

# **Vulnerable Populations In Alberta**

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## Introduction

On the whole Albertans enjoy good to excellent physical and mental health. A closer look at health outcomes, however, reveals that some groups are healthier than others. Differences in health are not randomly distributed. Groups that experience poor health - Aboriginal People, residents of northern and remote communities, and those with low income and education – are made vulnerable largely due to their life circumstances.

The existence of health inequalities is a concern for all Albertans. Beyond the ethical imperative for health equity, inequalities put pressures on health and welfare systems and increase the costs to taxpayers as a whole. For example, in Canada as a whole, the poorest 20% of the population use 31% of the all healthcare services. It is estimated that 20% of health care spending may be attributable to income inequalities. (Public Health Agency of Canada, 1994)

Alberta Health Services (AHS) is committed to reducing inequalities in the health of Albertans through a number of key priorities including reorienting existing services and developing targeted services. “While it is important to think of Alberta as a whole it is also important to give special attention to diverse population needs with the aim to reduce inequalities of outcomes”. (Alberta Health Services, 2009)

This document will suggest a definition of vulnerable populations, identify those populations in Alberta that are vulnerable, and review what we know about what makes them vulnerable.

## Definition of Vulnerable Populations

Health inequalities is a generic term used to designate differences or variations in health outcomes between population groups. Some health inequalities reflect random variations (i.e., unexplained causes), while others result from individual biological endowment, the consequences of personal choice, social organization, economic opportunity or access to health care (Alberta Health Services, Towards an Understanding of Health Equity Glossary, 2011). (The terms disparities and inequalities are often used interchangeably, AHS recommends the use of the term “inequalities.”)

[Health] Inequities are commonly referred to differences in health outcomes between population groups that are socially produced unfair and unjust (Alberta Health Services). Because identifying health inequities involves normative judgment, science alone cannot determine which inequalities are also inequitable, or what proportion of an observed inequality is unjust or unfair. Examples of health inequalities that are not considered inequitable are: voluntarily assumed risks (such as skydiving), pure chance (having a genetic disposition to a disease), or life stage differences (better health at age 20 than at age 70).

The word vulnerable derives from the Latin verb, *vulnerare*, meaning “to wound” and the noun *vulnus* (wound). (Aday, 1994)

We can make a distinction between “vulnerability”, the universal human condition of being intact but fragile, and “susceptibility”, the condition of being biologically weak or diseased, with an increased predisposition to additional harm. (Kottow, M., 2002) The distinction is important because it distinguishes between the moral and professional obligation to treat the sick and the ethical obligation to ensure all populations have equal access to the resources that lead to health.

We are all vulnerable to poor health, but some of us are more vulnerable than others by virtue of where and with whom we live. (Aday, 2001; Blacksher and Stone, 2002) “Although the number of

Canadians who die prematurely and suffer from poor health is low in comparison to other countries, those who do so tend to belong to specific sub-populations – Aboriginal People, residents of northern and remote communities, and those with low income and education.” (Butler-Jones, 2008)

What makes some sub-populations more vulnerable than others is a matter of considerable debate. At the most general level, vulnerable populations are those which have less access to the resources needed to handle the inevitable risks to health that all people experience. “An individual’s risk is known to vary as a function of opportunities and resources associated with the following social arrangements: personal traits and social status (age, sex, race, and ethnicity), ties between people (family structure, marital status, and social networks), environmental factors (school, jobs, income, and housing), and associated factors (violence and/or crime).” (Leight, 2003)

Vulnerable populations, then, are those which have increased susceptibility to adverse health outcomes as a result of inequitable access to the resources needed to handle risks to health.

### **Who is Vulnerable in Alberta?**

To identify vulnerable populations in Alberta we need to examine chronic disease rates and patterning. The following health outcomes are commonly cited in public health literature:

- Incidence of chronic diseases
  - Cancer
  - Circulatory disease (heart and stroke)
  - Mental health
  - Obesity and diabetes
  - COPD
  - HIV/AIDS
- Incidence of injury and death due to violence and suicide
- Disability free life expectancy
- Infant mortality
- Self-reported health
- System utilization
  - Access to and use of family physicians
  - Access to and use of emergency services
  - Access to and use of mental health services

To date AHS has not systematically analyzed health outcomes to determine if there are any correlations with age, place, gender, income levels, family status, education, ethnic identity, sexual orientation, etc. But based on population-specific reports that have been done and given what we know from national and international trends we can draw up a provisional list of vulnerable populations in Alberta:

- Aboriginal peoples;
- People living in poverty;
- Immigrants and temporary workers;
- Refugees;
- People with disabilities;
- People who are gender and sexually diverse;

- People experiencing homelessness or lack of affordable housing;
- People with low literacy skills; and
- People living in poor, rural or remote communities.

Further, rigorous analysis of existing data on health outcomes needs to be done before we can identify a definitive list of vulnerable populations.

## **What We Know About These Populations**

### **Aboriginal Peoples**

- Definition:** Aboriginal peoples refers to three major groups of people in Canada; First Nations, Inuit and Métis.
- Numbers:** In 2006 5.8% of Alberta's population self reported as Aboriginal; 51.6% of the Aboriginal population reported as First Nations, 45.4% Metis, 0.8% Inuit, and another 2.1% who did not identify as First Nations, Metis or Inuit (Statistics Canada, 2006)
- Health:** The literature is very clear that one of the most vulnerable populations in Canada is Aboriginal People. Compared to the general Canadian populations, Aboriginal people experience a 1.5 times higher rate of heart disease and a 8-10 times higher rate of tuberculosis infection. Type 2 diabetes is 3 to 5 times higher among Canadian First Nations and the rates are increasing among the Inuit. (Health Canada) In 2000, life expectancy at birth for the Registered Indian population was estimated at 68.9 years for males and 76.6 years for females. This reflects differences of 8.1 years and 5.5 years, respectively, from the 2001 Canadian population's life expectancies. In 2000, suicide accounted for approximately 1,079.91 potential years of life lost (PYLL) per 100,000 population in First Nations. This is nearly three times the 2001 Canadian rate. (Statistics Canada, 2009)

## People living in poverty

- Definition:** Poverty is a condition of not having sufficient economic and other resources to live with the dignity, choices and power which support full participation in society. (Vibrant Communities Calgary, 2009)
- Numbers:** Based on the Low Income Cut Off (LICO) rate, Statistics Canada reports 9.1% of Albertans are living in poverty or low income households. (Statistics Canada, 2010) They experience significantly lower health-adjusted life expectancies, a 3.5 times greater rate of disability, a 60% greater rate of two or more chronic diseases, more than three times the rate of bronchitis, and nearly double the rate of arthritis and rheumatism. (Statistics Canada, 2010; Lightman, Mitchell, Wilson, 2008)
- Health:** In Canada as a whole the poorest fifth of the population, when compared to the richest fifth, have
- More than double the rate of diabetes and heart disease
  - A sixty percent greater rate of two or more chronic diseases
  - More than three times the rate of bronchitis
  - Nearly double the rate of arthritis and rheumatism
  - A 358% greater rate of disability (Lightman, Mitchell, Wilson, 2008)
  - Significantly lower health-adjusted life expectancy (MacIntosh, Fines, Wilkins, Wolfson, 2009)

## Immigrants and temporary foreign workers

- Definition:** Immigrants are people who were born outside of Canada and have been granted the right to permanently live in Canada. Temporary workers are people who have a permit to work in Canada for a specific employer for a specific time. (Alberta Health Services 2011)
- Numbers:** According to the 2006 census, 20% of Albertans are first generation immigrants and 19.7% are second generation immigrants. Over 80% of immigrants live in urban centres. While 17.9% of Albertans have a first language other than English or French. 13.9% of Albertans classified themselves as visible minorities. In December 2008, there were 57,843 temporary foreign workers in Alberta, a 55% increase in one year.
- Health:** In general, research shows that immigrants have a lower prevalence of chronic illness, depression, and alcohol dependency compared to the Canadian-born population. (Ali, McDermott, Gravel, 2004; Perez 2002) However, certain chronic diseases such as diabetes, cancer, hypertension and heart disease have been reported at a higher prevalence among the immigrant population compared to the Canadian-born population. (Perez 2002) Immigrants often under utilize services (such as mental health services), especially when they do not feel that the health care system fulfills their needs. (Chen, Kazanjian, 2005; Lai, 2004)

## Refugees

- Definition:** Refugees are people who are forced to leave their country of origin and are unable to return due to environmental factors or a well-founded fear of persecution. There are three categories of refugees in Canada: government sponsored, private sponsored and refugee claimants.

- Numbers:** According to Citizenship and Immigration Canada, 3027 refugees (including both government sponsored and refugee claimants) arrived in Alberta in 2008. (Citizenship and Immigration Canada, 2008)
- Health:** Refugees are at high risk of arriving to Canada with a number of physical and mental health conditions. (Dillman, Renato, Wilson, 1993; Redwood-Campbell et al., 2003; Tribe, 2002) Health problems common among refugees to Canada include vision and hearing impairment, oral health problems, ear infections, women's sexual health problems, respiratory infections, and mental health problems. (Dillman, 1993; Tribe, 2002)

### **People with disabilities**

- Definition:** People who have a long-term or recurring physical, developmental, sensory, psychiatric or learning impairment and who consider themselves to be disadvantaged by reason of that impairment. (Human Resources and Skills Development Canada)
- Numbers:** The proportion of people with disabilities in Alberta rose from 12% in 2001 to 14% in 2006. (Statistics Canada, 2001, 2006) These rates are marginally higher in urban centres. In September 2004, approximately 31,500 of Albertans were receiving Assured Income for the Severely Handicapped (AISH) payments. (Kneebone, 2005) 45% of AISH recipients had a physical disability, while 23% had a developmental disability, and 32% had a chronic mental illness. (Government of Alberta, 2004)
- Health:** In general, individuals with a disability tend to have reduced life expectancy, a higher prevalence of serious health conditions, and increased morbidity and mortality compared the general population. (Kerr, 2004; Bittles et al., 2002) Mental health problems are common among individuals with any type of disability. (Ailey, 2003)

### **People who are gender and sexually diverse**

- Definition:** This population includes, but is not limited to people who consider themselves to be lesbian, gay, bisexual, queer, inter-sexed, transgender, and two-spirited. (McKinley Health Center, 2008)
- Numbers:** According to the 2001 census, 1.2% of the Albertans considered themselves to be homosexual or bisexual. (Statistics Canada, 2004a) Organizations serving the lesbian, gay, bisexual, and transgender (LGBT) population estimate that 5-8% are LGBT.
- Health:** A review of research in Alberta and North America as a whole reveals that gay men and transgender individuals have higher rates of depression and suicidal ideation, and lesbian women have lower rates of preventative screening. (Calgary Health Region, 2007). Studies have also shown that experiences of bias, insensitivity, discrimination and inappropriate or inadequate health-related services can result in a distrust of the health care system and potentially lead to avoidance of regular and preventive health care. (Ontario Public Health Association, 2000; Jackson, 2006; Davis, 2000)

### **People experiencing homelessness**

- Definition:** People experiencing homelessness are people who do not have a permanent residence to which they can return whenever they choose. (Calgary Committee to End Homelessness, 2008) There are essentially three categories of homelessness;

1) absolutely homeless – individuals who live outdoors, in areas not anticipated for human occupancy and those living in community shelters, 2) “couch surfing” homeless – individuals temporary staying with family and friends, and 3) at risk of homelessness – individuals living in inappropriate or unsafe housing as well as those individuals who spend more than 50% of their total income on housing. (Frankish, Hwang, Quantz, 2005)

**Numbers:** In 2006 it was estimated that 8,400 Albertans were homeless, 14% of whom were living on the street; 40% had some form of mental health problem and 50% had some history of substance abuse. (Alberta Secretariat for Action on Homelessness, 2008)

**Health:** A strong and complex relationship has been reported between homelessness and adverse health status. (Hwang, 2001; Frankish, Hwang, Quantz, 2005; Gaetz, 2004) Substance abuse, poverty, mental illness, and unemployment have all been associated with negative health implications and have been reported to be highly prevalent among the homeless. (Hwang, 2001) Mortality rates are significantly higher among the homeless compared to the overall general population. (Roy et al., 2004; Hwang, 2000) The prevalence of mental illness and substance abuse is significantly higher. (Hwang, Bugeja, 2000)

People experiencing homelessness are at greater risk of contracting infections and infestations such as scabies and lice, tuberculosis and other respiratory illness. Homeless individuals are also more likely to eat a poor diet (Tarasuk, Dachner, Li, 2005; Treasury Board of Canada Secretariat), and participate in high risk behaviours such as drug use, multiple sex partners, and inconsistent condom use, which puts them at risk for HIV, AIDS, hepatitis and sexually transmitted diseases. (Hwang, 2001) Lack of follow-up and medication compliance is evident among the homeless. (Hwang, Gottlieb, 1999) In addition, poor chronic disease management is common. (Lee et al., 2005; Frankish, Hwang, Quantz, 2005; Hwang, Bugeja, 2000) Homeless individuals have high incidence of injury and chronic illness. (Gaetz, 2004)

### **People with low literacy skills**

**Definition:** Literacy is “a complex set of abilities needed to understand and use the dominant symbol systems of a culture – alphabets, numbers, visual icons - for personal and community development.” (The Centre for Literacy) People with low literacy skills have difficulty accessing, understanding, evaluating and communicating information in a way that will promote, maintain and improve health. (Rootman, El-Bihbety, 2008)

**Numbers:** 53% of adult Albertans lack the literacy skills and abilities needed to obtain, understand, and act upon health information and to make appropriate health decision on their own. (Canadian Council on Learning)

**Health:** In general, Canadians with low literacy have poorer overall health – lower life expectancy and higher rates of chronic diseases, accidents and utilization of health services. (Canadian Council on Learning, 2008; Perrin, 1998; Literacy BC, 2005)

### **People living in rural, poor or isolated communities**

**Definition:** Rural populations are defined here as people “living in towns and municipalities outside the commuting zone of centres with population of 10,000 or more.” (Statistics Canada, 2002)

**Numbers:** 18% of Albertans live in rural communities. (Statistics Canada, 2009)

**Health:** In Canada as a whole people living in rural areas have lower life expectancies and self reported health and higher rates of infant mortality, chronic disease, and rates of preventable injury and death. (Lauren, 2002) People living in poorer neighbourhoods also experience significantly poorer health outcomes. (Calgary Health Region, 2007)

### **Why are These Populations Vulnerable?**

Once we have identified vulnerable populations based on health outcomes and service utilization it will be important to look for the reasons why they are vulnerable.

The health of a population is influenced by many factors including age, hereditary risks, lifestyle, social and community networks, living conditions, working conditions, access to health care, etc. But it is the social determinants of health that “are the primary determinants of whether individuals stay healthy or become ill [and]... determine the extent to which a person possesses the physical, social, and personal resources to identify and achieve personal aspirations, satisfy needs, and cope with the environment.” (Raphael, 2008)

The following social determinants of health need to be considered when developing any strategy to reduce health inequities in Alberta. (Queensland Health, 2001)

- Living and working conditions
  - Income
  - Stress
  - Education
  - Working conditions
  - Unemployment
  - Social capital
  - Discrimination/marginalization
- Physical environment
  - Housing
  - Transportation
  - Remote or isolated communities
- Personal health practices and coping skills
  - Personality
  - Mental health
  - Disability
  - Culture/ethnicity
- Age
  - Childhood development
  - Youth
  - Seniors
- Gender
  - Women
  - Men

## Definitions<sup>a</sup>

### Determinants of health

The range of personal, social, economic and environmental factors that determine the health status of individuals or populations. (Nutbeam, 1998) The determinants of health can be grouped into seven broad categories: socio-economic environment; physical environments; early childhood development; personal health practices; individual capacity and coping skills; biology and genetic endowment; and health services.

### Social determinants of health

The social conditions and processes that promote and/or undermine the distribution of health outcomes among population groups. Not all health determinants are equal in impact. It is important to distinguish between the structural and intermediary determinants as they play different roles in the creation of population health outcomes and require different interventions. Social determinants of health can be divided into the two following groups.

1. *Structural determinants* sort (stratify) individuals and groups into social classes with resulting unequal distribution of and access to resources for living. The structural determinants are:
  - Education
  - Employment and working conditions
  - Unemployment and working conditions
  - Early childhood development
  - Ethnicity/Aboriginal status
  - Social exclusion
  - Gender
  - Social safety network

Several synonyms for the structural determinants of health include causes of the causes, root causes, systemic factors, primordial factors, underlying conditions, pre-requisites for health and social determinants of health (SDOH). This list is not exhaustive.

2. *Intermediary determinants* do not sort populations into ranked groups or social classes. The main categories and corresponding intermediary determinants of health include the following.
  - Material (intermediary determinants: housing workplace, food security)
  - Psychosocial circumstances (intermediary determinant: stress)
  - Health Behaviours (intermediary determinants: tobacco use, alcohol use, physical activity, healthy eating)
  - Human biology and genetics
  - Health care system (intermediary determinant: access to health care services)

### Health inequality

Health inequalities is a generic term used to designate differences or variations in health outcomes between population groups. Some health inequalities reflect random variations (i.e., unexplained causes), while other result from individual biological endowment, the consequences of personal choice, social organization, economic opportunity or access to health care.

A broad range of factors influence the development and persistence of inequalities in health [these factors are commonly referred to as the social determinants of health (see SDOH)]. The terms

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<sup>a</sup> Adapted from PHAC 2010

disparities and inequalities are often used interchangeably. The term *disparities* is more commonly used in the US while inequalities is used more frequently in Canada and Europe. We recommend the use of the term inequalities in the Canada context.

### **Health inequity**

Health inequities refer to differences in health outcomes between population groups that are socially produced, unfair and unjust.

The crux of the distinction between equality and equity is that the identification of health inequities entails normative judgment premised upon ones theories of (a) social justice, (b) how society is organized, and (c) the root causes underlying health inequalities. These differences systematically place vulnerable populations at further risk for poor health outcomes. Assessing health inequities requires comparing health and its social determinants between more and less advantaged social groups.

### **Population health**

Population Health describes the health of the population and can be measured by health status indicators and other indicators.

The distinction between population health and public health is that population health describes the condition, where as public health is the practices, procedures, institutions and disciplines required to achieve the desired state of population health.

### **Public health**

Public Health is a social and political concept and professional practice aimed at improving health; prolong life and improving the quality of life among whole populations.

Public health is achieved through health promotion, disease prevention and other forms of health intervention including policy advocacy.

### **Health sector**

The Health sector is the policies, laws, resources, programs and services that fall under the jurisdiction of Health Ministries. The sector spans health promotion and preventive health, public health, community health services such as home care, drugs and devices, mental health, long-term residential care, hospitals, and the services generally provided by health care professionals (doctors, nurses, therapists, pharmacists, etc.).

### **Health care**

The programs, services, procedures, therapies and interventions that treat and care for individuals with diseases, injuries and disabilities. Health care is the largest subset of the health sector.

### **Primary health care**

The World Health Organization defines primary health care as “the principal vehicle for the delivery of health care at the most local level of a country's health system. ... Beside an appropriate treatment of common diseases and injuries, provision of essential drugs, material and child provision of essential

drugs, maternal and child health, and prevention and control of locally endemic diseases and immunization, it should also include at least education of the community on prevalent health problems and methods of preventing them, promotion of proper nutrition, safe water and sanitation.”

### **Social Capital**

Social capital refers to the networks, norms and trust that members of a community can draw upon to improve and maintain their health. (Putnam, 1996)

### **Socio-economic status (SES)**

A composite measure of an individual's or population's income, education, occupation and social class. Usually categorized into high SES, middle SES, and low SES.

Socioeconomic status is one of the strongest predictors of health.

### **Vulnerable populations**

Vulnerable populations are those which have increased susceptibility to adverse health outcomes as a result of disparities in access to the resources needed to handle risks to health (e.g. Aboriginal peoples, single mothers in poverty, people experiencing homelessness, refugees). A “vulnerable populations approach” refers to the use of specific strategies targeted at that particular population.

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