

C: Health Status and Determinants



Health Trends in Alberta: A Working Document

SECTION C: HEALTH STATUS AND DETERMINANTS

Data for this section come from population health surveys conducted by Statistics Canada including the Canadian Community Health Survey and the National Population Health Survey.

Other data sources are the National Council of Welfare, Statistics Canada Health Indicators Database and the Alberta Vital Statistics database.

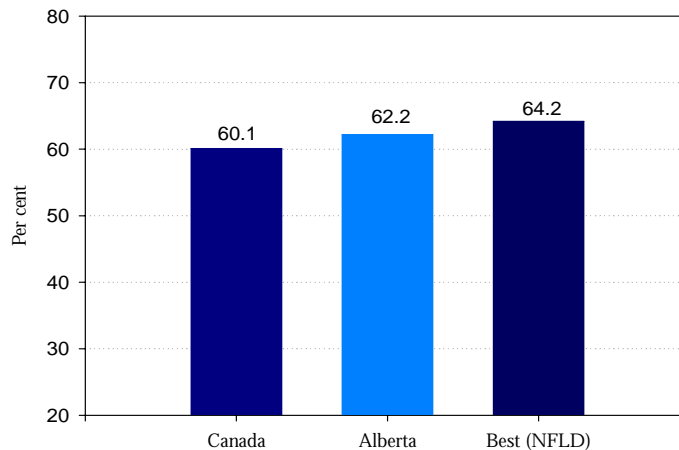
The specific data source is indicated for each graph.

Self-reported Health

Health is much more than just the absence of illness or disability. It is a state of physical, emotional, and social well being.

Self-reported health status -- the subjective experience of how healthy a person feels -- is an important health indicator that provides an indication of general population health status. In 2005, almost two out of three (62.2 per cent) Albertans reported that their health was very good or excellent. This proportion was slightly higher than the national average of 60.1 per cent. Newfoundland and Labrador had the highest percentage in the country at 64.2 per cent; however this was not significantly different from Alberta.

Figure 32: Self-Reported Health Status “Very Good” or “Excellent”
(Canada, Alberta, Best Province)

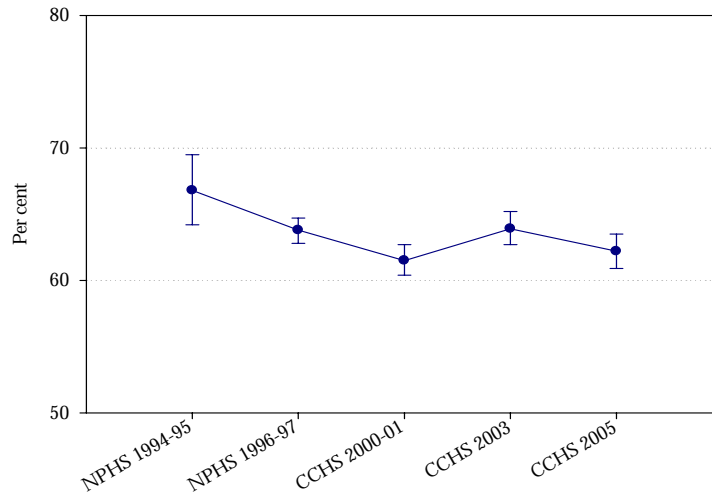


Source: Statistics Canada, Canadian Community Health Survey, 2005 (age 12+)

Over the past 10 years, self-reported health status has been fairly constant in Alberta. Slightly higher results in years measured by the National Population Health Survey (NPHS) may reflect a slight difference in the wording of the question in the NPHS.

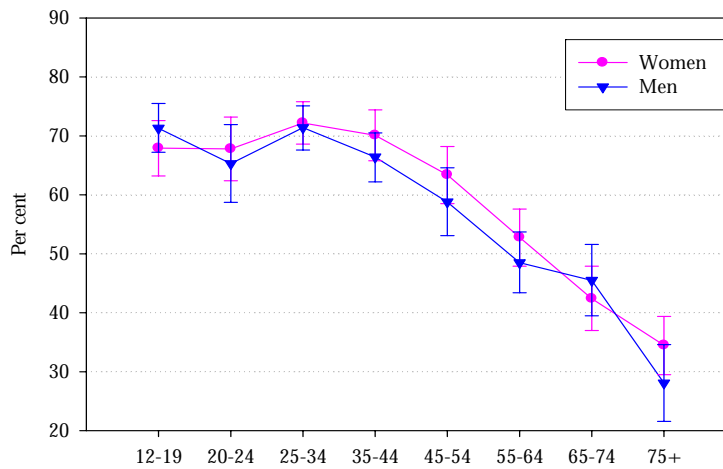
The percentage of Albertans who report their health to be “very good” or “excellent” decreases with increasing age. There was little difference between men and women for this indicator in 2005.

Figure 33: Trends in Self-Reported Health Status “Very Good” or “Excellent”
Alberta, 1994 - 2005



Sources: Statistics Canada, National Population Health Survey (age 12+); Canadian Community Health Survey (age 12+)

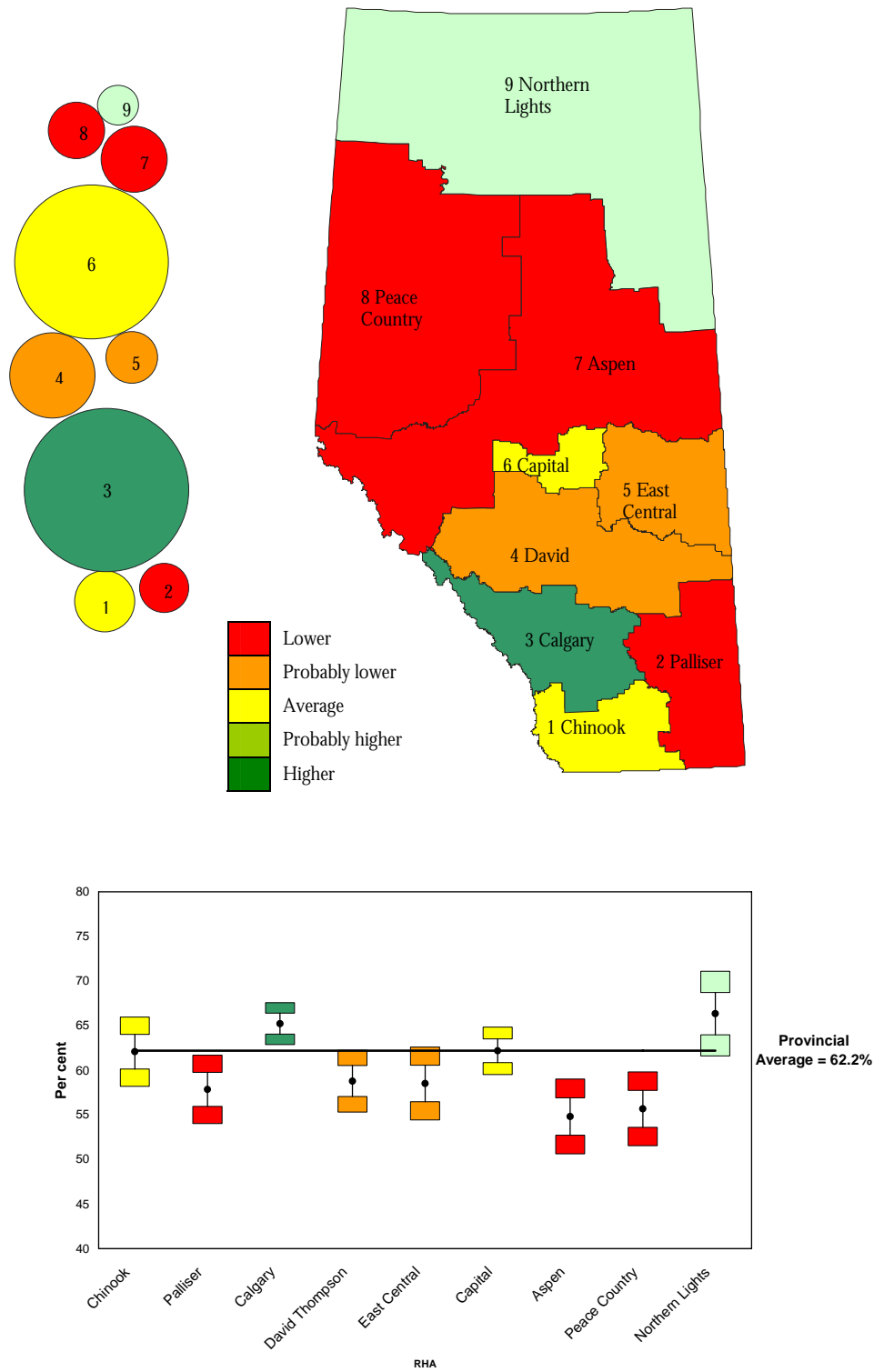
Figure 34: Self-Reported Health Status “Very Good” or “Excellent” by Age and Sex



Sources: Statistics Canada, Canadian Community Health Survey, 2005

The Calgary and Northern Lights health regions had a higher percentage of people who reported their health as very good or excellent compared to the provincial rate. Peace Country, Aspen, and Palliser regions had a lower percentage reporting very good or excellent health.

Figure 35: Regional Differences in Self-Reported Health Status “Very Good” or “Excellent”, 2005



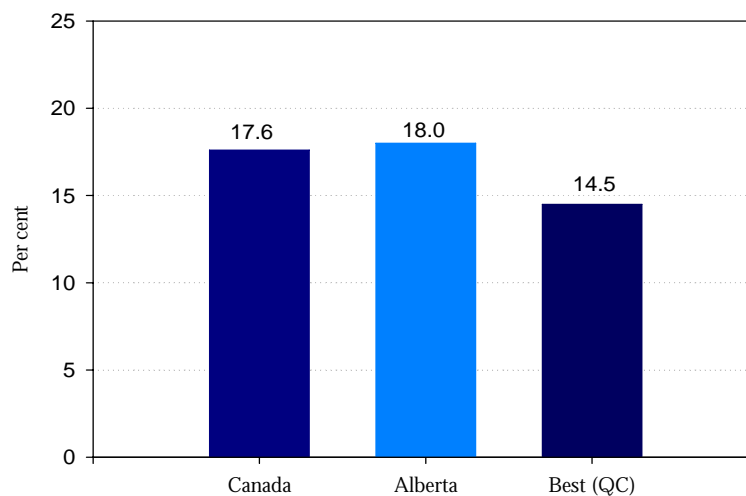
Sources: Statistics Canada, Canadian Community Health Survey, 2005

Health Utility Index

The Health Utility Index (HUI) was developed at McMaster University's Centre for Health Economics and Policy Analysis and measures overall functional health, based on eight dimensions of functioning (vision, hearing, speech, mobility, dexterity, feelings, cognition and pain). A score of 0.8 to 1.0 indicates very good or perfect health. A score below 0.8 indicates moderate or severe functional health problems.

In 2005, 18 per cent of Albertans who were 12 years and older reported moderate to severe functional health problems. These functional limitations may affect many aspects of an individual's life such as access to transportation, employment and leisure activities. Alberta's percentage is similar to the Canadian average (17.6 per cent), and somewhat higher than that of the best province, Quebec (14.5 per cent).

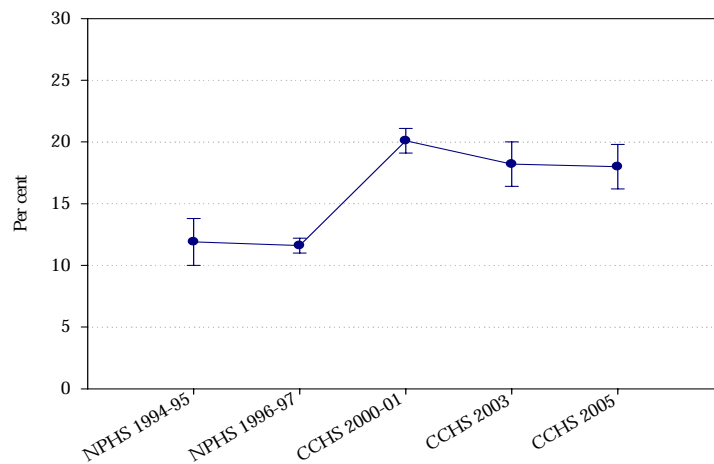
Figure 36: Moderate or Severe Functional Health Problems
(Canada, Alberta, Best Province)



Source: Statistics Canada, Canadian Community Health Survey, 2005 (age 12+)

The percentage of Albertans reporting moderate to severe functional health problems increased from the mid 1990s and has remained fairly stable over the last three measurement points. Slightly higher results in years measured by the Canadian Community Health Survey (CCHS) may reflect a slight difference in the wording of the question.

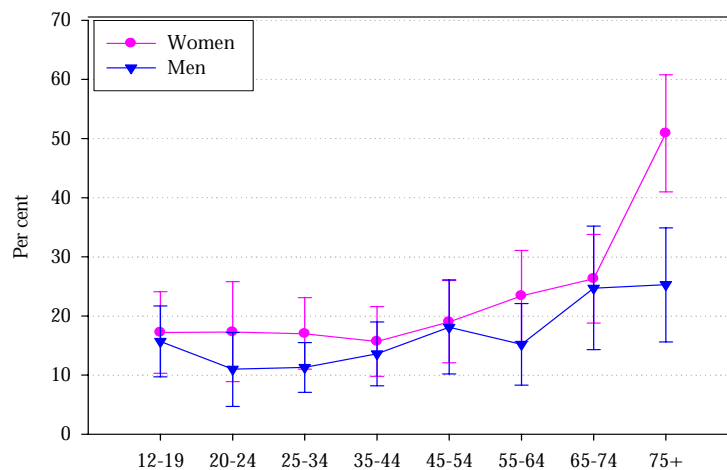
Figure 37: Trends in Self-Reported Moderate or Severe Functional Health Problems
Alberta, 1994 - 2005



Sources: Statistics Canada National Population Health Survey; Canadian Community Health Survey

The percentage of Albertans reporting moderate to severe functional health problems is fairly constant across different age groups until older adulthood where it increases, especially for women. *These results should be used with caution due to a large coefficient of variation.* Sample sizes were not large enough to calculate regional rates for this measure so maps are not provided.

Figure 38: Moderate or Severe Functional Health Problems by Age and Sex



Sources: Statistics Canada, Canadian Community Health Survey, 2005

Life Expectancy

Life expectancy is "the average number of years an individual of a given age is expected to live if current mortality rates continue to apply" (Last, J. *Dictionary of Epidemiology*, 3rd edition, Oxford University Press, New York, 1995. p 59.). A higher life expectancy at birth is frequently interpreted as an indicator that a population is healthy, has adequate access to health care, has healthy diets, and is protected from the effects of environmental, workplace, or other hazards that would shorten life.

Life expectancy is calculated using estimates of age-specific mortality rates for a defined population over a circumscribed time period. Because these estimates depend upon large populations for stability, life expectancy is most often interpreted for large populations. Measures of variability should be calculated if the measure is to be employed on smaller regional populations. The following tables show the life expectancy at birth for females and males separately compared with Canada and the best province, British Columbia.

Figure 39: Female Life Expectancy at Birth, 2004 (Canada, Alberta, Best Province)

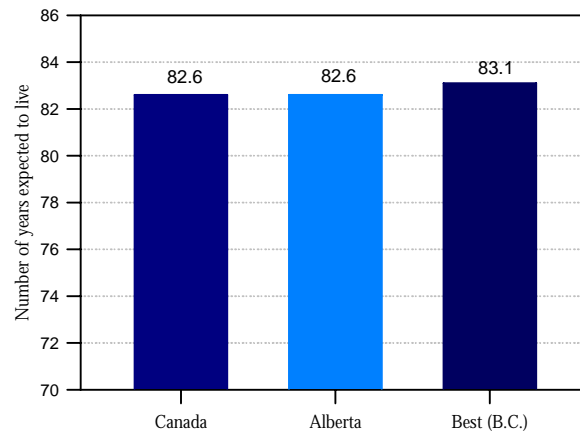
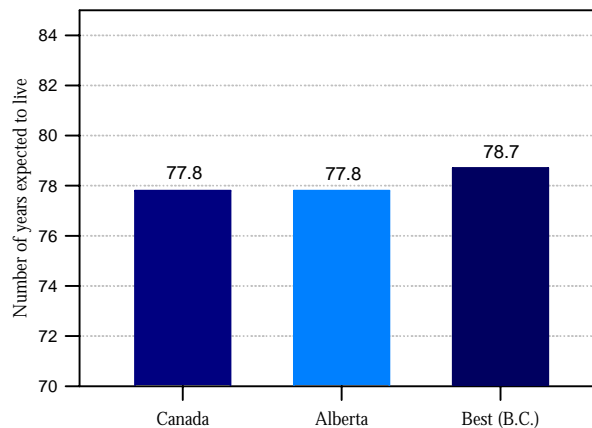


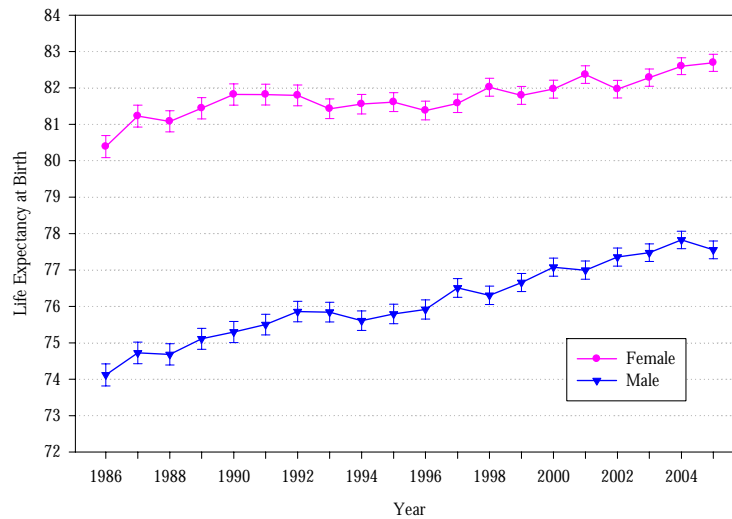
Figure 40: Male Life Expectancy at Birth, 2004 (Canada, Alberta, Best Province)



Source: Statistics Canada

The figure below shows the life expectancy at birth for Alberta males and females from 1986 to 2005. There is a general upward trend, slightly more marked for males than for females.

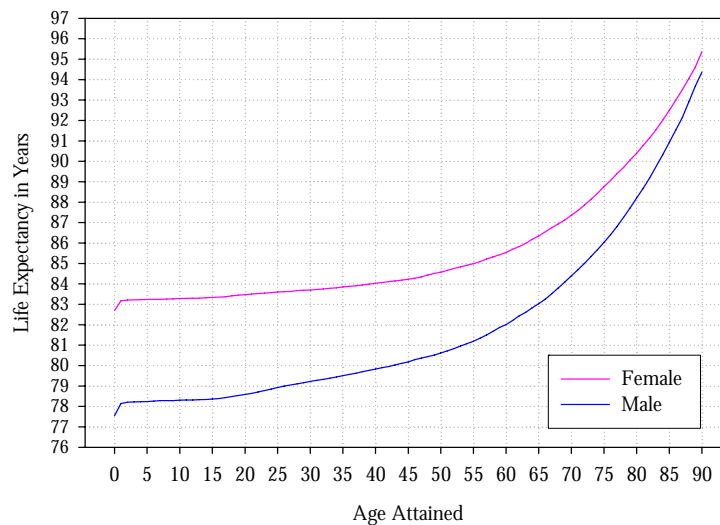
Figure 41: Trends in Alberta Life Expectancy at Birth 1986 - 2005



Source: Surveillance & Environmental Health, Alberta Health & Wellness

As individuals continue to survive through time, their life expectancies increase as they continue to avoid premature death. For example, a male who was 65 years of age in 2005 will have a life expectancy of about 83 years, while a female who was 65 years of age will have a life expectancy of about 86.5 years. These figures are of particular importance for planning the delivery of services for older adults.

Figure 42: Conditional Life Expectancy, Alberta, 2005



Source: Surveillance & Environmental Health, Alberta Health & Wellness

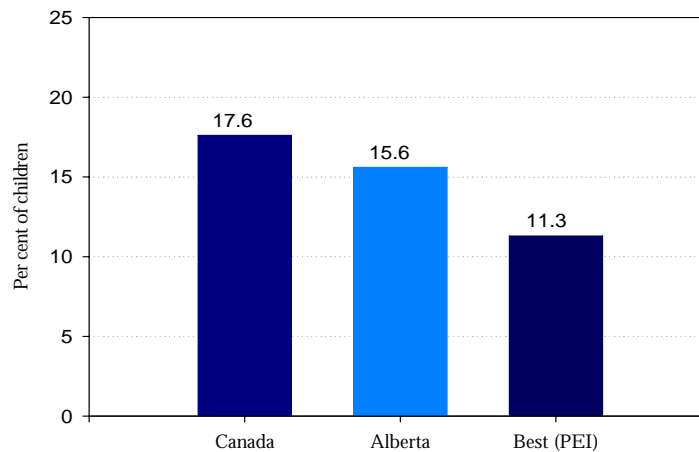
Childhood Poverty

Living in poverty increases the risk of poor health and is associated with decreased life expectancy. Children living in poverty are particularly at risk. They are more likely to have poorer nutrition, increased infections, and are often not well prepared for school entry. The effects of childhood poverty can often be measured well into adulthood.

For the purposes of this section, "children" are defined as those under the age of 18; "living in poverty" is defined as the situation when 55 per cent or more of the child's family income is being spent on shelter, food and taxes. This cutoff, called the Low Income Cut-offs (LICO) measure has been created by Statistics Canada. LICO rates are updated annually by Statistics Canada using the Consumer Price index, and vary based on family size and population of the area in which the family or person resides.

In 2003, Alberta had the second lowest child poverty rate in the country at 15.6 per cent. This was below the national average of 17.6 per cent and higher than the 11.3 per cent reported for Prince Edward Island, the province with the lowest rate.

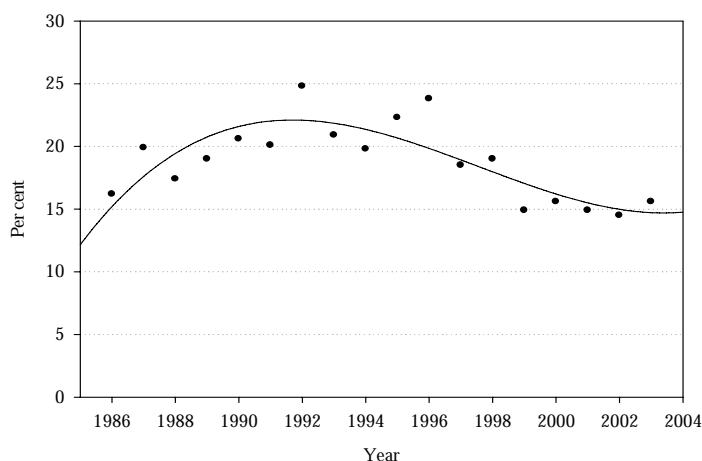
Figure 43: Percentage of Children in Families Living Below the Poverty Line (Canada, Alberta, Best Province, 2003)



Source: Poverty Profile 2002 and 2003, National Council of Welfare, summer 2006

The trend in child poverty in Alberta since 1986 shows an increase during the late 1980s until the mid 1990s, when it appears to decrease and level out.

Figure 44: Trends in Child Poverty, Alberta, 1986 - 2003

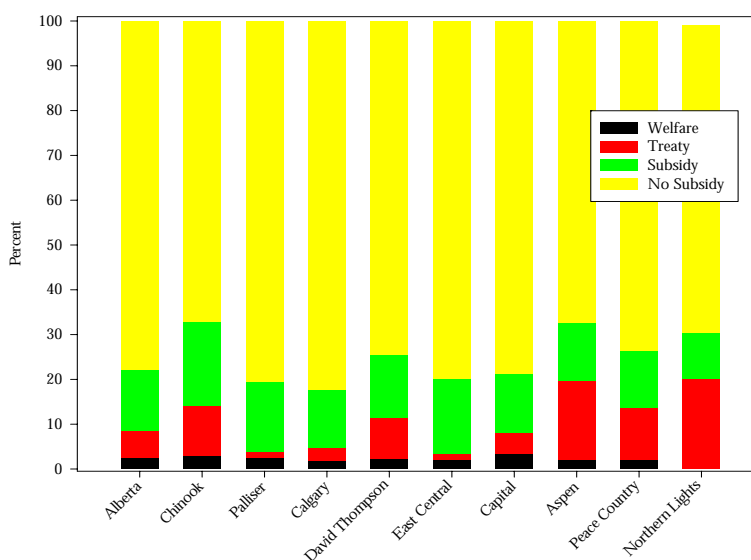


Source: Poverty Profile 2002 and 2003, National Council of Welfare, summer 2006

Comparable figures for each of Alberta’s nine regional health authorities are not available. However, the Alberta Health Care Insurance Plan (AHCIP) Stakeholder Registry can be used as a proxy for low income. Partial subsidies and waivers of AHCIP premiums are available to families with children who have an adjusted taxable income below \$39,250 and above \$32,210. Full premium subsidies are available to families with children who have incomes below \$32,210.

For fiscal year 2006, 77.9 per cent of children under the age of 18 were in families not requiring a subsidy in paying AHCIP premiums. Low income families comprised 13.5 per cent of children, and families on social assistance (welfare) comprised 2.5 per cent of children; 6.4 per cent of children were in families with treaty aboriginal status who qualify for subsidies from the federal government regardless of family income.

Figure 45: Percent of Families with: AHCIP Subsidy; No Subsidy; Welfare; or Treaty Status: 2006



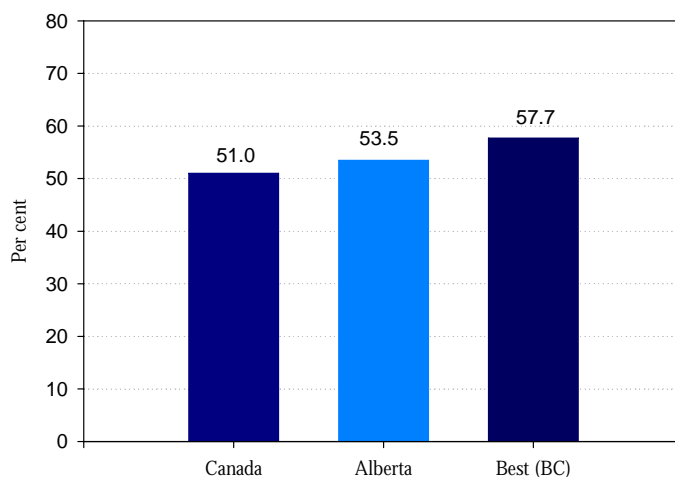
Source: Alberta Health Care Insurance Plan Stakeholder Registration File

Physical Activity

Regular physical activity relieves stress, builds strength, increases resistance to disease and injury, improves cardiovascular fitness, and helps maintain healthy weight levels. The Canadian Community Health Survey (CCHS) classifies respondents as active, moderately active or inactive based on an index of average daily physical activity over three months. For each leisure time physical activity engaged in by the respondent, average daily energy expenditure is calculated by multiplying the frequency of the activity by the average duration of the activity, by the energy cost (kilocalories per kilogram of body weight per hour) of the activity. The index is calculated as the sum of the average daily energy expenditures of all activities. Respondents are classified as follows: 3.0 kcal/kg/day or more = physically active; 1.5 to 2.9 kcal/kg/day = moderately active; less than 1.5 kcal/kg/day = inactive.

In 2005, 53.5 per cent of Albertans were classified as moderately active to active. This is higher than the national average of 51 per cent, but less than the best province, British Columbia with 57.7 per cent.

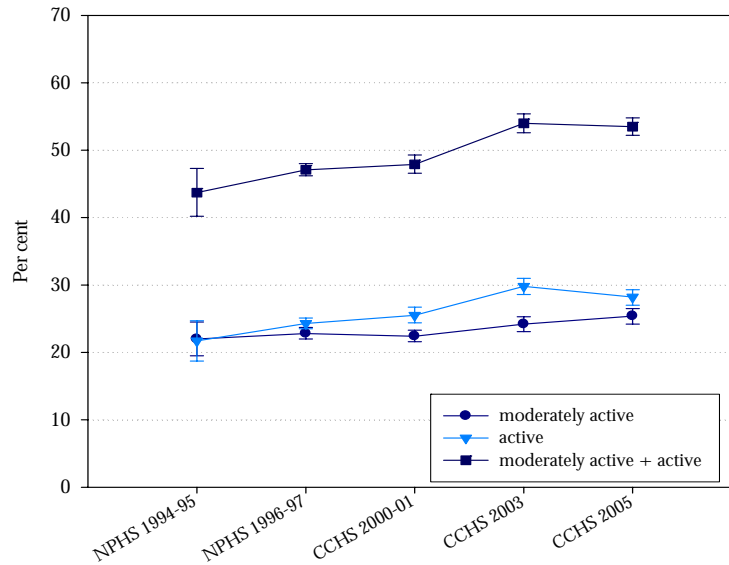
Figure 46: Percent of Population (age 12+) Moderately Active and Active, 2005
(Canada, Alberta, Best Province)



Source: Statistics Canada, Canadian Community Health Survey, 2005

Over the past decade, the proportion of Albertans who reported moderate to active physical activity levels gradually increased until 2003, after which it leveled off. As shown in the graph, there was a greater increase in the percentage of Albertans classified as “active” versus “moderately active” until 2003. Despite a modest increase over the last 10 years, only about half (53.5 per cent) of Albertans 12 years and older reported enough physical activity to maintain or improve their health.

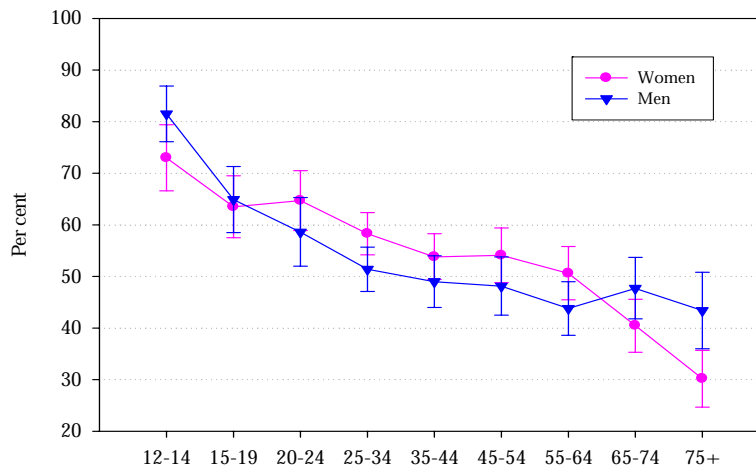
Figure 47: Trends in Moderately Active and Active Albertans, 1994 - 2005



Source: Statistics Canada, National Population Health Survey; Canadian Community Health Survey

Despite public health messages promoting physical activity, the percentage of Albertans who report at least moderate activity begins to drop in adolescence and continues to drop across the lifespan. There is little difference between men and women.

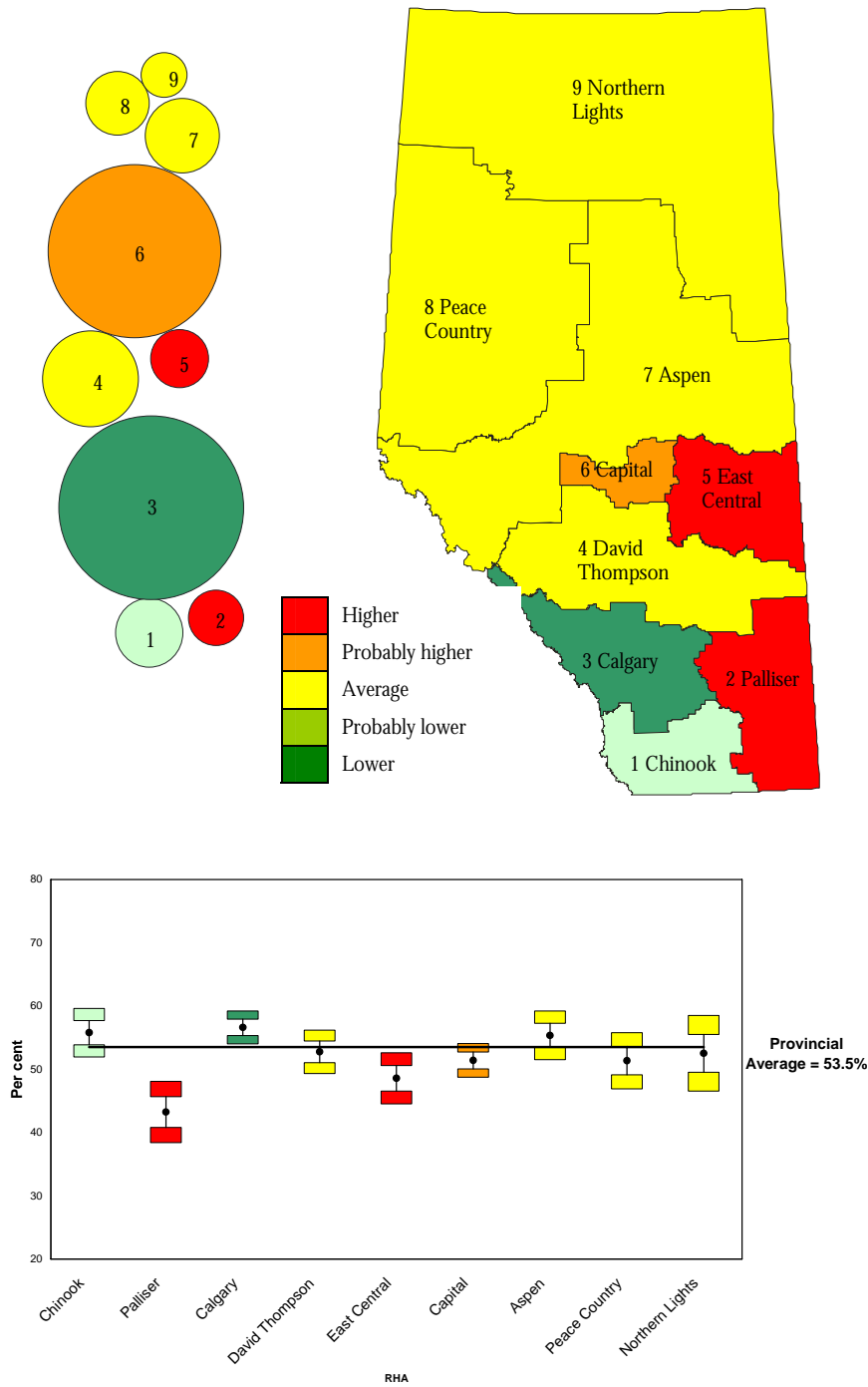
Figure 48: Moderately Active and Active Albertans by Age and Sex, 2005



Source: Statistics Canada, Canadian Community Health Survey, 2005

In 2005, the Calgary health region led the province with the highest percentage of people classified as moderately active or active. Palliser and East Central regions had percentages lower than the provincial average.

Figure 49: Regional Differences in Physical Activity, 2005



Source: Statistics Canada, Canadian Community Health Survey, 2005

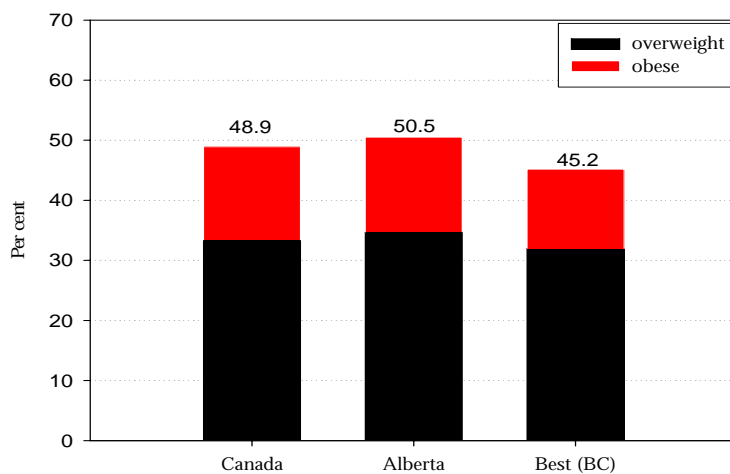
Body Mass Index

Body weight depends on various factors such as genetics, nutrition, mental health, and level of physical activity. Overweight and obesity are linked to a range of health problems, particularly cardiovascular disease and diabetes.

Body mass index (BMI) is a common measure used to determine whether a person is over or under the desirable weight for their height. BMI is calculated as 'weight in kilograms' divided by 'height in metres' squared. Adults (aged 18 and over), excluding pregnant women and persons less than 3 feet or greater than 6 feet 11 inches tall, may be considered overweight if they have a BMI greater than 25, and obese if they have a BMI of 30 or more.

In 2005, 34.7 per cent of Albertans surveyed were overweight and 15.8 percent were obese (based on self-report height and weight), for a total of 50.5 percent. Alberta was similar to the national average (48.9 percent) and higher than the best province, British Columbia (45.2 percent).

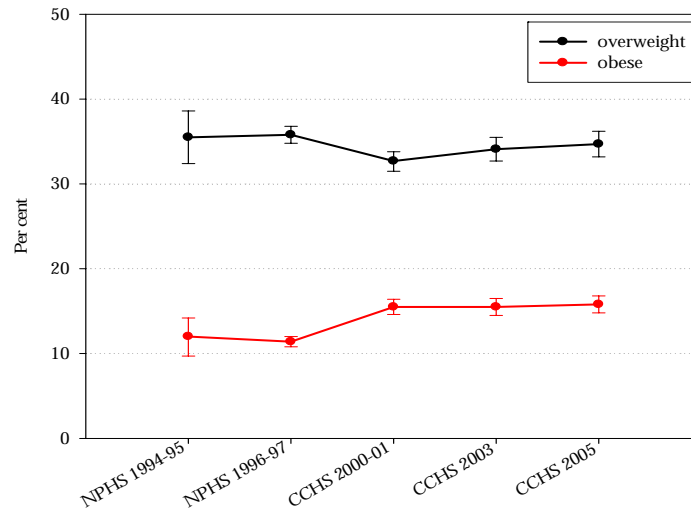
Figure 50: Overweight and Obese Adults, 2005 (Canada, Alberta, Best Province)



Source: Statistics Canada, Canadian Community Health Survey, 2005 (age 18+)

Between 1994 and 2005, the proportion of overweight and obese adults (based on self report) in Alberta has remained fairly stable, rising slightly from 47.5 per cent to 50.5 per cent. This means that in 2005, an estimated one out of every two adults in Alberta was overweight or obese. Despite public health messages promoting healthy eating, exercise, and healthy weight, the proportion of the population that is overweight or obese remains high.

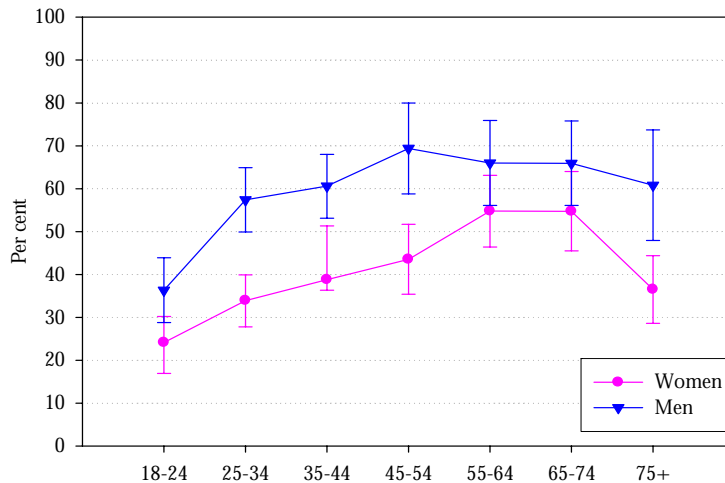
Figure 51: Trends in Overweight and Obese Adults in Alberta, 1994 - 2005



Source: Statistics Canada National Population Health Survey; Canadian Community Health Survey

In 2005, a greater percentage of older Albertans were overweight or obese than in younger age groups. Also a larger percentage of males were overweight than females. The highest proportion of overweight and obese adults occurs in middle aged males. Weight appears to rise with age for both sexes until around the seventh decade of life.

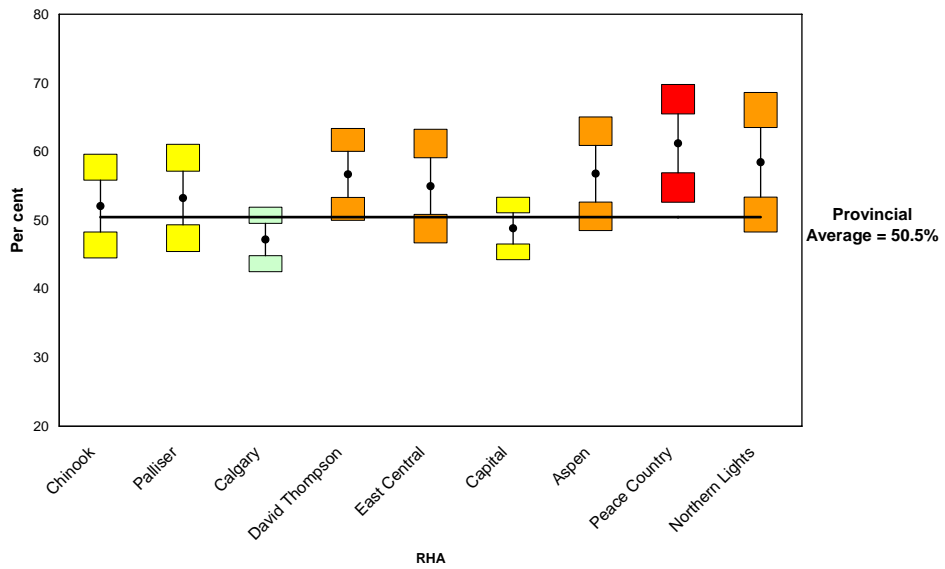
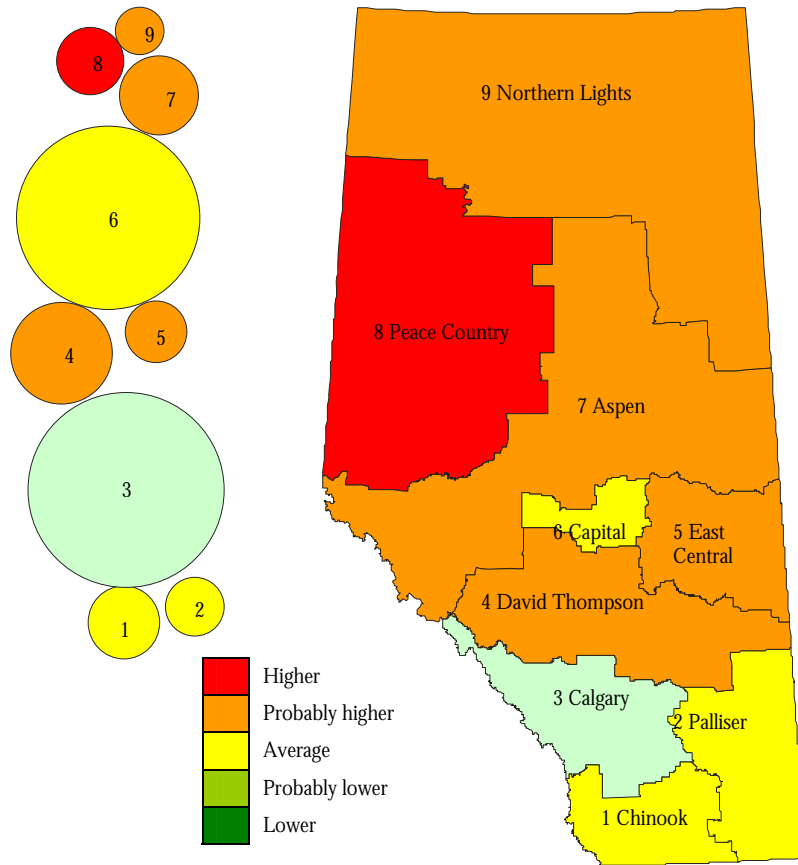
Figure 52: Age- and Sex-Specific Rates for Overweight and Obese Adults in Alberta, 2005



Source: Statistics Canada, Canadian Community Health Survey, 2005

Calgary region had a slightly lower percentage of overweight and obese people than the provincial average, while the Peace Country region percentage was higher than the provincial average

Figure 53: Regional Differences in Overweight and Obesity, 2005



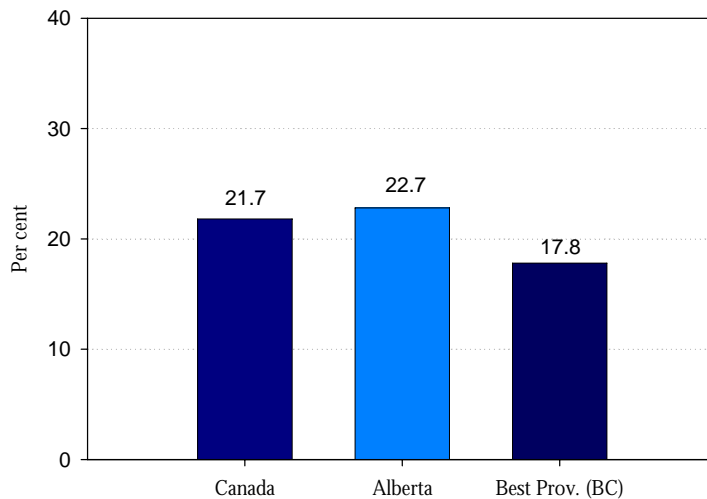
Source: Statistics Canada, Canadian Community Health Survey, 2005 (age 18+)

Tobacco Use

Tobacco use is a serious threat to health. Smoking or exposure to tobacco smoke is a known cause of heart disease and lung cancer as well as chronic obstructive pulmonary disease (COPD) and other respiratory diseases. Women who smoke during pregnancy are more likely to have low birth weight babies with increased risk of birth-related complications and chronic health problems. Children living with smokers are more prone to allergies, ear infections, coughs, and other respiratory ailments.

In 2005, 22.7 per cent of Albertans reported that they smoked cigarettes daily or occasionally. This is similar to the national rate (21.7 percent) and higher than the best province, British Columbia, at 17.8 per cent.

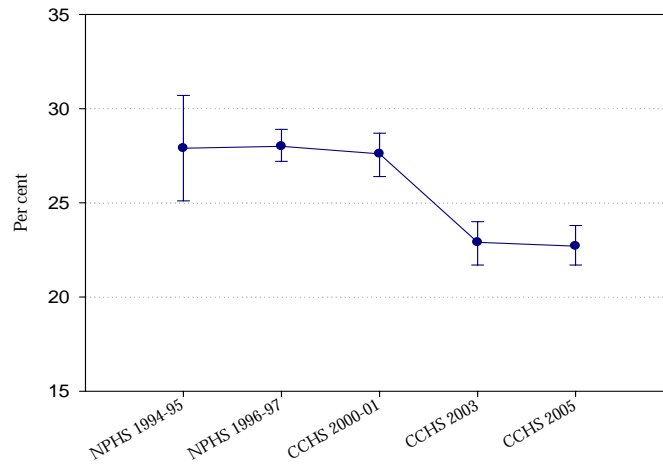
Figure 54: Current Cigarette Smokers in Alberta and Canada, 2005



Source: Statistics Canada, Canadian Community Health Survey (age 12+), 2005

Since the 1990s, the percentage of Albertans and Canadians who smoke cigarettes decreased and leveled off between 2003 and 2005.

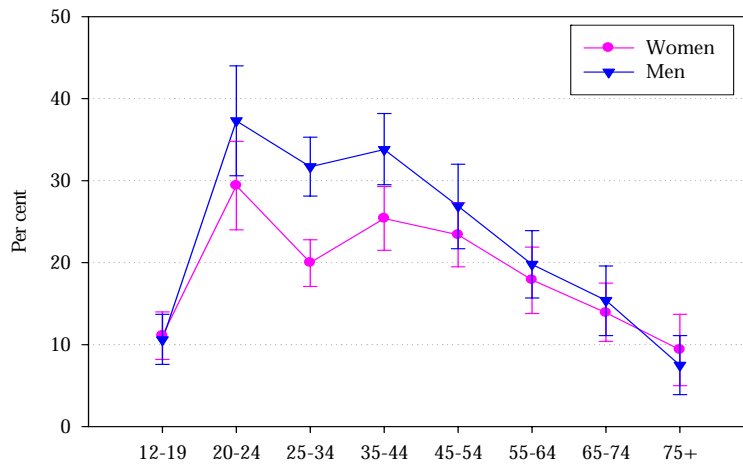
Figure 55: Trends in Cigarette Smokers in Alberta, 1994 – 2005



Sources: Statistics Canada, National Population Health Survey ; Canadian Community Health Survey (age 12+)

As shown in the graph, the percentage of smokers for both males and females is highest in ages 20-24 years. For males in this age range the percentage of smokers is nearly 40 per cent, and for females nearly 30 percent. Smoking rates are similar for men and women across the lifespan except during the childbearing years where they are lower in women.

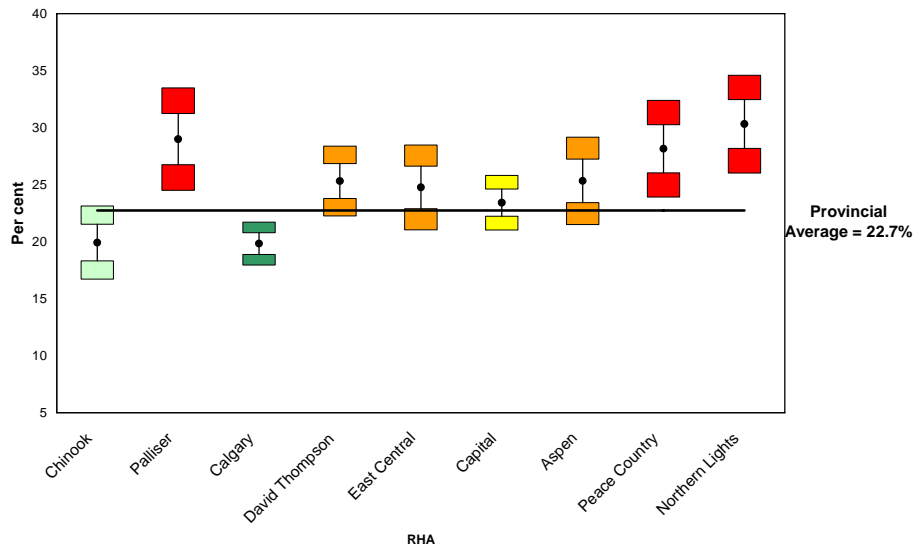
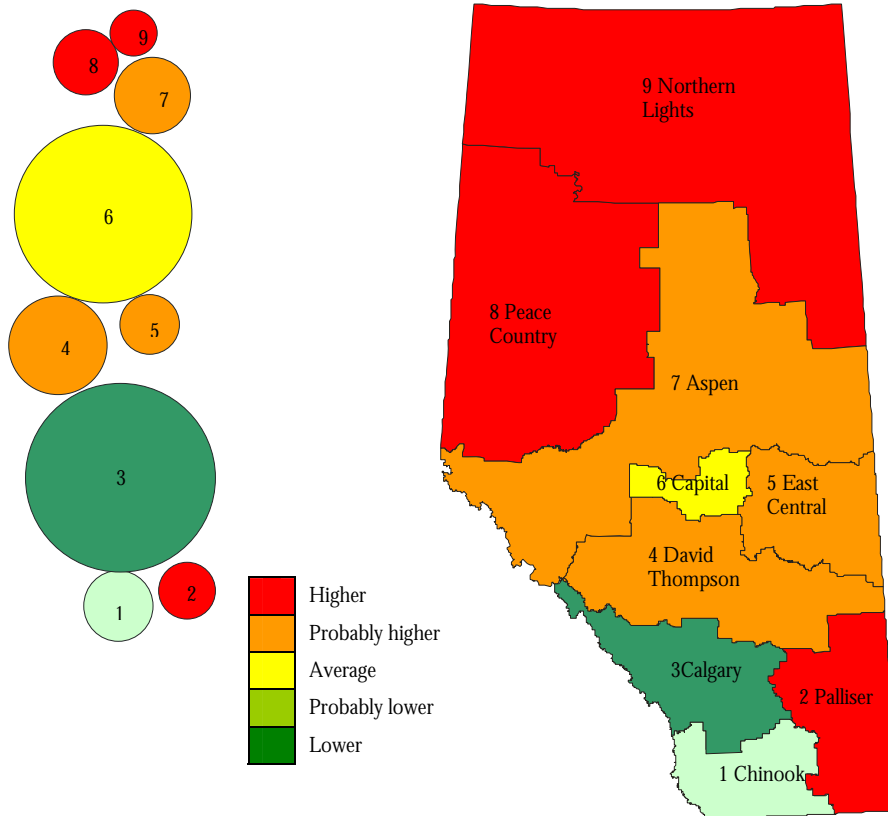
Figure 56: Age- and Sex-Specific Rates for Cigarette Smokers in Alberta, 2005



Source: Statistics Canada, Canadian Community Health Survey, 2005

Figure 57: Regional Differences in Smoking, 2005

The Palliser, Peace Country, and Northern Lights regions had a smoking rate higher than the provincial average. Calgary region had a rate lower than the provincial average.

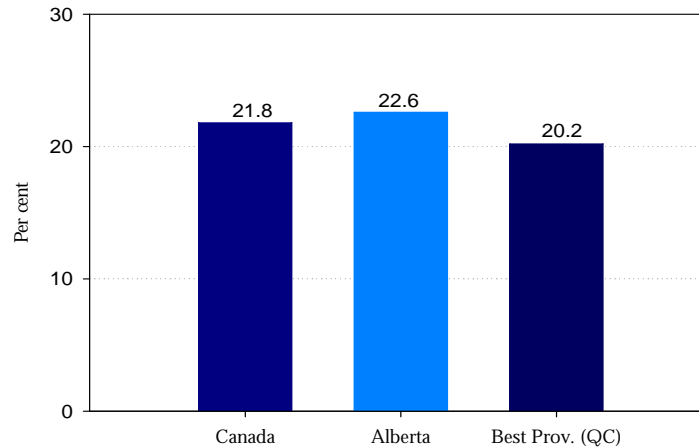


Source: Statistics Canada, Canadian Community Health Survey, 2005

Alcohol Use

People who have five or more drinks at one sitting, 12 or more times per year, are considered to be heavy drinkers, and may be at risk for problems associated with heavy alcohol consumption. According to the 2005 Canadian Community Health Survey, 22.6 per cent of Albertans who consumed alcohol in the last 12 months reported heavy drinking. The rate for Alberta is similar to the national average (21.8 per cent), and higher than the best province, Quebec (20.2 per cent).

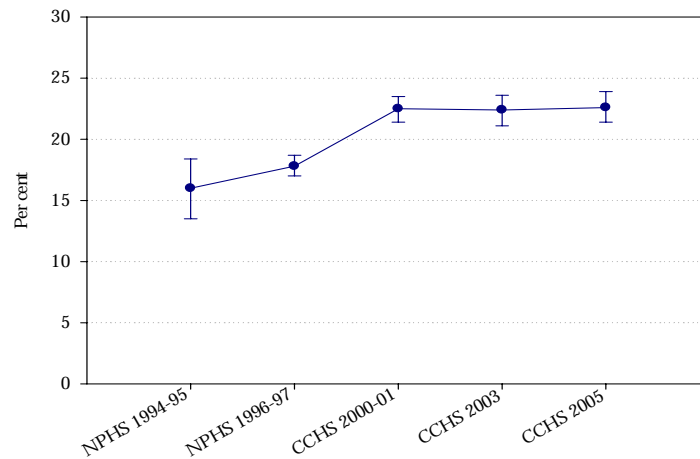
Figure 58: Heavy Drinkers, 2005 (Canada, Alberta, Best Province)



Source: Statistics Canada, Canadian Community Health Survey, 2005
(Heavy drinkers as a per cent of those who consumed alcohol in the last 12 months, aged 12 and over)

It appears that over the past decade, the proportion of heavy drinkers in Alberta has increased from 16 per cent in 1994-95 to around 22 per cent from 2000 to 2005. However, trends in heavy drinking are problematic to determine using the National Population Health Survey and Canadian Community Health Survey as the differences observed could be due to differing methods and wording of the questions across the two surveys.

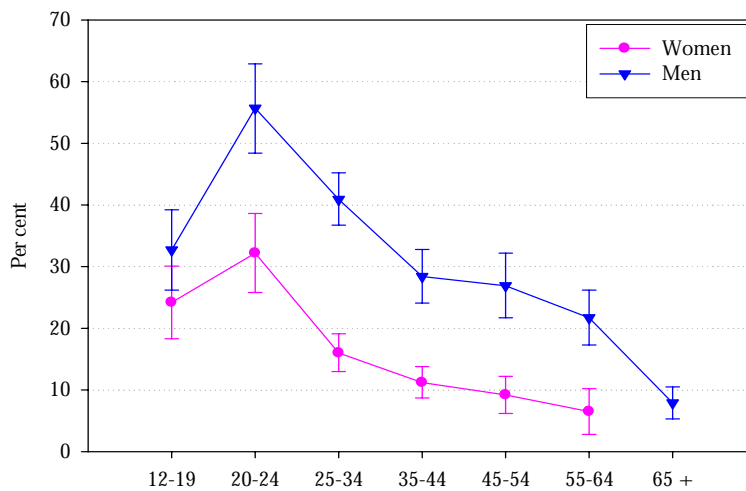
Figure 59: Trends in Heavy Drinkers in Alberta, 1994 - 2005



Sources: National Population Health Survey; Canadian Community Health Survey
(Heavy drinkers as a per cent of those who consumed alcohol in the last 12 months, aged 12 and over)

The highest percentage of heavy drinkers is in the 20-24 year age range. In 2005, more than half the males (55.7 per cent) and about a third of females (32.2 per cent) in this age range who had consumed alcohol in the last 12 months reported heavy drinking. The percentage of heavy drinkers decreases with increasing age for both sexes. *Note: Data for women 65 + is suppressed due to unreliability.*

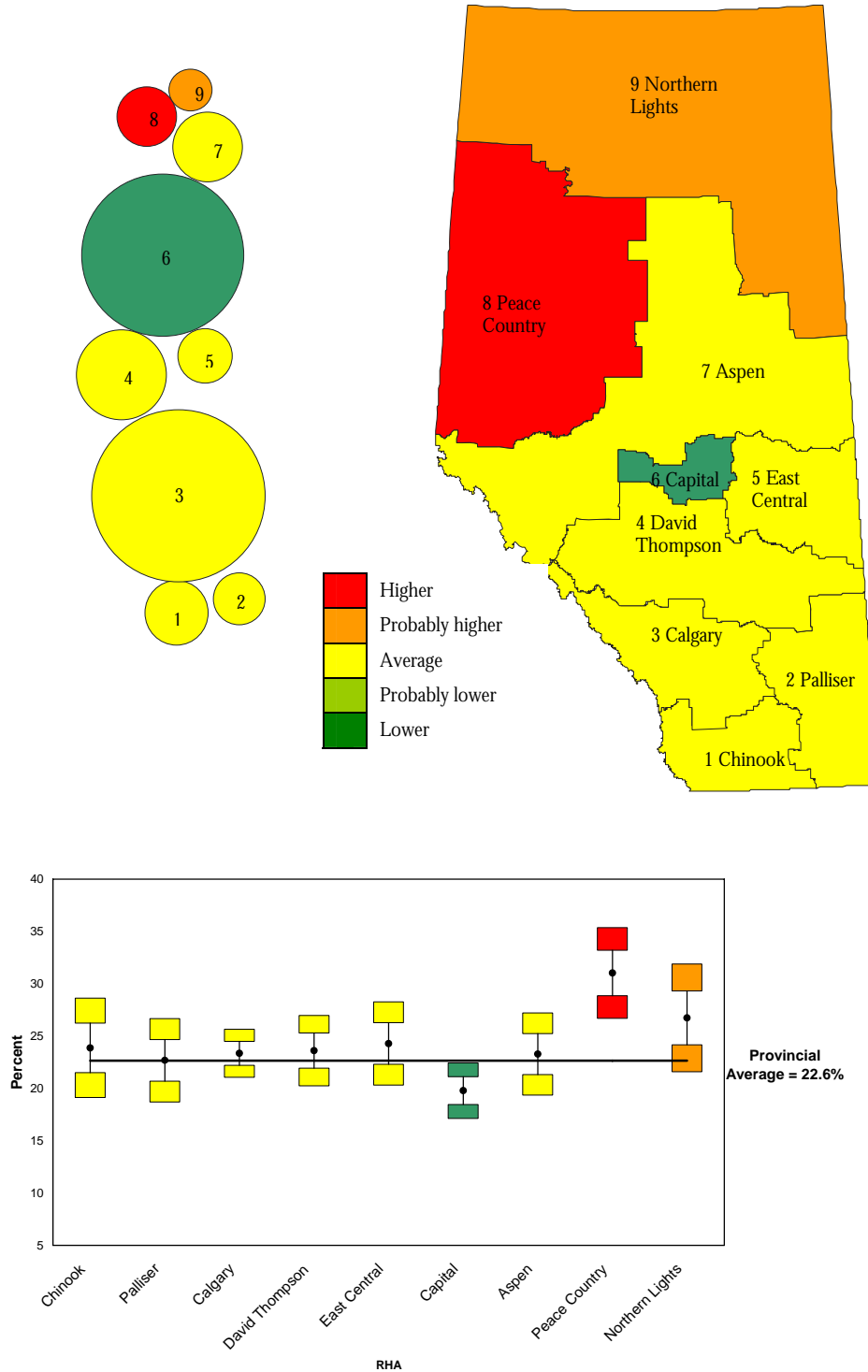
Figure 60: Age- and Sex-Specific Rates for Heavy Drinkers in Alberta, 2005



Source: Statistics Canada, Canadian Community Health Survey, 2005

Figure 61: Regional Differences for Heavy Drinkers, 2005

Peace Country region had a higher percentage of heavy drinkers than the provincial average in 2005. The Capital region had a rate lower than the provincial average.



Source: Statistics Canada, Canadian Community Health Survey, 2005

