

Death-related Statistics



Vital Statistics Information Box

DEATHS BY DECEDENT'S PLACE OF BIRTH

BRITISH COLUMBIA, 2011

Area	Province/Country	Deaths
Canada	Total	21,391
	British Columbia	8,557
	Saskatchewan	3,916
	Alberta	2,989
	Ontario	2,305
	Manitoba	2,121
	Quebec	697
	Nova Scotia	375
	New Brunswick	243
	Newfoundland & Labrador	108
	Prince Edward Island	51
	Yukon	17
	Northwest Territories & Nunavut	4
	Unknown Province	8
North and Central America	Total	780
	United States	650
	Other North and Central American countries	130
South America	Total	76
Europe	Total	6,190
	United Kingdom	2,518
	Germany	749
	Netherlands	442
	Italy	371
	Scandinavian Countries	354
	Poland	262
	Hungary	180
	Republic of Ireland	143
	Russia	134
	Portugal	123
	Other European Countries	914
Asia and the Middle East	Total	2,788
	China	1,050
	India	658
	Philippines	251
	Hong Kong	169
	Vietnam	114
	South Korea	79
	Iran	76
	Pakistan	69
	Japan	49
	Other Asian and the Middle Eastern countries	273
Africa	Total	192
	South Africa	58
	Other African countries	134
Oceania	Total	193
	Fiji	122
	Australia	50
	New Zealand	20
	Other Oceanic countries	1
Unknown	Total	166
Total		31,776

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 age group and gender is shown in Table 21. It provides a summary of the contribution of the 19 diagnostic categories to total deaths in BC in 2011. 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 4 or 5 characters, and are therefore even more detailed than the rollups shown in Appendix 2. Neoplasms and Diseases of the Circulatory System accounted for most of the deaths in 2011 for both genders. Deaths in those two categories are further analysed in the following sections.



Vital Statistics Information Box

PLACE OF DEATH FOR DEATHS FROM NATURAL CAUSES

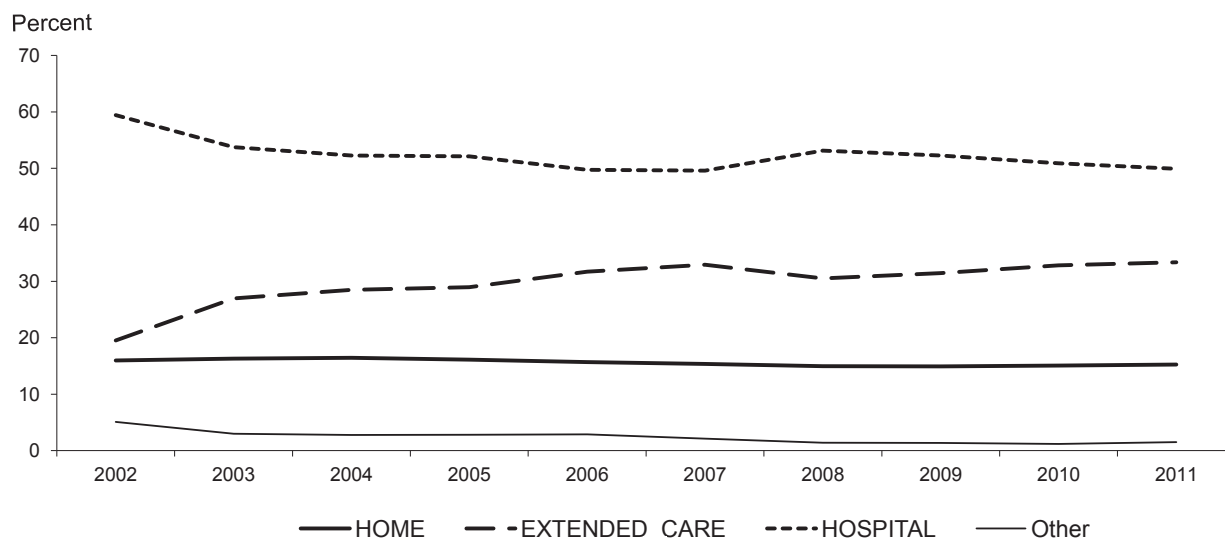
BRITISH COLUMBIA, 2002 - 2011

Deaths from natural causes in 2002 to 2011 were examined to determine the place of death. The majority of these deaths to residents of British Columbia occurred in hospital (53.3 percent over the 10-year period). Of deaths from natural causes, 15.6 percent occurred at home and 29.8 percent occurred in extended care facilities.

Place of Death	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2002-2011
Home	4,266	4,437	4,571	4,533	4,495	4,475	4,490	4,365	4,389	4,573	44,594
Extended Care	5,213	7,343	7,916	8,139	9,091	9,601	9,145	9,188	9,554	10,005	85,195
Hospital	15,872	14,641	14,523	14,645	14,265	14,453	15,936	15,277	14,824	14,977	149,413
Other and Unknown	1,357	812	775	788	824	617	423	403	351	449	6,799
Total	26,708	27,233	27,785	28,105	28,675	29,146	29,994	29,233	29,118	30,004	286,001

PERCENT OF DEATHS FROM NATURAL CAUSES BY PLACE OF DEATH

BRITISH COLUMBIA, 2002 - 2011



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, 2002 - 2011

More British Columbians succumbed to cancer or malignant neoplasms (ICD Codes C00-C97) than any other cause in 2011. The following charts illustrate the trends and changes in deaths caused by cancer from 2002 to 2011. As illustrated, the proportion of deaths caused by specific types of cancer has not changed substantially from 2002 to 2011. However, those dying of cancer in 2011 are older than they were in 2002, and larger shares of them are female. Both the Age Standardized Mortality Rate (ASMR) rate and Potential Years of Life Lost (PYLLSR) have fallen.

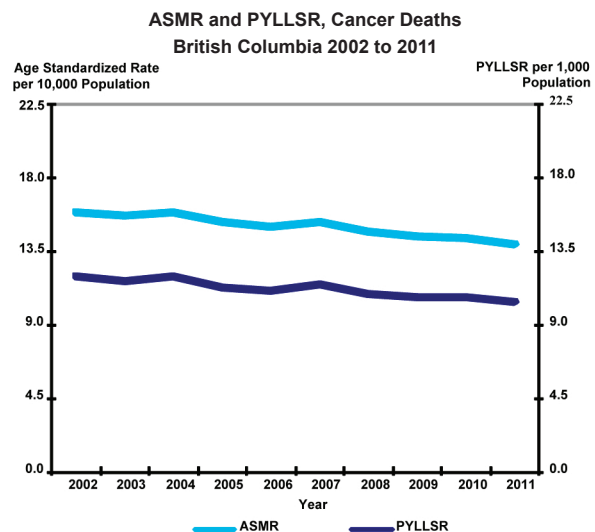
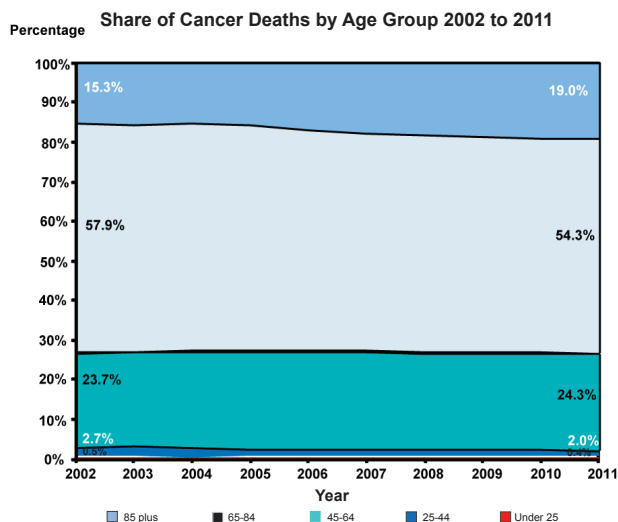
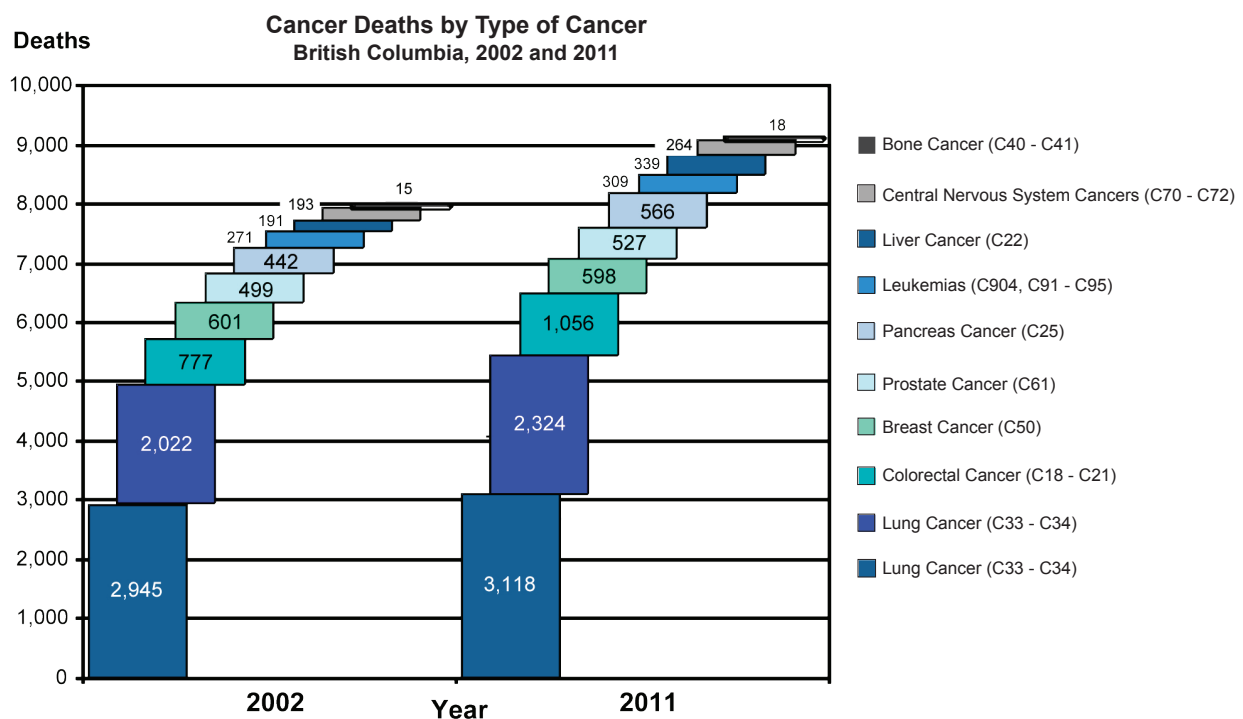


TABLE 21
CAUSES OF DEATH BY GENDER AND AGE
BRITISH COLUMBIA, 2011

ICD-10 Code(s)	Causes of Death	Gender	Age Group (in Years)										Total		
			<1	1-4	5-9	10-14	15-19	20-24	25-44	45-64	65-79	80+	Number	Percent	ASMR
A00-B99	Certain infectious and parasitic diseases	M	1	-	-	1	-	-	22	101	49	119	293	1.8	0.96
		F	-	-	1	-	1	1	14	42	57	147	263	1.6	0.67
		T	1	-	1	1	1	1	36	143	106	266	556	3.4	0.81
C00-D48	Neoplasms	M	1	3	4	4	5	6	90	1,163	2,068	1,591	4,935	30.2	16.48
		F	-	-	1	1	2	7	93	1,072	1,623	1,563	4,362	26.7	12.24
		T	1	3	5	5	7	13	183	2,235	3,691	3,154	9,297	57.0	14.14
D50-D89	Diseases of blood and blood-forming organs, certain immune mechanisms	M	1	-	-	-	1	-	1	7	9	23	42	0.3	0.14
		F	-	-	-	1	-	-	-	7	5	35	48	0.3	0.10
		T	1	-	-	1	1	-	1	14	14	58	90	0.6	0.12
E00-E90	Endocrine/nutritional/metabolic diseases	M	-	1	-	-	2	2	12	171	371	409	968	5.9	3.19
		F	-	1	-	-	-	4	8	88	226	435	762	4.7	1.92
		T	-	2	-	-	2	6	20	259	597	844	1,730	10.6	2.50
F00-F99	Mental and behavioural disorders	M	-	-	-	-	-	-	7	49	110	397	563	3.4	1.76
		F	-	-	-	-	2	-	5	22	93	871	993	6.1	1.92
		T	-	-	-	-	2	-	12	71	203	1,268	1,556	9.5	1.89
G00-G99	Diseases of the nervous system	M	3	3	-	-	1	2	8	75	187	354	633	3.9	2.06
		F	2	1	1	-	1	1	14	60	144	508	732	4.5	1.70
		T	5	4	1	-	2	3	22	135	331	862	1,365	8.4	1.87
H00-H59	Diseases of the eye and adnexa	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
H60-H95	Diseases of the ear and mastoid process	M	-	-	-	-	-	-	-	-	1	-	1	0.0	+
		F	-	-	-	-	-	-	-	-	-	2	2	0.0	+
		T	-	-	-	-	-	-	-	-	1	2	3	0.0	+
I00-I99	Diseases of the circulatory system	M	-	-	-	-	-	3	58	585	1,166	2,455	4,267	26.1	13.67
		F	1	-	-	1	1	-	32	207	711	3,459	4,412	27.0	9.38
		T	1	-	-	1	1	3	90	792	1,877	5,914	8,679	53.2	11.38
J00-J99	Diseases of the respiratory system	M	-	1	-	-	-	1	13	121	497	1,051	1,684	10.3	5.41
		F	-	1	-	-	-	-	10	91	345	1,161	1,608	9.9	3.59
		T	-	2	-	-	-	1	23	212	842	2,212	3,292	20.2	4.38
K00-K93	Diseases of the digestive system	M	-	-	-	-	1	-	25	200	187	224	637	3.9	2.08
		F	-	-	-	-	-	-	16	113	143	336	608	3.7	1.51
		T	-	-	-	-	1	-	41	313	330	560	1,245	7.6	1.79
L00-L99	Diseases of the skin and subcutaneous tissue	M	-	-	-	-	-	-	1	5	5	16	27	0.2	0.09
		F	-	-	-	-	-	-	-	4	11	37	52	0.3	0.12
		T	-	-	-	-	-	-	1	9	16	53	79	0.5	0.10
M00-M99	Diseases of the musculoskeletal system and connective tissue	M	-	-	-	-	-	-	2	15	25	26	68	0.4	0.23
		F	-	-	-	-	-	-	5	20	30	81	136	0.8	0.33
		T	-	-	-	-	-	-	7	35	55	107	204	1.3	0.29
N00-N99	Diseases of the genitourinary system	M	1	-	-	-	-	-	1	17	78	213	310	1.9	0.98
		F	-	-	-	-	-	-	1	11	56	300	368	2.3	0.75
		T	1	-	-	-	-	-	2	28	134	513	678	4.2	0.85
O00-O99	Complications of pregnancy, childbirth and the puerperium	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
P00-P96	Certain conditions originating in the perinatal period	M	44	-	-	-	-	-	-	-	-	-	44	0.3	0.28
		F	41	-	-	-	-	-	-	-	-	-	41	0.3	0.28
		T	85	-	-	-	-	-	-	-	-	-	85	0.5	0.28
Q00-Q99	Congenital anomalies	M	21	2	2	-	1	1	4	13	5	-	49	0.3	0.25
		F	14	1	-	1	1	-	5	11	5	3	41	0.3	0.19
		T	35	3	2	1	2	1	9	24	10	3	90	0.6	0.22
R00-R99	Symptoms, signs and ill-defined conditions, unknown causes	M	26	3	-	2	17	49	138	240	97	100	672	4.1	2.61
		F	11	-	1	3	8	12	54	110	51	133	383	2.3	1.22
		T	37	3	1	5	25	61	192	350	148	233	1,055	6.5	1.91
V01-Y98	External causes	M	-	1	3	4	29	71	258	341	154	263	1,124	6.9	4.28
		F	-	5	1	2	14	24	96	113	90	300	645	4.0	1.92
		T	-	6	4	6	43	95	354	454	244	563	1,769	10.8	3.07
All causes		M	98	14	9	11	57	135	640	3,104	5,010	7,241	16,319	100.0	54.48
		F	69	9	5	9	30	49	353	1,972	3,590	9,371	15,457	100.0	37.87
PROVINCIAL TOTAL		T	167	23	14	20	87	184	993	5,076	8,600	16,612	31,776	100.0	45.61

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 2006 to 2010 period and the year 2011, 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 2011 ASMR rank.

For 2011, the 12 leading causes of death shown in Table 22 were responsible for 84.0 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 2011, these 3 leading causes account for 54.6 percent of all deaths.

Figure 35 shows the number of deaths from Table 22 in 2011 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 one year of age (infant mortality), were certain conditions originating in the perinatal period with 50.9 percent of the deaths attributable to this cause. The second highest cause of infant deaths was congenital malformations and chromosome abnormalities. Males accounted for 58.7 percent of the deaths among those under 1 year of age. Of all infant deaths, 58.7 percent occurred within the first seven days after birth and 63.5 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 to 24 and 25 to 44. These causes include events such as motor vehicle accidents, fall, 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 deaths of females, outnumbering deaths of 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 37.2 percent of deaths for males and 54.0 percent of deaths for females in this age group.

Between 65 and 84 years of age, 36.7 percent of the deaths were due to malignant neoplasms followed by cardiovascular disease, which caused 16.7 percent of deaths. For those 85 years and older, the order of those two cause categories was reversed with cardiovascular disease causing 26.2 percent of deaths and malignant neoplasms causing 14.7 percent.

Malignant neoplasms ranked in the first three leading causes of death in each age group for those over one year of age. This cause of death was the overall leading cause of death in BC in 2006 to 2010, as well as in 2011 (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, 2006–2010 AND 2011

Cause of Death	ICD-10 Code(s)	2006–2010				2011			
		Number	Rank	ASMR	Rank	Number	Rank	ASMR	Rank
Malignant neoplasms	C00-C97	44,208	1	14.71	1	9,119	1	13.89	1
Cardiovascular disease	I00-I51	33,772	2	9.99	2	5,991	2	7.84	2
Cerebrovascular diseases	I60-I69	11,512	3	3.33	3	2,224	3	2.89	3
Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	6,849	5	2.62	4	1,282	7	2.11	4
Diabetes mellitus	E10-E14	5,051	7	1.60	7	1,458	5	2.11	5
Chronic pulmonary disease	J40-J44	6,957	4	2.15	5	1,476	4	2.05	6
Vascular/senile dementia	F01, F03	4,877	8	1.30	9	1,373	6	1.61	7
Pneumonia/influenza	J09-J181, J188, J189	6,343	6	1.79	6	1,112	8	1.36	8
Other diseases of digestive system	K00-K67, K80-K93	4,329	9	1.31	8	819	9	1.11	9
Other disorders of the nervous system	G00-G25, G31-G99	3,305	11	1.09	10	714	10	1.08	10
Other diseases of the respiratory system	J00-J06, J182, J20-J39, J45-J98	3,333	10	1.01	11	704	11	0.96	11
Suicide	X60-X84, Y870	2,335	12	0.97	12	426	12	0.83	12
Other causes¹		23,097		7.62		5,078		7.76	
TOTAL (All causes of death)		155,968		49.49		31,776		45.61	

Note: ¹Other 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 2011 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, 2011

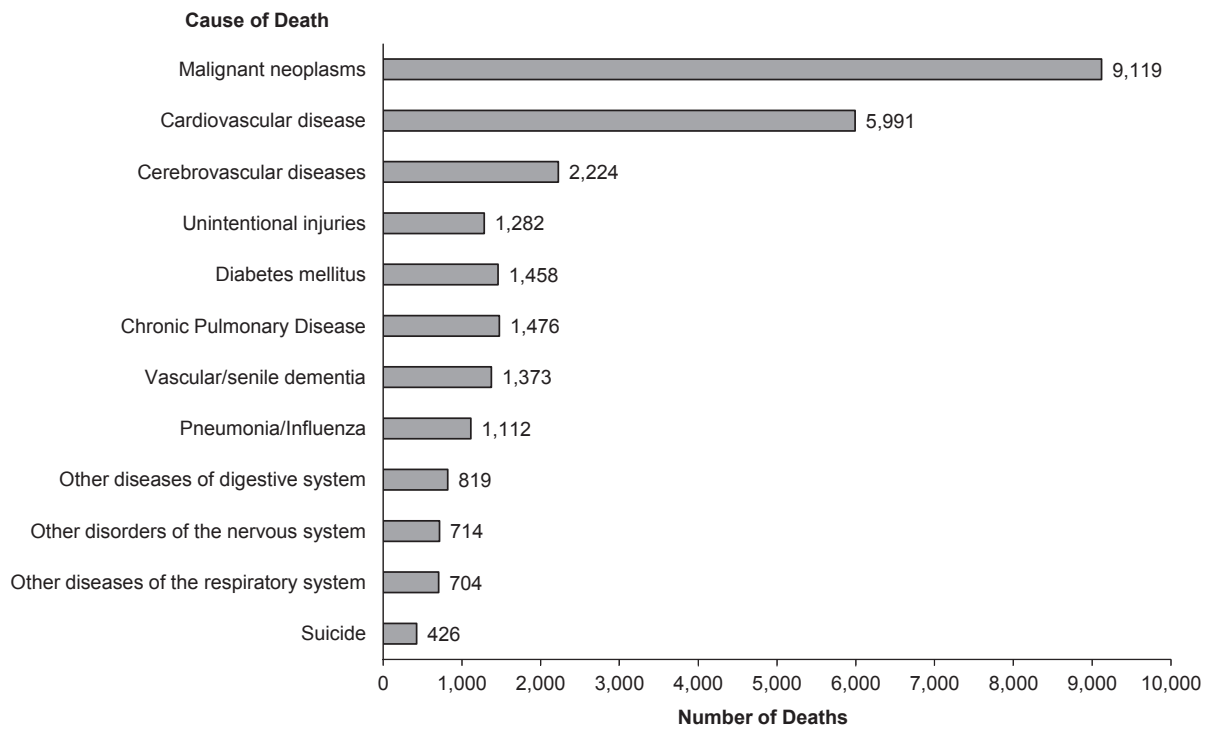


TABLE 23
LEADING CAUSES OF DEATH BY AGE AND GENDER
 BRITISH COLUMBIA, 2011

Cause of Death	ICD-10 Code(s)	Male		Female		Total	
		Number	Percent	Number	Percent	Number	Percent
Under 1 Year Old							
1. Certain conditions originating in the perinatal period	P00-P96	44	44.9	41	59.4	85	50.9
2. Congenital malformations and chromosome abnormalities	Q00-Q99	21	21.4	14	20.3	35	21.0
3. Sudden infant death syndrome	R95	5	5.1	5	7.2	10	6.0
4. Other disorders of the nervous system	G00-G25, G31-G99	3	3.1	2	2.9	5	3.0
5. Malignant neoplasms	C00-C97	1	1.0	-	-	1	0.6
Other causes ¹		24	24.5	7	10.1	31	18.6
All causes		98	100.0	69	100.0	167	100.0
1-14 Years Old							
1. Malignant neoplasms	C00-C97	11	32.4	2	8.7	13	22.8
2. Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	7	20.6	6	26.1	13	22.8
3. Congenital malformations and chromosome abnormalities	Q00-Q99	4	11.8	2	8.7	6	10.5
4. Other disorders of the nervous system	G00-G25, G31-G99	3	8.8	2	8.7	5	8.8
5. Metabolic disorders	E70-E89	1	2.9	1	4.3	2	3.5
Other causes ¹		8	23.5	10	43.5	18	31.6
All causes		34	100.0	23	100.0	57	100.0
15-24 Years Old							
1. Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	65	33.9	19	24.1	84	31.0
2. Suicide	X60-X84, Y870	26	13.5	16	20.3	42	15.5
3. Malignant neoplasms	C00-C97	11	5.7	9	11.4	20	7.4
4. Homicide	X85-Y09, Y871	8	4.2	2	2.0	10	3.7
5. Metabolic disorders	E70-E89	3	1.6	3	3.8	6	2.2
Other causes ¹		79	41.1	30	38.0	109	40.2
All causes		192	100.0	79	100.0	271	100.0
25-44 Years Old							
1. Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	153	23.9	58	16.4	211	21.2
2. Malignant neoplasms	C00-C97	90	14.1	91	25.8	181	18.2
3. Suicide	X60-X84, Y870	91	14.2	31	8.8	122	12.3
4. Cardiovascular disease	I00-I51	45	7.0	14	4.0	59	5.9
5. Certain infectious and parasitic diseases	A00-B99, G14	22	3.4	14	4.0	36	3.6
Other causes ¹		239	37.3	145	41.1	384	38.7
All causes		640	100.0	353	100.0	993	100.0

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

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

TABLE 23 – *concluded*
LEADING CAUSES OF DEATH BY AGE AND GENDER
 BRITISH COLUMBIA, 2011

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	1,155	37.2	1,065	54.0	2,220	43.7
2. Cardiovascular disease	I00-I51	476	15.3	125	6.3	601	11.8
3. Unintentional injuries	V01-X59, Y40-Y86, Y880-Y883	191	6.2	67	3.4	258	5.1
4. Diseases of liver	K70-K76	143	4.6	79	4.0	222	4.4
5. Diabetes mellitus	E10-E14	140	4.5	62	3.1	202	4.0
Other causes¹		999	32.2	574	29.1	1,573	31.0
All causes		3,104	100.0	1,972	100.0	5,076	100.0
65-84 Years Old							
1. Malignant neoplasms	C00-C97	2,767	36.1	2,187	37.6	4,954	36.7
2. Cardiovascular disease	I00-I51	1,372	17.9	876	15.1	2,248	16.7
3. Cerebrovascular diseases	I60-I69	464	6.1	441	7.6	905	6.7
4. Chronic Pulmonary Disease	J40-J44	446	5.8	361	6.2	807	6.0
5. Diabetes mellitus	E10-E14	497	6.5	303	5.2	800	5.9
Other causes¹		2,117	27.6	1,650	28.4	3,767	27.9
All causes		7,663	100.0	5,818	100.0	13,481	100.0
85 Years and Older							
1. Cardiovascular disease	I00-I51	1,186	25.9	1,892	26.5	3,078	26.2
2. Malignant neoplasms	C00-C97	804	17.5	926	13.0	1,730	14.7
3. Cerebrovascular diseases	I60-I69	380	8.3	794	11.1	1,174	10.0
4. Vascular/senile dementia	F01, F03	269	5.9	720	10.1	989	8.4
5. Pneumonia/Influenza	J09-J181, J188, J189	298	6.5	442	6.2	740	6.3
Other causes¹		1,651	36.0	2,369	33.2	4,020	34.3
All causes		4,588	100.0	7,143	100.0	11,731	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 2010; the most recent year for which information on Canadian infant mortality rates is available (see Table 5). There were 167 infant deaths for BC residents in 2011 or 3.80 deaths per 1,000 live births. Twenty years ago, the rate was over 6 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 2011 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 three birth weight categories is quite distinct. For infants with birth weights of 2,500 grams or more, 1.30 per 1,000 live births in the same birth weight category died in their first year. In the 1,500 to 2,499 gram group the rate was 12.00 per 1,000 live births, and infants who weigh less than 1,500 grams had an infant mortality rate of 212.04 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 167 infant deaths in 2011, there were 49 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, 43.1 percent were extremely premature (less than 28 weeks) with low birth weight (less than 2,500 grams), 63.5 percent were low birth weight, 63.5 percent were premature (less than 37 weeks) and 59.3 percent were both low birth weight and premature.

Table 26 shows infant mortality in each LHA of the infants' usual residence, for 2006 to 2010 and for the year 2011. The left two columns show the LHA number and name. The three columns for 2006 to 2010 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 4 LHAs with statistically significant ratios (2 high and 2 low). For 2011, 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 167 infant deaths and 441 stillbirths in 2011. More than half (58.7 percent) of infant deaths in 2011 occurred in the early neonatal period, of those, 96.9 percent were due to congenital anomalies or perinatal conditions. In 2011, perinatal conditions were the cause of 50.9 percent of infant deaths and 95.2 percent of stillbirths.

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

BRITISH COLUMBIA, 2011

Age of Mother	Birth Weight (in Grams)				Total		
	<1500	1500-2499	2500+	N.S.	Number	Percent	Rate
<20	4	3	2	1	10	6.0	8.58
20-24	11	8	14	2	35	21.0	6.49
25-29	24	5	12	2	43	25.7	3.48
30-34	30	6	15	1	52	31.1	3.49
35-39	9	3	9	-	21	12.6	2.55
40+	3	-	1	-	4	2.4	+
N.S.	-	-	-	1	1	2	1.2
TOTAL	81	25	54	7	167	100.0	3.80
Percent	48.5	15.0	32.3	4.2	100.0		
Rate	212.04	12.00	1.30		3.80		

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, 2011

Gestational Age (In Weeks)	Birth Weight (in Grams)				Total		
	<1500	1500-2499	2500+	N.S.	Number	Percent	Rate
<20	5	-	-	2	7	4.2	1,000.00
20-27	67	-	-	2	69	41.3	463.09
28-36	8	19	3	-	30	18.0	9.91
37-41	1	6	49	-	56	33.5	1.38
42+	-	-	2	-	2	1.2	+
N.S.	-	-	-	3	3	1.8	
TOTAL	81	25	54	7	167	100.0	3.80
Percent	48.5	15.0	32.3	4.2	100.0		
Rate	212.04	12.00	1.30		3.80		

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.

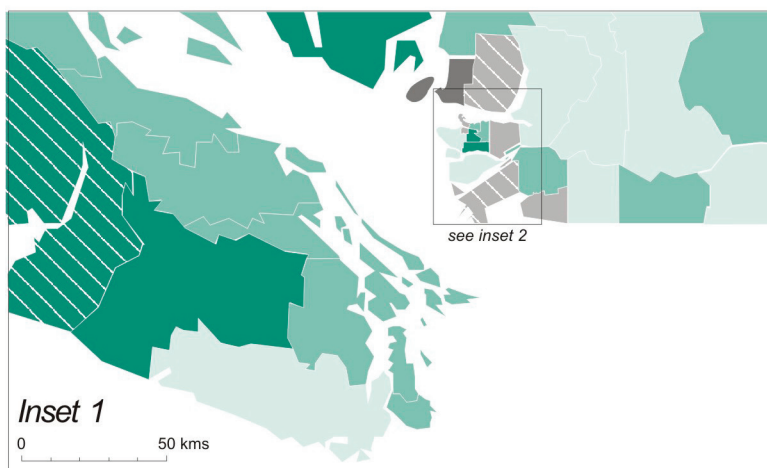
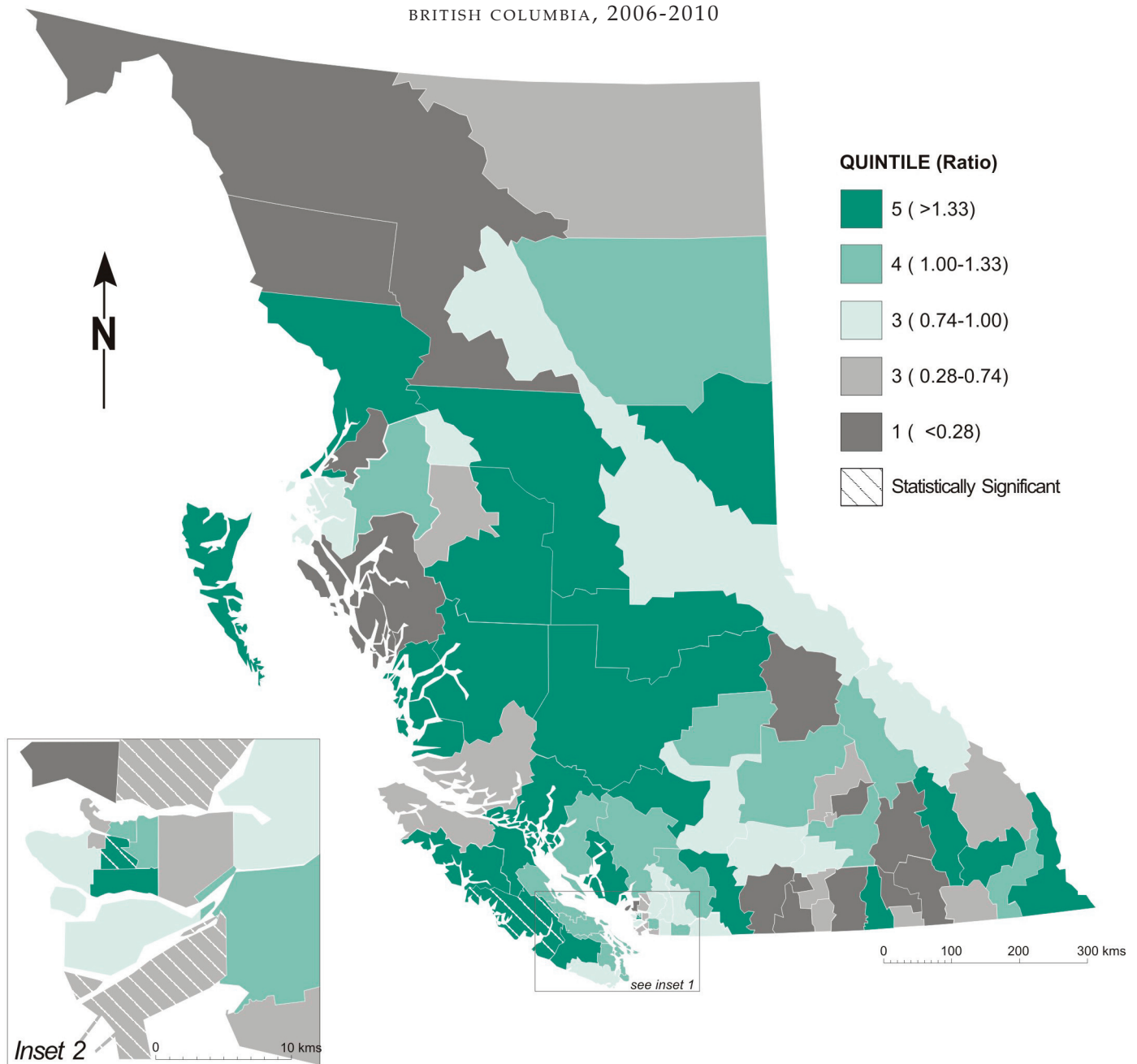
Non-residents are excluded.

N.S. – Not stated.

Local Health Area		2006–2010			2011				
		Observed Deaths	Ratio (p)	Rate	Age at Death (in Days)			Total	
					0–6	0–27	28–364	Number	Rate
001	Fernie	4	1.44	5.43	-	-	-	-	-
002	Cranbrook	5	1.03	3.89	-	-	1	1	4.46
003	Kimberley	2	1.34	5.06	-	-	-	-	-
004	Windermere	1	0.59	2.23	-	-	1	1	12.99
005	Creston	1	0.46	1.72	-	-	-	-	-
006	Kootenay Lake	1	2.07	7.81	-	-	-	-	-
007	Nelson	1	0.23	0.85	-	-	-	-	-
009	Castlegar	-	-	-	-	-	-	-	-
010	Arrow Lakes	-	-	-	-	-	-	-	-
011	Trail	1	0.33	1.23	-	-	1	1	4.88
012	Grand Forks	2	1.80	6.80	1	1	-	1	18.18
013	Kettle Valley	-	-	-	-	-	-	-	-
014	Southern Okanagan	1	0.41	1.56	-	-	-	-	-
015	Penticton	4	0.64	2.42	-	-	-	-	-
016	Keremeos	-	-	-	-	-	-	-	-
017	Princeton	-	-	-	-	-	-	-	-
018	Golden	1	0.77	2.91	1	1	-	1	14.29
019	Revelstoke	2	1.32	5.00	-	-	-	-	-
020	Salmon Arm	3	0.60	2.26	-	-	-	-	-
021	Armstrong - Spallumcheen	1	0.60	2.25	-	-	-	-	-
022	Vernon	12	1.12	4.24	1	1	-	1	1.73
023	Central Okanagan	29	0.96	3.62	2	2	-	2	1.22
024	Kamloops	21	1.08	4.08	2	2	2	4	3.91
025	100 Mile House	2	1.04	3.94	-	-	-	-	-
026	North Thompson	-	-	-	-	-	-	-	-
027	Cariboo - Chilcotin	9	1.65	6.24	-	-	2	2	7.69
028	Quesnel	8	1.68	6.36	3	3	-	3	13.45
029	Lillooet	2	2.30	8.70	-	-	1	1	25.00
030	South Cariboo	1	0.87	3.30	-	-	1	1	16.39
031	Merritt	2	0.89	3.35	-	-	-	-	-
032	Hope	3	2.25	8.50	1	1	-	1	14.71
033	Chilliwack	17	0.89	3.34	3	4	3	7	6.80
034	Abbotsford	34	1.05	3.96	3	4	5	9	5.19
035	Langley	23	0.88	3.34	8	9	1	10	6.80
037	Delta	7	0.43 *	1.63	1	1	1	2	2.36
038	Richmond	27	0.84	3.19	2	2	5	7	4.42
040	New Westminster	15	1.15	4.35	2	2	-	2	2.81
041	Burnaby	30	0.70	2.66	3	3	2	5	2.20
042	Maple Ridge	14	0.77	2.91	4	4	2	6	6.35
043	Coquitlam	31	0.77	2.92	2	2	3	5	2.39
044	North Vancouver	12	0.53 *	1.99	1	1	3	4	3.20
045	West Vancouver-Bowen Is.	1	0.20	0.74	-	-	-	-	-
046	Sunshine Coast	7	1.73	6.52	-	-	1	1	4.67
047	Powell River	3	1.14	4.32	-	-	-	-	-
048	Howe Sound	11	1.25	4.74	2	2	-	2	4.17
049	Bella Coola Valley	2	2.51	9.48	-	-	-	-	-
050	Queen Charlotte	3	3.68	13.89	-	-	-	-	-
051	Snow Country	1	12.61	47.62	-	-	-	-	-
052	Prince Rupert	3	0.86	3.23	1	1	-	1	6.02
053	Upper Skeena	1	0.83	3.13	-	-	1	1	14.71
054	Smithers	2	0.49	1.85	-	-	-	-	-
055	Burns Lake	3	1.90	7.16	-	-	-	-	-
056	Nechako	8	1.94	7.33	1	1	-	1	4.59
057	Prince George	16	0.77	2.90	4	4	1	5	4.78
059	Peace River South	11	1.76	6.65	2	2	1	3	8.67
060	Peace River North	12	1.07	4.05	3	3	-	3	4.86
061	Greater Victoria	38	1.12	4.21	5	6	2	8	4.53
062	Sooke	11	0.81	3.05	2	2	1	3	3.72
063	Saanich	8	1.08	4.09	1	1	-	1	2.52
064	Gulf Islands	2	1.16	4.39	-	-	-	-	-
065	Cowichan	12	1.17	4.41	2	2	-	2	3.74
066	Lake Cowichan	3	3.90	14.71	-	-	-	-	-
067	Ladysmith	3	1.10	4.16	-	-	-	-	-
068	Nanaimo	19	1.11	4.19	1	1	3	4	4.16
069	Qualicum	5	1.05	3.95	1	1	1	2	8.47
070	Alberni	16	2.52 *	9.51	1	1	-	1	2.92
071	Courtenay	11	1.16	4.38	-	-	1	1	1.90
072	Campbell River	10	1.36	5.14	-	-	1	1	2.54
075	Mission	8	0.92	3.48	1	1	2	3	6.32
076	Agassiz - Harrison	2	1.10	4.16	-	-	-	-	-
077	Summerland	-	-	-	-	-	-	-	-
078	Enderby	-	-	-	-	-	-	-	-
080	Kitimat	-	-	-	1	1	1	2	22.47
081	Fort Nelson	1	0.55	2.09	-	-	-	-	-
083	Central Coast	2	3.78	14.29	-	-	-	-	-
084	Vancouver Island West	1	2.39	9.01	-	-	-	-	-
085	Vancouver Island North	2	0.69	2.61	-	-	-	-	-
087	Stikine	-	-	-	-	-	-	-	-
088	Terrace	6	1.29	4.89	1	1	1	2	8.33
092	Nisga'a	-	-	-	-	-	-	-	-
094	Telegraph Creek	-	-	-	-	-	-	-	-
161	Vancouver - City Centre	13	0.71	2.66	2	2	-	2	1.92
162	Vancouver - Dwntrwn E.side	10	1.09	4.10	2	2	-	2	3.26
163	Vancouver - North East	20	0.97	3.67	2	4	1	5	4.84
164	Vancouver - Westside	19	0.88	3.33	2	2	1	3	2.69
165	Vancouver - Midtown	44	2.28 *	8.59	7	7	-	7	6.73
166	Vancouver - South	34	1.39	5.25	1	2	1	3	2.45
201	Surrey	102	1.08	4.06	12	12	6	18	3.37
202	South Surrey/White Rock	7	0.66	2.49	1	2	1	3	4.62
PROVINCIAL TOTAL		822	1.00	3.78	98	106	61	167	3.80

Notes for this table follow the map.

FIGURE 36
INFANT MORTALITY BY LOCAL HEALTH AREA
 BRITISH COLUMBIA, 2006-2010



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, 2011

Cause of Death	ICD-10 Code(s)	Infant Deaths – Age Group (in Days)					Stillbirths	
		<7	7–27	28–364	Total	Rate ¹	Number	Rate ²
Congenital anomalies								
- of the nervous system	Q00-Q07	2	-	2	4	0.91	2	0.45
- of the eye, ear, face & neck	Q10-Q18	-	-	-	-	-	-	-
- of the heart and circulatory system	Q20-Q28	5	4	5	14	3.18	4	0.90
- of the respiratory system	Q30-Q34	2	-	-	2	0.45	-	-
- of the digestive system	Q35-Q45	-	-	1	1	0.23	-	-
- of the genital organs	Q50-Q56	-	-	-	-	-	-	-
- of the urinary system	Q60-Q64	1	-	1	2	0.45	1	0.23
- of the musculoskeletal system	Q65-Q79	1	-	2	3	0.68	-	-
Other and multiple system syndromes	Q80-Q89	2	-	1	3	0.68	7	1.58
Chromosomal anomalies	Q90-Q99	5	-	1	6	1.36	7	1.58
Total deaths due to congenital anomalies	Q00-Q99	18	4	13	35	7.96	21	4.73
Perinatal conditions								
Infant affected by maternal factors	P00-P04	35	-	1	36	8.18	103	23.18
Premature/postmature and fetal growth disorders	P05-P08	25	1	2	28	6.36	9	2.03
Birth trauma	P10-P15	-	-	-	-	-	-	-
Respiratory and cardiovascular disorders	P20-P29	5	-	1	6	1.36	10	2.25
Infections specific to the perinatal period	P35-P39	2	-	-	2	0.45	-	-
Hemorrhage and hematological disorders	P50-P61	2	-	-	2	0.45	-	-
Transitory endocrine and metabolic disorders	P70-P74	-	-	-	-	-	2	0.45
Digestive system disorders of fetus and newborn	P75-P78	-	1	1	2	0.45	-	-
Other disorders originating in the perinatal period	P80-P94, P96	8	-	1	9	2.05	230	51.76
Fetal death of unknown cause	P95	-	-	-	-	-	66	14.85
Total deaths due to perinatal conditions	P00-P96	77	2	6	85	19.32	420	94.53
Pneumonia/influenza	J09-J18.1, J18.8-J18.9	-	-	-	-	-	-	-
Sudden infant death syndrome (SIDS) ³	R95	-	-	10	10	2.27	-	-
Other causes ³		3	2	32	37	8.41	-	-
TOTAL		98	8	61	167	37.96	441	99.25
PERCENT		58.7	4.8	36.5	100.0			

Note: ¹Rate per 10,000 live births.

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

³ Some of the infant deaths that were still under investigation (ICD-10 code R99) may later be identified as SIDS. 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) in British Columbia peaked at 331 in 1994 (not shown in Table 28) and has seen a general downward trend since then.

Table 28 shows the number of deaths due to HIV from 1996 to 2011 disaggregated 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 2006 to 2011 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 have fluctuated with no significantly increasing or decreasing trend. Vancouver, HSDA 32, had the highest mortality rate (10.91 deaths per 100,000 population) from 1996 to 2011.

FIGURE 37
DEATHS DUE TO HIV DISEASE BY AGE GROUP
BRITISH COLUMBIA, 2006–2011

Number of Deaths

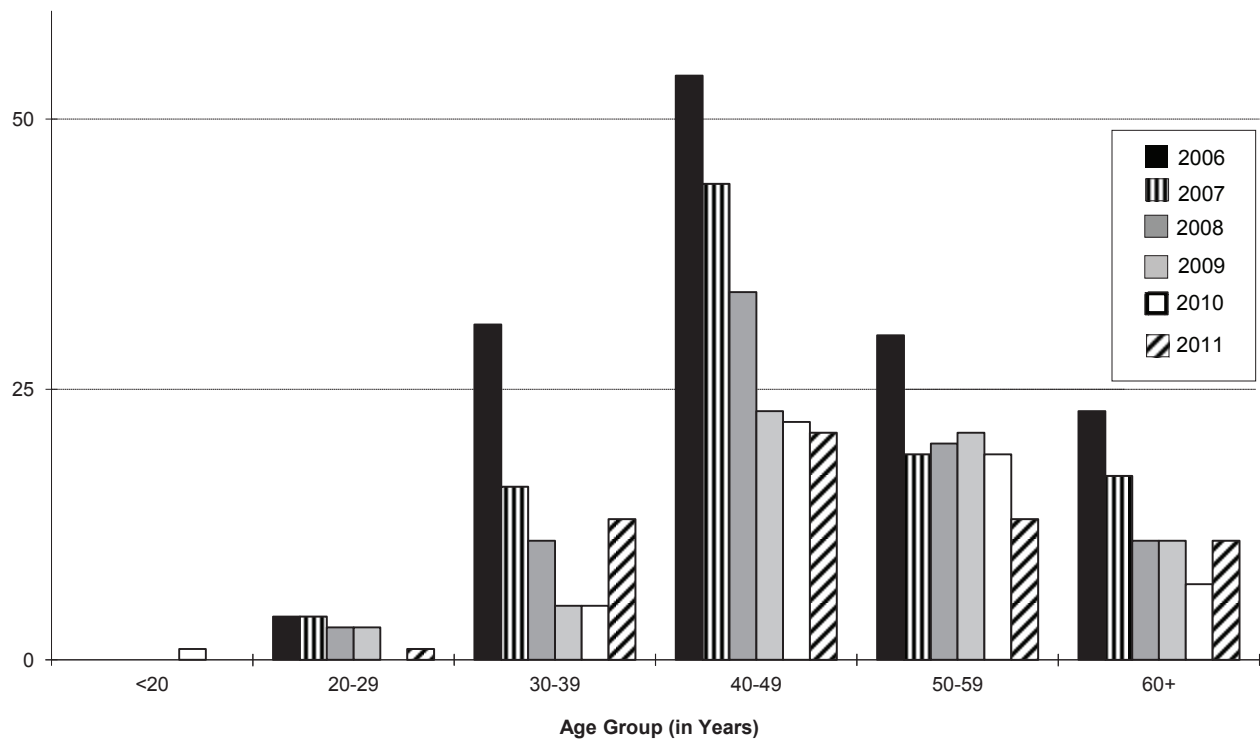


TABLE 28
DEATHS DUE TO HIV DISEASE BY
GENDER AND AGE GROUP
BRITISH COLUMBIA, 1996–2011

Year of Death	Gender	Age at Death (in Years)						Total
		<20	20–29	30–39	40–49	50–59	60+	
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	5	4	-	12
	T	1	-	5	22	19	7	54
	Percent	1.9	-	9.3	40.7	35.2	13.0	100.0
2011	M	-	-	8	18	10	11	47
	F	-	1	5	3	3	-	12
	T	-	1	13	21	13	11	59
	Percent	-	1.7	22.0	35.6	22.0	18.6	100.0
1996 - 2011	M	4	47	433	540	315	160	1,499
	F	1	33	89	116	43	16	298
	T	5	80	522	656	358	176	1,797
	Percent	0.3	4.5	29.0	36.5	19.9	9.8	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, 1996–2010

Health Service Delivery Area	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	1996–2011		
																	Number	Percent	Rate
11 East Kootenay	-	2	-	-	-	1	-	1	-	1	-	-	-	-	-	1	6	0.3	0.56
12 Kootenay Boundary	2	-	1	1	-	-	2	-	1	-	2	-	2	-	-	2	13	0.7	1.19
13 Okanagan	7	2	4	2	3	3	3	6	2	5	11	1	2	2	3	3	59	3.3	1.30
14 Thompson Cariboo Shuswap	3	2	2	2	2	6	2	4	6	2	4	3	1	3	1	1	44	2.4	1.46
21 Fraser East	7	1	5	3	3	2	4	1	5	6	4	1	3	2	2	2	51	2.8	1.39
22 Fraser North	15	8	6	7	11	8	10	10	8	8	10	7	6	3	11	5	133	7.4	1.69
23 Fraser South	23	6	4	11	7	11	10	8	5	12	9	13	5	5	5	6	140	7.8	1.55
31 Richmond	4	5	2	2	1	1	-	1	2	3	1	1	2	1	-	-	26	1.4	1.02
32 Vancouver	146	66	65	53	73	60	62	74	50	78	67	42	27	31	17	16	927	51.6	10.91
33 North Shore/ Coast Garibaldi	11	7	5	5	3	3	2	6	3	7	5	6	7	2	1	4	77	4.3	2.04
41 South Vancouver Island	21	10	10	13	7	9	3	8	9	9	17	11	11	6	2	8	154	8.6	3.12
42 Central Vancouver Island	6	4	3	4	8	4	4	4	5	6	3	7	4	5	4	4	75	4.2	2.17
43 North Vancouver Island	1	1	-	-	4	2	-	1	2	3	2	-	2	-	1	2	21	1.2	1.30
51 Northwest	1	-	-	-	-	-	-	-	1	2	-	2	3	1	3	2	15	0.8	1.35
52 Northern Interior	5	2	2	-	-	1	3	3	5	4	7	6	2	2	1	2	45	2.5	2.21
53 Northeast	-	-	1	-	-	-	1	-	1	-	-	-	1	-	1	1	6	0.3	0.66
N.S.	1	1	-	-	-	-	-	-	-	-	-	-	1	-	2	-	5	0.3	
PROVINCIAL TOTAL	253	117	110	103	122	111	106	127	105	146	142	100	79	63	54	59	1,797	100.0	3.04

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 2011, there were 1,769 deaths due to external causes or approximately 56 externally caused deaths for each 1,000 deaths in BC (see Table 30).

Of the 1,769 deaths:

- 426 were suicides
- 196 were motor vehicle accidents
- 624 were accidental falls
- 288 were accidental poisonings
- 32 were accidental drownings
- 40 were homicides
- 106 were due to other external causes

Males accounted for 63.5 percent of deaths by external causes as shown in Table 30. The leading four causes of external deaths in males in 2011 (in ASMR rank order) were suicide (1.25), accidental falls (0.95), accidental poisoning (0.88), and motor vehicle accidents (0.55). For females, the leading four (in ASMR rank order) were accidental falls (0.69), suicide (0.43), accidental poisoning (0.34), and motor vehicle accidents (0.24).

Table 31 shows the allocation of external death causes according to the LHA of the deceased's usual residence. The highest ASMRs in 2011 are found in the following LHAs (with 5 or more deaths): Arrow Lakes (9.55), Princeton (9.21), Nechako (8.07), Enderby (7.93), and Fernie (7.93).

Table 32 shows the number of deaths from suicide classified by month of occurrence and by gender. Percentages across months are also given. In 2011, there were about 2.9 times more male suicides than female suicides. The data for 2011 shows that November was the month with the fewest number of suicides (24) while August was the month with the highest number of suicides (45).

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, 2011

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	134	0.55	62	0.24	196	0.39
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	13	0.06	-	-	13	0.03
Accidental drowning (including water transport)	V90, V92, W65-W74	27	0.11	5	0.02	32	0.06
Accidental falls	W00-W19	296	0.95	328	0.69	624	0.81
Accident caused by machinery	W24, W28-W31	4	0.01	-	-	4	0.01
Accidental firearm discharge	W32-W34	3	0.01	-	-	3	0.01
Exposure to smoke, fire and flames	X00-X09	10	0.03	6	0.02	16	0.03
Accidental poisoning	X40-X49	207	0.88	81	0.34	288	0.61
All other accidents	W20-W23, W25-W27, W35-W64, W75-W99, X10-X39, X50-X59, Y35-Y36, Y40-Y84, Y86, Y88	70	0.25	36	0.09	106	0.17
Suicide	X60-X84, Y870	317	1.25	109	0.43	426	0.83
Homicide	X85-Y09, Y871	29	0.13	11	0.05	40	0.09
External events of undetermined intent	Y10-Y34, Y872	14	0.05	7	0.03	21	0.04
Sequelae of other external causes	Y89	-	-	-	-	-	-
TOTAL		1,124	4.28	645	1.92	1,769	3.07

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	3	-	-	5	-	2	13	7.93
002 Cranbrook	-	-	-	3	-	-	4	-	1	8	2.75
003 Kimberley	1	-	-	2	-	-	-	-	-	3	1.64
004 Windermere	-	-	-	3	-	-	3	-	1	7	3.91
005 Creston	1	1	2	4	-	-	2	-	-	10	4.64
006 Kootenay Lake	1	-	-	1	-	-	1	-	-	3	4.18
007 Nelson	1	-	3	4	-	1	2	-	-	11	3.69
009 Castlegar	1	-	-	2	-	-	1	-	-	4	1.70
010 Arrow Lakes	3	-	-	2	-	-	-	-	-	5	9.55
011 Trail	1	-	1	5	-	1	-	1	-	9	3.38
012 Grand Forks	1	-	1	1	-	1	2	-	-	6	3.92
013 Kettle Valley	-	-	-	-	-	-	-	-	-	-	-
014 Southern Okanagan	3	-	1	4	-	-	2	1	-	11	4.26
015 Penticton	4	-	3	13	-	-	2	1	-	23	3.07
016 Keremeos	-	-	1	2	-	-	-	-	-	3	2.19
017 Princeton	1	-	2	2	-	-	2	-	-	7	9.21
018 Golden	-	-	-	4	-	-	-	-	1	5	6.82
019 Revelstoke	2	1	-	1	-	-	-	-	1	5	7.07
020 Salmon Arm	2	-	1	5	-	-	4	1	-	13	2.84
021 Armstrong - Spallumcheen	1	-	-	-	-	-	1	-	1	3	2.26
022 Vernon	8	-	5	15	-	1	7	-	1	37	3.89
023 Central Okanagan	5	2	10	26	1	4	7	-	2	57	2.30
024 Kamloops	7	-	4	19	-	-	15	-	2	47	3.21
025 100 Mile House	1	-	3	2	-	-	-	-	-	6	3.65
026 North Thompson	-	-	-	-	-	-	-	-	-	-	-
027 Cariboo - Chilcotin	4	1	-	4	-	-	2	-	1	12	3.90
028 Quesnel	3	-	1	7	-	-	1	-	-	12	4.19
029 Lillooet	3	-	-	1	-	-	-	-	-	4	7.05
030 South Cariboo	1	-	1	-	-	1	1	-	-	4	4.62
031 Merritt	-	-	-	4	-	-	-	1	1	6	3.43
032 Hope	-	-	1	2	-	1	-	1	2	7	6.33
033 Chilliwack	6	-	6	8	1	-	7	-	3	31	2.93
034 Abbotsford	5	-	16	22	-	3	12	-	5	63	3.64
035 Langley	3	2	11	13	-	-	9	-	1	39	2.38
037 Delta	4	-	4	9	-	-	5	2	4	28	2.43
038 Richmond	2	-	9	16	-	1	9	1	2	40	1.60
040 New Westminster	1	-	5	9	-	-	8	-	3	26	2.88
041 Burnaby	6	-	12	19	-	1	18	3	8	67	2.44
042 Maple Ridge	7	-	4	12	-	1	5	-	6	35	3.24
043 Coquitlam	8	-	9	14	-	-	18	1	8	58	2.55
044 North Vancouver	2	-	2	18	1	1	15	1	7	47	2.74
045 West Vancouver-Bowen Is.	-	-	1	10	-	1	10	-	-	22	2.97
046 Sunshine Coast	-	-	1	8	-	-	3	-	1	13	1.90
047 Powell River	-	1	4	3	-	-	5	-	1	14	5.55
048 Howe Sound	1	-	3	2	-	-	4	-	-	10	2.87
049 Bella Coola Valley	-	-	-	1	-	-	-	-	-	1	2.65
050 Queen Charlotte	1	-	1	-	-	-	1	-	1	4	11.75
051 Snow Country	-	-	-	-	-	-	1	-	-	1	6.16
052 Prince Rupert	1	-	-	4	-	-	3	-	-	8	4.87
053 Upper Skeena	-	-	-	1	-	-	-	-	3	4	7.00
054 Smithers	3	-	-	-	-	-	3	-	1	7	4.55
055 Burns Lake	1	-	-	-	-	-	1	-	1	3	3.98
056 Nechako	3	-	1	4	-	-	4	-	1	13	8.07
057 Prince George	5	1	5	5	2	-	9	-	3	30	2.78
059 Peace River South	1	-	-	5	1	-	4	-	2	13	3.83
060 Peace River North	12	-	2	1	-	-	4	-	3	22	6.54
061 Greater Victoria	9	-	23	63	-	-	33	1	9	138	3.90
062 Sooke	1	-	4	10	-	-	8	1	1	25	3.23
063 Saanich	-	1	1	20	1	1	7	-	-	31	2.98
064 Gulf Islands	-	-	-	3	-	-	2	-	2	7	2.42
065 Cowichan	3	1	-	11	-	1	9	-	2	27	2.99
066 Lake Cowichan	-	-	-	1	-	1	-	-	-	2	4.42
067 Ladysmith	2	-	-	5	-	1	3	-	1	12	5.82
068 Nanaimo	1	-	4	15	-	1	8	-	2	31	2.01
069 Qualicum	-	-	2	15	-	-	6	-	3	26	2.63
070 Alberni	6	-	2	8	1	1	-	-	1	19	4.97
071 Courtenay	3	-	7	10	1	-	9	1	1	32	4.15
072 Campbell River	4	-	7	5	-	1	8	1	2	28	5.88
075 Mission	1	-	8	7	-	-	4	-	2	22	4.84
076 Agassiz - Harrison	1	-	-	3	-	-	1	-	-	5	4.32
077 Summerland	-	-	-	1	-	-	1	-	1	3	1.54
078 Enderby	3	-	-	3	-	1	-	-	1	8	7.93
080 Kitimat	2	-	1	2	-	-	2	-	-	7	5.24
081 Fort Nelson	3	-	-	-	-	-	1	-	-	4	6.41
083 Central Coast	-	-	-	-	-	-	-	-	-	-	-
084 Vancouver Island West	-	-	-	-	1	1	-	-	-	2	7.82
085 Vancouver Island North	1	-	1	-	1	1	4	-	-	8	6.16
087 Stikine	-	-	-	-	-	-	-	-	-	-	-
088 Terrace	1	-	4	2	2	-	2	-	2	13	7.34
092 Nisga'a	1	-	-	1	-	-	1	-	-	3	22.40
094 Telegraph Creek	-	-	-	-	-	-	-	-	-	-	-
161 Vancouver - City Centre	3	-	9	12	-	-	22	3	2	51	3.49
162 Vancouver - Dwntrwn E.side	3	-	30	4	1	-	9	4	3	54	6.39
163 Vancouver - North East	2	-	3	5	-	3	3	-	-	16	1.24
164 Vancouver - Westside	2	1	1	13	-	-	9	1	2	29	1.48
165 Vancouver - Midtown	-	-	5	7	-	-	4	2	1	19	1.76
166 Vancouver - South	2	-	4	13	-	-	12	3	4	38	2.27
201 Surrey	-	-	-	-	-	-	-	-	-	-	-
202 South Surrey/White Rock	11	1	34	37	2	1	29	9	10	134	3.20
PROVINCIAL TOTAL	196	13	288	624	16	32	426	40	134	1,769	3.07
PERCENT	11.1	0.7	16.3	35.3	0.9	1.8	24.1	2.3	7.6	100.0	

Notes for table follow table 32.

TABLE 32
SUICIDE DEATHS BY MONTH AND GENDER
 BRITISH COLUMBIA, 2011

Month	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
January	27	8.5	7	6.4	34	8.0
February	23	7.3	14	12.8	37	8.7
March	25	7.9	10	9.2	35	8.2
April	33	10.4	8	7.3	41	9.6
May	30	9.5	8	7.3	38	8.9
June	30	9.5	7	6.4	37	8.7
July	27	8.5	6	5.5	33	7.7
August	34	10.7	11	10.1	45	10.6
September	27	8.5	12	11.0	39	9.2
October	27	8.5	11	10.1	38	8.9
November	16	5.0	8	7.3	24	5.6
December	18	5.7	7	6.4	25	5.9
TOTAL	317	100.0	109	100.0	426	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

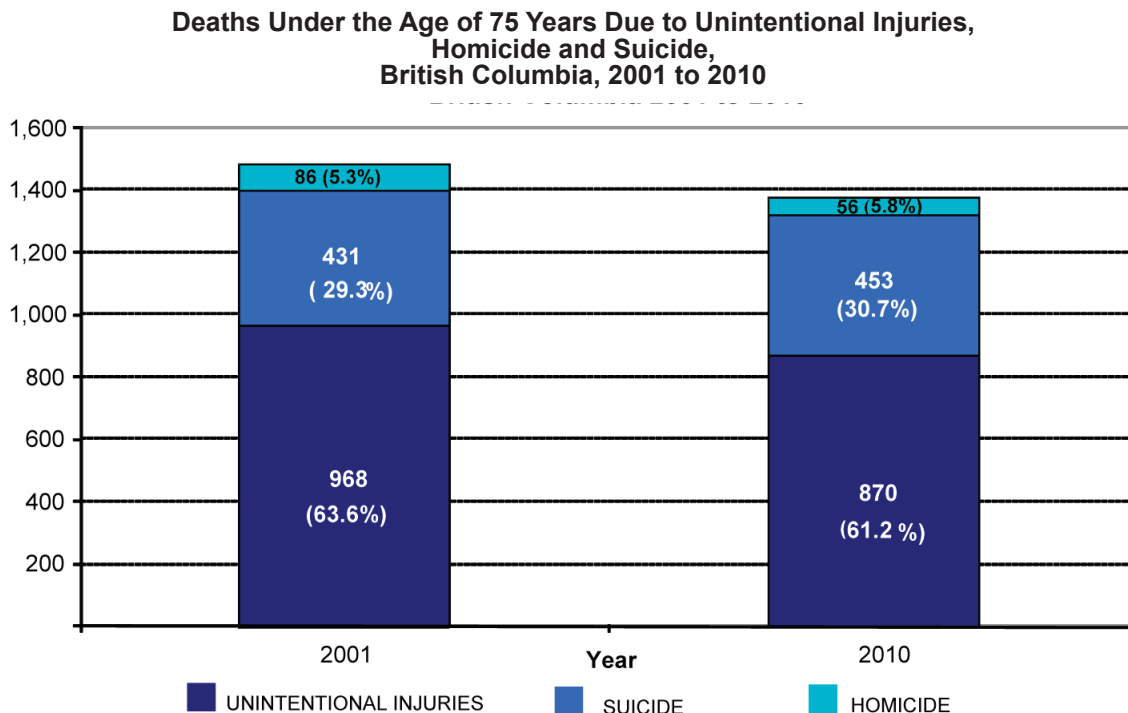
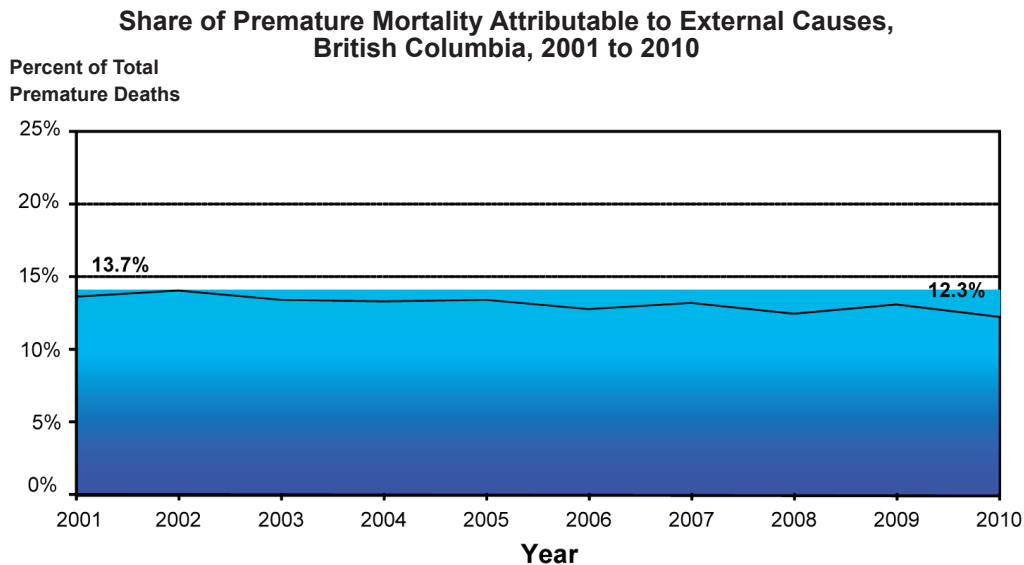
Note: Based on usual residence. ASMR – per 10,000 standard population (Canada 1991 Census). PERCENT – Provincial total for each cause as a percent of the Provincial total for all deaths from external causes. Other is comprised of accident caused by machinery, accidental firearm discharge, all other accidents, 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, 2001 - 2010

From 2001 to 2010, deaths among those under the age of 75 have accounted for just 37.8 percent of all deaths; however, 77.4 percent of deaths from external causes were in this age group. The share of premature deaths attributable to external causes has fallen from 13.7 percent in 2001 to 12.3 percent in 2010. Unintentional injuries account for the vast majority (61.7 percent in 2010) of deaths from external causes among those under the age of 75.



Mortality Due to All Causes of Death

Table 33 shows the number of deaths from all causes in each LHA for 2011 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. Nearly half (41) of the 89 LHAs had statistically significant ratios in 2011 (27 high and 14 low), 62 LHAs had statistically significant ratios (46 high and 16 low) in the period of 2006 to 2010, and 38 LHAs had statistically significant ratios (25 high and 13 low) in both 2011 and the previous five-year period.

In 2011, the LHAs with the five highest statistically significant SMRs were Snow Country (2.24), Queen Charlotte (1.78), Vancouver Island North (1.57), Arrow Lakes (1.55), and Peace River South (1.53).

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 Fraser and Vancouver Coastal Health Authorities, while higher ratios were more frequent in the Northern and Interior Local Health Areas of BC.

Vital Statistics Information Box

DEATHS AGED 65+ BY GENDER AND HEALTH SERVICE DELIVERY AREA

BRITISH COLUMBIA, 2011

Health Service Delivery Area	Gender	Age at Death								Total	% 65+
		65-69	70-74	75-79	80-84	85-89	90-94	95-99	100+		
11 East Kootenay	M	27	28	55	77	59	26	8	2	355	79.4%
	F	19	24	39	44	63	34	22	3	295	84.1%
12 Kootenay Boundary	M	25	51	47	68	60	37	8	1	398	74.6%
	F	22	21	35	65	61	63	28	3	343	86.9%
13 Okanagan	M	125	174	249	305	341	181	49	8	1,782	80.4%
	F	91	129	172	239	323	271	145	20	1,601	86.8%
14 Thompson Cariboo Shuswap	M	95	128	147	161	126	64	16	3	1,003	73.8%
	F	72	65	112	125	126	124	51	15	829	83.2%
21 Fraser East	M	97	106	132	186	172	106	37	2	1,103	76.0%
	F	51	78	114	141	207	151	65	13	1,004	81.7%
22 Fraser North	M	150	161	208	290	273	161	51	8	1,751	74.4%
	F	82	140	162	247	330	271	135	21	1,637	84.8%
23 Fraser South	M	200	254	283	358	334	202	74	11	2,294	74.8%
	F	128	170	183	296	452	377	165	34	2,182	82.7%
31 Richmond	M	23	37	59	78	81	47	11	2	445	76.0%
	F	35	20	42	76	83	79	47	11	477	82.4%
32 Vancouver	M	138	171	220	289	237	161	73	7	1,799	72.0%
	F	74	128	154	231	355	324	193	53	1,819	83.1%
33 North Shore/Coast Garibaldi	M	54	72	105	163	160	118	24	6	907	77.4%
	F	49	60	108	150	176	179	93	13	961	86.2%
41 South Vancouver Island	M	78	123	190	239	288	199	65	13	1,537	77.7%
	F	93	104	149	249	397	379	172	37	1,797	87.9%
42 Central Vancouver Island	M	124	140	159	222	223	120	33	5	1,341	76.5%
	F	80	97	130	179	241	195	100	17	1,247	83.3%
43 North Vancouver Island	M	49	64	86	85	76	35	11	2	553	73.8%
	F	30	44	59	72	96	57	19	4	451	84.5%
51 Northwest	M	41	38	41	46	29	13	0	1	310	67.4%
	F	18	19	21	34	37	19	13	1	225	72.0%
52 Northern Interior	M	53	60	65	67	61	29	3	2	519	65.5%
	F	31	35	43	62	68	36	14	3	421	69.4%
53 Northeast	M	23	29	26	19	24	6	3	0	217	59.9%
	F	18	18	22	18	24	19	14	2	166	81.3%
Provincial Total	M	1,302	1,636	2,072	2,653	2,544	1,505	466	73	16,319	75.1%
	F	893	1,152	1,545	2,228	3,039	2,578	1,276	250	15,457	83.9%

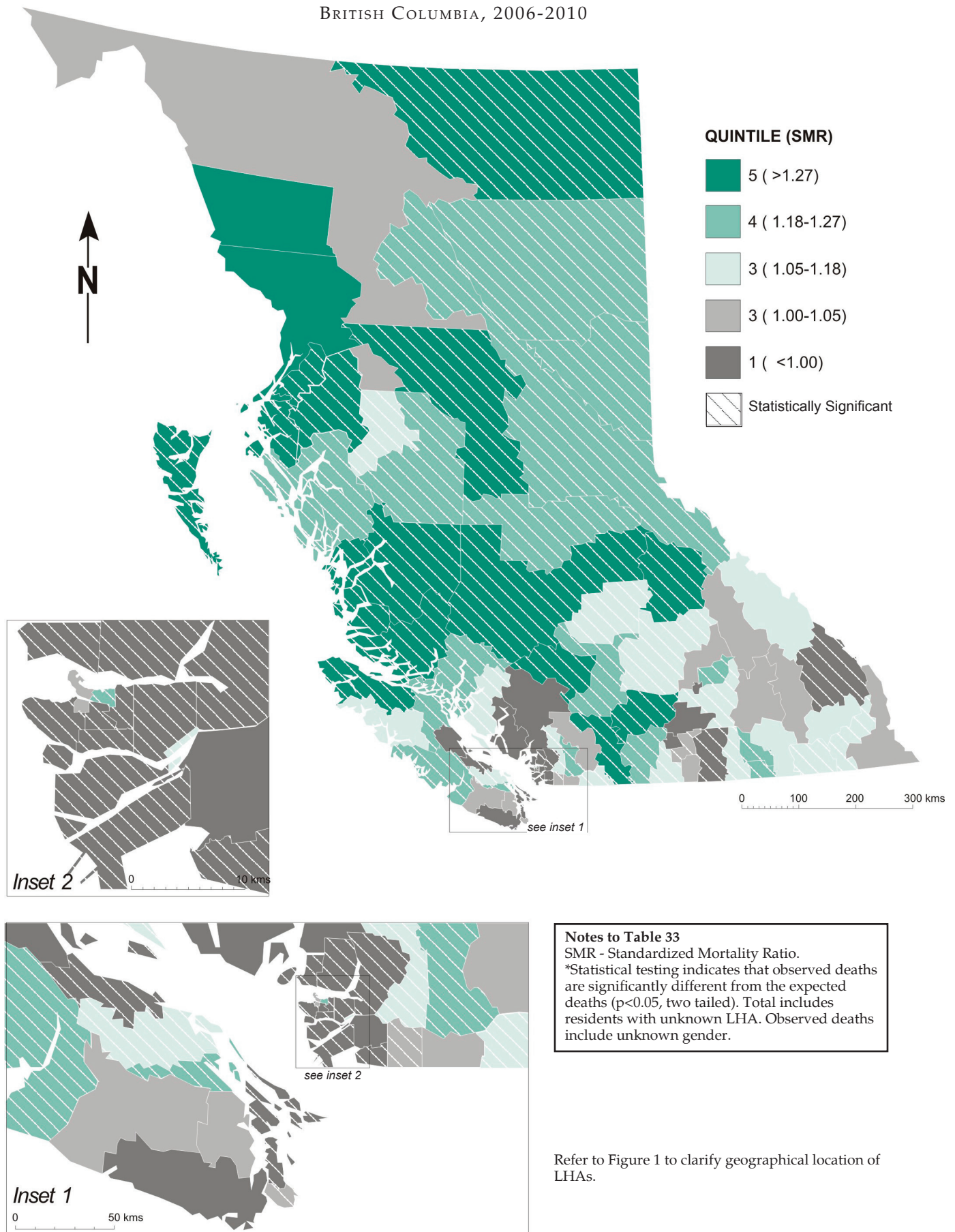
Note: %65+ is the percentage of deaths aged 65 or older out of all deaths to residents of the specified area by gender.

Provincial Total includes residents with unknown addresses.

		2006-2010			2011				
Local Health Area		Observed Deaths	SMR	(p)	Observed Deaths	Expected Deaths	SMR	(p)	95% Confidence Interval
									Lower Upper
001	Fernie	421	1.05		95	79.87	1.19		0.96 - 1.45
002	Cranbrook	1,049	1.14	*	200	184.56	1.08		0.94 - 1.24
003	Kimberley	398	1.05		82	74.56	1.10		0.87 - 1.37
004	Windermere	270	0.80	*	74	67.34	1.10		0.86 - 1.38
005	Creston	748	1.10	*	159	132.10	1.20	*	1.02 - 1.41
006	Kootenay Lake	163	1.03		37	30.76	1.20		0.85 - 1.66
007	Nelson	933	1.06		184	172.14	1.07		0.92 - 1.23
009	Castlegar	621	1.21	*	129	103.25	1.25	*	1.04 - 1.48
010	Arrow Lakes	223	1.04		65	41.95	1.55	*	1.20 - 1.98
011	Trail	1,148	1.27	*	185	174.41	1.06		0.91 - 1.23
012	Grand Forks	535	1.17	*	109	89.66	1.22		1.00 - 1.47
013	Kettle Valley	124	0.83	*	32	31.72	1.01		0.69 - 1.42
014	Southern Okanagan	1,283	1.03		264	241.40	1.09		0.97 - 1.23
015	Penticton	2,599	1.05	*	517	475.05	1.09		1.00 - 1.19
016	Keremeos	336	1.13	*	59	57.22	1.03		0.78 - 1.33
017	Princeton	305	1.22	*	64	48.45	1.32	*	1.02 - 1.69
018	Golden	209	1.08		40	38.80	1.03		0.74 - 1.40
019	Revelstoke	261	1.03		65	49.43	1.32	*	1.01 - 1.68
020	Salmon Arm	1,679	1.04		306	320.06	0.96		0.85 - 1.07
021	Armstrong - Spallumcheen	402	0.98		72	82.99	0.87		0.68 - 1.09
022	Vernon	3,113	1.07	*	645	579.99	1.11	*	1.03 - 1.20
023	Central Okanagan	7,567	0.99		1,530	1,520.27	1.01		0.96 - 1.06
024	Kamloops	4,162	1.11	*	922	774.40	1.19	*	1.11 - 1.27
025	100 Mile House	658	1.18	*	129	113.31	1.14		0.95 - 1.35
026	North Thompson	208	1.46	*	28	28.25	0.99		0.66 - 1.43
027	Cariboo - Chilcotin	957	1.29	*	169	154.12	1.10		0.94 - 1.27
028	Quesnel	935	1.26	*	205	153.84	1.33	*	1.16 - 1.53
029	Lillooet	205	1.45	*	40	28.01	1.43	*	1.02 - 1.94
030	South Cariboo	361	1.25	*	69	58.49	1.18		0.92 - 1.49
031	Merritt	567	1.40	*	104	78.72	1.32	*	1.08 - 1.60
032	Hope	536	1.48	*	94	70.17	1.34	*	1.08 - 1.64
033	Chilliwack	3,540	1.13	*	690	644.33	1.07		0.99 - 1.15
034	Abbotsford	4,593	1.01		947	902.98	1.05		0.98 - 1.12
035	Langley	4,604	1.05	*	989	1,025.30	0.96		0.91 - 1.03
037	Delta	3,174	0.93	*	704	804.67	0.87	*	0.81 - 0.94
038	Richmond	4,549	0.74	*	922	1,202.26	0.77	*	0.72 - 0.82
040	New Westminster	2,524	1.15	*	463	425.85	1.09		0.99 - 1.19
041	Burnaby	6,834	0.93	*	1,314	1,418.28	0.93	*	0.88 - 0.98
042	Maple Ridge	2,901	1.14	*	604	525.30	1.15	*	1.06 - 1.25
043	Coquitlam	4,798	0.90	*	1,007	1,106.30	0.91	*	0.85 - 0.97
044	North Vancouver	4,083	0.88	*	801	934.62	0.86	*	0.80 - 0.92
045	West Vancouver-Bowen Is.	2,277	0.81	*	442	541.81	0.82	*	0.74 - 0.90
046	Sunshine Coast	1,374	0.98		281	281.48	1.00		0.88 - 1.12
047	Powell River	990	1.08	*	195	181.33	1.08		0.93 - 1.24
048	Howe Sound	595	0.99		125	128.73	0.97		0.81 - 1.16
049	Bella Coola Valley	104	1.29	*	15	16.58	0.90		0.51 - 1.49
050	Queen Charlotte	171	1.46	*	40	22.53	1.78	*	1.27 - 2.42
051	Snow Country	17	1.34		6	2.68	2.24		0.82 - 4.88
052	Prince Rupert	479	1.28	*	89	75.96	1.17		0.94 - 1.44
053	Upper Skeena	127	1.03		31	25.74	1.20		0.82 - 1.71
054	Smithers	447	1.12	*	124	83.85	1.48	*	1.23 - 1.76
055	Burns Lake	271	1.19	*	51	43.74	1.17		0.87 - 1.53
056	Nechako	532	1.37	*	109	82.77	1.32	*	1.08 - 1.59
057	Prince George	2,858	1.25	*	575	470.88	1.22	*	1.12 - 1.33
059	Peace River South	844	1.22	*	213	138.79	1.53	*	1.34 - 1.76
060	Peace River North	771	1.25	*	147	125.86	1.17		0.99 - 1.37
061	Greater Victoria	10,750	1.02	*	2,120	1,939.86	1.09	*	1.05 - 1.14
062	Sooke	1,735	0.99		386	371.89	1.04		0.94 - 1.15
063	Saanich	3,261	0.85	*	690	756.34	0.91	*	0.85 - 0.98
064	Gulf Islands	699	0.79	*	138	170.28	0.81	*	0.68 - 0.96
065	Cowichan	2,317	1.01		476	465.99	1.02		0.93 - 1.12
066	Lake Cowichan	228	1.05		45	43.61	1.03		0.75 - 1.38
067	Ladysmith	1,120	1.22	*	220	182.57	1.21	*	1.05 - 1.38
068	Nanaimo	4,610	1.07	*	963	863.00	1.12	*	1.05 - 1.19
069	Qualicum	2,581	0.94	*	542	547.89	0.99		0.91 - 1.08
070	Alberni	1,473	1.25	*	342	234.68	1.46	*	1.31 - 1.62
071	Courtenay	2,607	0.99		577	548.85	1.05		0.97 - 1.14
072	Campbell River	1,591	1.18	*	336	282.65	1.19	*	1.07 - 1.32
075	Mission	1,384	1.20	*	294	229.67	1.28	*	1.14 - 1.44
076	Agassiz - Harrison	352	1.00		82	67.09	1.22		0.97 - 1.52
077	Summerland	689	0.95		154	139.16	1.11		0.94 - 1.30
078	Enderby	397	1.23	*	78	65.27	1.19		0.94 - 1.49
080	Kitimat	325	1.26	*	83	54.89	1.51	*	1.20 - 1.87
081	Fort Nelson	116	1.60	*	23	16.88	1.36		0.86 - 2.04
083	Central Coast	60	2.01	*	9	6.14	1.47		0.67 - 2.78
084	Vancouver Island West	66	1.10		6	10.98	0.55		0.20 - 1.19
085	Vancouver Island North	435	1.65	*	85	54.19	1.57	*	1.25 - 1.94
087	Stikine	26	1.05		4	4.73	0.85		0.23 - 2.17
088	Terrace	703	1.40	*	144	105.77	1.36	*	1.15 - 1.60
092	Nisga'a	70	1.86	*	10	7.29	1.37		0.66 - 2.52
094	Telegraph Creek	21	1.40		4	3.27	1.22		0.33 - 3.13
161	Vancouver - City Centre	3,154	1.02		651	607.46	1.07		0.99 - 1.16
162	Vancouver - Dwntrwn E.side	2,443	1.20	*	500	381.56	1.31	*	1.20 - 1.43
163	Vancouver - North East	2,851	0.84	*	555	677.22	0.82	*	0.75 - 0.89
164	Vancouver - Westside	3,711	0.81	*	701	866.26	0.81	*	0.75 - 0.87
165	Vancouver - Midtown	2,248	0.89	*	389	500.17	0.78	*	0.70 - 0.86
166	Vancouver - South	4,176	0.85	*	822	942.57	0.87	*	0.81 - 0.93
201	Surrey	8,966	0.99		1,857	2,268.03	0.82	*	0.78 - 0.86
202	South Surrey/White Rock	4,318	0.91	*	926	1,091.90	0.85	*	0.79 - 0.90
PROVINCIAL TOTAL		155,968	1.00		31,776	31,776.00	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
 BRITISH COLUMBIA, 2006-2010



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.

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 (4,731 under the age of 75) have a relatively low average PYLL at 12.4 years since malignant neoplasms tend to afflict older individuals more frequently.

Figure 39 compares the profiles of PYLLSR and ASMR for several major causes of death. The graph demonstrates that PYLL and ASMR follow different patterns because they measure different things. While ASMR measures the rate of dying, PYLL measures the shortening of life. We can see this most clearly with external causes of death which has a relatively moderate ASMR but very high PYLLSR.

In Table 35, causes of death in 2011 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 to 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 2006 to 2010 and the year 2011. For 2011, 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 this 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, 1992-2011

Gender	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Male	111	111	109	108	108	106	109	108	109	104	104	107	106	107	105	107	106	105	105	105
Female	107	110	110	108	109	111	113	108	111	113	111	107	108	110	109	110	110	109	108	112

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

BRITISH COLUMBIA, 2011

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	240	4,667.0	2.5	19.4	0.95	556	1.7	0.81
- HIV disease	B20-B24	56	1,525.0	0.8	27.2	0.34	59	0.2	0.11
Malignant neoplasms	C00-C97	4,731	58,738.0	31.9	12.4	10.42	9,119	28.7	13.89
- Malignant neoplasm of trachea and lung	C33-C34	1,276	13,395.0	7.3	10.5	2.21	2,324	7.3	3.58
- Malignant neoplasm of female breast	C500-C509	366	5,555.0	3.0	15.2	1.96	598	1.9	1.75
- Malignant neoplasm of colon and rectum	C18-C21	516	6,165.0	3.4	11.9	1.04	1,056	3.3	1.58
Endocrine nutritional and metabolic diseases	E00-E89	626	7,134.0	3.9	11.4	1.29	1,730	5.4	2.50
- Diabetes mellitus	E10-E14	513	5,287.5	2.9	10.3	0.93	1,458	4.6	2.11
Diseases of the circulatory system	I00-I99	1,901	22,329.5	12.1	11.7	4.03	8,679	27.3	11.38
- Ischemic heart diseases	I20-I25	953	10,937.5	5.9	11.5	1.89	3,641	11.5	4.83
- Cerebrovascular diseases	I60-I69	364	4,040.0	2.2	11.1	0.76	2,224	7.0	2.89
Diseases of the respiratory system	J00-J98	673	6,551.5	3.6	9.7	1.20	3,292	10.4	4.38
- Pneumonia/Influenza (excluding hypostatic)	J09-J181, J188, J189	142	2,009.0	1.1	14.1	0.41	1,112	3.5	1.36
- Chronic Pulmonary Disease	J40-J44	364	2,875.0	1.6	7.9	0.49	1,476	4.6	2.05
Diseases of the digestive system	K00-K93	556	8,155.0	4.4	14.7	1.46	1,245	3.9	1.79
- Chronic liver disease/cirrhosis	K70, K73-74, K760-K761	322	5,100.0	2.8	15.8	0.88	387	1.2	0.62
Congenital malformations and chromosome abnormalities	Q00-Q99	82	4,043.5	2.2	49.3	1.26	90	0.3	0.22
Certain conditions originating in the perinatal period	P00-P96	85	6,332.5	3.4	74.5	2.20	85	0.3	0.28
External causes of death	V01-Y98	1,112	32,772.0	17.8	29.5	7.83	1,769	5.6	3.07
- Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850	163	5,461.0	3.0	33.5	1.35	196	0.6	0.39
- Suicide	X60-X84, Y870	384	11,145.0	6.1	29.0	2.63	426	1.3	0.83
Other causes ¹		1,541	33,252.0	18.1	21.6	7.66	5,211	16.4	7.29
All causes		11,547	183,975.0	100.0	15.9	38.30	31,776	100.0	45.61

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).

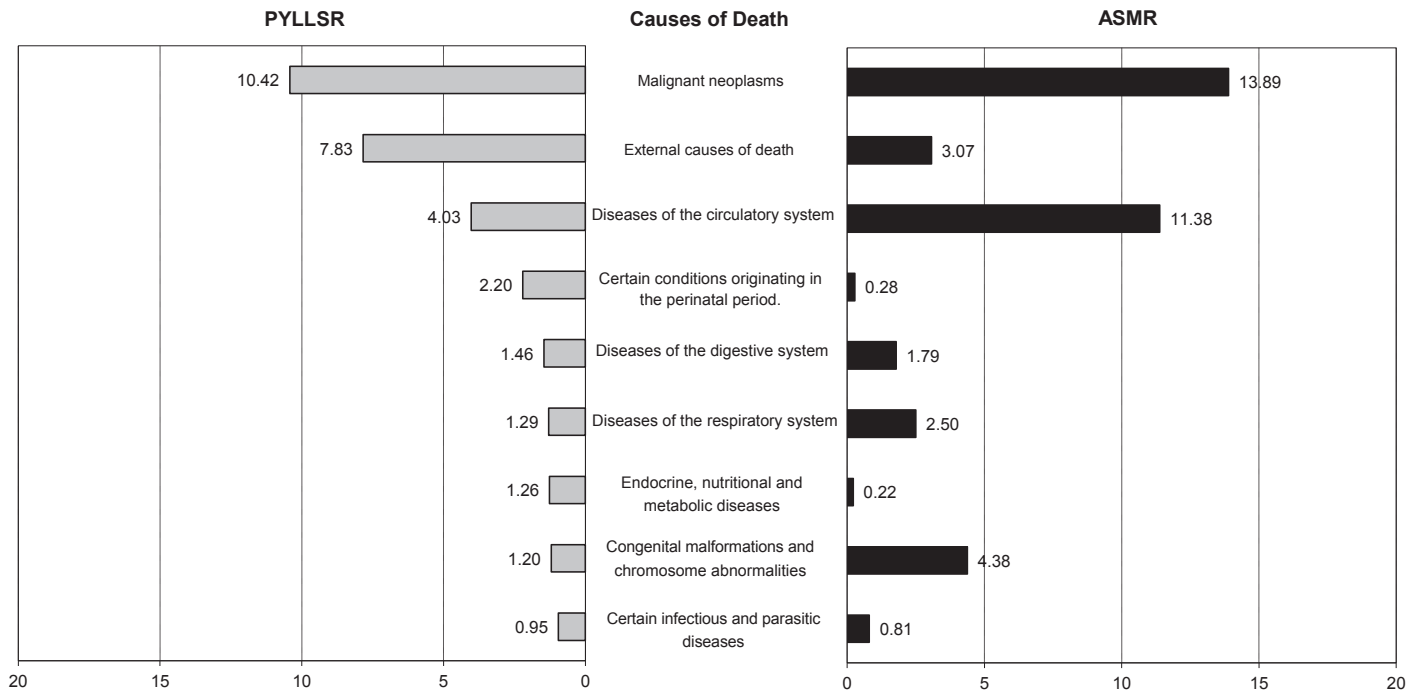
ASMR – per 10,000 standard population (Canada 1991 Census).

¹Other causes includes undetermined and pending.

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

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

FIGURE 39
**POTENTIAL YEARS OF LIFE LOST AND AGE STANDARDIZED
 MORTALITY RATES BY SELECTED CAUSES OF DEATH**
 BRITISH COLUMBIA, 2011



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.



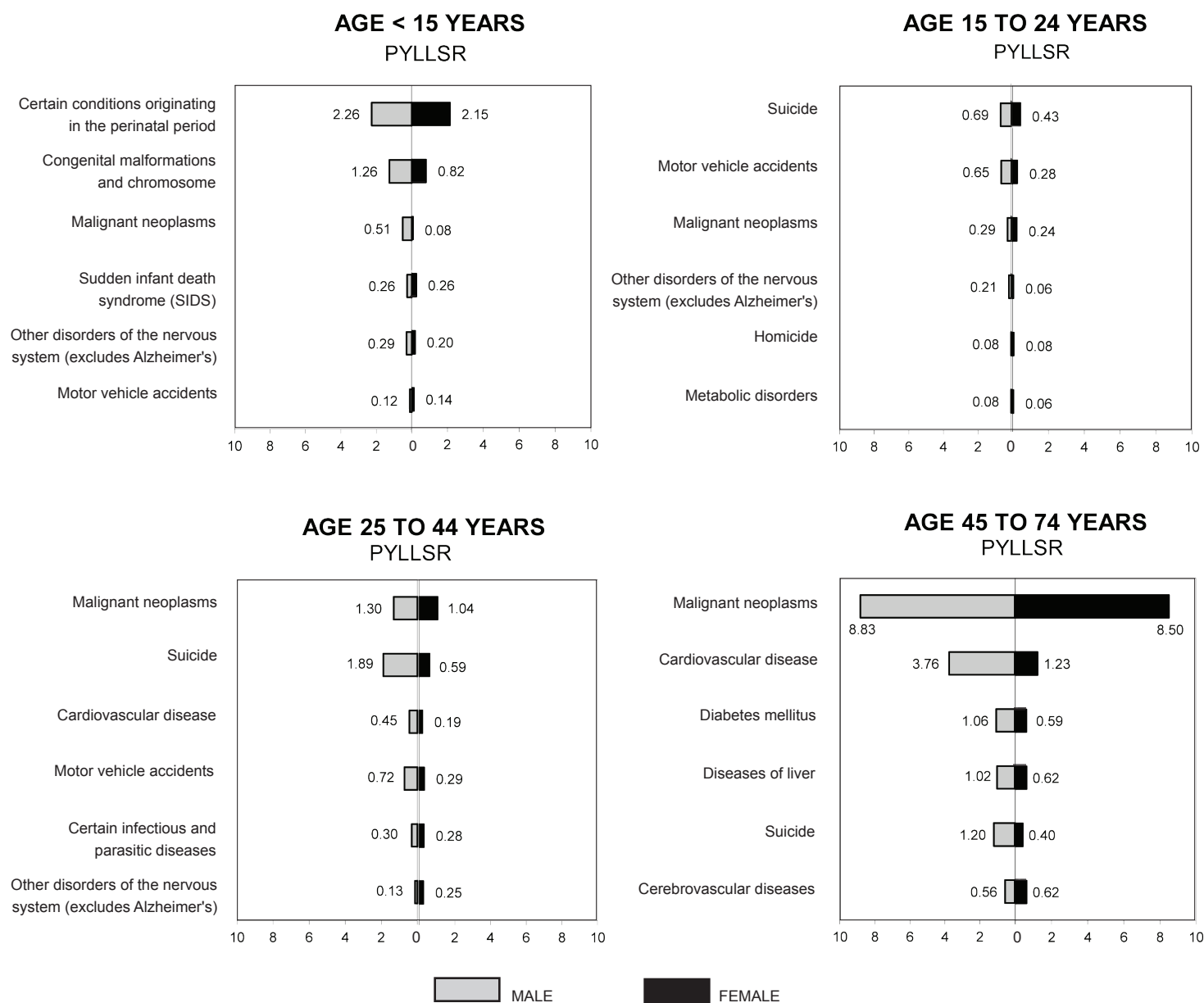
TABLE 35
**POTENTIAL YEARS OF LIFE LOST BY AGE GROUP AND
 MAJOR CAUSES OF DEATH (AGE UNDER 75 YEARS)**

BRITISH COLUMBIA, 2011

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	44	3,278.0	34.1	2.26	41	3,054.5	45.7	2.15	85	6,332.5	38.9	2.20
Congenital malformations and chromosome abnormalities	Q00-Q99	25	1,843.5	19.2	1.26	16	1,177.5	17.6	0.82	41	3,021.0	18.5	1.04
Malignant neoplasms	C00-C97	12	810.5	8.4	0.51	2	130.0	1.9	0.08	14	940.5	5.8	0.30
Sudden infant death in the perinatal period	R95	5	372.5	3.9	0.26	5	372.5	5.6	0.26	10	745.0	4.6	0.26
Other disorders of the nervous system (excludes Alzheimer's)	G00-G25, G31-G99	6	439.5	4.6	0.29	4	288.5	4.3	0.20	10	728.0	4.5	0.26
Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850	3	197.0	2.1	0.12	3	211.5	3.2	0.14	6	408.5	2.5	0.13
Other causes ¹		37	2,663.0	27.7	1.78	21	1,454.0	21.7	0.95	58	4,117.0	25.3	1.37
All causes		132	9,604.0	100.0	6.47	92	6,688.5	100.0	4.59	224	16,292.5	100.0	5.54
15-24 Years Old													
Suicide	X60-X84, Y870	26	1,420.0	13.7	0.69	16	870.0	20.2	0.43	42	2,290.0	15.6	0.56
Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850	25	1,347.5	13.0	0.65	10	550.0	12.8	0.28	35	1,897.5	12.9	0.46
Malignant neoplasms	C00-C97	11	602.5	5.8	0.29	9	482.5	11.2	0.24	20	1,085.0	7.4	0.27
Homicide	X85-Y09, Y871	8	435.0	4.2	0.21	2	110.0	2.6	0.06	10	545.0	3.7	0.13
Metabolic disorders	E70-E89	3	167.5	1.6	0.08	3	157.5	3.7	0.08	6	325.0	2.2	0.08
Other disorders of the nervous system (excludes Alzheimer's)	G00-G25, G31-G99	3	162.5	1.6	0.08	2	110.0	2.6	0.06	5	272.5	1.9	0.07
Other causes ¹		116	6,230.0	60.1	2.97	37	2,017.5	46.9	1.01	153	8,247.5	56.2	2.01
All causes		192	10,365.0	100.0	4.97	79	4,297.5	100.0	2.14	271	14,662.5	100.0	3.58
25-44 Years Old													
Malignant neoplasms	C00-C97	90	3,390.0	13.7	1.30	91	3,282.5	24.4	1.04	181	6,672.5	17.5	1.17
Suicide	X60-X84, Y870	91	3,687.5	14.9	1.89	31	1,217.5	9.0	0.59	122	4,905.0	12.8	1.23
Cardiovascular disease	I00-I51	45	1,607.5	6.5	0.45	14	515.0	3.8	0.19	59	2,122.5	5.6	0.32
Motor vehicle accidents	V02-V04, V09, V12-V14, V190-V196, V20-V79, V803-V805, V820-V821, V823-V890, V892, V899, Y850	36	1,445.0	5.8	0.72	13	547.5	4.1	0.29	49	1,992.5	5.2	0.50
Certain infectious and parasitic diseases	A00-B99,G14	22	795.0	3.2	0.30	14	555.0	4.1	0.28	36	1,350.0	3.5	0.29
Other disorders of theG00-G25, G31-G99 nervous system (excludes Alzheimer's)		8	305.0	1.2	0.13	14	575.0	4.3	0.25	22	880.0	2.3	0.19
Other causes ¹		348	13,510.0	54.6	5.77	176	6,780.0	50.3	2.86	524	20,290.0	53.1	4.30
All causes		640	24,740.0	100.0	10.56	353	13,472.5	100.0	5.49	993	38,212.5	100.0	8.00
45-74 Years Old													
Malignant neoplasms	C00-C97	2,441	26,052.5	37.6	8.83	2,075	23,987.5	52.8	8.50	4,516	50,040.0	43.6	8.69
Cardiovascular disease	I00-I51	949	10,572.5	15.2	3.76	374	3,375.0	7.4	1.23	1,323	13,947.5	12.1	2.50
Diabetes mellitus	E10-E14	330	3,160.0	4.6	1.06	166	1,480.0	3.3	0.59	496	4,640.0	4.0	0.83
Diseases of liver	K70-K76	208	2,885.0	4.2	1.02	116	1,705.0	3.8	0.62	324	4,590.0	4.0	0.82
Suicide	X60-X84, Y870	167	2,882.5	4.2	1.20	51	942.5	2.1	0.40	218	3,825.0	3.3	0.80
Cerebrovascular diseases	I60-I69	185	1,607.5	2.3	0.56	157	1,617.5	3.6	0.62	342	3,225.0	2.8	0.59
Other causes ¹		1,762	22,220.0	32.0	8.99	1,078	12,320.0	27.1	4.92	2,840	34,540.0	30.1	6.96
All causes		6,042	69,380.0	100.0	25.50	4,017	45,427.5	100.0	16.78	10,059	114,807.5	100.0	21.18

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). ¹Other causes includes undetermined and pending. Causes of death are ordered by total PYLL in the age group. Total percentage may not add up to 100 due to rounding. Non-residents are excluded. The output from ICD-10 mortality coding and underlying cause of death selection was modified in 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, 2011



Note: Causes of death are ordered by total deaths (Table 35).

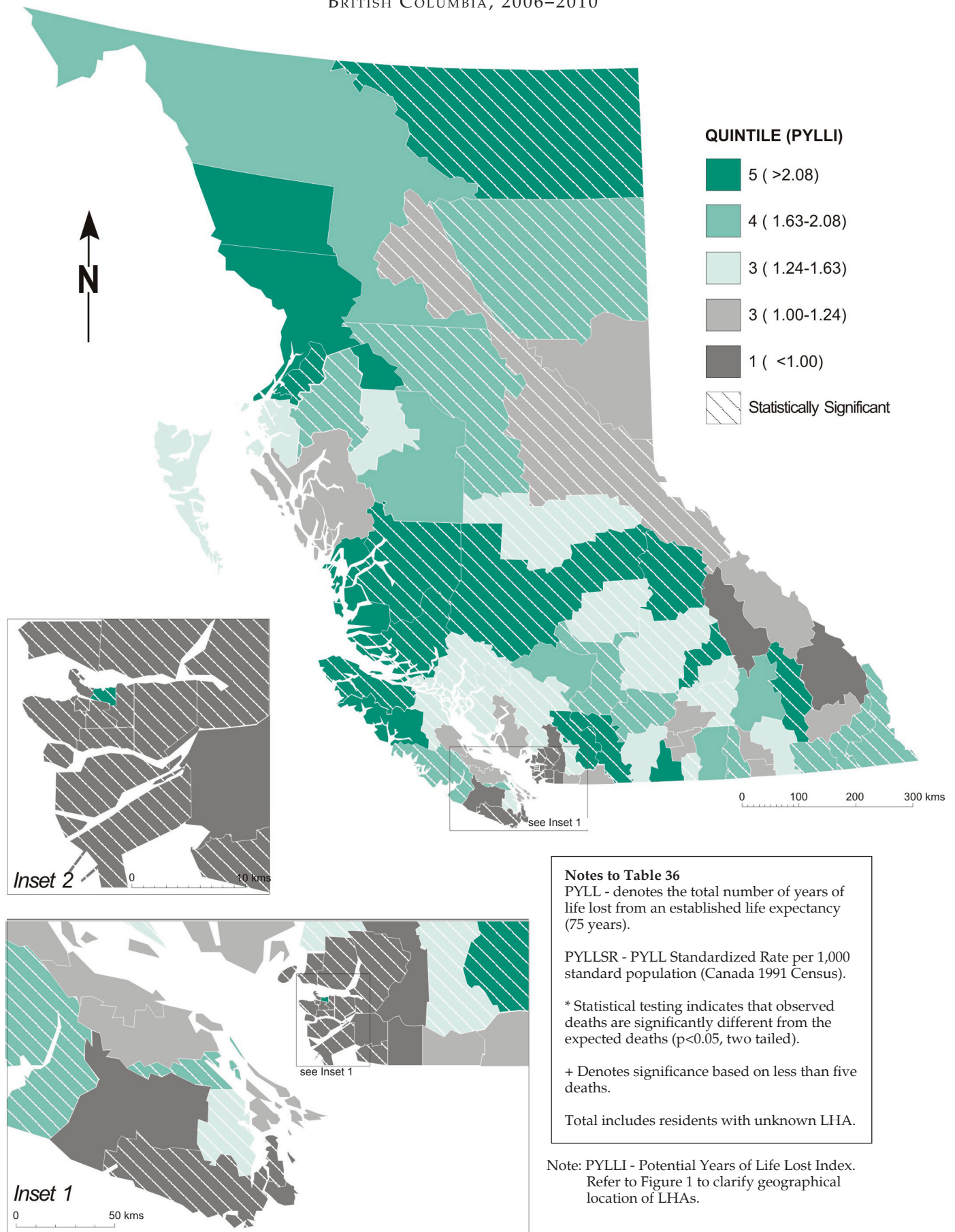
PYLLSR-PYLL Standardized Rate per 1,000 population.

¹The BC Coroners' Service classifies SIDS deaths as "SUDI" - please see glossary (under "SIDS") for explanation.

Local Health Area		2006-2010			2011						
		Observed	Observed	PYLL	Observed	Observed	Expected	PYLL	95% Confidence Limit		
		Deaths	PYLL	Index (p)	Deaths	PYLL	PYLL	Index (p)	Lower	Upper	
001	Fernie	44	1,445.0	1.81 *	11	392.5	112.69	3.48 *	1.19	-	5.78
002	Cranbrook	73	2,147.5	1.71 *	4	155.0	174.27	0.89	0.00	-	1.82
003	Kimberley	18	485.0	1.22	1	2.5	56.82	0.04 +	0.00	-	0.13
004	Windermere	18	480.0	0.91	4	80.0	77.48	1.03	0.01	-	2.05
005	Creston	33	902.5	1.74 *	4	100.0	77.17	1.30	0.00	-	2.62
006	Kootenay Lake	14	485.0	2.79 *	3	27.5	25.71	1.07	0.00	-	2.53
007	Nelson	49	1,577.5	1.24	7	227.5	179.64	1.27	0.28	-	2.25
009	Castlegar	27	802.5	1.21	2	35.0	95.95	0.36 +	0.00	-	0.87
010	Arrow Lakes	13	347.5	1.66	2	70.0	30.15	2.32	0.00	-	5.55
011	Trail	40	995.0	1.09	4	100.0	127.78	0.78	0.00	-	1.71
012	Grand Forks	27	787.5	2.02 *	4	80.0	53.53	1.49	0.00	-	3.59
013	Kettle Valley	13	302.5	1.87	-	-	23.07	-	-	-	-
014	Southern Okanagan	45	1,237.5	1.60 *	6	190.0	110.13	1.73	0.28	-	3.18
015	Penticton	78	2,295.0	1.23	9	272.5	261.32	1.04	0.27	-	1.81
016	Keremeos	16	439.5	2.20	1	12.5	28.66	0.44	0.00	-	1.29
017	Princeton	10	315.0	1.49	4	130.0	31.44	4.13	0.00	-	8.60
018	Golden	14	475.0	1.16	1	7.5	57.06	0.13 +	0.00	-	0.39
019	Revelstoke	13	327.5	0.77	5	247.5	57.92	4.27	0.40	-	8.14
020	Salmon Arm	98	3,434.5	2.22 *	9	252.5	220.78	1.14	0.20	-	2.09
021	Armstrong - Spallumcheen	21	727.5	1.63	3	77.5	60.97	1.27	0.00	-	3.18
022	Vernon	133	3,842.0	1.25 *	18	585.0	429.73	1.36	0.66	-	2.07
023	Central Okanagan	314	9,387.0	1.05	37	1,062.5	1,300.05	0.82	0.51	-	1.12
024	Kamloops	272	8,274.0	1.47 *	27	732.5	783.81	0.93	0.53	-	1.34
025	100 Mile House	46	1,075.0	1.58 *	5	122.5	98.00	1.25	0.01	-	2.49
026	North Thompson	16	560.0	2.73 *	-	-	28.14	-	-	-	-
027	Cariboo - Chilcotin	115	3,807.5	2.72 *	8	305.0	192.02	1.59	0.35	-	2.82
028	Quesnel	57	1,812.5	1.53 *	6	205.0	167.93	1.22	0.16	-	2.28
029	Lillooet	15	427.5	1.93	3	67.5	32.00	2.11	0.00	-	4.76
030	South Cariboo	23	697.5	2.04 *	3	67.5	49.23	1.37	0.00	-	3.14
031	Merritt	44	1,140.0	2.01 *	2	45.0	77.61	0.58	0.00	-	1.40
032	Hope	28	850.0	2.27 *	4	120.0	52.30	2.29	0.00	-	4.84
033	Chilliwack	151	4,647.5	1.13	22	650.0	591.49	1.10	0.57	-	1.63
034	Abbotsford	224	7,942.0	1.11	38	1,229.5	1,020.07	1.21	0.78	-	1.63
035	Langley	191	6,457.5	0.97	26	755.0	909.34	0.83	0.47	-	1.19
037	Delta	110	3,589.0	0.70 *	18	500.0	673.51	0.74	0.35	-	1.13
038	Richmond	140	4,547.0	0.44 *	24	635.0	1,480.60	0.43 *	0.24	-	0.62
040	New Westminster	107	3,092.5	0.86	17	502.0	526.78	0.95	0.43	-	1.47
041	Burnaby	257	7,562.5	0.62 *	45	1,537.0	1,764.16	0.87	0.59	-	1.16
042	Maple Ridge	155	4,782.5	0.98	22	515.0	694.65	0.74	0.37	-	1.11
043	Coquitlam	219	6,902.0	0.58 *	38	1,165.0	1,694.98	0.69 *	0.44	-	0.93
044	North Vancouver	135	4,069.0	0.56 *	27	782.5	1,030.07	0.76	0.43	-	1.09
045	West Vancouver-Bowen Island	42	1,279.5	0.55 *	11	302.5	333.26	0.91	0.32	-	1.50
046	Sunshine Coast	46	1,320.0	1.02	4	75.0	185.12	0.41 +	0.00	-	0.83
047	Powell River	47	1,442.5	1.59 *	10	325.0	129.93	2.50	0.78	-	4.22
048	Howe Sound	81	2,877.5	1.38 *	9	347.5	297.47	1.17	0.37	-	1.96
049	Bella Coola Valley	12	425.0	2.88 *	-	-	20.01	-	-	-	-
050	Queen Charlotte	14	360.0	1.43	4	130.0	33.53	3.88	0.00	-	8.14
051	Snow Country	2	85.0	3.18	1	12.5	3.68	3.40	0.00	-	10.05
052	Prince Rupert	37	982.5	1.31	5	177.5	101.32	1.75	0.00	-	3.58
053	Upper Skeena	16	600.0	2.11	3	72.5	39.71	1.83	0.00	-	4.56
054	Smithers	35	1,112.5	1.32	6	105.0	116.13	0.90	0.00	-	1.85
055	Burns Lake	23	692.5	1.68	2	60.0	57.43	1.04	0.00	-	2.54
056	Nechako	40	1,375.0	1.77 *	9	307.5	105.89	2.90	0.81	-	5.00
057	Prince George	195	6,353.5	1.21 *	24	675.0	722.50	0.93	0.52	-	1.35
059	Peace River South	55	1,777.5	1.23	10	165.0	206.46	0.80	0.23	-	1.37
060	Peace River North	91	3,401.5	1.73 *	19	786.5	275.55	2.85 *	1.44	-	4.27
061	Greater Victoria	370	10,892.0	0.93	69	1,727.5	1,626.19	1.06	0.77	-	1.36
062	Sooke	83	2,722.5	0.78 *	17	547.5	518.19	1.06	0.50	-	1.61
063	Saanich	69	2,197.5	0.79 *	13	272.5	388.39	0.70	0.24	-	1.16
064	Gulf Islands	26	710.0	1.11	4	95.0	95.22	1.00	0.01	-	1.99
065	Cowichan	116	3,754.5	1.38 *	15	377.5	384.93	0.98	0.39	-	1.57
066	Lake Cowichan	8	259.5	0.83	2	55.0	44.95	1.22	0.00	-	3.32
067	Ladysmith	43	1,482.5	1.83 *	5	192.5	114.48	1.68	0.13	-	3.23
068	Nanaimo	159	5,271.5	1.04	17	437.5	721.62	0.61 *	0.29	-	0.92
069	Qualicum	66	1,950.0	1.09	9	142.5	254.94	0.56	0.07	-	1.05
070	Alberni	91	2,947.0	1.89 *	11	362.5	214.34	1.69	0.56	-	2.82
071	Courtenay	108	3,055.0	1.03	23	647.5	415.40	1.56	0.80	-	2.32
072	Campbell River	116	3,180.0	1.53 *	20	645.0	287.44	2.24 *	1.12	-	3.36
075	Mission	91	3,067.5	1.34 *	16	510.0	317.04	1.61	0.74	-	2.48
076	Agassiz - Harrison	26	1,015.0	2.40 *	2	50.0	59.91	0.83	0.00	-	2.39
077	Summerland	19	567.5	1.17	1	52.5	66.62	0.79	0.00	-	2.33
078	Enderby	18	525.0	1.48	3	122.5	48.97	2.50	0.00	-	5.50
080	Kitimat	25	652.5	1.18	5	117.5	74.10	1.59	0.00	-	3.25
081	Fort Nelson	20	855.0	2.27 *	4	170.0	51.19	3.32	0.03	-	6.61
083	Central Coast	6	230.0	2.84	-	-	10.74	-	-	-	-
084	Vancouver Island West	10	285.0	2.36	2	80.0	16.55	4.83	0.00	-	11.86
085	Vancouver Island North	53	1,809.0	2.77 *	8	170.0	88.85	1.91	0.09	-	3.73
087	Stikine	3	82.5	1.63	-	-	6.34	-	-	-	-
088	Terrace	52	1,867.0	1.78 *	11	387.5	147.48	2.63	0.91	-	4.35
092	Nisga'a	14	605.0	5.84 *	2	85.0	13.81	6.15	0.00	-	14.74
094	Telegraph Creek	6	210.0	5.37	-	-	5.27	-	-	-	-
161	Vancouver - City Centre	198	5,760.0	0.74 *	37	1,122.5	1,102.51	1.02	0.65	-	1.38
162	Vancouver - Downtown Eastside	296	8,234.0	2.16 *	51	1,432.5	603.96	2.37 *	1.65	-	3.09
163	Vancouver - North East	115	3,767.5	0.66 *	10	320.0	795.33	0.40 *	0.13	-	0.68
164	Vancouver - Westside	115	3,274.5	0.44 *	12	430.0	1,051.87	0.41 *	0.16	-	0.65
165	Vancouver - Midtown	106	3,369.0	0.68 *	14	365.0	735.96	0.50 *	0.20	-	0.80
166	Vancouver - South	124	4,216.5	0.59 *	21	647.5	1,001.46	0.65 *	0.33	-	0.96
201	Surrey	600	19,531.0	0.95	108	3,459.5	2,911.55	1.19	0.94	-	1.44
202	South Surrey/White Rock	80	2,544.5	0.69 *	9	162.5	509.42	0.32 *	0.06	-	0.58
PROVINCIAL TOTAL		7,410	231,308.0	1.00	1,112	32,772.0	32,772.00	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, 2006–2010



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 137 deaths due to medically treatable diseases in 2011, which represents about 0.4 percent of all deaths in the province.

Table 37 indicates the number and percent of all medically treatable disease (MTD) deaths by cause for 2011 and the five-year period of 2006 to 2010. Bacterial infections accounted for most of the deaths due to MTDs in 2011 and the previous five years. In 2011, two cause categories, hypertension and hypertensive diseases, and pneumonia and unqualified bronchitis, accounted for 42.1 percent male deaths due to MTDs and for females, 19.7 percent.

Table 38 shows the count of deaths due to MTDs organized by the LHA in which the decedent lived. For the current year (2011) the table shows the actual number of deaths observed in the LHA and the expected deaths (calculated using the 2011 age-specific death rates for MTD).

There were 13 LHAs that had no deaths due to these conditions in 2006 to 2010 and 42 in 2011 as shown in Table 38. Further, there were only eight LHAs in 2006 to 2010 that showed differences between observed and expected deaths that were statistically significant based on five or more deaths, and only one LHA with five or more deaths had a statistically significant and high ratio in 2011.

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 green 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, 2006–2010 AND 2011

Cause of Death	ICD-10 Code(s)	2006–2010		2011					
		Number	Percent	Male		Female		Total	
				Number	Percent	Number	Percent	Number	Percent
Bacterial Infections	A00-A05, ..., M87.1	245	30.1	34	44.7	16	26.2	50	36.5
Pneumonia and unqualified bronchitis	J12-J181, J188, J189, J40	175	21.5	17	22.4	4	6.6	21	15.3
Hypertension and hypertensive diseases	I10-I15	130	16.0	15	19.7	8	13.1	23	16.8
Malignant neoplasm of cervix	C53	126	15.5	-	-	24	39.3	24	17.5
Abdominal hernias, cholecystitis and cholelithiasis, appendicitis	K35-K37, K40-K46, K80, K81	52	6.4	5	6.6	4	6.6	9	6.6
Acute respiratory infections and influenza	J00-J06, J09-J11, J20-J22	25	3.1	1	1.3	1	1.6	2	1.5
Asthma	J45-J46	23	2.8	-	-	1	1.6	1	0.7
Tuberculosis	A15-A19, B90	20	2.5	3	3.9	2	3.3	5	3.6
Chronic rheumatic heart disease	I05-I09	9	1.1	-	-	-	-	-	-
Hodgkin's disease	C81	8	1.0	1	1.3	1	1.6	2	1.5
Nutritional anemias	D50-D53	-	-	-	-	-	-	-	-
TOTAL		813	100.0	76	100.0	61	100.0	137	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.

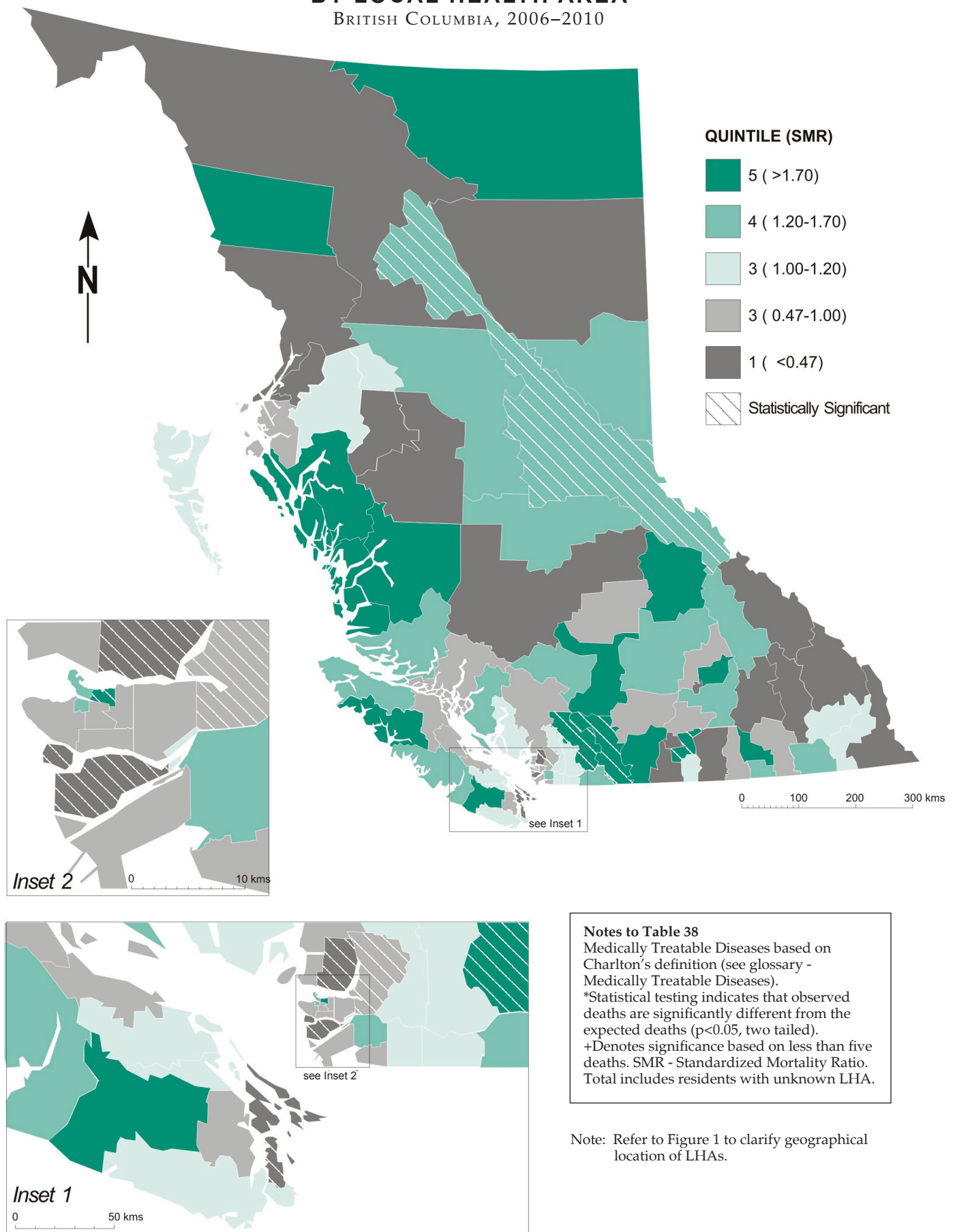
Total percentage may not add up to 100 due to rounding.

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.

			2006-2010		2011			
Local Health Area			Observed Deaths	SMR (p)	Observed Deaths	Expected Deaths	SMR (p)	95% Confidence Interval
								Lower Upper
001	Fernie		1	0.34	-	0.50	-	- -
002	Cranbrook		5	1.04	1	0.79	1.27	0.02 - 7.08
003	Kimberley		2	1.19	-	0.28	-	- -
004	Windermere		-	-	-	0.36	-	- -
005	Creston		3	1.33	-	0.37	-	- -
006	Kootenay Lake		-	-	-	0.13	-	- -
007	Nelson		4	0.82	-	0.82	-	- -
009	Castlegar		5	1.98	1	0.42	2.39	0.03 - 13.30
010	Arrow Lakes		-	-	-	0.16	-	- -
011	Trail		5	1.35	1	0.61	1.65	0.02 - 9.16
012	Grand Forks		1	0.58	2	0.27	7.41	0.83 - 26.77
013	Kettle Valley		-	-	-	0.13	-	- -
014	Southern Okanagan		4	1.10	-	0.59	-	- -
015	Penticton		14	1.86 *	2	1.24	1.62	0.18 - 5.85
016	Keremeos		-	-	-	0.16	-	- -
017	Princeton		2	1.84	-	0.20	-	- -
018	Golden		-	-	-	0.23	-	- -
019	Revelstoke		2	1.29	-	0.26	-	- -
020	Salmon Arm		5	0.75	-	1.11	-	- -
021	Armstrong - Spallumcheen		-	-	-	0.29	-	- -
022	Vernon		15	1.24	1	2.01	0.50	0.01 - 2.77
023	Central Okanagan		31	0.95	7	5.61	1.25	0.50 - 2.57
024	Kamloops		29	1.41	4	3.41	1.17	0.32 - 3.00
025	100 Mile House		2	0.66	1	0.49	2.05	0.03 - 11.38
026	North Thompson		2	2.33	-	0.14	-	- -
027	Cariboo - Chilcotin		2	0.39	-	0.83	-	- -
028	Quesnel		7	1.55	-	0.75	-	- -
029	Lillooet		1	1.20	-	0.14	-	- -
030	South Cariboo		3	2.11	-	0.23	-	- -
031	Merritt		2	0.92	-	0.34	-	- -
032	Hope		8	5.19 *	-	0.24	-	- -
033	Chilliwack		20	1.41	3	2.43	1.24	0.25 - 3.61
034	Abbotsford		24	1.08	5	3.77	1.33	0.43 - 3.10
035	Langley		26	1.14	1	3.63	0.28	0.00 - 1.53
037	Delta		18	0.95	2	2.89	0.69	0.08 - 2.50
038	Richmond		16	0.45 *	3	6.01	0.50	0.10 - 1.46
040	New Westminster		14	1.15	2	2.11	0.95	0.11 - 3.43
041	Burnaby		29	0.73	5	6.74	0.74	0.24 - 1.73
042	Maple Ridge		17	1.01	2	2.87	0.70	0.08 - 2.52
043	Coquitlam		25	0.62 *	11	6.97	1.58	0.79 - 2.82
044	North Vancouver		12	0.45 *	2	4.50	0.44	0.05 - 1.60
045	West Vancouver-Bowen Is.		8	0.81	-	1.64	-	- -
046	Sunshine Coast		7	1.13	1	1.07	0.94	0.01 - 5.21
047	Powell River		6	1.52	1	0.65	1.55	0.02 - 8.62
048	Howe Sound		5	0.81	1	1.11	0.90	0.01 - 5.00
049	Bella Coola Valley		1	1.85	-	0.09	-	- -
050	Queen Charlotte		1	1.04	-	0.15	-	- -
051	Snow Country		-	-	-	0.02	-	- -
052	Prince Rupert		2	0.74	1	0.44	2.29	0.03 - 12.76
053	Upper Skeena		1	1.05	-	0.16	-	- -
054	Smithers		1	0.34	2	0.48	4.16	0.47 - 15.02
055	Burns Lake		-	-	-	0.24	-	- -
056	Nechako		4	1.51	1	0.43	2.30	0.03 - 12.82
057	Prince George		28	1.55 *	1	2.97	0.34	0.00 - 1.87
059	Peace River South		6	1.22	-	0.83	-	- -
060	Peace River North		2	0.36	-	0.97	-	- -
061	Greater Victoria		44	1.09	7	6.75	1.04	0.42 - 2.14
062	Sooke		13	1.03	-	2.23	-	- -
063	Saanich		4	0.32 +	-	2.04	-	- -
064	Gulf Islands		-	-	-	0.60	-	- -
065	Cowichan		7	0.66	4	1.77	2.26	0.61 - 5.78
066	Lake Cowichan		3	2.35	1	0.22	4.64	0.06 - 25.81
067	Ladysmith		4	1.07	1	0.65	1.54	0.02 - 8.56
068	Nanaimo		23	1.19	4	3.28	1.22	0.33 - 3.12
069	Qualicum		5	0.56	4	1.46	2.73	0.74 - 7.00
070	Alberni		8	1.33	6	0.97	6.17 *	2.25 - 13.43
071	Courtenay		6	0.48	1	2.07	0.48	0.01 - 2.69
072	Campbell River		5	0.60	2	1.37	1.46	0.16 - 5.28
075	Mission		8	1.06	1	1.27	0.79	0.01 - 4.37
076	Agassiz - Harrison		5	3.11 *	1	0.26	3.81	0.05 - 21.17
077	Summerland		-	-	-	0.36	-	- -
078	Enderby		3	2.07	-	0.23	-	- -
080	Kitimat		4	1.96	1	0.34	2.98	0.04 - 16.61
081	Fort Nelson		3	2.81	-	0.18	-	- -
083	Central Coast		2	8.39	1	0.04	25.08	0.33 - 139.53
084	Vancouver Island West		1	1.90	-	0.09	-	- -
085	Vancouver Island North		3	1.22	-	0.40	-	- -
087	Stikine		-	-	-	0.03	-	- -
088	Terrace		4	1.07	-	0.61	-	- -
092	Nisga'a		-	-	-	0.06	-	- -
094	Telegraph Creek		1	8.82	-	0.02	-	- -
161	Vancouver - City Centre		27	1.25	6	3.64	1.65	0.60 - 3.59
162	Vancouver - Dwntrwn E.side		45	3.65 *	4	2.41	1.66	0.45 - 4.25
163	Vancouver - North East		14	0.77	1	3.19	0.31	0.00 - 1.75
164	Vancouver - Westside		15	0.63	2	3.93	0.51	0.06 - 1.84
165	Vancouver - Midtown		15	0.95	1	2.94	0.34	0.00 - 1.89
166	Vancouver - South		18	0.75	7	4.13	1.70	0.68 - 3.50
201	Surrey		77	1.20	16	10.75	1.49	0.85 - 2.42
202	South Surrey/White Rock		15	0.97	1	2.46	0.41	0.01 - 2.27
PROVINCIAL TOTAL			813	1.00	137	137.00	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, 2006–2010



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 2011 and in the five preceding years, while Figure 43 graphically shows the pattern of alcohol-related deaths by cause. About 23.4 percent of the 1,894 deaths related to alcohol in 2011 were directly attributable to alcohol (443 deaths). Alcohol was a contributing factor in the remaining 76.6 percent of these deaths. The table indicates that most of the deaths directly attributable to alcohol were caused by liver disease (16.1 percent) in 2011.

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

Alcohol-related deaths constitute 6.1 percent of all deaths in 2011 and 8.9 percent of all male deaths. Males died of such causes nearly 3 times more frequently than women did in 2011.

Alcohol-related deaths for seniors (65 or older) accounted for 45.5 percent of deaths; 41.8 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 15 LHAs with at least five deaths where the observed values were statistically significant and above the expected values in both 2006 to 2010 and 2011 as shown in Table 41. There were 12 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 2006 to 2010.

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, 2006–2010 AND 2011

Cause of Death	ICD-10 Code(s)	Year of Death			
		2006–2010		2011	
		Number	Percent	Number	Percent
Directly Related to Alcohol					
Alcohol intoxication	F100	116	1.2	31	1.6
Alcoholic psychoses and dependence	F101-F109	471	4.7	70	3.7
Alcoholic neurological disorders	G312, G621, G721	1	0.0	-	-
Alcoholic cardiomyopathy	I426	88	0.9	12	0.6
Alcoholic gastritis	K292	12	0.1	5	0.3
Alcoholic liver disease	K70	1,325	13.2	304	16.1
Alcohol induced chronic pancreatitis	K860	5	0.0	1	0.1
Alcohol poisoning	X45, X65	123	1.2	20	1.1
Other alcohol causes	E244, O354, O993, P043, Q860, R780, T510-T512, T519	-	-	-	-
Subtotal		2,141	21.4	443	23.4
Indirectly Related to Alcohol ¹					
Certain infectious and parasitic diseases	A00-B99,G14	294	2.9	57	3.0
Neoplasms	C00-D48	1,218	12.2	277	14.6
Endocrine/Nutritional/Metabolic	E00-E243, E248-E89	267	2.7	74	3.9
Mental disorders	F00-F09, F11-F99	125	1.2	30	1.6
Neurological diseases	G00-G311, G318-G620, G622-G720, G722-G99	117	1.2	24	1.3
Circulatory	I00-I425, I427-I99	1,892	18.9	329	17.4
Diseases of the respiratory system	J00-J98	718	7.2	122	6.4
Digestive system diseases	K00-K291, K293-K69, K71-K85, K861-K92	474	4.7	73	3.9
Urinary system diseases	N00-N39, N990, N991, N995	92	0.9	17	0.9
Unintentional injury	V01-X44, X46-X59, Y40-Y86, Y88	1,596	15.9	210	11.1
Suicide	X60-X64, X66-X84, Y870	499	5.0	87	4.6
Homicide	X85-Y09, Y871	46	0.5	4	0.2
All other causes		528	5.3	147	7.8
Subtotal		7,866	78.6	1,451	76.6
TOTAL		10,007	100.0	1,894	100.0

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

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

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

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, 2011

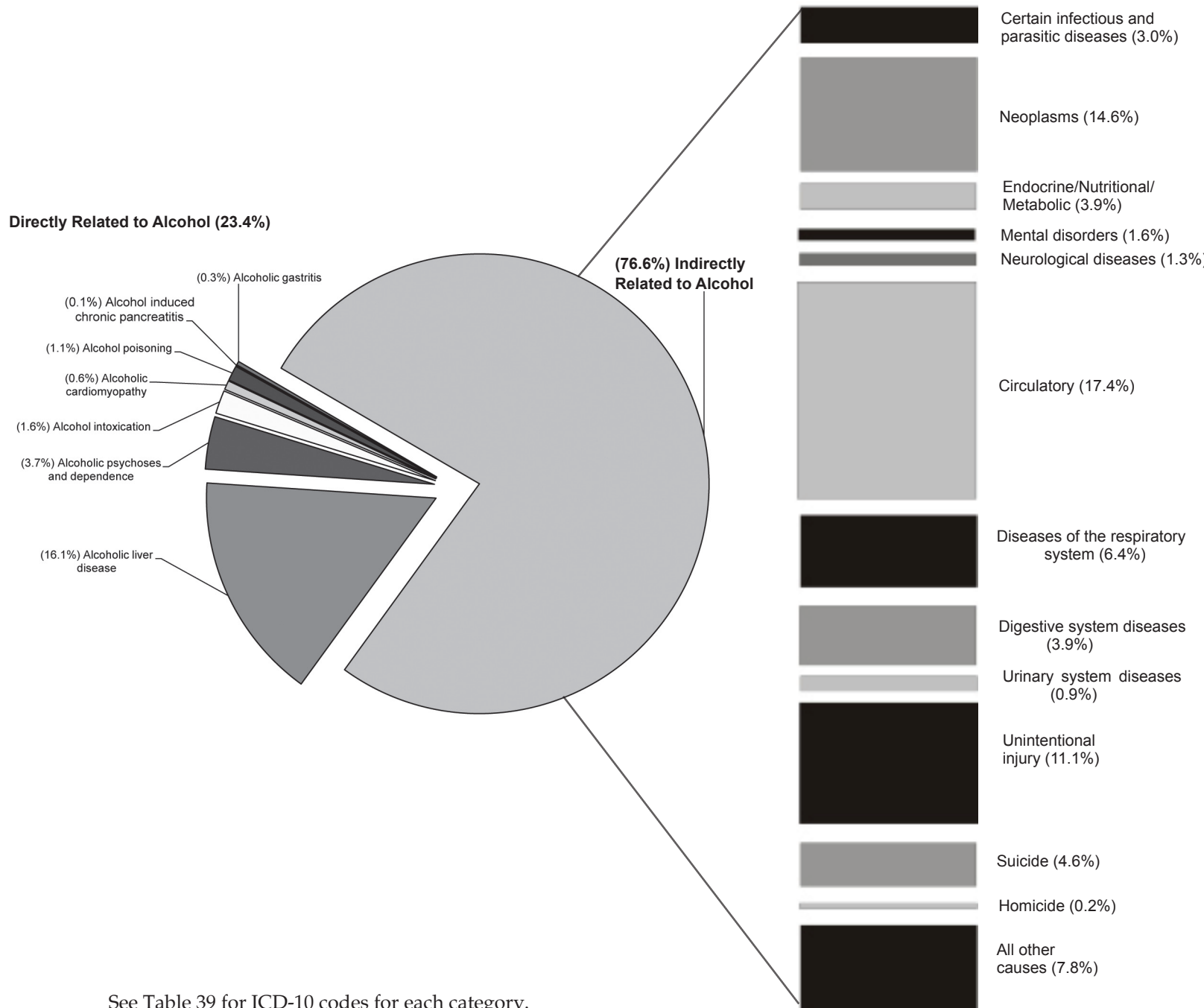


TABLE 40
ALCOHOL-RELATED DEATHS BY AGE AND GENDER
 BRITISH COLUMBIA, 2011

Age	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
<15	-	-	-	-	-	-
15-19	10	0.7	4	0.8	14	0.7
20-24	31	2.2	9	1.9	40	2.1
25-44	133	9.4	54	11.2	187	9.9
45-64	595	42.1	196	40.7	791	41.8
65-84	552	39.1	158	32.8	710	37.5
85+	91	6.4	61	12.7	152	8.0
TOTAL	1,412	100.0	482	100.0	1,894	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.



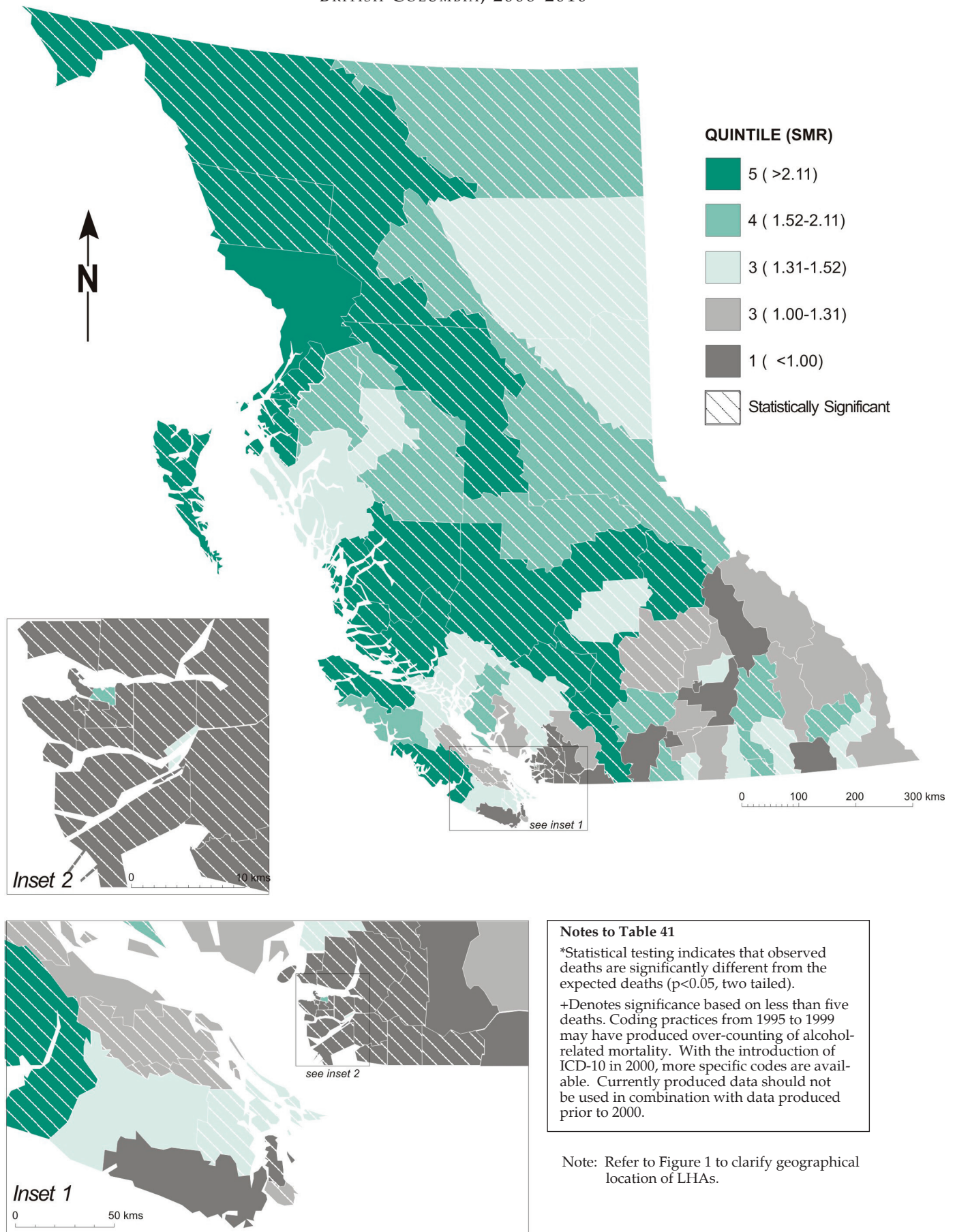
Table 41

STANDARDIZED MORTALITY RATIO BY LOCAL HEALTH AREA ALCOHOL-RELATED DEATHS,
BRITISH COLUMBIA, 2006-2010 AND 2011

Local Health Area		2006-2010		2011					
		Observed Deaths	SMR (p)	Observed Deaths	Expected Deaths	SMR	(p)	95% Confidence Interval	
								Lower	Upper
001	Fernie	35	1.06	7	6.23	1.12		0.45	2.31
002	Cranbrook	88	1.44 *	20	11.37	1.76	*	1.07	2.72
003	Kimberley	36	1.56 *	4	4.30	0.93		0.25	2.38
004	Windermere	28	1.13	10	4.65	2.15	*	1.03	3.96
005	Creston	35	0.94	9	6.82	1.32		0.60	2.51
006	Kootenay Lake	11	1.02	4	2.02	1.98		0.53	5.08
007	Nelson	86	1.46 *	20	11.07	1.81	*	1.10	2.79
009	Castlegar	51	1.54 *	9	6.26	1.44		0.66	2.73
010	Arrow Lakes	23	1.64 *	6	2.62	2.29		0.84	4.99
011	Trail	98	1.92 *	15	9.39	1.60		0.89	2.63
012	Grand Forks	38	1.41	6	4.93	1.22		0.44	2.65
013	Kettle Valley	13	1.17	2	2.13	0.94		0.11	3.38
014	Southern Okanagan	94	1.43 *	22	11.96	1.84	*	1.15	2.78
015	Penticton	139	1.15	31	22.04	1.41		0.96	2.00
016	Keremeos	33	1.91 *	4	3.21	1.25		0.34	3.19
017	Princeton	13	0.77	6	3.23	1.86		0.68	4.05
018	Golden	18	1.16	2	2.88	0.69		0.08	2.51
019	Revelstoke	18	0.99	8	3.33	2.40	*	1.03	4.73
020	Salmon Arm	113	1.16	17	18.24	0.93		0.54	1.49
021	Armstrong - Spallumcheen	17	0.68	6	4.72	1.27		0.46	2.77
022	Vernon	166	0.99	34	31.56	1.08		0.75	1.51
023	Central Okanagan	447	1.00	75	83.70	0.90		0.70	1.12
024	Kamloops	305	1.18 *	62	48.57	1.28		0.98	1.64
025	100 Mile House	56	1.33 *	8	7.87	1.02		0.44	2.00
026	North Thompson	24	2.20 *	3	2.05	1.46		0.29	4.27
027	Cariboo - Chilcotin	141	2.38 *	15	11.10	1.35		0.76	2.23
028	Quesnel	95	1.73 *	20	10.36	1.93	*	1.18	2.98
029	Lillooet	36	3.44 *	4	1.97	2.03		0.55	5.21
030	South Cariboo	56	2.76 *	9	3.79	2.38	*	1.08	4.51
031	Merritt	59	2.09 *	6	5.15	1.16		0.43	2.53
032	Hope	49	2.13 *	4	4.20	0.95		0.26	2.44
033	Chilliwack	169	0.89	30	35.98	0.83		0.56	1.19
034	Abbotsford	206	0.75 *	31	50.86	0.61	*	0.41	0.87
035	Langley	234	0.85 *	49	55.92	0.88		0.65	1.16
037	Delta	159	0.69 *	32	46.44	0.69	*	0.47	0.97
038	Richmond	157	0.38 *	35	75.66	0.46	*	0.32	0.64
040	New Westminster	182	1.32 *	21	25.72	0.82		0.51	1.25
041	Burnaby	338	0.72 *	70	85.92	0.81		0.64	1.03
042	Maple Ridge	154	0.84 *	21	34.49	0.61	*	0.38	0.93
043	Coquitlam	239	0.57 *	40	80.35	0.50	*	0.36	0.68
044	North Vancouver	176	0.58 *	37	57.34	0.65	*	0.45	0.89
045	West Vancouver-Bowen Is.	67	0.47 *	18	26.28	0.68		0.41	1.08
046	Sunshine Coast	86	1.00	13	16.57	0.78		0.42	1.34
047	Powell River	91	1.63 *	19	10.47	1.82	*	1.09	2.83
048	Howe Sound	80	1.36 *	13	11.50	1.13		0.60	1.93
049	Bella Coola Valley	28	4.35 *	3	1.20	2.49		0.50	7.29
050	Queen Charlotte	44	4.24 *	6	1.89	3.17	*	1.16	6.89
051	Snow Country	3	2.30	1	0.24	4.10		0.05	22.83
052	Prince Rupert	70	2.33 *	15	5.55	2.70	*	1.51	4.46
053	Upper Skeena	21	1.98 *	5	1.98	2.53		0.81	5.89
054	Smithers	48	1.48 *	11	6.16	1.79		0.89	3.20
055	Burns Lake	33	1.91 *	10	3.15	3.17	*	1.52	5.83
056	Nechako	72	2.31 *	11	5.85	1.88		0.94	3.36
057	Prince George	305	1.57 *	48	36.42	1.32		0.97	1.75
059	Peace River South	82	1.48 *	21	10.24	2.05	*	1.27	3.14
060	Peace River North	83	1.48 *	13	10.43	1.25		0.66	2.13
061	Greater Victoria	684	1.29 *	145	95.78	1.51	*	1.28	1.78
062	Sooke	134	0.99	27	26.43	1.02		0.67	1.49
063	Saanich	143	0.74 *	42	35.69	1.18		0.85	1.59
064	Gulf Islands	67	1.33 *	6	9.67	0.62		0.23	1.35
065	Cowichan	200	1.41 *	35	26.76	1.31		0.91	1.82
066	Lake Cowichan	22	1.35	5	3.06	1.64		0.53	3.82
067	Ladysmith	69	1.29 *	17	10.35	1.64		0.96	2.63
068	Nanaimo	312	1.21 *	62	48.97	1.27		0.97	1.62
069	Qualicum	153	1.00	31	28.55	1.09		0.74	1.54
070	Alberni	178	2.24 *	42	14.70	2.86	*	2.06	3.86
071	Courtenay	205	1.23 *	48	31.97	1.50	*	1.11	1.99
072	Campbell River	149	1.49 *	23	19.10	1.20		0.76	1.81
075	Mission	82	0.97	11	15.60	0.71		0.35	1.26
076	Agassiz - Harrison	30	1.31	2	4.20	0.48		0.05	1.72
077	Summerland	29	0.82	5	6.45	0.77		0.25	1.81
078	Enderby	28	1.36	3	3.87	0.77		0.16	2.26
080	Kitimat	30	1.31	5	4.25	1.18		0.38	2.75
081	Fort Nelson	19	2.05 *	3	1.73	1.74		0.35	5.08
083	Central Coast	16	5.99 *	4	0.49	8.14	+	2.19	20.85
084	Vancouver Island West	11	1.86	2	1.09	1.84		0.21	6.64
085	Vancouver Island North	79	3.01 *	16	4.88	3.28	*	1.87	5.32
087	Stikine	10	4.17 *	-	0.43	-		-	-
088	Terrace	86	2.05 *	11	7.92	1.39		0.69	2.49
092	Nisga'a	13	3.56 *	-	0.67	-		-	-
094	Telegraph Creek	6	4.85 *	-	0.23	-		-	-
161	Vancouver - City Centre	166	0.72 *	42	41.74	1.01		0.73	1.36
162	Vancouver - Dwntrwn E.side	301	2.08 *	55	28.13	1.96	*	1.47	2.55
163	Vancouver - North East	117	0.52 *	20	40.67	0.49	*	0.30	0.76
164	Vancouver - Westside	125	0.46 *	21	48.83	0.43	*	0.27	0.66
165	Vancouver - Midtown	118	0.68 *	21	33.18	0.63	*	0.39	0.97
166	Vancouver - South	147	0.50 *	30	53.42	0.56	*	0.38	0.80
201	Surrey	579	0.82 *	115	147.98	0.78	*	0.64	0.93
202	South Surrey/White Rock	135	0.58 *	22	48.89	0.45	*	0.28	0.68
PROVINCIAL TOTAL		10,007	1.00	1,894	1,894.00	1.00		0.96	1.05

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

FIGURE 44
ALCOHOL-RELATED DEATHS BY LOCAL HEALTH AREA
 BRITISH COLUMBIA, 2006-2010



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

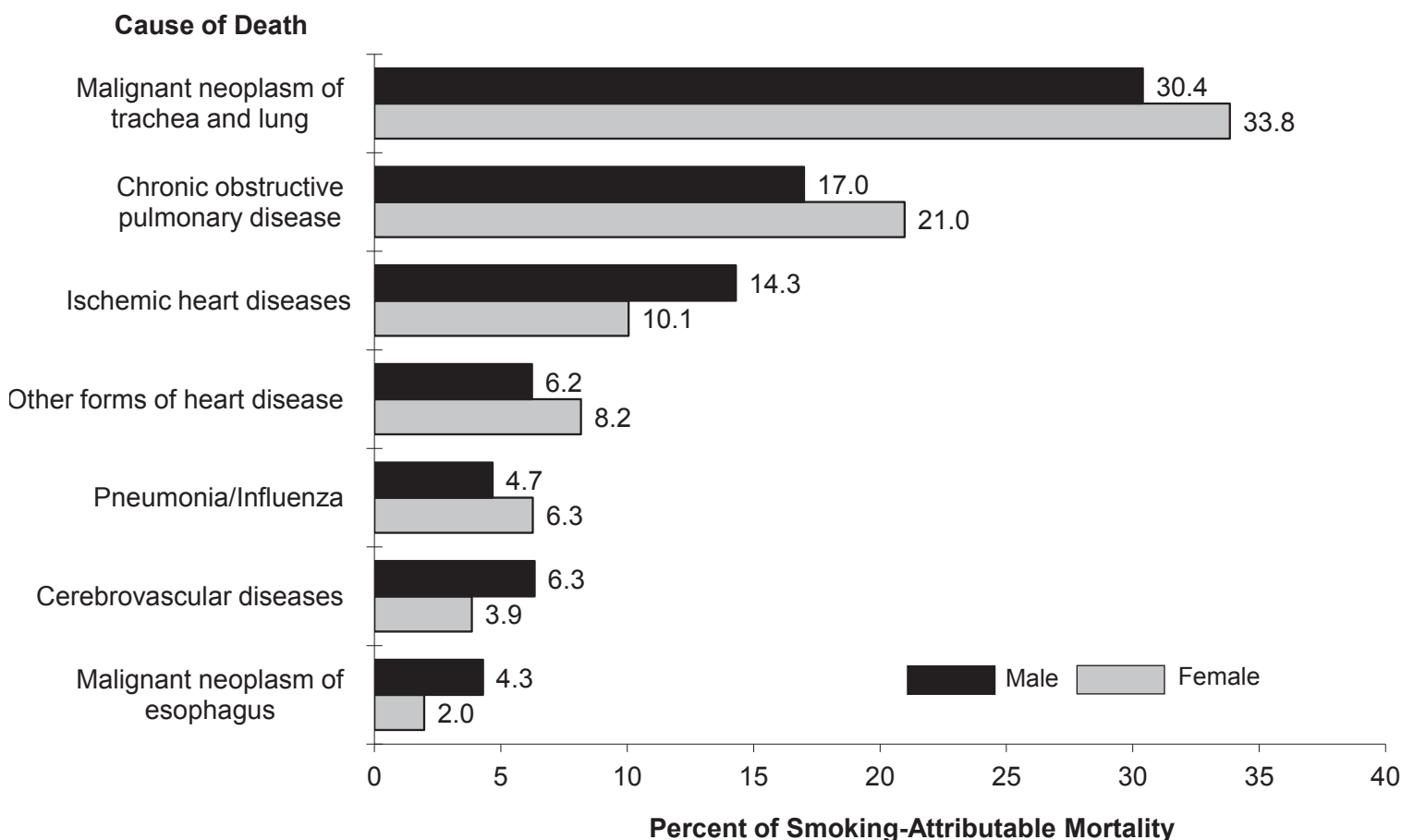
Table 42 and Figure 45 portray the number and percent of deaths in 2011 that were attributable to smoking for those aged 35 years and older. The age restriction relates to the fact that smoking-attributable conditions generally become apparent over time and after several years of tobacco use. Because 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 2011, there were 6,074 deaths attributed to smoking as shown in Table 42. By far the largest disease category was malignant neoplasms of trachea and lung (31.8 percent) followed by chronic obstructive pulmonary disease (18.6 percent) and ischemic heart disease (12.6 percent).

FIGURE 45
**SMOKING-ATTRIBUTABLE MORTALITY
BY SELECTED CAUSES AND GENDER**
BRITISH COLUMBIA, 2011



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, 2011

Cause of Death	ICD-10 Code(s)	Male				Female				Total		
		Deaths	SAM (%)	SAM		Deaths	SAM (%)	SAM		Deaths	SAM	
				Number	Percent			Number	Percent		Number	Percent
Malignant Neoplasms												
Malignant neoplasms of lip, oral cavity and pharynx	C00-C14	122	91.2	111	3.1	54	59.9	32	1.3	176	144	2.4
Malignant neoplasm of esophagus	C15	197	78.2	154	4.3	69	71.0	49	2.0	266	203	3.3
Malignant neoplasm of pancreas	C25	306	21.7	66	1.8	258	33.9	87	3.5	564	154	2.5
Malignant neoplasm of larynx	C32	32	79.7	26	0.7	7	87.2	6	0.2	39	32	0.5
Malignant neoplasm of trachea and lung	C33-C34	1,222	89.3	1,091	30.4	1,099	76.5	841	33.8	2,321	1,932	31.8
Malignant neoplasms of cervix, uterus	C53-C55	-	-	-	-	156	33.9	53	2.1	156	53	0.9
Malignant neoplasm of bladder	C67	190	44.8	85	2.4	89	37.6	33	1.3	279	119	2.0
Malignant neoplasm of kidney and other unspecified urinary organs	C64-C66, C68	148	46.8	69	1.9	60	12.4	7	0.3	208	77	1.3
SUBTOTAL		2,217		1,603	44.7	1,792		1,109	44.7	4,009	2,712	44.7
Circulatory System Diseases												
Hypertension	I10-I13	152	24.6	37	1.0	210	16.4	34	1.4	362	72	1.2
Ischemic heart diseases :	I20-I25											
35-64 years		379	43.2	164	4.6	73	36.5	27	1.1	452	190	3.1
65+ years		1,656	21.1	349	9.7	1,528	14.6	223	9.0	3,184	573	9.4
Other forms of heart disease	I01-I09, 127, I30-I52	844	26.5	224	6.2	1,046	19.4	203	8.2	1,890	427	7.0
Cerebrovascular diseases :	I60-I69											
35-64 years		67	44.8	30	0.8	74	49.3	36	1.5	141	66	1.1
65+ years		844	23.4	197	5.5	1,235	4.8	59	2.4	2,079	257	4.2
Atherosclerosis	I70	26	55.5	14	0.4	26	31.7	8	0.3	52	23	0.4
Aortic aneurysm	I71	147	55.5	82	2.3	60	31.7	19	0.8	207	101	1.7
Other arterial diseases	I26, I28, I72-I78	114	55.5	63	1.8	132	31.7	42	1.7	246	105	1.7
SUBTOTAL		4,229		1,161	32.3	4,384		652	26.2	8,613	1,813	29.8
Respiratory System Diseases												
Pneumonia/Influenza	J09-J181, J188, J189	513	32.7	168	4.7	592	26.3	156	6.3	1,105	323	5.3
Bronchitis, emphysema	J40-J43	50	84.7	42	1.2	48	79.2	38	1.5	98	80	1.3
Chronic obstructive pulmonary disease	J44	720	84.7	610	17.0	658	79.2	521	21.0	1,378	1,131	18.6
Other respiratory diseases	A15-A19, J46	18	32.7	6	0.2	32	26.3	8	0.3	50	14	0.2
SUBTOTAL		1,301		826	23.0	1,330		723	29.1	2,631	1,549	25.5
TOTAL		7,747		3,590	100.0	7,506		2,485	100.0	15,253	6,074	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

The drug-induced deaths category has deaths that are directly caused by 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 (236) died of drug-induced causes than females (135). Among individuals aged 25 to 64 years, there were 317 drug-induced deaths (85.4 percent), and 158 drug-induced deaths (42.6 percent) in the 45 to 64-year age group.

Table 44 presents drug-induced deaths by cause for 2006 to 2010 and 2011. In 2011, 71.2 percent of drug-induced deaths were the result of accidental poisoning by drugs compared to 68.7 percent in the previous five years. Of the 426 suicide deaths in BC in 2011, 19.2 percent were drug-induced.

Figure 46 is a graphic presentation of the results from Table 44. In 2011, 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 2011 and in the previous five years. In 2011, 34 LHAs had no drug-induced deaths and 3 had no drug-induced deaths from 2006 to 2010.

Greater Victoria and Vancouver - Downtown Eastside were the only LHAs where the observed number of deaths was more than 5 and statistically significantly higher than the expected numbers in 2011 as well as the previous five years.

Figure 47 maps the variation of SMRs in the LHAs divided into quintiles for 2006 to 2010.

TABLE 43
DRUG-INDUCED DEATHS BY AGE AND GENDER
BRITISH COLUMBIA, 2011

Age	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
<15	1	0.4	-	-	1	0.3
15-19	2	0.8	2	1.5	4	1.1
20-24	22	9.3	6	4.4	28	7.5
25-44	100	42.4	59	43.7	159	42.9
45-64	102	43.2	56	41.5	158	42.6
65-84	7	3.0	9	6.7	16	4.3
85+	2	0.8	3	2.2	5	1.3
TOTAL	236	100.0	135	100.0	371	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.

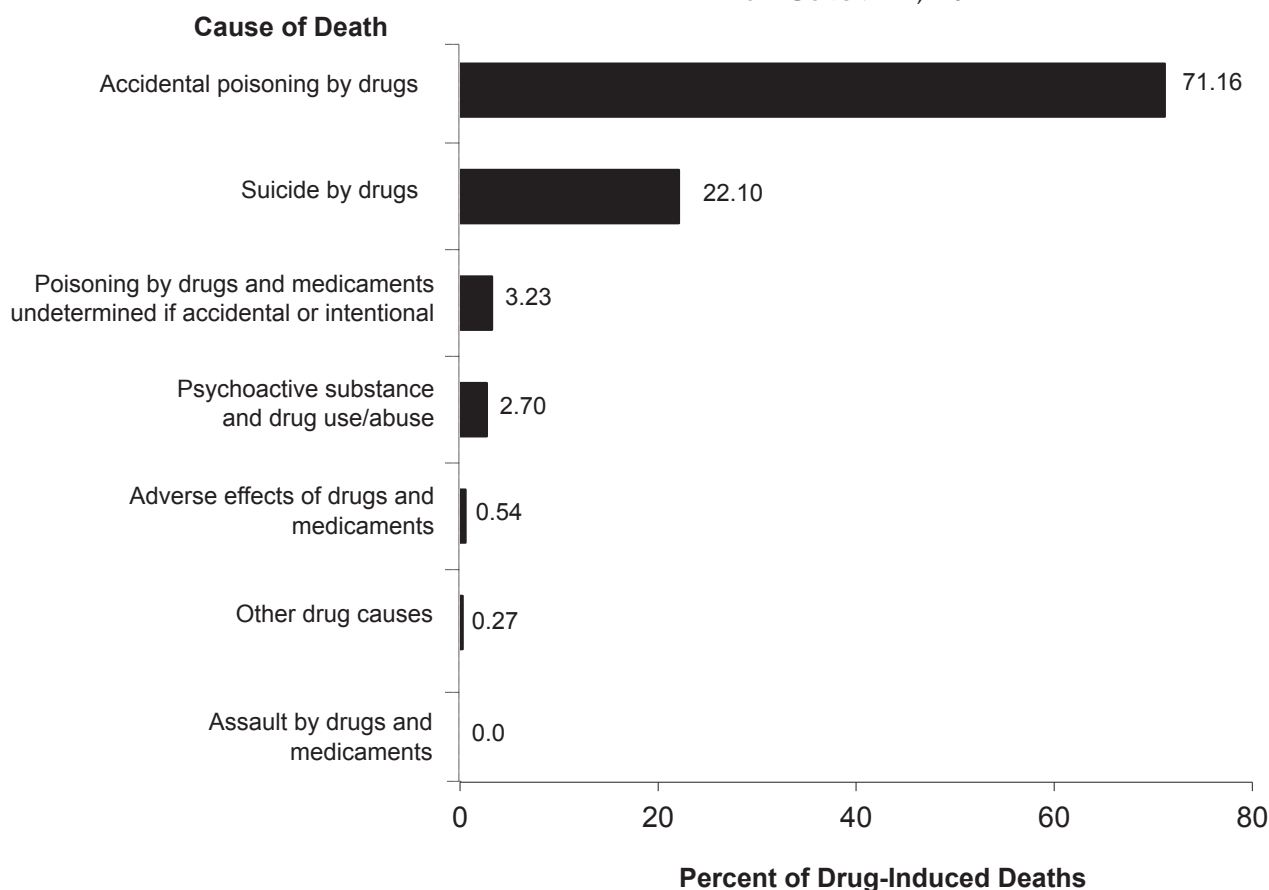
TABLE 44
DRUG-INDUCED DEATHS BY CAUSE
 BRITISH COLUMBIA, 2006–2010 AND 2011

Cause of Death	ICD-10 Code(s)	Year of Death			
		2006–2010		2011	
		Number	Percent	Number	Percent
Psychoactive substance and drug use/abuse	F11-F16, F19	112	5.1	10	2.7
Accidental poisoning by drugs	X40-X44	1,505	68.7	264	71.2
Suicide by drugs	X60-X64	456	20.8	82	22.1
Assault by drugs and medicaments	X85	1	0.0	-	-
Poisoning by drugs and medicaments undetermined if accidental or intentional	Y10-Y14	90	4.1	12	3.2
Adverse effects of drugs and medicaments	Y40-Y574, Y577-Y579, Y598, Y880	25	1.1	2	0.5
Other drug causes *		3	0.1	1	0.3
TOTAL		2,192	100.0	371	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.

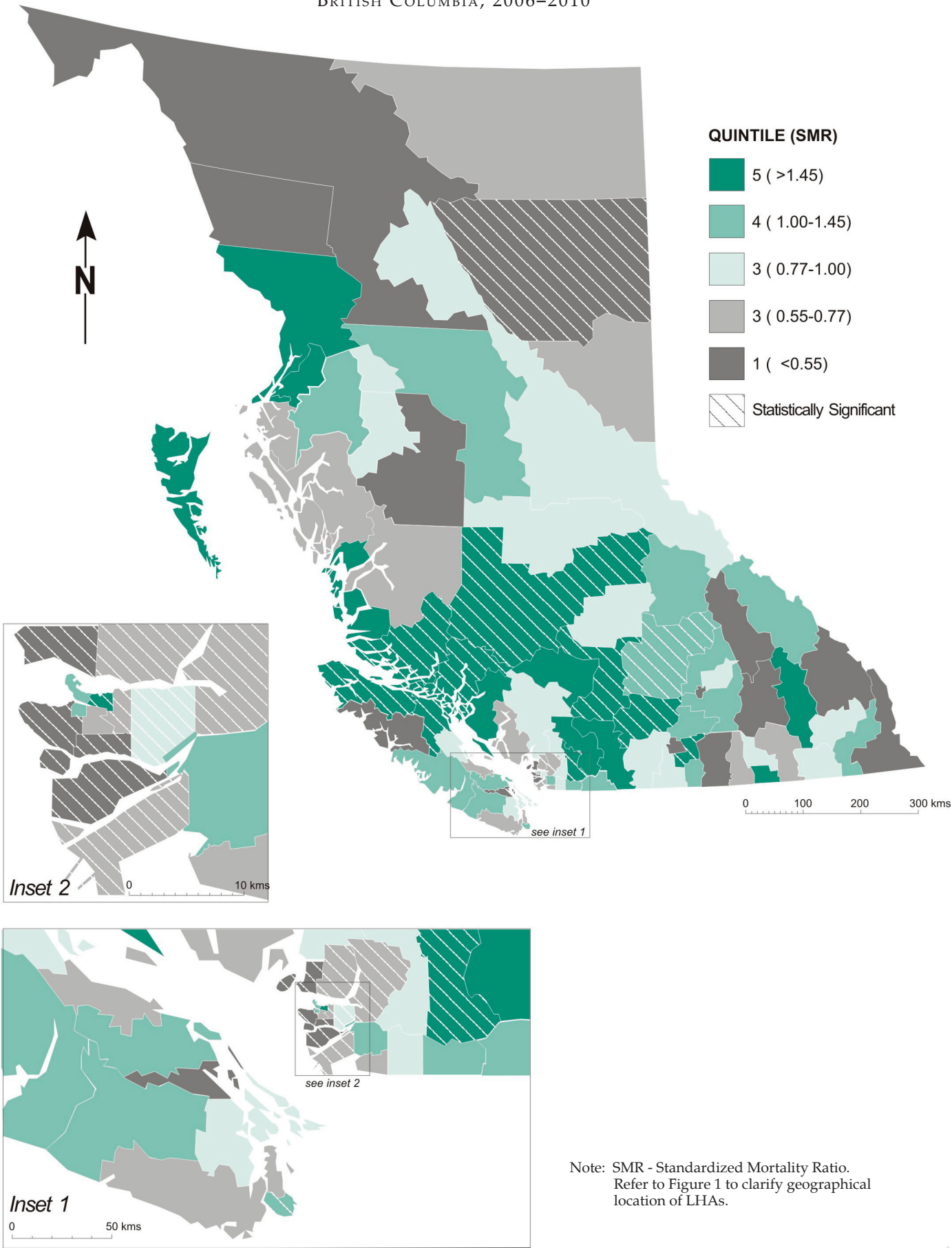
FIGURE 46
DRUG-INDUCED DEATHS BY CAUSE
 BRITISH COLUMBIA, 2011



110		2006-2010		2011				
Local Health Area		Observed Deaths	SMR (p)	Observed Deaths	Expected Deaths	SMR (p)	95% Confidence Interval	
							Lower	Upper
001	Fernie	4	0.52	1	1.28	0.78	0.01	4.34
002	Cranbrook	15	1.22	1	1.99	0.50	0.01	2.80
003	Kimberley	4	0.95	-	0.68	-	-	-
004	Windermere	2	0.39	-	0.89	-	-	-
005	Creston	5	0.89	3	0.90	3.35	0.67	9.79
006	Kootenay Lake	3	1.57	-	0.31	-	-	-
007	Nelson	9	0.72	4	2.07	1.93	0.52	4.94
009	Castlegar	6	0.91	-	1.10	-	-	-
010	Arrow Lakes	1	0.43	-	0.36	-	-	-
011	Trail	14	1.47	1	1.52	0.66	0.01	3.67
012	Grand Forks	3	0.71	2	0.64	3.12	0.35	11.26
013	Kettle Valley	1	0.54	-	0.28	-	-	-
014	Southern Okanagan	9	0.99	2	1.38	1.44	0.16	5.22
015	Penticton	35	1.76 *	3	3.17	0.95	0.19	2.76
016	Keremeos	2	0.84	-	0.36	-	-	-
017	Princeton	2	0.79	2	0.41	4.88	0.55	17.61
018	Golden	4	1.05	-	0.64	-	-	-
019	Revelstoke	2	0.49	-	0.67	-	-	-
020	Salmon Arm	19	1.15	1	2.64	0.38	0.00	2.11
021	Armstrong - Spallumcheen	2	0.44	-	0.71	-	-	-
022	Vernon	35	1.12	7	5.03	1.39	0.56	2.87
023	Central Okanagan	105	1.20	11	14.88	0.74	0.37	1.32
024	Kamloops	72	1.34 *	5	8.89	0.56	0.18	1.31
025	100 Mile House	6	0.82	2	1.14	1.75	0.20	6.32
026	North Thompson	3	1.43	-	0.32	-	-	-
027	Cariboo - Chilcotin	22	1.67 *	-	2.14	-	-	-
028	Quesnel	10	0.87	1	1.89	0.53	0.01	2.95
029	Lillooet	5	2.32	-	0.36	-	-	-
030	South Cariboo	9	2.56 *	1	0.56	1.78	0.02	9.90
031	Merritt	12	2.16 *	-	0.88	-	-	-
032	Hope	6	1.53	1	0.61	1.65	0.02	9.18
033	Chilliwack	48	1.24	8	6.59	1.21	0.52	2.39
034	Abbotsford	71	1.13	18	10.99	1.64	0.97	2.59
035	Langley	53	0.86	12	10.18	1.18	0.61	2.06
037	Delta	30	0.61 *	7	7.60	0.92	0.37	1.90
038	Richmond	37	0.38 *	9	16.55	0.54	0.25	1.03
040	New Westminster	36	1.06	5	5.99	0.83	0.27	1.95
041	Burnaby	86	0.77 *	19	19.54	0.97	0.59	1.52
042	Maple Ridge	44	0.97	5	7.81	0.64	0.21	1.49
043	Coquitlam	61	0.56 *	15	18.81	0.80	0.45	1.32
044	North Vancouver	42	0.60 *	5	11.84	0.42 *	0.14	0.99
045	West Vancouver-Bowen Is.	11	0.45 *	4	3.93	1.02	0.27	2.61
046	Sunshine Coast	9	0.62	1	2.33	0.43	0.01	2.38
047	Powell River	16	1.65	4	1.53	2.61	0.70	6.68
048	Howe Sound	17	0.94	3	3.29	0.91	0.18	2.66
049	Bella Coola Valley	1	0.71	-	0.23	-	-	-
050	Queen Charlotte	5	2.07	1	0.38	2.62	0.03	14.57
051	Snow Country	1	3.57	-	0.04	-	-	-
052	Prince Rupert	5	0.72	-	1.12	-	-	-
053	Upper Skeena	2	0.80	-	0.42	-	-	-
054	Smithers	6	0.78	-	1.27	-	-	-
055	Burns Lake	2	0.53	-	0.62	-	-	-
056	Nechako	8	1.13	1	1.16	0.86	0.01	4.81
057	Prince George	46	0.96	7	7.95	0.88	0.35	1.81
059	Peace River South	10	0.77	-	2.24	-	-	-
060	Peace River North	7	0.43 *	2	2.88	0.69	0.08	2.51
061	Greater Victoria	157	1.41 *	29	18.66	1.55 *	1.04	2.23
062	Sooke	25	0.75	6	5.93	1.01	0.37	2.20
063	Saanich	23	0.75	1	4.74	0.21	0.00	1.17
064	Gulf Islands	7	0.90	-	1.24	-	-	-
065	Cowichan	26	0.96	2	4.43	0.45	0.05	1.63
066	Lake Cowichan	4	1.26	-	0.52	-	-	-
067	Ladysmith	4	0.44	-	1.43	-	-	-
068	Nanaimo	58	1.16	8	8.36	0.96	0.41	1.89
069	Qualicum	13	0.61	2	3.23	0.62	0.07	2.24
070	Alberni	17	1.10	2	2.46	0.81	0.09	2.94
071	Courtenay	30	0.97	9	4.98	1.81	0.83	3.43
072	Campbell River	37	1.79 *	6	3.34	1.80	0.66	3.91
075	Mission	32	1.54 *	8	3.49	2.29	0.99	4.52
076	Agassiz - Harrison	7	1.68	-	0.68	-	-	-
077	Summerland	2	0.37	-	0.83	-	-	-
078	Enderby	3	0.82	-	0.57	-	-	-
080	Kitimat	4	0.76	1	0.84	1.20	0.02	6.65
081	Fort Nelson	2	0.64	-	0.55	-	-	-
083	Central Coast	1	1.47	-	0.11	-	-	-
084	Vancouver Island West	-	-	-	0.19	-	-	-
085	Vancouver Island North	13	2.11 *	-	0.99	-	-	-
087	Stikine	-	-	-	0.08	-	-	-
088	Terrace	10	1.04	4	1.59	2.51	0.68	6.44
092	Nisga'a	2	2.19	-	0.15	-	-	-
094	Telegraph Creek	-	-	-	0.05	-	-	-
161	Vancouver - City Centre	86	1.24	17	12.43	1.37	0.80	2.19
162	Vancouver - Dwntrwn E.side	188	5.11 *	35	7.05	4.97 *	3.46	6.91
163	Vancouver - North East	29	0.55 *	4	9.06	0.44	0.12	1.13
164	Vancouver - Westside	36	0.54 *	4	11.47	0.35 +	0.09	0.89
165	Vancouver - Midtown	33	0.71	6	8.48	0.71	0.26	1.54
166	Vancouver - South	31	0.46 *	8	11.35	0.70	0.30	1.39
201	Surrey	195	1.09	42	31.50	1.33	0.96	1.80
202	South Surrey/White Rock	29	0.73	3	6.24	0.48	0.10	1.40
PROVINCIAL TOTAL		2,192	1.00	371	371.00	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, 2006–2010



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, hepatitis 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 2011 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, 2005–2011

Health Authority	2005	2006	2007	2008	2009	2010	2011
01 Interior	0.71	0.53	0.83	0.55	0.84	0.81	0.44
02 Fraser	0.58	0.68	0.48	0.50	0.39	0.65	0.60
03 Vancouver Coastal	0.63	0.60	0.54	0.46	0.60	0.36	0.49
04 Vancouver Island	0.65	0.73	0.68	0.63	0.64	0.55	0.51
05 Northern	0.37	0.18	0.54	0.45	0.39	0.61	0.47
PROVINCIAL TOTAL	0.61	0.61	0.58	0.52	0.55	0.57	0.52

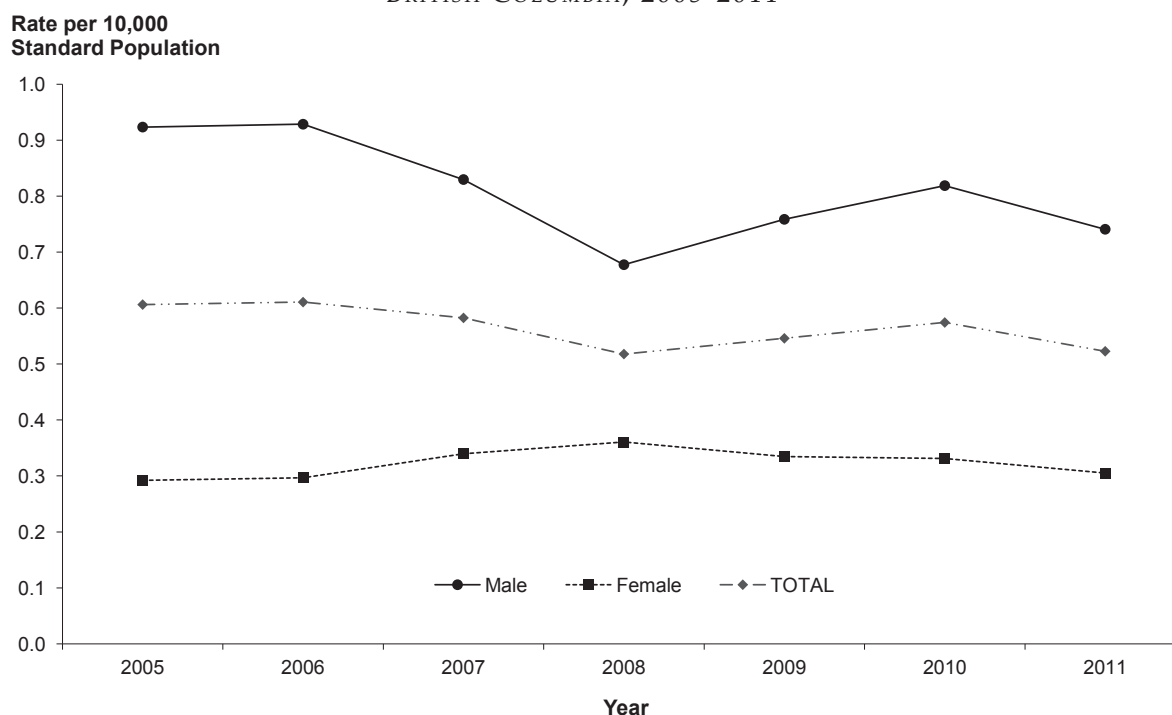
Note: Deaths that are still under investigation may later be identified as unintentional illicit/illegal overdose deaths.
ASMR - Age Standardized Mortality Rate per 10,000 standard population (Canada 1991 Census).
Non-residents are excluded.

TABLE 47
**ASMR FOR UNINTENTIONAL ILLICIT/ILLEGAL
OVERDOSE DEATHS BY GENDER**
BRITISH COLUMBIA, 2005–2011

Gender	2005	2006	2007	2008	2009	2010	2011
Male	0.92	0.93	0.83	0.68	0.76	0.82	0.74
Female	0.29	0.30	0.34	0.36	0.33	0.33	0.31
TOTAL	0.61	0.61	0.58	0.52	0.55	0.57	0.52

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, 2005–2011

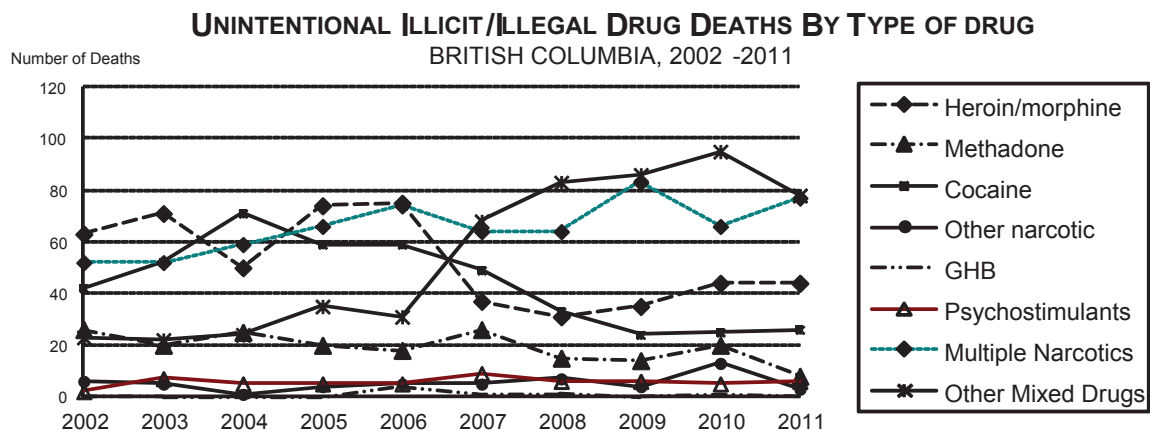


Vital Statistics Information Box

UNINTENTIONAL ILLICIT/ILLEGAL DRUG DEATHS BRITISH COLUMBIA, 2002-2011

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 2002. It is important to note that numbers for 2011 (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.



Vital Statistics Information Box

COUNTS OF DEATHS BY CAUSATIVE SUBSTANCES

Over the past ten 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, 2002-2011

Drug	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Heroin/morphine type only	63	71	50	74	75	37	31	35	44	44
Methadone only	26	20	25	20	18	26	15	14	20	8
Cocaine only	42	52	71	59	59	49	33	24	25	26
Other narcotic/hallucinogen only	6	5	1	4	5	5	7	4	13	3
GHB only	0	0	0	0	4	1	1	0	1	0
Psychostimulants* only	2	7	5	5	5	9	6	6	5	6
Multiple narcotics	52	52	59	66	74	64	64	83	66	77
Other mixed drugs	23	22	24	35	31	68	83	86	95	78
TOTAL	214	229	235	263	271	259	240	252	269	242

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 2011, there were 1,769 deaths due to external causes among BC residents and of these, unintentional (accidental) deaths comprised over 72.5 percent (1,282) of non-natural deaths. Overall, falls were the leading cause of unintentional deaths, contributing 48.7 percent to this category in 2011 and exceeding fatal motor-vehicle incidents in number: 624 to 196 (see Table 30).

Analysis of various causes of unintentional (accidental) mortality in 2011 shows that more females died as the result of falls than males did. Of unintentional mortality, 38.7 percent of male deaths were the result of falls. In contrast, 63.3 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. There are additional deaths that involve accidental falls, but where the fall was considered to be only a contributing factor.

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 to 69 age groups, direct fall-related deaths are more frequent.

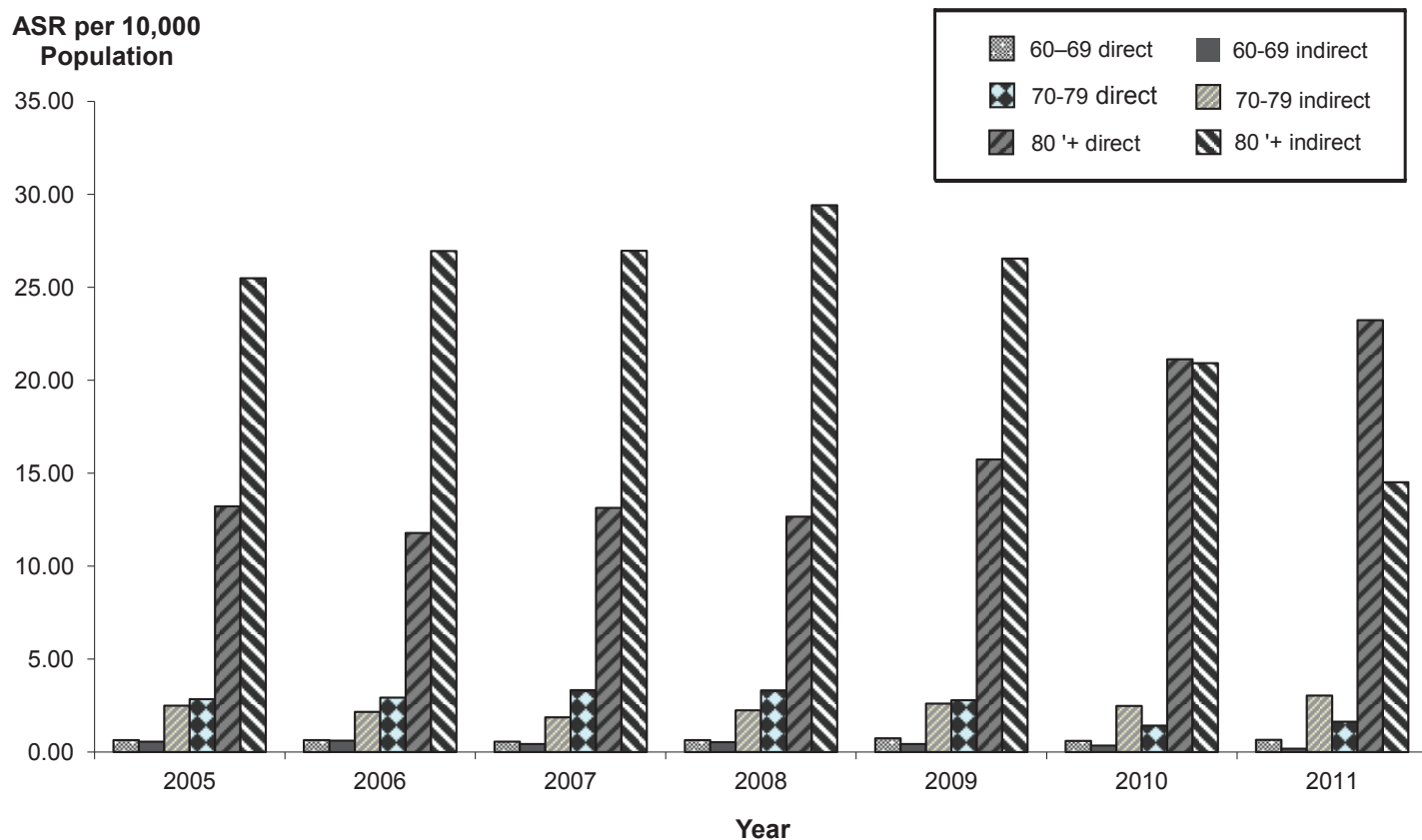
The BC Injury Research and Prevention Unit (BCIRPU) is a national leader in falls injury research and in the design and implementation of falls prevention strategies. A summary of the initiatives undertaken by the BCIRPU can be found at the Unit's website: <http://www.injuryresearch.bc.ca>.

TABLE 48
DEATHS DIRECTLY AND INDIRECTLY
DUE TO FALLS BY AGE
BRITISH COLUMBIA, 2005–2011

Cause of Death	Age (in Years)	2005		2006		2007		2008		2009		2010		2011	
		Counts	ASR	Counts	ASR	Counts	ASR	Counts	ASR	Counts	ASR	Counts	ASR	Counts	ASR
Directly due to falls															
	60-69	24	0.65	25	0.64	23	0.56	28	0.64	34	0.74	29	0.60	33	0.66
	70-79	65	2.50	57	2.16	50	1.87	61	2.25	72	2.61	70	2.48	88	3.04
	80+	212	13.21	196	11.79	226	13.13	225	12.65	290	15.74	404	21.12	461	23.23
Indirectly due to falls															
	60-69	21	0.56	24	0.62	18	0.44	23	0.53	20	0.44	17	0.35	9	0.18
	70-79	74	2.84	77	2.92	89	3.33	90	3.31	77	2.79	40	1.42	47	1.63
	80+	409	25.48	448	26.94	464	26.96	523	29.41	489	26.54	400	20.91	288	14.51

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

FIGURE 49
DEATHS DIRECTLY AND INDIRECTLY
DUE TO FALLS, AGES 60-80+
BRITISH COLUMBIA, 2005-2011



Burials and Cremations

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

In 2011, 82.3 percent of deaths resulted in cremations (26,155) and 16.9 percent involved burials (5,362). Since 1986, the percentage of burials has consistently decreased.

Table 50 disaggregates this information by LHA.

TABLE 49
METHOD OF DISPOSITION OF DECEDENT
BRITISH COLUMBIA, 1986–2011

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	214	46	27,272
1998	7,198	25.9	20,379	73.3	227	9	27,813
1999	7,063	25.3	20,635	74.0	200	-	27,898
2000	6,469	23.6	20,696	75.7	191	1	27,357
2001	6,692	23.7	21,331	75.5	227	1	28,251
2002	6,542	22.8	21,979	76.5	193	3	28,717
2003	6,608	22.7	22,363	76.7	188	-	29,159
2004	6,381	21.5	23,162	77.9	187	-	29,730
2005	6,282	20.9	23,634	78.5	186	-	30,102
2006	6,363	20.8	24,016	78.6	168	-	30,547
2007	6,148	19.8	24,803	79.7	169	-	31,120
2008	6,313	19.8	25,396	79.6	197	-	31,906
2009	5,844	18.7	25,201	80.7	199	-	31,244
2010	5,537	17.8	25,359	81.4	255	-	31,151
2011	5,362	16.9	26,155	82.3	259	-	31,776

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.

Vital Statistics Information Box

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

BRITISH COLUMBIA, 2011

Local Health Area		Burial		Cremation		Other	Total
		Number	Percent	Number	Percent		
001	Fernie	18	18.9	77	81.1	-	95
002	Cranbrook	23	11.5	175	87.5	2	200
003	Kimberley	5	6.1	77	93.9	-	82
004	Windermere	6	8.1	68	91.9	-	74
005	Creston	40	25.2	119	74.8	-	159
006	Kootenay Lake	1	2.7	36	97.3	-	37
007	Nelson	38	20.7	143	77.7	3	184
009	Castlegar	40	31.0	88	68.2	1	129
010	Arrow Lakes	9	13.8	56	86.2	-	65
011	Trail	23	12.4	160	86.5	2	185
012	Grand Forks	28	25.7	81	74.3	-	109
013	Kettle Valley	1	3.1	31	96.9	-	32
014	Southern Okanagan	40	15.2	224	84.8	-	264
015	Penticton	61	11.8	456	88.2	-	517
016	Keremeos	9	15.3	50	84.7	-	59
017	Princeton	-	0.0	64	100.0	-	64
018	Golden	6	15.0	34	85.0	-	40
019	Revelstoke	10	15.4	55	84.6	-	65
020	Salmon Arm	55	18.0	251	82.0	-	306
021	Armstrong-Spallumcheen	10	13.9	62	86.1	-	72
022	Vernon	93	14.4	550	85.3	2	645
023	Central Okanagan	201	13.1	1,323	86.5	6	1,530
024	Kamloops	95	10.3	811	88.0	16	922
025	100 Mile House	15	11.6	114	88.4	-	129
026	North Thompson	3	10.7	25	89.3	-	28
027	Cariboo-Chilcotin	38	22.5	131	77.5	-	169
028	Quesnel	29	14.1	174	84.9	2	205
029	Lillooet	9	22.5	30	75.0	1	40
030	South Cariboo	11	15.9	58	84.1	-	69
031	Merritt	22	21.2	81	77.9	1	104
032	Hope	15	16.0	79	84.0	-	94
033	Chilliwack	126	18.3	560	81.2	4	690
034	Abbotsford	239	25.2	702	74.1	6	947
035	Langley	127	12.8	856	86.6	6	989
037	Delta	84	11.9	614	87.2	6	704
038	Richmond	216	23.4	692	75.1	14	922
040	New Westminster	72	15.6	387	83.6	4	463
041	Burnaby	325	24.7	958	72.9	31	1,314
042	Maple Ridge	60	9.9	542	89.7	2	604
043	Coquitlam	175	17.4	817	81.1	15	1,007
044	North Vancouver	115	14.4	676	84.4	10	801
045	West Vancouver-Bowen Is.	56	12.7	383	86.7	3	442
046	Sunshine Coast	23	8.2	258	91.8	-	281
047	Powell River	23	11.8	170	87.2	2	195
048	Howe Sound	18	14.4	107	85.6	-	125
049	Bella Coola Valley	9	60.0	6	40.0	-	15
050	Queen Charlotte	17	42.5	23	57.5	-	40
051	Snow Country	1	-	5	83.3	-	6
052	Prince Rupert	32	36.0	56	62.9	1	89
053	Upper Skeena	12	38.7	19	61.3	-	31
054	Smithers	33	26.6	91	73.4	-	124
055	Burns Lake/Eutsuk	20	39.2	30	58.8	1	51
056	Nechako	40	36.7	69	63.3	-	109
057	Prince George	101	17.6	473	82.3	1	575
059	Peace River South	42	19.7	171	80.3	-	213
060	Peace River North	38	25.9	109	74.1	-	147
061	Greater Victoria	251	11.8	1,852	87.4	17	2,120
062	Sooke	34	8.8	350	90.7	2	386
063	Saanich	65	9.4	618	89.6	7	690
064	Gulf Islands	8	5.8	130	94.2	-	138
065	Cowichan	66	13.9	409	85.9	1	476
066	Lake Cowichan	4	8.9	41	91.1	-	45
067	Ladysmith	23	10.5	197	89.5	-	220
068	Nanaimo	91	9.4	869	90.2	3	963
069	Qualicum	25	4.6	515	95.0	2	542
070	Alberni	48	14.0	294	86.0	-	342
071	Courtenay	30	5.2	546	94.6	1	577
072	Campbell River	16	4.8	319	94.9	1	336
075	Mission	41	13.9	253	86.1	-	294
076	Agassiz-Harrison	16	19.5	66	80.5	-	82
077	Summerland	17	11.0	137	89.0	-	154
078	Enderby	14	17.9	64	82.1	-	78
080	Kitimat	27	32.5	56	67.5	-	83
081	Fort Nelson	7	30.4	16	69.6	-	23
083	Central Coast	7	77.8	2	22.2	-	9
084	Vancouver Island West	1	16.7	5	83.3	-	6
085	Vancouver Island North	22	25.9	62	72.9	1	85
087	Stikine	2	50.0	2	50.0	-	4
088	Terrace	38	26.4	106	73.6	-	144
092	Nisga'a	6	60.0	4	40.0	-	10
094	Telegraph Creek	4	100.0	-	0.0	-	4
161	Vancouver - City Centre	126	19.4	519	79.7	6	651
162	Vancouver - Dwntrwn E.Side	140	28.0	357	71.4	3	500
163	Vancouver - North East	243	43.8	295	53.2	17	555
164	Vancouver - Westside	172	24.5	522	74.5	7	701
165	Vancouver - Midtown	135	34.7	240	61.7	14	389
166	Vancouver - South	261	31.8	546	66.4	15	822
201	Surrey	328	17.7	1,513	81.5	16	1,857
202	South Surrey/White Rock	133	14.4	789	85.2	4	926
PROVINCIAL TOTAL		5,362	16.9	26,155	82.3	259	31,776

Note: Total includes residents with unknown LHA.

