PART FIVE

Technical Appendix



TECHNICAL APPENDIX





PART FIVE

Rethinking Women and Healthy Living in Canada

Technical Appendix

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Introduction

This appendix provides augmented technical information to aid readers in the interpretation of evidence provided in the report entitled: *Rethinking Women and Healthy Living in Canada*. Specifically, it builds on content found in the methods chapter and in the section that profiles healthy living evidence (see Part Two), providing definitions of measures and details on original data sources and steps taken in the analysis. This information will help readers better appreciate the limitations and appropriate scope of our data, measures and methods. In this appendix some points on design and analysis are summarized or repeated from the report in order to maintain the continuity of the story of the data and analysis. Conceptual issues and critical analyses, for example on the gender sensitivity of a given measure, are developed more fully within the body of the report.

Study Design

Our research drew from recent data on a wide range of factors that are understood to influence Canadian women's health. The analysis was divided into 10 healthy living topic areas, namely: body weight, healthy eating, food insecurity, physical activity and sedentary behaviour, tobacco use, alcohol use, sexual behaviour, injury and gender-based violence. Cross-sectional or period estimated data provided the bulk of the evidence-base, with some examination of trends. Data were stratified by sex, with a focus on data for females. Although some comparisons were drawn between women and men and girls and boys—largely as illustrations of gender inequities—our main objective was to build an in-depth view of healthy living for women.

A sex- and gender-based analysis was applied to each topical area, allowing a deeper level of analysis that considered multiple determinants of health (e.g. at the individual, community or structural levels), as outlined by the indicator framework (see figure below). Gender was viewed as neither dichotomous (female versus male) nor constant,

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but rather a socially ascribed and individually interpreted dimension that is best understood as a continuous variable, and one that is context dependent (i.e. shaped by time, place, and social group membership). Particular focus was placed on evidence of disparities among women in Canada, accomplished through simple bivariate analysis of healthy living indicators (dependent variables) cross-tabulated against social and socioeconomic variables (independent or stratifying variables) known to represent some important dimensions of diversity, and for which data are readily available in Canada. All indicators were reported at the national level. Indicators were stratified first by sex, and then further stratified by other socioeconomic/demographic variables, as allowed by sample size and data availability.



Figure 1. Organizing framework for gender-sensitive indicators. Adapted, with permission from the authors, from Moussavi et al (See reference in our full report).

Selection of Data

The project relied upon secondary data sources of various types, including surveys, census, routine public health surveillance systems, and some administrative sources. The Canadian Community Health Survey (CCHS) was the primary data source. The CCHS was selected because it:



- Is the most comprehensive data source for healthy living indicators;
- Is based upon a large national sample, which could support stable estimates for Canadian women as well as regional and other sub-populations of women; and
- Contains enough social and economic measures to allow for diversity analysis.

The project team also explored other possible data sources that could complement the CCHS, pose additional questions, or target special sub-populations. A brief scan of key reports and websites was conducted to learn about the breadth of data sources and standard indicators employed by experts in the various topic areas. Products supplied by data administrators—key among them, Statistics Canada and Health Canada—were also reviewed for available summary statistics (e.g. Health Trends, Canadian Socio-Economic Information Management System [CANSIM] tables, Health Canada summary data tables on particular health concerns, e.g. tobacco use). Public Use Microdata Files (PUMF) for key CCHS cycles were obtained and provided a preview of data and tools to test our analyses (see Data Analysis section below). Data administrators' websites and universitybased online resources (e.g. Equinox, a data dissemination tool available through the University of Winnipeg library) provided documentation, including user guides, questionnaires, variable lists, and derived variable lists. This background research provided helpful specificity on definitions, questions posed, inclusion/exclusion criteria and demographic characteristics of respondents. Lastly, we investigated the processes and logistics of obtaining data.

A list of potential data sources to include in our analysis was compiled and shared among the project team. The decision on which data sets could be included depended upon several factors, including: available time, funds, human resources for technical tasks, and available data format (e.g. customized tables produced by data administrators, PUMF, or anonymatized individual-level data i.e. Master Files). Notably, the data chosen were not intended to build a comprehensive evidence base on a given topic, but to be illustrative of our overall thesis. As an example of the data excluded, CCHS 2.2 Nutrition Cycle data were omitted on the advice of analysts at the Health Division because of the complex file structure and the need for advanced programming skills and knowledge specific to this source.

Although we explored the possibility of a partnership with the First Nations Information Governance Centre (FNIGC) so that we could include sex-specific data from the 2009/10 First Nations Regional Longitudinal Health Survey, we were unable to incorporate their datasets. Our project team lacked sufficient time to develop a process to prioritize the available indicators and, together with our colleagues at the FNIGC, we concluded that meaningful analysis would require a separate and subsequent project. As a point of clarification, the omission of FN-RLHS data represents a significant gap, because the CCHS did not gather data from First Nations reserves, but from an off-reserve population of those who self-identify as Aboriginal (American Indian, Métis or Inuit). Other data sources that were considered but not pursued included: the CCHS—Health Aging (2008-2009), although information on older women was derived from age-specific comparisons of data from various CCHS Annuals; the Canadian Tobacco Use Monitoring Survey (CTUMS) 2006, when time constraints led to a decision to prioritize CCHS smoking data instead; the General Social Survey-Victimization (2009), because a key variable on spousal violence from a current spouse was suppressed in the PUMF, and there was insufficient time to request this data; National Trauma Registry data on hospitalizations for major injury, administrated by the Canadian Institute for Health Information (CIHI), due to a delay in their data request process; and National Population Health Surveys, because similar variables from the CCHS served our purpose. Despite such constraints, we were most often able to provide information on these data from other published analyses, either from grey or peer reviewed academic literature. However, not all publications and data sets consistently included sex-disaggregated data. In all cases, the quantitative evidence we presented was accompanied by evidence from other quantitative and qualitative research studies.

For each data set, efforts were made to include the most recent data, however due to the large number of data sets and our time constraints, data released after analyses were underway were not updated. In some cases, older data were purposefully chosen when the more recent data available did not support sex-disaggregation of the variable of interest (e.g. Census of Agriculture 2001 instead of 2006).

The selection of CCHS involved added considerations. The data collection schedule of the CCHS balances needs for regular updates on many measures of the health of Canadians, as well as the need to gather information on emerging issues and priority interests of various health regions. These needs are addressed by combining the use of many thematic series of questions or 'modules', some of which are 'common content' modules given to all survey respondents, whereas others are 'optional content' modules, meaning that health regions are given a choice of whether to ask them of respondents in their region. Some common content modules are collected every year, others are collected for either one or two years and periodically rotated in either 2 or 4 year cycles, whereas optional content is often harmonized over a province but may vary from year to year (1,2). Given the breadth of topics involved in our study, greater familiarity with the frequency and coverage of relevant modules in the CCHS was needed. A checklist of modules for all annuals and cycles of the CCHS provided by the Health Division was consulted, which guided our selection of indicators included in common content modules, and the most recent annual/cycle in which that data were gathered. Thus, the focus on common content modules supported nationally representative estimates on these



measures for women across Canada. Furthermore, owing to a redesign of CCHS sampling methods in 2007, which brought in ongoing data collection but reduced the sample size in any given year by half (3), we combined two consecutive annuals with coverage of the same modules (i.e. 2007-2008 and 2009-2010) in order to bolster the sample size and support more stable estimates.

The format of CCHS data releases also required consideration. Although PUMF data were originally obtained, these proved insufficient. The public data source constrained our analyses as some variables were inaccessible (e.g. pregnancy status, Aboriginal identity), and it was not possible to calculate precise coefficients of variation, due to the confidential nature of data required for the Bootstrap methodology. PUMF data relied upon estimated coefficients of variation provided in manual look-up tables for a limited selection of population groups, which raised concerns for lost precision when used to compare results among small subsets of the female population. Thus, Master File data, comprised of anonymised individual level data, were required. The data were secured through application to the remote access program of the Health Division of Statistics Canada, which consented to our use of the data in accordance with terms of license agreements. Other data sources including the Canadian Drug Use Monitoring Survey (CADUMS), the Canadian Census of Agriculture, and Sexually Transmitted Infections surveillance data administrated by the Public Health Agency of Canada, were derived from publically available data sets (i.e. PUMF and summary tables available online), whereas Canadian Health Measures Survey (CHMS) and National Work Injury Statistics Program (NWISP) data were purchased as customized tables and reports from Statistics Canada and the Association of Workers' Compensation Boards of Canada (AWCBC), respectively.

During the data selection stage, we made decisions on which variables, among alternative measures of certain characteristics, were most appropriate to the analysis, given our understanding of issues affecting women. The methods section of the full report already explains the kinds of issues, priorities and tradeoffs involved in our selection of an 'income' variable from the CCHS; 'Distribution of Household Income-Health Region Level' was chosen, as it would support meaningful comparison of the socioeconomic status of women living in very disparate contexts for standards of living, while still reflecting an important dimension of relative material deprivation (see page 69). CCHS provided two possible indices of food security. The 'standard' and 'modified' household food security indices are both based on responses to 18 questions relating to specific psychological, economic, and physical indicators of food insecurity. What differs is the importance each composite index gives to the individual components and how gradations of severity are gauged. The standard index includes a measure of low-level food insecurity ("food insecurity without hunger") in which case anxiousness over having

enough food is, in itself, taken as a sufficient indicator of food insecurity. Other markers may be that poorer quality food choices are made in order that the household has enough food, but reduced intake and repeated hunger is not experienced. Where household members do reduce food intake ('food insecurity with hunger'), the standard index differentiates severe from moderate levels of food insecurity on the basis of whether adults experience both repeated and *extensive* reductions in food intake, and whether *children's* intake is also reduced. In contrast, the modified index differentiates food insecurity severity for households (with or without children) on the basis of whether there is an "indication of compromise" in quality and/or amount of food (moderate food insecurity), or both reduced intake of food and disrupted eating patterns (severe food insecurity). For our purposes, the standard index was selected because the literature has identified child hunger as a significant concern among women and this index offers a better gauge of food insecurity of female-headed households with children, as well as sensitivity in detecting low-level food insecurity.

The project team worked together in the selection of a standard set of stratifying variables that would unify the data analysis across the several topic areas. The core stratifying variables were: sex (female sex); province/territory; age; and income/socioeconomic status. As well, the project team agreed to accommodate the optional use of additional stratifying variables where such variables were particularly relevant to a topic. The additional stratifying variables were: educational attainment; Aboriginal identity; urban/rural residence; living arrangement (lone parent); race/cultural origin; and number of years in Canada. These factors reflect the kinds of indicators included in our indicator framework; that is, the determinants of health that include social, household and socioeconomic factors and the community and structural level factors. The variables, as well as the healthy living indicators, are defined in the Indicators section (Tables A1 and A2) below.

Data Sources

The healthy living profile in Part Two drew on data from seven sources and, in the case of the CCHS, several annuals/cycles of data collected from the ongoing survey. A brief description of these main data sources follows, providing general information such as the data collection method employed; characteristics of target populations, and those excluded; and key limitations that influence the interpretation of the data. Links to summary website content on each data source are also provided for those readers who require added methodological detail.



Canadian Community Health Survey (CCHS); 2009-2010; 2007-2008; 2005: ٠ The CCHS is a general health survey administered by Statistics Canada, which covers the Canadian population aged 12 and older who live in private households. It does not include residents of Indian Reserves, Crown lands, health care or other institutions (e.g. hospitals, long-term care facilities, prisons), Canadian Forces bases, and some remote areas. The survey collects information on numerous health determinants, which are relevant to this report, as well as health status and health care usage. CCHS measures most often rely on self-reported health behaviours or health status. Data are collected through telephone interviews (residential telephones) with one individual per household. Since 2007, annual cycles of the CCHS have been based on samples of 65,000 individuals, although we have combined two collection years in order to draw on double the sample size (130,000) for data collected in recent annuals (2007-2008; 2009-2010), which enhances the stability of estimates for the sub-set of only females in the population. Detailed descriptions of the design, sample and interview procedures of the surveys are available through the Statistics Canada website (www.statcan.gc.ca/imdb-bmdi/3226-eng.htm)

• Canadian Health Measures Survey (CHMS); Cycle 1, 2007-2009:

Administered by the Physical Health Measures Division of Statistics Canada, the CHMS is a national, periodic survey based on clinical measurements and interviews with index residents (i.e. one per household) in a sample of Canadian households. Data based on clinical measures of individual behaviours (e.g. tobacco smoking, drinking alcohol) are considered to be more objective than self-reports, because there is a risk that respondents will want to make their answers more socially desirable. The survey targets individuals aged 6-79 years of age living in privately occupied dwellings, excluding residents of Indian Reserves, Crown lands, certain remote regions, institutions and full-time Canadian Forces personnel. A stratified random sampling methodology, based on regional representation, was employed. Approximately 5,000 households were sampled from 15 community sites, in 5 provinces. Approximately 97% of Canadians are represented by the survey results.

(http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=5071&l ang=en&db=imdb&adm=8&dis=2)

• National Work Injury Statistics Program (NWISP): The Association of Workers' Compensation Boards of Canada collects data on accepted time loss injuries, diseases and fatalities for individuals (age 15 and older) working in industries covered by workers compensation legislation. Time Loss Injury is defined as an injury where a worker is compensated for a loss of wages following

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a work-related injury (or exposure to a noxious substance), or receives compensation for a permanent disability with or without any time lost in his or her employment. Therefore, not all work-related injuries are included in the data set; for example, injuries reported but not accepted by the Board, or injuries involving a claim for compensation but where the injury did not result in a loss of time worked. Time loss injury data for the three most recent years available are published in annual reports, entitled "National Work Injury, Disease and Fatality Statistics". The publication includes statistical summaries by jurisdiction with cross tabulations by nature and source of injury, part of body, event, age, gender (sex), industry and occupation as well as industry cross tabulations by nature and source of injury, part of body and event. Variation in these statistics may arise across jurisdictions because of differing acts, regulations, operating policies and procedures. Also, jurisdictions vary for their coverage of industries by workers compensation legislation (4).

- Sexually Transmitted Infections Surveillance Data, Public Health Agency of • Canada: Routine surveillance of sexually transmitted infections (STIs) is undertaken by the Centre for Communicable Diseases and Infection Control, Public Health Agency of Canada, through collaboration with provincial and territorial representatives, who collect and manage the data. As well, the Centre is responsible for enhanced surveillance of populations vulnerable to sexuallytransmitted and blood-borne infections. These data include information on nationally reportable bacterial sexually transmitted infections, including Chlamydia, gonorrhea, and infectious syphilis, by sex, age and location. Health care providers are legally required to report cases of these infections to public health authorities; cases are confirmed through diagnoses obtained through laboratory test results from authorized labs. It is important to note that reported cases of STIs likely underestimate the actual number of infections in a given population, as many people who are infected do not exhibit symptoms and may not seek care or be tested. The data are published in online national data tables and in regular surveillance reports. (http://www.phac-aspc.gc.ca/stdmts/report/sti-its2008/07-eng.php)
- Census of Agriculture, 2001: Statistics Canada produces a census of agriculture every five years, which collects data using mail-in questionnaires and telephone or in-person follow-up. The census includes information on census farms and farm operators, although farms with gross farm receipts of less than \$10,000 are excluded due to their small size. Census farms are defined as agricultural operations that produce crops, livestock, poultry, animal products, or other agricultural products intended for sale. Farm operators are defined as the women



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and men who make the day-to-day management decisions on Canadian farms. In 2001, up to three farm operators could be reported per farm. The farm operator variables include farm-related injuries within the 12 months preceding the survey, among other variables (number of farm operators, age, sex, residence status, farm and non-farm work). Notably, not all farm workers are included in the census, which limits the information available on, for example, the injuries of seasonal or transient farm workers. Some First Nations reserves and settlements did not allow enumeration of farm operations, and others are incompletely enumerated. Farm operations in the territories are few and distinct. Injury data on farm operators in the territories were suppressed due to insufficient numbers and requirements to maintain confidentiality. (http://www.statcan.gc.ca/pub/95f0355x/4064985-eng.htm)

 Canadian Drug Use Monitoring Survey: The Canadian Drug Use Monitoring Survey (CADUMS) was implemented in 2008 by Health Canada as the first ongoing survey on alcohol and drug use. The survey aims to determine the prevalence and frequency of substance use amongst Canadians aged 15 and older. At least 10,000 Canadians are surveyed each year, using telephone interviews (random digit dialing). The sample excludes: residents of Yukon, the Northwest Territories and Nunavut; permanent residents of institutions; people living in households without a telephone; and people who rely on cell phones as their only telephone. As well, it is recognized that some high-risk groups, including homeless individuals, would not be reached by the survey. Participants are randomly selected across the 10 provinces with an equal number of respondents surveyed each month. (http://www.hc-sc.gc.ca/hc-ps/drugs-drogues/cadumsesccad-eng.php http://datalib.chass.utoronto.ca/inventory/3000/3891.htm)

Data Manipulation and Analysis

Similar methods were applied in our analysis of primary data from CCHS and CADUMS sources, although some specific data treatment methods varied due to the unique sampling methodology of each survey and the specifications that accompanied different format types (e.g. PUMF data for CADUMS; anonymised Master File data for all CCHS cycles).

Statistical analysis software—SAS 9.2 (5) for all CCHS data and SPSS 20 (6) for CADUMS data—were used to develop code to compute unweighted and weighted estimated frequencies and weighted estimates of proportionate distributions for all healthy living variables and cross-tabulations. Sample weights, specific to each data source, were applied for the purpose of adjusting estimates to represent the age-sex structure of the Canadian target population for the corresponding period.

For the CCHS, SAS code was tested for each cross-tabulation using synthetic files provided by Statistics Canada-Health Division to ensure accuracy of programming. Tested files were re-submitted to the Health Division of Statistics Canada to run on Master File data. Final output was provided by the Health Division in a series of Excel files. For most data, preliminary testing was also carried out with PUMFs, which helped to identify comparison groups and response categories that might be too small and unstable to support reliable estimates. Where possible, response categories were regrouped into larger categories to limit data suppression and improve the quality of estimates. The data were cleaned for not-applicable categories.

Non-responses to survey items were treated as missing data and excluded from analysis. The assumption is made that non-responses are similarly distributed among item responses, which may not hold true, particularly for questions that elicit socially undesirable responses. For example, non-response may be higher for overweight and obese body mass categories than for smaller body mass categories. Consequently, results for socially undesirable health behaviours or outcomes are understood to likely represent conservative estimates. As an aid to interpretation of this limitation, a proportion of missing values was calculated for each cross-tabulation according to the following formula: Missing values (%) = 100 - [Total responses / Total sample size)*100]. This value accompanies most charts that appear in the topic summaries. However, missing values could not be calculated for some results. The problem arose where questions had been posed to a specific sub-group of respondents (e.g. women pregnant within the past five years who smoked) because these groups had not been anticipated when computing various sub-group sample totals. Therefore, appropriate denominators for the calculation of the percentage of missing values were not available.

The extent of potential sampling error for each result was estimated by a coefficient of variation (CV), which accounted for the complex sampling design of each survey. CCHS data required application of a bootstrap method (macro program Bootvar) of computation; and the SPSS Complex Samples Add-on for SPSS 20 was used to calculate precise standard errors and CVs for CADUMS data. Results were checked against the data release guidelines provided in user guides. As per practice at Statistics Canada, CCHS data were not released where unweighted counts totaled less than 30, or where weighted estimates yielded coefficients of variation that exceeded 33.3%. Coefficients equal to or greater than 16.6% and less than 33.3% signified marginally reliable estimates and were released with a caution. Confidence limits (95%) were derived for each estimate.



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All estimated frequencies were rounded to the nearest 100 units, applying the normal rounding method. Proportions were computed from unrounded components and percentages were rounded to one decimal place. Results from all sources were summarized in tables and charts. Necessary data suppression was noted and those crosstabulations that produced insufficient results to allow for comparison were omitted. Where available, confidence limit values were converted into customized high/low error bars in Excel bar charts, where the width of the error bars depicted the degree of variability associated with each estimate. Relationships between healthy living variables and stratifying variables were explored through simple bivariate analysis. Visual inspection of confidence intervals among different categories was used to assess differences between proportions, where non-overlapping 95% confidence intervals defined statistically significant differences, a degree of difference unlikely to be due to chance. Readers are cautioned that simultaneous comparison of several categorical results is known to inflate Type I error. Based on the methods employed, confidence interval comparison will not address inflated Type I error, that is, there is some increased risk of concluding that there are real differences between categories when there truly are none (7). As well, 'total' categories are not independent from the sub-categories from which totals are derived, so that confidence interval comparisons between totals and sub-groups should be avoided.

Indicators & Stratifying Variables

The following tables list healthy living indicators and the various cross-tabulations performed in our analysis (Table A1) and details on stratifying variables (Table A2), which differ across the data sources employed. Notably, the results for some cross-tabulations are not described in the report, particularly where data quality issues arose (i.e. suppression of too many results to allow for meaningful comparisons). Indicators are grouped by topic, whereas stratifying variables are listed by data source. Each table also contains notes on the name given to the indicator or variable, code names (where applicable), definitions and added explanatory notes on the treatment of data. Various documents were consulted, including data dictionaries, derived variable listings, report appendices, and data table footnotes (4,8-13).¹

¹ CCHS documentation is not cited because, at the time of publication, Statistics Canada no longer provided public access to the files on their website. As well, CADUMS documentation was not available on Health Canada's website.



Table A1: Indicator List by Topic - Definitions and Specifications

PHYSICAL ACTIVITY

DATA SOURCE	CODE NAME	VARIABLE NAME & DEFINITION	DATA TREATMENT NOTES
CCHS 2007-2008	PACFLEI	Participant in leisure time physical activities in the three months prior to the interview.	Standard cross-tabulations were performed, as well as by education, Aboriginal identity, and by urban/rural residence.
CCHS 2007-2008	PACFLTI	Participant in leisure time or transportation physical activities in the three months prior to the interview.	Standard cross-tabulations were performed, as well as by education, Aboriginal identity, and by urban/rural residence.
CCHS 2007-2008	PACFD	Participant in daily leisure physical activity with a duration of more than 15 minutes. Universe includes all respondents.	Cross-tabulated by female sex and age only.
CCHS 2007-2008	PACDFR	Frequency of all leisure physical activity with a duration of more than 15 minutes. Universe includes participants.	Cross-tabulated by female sex and age only.
CCHS 2007-2008	PACDPAI	Leisure time physical activity index. This indicator is based upon responses to questions about the frequency, duration and types of leisure activities engaged in during the last three months. The calculations employ estimates of the typical hourly energy costs of numerous standard activities. For each leisure-time physical activity, an average daily energy expenditure is calculated by multiplying the number of times the activity was performed by the average duration and then by the energy cost (kilocalories per kilogram of body weight per hour). The index is calculated as the sum of the average daily energy expenditures of all activities. Respondents are classified: Active - Using 3 or more kilocalories per kilogram of body weight per day; Moderately active - Using 1.5 to less than 3 kilocalories per kilogram of body weight per day; Inactive - Using less than 1.5 kilocalories per kilogram of body weight per day (3). Universe includes all respondents.	Standard cross-tabulations were performed, as well as by education, Aboriginal identity, and by urban/rural residence.

CCHS 2007-2008	PACDLTI	Leisure and transportation physical activity index. The index is calculated using the same method described as the leisure-time physical activity index, although physical activities undertaken for transportation are also included (e.g. walking or cycling to work). Universe includes all respondents.	Standard cross-tabulations were performed, as well as by education, Aboriginal identity, and by urban/rural residence.
CCHS 2007-2008	PAFFACC	Access to physical activity facilities at work. Universe includes respondents aged 15 to 75 who worked at a job or business or who had a job but were absent from work.	Cross-tabulated by female sex and age, and female sex by household income distribution only.
CCHS 2007-2008	PAC_1A through PAC_1Z (excluding U, V, W, X, Y)	Participation, within the past three months, in the following leisure time activities: walking, gardening, swimming, bicycling, popular or social dance, home exercise, ice hockey, ice skating, in- line skating or rollerblading, jogging, golfing, exercise class or aerobics, downhill skiing or snow boarding, bowling, baseball or softball, tennis, weight training, fishing, volley ball, basket ball, soccer. Respondents could select any or all of the activities for which they were prompted. The "not stated" category (treated as missing data) includes people who did the interview by proxy. The universe includes all respondents.	Cross-tabulated by female sex and age only.
CHMS, Cycle 1, 2007- 2009	CPADSAC	Total number of hours per day spent in sedentary activities (based on self-report, children aged 6-11)	Cross-tabulations performed by female sex and by age, total household income, and culture / race.
CHMS, Cycle 1, 2007- 2009	CPADTOT	Total number of hours per week participated in physical activities (based on self-report, children aged 6-11)	Cross-tabulations performed by female sex and by age, total household income, and culture / race.
CHMS, Cycle 1, 2007- 2009	PACDEE	Daily energy expenditure (based on self-report, respondents 12 and older)	Cross-tabulations performed by female sex and by age, highest level of education, total household income, and culture / race.
CHMS, Cycle 1, 2007- 2009	PACDFM	Monthly frequency of physical activity lasting >15 minutes (based on self-report, respondents 12 and older)	Cross-tabulations performed by female sex and by age, highest level of education, total household income, and culture / race.
CHMS, Cycle 1, 2007- 2009	PACDFR	Frequency of all physical activity > 15 min. (based on self-report, respondents 12 and older). Response choice: Regular or Occasional / Infrequent.	Cross-tabulations performed by female sex and by age, highest level of education, total household income, and culture / race.

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16	CHMS, Cycle 1, 2007- 2009	PACFD	Participant in daily physical activity > 15 min. (based on self- report, respondents 12 and older). Response choice: Yes, No.	Cross-tabulations performed by female sex and by age, highest level of education, total household income, and culture / race.

SEDENTARY BEHAVIOURS

DATA SOURCE	CODE NAME	VARIABLE NAME & DEFINITION	DATA TREATMENT NOTES
CCHS 2007-2008	SACDTOT	Total number of hours in a week spent on sedentary activities. This variable estimates the total number of hours the respondent spent in a typical week in the past three months in sedentary activities including using a computer (including playing computer games), using the Internet, playing video games (e.g. Nintendo, PlayStation) (for respondents aged 25 or less), watching television or videos and reading. For all activities, the time spent at school or work is excluded.	Standard cross-tabulations were performed, as well as by education, Aboriginal identity, and by urban/rural residence.
CCHS 2007-2008	SAC_1	Number of hours - on a computer - in the past 3 months. Question: In a typical week in the past 3 months, how much time did you usually spend on a computer, including playing computer games and using the Internet? Includes only leisure time activities. Universe includes all respondents.	Cross-tabulated by female sex and age only.
CCHS 2007-2008	SAC_2	Number of hours - playing video games - in the past 3 months. Question: In a typical week, in the past 3 months, how much time did you usually spend playing video games, such as XBOX, Nintendo and Playstation? Includes only leisure time activities. Universe includes respondents aged less than 25.	Cross-tabulated by female sex and age only. Grouped more than 10 hours into one category.
CCHS 2007-2008	SAC_3	Number of hours - watching television or videos - in the past 3 months. Question: In a typical week, in the past 3 months, how much time did you usually spend watching television or videos? Includes only leisure time activities. Universe includes all respondents.	Cross-tabulated by female sex and age only.
CCHS 2007-2008	SAC_4	Number of hours - reading - past 3 months. Universe includes all respondents. Question: In a typical week, in the past 3 months, how much time did you usually spend reading, not counting at work or at school? Includes books, magazines, newspapers, and homework.	Cross-tabulated by female sex and age only.

CHMS, Cycle 1, 2007- 2009	SACDTOT	Total number of hours - sedentary activities - in a typical week in past 3 months (based on self-report, respondents 12 and older). Less than 5 hours to 14 hours; From 15 to 29 hours; 30 or more hours.	Cross-tabulations performed by female sex and by age, highest level of education, total household income, and culture / race.
CHMS, Cycle 1, 2007- 2009	AMMDSAC	Average hours per day spent in sedentary activities (activity monitor data, all respondents, using only valid days)	Cross-tabulations performed by female sex and by age, highest level of education, total household income, and culture / race.
CHMS, Cycle 1, 2007- 2009	AMMDMVPA	Average hours per day spent in moderate-to-vigorous physical activities (activity monitor data, all respondents, using only valid days)	Cross-tabulations performed by female sex and by age, highest level of education, total household income, and culture / race.

ALCOHOL USE

DATA SOURCE	CODE NAME	VARIABLE NAME & DEFINITION	DATA TREATMENT NOTES
CCHS 2005 (Cycle 3.1)	ALCEDDLY	Average daily alcohol consumption. This variable indicates the average number of drinks the respondent consumed per day in the week prior to the interview. 'Drink' is defined as one bottle or can of beer or a glass of draft, one glass of wine or a wine cooler, or one drink or cocktail with 1 and 1/2 ounces of liquor. Excludes respondents who did not have at least one drink in the last 12 months.	Standard cross-tabulations were performed, as well as cross-tabulations by education, urban/rural residence, Aboriginal identity, and by pregnancy status. 3 drinks or more categories were grouped together.
CCHS 2005 (Cycle 3.1)	ALCEDWKY	Weekly consumption. This variable indicates the total number of drinks consumed in the week prior to the interview. Excludes respondents who did not have at least one drink in the past 12 months.	Standard cross-tabulations were performed, as well as cross-tabulations by education, Aboriginal status, urban/rural residence and pregnancy status. Categories were grouped into less than 10, and 10 or more drinks per week.
CCHS 2005 (Cycle 3.1)	MEXE_32	Drank alcohol while breastfeeding last baby. Universe excludes those who did not breast feed or try to breast feed and 'non- drinkers'. Includes women aged 15-55, but see Data Treatment Specifications.	Standard cross-tabulations were performed, as well as cross-tabulations by education and Aboriginal identity. We used results only for women in the age range when most births occur: age 18-44.



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CCHS 2005 (Cycle 3.1)	MEXE_33	Frequency of drinking - while breastfeeding last baby	Standard cross-tabulations were performed, as well as cross-tabulati education and by Aboriginal identit
CCHS 2009-2010	ALC_2	Frequency of drinking alcohol. Universe includes all respondents, except those who did not have a drink of beer, wine, liquor or any other alcoholic beverage in the past 12 months.	Standard cross-tabulations were performed, as well as cross-tabulati urban/rural residence, Aboriginal id and by pregnancy status.
CCHS 2009-2010	ALC_3	Frequency of heavy drinking in the past 12 months. How often in past 12 months has respondent had five or more drinks (bottle/can/glass or 1.5 oz liquor) on one occasion. Universe excludes those who did not drink an alcoholic beverage in the past 12 months.	Standard cross-tabulations were performed, as well as cross-tabulati urban/rural residence, Aboriginal id and by pregnancy status. Once a w all the more frequent categories we grouped together.
CCHS 2007-2008	ALN_3C	Why did you reduce or quit drinking pregnancy	Cross-tabulation by female sex only
CCHS 2009-2010	MEX_10	Main reason stopped breast feeding last child. Not grouped.	Cross-tabulation by female sex only
CADUMS, 2010		Frequency of drinking. How often did you drink alcoholic beverages during the past 12 months? Categories include: never, less than once/month, 2-3 times/month, once/week, 2-3 times/week, 4-6 times/week.	Cross-tabulated by female sex and province, and highest educational attainment.
CADUMS, 2010		Heavy monthly alcohol use in past 12 months (5 or more drinks for men, 4 or more drinks for women in one sitting).	Cross-tabulated by female sex and province, and highest educational attainment, household income, ma status.
CADUMS, 2010		Heavy alcohol use weekly in the past 12 months	Cross-tabulation by female sex only
CADUMS, 2010		Frequency of heavy drinking (4+ drinks). How often in the past 12 months have you had 4 or more drinks on one occasion? Categories included: daily or almost daily, 2-5 times/week, once/week, 2-3 times/month, once/month, less than once/month.	Cross-tabulation by female sex only
CADUMS, 2010		Drinking patterns. Categories included: Lifetime abstainer, former drinker, light/infrequent, light/frequent, heavy/infrequent, heavy/frequent.	Cross-tabulation by female sex only

PART FIVE

CADUMS, 2010	Drinking status. Categories included: Abstainer, former drinker, current drinker.	Cross-tabulation by female sex only.
CADUMS, 2010	Past month alcohol use (yes/no).	Cross-tabulation by female sex only.
CADUMS, 2010	Percentage of women exceeding the low risk drinking guidelines during the past 7 days.	Cross-tabulated by female sex and by age, province, highest educational attainment, household income, marital status.

SMOKING (TOBACCO)

DATA SOURCE	CODE NAME	VARIABLE NAME & DEFINITION	DATA TREATMENT NOTES
CCHS 2005 (Cycle 3.1)	MEXE_23	Smoked while breastfeeding last baby (occasional smoker). Excludes those who did not breast feed or try to breast feed. Universe includes occasional smokers.	Standard cross-tabulations were performed, as well as cross-tabulations by education, Aboriginal identity, and by urban/rural residence.
CCHS 2005 (Cycle 3.1)	MEXEG24	Number of cigarettes daily while breastfeeding (daily smoker). Universe: Daily smoker who answered yes to 'smoked while breast feeding last baby'. Excludes those who did not breast feed or try to breast feed.	Cross-tabulations were tested but were unstable. Data were examined for all women who breast fed. 1-5 cigarettes were grouped into one category.
CCHS 2005 (Cycle 3.1)	MEXEG25	Number of cigarettes daily - while breastfeeding (occ. Smoker)	Cross-tabulation by female sex only.
CCHS 2005 (Cycle 3.1)	MEXE_20	Type of smoker - last pregnancy (daily, occasional, not at all, NA, DK, NS) Universe: have given birth in past 5 years. (I think it is also restricted to females aged 15-55)	Standard cross-tabulations were performed, as well as cross-tabulations by urban/rural residence, education and Aboriginal identity. We restricted the universe to women aged 18-44.
CCHS 2009-2010	SMKDSTY	Type of smokeramong those who ever smoked. This variable indicates the type of smoker the respondent is, based on her smoking habits. It includes lifetime cigarette consumption. Original categories included: Daily smoker; Occasional smoker (former daily smoker), Occasional smoker (never a daily smoker or has smoked less than 100 cigarettes in her lifetime), Former daily smoker (non-smoker now); Former occasional smoker (at least 1 whole cigarette, non smoker now); Never smoked (a whole cigarette).	Standard cross-tabulations were performed, as well as cross-tabulations by urban/rural residence, education, and Aboriginal identity. We grouped both former categories together and both occasional categories together, and we removed the never smoked category.



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20	CCHS 2009-2010	SMK_204	How many cigarettes do you smoke each day now (among daily smokers)	Cross-tabulations performed for female sex by age and by pregnancy status.
	CCHS 2009-2010	SMK_05B	On the days you do smoke, how many cigarettes do you usually smoke (Occasional smoker)	Cross-tabulations performed for female sex by age and by pregnancy status.
	CCHS 2009-2010	ETS_36	Are there any restrictions against smoking cigarettes in your home? Excludes respondents where smoking occurs inside the home every day, and those who do not allow smoking in the house. Error noted in documentation: Due to an error in the application flow, respondents in 2009 who do not allow smoking in their house were asked this question. As a result of this error, a large number of respondents answered "Yes" to this question when it should have been "Not Applicable	Cross-tabulations performed for female sex by age and by pregnancy status.

FOOD SECURITY

DATA SOURCE	CODE NAME	VARIABLE NAME & DEFINITION	DATA TREATMENT NOTES
CCHS 2007-2008	FSCDHFS	Food security index. Universe includes all respondents. Based on 18 food security questions and the degree to which the statements applied. Inquires about food situation in the household. The individual questions presented these scenarios: Worried food would run out, Food bought just didn't last and no money to buy more, Could not afford to eat balanced meals, Relied on few kinds of low-cost food for children, Could not feed children a balanced meal, Children were not eating enough, Adults skipped or cut size of meals, Adults skipped or cut size of meals - frequency, Ate less than felt should , Was hungry but could not afford to eat, Lost weight no money to buy food, Adults did not eat for whole day, Adults did not eat whole day - frequency, Adults cut size of children's meals, Children skipped meals, Children skipped meals - frequency, Children were hungry, Children did not eat for whole day.	Standard cross-tabulations were performed, as well as by urban/rural residence, education and Aboriginal identity, living arrangement, BMI-Adult, and BMI-Youth. It was necessary to group food insecurity categories for some cross- tabulations (e.g. Youth BMI, Living arrangement).

HEALTHY BODY WEIGHT

DATA SOURCE	CODE NAME	VARIABLE NAME & DEFINITION	DATA TREATMENT NOTES
CCHS 2007-2008	HWTGISW	Body mass index classification for adults, based upon self- reported weight - International Standard. BMI is calculated by dividing weight, in kilograms, by height in meters, squared (unit of measurement kg/m2). Respondents are classified: Underweight < 18.5, Normal weight 18.5- 24.9, Overweight 25.0-29.9, Obese 30.0 or greater. Universe includes respondents aged 18 and over excluding pregnant women.	Standard cross-tabulations were performed, as well as by urban/rural residence, education, Aboriginal identity, race/cultural origin, and number of years in Canada.
CCHS 2007-2008	HWTDCOL	Body mass index classification for youth based on self-reported weight - Cole system. This variable classifies children aged 12 to 17 (except female respondents aged 15 to 17 who were pregnant or did not answer the pregnancy question) as "obese", "overweight" or "neither obese nor overweight" according to the age-and-sex- specific BMI cut-off points as defined by Cole et al. The Cole cut-off points are based on pooled international data (Brazil, Great Britain, Hong Kong, Netherlands, Singapore, and United States) for BMI and linked to the widely internationally accepted adult BMI cut-off points of 25 (overweight) and 30 (obese). Respondents who do not fall within the categories of "Obese" or "Overweight" (as defined by Cole et al. (14)) have been classified by CCHS as "neither obese nor overweight".	Standard cross-tabulations were performed, except for Household income distribution. Additional cross-tabulations were performed by urban/rural residence, education, Aboriginal identity, and race/cultural origin.
CCHS 2007-2008	HWT_4	Respondent's opinion of own weight - self-reported. Respondents were asked: Do you consider yourself: overweight, underweight, or just about right? Universe included all respondents. 'Not stated' (treated as missing data) includes people who did the interview by proxy.	Standard cross-tabulations were performed, as well as by urban/rural residence, education, Aboriginal identity, race/cultural origin, and number of years in Canada.





SEXUAL BEHAVIOURS

DATA SOURCE	CODE NAME	VARIABLE NAME & DEFINITION	DATA TREATMENT NOTES
CCHS 2005 (Cycle 3.1)	SXBE_1	Ever had sexual intercourse. Universe includes respondents aged 15-49.	Cross-tabulated by female sex and age only.
CCHS 2005 (Cycle 3.1)	SXBE_3	Had sexual intercourse in the past 12 months. Universe excludes those who have never had sexual intercourse, as well as respondents under age 15 and age 50 and older.	Cross-tabulated by female sex and age only.
CCHS 2005 (Cycle 3.1)	SXBE_07	Ever diagnosed with a sexually transmitted disease. Universe excludes those who have never had sexual intercourse, as well as respondents under age 15 and age 50 and older.	Standard cross-tabulations were performed, as well as by urban/rural residence, education, Aboriginal identity.
CCHS 2005 (Cycle 3.1)	SXBE_13A	Birth control method used last time was condom. Universe includes respondents aged 15-24, excluding those who did not usually use birth control (any method) in the last 12 months.	Cross-tabulated by female sex and age only.
CCHS 2005 (Cycle 3.1)	SXBE_12A	Usual birth control method reported is condom. Universe includes respondents aged 15-24, excluding those who did not usually use birth control (any method) in the last 12 months.	Cross-tabulated by female sex and age only.
CCHS 2005 (Cycle 3.1); CCHS 2009-2010	SXBE_7A	Condom use at last sexual intercourse. Universe includes those aged 15-49 who report having had sexual intercourse within the past 12 months, but excludes those who are married or in common-law unions who report having only one sexual partner within the past 12 months.	Standard cross-tabulations performed, except Household income distribution. Additional cross-tabulations were performed by sex and by education and by Aboriginal identity.
CCHS 2009-2010 (custom tabulation AND remote access)	SXB_2	Age at first intercourse. Universe includes respondents aged 15- 49.	Standard cross-tabulations, as well as by urban/rural residence, Aboriginal identity, and education. In some cross-tabulations, it was necessary to group categories (E.g. Age 1-13 with Age 14 in Provincial cross- tabulation; Age 20-24 and 25+ in Education and Aboriginal identity cross-tabulations).
CCHS 2009-2010 (custom tabulation AND remote access)	SXB_4	Number of sexual partners past 12 months. Universe includes females aged 15-49.	Standard cross-tabulations were performed.

РНАС	La pr na lik pc w ex he	aboratory confirmed cases of Chlamydia, routinely reported by provincial/territorial health authorities to PHAC. Chlamydia is a nationally notifiable infection. "The number of reported cases ikely underestimates the true burden of infection in a given population for a variety of reasons. For example, many people who are infected with sexually transmitted infections do not exhibit symptoms and therefore may not present to a nealthcare practitioner for testing" (Reference: CCDC report).	Cross-tabulations by female sex and by age, province/territory, year.
РНАС	La pr na	aboratory confirmed cases of gonorrhea routinely reported by provincial/territorial health authorities to PHAC. Gonorrhea is a pationally notifiable infection.	Cross-tabulations by female sex and by age, province/territory, year.

INJURIES

DATA SOURCE	CODE NAME	VARIABLE NAME & DEFINITION	DATA TREATMENT NOTES
CCHS 2009-2010	INJ_01	Injured in past 12 months (yes/no). Excludes repetitive strain injuries.	Standard cross-tabulations were performed, excluding education. Also cross-tabulated female sex by urban/rural residence and Aboriginal identity.
CCHS 2009-2010	INJG02	Number of injuries in past month (grouped into categorical ranges). Excludes those not injured within the past 12 months. Excludes repetitive strain injuries.	Standard cross-tabulations were performed, excluding education. Also cross-tabulated female sex by urban/rural residence and Aboriginal identity. 3 or more injuries were grouped as one category.
CCHS 2009-2010	INJDSTT	Injury status of those who have suffered an injury. Status types include: activity limitation, non-activity limitation, both activity and non-activity limiting. We close to exclude respondents who had no type of injury from this data.	Standard cross-tabulations were performed, excluding education. Also cross-tabulated female sex by urban/rural residence and Aboriginal identity.





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24	CCHS 2009-2010	INJG06	Most serious injury - body part affected (This appears to exclude concussional or internal injuries, as this indicator is based upon INJ_05 responses 1-7)	Cross-tabulated by female sex and age only. The following categories were grouped: Upper extremity = shoulder/upper arm + elbow/lower arm + wrist/hand; Lower extremity = hip/thigh + knee/lower leg + ankle/foot, and Other = 'multiple sites' + 'chest/abdomen/pelvis'. These categories remained separate: Eyes/head/neck, and upper or lower back/spine.
	CCHS 2009-2010	INJG092	Most serious injury - activity when injured. Excludes respondents who did not suffer an injury in the past 12 months.	Standard cross-tabulations were performed, excluding education. Also cross-tabulated female sex by urban/rural residence and Aboriginal identity. The following categories were grouped: Sport/physical exercise + leisure or hobby, Working at a job/business + Other.
	CCHS 2009-2010	INJGCAU	Cause of injury	Cross-tabulations were tested, but results were too unstable. Indicator was omitted.
	CCHS 2009-2010	INJ_10	Most serious injury - result of fall. Excludes respondents who did not suffer an injury in the past 12 months.	Standard cross-tabulations were performed, excluding education. Also cross-tabulated female sex by urban/rural residence and Aboriginal identity.
	CCHS 2009-2010	INJG11A	How did you fall. Excludes respondents who did not suffer an injury in the past 12 months.	Cross-tabulated by female sex and age only.
	Census of Agriculture, 2001		Farm-related injuries during the 12 months prior to the census - Yes , No. Injuries include any wounds, fractures or other physical damage requiring medical attention that the agricultural operator suffered as a result of an accident related to work on the farm.	Cross-tabulated by female sex, province, and operator number. Territories data were not obtained. Data did not permit cross-tabulation by other socio- demographic variables, as they were not linked to the injury variable.

NWISP - AWCBC, 2009	Work-related injury/disease: An injury where a worker is compensated for a loss of wages following a work-related injury (or exposure to a noxious substance), or receives compensation for a permanent disability with or without any time lost in his or her employment. Saskatchewan, Ontario, New Brunswick, Nova Scotia and Newfoundland and Labrador do not include claims that receive compensation for a permanent disability without any time lost.	Cross-tabulated by female sex and by province/territory, reference year (1999- 2009), part of body, nature of injury, event/exposure, industry, occupation.
NWISP - AWCBC, 2009	Work-related fatality: A death resulting from a work-related incident (including disease) that has been accepted for compensation by a Board.	Cross-tabulated by female sex and year (1999-2009).

NUTRITION

DATA SOURCE	CODE NAME	VARIABLE NAME & DEFINITION	DATA TREATMENT NOTES
CCHS 2009-2010	FVCGTOT	Daily Consumption - Total Fruit and Vegetable (grouped). This variable classifies the respondent based on the total number of times per day she eats fruits and vegetables. Note that this does not measure the amount consumed. Universe includes all respondents.	Standard cross-tabulations were performed, as well as by urban/rural residence, Aboriginal identity, and education.
CCHS 2009-2010	FDC_3C	Respondents were asked: Do you avoid certain foods because of the salt content? Universe includes respondents in PEI, MB, ALTA, BC, and NWT. This variable was part of 'optional content' and is the only variable we have chosen that is not core content.	Standard cross-tabulations were performed, except by Province. As well, female sex was cross-tabulated by urban/rural residence, Aboriginal identity, and education.
CHMS, Cycle 1, 2007- 2009	SLT_11	How often salt usually added to food, excluding during cooking. Always / Often / Sometimes or Rarely / Never.	Cross-tabulations performed by female sex and by age, highest level of education, total household income, and culture / race.
CHMS, Cycle 1, 2007- 2009	SLT_12	Type of salt usually used: ordinary table salt or all other.	Cross-tabulations performed by female sex and by age, highest level of education, total household income, and culture / race.





THINGS DONE TO IMPROVE HEALTH (APPLIED TO ALL TOPICS)

DATA SOURCE	CODE NAME	VARIABLE NAME & DEFINITION	DATA TREATMENT NOTES
CCHS 2007-2008	CIH_1	Respondents were asked: Did you do anything to improve your health in the past 12 months (yes/no) and were prompted with specific examples: lost weight, quit smoking, increased exercise? Universe included all respondents.	Standard cross-tabulations were performed, except by education. As well, female sex was cross-tabulated by urban/rural residence and Aboriginal identity
CCHS 2007-2008	CIH_2	Single most important change. Respondents who made changes were asked: What is the single most important change you have made? Universe included those who did something to improve health (all but those who answered no to CIH_1)	Standard cross-tabulations were performed. As well, female sex was cross- tabulated by urban/rural residence, Aboriginal identity, adult BMI, and physical activity index. The 'less alcohol' and 'other' categories were grouped.
CCHS 2007-2008	CIH_3	Respondents were asked: Do you think there is [anything else/anything] you should do to improve your physical health (yes/no)? Universe included all respondents.	Standard cross-tabulations were performed, except by education. As well, female sex was cross-tabulated by urban/rural residence and Aboriginal identity.
CCHS 2007-2008	CIH_4	Most important thing? Universe included all but those who felt there was nothing (nothing more) they should do to improve health (no to CIH_3).	Standard cross-tabulations were performed, except by education. As well, female sex was cross-tabulated by urban/rural residence, Aboriginal identity, and physical activity index. Grouped three categories: 'less alcohol', 'took vitamins' and 'other'.

CCHS 2007-2008	CIH_6A	Barriers to improving health. Universe included respondents	Cross-tabulated by female sex and age,
	through 6N	who had experienced a barrier to doing something to improve	household income distribution, Aboriginal
	(excluding 6C,	health.	identity, and urban/rural residence.
	6C) 12		Grouped the following categories: 'not
	variables		available in area' + 'transportation
			problem', and 'addicted to drugs/alcohol' +
			'other'.





Table A2: Stratifying Variables by Data Source

Canadian Community Health Survey (2005, 2007-2008, 2009-2010)

CODE NAME	VARIABLE NAME & DEFINITION	DATA TREATMENT NOTES
DHHE_SEX	Sex. Male, Female. ^{1, 2}	
DHHEGAGE	Age. Age at time of interview.	Five-year categories were used, where possible. Some data were grouped into larger age ranges in order to provide more reliable estimates.
GEOGPRV or GEOE_PRV	Province/Territory . Province or territory of residence of respondent.	Atlantic and Prairie provinces were grouped together in some cross-tabulations, to preserve reliable results.
EDUEDR04	Highest level of education - Household, 4 levels. This variable indicates the highest level of education acquired by each member of the household. Categories: Less than secondary school graduation, Secondary school graduation, Some post-secondary, Post-secondary graduation, Not stated.	
INCDRRS or INCEDRRS	Household income distribution - health region level. This derived variable is a distribution of residents of each health region in deciles (ten categories including approximately the same percentage of residents for each province) based on their value for the adjusted ratio of their total household income to the low income cut-off corresponding to their household and community size. The low income cut-off is the threshold at which a household would typically spend a larger portion of its income than the average household on food, shelter and clothing. The variable provides, for each respondent, a relative measure of their household income to the household incomes of all other respondents in the same health region. The Territories are excluded from this derived variable.	
SDCDABT or SDCnFABT	Aboriginal Identity flag. ³ This variable indicates whether the respondent reported being an aboriginal person. Aboriginal (North American Indian, Métis, Inuit).	

GEODUR2 or GEOnDUR2	Urban/rural residence . In the CCHS, urban or rural residence is a derived variable and is based on census geography. Urban areas are continuously built-up areas having a population concentration of 1,000 or more and a population density of 400 or more per square kilometre, based on current census population counts. All other areas are considered to be rural, and include about 5% of postal codes where information about urban status is missing.	
MAM_037	Pregnancy status.	
SDCGCGT	Culture/Race flag - grouped. This variable indicates the cultural or racial origin of the respondent.	The data were grouped into 'white' and 'non-white' categories in order to provide more reliable estimates.
SDCGRES	Length of time in Canada - grouped . This variable indicates the length of time the respondent has been in Canada since his/her immigration. Non immigrants were excluded from the population. Under 10 years and 10 or more years in Canada since immigration are grouped	
DHHGLVG	Living arrangement. This variable identifies the family relationships between the selected respondent and the rest of the household. The data are collected using a set of relationship codes that define a link between each pair of persons in a household.	Of particular interest was the category: Single parent living with children (Selected respondent lives with one or more children. No other relationships are permitted).

Canadian Health Measures Survey, Cycle 1, 2007-2009^{4, 5}

CODE NAME	VARIABLE NAME & DEFINITION	DATA TREATMENT NOTES
DHH_SEX	Sex. Male, Female.	
DHH_AGE	Age. Age at household interview.	Groupings varied. Most often 6-11, 12-19, 20-39, 40-59, 60-79.
EDUDR04	Highest level of education - Household, 4 levels. This variable indicates the highest level of education acquired by each member of the household. Categories: Less than secondary school graduation, Secondary school graduation, Some post-secondary, Post-secondary graduation, Not stated.	
INCDDIA4	Total household income - 4 categories . This variable classifies the total household income into four categories based on total household income and the number of people living in the household.	Categories were grouped into: Low to low-middle, Upper-middle to upper.





National Work Injuries Statistics Program, AWCBC⁶

CODE NAME	VARIABLE NAME & DEFINITION	DATA TREATMENT NOTES
	Gender (Sex). Male, Female.	
	Age. Age groups of 5 year periods starting at 15-19 up to 65 and over.	
	Reference Period (Year). The NWISP report contains time-loss injuries by calendar year of injury (or diagnosis in case of a disease) that had been accepted for payment during the year of the accident, or the three-month period immediately following the reference year. The standard reference period for a fatality is recorded during the year that the claim was accepted as a fatality by a Board, not the year when the incident causing the death occurred.	Total time-loss injury and fatality data for 1999 through 2009 were included. Further cross- tabulations focused on data for 2009.
	Province/Territory. Northwest Territories and Nunavut are grouped. Each province/territory has its own workers' compensation legislation, policy and operating procedures that dictate how workers' compensation is administered in that jurisdiction. i.e. who and what is (and isn't) covered by workers' compensation. This may vary significantly between jurisdictions and would directly affect what each jurisdiction includes in NWISP data. See NWISP Preface Report.	
	Nature of Injury/Disease. The principal physical characteristics of an injury/disease.	Approximate 60 characteristics were grouped into larger categories, E.g. traumas, systemic, infectious, cancer, symptoms, mental disorders.
	Part of Body. The injured/diseased part of body directly affected by an injury/disease.	Approximately 50 specific body sites were grouped into larger categories, E.g. neck/face, upper extremities, lower extremities, trunk, etc.
	Event or Exposure. The event or exposure that directly resulted in the injury/disease.	69 specific types of events were grouped into 7 larger classifications, including bodily reaction/exertion, falls, contact with objects/equipment, exposure to harmful substances, transportation, fire/explosion, assault/violent acts, as well as 'other'.

Occupation. The principal activity a person is engaged in at his or her place of work. The occupation of an injured or ill employee is coded according to the National Occupational Classification, 2001, Human Resources Development Canada (Catalogue No. MP53-25/1- 1993E).	
Industry. A group of enterprises (for example, companies or establishments) that are engaged in the same or similar kind of economic activity. Boards classify businesses according to their industrial activity for administrative purposes. In the NWISP report, the industry of the injured or ill worker is shown on the basis of the Standard Industrial Classification, 1980, Statistics Canada (Catalogue 12-501). Jurisdictions may have very different industry mixes based on their economies, geographies, etc. Certain industries/occupations are more/less prevalent in different jurisdictions and this will be reflected in NWISP data. See the 'scope of coverage' information on AWCBC website. ⁷	

Census of Agriculture, 2001⁸

CODE NAME	VARIABLE NAME & DEFINITION	DATA TREATMENT NOTES
	Sex of farm operator.	
	Province . Territories excluded. Data for Yukon and Northwest Territories are not included in the 2001 data set for two main reasons. The definition of an agricultural operation for these territories is expanded to include operations not included in southern farms and the small number of respondents in the North would have required data to be frequently suppressed. No farms were identified in Nunavut in 2001.	
	Number of farm operators. Categories: Operators of farms with one operator, operators of farms with two or more operators. The definition of operator is not intended to include children or other individuals responsible for particular chores or work on the agricultural operation. Only those persons responsible for day-to-day management decisions should be listed as farm operators.	
	Age of farm operator. Categories: Under age 35, 35-54, 55 years and over.	



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3		Average hours - farm. Average hours per week spent working for the	
2		agricultural operation in 2000. Categories: Less than 20, 20-40, More than 40 hours.	
		Average hours - non-farm. Average hours per week of non-farm work	
		(not related to the agricultural operation) in 2000. Categories: None, Less than 20, 20-40, More than 40 hours.	
		Farm size. Farms reporting total farm area. Categories: Less than 10 acres, 10-69, 70-239, 240-559, 560-1,599, 1,600 acres and over.	
		Farm type (NAICS classification). Categories: Cattle ranching and farming, Hog and pig farming, Poultry and egg production, Sheep and goat farming, Other animal production, Oilseed and grain farming, Vegetable and melon production, Fruit and tree nut farming, Greenhouse nursery and floriculture production, Other crop farming.	
		Gross Receipts. Farms reporting total gross farm receipts in 2000. Categories: Less than \$10,000, \$10,000-\$49,999, \$50,000-\$99,999, \$100,000-\$249,999, \$250,000-\$499,999, \$500,000 and over.	

Sexually Transmitted Infections Surveillance, PHAC

CODE NAME	VARIABLE NAME & DEFINITION	DATA TREATMENT NOTES
	Sex. Categories: Female, Male, Unspecified. Unspecified sex includes	
	transgender cases.	
	Age at date of test. Categories: < 1 year, 1-4, 5-9, 10-14, 15-19, 20-24,	
	25-29, 30-39, 40-59, 60+	
	Year. 1991-2009.	
	Province/territory. Nunavut did not officially become a territory until	
	1999; prior to 1999, data for Nunavut was combined with Northwest	
	Territories. Due to small counts, cases of Gonnorhea in PEI were	
	combined with those in NS, as of 2009.	

Canadian Drug Use Monitoring Survey

TECHNICAL APPENDIX

CODE NAME	VARIABLE NAME & DEFINITION	DATA TREATMENT NOTES
	Gender (sex): female or male.	
	Provinces.	
	Highest level of educational attainment. Categories include: Less than high school completion, completed high school, some post-secondary education (college/university), university degree.	
	Household income. Categories used: Less than \$30,000, \$30,000- \$49,0000, \$50,000-\$79,000, \$80,000-\$99,000, \$100,00.	Recoded to 6 categories.
	Marital status. Categories include: Married/common law, divorced/separated, widowed, never married.	

Footnotes:

1. For all data sources, only data for females were reported.

2. All CCHS data were disaggregated by sex, with further cross-tabulations of female data. Standard stratifiers include: Age, Province/territory, Highest level of education, Household income distribution, Aboriginal identity. The other variables were applied to particular topics, where authors deemed them important to analysis.

3. The CCHS has changed its questions on Aboriginal identity and ancestry over time. Earlier versions of the survey (e.g. cycle 1.1 2000/2001) included an Aboriginal ancestry category in a question about cultural and racial backgrounds. This question states: "People living in Canada come from many different cultural and racial backgrounds. Are you ...?" The list of options included: "Aboriginal Peoples of North America (North American Indian, Métis, Inuit/Eskimo)." Notably, this question allowed respondents to select multiple ancestral groups. However, the questionnaire underwent changes early in 2005, when a combination of questions was used to distinguish Aboriginal from non-Aboriginal respondents. By June 2005, a direct question on Aboriginal identity had been added: "Are you an Aboriginal person, that is, North American Indian, Métis or Inuit?". The guestion provided no options for other backgrounds, and respondents who identified themselves as Aboriginal were not asked the guestion about other cultural or racial backgrounds. (15)

4. The CHMS (Cycle 1) was designed to select only enough collection sites to ensure representativity at the national level. No provincial estimates were possible.

5. Although the CHMS gathers data on living arrangement and Aboriginal identity, sample sizes are too small and the cross-tabulations resulted in unreliable estimates

6. AWCBC cautions that the information contained in the NWISP report is based on accepted national definitions and may not be the same as statistics published in WCB annual reports. Readers are referred to the 'Preface to Accompany' report, found at the following link: http://www.awcbc.org/common/assets/english%20pdf/2010 nwisp preface report.pdf

7. Details on the scope of coverage for industries/occupations can be found on the AWCBC website: http://www.awcbc.org/common/assets/assessment/industries_occupations_covered.pdf

8. For the Census of Agriculture data, several socio-demographic variables that are understood to influence the risk of injury were analysed by sex, but were not crosstabulated with injury because the 2001 Census of Agriculture did not link the variables. These variables included: age of farm operator, hours worked on agricultural operation, hours worked in non-farm work, farm type, total gross farm receipts.



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