

IN THIS ISSUE**LEADING CAUSES OF
DEATH, ONTARIO 1996-1999**Population Health Service,
Public Health Branch**Statistics**

- June 2002

**LEADING CAUSES OF DEATH,
ONTARIO 1996 - 1999****Introduction**

This article describes and analyses the leading causes of death of Ontario residents between 1996 and 1999; it is a continuation of a previous PHERO paper on the same topic. (Wong C. Leading causes of death, Ontario 1991-1995, PHERO, 1998; 9(2): 28-34.)

Previous studies have shown that the leading causes of death in Ontario varies more with sex and age than with residence of people (Wong & Montano 1993, 1998). In this article the leading causes of death of six age groups (namely, 0 to 6, 7 to 19, 20 to 44, 45 to 64, 65 to 74, 75 and over) of males and females are identified. The leading causes of death are then described in terms of the percent of total number of deaths and age specific death rates. Then for the total population, crude and age standardized death rates of all causes of death are developed and presented. The age group of 0 to 6 is chosen with the purpose of providing the Early Childhood Development project with background information and reference for program planning and evaluation.

Statistics in this article are derived from the vital statistics included in the Health Planning System (HELPS) set up and updated by the Public Health Branch.

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Public Health Branch
Ministry of Health and Long-Term Care
8th Floor, 5700 Yonge Street,
Toronto, Ontario, M2M 4K5
Telephone (416) 327-7090
Facsimile (416) 327-2625
Email: Mariam.Pingel@moh.gov.on.ca

Editorial Board: C. D'Cunha, G. Kettel, K. Kurji,
K. Rottensten, E. Bontovics, R. Jin

Editor: Mariam Pingel

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Leading Causes of Death in 1999

Among children aged 0 to 6, the leading causes of death in 1999 were as noted in Figure 1:

respiratory system (ICD-9 748), and other congenital anomalies of nervous system (ICD-9 742).

Sudden death was the third leading condition (cause) of

Figure 1

Male		Female	
Cause of death (ICD-9 code)	Deaths	Cause of death (ICD-9 code)	Deaths
conditions originating in perinatal period (760-779)	184	conditions originating in perinatal period (760-779)	156
congenital anomalies (740-759)	113	congenital anomalies (740-759)	116
sudden death, cause unknown (798)	30	sudden death, cause unknown (798)	17
drowning (E910)	12	lymphatic & haematopoietic cancer (200-208)	9
motor vehicle traffic accidents * (E810-E819)	10	motor vehicle traffic accidents (E810-E819)	6
septicaemia (38)	7	drowning (E910)	4
fire in private dwelling (E890)	6	septicaemia (38)	4
lymphatic & haematopoietic cancer (200-208)	6	fire in private dwelling	4
all other causes	107	all other causes	86
Total, All causes		402	

Note: (1) The data presented and analyzed in this paper cover only the deaths that occurred in Ontario to Ontario residents.
 (2) Cause of death is the underlying cause of death coded with the use of ICD-9 as shown in the Death Certificate.
 (3) " accident * " is used to correspond to the external causes of the International Classification of Diseases, injuries and Causes of Death, Ninth Revision (ICD-9). Currently, we consider motor vehicle collisions to be preventable, not accidents.

In 1999, 475 deaths occurred among boys aged 0 to 6, and 402 deaths among girls of the same age group.

Conditions originating in the perinatal period (ICD-9 760-779) was the number one cause of death for both boys and girls aged 0 to 6. They accounted for 185 deaths (38.5% of all deaths) in boys and 156 deaths (38.8% of all deaths) in girls. The major causes included in this category were: disorder relating to short gestation and unspecified low birth weight (ICD-9 765), other respiratory conditions of fetus and newborn, and fetus or newborn affected by maternal complication of pregnancy (ICD-9 761).

Congenital anomalies were the second leading cause for both boys and girls. It accounted for 113 (23.8%) and 116 deaths (28.9%) of boys and girls respectively. The major causes included in this category were: other congenital anomalies of heart (ICD-9 746), congenital anomalies of

death for both boys and girls (6.3% in boys and 4.2% in girls).

The fourth to eighth leading causes of death for boys and girls are basically identical but with a different order. For example, drowning was the fourth leading case of death for boys but was the sixth for girls (7.8% in boys and 4.2% in girls) and lymphatic and haematopoietic cancer was the eighth leading cause for boys but was the fourth for girls (1.3% in boys and 2.2% in girls).

Apart from the eight leading causes of death identified in the above Figure 1, all the other causes of deaths accounted for 22.5% and 21.4% of all deaths of boys and girls aged 0 to 6 respectively.

Overall, boys have a higher age specific death rate than girls in the 0 to 6 age group; the rate was 90.8 and 80.8 deaths per 100,000 boys and girls respectively. The same

pattern was observed in the previous studies (Wong & Montano 1993, 1998).

For children and teenagers aged 7 to 19, the leading causes of death were as noted in Figure 2:

girls are very similar but with different order. For example, drowning was the fourth leading case of death for boys (4.5% of all deaths) but was not included in the top eight causes for girls. For girls, homicide was the fourth leading

Figure 2

Male		Female	
Cause of death (ICD-9 code)	Deaths	Cause of death (ICD-9 code)	Deaths
motor vehicle traffic accidents (E810-E819)	84	motor vehicle traffic accidents (E810-E819)	34
suicide (E950-E959)	46	suicide (E950-E959)	8
congenital anomalies (740-759)	13	congenital anomalies (740-759)	6
drowning (E910)	13	homicide (E960-E969)	6
lymphatic & haematopoietic cancer (200-208)	12	brain cancer (191)	6
muscular dystrophies & other myopathies (359)	8	fire in private dwelling (E890)	5
brain cancer (191)	7	bone cancer (170)	5
infantile cerebral palsy (343)	6	lymphatic & haematopoietic cancer (200-208)	4
all other causes	103	all other causes	68
Total, All causes		Total, All causes	
	292		142

In 1999, 292 deaths were recorded among boys aged 7 to 19, and 142 deaths among girls of the same age group. Motor vehicle traffic accidents was the number one cause of death for both boys and girls. It accounted for 84 deaths (28.8% of all deaths) in boys and 34 deaths (23.9% of all deaths) in girls.

Suicide was the second leading cause for both boys and girls aged 7 to 19. It accounted for 46 (15.8%) and 8 deaths (5.6%) in boys and girls respectively.

Congenital anomalies was the third leading cause for both boys and girls. It accounted for 13 (4.5% of all deaths) and 6 deaths (4.2% of all deaths) in boys and girls respectively. The major cause included in this category was other congenital anomalies of heart.

The fourth to eighth leading causes of death for boys and

cause (4.2% of all deaths). Lymphatic and haematopoietic cancer was the fifth leading cause for boys but was the eighth for girls (4.1% in boys and 2.8% in girls).

Apart from the eight leading causes of death identified in the above Figure 2, all the other causes of deaths accounted for 35.3% and 47.9% of all deaths of boys and girls aged 7 to 19 respectively.

Overall, boys have an age specific death rate which is two times that of girls in the 7 to 19 age group; the rate was 28.4 and 14.6 deaths per 100,000 boys and girls respectively. For either sex, people of this age group have a much lower age specific rate than the younger age group of 0 to 6. The same pattern was observed in the previous studies (Wong & Montano 1993, 1998).

For young people aged 20 to 44, the leading causes of death were as noted in Figure 3:

Figure 3

Male		Female	
Cause of death (ICD-9 code)	Deaths	Cause of death (ICD-9 code)	Deaths
suicide & self inflicted injury (E950-E959)	384	female breast cancer (174)	131
motor vehicle traffic accidents (E810-E819)	252	suicide & self inflicted injury (E950-E959)	101
ischemic heart disease (410-414)	170	motor vehicle traffic accidents (E810-E819)	85
accidental poisoning (E860-E869)	112	lymphatic & haematopoietic cancer (200-208)	56
lymphatic & haematopoietic cancer (200-208)	95	lung cancer (162)	43
AIDS (42-44)	73	ischemic heart disease (410-414)	40
homicide (E960-E969)	46	accidental poisoning (E860-E869)	37
lung cancer (162)	46	stroke (430-438)	28
all other causes	1124	all other causes	723
Total, All causes		Total, All causes	
	2302		1219

In 1999, 2,302 deaths occurred among males aged 20 to 44, and 1,219 deaths among females of the same age group. The leading causes of death among males aged 20 to 44 were: suicide (which accounted for 16.7% of all deaths), motor vehicle traffic accident (10.9%), ischemic heart disease (7.4%), accidental poisoning (4.9%), lymphatic and haematopoietic cancer (4.1%), and AIDS (3.2%).

The leading causes of death among females of this age group are not the same as their male counterparts. The leading causes were: breast cancer (which accounted for 10.7% of all deaths), suicide (8.3%), motor vehicle traffic accident (7.0%), lymphatic and haematopoietic cancer (4.6%), lung cancer (3.5%), and ischemic heart disease (3.3%). It is noted that AIDS was the sixth leading cause of death for males, but not included in the top eight causes for females.

The age specific death rate for males aged 20 to 44 was about double that of their female counterparts, being 102.7 per 100,000 population for males and 54.7 for females.

The leading causes of death for adults aged 45 to 64 were as noted in Figure 4:

were: ischemic heart disease (which accounted for 22.0% of all deaths), lung cancer (11.7%), colorectal cancer (4.2%), lymphatic and haematopoietic cancer (4.1%), cirrhosis and chronic liver disease (3.2%), suicide (3.2%), stroke (3.1%) and diabetes (3.0%). Only one of the eight leading causes, i.e., "suicide" belongs to the category of external cause of death.

The leading causes of death among females aged 45 to 64 were not the same for their male counterparts. In 1999, lung cancer (which accounted for 13.4% of all deaths) has just overtaken breast cancer (13.0%) as the number one leading cause of death in this age group. (Note: For the total female population, lung cancer has overtaken breast cancer as a higher ranking cause of death since 1996.)

In 1999, lung cancer and breast cancer were followed by ischemic heart disease (9.0%), stroke (4.4%), colorectal cancer (4.2%), lymphatic and haematopoietic cancer (3.6%), diabetes (2.7%), and chronic obstructive pulmonary disease (COPD) (2.7%).

Like the other age groups, males aged 45 to 64 had a

Figure 4

Male		Female	
Cause of death (icd-9 code)	Deaths	Cause of death (icd-9 code)	Deaths
ischemic heart disease (410-414)	1602	lung cancer (162)	629
lung cancer (162)	854	female breast cancer (174)	612
colorectal cancer (153-154)	309	ischemic heart disease (410-414)	425
lymphatic & haematopoietic cancer (200-208)	302	stroke (430-438)	205
cirrhosis & chronic liver diseases (571)	235	colorectal cancer (153-154)	197
suicide & self inflicted injury (E950-E959)	232	lymphatic & haematopoietic cancer (200-208)	169
stroke (430-438)	225	diabetes mellitus (250)	127
diabetes mellitus (250)	216	COPD (490-496)	92
all other causes	3310	all other causes	2250
Total, All causes	7285	Total, All causes	4706

In 1999, 7,285 deaths were recorded among males aged 45 to 64, and 4,706 deaths among females of the same age group.

The leading causes of death among males aged 45 to 64

higher age specific death rate than the female counterpart, being 573.2 per 100,000 population of males compared to 359.6 per 100,000 population of females.

The leading causes of death for seniors aged 65 to 74 were as noted in Figure 5:

Figure 5

Male		Female	
Cause of death (icd-9 code)	Deaths	Cause of death (icd-9 code)	Deaths
ischemic heart disease (410-414)	2317	ischemic heart disease (410-414)	1148
lung cancer (162)	1292	lung cancer (162)	758
stroke (430-438)	459	female breast cancer (174)	369
colorectal cancer (153-154)	420	stroke (430-438)	349
COPD (490-496)	417	COPD (490-496)	300
lymphatic & haematopoietic cancer (200-208)	350	colorectal cancer (153-154)	293
Prostate cancer (185)	350	diabetes mellitus (250)	255
diabetes mellitus (250)	333	lymphatic & haematopoietic cancer (200-208)	237
all other causes	3970	all other causes	2795
Total, All causes	9908	Total, All causes	6504

In 1999, 9,908 deaths occurred among males aged 65 to 74, and 6,502 deaths among females of the same age group.

Ischemic heart disease was the number one cause of death for both males and females aged 65 to 74. It accounted for 2,317 deaths (23.4% of all deaths) in males and 1,148 deaths (17.8% of all deaths) in females. Lung cancer was the second leading cause for both sexes; it accounted for 1,292 (13.0%) and 758 deaths (11.7%) of males and females respectively.

The third to eighth leading causes of death for males and females aged 65 to 74 are almost identical except for the two types of sex specific cancers, namely prostate cancer for males and breast cancer for females. Prostate cancer was the seventh for males (3.5% of all deaths) whereas breast cancer was the third for females (5.7% of all deaths).

The other leading causes of death included stroke (4.6% in males, 5.4% in females), colorectal cancer (4.2% in males, 4.5% in females), chronic obstructive pulmonary diseases (4.2% in males, 4.6% in females), lymphatic and haematopoietic cancer (3.5% in males, 3.6% in females), and diabetes (3.4% in males, 3.9% in females).

Males aged 65 to 74 had a higher age specific death rate than females of the same age group, the rates were 2591.0 and 1486.0 per 100,000 population for males and females respectively.

The leading causes of death for seniors aged 75 and over were as noted in Figure 6:

In 1999, 20,745 deaths occurred among males aged 75 and over, and 26,958 deaths among females of the same age group.

Ischemic heart disease was the number one cause of death for both males and females aged 75 and over. It accounted for 5,155 deaths (24.8% of all deaths) in males and 6,183 deaths (17.78% of all deaths) in females. Stroke was the second leading cause for both sexes; it accounted for 1,656 (8.0%) and 2,880 deaths (10.7%) of males and females respectively.

The third to eighth leading causes of death for males and females aged 75 and over are very similar except for prostate cancer for males and breast cancer for females. Prostate cancer was the sixth leading cause of death for males (4.2% of all deaths) whereas breast cancer was the eighth for females (2.5% of all deaths).

The other leading causes of death included chronic obstructive pulmonary diseases (6.1% in males, 4.0% in females), lung cancer (6.0% in males, 3.3% in females), pneumonia (5.7% in males, 5.5% in females), and diabetes (3.2% in males, 3.1% in females). It is noted that psychosis was the fourth leading cause of death among the females (4.7%) but it was not included in the top eight causes for the males.

Males aged 75 and over had a higher age specific death rate than their female counterparts. The rates were 8850.4 per 100,000 population for males compared to 6948.5 for females.

Figure 6

Male		Female	
Cause of death (ICD-9 code)	Deaths	Cause of death (ICD-9 code)	Deaths
ischemic heart disease (410-414)	5155	ischemic heart disease (410-414)	6183
stroke (430-438)	1656	stroke (430-438)	2880
COPD (490-496)	1262	pneumonia (480-486)	1479
lung cancer (162)	1238	psychoses (290-299)	1260
pneumonia (480-486)	1188	COPD (490-496)	1081
prostate cancer (185)	881	lung cancer (162)	890
diabetes mellitus (250)	658	diabetes mellitus (250)	828
arteries, arterioles, & capill diseases (440-448)	601	female breast cancer (174)	684
all other causes	8106	all other causes	11673
	Total, All causes	Total, All causes	26958

The leading causes of death of the total Ontario population were as noted in Figure 7:

were presented in the appended Tables 4, 3, 2, and 1, respectively. Since the patterns for all years are similar, de-

Figure 7			
Male		Female	
Cause of death (ICD-9 code)	Deaths	Cause of death (ICD-9 code)	Deaths
ischemic heart disease (410-414)	9244	ischemic heart disease (410-414)	7796
lung cancer (162)	3431	stroke (430-438)	3469
stroke (430-438)	2382	lung cancer (162)	2321
COPD (490-496)	1805	female breast cancer (174)	1796
pneumonia (480-486)	1514	pneumonia (480-486)	1718
prostate cancer (185)	1318	COPD (490-496)	1486
colorectal cancer (153-154)	1255	psychoses (290-299)	1353
lymphatic & haematopoietic cancer (200-208)	1245	diabetes mellitus (250)	1228
all other causes	18813	all other causes	18764
Total, All causes		41007	
		39931	

In 1999, 41,007 deaths occurred among the total male population of Ontario, and 39,931 deaths among the total female population.

For the total male population, ischemic heart disease (22.5% of total deaths), lung cancer (8.4%), stroke (5.8%), chronic obstructive pulmonary disease (4.4%), pneumonia (3.7%), prostate cancer (3.2%), colorectal cancer (3.1%) and lymphatic and haematopoietic cancer (3.0%). This pattern is very similar to that of the seniors aged 65 and over because the number of deaths that occurred in this senior age group accounted for three quarters of the total deaths of males.

For the total female population, the leading causes of death were very similar to that of the male population except that breast cancer was ranked the fourth cause (4.5% of all deaths) and psychosis was the seventh cause (3.4%). These two causes were not ranked among the top eight causes of deaths of the males.

Regarding the overall death pattern in Ontario, the crude death rate for the total male population was 721.7 deaths per 100,000 population and for females, it was 672.6. The male population has a higher crude death rate than the female population. A similar comparison was observed in the previous studies.

Leading Causes of Death from 1996 to 1999

The top leading causes of death of Ontarians with number of deaths, per cent of total deaths, and age specific death rates of different sex and age groups for 1996 through 1999

tailed descriptions like those presented for 1999 in the preceding sections of this paper are not duplicated for 1996, 1997, and 1998.

For children aged 0 to 6, congenital anomalies, conditions originating in the perinatal period, and sudden death were the top three causes of death for both boys and girls in all four years.

Among teenagers aged 7 to 19, motor vehicle traffic accidents and suicide and self inflicted injury were the top two leading causes of death for both boys and girls.

The mortality patterns of young adults aged 20 to 44 are very consistent during the four year period. The top leading causes of death for males were: suicide and self inflicted injury, AIDS, motor vehicle traffic accidents and accidental poisoning. It is encouraging to note that AIDS has dropped from second place in 1996 to fourth in 1998 and sixth in 1999. For females: breast cancer, suicide and self inflicted injury, motor vehicle traffic accidents, and lung cancer were the top four causes for all four years.

The adult group aged 45 to 64 also had very consistent mortality patterns during the four year period. Among the males, ischemic heart disease, lung cancer, and colorectal cancer were the top three causes for all four years. Among the females, breast cancer, lung cancer, and ischemic heart disease were the top three throughout the four years.

The mortality patterns of the senior group aged 65 to 74 remained unchanged during the four year period. For

males, ischemic heart disease, lung cancer, and stroke were on the top three for all four years. For the females, ischemic heart disease, lung cancer, and stroke were the top four throughout the four years. Lung cancer has overtaken breast cancer and became the second leading cause of death since 1996 in this age group.

The mortality patterns of the senior group aged 75 and over were very stable during the four year period. For males, ischemic heart disease, lung cancer, and chronic obstructive pulmonary disease were the top three for all four years. For the females, ischemic heart disease, stroke, pneumonia, and psychosis were the top four throughout the period.

Like the other age groups, the mortality patterns of the total population in Ontario remained the same during the four years period. The top four leading causes of death for males were ischemic heart disease, lung cancer, stroke, and chronic obstructive pulmonary disease for all four years. For females, the top four leading causes were ischemic heart disease, stroke, lung cancer, and breast cancer throughout the four year period.

Temporal Comparison of Age Specific Death Rates of Ontario between 1996 and 1999

Whereas the leading causes of death remained practically unchanged in all the sex and age groups between 1996 and 1999, the age specific death rates in some groups and of some diseases have declined over the four year period. The appended Table 5 summarizes these declines.

Among boys aged 0 to 6, the age specific death rates declined from 104.1 deaths per 100,000 in 1996 to 90.8 in 1999, a decrease of 13%. For the girls, the age specific death rates dropped from 83.4 in 1996 to 80.8 in 1999, a decrease of 3% over the four year period. In the male group, congenital anomalies was the condition contributing to the decrease of age specific death rate.

The age specific death rate among male teenagers aged 7 to 19 was quite stable (28.8 in 1996 to 28.4 in 1999). For female teenagers, it was 16.4 in 1996, 17.7 in 1997, 17.3 in 1998, and 14.6 in 1999, showing some fluctuation in the age specific death rate.

The young male adults aged 20 to 44 recorded a 16% decrease in the age specific death rates; it was 122.8 per 100,000 in 1996 and 102.7 in 1999. For the females, it was 59.8 per 100,000 in 1996 and 54.7 in 1999, a decrease of 9% over the four year period. In the male group,

AIDS was the cause of death that contributed most to the decrease. The age specific death rate of AIDS dropped from 13.5 per 100,000 in 1996 to 3.3 in 1999, a 76% decrease.

For adults aged 45 to 64, declines of age specific death rates were recorded among both males and females. For the males, the rate declined from 635.8 per 100,000 in 1996 to 573.2 in 1999, showing a decrease of 10%. The corresponding rates and percent for the females were 394.8 in 1996 and 359.6 in 1999, a decrease of 9%. Declines of rates in ischemic heart disease, lung cancer, and lymphatic and haematopoietic cancer among males and in breast cancer and ischemic heart disease among females are noted.

Decreases of age specific death rates were recorded among adults aged 65 to 74. For the males, the rate declined by 10%, from 2877.2 per 100,000 in 1996 to 2591.0 in 1999. Among the females, the decrease was 7%, from 1596.9 per 100,000 in 1996 to 1486.9 in 1999. Declines of rates are noted in ischemic heart disease, lung cancer, and COPD among males and in breast cancer, ischemic heart disease, and stroke among females.

The declines in age specific death rates among male seniors aged 75 and over were smaller than among other male age groups; the rates declined from 9165.0 per 100,000 in 1996 to 8850.4 in 1999, representing a decrease of only 3%. Ischemic heart disease and stroke were the two diseases showing some decline among the male seniors. For females, only a small decrease of 3% was detected in the age specific rates; it was 7127.6 per 100,000 in 1996 and 6948.5 in 1999. Among the population aged 75 and over, ischemic heart disease and stroke showed slight decreases.

Temporal Comparison of Crude Death Rates and Age Standardized Death Rates (SRATE) of Ontario between 1996 and 1999

For the total population, a slight decline of the crude death rates was observed among males during the four year period. Among the males, the crude death rate dropped 2%, from 737.7 deaths per 100,000 population in 1996 to 721.7 in 1999. In contrast, among the total female population, the crude rate was 679.3 in 1996 and 684.3 in 1999, showing a very small increase of 0.7%.

The appended Tables 6A and 6B show the sex and age specific Ontario population between 1996 and 1999 and

the standard populations used for the calculation of age standardized death rates.

SRATEs were calculated for the male and female total population of Ontario in order to show the change of death rates during 1996 and 1999. The use of SRATE helps to eliminate the effect of age differences on the mortality patterns in the populations being compared. A summary is shown in Figures 8 and 9:

The causes of death differ in their ranks and age specific death rates in different sex and age groups.

Males have higher age specific death rates than their female counterparts in all age groups.

In either sex, seniors aged 75 and over have the highest age specific death rates followed by the adult group aged 65 to 74, and aged 45 to 64. Teenagers aged 7 to 19 have the lowest age specific death rates. The appended Table 5

presents a comparison of the age specific rates in the twelve sex and age specific groups.

Accidental drowning and fire in domestic dwelling are two leading causes of death among children and teenagers aged 19 and below. Accidental poisoning is one leading cause among young adults aged 20 to 44. All three are preventable causes of premature deaths.

It is worth noting that the age specific death rates of lung cancer among female seniors aged 75 and over rose between 1996 (184.3 per 100,000 population) and 1999 (229.4 per 100,000 population).

Among the total male population, the SRATE (standard year = 1991) declined steadily from 807.1 deaths per 100,000 in 1996 to 751.2 in 1999. A 7% decrease in the SRATE was recorded between 1996 and 1999. Among the total female population, the SRATE decreased 5% over four years from 549.0 per 100,000 in 1996 to 527.3 in 1999. The changes of rates are shown in Figure 9:

The decline of the age specific rate of AIDS among male adults aged 20 to 44 is encouraging; it has decreased steadily from 13.5 per 100,000 in 1996 to 3.3 per 100,000 in

Summary

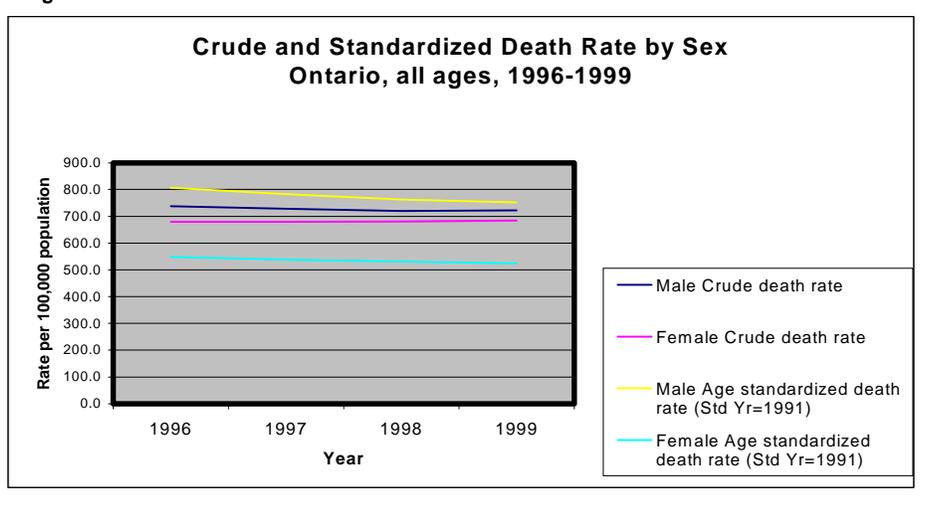
Leading causes of death vary strongly with age and sex. For either sex, different age groups of the same sex have different leading causes of death. Male and female groups of the same age also have different leading causes of death.

Figure 8

All causes of death, All ages		1996	1997	1998	1999
Male					
Crude death rate per 100,000 population		737.7	728.1	719.9	721.7
Age standardized death rate per 100,000 population (Standard year=1991)		807.1	783.1	762.3	751.2
Female					
Crude death rate per 100,000 population		679.3	679.1	680.6	684.3
Age standardized death rate per 100,000 population (Standard year=1991)		549.0	538.6	530.6	523.7

Note: (1) Age standardized death rate is the number of deaths caused by all diseases per 100,000 population of the standard population.
 (2) The total population of Canada in 1991 Census is used as the standard populations for comparison. Six age groups are adopted in the calculation, i.e. 0-6, 7-19, 20-44, 45-64, 65-74, 75 and over.
 (3) Crude death rate is the number of deaths caused by all diseases per 100,000 population of Ontario.

Figure 9



1999. A consistent downward trend of the AIDS deaths among male adults is clearly seen between 1996 and 1999.

The age standardized death rates (standard year=1991) for all causes of the male and female total population in Ontario declined steadily between 1996 and 1999; a 7% decrease of the SRATE was recorded for the males, and 5% for the females during the four year period.

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SOURCE and CONTACT

Chee H. Wong, BSSc, MA,MA
Epidemiologist
Public Health Branch
Ministry of Health and Long-Term Care

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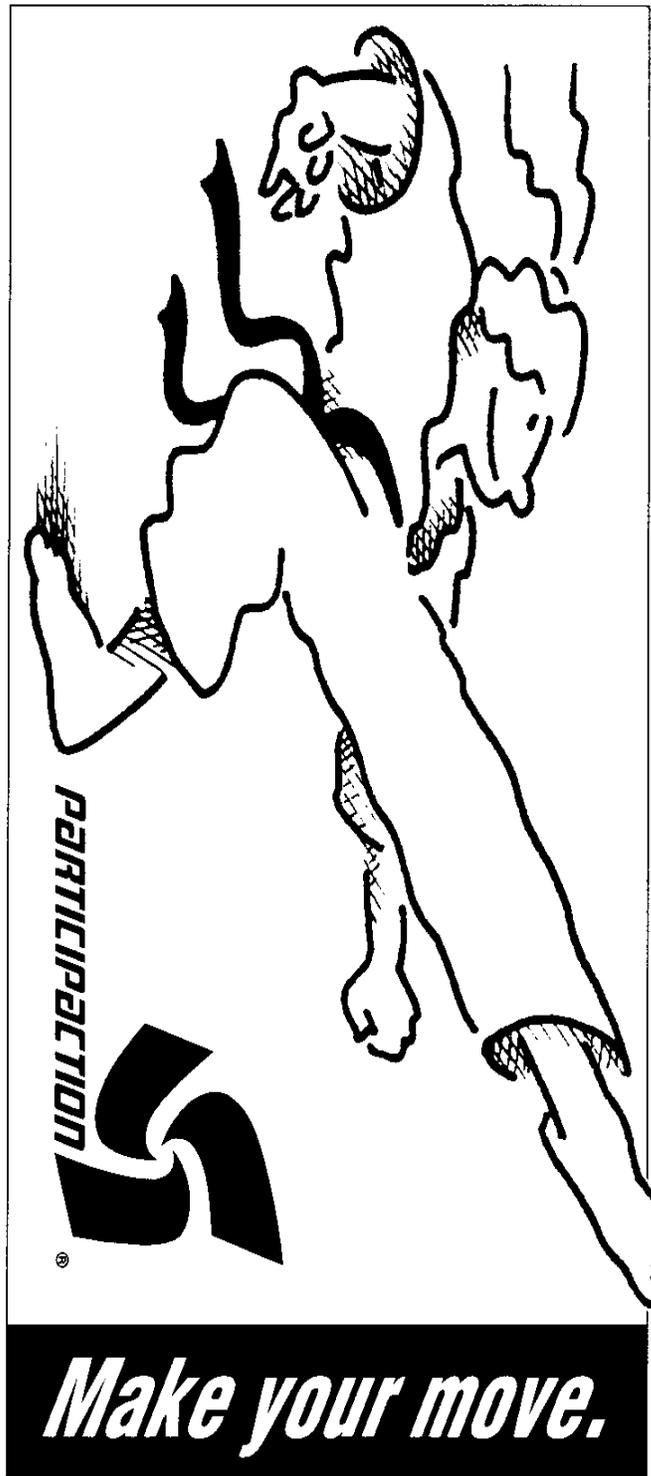


Table (1) Leading Causes of Death by Sex by Age Group, Ontario, 1999

Age 0-6

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
conditions originating in perinatal period (760-779)	184	38.7%	35.2	conditions originating in perinatal period (760-779)	156	38.8%	31.3
congenital anomalies (740-759)	113	23.8%	21.6	congenital anomalies (740-759)	116	28.9%	23.3
sudden death, cause unknown (798)	30	6.3%	5.7	sudden death, cause unknown (798)	17	4.2%	3.4
drowning (E910)	12	2.5%	2.3	lymphatic & haematopoietic cancer (200-208)	9	2.2%	1.8
motor vehicle traffic accidents * (E810-E819)	10	2.1%	1.9	motor vehicle traffic accidents (E810-E819)	6	1.5%	1.2
septicaemia (38)	7	1.5%	1.3	drowning (E910)	4	1.0%	0.8
fire in private dwelling (E890)	6	1.3%	1.1	septicaemia (38)	4	1.0%	0.8
lymphatic & haematopoietic cancer (200-208)	6	1.3%	1.1	fire in private dwelling	4	1.0%	0.8
all other causes	107	22.5%	20.4	all other causes	86	21.4%	17.3
Total, All causes	475	100.0%	90.8	Total, All causes	402	100.0%	80.8

Age 7-19

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
motor vehicle traffic accidents (E810-E819)	84	28.8%	8.2	motor vehicle traffic accidents (E810-E819)	34	23.9%	3.5
Suicide (E950-E959)	46	15.8%	4.5	Suicide (E950-E959)	8	5.6%	0.8
congenital anomalies (740-759)	13	4.5%	1.3	congenital anomalies (740-759)	6	4.2%	0.6
drowning (E910)	13	4.5%	1.3	homicide (E960-E969)	6	4.2%	0.6
lymphatic & haematopoietic cancer (200-208)	12	4.1%	1.2	brain cancer (191)	6	4.2%	0.6
muscular dystrophies & other myopathies (359)	8	2.7%	0.8	fire in private dwelling (E890)	5	3.5%	0.5
brain cancer (191)	7	2.4%	0.7	bone cancer (170)	5	3.5%	0.5
infantile cerebral palsy (343)	6	2.1%	0.6	lymphatic & haematopoietic cancer (200-208)	4	2.8%	0.4
all other causes	103	35.3%	10.0	all other causes	68	47.9%	7.0
Total, All causes	292	100.0%	28.4	Total, All causes	142	100.0%	14.6

Age 20-44

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
suicide & self inflicted injury (E950-E959)	384	16.7%	17.1	female breast cancer	131	10.7%	5.9
motor vehicle traffic accidents (E810-E819)	252	10.9%	11.2	suicide & self inflicted injury (E950-E959)	101	8.3%	4.5
ischemic heart disease (410-414)	170	7.4%	7.6	motor vehicle traffic accidents (E810-E819)	85	7.0%	3.8
accidental poisoning (E860-E869)	112	4.9%	5.0	lymphatic & haematopoietic cancer (200-208)	56	4.6%	2.5
lymphatic & haematopoietic cancer (200-208)	95	4.1%	4.2	lung cancer (162)	43	3.5%	1.9
AIDS (42-44)	73	3.2%	3.3	ischemic heart disease (410-414)	40	3.3%	1.8
homicide (E960-E969)	46	2.0%	2.1	accidental poisoning (E860-E869)	37	3.0%	1.7
lung cancer (162)	46	2.0%	2.1	stroke (430-438)	28	2.3%	1.3
all other causes	1124	48.8%	50.1	all other causes	723	59.3%	32.4
Total, All causes	2302	100.0%	102.7	Total, All causes	1219	100.0%	54.7

Age 45-64

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
ischemic heart disease (410-414)	1602	22.0%	126.1	lung cancer (162)	629	13.4%	48.1
lung cancer (162)	854	11.7%	67.2	female breast cancer (174)	612	13.0%	46.8
colorectal cancer (153-154)	309	4.2%	24.3	ischemic heart disease (410-414)	425	9.0%	32.5
lymphatic & haematopoietic cancer (200-208)	302	4.1%	23.8	stroke (430-438)	205	4.4%	15.7
cirrhosis & chronic liver diseases (571)	235	3.2%	18.5	colorectal cancer (153-154)	197	4.2%	15.1
suicide & self inflicted injury (E950-E959)	232	3.2%	18.3	lymphatic & haematopoietic cancer (200-208)	169	3.6%	12.9
stroke (430-438)	225	3.1%	17.7	diabetes mellitus (250)	127	2.7%	9.7
diabetes mellitus (250)	216	3.0%	17.0	COPD (490-496)	92	2.0%	7.0
all other causes	3310	45.4%	260.4	all other causes	2250	47.8%	171.9
Total, All causes	7285	100.0%	573.2	Total, All causes	4706	100.0%	359.6

Table (1) - continued

Age 65-74

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
ischemic heart disease (410-414)	2317	23.4%	605.9	ischemic heart disease (410-414)	1148	17.7%	262.4
lung cancer (162)	1292	13.0%	337.9	lung cancer (162)	758	11.7%	173.3
stroke (430-438)	459	4.6%	120.0	female breast cancer (174)	369	5.7%	84.4
colorectal cancer (153-154)	420	4.2%	109.8	stroke (430-438)	349	5.4%	79.8
COPD (490-496)	417	4.2%	109.0	COPD (490-496)	300	4.6%	68.6
lymphatic & haematopoietic cancer (200-208)	350	3.5%	91.5	colorectal cancer (153-154)	293	4.5%	67.0
prostate cancer (185)	350	3.5%	91.5	diabetes mellitus (250)	255	3.9%	58.3
diabetes mellitus (250)	333	3.4%	87.1	lymphatic & haematopoietic cancer (200-208)	237	3.6%	54.2
all other causes	3970	40.1%	1038.2	all other causes	2795	43.0%	639.0
Total, All causes	9908	100.0%	2591.0	Total, All causes	6504	100.0%	1486.9

Age 75 & over

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
ischemic heart disease (410-414)	5155	24.8%	2199.3	ischemic heart disease (410-414)	6183	22.9%	1593.7
stroke (430-438)	1656	8.0%	706.5	stroke (430-438)	2880	10.7%	742.3
COPD (490-496)	1262	6.1%	538.4	pneumonia (480-486)	1479	5.5%	381.2
lung cancer (162)	1238	6.0%	528.2	psychoses (290-299)	1260	4.7%	324.8
pneumonia (480-486)	1188	5.7%	506.8	COPD (490-496)	1081	4.0%	278.6
prostate cancer (185)	881	4.2%	375.9	lung cancer (162)	890	3.3%	229.4
diabetes mellitus (250)	658	3.2%	280.7	diabetes mellitus (250)	828	3.1%	213.4
arteries, arterioles, & capill diseases (440-448)	601	2.9%	256.4	female breast cancer (174)	684	2.5%	176.3
all other causes	8106	39.1%	3458.3	all other causes	11673	43.3%	3008.7
Total, All causes	20745	100.0%	8850.4	Total, All causes	26958	100.0%	6948.5

All ages

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	crude rate	cause of death (ICD-9 code)	deaths	% to total	crude rate
ischemic heart disease (410-414)	9244	22.5%	162.7	ischemic heart disease (410-414)	7796	19.5%	133.6
lung cancer (162)	3431	8.4%	60.4	stroke (430-438)	3469	8.7%	59.5
stroke (430-438)	2382	5.8%	41.9	lung cancer (162)	2321	5.8%	39.8
COPD (490-496)	1805	4.4%	31.8	female breast cancer (174)	1796	4.5%	30.8
pneumonia (480-486)	1514	3.7%	26.6	pneumonia (480-486)	1718	4.3%	29.4
prostate cancer (185)	1318	3.2%	23.2	COPD (490-496)	1486	3.7%	25.5
colorectal cancer (153-154)	1255	3.1%	22.1	psychoses (290-299)	1353	3.4%	23.2
lymphatic & haematopoietic cancer (200-208)	1245	3.0%	21.9	diabetes mellitus (250)	1228	3.1%	21.0
all other causes	18813	45.9%	331.1	all other causes	18764	47.0%	321.6
Total, All causes	41007	100.0%	721.7	Total, All causes	39931	100.0%	684.3

Source of Data: Ontario Office of Registrar General.

Distributor: HELPS, Death Database 1996-1999, Public Health Branch, Ministry of Health and Long-Term Care

Note: (1) The data presented and analysed in this paper cover only the deaths that occurred in Ontario to Ontario residents.

(2) Cause of death is the underlying cause of death coded with the use of ICD-9 as shown in the Death Certificate.

(3) "age spec rate" stands for the age specific death rate, which is the number of deaths caused by a disease per 100,000 population of the same age group, sex specific.

(4) "Crude death rate" is the number of deaths caused by a disease per 100,000 population of all age groups, sex specific.

(5) The population used as denominators for calculation of rates are retrieved from the "Updated postcensal estimates 1998 to 2000" series which was released by Statistics Canada in October 2001.

(6) * "Accidents" is used to correspond to the external causes of the International Classification of Diseases, injuries and Causes of Death, Ninth Revision (ICD-9) Currently, we consider motor vehicle collisions to be preventable, not simply accidents.

Table (2) Leading Causes of Death by Sex by Age Group, Ontario, 1998

Age 0-6

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
conditions originating in perinatal period (760-77)	172	37.9%	32.2	conditions originating in perinatal period (760-779)	155	40.8%	30.6
congenital anomalies (740-759)	93	20.5%	17.4	congenital anomalies (740-759)	89	23.4%	17.5
sudden death, cause unknown (798)	31	6.8%	5.8	sudden death, cause unknown (798)	16	4.2%	3.2
motor vehicle traffic accidents* (E810-E819)	9	2.0%	1.7	lymphatic & haematopoietic cancer (200-208)	9	2.4%	1.8
lymphatic & haematopoietic cancer (200-208)	7	1.5%	1.3	drowning (E910)	6	1.6%	1.2
fire in private dwelling (E890)	6	1.3%	1.1	motor vehicle traffic accidents (E810-E819)	5	1.3%	1.0
drowning (E910)	5	1.1%	0.9	pneumonia, organism unspecified (486)	5	1.3%	1.0
brain cancer (191)	5	1.1%	0.9	cardiomyopathy (425)	5	1.3%	1.0
all other causes	126	27.8%	23.6	all other causes	90	23.7%	17.7
Total, All causes	454	100.0%	85.1	Total, All causes	380	100.0%	74.9

Age 7-19

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
motor vehicle traffic accidents (E810-E819)	50	16.9%	4.9	motor vehicle traffic accidents (E810-E819)	37	22.3%	3.9
Suicide (E950-E959)	47	15.9%	4.6	Suicide (E950-E959)	17	10.2%	1.8
lymphatic & haematopoietic cancer (200-208)	18	6.1%	1.8	lymphatic & haematopoietic cancer (200-208)	10	6.0%	1.0
congenital anomalies (740-759)	16	5.4%	1.6	brain cancer (191)	6	3.6%	0.6
infantile cerebral palsy (343)	10	3.4%	1.0	fire in private dwelling (E890)	6	3.6%	0.6
homicide (E960-E969)	10	3.4%	1.0	drowning (E910)	5	3.0%	0.5
drowning (E910)	9	3.0%	0.9	bronch cancer (170)	5	3.0%	0.5
brain cancer (191)	7	2.4%	0.7	homicide (E960-E969)	4	2.4%	0.4
all other causes	129	43.6%	12.7	all other causes	76	45.8%	7.9
Total, All causes	296	100.0%	29.2	Total, All causes	166	100.0%	17.3

Age 20-44

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
suicide & self inflicted injury (E950-E959)	383	15.9%	17.2	female breast cancer	136	11.3%	6.1
motor vehicle traffic accidents (E810-E819)	250	10.4%	11.2	motor vehicle traffic accidents (E810-E819)	85	7.0%	3.8
ischemic heart disease (410-414)	166	6.9%	7.4	suicide & self inflicted injury (E950-E959)	81	6.7%	3.6
AIDS (42-44)	101	4.2%	4.5	lung cancer (162)	59	4.9%	2.7
accidental poisoning (E860-E869)	97	4.0%	4.4	lymphatic & haematopoietic cancer (200-208)	55	4.6%	2.5
lymphatic & haematopoietic cancer (200-208)	87	3.6%	3.9	cervical cancer (180)	46	3.8%	2.1
lung cancer (162)	52	2.2%	2.3	stroke (430-438)	39	3.2%	1.8
homicide (E960-E969)	46	1.9%	2.1	colorectal cancer (153-154)	31	2.6%	1.4
all other causes	1227	50.9%	55.0	all other causes	675	55.9%	30.4
Total, All causes	2409	100.0%	108.0	Total, All causes	1207	100.0%	54.3

Age 45-64

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
ischemic heart disease (410-414)	1573	22.0%	127.5	female breast cancer (174)	603	12.9%	47.6
lung cancer (162)	846	11.8%	68.6	lung cancer (162)	593	12.7%	46.8
colorectal cancer (153-154)	290	4.1%	23.5	ischemic heart disease (410-414)	430	9.2%	33.9
lymphatic & haematopoietic cancer (200-208)	269	3.8%	21.8	stroke (430-438)	204	4.4%	16.1
cirrhosis & chronic liver diseases (571)	259	3.6%	21.0	lymphatic & haematopoietic cancer (200-208)	200	4.3%	15.8
suicide & self inflicted injury (E950-E959)	254	3.5%	20.6	colorectal cancer (153-154)	188	4.0%	14.8
stroke (430-438)	210	2.9%	17.0	diabetes mellitus (250)	122	2.6%	9.6
diabetes mellitus (250)	200	2.8%	16.2	COPD (490-496)	108	2.3%	8.5
all other causes	3254	45.5%	263.8	all other causes	2236	47.7%	176.5
Total, All causes	7155	100.0%	580.1	Total, All causes	4684	100.0%	369.7

Table (2) - continued

Age 65-74

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	ge spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
ischemic heart disease (410-414)	2417	23.7%	636.2	ischemic heart disease (410-414)	1129	16.5%	257.3
lung cancer (162)	1291	12.6%	339.8	lung cancer (162)	776	11.3%	176.9
stroke (430-438)	475	4.7%	125.0	stroke (430-438)	441	6.4%	100.5
COPD (490-496)	458	4.5%	120.6	female breast cancer (174)	384	5.6%	87.5
colorectal cancer (153-154)	402	3.9%	105.8	COPD (490-496)	343	5.0%	78.2
lymphatic & haematopoietic cancer (200-208)	374	3.7%	98.5	diabetes mellitus (250)	273	4.0%	62.2
diabetes mellitus (250)	367	3.6%	96.6	colorectal cancer (153-154)	264	3.9%	60.2
prostate cancer (185)	366	3.6%	96.3	lymphatic & haematopoietic cancer (200-208)	241	3.5%	54.9
all other causes	4062	39.8%	1069.3	all other causes	3004	43.8%	684.7
Total, All causes	10212	100.0%	2688.2	Total, All causes	6855	100.0%	1562.4

Age 75 & over

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	ge spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
ischemic heart disease (410-414)	4925	24.7%	2196.8	ischemic heart disease (410-414)	6239	24.0%	1669.3
stroke (430-438)	1678	8.4%	748.5	stroke (430-438)	2760	10.6%	738.5
COPD (490-496)	1235	6.2%	550.9	pneumonia (480-486)	1557	6.0%	416.6
lung cancer (162)	1104	5.5%	492.4	psychoses (290-299)	1137	4.4%	304.2
pneumonia (480-486)	1073	5.4%	478.6	COPD (490-496)	1023	3.9%	273.7
prostate cancer (185)	882	4.4%	393.4	lung cancer (162)	804	3.1%	215.1
diabetes mellitus (250)	588	3.0%	262.3	diabetes mellitus (250)	793	3.1%	212.2
arteries, arterioles, & capill diseases (440-448)	562	2.8%	250.7	arteries, arterioles, & capill diseases (440-448)	720	2.8%	192.6
all other causes	7858	39.5%	3505.1	all other causes	10945	42.1%	2928.4
Total, All causes	19905	100.0%	8878.7	Total, All causes	25978	100.0%	6950.6

All ages

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	crude rate	cause of death (ICD-9 code)	deaths	% to total	crude rate
ischemic heart disease (410-414)	9081	22.5%	161.7	ischemic heart disease (410-414)	7824	19.9%	135.6
lung cancer (162)	3293	8.1%	58.6	stroke (430-438)	3446	8.8%	59.7
stroke (430-438)	2462	6.1%	43.8	lung cancer (162)	2232	5.7%	38.7
COPD (490-496)	1821	4.5%	32.4	pneumonia (480-486)	1778	4.5%	30.8
pneumonia (480-486)	1418	3.5%	25.2	female breast cancer (174)	1765	4.5%	30.6
prostate cancer (185)	1348	3.3%	24.0	COPD (490-496)	1486	3.8%	25.8
diabetes mellitus (250)	1228	3.0%	21.9	diabetes mellitus (250)	1209	3.1%	21.0
lymphatic & haematopoietic cancer (200-208)	1203	3.0%	21.4	psychoses (290-299)	1199	3.1%	20.8
all other causes	18577	45.9%	330.8	all other causes	18331	46.7%	317.7
Total, All causes	40431	100.0%	719.9	Total, All causes	39270	100.0%	680.6

Source of Data: Ontario Office of Registrar General.

Distributor: HELPS, Death Database 1996-1999, Public Health Branch, Ministry of Health and Long-Term Care

Note: (1) The data presented and analysed in this paper cover only the deaths that occurred in Ontario to Ontario residents.

(2) Cause of death is the underlying cause of death coded with the use of ICD-9 as shown in the Death Certificate.

(3) "age spec rate" stands for the age specific death rate, which is the number of deaths caused by a disease per 100,000 population of the same age group, sex specific.

(4) "Crude death rate" is the number of deaths caused by a disease per 100,000 population of all age groups, sex specific.

(5) The population used as denominators for calculation of rates are retrieved from the "Updated postcensal estimates 1998 to 2000" series which was released by Statistics Canada in October 2001.

(6) * "Accidents" is used to correspond to the external causes of the International Classification of Diseases, injuries and Causes of Death, Ninth Revision (ICD-9) Currently, we consider motor vehicle collisions to be preventable, not simply accidents.

Table (3) Leading Causes of Death by Sex by Age Group, Ontario, 1997

Age 0-6

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
conditions originating in perinatal period (760-779)	185	36.2%	34.1	conditions originating in perinatal period (760)	155	39.9%	30.1
congenital anomalies (740-759)	121	23.7%	22.3	congenital anomalies (740-759)	82	21.1%	15.9
sudden death, cause unknown (798)	36	7.0%	6.6	sudden death, cause unknown (798)	16	4.1%	3.1
motor vehicle traffic accidents* (E810-E819)	10	2.0%	1.8	motor vehicle traffic accidents (E810-E819)	8	2.1%	1.6
septicaemia (38)	10	2.0%	1.8	drowning (E910)	5	1.3%	1.0
drowning (E910)	7	1.4%	1.3	anterior horn cell disease (335)	5	1.3%	1.0
homicide (E960-E969)	6	1.2%	1.1	brain cancer (191)	4	1.0%	0.8
muscular dystrophies & other myopathies (359)	4	0.8%	0.7	septicaemia (38)	4	1.0%	0.8
all other causes	132	25.8%	24.4	all other causes	109	28.1%	21.2
Total, All causes	511	100.0%	94.3	Total, All causes	388	100.0%	75.4

Age 7-19

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
motor vehicle traffic accidents (E810-E819)	81	24.5%	8.1	motor vehicle traffic accidents (E810-E819)	49	29.3%	5.2
suicide & self inflicted injury (E950-E959)	48	14.5%	4.8	lymphatic & haematopoietic cancer (200-208)	15	9.0%	1.6
lymphatic & haematopoietic cancer (200-208)	12	3.6%	1.2	suicide & self inflicted injury (E950-E959)	11	6.6%	1.2
congenital anomalies (740-759)	12	3.6%	1.2	homicide (E960-E969)	4	2.4%	0.4
homicide (E960-E969)	12	3.6%	1.2	brain cancer (191)	4	2.4%	0.4
brain cancer (191)	11	3.3%	1.1	congenital anomalies (740-759)	3	1.8%	0.3
bone and articular cartilage cancer (170)	6	1.8%	0.6	drowning (E910)	3	1.8%	0.3
muscular dystrophies & other myopathies (359)	6	1.8%	0.6	accident to watercraft causing submersion	3	1.8%	0.3
all other causes	142	43.0%	14.2	all other causes	75	44.9%	7.9
Total, All causes	330	100.0%	33.1	Total, All causes	167	100.0%	17.7

Age 20-44

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
suicide & self inflicted injury (E950-E959)	336	13.7%	15.1	female breast cancer	130	10.8%	5.9
motor vehicle traffic accidents (E810-E819)	239	9.7%	10.8	suicide & self inflicted injury (E950-E959)	97	8.1%	4.4
ischemic heart disease (410-414)	173	7.0%	7.8	motor vehicle traffic accidents (E810-E819)	74	6.2%	3.3
AIDS (42-44)	128	5.2%	5.8	lymphatic & haematopoietic cancer (200-208)	58	4.8%	2.6
accidental poisoning (E860-E869)	106	4.3%	4.8	stroke (430-438)	49	4.1%	2.2
lymphatic & haematopoietic cancer (200-208)	77	3.1%	3.5	lung cancer (162)	40	3.3%	1.8
lung cancer (162)	47	1.9%	2.1	cervical cancer (ICD-9: 180)	37	3.1%	1.7
homicide (E960-E969)	45	1.8%	2.0	ischemic heart disease (410-414)	33	2.7%	1.5
all other causes	1310	53.2%	59.0	all other causes	685	56.9%	30.9
Total, All causes	2461	100.0%	110.9	Total, All causes	1203	100.0%	54.3

Age 45-64

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
ischemic heart disease (410-414)	1607	21.7%	134.1	female breast cancer (174)	596	12.9%	48.5
lung cancer (162)	825	11.1%	68.8	lung cancer (162)	528	11.5%	43.0
colorectal cancer (153-154)	324	4.4%	27.0	ischemic heart disease (410-414)	438	9.5%	35.6
lymphatic & haematopoietic cancer (200-208)	255	3.4%	21.3	colorectal cancer (153-154)	209	4.5%	17.0
stroke (430-438)	254	3.4%	21.2	lymphatic & haematopoietic cancer (200-208)	205	4.4%	16.7
cirrhosis & chronic liver diseases (571)	236	3.2%	19.7	stroke (430-438)	196	4.3%	15.9
suicide & self inflicted injury (E950-E959)	209	2.8%	17.4	diabetes mellitus (250)	141	3.1%	11.5
diabetes mellitus (250)	202	2.7%	16.9	COPD (490-496)	113	2.5%	9.2
all other causes	3492	47.2%	291.4	all other causes	2181	47.3%	177.5
Total, All causes	7404	100.0%	617.8	Total, All causes	4607	100.0%	374.8

Table (3) - continued

Age 65-74

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
ischemic heart disease (410-414)	2405	23.3%	641.1	ischemic heart disease (410-414)	1232	17.8%	281.5
lung cancer (162)	1243	12.0%	331.3	lung cancer (162)	701	10.1%	160.2
stroke (430-438)	532	5.2%	141.8	female breast cancer (174)	459	6.6%	104.9
COPD (490-496)	462	3.7%	123.2	stroke (430-438)	420	6.1%	96.0
colorectal cancer (153-154)	385	3.5%	102.6	COPD (490-496)	314	4.5%	71.7
prostate cancer (185)	359	3.5%	95.7	colorectal cancer (153-154)	263	3.8%	60.1
lymphatic & haematopoietic cancer (200-208)	344	3.3%	91.7	diabetes mellitus (250)	258	3.7%	58.9
diabetes mellitus (250)	341	3.3%	90.9	lymphatic & haematopoietic cancer (200-208)	237	3.4%	54.1
all other causes	4250	#REF!	1132.9	all other causes	3035	43.9%	693.4
Total, All causes	10321	100.0%	2751.2	Total, All causes	6919	100.0%	1580.7

Age 75 & over

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
ischemic heart disease (410-414)	4679	24.2%	2183.0	ischemic heart disease (410-414)	5946	23.4%	1652.5
stroke (430-438)	1669	8.6%	778.7	stroke (430-438)	2952	11.6%	820.4
COPD (490-496)	1164	6.0%	543.1	pneumonia (480-486)	1376	5.4%	382.4
lung cancer (162)	1063	5.5%	495.9	psychoses (290-299)	1115	4.4%	309.9
pneumonia (480-486)	1000	5.2%	466.5	COPD (490-496)	895	3.5%	248.7
prostate cancer (185)	856	4.4%	399.4	diabetes mellitus (250)	769	3.0%	213.7
diabetes mellitus (250)	554	2.9%	258.5	arteries, arterioles, & capill diseases (440-448)	762	3.0%	211.8
arteries, arterioles, & capill diseases (440-448)	536	2.8%	250.1	lung cancer (162)	681	2.7%	189.3
all other causes	7833	40.5%	3654.5	all other causes	10953	43.0%	3044.1
Total, All causes	19354	100.0%	9029.5	Total, All causes	25449	100.0%	7072.8

All ages

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	crude rate	cause of death (ICD-9 code)	deaths	% to total	crude rate
ischemic heart disease (410-414)	8867	22.0%	159.9	ischemic heart disease (410-414)	7649	19.7%	134.1
lung cancer (162)	3179	7.9%	57.3	stroke (430-438)	3619	9.3%	63.5
stroke (430-438)	2499	6.2%	45.1	lung cancer (162)	1950	5.0%	34.2
COPD (490-496)	1748	4.3%	31.5	female breast cancer (174)	1853	4.8%	32.5
prostate cancer (185)	1319	3.3%	23.8	pneumonia (480-486)	1558	4.0%	27.3
pneumonia (480-486)	1310	3.3%	23.6	COPD (490-496)	1331	3.4%	23.3
colorectal cancer (153-154)	1206	3.2%	21.7	diabetes mellitus (250)	1190	3.1%	20.9
diabetes mellitus (250)	1125	3.0%	20.3	psychoses (290-299)	1181	3.0%	20.7
all other causes	19131	47.4%	344.9	all other causes	18402	47.5%	322.7
Total, All causes	40384	100.0%	728.1	Total, All causes	38733	100.0%	679.1

Source of Data: Ontario Office of Registrar General.

Distributor: HELPS, Death Database 1996-1999, Public Health Branch, Ministry of Health and Long-Term Care

Note: (1) The data presented and analysed in this paper cover only the deaths that occurred in Ontario to Ontario residents.

(2) Cause of death is the underlying cause of death coded with the use of ICD-9 as shown in the Death Certificate.

(3) "age spec rate" stands for the age specific death rate, which is the number of deaths caused by a disease per 100,000 population of the same age group, sex specific.

(4) "Crude death rate" is the number of deaths caused by a disease per 100,000 population of all age groups, sex specific.

(5) The population used as denominators for calculation of rates are retrieved from the "Updated postcensal estimates 1998 to 2000" series which was released by Statistics Canada in October 2001.

(6) * "Accidents" is used to correspond to the external causes of the International Classification of Diseases, injuries and Causes of Death, Ninth Revision (ICD-9) Currently, we consider motor vehicle collisions to be preventable, not simply accidents.

Table (4) Leading Causes of Death by Sex by Age Group, Ontario, 1996

Age 0-6

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
conditions originating in perinatal period (760-779)	237	41.9%	43.6	conditions originating in perinatal period (760-7	159	36.9%	30.8
congenital anomalies (740-759)	143	25.3%	26.3	congenital anomalies (740-759)	118	27.4%	22.8
sudden death, cause unknown (798)	30	5.3%	5.5	sudden death, cause unknown (798)	25	5.8%	4.8
motor vehicle traffic accidents* (E810-E819)	13	2.3%	2.4	lymphatic & haematopoietic cancer (200-208)	9	2.1%	1.7
drowning (E910)	8	1.4%	1.5	drowning (E910)	9	2.1%	1.7
homicide (E960-E969)	8	1.4%	1.5	motor vehicle traffic accidents (E810-E819)	9	2.1%	1.7
lymphatic & haematopoietic cancer (200-208)	7	1.2%	1.3	pneumonia organism unspecified (486)	6	1.4%	1.2
cancer of othe endocrine glands (194)	6	1.1%	1.1	homicide (E960-E969)	4	0.9%	0.8
all other causes	114	20.1%	21.0	all other causes	92	21.3%	17.8
Total, All causes	566	100.0%	104.1	Total, All causes	431	100.0%	83.4

Age 7-19

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
motor vehicle traffic accidents (E810-E819)	75	26.4%	7.6	motor vehicle traffic accidents (E810-E819)	40	26.1%	4.3
Suicide (E950-E959)	44	15.5%	4.5	Suicide (E950-E959)	14	9.2%	1.5
lymphatic & haematopoietic cancer (200-208)	16	5.6%	1.6	congenital anomalies (740-759)	14	9.2%	1.5
congenital anomalies (740-759)	11	3.9%	1.1	brain cancer (191)	9	5.9%	1.0
homicide (E960-E969)	11	3.9%	1.1	homicide (E960-E969)	5	3.3%	0.5
muscular dystrophies & other myopathies (359)	11	3.9%	1.1	lymphatic & haematopoietic cancer (200-208)	4	2.6%	0.4
drowning (E910)	10	3.5%	1.0	accidental mechanical suffocation (913)	3	2.0%	0.3
brain cancer (191)	5	1.8%	0.5	cerebral degenerations in childhood (330)	3	2.0%	0.3
all other causes	101	35.6%	10.3	all other causes	61	39.9%	6.5
Total, All causes	284	100.0%	28.8	Total, All causes	153	100.0%	16.4

Age 20-44

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
suicide & self inflicted injury (E950-E959)	417	5.6%	18.9	female breast cancer	157	3.3%	7.1
AIDS (040)	298	4.0%	13.5	suicide & self inflicted injury (E950-E959)	129	2.7%	5.8
motor vehicle traffic accidents (E810-E819)	267	3.6%	12.1	motor vehicle traffic accidents (E810-E819)	117	2.5%	5.3
ischemic heart disease (410-414)	184	2.5%	8.4	lung cancer (162)	55	1.2%	2.5
accidental poisoning (E860-E869)	106	1.4%	4.8	lymphatic & haematopoietic cancer (200-208)	54	1.1%	2.4
lymphatic & haematopoietic cancer (200-208)	82	1.1%	3.7	stroke (430-438)	43	0.9%	1.9
cirrhosis & chronic liver diseases (571)	60	0.8%	2.7	ischemic heart disease (410-414)	38	0.8%	1.7
homicide (E960-E969)	53	0.7%	2.4	cervical cancer (180)	32	0.7%	1.5
all other causes	1237	16.7%	56.2	all other causes	695	14.7%	31.5
Total, All causes	2704	100.0%	122.8	Total, All causes	1320	100.0%	59.8

Age 45-64

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
ischemic heart disease (410-414)	1754	23.7%	150.5	female breast cancer (174)	945	20.1%	79.2
lung cancer (162)	879	11.9%	75.4	lung cancer (162)	609	12.9%	51.0
lymphatic & haematopoietic cancer (200-208)	303	4.1%	26.0	ischemic heart disease (410-414)	513	10.9%	43.0
colorectal cancer (153-154)	283	3.8%	24.3	colorectal cancer (153-154)	194	4.1%	16.3
stroke (430-438)	249	3.4%	21.4	lymphatic & haematopoietic cancer (200-208)	192	4.1%	16.1
cirrhosis & chronic liver diseases (571)	236	3.2%	20.2	stroke (430-438)	185	3.9%	15.5
suicide & self inflicted injury (E950-E959)	230	3.1%	19.7	COPD (490-496)	120	2.5%	10.1
diabetes mellitus (250)	199	2.7%	17.1	diabetes mellitus (250)	114	2.4%	9.6
all other causes	3279	44.2%	281.3	all other causes	1840	39.0%	154.1
Total, All causes	7412	100.0%	635.8	Total, All causes	4712	100.0%	394.8

Table (4) - continued

Age 65-74

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
ischemic heart disease (410-414)	2665	14.2%	721.3	ischemic heart disease (410-414)	1195	4.8%	274.1
lung cancer (162)	1315	7.0%	355.9	lung cancer (162)	721	2.9%	165.4
stroke (430-438)	544	2.9%	147.2	female breast cancer (174)	494	2.0%	113.3
COPD (490-496)	482	2.6%	130.5	stroke (430-438)	456	1.8%	104.6
colorectal cancer (153-154)	427	2.3%	115.6	COPD (490-496)	310	1.3%	71.1
prostate cancer (185)	373	2.0%	101.0	colorectal cancer (153-154)	279	1.1%	64.0
diabetes mellitus (250)	346	1.8%	93.7	lymphatic & haematopoietic cancer (200-208)	265	1.1%	60.8
lymphatic & haematopoietic cancer (200-208)	328	1.7%	88.8	diabetes mellitus (250)	247	1.0%	56.6
all other causes	4150	22.1%	1123.3	all other causes	2996	12.1%	687.1
Total, All causes	10630	100.0%	2877.2	Total, All causes	6963	100.0%	1596.9

Age 75 & over

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	age spec rate	cause of death (ICD-9 code)	deaths	% to total	age spec rate
ischemic heart disease (410-414)	4683	24.9%	2286.5	ischemic heart disease (410-414)	6161	25.0%	1779.4
stroke (430-438)	1593	8.5%	777.8	stroke (430-438)	2866	11.6%	827.7
COPD (490-496)	1183	6.3%	577.6	pneumonia (480-486)	1288	5.2%	372.0
lung cancer (162)	1066	5.7%	520.5	psychoses (290-299)	928	3.8%	268.0
pneumonia (480-486)	996	5.3%	486.3	COPD (490-496)	896	3.6%	258.8
prostate cancer (185)	858	4.6%	418.9	arteries, arterioles, & capill diseases (440-448)	768	3.1%	221.8
arteries, arterioles, & capill diseases (440-448)	568	3.0%	277.3	diabetes mellitus (250)	763	3.1%	220.4
diabetes mellitus (250)	563	3.0%	274.9	female breast cancer (174)	642	2.6%	185.4
all other causes	7261	38.7%	3545.2	all other causes	10367	42.0%	2994.1
Total, All causes	18771	100.0%	9165.0	Total, All causes	24679	100.0%	7127.6

All ages

Male				Female			
cause of death (ICD-9 code)	deaths	% to total	crude rate	cause of death (ICD-9 code)	deaths	% to total	crude rate
ischemic heart disease (410-414)	9286	23.0%	169.7	ischemic heart disease (410-414)	7908	20.7%	140.4
lung cancer (162)	3306	8.2%	60.4	stroke (430-438)	3553	9.3%	63.1
stroke (430-438)	2435	6.0%	44.5	lung cancer (162)	2023	5.3%	35.9
COPD (490-496)	1808	4.5%	33.0	female breast cancer (174)	1938	5.1%	34.4
pneumonia (480-486)	1327	3.3%	24.3	pneumonia (480-486)	1509	3.9%	26.8
prostate cancer (185)	1329	3.3%	24.3	COPD (490-496)	1338	3.5%	23.8
colorectal cancer (153-154)	1195	3.0%	21.8	diabetes mellitus (250)	1144	3.0%	20.3
lymphatic & haematopoietic cancer (200-208)	1157	2.9%	21.1	colorectal cancer (153-154)	1052	2.7%	18.7
all other causes	18525	45.9%	338.5	all other causes	17793	46.5%	315.9
Total, All causes	40368	100.0%	737.7	Total, All causes	38258	100.0%	679.3

Source of Data: Ontario Office of Registrar General.

Distributor: HELPS, Death Database 1996-1999, Public Health Branch, Ministry of Health and Long-Term Care

Note: (1) The data presented and analysed in this paper cover only the deaths that occurred in Ontario to Ontario residents.

(2) Cause of death is the underlying cause of death coded with the use of ICD-9 as shown in the Death Certificate.

(3) "age spec rate" stands for the age specific death rate, which is the number of deaths caused by a disease per 100,000 population of the same age group, sex specific.

(4) "Crude death rate" is the number of deaths caused by a disease per 100,000 population of all age groups, sex specific.

(5) The population used as denominators for calculation of rates are retrieved from the "Updated postcensal estimates 1998 to 2000" series which was released by Statistics Canada in October 2001.

(6) * "Accidents" is used to correspond to the external causes of the International Classification of Diseases, injuries and Causes of Death, Ninth Revision (ICD-9). Currently, we consider motor vehicle collisions to be preventable, not simply accidents.

Table (5) Comparison of Age Specific Death Rates, Crude Death Rates, and Age Standardized Death Rates, Ontario, 1996-1999

		1996	1997	1998	1999
All causes of death					
Male	age 0-6	104.1	94.3	85.1	90.8
	age 7-19	28.8	33.1	29.2	28.4
	age 20-44	122.8	110.9	108.0	102.7
	age 45-64	635.8	617.8	580.1	573.2
	age 65-74	2877.2	2751.2	2688.2	2591.0
	age 75&over	9165.0	9029.5	8878.7	8850.4
	all ages (crude rate)	737.7	728.1	719.9	721.7
	all ages (SRATE)	807.1	783.1	762.3	751.2
Female	age 0-6	83.4	75.4	74.9	80.8
	age 7-19	16.4	17.7	17.3	14.6
	age 20-44	59.8	54.3	54.3	54.7
	age 45-64	394.8	374.8	369.7	359.6
	age 65-74	1596.9	1580.7	1562.4	1486.9
	age 75&over	7127.6	7072.8	6950.6	6948.5
	all ages (crude rate)	679.3	679.1	680.6	684.3
	all ages (SRATE)	549.0	538.6	530.6	523.7

Selected Leading Causes of Death

motor vehicle traffic accidents (E810-E819)

Male	age 0-6	2.4	1.8	1.7	1.9
	age 7-19	7.6	8.1	4.9	8.2
	age 20-44	12.1	10.8	11.2	11.2
Female	age 0-6	1.7	1.6	1.0	1.2
	age 7-19	4.3	5.2	3.9	3.5
	age 20-44	5.3	3.3	3.8	3.8

suicide & self inflicted injury (E950-E959)

Male	age 7-19	4.5	4.8	4.6	4.5
	age 20-44	18.9	15.1	17.2	17.1
	age 45-64	19.7	17.4	20.6	18.3
Female	age 7-19	1.5	1.2	1.8	0.8
	age 20-44	5.8	4.4	3.6	4.5
	age 45-64				

Table (5) - continued

		1996	1997	1998	1999
ischemic heart disease (410-414)					
Male	age 20-44	8.4	7.8	7.4	7.6
	age 45-64	150.5	134.1	127.5	126.1
	age 65-74	721.3	641.1	636.2	605.9
	age 75&over	2286.5	2183.0	2196.8	2199.3
Female	age 20-44	1.7	1.5	1.2	1.8
	age 45-64	43.0	35.6	33.9	32.5
	age 65-74	274.1	281.5	257.3	262.4
	age 75&over	1779.4	1652.5	1669.3	1593.7
lung cancer (162)					
Male	age 20-44	2.1	2.1	2.3	2.1
	age 45-64	75.4	68.8	68.6	67.2
	age 65-74	355.9	331.3	339.8	337.9
	age 75&over	520.5	495.9	492.4	528.2
Female	age 20-44	2.5	1.8	2.7	1.9
	age 45-64	51.0	43.0	46.8	48.1
	age 65-74	165.4	160.2	176.9	173.3
	age 75&over	184.3	189.3	215.1	229.4
lymphatic & haematopoietic cancer (200-208)					
Male	age 0-6	1.3	0.4	1.3	1.1
	age 7-19	1.6	1.2	1.8	1.2
	age 20-44	3.7	3.5	3.9	4.2
	age 45-64	26.0	21.3	21.8	23.8
	age 65-74	88.8	91.7	98.5	91.5
Female	age 0-6	1.7	0.6	1.8	1.8
	age 7-19	0.4	1.6	1.0	0.4
	age 20-44	2.4	2.6	2.5	2.5
	age 45-64	16.1	16.7	15.8	12.9
	age 65-74	60.8	54.1	54.9	54.2

Note: For the various age groups, age specific rates are per 100,000 population of the relevant age groups. For the all ages group, the crude death rate is a number of deaths per 100,000 population of all ages, and the age standardized death rate (SRATE) is the number of deaths per 100,000 standard population (1991 Canada population, both sexes).

Table 6A Population Estimates by Age and Sex, Ontario, July 1, 1996 to 1999

Area Name	Year	Level	Sex	Total	age0to6	age7to19	age20to44	age45to64	age65to74	age75+
Ontario Total	1996	PD	male	5,470,272	543,668	985,136	2,201,379	1,165,822	369,456	204,811
Ontario Total	1997	PD	male	5,546,221	541,950	997,806	2,218,582	1,198,395	375,147	214,341
Ontario Total	1998	PR	male	5,616,047	533,537	1,015,178	2,229,845	1,233,445	379,855	224,187
Ontario Total	1999	PR	male	5,682,313	523,374	1,029,719	2,241,540	1,270,879	382,405	234,396
Ontario Total	1996	PD	female	5,630,604	516,520	932,543	2,205,617	1,193,663	436,014	346,247
Ontario Total	1997	PD	female	5,703,269	514,697	944,496	2,217,485	1,229,072	437,706	359,813
Ontario Total	1998	PR	female	5,770,086	507,229	960,373	2,223,042	1,266,929	438,759	373,754
Ontario Total	1999	PR	female	5,834,991	497,662	974,713	2,228,519	1,308,710	437,417	387,970
Ontario Total	1996	PD	both	11,100,879	1,060,188	1,917,679	4,406,996	2,359,485	805,470	551,058
Ontario Total	1997	PD	both	11,249,490	1,056,647	1,942,302	4,436,067	2,427,467	812,853	574,154
Ontario Total	1998	PR	both	11,386,133	1,040,766	1,975,551	4,452,887	2,500,374	818,614	597,941
Ontario Total	1999	PR	both	11,517,304	1,021,036	2,004,432	4,470,059	2,579,589	819,822	622,366

Source: Updated postcensal estimates 1996 to 2000 series. Released by StatCan on October 2001.
 Note: PD =final postcensal estimate
 PR = updated postcensal estimate

Table 6B

Standard Populations Used for the Calculation of Age standardized Death Rates

	Canada 1991 Census	% to total
Both Sexes		
Age 0 to 6	2,734,255	9.7%
Age 7 to 19	5,010,738	17.8%
Age 20 to 44	11,719,115	41.7%
Age 45 to 64	5,442,534	19.4%
Age 65 to 74	1,918,570	6.8%
Age 75 & over	1,292,420	4.6%
All ages	28,117,632	100.0%

Source: 1991 Census data, released by StatCan in 1992.

Summary of Reportable Diseases in Ontario - June, 2002

Health Units by Region	Population 2000	AIDS	Campylo.	Chicken-pox	Chlamydia	Enceph./ Meningitis	GAS	Gonorrhea
Algoma	125,109		1	33	15			
North Bay	93,505			49	8		1	
Northwestern	91,920		5	13	15	1		
Porcupine	93,680		1		4			
Sudbury	199,619		2	1	24			
Thunder Bay	158,698		5		12			1
Timiskaming	37,721				3			
Total - Northern	800,252		14	96	81	1	1	1
Eastern Ontario	194,945	1	6		10			1
Hastings & Prince Edward	159,088		4	17	7			
Kingston, Frontenac & Lennox	180,225				19	2	3	
Leeds, Grenville & Lanark	163,143		3				2	
Ottawa	779,274		30	238	88	2	2	22
Renfrew	101,131				2			
Total- Eastern	1,577,806	1	43	255	126	4	7	23
Durham	512,271		19		51	1	1	6
Haliburton-Kawartha	168,120		7		7			1
Muskoka-Parry Sound	86,218		2	10	1		1	
Peel	1,008,163		41		91	1	2	12
Peterborough	128,881		7		19			
Simcoe	377,405		10	142	28	1		1
Toronto - total	2,542,844	2	126	181	521	4	10	116
<i>North</i>	627,021		27	24	112		4	19
<i>South</i>	688,584	1	56	38	185	1	2	58
<i>West</i>	509,302	1	23	19	138	3		23
<i>East</i>	717,937		20	100	86		4	16
York	724,969		29	85	26	3	4	1
Total - Central East	5,548,871	2	241	418	744	10	18	137
Grey Bruce	157,664		3	2	10	1		
Elgin-St. Thomas	84,182		5	39	1			
Huron	61,097		1	9	2			
Chatham-Kent	112,897		8	15	7			
Lambton	131,643				10			1
Middlesex-London	412,976		11		26	5		8
Oxford	102,561		5		2			
Perth	75,238		6	11	3	1		
Windsor-Essex	381,672		50		44	1		2
Total - Southwest	1,519,930		89	76	105	8		11
Brant	126,481		8	57	16			
Haldimand-Norfolk	109,536		1	22	2			
Halton	375,705		18		2	1		
Hamilton	498,553	1	10	74	62	7	1	9
Niagara	423,600		14	320	15		1	5
Waterloo	446,833		10		47		1	5
Wellington-Dufferin-Guelph	241,777		7	27	12	1		1
Total - Central West	2,222,485	1	68	500	156	9	3	20
June 2002	11,669,344	4	455	1345	1212	32	29	192
* Total YTD 2002	-	34	1782	9391	8436	185	222	1366
* Total YTD 2001	-	66	1827	7595	8132	231	206	1459

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* Adjusted for deletions and late reports.

Summary of Reportable Diseases in Ontario - June, 2002

Health Units by Region	Population 2000	PPNG	Hepatitis A	Hepatitis B	Hepatitis C	Hib	Influenza	Measles	Meningococcal
Algoma	125,109				4				
North Bay	93,505				1				
Northwestern	91,920				3				
Porcupine	93,680				1	1			
Sudbury	199,619				8				
Thunder Bay	158,698				3				1
Timiskaming	37,721								
Total - Northern	800,252				20	1			1
Eastern Ontario	194,945				2				
Hastings & Prince Edward	159,088								
Kingston, Frontenac & Lennox	180,225				1				
Leeds, Grenville & Lanark	163,143				9		1		
Ottawa	779,274	2			25				
Renfrew	101,131				1				
Total- Eastern	1,577,806	2			38		1		
Durham	512,271								1
Haliburton-Kawartha	168,120				6				
Muskoka-Parry Sound	86,218				1				
Peel	1,008,163				32				
Peterborough	128,881				7				1
Simcoe	377,405	1			12				
Toronto - total	2,542,844	6	1	2	134		4		2
<i>North</i>	<i>627,021</i>	<i>1</i>		<i>1</i>	<i>34</i>				<i>1</i>
<i>South</i>	<i>688,584</i>	<i>2</i>		<i>1</i>	<i>51</i>		<i>1</i>		<i>1</i>
<i>West</i>	<i>509,302</i>	<i>1</i>	<i>1</i>		<i>31</i>				
<i>East</i>	<i>717,937</i>	<i>2</i>			<i>18</i>		<i>3</i>		
York	724,969		1						
Total - Central East	5,548,871	7	2	2	192		4		4
Grey Bruce	157,664				11				
Elgin-St. Thomas	84,182				5				
Huron	61,097				1				1
Chatham-Kent	112,897								
Lambton	131,643				2				
Middlesex-London	412,976				16				
Oxford	102,561								1
Perth	75,238				2				
Windsor-Essex	381,672								
Total - Southwest	1,519,930				37				2
Brant	126,481								1
Haldimand-Norfolk	109,536								
Halton	375,705				8				
Hamilton	498,553			1	14				
Niagara	423,600				18				1
Waterloo	446,833								
Wellington-Dufferin-Guelph	241,777			1	2				
Total - Central West	2,222,485			2	42				2
June 2002	11,669,344	9	2	4	329	1	5		9
* Total YTD 2002	-	104	49	50	2,386	4	2161		34
* Total YTD 2001	-	97	82	96	2,752	2	762	6	68

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Summary of Reportable Diseases in Ontario - June, 2002

Health Units by Region	Population 2000	Mumps	Pertussis	Rubella	Salmon.	Shigellosis	Syphilis (Prim/Sec)	VTEC
Algoma	125,109		3		1			1
North Bay	93,505				3			
Northwestern	91,920		1		2			2
Porcupine	93,680							
Sudbury	199,619		2		1			1
Thunder Bay	158,698		1					
Timiskaming	37,721				1			
Total - Northern	800,252		7		8			4
Eastern Ontario	194,945		3		4			
Hastings & Prince Edward	159,088				2			1
Kingston, Frontenac & Lennox	180,225	1	1					
Leeds, Grenville & Lanark	163,143		1		6			1
Ottawa	779,274		2		4	10	1	3
Renfrew	101,131		1					
Total- Eastern	1,577,806	1	8		16	10	1	5
Durham	512,271		1		9	1		1
Haliburton-Kawartha	168,120				1			1
Muskoka-Parry Sound	86,218				1			
Peel	1,008,163	1	3		16	10		3
Peterborough	128,881				2			
Simcoe	377,405				2			
Toronto - total	2,542,844		4		56	17	6	2
<i>North</i>	627,021		1		21	1	1	
<i>South</i>	688,584		1		12	7	5	
<i>West</i>	509,302		1		12	8		2
<i>East</i>	717,937		1		11	1		
York	724,969		3		15	2		3
Total - Central East	5,548,871	1	11		102	30	6	10
Grey Bruce	157,664							
Elgin-St. Thomas	84,182				1			
Huron	61,097				1			
Chatham-Kent	112,897		1					1
Lambton	131,643							
Middlesex-London	412,976				3			
Oxford	102,561				1	1		
Perth	75,238		2					
Windsor-Essex	381,672				2	1		
Total - Southwest	1,519,930		3		8	2		1
Brant	126,481				1			
Haldimand-Norfolk	109,536				1			
Halton	375,705		1		5			1
Hamilton	498,553				1	2		2
Niagara	423,600		1		8			3
Waterloo	446,833				1	1		1
Wellington-Dufferin-Guelph	241,777		1		7			1
Total - Central West	2,222,485		3		24	3		8
June 2002	11,669,344	2	32		158	45	7	28
* Total YTD 2002	-	8	172	1	991	659	43	103
* Total YTD 2001	-	1	228	15	1149	122	8	135

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