



# How healthy are we? 2010

## APPENDIX 1

### Data Sources and Definitions

FEBRUARY 2011

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# Appendix 1 – Data Sources and Definitions

## Population

DATA SOURCE	Alberta Health Care Insurance Plan (AHCIP)
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Historical population values (that is, for points in time between June 30, 1986 and March 31, 2009) are interpolations of actual population values (that is, annual values from June 30, 1986 to June 30, 1991 and from March 31, 1992 to March 31, 2009) from the Alberta Health Care Insurance Plan (AHCIP) Registration File. Forecast values (that is, for points in time after March 31, 2009) are estimated using the March 31, 2009 AHCIP Registration File values and year-over-year population growth values based on forecasts provided by the Health Surveillance Branch of Alberta Health and Wellness. The forecasts have been further adjusted using June 30, 2009 AH&W Registration File data.

The following registrants are included in the population estimates: residents of Alberta; 'residents' of Alberta temporarily living elsewhere, such as extended visits or vacations or students attending an educational institute outside of Alberta, or Albertans temporarily (up to four years) working outside Alberta; persons during the first three months after they move from Alberta to another Canadian province; dependants of members of the RCMP and Armed Forces; persons from another country who are working or studying in Alberta on valid visas; and Natives/Aboriginals whose premiums are paid by Health Canada, First Nations and Inuit Health Branch. Not included are: members of the Armed Forces and RCMP; inmates at federal penitentiaries; persons from other provinces during their first three months in Alberta; and persons who have not registered for eligibility, or have opted out.

The annual historical population files provided by Alberta Health and Wellness (AH&W) include individuals registered under the Alberta Health Care Insurance Plan for only part of that fiscal year, but not as at March 31. AH&W marks these records (i.e., about 97,000, or 2.8% in 2006/07, representing residents that have died, moved, opted out, and so forth) as "inactive" and we exclude them. Individuals in the Alberta Health Care Insurance Plan aged 121 years or older have their date of birth (DOB) checked against additional sources and are "corrected", if possible; otherwise they are removed from the database. Finally, an extremely small volume of individuals with a missing or obviously invalid postal code, date of birth, or gender (e.g., about 600, or 0.02% in 2006/07) have been excluded.

Slight differences between values provided at this level of aggregation and data provided at other levels of aggregation may occur because of round-off error.

Population values are subject to change without notice when new data are received.

Area (km <sup>2</sup> )	Data Source: MapInfo program and Boundary files for the Geographic Areas used in the report.
Number of people per km <sup>2</sup>	<ul style="list-style-type: none"> <li>Numerator (N): 2010 Population</li> <li>Denominator (D): Area of geography (from MapInfo and Boundary files)</li> <li>Calculation: <math>N/D = \text{people per km}^2</math></li> </ul>
Number of dwellings per km <sup>2</sup> (2006)	<ul style="list-style-type: none"> <li>Numerator (N): Number of dwellings (2006 Census)</li> <li>Denominator (D): Area of geography (from MapInfo and Boundary files)</li> <li>Calculation: <math>N/D = \text{dwellings per km}^2</math></li> </ul>

## Socioeconomics

DATA SOURCE	Federal Census – Statistics Canada Years: 2006
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Family Composition	
Percent male/female lone parent	<ul style="list-style-type: none"> <li>Numerator (N): Number of male or female lone parent families</li> <li>Denominator (D): Number of all census families (a census family is composed of a married couple or two persons living common-law, with or without children, or of a lone parent living with at least one child in the same dwelling).</li> <li>Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
Average income of male/female lone parent	<ul style="list-style-type: none"> <li>Numerator (N): Sum of income for all male or female lone parents for the year previous to the census year</li> <li>Denominator (D): Number of male or female lone parent families in census year</li> <li>Calculation: <math>N/D = \text{average}(\\$)</math></li> </ul>
Percent 65 yrs of age and older who live alone	<ul style="list-style-type: none"> <li>Numerator (N): Number of <math>\geq 65</math> yr olds that live alone</li> <li>Denominator (D): Number of all <math>\geq 65</math> yr olds</li> <li>Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>

<b>Home Ownership</b>	
<b>Percent living in owned dwellings</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number of occupied private dwellings that are owned</li> <li>• Denominator (D): Total number of occupied private dwellings (including owned, rented and band housing)</li> <li>• Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Percent where greater than 30% of income is spent on housing for homeowners</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number of dwellings where the owners spend &gt;30% on costs related to shelter (homeowners only)</li> <li>• Denominator (D): Total number of owned dwellings (homeowners only)</li> <li>• Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Average value of dwelling</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Sum of value of all owned dwellings</li> <li>• Denominator (D): Number of all owned dwellings</li> <li>• Calculation: <math>N/D = \text{average}(\\$)</math></li> </ul>
<b>Percent of homeowners who have homes in need of major repairs</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number of owned dwellings in need of major repairs</li> <li>• Denominator (D): Total number of owned dwellings (homeowners only)</li> <li>• Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Percent living in rented dwellings</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number of occupied private dwellings that are rented</li> <li>• Denominator (D): Total number of occupied private dwellings</li> <li>• Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Percent where greater than 30% of income is spent on housing for renters</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number of rented dwellings where the renter spends &gt;30% on rent</li> <li>• Denominator (D): Total number of rented dwellings</li> <li>• Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Percent living in band housing</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number living in band housing</li> <li>• Denominator (D): Total number of dwellings (including owned, rented and band housing)</li> <li>• Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Mobility</b>	
<b>Percent who are at the same address as of ONE/FIVE year (s) ago</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number living at same address as 1/5 years ago</li> <li>• Denominator (D): Total number participating in the Census</li> <li>• Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Language</b>	
<b>Percent who do not speak either French or English</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number who do not understand French or English (cannot conduct a conversation in either official languages)</li> <li>• Denominator (D): Total number participating in the Census</li> <li>• Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Percent of households where a non-official language is spoken at home</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number households that use a non-official language at home</li> <li>• Denominator (D): Total number participating in Census</li> <li>• Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Immigration</b>	
<b>Percent whose parents were born in a country other than Canada</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number whose parents were born outside of Canada (represents 1<sup>st</sup> generation immigrants)</li> <li>• Denominator (D): Total number participating in Census</li> <li>• Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Percent of recent immigrants (Arriving in the last 5 yrs)</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number of immigrants arriving in the 5 years prior to the census year</li> <li>• Denominator (D): Total number immigrants</li> <li>• Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Aboriginal Population</b>	
<b>Percent who are Aboriginal</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number who reported at least one Aboriginal ancestry (North American Indians, Métis, Or Inuit)</li> <li>• Denominator (D): Total number participating in Census</li> <li>• Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Highest Educational Achievement (25 to 64 yr olds)</b>	
<b>Percent at various levels of academic achievement</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number for each level of academic achievement</li> <li>• Denominator (D): Total number participating in Census, 25 to 64 years old</li> <li>• Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>

Income	
<b>Census Family Income</b>	<ul style="list-style-type: none"> <li>Census Family refers to a married couple (with or without children of either or both spouses), a couple living in common-law (with or without children of either or both partners) or a lone parent of any marital status, with at least one child living in the same dwelling. A couple may be of opposite or same sex.</li> </ul>
<b>Percent of families with income &lt; \$50,000/yr</b>	<ul style="list-style-type: none"> <li>Numerator (N): Number of census families with income &lt;\$50,000 in 2005 (year before census year)</li> <li>Denominator (D): Total number of census families</li> <li>Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Percent of families with income <math>\geq</math> \$100,000/yr</b>	<ul style="list-style-type: none"> <li>Numerator (N): Number of census families with income <math>\geq</math> \$100,000 in 2005 (year before census year)</li> <li>Denominator (D): Total number of census families</li> <li>Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Median income</b>	<ul style="list-style-type: none"> <li>Ordered statistic: When all incomes are put in order from lowest to highest, it is the income at which half of the incomes are higher and half are lower (\$)</li> </ul>
<b>Average income</b>	<ul style="list-style-type: none"> <li>Numerator (N): Sum of annual income for census families</li> <li>Denominator (D): Number of census families</li> <li>Calculation: <math>N/D = \text{average}(\\$)</math></li> </ul>
DATA ANNOTATIONS	
NA	<p>Not available</p> <p>Data are suppressed when the numbers are small enough to jeopardize confidentiality</p>

## Birth Indicators

<b>Percent Low Birth Weight (of live births, &lt;2500 gm)</b>	<ul style="list-style-type: none"> <li>Data Source: Service Alberta, Vital Statistics (Births)</li> <li>Years: 2009, and 2007 to 2009 combined</li> <li>Numerator (N): Number of live births with a low birth weight (&lt;2500 grams)</li> <li>Denominator (D): Number of live births</li> <li>Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Percent High Birth Weight (of live births, <math>\geq</math> 4000 gm)</b>	<ul style="list-style-type: none"> <li>Data Source: Service Alberta, Vital Statistics (Births)</li> <li>Years: 2009, and 2007 to 2009 combined</li> <li>Numerator (N): Number of live births with a high birth weight (<math>\geq</math> 4000 grams)</li> <li>Denominator (D): Number of live births</li> <li>Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Percent Small-for-Gestational-Age (of singleton live births)</b>	<ul style="list-style-type: none"> <li>Data Source: Service Alberta, Vital Statistics (Births)</li> <li>Years: 2009, and 2007 to 2009 combined</li> <li>Numerator (N): Number of singleton, live births with a birth weight below the 10<sup>th</sup> percentile of appropriate weight for gestational age (Reference: Robertson C, Svenson L. Birth weight by gestational age for Albertan live born infants, 1985-1998. JOGC (2002), February, pp 138-147)</li> <li>Denominator (D): Number of singleton, live births</li> <li>Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Percent Preterm Births (of live births, &lt;37 wks gestation)</b>	<ul style="list-style-type: none"> <li>Data Source: Service Alberta, Vital Statistics (Births)</li> <li>Years: 2009, and 2007 to 2009 combined</li> <li>Numerator (N): Number of live births with a gestational age of &lt;37 weeks</li> <li>Denominator (D): Number of live births</li> <li>Calculation: <math>N/D \times 100 = \text{Percent } (\%)</math></li> </ul>
<b>Crude Birth Rate (per 1,000 population)</b>	<ul style="list-style-type: none"> <li>Data Sources: (1) Service Alberta, Vital Statistics (Births); (2) Alberta Health Care Insurance Plan (Population)</li> <li>Years: 2009, and 2007 to 2009 combined</li> <li>Numerator (N): Number of live births</li> <li>Denominator (D): Total Population</li> <li>Calculation: <math>N/D \times 1000 = \text{Rate per } 1,000</math></li> </ul>

<b>General Fertility Rate (per 1,000 females aged 15-49 yr)</b>	<ul style="list-style-type: none"> <li>• Data Sources: (1) Service Alberta, Vital Statistics (Births); (2) Alberta Health Care Insurance Plan (Population)</li> <li>• Years: 2009, and 2007 to 2009 combined</li> <li>• Numerator (N): Number of live births</li> <li>• Denominator (D): Number of females aged 15-49 yrs</li> <li>• Calculation: <math>N/D \times 1000 = \text{Rate per 1,000}</math></li> </ul>
<b>Teen Birth Rate (per 1,000 females aged 15-19 yr)</b>	<ul style="list-style-type: none"> <li>• Data Sources: (1) Service Alberta, Vital Statistics (Births); (2) Alberta Health Care Insurance Plan (Population)</li> <li>• Years: 2009, and 2007 to 2009 combined</li> <li>• Numerator (N): Number of live births born to females aged 15-19 years</li> <li>• Denominator (D): Number of females aged 15-19 yrs</li> <li>• Calculation: <math>N/D \times 1000 = \text{Rate per 1,000}</math></li> </ul>
<b>Percent Maternal Prenatal Smoking (of women who delivered)</b>	<ul style="list-style-type: none"> <li>• Data Sources: Alberta Perinatal Health Program</li> <li>• Years: 2006 to 2008 combined</li> <li>• Numerator (N): Number of women who reported smoking cigarettes at some point during their pregnancy</li> <li>• Denominator (D): Number of women who delivered</li> <li>• Calculation: <math>N/D \times 100 = \text{Percent (\%)}</math></li> </ul>
<b>Life Expectancy at birth (yrs)</b>	<ul style="list-style-type: none"> <li>• Data Sources: (1) Service Alberta, Vital Statistics (Deaths); (2) Alberta Health Care Insurance Plan (Population)</li> <li>• Years: 2009 or 2007 to 2009 combined</li> <li>• Life Expectancy at birth is defined as the average number of years a hypothetical birth cohort would live if they were subjected to the current mortality conditions throughout the rest of their lives.</li> <li>• Calculation: The calculation is complex and is available in the Life Expectancy Indicator Template.</li> <li>• <a href="http://insite.albertahealthservices.ca/1764.asp">http://insite.albertahealthservices.ca/1764.asp</a></li> </ul>

## Deaths

<b>DATA SOURCES</b>	<b>Service Alberta, Vital Statistics (Births and Deaths) Alberta Health Care Insurance Plan (Population) Canadian 1991 Population (Standard Population)</b>
<b>Infant Mortality Rate (per 1,000 live births)</b>	<ul style="list-style-type: none"> <li>• Years: 2005 to 2009 combined</li> <li>• Numerator (N): Number of babies who died before 12 months of age</li> <li>• Denominator (D): Number of live births</li> <li>• Calculation: <math>N/D \times 1000 = \text{Rate per 1,000 live births}</math></li> </ul>
<b>Top 7 Causes of Death</b>	<ul style="list-style-type: none"> <li>• Years: 2009 and 2007-2009 combined</li> <li>• Top seven causes were based on percentage of all deaths due to a specific cause; and the causes with the seven highest percentages were selected.</li> <li>• See the ICD10 coding table for categories</li> </ul>
<b>Deaths Crude Rates (per 100,000) All cause and specific causes</b>	<ul style="list-style-type: none"> <li>• Years: 2009 and 2007-2009 combined</li> <li>• Numerator (N): Number of deaths due to a specific cause (see ICD10 coding table) or all causes</li> <li>• Denominator (D): Population</li> <li>• Calculation: <math>N/D \times 100,000 = \text{Rate per 100,000}</math></li> </ul>
<b>Deaths Age Standardized Rates (per 100,000) All cause and specific causes Standardized to the 1991 Canadian population</b>	<ul style="list-style-type: none"> <li>• Years: 2007-2009 combined</li> <li>• The standardized death rates were calculated using the direct approach with the standard population being the 1991 Canadian population. Both cause-specific death rates (see ICD10 coding table) and all-cause rates were computed.</li> <li>• An age standardized rate should be used when comparing rates across geographies.</li> </ul>
<b>DATA ANNOTATIONS</b>	
*	<ul style="list-style-type: none"> <li>• Release with caution due to sampling variability</li> </ul>
V	<ul style="list-style-type: none"> <li>• Suppressed due to extreme sampling variability</li> </ul>

## Hospitalizations

DATA SOURCE	Health Care Utilization Data (Inpatient data from AHS – Data Integration Measurement and Reporting) Alberta Health Care Insurance Plan (Population) Canadian 1991 Population (Standard Population)
<b>Percent of Hospitalizations that are Birth or Pregnancy Related</b>	<ul style="list-style-type: none"> <li>Years: 2009, 2007-2009 combined</li> <li>Numerator (N): Number of hospitalizations with an ICD10 code related to Birth/Pregnancy</li> <li>Denominator (D): Number of hospitalizations</li> <li>Calculation: <math>N/D \times 100 = \text{Percent (\%)}</math></li> </ul>
<b>Top 7 overall reasons for Hospitalization</b>	<ul style="list-style-type: none"> <li>Years: 2009, 2007-2009 combined</li> <li>Top seven reasons for hospitalization were based on percentage of all hospitalizations due to cause; and the causes with the seven highest percentages were selected.</li> <li>See the ICD10 coding table for categories.</li> </ul>
<b>Hospitalization Rate (Including Births and Pregnancy) Crude and Age Standardized (per 1,000)</b>	<ul style="list-style-type: none"> <li>Years: 2009, 2007-2009 combined</li> <li>Numerator (N): Number of hospitalizations</li> <li>Denominator (D): Population</li> <li>Calculation for Crude Rate: <math>N/D \times 1000 = \text{Rate per 1,000}</math></li> <li>This calculation can also be done for males and females separately using only females or only males in the numerator and denominator.</li> <li>The standardized hospitalization rate was calculated using the direct approach; with the standard population being the 1991 Canadian population.</li> <li>An age standardized rate should be used when comparing rates across geographies.</li> </ul>

## Emergency Department Visits

DATA SOURCE	Health Care Utilization Data (Emergency and Urgent Care Visits from AHS – Data Integration Measurement and Reporting) Alberta Health Care Insurance Plan (Population) Canadian 1991 Population (Standard Population)
<b>Top 7 overall reasons for Emergency Department visits</b>	<ul style="list-style-type: none"> <li>Years: 2009</li> <li>Top seven reasons for visiting the Emergency Department or Urgent Care Center were based on percentage of all Emergency and Urgent Care visits due to cause; and the reasons with the seven highest percentages were selected.</li> <li>See the ICD10 coding table for categories.</li> </ul>
<b>Emergency Department Visit Rate Crude and Age Standardized (per 1,000)</b>	<ul style="list-style-type: none"> <li>Years: 2009</li> <li>Numerator (N): Number of emergency and urgent care visits</li> <li>Denominator (D): Population</li> <li>Calculation for Crude Rate: <math>N/D \times 1000 = \text{Rate per 1,000}</math></li> <li>This calculation can also be done for males and females separately using only females or only males in the numerator and denominator.</li> <li>The standardized ED/Urgent care visit rate was calculated using the direct approach; with the standard population being the 1991 Canadian population.</li> <li>An age standardized rate should be used when comparing rates across geographies.</li> </ul>

## REFERENCE TABLE:

### ICD10 Codes for Mortality, Hospitalization and Emergency Department Visits

DISEASE GROUPINGS USED IN REPORT	ICD10 Codes
<b>Malignant Neoplasms (Cancer)</b>	<ul style="list-style-type: none"> <li>C00 -C43, C45-C97 Breast C50 Colorectal C18 - C21 Lung C34 Prostate C61</li> </ul>

<b>Endocrine, Nutritional &amp; Metabolic Diseases</b>	<ul style="list-style-type: none"> <li>E00 – E90</li> </ul> <p>Examples: Diabetes, metabolic disorders, obesity, malnutrition, thyroid disorders</p>
<b>Mental &amp; Behavioural Disorders</b>	<ul style="list-style-type: none"> <li>F00 – F99</li> </ul> <p>Examples: Organic disorders, disorders due to psychoactive substance use, mood affective disorders, neurotic, stress-related</p>
<b>Diseases of Nervous System</b>	<ul style="list-style-type: none"> <li>G00 – G99</li> </ul> <p>Examples: Alzheimer’s disease, Huntington’s disease, Parkinson’s disease, epilepsy, migraine</p>
<b>Circulatory Disease</b>	<ul style="list-style-type: none"> <li>I00 – I99</li> </ul> <p>All Heart Disease I01–I02, I05–I09, I11, I13, I20–I25, I26–I27, I30–I52 Stroke I60 – I69 Ischemic Heart Disease (IHD) I20–I25</p> <p>Examples: Heart disease, stroke, hypertension, aneurysm, varicose veins</p>
<b>Infectious and Parasitic Diseases</b>	<ul style="list-style-type: none"> <li>A00–B99</li> </ul> <p>Examples: Bacterial diseases, intestinal infections, viral diseases</p>
<b>Blood &amp; Blood Forming Organs</b>	<ul style="list-style-type: none"> <li>D50–D89</li> </ul> <p>Examples: Anaemias, diseases of spleen, coagulation defects</p>
<b>Respiratory Disease</b>	<ul style="list-style-type: none"> <li>J00 – J99</li> </ul> <p>COPD J40 - J47</p> <p>Examples: Asthma, chronic obstructive pulmonary disease, pneumonia, influenza, chronic sinusitis</p>
<b>Digestive Disease</b>	<ul style="list-style-type: none"> <li>K00 – K93</li> </ul> <p>Examples: Liver disease, irritable bowel syndrome, diseases of stomach, gall bladder, appendicitis</p>
<b>Diseases of Musculoskeletal System &amp; Connective Tissue</b>	<ul style="list-style-type: none"> <li>M00 – M99</li> </ul> <p>Examples: Connective/soft tissue disorders, dorsopathies, osteopathy’s, arthritis</p>
<b>Diseases of Genitourinary System</b>	<ul style="list-style-type: none"> <li>N00 – N99</li> </ul> <p>Examples: Renal failure, endometriosis, infertility</p>
<b>Pregnancy, Childbirth &amp; Puerperium (Obstetric Related)</b>	<ul style="list-style-type: none"> <li>O00 – O99</li> </ul> <p>Examples: Complications of labour and delivery, disorders related to pregnancy</p>
<b>Birth Event</b>	<ul style="list-style-type: none"> <li>Z37 – Z389</li> </ul> <p>Examples: Birth</p>
<b>Certain Conditions Originating in Perinatal Period (Perinatal Conditions)</b>	<ul style="list-style-type: none"> <li>P00 – P96</li> </ul> <p>Examples: Disorders due to length of gestation, haemorrhagic/respiratory/cardiovascular conditions with newborn</p>
<b>Congenital Malform, Deformities &amp; Chromosomal Abn (Congenital Anomaly)</b>	<ul style="list-style-type: none"> <li>Q00–Q99</li> </ul> <p>Examples: Congenital malformations of digestive, circulatory, musculoskeletal systems</p>
<b>Health Status</b>	<ul style="list-style-type: none"> <li>Z00 – Z369, Z39 – Z999</li> </ul> <p>Examples: Specific procedures, medical exams, education</p>
<b>Symptoms, Signs &amp; Abnorm Clin. Findings (Signs &amp; Symptoms)</b>	<ul style="list-style-type: none"> <li>R00 – R99</li> </ul> <p>Examples: Nausea &amp; vomiting, murmurs, fever, headache</p>
<b>Diseases of Skin &amp; Subcutaneous Tissue</b>	<ul style="list-style-type: none"> <li>L00 – L99</li> </ul> <p>Examples: Infections of the skin, dermatitis, eczema</p>
<b>Ear and Mastoid Process</b>	<ul style="list-style-type: none"> <li>H60 – H95</li> </ul> <p>Examples: Otitis media, diseases of inner ear</p>
<b>Eye and Adnexa</b>	<ul style="list-style-type: none"> <li>H00 – H59</li> </ul> <p>Examples: Disorders of conjunctiva, eyelid, sclera, glaucoma</p>
<b>Suicide</b>	<ul style="list-style-type: none"> <li>X60–X84.9, Y87.0</li> </ul>
<b>All Injury</b>	<ul style="list-style-type: none"> <li>V01–Y98</li> </ul> <p>Unintentional Injury V01 – V99, W00 – W99, X00 – X59, Y85 – Y86 Intentional Injury X60 – X99, Y00 – Y09, Y35 – Y36, Y87 – Y87.1, Y89 – Y89.1 Undetermined Intent Injury Y10 – Y34, Y89.9, Y87.2</p> <p>Examples: Transport accidents, falls, exposure, intentional self harm, assault, poisoning</p>



## Risk Factors

DATA SOURCE	Statistics Canada – Canadian Community Health Survey, 2009 ( <a href="http://www.statcan.gc.ca">www.statcan.gc.ca</a> ) Self-reported survey data, analyzed for Zones by Alberta Health & Wellness ( <a href="http://www.ahw.gov.ab.ca/IHDA_Retrieval">www.ahw.gov.ab.ca/IHDA_Retrieval</a> )
<b>Percent who are normal weight</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number of adults (20-64 yrs, not pregnant) whose self reported Body Mass Index (BMI) is in the normal BMI range (18.5 – 24.9), where BMI = Weight (kg) / Height<sup>2</sup> (m<sup>2</sup>)</li> <li>• Denominator (D): All respondents 20-64 yrs, not pregnant</li> <li>• Calculation: N/D x 100 = Percent (%)</li> </ul>
<b>Percent who are overweight</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number of adults (20-64 yrs, not pregnant) whose self reported Body Mass Index (BMI) is in considered overweight (25.0 – 29.9), where BMI = Weight (kg) / Height<sup>2</sup> (m<sup>2</sup>)</li> <li>• Denominator (D): All respondents 20-64 yrs, not pregnant</li> <li>• Calculation: N/D x 100 = Percent (%)</li> </ul>
<b>Percent who are obese</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number of adults (20-64 yrs, not pregnant) whose self reported Body Mass Index (BMI) is considered obese (≥ 30.0), where BMI = Weight (kg) / Height<sup>2</sup> (m<sup>2</sup>)</li> <li>• Denominator (D): All respondents 20-64 yrs, not pregnant</li> <li>• Calculation: N/D x 100 = Percent (%)</li> </ul>
<b>Percent who are never or former smokers</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number of respondents (≥ 12 yrs) who have never smoked or are former smokers, currently</li> <li>• Denominator (D): Total number of respondents 12 yrs and up</li> <li>• Calculation: N/D x 100 = Percent (%)</li> </ul>
<b>Percent who are daily smokers</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number of respondents (≥ 12 yrs) who reported smoking every day, currently</li> <li>• Denominator (D): Total number of respondents 12 yrs and up</li> <li>• Calculation: N/D x 100 = Percent (%)</li> </ul>
<b>Percent who are daily or occasional smokers</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number of respondents (≥ 12 yrs) who reported smoking every day or almost every day, currently</li> <li>• Denominator (D): Total number of respondents 12 yrs and up</li> <li>• Calculation: N/D x 100 = Percent (%)</li> </ul>
<b>Percent who eat 5 or more servings of fruit and vegetables per day</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number of respondents (≥ 12 yrs) who report eating 5 or more servings of fruits and vegetables/day</li> <li>• Denominator (D): Total number of respondents 12 yrs and up</li> <li>• Calculation: N/D x 100 = Percent (%)</li> </ul>
<b>Percent who are active or moderately active</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number of respondents (≥ 12 yrs) who are active or moderately active based on responses to physical activity questions</li> <li>• Denominator (D): Total number of respondents 12 yrs and up</li> <li>• Calculation: N/D x 100 = Percent (%)</li> </ul>
<b>Percent who are inactive</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number of respondents (≥ 12 yrs) who are inactive based on responses to physical activity questions</li> <li>• Denominator (D): Total number of respondents 12 yrs and up</li> <li>• Calculation: N/D x 100 = Percent (%)</li> </ul>
<b>Percent who say their life is extremely or quite a bit stressful</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number of respondents (≥ 18 yrs) who report that their life stress is extreme or quite a bit stressful</li> <li>• Denominator (D): Total number of respondents 18 yrs and up</li> <li>• Calculation: N/D x 100 = Percent (%)</li> </ul>
<b>Percent who are heavy drinkers (≥5 drinks on one occasion, at least once /month)</b>	<ul style="list-style-type: none"> <li>• Numerator (N): Number of respondents (≥ 12 yrs) who report having ≥ 5 drinks at least once per month in the past year</li> <li>• Denominator (D): Total number of Total number of respondents 12 yrs and up</li> <li>• Calculation: N/D x 100 = Percent (%)</li> </ul>
<b>HATi (Average number of risk factors per person)</b>	<ul style="list-style-type: none"> <li>• The Healthy Alberta Trends Index – HATi – measures the average number of risk factors per person.</li> <li>• The calculation of the HATi involves each of the 6 indicators listed below being dichotomized as 0 or 1 (0 for healthy or 1 for unhealthy) and totaling; meaning a 6 would be most unhealthy and 0 would be most healthy.</li> <li>• Life Stress</li> <li>• BMI Category</li> <li>• Fruit and Vegetable Consumption</li> </ul>

- Physical Activity Category derived from reported physical activities
- Smoking Status
- Heavy Drinking frequency
- HATi = sum of risk factors
- Average = Sum of HATi's/number of respondents (Ages 20-64)

## Cancer Incidence

### DATA SOURCE

### Alberta Cancer Registry – Report on Cancer Statistics in Alberta 2008

**Age Standardized Incidence Rate (ASIR) for all cancers or specific types of cancer (per 100,000)**

- Incidence measures the frequency of new cases of a disease or condition in a specified time period. For example, invasive breast cancer incidence of a year often refers to the number of new invasive breast cancer cases diagnosed in a year.
- Age Standardized Incidence Rate (per 100,000) is a weighted average of age-specific incidence rates, where the weights are the proportion of persons in the corresponding age groups of the 1991 Canadian Population.

$$ASIR = \sum_i \frac{c_i}{P_i} * w_i$$

Where  $c_i$  is the total new cancer cases diagnosed in a year in age group  $i$   
 $P_i$  is the population of age group  $i$  in the study of interest  
 $w_i$  is the weight of age group  $i$  in the standard population

- Age Standardized Incidence Rates are calculated as a three year moving average by averaging during calculation of crude rates before applying standard population weights as of the end of 2008.

$$\sum_i [(c_{i_1} + c_{i_2} + c_{i_3}) / (P_{i_1} + P_{i_2} + P_{i_3})] w_i$$

- Coding for specific cancer types can be found in the Report on Cancer Statistics in Alberta 2008 that is accessible at the following location <http://www.albertahealthservices.ca/1774.asp>
- Only invasive cancer cases are included in the calculation.

## Cancer Prevalence

### DATA SOURCE

### Alberta Cancer Registry – Report on Cancer Statistics in Alberta 2008

**Complete and limited duration prevalence for all cancers or specific types of cancer (Number)**

- Prevalence is defined as the total number of people in the population at a given time (December 31, 2008) that are living with the disease of interest.
- *Complete Prevalence* is the total number of people who were alive as of December 31, 2008, that had ever been diagnosed with any cancer or a specific cancer.
- *2 Yr Limited Duration Prevalence* is the total number of people who were alive on December 31, 2008, that had been diagnosed with any cancer or a specific cancer in the previous two years.
- Coding for specific cancer types can be found in the Cancer Surveillance Report, 2010.
- Only invasive cancer cases are included in the calculation.