





How healthy are we? 2003

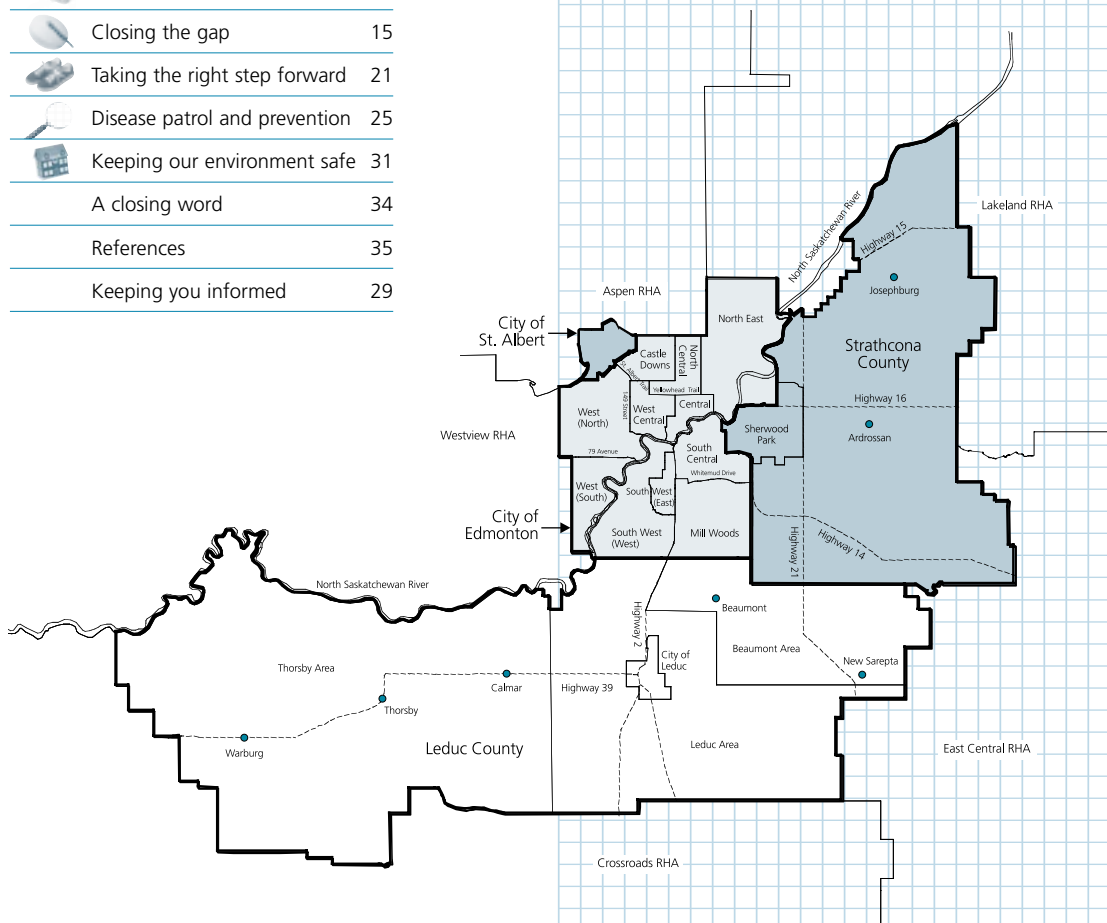
Time for
the annual
check-up



Capital
Health

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The Capital Health region in Alberta is the largest academic health region in Canada and includes Edmonton, St. Albert, Strathcona County, and Leduc County including the City of Leduc and surrounding municipalities.

Note: As of April 1, 2003 the Alberta regional health boundaries will change. The Capital Health region will include an additional 100,000 residents.

Population for the Capital Health region, 2001

Age Group	Females	Males	Total
< 1	4,688	4,976	9,664
1-4	19,689	20,774	40,463
5-9	27,578	28,489	56,067
10-14	28,967	30,351	59,318
15-19	29,322	30,829	60,151
20-44	166,341	165,336	331,677
45-64	95,884	95,781	191,665
65-74	27,295	24,367	51,662
75 +	24,575	14,603	39,178
TOTAL	424,339	415,506	839,845



An ounce of prevention...



Remember the old line: *An ounce of prevention is worth a pound of cure.*

Every year, we do an annual check-up on the health of people in the Capital Health region. We check the vital signs, check for health problems, check how people use the health system, and check the choices people make that affect their health and the health of others in our community. Just like going to the doctor for an annual check-up, one of the reasons for doing this annual report is to detect early signs of health problems, look at the trends, and identify areas where action can be taken to prevent illness and injury and improve the overall health of people in the Capital Health region.

This year, we're also putting a spotlight on five key areas – healthy babies, the health of Aboriginal people, preventing falls among seniors and young people, controlling the spread of communicable diseases, and protecting our health from risks in the environment. We'll examine the trends, look at the causes, and go behind the scenes on some of the investigations and actions of Capital Health's "disease patrol."

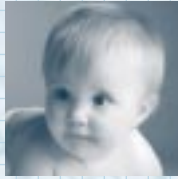
Although these five areas are diverse, there is a common thread – it's called prevention. Prevention is up to all of us. In Capital Health, many people in the community use a variety of innovative approaches that contribute to the health of people living in the region. This year the Prevention Power Community Awards Program was established to recognize individuals, teams, and organizations that are taking positive action to improve health and prevent disease and injury in their community.

In the province, and across Canada, there is a growing awareness that good health is a lot more than health care. Major reports from the Mazankowski Commission, to the Kirby Senate Committee Report, and the Romanow Commission on the Future of Health Care in Canada, all share a common view that the best way to improve health for all Canadians is to prevent illness and injury. Research suggests that many of the leading causes of death can be prevented ... everything from heart disease, to diabetes, some forms of cancer, and injury. Research also suggests that many health and related problems can be prevented if babies get a healthy start in life. And research shows that those pesky “bugs” that cause potentially serious illnesses are getting smarter all the time. This means we need to take deliberate action to continue making and enabling healthy choices.

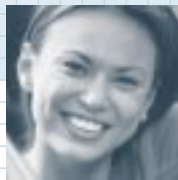
At Capital Health, we hope that putting the spotlight on prevention will raise people’s awareness of what can and should be done to help achieve the ultimate goal – improving the health of everyone in the Capital Health region.

A word about the data...

- *The most recent data available that are comparable for the Capital and Calgary Health regions, Alberta, and Canada are used in this report. Where trend data are available, they are included in the tables.*
- *Data from the 1996-97 National Population Health Survey (NPHS) were aggregated using 1996 Regional Health Authority boundaries, which included residents from Edmonton and St. Albert.*
- *Data from the 2000/01 Canadian Community Health Survey (CCHS) were aggregated using 1998 Regional Health Authority boundaries, which are currently in place.*
- *Data sources for the tables are noted under the tables. References for the text are noted at the back of the report.*



The annual check-up



The vital signs are good, but there are some troubling signs

- Overall, people in the Capital Health region continue to enjoy a high level of health. Life expectancy in Canada is among the best in the world and has been for several decades.¹ The life expectancy in 2000 for women in the Capital Health region (82.6 years) and for men (77.2 years) is similar to that of Canada and Alberta.
- Low birth weight babies face increased risks for many health problems not only when they are born but also later in life. Although we do not fully understand the complexity of the causes, we do know that smoking, alcohol, and drug use during pregnancy, age of the mother, multiple births, lower socio-economic status, and inadequate prenatal care all increase the risk of having a low birth weight baby. In 1999, Capital Health's low birth weight rate of 5.9% was lower than Calgary, the same as Alberta and slightly higher than the Canadian rate. In 2000, the rate increased to 6.4%, higher than the provincial target of 5.5%.
- Although mortality rates for heart disease in the province for both men and women have decreased by more than 50% in the last 20 years, heart disease continues to be a leading cause of death in the region.

Check the vital signs

Leading indicators of health	Year	Capital Health	Calgary Health	Alberta	Canada
Low birth weight (% babies <2500 g)	1996 ¹	6.2	6.8	6.1	5.8
	1999	5.9 ²	6.2 ³	5.9 ⁴	5.6 ⁴
	2000	6.4 ²	6.5 ³	6.1 ⁵	–
Teen (15-19 yr) birth rate (per 1000)	1996 ⁶	24.5	20.2	28.1	–
	1999 ⁷	21.9	17.2	24.4	–
	2000	19.7 ²	16.6 ⁵	22.3 ⁵	–
Teen (15-19 yr) pregnancy rate (per 1000)	1996 ⁶	–	–	50.4	–
	1999 ⁵	47.9	45.2	49.5	–
	2000 ⁵	45.3	45.7	46.3	–
Infant mortality rate (per 1,000 live births)	1996 ¹	6.4	5.0	6.1	5.8
	1999	5.7 ²	5.5 ³	4.9 ⁸	4.4 ⁸
	2000	7.8 ²	6.4 ³	6.5 ⁵	–
Life expectancy at birth (years)	1996 (M) ¹	76.3	77.0	75.9	75.4
	1996 (F) ¹	81.3	81.8	81.3	81.2
	1999 (M)	76.2 ⁵	77.8 ⁵	76.6 ⁵	76.3 ⁸
	1999 (F)	82.2 ⁵	82.3 ⁵	81.8 ⁵	81.7 ⁸
	2000 (M) ⁵	77.2	77.8	77.1	–
2000 (F) ⁵	82.6	82.5	82.0	–	
Death rate for heart disease (per 100,000)	1996 ¹	133.7	101.4	127.9	136.4
	1999 ⁹	124.8	108.9	127.2	–
	2000 ¹⁰	118.2	–	–	–
Death rate for cerebrovascular disease (stroke) (per 100,000)	1996 ¹	48.9	47.8	49.6	48.4
	1999 ⁹	47.7	47.5	49.5	–
	2000	43.5 ¹⁰	–	49.1 ⁵	–
Suicide rate (per 100,000)	1996 ¹	15.5	13.8	15.9	12.9
	1999 ⁹	15.7	13.2	15.2	–
	2000	13.7 ¹⁰	–	13.7 ⁵	–
Death rate for cancer (per 100,000)	1996 ¹	150.2	139.0	154.0	197.4
	1999 ⁹	179.4	177.9	180.2	–
	2000 ⁵	–	–	181.6	–
Death rate for unintentional injury (per 100,000)	1996 ¹	26.5	23.8	32.8	27.7
	1999 ⁹	24.8	20.4	29.2	–
	2000 ¹⁰	28.2	–	–	–

- 1 Canadian Institute for Health Information and Statistics Canada. Health Indicators, Volume 2000, No. 1: December 2000. Data are age-standardized to the 1991 Canadian population.
 - 2 Vital Statistics Birth Data. Capital Health Region, 2000.
 - 3 Calgary Health Region web site: www.crha-health.ab.ca/
 - 4 Statistics Canada, Canadian Vital Statistics, Birth Database
 - 5 Alberta Health and Wellness web site. Health Surveillance Branch.
 - 6 Alberta Health and Wellness & Alberta Medical Association. Alberta Reproductive Health : Pregnancy Outcomes December 1999.
 - 7 Alberta Health and Wellness & Alberta Medical Association. Alberta Reproductive Health : Pregnancy Outcomes December 2001.
 - 8 Alberta Health and Wellness, Standards and Measures, (September 2002). *Alberta's report on comparable health indicators.*
 - 9 Alberta Health and Wellness. Health Surveillance Branch. Epidemiological Measures Database, 2001 Edition, Mortality Rates for Alberta and Its Health Regions, 1986-1999. Data are age standardized to the 1996 Canadian population.
 - 10 Vital Statistics Death Data. Capital Health region, 2000. Data are age standardized to the 1996 Canadian population.
- (–) Dashed lines indicate that data were not available.

Socio-economic indicators

	Capital Health	Calgary Health	Alberta	Canada
Families and households¹				
Lone parent families (%)	16.7	14.7	14.4	15.7
Young adults (20-29 years) living with parents (%)	34.2	31.8	30.6	41.1
Seniors (65+) living alone (%)	28.5	25.9	27.7	26.7
Income and education²				
Low income families (%)	18.5	15.7	14.9	16.3
Children living in low income families (%)	26.5	22.2	21.2	22.8
No extra health insurance (%)	22.2	22.4	23.1	22.9
Housing affordability (proportion spending 30% or more of household income on shelter)	25.0	24.1	22.5	26.5
High school completion (% of 25-29 years)	68.5	73.0	66.5	71.8
Unemployment rate ³ (%)	4.9	6.5	5.3	7.5

1 Statistics Canada. 2001 Census.

2 Statistics Canada. 1996 Census.

3 Statistics Canada, Labour Force Survey for November, 2002.

- The cancer mortality rates for men in Alberta have decreased slightly over the past 10 years, while the rates for women have remained relatively stable. For women there have been big increases in lung cancer death rates but the decline in other cancer death rates, particularly breast cancer, has resulted in a relatively stable overall cancer rate. Breast, prostate, lung, and colorectal cancers were the top four cancers in Alberta. These four cancers were responsible for over 50% of new cancers and cancer deaths in 1999.²

Some serious health problems are on the rise

- A comparison of national survey data from 1996/97 and 2000/01 indicates that chronic health conditions such as high blood pressure, diabetes, and asthma are increasing.
- Rates for high blood pressure in the Capital Health region are up substantially from 8% in 1996/97 to 11.2% in

2000/01. High blood pressure increases the risk of stroke, aneurysms, heart failure, heart attacks, and kidney damage.

- Rates for diabetes have increased from 2.7% in 1996/97 to 3.3% in 2000/01. Similar increases can be seen across the province and across Canada. Nationally, 4.1% of people 12 years of age and older have been diagnosed by a health professional as having diabetes. The prevalence for men (4.4%) is slightly higher than for women (3.9%). Compared with other provinces, Alberta has the lowest prevalence of diabetes (3.4%) and Newfoundland has the highest (5.8%).
- Rates for asthma are up considerably from 6.4% to over 10% and the rates are also up across the country.
- Close to 18% of people in the region say they have had an injury that limits their activity.
- Fewer people in 2000/01 than in 1996/97 rated their health as excellent or good.

Health problems^{1,2}

	Year	Capital Health	Calgary Health	Alberta	Canada
High blood pressure (%)	96/97	8.0	8.1	8.0	10.0
	00/01	11.2	8.7	10.5	12.6
Diabetes (%)	96/97	2.7	2.2	2.4	3.2
	00/01	3.3	3.1	3.4	4.1
Asthma (%)	96/97	6.4	8.0	7.1	7.8
	00/01	10.2	8.2	8.9	8.4
Arthritis or rheumatism (%)	96/97	13.7	11.0	13.1	13.8
	00/01	12.9	12.9	15.9	15.2
Functional health status: moderate or severe functional health problem (%)	96/97	–	–	–	–
	00/01	22.0	18.8	20.1	18.6
Had an injury that limits normal activity (%)	96/97	15.7	12.4	13.9	10.9
	00/01	17.9	18.0	17.4	13.4
Self-rated health as excellent or very good (%)	96/97	62.0	67.5	64.3	67.0
	00/01	59.9	63.1	61.6	61.4
“Quite a lot” of life stress – 18 years and over (%)	96/97	–	–	–	–
	00/01	27.7	26.5	26.0	26.1
“Probable” risk of major depressive episode (%)	96/97	6.9	5.7	5.6	5.1
	00/01	9.9	9.3	9.2	7.1

1 Statistics Canada (1998). National Population Health Survey (NPHS), 1996/97, Public Use Microdata Files (PUMF).

2 Statistics Canada (2002). Canadian Community Health Survey (CCHS), 2000/01.

(–) Dashed lines indicate that data were not available.

- Close to 30% of people in the region indicate that they experience quite a lot of stress in their lives.
- The risk of people experiencing depression has increased (based on their responses to a set of questions that establishes the probability of suffering a ‘major depressive episode’). Nationally, 7% of the population 12 or older had a probable risk of a major depressive episode. Depression was higher among females at 9.2% compared to males with 5%. Newfoundland had the lowest rate at 4.7% and Alberta had the highest rate at 9.2%.⁴
- In Capital Health, almost 10% were considered at risk for a major depressive episode in 2000/01. Depression was also

higher among females at 12.2% compared to males with 7.6%.⁴ Perhaps not surprisingly, the use of antidepressants across Canada has grown by 353% between 1981 and 2000.⁵

Use of the health system continues to match the leading causes of illness and death

- Circulatory disease, such as heart disease and stroke, and cancer continue to be the leading causes of death in the region, accounting for 63% of deaths.
- An additional 11.6% of deaths are caused by respiratory disease. Respiratory

disease is also among the top three reasons for going to a hospital or an emergency department.

- The most common reason for visits to emergency departments in the region is for unintentional injury such as falls, motor vehicle collisions, and sports-related injuries.
- It is estimated that the total cost of illness in Canada was \$159 billion in 1998 with just over half of the costs attributable to direct costs and 47% to indirect costs.⁶ Direct costs include physician care, hospital care, care in other institutions, drug expenditures, and other direct costs. Indirect costs include mortality costs due to premature deaths, and morbidity costs due to long- and short-term disability (e.g. loss of earning power).⁶
- Nationally, circulatory disease, mental disorders, digestive disease, and respiratory disease have the highest

direct costs. When both direct and indirect costs are considered, cardiovascular disease, musculoskeletal disease, cancer, injuries, respiratory disease, and nervous system and sense organ disease represent the most significant economic burden of illness, accounting for over two-thirds of the total cost of illness classified by diagnostic category.⁶

- In the Capital Health region, the proportion of people who had contact with medical doctors was 82.7%, similar to Calgary, Alberta, and Canada. Nationally, 8.2% of Canadians consulted with a mental health professional at least once during the previous year. Women were more likely than men to have contacted a mental health professional (11.0% compared to 5.4%). In Capital Health, 8.9% of people contacted a mental health professional – 11.6% for women and 6.2% for men.⁴

Check how we use the health system

Leading health problems causing death, hospitalization, or an emergency department visit for Capital Health residents, 2000, percent and (rank)

Cause	Deaths ¹	Hospital Discharges ²	Emergency Department Visits ²
Circulatory disease	36.0% (1)	13.5% (1)	4.6% (5)
Cancer	28.3% (2)	7.8% (4)	0.3%
Respiratory disease	7.7% (3)	9.7% (3)	10.0% (2)
Mental disorders	5.9% (4)	6.4% (6)	3.7% (7)
Unintentional injury	4.7% (5)	7.2% (5)	23.5% (1)
Digestive disease	3.4% (6)	11.7% (2)	7.5% (3)
Intentional injury	2.8% (7)	1.1%	2.3%
Nervous/sense organ disease	1.8%	2.6%	5.8% (4)
Endocrine/metabolic disease	2.7% (8)	2.5%	1.5%
<i>Number</i>	4,749	49,958 ³	305,084

1 Vital Statistics (Death Data), 2000.

2 Capital Health, Clinical Performance Information and Research Unit, 2000.

3 Number of hospital separations does not include hospitalization for pregnancy/childbirth or for birth events.

Check how we use the health system (continued)

Indicators ¹	Year	Capital Health	Calgary Health	Alberta	Canada
Caesarean Section (C-sections) (% of live birth deliveries)	97/98	17.3	16.4	16.7	18.7
	98/99	18.9	18.5	17.7	19.2
	99/00	18.9	20.6	19.5	19.9
Vaginal birth after C-section (% of previous C-sections)	97/98	44.0	50.0	43.0	35.0
	98/99	38.0	45.0	–	35.0
	99/00	–	–	–	–
Hospitalization for pneumonia/influenza (Age 65+, age standardized rate per 100,000)	97/98	1,119	1,049	1,496	1,241
	98/99	1,127	1,092	–	1,273
	99/00	1,237	1,277	1,744	1,297
Hospitalization for hip fracture (Age 65+, age standardized rate per 100,000)	97/98	565	606	569	618
	98/99	595	529	–	599
	99/00	580	611	604	575
Hip replacement (per 100,000)	97/98	64.5	58.1	66.6	55.8
	98/99	62.9	57.8	–	57.0
	99/00	75.6	61.4	74.5	54.5
Knee replacement (per 100,000)	97/98	71.6	55.6	71.4	59.9
	98/99	68.7	52.7	–	61.4
	99/00	75.0	55.3	75.8	65.6
May not require hospitalization (% of all hospitalizations)	97/98	5.6	7.1	7.6	–
	98/99	5.1	6.9	8.0	–
	99/00	4.6	6.8	7.3	–

¹ Canadian Institute for Health Information and Statistics Canada Health Indicators (2000, 2001, 2002) standardized to the 1991 Canadian population. Rates are per/100,000 population.

(–) Dashed lines indicate that data were not available.

Contact with health professionals ¹	Capital Health	Calgary Health	Alberta	Canada
Contact with medical doctor(s) in the past 12 months	82.7%	82.0%	80.9%	81.3%
Contact with health professional(s) about mental health in the past 12 months	8.9%	10.0%	9.4%	8.2%
Contact with dental professional(s) in the past 12 months	58.5%	60.9%	56.6%	70.1%

¹ Statistics Canada. Canadian Community Health Survey (CCHS), 2000/01

Many people are making healthy choices, but some are not.

- There has been an alarming increase in the number of adults who are overweight or obese, and evidence suggests that this trend is growing in children as well. Statistics Canada information indicates that over 1/3 of Canadian children aged 2-11 were overweight in 1998/99 and about half of them would be considered obese. In the words of one report, “Canada’s obesity epidemic is galloping out of control and the health consequences will be staggering.”⁷
- Close to a quarter of people in the Capital Health region continue to smoke and 30% of non-smokers reported that they were exposed to secondhand smoke on most days during the month prior to the CCHS survey.

- More than 65% of people in the region don’t meet the recommended target of five servings of fruits and vegetables a day.
- Although the majority of women get regular pap smears and breast exams to detect problems early, almost 1/3 of women over the age of 50 did not get a mammogram in the past two years.

Comparisons among health regions

- One of the ways of assessing health in the region is to compare indicators of health with a number of similar regions. Because there is a strong association between socio-economic status and health, comparisons among communities are more meaningful if they are made among communities that are socio-economically similar. In Canada, health regions have been grouped in several different ways.

Check health choices

Indicators ¹	Capital Health	Calgary Health	Alberta	Canada
Pap smear (% done in previous 3 years – women 18 to 69 years)	76.3	73.4	75.1	72.7
Mammogram (% done in previous 2 years – women 50 to 69 years)	67.2	64.6	67.1	69.5
Influenza immunization within the previous year (% 65+ years)	72.4 ²	–	64.1	63.0
Healthy body weight (20-64 yrs) (% based on BMI ³ between 20.0 and < 25.0)	44.0	44.3	41.7	42.9
Overweight or obese (20-64 yrs) (% based on BMI ³ of 27.0 or over)	30.1	29.8	33.0	31.9
Consume fruits and vegetables 5-10 times per day (%)	33.9	29.5	29.9	33.4
Physically active (%)	28.5	24.7	25.5	21.0
Daily smokers (%)	23.3	20.5	22.9	21.5
Former smokers (%)	34.0	33.0	35.2	36.7
Exposure to secondhand smoke among non-smokers (%)	29.5	28.8	29.7	27.6
Frequency of drinking 5 or more drinks on one occasion, 12 or more times a year (%)	22.0	20.4	22.5	20.1

1 Statistics Canada. Canadian Community Health Survey (CCHS), 2000/01.

2 Capital Health, Public Health Division, Communicable Disease Control. Influenza/Pneumococcal Immunization, 2001-2002 Report.

3 BMI is the Body Mass Index and takes into account both height and weight. It is derived by dividing weight in kilograms by height in meters squared.

(–) Dashed lines indicate that data were not available.

- For the fourth year in a row, Maclean's magazine compared 54 health regions with populations over 125,000. The regions were divided into three groups: those with medical schools, regions with major communities, and largely rural regions. The 22 health indicators used were grouped into the following six categories: outcomes, prenatal care, community health, elderly services, efficiencies, and resources. Where necessary, the data were standardized to remove discrepancies that arise from age differences among regions.⁸

For the fourth year in a row, the Capital Health region was ranked #1 among the 15 regions with medical schools. Capital Health tied for 2nd (up from 4th the previous year) when compared to all 54 health regions. The rankings were calculated based on information from the Canadian Institute for Health Information and Statistics Canada.

- Statistics Canada also does comparisons of health indicators across the country. All 139 health regions in Canada are grouped into ten peer groups by Statistics Canada. The groupings are based on socio-demographic variables such as population size, proportion of the population aged 65 years or older, proportion of Aboriginal and visible minority groups, unemployment rate and income inequality. Capital Health is one of eight Canadian health regions in Peer Group B with the following characteristics; large urban centres with relatively high population density, average population size over 500,000, high percentage of visible minorities, low percentage of Aboriginal population, and a high average number of years of education.¹ Although the average proportion of Aboriginal people living in the Peer Group B health regions was 1.5%, Capital Health had a higher proportion (3.7%).

- Data obtained from the 1996 Census, mortality data from 1995 to 1997, population data, and self-perceived health and risk factor data from the Canadian Community Health Survey 2000/01 were used to make Canada-wide comparisons of nine variables including health outcomes and risk factors at the health region level for each of the ten peer groups. These comparisons showed that socio-demographic factors are associated with health status. People living in health regions such as Capital Health and those in larger metropolitan areas had the highest life expectancies and disability-free life expectancies. The links between risk factors and health outcomes were also examined. High life expectancies were associated with low rates of heavy drinking and low rates of daily smoking. A high obesity rate, a high smoking rate, and a high depression rate were the strongest predictors of a low disability-free life expectancy.
- The life expectancy for Peer Group B health regions is the highest in Canada at 79.6 years.
- Capital Health was significantly worse than the peer group on life expectancy, disability-free life expectancy, and the proportion in the region who were daily smokers.
- Compared to Canada, Capital Health had a higher proportion of people who were depressed and a lower disability-free life expectancy. On a positive note, Capital Health region had a lower proportion of people who exercised only infrequently.
- Capital Health's rates on the other indicators were similar to the peer group and to Canada.

Comparison of Peer Group B health regions, selected characteristics

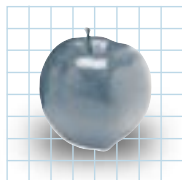
	Health outcomes			Health behaviours				Psycho-social factors	
	Life expectancy (yrs)	Disability-free life expectancy (yrs)	Fair or poor health (age 12+)	Daily smoking (age 12+)	Obese (age 20+)	Infrequent exercise (age 12+)	Heavy drinking (age 18+)	High stress (age 18+)	Depression (age 12+)
	P C	P C	P C	P C	P C	P C	P C	P C	P C
Canada	78.3	68.6	12	22	15	22	16	26	7
Peer Group B	79.6 ▲	69.5 ▲	11 ▲	18 ▲	14 ▲	19 ▲	15 ▲	27	8
AB Capital Health Region	78.8 ▼ ▲	68.0 ▼ ▼	12	23 ▼	15	17 ▲	18	28	10 ▼
Calgary Health Region	79.4 ▲	69.1 ▼ ▲	10 ▲	20	14	19	16	26	9
BC North Shore	80.3 ▲ ▲	72.5 ▲ ▲	7 ▲ ▲	10 ▲ ▲	7 ▲ ▲	10 ▲ ▲	18	30	6
South Fraser Valley	79.6 ▲	69.7 ▲	13	13 ▲ ▲	15	15 ▲ ▲	14	21 ▲ ▲	9
Simon Fraser	78.6 ▼	68.6 ▼	12	16 ▲	13	18 ▲	11 ▲ ▲	27	6
ON York Public Health Unit	80.6 ▲ ▲	71.1 ▲ ▲	11	18 ▲	12 ▲	20	13 ▲	29	7
Peel Public Health Unit	79.9 ▲	70.1 ▲ ▲	11	16 ▲	14	26 ▼ ▼	13 ▲	28	7
Ottawa Public Health Unit	79.5 ▲	69.2 ▼ ▲	11	17 ▲	14	17 ▲	16	25	8

Source: Shields, M & Tremblay, S (2002). The Health of Canada's Communities. Supplement to Health Reports, Vol. 13.

Data source: Estimates of life expectancy and disability-free life expectancy are based on the 1996 Census of Population, Canadian Vital Statistics Database, and population projections from Demography Division. Other estimates are based on the 2000/01 Canadian Community Health Survey (CCHS).

Notes: All estimates based on CCHS have been age-standardized. In column P, ▲ indicates that the health region estimate is significantly better than the peer group estimate and a ▲ in column C indicates the estimate is significantly better than the Canadian estimate. A ▼ or ▼ in the relevant column indicates the health region estimate is significantly worse than the peer group (P) or Canadian (C) estimate.

An ounce of prevention...



The most striking observation from the latest check-up is that so many of the health problems in our region can be prevented. Heart disease, cancer, chronic obstructive lung disease and diabetes share common causes. Poor diet, lack of exercise, smoking, stress and excessive alcohol intake – all lifestyle choices – are leading risk factors for these diseases.⁹ If we make better choices, we can at least reduce the incidence of these diseases. We need to continue to develop supportive environments where these choices are possible.



Born too soon



The birth of a new baby is a wonderful event and every new baby should have a healthy beginning to life. Unfortunately, too many babies are born at a low birth weight (LBW) weighing less than 2500 grams. Low birth weight can result from being born too soon (i.e., a shortened gestation) or being too small for gestational age (i.e., restricted fetal growth) or both.

In the Capital Health region, each year from 1985 to 1998, about two-thirds of low birth weight babies were born too soon – that is, they were born before 37 weeks gestation. In 2000, this percentage increased to 74%. The rate of preterm births is increasing not only in the Capital Health region but across the country. It is increasingly recognized that the prevention of preterm birth is crucial to improving pregnancy outcomes such as birth weight.¹⁰ Unfortunately, prevention strategies to date have had limited success.

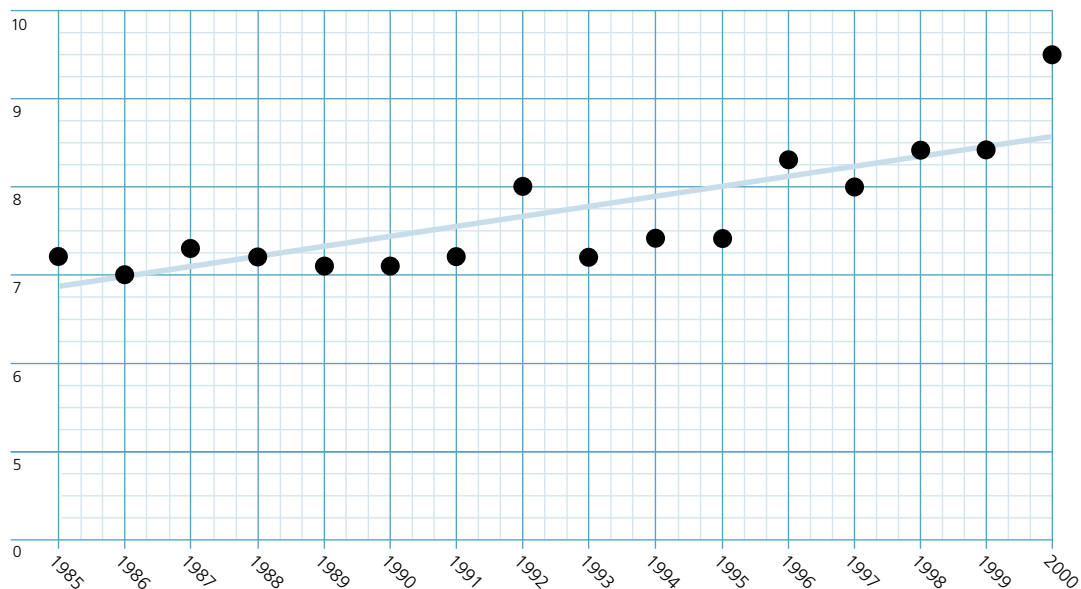
Some facts about preterm babies

- Preterm babies have higher rates of health problems such as respiratory problems, very severe bowel infection, and brain hemorrhage. Between 12-18% of preterm babies will develop disabilities including cerebral palsy and learning difficulties.¹¹
- Health Canada indicates that preterm births account for 75-85% of all babies who die before, during or shortly after birth in Canada.
- The preterm birth rate in the Capital Health region has increased from 7.2% of live births in 1985 to 9.5% in 2000.



Preterm birth rate (per 100 live births), Capital Health region, 1985-2000

Percent live births



Source: Vital Statistics Birth Database, Capital Health region 1985 - 2000

- In 2000, about 75% of the preterm babies were born between 34 and 36 weeks (32% of which were LBW); 20% were born between 28 and 33 weeks (90% LBW); and 10% were born before 28 weeks (98% LBW).
- While about half of twins and triplets are born preterm, between 6 and 8% of single births are preterm.

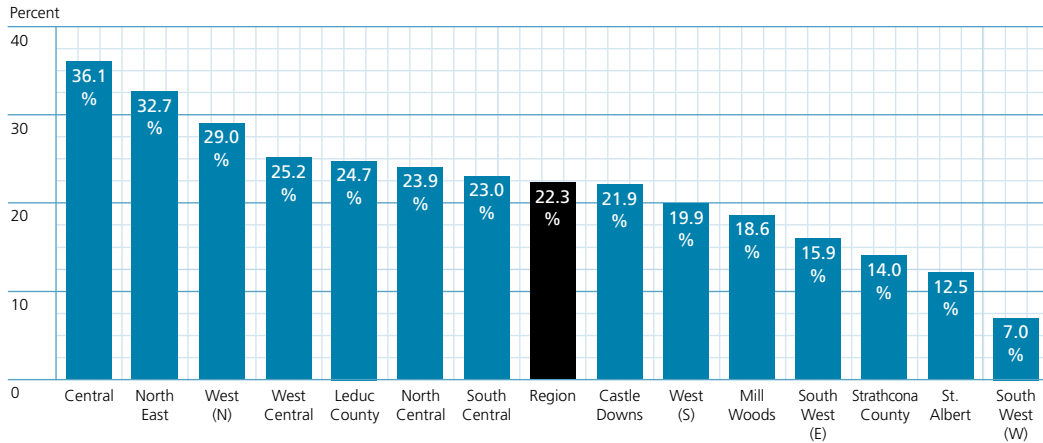
What are the causes?

- Preterm births result from three situations: (1) a medical reason for the baby to be born early (e.g., fetal distress, severe preeclampsia) which accounts for 25% of preterm births; (2) preterm rupture of membranes – about 25% of cases; and (3) spontaneous preterm labour which accounts for 50% of the preterm births.¹²
- Suggestions of why the rates of preterm births are increasing include: an

increasing number of twins or triplets due to fertility enhancing drugs, increases in obstetrical interventions (e.g., early induction or caesarean birth for fetal problems), or changes in the factors associated with preterm birth (e.g., stress, smoking, and prenatal care).¹¹

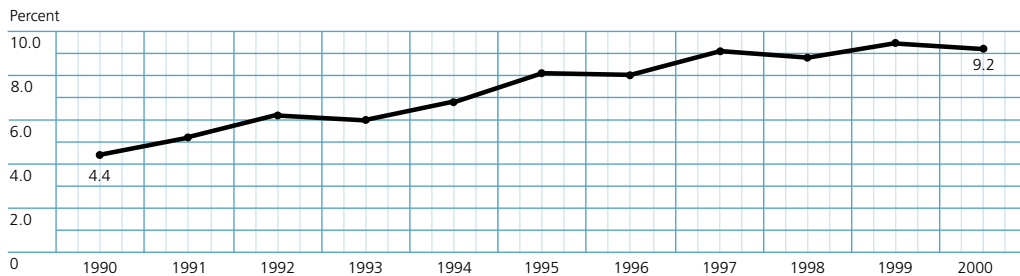
- Smoking has been identified as a risk factor for preterm births. In the Capital Health region, 26% of mothers who had a preterm baby smoked during their pregnancy and 21% of mothers with a full term baby were smokers.
- The age of the mother is also associated with preterm births. Mothers under the age of 20 and over the age of 34 tend to have higher rates of preterm births. Across Canada, the teenage birth rate is going down; however, Alberta's rates are higher than the national average. At the opposite end of the age spectrum, the average age of women having babies is increasing.

Percentage of women who reported smoking during pregnancy, 2000



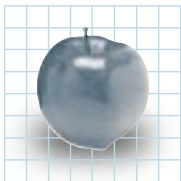
Source: Vital Statistics Birth Database, Capital Health region 2000.

Percentage of first babies born to mothers 35 years or older, Capital Health region, 1990-2000



Source: Vital Statistics Birth Database, Capital Health region 1990 - 2000.

An ounce of prevention...



Prevention efforts directed at low birth weight are elusive because the causes of both preterm labour and poor fetal growth are complex. In spite of this, prevention efforts should focus on known risk factors such as smoking, stress, and lack of prenatal care.¹¹ Additional prevention efforts such as education about preterm labour aimed at women without identifiable risk factors along with supportive hospital policies may also be effective at reducing preterm birth.¹¹ Due to the multiple causes and complex nature of low birth weight, community-wide programs with creative partnerships among health service providers and the community are needed in order to make an impact and reduce the number of babies born too soon.¹¹



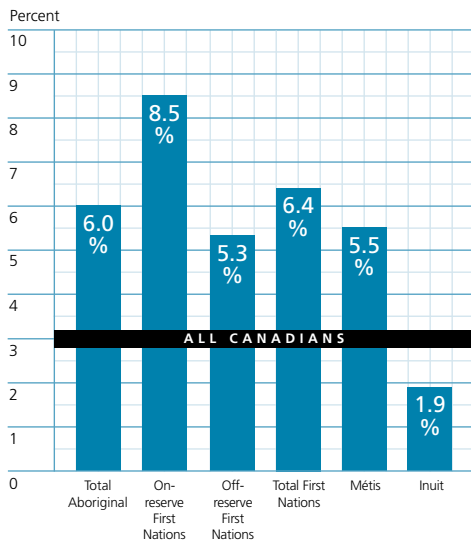
Closing the gap



In Canada, more Aboriginal people live in urban centres than on reserves.¹³ The urbanization of Aboriginal people is especially apparent in Western Canada with 65% of urban Aboriginals living in the western provinces. In spite of these proportions, policy discussions and health research tend to focus on those living on reserves, Registered First Nations, and the Inuit. Compared with other cities in Canada, the city of Edmonton has the second highest Aboriginal population. Many are young, live in single parent families, and have low incomes and high rates of unemployment. Some argue that the socio-economic conditions may, in part, be due to public policies and societal attitudes.¹³

On virtually every measure of health and health status, there is a serious gap between the health of Aboriginal people in the region, in Alberta and Canada, and the health of the overall population. Serious and persistent problems and conditions leading to poor health have a direct impact on Aboriginal babies and children, on youth, elders and families, and on communities. More needs to be done to close the gap and ensure that Aboriginal people have the chance to live healthy lives.

Crude prevalence of self-reported diabetes from the Aboriginal Peoples Survey, 1991



Source: Health Canada. Diabetes among Aboriginal (First Nations, Inuit, and Métis) People in Canada: The Evidence. March 10, 2000.

Note: "All Canadians" data are from the NPHS, 1994 and excludes On-reserve First Nations, remote Ontario and Quebec, and the Territories (First Nations and Inuit).

Some facts about Aboriginal health

- About 60% of Aboriginal Canadians who live off-reserve have at least one chronic health condition compared with less than half of the non-Aboriginal population. The most common chronic conditions among Aboriginals are arthritis (28.7%), high blood pressure (15.7%), and diabetes (8.8%).
- One of the most serious health issues is the rate of diabetes among Aboriginal people. Fifty years ago, diabetes was virtually unknown among First Nations, Inuit and Métis people. But today, rates of diabetes among Aboriginal people in Canada are three to five times higher than the non-Aboriginal population.¹⁴ Of particular concern is that Aboriginal children are now being diagnosed with type 2 diabetes – a condition that occurred mainly in older people in the past.¹⁴ Other concerns include greater disease severity when diabetes is diagnosed, high rates of complications, lack of accessible services, and the increasing prevalence of risk factors for a population that is already at risk.¹⁵
- More recent data (1998) for diabetes show that 2.3% of Aboriginal male youth, aged 15-24 years, were diagnosed with diabetes compared with 0.4% of the male youth population in Canada. The difference is even greater between female Aboriginal youth (3.6%) and the female youth population in Canada (0.4%).¹⁶
- Between 1975 and 2000, the life expectancy in the Registered First Nations population increased by about 10 years. In 2000, an Aboriginal man could expect to live 68.9 years and a woman, 76.6

years. While recent gains have been made in life expectancy for Aboriginal people, it remains seven to eight years shorter than for non-Aboriginal Canadians.¹⁷

- Across Canada, studies consistently show that Aboriginal people have a higher risk of suicide, injury, tuberculosis, HIV and AIDS.¹³ For the last 10 years, the number of AIDS cases in the Aboriginal population has risen dramatically. In 1997, the AIDS prevalence was estimated at 33.2 per 100,000 Aboriginal people, almost 11 times higher than the Canadian rate in 1996 (3.1 per 100,000).¹⁸
- According to the National Forum on Health, “the plight of all Aboriginal peoples is felt most harshly by children.”⁹
 - The infant mortality rate is higher for Aboriginal children - 15 per 1,000 live births compared to 6 for the general population in 1995.
 - The rate of low birth weight babies is increasing and catching up to the non-Aboriginal population. In 1991, the First Nations people had a low birth weight rate of 3.3%. This rate has gradually increased over the years and was reported to be 5.4% in 1993.
 - The suicide rate (1989-1993 data) for females aged 15-24 years was 35 per 100,000 among First Nations people compared to the national rate of 5 per 100,000. For males of the same age, the rate was 126 per 100,000 for First Nations compared to 24 per 100,000 in Canada.
- Over a five-year span from 1989 to 1993, Aboriginal women were three times as likely to commit suicide as were non-Aboriginal women.²⁰

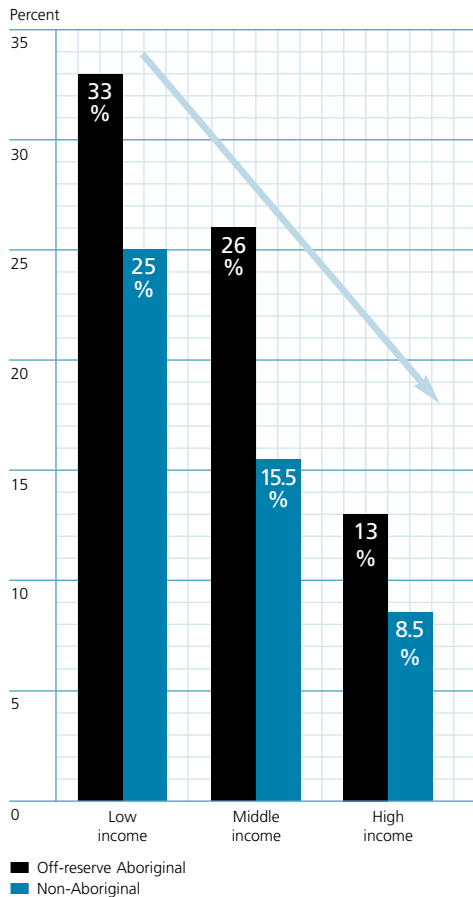
- Aboriginal women experience higher rates of circulatory problems, respiratory problems, diabetes, hypertension and cancer of the cervix.
- In a recent study of Aboriginal women and elders in Manitoba and Saskatchewan, the top health concerns identified were family violence, diabetes, substance abuse and mental health issues.²¹

What are the causes?

A number of determinants are known to have an impact on health, particularly education, employment and income.

- Data from the Canadian Community Health Survey (CCHS 2000/01) show that Aboriginals living in urban areas had a higher proportion of people who didn't complete high school (40%) compared to non-Aboriginals (20%).
- An Edmonton report indicates that, in 1991, 11% of the Aboriginal people living in the city had less than a grade 9 education, close to half had not completed high school; just over 3% had a trade certificate, less than 25% had some other post-secondary education, and about 9% had a university degree.²²
- Recent reports from the Edmonton Public School Board in 2002 show some encouraging results. There was an 11% improvement in the number of Aboriginal students reading at or above grade level at the end of grade 1 and a 12% improvement at grade 6. Results were even better for writing.²³
- Close to 62% of Aboriginal people in Edmonton had incomes below the low income cut off.²² As is seen in the non-aboriginal population, income and

Percentage of off-reserve Aboriginals (urban and rural) reporting fair or poor health by household income, Canada, 2000/01



Source: Statistics Canada, Tjepkema, M. The Health of the Off-reserve Aboriginal Population. Supplement to Health Reports, Volume 13, 2002.

overall health status have an inverse relationship.²⁴ Overall, 22% of urban Aboriginals rated their health as fair or poor.

- Overall, 40% of urban Aboriginals (15-75 years) worked the entire year prior to the 2000/01 CCHS survey as compared to 54% of urban non-Aboriginals.²⁵ In 1995, 35% of Edmonton workers in the general population were employed full time. However, only 18.6% of Aboriginal workers in Edmonton were employed full time and almost 41% of Aboriginal workers did not work at all in 1995.²²
- There are also a number of other factors that directly affect the health of Aboriginal people. Rates of smoking and alcohol consumption are higher than the Canadian average. About 14% of urban Aboriginals reported they were heavy daily smokers compared to 8.8% of urban non-Aboriginals.²⁵
- Rates of overweight and obesity are also higher for Aboriginal people. The reasons why Aboriginal children and adults have higher rates of obesity are unknown but genetic and environmental factors and rapid changes in lifestyle and diet have been suggested as possible reasons. One quarter of urban Aboriginals were classified as obese compared with 13% of urban non-Aboriginals.²⁵

Much of the research on Aboriginal health has focussed on Aboriginal people living on reserves, Registered First Nations, and the Inuit. In contrast, data from the Canadian Community Health Survey allow for a comparison in health status of off-reserve Aboriginals with the non-Aboriginal population taking into account differences in age, income and geographic region.

Health indicators and determinants for those 15 years or older in Canadian provinces (%)

Indicators (from the 2000/01 CCHS)	Urban Areas		Rural Areas	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
One or more chronic conditions	62.6*	49.4	59.6*	50.3
High blood pressure	15.7	13.2	15.8	13.4
Diabetes	8.8*	4.2	9.2*	4.6
Arthritis or rheumatism	28.7*	15.6	24.7*	16.9
Long-term activity restriction	15.5*	10.2	18.1*	10.5
Self-rated health				
(% who rated health as excellent or very good)	43.2*	61.5	42.8*	60.2
(% who rated health as fair or poor)	22.0*	12.1	25.8*	12.7
"Probable" risk of major depressive episode	13.8*	7.4	13.1*	6.8
Education				
Not completed high school	39.6*	20.9	48.0*	32.1
Completed post-secondary education	34.6*	52.8	29.3*	42.6
Household income				
Low	28.0*	9.7	23.3*	11.5
High	38.4*	61.9	36.2*	53.1
Worked the entire past year (aged 15 to 75)	39.6*	53.8	36.2*	50.5
Smoking status				
Light daily smoker	26.9*	12.4	24.4*	13.2
Heavy daily smoker	14.1*	8.8	16.0*	12.4
Never smoked daily	26.8*	51.5	23.9*	45.3
Physical activity				
Active	23.3	21.9	23.5	21.5
Inactive	53.8	54.5	53.2	55.7
Obese (Body Mass Index of 30 or more)	25.6*	13.2	23.5*	17.3

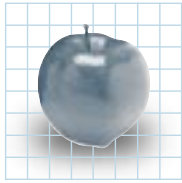
* Significantly different from the non-Aboriginal estimate.

Notes:

- Aboriginal refers to off-reserve self-identified Aboriginal people.
- Since age distribution differed between Aboriginal and non-Aboriginal populations, percentages have been age-standardized to the total Canadian population.
- Income: Low includes those with less than \$15,000 for 1-2 person households and less than \$30,000 for 5 or more persons in the household.
High includes those with \$30,000 or more for 1-2 person households and \$60,000 or more for those with 5 or more persons in the household.

Source: Statistics Canada, Tjepkema, M. The Health of the Off-reserve Aboriginal Population. Supplement to Health Reports, Volume 13, 2002.

An ounce of prevention...



Closing the gap will take more than an ounce of prevention. Raising these Aboriginal health concerns will hopefully lead to an increased understanding of the issues and encourage people to continue working together to find the best ways to improve social conditions, access to and continued development of culturally relevant health services, and ultimately, improve Aboriginal health. A survey suggested that Aboriginal people in Edmonton believe that the best solutions to problems in their communities lie in improved education, improved community services, counseling services, and more policing.²² Aboriginal leaders, community members, elders, parents and young people understand the health challenges and are working with Capital Health, the province and the federal government to develop the best solutions. Clearly, more needs to be done to close the gap and improve the health of Aboriginal people in the region.



Taking the right step forward



*Jack and Jill went up the hill
To fetch a pail of water
Jack fell down and broke his crown
And Jill came tumbling after.*

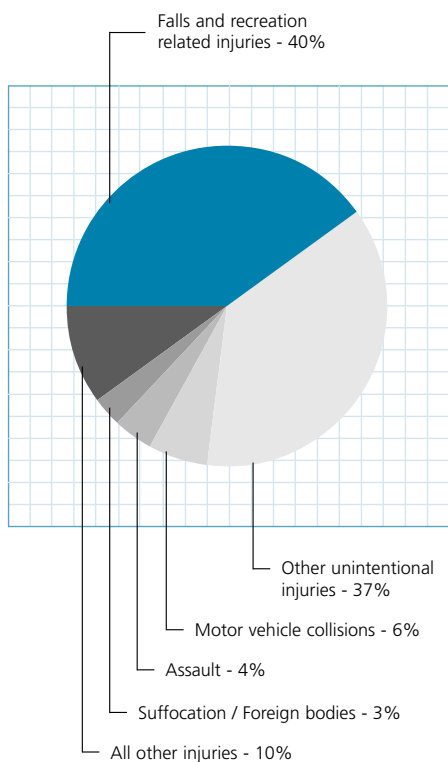
Unfortunately, there are too many Jacks and Jills in the Capital Health region. Too many falls. Too many children hurt in falls. And too many seniors losing their independence and health because of falls.

Injury is a leading cause of death and disability for people in the Capital Health region and many of these injuries are the result of falls. Falls primarily affect two categories of people – young people under the age of 19 and seniors over the age of 65. In both cases, falls can have serious, even life threatening, consequences.

Some facts about falls... for young people

- Falls account for about 39% of all injury-related hospitalizations and 40% of all injury-related visits to emergency departments.
- More young people have to go to an emergency department because of a fall than for motor vehicle collisions, unintentional poisonings, suicide and self-inflicted injuries, and assaults combined.

Leading causes of injury-related emergency department visits by young people, aged 0-19 years, Capital Health region, 1999-2001 (n=79,159)



Source: Capital Health, Clinical Performance Information and Research Unit, (Emergency Department Data).

- Between 1999 and 2001, falls were the cause of nearly 32,000 emergency department visits, over 600 hospitalizations, and four deaths.
- Perhaps not surprisingly, boys fall more often – about 2/3 of all fall-related visits to emergency departments and hospitalizations were for boys.
- It's not young children who have the most falls – it's youth who are 10-19 years old.

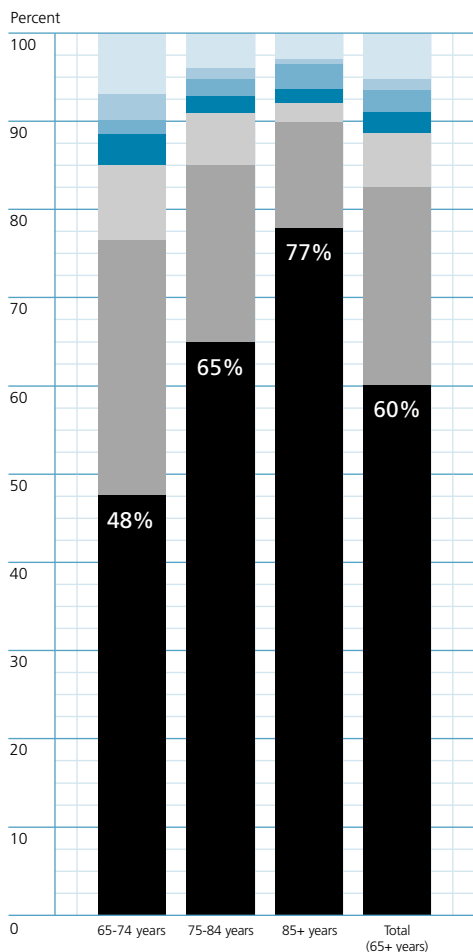
What are the causes?

- Human factors such as age and developmental stage of the young people involved, different products such as bicycles, and environmental factors such as use of appropriate gear all interact to influence the incidence of fall-related injuries.
- The kinds of falls young people have change with age. Young children are more likely to fall off furniture while older youth are more likely to have sports-related falls.
- Falls occur in a range of environments. The percentage of falls that happen in the home decreases as children grow older, while falls at school, during sports and recreation activities, and on the road become more frequent.

What's the impact?

- For young people, falls can result in sprains, strains, broken bones and head injuries, all of varying levels of severity.
- Between 1999 and 2001, for every fall-related death, there were some 161 hospitalizations and 7,978 emergency department visits.
- In terms of the economic burden, it is estimated that injuries from childhood falls cost Canadians \$630 million every year.²⁶

**Leading causes of injury-related emergency department visits by older adults aged 65+ years
Capital Health region, 1999-2001
(n=20,811)**



- All other injuries
- Natural / environmental incidents
- Fractures, not otherwise specified
- Suffocation / foreign bodies
- Motor vehicle collisions
- Other unintentional injuries
- **Falls**

Source: Capital Health, Clinical Performance Information and Research Unit, (Emergency Department Data).

**Some facts about falls...
for seniors**

- Falls are the leading cause of injury among seniors.
- Falls account for about 25% of injury-related deaths in older people, 76% of all injury-related hospitalizations, and 60% of all injury-related visits to emergency departments.
- More seniors are hospitalized because of a fall than for motor vehicle collisions, unintentional poisonings, assaults, and all other injury types combined.
- Between 1999 and 2001, falls were the cause of over 12,000 emergency department visits, 4,000 hospitalizations, and 55 deaths.
- Older women are more likely to fall. And the risk of falling increases with age – people 85 and over have the highest rate of fall-related hospitalizations and visits to emergency departments.

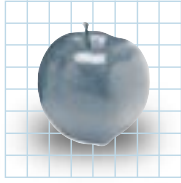
What are the causes?

- We don't know the causes of many of the falls for seniors, but a significant number result from simple slips, trips and stumbles. More than half of all falls happen at home.
- Falls and fall-related injuries usually result from the interaction between personal factors related to the person who falls and environmental factors.

What's the impact?

- For seniors, not only do they suffer the immediate impact of the injury, but there also can be a lasting effect. Falls and the subsequent fear of falling again can affect seniors' health, quality of life, mobility and independence.
- Evidence suggests that falls account for 40% of admissions to nursing homes.²⁷
- In Canada, over \$980 million is spent on treating falls among older adults every year.²⁶

An ounce of prevention...



Falls aren't a normal part of aging. Many falls can be prevented by helping seniors identify their risks for falls and helping to create safe home and community environments. Research has also pointed to the need for seniors to pay undivided attention while walking to compensate for some of the mobility losses due to aging. Seniors can also help prevent falls by staying physically active to maintain their strength, balance, and flexibility.

For young people, it's a matter of being careful, minimizing the risks of serious injury, and wearing helmets and protective sports gear. For parents of young children, it means creating a safe environment at home and remembering how quickly children can get into places they're not supposed to be.



Disease patrol and prevention



Every day, hundreds of people visit busy emergency departments and family doctors in the Capital Health region. When one of them tests positive for a serious communicable disease (which by law must be reported to the Public Health Division), a team of people from Public Health springs into action. Let's go behind the scenes to see what happens when cases of communicable diseases are identified.

In 2002, an Edmonton resident came to an emergency department with serious nausea, abdominal pain, anorexia and malaise, and jaundice. Tests were positive for Hepatitis A, a liver infection. And that's when the work started for the Public Health team. The Hepatitis A virus is spread most often through contaminated food or water. People who prepare food can spread the disease if they are infected with the virus and don't wash their hands properly.

STEP 1 – The Provincial Laboratory notified the Medical Officer of Health of the positive result.

STEP 2 - A Communicable Diseases Nurse Specialist interviewed the individual and the investigation began. The individual was a food handler at a mid-sized grocery store and had definitely handled fresh, ready-to-eat produce while infected.

STEP 3 - An investigation by an Environmental Health Officer revealed that some of the ready-to-eat food was still on the shelves at the grocery store. The items were removed and destroyed.

STEP 4 – People who were in immediate contact with the individual were identified and given injections of Hepatitis A Immune

Globulin (IG) prophylaxis the very next day in order to prevent further spread of the infection. IG is a blood product that is high in the antibodies that provide immediate protection from the disease for a short period of time (up to three months).

STEP 5 – Capital Health launched a media campaign to offer IG to anyone in the community who might have consumed any of the contaminated food items. The grocery store, the products, and the dates the food was handled by the worker were identified and people were encouraged to get injections. Capital Health Link was primed to respond to calls.

STEP 6 – The response was much bigger than expected. A large number of people purchased the ready-to-eat food in preparation for a special holiday time. The infected person also served food from the grocery store at another social event. Nursing staff (from Public Health and Community Health Services) conducted an intensive three-day campaign resulting in over 2,000 people receiving an IG injection.

STEP 7 – Staff at Capital Health have continued monitoring for further outbreaks as a result of this incident, but so far, it appears that staff of the “disease patrol” were successful in preventing any further spread of Hepatitis A as a result of this incident.

Preventing the spread of infectious diseases

Unfortunately, this story is not an isolated event. In 2001, Capital Health staff investigated a range of communicable diseases such as Hepatitis A, Hepatitis B, Hepatitis C, HIV/AIDS, Norwalk-like virus, Salmonella, E. coli O157:H7, Tuberculosis, Sexually Transmitted Diseases, and Meningitis.

Here are some examples of infectious diseases Public Health watches for in the Capital Health region.

Tuberculosis

While great progress has been made in treating and controlling TB, especially in wealthy countries, it still affects people in our community. Each year, between 35 and 60 new cases of tuberculosis are identified in the Capital Health region. In 2001, eight cases of active TB were identified in the inner city area of Edmonton. Public Health’s TB team launched a blitz of TB testing at the Bissell Centre and identified over 500 people who had potentially been in contact with the infected individuals. This resulted in 433 people being tested for TB. Preventive treatment was organized for those who were willing to participate. TB will likely continue to be a public health threat in Edmonton’s inner city because of poor socio-economic and environmental conditions.

Norwalk virus

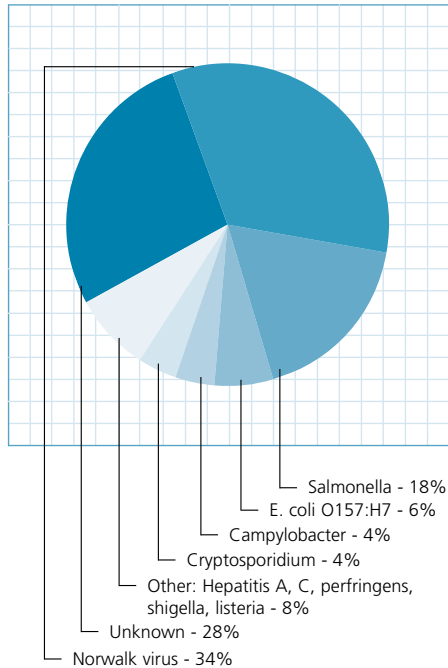
Norwalk is a viral infection that causes vomiting, diarrhea, aching muscles and fever. In the fall of 2002, over 30 outbreaks of the Norwalk virus were investigated by Public Health in seniors’ residences, day cares, schools and other institutions. Public Health also works with the institutions to contain the spread of the illness. The symptoms usually last only a day or two and no special treatment is required, but it can be serious for young children and seniors or for people with weakened immune systems.

Is it stomach upset or is it IID?

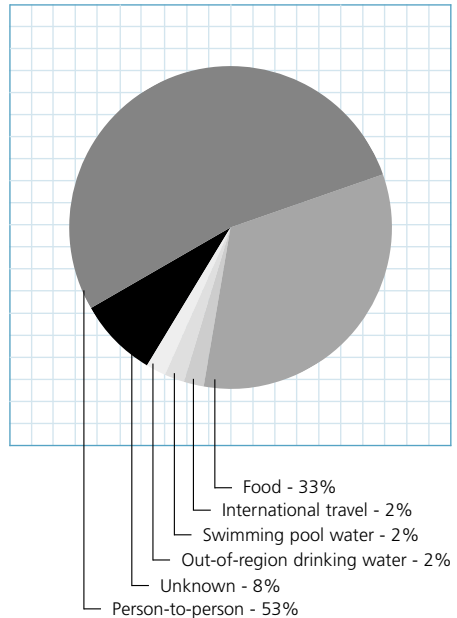
IID stands for Infectious Intestinal Disease and there were 52 IID outbreak investigations carried out by Environmental Health Officers in 2001. This translated into almost 800 people who were ill and followed up by Public Health staff. The most common organism responsible for these outbreaks was Norwalk virus (34%). The timely reporting of symptoms to Public Health by people experiencing illness is essential for the organisms causing the illness to be identified. These outbreaks can occur almost anywhere, from continuing care centres to restaurants, swimming pools,

Infectious intestinal disease outbreaks in the Capital Health region, 2001

Causes



Mode of transmission



Source: Environmental Health Services, Public Health Division, Capital Health, 2001.

summer festivals, wedding parties, hockey rinks, and even in people's own homes.

Influenza

Each year, another strain of influenza comes through our region. Influenza is an acute viral disease of the respiratory tract, characterized by fever, headache, muscle discomfort, exhaustion, sore throat, and cough. Most symptoms usually last 2 to 7 days. For older people and people with chronic illnesses or health problems, influenza can be very serious. That's why Public Health and Community Health Services organize an annual influenza immunization program, targeted especially at people who have a high risk of complications from influenza or those who work in positions where they could spread the disease to people who are at risk. In 2001, over 126,000 people in these categories received a flu shot.

While we're used to the annual outbreaks of influenza, people in the Capital Health region and in other areas around the world are increasingly concerned about the possibility of an influenza pandemic – a widespread, potentially global epidemic. The viruses that cause influenza change slightly from year to year, which means that our immune systems have to fight each new strain, and new vaccine is required for each influenza season. If the virus was to change drastically, our immune systems might not be able to fight it, new vaccine might not be available quickly enough, and this situation would lead to an influenza pandemic. There have been three pandemics in the past century and the result has been millions of deaths. The major threat is that, with the ease of travel, the virus can spread rapidly

from one country to another, well before there is a chance to prepare a vaccine. Plans are underway in Capital Health and with the provincial government to be prepared in case a pandemic influenza hits our province.

West Nile Virus

The alarm bells rang in New York in September 1999 when the first human case of West Nile virus was detected in North America. The virus spreads to humans through bites from certain species of mosquitoes. It was detected for the first time in Canada in the summer of 2001 in Ontario. Health officials in that province indicate that one person died as a result of the virus and six other deaths could be the result of the West Nile virus.²⁸ The first case of West Nile virus in Alberta was reported in the fall of 2002 in southern Alberta.²⁹ It is likely that the person became infected while travelling in an area of the United States that has a high incidence of the disease. The first case in the Capital Health region was reported in December, 2002 and again, was related to travelling. It should be emphasized that we have no evidence that the virus is circulating in the province and Albertans remain at low risk of contracting the disease.

Sexually Transmitted Diseases

Games on and off the track? Past experience with major events has shown that Sexually Transmitted Diseases (STDs) are a serious health concern. During the World Championships in Athletics held in the region in 2001, condoms were supplied to athletes, coaches, and support staff in their visitors' information package. Almost 100,000 posters were distributed to 57 establishments such as night clubs, bars, and lounges.

While awareness is heightened during major events, STDs are always a concern. There are a growing number of STDs reported and many can lead to sterility and even death in the case of AIDS. Chlamydia is the most frequently



Coasters distributed during the World Championships in Athletics in 2001

reported STD in Canada. The rate of Gonorrhoea cases in the Capital Health region has been increasing since 1998 and an enhanced surveillance program began in October of 2001.

The STD Centre provides services to promote sexual health and reduce STD/HIV/Bloodborne pathogen transmission within the Capital Health region. Almost 15,000 people visited the STD centre for assessment and treatment in 2001.

Diphtheria, Pertussis, Tetanus, Polio, Chicken Pox, Measles, Meningitis...

Thanks to a successful immunization program, children today have a healthier future. With the exception of safe water, no other intervention has contributed as significantly to the reduction in illness and an increase in life expectancy. However, everyone must remain vigilant and keep their immunizations current.

The graph shows a radical drop in the number of Haemophilus Influenza Invasive Disease cases among young children in Alberta after the introduction of vaccine.

This illustrates the important contribution immunization has made in the prevention of disease.

Reason for influenza immunization by location where immunization occurred, Capital Health region, 2001

Reason	Physicians' Offices	Continuing Care	Community Sector	Other	Total
Age (65+ years)	30,352	4,644	28,317	1,262	64,575
Chronic Illness (<65 years)	21,243	459	8,615	1,857	32,174
Spouse at high risk	1,714	5	1,128	64	2,911
Non-hands on health care worker	962	107	1,254	711	3,034
Health care worker	3,186	4,055	2,247	11,077	20,565
Other household contact of the immune suppressed and frail	1,856	49	1,110	71	3,086
Total	59,313	9,319	42,671	15,042	126,345

Source: Communicable Disease Control, Public Health, Capital Health, Annual Report 2001.

Notifiable disease numbers and rates in the Capital Health region, 2000 and 2001

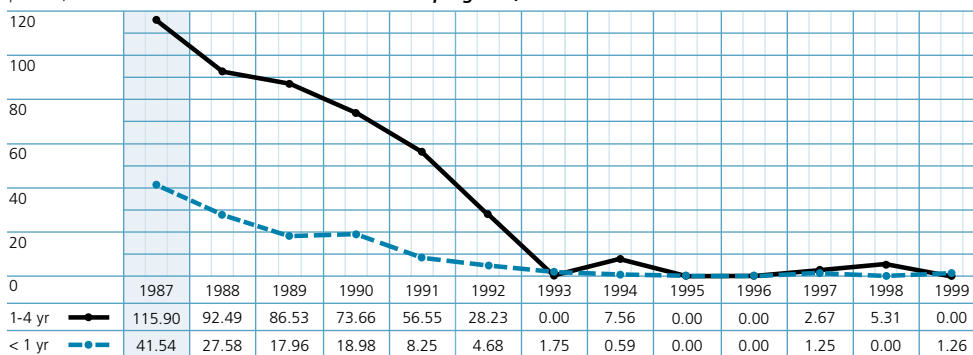
Disease	Number of cases in 2001	Number of cases in 2000	Rate per 100,000 in 2001	Rate per 100,000 in 2000
Chicken Pox	659	1,767	78.5	213.5
Hepatitis A	14	12	1.7	1.5
Hepatitis B	15	17	1.8	2.1
Hepatitis C	848	855	101.0	103.3
HIV Infection	100	82	11.9	9.9
AIDS	7	12	0.8	1.5
Pertussis (Whooping Cough)	46	85	5.5	10.3
E. coli O157:H7	58	50	6.9	6.0
Giardiasis	84	120	10.0	14.5
Sexually Transmitted Diseases				
Chlamydia	2,085	1,840	248.3	222.4
Gonorrhoea	415	256	49.4	30.9
Non-gonococcal Urethritis	541	554	64.4	67.0
Syphilis	10	15	1.2	1.8

Source: Communicable Disease Control, Public Health, Capital Health, Annual Report 2001.

Haemophilus influenzae invasive disease, Alberta, 1987-1999

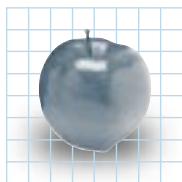
per 100,000

▼ Introduction of immunization programs, mid-1987



Source: Centre for Infectious Disease Prevention and Control, Health Canada, 2001.

An ounce of prevention...



For many of the infectious diseases common in the region, prevention is in our own hands ... literally! The single most important step people can take to prevent the spread of infectious diseases is to thoroughly wash their hands with soap and water after using the bathroom, providing care to an ill person, handling soiled laundry, and before handling food. Washing your hands breaks the chain of disease transmission.

People travelling to other countries should get vaccinated in advance, especially since Hepatitis A and other infectious diseases are common in many countries.

Parents should remember that one of the most important things they can do for their children is to make sure they are vaccinated. Some parents have been misinformed and think that immunization puts their child at risk. Nothing could be further from the truth. There are only very rare instances in which a child should not be immunized. In addition, because childhood diseases like mumps, measles and whooping cough or more serious illnesses like polio are no longer common in Canada, some people think vaccinations aren't as important as they used to be. But they're wrong. In countries like Britain, Sweden and Japan where immunization rates for whooping cough were allowed to decline, the result was a dramatic and immediate resurgence of the disease. Of particular interest is the major diphtheria epidemic that occurred in the former Soviet Union where low primary immunization rates for children and the lack of booster vaccinations for adults have resulted in an increase from 839 cases in 1989 to nearly 50,000 cases and 1,700 deaths in 1994.³⁰ Vaccinations are just as important as ever and remain a vitally important component for children's health.



From dog bites to bioterrorism – keeping our environment safe



8:00 a.m. and the day starts for Capital Health's Environmental Health Officers. What's in store for a typical day? A call comes from a worried mom – her son has just been bitten by a dog. What are the chances of rabies? An Environmental Health Officer heads out to see the child, find the dog, talk to the owner, and determine whether a rabies vaccination is needed. Restaurant inspections are on the list for another Environmental Health Officer, including a place that has had an outbreak of the Norwalk virus in the past few weeks. Another officer is off to work with a team of police officers, fire fighters, and building inspectors to inspect an inner city house and later, he'll need to be in court to give evidence in a case about an unsafe house that was condemned. In the midst of all this regular activity, a call comes in that someone has received a parcel with a strange white powder.

These may not be the usual things people expect from their health system, but they are part of the regular work of Public Health staff to protect people's health and ensure the environment is safe. Here are some other examples of health risks in the environment and how they are addressed by Public Health.



A Safe and Healthy Environment

Environmental Health staff is working to ensure that the air we breathe, the food we eat, the water we drink and play in, and the soil we live on are safe. This can only be accomplished by working closely with government agencies and a variety of industries.

The air we breathe

The nature of the air we breathe depends on many factors including whether it is indoor or outdoor air. Indoor air quality is important since the average Canadian takes 9 out of 10 breaths indoors where air quality is anywhere from 2 to 10 times worse than the air outside. Environmental Health Officers investigate air quality complaints in public facilities and rental dwellings, and provide consultation to concerned homeowners. Working closely with provincial staff from Workplace Health and Safety to address air quality concerns that affect workers is also a priority.

The infamous black mould received a lot of media attention this summer with headlines such as, 'Mouldy House Burned Down'. These little critters have kept our staff very busy inspecting, sampling, and explaining the health risks. While there have been a few mouldy houses condemned in the Capital Health region, most of these situations were remedied by repairing a leak and doing some general cleaning.

The quality of outdoor air is regulated by Alberta Environment in cooperation with Capital Health. Environmental Health Officers are involved in reviewing and approving plans for changes in industrial emissions, planning air monitoring networks, conducting air quality research, and advocating for improvements in air quality.

The water we drink

Turn on the tap and out comes a stream of clean, cold, fresh water. That's something we used to simply take for granted ... until Walkerton and North Battleford. In the Capital Health region, consistent monitoring and regular tests show that Edmonton's drinking water is safe. But the only way to keep it that way is with continuous vigilance – vigilance that is provided through a strong working relationship between the water utility staff and Environmental Health Services. The North Saskatchewan River is our region's primary source of drinking water. It's known for rapid changes in quality and it requires almost instantaneous adjustments to maintain quality and keep it safe for drinking.³¹

The food we eat

Each day, Environmental Health Officers inspect restaurants and other places that serve or distribute food. Sometimes inspections are done because of complaints of illness or unclean conditions. Other inspections are done before new restaurants open and all food places are monitored on a routine basis. In 2001, 15,500 inspections were done in restaurants, bakeries, butcher shops, caterers, grocery stores, vending machines and markets. Over 12,500 risks were identified and 95% were subsequently remedied.

In the summer, the pressure is really on as the Capital region hosts 19 summer festivals and welcomes 2.8 million visitors. More than 400 temporary food operations were inspected by Environmental Health officers in 2001 and the vast majority of problems were corrected with one inspection.

The water we play in

As soon as summer hits, beaches, water parks, swimming pools and wading pools are crammed with children and families enjoying a break from the heat. Whirlpools, hot tubs,

steam baths and saunas in hotels and other recreational facilities are also places where people go to relax. But we can only do that safely if the water is free from different disease-causing micro-organisms.

Environmental Health Officers routinely investigate the water quality at all these different locations and work with the owners to ensure safety. For example, Environmental Health Officers made sure the water in the Hawrelak Park Lake was safe for participants for the Canadian Triathlon event in 2000, the Triathlon World Championship in 2001, and the Triathlon World Cup in 2002. It will again be used as the World Cup site in 2003.

Safe homes, buildings, and businesses

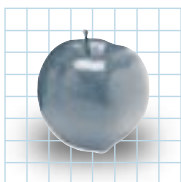
We've all seen rundown houses and wondered if they were safe for anyone. In some cases, they aren't, and that's when Public Health staff step-in to investigate and eventually close them down or charge the owner if repairs aren't made. Public Health staff also inspect hotels, hospitals, nursing homes, daycare centres, recreational facilities, beauty salons and shopping centres. In 2001, over 10,000 inspections were done and 6,300 non-critical building risks and violations were identified – 55% were remedied.

Environmental Health officers also check on the health and safety of tattoo and body piercing businesses, electrolysis and acupuncture clinics, spas and esthetics studios, tanning beds, fitness centres, and even massage parlours. Environmental Health staff have worked with other government agencies and the tattoo industry to develop regulations and safety standards, which has resulted in safer tattooing practices.

Bioterrorism

Following the events of September 11 in New York, people's attention quickly shifted to a new threat – a biological attack in the form of anthrax. In the United States, 22 cases of anthrax and five deaths brought heightened awareness of the new threat of bioterrorism. While these attacks have not continued and none have occurred in Alberta or Canada, people were on their guard for any suspicious parcels. As a result, Capital Health, together with other agencies, developed a comprehensive emergency plan to ensure that immediate action can be taken if acts of bioterrorism ever occur in the region.

An ounce of prevention...



Inspections and monitoring of air, water, buildings, waste management, restaurants, and even dog bites are regular ways of protecting people in the region and preventing illness and injury. People in the region can help by reporting cases of possible food poisoning or improper handling of food in restaurants. Keeping our environment safe and healthy requires action by all of us – individuals, restaurant and recreation facility owners, building owners, landlords, grocery staff, and the staff at Public Health.



A closing word

From falls to the spread of serious infectious disease, the message in this year's report is to use an ounce of prevention to keep ourselves and our community healthy.

While much of the focus in health is on the latest treatments and technology, on hospital services and diagnostic tests, there is growing recognition that health is about a lot more than health care. In fact, research consistently shows that so many of the diseases that affect people's health and independence and cost them their lives can be prevented by following a nutritious diet, being active, not smoking, and enabling all people to make healthier choices. These are well known facts, but unfortunately, too many people in our region don't put the information into action.

As a community, good health is up to all of us. We can keep our community and ourselves healthy simply by making and enabling better choices. At Capital Health, we're doing our part by promoting good health and healthy choices, highlighting areas where there are serious warning signs and health problems to watch, containing the spread of infectious diseases, and constantly monitoring potential threats to our health in the environment.

Together, we can improve health in the Capital Health region. It's up to all of us.

Dr. Gerry Predy
Medical Officer of Health
Capital Health

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Keeping you informed

At Capital Health, we regularly track trends and assess the impact of a number of factors on the health of people in the region.

We hope reports like this provide useful and interesting information for people and act as a catalyst for action.

If you have questions about the information or issues in this report or have other questions about the health of people in the region, please give us a call.

Contact:

Medical Officer of Health
Suite 300, 10216 – 124 Street
Edmonton, Alberta T5N 4A3
Phone: (780) 413-7946

For more information and resources...

Helpful phone numbers

Capital Health Link

Health advice and information
open 24 hours a day, 7 days a week
408-LINK (5465)

Adult Mental Health Crisis Response Team
482-0222

Children's Mental Health Crisis Services
427-4491

Community Service Referral Line
482-INFO (4636)

The Distress/Suicide Line
open 24 hours a day, 7 days a week
482-4357

Poison Control Centre
open 24 hours a day, 7 days a week
1-800-332-1414

Smoker's Help Line
1-866-332-2322

Health Resource Centres

Grey Nuns Community Hospital
450-7312

Northeast Community Health Centre
472-5181

Sturgeon Community Hospital
460-6303

Helpful web sites

Alberta Alcohol and Drug Abuse Commission (AADAC)
<http://www.aadac.com>

Alberta Cancer Board
<http://www.cancerboard.ab.ca>

Alberta Mental Health Board
<http://www.amhb.ab.ca>

Canadian Health Network
<http://www.canadian-health-network.ca>

Capital Health
<http://www.cha.ab.ca>

Canadian Institute for Health Information (CIHI)
<http://www.cihi.ca>

Dietitians of Canada
(for nutrition and BMI information)
<http://www.dietitians.ca>

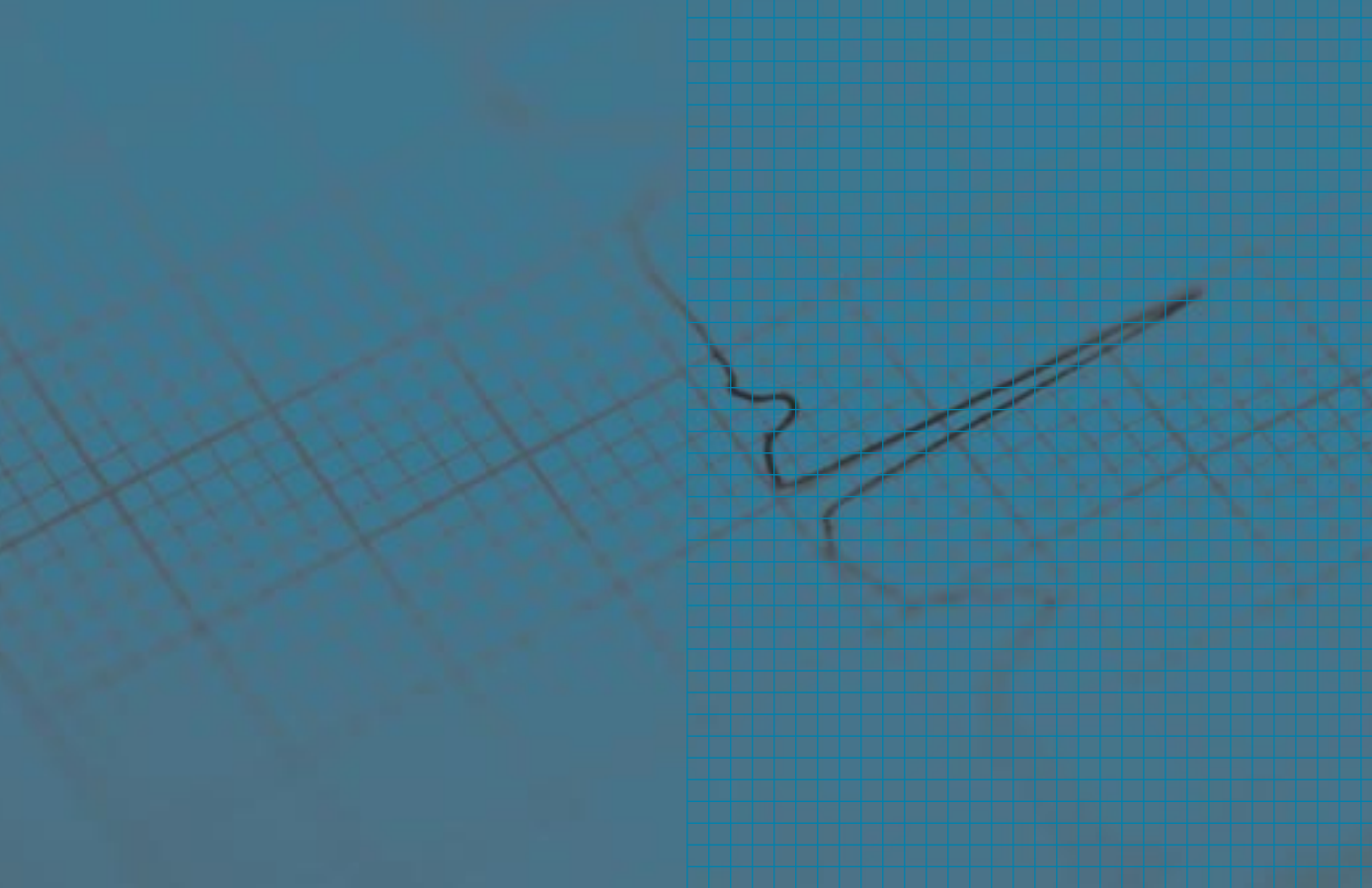
Health Canada
<http://www.hc-sc.gc.ca>

Health in Action (Alberta)
<http://www.health-in-action.org>

Heart and Stroke Foundation of Canada
<http://www.heartandstroke.ca>

Statistics Canada
<http://www.statcan.ca>

The Support Network
<http://www.thesupportnetwork.com>



Capital
Health

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On April 1, 2009, AHS brought together 12 formerly separate health entities in the province: nine geographically based health authorities (Chinook Health, Palliser Health Region, Calgary Health Region, David Thompson Health Region, East Central Health, Capital Health, Aspen Regional Health, Peace Country Health and Northern Lights Health Region) and three provincial entities working specifically in the areas of mental health (Alberta Mental Health Board), addiction (Alberta Alcohol and Drug Abuse Commission) and cancer (Alberta Cancer Board).