



CANADA

Department of Health  
Population Health

# Vital Statistics Annual Report 2005





# *Vital Statistics* Annual Report 2005

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# Introduction

The Prince Edward Island Department of Health, Vital Statistics Division is responsible for the registration and certification of vital events through the administration of the *Vital Statistics Act*, *Marriage Act*, and *Change of Name Act*.



The registration of vital events in Canada dates back to the 1600s, when the earliest missionaries and explorers kept records of births and deaths. These records provided the governments of France and later Britain with valuable information on the conditions and populations of their settlements in the New World.



The collection of such information, combined with census taking, has evolved and has been one of the key contributors for compiling accurate demographic information on the population and has also aided in other activities such as taxation, and monitoring disease outbreaks, causes of death and the health of the population. The administration of vital statistics programs has been a responsibility of provincial and territorial governments since the late 1800s. In 1919 the system of vital statistics was expanded to provide information for analysis at the national level for health planning and research and for population estimates. Vital statistics programs have responded to societal changes and today many commonalities exist between the programs from province to province, as jurisdictions adapt national standards in areas of data collection, legislation and document security.



Over the years certificates issued as proof of birth, death or marriage began to be viewed as the primary identity document, one that provided citizens with proof of age and citizenship. As well, government looked to birth certificates as the proof required to obtain other key forms of identification, such as the Social Insurance Number, Medicare, passports and drivers' licence. The need for a secure identity document has increased, especially since 9/11 and the escalation of identity fraud. Vital statistics programs have responded by strengthening the security within their programs by improving issuance practices and the quality of the documents issued.





## Vital Event Data

The information presented in this report is summary data and is based on the legislated requirement for notification of live birth, stillbirth, death and marriage events which are reported to Vital Statistics. This information is used by government agencies, health planners, researchers and the general public. In order to maintain confidentiality, the information does not disclose personally identifiable data.

Live birth, stillbirth and death statistics in this report summarize events which occurred in the province of Prince Edward Island and includes residents and non-residents. The information does not include events that occurred outside the province to residents of the province. Marriage statistics summarize all events that occurred in the province to either residents or non-residents. Statistics Canada makes modifications for events which occur outside the province for residents of the province. The registration requirements for each type of event are outlined briefly as follows:

**Live Births:** The *Vital Statistics Act* prescribes the legal requirements for registering live births. Parents are responsible for filing a Statement of Live Birth within 30 days of the event. For births which occur in a hospital, nursing staff are appointed in accordance with the *Vital Statistics Act* and Regulations as division registrars. They are responsible for ensuring that the Statement of Live Birth is completed and returned to Vital Statistics. For births which occur outside a hospital, the medical practitioner or other person who assumes responsibility for the delivery of the child is responsible for providing a notice of birth within 72 hours after the birth.

**Stillbirths:** In the event of a stillbirth, the person responsible for registering the live birth is also responsible for completing the Registration of Stillbirth. In addition a physician or coroner is required to complete the medical certificate portion of the Registration of Stillbirth and provide it to the funeral director, who files it with Vital Statistics.



**Deaths:** The medical practitioner in attendance at the last illness of a deceased person or the coroner conducting the investigation into the death of a person is required to complete the Medical Certificate portion of the Registration of Death. In addition an informant provides the necessary information on the Registration of Death to the funeral director. The funeral director provides the completed Registration of Death to the division registrar to obtain a Burial Permit. The division registrar forwards the Burial Permit and the Registration of Death to Vital Statistics.



**Marriages:** The *Marriage Act* prescribes the requirements for individuals to marry, as well as the authorization of religious representatives to perform the solemnization of marriage. Vital Statistics is also responsible for recommending the appointment of issuers of Marriage Licences and to oversee their work. In 2005 the *Marriage Act* was amended to accommodate same sex marriage and the appointment of marriage commissioners for the purpose of performing civil marriage ceremonies.



Individuals who meet the legal requirements to marry and obtain a Marriage Licence can choose a civil ceremony performed by a judge of the Supreme Court, a designated justice of the peace, the prothonotary or the deputy prothonotary of the Supreme Court or a marriage commissioner, or a religious ceremony by a religious representative. Under the *Marriage Act*, Vital Statistics is required to license marriage commissioners for civil ceremonies and religious representatives of established religious denominations who request to perform religious marriage ceremonies.





# Methodology



## Sources

The sources of data for this report originate with the registration of births, deaths, stillbirths and marriages for the year 2005. These are based on information provided by parents, physicians, coroners, funeral directors, division registrars, religious representatives, representatives of the Supreme Court and Marriage Commissioners. This information is used to register vital events, to issue certificates of birth, death and marriage, for administrative purposes, to provide information for national and provincial statistics and for population estimates. Researchers and health planners also use this information for determining the population's health and health services.



The Registration of Live Birth or Stillbirth includes information on birth weight, gestation and abnormalities of the infant. The Medical Certificate of Death portion of the Registration of Death and the Registration of Stillbirth include information on the immediate cause of death or stillbirth, antecedent causes giving rise to the immediate cause, and other significant conditions contributing to the death or stillbirth. This information is provided to Health Statistics Division of Statistics Canada where it is processed by medically trained staff using the World Health Organization's International Classification of Diseases (ICD) coding scheme and returned to PEI Vital Statistics.



Since the early 1900s, the International Classification of Diseases (ICD) have been revised regularly in order to reflect advances in medical science and changes in diagnostic terminology. Coding according to the 10<sup>th</sup> revision (ICD-10) was implemented in January 2000. See Appendix A.



The population figures used to compile the rates are based on Statistics Canada population estimate for Prince Edward Island for the year 2005 (138,113).



All age groups are based on the standard five year groupings used by Statistics Canada. Age ranges are determined by the frequency of events. Cell counts with less than five individuals are not provided.

### Time Periods

This report pertains to events that occurred in the calendar year for 2005. All events occurred in Prince Edward Island, involving both residents and non-residents.





# Terms and Definitions

Symbols	< less than + plus
Population	Population figures used to determine rates were based on the 2005 population estimates produced by Statistics Canada
Births	Infants born alive (excluding stillbirths)
Birth Weight	The official weight of the infant usually obtained within an hour of birth. Low Birth Weight      Live births where the birth weight is less than 2,500 grams Normal Birth Weight      Live births from 2,500 to 4,499 grams High birth weight      Live births where the birth weight is 4,500 or more grams
Stillbirths	Fetal deaths of at least 500 grams in weight or at least 20 weeks gestation
Deaths	Excludes stillbirths
Infant deaths	Deaths under one year of age.
Neonatal deaths	Deaths under 28 days (four weeks) of age
Total Births	Live births and stillbirths
Gestational Period	Elapsed time between conception (or last menstrual period) and birth. <i>Preterm</i> is less than 37 weeks; <i>term</i> is 37 to 42 weeks; <i>postterm</i> is 42 or more weeks.



**ICD -10 Coding**

Codes established by the World Health Organization International Statistical Classification of Diseases which are applied to cause of death information submitted on a Registration of Death – 10<sup>th</sup> Revision which was put into effect by Vital Statistics on January 1, 2000



**Resident**

For the purpose of this report, resident means person(s) permanently residing in Prince Edward Island.



**Non-resident**

For the purpose of this report, non-resident means person(s) who do not normally reside in Prince Edward Island.



**Region**

Represents geographic areas that were formally known as health regions



**Neonatal deaths**

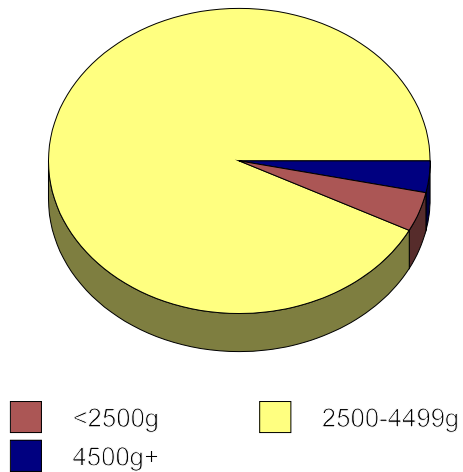
Deaths under 28 days (four weeks) of age

**Table 1**  
**Live Births by Age of Mother and Birth Weight of Child**

Birth Weight (in grams)	Age of Mother <sup>1</sup>					Total
	15-19	20-24	25-29	30-34	35+	
<2,500	<5	14	20	18	<5	
2,500-3,499	37	145	178	158	70	
3,500-4,499	37	126	194	187	84	
4,500+	<5	7	17	12	5	
<b>Total</b>						<b>1,314</b>

<sup>1</sup> Cases with age of mother less than 15 years have been excluded as they represent less than 1% of total cases.

**Live Births by Weight of Child**



**Table 2**  
**Live Births by Birth Weight of Child**

Birth Weight (in grams)	Total
<2,000	14
2,000-2,499	41
2,500-2,999	151
3,000-3,499	437
3,500-3,999	457
4,000-4,499	171
4,500+	43
<b>Total</b>	<b>1,314</b>

**Table 3**  
**Live Births by Gestation Period and Birth Weight of Child**

Birth Weight (in grams)	Gestation Period (Weeks)		
	<37 weeks	37+ weeks	
<2,500	38	17	
2,500-2,999	18	133	
3,000-3,499	7	430	
3,500-3,999	<5	454	
4,000+	<5	214	
<b>Total</b>	<b>66</b>	<b>1,248</b>	<b>1,314</b>

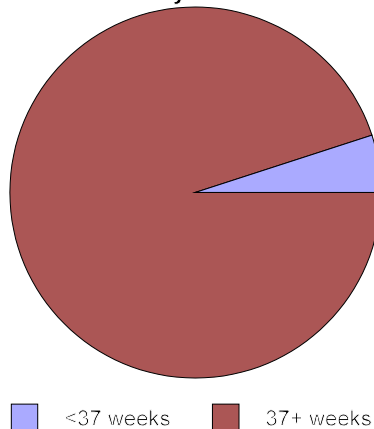
**Table 4**  
**Live Births by Age of Mother and County of Residence**

County of Residence	Age of Mother <sup>1</sup>					Total <sup>2</sup>
	15-19	20-24	25-29	30-34	35+	
Prince	27	129	155	114	47	472
Queens	42	122	204	211	91	670
Kings	8	41	52	46	19	166
<b>Total<sup>2</sup></b>	<b>77</b>	<b>292</b>	<b>411</b>	<b>371</b>	<b>157</b>	<b>1,308</b>

<sup>1</sup> Cases with age of mother less than 15 years have been excluded as they represent less than 1% of total

<sup>2</sup> Non-residents are not included in these figures as they represent less than 1% of total

**Live Births by Gestation Period**

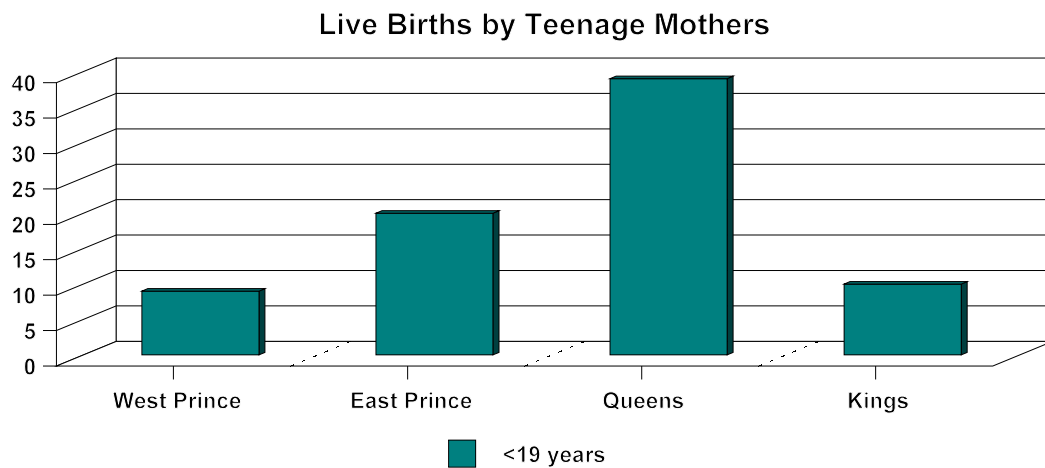


**Table 5**  
**Live Births by Age of Mother and Region of Residence**

Region of Residence	Age of Mother <sup>1</sup>					Total <sup>2</sup>
	15-19	20-24	25-29	30-34	35+	
West Prince	9	50	41	37	10	147
East Prince	20	81	119	82	39	341
Queens	39	116	198	204	86	643
Kings	10	44	53	48	22	177
<b>Total <sup>2</sup></b>	<b>78</b>	<b>291</b>	<b>411</b>	<b>371</b>	<b>157</b>	<b>1,308</b>

<sup>1</sup> Cases with age of mother less than 15 years have been excluded as they represent less than 1% of total.

<sup>2</sup> Non-residents are not included in these figures as they represent less than 1% of total.



**Table 6**  
**Births by Type**

Live Births	1,314
Stillbirths	7
<b>Total</b>	<b>1,321</b>

**Table 7**  
**Marriages by Type**

Heterosexual Marriages	882
Same Sex Marriages <sup>1</sup>	9
<b>Total</b>	<b>891</b>

<sup>1</sup>Same sex marriage legislation came into effect in August 2005.

**Table 8**  
**Marriages by Age of Spouse**

Age	Total
15-19	14
20-24	284
25-29	551
30-34	334
35-39	196
40-44	137
45-49	91
50+	175
<b>Total</b>	<b>1,782</b>

**Table 9**  
**Marriages by Marital Status**

	<b>Total</b>
<b>Both Spouses Never Married</b>	589
<b>Both Spouses Divorced</b>	105
<b>Both Spouses Widowed</b>	16
<b>Never Married and Divorced</b>	148
<b>Never Married and Widowed</b>	13
<b>Divorced and Widowed</b>	20
<b>Total</b>	<b>891</b>

**Table 10**  
**Marriages by Place of Residence**

<b>Both spouses Resident of PEI</b>	654
<b>Both spouses Non-Resident</b>	210
<b>Resident of PEI and Non-Resident</b>	27
<b>Total</b>	<b>891</b>



**Table 11**  
**Marriages by Type of Ceremony**

Civil Marriages	162
Religious Marriages	729
<b>Total</b>	<b>891</b>

**Table 12**  
**Marriages by Religious Denomination of Officiant**

Denomination	Total
Anglican	38
Baptist	35
Catholic	268
Eastern Orthodox	<5
Jehovah's Witness	<5
Jewish	<5
Lutheran	<5
Mennonite/Hutterite	<5
Pentecostal	12
Presbyterian	85
Salvation Army	<5
United Church	193
Other Christian	93
Other Non Christian	<5
<b>Total</b>	<b>729</b>

**Table 13**  
**Deaths by Sex, Age and County of Residence**

		Age						
	County of Residence	<25	25-44	45-59	60-74	75-84	85+	Total <sup>1</sup>
Female	Prince	<5	6	11	37	38	83	
	Queens	<5	<5	22	49	89	131	
	Kings	<5	<5	6	20	23	38	
Male	Prince	<5	10	20	47	42	30	
	Queens	<5	10	24	77	78	63	
	Kings	<5	<5	8	32	32	20	
<b>Total<sup>1</sup></b>		<b>10</b>	<b>34</b>	<b>91</b>	<b>262</b>	<b>302</b>	<b>365</b>	<b>1,064</b>

<sup>1</sup> Non-residents are not included as they represent less than 1% of total

**Table 14**  
**Deaths by Age and Region of Residence**

		Age						
Region		<25	25-44	45-59	60-74	75-84	85+	Total <sup>1</sup>
West Prince		<5	10	7	23	25	24	
East Prince		<5	6	26	65	60	100	
Queens		<5	12	44	120	156	166	
Kings		<5	6	14	54	61	75	
<b>Total<sup>1</sup></b>		<b>10</b>	<b>34</b>	<b>91</b>	<b>262</b>	<b>302</b>	<b>365</b>	<b>1,064</b>

<sup>1</sup> Non-residents are not included as they represent less than 1% of total

**Table 15**  
**Leading Cause of Death Categories<sup>1</sup>, by Age and Sex**

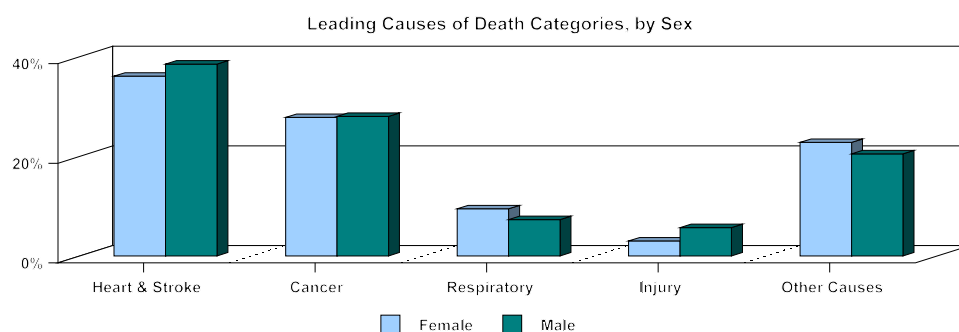
		Age							Total
		<20	20-34	35-49	50-64	65-74	75-84	85+	
Female	Heart and Stroke (all circulatory diseases)	<5	<5	<5	7	16	53	128	207
	Cancer (Malignant Neoplasms)	<5	<5	10	32	33	49	31	156
	Respiratory (all respiratory diseases)	<5	<5	<5	<5	9	13	27	53
	Injury (injury, poisons, accidents, suicide)	<5	<5	<5	<5	<5	<5	<5	17
	Other Causes	<5	<5	<5	7	22	32	60	128
Male	Heart and Stroke (all circulatory diseases)	<5	<5	11	29	41	65	48	195
	Cancer (Malignant Neoplasms)	<5	<5	7	30	41	48	16	142
	Respiratory (all respiratory diseases)	<5	<5	<5	<5	5	11	18	37
	Injury (injury, poisons, accidents, suicide)	<5	7	7	7	<5	<5	<5	29
	Other Causes	<5	<5	<5	17	25	26	27	104
		7	18	47	138	195	300	363	1,068

<sup>1</sup>These figures represent only deaths that have an ICD-10 code.

**Table 16**  
**Cause of Death<sup>1</sup>, by Sex and ICD-10 Chapter**

ICD 10 Code		Male	Female	Total	Unadjusted Rate/ 100,000
I100-I99	Heart and Stroke (all circulatory diseases)	195	207	402	291
C00-C97	Cancer (Malignant Neoplasms)	142	156	298	216
J00-J99	Respiratory (all respiratory diseases)	37	53	90	65
S00-Y98	Injury (injury, poisons, accidents, suicide)	29	17	46	33
K00-K93	Diseases of digestive system	15	25	40	29
E00-E90	Endocrine, nutritional, metabolic diseases	25	12	37	27
G00-G99	Diseases of nervous system	11	25	36	26
F00-F99	Mental and behavioural disorders	16	17	33	24
N00-N99	Diseases of genitourinary system	18	16	34	25
R00-R99	Ill defined	5	16	21	15
	Conditions not listed above	14	17	31	22
<b>Total<sup>1</sup></b>		<b>507</b>	<b>561</b>	<b>1,068</b>	<b>773</b>

<sup>1</sup>These figures represent only those deaths that have an ICD 10 code



**Table 17**  
**Live Births, Marriages and Deaths by Month**

<b>Month</b>	<b>Live Births</b>	<b>Marriages</b>	<b>Deaths</b>
January	96	5	96
February	97	16	100
March	141	21	100
April	104	20	79
May	121	58	71
June	100	102	82
July	121	210	88
August	113	196	82
September	114	116	96
October	88	91	101
November	90	22	88
December	129	34	93
<b>Total</b>	<b>1,314</b>	<b>891</b>	<b>1,076</b>

**Table 18**  
**Live Births and Deaths by County of Residence**

County of Residence	Live Births	Deaths
Prince	473	329
Queens	668	549
Kings	165	186
<b>Total<sup>1</sup></b>	<b>1,306</b>	<b>1,064</b>

<sup>1</sup> Non-residents are not included in these figures as they represent less than 1% of total

**Table 19**  
**Live Births and Deaths by Region of Residence**

County of Residence	Live Births	Deaths
West Prince	148	92
East Prince	341	259
Queens	641	500
Kings	176	213
<b>Total<sup>1</sup></b>	<b>1,306</b>	<b>1,064</b>

<sup>1</sup> Non-residents are not included in these figures as they represent less than 1% of total

# Appendix A

## List of 39 Selected Causes of Death

	Cause of Death	ICD-10 CODE
1	Tuberculosis	A16-A19
2	Syphilis	A50-A53
3	Human immunodeficiency virus (HIV) disease	B20-B24
	<b>Malignant neoplasms</b>	<b>C00-C97</b>
4	Malignant neoplasm of stomach	C16
5	Malignant neoplasms of colon, rectum and anus	C18-C21
6	Malignant neoplasm of pancreas	C25
7	Malignant neoplasms of trachea, bronchus and lung	C33-C34
8	Malignant neoplasm of breast	C50
9	Malignant neoplasms of cervix uteri, corpus uteri and ovary	C53-C56
10	Malignant neoplasm of prostate	C61
11	Malignant neoplasms of urinary tract	C64-C68
12	Non-Hodgkin's lymphoma	C82-C85
13	Leukemia	C91-C95
14	Other malignant neoplasms	C00-C15, C17, C22-C24, C26-C32, C37-C49, C51-C52, C57-C60, C62-C63, C69-C81, C88, C90, C96 -C97
15	Diabetes mellitus	E10-E14
16	Alzheimer's disease	G30
	<b>Major cardiovascular diseases</b>	<b>I00-I78</b>
	Diseases of heart	I00-I09, I11, I13, I20-I51
17	Hypertensive heart disease with or without renal disease	I11, I13
18	Ischemic heart diseases	I20-I25
19	Other diseases of heart	I00-I09, I26-I51
20	Essential (primary) hypertension and hypertensive renal disease	I10, I12
21	Cerebrovascular diseases	I60-I69

# Appendix A

## List of 39 Selected Causes of Death

22	Atherosclerosis	I70
23	Other diseases of circulatory system	I71-I78
24	Influenza and pneumonia	J10-J18
25	Chronic lower respiratory diseases	J40-J47
26	Peptic ulcer	K25-K28
27	Chronic liver disease and cirrhosis	K70, K73-K74
28	Nephritis, nephrotic syndrome and nephrosis	N00-N07, N17-N19, N25-N27
29	Pregnancy, childbirth and the puerperium	O00-O99
30	Certain conditions originating in the perinatal period	P00-P96
31	Congenital malformations, deformations and chromosomal abnormalities	Q00-Q99
32	Sudden infant death syndrome	R95
33	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (excluding Sudden infant death syndrome)	R00-R94, R96-R99
34	All other diseases (Residual)	A00-A09, A20-A49, A54-B19, B25-B99, D00-E07, E15-G25, G31-H93, I80-J06, J20-J39, J60-K22, K29-K66, K71-K72, K75-M99, N10-N15, N20-N23, N28-N98, U04.9
35	Motor vehicle accidents	V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2
36	All other and unspecified accidents and adverse effects	V01, V05-V06, V09.1, V09.3-V09.9, V10-V11, V15-V18, V19.3, V19.8-V19.9, V80.0-V80.2, V80.6-V80.9, V81.2-V81.9, V82.2-V82.9, V87.9, V88.9, V89.1, V89.3, V89.9, V90-X59, Y40-Y86, Y88
37	Intentional self-harm (suicide)	X60-X84, Y87.0
38	Assault (homicide)	X85-Y09, Y87.1
39	All other external causes	Y10-Y36, Y87.2, Y89



