The significant problems we face cannot be solved at the same level of thinking we were at when we created them.

—Albert Einstein

Learning Objectives

After the completion of this chapter, the student will be able to:
- define and differentiate among the various types of Indigenous people in Canada,
- describe the historical, social and negative health impacts associated with contact with European colonizers and traders,
- describe the negative impacts of the Indian Act and treaty systems on Indigenous families and people,
- provide three examples of how the residential school system has negatively impacted Indigenous families and people,
- describe how health care is managed and delivered in Indigenous populations in Canada, and
- list and describe three major health challenges facing Indigenous populations in Canada currently.
Core Competencies Addressed in Chapter 4

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<thead>
<tr>
<th>Core Competencies</th>
<th>Competency Statements</th>
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<td>1.0 Public Health Sciences</td>
<td>1.1, 1.2, 1.3, 1.4</td>
</tr>
<tr>
<td>2.0 Assessment and Analysis</td>
<td>2.1, 2.2, 2.3, 2.4, 2.5, 2.6</td>
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<tr>
<td>3.0 Policy and Program Planning, Implementation, and Evaluation</td>
<td>3.1, 3.2, 3.3, 3.6</td>
</tr>
<tr>
<td>4.0 Partnerships, Collaboration, and Advocacy</td>
<td>4.1, 4.3, 4.4</td>
</tr>
<tr>
<td>5.0 Diversity and Inclusiveness</td>
<td>5.1, 5.2, 5.3</td>
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<tr>
<td>6.0 Communication</td>
<td>6.1, 6.2</td>
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<tr>
<td>7.0 Leadership</td>
<td>7.1, 7.2, 7.3, 7.6</td>
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Note: Please see the following document or web-based link for a detailed description of these specific competencies. Public Health Agency of Canada (2007).

Introduction

The term “Indigenous” is defined as people who are and remain the earliest or initial inhabitants of a place or land (Bartfay 2010; Bartfay and Bartfay 2015). According to Smith (2003), there are over 350 million indigenous people representing more than 5,000 unique cultures in over seventy countries globally. Indigenous peoples from various countries that include Canada, the United States, Africa, Australia and New Zealand unfortunately share in common a history of exploitation by the Caucasian Europeans colonizers. Colonization is defined as the process of establishing a colony or group of settlers in a new land or territory, whether previously inhabited or not, during which the settlers are both partially or fully subject to and accountable to their mother country of origin (Pearson and Trumble 1996). The historical evidence suggests that the social, spiritual, physical and mental health of Indigenous populations has been negatively impacted, and that colonization per se has resulted in their marginalization and disempowerment by white Europeans (Adelson 2005; Eckermann et al. 2006; Fleet 1997; McMurray 2007; WHO 1999, 2002a, 2002c).

This chapter explores the historical impact of European traders and colonizers on the health and well-being of Indigenous populations in Canada including First Nations, Inuit and Métis people. We will explore how Indigenous beliefs, concepts, health care practices and structures often conflict with western health care systems and definitions of health and well-being. We will

Photo 4.1 Example of Indigenous art from Australia. Indigenous peoples, also known as first peoples, aboriginals, or native peoples, are ethnic groups who are the original inhabitants of a given region or land, in contrast to groups that have settled, occupied or colonized the area more recently. There are currently an estimated 370 million Indigenous people globally.
examine the impact of various government policies that have been formulated to protect, civilize, and assimilate the First People into the Canadian society (Wasekeesikaw 2006). Similarly, we will explore the effects of Christian-based residential schools, which were first established during the late 1800s to assimilate First Nations children into the white-western-based society and culture of the colonizers. We will also explore some of the major current health issues and challenges facing Indigenous across the lifespan, including the growing incidence of sexually transmitted infections (STIs), tuberculosis, diabetes, depression, and suicide in youth.

**Historical Perspectives**

A fundamental understanding of the history of Indigenous peoples in Canada and the implications of contract with the Europeans colonizers provides health care professionals with a better understanding of the roots of various current social and political injustices and current public health challenges (Bartfay and Bartfay 2015). Table 4.1 provides the reader with a brief historical timeline of some of the major events affecting Indigenous in Canada. We will explore these in greater detail later.

**Table 4.1 Historical Timeline of Major Events Affecting Indigenous people in Canada**

<table>
<thead>
<tr>
<th>Description of major historical event(s)</th>
<th>Time period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to contact with the European colonizers, it has been estimated that there were approximately eighteen million Indigenous inhabitants in North America and over 2,000 languages were spoken</td>
<td>1600s</td>
</tr>
<tr>
<td>Initial contact with the European traders and colonizers in 1535</td>
<td></td>
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<tr>
<td>French Jesuit missionaries first attempt to convert First Nations people to Christianity</td>
<td></td>
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<tr>
<td>Introduction of previously unknown contagious diseases (e.g., smallpox, syphilis, tuberculosis) devastated the First Nations and Inuit populations</td>
<td></td>
</tr>
<tr>
<td>Residential school system was first established by French Jesuit Missionaries</td>
<td>1800s</td>
</tr>
<tr>
<td>Primary objective was to convert the First Nations children to Christianity and to assimilate them into the European culture</td>
<td></td>
</tr>
<tr>
<td>Approximately 150,000 First Nations students are taken from their families and forced to attend residential schools until the closure of the last school in 1996</td>
<td></td>
</tr>
<tr>
<td>Introduction of the “Indian Act” by the Federal government created a paternalistic wardship system with the creation of Indian reserves and the Treaty system</td>
<td>1876</td>
</tr>
<tr>
<td>Indian Act was the first to legally define who was First Nation (Indian) versus those who were not</td>
<td></td>
</tr>
<tr>
<td>Royal Proclamation decreed that the British government had the right to negotiate treaties and purchase lands previously occupied by Indigenous people</td>
<td></td>
</tr>
<tr>
<td>Department of Indian Affairs transfers its health care portfolio over to Health Canada</td>
<td>1945</td>
</tr>
<tr>
<td>This department is renamed the First Nations and Inuit Health Branch (FNIIHB)</td>
<td></td>
</tr>
<tr>
<td>White Paper written</td>
<td>1969</td>
</tr>
<tr>
<td>This policy document attempted to abolish the Indian Act of 1867</td>
<td></td>
</tr>
<tr>
<td>Despite discussions and interest, the White paper is never implemented or passed by Parliament as a bill</td>
<td></td>
</tr>
<tr>
<td>Approximately 135 residential schools are in operation nationally</td>
<td></td>
</tr>
<tr>
<td>Indigenous communities across Canada express a desire to manage and control a greater proportion of their health care services</td>
<td>1980s</td>
</tr>
<tr>
<td>First Nations Environmental Network (FNEN) is formed to collectively deal with environmental challenges facing Indigenous communities across Canada</td>
<td>(Continued)</td>
</tr>
</tbody>
</table>
Table 4.1 Historical Timeline of Major Events Affecting Indigenous people in Canada (Continued)

<table>
<thead>
<tr>
<th>Description of major historical event(s)</th>
<th>Time period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amendments to Section 35 of the Canadian Constitution formally recognize Indigenous peoples of Canada, including First Nations, Treaty Indians, Non-treaty Indians, Inuit and Métis The Canadian Charter of Rights and Freedoms is passed into law The Charter does not specifically identify health care or the right to health care, but it does demand that health care be provided to all persons &quot;equally&quot; and &quot;fairly&quot;</td>
<td>1982</td>
</tr>
<tr>
<td>Bill C-31 passed by Parliament in response to complaints of discrimination and bias Bill C-31 now permits a Status Indian women to marry a non-Indigenous man and permits their children to apply to be registered as well</td>
<td>1985</td>
</tr>
<tr>
<td>The Government of Canada pledges $350 million to support the development of community-based healing initiatives for victims of the residential school system Indigenous Healing Foundation established as an independent and non-profit organization to address healing needs of Indigenous peoples nationally</td>
<td>1998</td>
</tr>
<tr>
<td>Federal government of Canada provides a formal apology to all First Nations’ people as a gesture of reconciliation and accountability for past actions Nunavut is given official territorial recognition and spans approximately one-fifth of Canada’s land mass and has communities that spread across the three regions of Baffin, Bivilliq and Kitikmeot Approximately 85% of the 30,000 people who inhabit Nunavut are Inuit Government of Canada announces the Indigenous Diabetes Initiative program and allocates $58 million over next the five years to deal with this growing health challenge Rates for diabetes are three to five times higher in Indigenous peoples than the national average</td>
<td>1999</td>
</tr>
<tr>
<td>The Canadian Institute of Health Research (CIHR) announces the establishment of the &quot;Institute of Indigenous Peoples' Health&quot; (IAPH) The IAPH provides funding to support research initiatives related to Indigenous health and well-being</td>
<td>2000</td>
</tr>
<tr>
<td>Health Canada (2001b) reports that 244 of the 599 eligible (41%) rural Indigenous communities have signed the Health Services Transfer Agreement</td>
<td>2001</td>
</tr>
<tr>
<td>Government of Canada—Department of Indian and Northern Affairs (DINA) attempts to clarify self-governance issues with proposed First Nations Governance Act (FNGA) FNGA fails to be passed by Parliament due to intense lobbying and opposition by Indigenous groups</td>
<td>2002</td>
</tr>
<tr>
<td>The Kelowna Accord—The first ministers met in Kelowna, British Columbia and the Federal government promises to spend $5 billion over the next five years to improve health, housing and education for Indigenous people First ministers also establish the “Blueprint on Indigenous Health” that seeks to improve health outcomes for Indigenous peoples in comparison to those of the general population Provinces and territories have yet to commit to the blueprint</td>
<td>2006</td>
</tr>
<tr>
<td>Congress of Indigenous People (CAP) presents their report to the Senate’s Subcommittee on Population Health April, 2007, the first ever national food guide designed for First Nations, Inuit and Métis populations entitled “Eating Well with Canada’s Food Guide—First Nations, Inuit and Métis” is launched in Yellowknife This is the first food guide tailored to reflect the unique values, traditions and food choices of Indigenous populations September, 2007, Federal government formalizes a $1.9 billion compensation plan for victims of the residential school system</td>
<td>2007</td>
</tr>
</tbody>
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(Continued)
From the late 1600s through the late 1800s, the new territory that we know as Canada today was increasingly populated by French and English colonizers, fur traders and military personnel (Bartfay 2010b). This period of time was characterized by very limited access to trained and formally educated health care professionals such as physicians, surgeons and nurses. Public health professionals and workers in Canada need to be aware of the negative historical effects of colonization and their continued impact on the health, well-being and health-seeking behaviours and beliefs of Indigenous peoples. First Nations, Métis and Inuit peoples face immense health challenges, and public health care professionals must work in collaboration with these populations to plan for effective health care access and delivery of primary health care services. It may be argued that Indigenous communities can be described as a unique society unto itself, and each community presents their own unique health care challenges (Bartfay 2010a).

The Venetian explorer John Cabot (circa 1450–1498) was commissioned by King Henry VII (Tudor) of England during the fifteenth century to find a safe trade passage to China, who was a valuable trading partner with Europe. Although Cabot was not successful in his efforts, he did discover a territory of land currently known as Newfoundland, Cape Breton and Nova Scotia. Cabot claimed the land for England, but King Henry VII was not eager to colonize these territories during his reign (Bartfay 2010a, 2010b).

In 1535, Cartier landed near the First Nations village of Stadocona near present-day Québec City. Cartier first utilized the word “Canada” to refer to the entire region lead by Chief Donnacona at Stadocona. It is interesting to note that the present name of our beloved country originates from the First Nations word “kanata,” which means village or settlement (Canadian Heritage 2004; Rayburn 2001; Trigger and Pendergast 1978).
In 1547, maps referring to this new and unexplored region by European explorers began to refer to this area as Canada (Canadian Heritage 2004; Trigger and Pendergast 1978). Upon Confederation in 1867, the name Canada was officially referred to as the “Dominion of Canada” until the 1950s. In 1982, the Canada Act refers to our country as “Canada” solely in both official languages.

The first attempt to establish a permanent year-round colony in New France occurred in 1604 on Saint Croix Island in the territory named “La Cadie” or “l’Acadie” by the French nobleman Pierre Dugua Sieur Mons (Archives de Montréal 2010). The founding of Québec by Samuel de Champlain in 1608 and Montréal by Paul Comedey de Maisonneuve in 1642 laid the groundwork for the major colonization of New France. During the sixteenth century, France was interested in expanding its economic and military power by discovering and colonizing new lands and territories (Bothwell 1996; Bumstead 2004; Trigger and Pendergast 1978). Canada was a land rich in natural resources including timber required for the construction of ships and houses and mineral resources. Animals including the beaver, fox and bear were also regarded as valuable trade commodities for the lucrative fashion industry in Europe. For example, beaver pelts were used for the fashionable top hats worn by gentlemen throughout Europe. The fur trade fuelled trans-Atlantic trade, and Europeans learned how to utilize the available national resources and adapt to the new land by First Nations peoples (Bartfay and Bartfay 2015).

Jacques Cartier’s mission was to find new lands and territories and claim it the rightful property of France. Cartier landed on the east coast of Newfoundland in 1535 and dubbed the territory as “New France” (Fleet 1997). Cartier declared that the land was “terra nullius,” which implies that the land was considered uninhabited and empty, and therefore France had a legal claim to the land. This was despite the fact that there were approximately 500 distinct First Nations tribes in the early 1600s. Notably, Dickanson (2002a, 2002b) estimates that there were approximately eighteen million First Nations peoples who inhabited the North American continent prior to contact with the European colonizers. There is archaeological evidence for the presence of humans in northern Yukon dating 26,500 years ago. Furthermore, archaeological evidence reveals that southern Ontario was inhabited 9,500 years ago by First Nations peoples (Cinq-Mars 2001; Wright 2001). During the seventeenth century, the French empire expanded throughout North America as a result of various expeditions. During the eighteenth century conflicts between France and England, France eventually ceded Acadia, Newfoundland and the territory surrounding the Hudson Bay in 1713. Subsequently, France surrendered the entire colony of New France to England under the Treaty of Paris in 1763. British troops now occupied Québec and Montréal in 1759 and 1760, respectively (Archives de Montréal 2010).

Ensuring that the fur traders and colonizers were healthy was of prime importance for the economic and political interests of France and England (Abbott 1931). This was a noted challenge because of the harsh climate and geography of the land. One of the earliest recorded uses of Indigenous healers and herbal treatments was by Jacques Cartier. This is also the first documented account of widespread illness in the new colony. During one of Cartier’s sailing expeditions up the St. Lawrence River in Québec, 127 of 130 of his men (97%) were struck with scurvy, and twenty-seven (21%) subsequently died as a result. Without the wisdom of First Nations’ healers, significantly more of Cartier’s sailors would have perished. Swan (1966) recounts that an observant officer noticed a native Indian, who suffered from similar symptoms, made a rapid recovery once he drank a decoction made from the sap and bark of a spruce tree. This brew saved Cartier and his remaining men.
These early fur traders and colonizers often had to provide for their own health care. They also relied on the wisdom of the traditional Indigenous healers or shamans who were often skilled in bloodletting, setting broken bones, the amputation of limbs, cauterizing wounds, and they also utilized a variety of herbal medicines to treat various ailments. The European colonizers and explorers were surprised and often astounded to learn about the extensive healing and medical practices known by First Nations people. In fact, many of the treatments and interventions employed, such as bloodletting, were regarded as state-of-the-art clinical practices in Europe at the time (Bartfay and Bartfay 2015). For examples, they knew about bloodletting and cupping, which were considered the contemporary treatments for fevers in Europe (Swan 1966). They also knew how to set fractures and perform amputations with great skill and to coagulate bleeding points with red-hot stones. First Nations’ people also employed a variety of plants and herbs for a variety of ailments, and also practiced poulticing (Swan 1966).

Indigenous Status

Statistics Canada (2006b, 2008) reports that there were 1,172,790 people in Canada who identified themselves with an Indigenous identity, of which 572,090 were males and 600,695 were females according to the 2006 Census. The Indigenous population grew 45% between 1996 and 2006, in comparison to just 8% for non-Indigenous (Indigenous Affairs and Northern Development Canada 2010a, 2010b). More than half (54%) of all Indigenous people reside in urban centres, and 8:10 live in Ontario and the four western provinces. The largest population gain since 2006 was among the Métis for a total population of 389,785; First Nations populations—including status and non-status was reported at 698,025 (29% increase), and the Inuit population was 50,485 (26% increase) (Statistics Canada 2006). Between 1996 and 2001, the proportion of the Canadian population reporting an Indigenous identity increased by 22.2% (Villeneuve and MacDonald 2006). In 2011, the Canadian population was 33.5 million of which 1.4 million or approximately 4% of the total number of individuals who identified themselves as being Indigenous (Statistics Canada 2011a, 2011c). Of the total number of Indigenous, 62% identified themselves as First Nations, 31% as Métis and 4% of Inuit. Canada’s population is predicted to exceed forty million by 2036, and the Indigenous population is expected to reach 2.2 million (Statistics Canada 2011c).

Although Indigenous seniors make up a relatively small proportion of Canada’s Indigenous population, their numbers are predicted to significantly grow like the general Canadian population at large, and is predicted to triple between the years 1996 and 2016 (Health Canada 2002). The province of Ontario has the largest number of individuals who identify themselves as Indian, the territory of Nunavut has the largest number of Inuit and the province of Alberta has the largest number of Métis (Shah 2003). Eight out of every ten Indigenous people live in Ontario, Manitoba, Saskatchewan, Alberta or British Columbia. Approximately 108,000 live in northern parts of the province of Quebec, and approximately 70% of all Métis reside in Western Canada with the largest population in the City of Winnipeg, Manitoba (Statistics Canada 2006).

According to Wasekeesikaw (2006), the term “Indian” originates from early French and English explorers to this continent who believed they had discovered India. The Indian Act of 1867 was the first to legally define who was Indian (First Nations), and it also provided a

Photo 4.3  Having the designation and status as an “Indian” in Canada is acquired via a birth status and is also defined in the Canadian Indian Act of 1876.
vehicle for the European colonizers to legislate and rule over First Nations’ peoples and the lands reserved for them (Bartfay 2010a; McMurray 2007).

**First Nations/Indian**


Having the designation and status as an “Indian” in Canada is acquired via a birth status and is also defined by the Canadian Indian Act of 1876 (Bartfay, 2010a; Bartfay and Bartfay 2015; Waldram et al. 1995). A treaty or registered Indian (First Nations) is an individual who is recognized under the Canadian Indian Act of 1876, and has also obtained a unique registration number known as a “treaty number.”

An Indian who is First Nations but does not have a registration number is still recognized as being “Indian” per se under the Canadian Indian Act of 1876 (Bartfay 2010a; Bartfay and Bartfay 2015; Waldram et al. 1995). Conversely, non-status Indians are recognized as First Nations people in Canada, but the tribe or band to which they belong to did not wish to sign a treaty. Statistics Canada (2008) reports that the majority ($n = 564,870$ or 81%) of First Nations people are Status Indians, which means they are registered under the Indian Act, whereas an estimated 133,155 are not registered under the Indian Act. An estimated 40% lived on reserve, while the remaining 60% lived off reserve. The vast majority (98%) of the First Nations people living on reserve are Status Indian (Statistics Canada, 2008).

**Inuit**

The Inuit are believed to be descendants of the Thule culture that dates back to 1000 CE, and consists of a total of eight separate tribal groups (Bartfay and Bartfay 2015). Approximately 4% or 50,485 of the Indigenous persons in the 2006 Census identified themselves as Inuit, which represents a 26% increase in comparison from 1996 data ($N = 40,220$) (Statistics Canada, 2008). In 2006, the medium age of the Inuit population was twenty-two years, compared with forty years for those on non-Indigenous decent. Moreover, 12% of the Inuit population was four years old and under; 11% were in the five to nine years age group, compared with only 6% of non-Indigenous people surveyed. According to Statistics Canada (2008), just over three-quarters of Inuit in Canada ($N = 40,000$ or 78%) live in one of the four regions within the Inuit Nunavut. This is the Inuktutit expression for “Inuit homeland,” a region stretching from Labrador to the Northwest Territories. In 2006, 49% of all Inuit lived in Nunavut, 19% lived in Nunavik in northern Québec, 6% lived in the Inuvialuit region in the Northwest Territories and 4% lived in Nunatsiavut in Labrador. An estimated 17% lived in urban centres and 5% in rural areas outside Inuit Nunavat (Statistics Canada 2008).
Historically, the term “Eskimo” was used to describe indigenous people who occupied the cold Arctic regions of Canada, Newfoundland and Labrador (Bartfay 2010a). The word Eskimo, however, is regarded as offensive by some individuals because it has been utilized as a negative descriptor of people who eat raw flesh. Consequently, the designation and term has been replaced by the current term “Inuit.” The Inuit peoples of Canada are renowned for their ability to adapt and survive in the often harsh environment and climate of Northern Canada and the Arctic regions (Bartfay 2010a; Bartfay and Bartfay 2015). There are absolutely no trees observed in the northern regions occupied by Inuit peoples, but there are some low stubby plants and berries. There are also a variety of alpine glaciers, icebergs as well as low-lying lakes and bays. The family remains the central economic unit of the Inuit, and everyone is assigned a particular job or task. Historically, the Inuit people lived semi-nomadic lives, in that they settled in accordance to their hunting needs. The women were responsible for transporting household’s items and possessions; whereas the men fished and hunted for sea mammals such as seals, walrus and whales. In addition, the men also hunted caribou and polar bears and other game such as rabbits in the summer. Occasionally, the Inuit would also gather and store seasonal plants and berries.

According to Pearson and Trumble (1996, 479), Inuit languages tend to be polysynthetic and ergative in nature and are divided into the following two main types. First, the “Inupiag” or “Inuit” types that are spoken in Labrador, Northern Alaska and the Arctic Coast of Canada. Second, the “Yupik” types that are spoken in southern Alaska and Siberia. The Inuktitut language is strongest in the region of Nunavik and Nunavut where more than nine of ten Inuit can speak the language well enough to carry on a conversation. In contrast, the numbers are 27% in Nunatsiavut and 20% in the Inuvialuit region (Statistics Canada 2008). The Government of Canada regards Inuit peoples in the same manner as registered Indians, but they are classified in a separate category (Waldram et al. 1995).

Métis

The “Métis” are people formed between the union of Indigenous and non-Indigenous parents who were historically of European descent, and are legally considered the same as non-status Indians and Inuit in Canada (Bartfay 2010a; Bartfay and Bartfay 2015). The first records of Métis people are shown as early as 1600 on the East coast of Canada. The mothers were often Cree, Ojibwa, Algonquin, Saulteaux, Menominee, Mi’kmaq or Maliseet. Historically, there were distinctions between the French Métis born of francophone voyageur fathers, and the Anglo-Métis (A.K.A. Country-born) who descended from English or Scottish fathers. Today, these two cultures have coalesced into one Métis heritage and tradition. A majority of the Métis once spoke, and many still speak, either Métis French or a mixed language known as “Michif.” The majority of Métis people today are not so much the direct result of First Nations and European intermixing, but are those who self-identify as being Métis due to intermarriages with others. The Supreme Court of Canada outlined three broad factors to identify Métis rights-holders in the Powley Ruling in 2003 as follows based on section 35 of the Constitution Act, 1982: (i) Self-identification as a Métis individual, (ii) ancestral connection to a historic Métis community and (iii) acceptance by a Métis community (Indigenous Affairs and Northern Development Canada 2012). The Powley Ruling dealt only with the Métis community in and around Sault Ste. Marie, although it did establish a legal precedent to determine the Indigenous rights of other Métis groups.

Data obtained from the 2006 Census suggest that the Métis population is on the rise in Canada, and this increase is outpacing other Indigenous groups in Canada as well as non-Indigenous populations.
over the past decade (Statistics Canada 2008). Indeed, in 2006 an estimated 389,785 people reported that they were Métis and this figure has increased 91% in comparison to 1996 figures. Nonetheless, the Métis represent just 1% of the total population in Canada. Approximately nine of ten people (87%), who identified themselves as Métis, live in either the western provinces or Ontario. The census enumerated 85,500 (22%) in Alberta, 73,605 (19%) in Ontario, 71,805 (18%) in Manitoba, 59,445 (15%) in British Columbia and 48,115 (12%) in Saskatchewan (Statistics Canada 2008). In 2006, 25% of the Métis population in Canada was aged fourteen or younger, in comparison to 17% of non-Indigenous population, and seven of ten Métis lived in urban centres that represents a 67% increase in comparison to 1996 figures (Statistic Canada 2008).

Indigenous Languages

It is notable that the cultural and linguistic variations amongst First Nations, Inuit and Métis are reported to be greater than the sum total of all European nations combined (Kirmayer et al. 2000). Prior to contact with the European colonizers, it has been estimated that there were approximately eighteen million inhabitants in North America and over 2,000 distinct languages were spoken (Dickason 2002a, 2002b; Waldram et al. 1995). Health care professionals need to be culturally sensitive and informed about the various types of Indigenous peoples located across Canada and their traditions and beliefs. Traditionally, the Indigenous culture has been visual or oral in nature and therefore transmitted via works of art, story-telling or the spoken word, in contrast to written or electronic/digital mediums (Bartfay 2010a; Bartfay and Bartfay 2015; Beckman Murray et al. 2006). Language and art still serve as an important cultural vehicle for Indigenous peoples to connect with their rich history, traditions and culture (Smylie 2000). Nonetheless, many Indigenous languages currently spoken are threatened and endangered, and if lost will have profound negative consequences for the cultural survival and identity of Indigenous peoples in Canada (Kendall et al. 2001).

Jesuit Missionaries and Residential Schools

Following the arrival of colonizers and fur traders to New France in the sixteenth and seventeenth centuries, Christian Jesuit missionaries arrived. Throughout the 1640s, Jesuit missionaries penetrated the Great Lakes and other inland regions and attempted to convert many of the Huron, Iroquois, Mohawk, Cree and other First Nations people to Christianity. This often created tensions and conflict between Europeans and First Nations Peoples. For example, Jesuit missionaries often came into conflict with the Iroquois, who frequently attacked Montréal. The primary objectives of these Jesuit missionaries were to befriend and convert the “savages” and “barbarians” to Christianity, which was the dominant religion in Europe during the time, and to civilize them according to their standards and beliefs. Early colonizers used canoes on the waterways, especially the St. Lawrence River and the Great Lakes, as their main form of transportation. During the winter when the lakes froze, individuals often travelled by sleds pulled by dogs or horses or on foot by snowshoes (an Indigenous invention). A land-based road transportation system was first developed during the 1830s.
The attempts of the Jesuits to convert First Nations people to a Christian-based faith were often regarded as hostile and unwelcomed attempts because they conflicted with their traditional values, beliefs and culture. Indeed, eight Jesuit missionaries and donnés who were killed between 1642 and 1649 were later canonized by the Catholic Church as the so-called “Canadian Martyrs” (Government of Ontario 2010). Detailed reports about their efforts to convert First Nations peoples to Christianity and the day-to-day lives of early colonizer’s and fur traders in the region were regularly sent back to France via ships by the Jesuits. Collectively, these official reports were known as the “Jesuit Relations” documents and they span a period of more than seventy years (Kenton 1925; Kerr 1996; Parkman 1897). For example, Gariel Sagard (1636) described First Nations (Hurons) peoples as faithless savages who required enlightenment by teaching them about their Christian faith and beliefs.

Go into the entire world and preach the Gospel. It is for this last reason that of obedience to what is holy we took the trip to the Hurons and the Canadians . . . to come to the aid of our brothers in Canada, take the torch of the knowledge of the Son of God to them and chase away the darkness of barbarism and faithlessness.

Source: Sagard (1866).

During the 1800s, Jesuit missionaries were even more aggressive in their attempt to convert Indigenous peoples to Christian-based faiths via the establishment of residential schools throughout Canada (Carney 1995; Miller 1996; Milloy 1999). The residential schools comprised a network of forced boarding schools for Indigenous children of Canada who were First Nations, Metis or Inuit. These residential schools were funded by the Canadian government’s Department of Indian Affairs, and administered by Christian-based churches including the Catholic Church of Canada, Anglican Church of Canada and the Methodists (United Church) (Carney 1995; Miller 1996; Milloy 1999). The goal of these Christian-based residential schools was to better assimilate First Nations children into the dominant white-European culture, values and society (Indigenous Healing Foundation 1999). In fact, parents of First Nations children were legally required to send their children to these residential schools that taught them to be ashamed of their First Nations heritage, beliefs, value systems and society. This school system

Photo 4.7 The primary purpose of residential schools was to assimilate Indigenous children into the dominant white European culture, values and society.

Photo 4.8 Residential schools were deemed compulsory for all Indigenous children from 1884 to 1948, but continued to exist in many parts of the country afterwards. The last residential school was closed in 1996 (Carney 1995; Miller 1996; Milloy 1999).
had origins dating back to pre-Confederation times, but was primarily active following the passage of the Indian Act in 1876, until the mid-twentieth century.

There is currently a consensus in Canada from Indigenous groups, survivors and the Federal government that these residential schools did result in significant harm to children in attendance by forcibly removing them from their families, depriving them of their ancestral languages, cultures and traditions, and exposing many of them to physical, emotional, sexual and spiritual abuse at the hands of priests, nuns, vicars, clergy and other church officials and teachers. Evidence for this consensus includes the June 11, 2008 public apology offered, not only by Prime Minister Stephen Harper on behalf of the Government of Canada, but also by the leaders of all the other parties in the Canadian House of Commons.

Justice Murray Sinclair, the Chair of the “Truth and Reconciliation Commission” declared in his landmark report released in June, 2015 that Canada’s former Indigenous policies could best be described as “cultural genocide” (CBC News 2015; Galloway and Curry 2015; The Truth and Reconciliation Commission of Canada 2015). This landmark report was based on over six years of testimonies from nearly 7,000 witnesses who were residential school survivors, and consisted of ninety-four specific recommendations. Add to your knowledge of the Truth and Reconciliation Commission’s report by accessing the link shown in Web-based Resource Box 4.1.

### Web-based Resource Box 4.1 Truth and Reconciliation Commission Report

<table>
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<th>Resource</th>
<th>Web-Based Link</th>
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Treaties and Reserves

British colonizers introduced the concept of paternalistic wardship, via the creation of the reserve system in Canada. The creation of geographically defined “Indian reserves” often resulted in the forced isolation and/or relocation of entire First Nations’ communities (Adelson 2005; Eckermann et al. 2006). England was instrumental in developing and implementing the “treaty system” in Canada. The treaty system provided a means for these colonizers to legally claim land that was originally occupied by First Nations people throughout North America (Dickason 2002a, 2002b). The British North America Act (BNA) of 1867 served as the impetus for Canada to become an independent nation. Despite the passage of the BNA Act of 1867, a Royal Proclamation stated that only Indigenous Australians and Torres Strait Islander people of Australia, descended from groups that existed in Australia and surrounding islands prior to British colonisation. Indigenous Australians are recognized to have arrived between 40,000 and 70,000 years ago.
England had the legal right to negotiate treaties or to purchase lands from First Nations peoples. In 1876, the *Indian Act* was passed to ensure that the terms and conditions of all signed existing treaties with Indigenous peoples were legally observed and enforced (Dickason 2002a, 2002b; Venne 2002).

Following Confederation, Indigenous peoples including First Nations, Inuit and Métis were often forced to be relocated and/or displaced from their traditional birth and hunting territories to make room for the ever-increasing numbers of Europeans (Wasekeesikaw 2006). For example, First Nations people were often forced to live on Indian reserves established for them by the Federal government, which often resulted in social or geographical isolation. These reserves were governed by the Federal government according to the terms and conditions of the Indian Act of 1867 (Department of Indian and Northern Affairs 1997; Dickason 2002a, 2002b; Venne 2002). The Federal government subsequently created the Department of Indian and Northern Affairs (DINA) whose specific mandate was to manage treaty Indians and the reserves. The DINA hired so-called “Indian agents” who were responsible for enforcing and carrying-out the specific terms of the treaties nationally (DINA 1997). First Nations people often felt that they were living in a police state, since they required special written permission from these agents to leave these established reserves. These required actions and behaviours often created conflicts since they were in marked contrast to their cultural and traditional beliefs related to autonomy and freedom. For example, individuals needed to obtain permission from an Indian agent to go hunting for food for their family off the reserve.

**Indian Act and Bill C-31**

The *Indian Act* (1876) was also discriminatory against status (treaty) First Nations (Indian) women who wished to marry a non-Indigenous person in Canada (Bartfay 2010b; Bartfay and Bartfay 2015). According to the *Indian Act*, this action would result in having her name stricken from the treaty list and her status would change from status Indian to a non-status Indian. Furthermore, any children born to the couple would be designated as non-status (non-treaty). Hence, the basic human right of choosing who you wished to be your husband had implications in terms of the status of First Nations women in Canada. In response to numerous complaints of bias and prejudice against these women, the Government of Canada responded by passing Bill C-31. In accordance with Bill C-31, a status Indian woman is now “permitted” to marry a non-Indigenous man, who can now also apply to become registered as well. In addition, the couple’s children can also apply to be admitted into the band or tribe in accordance with their specific membership codes. The Canadian Constitution was amended in 1982, and now legally recognizes the status treaty rights of all First Nations peoples (Bartfay 2010a). Moreover, First Nations, Inuit and Métis peoples are now recognized under Section 35 of the Canadian Constitution (Waldram et al. 1995). In January 2013, the Federal Court in Ottawa ruled that Métis and non-status Indians have the same rights as status treaty Indians, in accordance with the Canadian Charter of Right and Freedoms.

A report entitled the “White Paper” was written in 1969 that strongly advocated for the abolishment of the treaty system and the *Indian Act* (1867), and DINA who were responsible for administering the reserve and treaty systems (DINA 1997; Schouls 2002). Despite support by Indigenous leaders and discussions with various politicians and policy makers, the White Paper never became official government policy or legislation in Canada. Nonetheless, it did serve as a critical catalyst for the resurgence of the Indigenous culture and their desire for self-governance in Canada (Schouls 2002).

Numerous ongoing treaty and land disputes remain to be settled (Johal 2006). McMurray (2007) reports that negotiations between Indigenous peoples and various levels of government are ongoing with the ultimate objective or aspiration of Indigenous self-governance that will be grounded in the Constitution. For example, Nunavut was formally established and recognized as a separate territory from the Northwest Territories on April 1, 1999 by the *Nunavut Act* and the *Nunavut Land Claims Agreement Act*, although the actual boundaries had been established back in 1993. The creation of this new territory in Canada resulted in the first major change to Canada’s political map since the incorporation of the new province of Newfoundland and Labrador in 1949. It is notable that Nunavut represents the largest expanse of land owned and governed by any Indigenous peoples (McMurray 2007).
Social and Health Consequences of Colonization

The result of European colonization often had devastating social and health consequences for Indigenous peoples in Canada and abroad (Bartfay 2010a; Bartfay and Bartfay 2015). For example, prior to contact with French and English colonizers in the new world, the Six Nations (Haudenosaunee) of Ontario cultivated and farmed approximately 80% of their subsistence requirements (Dickason 2002a, 2002b). By contrast, the vast majority of present-day subsistence nutritional requirements by Six Nations’ people come from commercially available sources (e.g., supermarkets), and often consists of highly processed foods loaded with sugar, salt and fat. These alterations to their traditional subsistence means in the Six Nations has resulted in a growing incidence of obesity and associated cardiovascular disease (CVD) and Type 2 diabetes, which were not present fifty to sixty years ago (Bartfay 2010a; Hales and Lauzon 2007). According to the 2010 Canadian Community Health Survey, 66% of adults twenty years and older and 40% of children and youth not living on a reserve were overweight or obese, based on self-reported height and weight measures (Statistics Canada 2010b). For First Nations individuals who reside on reserves or northern communities, 62% of children (three to eleven years); 43% of youth (twelve to seventeen years) and 75% of adults eighteen years or older reported that they were overweight or obese (The First Nations Information Governance Centre 2011).

According to 2006 Census data, First Nations and Métis adults aged twenty or more were more likely to be diagnosed with one of several chronic conditions including heart disease, cancer, diabetes and arthritis (Statistics Canada 2007). According to Statistics Canada (2007), approximately 60% of non-Indigenous adults were reported having “excellent” or “very good health,” a greater proportion than reported by First Nations peoples living off-reserves (51%), Métis (57%) or Inuit (49%) adults. It is also notable that approximately three-quarters of non-Indigenous adults reported no activity limitation, compared with 58% of First Nations living off-reserve, 59% of Métis and 64% of Inuit adults. In many cases, First Nations living off-reserve, Inuit and Métis adults reported poorer health than non-Indigenous adults even when the effects of differences in socio-economic characteristics, in health care access and in lifestyle risk factors were taken into consideration (Statistics Canada 2007).

French and English colonizers brought with them various diseases including STIs (e.g., syphilis, gonorrhea), tuberculosis, measles and smallpox, which devastated tens of thousands of First Nations’ and Inuit people (Donahue 1996; Swan 1966).

... a white trader who had suffered losses of equipment as the result of an Indian raid. His retribution was to invite the leaders of the Indian tribe concerned to smoke the pipe of peace. At the meeting he ceremoniously presented them with a keg of rum wrapped in a flag, with the instruction that they were not to unwrap the keg until they got back to their encampment. The flag had been impregnated with the smallpox virus, and many members of the tribe died as a consequence. This must be one of the earliest examples of germ warfare (Swan 1966, 44–45).

Inuit populations have a homicide rate that is ten times that of non-Indigenous populations in Canada, higher rates of crime and imprisonment, and alcohol and substance abuse (WHO 2002a). For example, Indigenous women make up 87% of prisoners in the province of Saskatchewan (Sapers and Zinger 2010), and are three times as likely as non-Indigenous women to be victims of violence (Statistics Canada 2011d). Indigenous women prisoners are twice as likely as their male counterparts to be diagnosed with mental health issues at time of admission, and are three times as likely to suffer from depression (Sapers and Zinger 2010). According to the 2006 Indigenous Peoples Survey, 78% of Indigenous aged fifteen years and older reported consuming alcohol in the past year, and 39% (48% of males and 32% of females) consumed alcohol at least once per week (Statistics Canada 2006a).

When European whalers and fur traders came to the Canadian Arctic, tens of thousands of Inuit lives were lost and their population was reduced by two-thirds in number (World Health Organization 2002a). These events had profound effects on Inuit health, culture and traditional ways of subsistence in the Arctic.
regions of Canada. Indeed, each of these groups added to the Inuit’s sense of dispossession from their land and significantly destabilized their traditional ways of life (McMurray 2007). The Inuit’s traditional ways of life, culture, health and environment are increasingly being threatened as a result of exploration and mining in the Arctic for resources such as diamonds, minerals, natural gas and oil (Bartfay 2010a; Bartfay and Bartfay 2015).

A growing number of Indigenous communities across Canada are being affected by alterations to their environments (Bartfay 2010a; Bartfay and Bartfay 2015). These include mining, forestry, the exploration of oil and natural gas, the polluting of rivers and lakes with various contaminants including pesticides, herbicides, mercury, lead and PCB’s, and hydro-electric dam construction. All these activities negatively affect their environment and traditional ways of life including hunting, trapping and fishing. In response to this growing threat to their traditional ways of life, the FNEN was formed in the 1980s (FNEN 2004, 2002). The vision and mandate of the FNEN is to protect and restore the harmony of past, present and future life through traditional teachings by their ancestors and elders related to the mind, body and spirit (FNEN 2004, 2002). The mind consists of teachings and awareness related to the Mother Earth. The balance of body is achieved through grassroots activism by Indigenous peoples across Canada. To achieve balance with the spirit, various spiritual and cleansing ceremonies are often undertaken, such as healing circles. These ceremonies help to restore harmony and strengthen their unity with the powers of the Mother Earth, Sky and All Relations. The FNEN has been quite successful in preventing logging and clear cutting of forests in various provinces; bring to halt low-level flights by Canadian air force jets and aircraft over the traditional hunting grounds, and stopping the disposal of radioactive wastes on or near First Nations reserves (FNEN 2003). All Canadians, corporations, politicians and policy makers can certainly learn and benefit from the environmental planning and preservation efforts undertaken by the FNEN and other Indigenous groups (Burrows 1997; Duerden et al. 1996).

Government policies historically may be described as “assimilative” in nature, implying the Indigenous people should be more like their European colonizers in terms of their culture, beliefs and ways of life (Bartfay 2010a, 2010b). Wasekeesikaw (2006) argues that the Federal government policies were specifically developed to civilize and assimilate First Peoples into their western-based society, values and belief systems. For example, First Nations’ children were often placed into residential schools that were culturally inappropriate, insensitive and irrelative to their traditional belief systems and lifestyle (Chrisjohn et al. 1997). Consequently, First Nations’ people were often blamed and wrongfully labeled by non-Indigenous as being lazy individuals waiting for government handouts, demoralized and living in squalor conditions (Adelson 2005; Eckermann et al. 2006).

The socially biased and unnatural geographical segregation of First Nations peoples onto reserves has often resulted in limited post-secondary educational, career and economic opportunities. Indigenous youth are more likely than non-Indigenous to drop out of school, and by leaving school without graduating increases the possibility of lifelong unemployment or jobs with low wages (Human Resources and Skills Development Canada 2010; Statistics Canada 2011e). In fact, the unemployment rate for Indigenous people aged twenty-five to sixty-four remains almost three times the rate for non-Indigenous (Indigenous Affairs and Northern Development Canada 2010a, 2010b). The medium income of First Nations families in 2005 was reported to be $11,224 for those living on reserves and $17,464 for those living off reserves, compared to the median income of $25,955 for non-Indigenous families (Statistics Canada 2009).

Indigenous people in Canada are six times more likely to be victims of homicide in 2014 (Grant 2015; Statistics Canada 2015). Although Indigenous people account for approximately 5% of the Canadian population, they account for approximately a quarter of all homicide victims reported by police. In 1991, Indigenous women accounted for 14% of all female victims of homicide in Canada, compared to 21% in 2014. Moreover, Indigenous women had a rate of 115 sexual assaults per 1,000 women in 2014, which was more than triple the rate of non-Indigenous women in Canada (Grant 2015; Statistics Canada 2015).

In 1999, the Canadian Federal government offered a public apology to all First Nations people as a gesture of reconciliation and accountability for the past actions of previous governments (McMurray 2007).
Web-based Resource Box 4.2  Resources Related to Indigenous Healing and the Residential School System

<table>
<thead>
<tr>
<th>Resource</th>
<th>Website</th>
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<tbody>
<tr>
<td>Indigenous Healing Foundation</td>
<td><a href="http://www.ahf.ca">http://www.ahf.ca</a></td>
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2009, Pope Benedict XVI expressed “sorrow” to a delegation of First Nations representatives from Canada over the abuse and “deplorable treatment” that Indigenous students suffered at the hands of the Catholic Church in residential schools. Nonetheless, Pope Benedict XVI went short of providing a formal apology from the Catholic Church for its past wrongdoings. Add to your knowledge of Indigenous healing and the negative impacts associated with the forced residential school system by accessing the Web-Based Learning Resource Box 4.2.

It is also critical to report that the current depictions of Indigenous peoples in Canada are not all gloomy, negative or bleak in nature. Increasingly highly numbers of First Nations, Inuit and Métis peoples are pursuing higher education in community colleges and universities and/or seeking job or career training in various fields and disciplines (Bartfay 2010a). In fact, Indigenous are found in all of the trades in Canada (e.g., electrician, plumber, welder, carpenter, auto-mechanic), occupations and professions (e.g., lawyers, engineers, nurses, physicians). It is notable that the National Indigenous Achievement Awards are held and televised nationally by the Canadian Broadcasting Corporation (CBC). This annual award ceremony provides a vehicle to showcase the diverse talents and achievements of First Nations, Inuit and Métis peoples, and it also provides a critical vehicle for the promotion of positive role models for both Indigenous and non-Indigenous youth across Canada (Bartfay 2010a; Bartfay and Bartfay 2015).

Indigenous Perspectives of Health

First Nations, Inuit and Métis peoples are bound together by a rich tapestry comprising inherited cultural beliefs and values, customs, language, art and their spiritual bond with their surrounding environment (Bartfay 2010a; Bartfay and Bartfay 2015). According to McKenzie and Morrisette (2003), Indigenous perspectives on health and well-being emphasis a holistic and reciprocal relationship between the physical and spiritual world, the individual and their surrounding environment, and between the mind, body and spirit (see Figure 4.1). These holistic and reciprocal beliefs and values often contrast with the traditional western or European concepts of health and well-being related to the absence of disease and/or overt clinical signs and symptoms of illness or pathological processes (Lyons and Petrucelli 1978; Rosen 1958; WHO 1986, 1999, 2000c).

There are several versions of the origins of our world and the universe by the “Creator” told by Indigenous elders (Bartfay 2010a; Hales and Lauzon 2007). Nonetheless, they share in common their spiritual beliefs of holism and a strong bond or unity with the environment. These beliefs include a reciprocal and balanced relationship between individuals and the “Mother Earth,” which will help to provide a path to good life or “Bimaadiziwin” (Kulchyski et al. 1999). An understanding of the relationship between the Mother Earth and Bimaadiziwin provides the individual with the sustenance necessary for high-quality spiritual and physical life (Bartfay 2010a; Bartfay and Bartfay 2015). Wasekeesikaw (2006) reports that the term “miyupimaatisiium” means being alive well in First Nations culture and emphasize the relationship between the natural world and keeping one’s spirit strong.
“The Story of the Sacred Tree” exemplifies the common Indigenous belief that spiritual and physical life consists of a harmonious merger with all natural things (Bopp et al. 1985). This story begins with the great “Creator” who decides to plant a “Sacred Tree.” The Sacred Tree is a spiritual place where all people can assemble and acquire or achieve required healing, strength and power, knowledge and wisdom, and a sense of security and sanctuary. The Sacred Tree is highly symbolic and is representative of the close connectedness to the “Mother Earth,” since its roots are firmly and deeply embedded into her. Moreover, the branches of the Sacred Tree are also highly symbolic because they reach upwards towards “Father Sky.” Figure 4.1 is a pictorial representation of this Sacred Tree, which displays the four great intended meanings of protection, nourishment, growth and wholeness.

The symbol of a circle is also significant spiritually and is often depicted or represented in the form of a Medicine Wheel (see Figure 4.2), which also helps to pictorially represent the teaching of Bimaadiziwin (Beckman Murray et al. 2006; Bopp et al. 1984). First Nations’ Medicine Wheels are considered powerful and sacred symbols of the universe that depicts the circularity of life and the balance between the four required aspects of self: (a) Physical, (b) mental, (c) emotional and (d) spiritual (Bartfay 2010a; Bartfay and Bartfay 2015). The Northern component of the medicine wheel is often associated with the season winter, the colour white and a rock that represents strength and required action and the wolf (Bopp et al. 1985; Hales and Lauzon 2007; Beckman Murray et al. 2006). The Southern component of the medicine wheel is often associated with summer, the colour red and a tree that represents knowledge and honesty, and the bison or buffalo. The western aspect symbolizes the season fall, the colours black or blue, which represent sharing, reason and emotional responses and the bear. Lastly, the eastern component often symbolizes spring, the colour yellow and an eagle that represent the need for vision and kindness.

The totem pole, which dates back to the 1700s, also remains an important symbol of indigenous people in south-east Alaska, north-west Pacific coast and elsewhere (Halpin 2002; Huteson 2002; Jonaitis and Glass 2010). The word totem is derived from the Ojibway word “odoodem” that means “his kinship group” (Bartfay and Bartfay 2015). The carved symbols and figures represented on the totem poles are as varied as the cultures and clans that they originate from, but have never been employed as objects of worship per se. The lower the carved symbol or figure on the totem pole, the lower its importance. By contrast, the higher the symbol or figure, the more important it is. This is where the common phrase “low man on the totem pole” comes from.
Totem poles are employed for a variety of reasons including purely artistic ventures; to illustrate stories that commemorate important historical events, accomplishments or persons; to represent shamanic powers; to recount familiar legends; to celebrate cultural beliefs and values; illustrate familiar lineages or prestige; serve as emblems for clans or families; symbolize unity; and illustrate links to spiritual ancestors (Halpin 2002; Huteson 2002; Jonaitis and Glass 2010).

Public health professionals and workers need to be cognizant of the fact that Indigenous beliefs, customs and values are oft en rooted in the context of their oral history and traditions. Decision making related to their way of life, including those surrounding the concept of health and well-being, are oft en situational in nature and dependent on the values and norms of their extended family unit and/or community (Daniel et al. 1999; Ellerby et al. 2000; Hernandez et al. 1999; Young 2003; Young et al. 2000). Indeed, the family and its children are recognized as the cornerstone of various Indigenous communities (Hammersmith and Sawatsky 2000). Indigenous values oft en emphasize holism, pluralism, autonomy, the importance of community- and family-based decision making and the maintenance of their overall quality-of-life, as opposed to the pursuit of a cure per se (Bartfay 2010a).

**Figure 4.2 First Nations Medicine Wheel**

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**Delivery of Health Services**

The role of the Federal government in providing delivery of health care services to Indigenous peoples dates back to 1945, when responsibility was transferred from the Department of Indian Affairs to the newly constituted Department of National Health and Welfare (Health Canada 2007c). Subsequently, a network of eighteen hospitals, thirty-three nursing stations, fifty-two

**Photo 4.10** Originally, totem poles were the size of a walking cane, but slowly grew in grandeur and size over the centuries.
health centres with dispensaries and thirteen other health facilities with full-time physicians or nurses were established to serve the needs of Indigenous communities over the next ten years. In 1962, Health Canada was mandated with the responsibility for bestowing direct health service in Inuit communities in northern Canada and to First Nations people living on reserves (Bartfay 2010a, 2010b; Bartfay and Bartfay 2015).

During the mid-1980s, there was growing interest and movement by Inuit and First Nations communities to control and manage a greater proportion of their required health services (Health Canada 2007c). More recently, the First Nations and Inuit Branch of Health Canada (FNIHB 2008) has agreed to support the delivery of public health and health promotion services on reserves and in Inuit communities with this proposed model under the Health Services Transfer Agreement (HSTA). However, this transfer agreement of increased self-management and control of their health care services only applies to communities located south of the 60th parallel. According to Health Canada (2001b), since initiation of the transfer process of control and management of their health services more than a decade ago, 244 communities of the 599 eligible (or 41%, N = 388,712 total individuals) have agreed to sign the HSTA (Bartfay 2010a; FNIHB 2008).

Health care delivery approaches and systems vary in scope across provinces and territories in Canada, and between Indigenous communities and reserves. Larger and less-isolated communities, for example, often have designated health centres that provide their residents with more traditional public health and primary care services (Bartfay 2010a). Conversely, remote Indigenous communities will often have only nursing stations staffed by registered nurses (RNs) or nurse practitioners (NPs). NPs are licensed RNs who have advanced clinical and scientific knowledge and decision-making skills in assessment, diagnosis and health care management (Bartfay and Bartfay 2015; Stafanson and Bartfay 2010). Dalhousie University had the first educational program established for NPs in 1967 to deal with the critical shortage of physicians, and was targeted for RNs working in remote northern nursing stations in Nova Scotia (Stafanson and Bartfay 2010).

In 1998, the Ontario Minister of Health and Long-term Care (MOHLTC) passed Bill 127– the Expanded Nursing Services for Patients Act. This Act gives licensed NPs in the province of Ontario independent authority to prescribe a variety of medications, communicate a medical diagnosis (e.g., diabetes), and order a variety of blood tests, x-rays and diagnostic ultrasounds (College of Nurses of Ontario 2001, 2003). NPs in Ontario provide wellness screening activities (e.g., pap smears), monitor and assess infant growth and development, diagnose and treat minor illnesses (e.g., ear or urinary tract infections) and minor injuries (e.g., sprains and lacerations), provide screening and diagnostic evaluations for a variety of common clinical conditions (e.g., diabetes, heart disease) and clinically assess and monitor these patients. More recent legislation in Ontario has also expanded the role of NPs to include admitting and discharging patients from hospitals and prescription of various classes of medications. In 2004, representatives from all ten provinces and three territories meet and developed the first standardized national licensing exam for NPs in Canada. Despite these efforts, there remains of shortage of both RNs and NPs in Indigenous communities across Canada (Bartfay and Bartfay 2015; Stafanson and Bartfay 2010).

It is notable that approximately two-thirds of Indigenous peoples in Canada live in rural or remote areas (Shah 2003). There are few physicians and surgeons in rural and remote communities in Canada. Patients with serious illnesses in these communities must often wait eight to twelve hours for a flight to see a physician. In fact, only about 40% of the Inuit living in the Arctic get to see a physician throughout the year, in comparison to over 70% of other Canadians living in urban areas (World Health Organization 2007). There are also very few Indigenous physicians and surgeons. In 2002, Indigenous represented only 0.9% of all first-year medical students in Canada (Thompson 2010). The Indigenous Physicians Association of Canada, the National Indigenous Health Organization (NAHO) and the Association of Faculties of Medicine in Canada are currently collaborating on improving these stark numbers to better address the health care needs of Indigenous peoples across Canada.

Health care services, therefore, are often only provided by nurses. These nursing services are often delivered on need; or on an on-call basis 24-hours-a-day, seven-days-per-week (24/7) basis (Bartfay 2010a; Bartfay and Bartfay 2015). Nurses in these locations typically work in nursing stations (outposts) that are staffed alone by
themselves or by a small group of nurses. Nurses in these isolated and remote communities provide a variety of essential public health services including physician and pharmacist replacement services, and advanced health assessments and referrals (Cradduck 1995; Tarlier et al. 2003). Nurses in these communities may be required to staff a small nursing station (outpost) and/or be flown in on a needs basis. Funding for these health care services depends on the size of the community, their accessibility and identified health care needs (Health Canada 2001a, 2001b). Table 4.2 shows the major types of communities by the FNIHB, which is based on their accessibility and community resources available (Health Canada 2001a, 2001b).

According to Health Canada (2007d), there are over 600 First Nations communities with 195 health centres and seventy-six nursing stations that provide primary health services in remote and/or isolated communities nationally. There are approximately 1,200 full-time RNs collectively employed either by the FNIHB and the transferred bands (Health Canada 2001a, 2001b). FNIHB nurses are employed by the Government of Canada (Federal), and they more than often serve as the only or main point of contact with our publicly funded health care systems. Nurses are also often employed by various Band Councils who have obtained responsibility for providing health care services in accordance with the HSTA (Health Canada 2007a, 2007b).

The Sioux Lookout Zone Hospital in Ontario had its control transferred to the province in 2002, as part of an amalgamation agreement reached with the local community hospital. In the province of Manitoba, the Percy E. Morre Hospital located in Hodgson, and the Norway House Hospital still operate under the jurisdiction of the FNIHB. In Alberta, The Blood Indian Hospital in Cardston also operates under FNIHB.

It is notable that although these hospitals were established to service the health care needs of Indigenous communities in these regions, the health care and diagnostic services provided by these hospitals are available to any non-Indigenous in need as well. In June of 2004, the non-profit All Nations’ Healing Hospital was opened in Fort Qu’Appelle, Saskatchewan. This institution was built on First Nations land and integrates traditional Indigenous beliefs, values and health care practices with the conventional western-type of medical health care services employing a culturally sensitive approach (Bartfay 2010a; Hales and Lauzon 2007). Traditional healing practices and beliefs are integrated to meet the health care needs and challenges facing Indigenous peoples. These include the use of traditional herbal or folkloric remedies, shamanism and a variety of purification rituals including healing circles, smudging and sweat lodges (Donahue 1996; Mullin et al. 2001).

**Cultural Safety and Public Health**

The preservation and maintenance of the health and well-being of Indigenous peoples across Canada is a growing public health challenge. Indigenous beliefs surrounding the concept of health emphasize a holistic and reciprocal relationship between the physical and spiritual world, the individual and their environment,
and their mind, body and spirit (Bartfay 2010a; Bartfay and Bartfay 2015). Indigenous beliefs are rooted in the context of oral history and culture, and decisions surrounding one's health and well-being are often situational and highly dependent on the values of the individual within the context of their family and community.

Public health care professionals and workers need to be aware of the history, beliefs, traditions and cultures of Indigenous communities they serve to effectively provide safe, effective and culturally appropriate primary health care services. The concept of “cultural safety” is based on a broad definition of culture care and on the public health care professional's interpretations and analyses of their own cultural selves and the impact of these on providing health care, and requires the mutual empowerment of both client and public health care professional or worker (De and Richardson 2008; Dion Stout and Downey 2008; Richardson and Williams 2007). With the concept of cultural safety, it is the client who ultimately judges whether the professional relationship is seen as beneficial, healing and/or therapeutic in nature. This concept first emerged during the 1980s in response to the poor treatment of the Maori who are indigenous New Zealanders. However, the concept of cultural safety has broadened to include a wide range of determinants of health.

It has been argued that public health care systems that are deemed culturally unsafe fail to acknowledge institutional discrimination and disregard the needs of Indigenous families and communities (Brown and Fiske 2001). The concept of cultural safety provides a mechanism for recognition of the indices of power inherent in any professional relationship or interaction, and the potential for disparity and inequality within any relationship (Bartfay 2010a; Bartfay and Bartfay 2015). An understanding of this concept is fundamental to providing safe, relevant and culturally appropriate public health care to Indigenous people. An understanding and acknowledgement by the public health professional or worker who imposes their own cultural beliefs and values may disadvantage the client is fundamental to the delivery of culturally safe primary health care services. Additional research by both Indigenous and non-Indigenous health care scientists and practitioners is needed to address the growing number and magnitude of health concerns and issues facing Indigenous populations in Canada. Accordingly, a proposal has been tabled for the need to create a unique research institute devoted solely to Indigenous health (Reading et al. 2002).

**Group Activity-based Learning Box 4.1**

**Health Challenges Facing Indigenous People in Canada**

This box provides the learner with opportunities to examine major health challenges and possible public health interventions to address these issues. Working in small groups of three to five students, discuss and answer the following questions:

1. What are some of the major health problems/challenges facing Indigenous peoples in your province or territory?

2. What is the role of Indigenous community leaders and elders in responding to these health problems/challenges?

3. What would you do as a public health care professional or worker to better address the health care needs of Indigenous people in your province/territory?

4. How can research findings be utilized to facilitate culturally sensitive evidence-based public health services in Indigenous communities across Canada?
Major Current Health Issues

The health of Indigenous peoples is one of the most pressing issues for public health in Canada. For example, arthritis is one of the most prevalent non-communicable chronic conditions among Indigenous populations in Canada (Butler-Jones 2012; Public Health Agency of Canada 2010a). According to the 2006 Indigenous Peoples Survey, 20% of respondents fifteen years and older reported being diagnosed with arthritis or rheumatism (Ng et al. 2010).

The life expectancy of Indigenous peoples is approximately ten years less in comparison to non-Indigenous Canadians (Bramley et al. 2005; Butler-Jones 2012; MacKinnon 2005; Statistics Canada 2004, 2008). For example, whereas the average life expectancy for non-Indigenous in Canada is seventy-six years for men and eighty-three years for women, First Nations men are expected to live 68.9 and 76.6 years (Health Canada 2005b; Health Council of Canada 2005). Statistics Canada (2004) reports that First Nations infants are more likely to be born pre-term, but have heavier birth weights than non-First Nations infants. Moreover, infant mortality rates are typically more than twice as high among First Nations, when compared to non-First Nations people. Post-neonatal mortality rates are 3.6 times as high and are independent of neighbourhood socio-economic status (Statistics Canada 2004). The birth rate among Indigenous women is higher than their non-Indigenous counterparts at 2.6 children per woman aged fifteen to forty-nine, 3.4 children per Inuit women, 2.9 children per First Nations women and 2.2 children per Métis women (Butler-Jones 2012; Statistics Canada 2010a, 2011b). In November 2010, a report based on a two-year study by the House of Commons Standing Committee on Human Resources, Skills and Social Development and the Status of Persons with Disabilities (HUMA) issued a comprehensive report that called for a Federal poverty-reduction plan (Canada 2010). Specifically, HUMA recommended that national initiatives be undertaken to:

- eliminate the gap in well-being between Indigenous and non-Indigenous children by granting as a first step adequate funding to social programs that provide early intervention to First Nations, Inuit and Métis children and their families including the Indigenous Head Start and the First Nations and Inuit Child Care Initiative (Canada 2010, Recommendation 4.3.2).

The Federal government responded by providing a list of current existing Indigenous programs in Canada. Add to your knowledge of current Indigenous health issues and resources by accessing the Web-based Resource Box 4.3.

With each passing year, it appears that more and more Indigenous communities and groups are speaking out in protest at the imbalances and substandard levels of health care delivery received compared to non-Indigenous populations (Bartfay and Bartfay 2015). Deagle (1999) argues that the health care system in Canada is best categorized as a three-tier system, with Indigenous peoples on the last tier. The Assembly of First Nations has accused the Government of Canada for failing to appropriately invest in measures to improve the social and health conditions, and quality of life of First Nations peoples (Adelson 2005). For example, in November, 2005 an *Escherichia coli* outbreak in the water supply on the Kashechewan reserve near Timmons, Ontario resulted in

**Web-based Resource Box 4.3 Indigenous Health Issues and Resources**

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<tr>
<th>Learning Resource</th>
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<tr>
<td>Indigenous Nurses Association of Canada (ANAC)</td>
<td><a href="http://www.anac.on.ca">http://www.anac.on.ca</a></td>
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<tr>
<td>Assembly of First Nations</td>
<td><a href="http://www.afn.ca">http://www.afn.ca</a></td>
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<tr>
<td>First Nations and Inuit Health Branch</td>
<td><a href="http://www.hc-sc.gc.ca/fnihb-dgspni">http://www.hc-sc.gc.ca/fnihb-dgspni</a></td>
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<tr>
<td>Indian and Northern Affairs Canada</td>
<td><a href="http://www.ainc-inac.gc/pr//pub/ywt/index_e.html">http://www.ainc-inac.gc/pr//pub/ywt/index_e.html</a></td>
</tr>
<tr>
<td>National Indigenous Health Organization (NAHO)</td>
<td><a href="http://www.naho.ca">http://www.naho.ca</a></td>
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various health conditions including severe skin rashes and gastro-intestinal disorders (e.g., diarrhoea, vomiting) (Health Canada 2005c). Consequently, because their water supply was deemed not safe for human consumption, 946 residents of the Kashechewan reserve had to be evacuated and received treatment for their associated health conditions. The contamination of drinking water supplies in these First Nations’ communities resulted from out-dated and/or poorly managed water treatment plants. In March, 2007 there were ninety-two First Nations’ communities across Canada under a drinking water advisory due to unsafe or contaminated water supplies (Health Canada 2007a). Despite the passage of time, the situation appears to remain status quo given that 121 First Nations communities across Canada were under drinking water advisories as of March 31, 2012 (Health Canada 2012a; National Expert Commission Canadian Nurses Association 2012). The Council of Canadians (2015) reports that as of January 2015, there were 1,838 drinking water advisories issued across Canada, including 169 drinking water advisories issued on 126 First Nation communities.

Mental Health Issues, Injuries, and Drownings

Unemployment rates of 25% to 50% have been reported in certain Indigenous communities across Canada, with associated decreased life expectancies and negative physical and mental health outcomes (McMurray 2007). For example, the First Nations’ and Inuit Health Branch of Manitoba reports that between 30% and 50% of all health related issues for which Indigenous were seeking assistance from nurses were of mental health origin (Migrone et al. 2003).

Self-inflicted injuries (e.g., cutting oneself) and the suicide rate are approximately six times higher in Indigenous youth aged fifteen to twenty-four, in comparison to the general population in Canada (Bolaria and Bolaria 2006, 2002; Crisis Intervention and Suicide Prevention Centre of British Columbia 2008). In fact, suicide and self-inflicted injuries in Indigenous youth and adults up to the age of forty-four years of age remain leading causes of death (Canadian Mental Health Association n.d.; National Expert Commission Canadian Nurses Association 2012). Moreover, the suicide rate among Inuit youth is among the highest in the world, and is eleven times the Canadian national average (Health Canada 2012b). The Canadian Institute for Health Information (CIHR 2004) reports that injury rates resulting in premature deaths among First Nations’ people living on reserves are four times higher in comparison to the general Canadian population.

Mortality rates resulting from trauma and injuries (e.g., motor vehicle accidents, falls) in Indigenous children are significantly higher in comparison to non-Indigenous Canadian children (MacMillan et al. 1999). Every $1.00 invested toward road safety and prevention results in a $40.00 saving towards health care costs, or a return on investment (ROI) of 3,900%. Findings from the First Nations and Inuit Regional Health Survey show that injuries, trauma and drownings are major health concerns in school-aged and teenage Indigenous children (Canadian Institute of Child Health 2000). For examples, by the time Indigenous children reach the age of seventeen years, 13% of them will have broken a bone; 4% will receive a serious trauma to the cranium; 2% will report severe frostbite and 3% will have drowned. Similar findings were reported by Bristow et al. (2002) in their study that examined paediatric drownings in Manitoba.

Gasoline Sniffing

The sniffing of the toxic solvent gasoline is a growing problem in many Indigenous communities across Canada, and this disturbing health altering behaviour has been reported in teens and school-aged children (Schissel 2006; York 1992). Gasoline is a highly addictive neurotoxin that may result in permanent damage to the brain, nervous system, kidneys, liver and other vital organs (Schubert and Bartfay 2010c; Bartfay and Bartfay 2015).

On January 26, 1993, six Inuit youth from Davis Inlet, Labrador made national headlines in the news when they attempted to commit group suicide by sniffing gasoline (Schissel 2006). Luckily, their suicide attempt was thwarted by a counsellor who heard about their plans from fellow children. Alarmingly, twenty additional Inuit children attempted to end their lives in November, 2000 and were consequently air-lifted for medical treatment and counselling to Goose Bay. According to Schissel (2006), of the 169 children (aged 10–19)
living in Davis Inlet at the end of 2000, 154 have attempted gas sniffing and seventy children were considered chronic gas sniffers.

Gasoline sniffing is not limited to Inuit populations in Canada, many Indigenous communities have been affected or are threatened due in part to the negative social, cultural and economic effects of colonization and/or the reserve system (Bartfay 2010a, 2010c). For example, during the 1940s the Shamattawa Cree of Northeastern Manitoba were relocated onto reserves created by the Federal government (York 1992). Gasoline has been referred to as their “lifeblood” of these reserves because residents are dependent on it for a variety of uses including heating their homes and fuelling their all-terrain vehicles and cycles (ATVs, ATCs), and snowmobiles so they can hunt and fish to feed their families (York 1992). Unfortunately, it is also a relatively inexpensive addictive substance of abuse that can easily be obtained by youths, and it is one of the most dangerous forms of addictions in the world.

But gasoline is the deadliest poison at Shamattawa. Children and teenagers sniff to gain a quick escape, a cheap and immediate high—a few minutes of euphoria in the land of poverty and misery... At night, they break into snowmobile gas-tanks to steal more of the precious substance, until it finally dominates their existence... Medical experts have concluded that gasoline sniffing is one of the most dangerous addictions in the world... a single inhalation can hook a child... Once inhaled, gasoline harms the kidneys and liver, and inflicts permanent damage to the nervous system and the brain (York 1992, 8–9).

These highly publicized events above received both national and international coverage by various news media outlets. They have also brought with them a dramatic realization of the negative effects of colonization and the creation of reserves, which has often resulted in the social, economic and political marginalization of Indigenous peoples in Canada (Bartfay 2010c).

Health of Indigenous Families

Infant mortality rates are often employed as an indicator of the health of a nation or defined population because it is strongly associated with both adult mortality and overall life expectancy rates (Mandelco and Bartfay 2010). Over the past few decades, infant mortality rates have steadily declined in Canada. For example, in 1960 it was 27 per 1,000 live births, and by 2003 it had dropped to 5.3 deaths per 1,000 live births. Mortality rates amongst Indigenous infants remain two to three times higher in comparison to non-Indigenous Canadians (McMurray 2007). Infant mortality rates were highest in Nunavut (19.8 per 1,000 live births); among the provinces—Manitoba ranked the highest (8.0 per 1,000 live births), and New Brunswick and British Columbia had the lowest rates at 4.1 and 4.2 live births per 1,000, respectively (Statistics Canada 2006c).

The Research Focus Box 4.1 examines maternal psychosocial, situational and home-environments of Indigenous adolescent mothers residing on and off reserves, in comparison to non-Indigenous mothers in Canada. The findings suggest that teen First Nations and Métis mothers may be at increased risk for negative health and developmental outcomes as a result of their compromised socioeconomic living conditions and negative home environments.

The family unit as a collective whole is often faced with the challenge of providing adequate shelter. Based on findings from the 2006 Census, Indigenous children were almost nine times (26%) more likely to live in families with a crowded home, in comparison to non-Indigenous children (3%) (Statistics Canada 2009). Furthermore, remote and isolated communities are often confronted with the additional burden of having to secure affordable and nutritious food items for themselves and their children (Bartfay 2010a; Bartfay and Bartfay 2015). For example, the prevalence of iron-deficiency anemia and associated risk factors were found to be higher in one study that examined James Bay Cree infants in Northern Québec (Willows et al. 2000). The cost of food is also rising in many remote Indigenous communities and regions in Canada. Indigenous peoples are reported to be four times more likely than non-Indigenous people to experience hunger as a direct result of poverty (Food Banks of Canada 2011). For example, residents in Nunavut spend approximately 25% (or $14,815) of their total expenditures on food, compared to the national average of only 11%
(or $7,626) of total expenditures (Statistics Canada 2011). Indeed, the cost for a litre of milk can be as high as $12, $17 per kilogram for green peppers and $29 for cheese spread (Food Banks of Canada 2012). The use of food banks has also grown in the territories over the past decade and food insecurity has become much more severe of late due to the high costs of delivering food items to these remote communities and the population boom. As of March 2008, the total number of individuals accessing food banks in the territories was 1,340, and by 2012 this number has grown to 2,420 (72.8% increase) (Food Banks of Canada 2012). Similarly, Statistics Canada (2009) reports that First Nations, Inuit and Métis people account for only 4% of the total Canadian population, yet make up 11% of individuals utilizing food banks nationally (Statistics Canada 2010c).

According to WHO (2000a, 2000b, 2000c), when treatment protocols for tuberculosis (TB) were first introduced in 1948, it was predicted that the respiratory disorder would be eradicated worldwide by the year 2000. A growing number of Indigenous families are forced to live in crowded houses. This over-crowding is an ideal breeding ground for respiratory infections such as TB. In addition to over-crowding, multidrug-resistant strains of TB have also emerged, and an estimated eight million people acquire TB worldwide each year. It is predicted that by 2020, nearly one billion people will be newly infected globally, 200 million will be severely ill,
and thirty-five million will die if control measures are not further developed (WHO 2000a, 2000b, 2000c). The incidence of TB in 1999 in Indigenous in Canada was approximately seventy per 100,000, in comparison to only one per 100,000 in non-Indigenous (Fitzgerald et al. 2000; Long et al. 1999). Currently, the TB rate among Indigenous people is almost six times higher in comparison to non-Indigenous (Muntaner et al. 2012; National Expert Commission Canadian Nurses Association 2012). George (2012) reports that the incidence of TB among the Inuit is currently 284 times higher, in comparison to other Canadians, according to recent statistics released by the Government of Nunavut’s Health Department. In 2010, the overall rate for TB among the Inuit was 198.6 per 100,000 people, compared to 0.7 per 100,000 for the Canadian-born, non-Indigenous members of the population. Moreover, the rate for Inuit in Nunavut was even higher at 434 times the national rate (George 2012). The WHO strategy for the detection and cure of TB consists of the following five elements: (i) Political commitment, (ii) microscopy services, (iii) drug supplies, (iv) surveillance and monitoring systems and (v) the use of efficacious regiments with direct observation of treatment (Bartfay and Bartfay 2015; Thomas and Bartfay 2010). This represents a significant public health challenge in various Indigenous communities across Canada.

**Sexually Transmitted Infections**

The incidence of STIs, including HIV/AIDS, chlamydia, gonorrhoea and syphilis has been increasing in recent years, especially among Indigenous teens and young women (Public Health Agency of Canada 2010c; Ship and Norton 2001; WHO 2000b). In 2005, for example, although Indigenous peoples comprised 3.3% of the entire population in Canada, 22.4% of new infections for HIV/AIDS were reported amongst Indigenous (National Indigenous Council on HIV/AIDS 2003; Public Health Agency of Canada [PHAC] 2006a, 2006b). Similarly, in 2013 Indigenous peoples comprised only 4.3% of the entire Canadian population (Statistics Canada 2013), yet 8.9% of all prevalent infections for HIV/AIDS reported were amongst Indigenous peoples (PHAC 2012). STIs are notifiable communicable diseases in Canada (PHAC 2003; 2005), and all provinces and territories have developed guidelines and recommendations for prenatal testing for these diseases (Canadian Paediatric Society 2006).

The Government of Canada has identified HIV/AIDS as an epidemic among Indigenous peoples (Jenkins et al. 2003; PHAC 2004). In May of 2001, the National Indigenous Council on HIV/AIDS (NACHA 2002) was established to address this epidemic. Furthermore, the council was also formed to advise Health Canada on STI prevention and treatment strategies that are culturally specific to Indigenous peoples (Figure 4.3).

![Figure 4.3](image)

**Figure 4.3** HIV-positive test reports among Indigenous people as a percentage of the total number of HIV-positive reports in Canada from 1998 to 2008.

Indigenous people remain disproportionately affected by HIV/AIDS and accounted for 13% of all new HIV infections in 2008, a rate estimated to be approximately 3.6 times higher than non-Indigenous (Butler-Jones 2012; PHAC 2010b, 2010d). Between the years 1998 and 2008, female Indigenous accounted for approximately 50% of all new reported HIV infections, compared with 21% among the non-Indigenous population (PHAC 2010b, 2010d). Add to your knowledge of STIs and current evidence-based public health programs and initiatives for Indigenous populations by accessing the Web-based Resource Box 4.4.

Cardiovascular Disease and Diabetes

The Heart and Stroke Foundation's (HSF 2003) report entitled "The Growing Burden of Heart Disease and Stroke," notes that Indigenous are particularly vulnerable to the development of CVD, including heart disease and stroke. Findings from this report indicate that Indigenous peoples are more likely to have major risk factors associated with the development of CVD including a sedentary lifestyle, being overweight or obese, consuming large amounts of processed foods high in sugar, saturated and trans-fats and salt, smoking and diabetes. The 2002–2003 First Nations Regional Longitudinal Health Survey found that women aged twenty to thirty-four were more likely to be obese or morbid obese, in comparison to non-Indigenous women (National Indigenous Health Organization [NAHO], 2006). The greater incidence of sedentary lifestyles can be attributed, in part, to a reduction in traditional fishing, trapping and hunting practices, and an increased reliance on motorized boats and vehicles such as ATCs and snowmobiles (Bartfay 2010a; Bartfay and Bartfay 2015). Furthermore, changes to the traditional fishing, trapping and hunting lifestyles by Indigenous peoples in Canada have resulted in an increased reliance on highly processed commercially available foods, an increased incidence of obesity in both children and adults, and Type 2 diabetes (Bartlett 2003; Bobet 1998; Ralph-Campbell et al. 2009; Youn 2003; Youn et al. 2000).

Obesity is a well-documented risk factor for the development of various chronic diseases including Type 2 diabetes, heart disease and stroke, metabolic syndrome; hypertension, hyperlipidemia and certain forms of cancer. Interestingly, although Inuit populations in Canada have also observed an increased incidence of obesity over the decades, they still have a relatively low incidence of Type 2 diabetes. The term "healthy obese" has thus been linked to Inuit peoples; where although individuals have increased levels of body fat present, this does not appear to predispose them to the development of Type 2 diabetes (Lemas et al. 2011; Reading 2010; Wildman 2009). It is speculated that a diet rich in polyunsaturated fatty acids (n-3 PUFA) by Inuit peoples may be a protector factor.

It is notable that diabetes was not known in Indigenous populations fifty to sixty years ago in Canada who engaged in traditional subsistence practices (e.g., hunting, fishing) without the use of motorized vehicles, ate traditional diets and had more active lifestyles (Bartfay 2010a). Further challenges to obtaining healthy and affordable food choices exist in northern and remote Indigenous communities (Butler-Jones 2012; Chan et al. 2006; Rosol 2009; Rosol, et al. 2011). For example, according to the 2007 to 2008 Inuit Health Survey, approximately 70% of households in Nunavut reported experiencing moderate-to-severe food insecurity over the past year (Egeland et al. 2011; Rosol 2009; Rosel 2011).

Tobacco has been employed by First Nations peoples as a sacred and purifying agent in their traditional ceremonies. However, the use of commercially available tobacco products such as cigarettes, cigars and chewing tobacco neither support nor is in concert with traditional sacred ceremonial uses of tobacco in First...

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<tr>
<td>Indigenous AIDS Network</td>
<td><a href="http://www.caan.ca">http://www.caan.ca</a></td>
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Web-based Resource Box 4.4 HIV/AIDS Resources for Indigenous Populations
Nations’ cultures, as detailed in the First Nations and Inuit Tobacco Control Strategy (FNITC) (Health Canada 2005a). Indeed, there are significant differences between ceremonial uses of tobacco and smoking or chewing commercially available products, which have major health implications for Indigenous communities across Canada (Bartfay 2010a; Bartfay and Bartfay 2015).

The age-adjusted rate for adult onset Type 2 diabetes in Indigenous people is three to five times higher than the general non-Indigenous population (Bobet 1998; First Nations and Inuit Regional Health Survey 1999; Health Canada 2011; Macaulay et al. 2003; Statistics Canada 2007; Young 2003; Young et al. 2000). For example, Health Canada and the Public Health Agency of Canada (2011) report that 17.2% of on-reserve and 10.3% of off-reserve First Nations peoples in Canada were clinically diagnosed with Type 2 diabetes, compared to a national rate of 6.4% for non-Indigenous peoples. The Indigenous Peoples Survey conducted by Health Canada found that 6.5% of First Nations people over the age of fifteen years have already been diagnosed with Type 2 diabetes, and this number has been steadily increasing over the past decades (Hales and Lauzon 2007). Moreover, the survey found that 5.5% of Métis and 8.4% of First Nations people living on reserves have this disease. The 2002–2003 First Nations Regional Longitudinal Health Survey found that women aged twenty to thirty-four years are now being diagnosed with diabetes earlier (HAHO 2006). Indigenous mothers are also at increased risk of having adult-onset Type 2 diabetes and/or developing gestational diabetes (Hegele et al. 2002; Young et al. 2000).

Discouragement and suppression of traditional lifestyles and diet, displacement of entire communities, the exploitation of natural resources for profit by multinational companies and increasing sedentary lifestyles are just a few of the associated factors associated with the higher incidence of diabetes in Indigenous communities in Canada. The Canadian Diabetes Association Clinical Practice Guidelines Expert Committee (2003) reports that public health professionals and workers now face major challenges in trying to provide Indigenous people with culturally appropriate health care programs and prevention strategies. For example, there has been increased attention by health care professionals and various levels of government to provide culturally appropriate food guides and educational toolkits (e.g., Health Canada 2007b, 2003; Northwest Territories Food Guide 2003). The National Indigenous Diabetes Association (NADA) was established to promote healthy lifestyles (e.g., dietary choices, exercise, stop smoking), and to provide educational materials and assistance for those affected by this potentially life-threatening disease and its associated health complications including heart disease, stroke, kidney disease, blindness and amputations of limbs (Bartfay 2010a; Bartfay and Bartfay 2015). For example, every $1.00 spent on a tobacco prevention campaign results in a $20.00 saving in health care costs, or a return on investment of 1,900%.

The Canadian Diabetes Association Clinical Practice Guidelines Expert Committee (2003, S111, Grade D, Consensus) have made the following recommendations for the prevention, treatment and management of diabetes in First Nations, Inuit and Métis peoples:

(a) Treatment of diabetes in Indigenous people should follow clinical practice guidelines.
(b) There must be recognition of, respect for and sensitivity regarding the unique language, culture and geographic issues as they relate to diabetes care and education in Indigenous communities across Canada.
(c) Culturally appropriate primary prevention programs should be initiated by Indigenous communities to increase awareness of diabetes, increase physical activity, improve eating habits and achieve healthy body weights, and to promote environments that are supportive of a healthy lifestyle.
(d) Community-based diabetes screening programs should be established in Indigenous communities. Urban people of Indigenous origin should be screened for diabetes in primary care settings.

Add to your knowledge of diabetes nutrition and current public health toolkits and programs that have been designed specifically for Indigenous populations by accessing the Web-based Resources Box 4.5.
Web-based Resource Box 4.5 Indigenous Nutritional Guides and Toolkits

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Future Directions and Challenges

One of the major challenges involves educating public health professionals and workers about Indigenous definitions and meanings surrounding the concept of health. Public health care professionals need to be cognizant that western definitions of health and health care systems may often conflict with Indigenous culture, beliefs and health care practices (Bartfay 2010a; Bartfay and Bartfay 2015). Current curriculums and programs in public and community health need to include current (e.g., STIs, suicide in youth) and emerging health issues (e.g., growing rates of Type 2 diabetes, obesity trends) facing various Indigenous communities across Canada. Moreover, public health care professionals and workers also need to be educated and cognizant of the negative effects of colonization and its associated products (e.g., reserve system, residential schools) and how these have often marginalized and negatively impacted the health and well-being of First Nations, Inuit and Métis peoples. Indigenous families and communities face immense health challenges in the new millennium and public health care professionals, workers and policy makers must learn to work in collaboration with these populations to plan for effective access and delivery of primary health care services across the lifespan.

Collaborative public health initiatives and programs should be developed in consultation with Indigenous communities, elders and stakeholders and should be based on culturally appropriate and evidence-informed interventions. To better address these health care challenges, a delegation of Indigenous people and health care researchers have collectively lobbied the Government of Canada to consider funding research initiatives to more effectively deal with current Indigenous health issues based on evidence-informed initiatives. These recommendations were formally presented to the CIHR, and in the year 2000 the “IAPH was launched (Beckman Murray et al. 2006). The aim of the IAPH is to present the results from scientific investigations to Indigenous people and stakeholders in a manner that is culturally appropriate, accessible, and user friendly. National initiatives, such as the IAPH, are critical if we are to address current and emerging public health issues facing various Indigenous communities across Canada.

Group Review Exercise Box 4.1 “Sleeping Children Awake”

Overview of This Investigative Documentary

This short six-part documentary outlines the history of the residential school system and its negative ripple effects on First Nations families and peoples in Canada. Sleeping Children Awake (SCA) was filmed in 1991 and televised in 1992 and was one of the earliest, feature documentaries to examine the impact of the residential school system. SCA won several awards including “Best Canadian Documentary 1993” (CanPro) and was screened at the Truth and Reconciliation Commission of Canada’s national events held in Winnipeg, Manitoba 2010, and Saskatchewan 2012.
European colonization often resulted in “negative ripple effects” that had devastating social and health consequences. For example, French and English colonizers brought with them various diseases that were previously unknown to Indigenous populations including various STIs, tuberculosis, measles and smallpox that devastated tens of thousands of First Nations and Inuit peoples (Bartfay 2010a; Donahue 1996).

Government policies such as the treaty and reserve systems, residential schools, and various legislations were developed to control and assimilate First Nations people into the western cultures and belief systems have negatively impacted on their health and well-being. For example, we learned that following Confederation, Indigenous peoples including First Nations, Inuit and Métis were often forced to be relocated and/or displaced from their traditional birth and hunting territories to make room for the ever-increasing numbers of European settlers.

The First Nations’ Medicine Wheel is considered a powerful and sacred symbol of the universe, which depicts the circularity of life and the balance between the four aspects of self: (i) Physical, (ii) mental; (iii) emotional, and (iv) spiritual.

Indigenous beliefs, concepts, health care practices and structures often conflict with the western health care systems and definitions of health and well-being. Indeed, Indigenous perspectives on health and well-being emphasize a holistic and reciprocal relationship between the physical and spiritual world, the individual and their surrounding environment, and between the mind, body, and spirit.

Larger and less-isolated Indigenous communities often have designated health centres that provide their residents with more traditional public health and primary health services.
By contrast, nurses and NPs are typically the major health care providers in remote communities, where two-thirds of Indigenous peoples live in Canada.

Public health care professionals and workers need to be aware of the history, beliefs, traditions and cultures of Indigenous communities they serve to provide safe, effective, and culturally appropriate health care.

Public health care professionals and workers also need to be cognizant of the concept of “cultural safety,” which provides a mechanism for the recognition of the indices of power inherent in any professional relationship or interaction, and the potential for disparity and inequality within any relationship.

Lastly, we examined some of the current major health issues and challenges facing Indigenous populations in Canada including mental health issues, tuberculosis, diabetes and heart disease.

Critical Thinking Questions

1. You are working as a public health manager in a remote First Nations’ reserve in Canada. A routine water sample indicates significant growth of the bacteria *E. coli*. How would you deal with the major threat to the health and safety of the residents of the community? Who would you contact and what specific public health measures would you put into place. Justify your choices.

2. List and identify current public health issues facing Indigenous peoples in your community, province or territory. In your opinion, which are the top three issues and why? Identify public health strategies and interventions that could help decreasing the impact of these issues.

3. If you were a provincial/territorial minister of health, what specific policies or legislations would you put in place to improve the health of Indigenous populations across the lifespan in your jurisdiction? Justify your choices.


———. Infant Mortality Rates, by Province and Territory. Ottawa, ON: Author, 2006c (CANSIM, Table 102-0504).


———. Spending Pattern in Canada. Table 4-1 (Canada) and Table 4-14 (Nunavut): Average Expenditure Per Household, Canada, Provinces and Territories, Recent Years. Ottawa, ON: Government of Canada, 2010c.


