

Chronic Disease Mortality, Waterloo Region and Ontario, 2010, 2011 and 2012

Table 1. Number of chronic disease deaths and age-standardized chronic disease mortality rate, by place of residence, Waterloo Region and Ontario, 2010, 2011 and 2012

Place of residence	Number of deaths			Age-standardized Mortality rate		
	2010	2011	2012	2010	2011	2012
Cambridge	337	318	309	315.3	289.2	266.7
Kitchener	565	560	597	310.7	293.9	300.3
Waterloo	201	184	201	229.0	201.1	209.2
North Dumfries	16	19	19	215.6	333.5	239.2
Wellesley	11	19	18	176.9	331.2	310.0
Wilmot	44	37	46	234.3	185.8	224.0
Woolwich	71	53	70	282.0	201.5	249.8
Waterloo Region	1,245	1,190	1,260	286.7	264.0	266.9
Ontario	35,434	35,511	35,265	280.5	270.8	258.0

Definition:

Number and rate of deaths due to chronic disease.

Age-standardized mortality rate: Total number of deaths during a given year per 100,000 population, age-standardized to the 2011 Canadian population.

Table 2. Number of chronic disease-related deaths and age-standardized chronic disease-related mortality rate, by age group, Waterloo Region and Ontario, 2012

Place of residence	Age group	Number	Rate
Waterloo Region	Less than 20 years	NR	NR
	20 to 44 years	23	11.9
	45 to 64 years	145	103.0
	65 to 74 years	167	458.0
	75 years and older	921	3,047.8
Ontario	Less than 20 years	47	1.5
	20 to 44 years	418	9.2
	45 to 64 years	4,202	110.8
	65 to 74 years	5,158	480.1
	75 years and older	25,440	2,831.6

Definition (continued):

The following chronic diseases were included: cardiovascular disease (including ischaemic heart disease, cerebrovascular disease and stroke), respiratory disease (including chronic obstructive pulmonary disease, bronchitis, emphysema and asthma), and diabetes.

Cardiovascular disease is a term that refers to more than one disease of the circulatory system including the heart and blood vessels, whether the blood vessels are affecting the lungs, the brain, kidneys or other parts of the body. The Public Health Agency of Canada identifies six types of cardiovascular disease: ischaemic heart disease, cerebrovascular disease, peripheral vascular disease, heart failure, rheumatic heart disease, and congenital heart disease.¹

Limitations and Notes:

Although stroke and cerebrovascular disease are often used interchangeably, stroke is more specific. Cerebrovascular disease includes more unspecified and ill-defined diagnoses, as well as late effects of cerebrovascular disease.

Table 3. Number of chronic disease-related deaths and age-standardized chronic disease-related mortality rate, by cause of death, Waterloo Region and Ontario, 2012

Rank	Waterloo Region		Ontario			
	Cause of death	Number	Rate	Cause of death	Number	Rate
1	Cardiovascular disease	890	188.2	Cardiovascular disease	24,705	180.7
1a	Ischaemic heart disease	476	100.7	Ischaemic heart disease	13,151	96.3
1b	Cerebrovascular disease	185	39.2	Cerebrovascular disease	4,907	35.8
1c	Stroke	154	32.7	Stroke	3,734	27.3
1d	Hypertensive disease	20	4.2	Hypertensive disease	902	6.6
2	Respiratory diseases	256	54.5	Respiratory diseases	7,785	56.9
2a	Chronic lower respiratory tract disease	147	31.4	Chronic lower respiratory tract disease	3,804	27.8
2b	Chronic obstructive pulmonary disease	142	30.4	Chronic obstructive pulmonary disease	3,638	26.6
2c	Asthma	NR	NR	Asthma	104	0.8
3	Diabetes	114	24.3	Diabetes	2,775	20.4

Limitations and Notes (continued):

The respiratory disease category includes mostly chronic but some acute diseases as well. Influenza and pneumonia are included but lung cancer is not.

Although Chronic Obstructive Lung Disease (COLD) and Chronic Obstructive Pulmonary Disease (COPD) are often used interchangeably, COLD includes asthma, bronchiectasis, and extrinsic allergic alveolitis, whereas COPD does not. COPD consists only of bronchitis, emphysema, and chronic airways obstruction not elsewhere classified.

Table 4. Number of chronic disease-related deaths and age-standardized chronic disease-related mortality rate, by sex and cause of death, Waterloo Region, 2012

Rank	Males				Females			
	Cause of death	Number	Rate	Cause of death	Number	Rate		
1	Cardiovascular disease	435	280.2	Cardiovascular disease	455	115.5		
1a	Ischaemic heart disease	249	156.6	Ischaemic heart disease	227	57.0		
1b	Cerebrovascular disease	70	46.3	Cerebrovascular disease	115	30.0		
1c	Stroke	58	38.9	Stroke	96	24.4		
1d	Hypertensive disease	8	5.6	Hypertensive disease	12	3.3		
2	Respiratory diseases	118	77.5	Respiratory diseases	138	39.0		
2a	Chronic lower respiratory tract disease	62	40.9	Chronic lower respiratory tract disease	85	25.2		
2b	Chronic obstructive pulmonary disease	60	40.0	Chronic obstructive pulmonary disease	82	24.4		
2c	Asthma	NR	NR	Asthma	NR	NR		
3	Diabetes	68	41	Diabetes	46	14		

Limitations and Notes (continued):

Co-morbidity contributes uncertainty to classifying underlying cause of death.

Rates due to diabetes may be underestimated due to other diseases being specified as the underlying cause of death. Using underlying cause of death alone will capture fewer than one third of all diabetes-related deaths.² Most data sources do not differentiate between Type 1 and Type 2 diabetes.

'NR' means Not Reportable. Numbers and rates based on numbers less than five cannot be reported and have been suppressed.

Limitations and Notes (continued):

Age Standardization is a method of adjusting rates to minimize the effects that different age compositions have on populations. This method is used when comparing two or more populations. The standard 2011 Canadian population was used as the standard for the rates presented here.

This indicator includes only residents who resided within Waterloo Region and excludes any Waterloo Region or Ontario residents who died outside Ontario.

¹Public Health Agency of Canada. Six types of Cardiovascular Disease. Accessed June 18, 2009 at: <http://www.phac-aspc.gc.ca/cd-mc/cvd-mcv/index-eng.php>.

²Wilkins K, Wysocki M, Morin C, Wood P. Multiple causes of death. Health Reports 1997;9(2):19-29. Accessed Oct 1, 2012 at: <http://www.statcan.gc.ca/studies-etudes/82-003/archive/1997/3235-eng.pdf>.

Source:

Ontario Mortality Data (2010-2012), Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: March 7, 2017 and Estimates of Population by Age and Sex (2001-2015), Statistics Canada, Community Data Program, Date Extracted: April 6, 2016.

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