

Death rates are key indicators of the underlying state of the health of a population.

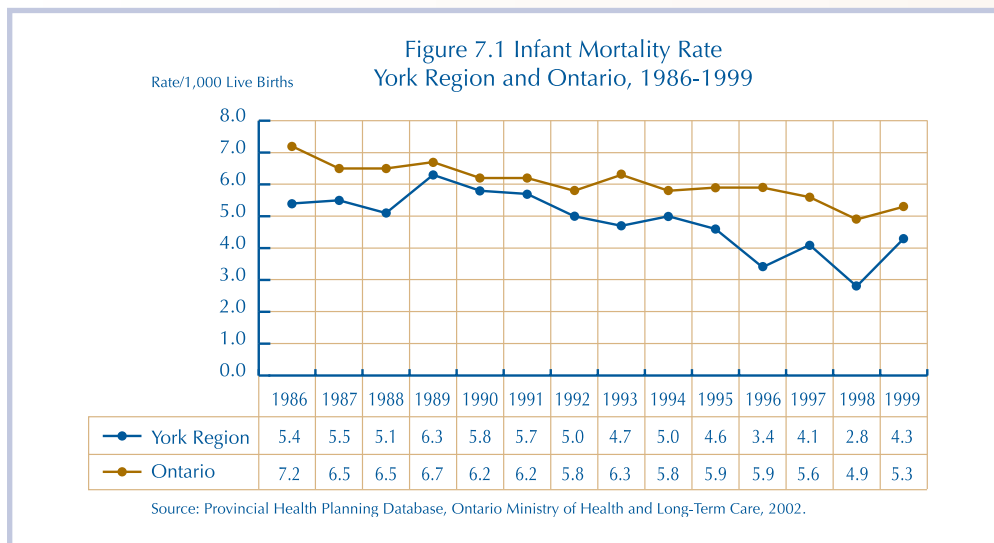
Infant and Perinatal Mortality Rates

Infant Mortality

Infant mortality is a good indicator of the level of economic and social development in a region. A low infant mortality rate reflects a society with good nutrition, education and health care programs and a relatively healthy physical and socio-economic environment.^{70,71}

The infant mortality rate (IMR) is described as the number of infant deaths (under one year of age) per 1,000 live births. The IMR includes early neonatal (0 to 6 days), late neonatal (7 to 27 days) and post-neonatal deaths (28 days to 11 months).

Infant mortality rates in Canada have declined over the last several decades, and are among the lowest in the world.⁷² Since 1986, York Region's infant mortality rate has been consistently lower than the provincial rate (Figure 7.1).



At a Glance

The infant mortality rate in York Region has been consistently lower than the provincial rate since 1986.

The mortality rate from all causes among York Region residents was the lowest in Ontario.

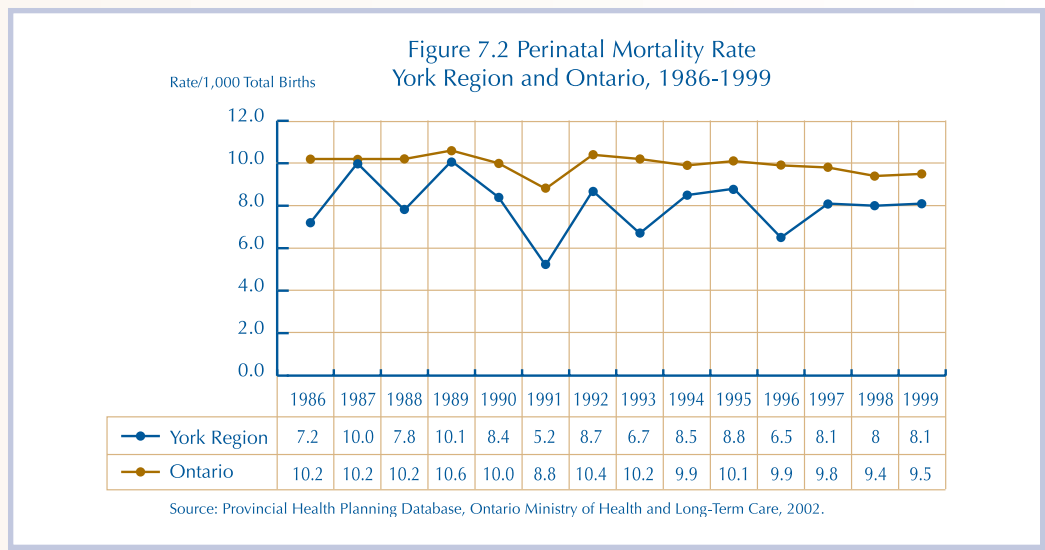
The major causes of death in York Region are cardiovascular diseases and cancer.





Perinatal Mortality

The perinatal mortality rate (PMR) is defined as the probability of an apparently viable fetus being born dead or dying during the first week after birth. In 1999, the PMR for York Region was 8.1 per 1,000 total births, which is lower than the Ontario rate of 9.5 per 1,000 total births (Figure 7.2)

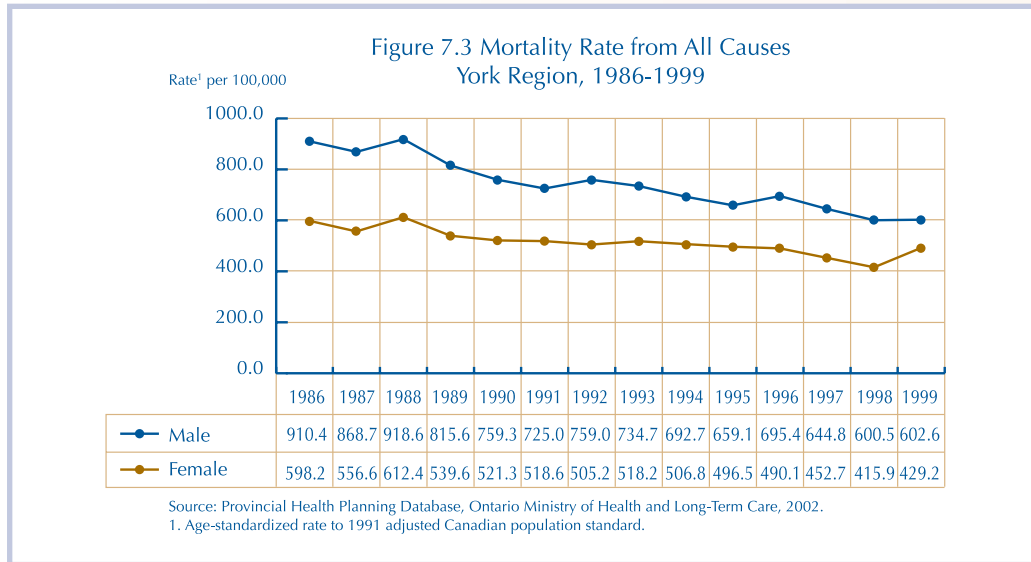


Deaths

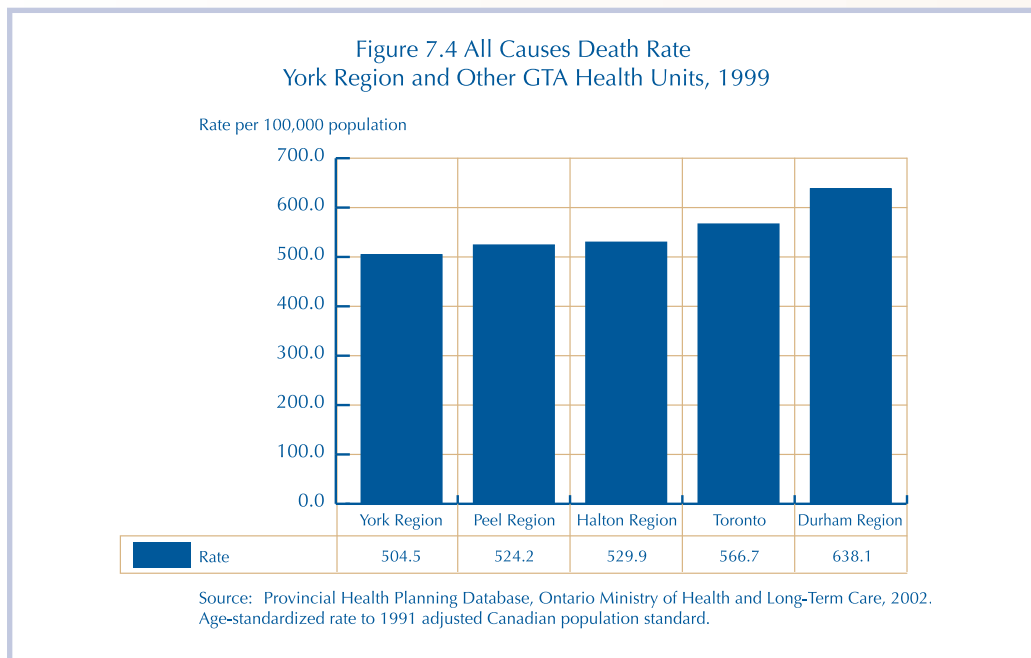
Deaths From All Causes

The death rate in a given population can reflect many different factors including the age composition and overall health of the population, as determined by factors such as socio-economic conditions, the quality of the health care system, the burden of illness, the state of the physical environment, and injury rates.

Because of both population growth and the increase in the elderly population, the number of deaths among York Region residents is growing steadily each year. However, the death rate has fallen by 34% for men and 28% for women (Figure 7.3). This is due to such factors as the relatively high health status of the population and evolving improvements in the early detection and treatment of illness.

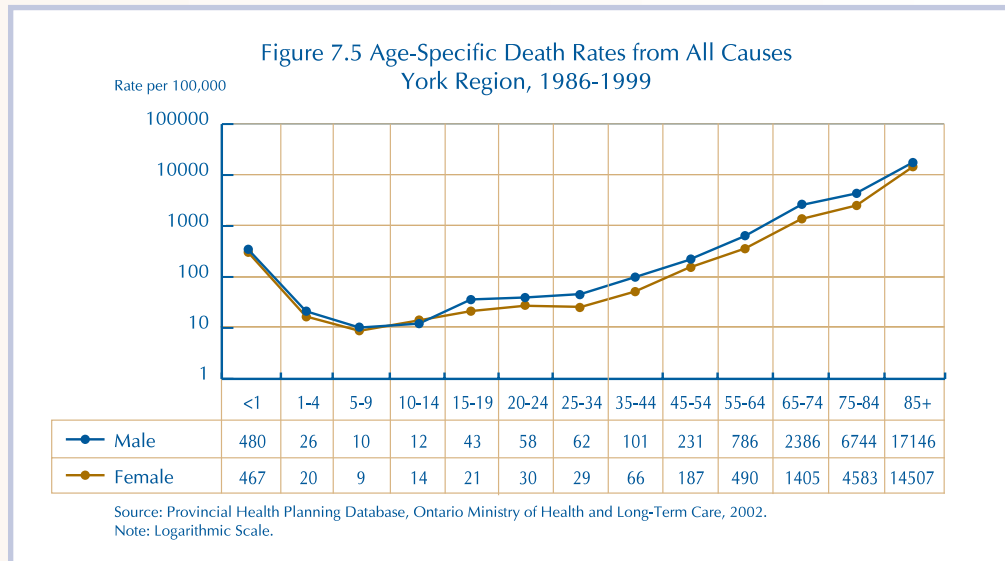


The death rate from all causes among York Region residents was the lowest across the Greater Toronto Area (GTA) as well as Ontario, according to the latest available data (1999) (Figure 7.4). This trend can be traced to lower frequencies of risk factors, such as smoking, which trigger many of the major causes of death, combined with the presence of other factors associated with better levels of health, such as higher income and education.





The age-specific death rate shows how many people die (per 100,000 population) in a particular age group. The mortality rates for both males and females are roughly equal at birth and then decline in early childhood. Male death rates are generally higher than female rates after age 15 primarily because of deaths among young men involved in motor vehicle collisions. Older age groups have more deaths and, into the senior years, the male death rate remains higher than the rate for females (Figure 7.5).



As noted in the section on population in Chapter 2, the proportion of older people in the York Region population is expected to increase. This will raise the overall death rate and increase the frequency of age-related diseases in the future.

Major Causes of Death

The major causes of death in York Region are cardiovascular or circulatory system diseases (mainly "heart attacks" and strokes), which accounted for 939 deaths, or 33% of all deaths, in 1999. The other major causes of death are cancer (32%), respiratory diseases (9%), injuries and poisonings (5%), and endocrine diseases (4%). Together, cardiovascular diseases, cancers and respiratory diseases accounted for 74% of all deaths in 1999. The major causes of death for males and females can be found in Tables 7.1 and 7.2.



Did You Know?

Large decreases in York Region death rates from all causes for the following age groups have occurred between 1986-1999: age under 19 (53%), age 20-44 (20%), age 45-64 (50%) and age 65 plus (30%).

York Region death rates from all causes were the lowest in the province over the 10-year period 1990-1999 for each of the above age groups.

**Table 7.1 Major Causes of Death
York Region Males, 1999**

Top 15 Causes of Death Among Males
Proportion of Deaths by Selected Leading Causes
York Region and Ontario, 1999.

Rank	Cause of Death	York Number	York Percent	Ontario Percent
1	Ischemic heart disease	257	18.1	22.5
2	Lung cancer	121	8.5	8.4
3	Stroke	94	6.6	5.8
4	All other heart disease	75	5.3	4.3
5	Pneumonia	63	4.4	3.7
6	Lymphoma and leukemia	59	4.2	3.0
7	Colorectal cancer	52	3.7	3.1
8	Diabetes	47	3.3	3.0
9	Chronic lung disease	42	3.0	4.4
10	Prostate cancer	40	2.8	3.2
11	Suicide	28	2.0	1.9
12	Artery disease	24	1.7	2.4
13	Accidental falls	22	1.6	1.2
14	Chronic liver disease and cirrhosis	20	1.4	1.4
15	Motor vehicle collisions	19	1.3	1.4
	All other causes	456	32.1	30.3
	All Cause Total	1419	100.0	100.0

Source: Provincial Health Planning Database, Ontario Ministry of Health and Long-Term Care, 2002

**Table 7.2 Major Causes of Death
York Region Females, 1999**

Top 15 Causes of Death Among Females
Proportion of Deaths by Selected Leading Causes
York Region and Ontario, 1999.

Rank	Cause of Death	York Number	York Percent	Ontario Percent
1	Ischemic heart disease	213	15.2	19.5
2	Stroke	130	9.3	8.7
3	Lung cancer	92	6.6	5.8
4	All other heart disease	84	6.0	5.8
5	Female breast cancer	75	5.4	4.5
6	Pneumonia	75	5.4	4.3
7	Chronic lung disease	50	3.6	3.7
8	Colorectal cancer	49	3.5	2.8
9	Diabetes	49	3.5	3.1
10	Artery Disease	48	3.4	2.4
11	Psychoses	34	2.4	3.4
12	Lymphoma and leukemia	31	2.2	2.6
13	Accidental falls	16	1.1	1.7
14	Motor vehicle collisions	12	0.9	0.7
15	Skin cancer	9	0.6	0.4
	All other causes	433	30.9	30.6
	All Cause Total	1400	100.0	100.0

Source: Provincial Health Planning Database, Ontario Ministry of Health and Long-Term Care, 2002



The number one leading cause of death from 1986-1999 varied according to age group (Table 7.3). Among younger people age 15-24, injuries alone accounted for over half of all deaths.

Did You Know?

The number one leading cause of death by age group in York Region from 1986-1999:

- injuries for residents 1 to 34 years of age
- cancer for residents 35 to 69 years of age
- cardiovascular diseases for residents age 70 and over

Table 7.3 Number One Leading Cause of Death By Age Group
York Region, 1986-1999 Combined

Age Group	Number One Leading Cause	Number of Leading Cause Deaths	Number of Total Deaths	Percent of Total
1-4	Injuries	25	106	23.6
5-9	Injuries	15	58	25.9
10-14	Injuries	25	75	33.3
15-19	Injuries	108	185	58.4
20-24	Injuries	137	242	56.6
25-29	Injuries	87	248	35.1
30-34	Injuries	89	302	29.5
35-39	Cancer	164	459	35.7
40-44	Cancer	283	684	41.4
45-49	Cancer	408	848	48.1
50-54	Cancer	617	1,214	50.8
55-59	Cancer	797	1,591	50.1
60-64	Cancer	1,010	2,121	47.6
65-69	Cancer	1,331	2,958	45.0
70-74	Cardiovascular	1,287	3,645	35.3
75-79	Cardiovascular	1,770	4,447	39.8
80-84	Cardiovascular	2,100	4,718	44.5
85+	Cardiovascular	3,799	7,693	49.4

Source: Provincial Health Planning Database, Ontario Ministry of Health and Long-Term Care, 2002

This chapter has outlined rates and patterns of death in various age groups in York Region. Chapter 6 (Reproductive Health) discusses issues related to infant and perinatal mortality rates, while causes of death for other age groups are discussed at length in several other chapters: Chapter 8 (Chronic Diseases), Chapter 9 (Injuries) and Chapter 10 (Infectious Diseases).