	48
	Japan	40
	Other Asian and the Middle Eastern countries	204
Africa	**Total**	**199**
	South Africa	72
	Other African countries	127
Oceania	**Total**	**197**
	Fiji	121
	Australia	48
	New Zealand	26
	Other Oceanic countries	2
Unknown	**Total**	**169**
Total		**31,143**

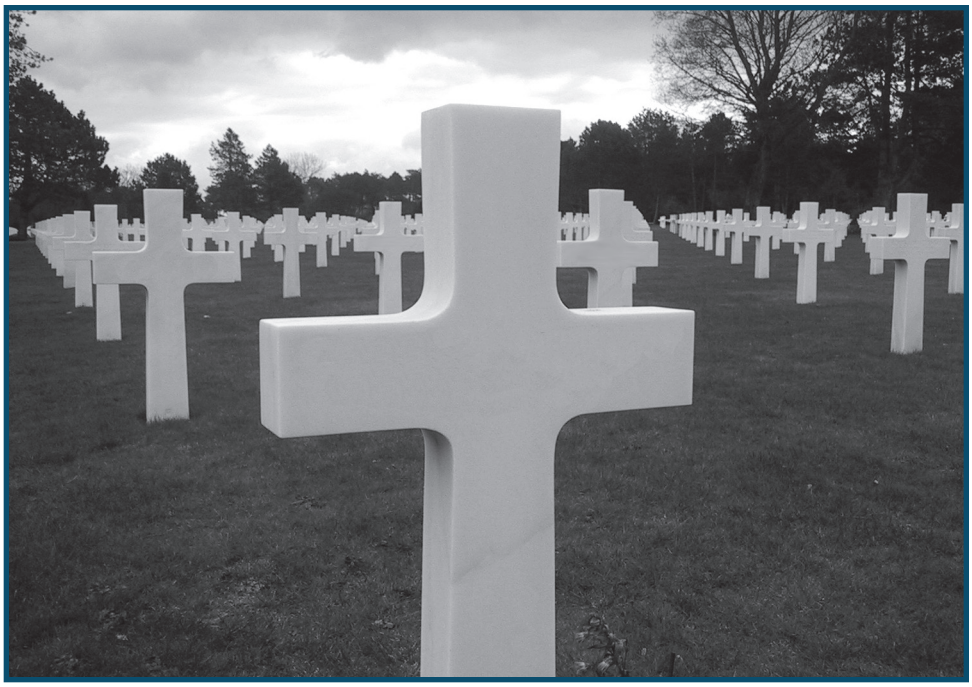
Note: Non-residents are excluded.

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 chain of events leading directly to the 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 gender and age is shown in Table 21. It provides a summary of the contribution of the 19 diagnostic categories to total deaths in BC in 2010. 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 2010 for both genders. Deaths in those two categories are further analysed in the sections following.



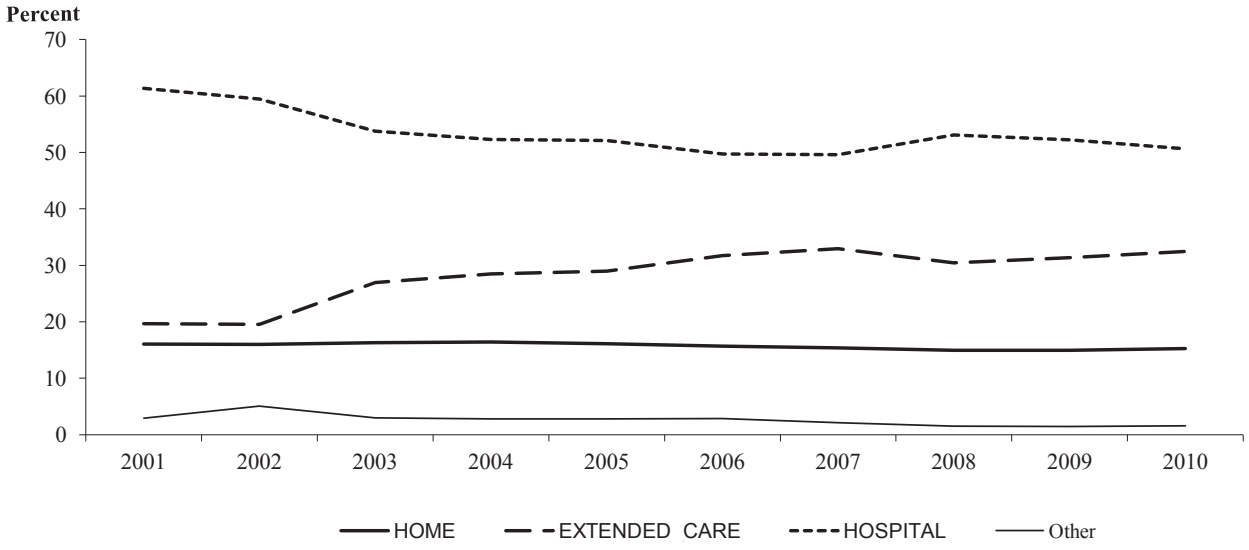
Vital Statistics Information Box

Place of Death for Deaths From Natural Causes
British Columbia, 2001 - 2010

Deaths from natural causes in 2001 to 2010 were examined to determine the place of death. The majority of these deaths to British Columbia residents occurred in hospital (53.3 percent over the ten year period). 15.7 percent of deaths from natural causes occurred at home and 28.4 percent occurred in extended care facilities.

Place of Death	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2001-2010
Home	4,227	4,267	4,437	4,571	4,533	4,497	4,476	4,489	4,375	4,494	44,366
Extended Care	5,189	5,213	7,343	7,916	8,139	9,091	9,601	9,140	9,189	9,575	80,396
Hospital	16,180	15,876	14,641	14,525	14,642	14,265	14,453	15,931	15,293	14,930	150,736
Other and Unknown	775	1,353	813	775	788	824	618	456	433	471	7,306
Total	**26,371**	**26,709**	**27,234**	**27,787**	**28,102**	**28,677**	**29,148**	**30,016**	**29,290**	**29,470**	**282,804**

Percent of Deaths from Natural Causes by Place of Death
British Columbia, 2001 - 2010

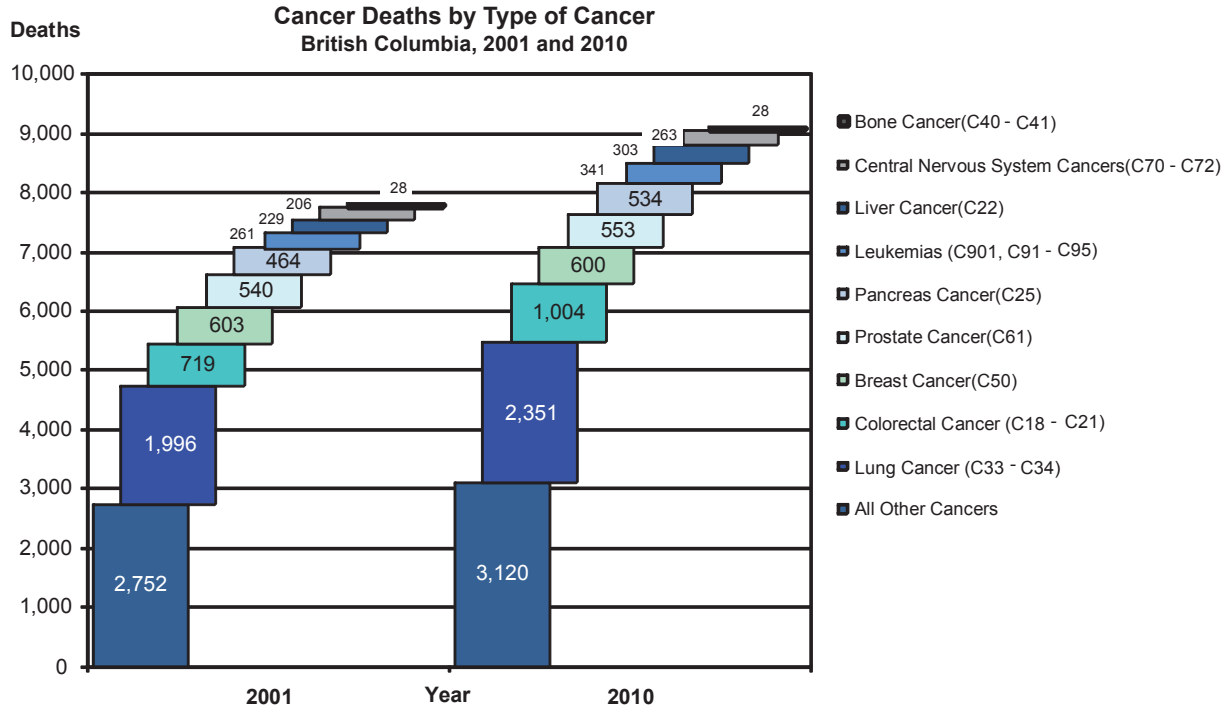


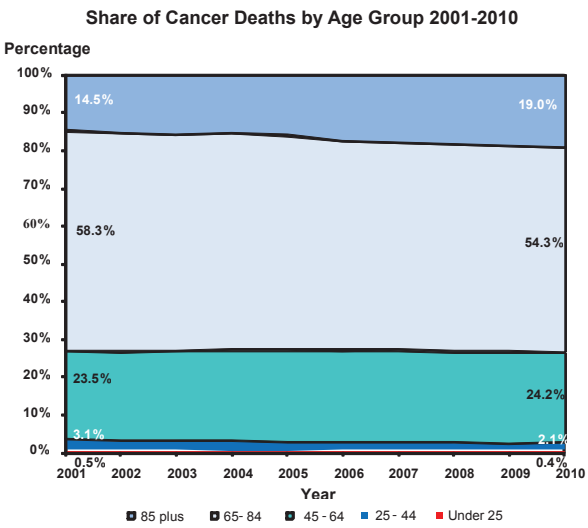
Note: The BC Vital Statistics Agency changed the way the place of death is recorded in 2008.

Vital Statistics Information Box

Cancer Deaths in British Columbia, 2001 to 2010

More British Columbians succumbed to Cancer or Malignant Neoplasms (ICD Codes C00-C97) than any other cause in 2010. The following charts illustrate the trends and changes in deaths caused by Cancer from 2001 to 2010. As illustrated, the proportion of deaths caused by specific types of Cancer has not changed substantially from 2001 to 2010. However, those dying of Cancer in 2010 are older than they were in 2001, and larger shares of them are female. Both the Age Standardized Mortality Rate (ASMR) rate and Potential Years of Life Lost (PYLLSR) have fallen.





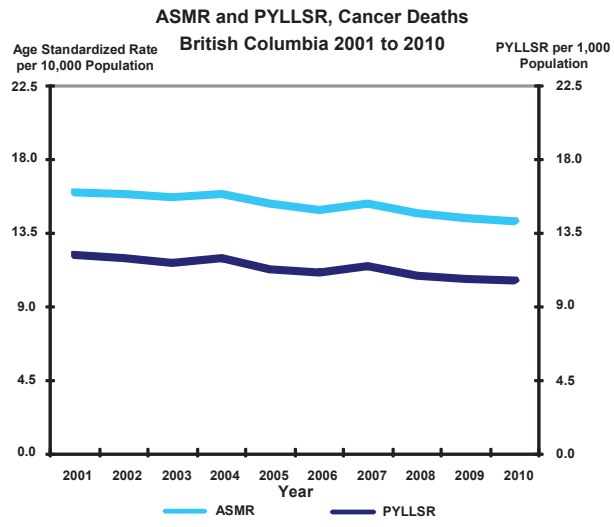


TABLE 21
CAUSES OF DEATH BY GENDER AND AGE
BRITISH COLUMBIA, 2010

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	3	-	-	-	-	-	17	96	68	120	304	1.9	1.03
		F	-	-	-	-	1	1	8	53	51	135	249	1.6	0.64
		T	3	-	-	-	1	1	25	149	119	255	553	3.5	0.82
C00-D48	Neoplasms	M	-	2	3	4	4	2	92	1,110	2,019	1,598	4,834	30.4	16.65
		F	2	1	4	-	5	11	103	1,103	1,622	1,572	4,423	27.8	12.81
		T	2	3	7	4	9	13	195	2,213	3,641	3,170	9,257	58.2	14.48
D50-D89	Diseases of blood and blood-forming organs, certain immune mechanisms	M	2	-	-	-	-	-	1	10	9	26	48	0.3	0.16
		F	-	-	-	-	1	1	1	6	11	37	57	0.4	0.14
		T	2	-	-	-	1	1	2	16	20	63	105	0.7	0.15
E00-E90	Endocrine/nutritional/metabolic diseases	M	1	2	-	-	1	1	18	114	270	289	696	4.4	2.41
		F	1	1	3	-	-	1	10	60	151	386	613	3.9	1.52
		T	2	3	3	-	1	2	28	174	421	675	1,309	8.2	1.94
F00-F99	Mental and behavioural disorders	M	-	-	-	-	-	-	8	46	114	325	493	3.1	1.63
		F	-	-	-	-	-	-	-	10	82	712	804	5.1	1.60
		T	-	-	-	-	-	-	8	56	196	1,037	1,297	8.2	1.65
G00-G99	Diseases of the nervous system	M	1	-	-	1	6	3	12	68	178	328	597	3.8	2.02
		F	2	-	1	-	2	2	10	71	115	497	700	4.4	1.65
		T	3	-	1	1	8	5	22	139	293	825	1,297	8.2	1.82
H00-H59	Diseases of the eye and adnexa	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
H60-H95	Diseases of the ear and mastoid process	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	1	1	2	0.0	+
		T	-	-	-	-	-	-	-	-	1	1	2	0.0	+
I00-I99	Diseases of the circulatory system	M	-	-	-	-	-	3	68	688	1,292	2,438	4,489	28.2	14.98
		F	-	-	-	1	-	3	33	234	806	3,518	4,595	28.9	10.19
		T	-	-	-	1	-	6	101	922	2,098	5,956	9,084	57.1	12.43
J00-J99	Diseases of the respiratory system	M	2	-	-	1	1	-	6	163	446	973	1,592	9 10.0	5
		F	-	-	1	-	-	-	12	93	367	1,067	1,540	9.7	3.66
		T	2	-	1	1	1	-	18	256	813	2,040	3,132	19.7	4.34
K00-K93	Diseases of the digestive system	M	-	1	-	-	-	2	28	180	187	241	639	4.0	2.16
		F	-	-	-	-	-	1	20	87	135	324	567	3.6	1.44
		T	-	1	-	-	-	3	48	267	322	565	1,206	7.6	1.78
L00-L99	Diseases of the skin and subcutaneous tissue	M	-	-	1	-	-	-	-	2	7	23	33	0.2	0.11
		F	-	-	-	-	-	-	-	5	8	39	52	0.3	0.12
		T	-	-	1	-	-	-	-	7	15	62	85	0.5	0.11
M00-M99	Diseases of the musculoskeletal system and connective tissue	M	-	-	-	-	-	-	3	6	12	33	54	0.3	0.18
		F	-	-	-	-	-	-	2	11	36	78	127	0.8	0.32
		T	-	-	-	-	-	-	5	17	48	111	181	1.1	0.26
N00-N99	Diseases of the genitourinary system	M	-	-	-	-	-	-	1	20	90	224	335	2.1	1.11
		F	-	-	-	-	-	-	2	18	78	349	447	2.8	0.99
		T	-	-	-	-	-	-	3	38	168	573	782	4.9	1.04
O00-O99	Complications of pregnancy, childbirth and the puerperium	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	2	1	-	-	3	0.0	+
		T	-	-	-	-	-	-	2	1	-	-	3	0.0	+
P00-P96	Certain conditions originating in the perinatal period	M	51	-	-	-	-	-	-	-	-	-	51	0.3	0.32
		F	47	1	-	-	-	-	-	-	-	-	48	0.3	0.32
		T	98	1	-	-	-	-	-	-	-	-	99	0.6	0.32
Q00-Q99	Congenital anomalies	M	14	1	2	1	-	1	5	10	5	3	42	0.3	0.20
		F	14	1	2	1	-	1	3	4	4	5	35	0.2	0.18
		T	28	2	4	2	-	2	8	14	9	8	77	0.5	0.19
R00-R99	Symptoms, signs and ill-defined conditions, unknown causes	M	16	1	1	10	17	20	142	219	103	71	600	3.8	2.40
		F	6	2	3	-	13	15	55	85	67	155	401	2.5	1.29
		T	22	3	4	10	30	35	197	304	170	226	1,001	6.3	1.84
V01-Y98	External causes	M	-	4	1	2	41	71	290	351	126	205	1,091	6.9	4.33
		F	1	4	-	3	19	17	92	117	69	256	578	3.6	1.77
		T	1	8	1	5	60	88	382	468	195	461	1,669	10.5	3.02
	All causes	**M**	**90**	**11**	**8**	**19**	**70**	**103**	**692**	**3,084**	**4,926**	**6,897**	**15,900**	**100.0**	**54.99**
		F	**73**	**10**	**14**	**5**	**41**	**53**	**353**	**1,958**	**3,603**	**9,133**	**15,243**	**95.9**	**38.67**
	PROVINCIAL TOTAL	**T**	**163**	**21**	**22**	**24**	**111**	**156**	**1,045**	**5,042**	**8,529**	**16,030**	**31,143**	**195.9**	**46.23**

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 the 2005-2009 period and the year 2010, the following four values are shown: number of deaths, the rank by number of deaths, the ASMR, and the rank by ASMR. The rows of the table are in the order of the 2010 ASMR rank.

For 2010, the 12 leading causes of death shown in Table 22 were responsible for 84.3 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 disease, and cerebrovascular diseases. For 2010, these three leading causes account for 57.1 percent of all deaths.

Figure 35 shows the number of deaths from Table 22 in 2010 graphically. It shows clearly the impact of the top three categories, which cause more than half of all deaths.

Table 23 shows the five leading causes of death in the seven different age groupings. The leading cause of death among those under 1 year of age (infant mortality), were certain conditions originating in the perinatal period with 60.1 percent of the deaths attributable to this cause. The second highest cause of infant deaths was congenital malformations and chromosome abnormalities. Males accounted for 55.2 percent of the deaths among those under 1 year of age. Of all infant deaths, 67.5 percent occurred within the first seven days after birth and 79.1 percent occurred within the first 28 days (see Table 27). 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; most of these were males. The second leading cause of death for this age group was unintentional injuries.

Unintentional injuries were the leading cause of death, particularly for males, in the age groups 15-24 and 25-44. These causes include events such as motor vehicle accidents, falls, and accidental 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, suicide 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 the 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, accounting for 35.9 percent of deaths for males and 56.1 percent of deaths for females in this age group.

Between 65 and 84 years of age, 37.3 percent of the deaths were due to malignant neoplasms followed by cardiovascular disease which caused 18.9 percent of deaths. For those 85 years and older, the order of those two cause categories was reversed with cardiovascular disease causing 27.8 percent of deaths and malignant neoplasms causing 15.2 percent.

Malignant neoplasms ranked in the first three leading causes of death in each age group for those over 1 year of age. This cause of death was the overall leading cause of death in BC in 2005-2009, as well as in 2010 (see Table 22 and Figure 35). Notwithstanding, the ASMR for total malignant neoplasms and for lung cancer have declined over the last two decades (see Figures 19 and 20).

TABLE 22
TWELVE LEADING CAUSES OF DEATH
BRITISH COLUMBIA, 2005–2009 AND 2010

Cause of Death	ICD-10 Code(s)	2005–2009 Number	2005–2009 Rank	2005–2009 ASMR	2005–2009 Rank	2010 Number	2010 Rank	2010 ASMR	2010 Rank
Malignant neoplasms	C00-C97	43,472	1	14.92	1	9,097	1	14.25	1
Cardiovascular disease	I00-I51	34,038	2	10.45	2	6,446	2	8.85	2
Cerebrovascular diseases	I60-I69	11,506	3	3.47	3	2,226	3	2.99	3
Chronic Pulmonary Disease	J40-J44	6,826	4	2.18	5	1,415	4	2.06	4
Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	6,791	5	2.69	4	1,156	5	1.98	5
Diabetes mellitus	E10-E14	5,025	7	1.65	7	1,048	8	1.54	6
Vascular/senile dementia	F01, F03	4,367	8	1.21	9	1,140	6	1.40	7
Pneumonia/Influenza	J09-J181, J188, J189	6,635	6	1.95	6	1,060	7	1.36	8
Other diseases of digestive system	K00-K67, K80-K93	4,317	9	1.35	8	804	9	1.12	9
Other disorders of the nervous system	G00-G25, G31-G99	3,230	11	1.10	10	660	11	1.03	10
Urinary system diseases	N00-N39, N990, N991, N995	3,524	10	1.06	11	753	10	1.00	11
Suicide	X60-X84, Y870	2,278	12	0.97	12	454	12	0.92	12
Other causes[1]		22,902		7.90		4,884		7.73	
TOTAL (All causes of death)		154,911		50.90		31,143		46.23	

Note: [1]Other causes includes undetermined and pending.
ASMR - Age Standardized Mortality Rate 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 2010 ASMR.
Non-residents are excluded. The output from ICD-10 mortality coding and underlying cause of death selection was modified in British Columbia 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, 2010

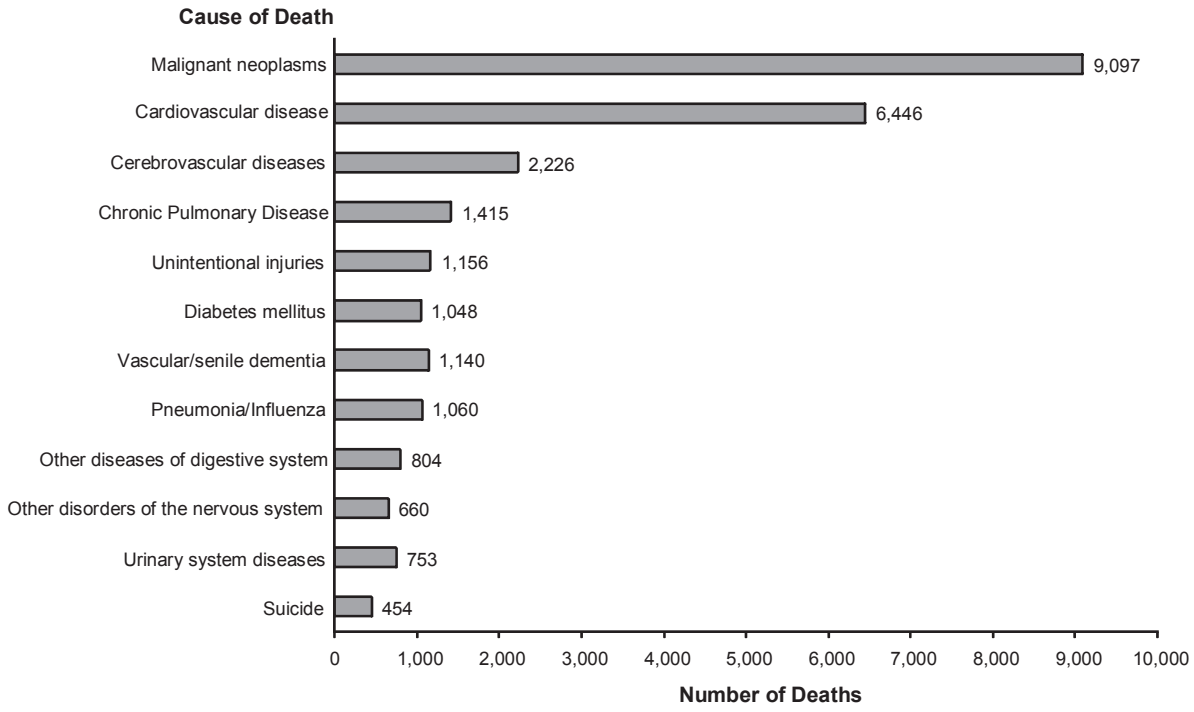


TABLE 23
LEADING CAUSES OF DEATH BY AGE AND GENDER
BRITISH COLUMBIA, 2010

Cause of Death	ICD-10 Code(s)	Male Number	Male Percent	Female Number	Female Percent	Total Number	Total Percent
Under 1 Year Old							
1. Certain conditions originating in the perinatal period	P00-P96	51	56.7	47	64.4	98	60.1
2. Congenital malformations and chromosome abnormalities	Q00-Q99	14	15.6	14	19.2	28	17.2
3. Sudden infant death syndrome	R95	4	4.4	1	1.4	5	3.1
4. Certain infectious and parasitic diseases	A00-B99, G14	3	3.3	-	-	3	1.8
5. Other disorders of the nervous system	G00-G25, G31-G99	1	1.1	2	2.7	3	1.8
Other causes[1]		17	18.9	9	12.3	26	16.0
All causes		**90**	**100.0**	**73**	**100.0**	**163**	**100.0**
1-14 Years Old							
1. Malignant neoplasms	C00-C97	8	21.1	4	13.8	12	17.9
2. Unintentional injuries	V01-X59, Y40-Y86	6	15.8	5	17.2	11	16.4
3. Congenital malformations	Q00-Q99	4	10.5	4	13.8	8	11.9
4. Metabolic disorders	E70-E89	2	5.3	4	13.8	6	9.0
5. Suicide	X60-X84, Y870	1	2.6	2	6.9	3	4.5
Other causes[1]		17	44.7	10	34.5	27	40.3
All causes		**38**	**100.0**	**29**	**100.0**	**67**	**100.0**
15-24 Years Old							
1. Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	58	33.5	23	24.5	81	30.3
2. Suicide	X60-X84, Y870	48	27.7	11	11.7	59	22.1
3. Malignant neoplasms	C00-C97	6	3.5	15	16.0	21	7.9
4. Other disorders of the nervous system	G00-G25, G31-G99	9	5.2	4	4.4	13	4.9
5. Homicide	X85-Y09, Y871	5	2.9	2	2.1	7	2.6
Other causes[1]		47	27.2	39	41.5	86	32.2
All causes		**173**	**100.0**	**94**	**100.0**	**267**	**100.0**
25-44 Years Old							
1. Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	153	22.1	60	17.0	213	20.4
2. Malignant neoplasms	C00-C97	92	13.3	102	28.9	194	18.6
3. Suicide	X60-X84, Y870	117	16.9	27	7.6	144	13.8
4. Cardiovascular disease	I00-I51	53	7.7	23	6.5	76	7.3
5. Diseases of Liver	K70-K76	19	2.7	13	3.7	32	3.1
Other causes[1]		258	37.3	128	36.3	386	36.9
All causes		**692**	**100.0**	**353**	**100.0**	**1,045**	**100.0**

(concluded on next page)

Note: Order of leading causes based on total deaths in the specified age group.
[1]Other 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, 2010

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	1,107	35.9	1,099	56.1	2,206	43.8
2. Cardiovascular disease	I00-I51	561	18.2	158	8.1	719	14.3
3. Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	193	6.3	81	4.1	274	5.4
4. Diseases of liver	K70-K76	126	4.1	55	2.8	181	3.6
5. Suicide	X60-84, Y870	140	4.5	34	1.7	174	3.5
Other causes[1]		957	31.0	531	27.1	1,488	29.5
All causes		**3,084**	**100.0**	**1,958**	**100.0**	**5,042**	**100.0**
65-84 Years Old							
1. Malignant neoplasms	C00-C97	2,720	36.8	2,218	37.8	4,938	37.3
2. Cardiovascular disease	I00-I51	1,519	20.6	985	16.8	2,504	18.9
3. Cerebrovascular diseases	I60-I69	436	5.9	441	7.5	877	6.6
4. Chronic Pulmonary Disease	J40-J44	418	5.7	377	6.4	795	6.0
5. Diabetes mellitus	E10-E14	323	4.4	209	3.6	532	4.0
Other causes[1]		1,974	26.7	1,633	27.9	3,607	27.2
All causes		**7,390**	**100.0**	**5,863**	**100.0**	**13,253**	**100.0**
85 Years and Older							
1. Cardiovascular disease	I00-I51	1,222	27.6	1,922	28.0	3,144	27.8
2. Malignant neoplasms	C00-C97	819	18.5	905	13.2	1,724	15.2
3. Cerebrovascular diseases	I60-I69	380	8.6	789	11.5	1,169	10.3
4. Vascular/senile dementia	F01, F03	234	5.3	576	8.4	810	7.2
5. Pneumonia/Influenza	J09-J181, J188, J189	284	6.4	379	5.5	663	5.9
Other causes[1]		1,494	33.7	2,302	33.5	3,796	33.6
All causes		**4,433**	**100.0**	**6,873**	**100.0**	**11,306**	**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 2007 the most recent year for which information on Canadian infant mortality rates is available (see Table 5). There were 163 infant deaths in BC in 2010 or 3.73 deaths per 1,000 live births. Twenty years ago, the rate was over 7 per 1,000 live births. This has progressively declined to the rates seen in the last few years.

Table 24 shows the number of infants who died in 2010 by birth weight and maternal age group. The first column has the mother's age group ranging from less than 20 years 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, 0.95 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 13.97 per 1,000 live births, and infants who weigh less than 1,500 grams had an infant mortality rate of 216.58 per 1,000 live births.

In the past decade there has been no significantly increasing or decreasing trend in the infant mortality rate.

Table 25 repeats the birth weight categories and general format shown in Table 24 but replaces maternal age groups with gestational age. Of the 163 infant deaths in 2010, there were 30 term births (37 to 41 weeks) with birth weights of 2,500 grams or more.

As expected, infant mortality tended to increase as birth weight and gestational age decrease. Of the infant deaths in the period, 44.2 percent were extremely premature (less than 28 weeks) with low birth weight (less than 2,500 grams), 66.9 percent were low birth weight, 70.6 percent were premature (less than 37 weeks) and 63.8 percent were both low birth weight and premature.

Table 26 shows infant mortality in each LHA of the infants' usual residence, for 2005-2009 and for the year 2010. The left two columns show the LHA number and name. The three columns for 2005-2009 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 5 LHAs with statistically significant ratios (3 high and 2 low). For 2010, the table indicates the number of deaths in three age ranges: early neonatal (0 to 6 days), neonatal (0 to 27 days), and post-neonatal (28 to 364 days). The last two 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. There were 163 infant deaths and 457 stillbirths in 2010. More than half (67.5 percent) of infant deaths in 2010 occurred in the early neonatal period, of those, 93.6 percent were due to congenital anomalies or perinatal conditions. In 2010, perinatal conditions were the cause of 60.1 percent of infant deaths and 92.8 percent of stillbirths.

TABLE 24

INFANT MORTALITY BY AGE OF MOTHER AND BIRTH WEIGHT

BRITISH COLUMBIA, 2010

Age of Mother	Birth Weight (in Grams)				Total		
	<1500	1500–2499	2500+	N.S.	Number	Percent	Rate
<20	2	-	3	-	5	3.1	3.81
20-24	13	4	12	2	31	19.0	5.38
25-29	29	4	10	2	45	27.6	3.67
30-34	14	8	11	2	35	21.5	2.46
35-39	17	10	2	1	30	18.4	3.66
40+	6	2	1	-	9	5.5	4.68
N.S.	-	-	-	8	8	4.9	
TOTAL	**81**	**28**	**39**	**15**	**163**	**100.0**	**3.73**
Percent	**49.7**	**17.2**	**23.9**	**9.2**	**100.0**		
Rate	**216.58**	**13.97**	**0.95**		**3.73**		

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, 2010

Gestational Age (In Weeks)	Birth Weight (in Grams)				Total		
	<1500	1500–2499	2500+	N.S.	Number	Percent	Rate
<20	9	-	-	-	9	5.5	1,125.00
20-27	62	1	-	1	64	39.3	395.06
28-36	10	22	9	1	42	25.8	13.62
37-41	-	5	30	4	39	23.9	0.97
42+	-	-	-	-	-	-	-
N.S.	-	-	-	9	9	5.5	
TOTAL	**81**	**28**	**39**	**15**	**163**	**100.0**	**3.73**
Percent	**49.7**	**17.2**	**23.9**	**9.2**	**100.0**		
Rate	**216.58**	**13.97**	**0.95**		**3.73**		

Note: Infant Mortality – Age at death less than one year.
Rate per 1,000 live births in the gestational 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.

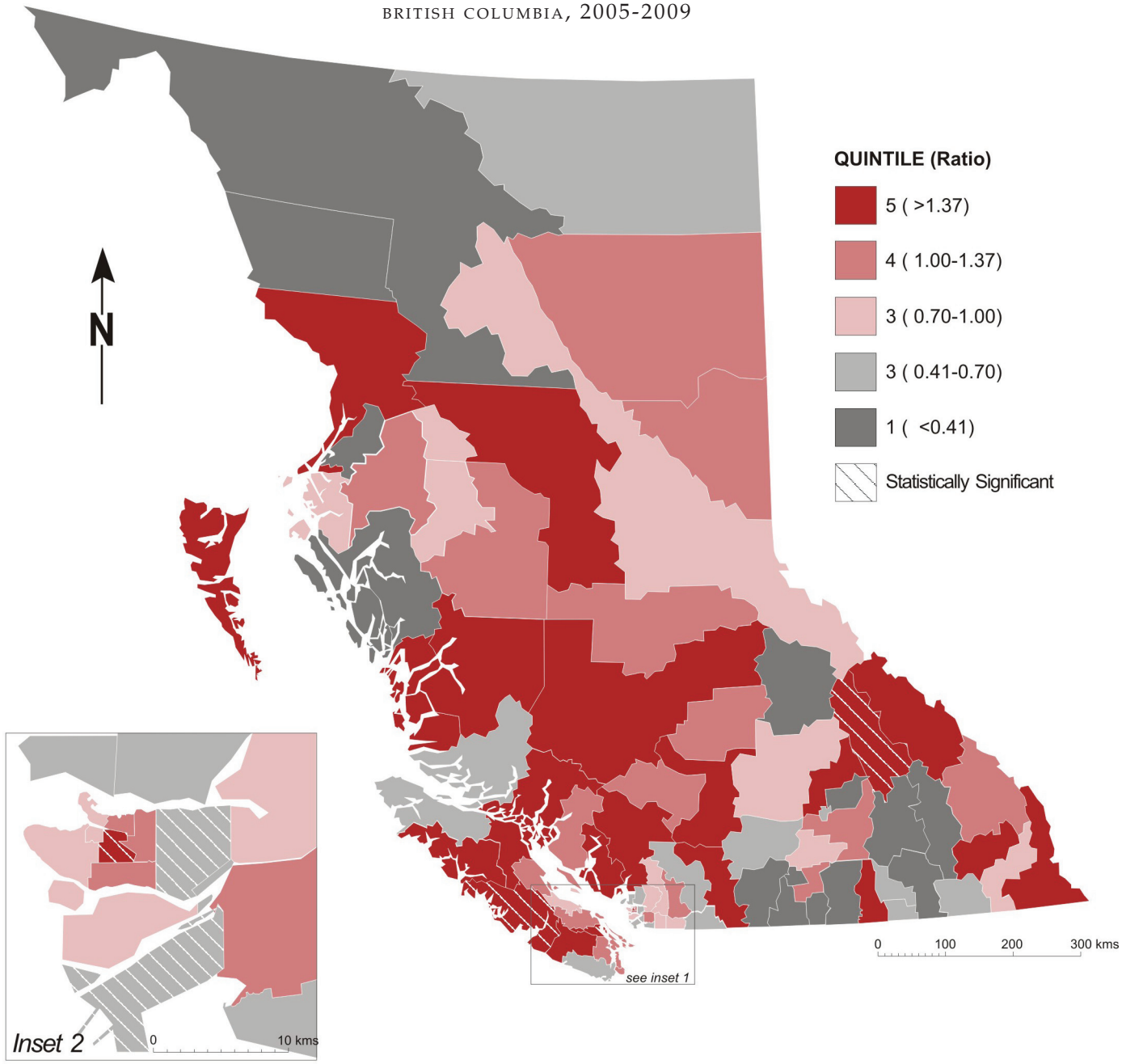
Local Health Area		2005–2009 Observed Deaths	Ratio	(p)	Rate	2010 Age at Death (in Days) 0–6	0–27	28–364	Total Number	Rate
001	Fernie	4	1.45		5.61	1	1	-	1	7.09
002	Cranbrook	4	0.84		3.27	-	1	-	1	3.58
003	Kimberley	2	1.40		5.42	-	-	-	-	-
004	Windermere	2	1.19		4.61	-	-	-	-	-
005	Creston	1	0.43		1.68	-	-	-	-	-
006	Kootenay Lake	-	-		-	1	1	-	1	29.41
007	Nelson	1	0.22		0.85	-	-	-	-	-
009	Castlegar	1	0.57		2.20	-	-	-	-	-
010	Arrow Lakes	-	-		-	-	-	-	-	-
011	Trail	2	0.65		2.51	-	-	-	-	-
012	Grand Forks	4	3.36		12.99	-	-	-	-	-
013	Kettle Valley	-	-		-	-	-	-	-	-
014	Southern Okanagan	1	0.41		1.59	-	-	-	-	-
015	Penticton	8	1.27		4.90	-	-	-	-	-
016	Keremeos	-	-		-	-	-	-	-	-
017	Princeton	-	-		-	-	-	-	-	-
018	Golden	2	1.48		5.75	-	-	-	-	-
019	Revelstoke	5	3.39	*	13.12	-	-	-	-	-
020	Salmon Arm	7	1.37		5.31	-	-	-	-	-
021	Armstrong - Spallumcheen	1	0.61		2.38	-	-	-	-	-
022	Vernon	14	1.30		5.05	-	-	-	-	-
023	Central Okanagan	24	0.80		3.10	6	8	3	11	6.61
024	Kamloops	17	0.88		3.41	5	5	1	6	5.74
025	100 Mile House	2	1.01		3.91	-	-	-	-	-
026	North Thompson	-	-		-	-	-	-	-	-
027	Cariboo - Chilcotin	10	1.79		6.92	-	1	-	1	3.75
028	Quesnel	6	1.24		4.79	1	1	1	2	8.66
029	Lillooet	1	1.09		4.22	1	1	-	1	20.83
030	South Cariboo	3	2.53		9.80	-	-	-	-	-
031	Merritt	1	0.42		1.64	-	-	1	1	9.43
032	Hope	3	2.11		8.17	-	-	1	1	16.39
033	Chilliwack	13	0.68		2.61	5	6	1	7	6.90
034	Abbotsford	29	0.88		3.42	9	10	-	10	5.79
035	Langley	22	0.85		3.27	3	3	1	4	2.91
037	Delta	7	0.42	*	1.61	2	3	-	3	3.56
038	Richmond	25	0.77		2.98	3	3	2	5	3.02
040	New Westminster	9	0.69		2.66	5	6	1	7	10.09
041	Burnaby	29	0.67	*	2.60	2	2	1	3	1.36
042	Maple Ridge	14	0.77		2.98	4	4	-	4	4.14
043	Coquitlam	33	0.81		3.15	6	8	-	8	3.79
044	North Vancouver	15	0.64		2.49	1	1	-	1	0.85
045	West Vancouver-Bowen Island	3	0.56		2.16	-	-	-	-	-
046	Sunshine Coast	6	1.48		5.72	-	1	-	1	4.52
047	Powell River	3	1.13		4.39	1	1	-	1	6.80
048	Howe Sound	13	1.50		5.82	1	1	-	1	2.12
049	Bella Coola Valley	2	2.33		9.01	-	-	-	-	-
050	Queen Charlotte	3	3.46		13.39	-	-	-	-	-
051	Snow Country	1	9.57		37.04	-	-	-	-	-
052	Prince Rupert	3	0.90		3.47	-	-	-	-	-
053	Upper Skeena	1	0.79		3.04	1	1	-	1	16.13
054	Smithers	4	0.95		3.69	-	-	1	1	4.35
055	Burns Lake	2	1.16		4.48	1	1	-	1	16.13
056	Nechako	8	1.90		7.34	-	2	-	2	8.44
057	Prince George	18	0.84		3.26	2	3	2	5	4.65
059	Peace River South	8	1.29		4.98	2	2	1	3	9.77
060	Peace River North	12	1.07		4.14	-	1	-	1	1.67
061	Greater Victoria	36	1.04		4.01	9	10	-	10	5.48
062	Sooke	9	0.68		2.62	3	3	2	5	6.05
063	Saanich	10	1.32		5.13	-	-	-	-	-
064	Gulf Islands	2	1.17		4.55	-	-	-	-	-
065	Cowichan	14	1.36		5.26	1	1	-	1	1.92
066	Lake Cowichan	3	3.54		13.70	-	-	-	-	-
067	Ladysmith	4	1.37		5.32	-	-	-	-	-
068	Nanaimo	23	1.35		5.21	2	2	-	2	2.13
069	Qualicum	4	0.83		3.22	-	-	1	1	3.88
070	Alberni	15	2.30	*	8.91	-	-	3	3	9.01
071	Courtenay	10	1.06		4.11	2	2	-	2	3.68
072	Campbell River	12	1.61		6.22	2	2	-	2	5.78
075	Mission	11	1.25		4.83	1	1	-	1	2.14
076	Agassiz - Harrison	1	0.53		2.06	1	1	-	1	11.90
077	Summerland	-	-		-	-	-	-	-	-
078	Enderby	-	-		-	-	-	-	-	-
080	Kitimat	-	-		-	-	-	-	-	-
081	Fort Nelson	1	0.52		2.01	-	-	-	-	-
083	Central Coast	2	3.47		13.42	-	-	-	-	-
084	Vancouver Island West	1	2.29		8.85	-	-	-	-	-
085	Vancouver Island North	2	0.67		2.61	-	-	-	-	-
087	Stikine	-	-		-	-	-	-	-	-
088	Terrace	6	1.25		4.85	-	-	2	2	8.77
092	Nisga'a	-	-		-	-	-	-	-	-
094	Telegraph Creek	-	-		-	-	-	-	-	-
161	Vancouver - City Centre	13	0.72		2.78	2	2	-	2	1.88
162	Vancouver - Dwtn Eastside	10	1.07		4.15	-	-	-	-	-
163	Vancouver - North East	22	1.03		3.98	1	1	1	2	1.89
164	Vancouver - Westside	21	0.95		3.67	-	1	1	2	1.83
165	Vancouver - Midtown	39	1.96	*	7.57	9	9	-	9	9.42
166	Vancouver - South	35	1.37		5.31	4	4	1	5	4.19
201	Surrey	111	1.17		4.54	8	9	6	15	2.88
202	South Surrey/White Rock	5	0.47		1.83	2	3	-	3	4.70
	PROVINCIAL TOTAL	**831**	**1.00**		**3.87**	**110**	**129**	**34**	**163**	**3.73**

Notes for this table follow the map.

FIGURE 36

INFANT MORTALITY BY LOCAL HEALTH AREA

BRITISH COLUMBIA, 2005-2009



Notes to Table 26
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. Rate per 1,000 live births in the specified LHA. Ratio – observed over the expected deaths. Non- residents are excluded. Total includes residents with unknown LHA.

Note: Ratio - Observed over the expected. Refer to Figure 1 to clarify geographical location of L HAs.

TABLE 27

SELECTED CAUSES OF INFANT DEATHS AND STILLBIRTHS

BRITISH COLUMBIA, 2010

Cause of Death	ICD-10 Code(s)	Infant Deaths – Age Group (in Days) <7	7–27	28–364	Total	Rate [1]	Stillbirths Number	Rate [2]
Congenital anomalies								
- of the nervous system	Q00-Q07	3	1	-	4	0.92	4	0.91
- of the eye, ear, face & neck	Q10-Q18	-	-	-	-	-	-	-
- of the heart and circulatory system	Q20-Q28	5	-	2	7	1.60	6	1.36
- of the respiratory system	Q30-Q34	-	-	-	-	-	-	-
- of the digestive system	Q35-Q45	-	-	-	-	-	-	-
- of the genital organs	Q50-Q56	-	-	-	-	-	-	-
- of the urinary system	Q60-Q64	4	-	-	4	0.92	-	-
- of the musculoskeletal system	Q65-Q79	2	-	1	3	0.69	-	-
Other and multiple system syndromes	Q80-Q89	-	-	1	1	0.23	6	1.36
Chromosomal anomalies	Q90-Q99	8	-	1	9	2.06	7	1.59
Total deaths due to congenital anomalies	**Q00-Q99**	**22**	**1**	**5**	**28**	**6.41**	**23**	**5.21**
Perinatal conditions								
Infant affected by maternal factors	P00-P04	33	-	-	33	7.56	102	23.12
Premature/postmature and fetal growth disorders	P05-P08	18	3	2	23	5.27	6	1.36
Birth trauma	P10-P15	-	-	-	-	-	-	-
Respiratory and cardiovascular disorders	P20-P29	13	6	1	20	4.58	7	1.59
Infections specific to the perinatal period	P35-P39	1	2	-	3	0.69	1	0.23
Hemorrhage and hematological disorders	P50-P61	2	1	-	3	0.69	1	0.23
Transitory endocrine and metabolic disorders	P70-P74	-	-	-	-	-	1	0.23
Digestive system disorders of fetus and newborn	P75-P78	-	1	-	1	0.23	-	-
Other disorders originating in the perinatal period	P80-P94, P96	14	1	-	15	3.44	228	51.67
Fetal death of unknown cause	P95	-	-	-	-	-	78	17.68
Total deaths due to perinatal conditions	**P00-P96**	**81**	**14**	**3**	**98**	**22.44**	**424**	**96.09**
Pneumonia/influenza	J09-J18.1, J18.8-J18.9	-	-	1	1	0.23	-	-
Sudden infant death syndrome (SIDS)[3]	R95	-	1	4	5	1.15	-	-
Other causes[3]		7	3	21	31	7.10	10	2.27
TOTAL		**110**	**19**	**34**	**163**	**37.33**	**457**	**103.57**
PERCENT		**67.5**	**11.7**	**20.9**	**100.0**			

Note: [1]Rate per 10,000 live births.
[2]Rate 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. The BC Coroners' Service classifies SIDS deaths as "SUDI" - please see glossary (under "SIDS") for explanation.
Non-residents are excluded.

Deaths Due to HIV

Mortality due to Human Immunodeficiency Virus (HIV) peaked in 1995 and has seen a general downward trend since then.

Table 28 shows the number of deaths due to HIV from 1995 to 2010 broken out by gender and six age groups. 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 2005-2010 most deaths due to HIV disease in BC occurred in individuals who were between 40 and 49 years of age.

Table 29 shows that the yearly numbers of HIV deaths over the past ten years numbers have fluctuated with no significantly increasing or decreasing trend. The HSDA 32-Vancouver had the highest mortality rate (13.03 deaths per 100,000 population), from 1995 to 2010.

FIGURE 37
DEATHS DUE TO HIV DISEASE BY AGE GROUP
BRITISH COLUMBIA, 2005–2010

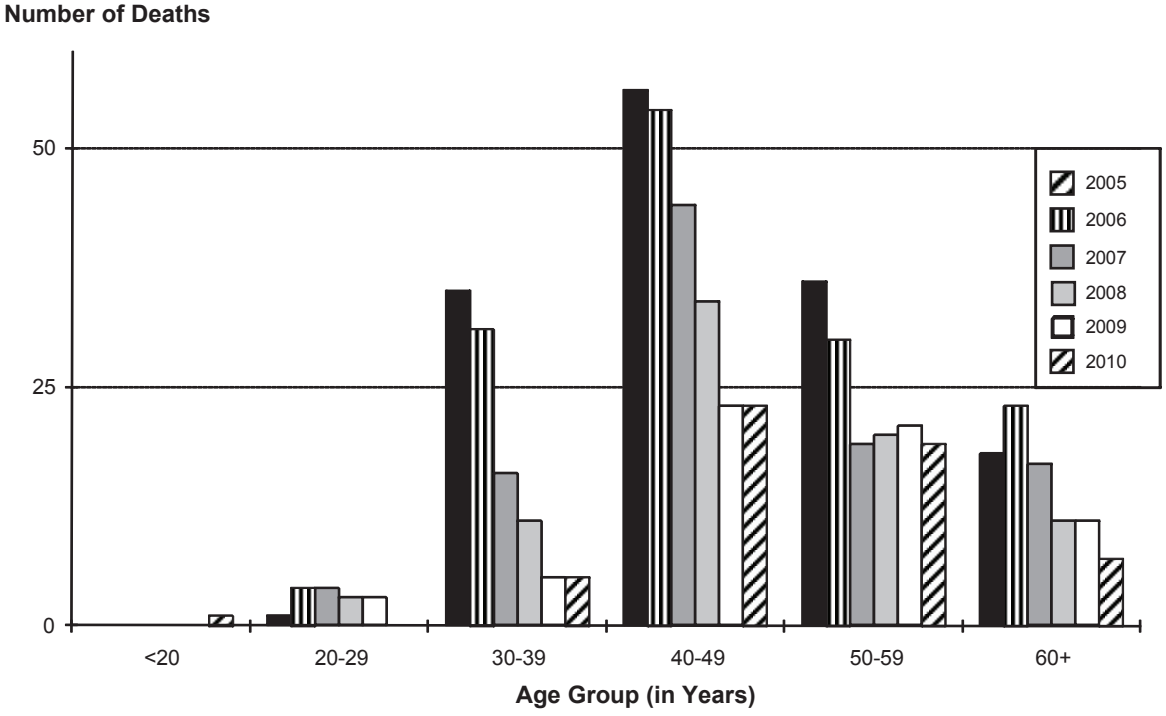


TABLE 28

DEATHS DUE TO HIV DISEASE BY GENDER AND AGE GROUP

BRITISH COLUMBIA, 1995–2010

Year of Death	Gender	Age at Death (in Years) <20	20–29	30–39	40–49	50–59	60+	Total
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	107	73	34	10	236
	F	-	4	6	6	-	1	17
	T	3	13	113	79	34	11	253
	Percent	1.2	5.1	44.7	31.2	13.4	4.3	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	13	5	-	26
	T	-	1	35	56	36	18	146
	Percent	-	0.7	24.0	38.4	24.7	12.3	100.0
2006	M	-	2	22	43	27	20	114
	F	-	2	9	11	3	3	28
	T	-	4	31	54	30	23	142
	Percent	-	2.8	21.8	38.0	21.1	16.2	100.0
2007	M	-	1	15	34	16	14	80
	F	-	3	1	10	3	3	20
	T	-	4	16	44	19	17	100
	Percent	-	4.0	16.0	44.0	19.0	17.0	100.0
2008	M	-	1	7	28	14	10	60
	F	-	2	4	6	6	1	19
	T	-	3	11	34	20	11	79
	Percent	-	3.8	13.9	43.0	25.3	13.9	100.0
2009	M	-	2	3	18	19	11	53
	F	-	1	2	5	2	-	10
	T	-	3	5	23	21	11	63
	Percent	-	4.8	7.9	36.5	33.3	17.5	100.0
2010	M	-	-	3	17	15	7	42
	F	1	-	2	6	4	-	13
	T	1	-	5	23	19	7	55
	Percent	1.8	-	9.1	41.8	34.5	12.7	100.0
1995-2010	**M**	**4**	**64**	**541**	**625**	**336**	**158**	**1,728**
	F	**1**	**38**	**91**	**118**	**41**	**17**	**306**
	T	**5**	**102**	**632**	**743**	**377**	**175**	**2,034**
	Percent	**0.2**	**5.0**	**31.1**	**36.5**	**18.5**	**8.6**	**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, 1995–2010

	Health Service Delivery Area	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	1995–2010 Number	Percent	Rate
11	East Kootenay	1	-	2	-	-	-	1	-	1	-	1	-	-	-	-	-	6	0.3	0.56
12	Kootenay Boundary	3	2	-	1	1	-	-	2	-	1	-	2	-	2	-	-	14	0.7	1.28
13	Okanagan	9	7	2	4	2	3	3	3	6	2	5	11	1	2	2	3	65	3.2	1.45
14	Thompson Cariboo Shuswap	-	3	2	2	2	2	6	2	4	6	2	4	3	1	3	1	43	2.1	1.43
21	Fraser East	6	7	1	5	3	3	2	4	1	5	6	4	1	3	2	2	55	2.7	1.52
22	Fraser North	21	15	8	6	7	11	8	10	10	8	8	10	7	6	3	12	150	7.4	1.93
23	Fraser South	17	23	6	4	11	7	11	10	8	5	12	9	13	5	5	5	151	7.4	1.71
31	Richmond	4	4	5	2	2	1	1	-	1	2	3	1	1	2	1	-	30	1.5	1.20
32	Vancouver	182	146	66	65	53	73	60	62	74	50	78	67	42	27	31	17	1,093	53.7	13.03
33	North Shore/ Coast Garibaldi	12	11	7	5	5	3	3	2	6	3	7	5	6	7	2	1	85	4.2	2.27
41	South Vancouver Island	17	21	10	10	13	7	9	3	8	9	9	17	11	11	6	2	163	8.0	3.33
42	Central Vancouver Island	14	6	4	3	4	8	4	4	4	5	6	3	7	4	5	4	85	4.2	2.48
43	North Vancouver Island	2	1	1	-	-	4	2	-	1	2	3	2	-	2	-	1	21	1.0	1.30
51	Northwest	2	1	-	-	-	-	-	-	-	1	2	-	2	3	1	3	15	0.7	1.34
52	Northern Interior	4	5	2	2	-	-	1	3	3	5	4	7	6	2	2	1	47	2.3	2.29
53	Northeast	1	-	-	1	-	-	-	1	-	1	-	-	-	1	-	1	6	0.3	0.66
	N.S.	-	1	1	-	-	-	-	-	-	-	-	-	-	1	-	2	5	0.2	
	PROVINCIAL TOTAL	**295**	**253**	**117**	**110**	**103**	**122**	**111**	**106**	**127**	**105**	**146**	**142**	**100**	**79**	**63**	**55**	**2,034**	**100.0**	**3.47**

Note: Health Service Delivery Area 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, deaths due to suicide, homicide, and deaths 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 2010, there were 1,669 deaths due to external causes or approximately 54 external cause deaths for each 1,000 deaths in BC (see Table 30).

Of the 1,669 deaths:

- 454 were suicides
- 240 were motor vehicle accidents
- 493 were unintentional falls
- 259 were unintentional poisonings
- 34 were accidental drownings
- 35 were homicides
- 76 were due to other external causes

Males accounted for 65.4 percent of deaths by external causes as shown in Table 30. The leading four causes of external deaths in males in 2010 (in ASMR rank order) were suicide (1.50), accidental falls (0.77), accidental poisoning (0.74), and motor vehicle accidents (0.66). For females, the leading four (in ASMR rank order) were accidental falls (0.56), suicide (0.35), accidental poisoning (0.34), and motor vehicle accidents (0.33).

Table 31 shows the allocation of external death causes according to the LHA of the deceased's usual residence. The highest ASMRs in 2010 are found in the following LHAs (with 5 or more deaths): Vancouver Island North (11.17), Keremeos (10.28), Agassiz - Harrison (8.33), Fort Nelson (8.06), and Fernie (7.53).

Table 32 shows the number of deaths from suicide classified by month of occurrence and by gender. Percentages across months are also given. In 2010, there were about 4.0 times more male suicides than female suicides. The data for 2010 shows that December was the month with the fewest number of suicides (21) while May was the month with the highest number of suicides (55).

Coroner's investigations into "externally caused" deaths can be lengthy, resulting in delays in determining the final causes. For this reason, recent year counts and rates may be underestimated and therefore should be interpreted with caution.

TABLE 30
EXTERNAL CAUSES OF DEATH BY GENDER
BRITISH COLUMBIA, 2010

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	159	0.66	81	0.33	240	0.49
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	14	0.06	3	0.01	17	0.03
Accidental drowning (inc water transport)	V90, V92, W65-W74	27	0.11	7	0.03	34	0.07
Accidental falls	W00-W19	231	0.77	262	0.56	493	0.66
Accident caused by machinery	W24, W28-W31	4	0.01	-	-	4	0.01
Accidental firearm discharge	W32-W34	1	0.00	-	-	1	0.00
Exposure to smoke, fire and flames	X00-X09	17	0.07	8	0.03	25	0.05
Accidental poisoning	X40-X49	175	0.74	84	0.34	259	0.54
All other accidents	W20-W23, W25-W27, W35-W64, W75-W99, X10-X39, X50-X59, Y35-Y36, Y40-Y84, Y88	45	0.17	31	0.08	76	0.12
Suicide	X60-X84, Y870	364	1.50	90	0.35	454	0.92
Homicide	X85-Y09, Y871	31	0.15	4	0.02	35	0.08
External events of undetermined intent	Y10-Y34, Y872	16	0.06	8	0.03	24	0.05
Sequelae of other external causes	Y86, Y89	7	0.02	-	-	7	0.01
TOTAL		**1,091**	**4.33**	**578**	**1.77**	**1,669**	**3.02**

Note: ASMR – Age Standardized Mortality Rate 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	2	-	1	5	-	1	3	-	-	12	7.53
002	Cranbrook	4	-	1	2	1	-	6	2	1	17	5.94
003	Kimberley	1	-	1	-	-	-	-	-	-	2	2.45
004	Windermere	2	1	-	2	-	-	2	-	-	7	5.56
005	Creston	2	-	-	7	-	-	3	-	2	14	6.98
006	Kootenay Lake	-	-	-	-	-	-	1	-	-	1	3.13
007	Nelson	-	-	-	5	-	1	4	-	-	10	2.80
009	Castlegar	1	1	1	3	-	1	-	-	1	8	3.82
010	Arrow Lakes	-	-	-	2	-	-	-	-	2	4	4.08
011	Trail	1	-	1	4	-	-	1	-	-	7	2.79
012	Grand Forks	2	-	-	3	-	1	1	-	-	7	6.03
013	Kettle Valley	-	-	-	-	-	-	1	-	-	1	1.35
014	Southern Okanagan	1	-	-	3	-	-	3	-	1	8	3.52
015	Penticton	1	-	1	14	-	-	5	-	-	21	2.41
016	Keremeos	1	-	1	1	-	1	1	-	1	6	10.28
017	Princeton	-	-	-	-	-	-	1	-	-	1	3.80
018	Golden	-	-	-	1	-	-	-	-	-	1	1.17
019	Revelstoke	-	-	-	1	-	-	2	-	-	3	2.63
020	Salmon Arm	1	1	4	8	-	2	8	-	2	26	6.60
021	Armstrong - Spallumcheen	-	-	-	1	-	-	1	-	1	3	1.54
022	Vernon	6	-	5	6	1	-	9	1	2	30	4.05
023	Central Okanagan	7	4	5	15	1	2	19	-	8	61	2.57
024	Kamloops	12	2	12	15	-	4	12	-	2	59	4.98
025	100 Mile House	3	-	-	2	1	1	2	-	-	9	3.44
026	North Thompson	1	-	1	-	-	-	1	-	-	3	7.54
027	Cariboo - Chilcotin	5	-	1	5	-	-	3	-	4	18	6.26
028	Quesnel	8	-	4	2	-	1	3	-	1	19	7.31
029	Lillooet	-	-	1	1	-	-	1	-	-	3	6.61
030	South Cariboo	-	-	-	-	-	-	2	-	-	2	3.21
031	Merritt	1	-	2	1	-	-	3	1	-	8	5.84
032	Hope	2	-	1	2	-	1	2	-	-	8	7.51
033	Chilliwack	2	-	4	15	2	1	7	1	1	33	2.68
034	Abbotsford	10	1	13	13	-	2	4	2	3	48	2.97
035	Langley	4	-	9	7	-	-	11	-	2	33	2.25
037	Delta	5	-	3	15	-	1	8	-	5	37	3.03
038	Richmond	5	-	5	20	-	-	11	-	7	48	1.93
040	New Westminster	6	-	4	4	-	-	4	-	1	19	2.32
041	Burnaby	3	-	12	13	2	1	18	2	4	55	1.92
042	Maple Ridge	6	-	8	4	-	-	4	1	1	24	2.12
043	Coquitlam	4	1	8	19	-	-	11	3	4	50	2.20
044	North Vancouver	3	-	3	12	-	1	13	-	1	33	2.02
045	West Vancouver-Bowen Island	1	-	1	9	2	-	2	-	-	15	1.70
046	Sunshine Coast	1	-	1	3	-	1	6	-	-	12	3.82
047	Powell River	3	-	1	2	-	-	4	-	2	12	7.40
048	Howe Sound	1	-	-	6	-	-	3	-	-	10	2.89
049	Bella Coola Valley	-	-	-	-	-	-	-	-	2	2	5.69
050	Queen Charlotte	-	-	2	-	-	-	-	-	-	2	3.61
051	Snow Country	-	-	-	-	-	-	1	-	-	1	14.33
052	Prince Rupert	1	-	1	4	-	1	2	-	-	9	5.15
053	Upper Skeena	2	-	1	-	-	-	1	-	-	4	7.54
054	Smithers	1	-	1	-	-	-	2	1	-	5	3.52
055	Burns Lake	4	-	2	-	-	-	-	-	-	6	5.97
056	Nechako	1	-	1	1	-	-	3	-	1	7	4.92
057	Prince George	13	-	3	7	-	-	15	2	3	43	4.37
059	Peace River South	6	-	-	3	-	-	2	-	1	12	4.01
060	Peace River North	7	-	-	2	-	-	5	-	2	16	4.90
061	Greater Victoria	12	1	18	48	1	-	32	2	6	120	3.44
062	Sooke	4	-	3	7	-	-	8	-	-	22	3.07
063	Saanich	-	-	2	17	-	1	6	-	4	30	3.18
064	Gulf Islands	-	-	-	1	-	1	2	-	-	4	1.72
065	Cowichan	4	-	3	8	1	-	7	-	2	25	3.79
066	Lake Cowichan	1	-	-	-	-	-	2	-	-	3	5.22
067	Ladysmith	1	1	-	4	-	-	2	-	-	8	2.91
068	Nanaimo	3	1	10	12	1	-	12	1	1	41	3.11
069	Qualicum	3	-	2	6	-	-	2	-	1	14	1.99
070	Alberni	1	-	1	6	-	2	4	-	-	14	4.35
071	Courtenay	2	1	2	9	-	-	9	-	3	26	3.65
072	Campbell River	3	-	6	7	1	-	11	1	-	29	6.71
075	Mission	6	-	6	3	1	-	3	-	1	20	4.19
076	Agassiz - Harrison	3	-	1	-	-	-	1	-	1	6	8.33
077	Summerland	3	-	-	3	-	-	3	-	-	9	6.11
078	Enderby	-	-	1	4	-	-	1	-	-	6	4.89
080	Kitimat	-	-	2	1	-	-	-	-	-	3	2.21
081	Fort Nelson	3	-	-	-	-	-	1	1	-	5	8.06
083	Central Coast	-	-	-	-	-	-	-	-	-	-	-
084	Vancouver Island West	-	-	-	-	-	-	-	-	-	-	-
085	Vancouver Island North	2	-	1	1	3	3	4	-	-	14	11.17
087	Stikine	-	-	-	-	-	-	-	-	-	-	-
088	Terrace	4	-	3	1	-	-	7	-	1	16	6.63
092	Nisga'a	1	-	-	-	-	-	-	-	-	1	3.86
094	Telegraph Creek	-	-	-	1	-	-	1	-	-	2	27.36
161	Vancouver - City Centre	1	-	8	6	-	-	16	1	3	35	2.31
162	Vancouver - Downtown E.side	1	-	21	2	-	-	21	-	2	47	5.18
163	Vancouver - North East	-	-	1	7	1	-	9	1	-	19	1.49
164	Vancouver - Westside	1	-	6	12	1	1	6	-	1	28	1.55
165	Vancouver - Midtown	2	1	1	4	1	-	5	1	3	18	1.71
166	Vancouver - South	4	-	4	15	2	-	9	3	1	38	2.05
201	Surrey	17	1	25	20	1	2	27	5	10	108	2.63
202	South Surrey/White Rock	4	-	5	18	1	-	5	3	2	38	3.13
	PROVINCIAL TOTAL	**240**	**17**	**259**	**493**	**25**	**34**	**454**	**35**	**112**	**1,669**	**3.02**
	PERCENT	**14.4**	**1.0**	**15.5**	**29.5**	**1.5**	**2.0**	**27.2**	**2.1**	**6.7**	**100.0**	

Notes for table follow table 32.

TABLE 32

SUICIDE DEATHS BY MONTH AND GENDER

BRITISH COLUMBIA, 2010

Month	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
January	33	9.1	8	8.9	41	9.0
February	32	8.8	7	7.8	39	8.6
March	29	8.0	16	17.8	45	9.9
April	27	7.4	9	10.0	36	7.9
May	45	12.4	10	11.1	55	12.1
June	26	7.1	6	6.7	32	7.0
July	36	9.9	5	5.6	41	9.0
August	30	8.2	7	7.8	37	8.1
September	41	11.3	2	2.2	43	9.5
October	29	8.0	11	12.2	40	8.8
November	20	5.5	4	4.4	24	5.3
December	16	4.4	5	5.6	21	4.6
TOTAL	**364**	**100.0**	**90**	**100.0**	**454**	**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

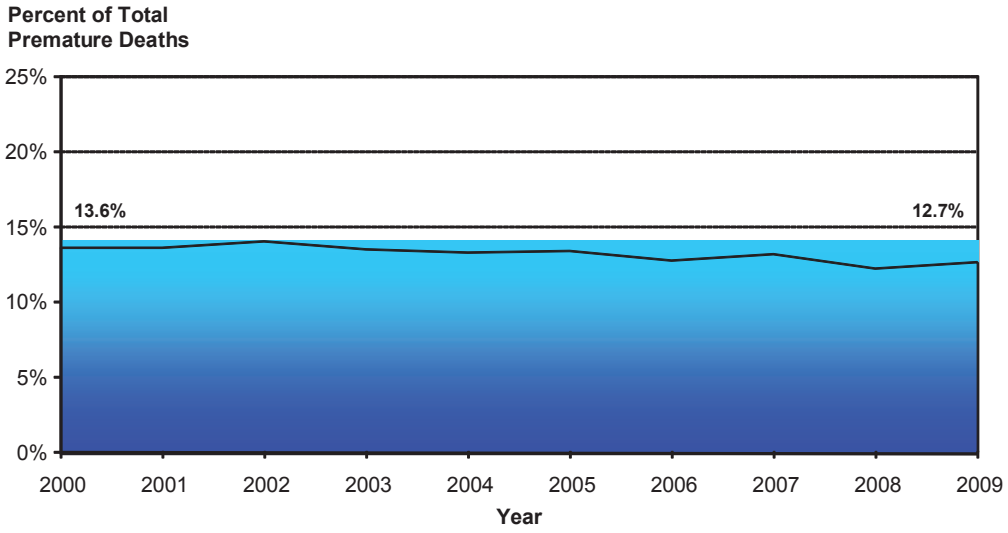
Note: Based on usual residence. ASMR – per 10,000 standard population (Canada 1991 Census). PERCENT – Provincial total for each cause as a percent of the Provincial total for all deaths from external causes. Other is comprised of accident caused by machinery, accidental firearm discharge, all other accidents,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

Vital Statistics Information Box

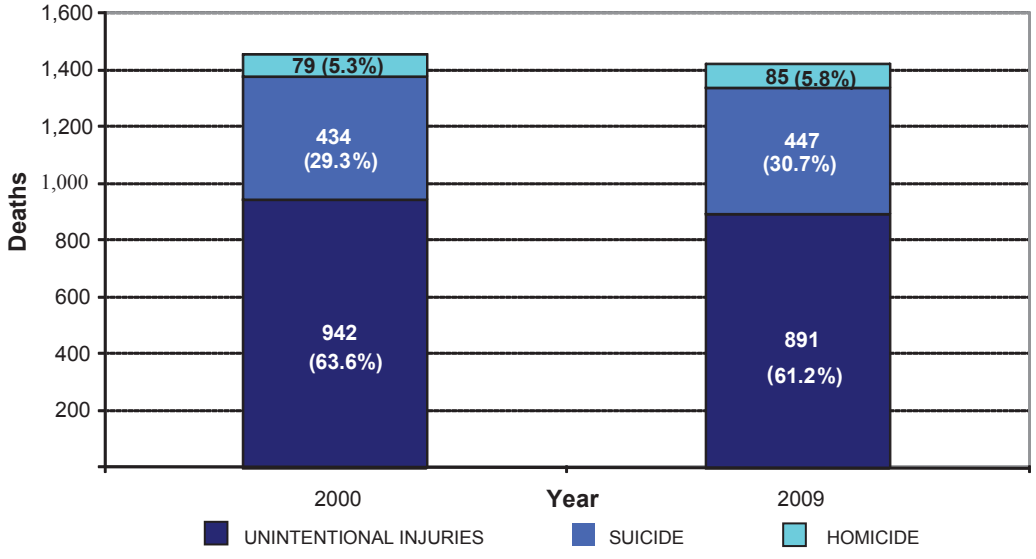
Premature (<75 years) External Causes of Death in British Columbia, 2000 to 2009

From 2000 to 2009, deaths among those under the age of 75 have accounted for just 38.1 percent of all deaths; however, 78.2 percent of deaths from external causes were in this age group. The share of premature deaths attributable to external causes has fallen from 13.6 percent in 2000 to 12.7 percent in 2009. Unintentional injuries account for the vast majority (61.2 percent in 2009) of deaths from external causes among those under the age of 75.

Share of Premature Mortality Attributable to External Causes, British Columbia 2000 to 2009



Deaths Under the Age of 75 Years due to Unintentional Injuries, Homicide and Suicide, British Columbia 2000 to 2009



Mortality Due to All Causes of Death

Table 33 shows the number of deaths from all causes in each LHA for 2010 and the previous five-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. Near half (44) of LHAs had statistically significant ratios in 2010 (30 high and 14 low), 60 LHAs had statistically significant ratios (45 high and 15 low) in the period of 2005-2009, and 39 LHAs had statistically significant ratios (27 high and 12 low) in both 2010 and the previous five-year period.

In 2010, the LHAs with the five highest statistically significant SMRs were Central Coast (2.12), Telegraph Creek (1.77), Vancouver Island North (1.76), Fort Nelson (1.75), and Snow Country (1.62).

Figure 38 shows the SMRs grouped into colour-coded quintiles. The map provides a graphical view of the provincial variation of SMRs. Lower ratios were more frequently observed in the south and higher ratios in central and northern BC.

Vital Statistics Information Box

DEATHS AGED 65+ BY GENDER AND HEALTH SERVICE DELIVERY AREA

BRITISH COLUMBIA, 2010

Health Service Delivery Area	Gender	Age at Death 65-69	70-74	75-79	80-84	85-89	90-94	95-99	100+	Total	% 65+
11 East Kootenay	M	23	44	48	54	44	28	6	1	320	77.5%
	F	10	24	31	52	60	48	15	2	296	81.8%
12 Kootenay Boundary	M	27	34	48	61	67	28	9	2	383	72.1%
	F	18	36	43	56	78	59	33	4	391	83.6%
13 Okanagan	M	116	165	243	301	285	168	69	9	1,690	80.2%
	F	95	122	157	260	378	263	139	15	1,634	87.5%
14 Thompson Cariboo Shuswap	M	93	133	148	159	125	47	22	2	1,020	71.5%
	F	65	95	94	122	138	88	41	8	809	80.5%
21 Fraser East	M	88	97	141	158	152	80	38	3	1,009	75.0%
	F	76	95	120	153	186	164	67	15	1,030	85.0%
22 Fraser North	M	124	181	215	251	279	164	48	6	1,704	74.4%
	F	99	130	185	256	332	292	110	28	1,737	82.4%
23 Fraser South	M	190	184	279	331	320	216	62	12	2,204	72.3%
	F	121	156	208	331	435	357	139	25	2,106	84.1%
31 Richmond	M	38	48	67	71	76	41	9	0	450	77.8%
	F	30	29	52	68	93	80	36	12	479	83.5%
32 Vancouver	M	139	169	248	270	263	175	73	12	1,864	72.4%
	F	82	106	165	243	325	290	169	58	1,706	84.3%
33 North Shore/Coast Garibaldi	M	69	82	126	139	149	94	41	4	896	78.6%
	F	40	49	75	136	194	159	87	18	906	83.7%
41 South Vancouver Island	M	103	110	191	244	287	192	66	12	1,542	78.1%
	F	84	85	162	234	385	316	175	30	1,677	87.7%
42 Central Vancouver Island	M	114	134	169	203	206	132	30	8	1,312	75.9%
	F	79	86	136	185	264	175	87	16	1,221	84.2%
43 North Vancouver Island	M	38	61	69	81	65	34	16	1	518	70.5%
	F	32	50	49	60	94	60	27	5	476	79.2%
51 Northwest	M	26	28	33	41	29	12	2	1	257	66.9%
	F	17	26	18	32	16	14	9	1	197	67.5%
52 Northern Interior	M	56	62	59	70	42	29	5	1	501	64.7%
	F	39	40	44	59	49	39	16	4	418	69.4%
53 Northeast	M	15	21	27	30	15	12	6	0	217	58.1%
	F	13	10	24	13	30	14	4	3	157	70.7%
Provincial Total	**M**	**1,260**	**1,554**	**2,112**	**2,464**	**2,404**	**1,453**	**502**	**74**	**15,900**	**74.4%**
	F	**901**	**1,139**	**1,563**	**2,260**	**3,057**	**2,418**	**1,154**	**244**	**15,243**	**83.6%**

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.

Table 33

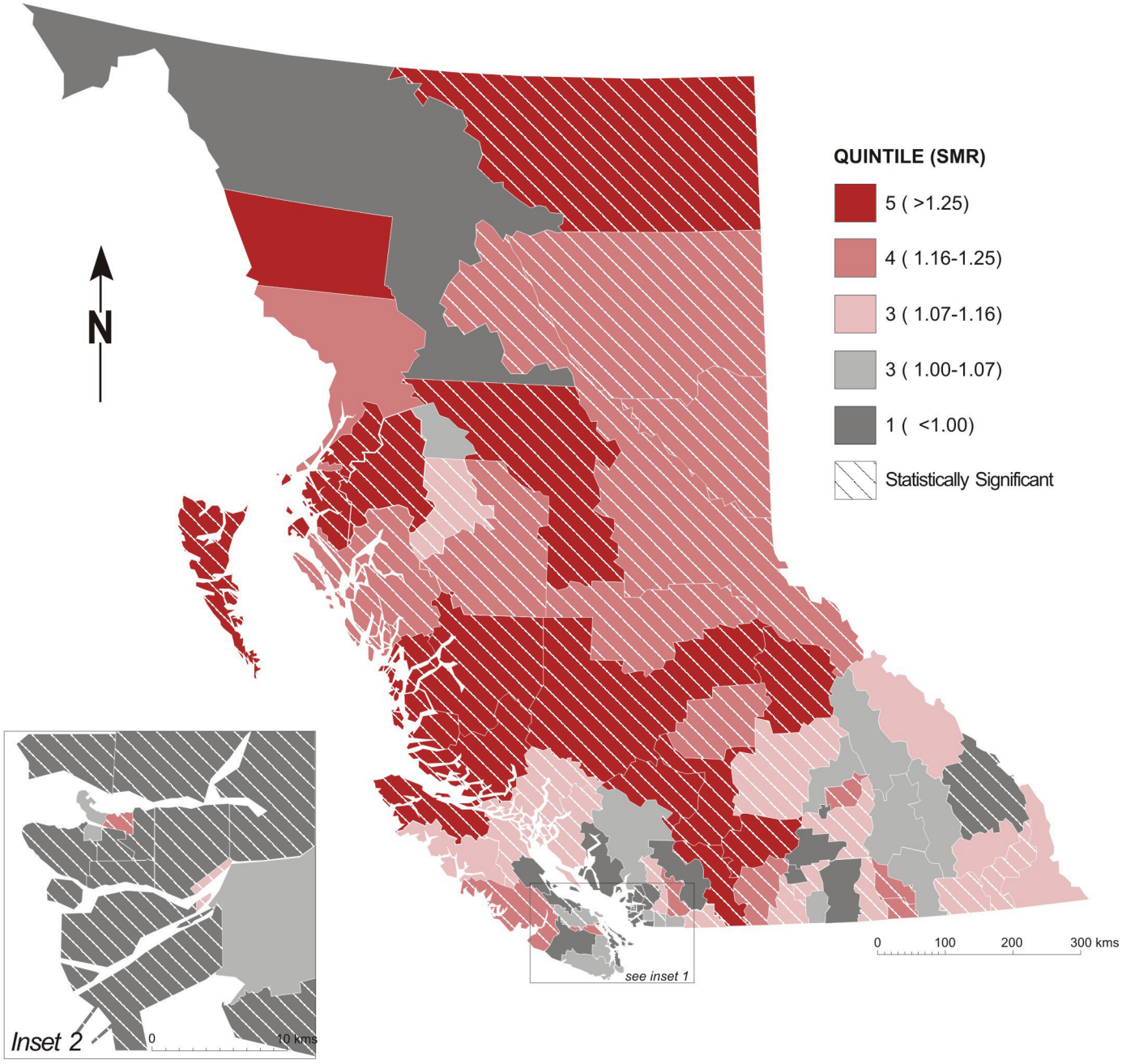
STANDARDIZED MORTALITY RATIO - ALL CAUSES OF DEATH BY LOCAL HEALTH AREA, BRITISH COLUMBIA, 2005–2009 AND 2010

Local Health Area		2005–2009 Observed Deaths	SMR	(p)	2010 Observed Deaths	Expected Deaths	SMR	(p)	95% Confidence Interval Lower		Upper
001	Fernie	433	1.08		75	77.68	0.97		0.76	-	1.21
002	Cranbrook	1,054	1.15	*	215	182.92	1.18	*	1.02	-	1.34
003	Kimberley	411	1.08		79	74.32	1.06		0.84	-	1.32
004	Windermere	253	0.76	*	68	67.18	1.01		0.79	-	1.28
005	Creston	747	1.09	*	144	133.57	1.08		0.91	-	1.27
006	Kootenay Lake	161	1.02		37	30.19	1.23		0.86	-	1.69
007	Nelson	935	1.06		179	172.39	1.04		0.89	-	1.20
009	Castlegar	623	1.21	*	116	100.64	1.15		0.95	-	1.38
010	Arrow Lakes	231	1.06		44	41.64	1.06		0.77	-	1.42
011	Trail	1,093	1.20	*	252	174.53	1.44	*	1.27	-	1.63
012	Grand Forks	515	1.13	*	118	89.15	1.32	*	1.10	-	1.59
013	Kettle Valley	126	0.87		28	30.60	0.92		0.61	-	1.32
014	Southern Okanagan	1,300	1.05		238	242.71	0.98		0.86	-	1.11
015	Penticton	2,663	1.07	*	496	477.22	1.04		0.95	-	1.13
016	Keremeos	344	1.15	*	69	56.17	1.23		0.96	-	1.55
017	Princeton	296	1.20	*	65	49.79	1.31	*	1.01	-	1.66
018	Golden	208	1.09		35	37.40	0.94		0.65	-	1.30
019	Revelstoke	259	1.02		51	50.17	1.02		0.76	-	1.34
020	Salmon Arm	1,632	1.01		368	317.65	1.16	*	1.04	-	1.28
021	Armstrong - Spallumcheen	392	0.97		101	82.71	1.22		0.99	-	1.48
022	Vernon	3,108	1.08	*	617	574.52	1.07		0.99	-	1.16
023	Central Okanagan	7,414	0.98		1,528	1,510.95	1.01		0.96	-	1.06
024	Kamloops	4,129	1.12	*	829	758.55	1.09	*	1.02	-	1.17
025	100 Mile House	649	1.17	*	125	111.04	1.13		0.94	-	1.34
026	North Thompson	193	1.37	*	40	27.33	1.46	*	1.05	-	1.99
027	Cariboo - Chilcotin	923	1.26	*	197	151.74	1.30	*	1.12	-	1.49
028	Quesnel	881	1.21	*	200	150.66	1.33	*	1.15	-	1.52
029	Lillooet	211	1.49	*	32	27.33	1.17		0.80	-	1.65
030	South Cariboo	357	1.27	*	71	57.55	1.23		0.96	-	1.56
031	Merritt	550	1.35	*	116	78.96	1.47	*	1.21	-	1.76
032	Hope	527	1.45	*	110	70.09	1.57	*	1.29	-	1.89
033	Chilliwack	3,530	1.14	*	678	635.06	1.07		0.99	-	1.15
034	Abbotsford	4,626	1.01		916	898.58	1.02		0.95	-	1.09
035	Langley	4,461	1.05	*	946	942.58	1.00		0.94	-	1.07
037	Delta	3,133	0.95	*	644	735.51	0.88	*	0.81	-	0.95
038	Richmond	4,479	0.73	*	929	1,199.76	0.77	*	0.73	-	0.83
040	New Westminster	2,544	1.15	*	489	423.90	1.15	*	1.05	-	1.26
041	Burnaby	6,890	0.93	*	1,321	1,420.10	0.93	*	0.88	-	0.98
042	Maple Ridge	2,839	1.13	*	648	516.59	1.25	*	1.16	-	1.35
043	Coquitlam	4,760	0.91	*	983	1,087.27	0.90	*	0.85	-	0.96
044	North Vancouver	4,145	0.90	*	751	924.11	0.81	*	0.76	-	0.87
045	West Vancouver-Bowen Island	2,351	0.83	*	426	540.11	0.79	*	0.72	-	0.87
046	Sunshine Coast	1,350	0.97		273	276.67	0.99		0.87	-	1.11
047	Powell River	996	1.09	*	217	180.44	1.20	*	1.05	-	1.37
048	Howe Sound	607	1.03		103	125.37	0.82	*	0.67	-	1.00
049	Bella Coola Valley	103	1.26	*	20	15.94	1.25		0.77	-	1.94
050	Queen Charlotte	168	1.42	*	32	21.95	1.46		1.00	-	2.06
051	Snow Country	16	1.20		4	2.47	1.62		0.44	-	4.15
052	Prince Rupert	474	1.27	*	88	75.43	1.17		0.94	-	1.44
053	Upper Skeena	128	1.05		30	23.32	1.29		0.87	-	1.84
054	Smithers	451	1.16	*	72	82.28	0.88		0.68	-	1.10
055	Burns Lake	280	1.23	*	55	44.53	1.23		0.93	-	1.61
056	Nechako	536	1.41	*	99	79.85	1.24	*	1.01	-	1.51
057	Prince George	2,770	1.23	*	565	462.56	1.22	*	1.12	-	1.33
059	Peace River South	828	1.21	*	184	137.94	1.33	*	1.15	-	1.54
060	Peace River North	732	1.19	*	162	123.78	1.31	*	1.12	-	1.53
061	Greater Victoria	10,785	1.01		2,075	1,969.55	1.05	*	1.01	-	1.10
062	Sooke	1,711	1.00		357	361.64	0.99		0.89	-	1.10
063	Saanich	3,246	0.84	*	641	753.36	0.85	*	0.79	-	0.92
064	Gulf Islands	682	0.78	*	146	170.17	0.86		0.72	-	1.01
065	Cowichan	2,295	1.01		461	460.25	1.00		0.91	-	1.10
066	Lake Cowichan	212	0.98		61	43.12	1.41	*	1.08	-	1.82
067	Ladysmith	1,108	1.21	*	224	179.66	1.25	*	1.09	-	1.42
068	Nanaimo	4,495	1.05	*	976	851.16	1.15	*	1.08	-	1.22
069	Qualicum	2,564	0.95	*	503	546.45	0.92		0.84	-	1.00
070	Alberni	1,424	1.21	*	308	233.75	1.32	*	1.17	-	1.47
071	Courtenay	2,565	0.99		535	539.15	0.99		0.91	-	1.08
072	Campbell River	1,531	1.16	*	352	277.51	1.27	*	1.14	-	1.41
075	Mission	1,430	1.24	*	262	228.04	1.15	*	1.01	-	1.30
076	Agassiz - Harrison	337	0.94		73	66.35	1.10		0.86	-	1.38
077	Summerland	683	0.93		131	141.05	0.93		0.78	-	1.10
078	Enderby	393	1.22	*	79	65.49	1.21		0.95	-	1.50
080	Kitimat	306	1.21	*	66	53.54	1.23		0.95	-	1.57
081	Fort Nelson	106	1.48	*	28	15.96	1.75	*	1.17	-	2.54
083	Central Coast	62	2.05	*	12	5.67	2.12	*	1.09	-	3.70
084	Vancouver Island West	67	1.07		10	10.49	0.95		0.46	-	1.75
085	Vancouver Island North	415	1.60	*	97	55.01	1.76	*	1.43	-	2.15
087	Stikine	22	0.87		5	4.83	1.03		0.33	-	2.41
088	Terrace	670	1.35	*	144	104.10	1.38	*	1.17	-	1.63
092	Nisga'a	73	1.93	*	8	7.68	1.04		0.45	-	2.05
094	Telegraph Creek	20	1.32		5	2.82	1.77		0.57	-	4.14
161	Vancouver - City Centre	3,150	1.02		615	603.78	1.02		0.94	-	1.10
162	Vancouver - Downtown E.side	2,514	1.21	*	446	384.42	1.16	*	1.05	-	1.27
163	Vancouver - North East	2,893	0.86	*	563	674.74	0.83	*	0.77	-	0.91
164	Vancouver - Westside	3,727	0.80	*	738	875.17	0.84	*	0.78	-	0.91
165	Vancouver - Midtown	2,283	0.91	*	408	494.24	0.83	*	0.75	-	0.91
166	Vancouver - South	4,218	0.85	*	800	946.81	0.84	*	0.79	-	0.91
201	Surrey	8,757	1.01		1,871	2,025.75	0.92	*	0.88	-	0.97
202	South Surrey/White Rock	4,301	0.92	*	849	1,007.86	0.84	*	0.79	-	0.90
	PROVINCIAL TOTAL	**154,911**	**1.00**		**31,143**	**31,143.00**	**1.00**		**0.99**	**-**	**1.01**

Note: SMR - Standardized Mortality Ratio. *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



Notes to Table 33
SMR - Standardized Mortality Ratio.
*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.

Note: SMR - Standardized Mortality Ratio.
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 is 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 of age 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. The Percent of PYLL column shows each disease category's proportion of the total PYLL for all causes. The Average PYLL column is the disease category's Total PYLL divided by number of deaths. The PYLLSR column 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.

Motor vehicle accidents (MVAs), which claim many young lives, have a high value for average PYLL at 33.5 years. Malignant neoplasms, on the other hand, although claiming many lives (4,660 under the age of 75) have a relatively low average PYLL at 12.6 years since Malignant neoplasms tend to afflict older individuals more frequently.

Figure 39 compares the profiles of PYLLSR and ASMR contrasting several major causes of death. The graph shows that 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 2010 have been ranked according to the Total PYLL for all genders in four 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. The PYLL % column indicates the percent of all PYLL in the age group due to each cause.

Most of the PYLL under 15 years were due to conditions originating in the perinatal 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 females than males (see Table 21).

Suicide 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 years, for females malignant neoplasms were responsible for a higher PYLL than the sum of all other major causes combined. Among males in this age group, suicide accounted for the largest PYLL, although PYLL due to MVA and malignant neoplasms were high as well.

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 contrasting the gender differences.

Males in the last three 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 (by LHA) 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.

The table also displays PYLL and the observed number of years of lost life in each LHA for both the period 2005 to 2009 and the year 2010. For 2010, the expected PYLL is also reported. This calculation is based on the age distribution in the LHA adjusted to the provincial age and gender specific rate.

During the period, more than half (45) of the LHAs had PYLL Indices that indicated significant differences compared to BC as a whole. Of these, 32 were higher than expected.

Vital Statistics Information Box

Age at Death of the Oldest Male and Female

British Columbia, 1991-2010

Gender	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Male	105	111	111	109	108	108	106	109	108	109	104	104	107	106	107	105	107	106	105	105
Female	113	107	110	110	108	109	111	113	108	111	113	111	107	108	110	109	110	110	109	108

TABLE 34

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

BRITISH COLUMBIA, 2010

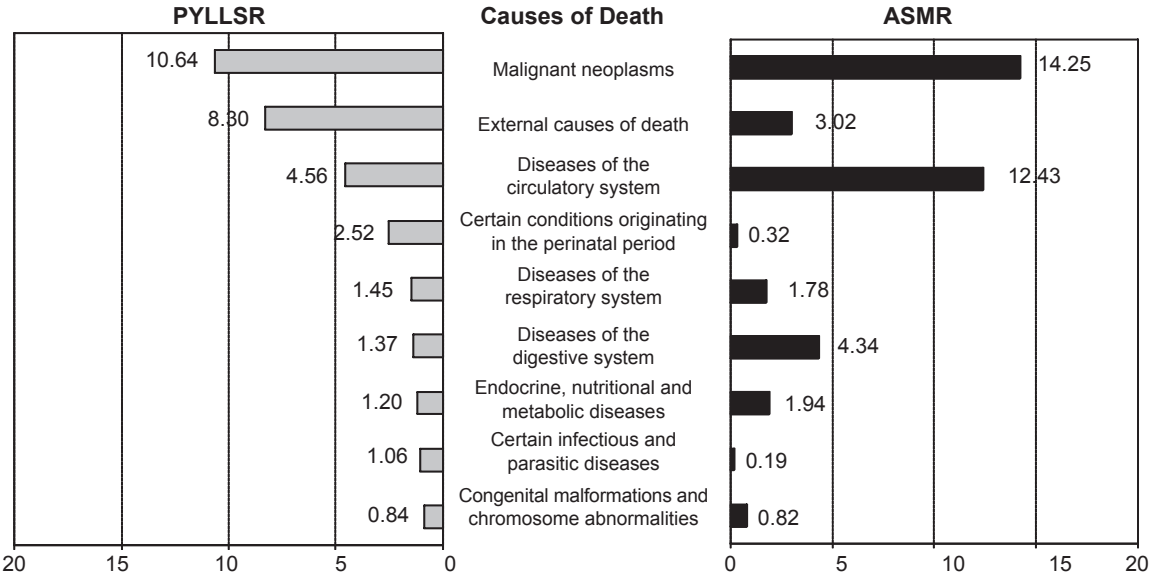
Cause of Death	ICD-10 Code(s)	PYLL (Age Under 75 Years)					Mortality (All Ages)		
		No. of Deaths	Total PYLL	Percent of PYLL	Average PYLL	PYLLSR	No. of Deaths	Percent of Deaths	ASMR
Certain infectious and parasitic diseases	A00-B99,G14	249	4,353.5	2.3	17.5	0.84	553	1.8	0.82
- HIV disease	B20-B24	53	1,367.5	0.7	25.8	0.27	55	0.2	0.10
Malignant neoplasms	C00-C97	4,660	58,747.5	31.7	12.6	10.64	9,097	29.2	14.25
- Malignant neoplasm of trachea and lung	C33-C34	1,287	14,257.0	7.7	11.1	2.42	2,351	7.5	3.75
- Malignant neoplasm of female breast	C500-C509	374	5,665.0	3.1	15.1	2.01	600	1.9	1.77
- Malignant neoplasm of colon and rectum	C18-C21	499	6,117.5	3.3	12.3	1.09	1,004	3.2	1.56
Endocrine nutritional and metabolic diseases	E00-E89	451	5,885.0	3.2	13.0	1.20	1,309	4.2	1.94
- Diabetes mellitus	E10-E14	348	3,810.0	2.1	10.9	0.70	1,048	3.4	1.54
Diseases of the circulatory system	I00-I99	2,125	25,157.5	13.6	11.8	4.56	9,084	29.2	12.43
- Ischemic heart diseases	I20-I25	1,177	13,592.5	7.3	11.5	2.38	4,120	13.2	5.74
- Cerebrovascular diseases	I60-I69	407	4,637.5	2.5	11.4	0.84	2,226	7.1	2.99
Diseases of the respiratory system	J00-J98	710	7,369.0	4.0	10.4	1.37	3,132	10.1	4.34
- Pneumonia/Influenza (excluding hypostatic)	J09-J181, J188, J189	153	2,284.5	1.2	14.9	0.44	1,060	3.4	1.36
- Chronic Pulmonary Disease	J40-J44	395	3,027.5	1.6	7.7	0.53	1,415	4.5	2.06
Diseases of the digestive system	K00-K93	519	7,762.0	4.2	15.0	1.45	1,206	3.9	1.78
- Chronic liver disease/cirrhosis	K70, K73-74, K760-K761	281	4,777.5	2.6	17.0	0.88	353	1.1	0.58
Congenital malformations and chromosome abnormalities	Q00-Q99	67	3,377.5	1.8	50.4	1.06	77	0.2	0.19
Certain conditions originating in the perinatal period	P00-P96	99	7,373.0	4.0	74.5	2.52	99	0.3	0.32
External causes of death	V01-Y98	1,122	34,443.0	18.6	30.7	8.30	1,669	5.4	3.02
- Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850	211	7,072.0	3.8	33.5	1.74	240	0.8	0.49
- Suicide	X60-X84, Y870	408	12,945.0	7.0	31.7	3.11	454	1.5	0.92
Other causes[1]		1,436	30,897.5	16.7	21.5	7.18	4,917	15.8	7.13
All causes		**11,438**	**185,365.5**	**100.0**	**16.2**	**39.12**	**31,143**	**100.0**	**46.23**

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).
ASMR – per 10,000 standard population (Canada 1991 Census).
[1]Other 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, 2010



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, 2010

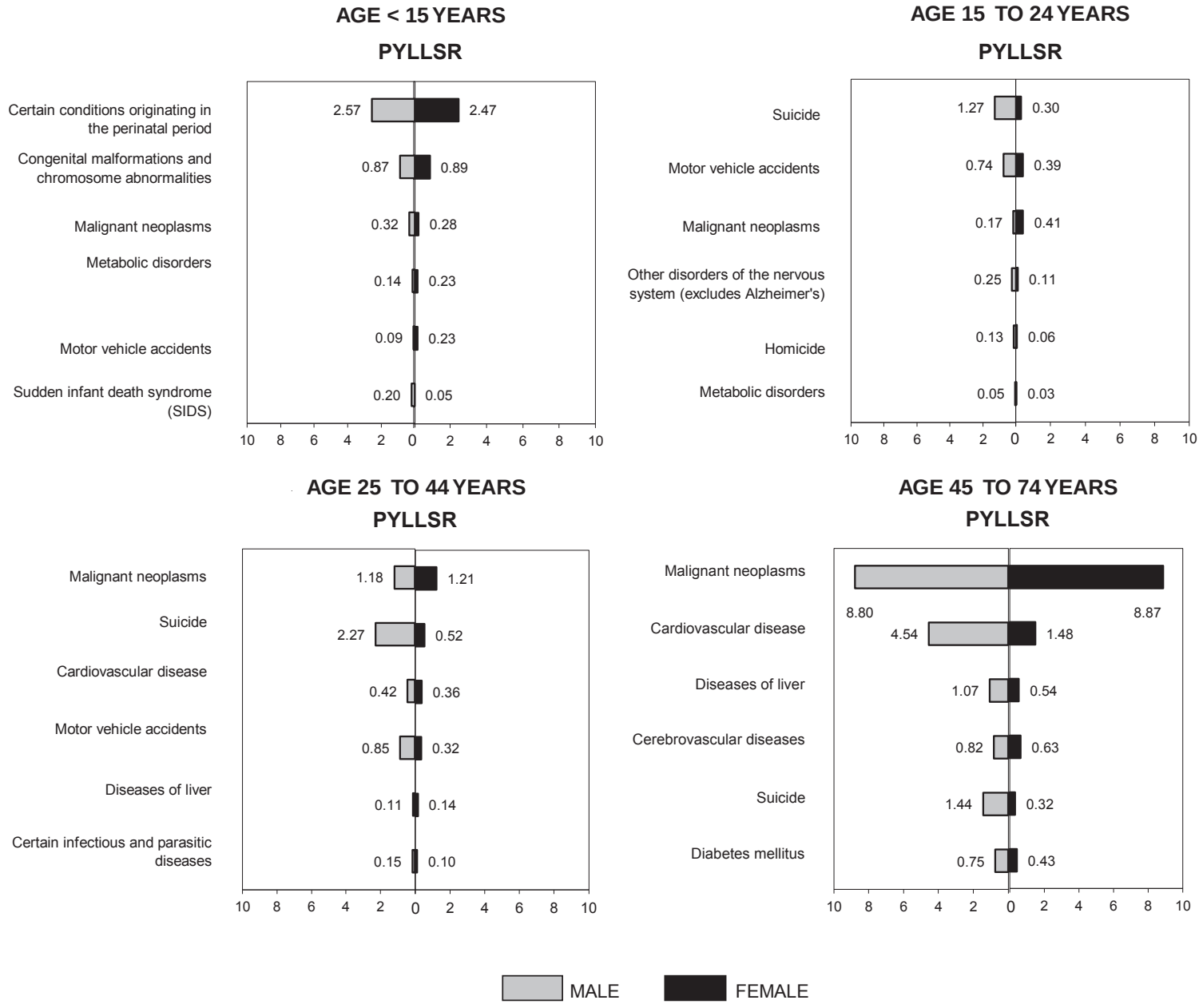
Cause of Death	ICD-10 Code(s)	Male				Female				Total			
		Deaths	PYLL	PYLL %	PYLLSR	Deaths	PYLL	PYLL %	PYLLSR	Deaths	PYLL	PYLL %	PYLLSR
Under 15 Years Old													
Certain conditions originating in the perinatal period	P00-P96	51	3,799.5	41.2	2.57	48	3,573.5	48.2	2.47	99	7,373.0	44.3	2.52
Congenital malformations and chromosome abnormalities	Q00-Q99	18	1,312.5	14.2	0.87	18	1,312.5	17.7	0.89	36	2625.0	15.8	0.88
Malignant neoplasms	C00-C97	8	529.0	5.7	0.32	6	423.5	5.7	0.28	14	952.5	5.7	0.30
Metabolic disorders	E70-E89	3	218.5	2.4	0.14	5	349.0	4.7	0.23	8	567.5	3.4	0.19
Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850	2	144.0	1.6	0.09	5	353.0	4.8	0.23	7	497.0	3.0	0.16
Sudden infant death syndrome (SIDS)	R95	4	298.0	3.2	0.20	1	74.5	1.0	0.05	5	372.5	2.2	0.13
Other causes[1]		42	2,923.0	31.7	1.88	19	1,330.0	17.9	0.88	61	4,253.0	25.6	1.38
All causes		**128**	**9,224.5**	**100.0**	**6.08**	**102**	**7,416.0**	**100.0**	**5.04**	**230**	**16,640.5**	**100.0**	**5.57**
15-24 Years Old													
Suicide	X60-X84, Y870	48	2,620.0	27.8	1.27	11	597.5	11.6	0.30	59	3,217.5	22.1	0.79
Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850	28	1,525.0	16.2	0.74	14	780.0	15.2	0.39	42	2,305.0	15.68	0.57
Malignant neoplasms	C00-C97	6	335.0	3.6	0.17	15	812.5	15.8	0.41	21	1,147.5	7.9	0.28
Other disorders of the nervous system (excludes Alzheimer's)	G00-G25, G31-G99	9	502.5	5.3	0.25	4	220.0	4.3	0.11	13	722.5	5.0	0.18
Homicide	X85-Y09, Y871	5	272.5	2.9	0.13	2	110.0	2.1	0.06	7	382.5	2.6	0.09
Metabolic disorders	E70-E89	2	110.0	1.2	0.05	1	52.5	1.0	0.03	3	162.5	1.1	0.04
Other causes[1]		75	4,067.5	43.1	1.97	47	2,567.5	50.0	1.29	122	6,635.0	45.5	1.63
All causes		**173**	**9,432.5**	**100.0**	**4.58**	**94**	**5,140.0**	**100.0**	**2.58**	**267**	**14,572.5**	**100.0**	**3.59**
25-44 Years Old													
Malignant neoplasms	C00-C97	92	3,400.0	12.8	1.18	102	3,700.0	27.7	1.21	194	7,100.0	17.8	1.20
Suicide	X60-X84, Y870	117	4,647.5	17.5	2.27	27	1,097.5	8.2	0.52	144	5,745.0	14.4	1.39
Cardiovascular disease	I00-I51	53	1,852.5	7.0	0.42	23	882.5	6.6	0.36	76	2,735.0	6.9	0.39
Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850	47	1,867.5	7.0	0.85	18	705.0	5.3	0.32	65	2,572.5	6.4	0.58
Diseases of liver	K70-K76	19	657.5	2.5	0.11	13	457.5	3.4	0.14	32	1,115.5	2.8	0.12
Certain infectious and parasitic diseases	A00-B99, G14	17	607.5	2.3	0.15	8	295.0	2.2	0.10	25	902.5	2.3	0.13
Other causes[1]		347	13,547.5	51.0	6.13	162	6,205.0	46.5	2.56	509	19,752.5	49.5	4.33
All causes		**692**	**26,580.0**	**100.0**	**11.11**	**353**	**13,342.5**	**100.0**	**5.20**	**1,045**	**39,922.5**	**100.0**	**8.13**
45-74 Years Old													
Malignant neoplasms	C00-C97	2,308	25,065.0	36.2	8.80	2,123	24,482.5	54.4	8.87	4,431	49,547.5	43.4	8.85
Cardiovascular disease	I00-I51	1,116	12,415.0	17.9	4.54	416	3,885.0	8.6	1.48	1,532	16,300.0	14.3	3.03
Diseases of liver	K70-K76	184	2,640.0	3.8	1.07	93	1,302.5	2.9	0.54	277	3,942.5	3.5	0.80
Cerebrovascular diseases	I60-I69	217	2,262.5	3.3	0.82	170	1,610.0	3.6	0.63	387	3,872.5	3.4	0.73
Suicide	X60-X84, Y870	164	3,090.0	4.5	1.44	38	705.0	1.6	0.32	202	3,795.0	3.3	0.88
Diabetes mellitus	E10-E14	225	2,157.5	3.1	0.75	107	1,062.5	2.4	0.43	332	3,3220.0	2.8	0.59
Other causes[1]		1,684	21,615.0	31.2	8.71	1,051	11,937.5	26.5	4.92	2,735	33,352.5	29.4	6.82
All causes		**5,898**	**69,245.0**	**100.0**	**26.41**	**3,998**	**44,985.0**	**100.0**	**17.20**	**9,896**	**114,230.0**	**100.0**	**21.83**

Note: PYLL – Potential Years of Life Lost, denotes the total number of years of life lost from an established life expectancy (75 years). PYLLSR – PYLL Standardized Rate per 1,000 standard population (Canada 1991 Census). [1]Other 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 British Columbia 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, 2010



Note: Causes of death are ordered by total deaths (Table 35).
PYLLSR-PYLL Standardized Rate per 1,000 population.
[1]The BC Coroners' Service classifies SIDS deaths as "SUDI" - please see glossary (under "SIDS") for explanation.

Table 36

POTENTIAL YEARS OF LIFE LOST BY LOCAL HEALTH AREA
EXTERNAL CAUSES OF DEATH (AGE UNDER 75 YEARS), BRITISH COLUMBIA, 2005–2009 AND 2010

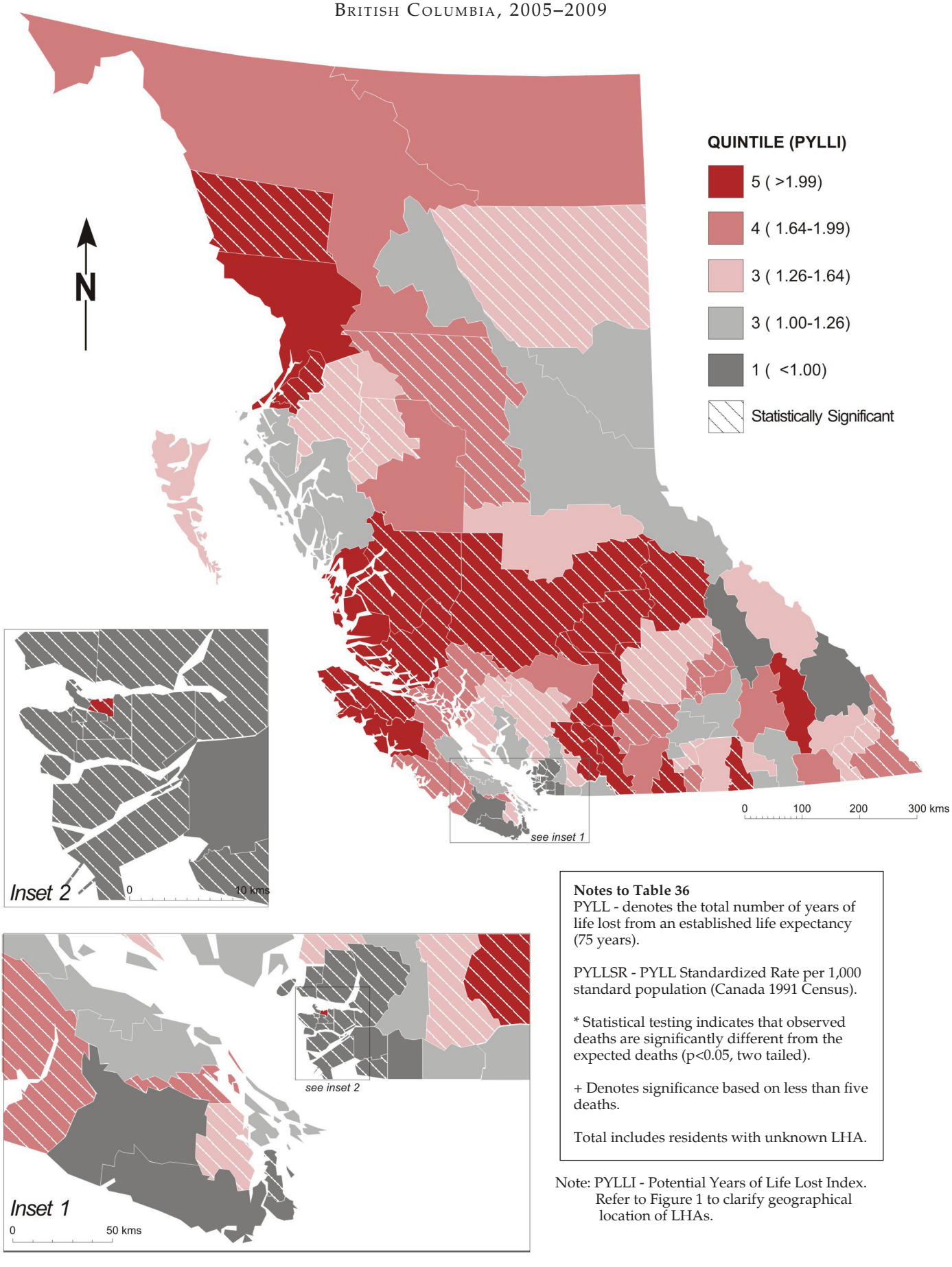
Local Health Area		2005–2009 Observed Deaths	2005–2009 Observed PYLL	2005–2009 PYLL Index (p)		2010 Observed Deaths	2010 Observed PYLL	2010 Expected PYLL	2010 PYLL Index (p)		2010 95% Confidence Limit Lower		Upper
001	Fernie	43	1,392.5	1.71	*	7	222.5	118.73	1.87		0.32	-	3.43
002	Cranbrook	69	2,042.5	1.60	*	14	425.0	185.51	2.29		0.95	-	3.64
003	Kimberley	20	535.0	1.34		2	65.0	59.42	1.09		0.00	-	2.63
004	Windermere	16	390.0	0.75		4	120.0	81.90	1.47		0.00	-	2.98
005	Creston	31	857.5	1.66		8	225.0	79.56	2.83		0.56	-	5.10
006	Kootenay Lake	14	380.0	2.18		1	57.5	26.25	2.19		0.00	-	6.48
007	Nelson	52	1,560.0	1.21		5	157.5	188.96	0.83		0.03	-	1.64
009	Castlegar	28	937.0	1.40		5	132.5	100.47	1.32		0.00	-	2.69
010	Arrow Lakes	11	357.5	1.69		3	47.5	31.65	1.50		0.00	-	3.33
011	Trail	40	1,035.0	1.10		4	110.0	134.07	0.82		0.00	-	1.68
012	Grand Forks	29	827.5	2.08	*	4	105.0	56.50	1.86		0.00	-	3.77
013	Kettle Valley	10	220.0	1.34		1	22.5	24.13	0.93		0.00	-	2.76
014	Southern Okanagan	47	1,357.5	1.74	*	4	150.0	114.78	1.31		0.00	-	2.68
015	Penticton	89	2,762.5	1.47	*	7	187.5	273.02	0.69		0.11	-	1.26
016	Keremeos	18	560.0	2.79	*	5	142.0	29.99	4.73		0.00	-	10.22
017	Princeton	13	407.5	1.90		1	52.5	32.45	1.62		0.00	-	4.79
018	Golden	15	552.5	1.32		-	-	60.96	-		-	-	-
019	Revelstoke	12	310.0	0.71		2	45.0	60.93	0.74		0.00	-	1.79
020	Salmon Arm	88	3,020.0	1.95	*	18	535.0	231.74	2.31	*	1.08	-	3.54
021	Armstrong - Spallumcheen	26	910.0	1.99	*	1	17.5	65.70	0.27	+	0.00	-	0.79
022	Vernon	128	3,830.0	1.24		24	679.5	452.58	1.50		0.80	-	2.20
023	Central Okanagan	314	9,509.5	1.06		39	1,094.5	1,357.16	0.81		0.51	-	1.10
024	Kamloops	265	7,717.5	1.35	*	44	1,459.0	825.99	1.77	*	1.17	-	2.36
025	100 Mile House	50	1,400.0	2.02	*	8	105.0	102.34	1.03		0.17	-	1.88
026	North Thompson	14	535.0	2.54	*	3	67.5	29.91	2.26		0.00	-	5.27
027	Cariboo - Chilcotin	113	3,597.5	2.51	*	14	510.0	203.05	2.51	*	1.05	-	3.97
028	Quesnel	54	1,610.0	1.33		17	527.5	174.39	3.02	*	1.37	-	4.68
029	Lillooet	14	405.0	1.80		2	35.0	32.83	1.07		0.00	-	3.01
030	South Cariboo	22	685.0	2.00	*	2	90.0	50.99	1.77		0.00	-	4.30
031	Merritt	40	1,010.0	1.75	*	7	177.5	82.26	2.16		0.29	-	4.03
032	Hope	27	847.5	2.23	*	5	112.5	55.95	2.01		0.00	-	4.02
033	Chilliwack	154	4,875.0	1.18		15	412.5	620.41	0.66		0.28	-	1.05
034	Abbotsford	216	7,721.5	1.06		34	1,045.0	1,073.68	0.97		0.61	-	1.33
035	Langley	183	6,092.5	0.90		23	722.5	970.59	0.74		0.40	-	1.08
037	Delta	106	3,479.0	0.66	*	19	522.5	723.64	0.72		0.36	-	1.08
038	Richmond	141	4,589.5	0.44	*	22	710.0	1,556.82	0.46	*	0.24	-	0.67
040	New Westminster	113	3,357.5	0.94		16	460.0	550.56	0.84		0.37	-	1.30
041	Burnaby	254	7,510.0	0.61	*	37	977.5	1,844.66	0.53	*	0.33	-	0.73
042	Maple Ridge	154	4,985.0	1.01		18	610.0	734.26	0.83		0.40	-	1.26
043	Coquitlam	234	7,299.5	0.61	*	33	1,172.5	1,782.42	0.66	*	0.41	-	0.90
044	North Vancouver	140	4,416.5	0.60	*	20	665.0	1,082.58	0.61	*	0.32	-	0.91
045	West Vancouver-Bowen Island	44	1,329.5	0.57	*	4	160.0	347.63	0.46	+	0.00	-	0.94
046	Sunshine Coast	50	1,424.5	1.10		9	242.5	192.28	1.26		0.37	-	2.15
047	Powell River	48	1,395.0	1.52	*	9	337.5	135.34	2.49		0.82	-	4.17
048	Howe Sound	85	2,952.5	1.41	*	8	310.0	313.76	0.99		0.28	-	1.70
049	Bella Coola Valley	15	582.5	3.80	*	1	2.5	21.45	0.12	+	0.00	-	0.35
050	Queen Charlotte	13	332.5	1.28		2	75.0	35.09	2.14		0.00	-	5.33
051	Snow Country	2	100.0	3.52		1	32.5	3.93	8.26		0.00	-	24.45
052	Prince Rupert	32	915.0	1.19		8	180.0	107.69	1.67		0.24	-	3.10
053	Upper Skeena	12	475.0	1.63		4	130.0	41.87	3.10		0.00	-	6.57
054	Smithers	42	1,355.0	1.56	*	4	130.0	123.18	1.06		0.00	-	2.14
055	Burns Lake	21	697.5	1.66		6	145.0	60.92	2.38		0.40	-	4.36
056	Nechako	43	1,402.5	1.73	*	6	205.0	111.00	1.85		0.09	-	3.60
057	Prince George	196	6,336.5	1.17		35	1,252.0	765.09	1.64	*	1.03	-	2.24
059	Peace River South	52	1,640.0	1.13		9	342.5	215.23	1.59		0.43	-	2.75
060	Peace River North	82	3,179.0	1.59	*	15	487.5	291.68	1.67		0.71	-	2.63
061	Greater Victoria	367	10,869.5	0.91		59	1,707.5	1,707.14	1.00		0.71	-	1.29
062	Sooke	91	2,862.5	0.82		14	490.0	543.31	0.90		0.38	-	1.43
063	Saanich	74	2,240.0	0.79	*	8	270.0	405.60	0.67		0.18	-	1.15
064	Gulf Islands	24	660.0	1.03		2	55.0	97.70	0.56		0.00	-	1.34
065	Cowichan	116	3,854.5	1.40	*	19	452.5	404.16	1.12		0.50	-	1.74
066	Lake Cowichan	10	305.0	0.97		3	142.0	47.04	3.02		0.00	-	6.80
067	Ladysmith	39	1,392.5	1.71	*	5	142.5	119.63	1.19		0.00	-	2.56
068	Nanaimo	163	5,286.5	1.03		27	817.5	751.64	1.09		0.64	-	1.53
069	Qualicum	67	2,112.5	1.17		6	150.0	267.94	0.56		0.01	-	1.11
070	Alberni	97	2,987.0	1.88	*	10	325.0	226.57	1.43		0.49	-	2.38
071	Courtenay	110	3,140.0	1.05		17	532.5	437.29	1.22		0.54	-	1.89
072	Campbell River	120	3,460.0	1.63	*	22	650.0	304.42	2.14	*	1.16	-	3.11
075	Mission	93	3,097.5	1.34	*	17	602.5	340.58	1.77		0.85	-	2.69
076	Agassiz - Harrison	24	940.0	2.19	*	6	210.0	63.45	3.31		0.36	-	6.25
077	Summerland	17	572.5	1.16		6	130.0	70.05	1.86		0.15	-	3.57
078	Enderby	20	625.0	1.73		3	77.5	51.56	1.50		0.00	-	3.61
080	Kitimat	27	672.5	1.17		2	50.0	78.81	0.63		0.00	-	1.52
081	Fort Nelson	18	690.0	1.76		5	257.5	54.14	4.76		0.51	-	9.00
083	Central Coast	6	220.0	2.59		-	-	11.60	-		-	-	-
084	Vancouver Island West	11	337.5	2.76		-	-	17.83	-		-	-	-
085	Vancouver Island North	51	1,769.5	2.62	*	13	482.0	93.84	5.14	*	2.04	-	8.23
087	Stikine	4	100.0	1.89		-	-	7.00	-		-	-	-
088	Terrace	47	1,644.5	1.54	*	14	420.0	155.01	2.71	*	1.20	-	4.22
092	Nisga'a	13	547.5	5.12	*	1	57.5	14.76	3.89		0.00	-	11.53
094	Telegraph Creek	6	290.0	7.24	*	2	35.0	5.71	6.13		0.00	-	14.96
161	Vancouver - City Centre	207	5,992.5	0.75	*	30	970.0	1,155.19	0.84		0.52	-	1.16
162	Vancouver - Downtown Eastside	312	8,955.0	2.39	*	46	1,199.5	624.75	1.92	*	1.31	-	2.53
163	Vancouver - North East	119	4,047.5	0.70	*	13	442.5	838.12	0.53	*	0.21	-	0.85
164	Vancouver - Westside	121	3,464.5	0.46	*	15	422.5	1,101.20	0.38	*	0.17	-	0.60
165	Vancouver - Midtown	114	3,492.0	0.69	*	11	322.5	755.95	0.43	*	0.14	-	0.71
166	Vancouver - South	123	4,214.0	0.57	*	18	645.0	1,052.60	0.61	*	0.31	-	0.92
201	Surrey	598	19,635.0	0.95		86	2,725.0	3,067.82	0.89		0.68	-	1.09
202	South Surrey/White Rock	86	3,009.5	0.80	*	18	465.0	540.68	0.86		0.41	-	1.31
	PROVINCIAL TOTAL	**7,462**	**234,243.5**	**1.00**		**1,122**	**34,443.0**	**34,443.00**	**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, 2005–2009



Notes to Table 36

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

PYLLSR - PYLL Standardized Rate 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 142 deaths due to medically treatable diseases in 2010, which represents about 0.5 percent of all deaths in the province.

Table 37 indicates the number and percent of all Medically Treatable Disease (MTD) deaths by cause for 2010 and the five-year period 2005-2009. Bacterial Infections accounted for most of the deaths due to MTDs in 2010 and the previous five years. In 2010, two cause categories, Hypertension and Hypertensive Diseases, and Pneumonia and Unqualified Bronchitis, accounted for 30.3 percent male deaths due to MTDs and for females, 46.6 percent.

Table 38 shows the count of deaths due to MTDs organized by the LHA in which the decedent lived. For the current year (2010) the table shows the actual number of deaths observed in the LHA and the expected deaths (calculated using the 2010 age-specific death rates for MTD).

There were 12 LHAs that had no deaths due to these conditions in 2005-2009 and 44 in 2010 as shown in Table 38. Further, there were only 7 LHAs in 2005-2009 that showed differences between observed and expected deaths that were statistically significant based on five or more deaths, and only 2 LHAs with five or more deaths had statistically significant and high ratios in 2010.

Figure 42 shows the province divided up into its eighty-nine LHAs, with each area indicated as to whether its SMR for deaths due to MTDs was high or low on a quintile scale: dark 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, 2005–2009 AND 2010

Cause of Death	ICD-10 Code(s)	2005–2009		2010					
				Male		Female		Total	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Bacterial Infections	A00-A05, ..., M871	269	31.9	24	31.6	12	18.2	36	25.4
Pneumonia and unqualified bronchitis	J12-J181, J188, J189, J40	187	22.2	15	19.7	12	18.2	27	19.0
Hypertension and hypertensive diseases	I10-I15	139	16.5	22	28.9	6	9.1	28	19.7
Malignant neoplasm of cervix	C53	123	14.6	-	-	25	37.9	25	17.6
Abdominal hernias, cholecystitis and cholelithiasis, appendicitis	K35-K37, K40-K46, K80, K81	38	4.5	11	14.5	3	4.5	14	9.9
Asthma	J45-J46	28	3.3	1	1.3	3	4.5	4	2.8
Acute respiratory infections and influenza	J00-J06, J09-J11, J20-J22	24	2.9	-	-	-	-	-	-
Tuberculosis	A15-A19, B90	21	2.5	1	1.3	2	3.0	3	2.1
Hodgkin's disease	C81	7	0.8	2	2.6	-	-	2	1.4
Chronic rheumatic heart disease	I05-I09	6	0.7	-	-	3	4.5	3	2.1
Nutritional anemias	D50-D53	-	-	-	-	-	-	-	-
TOTAL		**842**	**100.0**	**76**	**100.0**	**66**	**100.0**	**142**	**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.

Table 38

STANDARDIZED MORTALITY RATIO BY LOCAL HEALTH AREA DEATHS DUE TO MEDICALLY TREATABLE DISEASES, BRITISH COLUMBIA, 2005–2009 AND 2010

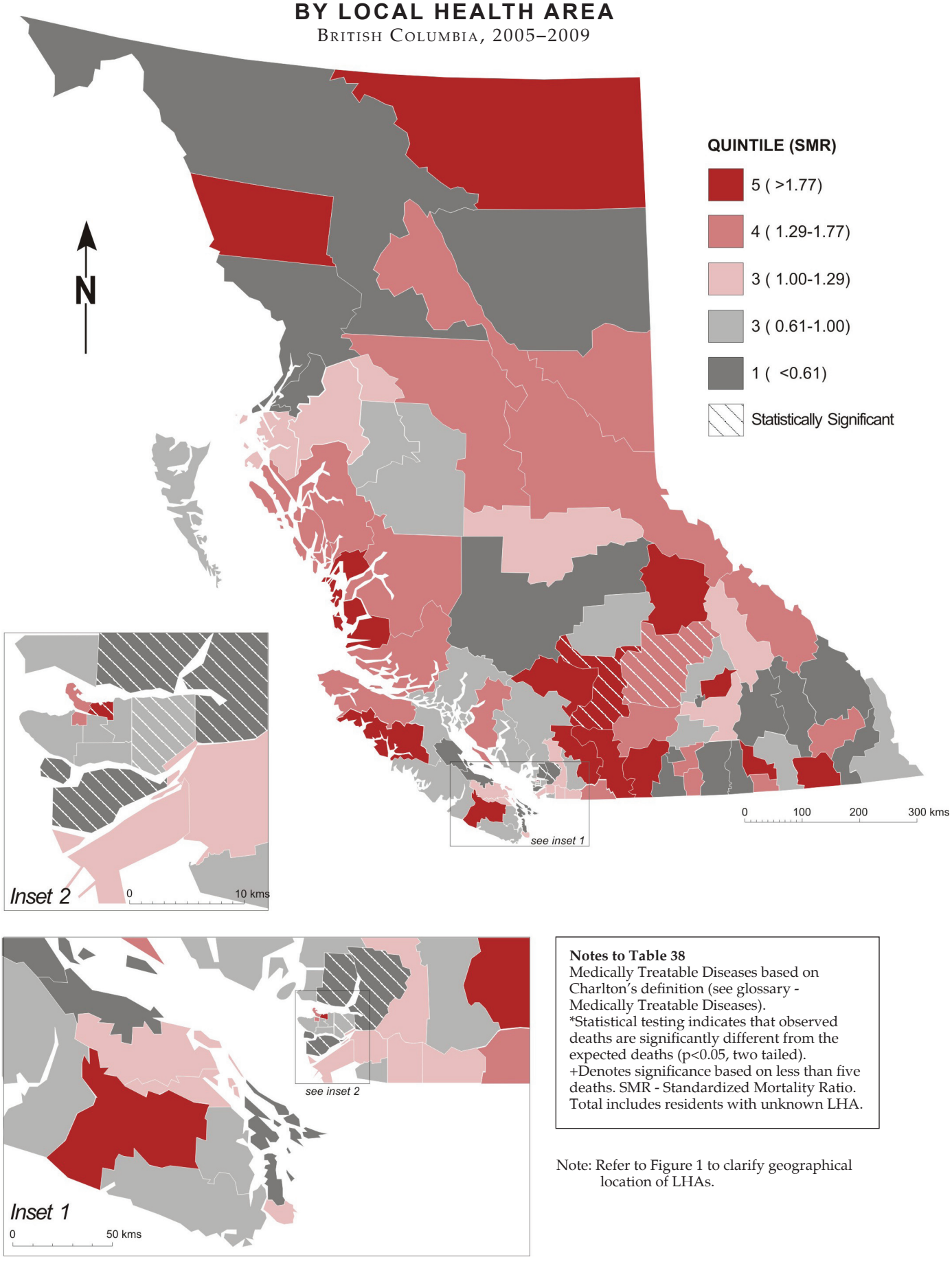
Local Health Area		2005–2009 Observed Deaths	2005–2009 SMR	(p)	2010 Observed Deaths	2010 Expected Deaths	2010 SMR	(p)	95% Confidence Interval Lower		95% Confidence Interval Upper
001	Fernie	2	0.65		-	0.52	-		-	-	-
002	Cranbrook	3	0.60		2	0.83	2.41		0.27	-	8.72
003	Kimberley	3	1.72		1	0.29	3.44		0.04	-	19.13
004	Windermere	-	-		-	0.37	-		-	-	-
005	Creston	5	2.11		-	0.38	-		-	-	-
006	Kootenay Lake	-	-		-	0.14	-		-	-	-
007	Nelson	5	0.99		-	0.85	-		-	-	-
009	Castlegar	6	2.28		-	0.44	-		-	-	-
010	Arrow Lakes	-	-		-	0.17	-		-	-	-
011	Trail	6	1.56		-	0.65	-		-	-	-
012	Grand Forks	-	-		1	0.28	3.53		0.05	-	19.64
013	Kettle Valley	-	-		-	0.14	-		-	-	-
014	Southern Okanagan	5	1.31		-	0.60	-		-	-	-
015	Penticton	11	1.42		5	1.30	3.85	*	1.24	-	8.98
016	Keremeos	-	-		-	0.17	-		-	-	-
017	Princeton	2	1.78		-	0.20	-		-	-	-
018	Golden	2	1.37		-	0.25	-		-	-	-
019	Revelstoke	2	1.24		-	0.27	-		-	-	-
020	Salmon Arm	6	0.87		1	1.15	0.87		0.01	-	4.83
021	Armstrong - Spallumcheen	-	-		-	0.30	-		-	-	-
022	Vernon	16	1.27		3	2.10	1.43		0.29	-	4.17
023	Central Okanagan	33	0.99		4	5.77	0.69		0.19	-	1.77
024	Kamloops	32	1.49	*	3	3.53	0.85		0.17	-	2.48
025	100 Mile House	2	0.62		-	0.51	-		-	-	-
026	North Thompson	2	2.20		-	0.14	-		-	-	-
027	Cariboo - Chilcotin	3	0.56		2	0.87	2.29		0.26	-	8.25
028	Quesnel	5	1.06		2	0.78	2.57		0.29	-	9.26
029	Lillooet	3	3.46		-	0.14	-		-	-	-
030	South Cariboo	5	3.32	*	1	0.24	4.14		0.05	-	23.02
031	Merritt	4	1.75		-	0.36	-		-	-	-
032	Hope	4	2.45		4	0.26	15.44	+	4.16	-	39.54
033	Chilliwack	20	1.37		2	2.47	0.81		0.09	-	2.92
034	Abbotsford	23	1.00		2	3.86	0.52		0.06	-	1.87
035	Langley	27	1.14		4	3.84	1.04		0.28	-	2.66
037	Delta	23	1.14		3	3.11	0.96		0.19	-	2.82
038	Richmond	16	0.43	*	5	6.25	0.80		0.26	-	1.87
040	New Westminster	13	1.04		2	2.17	0.92		0.10	-	3.33
041	Burnaby	26	0.64	*	9	7.04	1.28		0.58	-	2.43
042	Maple Ridge	19	1.10		3	2.95	1.02		0.20	-	2.97
043	Coquitlam	24	0.58	*	6	7.29	0.82		0.30	-	1.79
044	North Vancouver	16	0.59	*	1	4.70	0.21		0.00	-	1.18
045	West Vancouver-Bowen Island	8	0.78		1	1.73	0.58		0.01	-	3.22
046	Sunshine Coast	5	0.79		2	1.09	1.83		0.21	-	6.60
047	Powell River	6	1.44		1	0.68	1.48		0.02	-	8.22
048	Howe Sound	5	0.80		-	1.11	-		-	-	-
049	Bella Coola Valley	1	1.74		-	0.09	-		-	-	-
050	Queen Charlotte	1	0.98		-	0.16	-		-	-	-
051	Snow Country	-	-		-	0.02	-		-	-	-
052	Prince Rupert	3	1.05		-	0.46	-		-	-	-
053	Upper Skeena	1	1.01		-	0.16	-		-	-	-
054	Smithers	2	0.65		1	0.50	1.98		0.03	-	11.03
055	Burns Lake	1	0.66		-	0.25	-		-	-	-
056	Nechako	4	1.42		-	0.45	-		-	-	-
057	Prince George	28	1.49		6	3.12	1.93		0.70	-	4.19
059	Peace River South	8	1.57		-	0.86	-		-	-	-
060	Peace River North	3	0.52		-	0.98	-		-	-	-
061	Greater Victoria	43	1.03		6	7.00	0.86		0.31	-	1.87
062	Sooke	12	0.93		5	2.26	2.21		0.71	-	5.15
063	Saanich	6	0.46		-	2.13	-		-	-	-
064	Gulf Islands	-	-		-	0.61	-		-	-	-
065	Cowichan	7	0.64		1	1.84	0.54		0.01	-	3.02
066	Lake Cowichan	4	3.04		-	0.23	-		-	-	-
067	Ladysmith	4	1.04		-	0.66	-		-	-	-
068	Nanaimo	23	1.16		6	3.37	1.78		0.65	-	3.87
069	Qualicum	5	0.53		-	1.54	-		-	-	-
070	Alberni	6	0.95		3	1.01	2.96		0.59	-	8.64
071	Courtenay	7	0.55		1	2.16	0.46		0.01	-	2.58
072	Campbell River	6	0.69		-	1.42	-		-	-	-
075	Mission	6	0.77		2	1.33	1.51		0.17	-	5.45
076	Agassiz - Harrison	3	1.78		2	0.28	7.25		0.81	-	26.16
077	Summerland	-	-		-	0.37	-		-	-	-
078	Enderby	3	1.99		-	0.25	-		-	-	-
080	Kitimat	3	1.39		1	0.35	2.83		0.04	-	15.73
081	Fort Nelson	3	2.68		-	0.19	-		-	-	-
083	Central Coast	2	7.90		-	0.04	-		-	-	-
084	Vancouver Island West	1	1.84		-	0.09	-		-	-	-
085	Vancouver Island North	4	1.54		-	0.42	-		-	-	-
087	Stikine	-	-		-	0.04	-		-	-	-
088	Terrace	5	1.28		1	0.64	1.57		0.02	-	8.73
092	Nisga'a	-	-		-	0.06	-		-	-	-
094	Telegraph Creek	1	8.48		-	0.02	-		-	-	-
161	Vancouver - City Centre	31	1.37		2	3.64	0.55		0.06	-	1.98
162	Vancouver - Dwtn Eastside	53	4.33	*	7	2.43	2.88	*	1.15	-	5.93
163	Vancouver - North East	17	0.90		1	3.25	0.31		0.00	-	1.71
164	Vancouver - Westside	18	0.72		1	4.11	0.24		0.00	-	1.36
165	Vancouver - Midtown	12	0.74		4	2.88	1.39		0.37	-	3.55
166	Vancouver - South	17	0.68		2	4.26	0.47		0.05	-	1.70
201	Surrey	75	1.13		14	11.14	1.26		0.69	-	2.11
202	South Surrey/White Rock	13	0.80		5	2.62	1.91		0.62	-	4.45
	PROVINCIAL TOTAL	**842**	**1.00**		**142**	**142.00**	**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, 2005–2009



Notes to Table 38
Medically Treatable Diseases 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. SMR - Standardized Mortality Ratio. 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 in this publication 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 2010 and in the five preceding years, while Figure 43 graphically shows the pattern of alcohol-related deaths by cause. About 22.4 percent of the 1,832 deaths related to alcohol in 2010 were directly attributable to alcohol (410 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 (15.5 percent) in 2010.

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 5.9 percent of all deaths in 2010 and 8.8 percent of all male deaths. Males died of such causes 3.3 times more frequently than women in 2010.

Alcohol-related deaths for seniors (65 or older) accounted for 45.5 percent of deaths; 39.0 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 23 LHAs with at least five deaths where the observed values were statistically significant and above the expected values in both 2005-2009 and 2010 as shown in Table 41. There were 15 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 2005-2009.

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 later annual reports.

TABLE 39

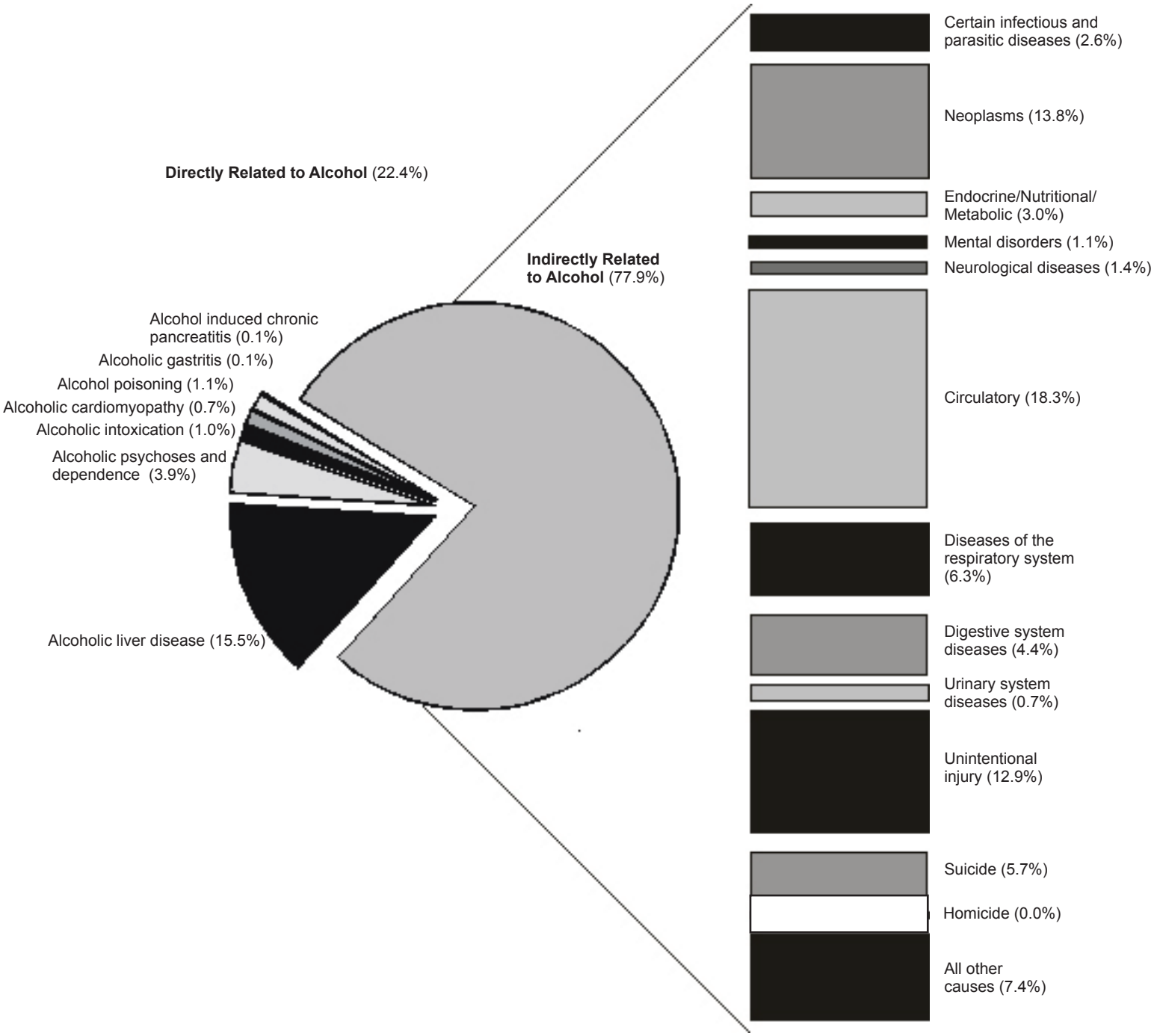
ALCOHOL-RELATED DEATHS BY CAUSE

BRITISH COLUMBIA, 2005–2009 AND 2010

Cause of Death	ICD-10 Code(s)	Year of Death			
		2005–2009		2010	
		Number	Percent	Number	Percent
Directly Related to Alcohol					
Alcohol intoxication	F100	140	1.4	18	1.0
Alcoholic psychoses and dependence	F101-F109	507	5.0	71	3.9
Alcoholic neurological disorders	G312, G621, G721	-	-	1	0.1
Alcoholic cardiomyopathy	I426	90	0.9	13	0.7
Alcoholic gastritis	K292	14	0.1	1	0.1
Alcoholic liver disease	K70	1,222	12.1	284	15.5
Alcohol induced chronic pancreatitis	K860	7	0.1	1	0.1
Alcohol poisoning	X45, X65	107	1.1	21	1.1
Other alcohol causes	E244, O354, O993, P043, Q860, R780, T510-T512, T519	-	-	-	-
Subtotal		**2,087**	**20.7**	**410**	**22.4**
Indirectly Related to Alcohol[1]					
Certain infectious and parasitic diseases	A00-B99,G14	313	3.1	48	2.6
Neoplasms	C00-D48	1,201	11.9	252	13.8
Endocrine/Nutritional/Metabolic	E00-E243, E248-E89	274	2.7	55	3.0
Mental disorders	F00-F09, F11-F99	129	1.3	21	1.1
Neurological diseases	G00-G311, G318-G620, G622-G720, G722-G99	112	1.1	25	1.4
Circulatory	I00-I425, I427-I99	1,963	19.5	336	18.3
Diseases of the respiratory system	J00-J98	706	7.0	116	6.3
Digestive system diseases	K00-K291, K293-K69	519	5.1	80	4.4
Urinary system diseases	N00-N39, N990, N991, N995	93	0.9	12	0.7
Unintentional injury	V01-X44, X46-X59, Y40-Y86, Y88	1,624	16.1	237	12.9
Suicide	X60-X64, X66-X84, Y87	505	5.0	105	5.7
Homicide	X85-Y09, Y871	52	0.5	-	-
All other causes		504	5.0	135	7.4
Subtotal		**7,995**	**79.3**	**1,422**	**77.6**
TOTAL		**10,082**	**100.0**	**1,832**	**100.0**

Note: [1]ICD-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.
In 2008, the BC Coroners Service and BC Vital Statistics Agency engaged in a retrospective review of death registrations of alcohol-related fatalities. As a result of the project, a number of registrations were amended and are reflected in this report.

FIGURE 43
ALCOHOL-RELATED DEATHS BY CAUSE
BRITISH COLUMBIA, 2010



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

TABLE 40
ALCOHOL-RELATED DEATHS BY AGE AND GENDER
BRITISH COLUMBIA, 2010

Age	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
<15	1	0.1	-	-	1	0.1
15-19	7	0.5	8	1.9	15	0.8
20-24	28	2.0	10	2.3	38	2.1
25-44	174	12.4	55	12.8	229	12.5
45-64	573	40.9	142	32.9	715	39.0
65-84	539	38.5	161	37.4	700	38.2
85+	79	5.6	55	12.8	134	7.3
TOTAL	**1,401**	**100.0**	**431**	**100.0**	**1,832**	**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.

Table 41

STANDARDIZED MORTALITY RATIO BY LOCAL HEALTH AREA ALCOHOL-RELATED DEATHS, BRITISH COLUMBIA, 2005–2009 AND 2010

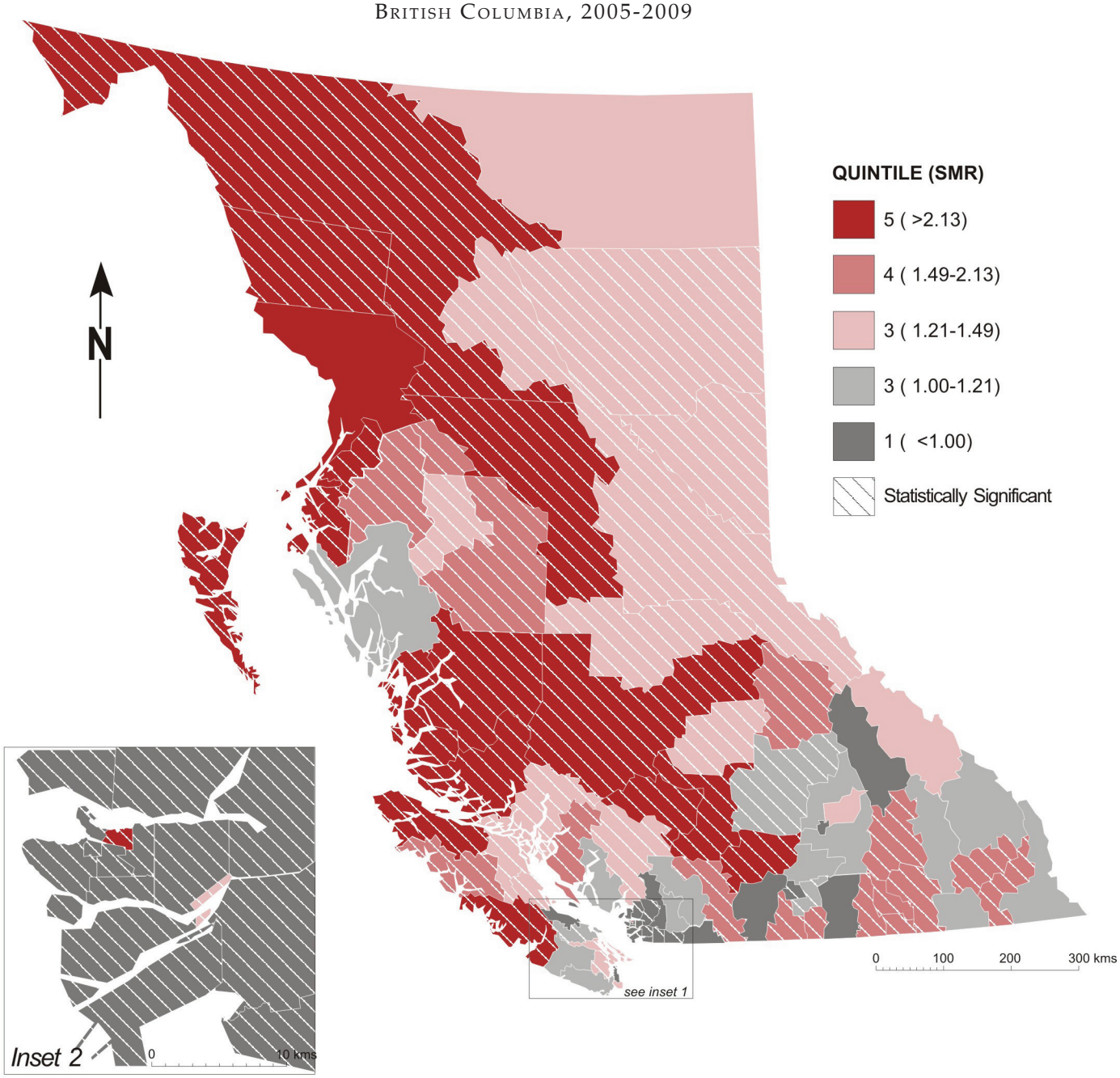
Local Health Area		2005–2009 Observed Deaths	SMR	(p)	2010 Observed Deaths	Expected Deaths	SMR	(p)	95% Confidence Interval Lower		Upper
001	Fernie	37	1.12		5	5.98	0.84		0.27	-	1.95
002	Cranbrook	93	1.51	*	16	11.10	1.44		0.82	-	2.34
003	Kimberley	35	1.49	*	8	4.18	1.91		0.82	-	3.77
004	Windermere	29	1.17		4	4.49	0.89		0.24	-	2.28
005	Creston	41	1.08		3	6.65	0.45		0.09	-	1.32
006	Kootenay Lake	12	1.10		3	1.94	1.55		0.31	-	4.51
007	Nelson	92	1.54	*	12	10.69	1.12		0.58	-	1.96
009	Castlegar	50	1.50	*	8	6.04	1.32		0.57	-	2.61
010	Arrow Lakes	26	1.82	*	2	2.52	0.79		0.09	-	2.87
011	Trail	100	1.92	*	17	9.13	1.86	*	1.08	-	2.98
012	Grand Forks	43	1.57	*	3	4.81	0.62		0.13	-	1.82
013	Kettle Valley	11	0.99		2	2.02	0.99		0.11	-	3.57
014	Southern Okanagan	115	1.71	*	10	11.72	0.85		0.41	-	1.57
015	Penticton	146	1.19	*	24	21.43	1.12		0.72	-	1.67
016	Keremeos	31	1.76	*	8	3.10	2.58	*	1.11	-	5.09
017	Princeton	15	0.89		1	3.11	0.32		0.00	-	1.79
018	Golden	19	1.22		5	2.79	1.79		0.58	-	4.18
019	Revelstoke	18	0.98		2	3.25	0.61		0.07	-	2.22
020	Salmon Arm	111	1.13		19	17.67	1.08		0.65	-	1.68
021	Armstrong - Spallumcheen	19	0.76		3	4.57	0.66		0.13	-	1.92
022	Vernon	174	1.02		30	30.63	0.98		0.66	-	1.40
023	Central Okanagan	457	1.02		80	81.27	0.98		0.78	-	1.23
024	Kamloops	314	1.20	*	56	47.02	1.19		0.90	-	1.55
025	100 Mile House	57	1.34	*	11	7.61	1.44		0.72	-	2.59
026	North Thompson	23	2.09	*	3	1.97	1.52		0.31	-	4.44
027	Cariboo - Chilcotin	140	2.34	*	22	10.79	2.04	*	1.28	-	3.09
028	Quesnel	81	1.46	*	22	10.00	2.20	*	1.38	-	3.33
029	Lillooet	34	3.23	*	7	1.89	3.71	*	1.49	-	7.64
030	South Cariboo	52	2.54	*	10	3.68	2.72	*	1.30	-	5.00
031	Merritt	64	2.23	*	4	5.03	0.79		0.21	-	2.04
032	Hope	46	1.96	*	10	4.12	2.43	*	1.16	-	4.46
033	Chilliwack	171	0.90		25	34.92	0.72		0.46	-	1.06
034	Abbotsford	215	0.77	*	25	49.88	0.50	*	0.32	-	0.74
035	Langley	232	0.85	*	36	52.58	0.68	*	0.48	-	0.95
037	Delta	157	0.68	*	29	43.56	0.67	*	0.45	-	0.96
038	Richmond	159	0.38	*	28	73.78	0.38	*	0.25	-	0.55
040	New Westminster	197	1.42	*	21	25.17	0.83		0.52	-	1.28
041	Burnaby	343	0.72	*	57	84.88	0.67	*	0.51	-	0.87
042	Maple Ridge	157	0.86		36	33.49	1.07		0.75	-	1.49
043	Coquitlam	256	0.61	*	35	77.55	0.45	*	0.31	-	0.63
044	North Vancouver	166	0.54	*	38	55.47	0.69	*	0.48	-	0.94
045	West Vancouver-Bowen Is.	74	0.50	*	14	25.46	0.55	*	0.30	-	0.92
046	Sunshine Coast	85	0.99		18	15.76	1.14		0.68	-	1.81
047	Powell River	92	1.62	*	19	10.15	1.87	*	1.13	-	2.92
048	Howe Sound	78	1.33	*	13	11.16	1.16		0.62	-	1.99
049	Bella Coola Valley	33	5.00	*	2	1.16	1.73		0.19	-	6.23
050	Queen Charlotte	40	3.80	*	7	1.83	3.83	*	1.53	-	7.89
051	Snow Country	3	2.20		-	0.23	-		-	-	-
052	Prince Rupert	71	2.32	*	12	5.40	2.22	*	1.15	-	3.88
053	Upper Skeena	19	1.76	*	7	1.89	3.71	*	1.49	-	7.65
054	Smithers	47	1.44	*	5	5.97	0.84		0.27	-	1.96
055	Burns Lake	34	1.93	*	7	3.09	2.27		0.91	-	4.67
056	Nechako	71	2.24	*	12	5.65	2.13	*	1.10	-	3.71
057	Prince George	281	1.43	*	65	35.38	1.84	*	1.42	-	2.34
059	Peace River South	81	1.44	*	21	10.01	2.10	*	1.30	-	3.21
060	Peace River North	81	1.44	*	19	10.25	1.85	*	1.12	-	2.89
061	Greater Victoria	675	1.24	*	135	93.78	1.44	*	1.21	-	1.70
062	Sooke	137	1.03		27	25.35	1.06		0.70	-	1.55
063	Saanich	143	0.73	*	21	34.51	0.61	*	0.38	-	0.93
064	Gulf Islands	64	1.25		10	9.19	1.09		0.52	-	2.00
065	Cowichan	180	1.26	*	50	25.85	1.93	*	1.44	-	2.55
066	Lake Cowichan	18	1.10		9	2.96	3.04	*	1.39	-	5.77
067	Ladysmith	68	1.27		12	9.87	1.22		0.63	-	2.12
068	Nanaimo	296	1.14	*	73	47.17	1.55	*	1.21	-	1.95
069	Qualicum	144	0.94		32	27.81	1.15		0.79	-	1.62
070	Alberni	175	2.18	*	35	14.29	2.45	*	1.71	-	3.41
071	Courtenay	228	1.37	*	31	30.78	1.01		0.68	-	1.43
072	Campbell River	146	1.46	*	31	18.34	1.69	*	1.15	-	2.40
075	Mission	89	1.05		13	15.30	0.85		0.45	-	1.45
076	Agassiz - Harrison	26	1.11		6	4.09	1.47		0.54	-	3.19
077	Summerland	24	0.66	*	9	6.30	1.43		0.65	-	2.71
078	Enderby	29	1.40		4	3.79	1.06		0.28	-	2.71
080	Kitimat	28	1.20		7	4.13	1.70		0.68	-	3.49
081	Fort Nelson	14	1.49		5	1.68	2.98		0.96	-	6.96
083	Central Coast	20	7.33	*	1	0.48	2.07		0.03	-	11.54
084	Vancouver Island West	12	1.99	*	-	1.04	-		-	-	-
085	Vancouver Island North	77	2.90	*	19	4.77	3.98	*	2.40	-	6.22
087	Stikine	11	4.46	*	-	0.42	-		-	-	-
088	Terrace	84	1.98	*	17	7.68	2.21	*	1.29	-	3.54
092	Nisga'a	14	3.79	*	-	0.67	-		-	-	-
094	Telegraph Creek	6	4.77	*	3	0.22	13.74	+	2.76	-	40.14
161	Vancouver - City Centre	180	0.77	*	27	41.91	0.64	*	0.42	-	0.94
162	Vancouver - Downtown E.side	332	2.32	*	52	27.76	1.87	*	1.40	-	2.46
163	Vancouver - North East	116	0.51	*	23	39.89	0.58	*	0.37	-	0.87
164	Vancouver - Westside	124	0.44	*	24	48.25	0.50	*	0.32	-	0.74
165	Vancouver - Midtown	130	0.74	*	13	31.98	0.41	*	0.22	-	0.70
166	Vancouver - South	148	0.49	*	26	52.20	0.50	*	0.33	-	0.73
201	Surrey	565	0.82	*	123	138.31	0.89		0.74	-	1.06
202	South Surrey/White Rock	136	0.58	*	28	45.36	0.62	*	0.41	-	0.89
PROVINCIAL TOTAL		**10,082**	**1.00**		**1,832**	**1,832.00**	**1.00**		**0.95**	**-**	**1.05**

Notes for this table follow the map (Figure 44).

FIGURE 44

ALCOHOL-RELATED DEATHS BY LOCAL HEALTH AREA

BRITISH COLUMBIA, 2005-2009



Notes to Table 41

*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

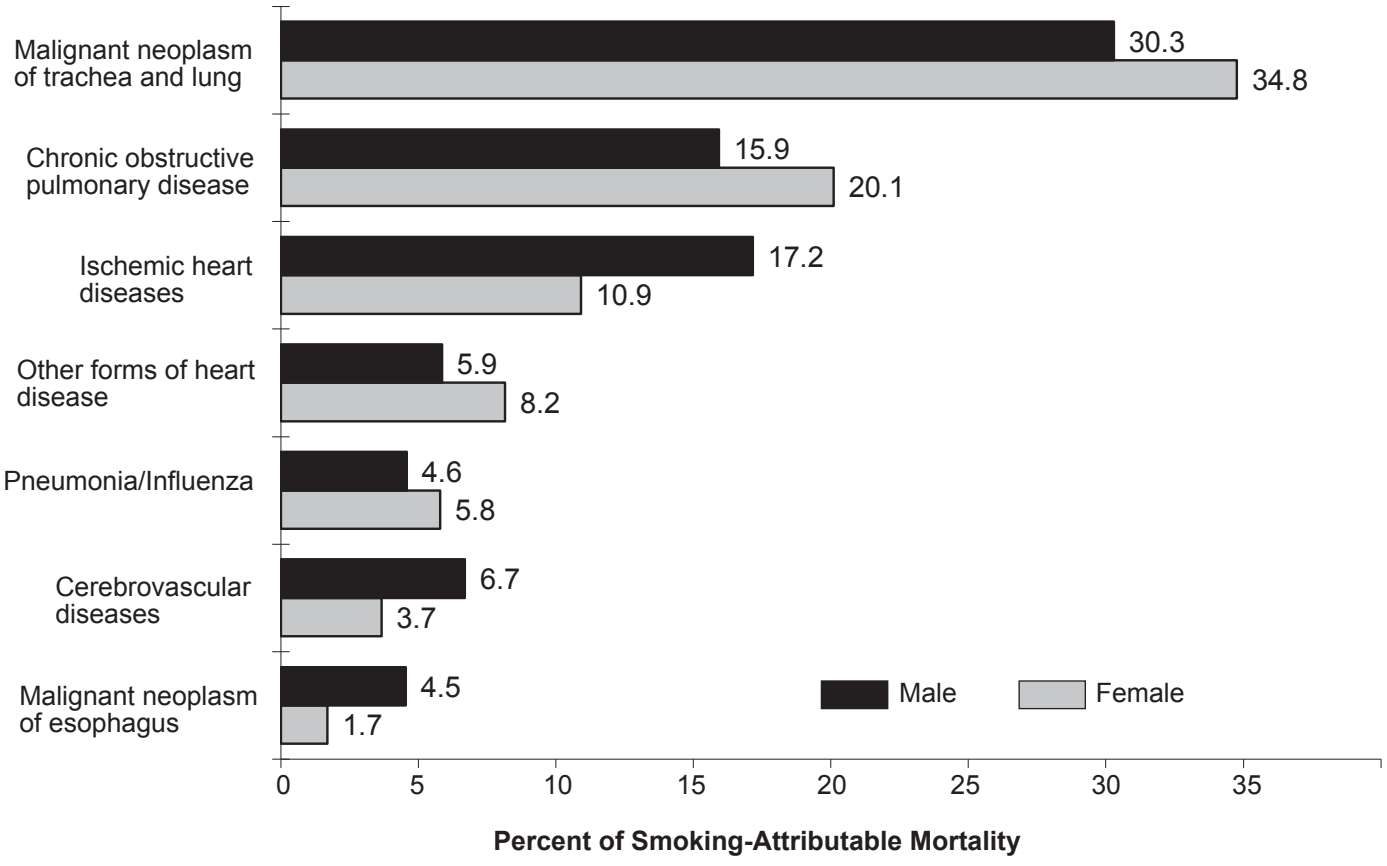
Table 42 and Figure 45 portray the number and percent of deaths in 2010 that were attributable to smoking for those aged 35 years and older. The age restriction relates to the fact that smoking-attributable conditions generally become apparent over time and after several years of tobacco use. Because the decedent's smoking history is usually not available on the death record, the link between smoking and mortality is estimated indirectly. Research-derived proportions of deaths from certain diseases (like lung cancer) that are due to smoking are 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 seven cause-of-death categories selected according to highest SAM number from Table 42.

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

In 2010, there were 6,071 deaths attributed to smoking as shown in Table 42. By far the largest disease category was malignant neoplasms of trachea and lung (32.1 percent) followed by chronic obstructive pulmonary disease (17.7 percent) and ischemic heart disease (14.6 percent).

FIGURE 45
SMOKING-ATTRIBUTABLE MORTALITY BY SELECTED CAUSES AND GENDER
BRITISH COLUMBIA, 2010



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, 2010

Cause of Death	ICD-10 Code(s)	Male				Female				Total		
				SAM				SAM			SAM	
		Deaths	SAM (%)	Number	Percent	Deaths	SAM (%)	Number	Percent	Deaths	Number	Percent
Malignant Neoplasms												
Malignant neoplasms of lip, oral cavity and pharynx	C00-C14	94	91.2	86	2.4	44	59.9	26	1.0	138	112	1.8
Malignant neoplasm of esophagus	C15	207	78.2	162	4.5	60	71.0	43	1.7	267	204	3.4
Malignant neoplasm of pancreas	C25	281	21.7	61	1.7	252	33.9	85	3.4	533	146	2.4
Malignant neoplasm of larynx	C32	27	79.7	22	0.6	7	87.2	6	0.2	34	28	0.5
Malignant neoplasm of trachea and lung	C33-C34	1,207	89.3	1,078	30.3	1,142	76.5	874	34.8	2,349	1,951	32.1
Malignant neoplasms of cervix, uterus	C53-C55	-	-	-	-	171	33.9	58	2.3	171	58	1.0
Malignant neoplasm of bladder	C67	204	44.8	91	2.6	77	37.6	29	1.2	281	120	2.0
Malignant neoplasm of kidney and other unspecified urinary organs	C64-C66, C68	134	46.8	63	1.8	72	12.4	9	0.4	206	72	1.2
SUBTOTAL		**2,154**		**1,562**	**43.9**	**1,825**		**1,130**	**45.0**	**3,979**	**2,692**	**44.3**
Circulatory System Diseases												
Hypertension	I10-I13	146	24.6	36	1.0	240	16.4	39	1.6	386	75	1
Ischemic heart diseases :	I20-I25											
35-64 years		490	43.2	212	5.9	96	36.5	35	1.4	586	247	4.1
65+ years		1,891	21.1	399	11.2	1,639	14.6	239	9.5	3,530	638	10.5
Other forms of heart disease	I01-I09, I27, I30-I52	787	26.5	209	5.9	1,057	19.4	205	8.2	1,844	414	6.8
Cerebrovascular diseases :	I60-I69											
35-64 years		106	44.8	47	1.3	67	49.3	33	1.3	173	81	1.3
65+ years		816	23.4	191	5.4	1,230	4.8	59	2.3	2,046	250	4.1
Atherosclerosis	I70	21	55.5	12	0.3	54	31.7	17	0.7	75	29	0.5
Aortic aneurysm	I71	102	55.5	57	1.6	66	31.7	21	0.8	168	78	1.3
Other arterial diseases	I26, I28, I72-I78	92	55.5	51	1.4	113	31.7	36	1.4	205	87	1.4
SUBTOTAL		**4,451**		**1,213**	**34.1**	**4,562**		**685**	**27.2**	**9,013**	**1,898**	**31.3**
Respiratory System Diseases												
Pneumonia/Influenza	J09-J181, J188, J189	499	32.7	163	4.6	554	26.3	146	5.8	1,053	309	5.1
Bronchitis, emphysema	J40-J43	56	84.7	47	1.3	52	79.2	41	1.6	108	89	1.5
Chronic obstructive pulmonary disease	J44	669	84.7	567	15.9	638	79.2	505	20.1	1,307	1,072	17.7
Other respiratory diseases	A15-A19, J45-J46	18	32.7	6	0.2	23	26.3	6	0.2	41	12	0.2
SUBTOTAL		**1,242**		**783**	**22.0**	**1,267**		**698**	**27.8**	**2,509**	**1,481**	**24.4**
TOTAL		**7,847**		**3,558**	**100.0**	**7,654**		**2,513**	**100.0**	**15,501**	**6,071**	**100.0**

Note: Deaths are the total number of deaths aged 35+ years or as specified in the diagnostic category.
SAM – Smoking-Attributable Mortality, 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(%).
Total SAM Number may not add up to the sum of Male SAM Number and Female SAM Number 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.

Drug-Induced Deaths

Drug-induced deaths are all deaths directly due to drug use, including use of illicit, prescribed, and over-the-counter 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 more males (223) died of drug-induced causes than females (116). Among individuals aged 25 to 64 years, there were 289 drug-induced deaths (85.3 percent), and 155 drug-induced deaths (45.7 percent) in the 45 to 64 year age-group.

Table 44 presents drug-induced deaths by cause for 2005-2009 and 2010. In 2010, 69.3 percent of drug-induced deaths were the result of accidental poisoning by drugs compared to 68.1 percent in the previous five years. Of the 454 suicide deaths in BC in 2010, 16.3 percent were drug-induced.

Figure 46 is a graphic presentation of the results from Table 44. In 2010, almost all drug induced deaths were unintentional poisoning 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 2010 and in the previous five years. In 2010, 22 LHAs had no drug-induced deaths and 5 had no drug-induced deaths in 2005-2009.

Vancouver - Downtown Eastside was the only LHA where the observed number of deaths was more than 5 and statistically significantly higher than the expected numbers in 2010 as well as the previous five years.

Figure 47 maps the variation of SMRs in the LHAs divided into quintiles for 2005-2009.

TABLE 43
DRUG–INDUCED DEATHS BY AGE AND GENDER
BRITISH COLUMBIA, 2010

Age	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
<15	-	-	1	0.9	1	0.3
15-19	3	1.3	2	1.7	5	1.5
20-24	11	4.9	4	3.4	15	4.4
25-44	90	40.4	44	37.9	134	39.5
45-64	102	45.7	53	45.7	155	45.7
65-84	15	6.7	6	5.2	21	6.2
85+	2	0.9	6	5.2	8	2.4
TOTAL	**223**	**100.0**	**116**	**100.0**	**339**	**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, 2005–2009 AND 2010

Cause of Death	ICD-10 Code(s)	Year of Death: 2005–2009 Number	2005–2009 Percent	2010 Number	2010 Percent
Psychoactive substance and drug use/abuse	F11-F16, F19	123	5.7	12	3.5
Accidental poisoning by drugs	X40-X44	1,481	68.1	235	69.3
Suicide by drugs	X60-X64	460	21.1	74	21.8
Assault by drugs and medicaments	X85	-	-	1	0.3
Poisoning by drugs and medicaments undetermined if accidental or intentional	Y10-Y14	83	3.8	15	4.4
Adverse effects of drugs and medicaments	Y40-Y574, Y577-Y579, Y598, Y880	26	1.2	1	0.3
Other drug causes*		2	0.1	1	0.3
TOTAL		**2,175**	**100.0**	**339**	**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, 2010

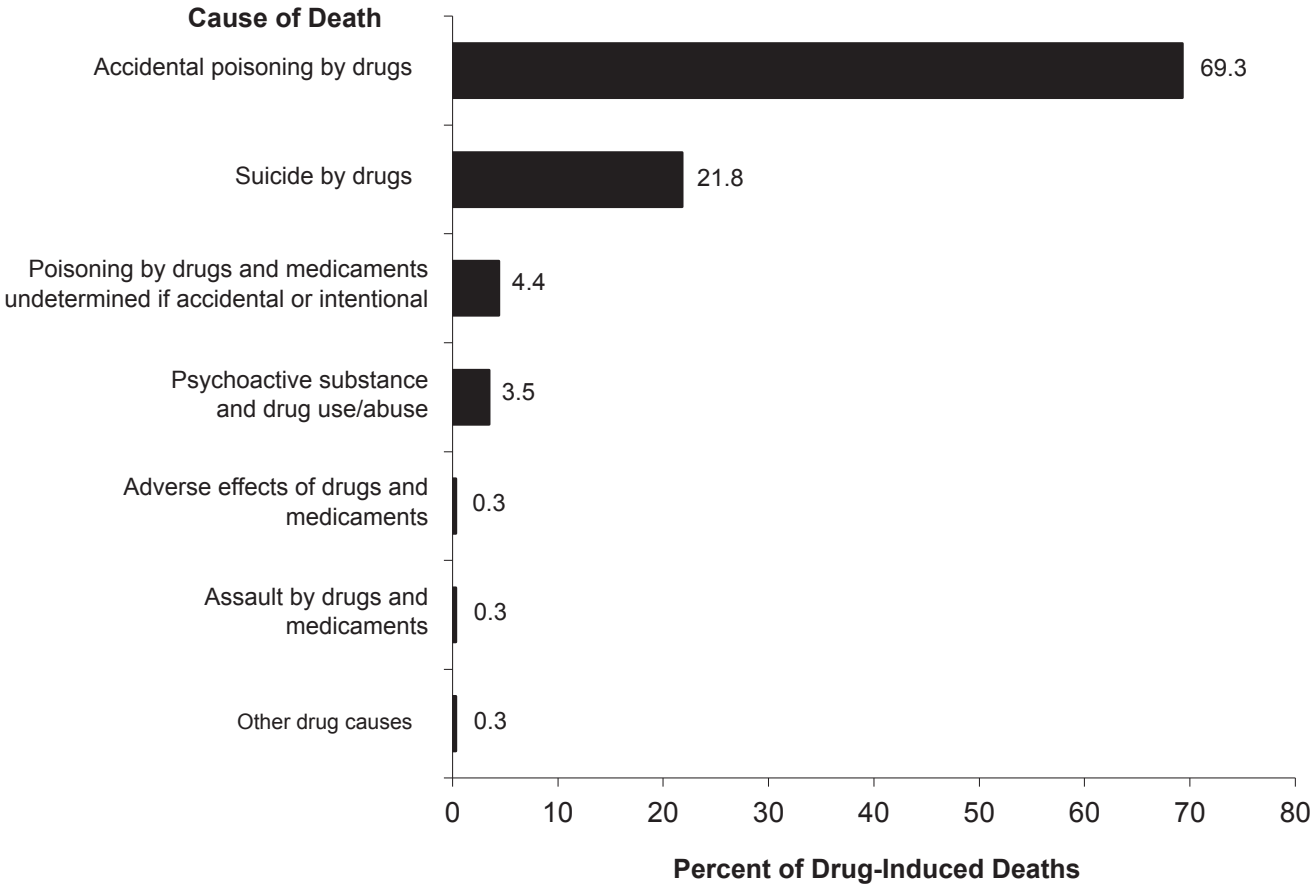


Table 45

STANDARDIZED MORTALITY RATIO BY LOCAL HEALTH AREA DRUG-INDUCED DEATHS, BRITISH COLUMBIA, 2005–2009 AND 2010

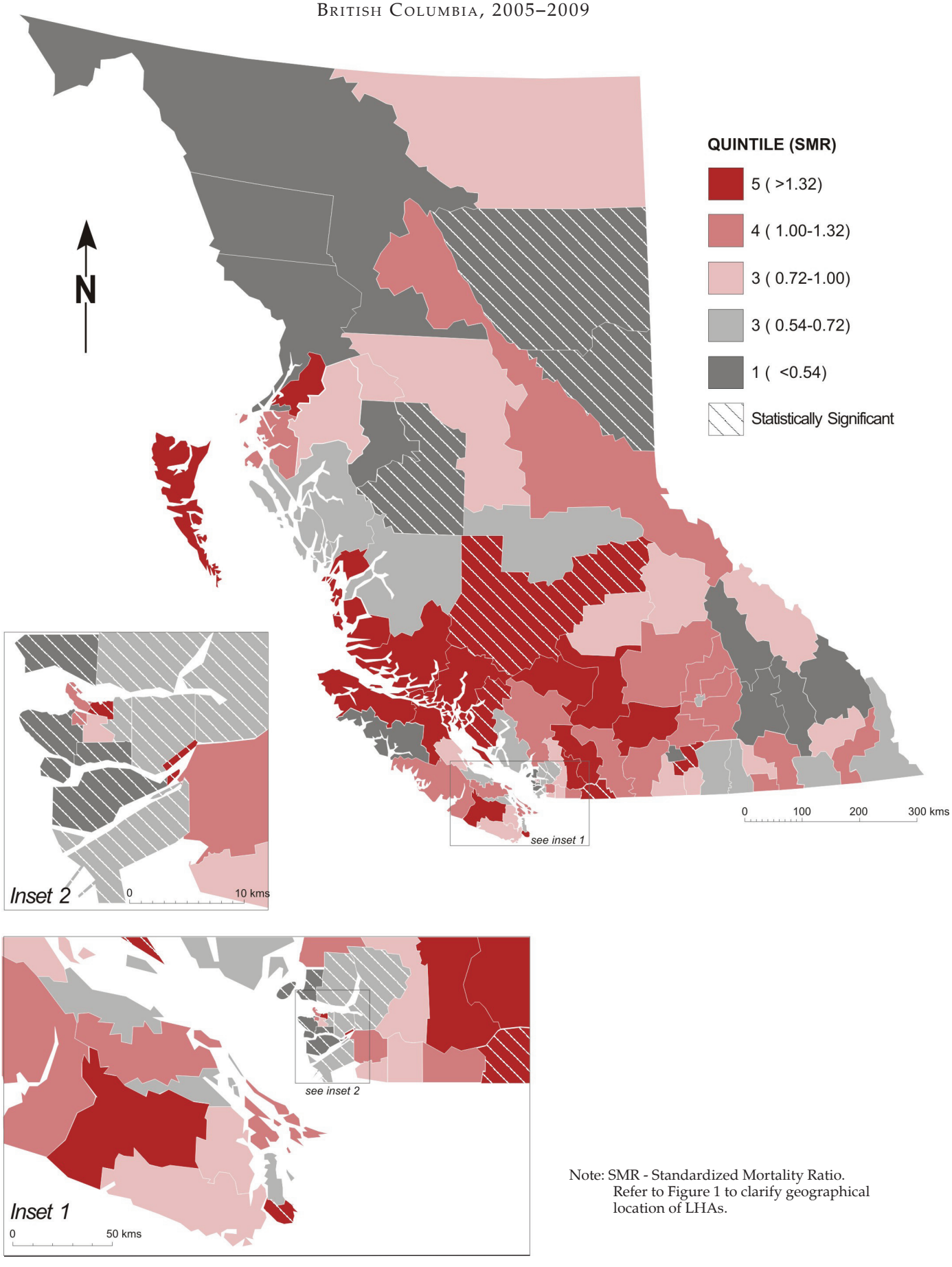
	Local Health Area	2005–2009 Observed Deaths	SMR	(p)	2010 Observed Deaths	Expected Deaths	SMR	(p)	95% Confidence Interval Lower	Upper
001	Fernie	5	0.65		1	1.16	0.86		0.01	4.78
002	Cranbrook	15	1.23		1	1.87	0.54		0.01	2.98
003	Kimberley	3	0.72		1	0.65	1.55		0.02	8.62
004	Windermere	2	0.40		-	0.82	-		-	-
005	Creston	3	0.54		1	0.87	1.15		0.02	6.41
006	Kootenay Lake	1	0.53		-	0.29	-		-	-
007	Nelson	13	1.04		-	1.92	-		-	-
009	Castlegar	6	0.92		1	1.02	0.98		0.01	5.48
010	Arrow Lakes	1	0.43		-	0.35	-		-	-
011	Trail	11	1.15		2	1.42	1.41		0.16	5.08
012	Grand Forks	3	0.71		-	0.63	-		-	-
013	Kettle Valley	1	0.55		-	0.28	-		-	-
014	Southern Okanagan	7	0.79		1	1.38	0.73		0.01	4.04
015	Penticton	36	1.84	*	2	3.03	0.66		0.07	2.39
016	Keremeos	2	0.85		1	0.37	2.72		0.04	15.15
017	Princeton	3	1.22		-	0.40	-		-	-
018	Golden	3	0.79		-	0.58	-		-	-
019	Revelstoke	1	0.24		1	0.61	1.64		0.02	9.13
020	Salmon Arm	19	1.17		5	2.53	1.98		0.64	4.61
021	Armstrong - Spallumcheen	3	0.66		-	0.69	-		-	-
022	Vernon	39	1.27		5	4.77	1.05		0.34	2.44
023	Central Okanagan	102	1.20		11	13.70	0.80		0.40	1.44
024	Kamloops	63	1.18		12	8.19	1.47		0.76	2.56
025	100 Mile House	7	0.96		-	1.10	-		-	-
026	North Thompson	2	0.94		1	0.31	3.23		0.04	17.97
027	Cariboo - Chilcotin	23	1.74	*	1	1.97	0.51		0.01	2.82
028	Quesnel	7	0.61		4	1.73	2.31		0.62	5.91
029	Lillooet	4	1.85		1	0.32	3.09		0.04	17.22
030	South Cariboo	8	2.28		-	0.53	-		-	-
031	Merritt	10	1.79		2	0.82	2.44		0.27	8.80
032	Hope	5	1.27		1	0.59	1.70		0.02	9.43
033	Chilliwack	53	1.40	*	4	6.06	0.66		0.18	1.69
034	Abbotsford	67	1.07		14	9.86	1.42		0.78	2.38
035	Langley	48	0.78		11	9.38	1.17		0.58	2.10
037	Delta	31	0.63	*	4	7.19	0.56		0.15	1.42
038	Richmond	36	0.38	*	9	14.89	0.60		0.28	1.15
040	New Westminster	48	1.42	*	4	5.39	0.74		0.20	1.90
041	Burnaby	79	0.71	*	15	17.57	0.85		0.48	1.41
042	Maple Ridge	38	0.84		7	7.10	0.99		0.39	2.03
043	Coquitlam	65	0.61	*	10	16.85	0.59		0.28	1.09
044	North Vancouver	45	0.65	*	5	10.78	0.46		0.15	1.08
045	West Vancouver-Bowen Is.	11	0.46	*	2	3.72	0.54		0.06	1.94
046	Sunshine Coast	10	0.70		2	2.24	0.89		0.10	3.22
047	Powell River	19	1.96	*	1	1.46	0.68		0.01	3.80
048	Howe Sound	18	1.01		-	2.88	-		-	-
049	Bella Coola Valley	1	0.69		-	0.21	-		-	-
050	Queen Charlotte	4	1.63		2	0.34	5.80		0.65	20.94
051	Snow Country	-	-		1	0.04	23.62		0.31	131.43
052	Prince Rupert	8	1.13		1	1.03	0.97		0.01	5.42
053	Upper Skeena	2	0.79		-	0.38	-		-	-
054	Smithers	4	0.51		2	1.15	1.74		0.20	6.27
055	Burns Lake	-	-	*	2	0.57	3.50		0.39	12.64
056	Nechako	7	0.97		1	1.05	0.95		0.01	5.31
057	Prince George	49	1.02		4	7.21	0.55		0.15	1.42
059	Peace River South	5	0.39	*	2	2.00	1.00		0.11	3.60
060	Peace River North	6	0.37	*	1	2.52	0.40		0.01	2.21
061	Greater Victoria	160	1.43	*	24	17.06	1.41		0.90	2.09
062	Sooke	29	0.89		4	5.34	0.75		0.20	1.92
063	Saanich	21	0.69		4	4.62	0.87		0.23	2.22
064	Gulf Islands	8	1.06		-	1.21	-		-	-
065	Cowichan	25	0.93		3	4.16	0.72		0.14	2.11
066	Lake Cowichan	5	1.59		1	0.49	2.05		0.03	11.38
067	Ladysmith	5	0.57		-	1.39	-		-	-
068	Nanaimo	51	1.03		13	7.71	1.69		0.90	2.89
069	Qualicum	13	0.62		2	3.29	0.61		0.07	2.20
070	Alberni	17	1.10		2	2.30	0.87		0.10	3.14
071	Courtenay	27	0.88		3	4.77	0.63		0.13	1.84
072	Campbell River	29	1.40		9	3.11	2.90	*	1.32	5.50
075	Mission	28	1.36		7	3.21	2.18		0.87	4.49
076	Agassiz - Harrison	8	1.93		1	0.64	1.57		0.02	8.73
077	Summerland	1	0.18		1	0.82	1.22		0.02	6.76
078	Enderby	4	1.11		1	0.55	1.83		0.02	10.17
080	Kitimat	3	0.56		2	0.77	2.58		0.29	9.33
081	Fort Nelson	3	0.94		-	0.47	-		-	-
083	Central Coast	1	1.43		-	0.10	-		-	-
084	Vancouver Island West	-	-		-	0.19	-		-	-
085	Vancouver Island North	11	1.75		2	0.91	2.21		0.25	7.97
087	Stikine	-	-		-	0.08	-		-	-
088	Terrace	9	0.93		3	1.45	2.07		0.42	6.05
092	Nisga'a	2	2.17		-	0.14	-		-	-
094	Telegraph Creek	-	-		-	0.05	-		-	-
161	Vancouver - City Centre	89	1.29	*	14	10.72	1.31		0.71	2.19
162	Vancouver - Downtown E.side	200	5.64	*	28	6.33	4.43	*	2.94	6.40
163	Vancouver - North East	36	0.69	*	2	8.18	0.24	+	0.03	0.88
164	Vancouver - Westside	34	0.51	*	6	10.24	0.59		0.21	1.28
165	Vancouver - Midtown	40	0.87		1	7.42	0.13	+	0.00	0.75
166	Vancouver - South	29	0.43	*	8	10.29	0.78		0.33	1.53
201	Surrey	190	1.07		31	28.15	1.10		0.75	1.56
202	South Surrey/White Rock	29	0.74		6	6.09	0.99		0.36	2.15
	PROVINCIAL TOTAL	**2,175**	**1.00**		**339**	**339.00**	**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, 2005–2009



Note: SMR - Standardized Mortality Ratio.
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 2010 at the time of reporting appear to have declined in all areas. 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, 2004–2010

Health Authority	2004	2005	2006	2007	2008	2009	2009
01 Interior	0.75	0.71	0.53	0.83	0.53	0.84	0.52
02 Fraser	0.41	0.58	0.68	0.48	0.49	0.39	0.49
03 Vancouver Coastal	0.58	0.63	0.61	0.54	0.45	0.60	0.31
04 Vancouver Island	0.75	0.64	0.73	0.68	0.63	0.61	0.44
05 Northern	0.40	0.37	0.18	0.54	0.45	0.36	0.50
PROVINCIAL TOTAL	**0.56**	**0.60**	**0.61**	**0.58**	**0.51**	**0.54**	**0.43**

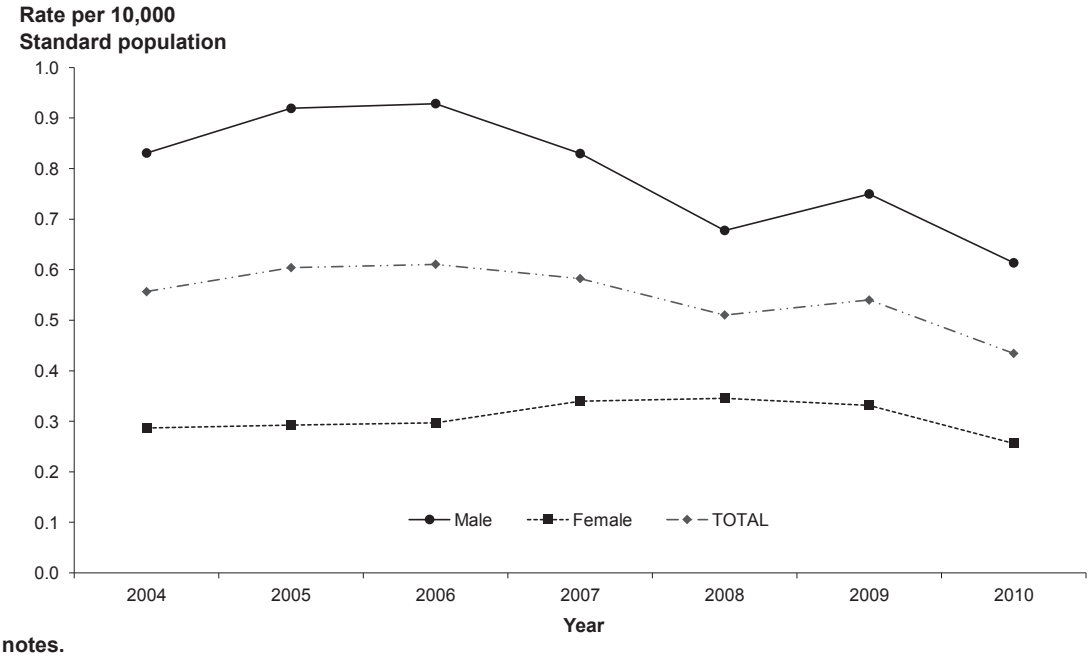
Note: Deaths that are still under investigation may later be identified as unintentional illicit/illegal overdose deaths.
ASMR - Age Standardized Mortality Rate per 10,000 standard population (Canada 1991 Census).
Non-residents are excluded.

TABLE 47
ASMR FOR UNINTENTIONAL ILLICIT/ILLEGAL OVERDOSE DEATHS BY GENDER
BRITISH COLUMBIA, 2004–2010

Gender	2004	2005	2006	2007	2008	2009	2010
Male	0.83	0.92	0.93	0.83	0.68	0.75	0.61
Female	0.29	0.29	0.30	0.34	0.35	0.33	0.26
TOTAL	**0.56**	**0.60**	**0.61**	**0.58**	**0.51**	**0.54**	**0.43**

Note: Deaths that are 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, 2004-2010



See Table 47 for notes.

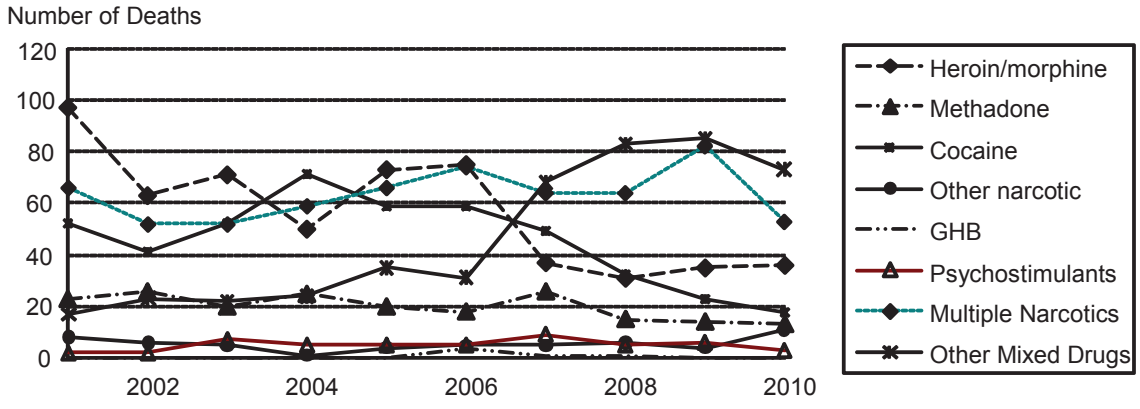
Vital Statistics Information Box

UNINTENTIONAL ILLICIT/ILLEGAL DRUG DEATHS
BRITISH COLUMBIA, 2001-2010

In 1993, British Columbia experienced an unprecedented "high water" mark in unintentional drug overdoses. In that year, 470 people died as the result of unintentional poisoning by drugs. Over 300 of these were determined to be the result of illicit drug use. These included heroin and other opiates, methadone, and cocaine, used alone or in various combinations or with a variety of other substances being used illicitly.

This information box provides a code-based analysis of deaths due to accidental illicit drug overdoses in British Columbia since 2000. It is important to note that numbers for 2010 (and to a certain extent previous years) may be revised upwards as final reports from investigating coroners are submitted to the Agency for processing. This analysis includes deaths where unintentional drug overdose was determined to be the "underlying cause of death" (see Glossary for the definition of this term), and where the offending substances included selected "narcotics and psychodysleptics" – heroin, morphine, methadone, and cocaine - and "psychostimulants with abuse potential", specifically so-called "crystal meth" (methamphetamine hydrochloride) and "ecstasy" (methylenedioxymethamphetamine). "Mixed drug overdoses" included at least one of the above substances, as well as any other drug. A separate total for deaths in which mixed narcotics such as heroin with cocaine were implicated is also included, because multiple narcotic substances are used in combination relatively frequently.

UNINTENTIONAL ILLICIT/ILLEGAL OVERDOSE DEATHS BY TYPE OF DRUG
BRITISH COLUMBIA, 2001-2010



Vital Statistics Information Box

Counts of Deaths by Causative Substances

Over the past nine years, deaths involving single heroin/morphine type drug use appear to be declining slightly. On the other hand, deaths where cocaine was the only substance implicated appear to be on the increase, along with deaths from combined narcotics.

Deaths from the combined use of illicit drugs with other drugs (other than narcotics) have risen sharply since 2007 and remain the leading cause of illicit drug overdose since then.

The use of psychostimulants is a relatively new phenomenon. Its place as the direct cause of unintentional overdose does not appear to be rising. It is interesting to note that methadone, a substance used in the treatment of heroin addiction, is apparently being used illicitly and causing overdose deaths in and of itself.

Overdose Deaths by Type of Drug

British Columbia, 2001-2010

Drug	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Heroin/morphine type only	97	63	71	50	73	75	37	31	35	36
Methadone only	23	26	20	25	20	18	26	15	14	13
Cocaine only	52	41	52	71	59	59	49	32	23	18
Other narcotic/ hallucinogen only	8	6	5	1	4	5	5	6	4	11
GHB only	0	0	0	0	0	4	1	1	0	0
Psyschostimulants* only	2	2	7	5	5	5	9	5	6	3
Multiple narcotics	66	52	52	59	66	74	64	64	82	53
Other mixed drugs	17	23	22	24	35	31	68	83	85	73
TOTAL	**265**	**213**	**229**	**235**	**262**	**271**	**259**	**237**	**249**	**207**

Note: Deaths that were still under investigation may later be identified as unintentional illicit/illegal overdose deaths.
*ICD-10 codes for psychostimulants include "crystal meth" and "ecstasy".
Unintentional illicit/illegal drug overdose deaths (X41, X42, X44) include these specified drug injury categories:

1) T40.0, T40.1, or T40.2 for heroin/morphine type.
2) T40.3 for methadone.
3) T40.5 for cocaine.
4) T40.4, T40.6, T40.9 for other narcotic/hallucinogen.
5) T41.2 for gamma hydroxybutyrate (GHB).
6) T43.6 for psychostimulant*.

Multiple Narcotic deaths involve mixed drugs from categories 1 - 4 only.
Other Mixed Drug deaths include one illicit drug from categories 1 - 6 (T40.0-T40.9, T41.2, T43.6) and one or more other drugs (T36.0-T48.6, T52.8, T53.9) and are not multiple narcotic deaths.
Non-residents are excluded.

Accidental Fall Deaths

In 2010, there were 1,669 deaths due to external causes among BC residents and of these, unintentional (accidental) deaths comprised over 69.3 percent (1,156) of non-natural deaths. Overall, falls were the leading cause of unintentional death, contributing 42.6 percent to this category in 2010 and exceeding fatal motor-vehicle incidents 493 to 240 (see Table 30).

Analysis of various causes of unintentional (accidental) mortality in 2010 shows that more females died as the result of a fall than males did. Of unintentional mortality, 34.0 percent of male deaths were the result of falls. In contrast, 55.0 percent of female unintentional mortality was the result of falls.

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 (direct). There are additional deaths that involve accidental falls, but where the fall was considered to be only a contributing factor (indirect).

Table 48 and Figure 49 show how age specific rates compare between the two categories (direct and indirect) of fall-related deaths in BC for individuals aged 60 and older. Indirect fall-related deaths are more frequent among the over 70 age group than direct fall deaths; however, in the 60-69 age groups, direct fall deaths are more frequent.

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 under "Falls Prevention" in the "Injury Topics" menu.

TABLE 48

DEATHS DIRECTLY AND INDIRECTLY DUE TO FALLS BY AGE

BRITISH COLUMBIA, 2004–2010

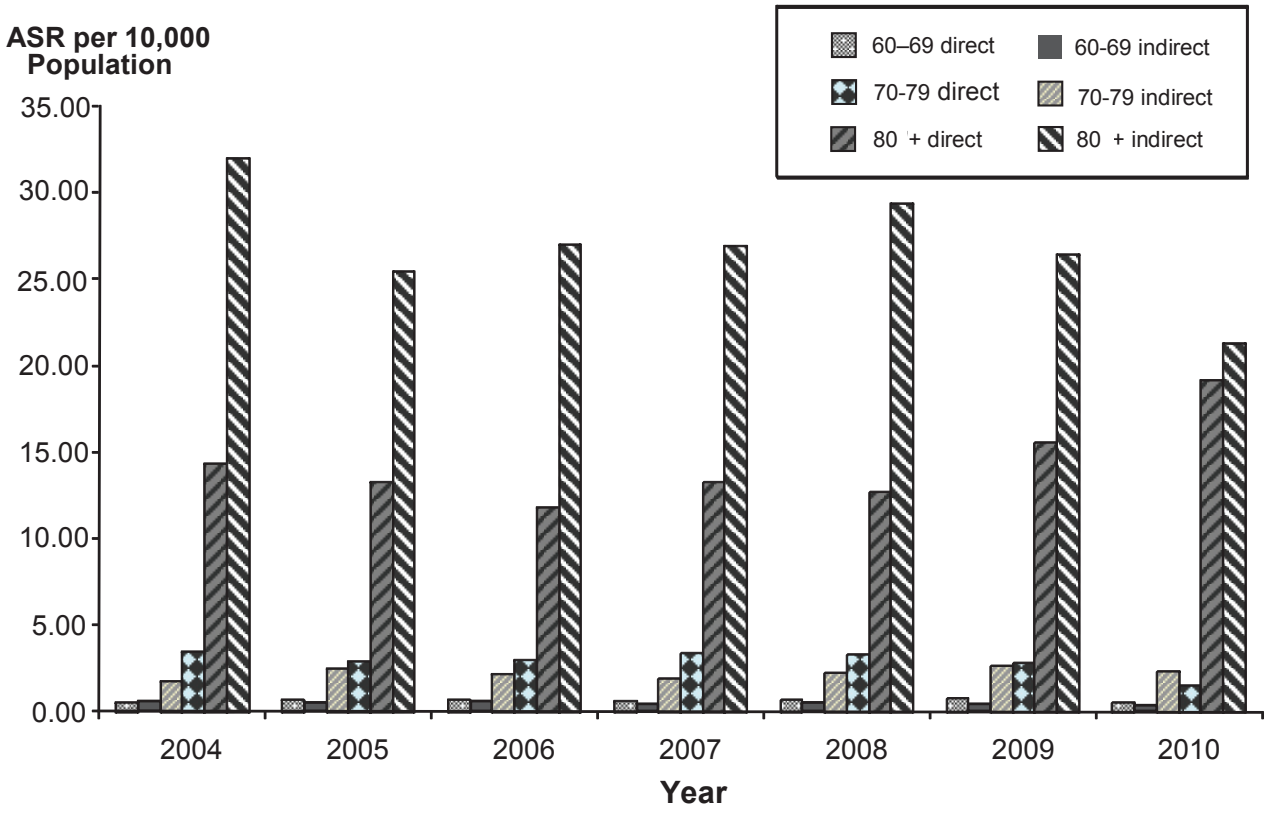
Cause of Death	Age (in Years)	2004		2005		2006		2007		2008		2009		2010	
		Counts	ASR	Counts	ASR	Counts	ASR	Counts	ASR	Counts	ASR	Counts	ASR	Counts	ASR
Directly due to falls															
	60-69	18	0.50	24	0.65	25	0.64	23	0.56	28	0.64	36	0.78	25	0.52
	70-79	44	1.71	65	2.50	57	2.16	50	1.87	61	2.25	72	2.61	64	2.27
	80+	221	14.27	213	13.27	196	11.79	228	13.25	226	12.71	287	15.57	366	19.12
Indirectly due to falls															
	60-69	21	0.59	20	0.54	24	0.62	18	0.44	23	0.53	19	0.41	16	0.33
	70-79	89	3.45	74	2.84	77	2.92	89	3.33	90	3.31	77	2.79	42	1.49
	80+	495	31.97	408	25.42	448	26.94	462	26.85	522	29.36	486	26.36	407	21.27

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

FIGURE 49

DEATHS DIRECTLY AND INDIRECTLY DUE TO FALLS, AGES 60-80+

BRITISH COLUMBIA, 2004-2010



Burials and Cremations

Table 49 shows the method used to dispose of decedents' remains.

In 2010, 81.4 percent of deaths resulted in cremations (25,355) and 17.8 percent involved burials (5,535).

Since 1986, the percentage of burials has consistently decreased.

TABLE 49

METHOD OF DISPOSITION OF DECEDENT

BRITISH COLUMBIA, 1986–2010

Year	Burial		Cremation		Other	N.S.	Total
	Number	Percent	Number	Percent			
1986	8,204	39.0	12,686	60.4	98	21	21,009
1987	8,211	38.0	13,279	61.4	104	25	21,619
1988	8,319	37.2	13,926	62.3	96	17	22,358
1989	8,061	35.4	14,616	64.1	81	28	22,786
1990	8,208	35.1	15,088	64.4	91	29	23,416
1991	8,035	33.7	15,675	65.8	75	36	23,821
1992	7,818	32.0	16,512	67.5	97	36	24,463
1993	7,989	31.2	17,213	67.2	151	251	25,604
1994	7,712	29.9	17,888	69.2	177	55	25,832
1995	7,615	29.0	18,361	70.0	187	63	26,226
1996	7,640	27.9	19,546	71.4	196	12	27,394
1997	7,360	27.0	19,652	72.1	213	46	27,271
1998	7,198	25.9	20,379	73.3	227	9	27,813
1999	7,063	25.3	20,634	74.0	200	-	27,897
2000	6,469	23.6	20,695	75.7	190	1	27,355
2001	6,691	23.7	21,331	75.5	227	1	28,250
2002	6,541	22.8	21,979	76.5	192	3	28,715
2003	6,608	22.7	22,363	76.7	188	-	29,159
2004	6,380	21.5	23,163	77.9	185	-	29,728
2005	6,282	20.9	23,633	78.5	186	-	30,101
2006	6,362	20.8	24,014	78.6	168	-	30,544
2007	6,148	19.8	24,804	79.7	169	-	31,121
2008	6,313	19.8	25,396	79.6	196	-	31,905
2009	5,843	18.7	25,198	80.7	199	-	31,240
2010	5,535	17.8	25,355	81.4	253	-	31,143

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, 2010

Local Health Area		Burial		Cremation		Other	Total
		Number	Percent	Number	Percent		
001	Fernie	13	17	62	83	-	75
002	Cranbrook	30	14	185	86	-	215
003	Kimberley	7	9	72	91	-	79
004	Windermere	8	12	60	88	-	68
005	Creston	27	19	117	81	-	144
006	Kootenay Lake	2	5	35	95	-	37
007	Nelson	38	21	138	77	3	179
009	Castlegar	32	28	84	72	-	116
010	Arrow Lakes	8	18	36	82	-	44
011	Trail	37	15	215	85	-	252
012	Grand Forks	27	23	91	77	-	118
013	Kettle Valley	4	14	24	86	-	28
014	Southern Okanagan	33	14	203	85	2	238
015	Penticton	66	13	430	87	-	496
016	Keremeos	9	13	60	87	-	69
017	Princeton	5	8	60	92	-	65
018	Golden	9	26	26	74	-	35
019	Revelstoke	8	16	43	84	-	51
020	Salmon Arm	47	13	320	87	1	368
021	Armstrong-Spallumcheen	12	12	89	88	-	101
022	Vernon	97	16	519	84	1	617
023	Central Okanagan	256	17	1,267	83	5	1,528
024	Kamloops	109	13	710	86	10	829
025	100 Mile House	13	10	112	90	-	125
026	North Thompson	8	20	32	80	-	40
027	Cariboo-Chilcotin	45	23	152	77	-	197
028	Quesnel	32	16	168	84	-	200
029	Lillooet	10	31	22	69	-	32
030	South Cariboo	11	15	59	83	1	71
031	Merritt	25	22	91	78	-	116
032	Hope	17	15	93	85	-	110
033	Chilliwack	131	19	546	81	1	678
034	Abbotsford	247	27	661	72	8	916
035	Langley	132	14	810	86	4	946
037	Delta	77	12	559	87	8	644
038	Richmond	235	25	677	73	17	929
040	New Westminster	85	17	400	82	4	489
041	Burnaby	355	27	933	71	33	1,321
042	Maple Ridge	77	12	566	87	5	648
043	Coquitlam	153	16	820	83	10	983
044	North Vancouver	104	14	636	85	11	751
045	West Vancouver-Bowen Is.	50	12	372	87	4	426
046	Sunshine Coast	17	6	255	93	1	273
047	Powell River	21	10	188	87	8	217
048	Howe Sound	19	18	84	82	-	103
049	Bella Coola Valley	14	70	6	30	-	20
050	Queen Charlotte	16	50	16	50	-	32
051	Snow Country	1	-	3	75	-	4
052	Prince Rupert	23	26	65	74	-	88
053	Upper Skeena	19	63	11	37	-	30
054	Smithers	26	36	46	64	-	72
055	Burns Lake/Eutsuk	21	38	34	62	-	55
056	Nechako	32	32	67	68	-	99
057	Prince George	91	16	473	84	1	565
059	Peace River South	63	34	121	66	-	184
060	Peace River North	44	27	117	72	1	162
061	Greater Victoria	269	13	1,796	87	10	2,075
062	Sooke	28	8	329	92	-	357
063	Saanich	70	11	568	89	3	641
064	Gulf Islands	12	8	132	90	2	146
065	Cowichan	70	15	391	85	-	461
066	Lake Cowichan	3	5	57	93	1	61
067	Ladysmith	24	11	199	89	1	224
068	Nanaimo	86	9	888	91	2	976
069	Qualicum	35	7	466	93	2	503
070	Alberni	64	21	244	79	-	308
071	Courtenay	30	6	505	94	-	535
072	Campbell River	26	7	326	93	-	352
075	Mission	42	16	219	84	1	262
076	Agassiz-Harrison	12	16	60	82	1	73
077	Summerland	9	7	122	93	-	131
078	Enderby	12	15	67	85	-	79
080	Kitimat	31	47	35	53	-	66
081	Fort Nelson	9	32	19	68	-	28
083	Central Coast	10	83	2	17	-	12
084	Vancouver Island West	2	20	8	80	-	10
085	Vancouver Island North	18	19	78	80	1	97
087	Stikine	1	20	4	80	-	5
088	Terrace	40	28	104	72	-	144
092	Nisga'a	7	88	1	13	-	8
094	Telegraph Creek	4	80	1	20	-	5
161	Vancouver - City Centre	101	16	508	83	6	615
162	Vancouver - Dwtn Eastside	141	32	301	67	4	446
163	Vancouver - North East	242	43	307	55	14	563
164	Vancouver - Westside	174	24	557	75	7	738
165	Vancouver - Midtown	140	34	255	63	13	408
166	Vancouver - South	267	33	517	65	16	800
201	Surrey	344	18	1,507	81	20	1,871
202	South Surrey/White Rock	110	13	730	86	9	849
PROVINCIAL TOTAL		5,535	17.8	25,355	81.4	253	31,143

Note: Total includes residents with unkown LHA.