

Health Status of Canadians 2016

A REPORT OF THE CHIEF PUBLIC HEALTH OFFICER



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A message from Canada's Chief Public Health Officer

ealth is fundamental to our quality of life and to Canada's prosperity in the world. I think most Canadians would agree that their health and the health of their loved ones is what matters most to them.

Using a collection of health indicators to monitor the health status of a population helps us understand areas where we are doing well and those areas where we can improve. This report tells us Canadians are experiencing



good health on a number of measures—almost 90 percent of Canadians reported having good to excellent health. If you **feel** healthy, then you likely **are** healthy. Canada's average life expectancy of 82 years ranks us as among the healthiest nations in the world. A long life-expectancy reflects well on many social and environmental factors in Canada that influence our health.

There are some worrisome trends. Over a relatively short period of time, the proportion of Canadians living with diabetes has almost doubled from 6% in 2000 to 10% in 2011. This is a concern as we know that more Canadians living with type 2 diabetes is linked to a higher proportion of people with an unhealthy diet, low physical activity and higher rates of overweight and obesity—which are all associated with higher rates of other diseases and conditions.

In addition, some Canadians are not as healthy as others or are at higher risk for poor health outcomes.

- In 2008/2010, more than half of First Nations households on reserve reported not having access to enough safe, affordable and nutritious food;
- In 2011, almost a third of women single-parent households reported living in housing that was not adequate, not affordable and/or not suitable;
- Between 1991 and 2006, men in the lowest income group died of cancer at a rate more than double that of women in the highest income group; and,
- In 2014, the rate of new or retreatment cases of tuberculosis was almost 50 times higher in the Inuit population than in the Canadian population overall.

This snapshot is a useful tool to help bring us closer to narrowing health gaps in Canada and preventing illness in the most vulnerable.

Ultimately, my hope is that this report provides a glimpse to all Canadians about the health of our country while illustrating how many different factors interact to makes us healthy.

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Key messages

HEALTH STATUS OF CANADIANS 2016

HOW HEALTHY ARE WE?

- Canadians are living longer than ever with an **average life expectancy** of 82 years, although life expectancy in Canada is not the same for everyone.
- More babies are being born with a low birth weight than in the past. A higher proportion of babies with a low birth weight are born to mothers under the age of 20 and between the ages of 35 to 49 years.
- The proportion of Canadians who reported a strong sense of community belonging in 2014 was lowest among those aged 20 to 34 years.
- Almost 90% of Canadians reported feeling in good to excellent health – the highest proportion of people among G7 countries.
- At 70%, most Canadians considered their mental health to be either very good or excellent in 2014. People living in lower income households had lowered perceived mental health.

WHAT IS INFLUENCING OUR HEALTH?

- The gap between the highest and lowest **income** groups is widening. Men and women are now equally likely to have a low income.
- More Canadians are completing their **high school and post-secondary education** than ever before in 2015, 90% finished high school and 66% were a post-secondary graduate.
- Canadians with the lowest incomes report the highest rates of core housing need and food insecurity. In 2011, 29% of women single-parent households were in core housing need and 54% of First Nations on-reserve households reported food insecurity in 2008/2010.

- The vast majority of Canadians do not meet recommended levels of **physical activity** with 9 out of 10 children and youth not meeting the Canadian Physical Activity Guidelines.
- The proportion of Canadians who **smoke** is decreasing, but just under 4 million Canadians currently smoke.
- Immunization rates for measles and DPT in Canada are below national immunization coverage goals of 97% by age 2.

HOW ARE WE UNHEALTHY?

- **Cancer** continues to be the leading cause of death in Canada.
- In 2014, Canadians with the lowest income were twice as likely to report living with cardiovascular disease than those of the highest income.
- The proportion of Canadians 20 years and older with **diabetes** almost doubled between 2000 and 2011 - up from 6% to 10%.
- The proportion of Canadians reporting having been injured in the previous year increased to 16% in 2014 from 13% in 2003. An estimated 20% to 30% of seniors fall each year in Canada.
- The proportion of Canadians saying they had been diagnosed with a **mood disorder** increased from 5% in 2003 to 8% in 2014.
- In 2011, just over 340,000 Canadians were diagnosed with **dementia**, representing an estimated 2% of the Canadian population aged 40 years and older.
- Tuberculosis rates for Indigenous and foreignborn populations in Canada are higher than the overall Canadian population. Rates are almost 50 times higher for the Inuit.

What is a health indicator?

n this Chief Public Health Officer's report, select health indicators collectively provide a concise snapshot of the health of our country. Being healthy or sick are concepts that are well understood. However, providing a picture at a point in time of the health of Canadians as a **population** is a complicated task. Unlike gross domestic product (GDP), which is used to gauge the health of a country's economy, there is **no universal measure that tells us about the health of a populace**. Perhaps the closest is life expectancy.

There are hundreds, if not thousands, of health measures available. Rather than reporting on a very lengthy list, health indicators are selected that each "indicate" or are linked to multiple health measures. It is an informative way to gauge the health of a population because even a simple health measure about a specific disease can provide clues to the broader population context. For example, rates of type 2 diabetes in a population show not only the state of the disease itself, but also indirectly reflect on other factors, such as obesity, diet and physical activity, that all play a role in the development of this disease. Diabetes also increases the risk to develop other health conditions, including kidney problems, cardiovascular disease and stroke. Knowing the rates of diabetes can also indirectly provide us with a sense of what may be happening to rates of other diseases.

Indicators can be straightforward, such as the rate of a specific disease in a population, or composite, like the Early Development Instrument (EDI) which measures school readiness in young children by combining responses to over 100 questions. Composite indicators can be more difficult to understand or interpret, so all of the indicators selected for in this report are simple and practical measures. Each indicator is calculated in a specific way, such as through self-reported surveys. Each also has limitations of what it can tell us, including how it may or may not be compared. As such, the health indicators included in this report each stand alone. Taken together, they speak to important factors that shape our lives toward health or illness.

Our social context greatly influences how healthy we are. Our choices, level of education and income, and whether or not we have access to adequate housing and food all contribute to the health status of our population.

To tell the story of the health status of Canadians, health indicators have been grouped into the following three sections: "How healthy are we?"; "What is influencing our health?" and, "How are we unhealthy?"

For more information on health indicators:

- "A Citizen's Guide to Health Indicators is available at" <u>http://healthcouncilcanada.ca/</u> tree/2.10-HCC_Indicators_Bookmark_Accessible.pdf
- Connect with Canadian indicators data at Statistics Canada—Health Indicators: Data Tables, Maps and Fact Sheets <u>www.statcan.gc.ca</u> and Canadian Institute for Health Information (CIHI) <u>www.cihi.ca</u>

Describing Canada's population

In January 2016, Canada's population exceeded 36 million for the first time.¹ Canada's population is concentrated in urban centres and is diverse, growing, and aging.¹⁻⁴

Population characteristics can help explain or anticipate the health and well-being of citizens. For example, arthritis, dementia and some cancers, are linked to aging. In areas with an aging population, it would be expected that rates of these diseases would be increasing.⁵



DID YOU KNOW? As of July 1st, 2015, 25 million or 7 in 10 Canadians were living in a city of at least 100,000 residents where half of the population lived in the city's core.⁶

BY SEX

In 2016, men and women were equally represented in Canada's population.¹



BY AGE

OVER TIME

Canada's population has increased by 57% over the past 40 years and 24% over the past 20 years.²



In 2015, there were more Canadians over the age of 65 years than under the age of 15 years for the first time.²



INDIGENOUS POPULATIONS

In 2011, approximately 1.4 million or 4% of Canadians identified themselves as Indigenous. Among these Canadians, 61% self-identified as First Nations, 32% as Métis and 4% as Inuit.⁷ Indigenous populations were significantly younger than the general Canadian population with almost 50% being under the age of 25 years compared to 30% of the non-Indigenous population.⁷

4% OF CANADIANS IDENTIFIED THEMSELVES AS INDIGENOUS

PERCENTAGE OF THAT POPULATION IDENTIFY

as First Nations **61%**

as Métis **32%**

PERCENTAGE OF THE POPULATION WHO ARE UNDER THE AGE OF 25

50% of the Indigenous population

30% of the non-Indigenous population

FOREIGN-BORN POPULATIONS

In 2011, approximately 7 million people living in Canada identified themselves as foreign-born, which represented 21% of the total population.⁸ 17% arrived in Canada between 2006 and 2011 with 57% being from Asia and 14% from Europe.⁸



INTERNATIONAL COMPARISON

Canada's annual population growth rate was the highest among G7 countries in 2012/2014 at 1% .⁹ Canada's population is not growing as quickly as in the past.²



Notes to the reader

- The estimated population represents the number of Canadians whose usual place of residence is in Canada. It also includes any Canadians staying in a dwelling in Canada on Census Day and having no usual place of residence elsewhere in Canada, as well as non-permanent residents (e.g., a person and his or her family who is lawfully in Canada on a temporary basis under the authority of a valid document such as a work permit, study permit, Minister's permit or refugee).¹
- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.
- <u>G7 countries</u> include seven of the world's industrialized countries, namely the United States, Japan, Germany, France, the United Kingdom, Italy and Canada that form an informal discussion group and economic partnership

For more information on Canada's population, please see:

<u>Statistics Canada</u>

- 1. Statistics Canada (2016). Canada's population estimates, fourth quarter 2015. Quarterly Demographic Estimates, 29(4), (91-002-X).
- 2. Statistics Canada (2015). Table 051-0001 Estimates of population, by age group and sex for July 1, Canada, provinces and territories. [Data file]. November 18, 2016.
- Statistics Canada (2016). Population and dwelling counts, for population centres, 2011 and 2006 censuses [Data File]. Retrieved on March 29, 2016.
- Statistics Canada (2013). Census Profile Age, Sex, Marital Status, Families, Households, Dwellings and Language for Population Centres, 2011 Census [Data File]. Retrieved on May 12, 2015.

- 5. Canadian Institute of Health Information (2011). Health Care in Canada, 2011: A Focus on Seniors and Aging. Ottawa ON: Canadian Institute of Health Information.
- 6. Statistics Canada (2016). Annual Demographic Estimates: Sub-provincial Areas 2015.
- Statistics Canada (2016). Aboriginal Identity, Age Groups, Registered or Treaty Indian Status, Area of Residence: On Reserve and Sex for the Population in Private Households of Canada, Provinces and Territories, 2011 National Household Survey [Data File]. Retrieved on November 18, 2016.
- 8. Statistics Canada (2013). 2011 National Household Survey: Immigration, place of birth, citizenship, ethnic origin, visible minorities, language and religion. The Daily.
- 9. Statistics Canada (2014). Annual Demographic Estimates. Canada, Provinces, and Territories, 2014.

How healthy are we?



LIFE EXPECTANCY



LOW BIRTH WEIGHT



COMMUNITY BELONGING



PERCEIVED

HEALTH



7

PERCEIVED MENTAL HEALTH

Life expectancy at birth

In 2012, the average life expectancy at birth in Canada was estimated at 82 years.¹

Life expectancy at birth is the number of years a person is expected to live from birth onwards.² It is one measure of a nation's health and is affected by a variety of factors, such as genetics, lifestyle, diet, access to healthcare, education and income, and rates of diseases and conditions.²⁻⁶

OVER TIME, BY SEX

The average life expectancy at birth has increased since the early 1920s.^{1, 7, 8} Women consistently have a higher life expectancy than men.^{1, 7, 8}



BY INCOME

In urban centres in 2005-2007, life expectancy at birth for Canadians tended to be higher for people living in high-income neighbourhoods.⁹

LIFE EXPECTANCY AT BIRTH BY SEX AND **NEIGHBOURHOOD INCOME, 2005-2007⁹** (in years) 86 84 82 80 78 76 74 72 70 Q2 Q3 Q4 Q5 Q1 Middle Highest Lowest

Quintiles (Q) are calculated by dividing the Canadian population into five groups of equal size (quintiles) based on neighbourhood income.

INDIGENOUS POPULATIONS

Available data suggest that Indigenous populations have lower life expectancy at birth than non-Indigenous populations.¹⁰ Projections for 2017 suggest this is especially true for Inuit.¹¹

LIFE EXPECTANCY			2
AT BIRTH, PROJECTIONS FOR 2017 ¹¹	First Nations	73	78
(in years)	Métis	74	80
	Inuit	64	73
	Canada (total)	79	83

INTERNATIONAL COMPARISON

In 2012, life expectancy at birth in G7 countries was highest in Japan at 80 years for men and 86 years for women and lowest in the United States at 76 years for men and 81 years for women. Canada ranked in the middle at 79 years for men and 84 years for women.¹²

LIFE EXPECTANCY AT BIRTH IN G7 COUNTRIES, 2012"



Notes to the reader

- Life expectancy is the number of years a person would be expected to live starting at birth if mortality rates stayed the same over his or her lifetime.³
- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.
- <u>G7 countries</u> include seven of the world's industrialized countries, namely the United States, Japan, Germany, France, the United Kingdom, Italy and Canada, that form an informal discussion group and economic partnership.

For more information on life expectancy, please see:

- <u>Statistics Canada</u>
- Organisation for Economic Co-Operation
 and Development

- Statistics Canada (2016). Table 053-0003 Elements of the life table, Canada, provinces and territories, annual (number), (CANSIM database)
- 2. World Health Organization (n.d.). Life expectancy. Retrieved on March 29, 2016.
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- Statistics Canada (2012). Life expectancy at birth, by sex, by province [Data File]. Retrieved on May 12, 2015.
- Greenberg, L. & Normandin, C. (2011). Disparities in life expectancy at birth. Health at a Glance, 1. Statistics Canada.
- Morency, J.D., Caron-Malenfant, E., Coulombe, S., Langlois, S. (2015). Projections of the Aboriginal Population and Households in Canada, 2011 to 2036. Statistics Canada.
- 10. Statistics Canada (2010). Aboriginal statistics at a glance. Ottawa ON: Statistics Canada.
- 11. Organisation for Economic Co-operation and Development. (2015). OECD.Stat [Data File].

Low birth weight

In 2013, 24,000 or just over 6% of newborns had a low birth weight.¹

Low birth weight is defined as a weight of less than 2,500 grams at birth. Being born at a low birth weight increases the risk for short- and long-term impacts on health.²⁻⁶

OVER TIME

Just over 18,000 or 5.6% of babies born in 2000 and just under 24,000 or 6.3% in 2013 had a low birth weight.¹



PRE-TERM BIRTH AND SMALL-FOR-GESTATIONAL-AGE BY NEIGHBOURHOOD INCOME, 2006-2007³



Quintiles (Q) are calculated by dividing the Canadian opulation into five groups of equal size (quintiles) based on neighbourhood income.

BY AGE

BY INCOME

National data on low birth weight by income are not available. Data by income are available for pre-term birth and small-for-gestational-age. Pre-term birth and being small for gestational age are conditions associated with low birth weight.^{2,3}

In 2006–2007, the proportion of preterm births and babies that were small for their gestational age was higher in low income neighbourhoods than in the highest income neighbourhood.³ A higher proportion of babies with a low birth weight are born to mothers under the age of 20 years and between the ages of 35 to 49 years.⁷

LOW BIRTH WEIGHT BY MOTHER'S AGE, 2000 AND 2012 (% OF LIVE BIRTHS) ⁷ (MOTHER'S AGE)	Under the a 2000 6.8%	age of 20 years ²⁰¹³ 6.6%
	20 to 34 ye 2000 5.3%	ears ²⁰¹³ 5.9%
	35 to 49 ye 2000 6.6%	ears ²⁰¹³ 7.5%

INDIGENOUS POPULATIONS

Data on low birth weight in Indigenous populations **are not directly comparable** to the data described above.

In First Nations on-reserve in 2008/2010, mothers aged 35 years or older were more likely to report giving birth to a baby with low birth weight than mothers in other age groups.⁸



*High sampling variability. Interpret data with caution

In Inuit regions in 2004–2008, the proportion of low birth weights in Nunavut and Nunavik was higher than the overall Canadian population (which included all Inuit regions).⁹



INTERNATIONAL COMPARISON

In 2011, the proportion of newborns with a low birth weight among G7 countries ranged from 6% to 10%. Canada had the lowest proportion of babies born at a low birth weight at 6%.¹⁰

PERCENT OF LIVE BIRTHS WITH LOW BIRTH WEIGHT IN G7 COUNTRIES, 2011¹⁰



Notes to the reader

- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.
- Data on First Nations on-reserve are from the First Nations Regional Health Survey (2008/10). Prenatal health data, including information on birth weight, were obtained through the child survey. This survey was completed by the child's primary caregiver.⁸
- <u>G7 countries</u> include seven of the world's industrialized countries, namely the United States, Japan, Germany, France, the United Kingdom, Italy and Canada, that form an informal discussion group and economic partnership.

For more information on children's health and well-being, please see:

- Government of Canada
- Public Health Agency of Canada
- World Health Organization

- Statistics Canada (2016). Table 102-4509

 Live births, by birth weight and sex, Canada, provinces and territories [Data File].
 Retrieved on March 16, 2016.
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- 5. Barker, D.J. (2007). The original the developmental origins theory. Journal of Internal Medicine, 261(5), 412-417.
- 6. Calkins, K., Devaskar, S.U. (2011). Fetal origins of adult disease. Current Problems in Pediatric and Adolescent Health Care, 41(6), 158-176.
- Statistics Canada (2016). Table 102-4511 Live births, birth weight indicators, by characteristics of the mother and child, Canada (annual) [Data File]. Retrieved on March 16, 2016.
- First Nations Information Governance Centre (2012). First Nations Regional Health Survey (RHS) 2008/10: National report on adults, youth and children living in First Nations communities. Ottawa ON: FNIGC.
- 9. Statistics Canada. (2016). Table 102-0701

 Low birth weight babies (500 to less than 2,500 grams), by sex, five-year average, Canada and Inuit regions (every 5 years)
 [Data File]. Retrieved on March 29, 2016.
- 10. Organisation for Economic Co-operation and Development. (2015). OECD.Stat [Data File].



Community belonging

In 2014, over 19 million or two thirds of Canadians said they had a somewhat or very strong sense of community belonging.¹

2 in 3 Canadians said they had a somewhat or very strong sense of community belonging.¹



A sense of community belonging can positively influence a person's long-term physical and mental health.²⁻⁴

OVER TIME

The proportion of Canadians who consider their sense of community belonging to be somewhat or very strong has remained constant over time.¹



BY INCOME

In 2014, Canadians living in the lowest income households were less likely to report a somewhat or very strong sense of community belonging than those living in the highest income households.⁵



Deciles (D) are calculated by dividing the Canadian population into ten groups of equal size (deciles) based on household income.

BY SEX

In 2014, 66% of men and 67% of women said they had a somewhat or very strong sense of community belonging.¹

MEN	WOMEN
	2
66%	67%

BY AGE

Community belonging differs by age. In 2014, younger and older age groups were more likely to say they had a somewhat or very strong sense of community belonging than other age groups. The proportion of Canadians who report a somewhat or very strong sense of community belonging is lowest among those aged 20 to 34 years.¹

PERCENT OF CANADIANS REPORTING A SOMEWHAT OR VERY STRONG SENSE OF COMMUNITY BELONGING, 2014 1	8	12 to 19 years	77%
		20 to 34 years	57%
		35 to 44 years	65%
	2	45 to 64 years	67%
	2	65 years and older	74%

INDIGENOUS POPULATIONS

Data on community belonging in Indigenous populations **are not directly comparable** to the data described above. Community belonging data are not available for First Nations on-reserve. Data on some Indigenous populations show that Inuit are most likely to say they have a strong sense of community belonging.⁶



Data presented in this table are adjusted by age. Indigenous populations tend to be younger than non-Indigenous populations which can affect the ability to compare data across groups.

INTERNATIONAL COMPARISON

Data on community belonging are not collected internationally.

Notes to the reader

- A sense of belonging is based on a person's attachment to and social comfort with their community, friends, family, workplace, or personal interests.^{1,2}
- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.

- Statistics Canada (2016). Table 105-0501 Health indicator profile, annual estimates, by age group and sex, Canada, provinces, territories, health regions (2013 boundaries) and peer groups, occasional [Data File]. Retrieved on March 30, 2016.
- Kitchen, P., Williams, A. & Chowhan, J. (2012). Sense of Community Belonging and Health in Canada: A Regional Analysis. Social Indicators Research, 107(1), 103-126.
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Perceived health

In 2014, 18 million or three in five Canadians said they felt they had very good or excellent health.¹

3 in 5 Canadians said they felt they had **very** good or excellent health.¹



Perceived health is a subjective measure of how people feel about their health and can be a good reflection of actual health.²⁻⁴ Health means not only the absence of disease or injury but also physical, mental and social well-being.¹

OVER TIME

The proportion of Canadians reporting that they felt they had **very good** or **excellent** health has not changed.¹



BY INCOME

In 2014, Canadians in the lowest household incomes were less likely to report feeling they had **very good** or **excellent** health than those living in the highest income households.⁵



Deciles (D) are calculated by dividing the Canadian population into ten groups of equal size (deciles) based on household income.

BY SEX

In 2014, the same proportion of men and women rated their health as very good/excellent or fair/poor.¹

PERCENT OF CANADIAN MEN AND WOMEN REPORTING VERY GOOD/EXCELLENT OR FAIR/POOR HEALTH, 2014 ¹			
Very good or excellent Fair or poor			
Men	Women	Men	Women
	2		2
59%	59%	12%	12%

INDIGENOUS POPULATIONS

Data on perceived health in Indigenous populations **are not directly comparable** to the data described above. In 2008/2010, 44% of First Nations on-reserve rated their health as very good or excellent.⁶



In 2007–2010, First Nations off reserve, Métis and Inuit were less likely than non-Indigenous people to report that their health was **very good** or **excellent**.⁷

PERCENT OF CANADIANS	First Nations off reserve	50%
EXCELLENT/	Métis	54%
HEALTH,	Inuit	55%
2007-2010	Non-Indigenous	63%

Data presented in this table are adjusted by age. Indigenous populations tend to be younger than non-Indigenous populations which can affect the ability to compare data across groups.

INTERNATIONAL COMPARISON

Perceived health is not measured the same way across all countries, so data were adjusted so that they could be compared. Data presented above represent very good or excellent health. These data can be reported overtime, by income and by sex. The data below for Canada represent good, very good and excellent health (they include all positive responses) in order to allow for the comparison of perceived health among G7 countries.⁸ At 88%, Canada and the United States had the highest proportion of people among G7 countries in 2014 who said that they felt they had good or very good health.⁸ It should be noted that perceived health is a subjective measure that can be affected by factors such as culture. This means that for some cultures, perceived health may not accurately reflect actual health.¹⁰



* For Canada, good/very good data indicate any positive response, including "excellent". This adjustment was made in order to be consistent with other countries' data collection.

**Adjusted to match WHO methodology.¹⁰

⁺ Data for 2013

Notes to the reader

- To measure perceived health, Canadians
 12 years and older were asked if they felt their health was excellent, very good, fair or poor.¹
- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.
- <u>G7 countries</u> include seven of the world's industrialized countries, namely the United States, Japan, Germany, France, the United Kingdom, Italy and Canada, that form an informal discussion group and economic partnership.

For more information on health, please see:

- Government of Canada
- <u>Statistics Canada</u>
- World Health Organization

- Statistics Canada (2016). Table 105-0501 -Health indicator profile, annual estimates, by age group and sex, Canada, provinces, territories, health regions (2013 boundaries) and peer groups, occasional [Data File]. Retrieved on March 30, 2016.
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- Smith, P.M., Glazier, R.H., Sibley, L.M. (2010). The predictors of self-rate health and the relationship between self-rated health and health service needs are similar across socioeconomic groups in Canada. Journal of Clinical Epidemiology, 63(4), 412-421.

- 4. Nielsen, T.H. (2015). The relationships between self-rated health and hospital records. Health Economics, 25(4), 497-512.
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- First Nations Information Governance Centre (2012). FNIGC Data Online [Data File]. Retrieved on December 3, 2014.
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- Organisation for Economic Co-operation and Development (2016). Health Statistics 2016. Perceived health status. Definitions, Sources and Methods.
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Perceived mental health

In 2014, 21 million or 7 in 10 Canadians said they felt they had excellent or very good mental health.¹

7 in 10 Canadians said they felt they had excellent or very good mental health.¹



Perceived mental health is a subjective measure of how people feet about their mental health and can be a good reflection of actual mental health. Mental health is an important aspect of overall health and well-being.²⁻⁴

OVER TIME

The proportion of Canadians who consider their mental health to be either very good or excellent has decreased slightly.¹



BY INCOME

In 2014, Canadians with the lowest household incomes were less likely than those with the highest income households to report feeling they had very good or excellent perceived mental health $.^{5}$



Deciles (D) are calculated by dividing the Canadian population into ten groups of equal size (deciles) based on household income.

BY SEX

In 2014, 72% of men and 70% of women rated their mental health as very good or excellent.¹

MEN	WOMEN
72%	2 70%

INDIGENOUS POPULATIONS

Data on perceived mental health in Indigenous populations **are not directly comparable** to the data described above. Data for First Nations on-reserve measured how often people felt they were mentally balanced most or all of the time.⁶

REPORTING FEELING MENTALLY BALANCED MOST OR ALL OF THE TIME, 2008/2010⁶



Data on First Nations living off reserve, Métis and Inuit measured how people perceived their mental health. In 2007–2010, Inuit were least likely to rate their mental health as excellent or very good.⁷

PERCENT OF INDIGENOUS	First Nations off reserve	66%
EXCELLENT/VERY	Métis	67%
GOOD MENTAL HEALTH, 2007-2010 ⁷	Inuit	65%
	Non-Indigenous	75%

Data presented in this table are adjusted by age. Indigenous populations tend to be younger than non-Indigenous populations which can affect the ability to compare data across groups.

INTERNATIONAL COMPARISON

Data on perceived mental health are not collected such that they can be compared across countries.

Notes to the reader

- To measure perceived mental health, Canadians 12 years and older were asked if they felt their health was excellent, very good, fair or poor.¹
- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.
- Data on First Nations living on-reserve are from the First Nations Regional Health Survey (2008/10). Self-reported mental balance was measured based on how often people felt mentally balanced ("all of the time," "most of the time," "some of the time" or "none of the time").⁸

For more information on mental health, please see:

- Government of Canada
- Mental Health Commission of Canada

- Statistics Canada. (2016). Table 105-0501

 Health indicator profile, annual estimates, by age group and sex, Canada, provinces, territoies, health regions (2013 boundaries) and peer groups, occasional [Data File]. Retrieved on March 30, 2016.
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- Public Health Agency of Canada (2014). Mental Health Promotion. Retrieved on May 26, 2015.
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What is influencing our health?









21

INCOME

EDUCATION

HOUSING

FOOD SECURITY



PHYSICAL ACTIVITY SMOKING

IMMUNIZATION



In 2014, the average household income after taxes was \$68,000.¹ Just under 5 million or just over 1 in 10 Canadians were living in low-income households.²

Just over 1 in 10 Canadians were living in low-income households.²

LIVING IN LOW-INCOME HOUSEHOLDS

just over 1 in 10 Canadians

For this section, low income is considered as any income that is less than half of a country's average income, calculated after taxes and transfers.^{2,8} Income influences people's health and is an important predictor of health outcomes, such as life expectancy and risk for some diseases.³⁻⁷



Deciles are calculated by dividing the Canadian population into ten groups of equal size (deciles) based on income.

OVER TIME

The proportion of Canadians living in low income has fluctuated from 13% in 1976 to 11% in 1989 and back to 13% in 2014.⁸ The gap between those with the highest and lowest incomes has been growing.⁹

BY SEX

In the past, men were less likely to have a low income than women. More recently, men and women were equally likely to have a low income.²



BY AGE

The proportion of older Canadians who have a low income has decreased from 31% in 1976 to 13% in 2013. Other age groups have seen a slight increase.²



INDIGENOUS POPULATIONS

Data on income in Indigenous populations **are not directly comparable** to the data described above. Comparable data show that Indigenous populations, particularly First Nations at just over 30%, were more likely to have a low income than non-Indigenous populations at just under 15%.¹⁰

PERCENT OF CANADIANS LIVING IN LOW INCOME, 2011 ¹⁰	First Nations	30%
	Métis	20%
	Inuit	22%
	Total Indigenous	25%
	Non-Indigenous	15%

INTERNATIONAL COMPARISON

In 2013, the proportion of people living in lowincome was highest in the United States at just under 18% and lowest in France at 8%. Canada ranked in the middle of G7 countries at just under 13%.¹¹

PERCENT OF PEOPLE LIVING IN LOW-INCOME (AFTER TAXES AND TRANSFERS) IN G7 COUNTRIES, 2013¹¹



⁺ data for 2012

For more information on income, please see:

- <u>Statistics Canada</u>
- Organisation for Economic Co-Operation
 and Development

Notes to the reader

- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.
- The data on Indigenous populations have not been adjusted for their high cost of living, meaning gaps may not accurately represent reality.
- <u>G7 countries</u> include seven of the world's industrialized countries, namely the United States, Japan, Germany, France, the United Kingdom, Italy and Canada, that form an informal discussion group and economic partnership.

- Statistics Canada (2015). Table 206-0011 Market income, government transfers, total income, income tax and after-tax income, by economic family type, Canada, provinces and selected census metropolitan areas (CMAs), annual [Data File]. Retrieved on February 16, 2016.
- Statistics Canada (2015). Table 206-0041 Low income statistics by age, sex and economic family type, Canada, provinces and selected census metropolitan areas (CMAs), annual [Data File]. Retrieved on February 16, 2016.
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- Lysy, Z., Booth, G. L., Shah, B. R., Austin, P. C. et al. (2013). The impact of income on the incidence of diabetes: A population-base study. Diabetes Research and Clinical Practice, 99(3), 372-379.
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- Statistics Canada (2015). Table 206-0042 Low income statistics by economic family type, Canada, provinces and selected census metropolitan areas (CMAs), annual [Data File]. Retrieved on February 16, 2016.
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Education

In 2014, just under 18 million or 90% of Canadians between the ages of 25 to 64 years had completed high school.¹ Just under 13 million or 66% had graduated with a postsecondary certificate or university degree.¹

90% of Canadians completed high school and 66% graduated with a postsecondary certificate or university degree.¹



A higher level of education is linked to better health through a variety of factors such as higher income and better health literacy.²⁻⁷

DID YOU KNOW? In Canada, the ability to read and do math has been getting worse over time.^{11,12} In 2012, almost 50% of Canadians aged 25 to 65 years had low scores for literacy skills, 55% had low scores for numeracy skills and 43% had low scores for both.¹³

OVER TIME

The proportion of Canadians aged 25 to 64 years who graduated from high school has been increasing in Canada.¹



BY INCOME

In 2011, 50% of Canadians in the top 10% income level and 20% of those below that income level had a university degree.⁸



BY SEX

The proportion of Canadians graduating from a post-secondary institution has increased for both men and women^{.1}

PERCENT OF CANADIAN MEN AND WOMEN WHO COMPLETED A POST-SECONDARY CERTIFICATE, DIPLOMA OR DEGREE, 1990 AND 2014 ¹			
19	99	20	014
Men	Women	Men	Women
39%	33%	60%	60%

INDIGENOUS POPULATIONS

Data on education in Indigenous populations **are not directly comparable** to the data described above. Comparable data show Inuit are least likely to have graduated from high school or completed a post-secondary certificate, diploma or degree.⁹



INTERNATIONAL COMPARISON

In 2012, 89% of Canadians completed high school, which is the same proportion as in the United States. This is the second highest among G7 countries, after Japan, where the proportion of people completing high school was 94%.¹⁰



Notes to the reader

- High school graduates include people who have received a high school diploma or, in Quebec, completed Secondary V or, in Newfoundland and Labrador, completed fourth year of secondary.¹
- Post-secondary graduates include people who have completed, at minimum, a certificate (including a trade certificate) or diploma from an educational institution beyond the secondary level. This includes certificates from vocational schools, apprenticeship training, community college, Collège d'Enseignement Général et Professionnel (CEGEP), and schools of nursing. Also included are certificates below a bachelor's degree obtained at a university.¹
- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.

- For international comparisons, educational attainment represents the number of adults aged 25 to 64 holding at least an upper secondary degree over the population of the same age, as defined by the OECD-ISCED classification.¹⁰
- <u>G7 countries</u> include seven of the world's industrialized countries, namely the United States, Japan, Germany, France, the United Kingdom, Italy and Canada, that form an informal discussion group and economic partnership.

For more information on education, please see:

- <u>Statistics Canada</u>
- Organisation for Economic Co-Operation and Development

- Statistics Canada (2016). Table 282-0004 -Labour force survey estimates (LFS), by educational attainment, sex and age group, annual (persons unless otherwise noted) [Data File]. Retrieved on February 18, 2016.
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- Statistics Canada (2015). Aboriginal statistics at a glance: 2nd edition. Ottawa ON: Statistics Canada
- Organisation for Economic Co-operation and Development (2015). OECD.Stat [Data File]. Retrieved on November 12, 2015.
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- Organisation for Economic Co-Operation and Development (2013). OECD Skills Outlook 2013: First Results from the Survey of Adult Skills.
- Statistics Canada (2014). University graduates with lower levels of literacy and numeracy skills Insights on Canadian Society, Catalogue no. 75-006-X.



In 2011, almost 2 million or just over 1 in 10 Canadian households reported living in core housing need.¹

Just over 1 in 10 Canadian households reported living in core housing need.¹

LIVING IN CORE HOUSING NEED

1 in 10 Canadian households

Poor housing conditions have been linked to poor health and well-being, as well as increased stress and feelings of vulnerability.²⁻⁵ Core housing need is an indicator that measures whether or not Canadians are living in a house that meets Canada Mortgage and Housing Corporation (CMHC)'s housing standards. This includes not meeting at least one standard that assesses adequacy (e.g., does it need repairs?), affordability (e.g., how much does it cost?) or suitability (e.g., does it have enough bedrooms for the number and types of occupants?).¹

OVER TIME

The proportion of Canadian households in core housing need has remained unchanged.¹



BY INCOME

In 2011, 50% of low income households and less than 1% of high income households were in core housing need. $^{\rm 6}$



BY SUBPOPULATION

In 2011, the proportion of Canadians in core housing need differed by sub-population:⁶

- 29% of single parent households where the parent was a woman;
- 27% of people who were renting a place;
- 24% of single woman households;
- 19% of Indigenous households;
- 17% of immigrant households;
- 15% of households whose primary maintainer was between the ages of 15 to 29 years, and;
- 14% of senior households.

INDIGENOUS POPULATIONS

Generally, Indigenous populations have higher rates of core housing need.^{1,6-8} Almost 100,000 or 19% of Indigenous households were in core housing need in 2011 compared to 12% of non-Indigenous households.⁶

PERCENT OF HOUSEHOLDS IN CORE HOUSING NEED, 2011 ⁶	First Nations Status Indian	23%
	First Nations Non-Status Indian	19%
	Métis	15%
	Inuit	34%
	Indigenous (overall)	19%
	Non-Indigenous	12%
	Canada (overall)	13%

For First Nations on-reserve, the definition of housing need differs from CMHC's definition in that it does not include the need to meet affordability standards. **This means the data above are not comparable to the data presented below.** Based on this definition, First Nations on-reserve were more likely to be in core housing need than the overall Canadian population.⁸

PERCENT OF HOUSEHOLDS IN	First Nations on-reserve	33%
CORE HOUSING NEED, 2011 ⁸	Canada (overall)	4%

INTERNATIONAL COMPARISON

Data on housing are not collected such that they can be compared across countries.

Notes to the reader

- The primary household maintainer is the person in the household responsible for major household payments such as the rent or mortgage.⁶
- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.

For more information on housing, please see:

<u>Canada Mortgage and Housing Corporation</u>

- Canada Mortgage and Housing Corporation (2015). Housing in Canada Online (HICO) [Data File]. Retrieved on May 28, 2015.
- Dunn, J. R., Hayes, M. V., Hulchanski, J. D., Hwang, S. W. et al. (2006). Housing as a socio-economic determinant of health: findings of a national needs, gaps and opportunities assessment. Canadian Journal of Public Health, 97 (Supplement 3), S11-S15.
- Krieger, J., Higgins, D. L. (2002). Housing and health: time again for public health action. American Journal of Public Health, 92(5), 758-768.
- Mikkonen, J., Raphael, D. (2010). Social Determinants of Health: The Canadian Facts. Toronto ON: York University School of Health Policy and Management.
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- Canada Mortgage and Housing Corporation (2014). Canadian Housing Observer, 2014. Canada: Canada Mortgage and Housing Corporation.
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In 2011–2012, more than 1 million or just under 1 in 10 Canadian households were living with moderate to severe food insecurity.¹

Just under 1 in 10 Canadian households were living with moderate to severe food insecurity.¹

LIVING WITH MODERATE TO SEVERE FOOD INSECURITY

Just under 1 in 10 Canadian households

Food plays a key role in health and well-being and is a basic human need.^{2,3} Food insecurity means not having physical and economic access to enough safe, affordable and nutritious food to meet dietary needs and food preferences for an active and healthy life.^{4,5} Parents in food-insecure households may forgo food to ensure their children are fed.⁶

OVER TIME

From 2007-2008 to 2011-2012, the proportion of Canadian households living with food insecurity remained unchanged at 8%.¹

BY INCOME

In 2011–2012, 31% of the lowest income households and less than 1% of the highest income households had moderate to severe household food insecurity.^{7,8} 21% of households using government benefits as their main source of income and 6% of households with other main sources of income were food insecure.⁹

INDIGENOUS POPULATIONS

Data on food insecurity in Indigenous populations **are not directly comparable** to the data described above. In 2008/2010, 54% First Nations on-reserve households reported being either moderately or severely food insecure.¹⁰

PERCENT OF FIRST NATIONS ON-RESERVE HOUSEHOLDS WITH MODERATE OR SEVERE FOOD INSECURITY, 2008/2010¹⁰ Moderately food insecure **40%**

Severely food insecure **14%**

DID YOU KNOW? Food safety is also an important issue. An estimated 4 million Canadians suffer from food-related illnesses every year, with 11,600 hospitalizations and 238 deaths associated with these illnesses.¹⁴ Food insecurity is significantly higher in Indigenous households. In 2007-2010, 27% of Inuit households reported having low to very low food security.¹¹ Other surveys suggest that rates of food insecurity in Inuit households may be even higher, reaching over 62%.^{12,13}

PERCENT OF HOUSEHOLDS	First Nations off reserve	22%
VERY LOW FOOD SECURITY, 2007-2010"	Métis	15%
	Inuit	27%
	Non-Indigenous	7%

Data presented in this table are adjusted by age. Indigenous populations tend to be younger than non-Indigenous populations which can affect the ability to compare data across groups.

INTERNATIONAL COMPARISON

Food insecurity is not collected in a systematic fashion for industrialized countries. The United Nations and other international organizations regularly monitor food insecurity in developing regions and countries.¹⁵

Notes to the reader

- Food insecurity is defined as whether or not households are able to afford the food they need. According to Statistics Canada, levels of food security are defined as: food secure—no difficulty with food access; moderately food insecure—some compromise in quality and/or quantity of food consumed; severely food insecure—food intake is reduced and eating patterns disrupted.
- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.

For more information on food and health, please see:

- <u>Canada's Food Guide</u>
- Public Health Agency of Canada
- <u>United Nations</u>

- Statistics Canada (2013). Table 105-0546 -Household food insecurity measures, by presence of children in the household, Canada, provinces and territories, occasional (number unless otherwise noted) [Data File]. Retrieved on November 20, 2014.
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- United Nations (2015). The State of Food Insecurity in the World 2015. Meeting the 2015 international hunger targets: taking stock of uneven progress. Rome, FAO.





Physical activity

In 2013, just over 2 in 10 adults and 1 in 10 children and youth met the <u>Canadian</u> <u>Physical Activity Guidelines</u>.¹

Just over 2 in 10 adults and 1 in 10 children and youth met the Canadian Physical Activity Guidelines.¹



Physical activity can improve health, lower the risk for many chronic health conditions and contribute to the healthy development of children and youth.²⁻⁵ Physical activity can be measured in many different ways which can make it challenging to report on. In this section, physical activity is measured based on comparisons to the Canadian Physical Activity Guidelines, energy expenditures and amounts of physical activity per day or week.

DID YOU KNOW? Individuals who meet the recommended guidelines for physical activity can still be at risk for developing poor health if a significant amount of their waking hours are spent not being active.^{11, 12}

OVER TIME

Data on physical activity related to the Canadian Physical Activity Guidelines are only available for 2009, 2011 and 2013. While rates have fluctuated, there is no evident trend yet.¹

BY AGE AND SEX

In 2013, the proportion of people who met the Canadian Physical Activity Guidelines differs by age and sex. It is important to note that different age groups have different guidelines.¹



* too unreliable to report

BY INCOME

In 2005, Canadians with a personal income of over \$60,000 spent 9% of their leisure time being active while Canadians with a personal income below \$30,000 spent 7% of their leisure time being active.⁶

INDIGENOUS POPULATIONS

Data on physical activity in Indigenous populations **are not directly comparable** to the data described above as they are not measured against the Canadian Physical Activity Guidelines and were collected in a different manner. In 2008/2010, First Nations on-reserve were asked about their levels of activity.⁷

- 62% of children aged 6 to 11 years were considered active.
- 49% of youth aged 12 to 17 years were considered active.
- 25% of adults aged 18 years and older were considered active.

In 2007–2010, First Nations off reserve and Métis were more likely to report being active during their leisure time than other groups.⁸

PERCENT OF CANADIANS WHO	First Nations off reserve	56%
REPORT BEING PHYSICALLY ACTIVE, 2007-2010 ⁸	Métis	61%
	Inuit	51%
	Non-Indigenous	54%

Data presented in this table are adjusted by age. Indigenous populations tend to be younger than non-Indigenous populations which can affect the ability to compare data across groups.

INTERNATIONAL COMPARISON

International comparisons are based on **inactivity** rather than meeting/not meeting specific guidelines. In 2010, Canada ranked as the second least inactive country for people 18 years and older and for youth ages 11 to 17.⁹ Different age groups had different definitions of inactivity.⁹





PERCENT OF PEOPLE WHO ARE INACTIVE IN G7 COUNTRIES, 2010⁹

Youth 12 to 17 years



Notes to the reader

- For the data reported above, meeting <u>Canada's</u> <u>Physical Activity Guidelines</u> is defined as follows: Children and youth (5 to 17 years) should do at least 60 minutes of moderate-to-vigorous activity every day. Adults (18 to 79 years) should do at least 150 minutes of moderate-to-vigorous activity per week in periods of activity that are at least 10 minutes long.¹
- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.
- Data on First Nations living on-reserve are from the First Nations Regional Health Survey (2008/10). People were asked to report the frequency and duration of physical activities they had undertaken in the previous year. These activities were reported as a metabolic equivalent value.¹³ For all age groups, those with energy expenditures of less than 1.5 kcal/ kg/day were considered to be inactive; those with energy expenditures between 1.5 kcal/kg/ day and 2.9 kcal/kg/day were considered to be moderately active; and those with energy expenditures of 3 kcal/kg/day or greater were considered to be active.⁷
- Data on First Nations living off-reserve, Métis and Inuit are from Statistics Canada's Canadian Community Health Survey. People were considered to be physically active if they had an average energy expenditure of 3 kcal/kg/day or more, moderately active if they had an average energy expenditure of 1.5-2.9 kcal/kg/ day and inactive if they had an average energy expenditure of less than 1.5 kcal/kg/day.⁸
- <u>G7 countries</u> include seven of the world's industrialized countries, namely the United States, Japan, Germany, France, the United Kingdom, Italy and Canada, that form an informal discussion group and economic partnership.
- Internationally, inactvity was measured as less than 150 minutes of moderate intensity or 75 minutes of vigorous-intensity physical activity per week for adults 18 years or older; and less than 60 minutes of moderate- to vigourous-intensity physical activity daily for ages 11 to 17 years.¹⁰

For more information on physical activity, please see:

- <u>Canadian Physical Activity Guidelines</u>
- World Health Organization

- Statistics Canada (2015). Table 117-0019 Distribution of the household population meeting/not meeting the Canadian physical activity guidelines, by sex and age group, occasional (percentage) [Data File]. Retrieved on May 26, 2015.
- 2. Statistics Canada (2015). Directly measured physical activity of adults, 2012 and 2013. Retrieved on October 7, 2015.
- Canadian Society for Exercise Physiology. (2012). Canadian Physical Activity Guidelines - Scientific Statements.
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Smoking

In 2015, just under 4 million or just over 1 in 10 Canadians smoked regularly or occasionally.¹

Just over 1 in 10 Canadians smoked regularly or occasionally.¹

SMOKED REGULARLY OR OCCASIONALLY



Canadians who smoked daily consumed an average of 14 cigarettes a day.¹

Smoking is a leading cause of preventable disease and premature death. Both smoking and exposure to second-hand smoke have been linked to a number of cardiovascular and respiratory diseases and other chronic conditions.³⁻⁷



DID YOU KNOW? More Canadians are trying e-cigarettes. In 2015, approximately 3.9 million or 13% of Canadians 15 years and older had tried e-cigarettes compared to 2.5 million or 9% in 2013.¹² Young adults are most likely to try e-cigarettes with 31% or 734,000 Canadians aged 20 to 24 years saying they tried them in 2015.¹²

OVER TIME, BY SEX

In 1999, 25% of Canadians 15 years and older were daily or occasional smokers. By 2015, this had dropped to 13%.^{1,8} In 2015, 16% of men and 10% of women were current smokers.¹ Men smoked an average of 15 cigarettes per day while women smoked 12.¹



Data on smoking have not been collected every year since 1985. There are differences in the methods used to collect data and how questions were asked in surveys over this period. Caution should be used when interpreting these results.

BY INCOME

In 2013, 27% of people living in the lowest-income households and 14% of people living in the highest-income households said they smoked.¹⁰

BY AGE

In 2015, young adults were most likely to smoke compared to other age groups.^{1,2} Only adults aged 25 years and older have were less likely to smoke in 2015 than in 2013.^{1,2}



INDIGENOUS POPULATIONS

Data on smoking in Indigenous populations **are not directly comparable** to the data described above. Among First Nations on-reserve, adults were more likely to smoke on a daily basis than youth.¹¹



In 2007–2010, Indigenous peoples were more likely to say they smoked daily or occasionally than non-Indigenous people.¹²

PERCENT OF CANADIANS	First Nations off reserve	40%
DAILY OR	Métis	36%
OCCASIONALLY, 2007-2010 ¹²	Inuit	48%
	Non-Indigenous	21%

Data presented in this table are adjusted by age. Indigenous populations tend to be younger than non-Indigenous populations which can affect the ability to compare data across groups.

INTERNATIONAL COMPARISON

Canada continues to have the second lowest smoking proportion of people who smoke among G7 countries. Between 1994 and 2013, the percent of people who smoked daily decreased by 45% in Canada compared to a reduction of 39% in the United States and that of 20% in France.¹³



Notes to the reader

- Data on smoking are measured among Canadians aged 15 years and over who have identified themselves as current smoker (either daily smokers or occasional smokers).¹
- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.
- <u>G7 countries</u> include seven of the world's industrialized countries, namely the United States, Japan, Germany, France, the United Kingdom, Italy and Canada, that form an informal discussion group and economic partnership.

For more information on smoking, please see:

- Government of Canada
- <u>Canadian Tobacco, Alcohol and Drugs Survey</u>
- World Health Organization

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Immunization

In 2013, 90% of two year old children had received one dose for measles and 77% had received the recommended four doses of vaccine against diphtheria, pertussis (whooping cough), and tetanus (the DPT vaccine).¹ Among seven-year olds, 86% had received the recommended two doses of measles-containing vaccine and 71% had received five doses of the DPT vaccine.¹

Immunization is one of the greatest public health successes. High immunization rates are important for preventing disease, particularly in those who are most vulnerable such as the very old and the very young.¹ Analysing data on immunization coverage in Canada is challenging because there are large differences in how data are collected.² To date, immunization data represent a best available estimate.

DID YOU KNOW? In 2014, 80% of Canadian adults believed that they have received all of the vaccines required for someone their age, but only 6% had the recommended number of pertussis and tetanus vaccine doses in adulthood.³

OVER TIME

The proportion of children being vaccinated has remained below national immunization coverage goals of 97% by age two.¹





The methods used to estimate immunization coverage have improved over time. Because of significant changes beginning in 2011, **data over time are not directly comparable**.

BY INCOME

National data on immunization rates by income are not available.

INDIGENOUS POPULATIONS

Immunization data have not been reported at a national level for Indigenous populations. Data from program evaluations for Health Canada's First Nations and Inuit Health Branch from 2008 to 2012 suggest that at least 80% of First Nations two year old children living on reserve received the measles, mumps and rubella vaccine in most regions. In First Nations communities, use of this vaccine appears to be increasing.⁵

INTERNATIONAL COMPARISON

In 2015, Canada had the lowest proportion of one year olds vaccinated for DPT among G7 countries.⁶ Vaccination schedules, namely at what age children get vaccinated, differ across and within countries, making it challenging to compare data on immunization.



PERCENT OF ONE YEAR OLDS BEING VACCINATED IN G7 COUNTRIES, 1990 AND 20156



Notes to the reader

- The Public Health Agency of Canada regularly collects data and monitors immunization coverage in children aged 2, 7 and 17 years, and in girls aged 12-14 years (to assess HPV coverage) by vaccine antigen through the childhood National Immunization Coverage Survey (cNICS). Data from First Nations on reserve are not collected as part of this survey. Starting in 2011, Statistics Canada has been conducting the cNICS on behalf of the Public Health Agency of Canada using a representative sampling method. Data are collected from immunization records held by parents. With parental consent, information is also obtained from health care providers.
- Adult immunization coverage is assessed every two years by the adult National Immunization Coverage survey. Canadians aged 18 years and older are asked about their vaccination history in adulthood.
- Health Canada's First Nations and Inuit Health Branch collects information on immunization coverage through annual community-based reporting to its regional offices.
- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.

- <u>G7 countries</u> include seven of the world's industrialized countries, namely the United States, Japan, Germany, France, the United Kingdom, Italy and Canada, that form an informal discussion group and economic partnership.
- Across G7 countries, childhood vaccination coverage reflects the proportion of children who received a vaccination in the recommended timeframe. Recommended ages for vaccination differ across countries due to different immunization schedules.¹¹

For more information on immunization, please see:

- Public Health Agency of Canada
- World Health Organization

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How are we unhealthy?



43



In 2016, more than 200,000 new cases of cancer are expected to be diagnosed.¹ An estimated 2 in 5 Canadians will develop cancer in their lifetime which is most often linked to aging.¹

2 in 5 Canadians will develop cancer in their lifetime.¹



2 in 5 Canadians

In 2012, cancer was the leading cause of death in Canada at 30% of all deaths. The next leading causes of death are heart disease at 20% of all deaths and cerebrovascular diseases (e.g., stroke) at 5% of all deaths.² An estimated 78,800 Canadians are expected to die from cancer in 2016.¹

RATE OF NEW CASES OF CANCER BY SEX, 1987-2016¹ Men Women (Rate per 100,000 population) 800 600 400 7 1987 1991 1995 1999 2003 2007 2011 2015

Data presented in this graph are adjusted by age.

BY INCOME, BY SEX

OVER TIME, BY SEX

Rates of new cases of cancer have decreased for men and increased slightly for women.¹

Data from 1991 to 2006 show that mortality rates for cancer were much higher for those living in the lowest-income households than for those living in the highest-income households.³



Quintiles are calculated by dividing the Canadian population into five groups of equal size (quintiles) based on household income. Data presented in this table are adjusted by age.

BY AGE, BY SEX

Rates of new cases of cancer are higher in older Canadians.¹ Among the oldest Canadians, rates of new cases of cancer are higher in men than women.¹



RATE OF NEW CASES OF CANCER IN OLDER AGE GROUPS BY SEX, 1990, 2000, 2010 AND 2016¹ Women

2000 2010 2016 (Rate per 100,000 population) 4,000 3,000 2,000 1,000 50 to 59 years 60 to 69 years 70 to 79 years and older

Data presented in these graphs are adjusted by age.

INDIGENOUS POPULATIONS

Data on cancer in Indigenous populations are limited and **not directly comparable to the data** described above. Research on cancer in Indigenous populations has found that:

- Using data from 1991 to 2001, age-standardized mortality rates for all types of cancer were calculated to be 163 per 100,000 for First Nations men, 176 per 100,000 for Métis men and 188 per 100,000 for non-Indigenous men.⁴
- Using data from 1991 to 2001, age-standardized mortality rates for all types of cancer were calculated to be 156 per 100,000 for First Nations women, 180 per 100,000 for Métis women and 134 per 100,000 for non-Indigenous women.⁴
- Rates of cancer are increasing among Inuit in Canada. Using data from 1998 to 2007, the age-standardized rate for new cases of cancers among Inuit was 323 per 100,000 population.⁵

INTERNATIONAL COMPARISON

In G7 countries, the United States had the highest rate of new cases of cancer at 318 cases per 100,000 population in 2012. Japan had the lowest at 217 cases per 100,000 population. Canada had 296 cases per 100,000 population.⁶



For more information on cancer, please see:

- <u>Public Health Agency of Canada</u>
- <u>Canadian Cancer Society</u>
- World Health Organization
- International Agency for Research on Cancer

Notes to the reader

- Rates are calculated as age-standardized rates per 100,000 population. Age-standardized rates are adjusted so that they account for different age structures in different populations.³ This allows for comparisons across time. For example, cancer is more common in older age groups. With an aging population, there should be more cases of cancer now than in the past. This would also increase the rate of cancer in the overall population. In order to determine if rates are changing, they need to be adjusted to take out the influence of an aging.
- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.
- <u>G7 countries</u> include seven of the world's industrialized countries, namely the United States, Japan, Germany, France, the United Kingdom, Italy and Canada, that form an informal discussion group and economic partnership.

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Cardiovascular disease

In 2014, 6% of Canadians 20 years and older report that they were living with a cardiovascular disease.¹

Examples of cardiovascular diseases include heart disease and cerebrovascular disease. These two diseases are the second and third most common causes of death in Canada after cancer. High blood pressure is a chronic condition that can increase a person's risk for cardiovascular disease.^{2, 3}

OVER TIME

From 2007 to 2014, the proportion of Canadians living with a cardiovascular disease has remained stable at 5%. These rates were adjusted by age so they could be compared over time.¹



BY INCOME

In 2014, Canadians with the lowest household incomes were more likely than those with the highest household incomes to **report** living with a cardiovascular disease.⁴

PERCENT OF CANADIANS REPORTING LIVING WITH A CARDIOVASCULAR DISEASE BY HOUSEHOLD INCOME, 2014⁴



Quintiles (Q) are calculated by dividing the Canadian population into five groups of equal size (quintiles) based on household income.

BY SEX

In 2014, 7% of men and 5% of women **reported** living with a cardiovascular disease.¹

7% 5%	MEN	WOMEN
	7%	5%

BY AGE

The proportion of Canadians reporting that they were living with a cardiovascular disease increases with age. A similar pattern was found for high blood pressure.¹



INDIGENOUS POPULATIONS

Data on cardiovascular disease in Indigenous populations **are not directly comparable** to the data described above. In 2008/2010, 22% of First Nations on-reserve reported having high blood pressure, 6% reported living with a heart disease and 2% reported living with the effects of a stroke.⁵



In 2007–2010, First Nations off reserve, Métis and Inuit were less likely to **report** living with a cardiovascular disease or high blood pressure than non-Indigenous people.⁶

PERCENT OF CANADIANS LIVING WITH A CARDIOVAS- CULAR DISEASE, 2007-2010 ⁶	First Nations of cardiovascular disease	First Nations off reserve CARDIOVASCULAR HIGH BLOOD DISEASE PRESSURE 11% 9%		
	Métis cardiovascular disease 10%	HIGH BLOOD PRESSURE 9%		
	Inuit cardiovascular disease 9%*	high blood pressure 7%		
	Non-Indigenou cardiovascular disease 14%	IS HIGH BLOOD PRESSURE 12%		

* High sampling variability. Interpret with caution.

Data presented in this table are adjusted by age. Indigenous populations tend to be younger than non-Indigenous populations which can affect the ability to compare data across groups.

INTERNATIONAL COMPARISON

Data on rates of cardiovascular disease in G7 countries are not collected such that comparisons can be made. Looking at rates of mortality, Japan had the lowest mortality rate from heart disease (ischaemic, meaning reduced blood supply to the heart) at 39 deaths per 100,000 population in 2011, while the United States had the highest rate at 124 deaths per 100,000. Canada ranked in the middle at 95 deaths per 100,000 population.⁷



Data presented in this graph are adjusted by age.

Notes to the reader

- Cardiovascular diseases are conditions or diseases of the circulatory system. The four most common types are ischemic heart disease, myocardial infarction or heart attack, congestive heart failure and cerebrovascular disease.¹ Hypertension is a chronic condition that occurs when blood pressure is consistently high for long periods. Hypertension is a leading risk factor for cardiovascular disease.²
- Rates are calculated as age-standardized rates per 100,000 population. Age-standardized rates are are adjusted so that they account for different age structures in different populations. For example, cardiovascular diseases are more common in older age groups. With an aging population, there should be more cases now than in the past. In order to determine if rates are changing, they need to be adjusted to take out the influence of an aging population.
- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.
- <u>G7 countries</u> include seven of the world's industrialized countries, namely the United States, Japan, Germany, France, the United Kingdom, Italy and Canada, that form an informal discussion group and economic partnership.

For more information on cardiovascular diseases, please see:

- Heart and Stroke Foundation
- Public Health Agency of Canada
- Government of Canada

- Public Health Agency of Canada (2016). Chronic Disease and Injury Indicator Framework. Edition 2016, using data from the Canadian Community Health Survey 2014
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In 2011, almost 2.7 million or 1 in 10 Canadians 20 years and older were living with diagnosed diabetes (type 1 or type 2) as measured through hospitalizations or physician claims.¹

1 in 10 Canadians had been diagnosed



with diabetes.1

Diabetes is one of the most common chronic diseases in Canada and is linked to a variety of complications (e.g., amputations, loss of vision) and other diseases (e.g., cardiovascular disease, kidney disease).² Age, obesity and physical inactivity are some of the many risk factors for type 2 diabetes.²

OVER TIME



Data adjusted by age and collected from hospitalizations and physicians claims show that:¹



DID YOU KNOW? Although historically only found in adults, type 2 diabetes has been on the rise globally among children and youth over the past 20 years.^{10, 11}

Self-reported data are lower than data collected through hospitalizations and physician claims, but show the same general trend. The proportion of Canadians 12 years and older who **reported** being diagnosed with diabetes (type 1, type 2 or gestational) at some point in their life has been increasing.³

Data from hospitalizations and physician claims may be more accurate; however, are not available to make comparisons by sex, income, age and in Indigenous populations. For these analyses (see below), **self-reported** data are used.

BY SEX

In 2014, the proportion of Canadians 12 years and older who **reported** living with diabetes was 6% for men and 5% for women based on age-adjusted data.





* High sampling variability. Interpret with caution

BY INCOME

From 2003 to 2013, the proportion of Canadians 18 years and older in the lowest income group were more likely to **report** being diagnosed with diabetes (type 1, type 2 or gestational) than those in the highest income group.⁴

Data presented in this graph are adjusted by age.



Quintiles (Q) are calculated by dividing the Canadian population into five groups of equal size (quintiles) based on income.

BY AGE

The proportion of Canadians 12 years and older **reporting** being diagnosed with diabetes (type 1, type 2 or gestational) increases with age.⁵

INDIGENOUS POPULATIONS

Data on diabetes in Indigenous populations **are not directly comparable** to the data described above. In 2008/2010, 16% of First Nations onreserve reported they had been diagnosed with diabetes (type 1, type 2 or gestational). Of those reporting being diagnosed with this disease, 81% said they had type 2 diabetes, 9% had type 1 and 6% had gestational diabetes.⁶



In 2007–2010, First Nations off reserve were more likely to be living with diabetes (type 1, type 2 or gestational) than other groups.⁷

PERCENT OF CANADIANS LIVING WITH DIABETES, 2007-2010 ⁷	First Nations off reserve 6%	
	Métis 4%	
	Inuit 2%*	
	Non-Indigenous 4%	

* High sampling variability. Interpret with caution Data presented in this table are adjusted by age. Indigenous populations tend to be younger than non-Indigenous populations which can affect the ability to compare data across groups.

INTERNATIONAL COMPARISON

International data on diabetes are estimates of

diagnosed and undiagnosed diabetes. Among G7 countries, it is estimated that Canada had one of the highest proportions of people aged 20 to 79 years living with diabetes in 2015 at almost 8%. The United Kingdom was estimated to have the lowest proportion of people living with diabetes at less than 5%. The United States was estimated to have the highest at 11%.⁸ It should be noted that countries can have different approaches to screening for and diagnosis of diabetes that may affect estimates on how many people are living with diabetes.



Data presented in this graph are adjusted by age.

Notes to the reader

- Diabetes mellitus occurs in several forms with type 1, type 2 and gestational diabetes being the most common types.²
- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.
- Comparing of international rates of diabetes are challenging. The International Diabetes Federation generated age-adjusted estimates for each country by applying the country's age-specific diabetes prevalence estimates to each age-group and standardising the country's population age structure to the global age structure of 2001.9
- <u>G7 countries</u> include seven of the world's industrialized countries, namely the United States, Japan, Germany, France, the United Kingdom, Italy and Canada, that form an informal discussion group and economic partnership.

For more information on diabetes, please see:

- Public Health Agency of Canada
- <u>Canadian Diabetes Association</u>
- World Health Organization

- Public Health Agency of Canada (2016). Canadian Chronic Disease Surveillance System, 1996/1997-2011/2012. Ottawa ON: Public Health Agency of Canada.
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Injuries

In 2014, nearly 5 million or just under 2 in 10 Canadians reported experiencing an injury in the previous year that was serious enough to limit their normal activity.¹

Just under 2 in 10 Canadians reported experiencing an injury in the previous year.¹

EXPERIENCED AN INJURY IN THE PREVIOUS YEAR

just under 2 in 10 Canadians

Injuries are a leading cause of morbidity and disability for Canadians.^{2,3}

OVER TIME

The proportion of Canadians reporting that they experienced an injury in the previous year has increased from 13% in 2003 to 16% in 2014.¹

DID YOU KNOW? An estimated 20% to 30% of seniors fall each year in Canada.² Falls are the leading cause of injury-related hospitalizations for seniors. In 2010-2011, more than 100,000 Canadian seniors were hospitalized due to an injury with 78,000 of these hospitalizations being related to falls.^{2,3}

BY INCOME

In 2014, people living in households with the lowest income are less likely to report experiencing an injury than those living in the highest household income.⁴



BY SEX

In 2014, 17% of men and 14% of women reported having experienced an injury in the previous year.¹



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BY AGE

In 2014, youth were more likely to report having experienced an injury in the previous year than other age groups.¹

PERCENT OF CANADIANS REPORTING BEING INJURED BY AGE GROUP,	8	12 to 19 years	26%
		20 to 34 years	18%
		35 to 44 years	15%
	2	45 to 64 years	14%
	2	65 years and older	10%

INDIGENOUS POPULATIONS

Data on injuries in Indigenous populations are **not directly comparable** to the data described above.

In 2008/2010, 19% of First Nations on-reserve aged 18 years and older reported experiencing an injury in the previous year.⁵

In 2012, 20% of First Nations living off reserve, 21% of Métis and 16% of Inuit aged 19 years and older reported experience an injury in the previous year.⁶

INTERNATIONAL COMPARISON:

Data related to injuries are not collected such that they can be compared across countries.

Notes to the reader

• Data on injuries are reported by Canadians aged 12 years and older as being an injury that occurred in the previous year and was considered to be serious enough to limit normal activities. Repetitive strain injuries are not included.¹ The survey did not ask whether injuries were unintentional and intentional injuries.¹

• <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.

For more information on injuries, please see:

- Government of Canada
- Public Health Agency of Canada

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- Canadian Institute for Health Information 2012). National Trauma Registry Minimum Data Set (NTR MDS), 2010-2011 [Data File]. Retrieved on October 1, 2015.
- 4. Statistics Canada (2014). Canadian Community Health Survey, 2014 [Share Microdata File]. Ottawa, ON: Statistics Canada. All computations on these microdata were prepared by the Public Health Agency of Canada and the responsibility for the use and interpretation of these data is entirely that of the author(s).
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Mood disorders

In 2014, just over 2 million or just under 1 in 10 Canadians said they had been diagnosed with a mood disorder by a health professional.¹

Just under 1 in 10 Canadians said they had been diagnosed with a mood disorder.¹

DIAGNOSED WITH A MOOD DISORDER

8220202020

just under 1 in 10 Canadians

Mood disorders are among the most common types of psychological disorders in Canada. They can lead to stress, problems at work or with social relationships, as well as poor health and well-being.^{2,3}

OVER TIME, BY SEX, BY AGE

The proportion of Canadians who said they had been diagnosed with a mood disorder has been increasing, from 5% in 2003 to 8% in 2014.¹



The proportion of Canadians who report being diagnosed with a mood disorder is increasing for both men and women. Women are consistently more likely to report being diagnosed with mood disorders than men.¹



The proportion of Canadians reporting that they have been diagnosed with a mood disorder has increased in all age groups since 2003.¹



BY INCOME

In 2014, 14% of Canadians living in the lowest income households and 5% of Canadians living in the highest income households reported having symptoms similar to those of a mood disorder.⁴



Deciles (D) are calculated by dividing the Canadian population into ten groups of equal size (deciles) based on income.

INDIGENOUS POPULATIONS

Data on mood disorders in Indigenous populations **are not directly comparable** to the data described above. Data on mood disorders have not been collected at a national level for First Nations on-reserve.

In 2007–2010, First Nations living off reserve and Métis were more likely to report being diagnosed with a mood disorder than Inuit and non-Indigenous people.⁵



* High sampling variability. Interpret with caution

Data presented in this table are adjusted by age. Indigenous populations tend to be younger than non-Indigenous populations which can affect the ability to compare data across groups.

INTERNATIONAL COMPARISON

Data related to mood disorders are not collected such that they can be compared across countries.

Notes to the reader

- Mood disorders are measured in Canadians aged 12 and over. Data presented in this section are based on whether or not people report having been diagnosed by a health professional with a mood disorder (such as depression, bipolar disorder, mania or dysthymia).¹
- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.

For more information on mental health, please see:

- Government of Canada
- Mental Health Commission of Canada
- <u>Canadian Mental Health Association</u>

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In 2011, an estimated 340,200 or 2% of Canadians aged 40 years and older were living with a diagnosis of dementia.¹

Alzheimer's disease is the most common form of dementia, representing 60% to 70% of cases.² Common symptoms include memory problems, problems with routine tasks and language, impaired judgement and changes in mood and personality. Symptoms become more severe as the disease progresses.³

OVER TIME, BY AGE, BY SEX

The number of Canadians living with dementia is expected to double in the next 20 years.¹



Rates of dementia increase at a similar rate for men and women until 80 years of age, after which they increase more quickly for women than men. The average age of the onset of symptoms is 70 years for men and 74 years for women.¹

BY INCOME

Data on dementia by income are not available at a national level.

INDIGENOUS POPULATIONS

Limited data are available on dementia for Indigenous populations. Research in 2009 has shown that the age-standardized rate of First Nations living with dementia in Alberta was just under 8 per 1,000 population compared to just under 6 per 1,000 population in non-First Nations Albertans.⁴ Dementia also tended to be diagnosed at an earlier age among First Nations than non-First Nations.⁴

INTERNATIONAL COMPARISON

Globally, there are an estimated 47 million people living with dementia. This number is expected to nearly triple by 2050 to almost 132 million people.⁵ In 2015, Canada had the second lowest rate of dementia among G7 countries at 14 cases per 1000.⁶



Notes to the reader

- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.
- <u>G7 countries</u> include seven of the world's industrialized countries, namely the United States, Japan, Germany, France, the United Kingdom, Italy and Canada, that form an informal discussion group and economic partnership.

For more information on Alzheimer's disease and other dementias, please see:

- Government of Canada
- Alzheimer Society of Canada
- World Health Organization

- Public Health Agency of Canada (2014). Mapping Connections: An Understanding of Neurological Conditions in Canada.
- 2. World Health Organization (2016). Dementia, Fact Sheet No. 362.
- National Institute on Aging (2014). Alzheimer's Disease Fact Sheet. Retrieved on December 11, 2014.
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Tuberculosis

In 2014, 1,568 new and re-treatment cases of tuberculosis (TB) were reported in Canada, resulting in a rate of just over 4 per 100,000 population.¹

Tuberculosis (TB) is a curable bacterial infection that spreads from person to person primarily through the air.²



DID YOU KNOW? Drug-resistant TB is a major global public health issue. Rates of drug-resistant TB are currently low in Canada.³

OVER TIME

The number and rates of new TB cases have been decreasing.¹

RATES OF NEW TB CASES, 2004 AND 2014 ¹			
2004	2014		
	2		
1,612 new or re-treatment cases	1,568 new or re-treatment cases		
5 per 100,000 population	4 per 100,000 population		

BY INCOME

Data at a national level are not available on TB by income. Research has shown that living in a low-income household is one of the risk factors for the transmission of TB.⁴

BY SEX

In 2014, rates of TB were 5 new or re-treatment cases per 100,000 population for men and 4 per 100,000 population for women.¹



BY AGE

In 2014, rates of new or re-treated cases of TB were lowest in children and highest in people 75 years and older.¹



INDIGENOUS POPULATIONS

In 2014, Indigenous populations made up 4% of the total Canadian population, but accounted for 21% of reported cases of TB. This resulted in a rate of 20 new or re-treatment cases per 100,000 of the Indigenous population.¹ Rates vary across Indigenous populations. The rate of TB among Inuit is **almost 50 times higher** than the overall Canadian rate.¹

RATE OF NEW OR RE-TREATMENT CASES	First Nations On reserve Off reserve	19 20 15
Rate per 100,000	Métis	3
	Inuit	198
	Indigenous (overall)	20
	Canada (overall)	4

In 2014, the foreign-born population, which represented approximately 22% of the total Canadian population, accounted for 69% of reported new or re-treatment cases of TB for rate of almost 14 cases per 100,000 population.¹

INTERNATIONAL COMPARISON

In 2015, there was an estimated 10 million new cases of TB across the world.⁵ In G7 countries, Canada had the second lowest rate of new cases of TB at just over 5 cases per 100,000 population.⁶ The United States had the lowest rate at 3 per 100,000 population while Japan had the highest at 17 per 100,000 population.⁶



Notes to the reader

- Annual rates of TB are calculated by using the number of new active and re-treatment cases each year. A re-treatment case occurs when a person who was previously diagnosed with TB has a second diagnosis of TB (i.e., reactivated or new infection). To be considered a re-treatment case, the disease must have been inactive for at least six months between the first and second diagnosis.¹
- <u>Indigenous populations</u> consist of First Nations, Métis and Inuit.

 <u>G7 countries</u> include seven of the world's industrialized countries, namely the United States, Japan, Germany, France, the United Kingdom, Italy and Canada, that form an informal discussion group and economic partnership.

For more information on TB, please see:

- Government of Canada
- <u>Canadian Tuberculosis Standards</u>
- World Health Organization

- Public Health Agency of Canada (2016). Tuberculosis in Canada - Pre-release 2014.
- Public Health Agency of Canada, the Lung Association and the Canadian Thoracic Society (2014). Canadian Tuberculosis Standards, 7th edition.
- Public Health Agency of Canada (2015). Tuberculosis: Drug resistance in Canada 2014.
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- 5. Glaziou, P., Sismanidis, C., Pretorius, C., Timimi, H. (2015). Global TB Report 2015 .
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