

Canadian Community Health Survey 3.1

Summary Report to the District Health Authorities



Canadian Community Health Survey 3.1

Summary Report to the District Health Authorities

© Crown copyright, Province of Nova Scotia, 2007

Published by:
Information Analysis and Reporting Section, Nova Scotia Department of Health

Published December 2007
ISBN: 1-55457-176-6

For further information contact:

Information Analysis and Reporting Section
Nova Scotia Department of Health
Joseph Howe Building
1690 Hollis St.
PO Box 488
Halifax, Nova Scotia
B3J 2R8

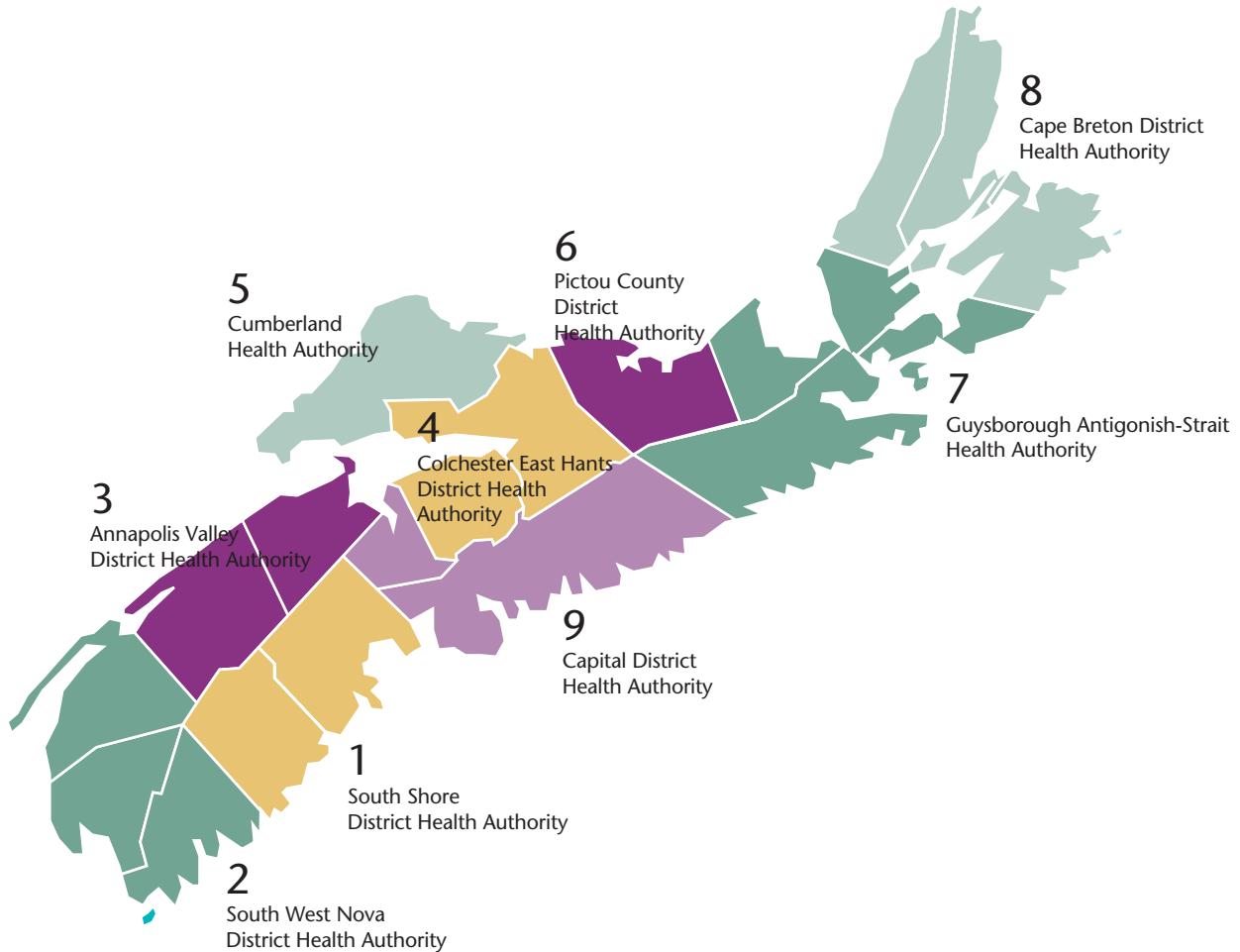
Phone (902) 424-8291
Fax (902) 424-0506

Sources for charts: *Canadian Community Health Survey (CCHS) Cycle 3.1*, Statistics Canada.

Contents

Nova Scotia District Health Authorities Map	
Overview of CCHS Cycle 3.1	1
Importance of CCHS	2
Social and Physical Environments, Income and Social Status	3
Income Adequacy	3
Food Insecurity	4
Second-hand Smoke	5
Healthy Childhood Development	6
Folic Acid Intake	6
Breastfeeding	7
Maternal smoking	8
Personal Health Practices	9
Smoking	9
Heavy Drinking	10
Fruit and Vegetable Consumption	10
Physical Activity	11
Current Health Status	13
Self-perceived Health	13
Heart Disease	13
Diabetes	14
Respiratory Diseases	14
Adult Overweight and Obesity	15
Perception of Own Weight	16
Health Services	17
Unmet Health Care Needs	17
PAP Smear Test	18
Home Care	18
Appendix 1 CCHS 3.1 Modules for Nova Scotia	19
Appendix 2 Survey Design, Sampling, and Bootstrapping	20
Appendix 3 Guide to Data Interpretation	22
References	23

District Health Authorities



Overview of CCHS Cycle 3.1

The Canadian Community Health Survey (CCHS) is a series of national cross sectional surveys that have been carried out by Statistics Canada since 2001. The purpose of CCHS is to provide regular and timely cross-sectional estimates of health determinants, health status, and health system utilization at the provincial and sub-provincial levels. This will assist provinces and District Health Authorities in planning, implementing and evaluating health promotion policies, programs, and services.

The CCHS operates on a two-year collection cycle, comprised of two distinct surveys. Point one (*.1) surveys are large surveys conducted on a broad range of health topics. Point two (*.2) surveys are smaller surveys intended to collect in-depth information on focused topics, e.g. – mental health (cycle 1.2), nutrition (cycle 2.2), etc. CCHS Cycle 3.1 is the third in a series of the larger surveys. It was collected between January and December of 2005, and released in June, 2006.

The surveyed population includes household residents aged 12 and older in all provinces and territories, with the exception of populations on Indian Reserves, Canadian Forces Bases, and in some remote areas.

Survey questions are arranged in modules, which are further organized as core and optional content. The core content questions are asked of respondents nationally in all health authorities.

Health authorities select the optional content questions to be asked in their regions based on their specific areas of interest. Thus, the optional content varies by provinces, and in some cases, between health authorities within a province. As in the past, in order to facilitate intra-provincial comparisons, all health authorities in Nova Scotia selected the same optional content questions for Cycle 3.1. Please see Appendix One for a list of the CCHS Cycle 3.1 core and optional content modules available for Nova Scotia.

Since the CCHS employs a complex sampling design, guides to CCHS sampling and to interpreting the results are presented in Appendices Two and Three.

Importance of CCHS

The CCHS is the first extensive survey of the health and well-being of Canadians to provide data for all variables at the sub-provincial level, i.e. at the Statistics Canada Health Zone level.

The data can be further manipulated to yield reliable data at the DHA level for most variables, providing decision and policy makers with rich, DHA-specific information.

Provincial health authorities have input into the questions that are asked in the CCHS, providing a unique opportunity for decision and policy makers to tailor the data content to meet their data and information needs.

This report presents DHA-level data on indicators reflective of the determinants of health as presented in *Healthy People, Healthy Communities: Using the Population Health Approach in Nova Scotia*, Summer 2002¹ (page 2).

Social & Physical Environment, Income & Social Status

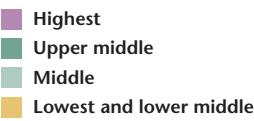
Economic, social, and physical environmental factors play important roles in determining health. CCHS Cycle 3.1 included many questions on these determinants of health, such as income levels, income adequacy, food insecurity, and exposure to second-hand smoke (environmental tobacco smoke).

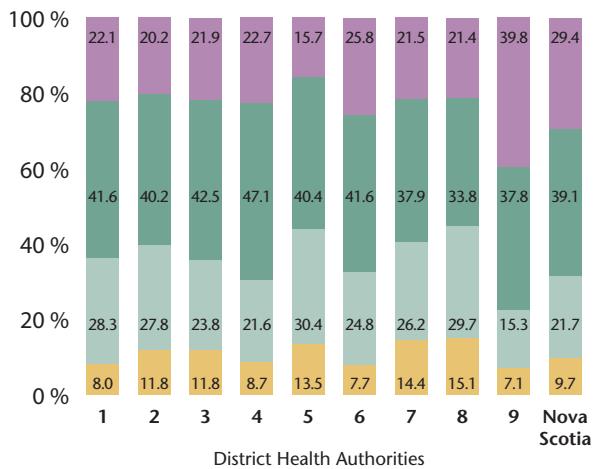
Income Adequacy

Income adequacy is a measure of household income relative to household size. It classifies total household income into 5 categories: lowest, lower middle, middle, upper middle, and highest. For example, a household income will be categorized into the “lowest income” group if the total household income is below \$10,000 and there are up to 4 people living in the household or if the total household income is below \$15,000 and there are 5 or more people living in the household.

Upper middle income was the largest income category in Nova Scotia. Overall, 39.1% of Nova Scotians were in this category, ranging from a low of 33.8% in DHA 8 to a high of 47.1% in DHA 4.

Income adequacy

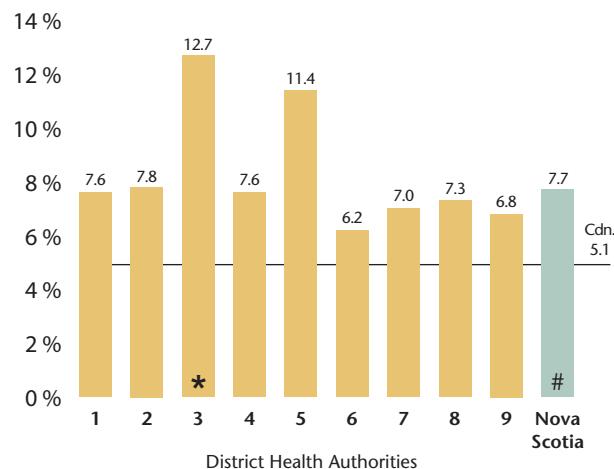




All districts had about 7% to 15% of their households in the lowest/lower middle category, with DHA 8 having the most and DHA 9 having the fewest.

DHA 9 also had significantly more households in the highest category, while DHAs 2, 3, 5, and 8 had significantly fewer households in this category.

Household food insecurity



* Significantly higher than Nova Scotia.

Significantly higher than Canada.

Food Insecurity

Food security status indicates whether households both with and without children were able to afford the food they needed in the previous 12 months. The model for “household food security status levels” is adopted from the U.S. model of food security status levels published by U.S. Department of Agriculture in 2000. Please note that this variable is different from the food security variable in previous CCHS Cycles.

The respondent's household is considered to have experienced some food insecurity if any of the following conditions are met:

1 Food insecure without hunger:

Household members feel anxious about running out of food or compromise on the quality of foods they eat by choosing less expensive options. Little or no reduction in the household members' food intake is reported.

2 Food insecure with moderate hunger:

Food intake for adults in the household has been reduced to an extent that implies that adults have repeatedly experienced the physical sensation of hunger. In most (but not all) food insecure households with children, such reductions are not observed at this stage for children.

3 Food insecure with severe hunger:

At this level, all households with children have reduced the children's food intake to an extent indicating that the children have experienced hunger. Adults in households with and without children have repeatedly experienced more extensive reductions in food intake.

Results from CCHS 3.1 indicate that 7.7% of Nova Scotian households reported some evidence of food insecurity in the past 12 months. This number was significantly higher than the national rate at 5.1%.

Within Nova Scotia, DHA 6 reported the lowest level of food insecurity (6.2%). DHA 3 reported the highest (12.7%), and was also significantly higher than Nova Scotia as a whole.

Second-hand Smoke

Between 12 and 24 percent of all households reported that there was at least one smoker who smoked inside the house every day or almost every day.

A significant difference was observed between DHA 7, which had the lowest rate (12.8%), and DHA 8, which had the highest rate (23.8%). The rate for DHA 8 was also significantly higher than Nova Scotia's as a whole (17.8%).

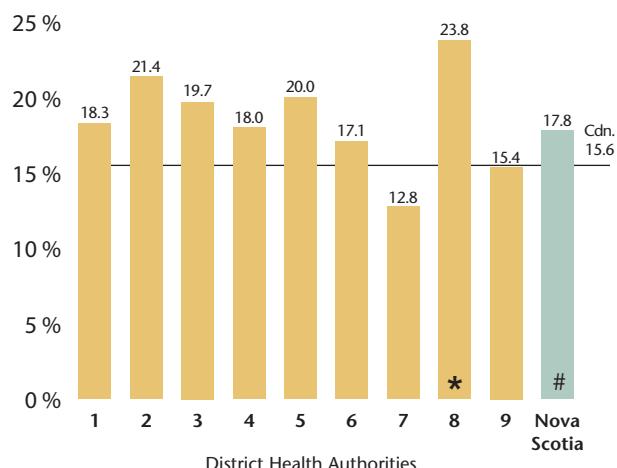
Although the percentage of Nova Scotians who reported regular exposure to second-hand smoke at home had decreased from 22.1% (CCHS 2.1) to 17.8% since 2003, it was still significantly higher than the national rate (15.6%).

Non-smoker respondents were also asked if they had been regularly exposed to second-hand smoke in public places in the past month.

Overall, 9.1% of non-smokers in Nova Scotia reported being exposed to second-hand smoke in public places every day or almost every day in the past month. This rate varied among the DHAs, with DHA 5 reported the highest (15.4%) and DHA 8 reported the lowest (5.4%).

The rate of regular exposure to second-hand smoke in public places had decreased from 15.6% (CCHS 2.1) to 9.1% since 2003. It was also significantly lower than the national rate (14.8%).

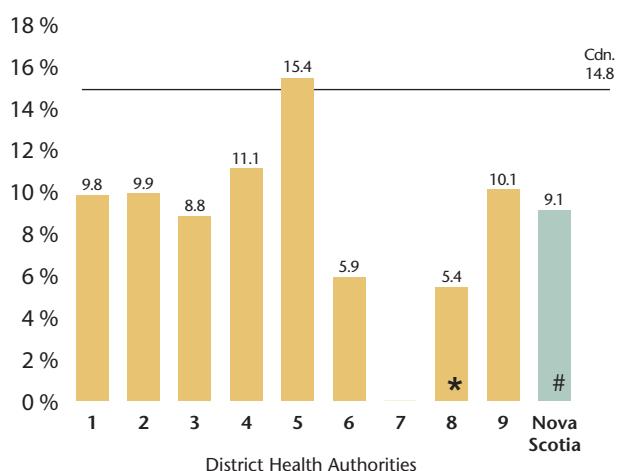
Second-hand smoke at home



* Significantly higher than Nova Scotia.

Significantly higher than Canada.

Second-hand smoke in public

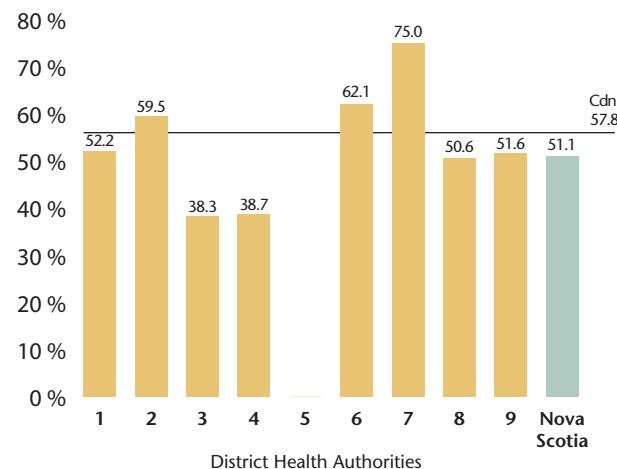


* Significantly lower than Nova Scotia.

Significantly lower than Canada.

Estimate could not be reported for DHA7 according to the Statistics Canada guidelines.

Folic acid intake before pregnancy



Estimates for DHA 5 could not be reported according to Statistics Canada guidelines. This question was asked of women who have given birth in the last 5 years.

Healthy Childhood Development

Many factors have an impact on the health of children during the prenatal period, throughout their development, and well into their later life. These factors include things such as nutrition, environment, and the mother's life-style choices. The following section presents CCHS results concerning prenatal health.

Folic Acid Intake

Folic acid has been shown to reduce congenital neurological problems.

Female respondents in Nova Scotia who had given birth in the last 5 years took folic acid less often than the Canadian rate (51.1% and 57.8% respectively). However, the difference was not statistically significant.

Within Nova Scotia, although the DHA rates covered a wide range (from a low of 38.3% for DHA 3 to a high of 75.0% for DHA 7), no significant differences were found.

Breastfeeding

According to Health Canada, breastfeeding is the best method of feeding infants as it provides optimal nutritional, immunological, and emotional benefits for the growth and development of infants².

Overall, an average of 75.1% of female respondents aged 15 to 55 who had given birth in the last 5 years reported that they had breastfed or tried to breastfeed their last baby, even if only for a short time.

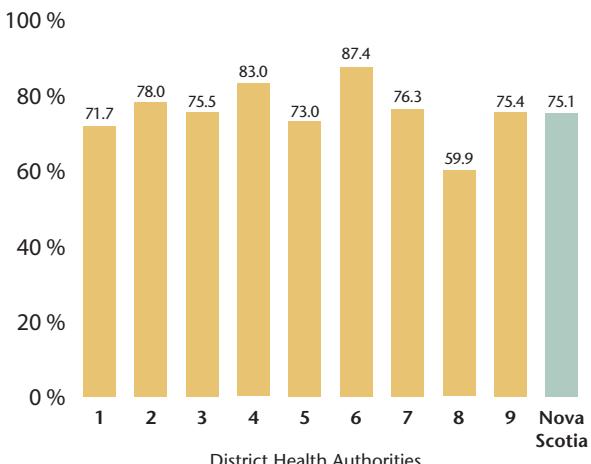
Despite the apparent variation among DHAs (from 60.0% to 87.4%), no significant differences were reported.

Exclusive breastfeeding refers to the practice of feeding only breast milk (including expressed breast milk) and allows the baby to receive vitamins, minerals or medicine. Water, breast milk substitutes, other liquids and solid foods are excluded³.

The World Health Organization (WHO) recommended exclusive breastfeeding for the first four to six months of age to provide optimal growth for the infant⁴.

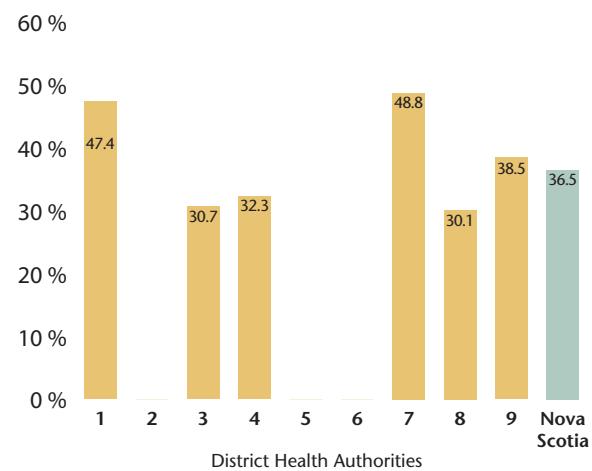
Among Nova Scotian females aged 15 to 55 who had given birth in the last 5 years, 36.5% reported having exclusively breastfed their last baby for at least 4 months. This rate could not be reported for all DHAs due to small numbers of sample sizes. For those DHAs that supported valid estimates, the rates ranged from 30.1% to 48.8% and no significant differences were observed.

Breastfeeding initiation



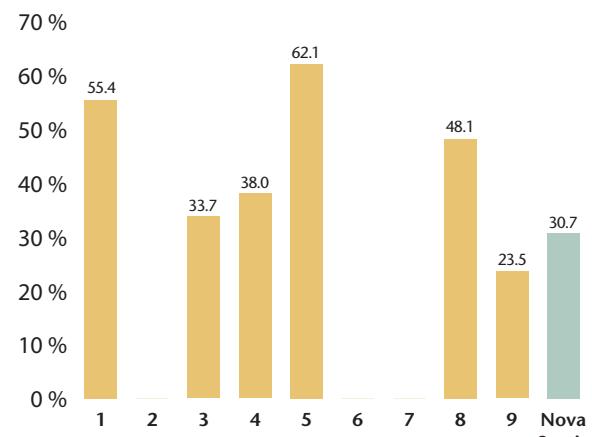
This question was asked of women aged 15–55 who had given birth in the last five years.

Exclusive breastfeeding for over 4 months



This question was asked of women aged 15–55 who had given birth in the last five years. Estimates for DHA 2, 5, and 6 could not be reported according to Statistics Canada guidelines.

Maternal smoking



This question was asked of women aged 15–55 who had given birth in the last five years. Estimates for DHA 2, 6, and 7 could not be reported according to Statistics Canada guidelines.

Maternal Smoking

Women who smoke or are exposed to second-hand smoke while pregnant have a greater risk of having a miscarriage or experiencing complications during the birth⁵. They also subject their unborn child to significantly increased health risks including low birth weight⁶, sudden infant death syndrome (SIDS)⁷, and even long term health problems in the later years such as learning disabilities and behavioral problems⁸. Nursing mothers who smoke can also pass along harmful chemicals from cigarettes to their babies in breast milk⁹.

Among Nova Scotian females aged 15 to 55 who have given birth in the last 5 years, 30.7% reported that they had smoked during their last pregnancy or while breastfeeding, or had regularly exposed to second-hand smoke during or immediately after their last pregnancy (about 6 months after).

This rate could not be reported for all DHAs due to small sample sizes. For those DHAs that supported valid estimates, the variation covered a wide range (from 23.5% to 62.1%) and no significant differences were observed.

Personal Health Practices

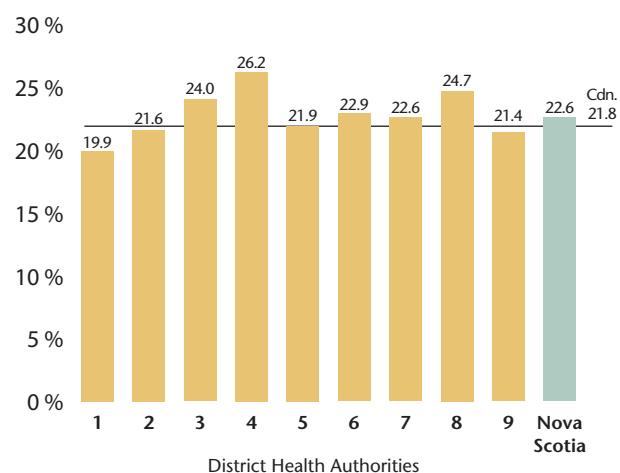
The CCHS provides a wealth of data on personal health practices. These health practices are a potential avenue for health improvement that is within the control of the individual. For instance, when smokers quit smoking, they potentially improve their health and life-expectancy. Also, health service providers can target educational materials to specific 'unhealthy' practices and populations and thereby encourage change.

Smoking

Smoking has repeatedly been shown to cause detrimental health effects for smokers and those around them. This measure reports daily smokers and occasional smokers as 'smokers' and those who either quit or never smoked as 'non-smokers'.

Overall, 22.6% of Nova Scotians reported being smokers. This rate was slightly higher than the Canadian rate (21.8%), but the difference was not statistically significant. Within Nova Scotia, slight variations were observed among the DHAs, but no significant differences were reported.

Smoking

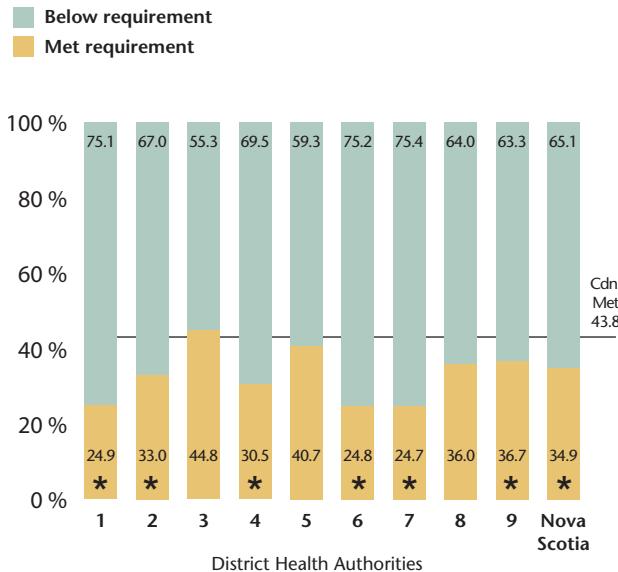


Heavy frequent drinking (5+ drinks on one occasion once a week or more)



*Significantly lower than Nova Scotia and Canada. This question was asked of respondents who had at least one drink in the past year.

Daily servings of fruit and vegetable



*"Met requirement" significantly lower than Canada.
"Met requirement" includes both "Met requirement" and "Over requirement".

Alcohol Use

The volume of alcohol intake can be determined by the Quantity-Frequency (QF) method, based on how much and how often alcohol is usually consumed. For example, in the 2004 Canadian Addiction Survey, "heavy frequent drinking" is defined as consumption of 5 or more drinks on a single occasion at least once a week.

Among Nova Scotians who have had at least one drink in the past year, 10.2% were identified as heavy frequent drinkers. DHA 3 reported a significantly lower percentage of heavy frequent drinkers (5.8%) than Nova Scotia as a whole. DHA 7 had a higher percentage of heavy frequent drinkers (12.3%) than the provincial rate, but the difference was not statistically significant.

Fruit and Vegetable Consumption

The Canada Food Guide recommends that we consume 5 to 10 servings of fruits and vegetables per day.

The CCHS fruit and vegetable consumption measure is calculated from responses to questions on the number of daily servings of fruit juice, fruit, green salad, potatoes, carrots, and other vegetables.

Those listed as 'below requirement' consumed fewer than 5 fruit and vegetable servings per day.

Those who “met requirement” consumed between 5 and 10 servings of fruit and vegetables per day.

Those ‘over requirement’ consumed over 10 servings of fruit and vegetables per day.

Overall, only 34.9% of Nova Scotians met or exceeded the recommended level of daily fruit and vegetable consumption, significantly lower than the Canadian rate at 43.8%.

A wide range of “met & over requirement” was reported by the DHAs. DHA 7 reported the lowest at 24.7%, while DHA 3 reported the highest at 44.8%. Most DHAs (DHA 1, 2, 4, 6, 7, and 9) also reported significantly lower rates than Canada as a whole.

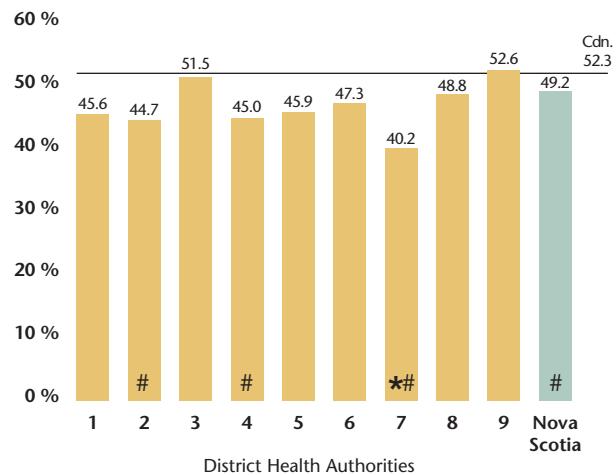
Physical Activity

Respondents were asked a series of questions pertaining to the types, frequency, and duration of leisure activities they engaged in during the past three months. Answers to these questions were used to calculate the respondent’s daily energy expenditure.

A respondent was classified as being physically active if he/she had an average energy expenditure of 3.0+ Kilocalories per Kilogram of bodyweight per Day (KKD).

Being moderately active was defined as expending an average of between 1.5 and 2.9 KKD.

Physical activity index - Active or moderately active



* Significantly lower than Nova Scotia.

Significantly lower than Canada.

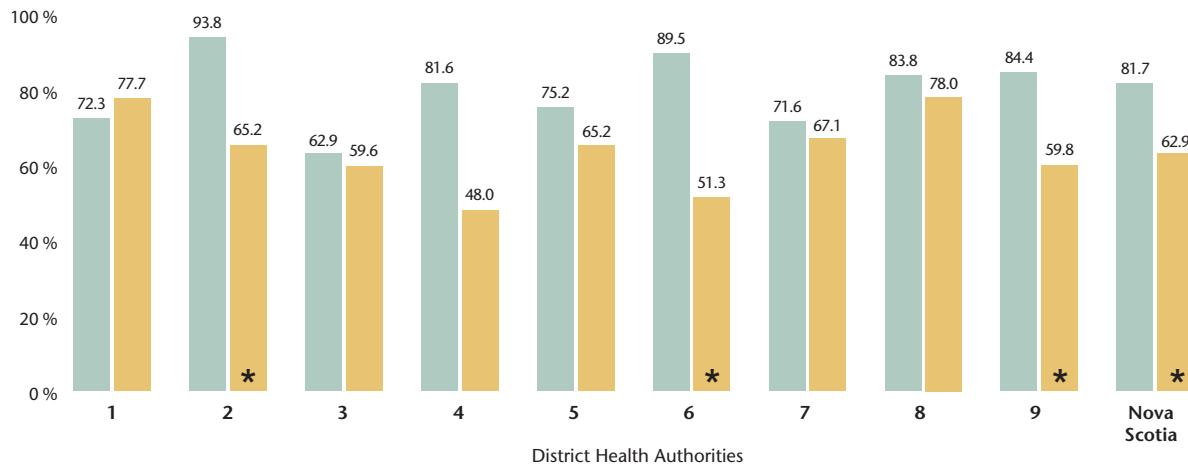
A respondent who reported activity level leading to an average energy expenditure of less than 1.5 KKD was considered to be physically inactive.

Slightly less than half (49.2%) of Nova Scotians reported being active or moderately active. This number was significantly lower than the Canadian average (52.3%).

DHA 7 reported the lowest activity level (40.2%) among all DHAs, significantly lower than both Nova Scotia and Canada.

Youth physical activity by gender

Active or moderately active males
 Active or moderately active females



* Significant differences between males and females

Nova Scotian youth were more active than their older counterparts. Those between 12 to 19 years old reported significantly higher activity levels than adults aged 20 and older.

Within the 12-19 age group, males were significantly more likely to be physically active or moderately active than females (81.7% vs. 62.9%). The differences between males and females for DHA2, DHA6, and DHA9 were also statistically significant.

Current Health Status

Current health status provides an overall ‘snapshot’ of the health of a population. Current health status measures include self-perceived health status, chronic conditions, Body Mass Index (BMI), and opinion of own weight.

Self-Perceived Health

Respondents were asked how they perceived their overall health status. In Nova Scotia, 14.2% reported their overall health to be “poor or fair”, significantly higher than the Canadian average (11.2%).

DHA 2 reported the poorest health status, with the highest percentage of people reporting “poor or fair” (19.5%) and the lowest reporting “excellent” (10.7%).

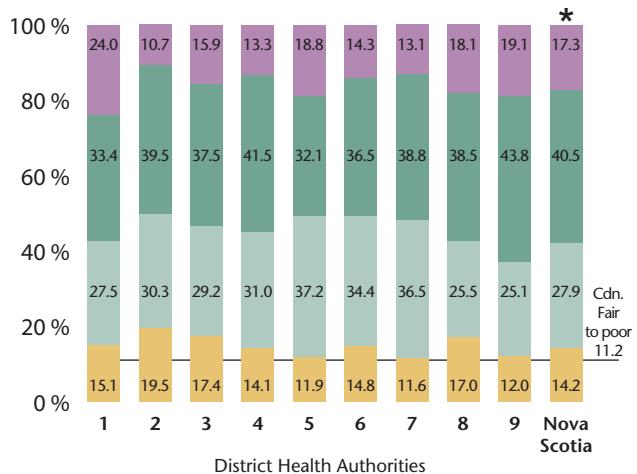
Heart Disease

Between 4 and 10 percent of Nova Scotians reported having been diagnosed with heart disease, with an average prevalence of 7.3%.

Compared to the Canadian average (4.8%), significantly more people in Nova Scotia and in most DHAs (DHA 1, 2, 3, 7, 8 and 9) reported that they had been diagnosed with heart disease.

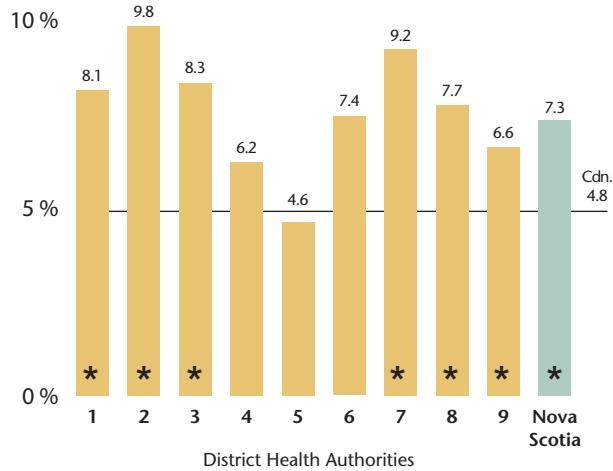
Self-perceived health status

Excellent
Very good
Good
Fair to poor



*Significantly more people reporting “fair” or “poor” health than Canada.

Self-reported diagnosis of heart disease



* Significantly higher than Canada.

Self-reported diagnosis of diabetes



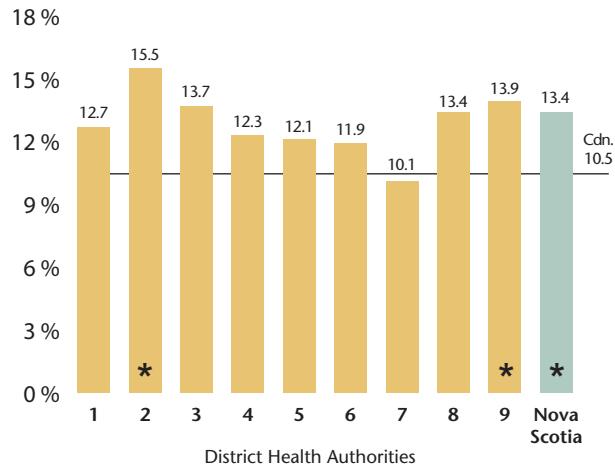
* Significantly higher than Canada.

Diabetes

Between 5 and 9 percent of Nova Scotians reported having diabetes, with an average prevalence of 6.5%.

The percentages of self reported diagnosis of diabetes in DHA 2, DHA 8, and Nova Scotia were significantly higher than Canada as a whole (4.9%).

Self-reported respiratory diseases



* Significantly higher than Canada.

Respiratory Diseases

Between 10 and 16 percent of Nova Scotians reported having been diagnosed with at least one chronic respiratory disease (asthma, chronic bronchitis, emphysema, or chronic obstructive pulmonary disease).

Significantly more Nova Scotians reported having respiratory illnesses than Canada as a whole (13.4% and 10.5% respectively). DHA 2 and DHA 9 also reported significantly higher rates of respiratory illnesses than Canada.

Adult Overweight and Obesity (Age 18+)

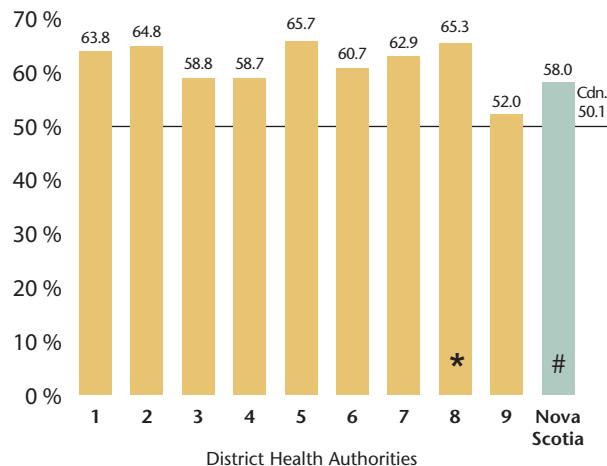
The Body Mass Index (BMI) variable assigns adult respondents aged 18 and over (except pregnant women) to one of the following categories: underweight; acceptable weight (normal weight); overweight; obese class I; obese class II; and obese class III. The BMI categories are adopted from a body weight classification system recommended by Health Canada and the World Health Organization (WHO) which has been widely used internationally¹⁰.

According to Health Canada, this BMI classification system can be used as a screening tool to identify weight-related health risks at the population and individual levels. The following health risks are associated with each of the BMI categories for adults aged 18 and over:

- Normal weight = least health risk;
- Underweight and Overweight = increased health risk;
- Obese class I - III= high to extremely high health risk

According to their Body Weight Index, the majority of Nova Scotians aged 18 years and older were overweight or obese (58.0%). In comparison to this provincial average, DHA 9 reported a significantly lower rate of overweight/obesity (52.0%), while DHA 8 reported a significantly higher rate of overweight/obesity (65.3%).

BMI overweight and obesity, age 18+



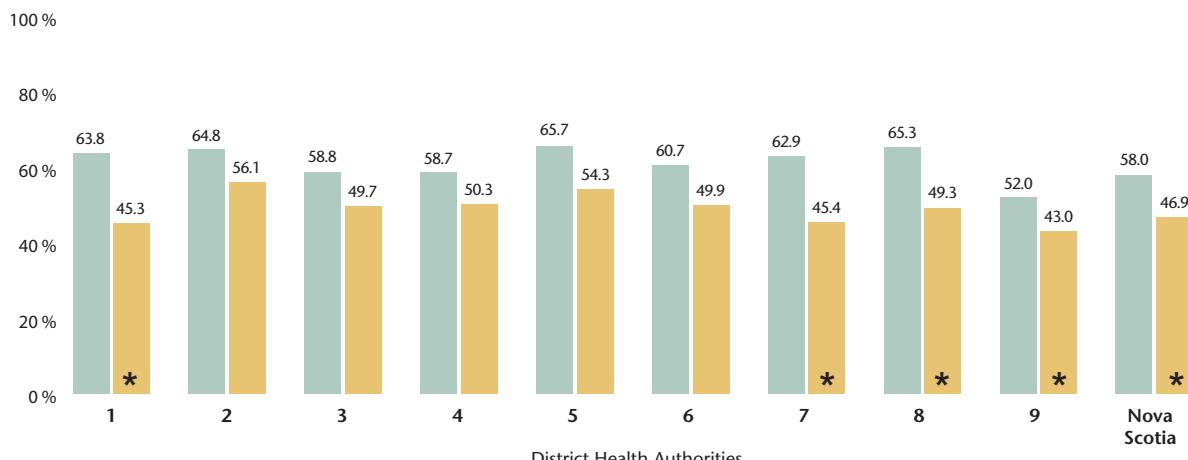
* Significantly higher than Nova Scotia.

Significantly higher than Canada.

Obesity was a more serious issue for Nova Scotia than for the rest of Canada on average. The 58.0% overweight/obesity rate in Nova Scotia was significantly higher than the national rate at 50.1%.

Self-reported overweight, age 18+

BMI
Own opinion



* Self-reported overweight significantly lower than BMI classified overweight/obese.

Perception of Own Weight

Respondents were asked how they perceived their own weight.

Overall, 46.9% of Nova Scotians aged 18 and over considered themselves to be overweight. This rate was significantly lower than the percentage of adult Nova Scotians who were classified as either overweight or obese according to the Body Mass Index (58.0%).

Similarly, for every DHA, fewer people considered themselves to be overweight than as classified to be overweight or obese. For DHAs 1, 7, 8 and 9, these differences were statistically significant.

Health Services

Health services questions can provide insight into health services utilization, perceptions of service adequacy and service mix.

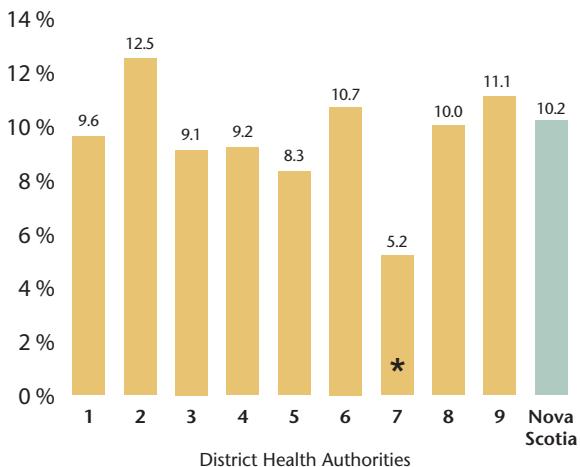
Unmet Health Care Needs

Nova Scotians were asked if there was ever a time in the last 12 months when they felt they needed health care but did not receive it.

Overall, 10.2% Nova Scotians reported unmet health care needs in the last 12 months. The DHAs reported various rates of unmet health care needs, ranging from 5.2% (DHA 7) to 12.5% (DHA 2).

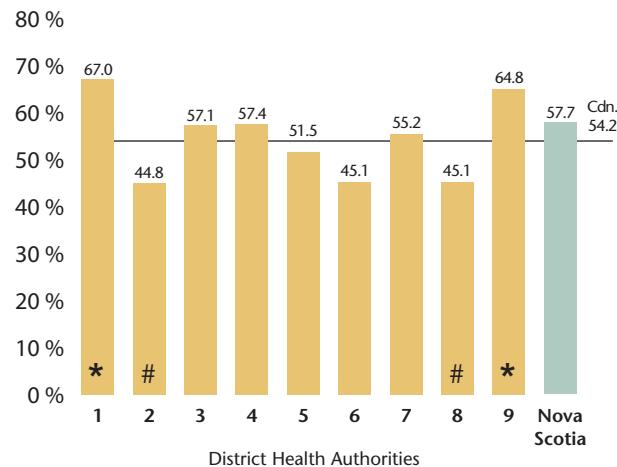
Nova Scotian respondents reported different reasons to explain why their health care needs were not met. Some were system related reasons such as care not available in area, or waiting time too long; others were personal reasons such as too busy, afraid of doctors, transportation problems, etc.

Self-reported unmet health care needs



* Significantly lower than Nova Scotia.

Had a PAP smear in the last year



* Significantly higher than Nova Scotia and Canada.

Significantly lower than Nova Scotia and Canada.

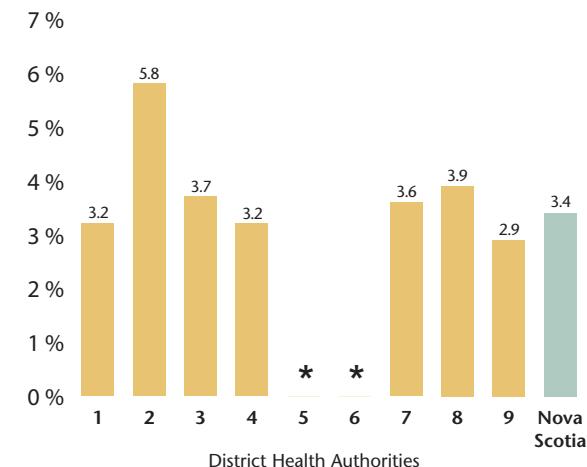
Pap Smear Test

A regular PAP test can greatly reduce the risk of cervical cancer.

Overall, 57.7% of female Nova Scotians aged 18 and over reported having had a PAP smear in the last year. This rate was significantly higher than the national rate at 54.2%.

The rates reported by the DHAs showed a great range of variation. DHA 1 and DHA 9 reported significantly higher rates (67.0% and 64.8% respectively) than both Nova Scotia and Canada as a whole, while DHA 2 and DHA 8 reported significantly lower rates (44.8% and 45.1% respectively) than Nova Scotia and Canada.

Received home care services in the last year



* Estimates for DHA 5 and 6 could not be reported according to Statistics Canada guidelines.

Home Care

Respondents to the questions regarding home care services were 18 years or older.

Overall, 3.4% of Nova Scotians indicated that they had received some type of home care services during the past 12 months. This rate varied across the DHAs, ranging from 2.9% to 5.8%. Estimates for DHA 5 and DHA 6 were not valid according to Statistics Canada guidelines. No significant differences were observed.

Appendix 1

CCHS 3.1 Modules for Nova Scotia

Health Status	General Health Chronic Conditions Depression
Social & Physical Environment	Household Composition Food Insecurity Socio-Demographic Characteristics Exposure to Second-hand Smoke
Education	Highest Education level
Income & Social Status	Income
Employment & Working Conditions	Labour Force
Personal Health Practices	Physical Activities Food Choices Fruit and Vegetable Consumption Smoking Youth Smoking Alcohol Consumption Use of Protective Equipment Sexual Behaviour
Individual Capacity & Coping Skills	Injuries Two-week Disability Restriction of Activities
Genetics	Height/Weight (BMI)
Gender	Sex
Health Services	Health Care Utilization Home Care Blood Pressure Check Flu Shots PAP Smear Test Mammography Health Utility Index Diabetes Care Patient Satisfaction Health Care System Satisfaction Medication Use Waiting Times
Culture	Ethnicity
Healthy Child Development	Maternal Experiences

Appendix 2

Survey Design, Sampling, and Bootstrapping

The survey employed a complex cluster sampling design of households and involved respondents aged 12 years plus. The responses to the survey were distributed by Statistics Canada to the provinces as encrypted raw scores (to roughly 2,000 variables) for those respondents who agree to share their responses with the various health departments.

The data were provided with three sets of population weights to create point estimates. (Please see the Table of “Raw Samples and Weighted Samples for DHAs”.) Once the point estimate is generated, its variance, reflecting the reliability of the estimate, needs to be calculated.

Since the sample design was non-random, a complex method of estimating the variance needs to be applied. Statistics Canada provided a ‘bootstrapping method’ which calculates the point estimate using 500 different weights; creates a mean value for the point estimates; and then calculates the variance and 95% confidence intervals for that estimate.

The differences between point estimates, within the same measure, are said to be statistically significant when the confidence intervals do not overlap. For instance, within the measure ‘Income Adequacy’, if the confidence intervals for the point estimate from DHA1 and those for the point estimate from Nova Scotia do not overlap, then the DHA1 point estimate is statistically different from the Nova Scotia point estimate.

The bootstrapping method also produces the coefficient of variation, which is used to decide if a point estimate could be reported. Data with a coefficient of variation (CV) greater than 33.3% are suppressed due to extreme sampling variability.

Raw Samples and Weighted Samples for DHAs

DHAs	Sample			Weighted Sample		
	Male	Female	Total	Male	Female	Total
1	154	163	317	24,188	24,730	48,918
2	205	258	463	29,073	30,014	59,087
3	294	352	646	33,265	36,102	69,367
4	229	288	517	32,563	34,030	66,593
5	84	108	192	11,868	12,164	24,032
6	151	164	315	17,352	20,372	37,724
7	196	192	388	22,079	20,299	42,378
8	349	454	803	52,220	56,864	109,084
9	557	759	1,316	162,412	176,389	338,801
Nova Scotia	2,219	2,738	4,957	385,020	410,963	795,983

This table compares the number of respondents sampled to their corresponding representative population estimate (weighted sample). For example, 154 women sampled for DHA 1 represent 24,188 women in DHA 1. The magnitude of the differences between those actually sampled and their corresponding population representation illustrates the need for very accurate variance calculations in order to establish the reliability of the point estimates and thus the necessity of the bootstrapping methodology.

Appendix 3

Guide to Data Interpretation

- The data provided in this report are point estimates with bootstrapping methodology applied to determine statistical significance where necessary.
- All data are presented as percentages.
- For all graphs y-axis label 'percentage' is to be read as 'percentage of the total estimated population', unless otherwise specified.

References

- 1 Department of Health. Healthy People, Healthy Communities, Using the population health approach in Nova Scotia, 2002. <http://www.gov.ns.ca/hpp/publichealth/content/pubs/PopulationHealthApproach.pdf>
- 2 Health Canada. Nutrition for a Healthy Pregnancy: National Guidelines for the Childbearing Years. 1999. Ottawa: Minister of Public Works and Government Services.
- 3 World Health Organization. Promoting proper feeding for infants and young children. 2004. Geneva. <http://www.who.int/nutrition/topics/infantfeeding/en/>
- 4 In 2001, the World Health Organization (WHO) changes its recommendation for exclusive breastfeeding from four to six months of age to exclusive breastfeeding until six months of age. Given that the duration of exclusive breastfeeding among Canadian women is significantly below six months, and the research results regarding the health outcomes related to six months versus four months of exclusive breastfeeding have been inconclusive (Health Canada, Exclusive breastfeeding duration. 2004), 4-month duration of exclusive breastfeeding is reported in this report.
- 5 U.S. Department of Health and Human Services. Reducing the health consequences of smoking: 25 years of progress. A report of the surgeon general, Rockville, Maryland. 1989.
- 6 Same as 5
- 7 Hunt CE and Hauck FR. Sudden infant death syndrome. *CMAJ* 2006; 174(13): 1861-1869.
- 8 Batstra L, Hadders-Algra M, Neeleman J. Effect of antenatal exposure to maternal smoking on behavioral problems and academic achievement in childhood: prospective evidence from a Dutch birth cohort. *Early Human Development* 2003; 75:21-33.
- 9 Health Canada. Pre- and postnatal smoking issues. http://www.hc-sc.gc.ca/hl-vs/tobac-tabac/body-corps/preg-gros/natal-nataux_e.html
- 10 For more detailed information, see Canadian Guidelines for Body Weight Classification in Adults, Health Canada, 2003, available online at http://www.hc-sc.gc.ca/hpfb-dgpsa/onpp-bppn/weight_book_e.pdf