

HIGHLIGHTS

Department of Health
2007

New Brunswick Health Status Report: 1999-2003



5th Report

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New Brunswick Health Status Report: 1999-2003

Special points of interest:

- *Diseases of the Circulatory System (DCS)* remains the leading cause of death in New Brunswick, followed by cancer.
- *Neoplasms* was the leading cause for Potential Years of Life Lost (PYLL).
- *Mental Disorders* and *Diseases of the Circulatory System* were the leading causes for Hospital Care.

This is the 5th Health Status Report which evaluates mortality, incidence, and hospital utilization data by major disease classification for the period 1999-2003 in New Brunswick and each of its seven Health Regions (HR).

The findings are valuable to the Department as a report card on how

the health of residents in the seven Health Regions compares to each other, and how the health of New Brunswickers compares to the rest of Canada.

The findings of this report may also be useful in developing a strategy for chronic disease management.

This report contains six Chapters: Chapter

1. Introduction; Chapter 2. Population; Chapter 3. Mortality; Chapter 4. Incidence; Chapter 5. Hospital Utilization; and Chapter 6. Regional Assessments.



Population

NB Population

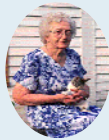
Both Genders: 751,384

Males: 370,838

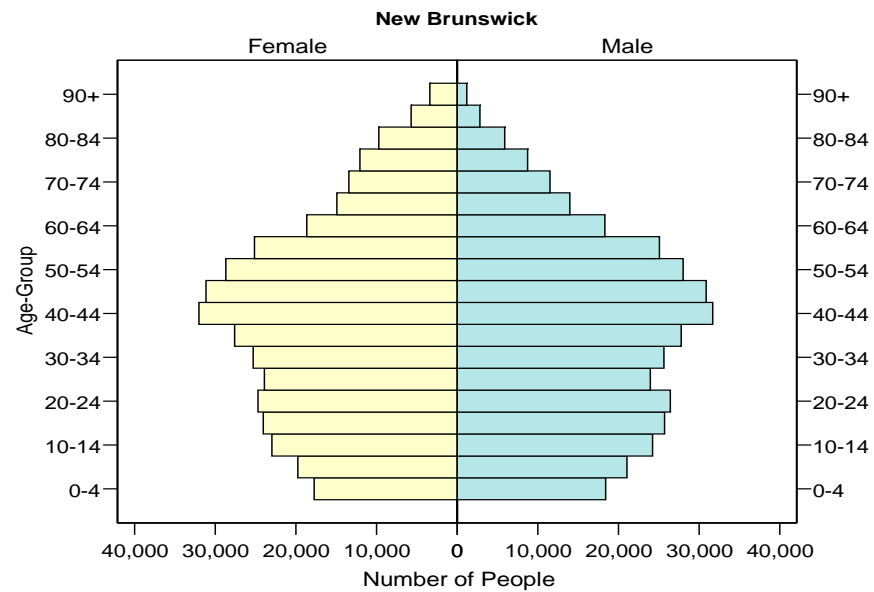
Females: 380,546

97 Males per 100 Females

The largest age group in the population is 40-44 years of age.



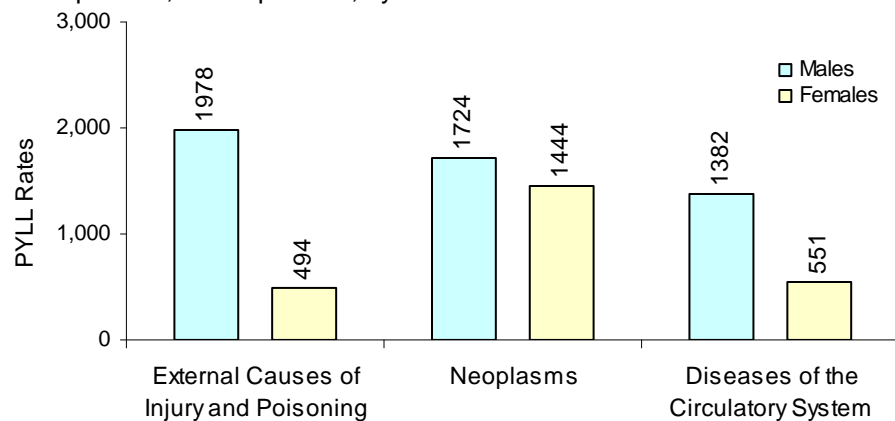
Population Structure—Distribution by Age-Group and Gender: 2004.



Potential Years of Life Lost (PYLL)

The leading cause for Potential Years of Life Lost (PYLL) per 100,000 population for males was *External Causes of Injury and Poisoning* 1,978 and for females it was *Neoplasms* 1,444.

Potential Years of Life Lost (PYLL)—Leading Causes in New Brunswick, Rate per 100,000 Population, by Gender: 1999-2003.

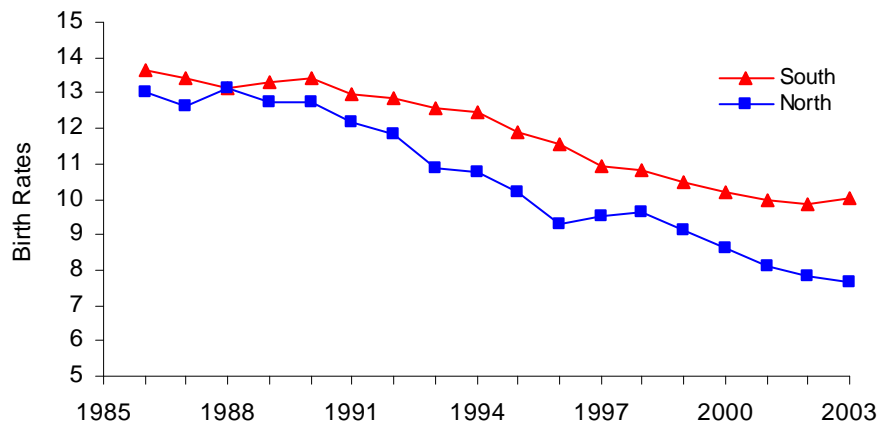


Birth Rate

Birth rates have steadily declined in New Brunswick.

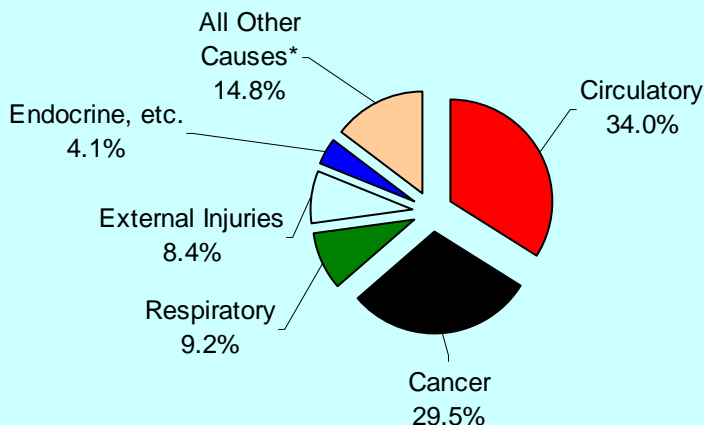


Birth Rates per 1,000 Population for the South (HR 1,2,3) and the North (HR 4,5,6 and 7) in New Brunswick: 1986-2003.



Leading Causes of Death: 1999-2003

MALES—Percent (%) Cause of Death in New Brunswick, 1999-2003.

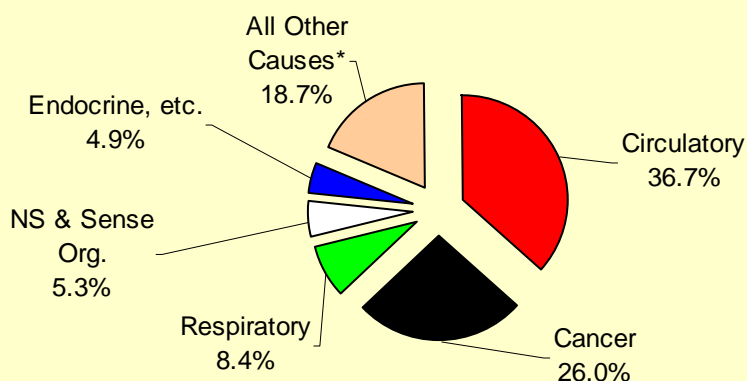


Males

In males, *Diseases of the Circulatory System (DCS)* made up 34.0% of all deaths.

Cancer made up 29.5% of the total deaths.

FEMALES—Percent (%) Cause of Death in New Brunswick, 1999-2003.

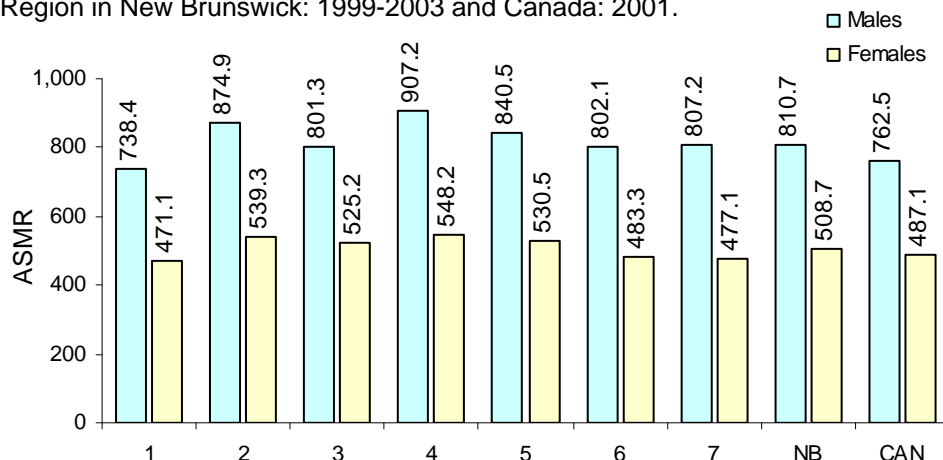


Females

DCS made up the largest percentage (36.7%) of the total deaths in females.

Cancer made up 26.0% of all deaths in females.

All Causes of Death—Age-Standardized Mortality Rates by Gender and Health Region in New Brunswick: 1999-2003 and Canada: 2001.



ASMR by Health Region

Age-standardized Mortality Rates (ASMRs) per 100,000 population for *All Causes of Death* were highest in Health Region 4 (907.2 per for males; 548.2 for females).

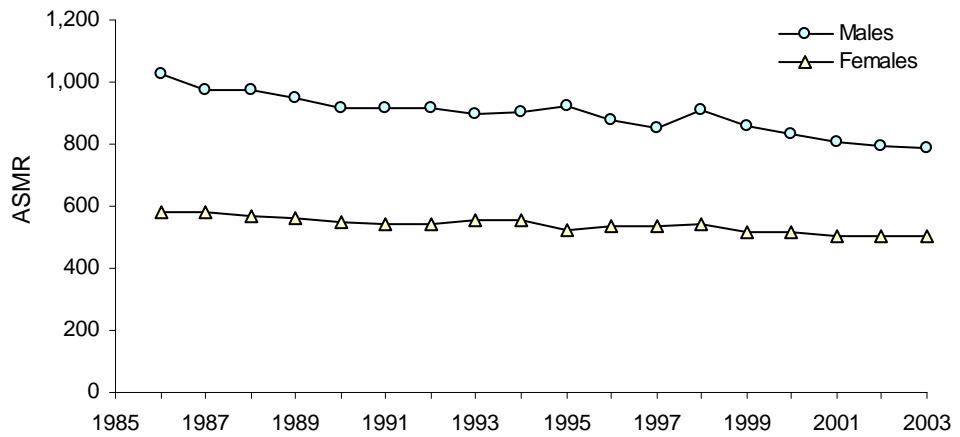
*Includes other major diseases such as *Diseases of the Digestive System, Genitourinary System, etc.*

Mortality Rates

Trend for All Causes of Death

Since 1986, the mortality rates for *All Causes of Death* showed a decreasing trend for males and females in New Brunswick.

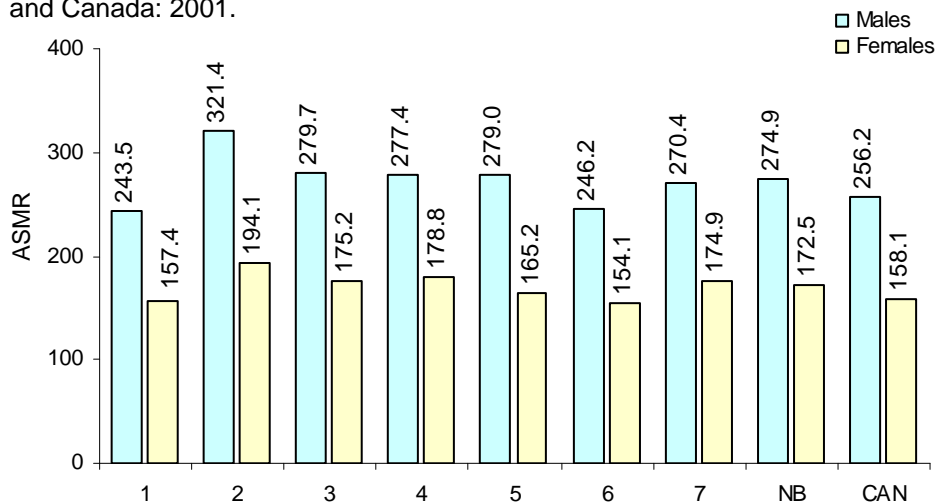
All Causes of Death—Age-Standardized Mortality Rates per 100,000 Population by Gender in New Brunswick: 1986-2003.



Circulatory Diseases

Health Region 2 had higher mortality rates per 100,000 population for DCS of 321.4 for males and 194.1 for females, than the remaining Health Regions.

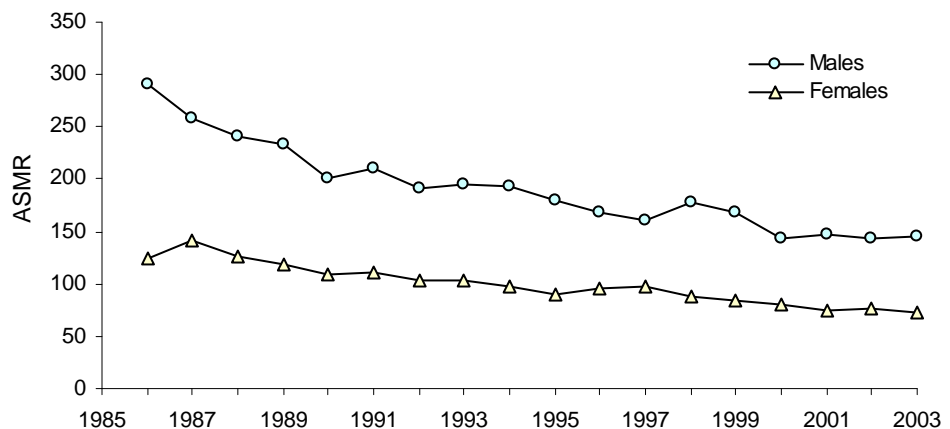
Diseases of the Circulatory System—Age-Standardized Mortality Rates per 100,000 Population by Gender and Health Region in New Brunswick: 1999-2003 and Canada: 2001.



Trend for Ischemic Heart Disease

In New Brunswick since 1986, the mortality rates for ischemic heart disease have steadily declined for males and females.

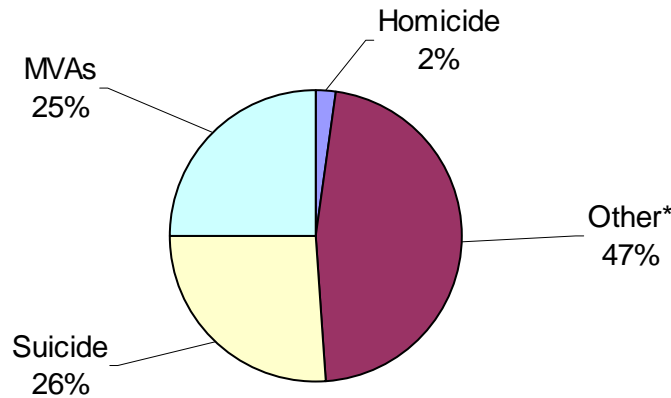
Ischemic Heart Disease—Age-Standardized Mortality Rates per 100,000 Population by Gender in New Brunswick: 1986-2003.



Accidental Death and Suicides

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External Causes of Injury and Poisoning—Percent Distribution (%) of Injuries Causing Death in New Brunswick: 1999-2003.

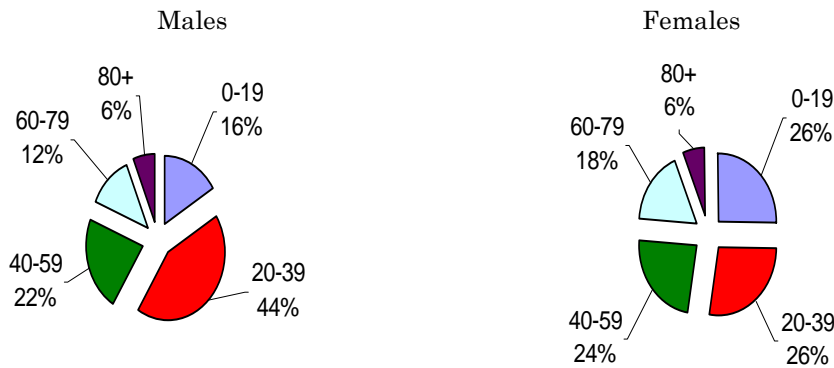


External Causes

Motor vehicle accidents (MVA's), accounted for 25% of deaths in the *External Causes of Injury and Poisoning* category, and suicides made up 26% of deaths.



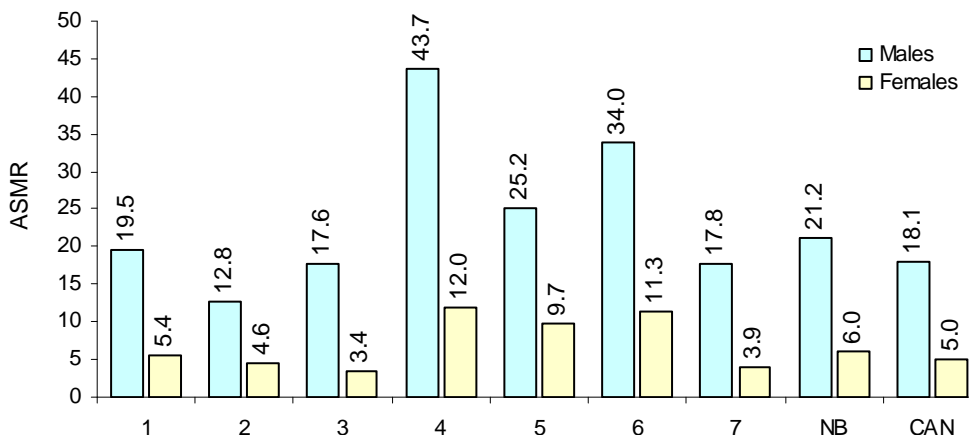
Motor Vehicle Accidents—Percent Distribution of Deaths by Gender and Age Group in New Brunswick: 1999-2003.



Motor Vehicle

Between 1999-2003, 467 residents lost their lives in motor vehicle accidents, 76% of the deaths were males. Of the deaths 44% of males and 26% of females were 20-39 years old.

Suicides—Age-Standardized Mortality Rates per 100,000 Population by Gender and Health Region in New Brunswick: 1999-2003 and Canada: 2001.



Suicide

Between 1999-2003, 485 residents committed suicide. Of these suicides, 84% were males. The rates were highest in the age group 40-59 years in both genders. HR 4 had the highest suicide rate.

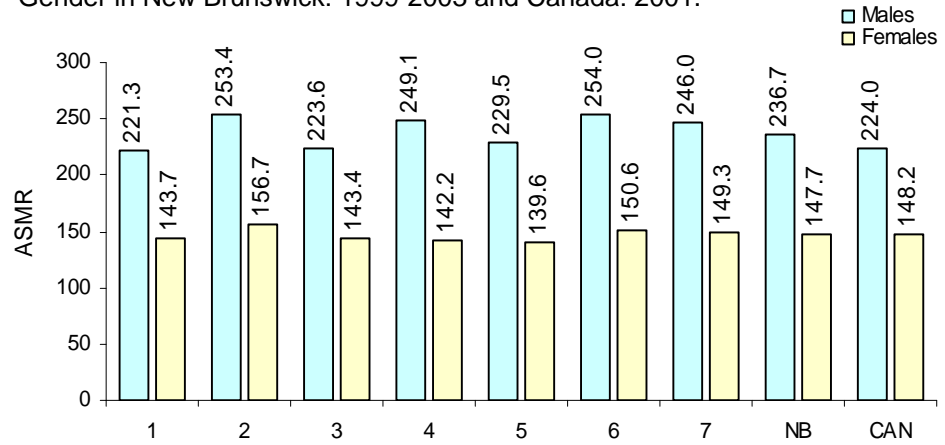
*Includes falls, choking, drowning, fires, etc.

Mortality Rates

Cancer

In males, HR 1 had the lowest ASMR per 100,000 population for cancer of 221.3 and HR 6 had the highest rate of 254.0. In females, HR 5 had the lowest rate of 139.6 and HR 2 the highest of 156.7.

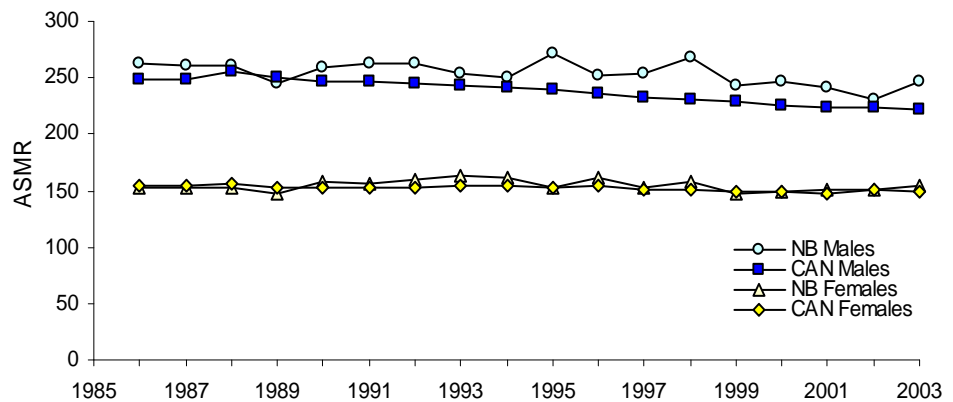
All Cancers—Age-Standardized Mortality Rates per 100,000 Population by Gender in New Brunswick: 1999-2003 and Canada: 2001.



Cancer Trends

Between 1986 and 2003, the mortality rates for cancer in males in New Brunswick have slightly decreased and for females have slightly increased.

All Cancers—Trends in Age-Standardized Mortality Rates per 100,000 Population by Gender in New Brunswick and Canada: 1986-2003.

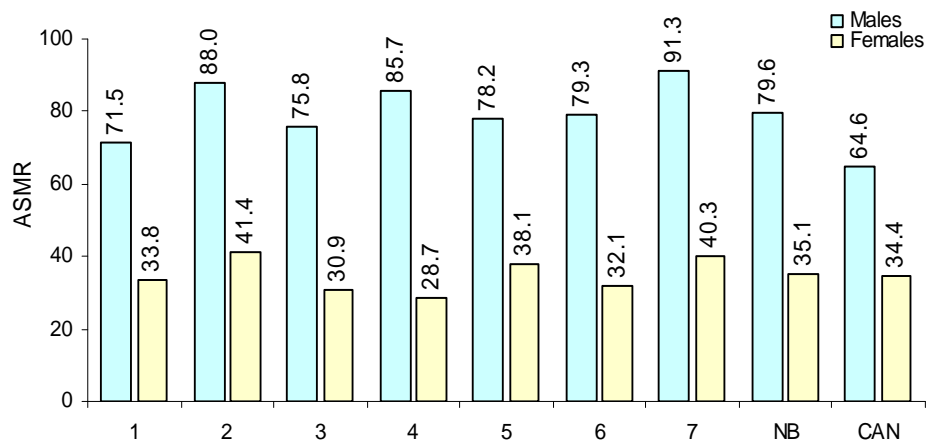


Lung Cancer

In males, HR 7 had the highest mortality rate per 100,000 population of 91.3 and HR 1 the lowest of 71.5.

In females, HR 2 had the highest rate of 41.4 and HR 4 the lowest of 28.7.

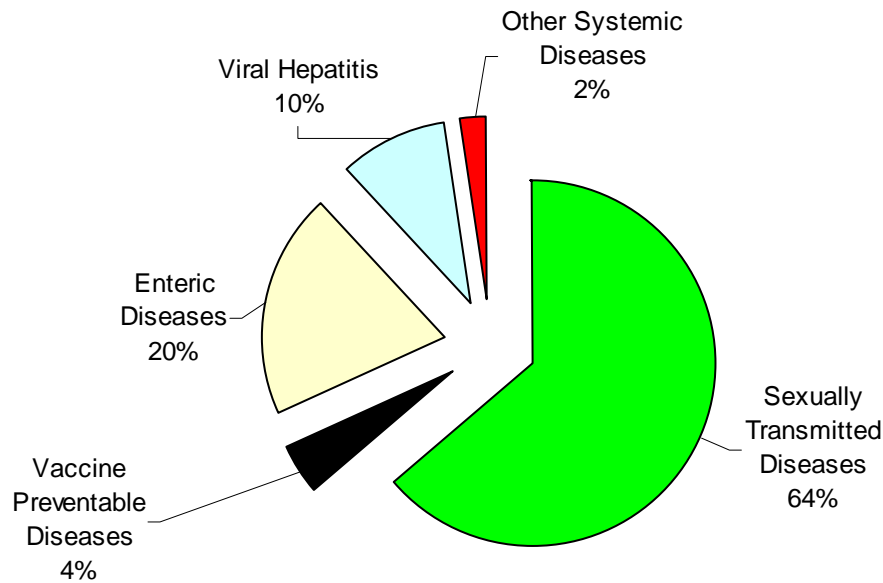
Lung Cancer—Age-Standardized Mortality Rates per 100,000 Population by Gender in New Brunswick: 1999-2003 and Canada: 2001.



Communicable Diseases

Percent Distribution of Communicable Diseases

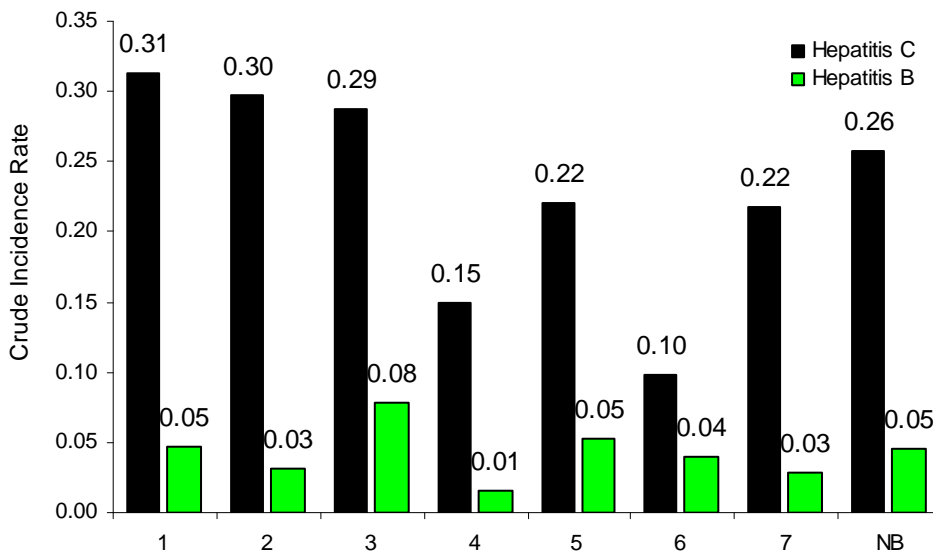
Between 1999-2003, sexually transmitted diseases made up 64% of the Communicable Diseases reported in the province.



HR 1, 2 and 3 generally had the highest rates for Communicable Diseases.

Hepatitis C was the most common form of Viral Hepatitis averaging 0.26 cases per 1,000 population for the province.

Hepatitis—Crude Incidence Rates per 1,000 Population by Health Region in New Brunswick: 1999-2003



Whooping cough was the most common of the Vaccine Preventable Diseases averaging 0.14 cases per 1,000 population for NB.

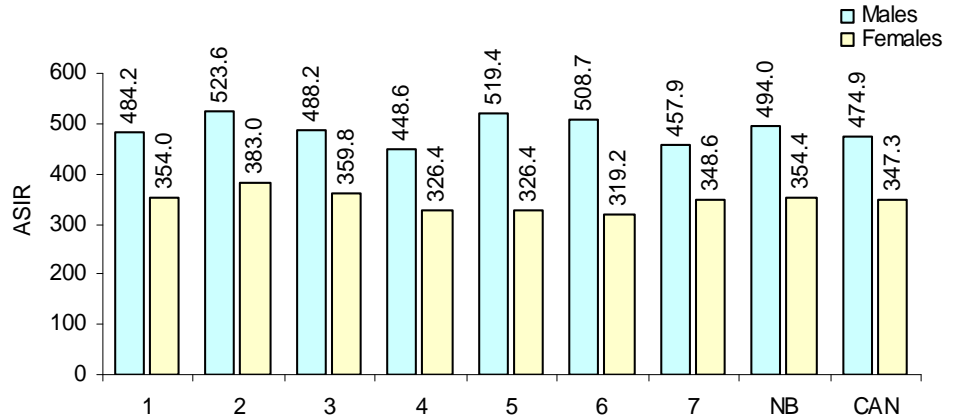
Campylobacteriosis and Shigellosis were the most frequently found Enteric (intestinal) Diseases and had rates of 0.29 and 0.17 cases per 1,000 population respectively.

Cancer Incidence

Cancer

Health Region 2 had the highest ASIRs per 100,000 population for *All Cancers* of 523.6 in males and 383.0 in females.

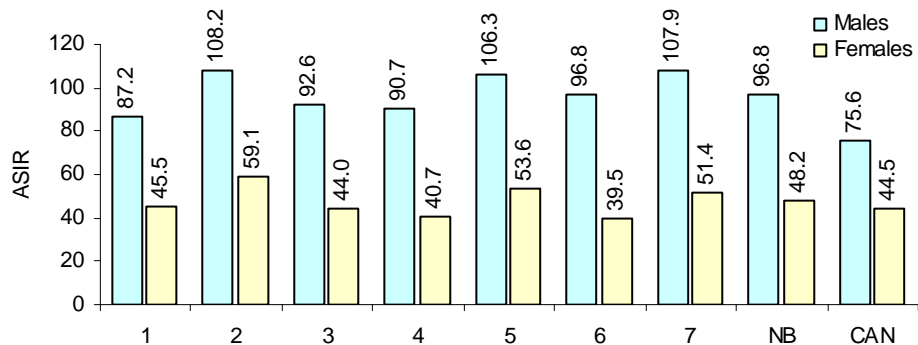
All Cancers—Age-Standardized Incidence Rates per 100,000 Population by Gender and Health Region in New Brunswick: 1999-2003 and Canada: 2001.



Lung Cancer

Health Region 2 had the highest incidence rates of lung cancer. The rate per 100,000 population was 108.2 for males and 59.1 for females.

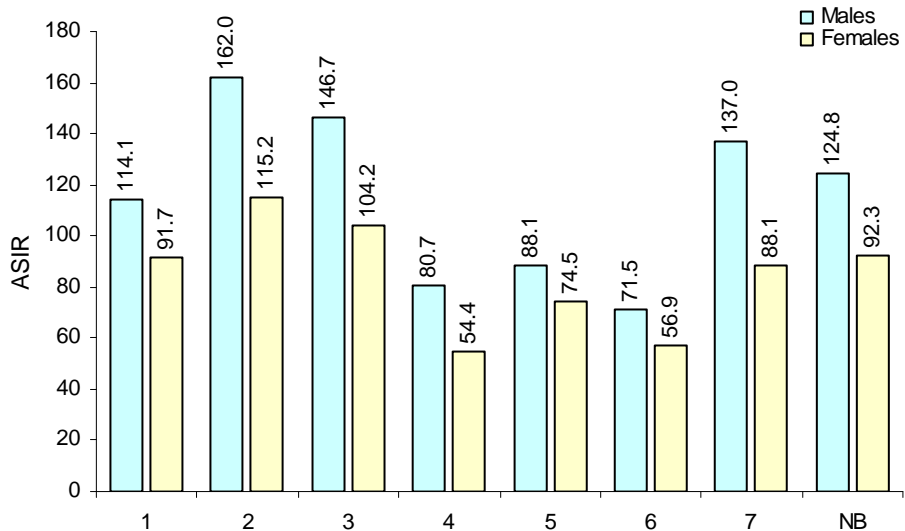
Lung Cancer—Age-Standardized Incidence Rates per 100,000 Population by Gender and Health Region in New Brunswick: 1999-2003 and Canada: 2001.



Non-Melanoma Skin Cancer

Non-Melanoma Skin Cancer (NMSC) such as Basal and Squamous Cell Carcinomas are increasing in New Brunswick. This is thought to be a result of exposure to UV radiation in sunlight. These cancers are not normally life threatening but are an added burden for health care.

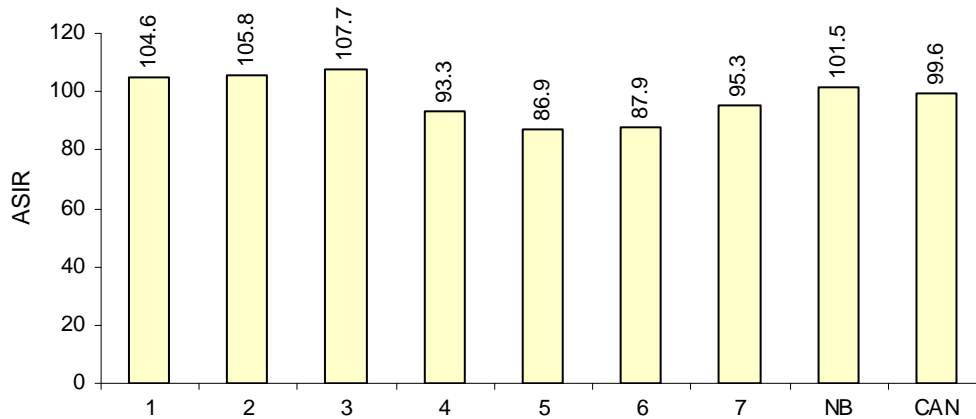
Basal Cell Carcinoma—Age-Standardized Incidence Rates per 100,000 Population by Gender and Health Region in New Brunswick: 1999-2003.



Cancer and Diabetes Incidence

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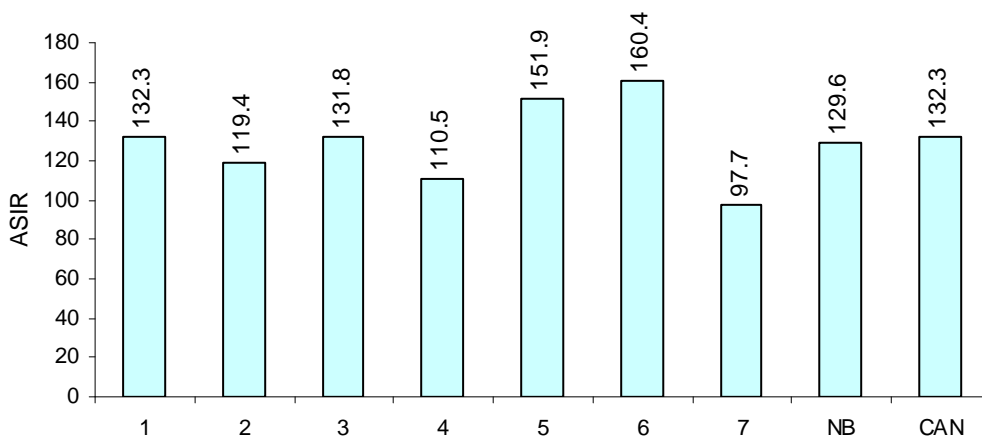
Breast Cancer—Age-Standardized Incidence Rates per 100,000 Population by Health Region in New Brunswick: 1999-2003 and Canada: 2001.



Breast Cancer

The incidence rates of breast cancer in females were higher in the south (HR 1, 2, 3) than in the north (4, 5, 6, 7). New Brunswick and Canadian rates were similar.

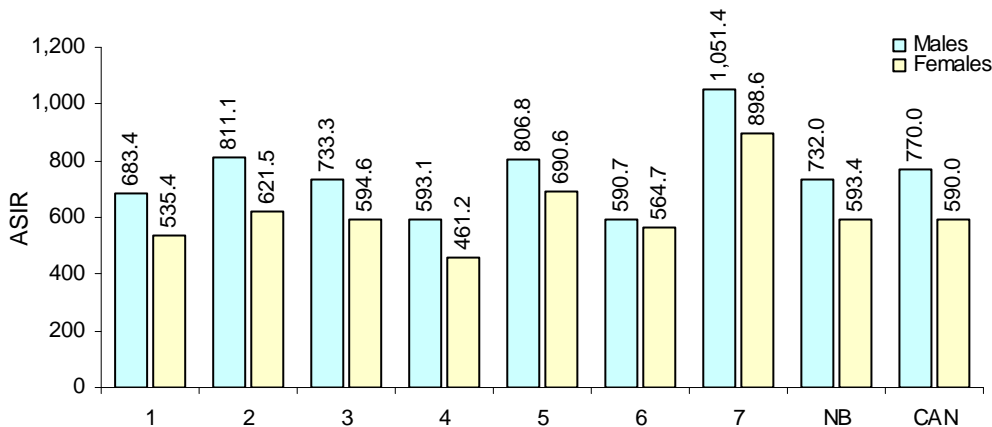
Prostate Cancer—Age-Standardized Incidence Rates per 100,000 Population by Health Region in New Brunswick: 1999-2003 and Canada: 2001.



Prostate Cancer

The incidence of prostate cancer was highest in HR 6 (160.4 cases per 100,000 population) and lowest in HR 7 (97.7 cases per 100,000 population).

Diabetes —Age-Standardized Incidence Rates per 100,000 Population by Gender and Health Region in New Brunswick: 1998/99-2002/03 and Canada: 2001.



Diabetes

Health Region 7 had the highest rate of diabetes in both males (1051.4 cases per 100,000 population) and females (898.6 cases per 100,000 population).



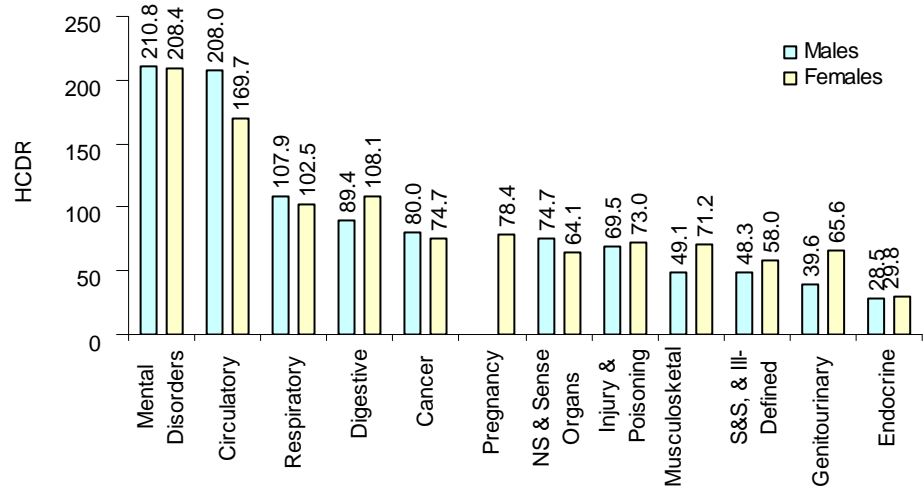
Hospital Utilization

Hospital Care Days

Mental Disorders and Diseases of the Circulatory System were the leading causes for residents spending the most time in the hospital.



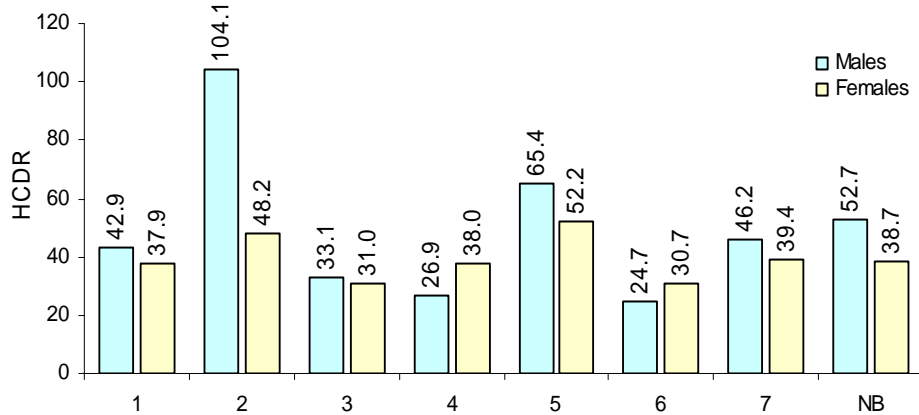
Hospital Care Days—Leading Causes (Rates per 1,000 Population) by Gender in New Brunswick: 1998/99-2002/03.



CVD-Hospital Care Days

The crude rates per 1,000 population for Hospital Care Days due to CVD were highest in HR 2 for males (104.1) and HR 5 for females (52.2).

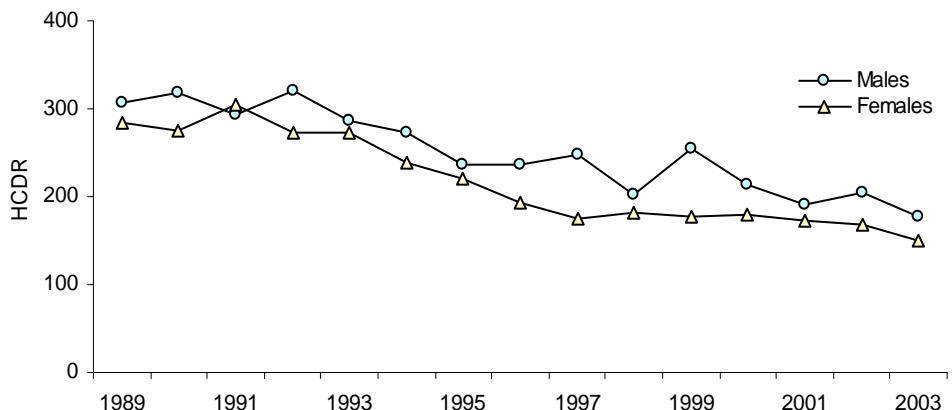
Cerebrovascular Disease—Hospital Care Days (Rates per 1,000 Population) by Gender and Health Region in New Brunswick: 1998/99-2002/03.



DCS-Hospital Care Days

Residents are spending less time in the hospital due to *Diseases of the Circulatory System* (DCS), down from 300 days per 1,000 population in 1986 to less than 200 days in 2003.

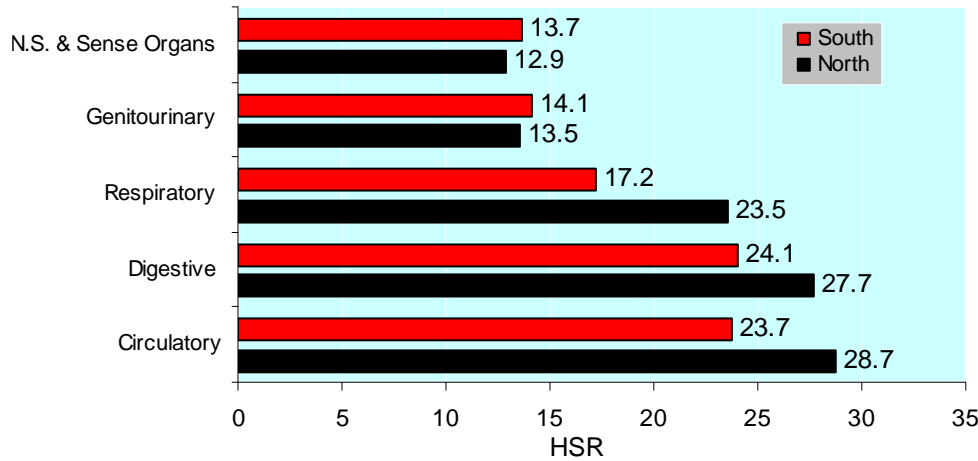
Diseases of the Circulatory System—Trend in Hospital Care Days (Rates per 1,000 Population) by Gender in New Brunswick: 1998/99-2002/03.



Hospital Utilization

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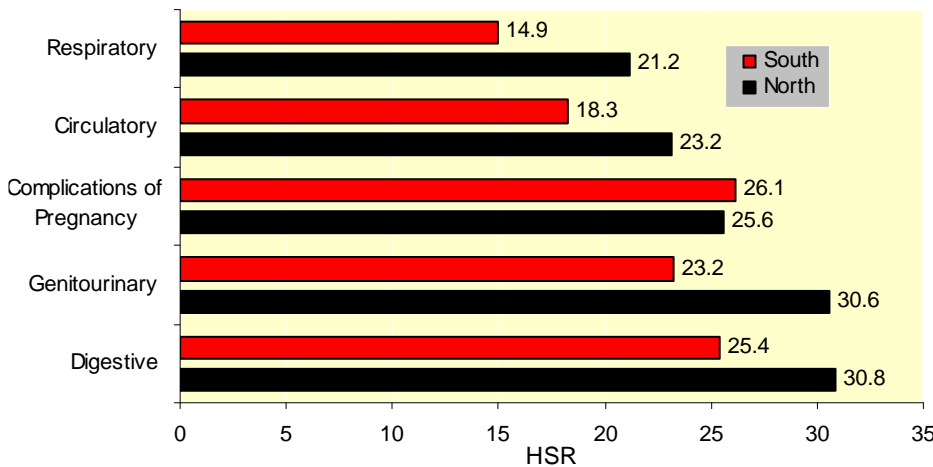
Hospital Separations—Comparison of the North and South (Rates per 1,000 Population) for Males in New Brunswick: 1998/99-2002/03.



Hospital Separations Males

Diseases of the Circulatory, Digestive and Respiratory Systems had higher Hospital Separation rates (HSRs) in the north than in the south.

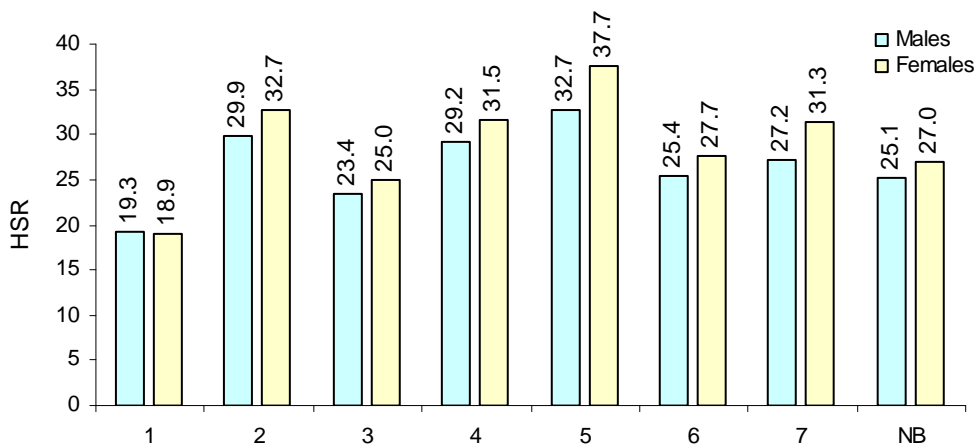
Hospital Separations—Comparison of the North and South (Rates per 1,000 population) for Females in New Brunswick: 1998/99-2002/03.



Hospital Separations Females

Diseases of the Digestive, Genitourinary, Circulatory and Respiratory Systems had higher Hospital Separation rates (HSRs) in the north than in the south.

Diseases of the Digestive System—Hospital Separations (Rates per 1,000 Population) by Gender and Health Region in New Brunswick: 1998/99-2002/03.



Digestive System-Hospital Separations

HR 5 had the highest rates of Hospital Separations for *Diseases of the Digestive System*, (32.7 for males and 37.7 for females per 1,000 population).

Health Status—Regional Report: 1999-2003

Regional Ranking—Cumulative Score by Health Region: 1999-2003.

MALES	Health Regions						
	1	2	3	4	5	6	7
Mortality	47	23	36	22	24	33	39
Incidence	37	21	35	40	26	29	36
Hospital Separations	36	27	32	26	12	37	26
Hospital Care Days	40	25	45	25	11	29	20
Cumulative Points	160	96	148	113	73	128	121
Percent (%)	76.2	45.7	70.5	53.8	34.8	61.0	57.6
FEMALES	Health Regions						
	1	2	3	4	5	6	7
Mortality	42	24	29	22	22	41	44
Incidence	24	23	30	39	38	44	26
Hospital Separations	36	33	30	30	10	34	23
Hospital Care Days	38	37	36	24	9	32	20
Cumulative Points	140	117	125	115	79	151	113
Percent (%)	66.7	55.7	59.5	54.8	37.6	71.9	53.8

Males		Females		Both Genders		Score	Health Status
HR	%	HR	%	HR	%	% [†]	
5	34.8	5	37.6	5	36.2	36.6	
2	45.7	7	53.8	2	50.7	52.5	
4	53.8	4	54.8	4	54.3	53.6	
7	57.6	2	55.7	7	55.7	55.8	
6	61.0	3	59.5	6	66.4	65.0	
3	70.5	1	66.7	3	65.0	65.4	
1	76.2	6	71.9	1	71.4	71.0	

[†] Percent includes population indicator scores such as infant mortality rates and low birth weights.

General Conclusions

In New Brunswick, mortality rates have decreased for the leading cause of death, *Diseases of the Circulatory System*.

External Causes of Injury and Poisoning (accidents, suicide) and cancer contributed to many of the younger adult deaths and rated higher for Potential Years of Life Lost.

Mortality rates for diabetes, as well as lung cancer and COPD are increasing in

females.

Incidence of non-melanoma skin cancer, lung cancer and diabetes show an increasing trend. Health Regions 2, 5 and 7 had higher incidence rates of lung cancer in males and females.

Hospital Care Day rates for most major disease classifications are decreasing whereas Hospital Separation rates are increasing.

Health Regions were ranked using mortality, incidence and hospital utilization rates for leading diseases.

Health Region 1, the Moncton area had the lowest rates, and ranked the best with an overall score of 71.0 %. Health Region 3 ranked second (65.4%) and Health Region 6 ranked third (65.0%).