

**Table 2-11**  
**Deaths and mortality rate, by selected grouped causes, age group at time of death and sex, Canada<sup>1</sup> —**  
**45 to 49 years<sup>2,3,4,5</sup>**

	Number of deaths			Age-specific mortality rate per 100,000 population <sup>6</sup>		
	Both sexes	Males	Females	Both sexes	Males	Females
<b>Total, all causes of death (A00-Y89) <sup>7, 8, 9</sup></b>	<b>5,846</b>	<b>3,510</b>	<b>2,336</b>	<b>209.7</b>	<b>250.4</b>	<b>168.5</b>
Salmonella infections (A01-A02)	0	0	0	0.0	0.0	0.0
Shigellosis and amoebiasis (A03, A06)	0	0	0	0.0	0.0	0.0
Certain other intestinal infections (A04, A07-A09)	8	6	2	0.3	0.4	0.1
<b>Tuberculosis (A16-A19)</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0.1</b>	<b>0.2</b>	<b>0.0</b>
Respiratory tuberculosis (A16)	1	1	0	0.0	0.1	0.0
Other tuberculosis (A17-A19)	2	2	0	0.1	0.1	0.0
Whooping cough (A37)	0	0	0	0.0	0.0	0.0
Scarlet fever and erysipelas (A38, A46)	0	0	0	0.0	0.0	0.0
Meningococcal infection (A39)	0	0	0	0.0	0.0	0.0
Septicaemia (A40-A41)	32	17	15	1.1	1.2	1.1
Syphilis (A50-A53)	0	0	0	0.0	0.0	0.0
Acute poliomyelitis (A80)	0	0	0	0.0	0.0	0.0
Arthropod-borne viral encephalitis (A83-A84, A85.2)	0	0	0	0.0	0.0	0.0
Measles (B05)	0	0	0	0.0	0.0	0.0
Viral hepatitis (B15-B19)	34	21	13	1.2	1.5	0.9
Human immunodeficiency virus [HIV] disease (B20-B24)	78	63	15	2.8	4.5	1.1
Malaria (B50-B54)	0	0	0	0.0	0.0	0.0
Other and unspecified infectious and parasitic diseases and their sequelae <sup>10</sup>	10	8	2	0.4	0.6	0.1
<b>Malignant neoplasms (C00-C97)</b>	<b>2,035</b>	<b>890</b>	<b>1,145</b>	<b>73.0</b>	<b>63.5</b>	<b>82.6</b>
Malignant neoplasms of lip, oral cavity and pharynx (C00-C14)	36	28	8	1.3	2.0	0.6
Malignant neoplasm of oesophagus (C15)	62	53	9	2.2	3.8	0.6
Malignant neoplasm of stomach (C16)	64	41	23	2.3	2.9	1.7
Malignant neoplasms of colon, rectum and anus (C18-C21)	206	117	89	7.4	8.3	6.4
Malignant neoplasm of liver and intrahepatic bile ducts (C22)	51	38	13	1.8	2.7	0.9
Malignant neoplasm of pancreas (C25)	106	58	48	3.8	4.1	3.5
Malignant neoplasm of larynx (C32)	6	6	0	0.2	0.4	0.0
Malignant neoplasms of trachea, bronchus and lung (C33-C34)	438	188	250	15.7	13.4	18.0
Malignant melanoma of skin (C43)	77	46	31	2.8	3.3	2.2
Malignant neoplasm of breast (C50)	288	2	286	10.3	0.1	20.6
Malignant neoplasm of cervix uteri (C53)	...	...	51	...	...	3.7
Malignant neoplasms of corpus uteri and uterus, part unspecified (C54-C55)	...	...	23	...	...	1.7
Malignant neoplasm of ovary (C56)	...	...	75	...	...	5.4
Malignant neoplasm of prostate (C61)	...	13	...	...	0.9	...
Malignant neoplasms of kidney and renal pelvis (C64-C65)	43	29	14	1.5	2.1	1.0
Malignant neoplasm of bladder (C67)	24	15	9	0.9	1.1	0.6
Malignant neoplasms of meninges, brain and other parts of central nervous system (C70-C72)	108	75	33	3.9	5.3	2.4
<b>Malignant neoplasms of lymphoid, haematopoietic and related tissue (C81-C96)</b>	<b>138</b>	<b>71</b>	<b>67</b>	<b>4.9</b>	<b>5.1</b>	<b>4.8</b>
Hodgkin's disease (C81)	4	1	3	0.1	0.1	0.2
Non-Hodgkin's lymphoma (C82-C85)	67	37	30	2.4	2.6	2.2
Leukaemia (C91-C95)	53	26	27	1.9	1.9	1.9
Multiple myeloma and immunoproliferative neoplasms (C88, C90)	13	6	7	0.5	0.4	0.5
Other and unspecified malignant neoplasms of lymphoid, haematopoietic and related tissue (C96)	1	1	0	0.0	0.1	0.0
All other and unspecified malignant neoplasms (C17, C23-C24, C26-C31, C37-C41, C44-C49, C51-C52, C57-C60, C62-C63, C66, C68-C69, C73-C80, C97)	226	110	116	8.1	7.8	8.4
In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown behaviour (D00-D48)	23	15	8	0.8	1.1	0.6
Anaemias (D50-D64)	2	2	0	0.1	0.1	0.0
Diabetes mellitus (E10-E14)	112	78	34	4.0	5.6	2.5
<b>Nutritional deficiencies (E40-E64)</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>
Malnutrition (E40-E46)	0	0	0	0.0	0.0	0.0
Other nutritional deficiencies (E50-E64)	1	0	1	0.0	0.0	0.1
Meningitis (G00, G03)	6	4	2	0.2	0.3	0.1
Parkinson's disease (G20-G21)	0	0	0	0.0	0.0	0.0
Alzheimer's disease (G30)	5	1	4	0.2	0.1	0.3
<b>Major cardiovascular diseases (I00-I78)</b>	<b>1,024</b>	<b>745</b>	<b>279</b>	<b>36.7</b>	<b>53.1</b>	<b>20.1</b>
<b>Diseases of heart (I00-I09, I11, I13, I20-I51)</b>	<b>843</b>	<b>646</b>	<b>197</b>	<b>30.2</b>	<b>46.1</b>	<b>14.2</b>

See footnotes at the end of the table.

Table 2-11 – continued

Deaths and mortality rate, by selected grouped causes, age group at time of death and sex, Canada<sup>1</sup> — 45 to 49 years<sup>2,3,4,5</sup>

	Number of deaths			Age-specific mortality rate per 100,000 population <sup>6</sup>		
	Both sexes	Males	Females	Both sexes	Males	Females
Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09)	4	3	1	0.1	0.2	0.1
Hypertensive heart disease (I11)	18	16	2	0.6	1.1	0.1
Hypertensive heart and renal disease (I13)	1	1	0	0.0	0.1	0.0
<b>Ischaemic heart diseases (I20-I25)</b>	<b>629</b>	<b>504</b>	<b>125</b>	<b>22.6</b>	<b>35.9</b>	<b>9.0</b>
Acute myocardial infarction (I21-I22)	290	229	61	10.4	16.3	4.4
Other acute ischaemic heart diseases (I24)	21	17	4	0.8	1.2	0.3
<b>Other forms of chronic ischaemic heart disease (I20, I25)</b>	<b>318</b>	<b>258</b>	<b>60</b>	<b>11.4</b>	<b>18.4</b>	<b>4.3</b>
Atherosclerotic cardiovascular disease, so described (I25.0)	51	39	12	1.8	2.8	0.9
All other forms of chronic ischaemic heart disease (I20, I25.1-I25.9)	267	219	48	9.6	15.6	3.5
<b>Other heart diseases (I26-I51)</b>	<b>191</b>	<b>122</b>	<b>69</b>	<b>6.9</b>	<b>8.7</b>	<b>5.0</b>
Acute and subacute endocarditis (I33)	6	3	3	0.2	0.2	0.2
Diseases of pericardium and acute myocarditis (I30-I31, I40)	7	4	3	0.3	0.3	0.2
Heart failure (I50)	12	9	3	0.4	0.6	0.2
All other forms of heart disease (I26-I28, I34-I38, I42-I49, I51)	166	106	60	6.0	7.6	4.3
Essential hypertension and hypertensive renal disease (I10, I12, I15)	5	4	1	0.2	0.3	0.1
Cerebrovascular diseases (I60-I69)	143	74	69	5.1	5.3	5.0
Atherosclerosis (I70)	3	3	0	0.1	0.2	0.0
<b>Other diseases of circulatory system (I71-I78)</b>	<b>30</b>	<b>18</b>	<b>12</b>	<b>1.1</b>	<b>1.3</b>	<b>0.9</b>
Aortic aneurysm and dissection (I71)	22	16	6	0.8	1.1	0.4
Other diseases of arteries, arterioles and capillaries (I72-I78)	8	2	6	0.3	0.1	0.4
Other disorders of circulatory system (I80-I99)	18	9	9	0.6	0.6	0.6
<b>Influenza and pneumonia (J09-J18)</b>	<b>118</b>	<b>68</b>	<b>50</b>	<b>4.2</b>	<b>4.9</b>	<b>3.6</b>
Influenza (J09-J11)	41	23	18	1.5	1.6	1.3
Pneumonia (J12-J18)	77	45	32	2.8	3.2	2.3
<b>Other acute lower respiratory infections (J20-J22)</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>
Acute bronchitis and bronchiolitis (J20-J21)	1	1	0	0.0	0.1	0.0
Unspecified acute lower respiratory infection (J22)	0	0	0	0.0	0.0	0.0
<b>Chronic lower respiratory diseases (J40-J47)</b>	<b>45</b>	<b>20</b>	<b>25</b>	<b>1.6</b>	<b>1.4</b>	<b>1.8</b>
Bronchitis, chronic and unspecified (J40-J42)	1	1	0	0.0	0.1	0.0
Emphysema (J43)	5	4	1	0.2	0.3	0.1
Asthma (J45-J46)	10	4	6	0.4	0.3	0.4
Other chronic lower respiratory diseases (J44, J47)	29	11	18	1.0	0.8	1.3
Pneumoconioses and chemical effects (J60-J66, J68)	6	2	4	0.2	0.1	0.3
Pneumonitis due to solids and liquids (J69)	17	10	7	0.6	0.7	0.5
Other diseases of respiratory system (J00-J06, J30-J39, J67, J70-J98)	34	18	16	1.2	1.3	1.2
Peptic ulcer (K25-K28)	9	8	1	0.3	0.6	0.1
Diseases of appendix (K35-K38)	3	2	1	0.1	0.1	0.1
Hernia (K40-K46)	3	2	1	0.1	0.1	0.1
<b>Chronic liver disease and cirrhosis (K70, K73-K74)</b>	<b>203</b>	<b>121</b>	<b>82</b>	<b>7.3</b>	<b>8.6</b>	<b>5.9</b>
Alcoholic liver disease (K70)	142	87	55	5.1	6.2	4.0
Other chronic liver disease and cirrhosis (K73-K74)	61	34	27	2.2	2.4	1.9
Cholelithiasis and other disorders of gallbladder (K80-K82)	7	2	5	0.3	0.1	0.4
<b>Nephritis, nephrotic syndrome and nephrosis (N00-N07, N17-N19, N25-N27)</b>	<b>17</b>	<b>11</b>	<b>6</b>	<b>0.6</b>	<b>0.8</b>	<b>0.4</b>
Acute and rapidly progressive nephritic and nephrotic syndrome (N00-N01, N04)	1	1	0	0.0	0.1	0.0
Chronic glomerulonephritis, nephritis and nephropathy not specified as acute or chronic, and renal sclerosis unspecified (N02-N03, N05-N07, N26)	0	0	0	0.0	0.0	0.0
Renal failure (N17-N19)	16	10	6	0.6	0.7	0.4
Other disorders of kidney (N25, N27)	0	0	0	0.0	0.0	0.0
Infections of kidney (N10-N12, N13.6, N15.1)	5	0	5	0.2	0.0	0.4
Hyperplasia of prostate (N40)	...	0	...	...	0.0	...
Inflammatory diseases of female pelvic organs (N70-N76)	...	...	2	...	...	0.1
<b>Pregnancy, childbirth and the puerperium (O00-O99)</b>	<b>...</b>	<b>...</b>	<b>0</b>	<b>...</b>	<b>...</b>	<b>0.0</b>
Pregnancy with abortive outcome (O00-O07)	...	...	0	...	...	0.0
Other complications of pregnancy, childbirth and the puerperium (O10-O99)	...	...	0	...	...	0.0
Certain conditions originating in the perinatal period (P00-P96)	0	0	0	0.0	0.0	0.0
Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)	49	30	19	1.8	2.1	1.4
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99)	111	72	39	4.0	5.1	2.8

See footnotes at the end of the table.

Table 2-11 – continued

Deaths and mortality rate, by selected grouped causes, age group at time of death and sex, Canada<sup>1</sup> — 45 to 49 years<sup>2,3,4,5</sup>

	Number of deaths			Age-specific mortality rate per 100,000 population <sup>6</sup>		
	Both sexes	Males	Females	Both sexes	Males	Females
All other diseases (residual) <sup>11</sup>	540	313	227	19.4	22.3	16.4
<b>Accidents (unintentional injuries) (V01-X59, Y85-Y86)</b>	<b>638</b>	<b>481</b>	<b>157</b>	<b>22.9</b>	<b>34.3</b>	<b>11.3</b>
<b>Transport accidents (V01-V99, Y85)</b>	<b>235</b>	<b>182</b>	<b>53</b>	<b>8.4</b>	<b>13.0</b>	<b>3.8</b>
Motor vehicle accidents <sup>12</sup>	199	152	47	7.1	10.8	3.4
Other land transport accidents <sup>13</sup>	4	4	0	0.1	0.3	0.0
Water, air and space, and other and unspecified transport accidents and their sequelae (V90-V99, Y85)	32	26	6	1.1	1.9	0.4
<b>Nontransport accidents (W00-X59, Y86)</b>	<b>403</b>	<b>299</b>	<b>104</b>	<b>14.5</b>	<b>21.3</b>	<b>7.5</b>
Falls (W00-W19)	55	43	12	2.0	3.1	0.9
Accidental discharge of firearms (W32-W34)	0	0	0	0.0	0.0	0.0
Accidental drowning and submersion (W65-W74)	20	16	4	0.7	1.1	0.3
Accidental exposure to smoke, fire and flames (X00-X09)	13	10	3	0.5	0.7	0.2
Accidental poisoning and exposure to noxious substances (X40-X49)	237	166	71	8.5	11.8	5.1
Other and unspecified nontransport accidents and their sequelae (W20-W31, W35-W64, W75-W99, X10-X39, X50-X59, Y86)	78	64	14	2.8	4.6	1.0
<b>Intentional self-harm (suicide) (X60-X84, Y87.0)</b>	<b>491</b>	<b>376</b>	<b>115</b>	<b>17.6</b>	<b>26.8</b>	<b>8.3</b>
Intentional self-harm (suicide) by discharge of firearms (X72-X74)	67	63	4	2.4	4.5	0.3
Intentional self-harm (suicide) by other and unspecified means and their sequelae (X60-X71, X75-X84, Y87.0)	424	313	111	15.2	22.3	8.0
<b>Assault (homicide) (X85-Y09, Y87.1)</b>	<b>42</b>	<b>30</b>	<b>12</b>	<b>1.5</b>	<b>2.1</b>	<b>0.9</b>
Assault (homicide) by discharge of firearms (X93-X95)	5	3	2	0.2	0.2	0.1
Assault (homicide) by other and unspecified means and their sequelae (X85-X92, X96-Y09, Y87.1)	37	27	10	1.3	1.9	0.7
Legal intervention (Y35, Y89.0)	3	3	0	0.1	0.2	0.0
<b>Events of undetermined intent (Y10-Y34, Y87.2, Y89.9)</b>	<b>106</b>	<b>75</b>	<b>31</b>	<b>3.8</b>	<b>5.3</b>	<b>2.2</b>
Discharge of firearms, undetermined intent (Y22-Y24)	0	0	0	0.0	0.0	0.0
Other and unspecified events of undetermined intent and their sequelae (Y10-Y21, Y25-Y34, Y87.2, Y89.9)	106	75	31	3.8	5.3	2.2
Operations of war and their sequelae (Y36, Y89.1)	0	0	0	0.0	0.0	0.0
Complications of medical and surgical care (Y40-Y84, Y88)	5	3	2	0.2	0.2	0.1

1. The number of deaths in this table is based on the deceased's usual place of residence.
2. Age attained at the last birthday preceding death.
3. For "Age at time of death, under 1 year", the mortality rate is based on live births in the calendar year.
4. For "Age at time of death, 1 to 4 years", the mortality rate is based on population estimates for 0 to 4 year olds less live births in the calendar year.
5. For "Age at time of death", each age group except "All ages", the mortality rate represents the age-specific death rate or the number of deaths in a particular age group during a given year per 100,000 population in the same age group as of July 1 of the same year.
6. Starting in 2005, the population estimates used to calculate the mortality rate are presented in the Appendix II of the publication "Mortality Summary List of Causes" (catalogue number 84F0209XIE).
7. The cause of death tabulated is the underlying cause of death. This is defined as (a) the disease or injury which initiated the train of events leading directly to death, or (b) the circumstances of the accident or violence which produced the fatal injury. The underlying cause is selected from the conditions listed on the medical certificate of cause of death.
8. World Health Organization (WHO), International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10)
9. National Center for Health Statistics, United States. "B" list in "Instruction Manual; Part 9; ICD-10 Cause-of-Death Lists for Tabulating Mortality Statistics".
10. Other and unspecified infectious and parasitic diseases, and their sequelae A00, A05, A20 to A36, A42 to A44, A48 to A49, A54 to A79, A81 to A82, A85.0 to A85.1, A85.8, A86 to B04, B06 to B09, B25 to B49, B55 to B99.
11. All other diseases (residual) D65 to E07, E15 to E34, E65 to F99, G04 to G12, G23 to G25, G31 to H93, K00 to K22, K29 to K31, K50 to K66, K71 to K72, K75 to K76, K83 to M99, N13.0 to N13.5, N13.7 to N13.9, N14, N15.0, N15.8 to N15.9, N20 to N23, N28 to N39, N41 to N64, N80 to N98. As of 2003, also includes U04.
12. Motor vehicle accidents V02 to V04, V09.0, V09.2, V12 to V14, V19.0 to V19.2, V19.4 to V19.6, V20 to V79, V80.3 to V80.5, V81.0 to V81.1, V82.0 to V82.1, V83 to V86, V87.0 to V87.8, V88.0 to V88.8, V89.0, V89.2.
13. Other land transport accidents V01, V05 to V06, V09.1, V09.3 to V09.9, V10 to V11, V15 to V18, V19.3, V19.8 to V19.9, V80.0 to V80.2, V80.6 to V80.9, V81.2 to V81.9, V82.2 to V82.9, V87.9, V88.9, V89.1, V89.3, V89.9.

**Note(s):** See Data quality, concepts and methodology — Explanatory notes for the tables section.

**Source(s):** Statistics Canada, Canadian Vital Statistics, Birth and Death Databases (CANSIM table 102-0551) and Appendix II.