

Leading Causes of Child Mortality and Hospitalization in Peel



INTRODUCTION

This section provides an overview of the leading causes of mortality and hospitalization among children aged one to nine years and 10–19 years. Infant mortality (deaths under one year of age) is presented in the chapter titled *Infant Health—the First Year of Life* (see page 23).

Both mortality and hospitalization rates among children aged one to nine years and 10–19 years were much lower than rates for infants or adults. Due to the small number of deaths each year, mortality from selected causes was examined by combining the data for the period from 1986–1996. Data for hospitalization are presented for 1998, the most recent available year of data.

The hospitalization data here reflects the diagnosis at the time of discharge from a hospital and do not include diagnoses made in hospital emergency rooms, clinics or physicians' offices in which no hospital admission occurred. Hospital separations represent the number of episodes of hospitalization and not the number of children or youth hospitalized. A child hospitalized on numerous occasions would have been counted once for each episode according to the discharge diagnosis.

LEADING CAUSES OF MORTALITY—CHILDREN AGED 1–19 YEARS

Table 11.1—Number and Proportion of Deaths and Crude Death Rates by Leading Cause for Children Aged 1–9 and 10–19 Years, Region of Peel and Ontario, 1986–1996 Combined

Leading Cause	Age 1–9 Years				Age 10–19 Years			
	Peel Number	Peel Per Cent	Peel AAR*	Ontario AAR*	Peel Number	Peel Per Cent	Peel AAR*	Ontario AAR*
Injury and Poisoning (All)	61	30.0	5.3	8.3	179	58.5	14.6	21.3
Motor vehicle traffic collisions	23	11.3	2.0	3.2	101	33.0	8.3	11.1
Suicide	<5	NR	NR	NR	39	12.7	3.2	4.4
Other transport collisions†	<5	NR	NR	0.1	7	2.3	0.6	0.8
Homicide	5	2.5	0.4	0.5	6	2.0	0.5	1.0
Cancer (All)	36	17.7	3.1	3.7	41	13.4	3.4	4.0
Lymphatic and haematopoietic	17	8.4	1.5	1.3	21	6.9	1.7	1.7
Congenital Anomalies	27	13.3	2.4	2.9	16	5.2	1.3	1.3
Nervous System and Sense Organ Disorders	15	7.4	1.3	1.8	12	3.9	1.0	1.8
Respiratory System (All)	10	4.9	0.9	1.2	15	4.9	1.2	0.9
Asthma	<5	NR	NR	0.1	7	2.3	0.6	0.3
Circulatory System	7	3.4	0.6	0.1	8	2.6	0.7	1.2
All Other Causes	47	23.2	4.1	4.1	35	11.4	2.9	4.1
All Causes Total	203	100.0	17.7	22.6	306	100.0	25.0	34.6

* Average annual rate per 100,000.

† Includes railway, other road vehicle, water transport, air and space, and other vehicle collisions.

NR= Not released due to small numbers.

Sources: Ontario Mortality Database 1986–1996, distributed through HELPS (Health Planning System) by the Ontario Ministry of Health and Long-Term Care. Statistics Canada, Population Estimates and Projections, distributed by the Ontario Ministry of Health and Long-Term Care.

LEADING CAUSES OF HOSPITALIZATION—CHILDREN AGED 1–9 YEARS

Table 11.2—Number, Proportion and Crude Hospitalization Rate by Leading Cause for Children Aged 1–9 Years by Sex, Region of Peel and Ontario, 1998

Leading Cause	Males				Females			
	Peel Number	Peel Per Cent	Peel Rate*	Ontario Rate*	Peel Number	Peel Per Cent	Peel Rate*	Ontario Rate*
Respiratory System (All)	944	35.6	1405.2	1288.5	574	29.4	903.1	874.2
Asthma	405	15.3	602.9	461.0	234	12.0	368.2	257.8
Pneumonia/influenza	224	8.5	333.4	303.1	160	8.2	251.7	250.7
Injury and Poisoning (All)	304	11.5	452.5	462.3	202	10.3	317.8	326.2
Accidental fall	117	4.4	174.2	180.4	85	4.4	133.7	146.4
Accidental poisoning	28	1.1	41.7	42.7	16	0.8	25.2	30.1
Transport collisions [†]	22	0.8	32.7	27.1	10	0.5	15.7	14.8
Motor vehicle traffic collisions	18	0.7	26.8	32.7	20	1.0	31.5	21.7
Digestive System Diseases	274	10.3	407.9	385.0	229	11.7	360.3	295.3
Infectious and Parasitic Diseases	231	8.7	343.9	222.6	193	9.9	303.7	194.1
Endocrine, Nutritional and Metabolic Diseases and Immunity Disorders (All)	126	4.8	187.6	185.6	120	6.1	188.8	180.4
Diabetes	13	0.5	19.4	26.4	21	1.1	33.0	27.9
Disorders of Blood and Blood Forming Organs	90	3.4	134.0	91.7	67	3.4	105.4	71.5
Congenital Anomalies	82	3.1	122.1	161.5	66	3.4	103.8	110.7
Nervous System and Sense Organ Disorders	73	2.8	108.7	147.9	67	3.4	105.4	118.6
Diseases of the Skin and Subcutaneous Tissue	60	2.3	89.3	78.4	46	2.4	72.4	66.8
Musculoskeletal System and Connective Tissue (All)	46	1.7	68.5	70.8	38	1.9	59.8	54.4
Arthropathies	18	0.7	26.8	20.9	13	0.7	20.5	16.3
All Other Causes	420	15.8	625.2	655.3	352	18.0	553.8	558.5
All Causes Total	2650	100	3944.7	3749.7	1954	100	3074.3	2850.8

* Rate per 100,000 population.

[†] Includes railway, other road vehicle, water transport, air and space, and other vehicle collisions.

Sources: Canadian Institute for Health Information (CIHI) 1998, distributed by the Central East Health Information Partnership (CEHIP). Statistics Canada, Population Estimates and Projections distributed by the Ontario Ministry of Health and Long-Term Care.

LEADING CAUSES OF HOSPITALIZATION—CHILDREN AGED 10–19 YEARS

Table 11.3—Number, Proportion and Crude Hospitalization Rate by Leading Cause for Children Aged 10–19 Years by Sex, Region of Peel and Ontario, 1998

Leading Cause	Males				Females			
	Peel Number	Peel Per Cent	Peel Rate*	Ontario Rate*	Peel Number	Peel Per Cent	Peel Rate*	Ontario Rate*
Complications of Pregnancy (All)	NA	NA	NA	NA	490	26.4	762.1	1255.8
Normal delivery					53	2.9	82.4	161.9
Abortion					31	1.7	48.2	58.1
Injury and Poisoning (All)	326	22.5	479.7	632.9	192	10.4	298.6	382.4
Accidental fall	107	7.4	157.5	158.3	41	2.2	63.8	74.5
Suicide	48	3.3	70.6	64.8	89	4.8	138.4	182.8
Assault	29	2.0	42.7	47.7	0	0	0	11.1
Motor vehicle traffic collisions	27	1.9	39.7	86.5	29	1.6	45.1	58.5
Transport collisions [†]	19	1.3	28.0	48.0	6	0.3	9.3	22.7
Accidental poisoning	9	0.6	13.2	16.2	6	0.3	9.3	16.8
Digestive System Diseases	218	15.1	320.8	381.2	160	8.6	248.9	362.5
Respiratory System (All)	173	12.0	254.6	255.5	193	10.4	300.2	302.1
Asthma	49	3.4	72.1	69.9	63	3.4	98.0	91.5
Pneumonia/influenza	21	1.5	30.9	41.9	22	1.2	34.2	40.2
Mental Disorders (All)	148	10.2	217.8	303.5	214	11.5	332.9	507.0
Affective psychosis	27	1.9	39.7	59.6	61	3.3	94.9	116.3
Schizophrenia	18	1.2	26.5	33.5	14	0.8	21.8	23.2
Depression	13	0.9	19.1	26.1	22	1.2	34.2	59.6
Neurosis/anxiety	8	0.6	11.8	18.4	9	0.5	14.0	38.7
Musculoskeletal System and Connective Tissue (All)	81	5.6	119.2	130.4	80	4.3	124.4	152.8
Arthropathies	37	2.6	54.4	53.6	31	1.7	48.2	60.1
Genitourinary System Diseases	55	3.8	80.9	77.9	83	4.5	129.1	201.8
Disorders of Blood and Blood Forming Organs	49	3.4	72.1	48.1	47	2.5	73.1	51.5
Infectious and Parasitic Diseases	48	3.3	70.6	71.7	54	2.9	84.0	70.9
Nervous System and Sense Organ Disorders	47	3.2	69.2	89.1	47	2.5	73.1	85.3
Endocrine, Nutritional and Metabolic Diseases, and Immunity Disorders (All)	44	3.0	64.7	80.6	46	2.5	71.5	97.1
Diabetes	24	1.7	35.3	52.0	24	1.3	37.3	56.3
All Other Causes	258	17.8	379.7	409.0	247	13.3	384.2	463.3
All Cause Total	1447	100	2129.4	2479.8	1853	100	2882.2	3932.5

* Rate per 100,000 population.

NA= Not applicable.

[†] Includes railway, other road vehicle, water transport, air and space, and other vehicle collisions.

Sources: Canadian Institute for Health Information (CIHI) 1998, distributed by the Central East Health Information Partnership (CEHIP). Statistics Canada, Population Estimates and Projections distributed by Ontario Ministry of Health and Long-Term Care.

SUMMARY

Mortality

The average annual mortality rate between 1986 and 1996 for one to nine year olds and 10–19 year olds in Peel was lower than that of Ontario. The top three causes of death for both age groups were injuries and poisoning, cancer and congenital anomalies.

Hospitalization

In Peel in 1998, the top three causes of hospitalization among children aged one to nine years were respiratory system diseases, injury and poisoning, and digestive system diseases. Hospitalization rates for both males and females aged one to nine years were slightly higher than for Ontario.

In Peel in 1998, the top three causes of hospitalization for male children aged 10–19 years were injury and poisoning, digestive system diseases and respiratory system diseases for males. During the same year, the top three causes of hospitalization for female children aged 10–19 in Peel were complications of pregnancy, mental disorders and respiratory system diseases.

Hospitalization rates for males and females aged 10–19 years in Peel were lower than for Ontario.