

A photograph of a metal shopping cart with red handles and wheels, parked on a paved surface. A red dashed line extends from the front of the cart towards the left, suggesting movement or a path. The background is a solid orange color at the top.

# HOUSEHOLD FOOD INSECURITY IN CANADA

2014

**PROOF**  
FOOD INSECURITY  
POLICY RESEARCH

Valerie Tarasuk  
Andy Mitchell  
Naomi Dachner

# Household Food Insecurity in Canada, 2014

**Valerie Tarasuk**

**Andy Mitchell**

**Naomi Dachner**

## **Acknowledgments:**

This report is a PROOF initiative which is supported by a Programmatic Grant in Health and Health Equity, Canadian Institutes of Health Research (CIHR) (FRN 115208). The authors wish to thank Stephanie Vasko for her layout and design work on the report. They also wish to acknowledge Timmie Li for his contribution to the report.

## **PROOF Investigators:**

Herb Emery (University of Calgary), Craig Gundersen (University of Illinois at Urbana-Champaign), Paul Kurdyak (Centre for Addiction and Mental Health), Catherine Mah (Memorial University), Lynn McIntyre (University of Calgary), Jurgén Rehm (Centre for Addiction and Mental Health), Valerie Tarasuk (University of Toronto).

Released April 5, 2016. Updated May 12, 2017.

## **How to cite this document:**

Tarasuk, V, Mitchell, A, Dachner, N. (2016). *Household food insecurity in Canada, 2014*.

Toronto: Research to identify policy options to reduce food insecurity (PROOF).

Retrieved from <http://proof.utoronto.ca>



Our annual reports are provided under the terms of a Creative Commons Attribution 4.0 International License. This license allows for free redistribution, as long as it is credited to PROOF.

**PROOF**  
FOOD INSECURITY  
POLICY RESEARCH

PROOF is an international, interdisciplinary team of researchers committed to a program of research to identify effective policy interventions to address household food insecurity.

Website: <http://proof.utoronto.ca>



**CIHR IRSC**  
Canadian Institutes of Health Research  
Instituts de recherche en santé du Canada

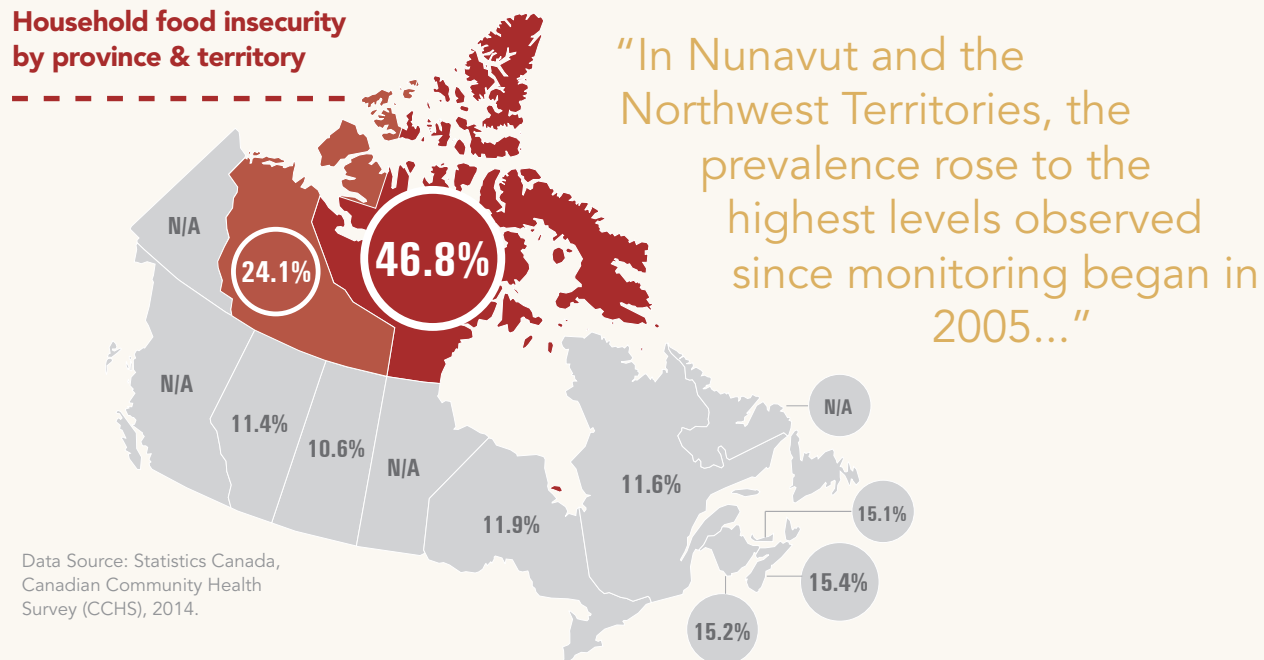
This study was supported by the  
Canadian Institutes of Health Research.

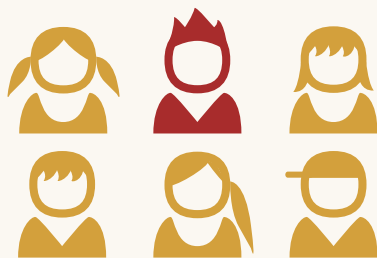
# Executive Summary

Household food insecurity, inadequate or insecure access to food because of financial constraints, is a significant social and health problem in Canada. Not all provinces and territories chose to measure food insecurity in 2014 but among those that did, the problem appears to have remained persistently high. When the results for the participating jurisdictions - Alberta, Saskatchewan, Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, the Northwest Territories, and Nunavut – are considered together, 12.0% of households experienced some level of food insecurity during the previous 12 months in 2014. This represents 1.3 million households, or 3.2 million individuals, including nearly 1 million children under the age of 18. More than 1 in 6 children under the age of 18 lived in households that experienced food insecurity.

Food insecurity was most prevalent in Canada's North (especially Nunavut) and the Maritimes in 2014. In Nunavut and the Northwest Territories, the prevalence rose to the highest levels observed since monitoring began in 2005, 46.8% and 24.1% respectively. While food insecurity appeared to drop in the provinces, no changes in prevalence were large enough to be statistically significant.

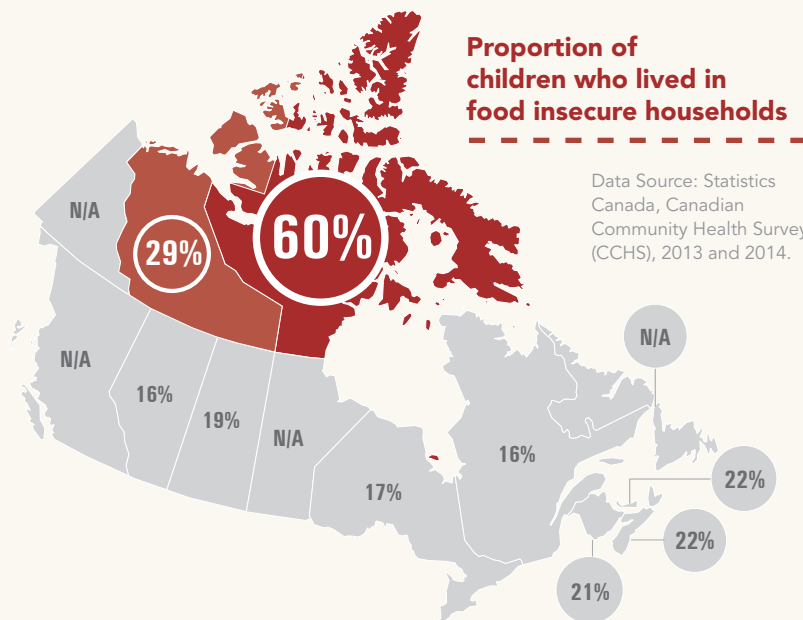
## Household food insecurity by province & territory





Household food  
insecurity affected

**1 in 6**  
children in Canada



Households with children under the age of 18 were at greater risk for food insecurity than households without children (15.6% versus 10.4%). The most vulnerable were lone parent families headed by women: 33.5% of these families were food insecure in 2014. Among households without children under 18 years old, the highest rate of food insecurity was 15.7% among unattached individuals. Nunavut and the Northwest Territories had the highest prevalence of children living in food-insecure households at 60% and 29% respectively.

Sixty-one percent of households whose major source of income was social assistance were food insecure, as were 35.6% of those reliant on Employment Insurance or Workers' Compensation. However, the majority of food insecure households (62.2%) were reliant on wages or salaries from employment. Other household characteristics associated with a higher likelihood of food insecurity included having an income below the Low Income Measure (29.2%), being Aboriginal (25.7%), being Black (29.4%), and renting rather than owning one's home (24.5%).



"60.9% of households whose major source of income was social assistance were food insecure. However, the majority of food insecure households (62.2%) were reliant on wages or salaries from employment."





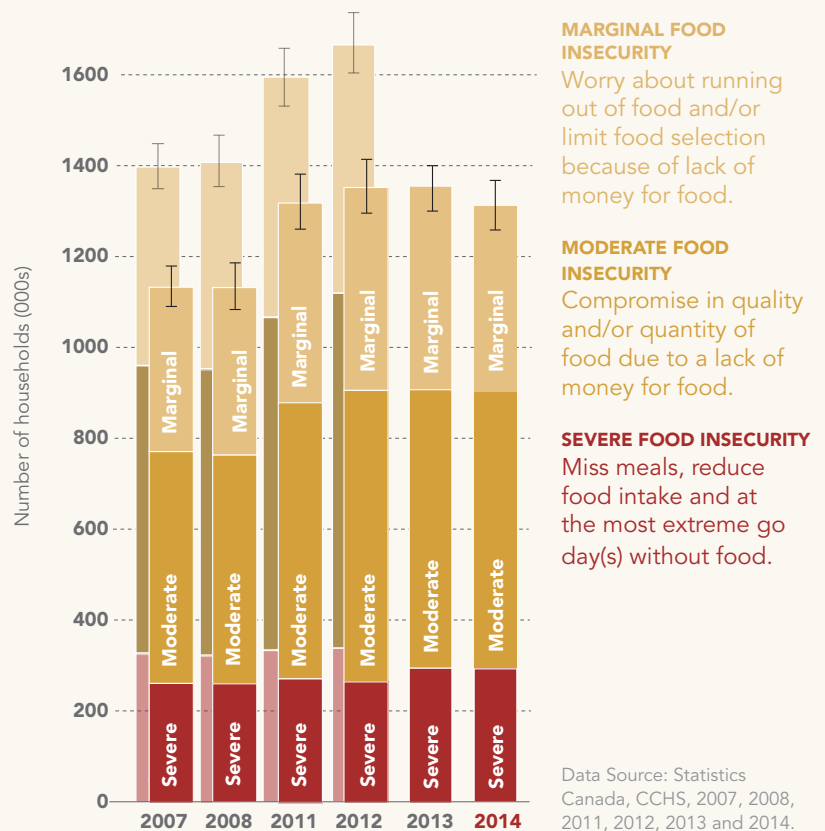
Although there has been rigorous measurement and monitoring of household food insecurity in Canada since 2005, the problem has not abated. And, still almost half of the households in Nunavut experience food insecurity.

Food insecurity was slightly more prevalent in urban areas than rural ones, but prevalence rates differed markedly between cities. Among the 27 major census metropolitan areas examined, food insecurity in 2013-14 was highest in Peterborough, Ontario, affecting over 1 in 6 households in this city. The lowest rate of food insecurity was in Quebec City, where 1 in 14 households were food insecure.

Food insecurity takes a serious toll on individual health and well-being, and costs our health care system. Although there has been rigorous measurement and monitoring of household food insecurity in Canada since 2005, the problem has not abated. While the number of food insecure households appeared to be slightly lower in 2014 than 2013, this decline was not statistically significant and the number remained substantially higher than in 2008. Among the provinces and territories surveyed in 2014, there were no significant drops in food insecurity prevalence, and even indications of upward trends in the already vulnerable North.

The geographic patterning of food insecurity, with the alarming rates in the North and the Maritimes and the density of affected households in our largest provinces, suggests that reducing the prevalence of food insecurity requires attention by provincial, territorial, and federal levels of government. The data in this report provide an impetus for discussion that is critical to the development of programs and policies aimed at tackling food insecurity in Canada.

### Household food insecurity



- Provinces and territories participating in the 2014 Canadian Community Health Survey - Alberta, Saskatchewan, Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, the Northwest Territories, and Nunavut.
- All provinces and territories.

# Introduction

In 2013 and 2014, the Household Food Security Survey

Module was optional on Statistics

Canada's annual Canadian Community

Health Survey (CCHS), and

British Columbia, Manitoba,

Newfoundland and Labrador, and

Yukon chose not to include the

measurement of food insecurity for

their populations. In this report,

we therefore present information

about household food insecurity

for only Alberta, Saskatchewan, Ontario,

Quebec, New Brunswick, Nova Scotia, Prince Edward

Island, the Northwest Territories, and Nunavut for 2014. Examining

the results of this survey provides an opportunity to deepen our

understanding of the prevalence, distribution, and relative severity of household food insecurity

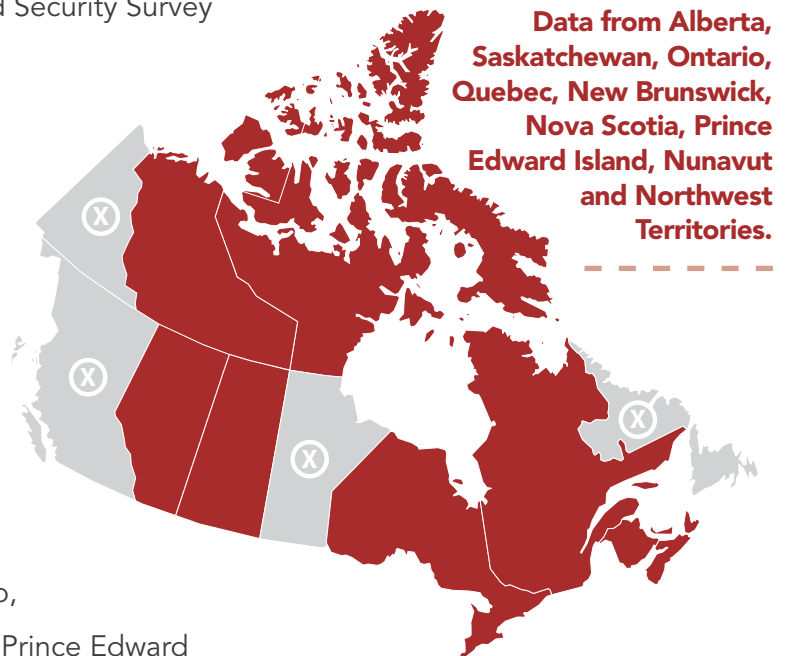
across the country. The Annual Report on Household Food Insecurity is designed to provide a

tool, utilizing Statistics Canada data, to monitor trends and identify priorities for interventions to

address this major public health issue. It builds on the extensive work of the Office of Nutrition

Policy and Promotion at Health Canada<sup>i</sup> and Statistics Canada<sup>ii</sup> in monitoring household food

insecurity in Canada.



The report has been prepared by PROOF, a Canadian Institutes of Health Research (CIHR)-

funded research program initiated to identify effective policy interventions to address household

food insecurity. It is the fourth in a series of annual reports on food insecurity in Canada.

## What is food insecurity?

According to the Food and Agriculture Organization (FAO) of the United Nations, food security exists when “all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.”<sup>iii</sup> This definition was adopted by Canada at the World Food Summit, but the measurement and monitoring of food insecurity in the country focuses on a household’s experience of food insecurity, or the inadequate or insecure access to adequate food due to financial constraints. The experience of food insecurity can range from concerns about running out of food before there is more money to buy more, to the inability to afford a balanced diet, to going hungry, missing meals, and in extreme cases, not eating for a whole day because of a lack of food and money for food.

Food insecurity is a serious public health problem because individuals’ health and well-being are tightly linked to their household food security. Recent research in Canada has shown that the experience of hunger leaves an indelible mark on children’s physical and mental health, manifesting in greater likelihood of certain conditions, such as depression and asthma in adolescence and early adulthood<sup>iv</sup>. Adults in food-insecure households have poorer physical and mental health and higher rates of numerous chronic conditions, including depression, diabetes, and heart disease<sup>v</sup>. Once chronic diseases are established, their management is also compromised in the context of food insecurity<sup>vi</sup>. The toll that food insecurity takes on health is evident through the heightened health care costs among food insecure Canadians<sup>vii</sup>.

Responses to items in the Household Food Security Module, Canadian Community Health Survey, Canada 2014*						
Adult food security scale:	All Households		Households with children < 18		Households without children < 18	
	Number (000s)	%	Number (000s)	%	Number (000s)	%
Worried food would run out	975.7	8.9%	370.6	11.5%	605.1	7.8%
No food, and no money for more	753	6.9%	264.4	8.2%	488.6	6.3%
Could not afford balanced meals	834	7.6%	259.5	8.1%	574.5	7.4%
Adults cut or skipped meals (Y/N)	417.8	3.8%	138.3	4.3%	279.5	3.6%
Adults cut or skipped meals (frequency)	312.6	2.9%	97.3	3.0%	215.3	2.8%
Ate less than felt should	468.1	4.3%	153.6	4.8%	314.5	4.1%
Was hungry but could not afford to eat	254	2.3%	70.9	2.2%	183.1	2.4%
Lost weight, no money to buy food	165.2	1.5%	45.8	1.4%	119.4	1.5%
Adults did not eat for a whole day (Y/N)	97.5	0.9%	27.8	0.9%	69.7	0.9%
Adults did not eat whole day (frequency)	73.9	0.7%	21.6	0.7%	52.3	0.7%
<b>Child food security scale:</b>						
Relied on a few kinds of low cost foods to feed children	258.9	2.4%	258.9	8.1%	n/a	n/a
Couldn't afford to feed children a balanced meal	178.1	1.6%	178.1	5.6%	n/a	n/a
Children were not eating enough because couldn't afford food	65.7	0.6%	65.7	2.1%	n/a	n/a
Adults cut the size of children's meals because they couldn't afford food	18.4	0.2%	18.4	0.6%	n/a	n/a
Child ever skip meals because there wasn't enough money for food	10.8	0.1%	10.8	0.3%	n/a	n/a
Child skipped meals almost every, or some months	5.9	0.1%	5.9	0.2%	n/a	n/a
Children were hungry but couldn't afford to buy more food	18.9	0.2%	18.9	0.6%	n/a	n/a
Children did not eat for a whole day	2.4	0.0%	2.4	0.1%	n/a	n/a

\* Participating provinces only. In 2014 Newfoundland and Labrador, Manitoba, British Columbia and Yukon Territory did not participate in the Food Security module of the Canadian Community Health Survey.

## How is food insecurity measured in Canada?

Data on food insecurity are collected through the Canadian Community Health Survey (CCHS), a cross sectional survey administered by Statistics Canada that collects health-related information from about 60,000 domiciled Canadians per year. The sample is designed to be representative of the ten provinces and three territories<sup>viii</sup>, but it excludes full-time members of the Canadian Forces, individuals living on First Nations reserves<sup>ix</sup>, Crown Lands, or in the Quebec health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James, and persons in prisons or care facilities. Although on-reserve First Nations people and homeless people<sup>x</sup> comprise relatively small proportions of the populations in each province, their high levels of vulnerability to food insecurity must mean that the true prevalence of food insecurity is to some extent underestimated because of their omission.

Since 2004, the Household Food Security Survey Module has been included in the CCHS to monitor households' experiences of food insecurity over the previous 12 months<sup>xi</sup>. (See Appendix A for the full Household Food Security Survey Module)

This survey module consists of 18 questions asking the respondent whether he/she or other household members experienced the conditions described, which range in severity from experiences of anxiety that food will run out before household members have money to buy more, to modifying the amount of food consumed, to experiencing hunger, and in the extreme, going a whole day without eating. These questions distinguish the experiences of adults from those of children, recognizing that in households with children, adults may compromise their own food intake as a way to reallocate scarce resources for children.

Based on the number of positive responses to the questions posed, households are classified as either

food secure or marginally, moderately, or severely food insecure. (See Appendix B for a full description) Food secure households are those who gave no indication of any income-related problem of food access. Those who are marginally food insecure have reported some concern or problem of food access over the past 12 months<sup>xii</sup>. Households classified as moderately food insecure have reported compromises in the quality and/or quantity of food consumed among adults and/or children. Those classed as severely food insecure



Data on food insecurity are collected through the Canadian Community Health Survey (CCHS), a cross sectional survey administered by Statistics Canada that collects health related information from about 60,000 domiciled Canadians per year.

have reported more extensive compromises, including reduced food intake among adults and/or children because of a lack of money for food.

In this report, we present estimates of the number of adults and children living in food insecure households and the rate of household food insecurity among children, based on population-weighted totals from CCHS 2014. Compared to earlier reports by Health Canada<sup>i</sup> and Statistics Canada<sup>ii</sup>, there are two important differences in our methods of calculation. We have considered all members of households classified as food insecure, whereas Health Canada and Statistics Canada have only reported on food insecurity among those 12 years of age and older. In addition, we have included marginally food



insecure households in our calculations, whereas Statistics Canada's and Health Canada's reports have only counted the people living in moderately and severely food insecure households. Thus, the prevalence estimates here encompass a more comprehensive spectrum of the population affected by food insecurity.

In the United States, food insecurity is monitored using the same questionnaire used in Canada, but the terminology and classification scheme differ. This means that the results in this report are not directly comparable to reports of food insecurity in the United States. A comparison of food insecurity rates in Canada and the United States in 2014 is not feasible given the absence of national data in Canada, but please refer to previous PROOF reports for 2011 and 2012 where the United States Department of Agriculture's coding of the questionnaire is presented for national comparisons for those years.



In 2013 and 2014 the food security survey module was optional, and B.C., Manitoba, Newfoundland and Labrador, and Yukon chose not to measure food insecurity.

In this report, we describe household food insecurity in the jurisdictions for which 2014 data are available. We also report on household food insecurity from 2007 to 2014 and food insecurity by household characteristics using pooled data from participating provinces and territories. These provinces and territories represented 81.8% of the Canadian population in 2014<sup>xiii</sup>. Because the results here are based only on data for this subset of the Canadian population, our description of the socio-demographic characteristics of food-insecure households in 2014 cannot be compared directly with the results we have reported in our 2011 and 2012 reports. Further, in cases where the samples sizes are smaller, we present statistics based on a combination of 2013 and 2014 data, in order to provide reliable estimates. Specifically, the provincial/territorial statistics describing severity, children in food insecure households and food insecurity among social assistance recipients, and the prevalence of food insecurity in census metropolitan areas are based on 2013 and 2014 data.

In looking at changes in estimates over time within the participating provinces and territories, 95% confidence intervals (presented in **Appendix D**) are examined, and where confidence intervals do not overlap, observed differences in prevalence estimates are considered statistically significant.

#### VISIT

► <http://proof.utoronto.ca> to access previous PROOF reports.

The food security survey module is not always part of the common content of CCHS, and during cycles of CCHS where it has been

optional, some provinces and territories have opted out of participation. In 2013 and 2014, the food security survey module was optional, and British Columbia, Manitoba, Newfoundland and Labrador, and Yukon chose not to measure food insecurity. Because we lack food insecurity data from these provinces and territory, it is not possible to calculate a national prevalence of household food insecurity for 2014.

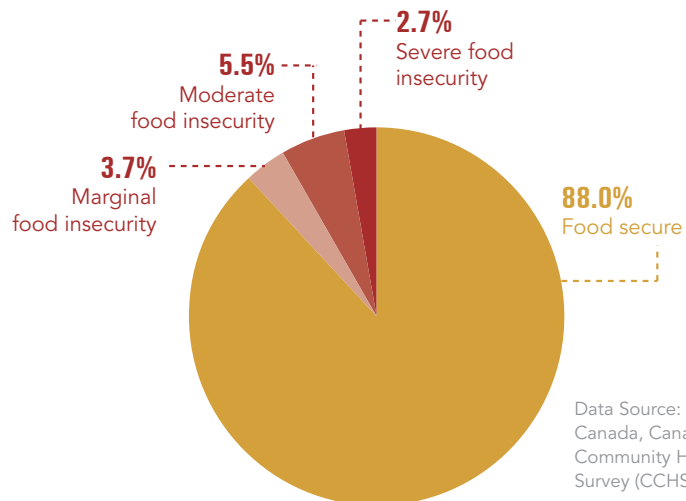
## Prevalence of Household Food Insecurity – Canada 2014

When the results for all of the provinces and territories that measured food insecurity in 2014 are considered together, 12.0% of households<sup>xiv</sup> in the country experienced some level of food insecurity during the previous 12 months. This represents 1.3 million households, or 3.2 million individuals, including nearly 1 million children under the age of 18. More than 1 in 6 children under the age of 18 lived in households that experienced food insecurity. (It should be noted that British Columbia, Manitoba, Newfoundland and Labrador and Yukon are not included in these estimates because they opted out of food insecurity measurement in 2014.)

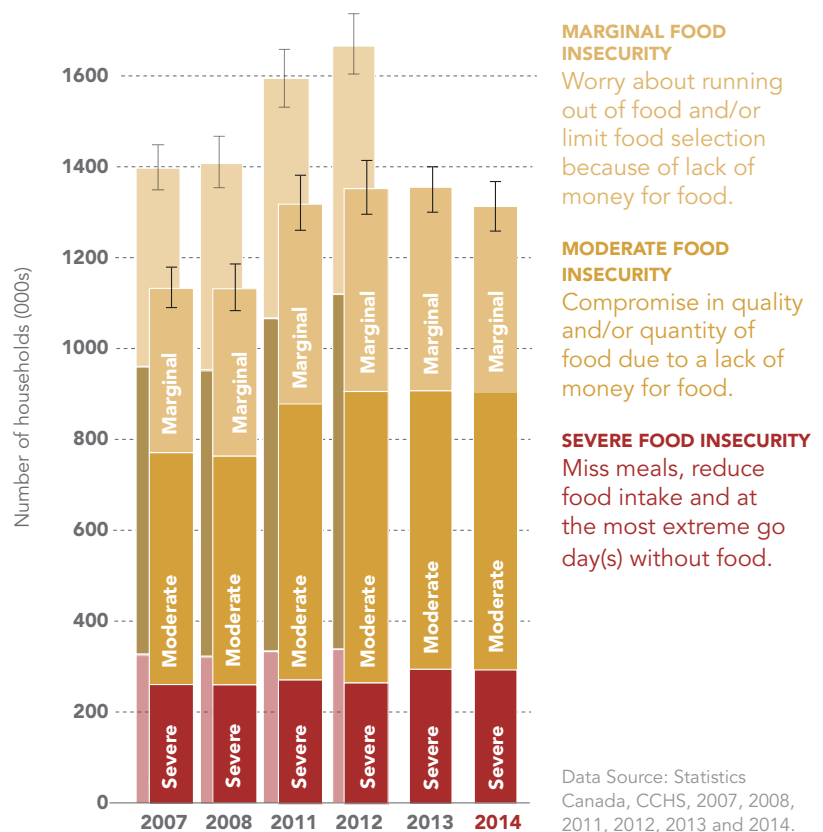
The levels of deprivation documented were substantial, with 5.5% of households (i.e. 608,100 households) classified as moderately food insecure, indicating compromises in the quality and possibly the quantity of food consumed over the past 12 months, and 2.7% (i.e. 293,000 households) severely food insecure.

Among the participating provinces and territories, household food insecurity rose significantly between 2008 and 2011, and then remained persistently high. While the number of food insecure households appeared to be slightly lower in 2014 than 2013, this decline was not statistically significant and the number remained substantially higher than in 2008.

Household food insecurity, Canada 2014



Household food insecurity



Provinces and territories participating in the 2014 Canadian Community Health Survey - Alberta, Saskatchewan, Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, the Northwest Territories, and Nunavut.

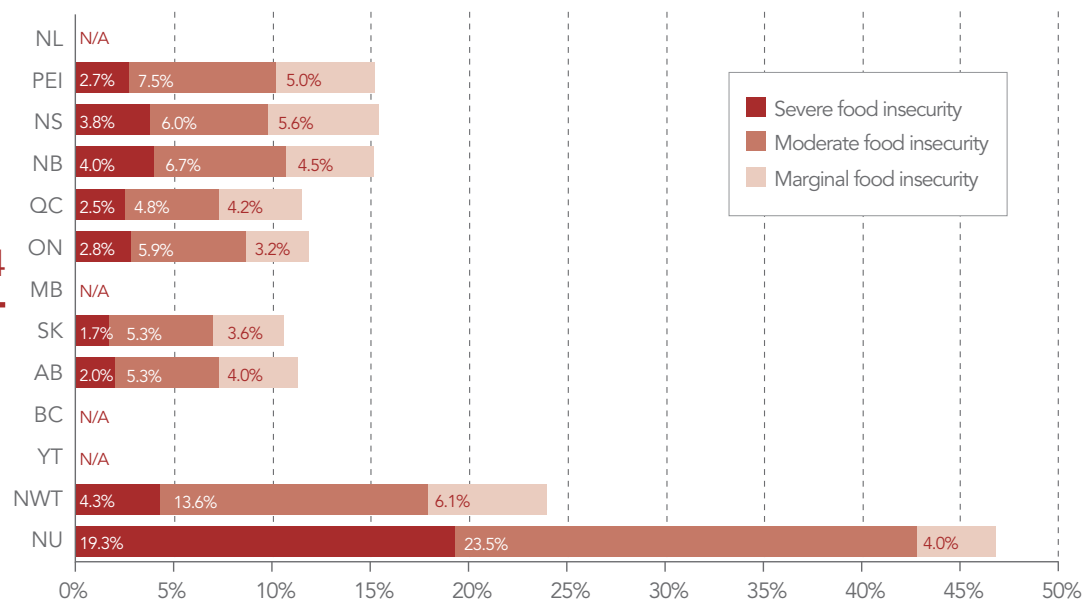
All provinces and territories.

## Food insecurity by province or territory

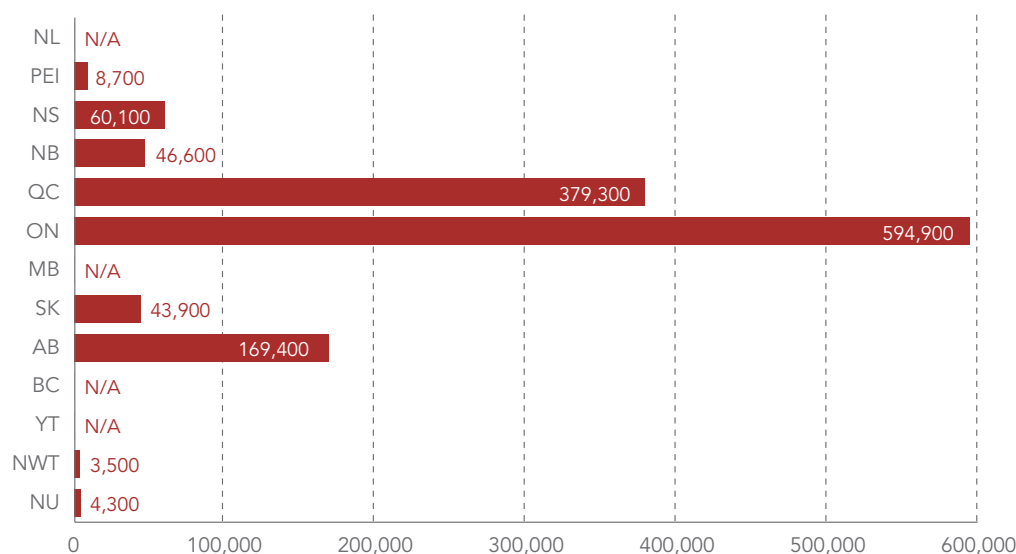
Food insecurity was a substantial problem in every province and territory in 2014. Food insecurity in Nunavut remained extraordinarily high, with a prevalence of 46.8% in 2014 and 19.3% of households experiencing severe food insecurity. The second highest prevalence (24.1%) of food insecurity in the country in 2014 was found in the Northwest Territories. Saskatchewan was the province with the lowest prevalence of food insecurity, at 10.6%.

### Household food insecurity in Canada by province & territory, 2014

Data Source: Statistics Canada, Canadian Community Health Survey (CCHS), 2014.



Prevalence tells us the proportion of the population or subpopulation experiencing food insecurity. To understand the problem of food insecurity in Canada, it is also instructive to examine the distribution of food insecure households across the country, as this tells us where the greatest numbers of food insecure households are located. Ontario, Canada's most populous province, was home to 594,900 food insecure households in 2014.



### Number of food insecure households by province & territory, 2014

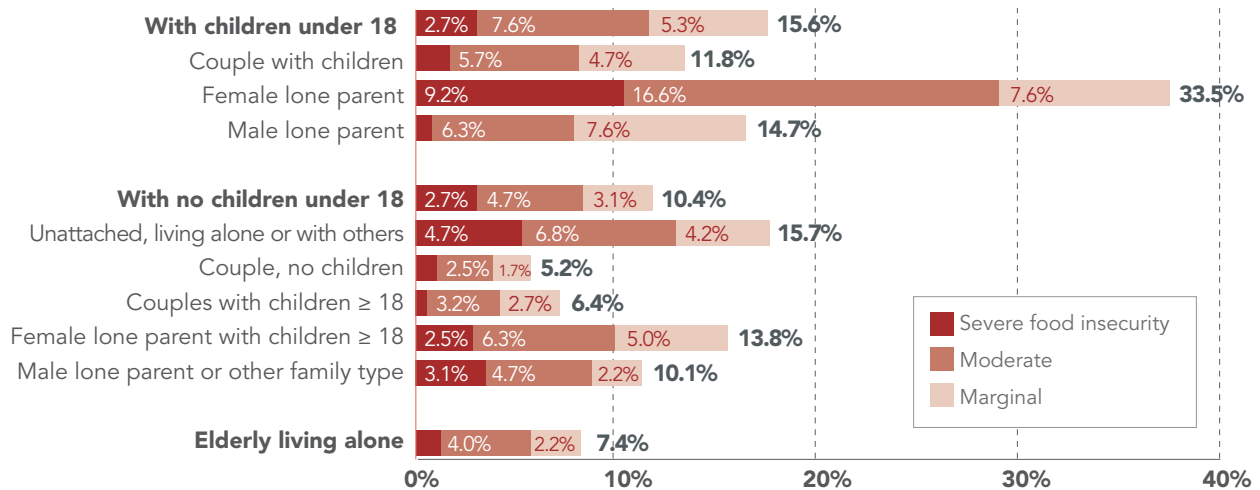
Data Source: Statistics Canada, Canadian Community Health Survey (CCHS), 2014.

## Food insecurity by household characteristics

Just as food insecurity rates vary across the provinces and territories, the risks also vary according to household characteristics. (See Appendix C for a detailed breakdown of food insecurity in relation to household characteristics) Looking at the pattern of vulnerability among all of the provinces and territories that participated in food insecurity measurement in 2014, we found that food insecurity was more prevalent among households with children under the age of 18. Most vulnerable were lone-parent families headed by women. Among this group, the prevalence of food insecurity was 33.5%. Among households without children under 18 years old, food insecurity rates were 15.7% among unattached individuals and 13.8% among female lone parents living with adult children. In contrast, the prevalence of food insecurity among couples without children was 5.2%, and 7.4% among elderly individuals living alone.

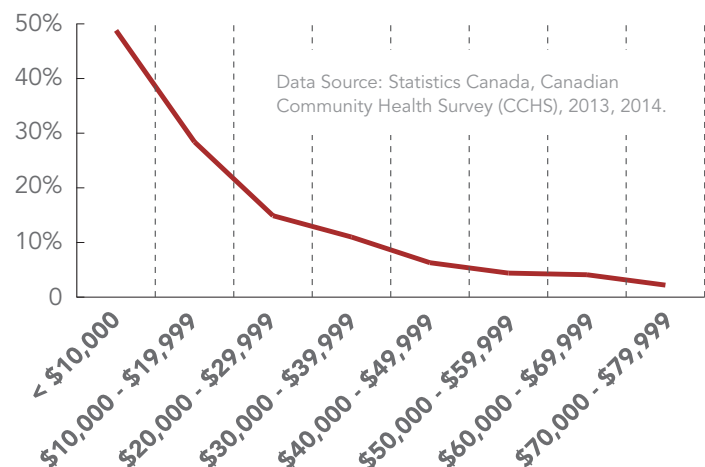
## Food insecurity by household composition

Data Source: Statistics Canada, Canadian Community Health Survey (CCHS), 2014.



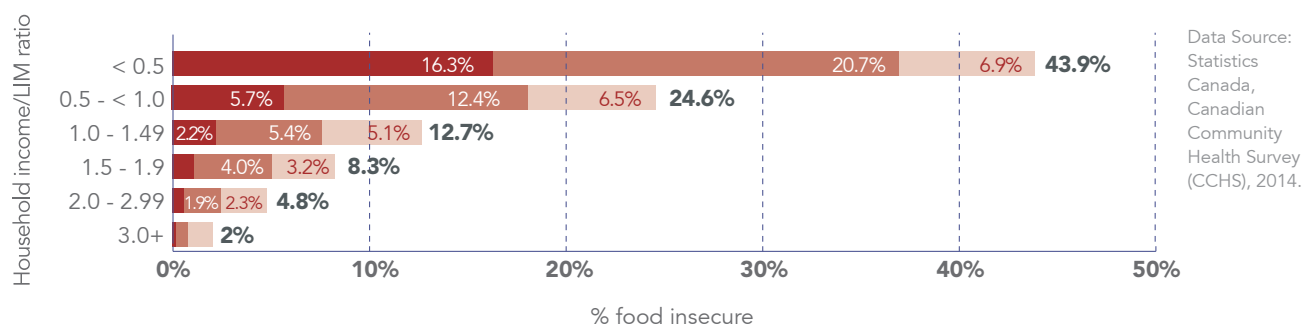
Because food insecurity results from a household's inability to access food for financial reasons, it is not surprising that income is the strongest predictor of food insecurity. The graph below plots the prevalence of food insecurity against income, adjusted for household size, so that we can see the relationship between food insecurity and household income across all household configurations. We see that the probability of food insecurity rises as household income declines. This pattern is most dramatic at very low levels of household income. Conversely, the probability of food insecurity decreases as income rises. The line ends at about \$80,000 because so few households are food insecure at this income level and beyond, that it is not possible to generate a reliable sample.

## Food insecurity by household income



While there is no official measure of poverty in Canada, Statistics Canada's Low Income Measure (LIM) is commonly used for making international comparisons, offering another window into the relationship between income and food insecurity. The LIM is 50% of median household income, adjusted for household size, to take into account that a household's needs increase with additional members<sup>xv</sup>. The lower household income is in relation to the LIM, the greater the likelihood of severe food insecurity. In 2014, 43.9% of households with incomes under half of the LIM were food insecure.

## Relationship between income and household food insecurity



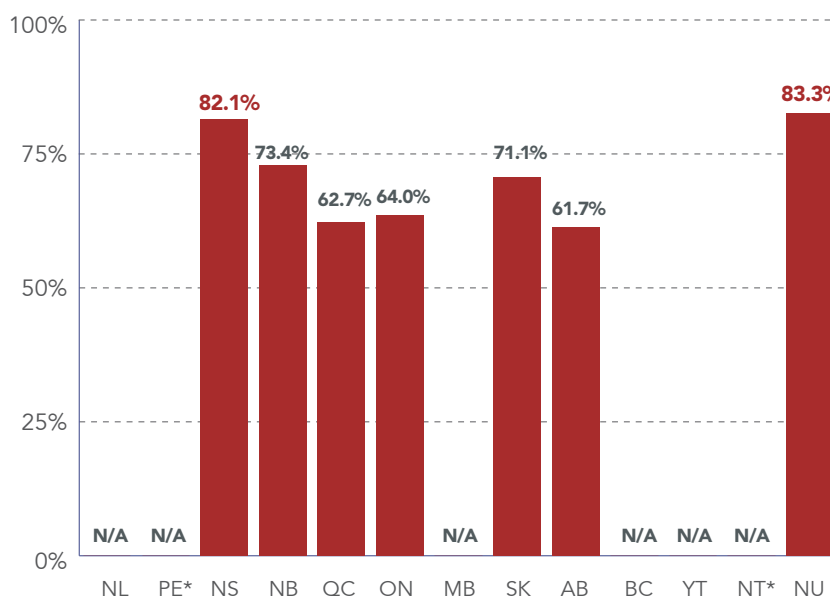
The source of a household's income is strongly related to food insecurity. Households whose main source of income was either pensions or dividends and interest had the lowest rate of food insecurity (7.3%)<sup>xvi</sup>. In contrast, food insecurity affected 60.9% of households reliant on social assistance (i.e. welfare and disability support programs) in 2014.

Social assistance recipients are particularly vulnerable to food insecurity, and the rates vary greatly across the provinces and territories. The bar graph below presents the rate of food insecurity among social assistance recipients by province and territory using combined data from 2013 and 2014 in order to generate larger samples and thus more reliable estimates. Social assistance recipients in Nova Scotia and Nunavut had the highest rates of food insecurity in the country (above 80%), and the lowest rate (61.7%) was found in Alberta. No results are shown for the Northwest Territories and Prince Edward Island because the sample sizes in these jurisdictions were too small to derive reliable estimates.

## Proportion of households reliant on social assistance who were food insecure

Data Source: Canadian Community Health Survey, 2013 and 2014. Newfoundland and Labrador, Manitoba, British Columbia and Yukon Territory did not participate in the food security module of the 2013 and 2014 CCHS.

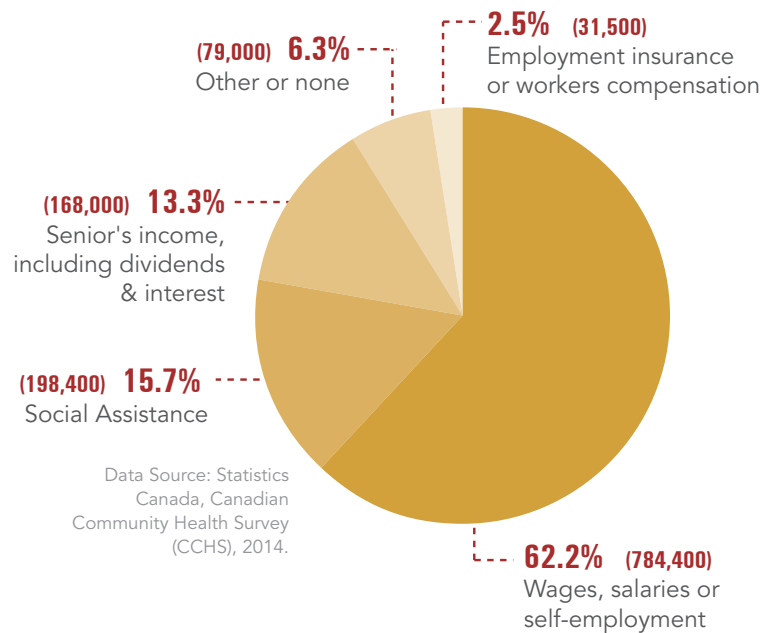
\* Prince Edward Island and the Northwest Territories excluded due to small sample size.





Although the prevalence of food insecurity among households whose main source of income was wages and salaries was 10.6% in 2014, this group made up the majority (62.2%) of food insecure households.

### Food insecure households' main source of income



Proportion of food insecure households reliant on wages and salaries, by province

Province	Percent
Newfoundland and Labrador	-
Prince Edward Island	61.3%
Nova Scotia	54.2%
New Brunswick	58.3%
Quebec	63.0%
Ontario	58.9%
Manitoba	-
Saskatchewan	66.3%
Alberta	74.6%
British Columbia	-
Yukon	-
Northwest Territories	67.9%
Nunavut	54.7%

Source: Canadian Community Health Survey, 2014. Newfoundland and Labrador, Manitoba, British Columbia and Yukon Territory did not participate in the food security module of the 2014 CCHS. Includes only those households with complete food security modules.

The percentage of food insecure households who were reliant on wages and salaries differed by province, with a low of 54.2% in Nova Scotia and high of 74.6% in Alberta.

Some other household characteristics associated with increased risk of food insecurity:

- 24.5% of households renting their accommodations experienced food insecurity, versus 6.2% of homeowners.
- The prevalence of food insecurity among households where the respondent was a recent immigrant to Canada (less than 5 years) was 15.2%, but the rate for households where the respondent had immigrated to the country five or more years ago was 12%, similar to the rate for Canadian-born respondents (11.8%).
- Households where the respondent was Aboriginal or black had an elevated rate of food insecurity at 25.7%, and 29.4% respectively.
- Households in rural areas experienced a rate of food insecurity that was slightly lower than that of households in population centres (10.3% versus 12.4%), but this difference was not statistically significant.

## Children in food insecure households

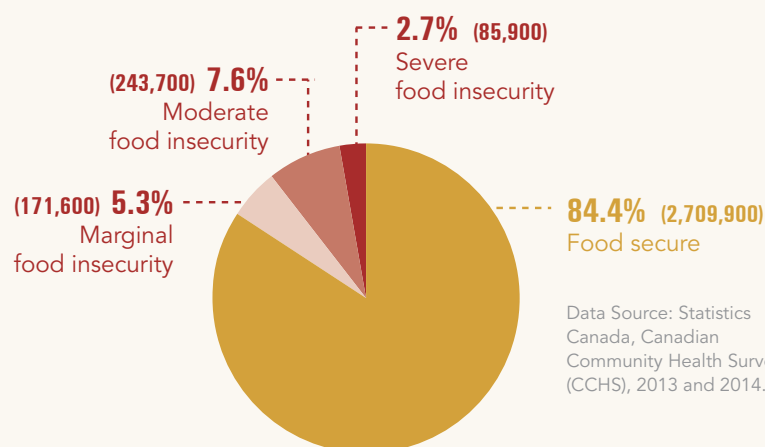
Food insecurity is more prevalent among households with children under the age of 18 than households without children.

### How many children are affected?

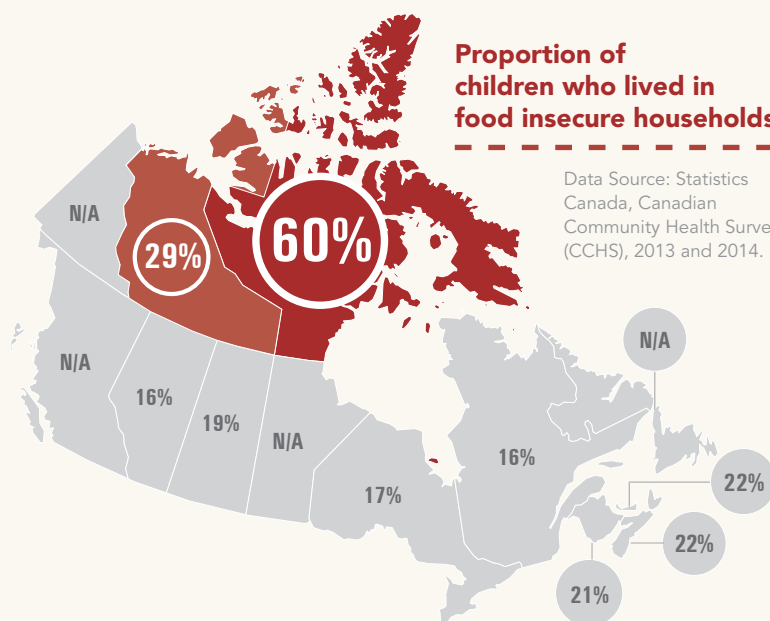
We combined data from 2013 and 2014 to get a larger and more reliable sample to answer this question. Considering the provinces and territories that monitored food insecurity in 2013 and 2014, 17.2% of children in Canada (an estimated 971,500 children) lived in households affected by some level of food insecurity. Two-thirds of these children (641,900) were in moderately or severely food insecure households.

The prevalence of food insecurity for households with children differs dramatically depending on the province or territory of residence. **Nunavut and the Northwest Territories had the highest prevalence of children living in food-insecure households, at 60% and 29% respectively.** Prince Edward Island, Nova Scotia, and New Brunswick had rates above 20%. The lowest prevalence of children in food-insecure families was found in Quebec and Alberta, both at 16%, but even in these cases, almost 1 in 6 children were living in a household that had reported some level of food insecurity in 2013-2014.

### Households with children by food security status



### Proportion of children who lived in food insecure households



Food insecurity is more prevalent among households with children under the age of 18 than households without children.



Household food insecurity affected  
**1 in 6**  
children in Canada

## Severe food insecurity

We combined data from 2013 and 2014 to get a larger and more reliable sample to examine severe food insecurity. Considering the provinces and territories that monitored food insecurity in 2013 and 2014, one in five food insecure households in Canada were *severely food insecure*, or a total of 294,900 households. This number has not declined since 2007 which is worrisome because severe food insecurity, in particular, has been shown to have a toxic impact on health<sup>vii</sup>.

Virtually all severely food insecure households worry about running out of food before they are able to get money to buy more, and the vast majority reported routinely cutting the size of meals and skipping meals. In nearly one-third of severely food insecure households, adults routinely went an entire day without food.

Adults in food insecure households may compromise their diets to spare their children. Thus, the magnitude of the deprivation denoted by severe food insecurity is most evident through the experience of children in severely food insecure households. The vast majority of these households reported that they could not afford to feed their children balanced meals and that they relied on limited low-cost food to feed their children. And, even more extreme, nearly one in five children in severely food insecure households were hungry because there was no food or money to buy food. (See Appendix C for a detailed description of the characteristics of severely food insecure households.)

### What does it mean to be a severely food insecure household in Canada?

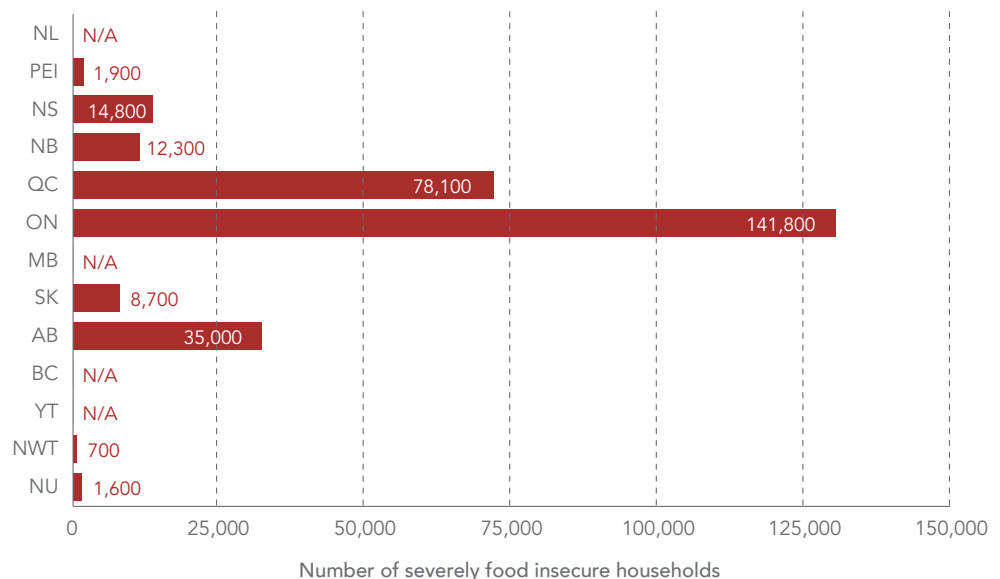
- 97.5% reported being worried that their food would run out before they got money to buy more.
- 95.3% reported that the food bought for the household did not last and there was no money to buy more.
- 94.7% reported that they could not afford to eat balanced meals.
- 95.7% reported that they had cut the size of meals, or skipped meals entirely because there wasn't enough money to purchase food; 85.2% reported that this had occurred several times.
- 96.1% felt that they had eaten less than they should because there wasn't enough money to buy food.
- 72.8% reported being hungry but not eating because they couldn't afford enough food.
- 54.3% of respondents had lost weight because they didn't have enough money for food.
- 36.8% reported that an adult did not eat for an entire day because there wasn't enough money for food; 29.9% reported that this happened several times.

### Among households with children:

- 84.2% relied on a few kinds of low-cost foods to feed children.
- 76.9% could not afford to feed their children balanced meals.
- In over a third (39.1%) of households, children were not eating enough because there was not enough money for food.
- 19.5% cut the size of children's meals, and in 12.0% of households children missed meals.
- 18.9% of children were hungry, and 2.3% went for a whole day without food.

### Number of severely food insecure households by province & territory

Data Source: Statistics Canada, Canadian Community Health Survey (CCHS), 2013 and 2014.



## Food Insecurity since 2005

Food insecurity has only been monitored on a consistent basis since 2005<sup>xvii</sup>, and not all provinces and territories have participated in the monitoring of food insecurity each year since then. Nevertheless, the available data suggests that in most parts of Canada, food insecurity in 2014 remained at the levels experienced in prior years. In particular, the Maritimes and the North have experienced extremely high rates of food insecurity that have persisted since monitoring began.

Household food insecurity – Canada, 2005-2014									
	2005	2007	2008	2009	2010	2011	2012	2013	2014
Newfoundland & Labrador		15.7%	14.3%	11.8%	11.5%	10.6%	13.4%		
Prince Edward Island	12.9%	14.9%	15.3%			15.4%	16.2%	16.7%	<b>15.1%</b>
Nova Scotia	16.1%	14.4%	13.5%	15.9%	14.9%	17.1%	17.5%	18.5%	<b>15.4%</b>
New Brunswick		13.8%	15.1%			16.5%	15.6%	16.0%	<b>15.2%</b>
Quebec	11.3%	10.9%	9.4%	11.3%	9.7%	12.5%	13.5%	11.8%	<b>11.6%</b>
Ontario	11.6%	11.8%	12.1%	12.5%	11.3%	11.9%	11.7%	12.5%	<b>11.9%</b>
Manitoba		12.4%	12.9%	10.8%	10.0%	12.4%	12.1%		
Saskatchewan		9.5%	9.7%	8.2%	9.2%	11.8%	12.5%	12.2%	<b>10.6%</b>
Alberta	10.4%	9.1%	10.0%	10.8%	10.9%	12.3%	11.5%	11.3%	<b>11.4%</b>
British Columbia	11.0%	10.8%	11.5%	11.9%	11.1%	11.0%	12.7%		
Yukon		17.8%	13.0%	13.9%	12.6%	16.7%	17.1%		
Northwest Territories	14.2%	16.5%	17.8%	9.8%	12.0%	15.2%	20.4%	20.4%	<b>24.1%</b>
Nunavut	38.0%	35.4%	34.6%	31.0%	31.0%	36.4%	45.2%	45.0%	<b>46.8%</b>

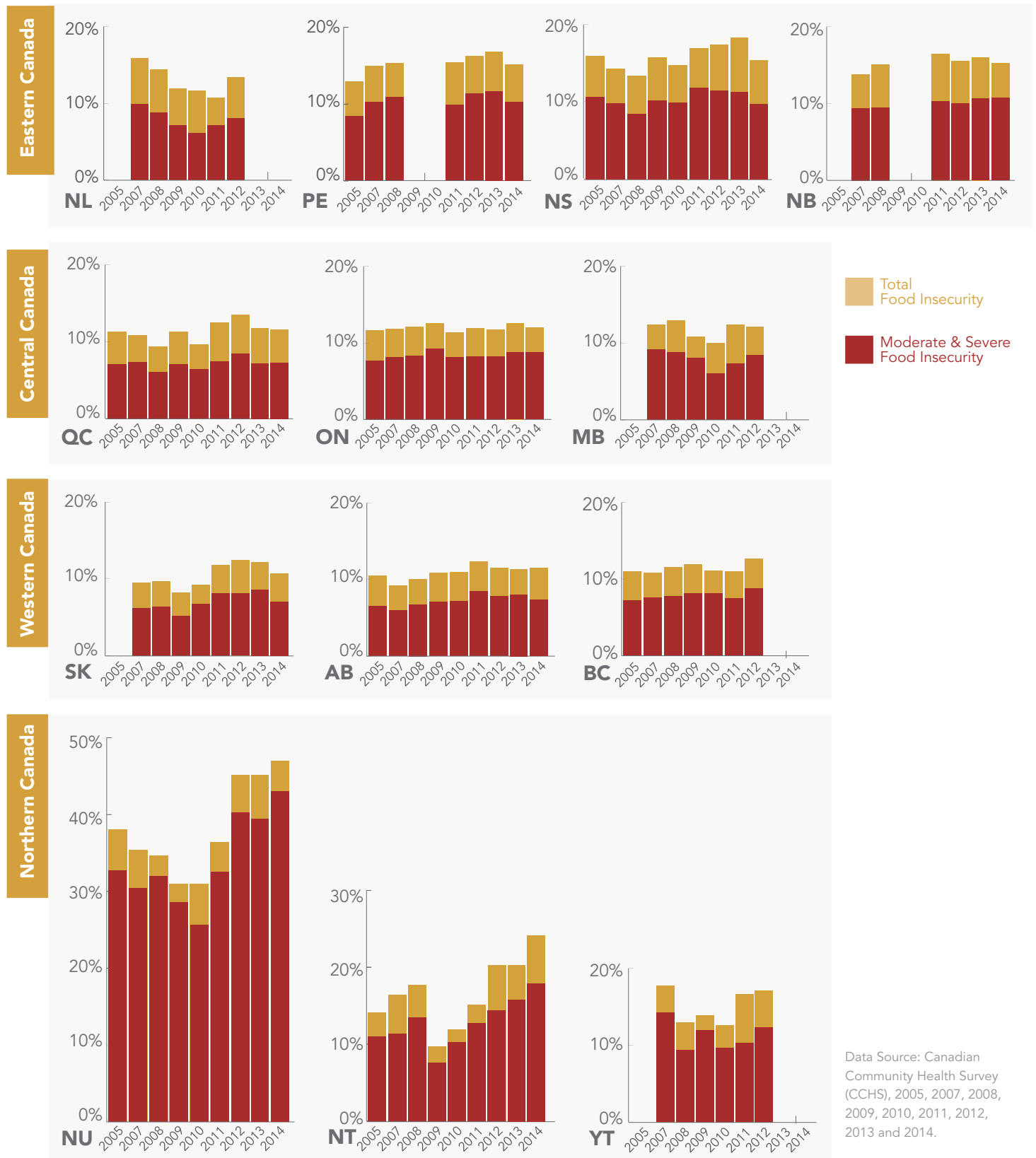
Data Source: Canadian Community Health Survey (CCHS), 2005, 2007, 2008, 2009, 2010, 2011, 2012, 2013 and 2014.

The table above presents the prevalence of total (marginal, moderate and severe) food insecurity in the provinces and territories from 2005 to 2014, with blanks indicating years that provinces and territories opted out of participation. Differences from one year to another may not be statistically significant. The 95% confidence intervals for these estimates and the estimated prevalence of moderate and severe food insecurity in the province and territories from 2005 to 2014 are presented in Appendix M.

While food insecurity prevalence rates in the Maritime provinces appeared slightly lower in 2014 than 2013, the changes were not statistically significant. Rates remained above 15%, unlike any other province in the country. Food insecurity rates in Alberta and Quebec in 2014 remained similar to the 2013 levels, at 11.4% and 11.6% respectively. In Ontario, the prevalence was 11.9% in 2014, down from 12.5% in 2013, but this decrease was not statistically significant. The prevalence of food insecurity was lowest in Saskatchewan at 10.6%, down from 12.2% in 2013, however this drop was not statistically significant.

Of particular concern are the persistently high and possibly growing rates of food insecurity in Nunavut. Food insecurity in Nunavut remained extraordinarily high with a prevalence of 46.8% in 2014, including 19.3% of households experiencing severe food insecurity. These rates are the highest ever observed in the territory. The second highest prevalence (24.1%) of food insecurity in the country in 2014 was found in the Northwest Territories, up from 20.4% in 2013 and significantly higher than the rates of food insecurity observed there in 2009 and 2010.

## Prevalence of household food insecurity, 2005-2014





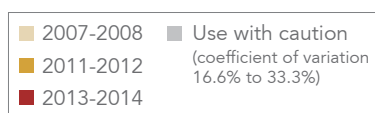
## Food insecurity – major census metropolitan areas

An examination of food insecurity in the 27 major urban areas in the provinces and territories that participated in the 2013-2014 survey revealed considerable variation. The prevalence of food insecurity in 2013-14 was highest in Peterborough, Ontario (17.6%) where over 1 in 6 households experienced food insecurity. Halifax (15.1%), Moncton (16.3%), Saint John (16.6%), and Windsor, Ontario (15.2%) also had relatively high rates.

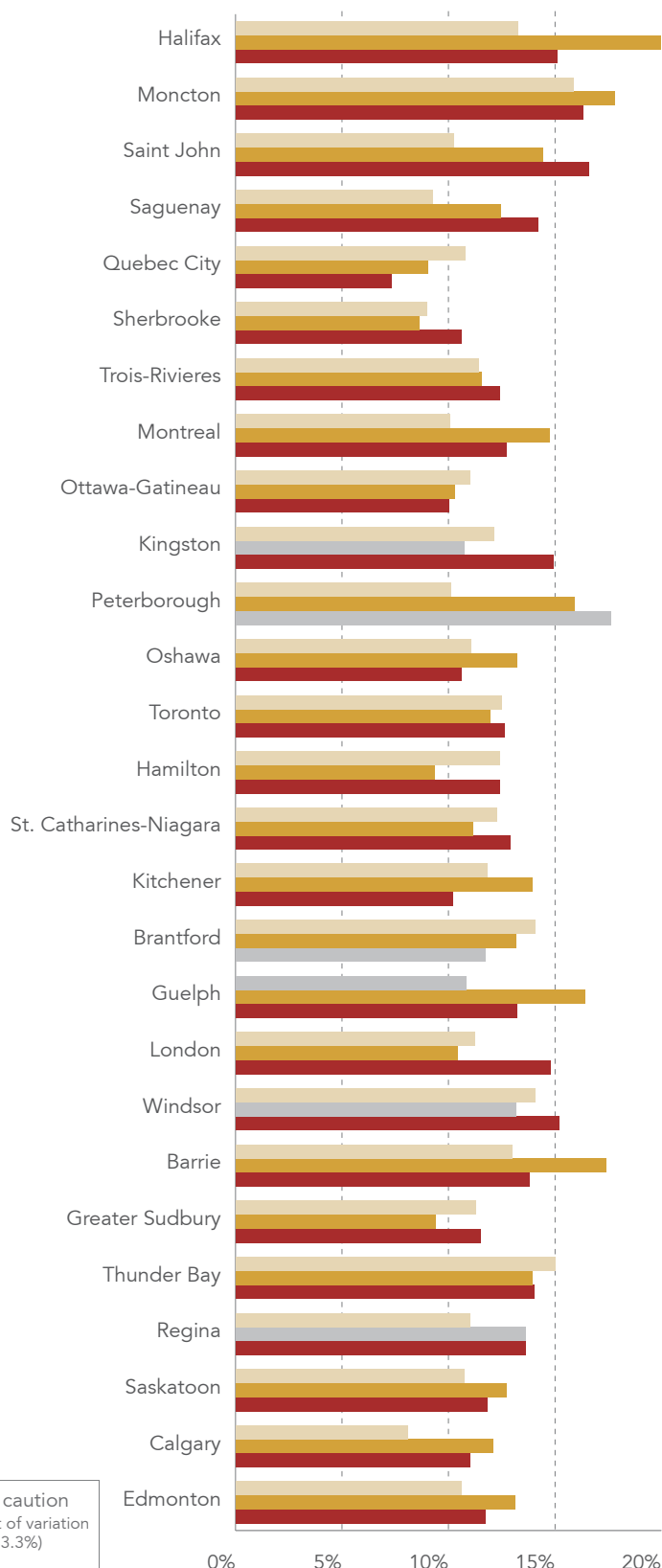
**The lowest rates of food insecurity were found in Quebec City (7.3%) where about 1 in 14 households were food insecure.**

Marked differences in the prevalence of food insecurity are apparent across the census metropolitan areas within Canada's largest provinces. In Ontario, the rate ranged from 10% in Ottawa-Gatineau to 17.6% in Peterborough, 15.2% in Windsor, 14.9% in Kingston, and 14.8% in London. In Quebec, the 7.3% rate in Quebec City stands in stark contrast to the 14.2% prevalence of food insecurity observed in Saguenay.

Our in-depth examination of food insecurity at the level of CMAs shows that food insecurity rises with unemployment rates<sup>xviii</sup>. Changes in food insecurity are likely consistent with economic shifts in the area. However, the estimates from one survey to the next have limited reliability in many areas because the sample sizes are relatively small, and all of the estimates in 2011-12 and 2013-14 have overlapping confidence intervals. The 2013-14 food insecurity estimates for Saguenay, Quebec City, Sherbrooke, Trois-Rivieres, Montreal, Ottawa-Gatineau, and Guelph should not be compared to 2007-08 and 2011-12 estimates because they are based on boundaries which were redefined by the 2011 census. (See *Appendix E for the prevalence estimates and confidence intervals for census metropolitan areas, 2007-08, 2011-12, 2013-14.*)



## Prevalence of household food insecurity by census metropolitan areas, 2007-2008, 2011-2012 and 2013-2014



Data Source: Weighted estimates from CCHS 07-08, CCHS 11-12 and CCHS 13-14 combined data files.

# Conclusions

Food insecure individuals are vulnerable to the physical and emotional hardships that underpin the experience of food insecurity, a marker of material deprivation that is intimately tied to compromised health and well-being.

Although there has been rigorous measurement and monitoring of household food insecurity in Canada since 2005, the problem has not abated. In fact, it has grown or persisted in every province and territory. Among the provinces and territories surveyed in 2014, there are no significant drops and indications of troubling upward trends in the already vulnerable North. The inclusion of the Household Food Security Survey Module on the Canadian Health Survey enables monitoring of food insecurity, and it is incumbent on provinces and territories to participate in all cycles of measurement.

Food insecurity is a very large and serious social and public health problem in Canada. The geographic patterning of food insecurity, such as the alarming rates in the North and the Maritimes, and the density of affected households in our largest provinces, suggests that reducing the prevalence of food insecurity requires attention by provincial, territorial, and federal levels of government. The data in this report provide an impetus for discussion that is critical to the development of programs and policies by all sectors aimed at tackling food insecurity in Canada.



The geographic patterning of food insecurity such as the alarming rates in the North and the Maritimes, and the density of affected households in our largest provinces suggest that reducing the prevalence of food insecurity requires attention by provincial and federal levels of government.

## Appendix A - CCHS Household Food Security Survey Module<sup>xi</sup>

The following questions are about the food situation for your household in the past 12 months.

**Q1. Which of the following statements best describes the food eaten in your household in the past 12 months, that is since [current month] of last year?**

1. You and other household members always had enough of the kinds of foods you wanted to eat.
2. You and other household members had enough to eat, but not always the kinds of food you wanted.
3. Sometimes you and other household members did not have enough to eat.
4. Often you and other household members didn't have enough to eat.
- Don't know / refuse to answer (Go to end of module)

*Question Q1 is not used directly in determining household food security status.*

### STAGE 1 Questions 2 - 6 — ask all households

Now I'm going to read you several statements that may be used to describe the food situation for a household. Please tell me if the statement was often true, sometimes true, or never true for you and other household members in the past 12 months.

**Q2. The first statement is: you and other household members worried that food would run out before you got money to buy more. Was that often true, sometimes true, or never true in the past 12 months?**

- |                   |                                 |
|-------------------|---------------------------------|
| 1. Often true     | 3. Never true                   |
| 2. Sometimes true | - Don't know / refuse to answer |

**Q3. The food that you and other household members bought just didn't last, and there wasn't any money to get more. Was that often true, sometimes true, or never true in the past 12 months?**

- |                   |                                 |
|-------------------|---------------------------------|
| 1. Often true     | 3. Never true                   |
| 2. Sometimes true | - Don't know / refuse to answer |

**Q4. You and other household members couldn't afford to eat balanced meals. In the past 12 months was that often true, sometimes true, or never true?**

- |                   |                                 |
|-------------------|---------------------------------|
| 1. Often true     | 3. Never true                   |
| 2. Sometimes true | - Don't know / refuse to answer |

IF CHILDREN UNDER 18 IN HOUSEHOLD, ASK Q5 AND Q6; OTHERWISE, SKIP TO FIRST LEVEL SCREEN

Now I'm going to read a few statements that may describe the food situation for households with children.

**Q5. You or other adults in your household relied on only a few kinds of low-cost food to feed the child(ren) because you were running out of money to buy food. Was that often true, sometimes true, or never true in the past 12 months?**

- |                   |                                 |
|-------------------|---------------------------------|
| 1. Often true     | 3. Never true                   |
| 2. Sometimes true | - Don't know / refuse to answer |

**Q6. You or other adults in your household couldn't feed the child(ren) a balanced meal, because you couldn't afford it. Was that often true, sometimes true, or never true in the past 12 months?**

- |                   |                                 |
|-------------------|---------------------------------|
| 1. Often true     | 3. Never true                   |
| 2. Sometimes true | - Don't know / refuse to answer |

**FIRST LEVEL SCREEN (screener for Stage 2):** If AFFIRMATIVE RESPONSE to ANY ONE of Q2-Q6 (i.e., “often true” or “sometimes true”) OR response [3] or [4] to Q1, then continue to STAGE 2; otherwise, skip to end.

---

**STAGE 2** Questions 7 - 11 — ask households passing the First Level Screen

IF CHILDREN UNDER 18 IN HOUSEHOLD, ASK Q7; OTHERWISE SKIP TO Q8

**Q7. The child(ren) were not eating enough because you and other adult members of the household just couldn't afford enough food. Was that often, sometimes or never true in the past 12 months?**

- |                   |                                 |
|-------------------|---------------------------------|
| 1. Often true     | 3. Never true                   |
| 2. Sometimes true | - Don't know / refuse to answer |

The following few questions are about the food situation in the past 12 months for you or any other adults in your household.

**Q8. In the past 12 months, since last [current month] did you or other adults in your household ever cut the size of your meals or skip meals because there wasn't enough money for food?**

- 1. Yes
- 2. No (Go to Q9)
- Don't know / refuse to answer

**Q8b. How often did this happen?**

- |                                    |                                 |
|------------------------------------|---------------------------------|
| 1. Almost every month              | 3. Only 1 or 2 months           |
| 2. Some months but not every month | - Don't know / refuse to answer |

**Q9. In the past 12 months, did you (personally) ever eat less than you felt you should because there wasn't enough money to buy food?**

- 1. Yes
- 2. No
- Don't know / refuse to answer

**Q10. In the past 12 months, were you (personally) ever hungry but didn't eat because you couldn't afford enough food?**

- 1. Yes
- 2. No
- Don't know / refuse to answer

**Q11. In the past 12 months, did you (personally) lose weight because you didn't have enough money for food?**

- 1. Yes
- 2. No
- Don't know / refuse to answer

**SECOND LEVEL SCREEN (screener for Stage 3):** If AFFIRMATIVE RESPONSE to ANY ONE of Q7-Q11, then continue to STAGE 3; otherwise, skip to end.

---

**STAGE 3** Questions 12 - 16 — ask households passing the Second Level Screen

**Q12. In the past 12 months, did you or other adults in your household ever not eat for a whole day because there wasn't enough money for food?**

1. Yes
2. No (IF CHILDREN UNDER 18 IN HOUSEHOLD, ASK Q13; OTHERWISE SKIP TO END)
- Don't know / refuse to answer

**Q12b. How often did this happen?**

1. Almost every month
2. Some months but not every month
3. Only 1 or 2 months
- Don't know / refuse to answer

IF CHILDREN UNDER 18 IN HOUSEHOLD, ASK Q13-16; OTHERWISE SKIP TO END

Now, a few questions on the food experiences for children in your household.

**Q13. In the past 12 months, did you or other adults in your household ever cut the size of any of the children's meals because there wasn't enough money for food?**

1. Yes
2. No
- Don't know / refuse to answer

**Q14. In the past 12 months, did any of the children ever skip meals because there wasn't enough money for food?**

1. Yes
2. No
- Don't know / refuse to answer

**Q14b. How often did this happen?**

1. Almost every month
2. Some months but not every month
3. Only 1 or 2 months
- Don't know / refuse to answer

**Q15. In the past 12 months, were any of the children ever hungry but you just couldn't afford more food?**

1. Yes
2. No
- Don't know / refuse to answer

**Q16. In the past 12 months, did any of the children ever not eat for a whole day because there wasn't enough money for food?**

1. Yes
2. No
- Don't know / refuse to answer

**End of module**



## Appendix B - Food security status, based on 18 item questionnaire

Food security status, based on 18 item questionnaire*			
Status	Interpretation	10 item adult food security scale	8 item child food security scale
Food secure	No report of income-related problems of food access.	No items affirmed	No items affirmed
Marginal food insecurity**	Some indication of worry or an income-related barrier to adequate, secure food access.	Affirmed no more than 1 item on either scale	
Moderate food insecurity	Compromise in quality and/or quantity of food consumed by adults and/or children due to a lack of money for food.	2 to 5 positive responses	2 to 4 positive responses
Severe food insecurity	Disrupted eating patterns and reduced food intake among adults and/or children	6 or more positive responses	5 or more positive responses

\* Adapted from: Canadian Community Health Survey, cycle 2.2, Nutrition (2004): Income related Household Food Security in Canada.

\*\* One item in either scale affirmed.

## Appendix C - Prevalence of household food security and insecurity, by selected household characteristics

Prevalence of household food security and insecurity, by selected household characteristics  
Canadian Community Health Survey 2014<sup>1</sup>

Characteristic		Food secure		Food insecure		Marginal food insecurity		Moderate food insecurity		Severe food insecurity	
	Total households (000s) <sup>2</sup>	Number (000s)	%	Number (000s)	%	Number (000s)	%	Number (000s)	%	Number (000s)	%
Household composition:											
With children under 18	3,211.10	2,709.90	84.40%	501.2	15.60%	171.6	5.30%	243.7	7.60%	85.9	2.70%
With children under 6	1,369.20	1,145.60	83.70%	223.6	16.30%	84.1	6.10%	97.1	7.10%	42.5	3.10%
Couple, with children	2,522.00	2,223.40	88.20%	298.5	11.80%	117.7	4.70%	143.8	5.70%	37	1.50%
Female lone parent	510.5	339.7	66.50%	170.8	33.50%	39	7.60%	84.7	16.60%	47.1	9.20%
Male lone parent	108.5	92.6	85.30%	15.9	14.70%	8.3	7.60%	6.8	6.30%	0.8	0.70%
Other <sup>3</sup>	43.2	32.6	75.40%	10.6	24.60%	5.2	12.00%	5	11.50%	0.4	1.00%
With no children < 18	7,747.30	6,937.70	89.60%	809.5	10.40%	238	3.10%	364.4	4.70%	207.2	2.70%
Unattached, living alone or with others	3,481.40	2,936.50	84.30%	544.9	15.70%	144.8	4.20%	236.6	6.80%	163.5	4.70%
Couple, no children	2,980.00	2,825.20	94.80%	154.8	5.20%	51.9	1.70%	75.3	2.50%	27.6	0.90%
Couple, with children	845.7	791.5	93.60%	54.2	6.40%	22.7	2.70%	27.1	3.20%	4.5	0.50%
Female lone parent	306.7	264.4	86.20%	42.3	13.80%	15.3	5.00%	19.4	6.30%	7.6	2.50%
Male lone parent	123.8	111.3	89.90%	12.5	10.10%	2.8	2.20%	5.8	4.70%	3.9	3.10%
Elderly living alone	1,132.10	1,048.70	92.60%	83.5	7.40%	25.2	2.20%	45.7	4.00%	12.6	1.10%
Education: <sup>4</sup>											
Less than secondary	992.1	814.5	82.10%	177.6	17.90%	36.6	3.70%	87.4	8.80%	53.6	5.40%
Secondary school graduate, no post-secondary	1,334.80	1,131.00	84.70%	203.8	15.30%	55.5	4.20%	94.8	7.10%	53.5	4.00%
Some post-secondary, not completed	411.7	319.7	77.70%	92	22.30%	23.6	5.70%	44.5	10.80%	23.9	5.80%
Completed post-secondary, below Bachelor's degree	4,104.40	3,557.00	86.70%	547.4	13.30%	190.1	4.60%	249.7	6.10%	107.6	2.60%
Completed Bachelor's degree or higher	3,765.20	3,534.10	93.90%	231.1	6.10%	85.6	2.30%	104.3	2.80%	41.2	1.10%
Main source of household income:											
Wages, salaries or self-employment	7,366.30	6,581.90	89.40%	784.4	10.60%	298.1	4.00%	360.8	4.90%	125.5	1.70%
Senior's income, including dividends & interest	2,310.20	2,142.30	92.70%	168	7.30%	50.4	2.20%	86.9	3.80%	30.7	1.30%
Employment insurance or workers compensation	88.4	56.9	64.40%	31.5	35.60%	6.4	7.20%	14.6	16.50%	10.5	11.80%
Social Assistance	325.8	127.5	39.10%	198.4	60.90%	27.7	8.50%	77.5	23.80%	93.2	28.60%
Other or none	322	243	75.50%	79	24.50%	14.5	4.50%	37	11.50%	27.5	8.50%

Characteristic		Food secure		Food insecure		Marginal food insecurity		Moderate food insecurity		Severe food insecurity	
	Total households (000s) <sup>1</sup>	Number (000s)	%	Number (000s)	%	Number (000s)	%	Number (000s)	%	Number (000s)	%
Housing Tenure:											
Dwelling owned by member of household	7,501.80	7,036.20	93.80%	465.6	6.20%	193.6	2.60%	204.5	2.70%	67.5	0.90%
Dwelling rented	3,427.30	2,586.50	75.50%	840.8	24.50%	215.1	6.30%	400.6	11.70%	225.1	6.60%
Cultural/racial group: <sup>5</sup>											
White	8,665.00	7,763.80	89.60%	901.2	10.40%	288.1	3.30%	405.7	4.70%	207.3	2.40%
Black	314.9	222.2	70.60%	92.7	29.40%	21.5	6.80%	46.6	14.80%	24.7	7.80%
East and southeast Asian	597.2	535.6	89.70%	61.6	10.30%	28.2	4.70%	29.1	4.90%	4.4	0.70%
Arab and West Asian	207.5	174.4	84.00%	33.1	16.00%	12.5	6.00%	13	6.20%	7.7	3.70%
South Asian	368.7	319.5	86.70%	49.2	13.30%	16.2	4.40%	25.8	7.00%	7.2	1.90%
Other or multiple origins	397.7	324.8	81.70%	72.9	18.30%	18.7	4.70%	42	10.60%	12.3	3.10%
Aboriginal	343.9	255.5	74.30%	88.4	25.70%	20.5	6.00%	40.7	11.80%	27.2	7.90%
Immigrant/Canadian born:											
Canadian born	8,518.80	7,511.30	88.20%	1,007.60	11.80%	317	3.70%	452.1	5.30%	238.5	2.80%
Immigrant < 5 years	328.5	278.4	84.80%	50.1	15.20%	16.1	4.90%	24.4	7.40%	9.5	2.90%
Immigrant 5+ years	2,033.20	1,790.00	88.00%	243.2	12.00%	75.4	3.70%	125.4	6.20%	42.4	2.10%
Urban/rural:											
Population centre	8,923.40	7,821.40	87.60%	1,102.10	12.40%	334	3.70%	515.2	5.80%	252.8	2.80%
Rural	2,034.90	1,826.30	89.70%	208.7	10.30%	75.5	3.70%	92.9	4.60%	40.3	2.00%
Household income/LIM ratio: <sup>6</sup>											
< 0.5	619.4	347.3	56.10%	272.1	43.90%	42.6	6.90%	128.4	20.70%	101.1	16.30%
0.5 - < 1.0	1,988.10	1,499.80	75.40%	488.3	24.60%	128.8	6.50%	247.1	12.40%	112.4	5.70%
1.0 - 1.49	1,806.90	1,577.70	87.30%	229.2	12.70%	92.6	5.10%	96.8	5.40%	39.7	2.20%
1.5 - 1.9	1,914.90	1,756.60	91.70%	158.4	8.30%	61.9	3.20%	76	4.00%	20.5	1.10%
2.0 - 2.99	2,224.40	2,118.10	95.20%	106.3	4.80%	51.2	2.30%	42.3	1.90%	12.8	0.60%
3.0 +	2,380.80	2,332.20	98.00%	48.5	2.00%	31.2	1.30%	13.1	0.60%	4.3	0.20%

1. Participating provinces only. In 2014 Newfoundland and Labrador, Manitoba, British Columbia and Yukon Territory did not participate in the Food Security module of the Canadian Community Health Survey.

2. 'Total households' excludes those households with missing values for food security.

3. 'Other' includes small numbers of households of unattached individuals and couples with no children, which contain individuals under age 18.

4. Education refers to the highest level of education achieved among household members.

5. This refers to the status of the respondent.

6. The LIM is 50% of median household income, adjusted for household size. It excludes the territories because the Survey of Labour and Income Dynamics, the survey from which the LIM is derived, excludes the territories.

Source: Canadian Community Health Survey, 2014.

## Appendix D - Provincial and territorial rates of household food insecurity, 2005-2014

Provincial and territorial rates of household food insecurity, 2005-2014									
Province/ Territory	2005 <sup>1</sup>			2007			2008		
	Moderate & severe food insecurity (%)	Total food insecure (%)	95% CI <sup>2</sup>	Moderate & severe food insecurity (%)	Total food insecure (%)	95% CI <sup>2</sup>	Moderate & severe food insecurity (%)	Total food insecure (%)	95% CI <sup>2</sup>
Newfoundland and Labrador	n/a	n/a		10.0%	15.7%	13.7 - 17.8%	8.9%	14.3%	12.3 - 16.3%
Prince Edward Island	8.3%	12.9%	11.1 - 14.7%	10.1%	14.9%	12.7 - 17.1%	10.6%	15.3%	12.8 - 17.7%
Nova Scotia	10.8%	16.1%	14.8 - 17.4%	10.0%	14.4%	12.6 - 16.2%	8.6%	13.5%	11.8 - 15.2%
New Brunswick	n/a	n/a		9.5%	13.8%	12.3 - 15.4%	9.6%	15.1%	13.5 - 16.8%
Quebec	7.2%	11.3%	10.8 - 11.9%	7.5%	10.9%	10.2 - 11.8%	6.2%	9.4%	8.6 - 10.2%
Ontario	7.7%	11.6%	11.26 - 12.0%	8.1%	11.8%	11.1 - 12.5%	8.3%	12.1%	11.3 - 13.0%
Manitoba	n/a	n/a		9.3%	12.4%	10.5 - 14.4%	8.9%	12.9%	11.0 - 14.7%
Saskatchewan	n/a	n/a		6.3%	9.5%	8.2 - 10.9%	6.5%	9.7%	8.4 - 10.9%
Alberta	6.6%	10.4%	9.6 - 11.2%	6.0%	9.1%	8.1 - 10.2%	6.8%	10.0%	8.9 - 11.1%
British Columbia	7.3%	11.0%	10.4 - 11.6%	7.7%	10.8%	9.8 - 11.8%	7.9%	11.5%	10.4 - 12.7%
Yukon	n/a	n/a		14.4%	17.8%	12.3 - 23.2%	9.5%	13.0%	9.7 - 16.3%
Northwest Territories	11.2%	14.2%	11.4 - 17.0%	11.6%	16.5%	10.5 - 22.4%	13.7%	17.8%	12.7 - 22.9%
Nunavut	33.1%	38.0%	27.0 - 49.0%	30.8%	35.4%	27.5 - 43.3%	32.3%	34.6%	20.1 - 49.1%

Province/ Territory	2009 <sup>1</sup>			2010			2011		
	Moderate & severe food insecurity (%)	Total food insecure (%)	95% CI <sup>2</sup>	Moderate & severe food insecurity (%)	Total food insecure (%)	95% CI <sup>2</sup>	Moderate & severe food insecurity (%)	Total food insecure (%)	95% CI <sup>2</sup>
Newfoundland and Labrador	7.2%	11.8%	10.0 - 13.6%	6.2%	11.5%	9.4 - 13.6%	7.2%	10.6%	8.7 - 12.4%
Prince Edward Island	n/a			n/a	n/a		9.8%	15.4%	12.4 - 18.4%
Nova Scotia	10.4%	15.9%	14.0 - 17.7%	10.1%	14.9%	12.7 - 17.2%	12.1%	17.1%	15.0 - 19.2%
New Brunswick	n/a			n/a	n/a		10.4%	16.5%	14.6 - 18.4%
Quebec	7.2%	11.3%	10.3 - 12.3%	6.5%	9.7%	8.8 - 10.7%	7.6%	12.5%	11.4 - 13.6%
Ontario	9.2%	12.5%	11.7 - 13.3%	8.1%	11.3%	10.7 - 12.0%	8.2%	11.9%	11.0 - 12.8%
Manitoba	8.1%	10.8%	9.0 - 12.6%	6.1%	10.0%	8.3 - 11.7%	7.4%	12.4%	10.5 - 14.3%
Saskatchewan	5.3%	8.2%	6.8 - 9.6%	6.8%	9.2%	7.4 - 11.0%	8.2%	11.8%	9.6 - 13.9%
Alberta	7.1%	10.8%	9.4 - 12.1%	7.2%	10.9%	9.8 - 12.1%	8.5%	12.3%	10.8 - 13.8%
British Columbia	8.2%	11.9%	10.7 - 13.0%	8.2%	11.1%	10.0 - 12.2%	7.6%	11.0%	9.9 - 12.2%
Yukon	12.1%	13.9%	9.4 - 18.3%	9.8%	12.6%	8.7 - 16.5%	10.4%	16.7%	13.1 - 20.4%
Northwest Territories	7.8%	9.8%	5.7 - 13.8%	10.5%	12.0%	8.2 - 15.8%	13.0%	15.2%	12.0 - 18.4%
Nunavut	28.9%	31.0%	26.4 - 35.5%	25.9%	31.0%	22.5 - 39.5%	32.9%	36.4%	29.4 - 43.4%

1 In 2005 (CCHS 3.1), Newfoundland and Labrador, New Brunswick, Manitoba, Saskatchewan and Yukon did not elect to measure food insecurity. In 2009-2010, Prince Edward Island and New Brunswick did not measure food insecurity. In 2013-2014, British Columbia, Manitoba, Newfoundland and Labrador and Yukon did not measure food insecurity.

2 95% confidence intervals are provided for the total food insecure. Where confidence intervals do not overlap, observed differences in prevalence estimates can be considered statistically significant.

	2012			2013 <sup>1</sup>			2014 <sup>1</sup>		
Province/Territory	Moderate & severe food insecurity (%)	Total food insecure (%)	95% CI <sup>2</sup>	Moderate & severe food insecurity (%)	Total food insecure (%)	95% CI <sup>2</sup>	Moderate & severe food insecurity (%)	Total food insecure (%)	95% CI <sup>2</sup>
Newfoundland and Labrador	8.1%	13.4%	10.6% - 16.1%	n/a	n/a	n/a	n/a	n/a	n/a
Prince Edward Island	11.4%	16.2%	12.5% - 20.0%	11.6%	16.7%	13.8% - 19.6%	10.2%	15.1%	12.0% - 18.3%
Nova Scotia	11.6%	17.5%	15.0% - 20.0%	11.3%	18.4%	16.1% - 20.9%	9.8%	15.4%	13.5% - 17.3%
New Brunswick	10%	15.6%	13.4% - 17.7%	10.6%	16.0%	14.0% - 17.9%	10.7%	15.2%	13.2% - 17.1%
Quebec	8.5%	13.5%	12.4% - 14.6%	7.2%	11.8%	10.7% - 12.9%	7.3%	11.6%	10.6% - 12.5%
Ontario	8.2%	11.7%	10.9% - 12.5%	8.7%	12.5%	11.5% - 13.5%	8.7%	11.9%	11.1% - 12.7%
Manitoba	8.4%	12.1%	10.2% - 14.1%	n/a	n/a	n/a	n/a	n/a	n/a
Saskatchewan	8.1%	12.5%	10.4% - 14.5%	8.6%	12.2%	10.4% - 14.0%	7.0%	10.6%	8.4% - 12.8%
Alberta	7.8%	11.5%	10.0% - 13.1%	8.0%	11.3%	9.7% - 12.9%	7.3%	11.4%	10.1% - 12.8%
British Columbia	8.8%	12.7%	11.3% - 14.1%	n/a	n/a	n/a	n/a	n/a	n/a
Yukon	12.4%	17.1%	14.0% - 20.3%	n/a	n/a	n/a	n/a	n/a	n/a
Northwest Territories	14.5%	20.4%	15.7% - 25.0%	15.9%	20.4%	16.3% - 24.5%	17.9%	24.1%	16.6% - 31.6%
Nunavut	40.3%	45.2%	37.0% - 53.5%	39.3%	45.0%	38.0% - 52.0%	42.8%	46.8%	37.9% - 55.7%



## Appendix E - Prevalence of household food insecurity by census metropolitan areas, 2007-2008, 2011-2012 and 2013-2014

Prevalence of household food insecurity by census metropolitan areas <sup>1</sup>						
CMA	2007-2008		2011-2012		2013-2014	
	(%)	95% CI	(%)	95% CI	(%)	95% CI
St John's	13.32%	10.9-16.4%	11.10%	8.6- 14.2%	-	-
Halifax	13.26%	10.9-16.0%	19.94%	16.9-23.3%	15.1%	12.5% - 17.7%
Moncton	15.87%	13.1-19.0%	17.81%	14.7-21.5%	16.3%	12.8% - 19.9%
Saint John	10.24%	7.6-13.8%	14.41%	11.4-18.0%	16.6%	12.6% - 20.6%
Saguenay	9.24%	7.1-12.0%	12.43%	10.0-15.5%	14.2% <sup>2</sup>	10.7% - 17.8%
Quebec City	10.78%	8.9-13.0%	9.04%	7.2-11.2%	7.3% <sup>2</sup>	5.5% - 9.2%
Sherbrooke	8.96%	6.6-12.1%	8.61%	6.4-11.5%	10.6% <sup>2</sup>	7.3% - 13.9%
Trois-Rivieres	11.42%	9.1-14.3%	11.56%	8.6-15.2%	12.4% <sup>2</sup>	8.8% - 16.0%
Montreal	10.04%	9.2-11.0%	14.75%	13.5-16.1%	12.7% <sup>2</sup>	11.3% - 14.0%
Ottawa-Gatineau	10.99%	9.5-12.7%	10.29%	8.8-12.0%	10.0% <sup>2</sup>	8.7% - 11.4%
Kingston	12.12%	9.4-15.3%	10.73% <sup>A</sup>	7.5-15.1%	14.9%	10.8% - 18.9%
Peterborough	10.08%	7.4-13.8%	15.90%	12.1-20.4%	17.6% <sup>A</sup>	11.9% - 23.4%
Oshawa	11.06%	8.6-14.2%	13.21%	10.3-16.7%	10.6%	7.8% - 13.4%
Toronto	12.50%	11.4-13.7%	11.96%	10.8-13.2%	12.6%	11.3% - 13.9%
Hamilton	12.40%	10.5-14.6%	9.32%	7.6-11.4%	12.4%	10.1% - 14.8%
St. Catharines-Niagara	12.24%	9.9-15.0%	11.12%	9.0-13.7%	12.9%	9.3% - 16.5%
Kitchener	11.82%	9.6-14.4%	13.93%	11.1-17.3%	10.2%	7.9% - 12.5%
Brantford	14.08%	10.5-18.6%	13.16%	10.4-16.6%	11.7% <sup>A</sup>	7.7% - 15.6%
Guelph	10.83% <sup>A</sup>	7.8-14.9%	16.38%	13.2-20.2%	13.2% <sup>2</sup>	9.8% - 16.7%
London	11.24%	9.3-13.6%	10.41%	8.3-13.0%	14.8%	11.4% - 18.1%
Windsor	14.06%	11.5-17.1%	13.15% <sup>A</sup>	8.5-19.7%	15.2%	11.7% - 18.7%
Barrie	12.96%	10.1-16.5%	17.37%	13.3-22.3%	13.8%	10.4% - 17.2%
Greater Sudbury	11.25%	9.1-14.1%	9.38%	6.9-12.7%	11.5%	8.6% - 14.4%
Thunder Bay	15.01%	12.6-18.1%	13.93%	10.9-17.7%	14.0%	10.3% - 17.8%
Winnipeg	14.25%	12.3-16.4%	11.51%	9.6-13.8%	-	-
Regina	11.01%	9.0-13.3%	13.6% <sup>A</sup>	9.4-19.2%	13.6%	9.8% - 17.4%
Saskatoon	10.74%	8.6-13.4%	12.71%	9.8-16.3%	11.8%	8.3% - 15.4%
Calgary	8.09%	6.8-9.6%	12.07%	10.1-14.4%	11.0%	9.1% - 12.9%
Edmonton	10.58%	9.1-12.2%	13.12%	11.0-15.5%	11.7%	9.6% - 13.8%
Kelowna	11.76% <sup>A</sup>	7.5-17.9%	14.24% <sup>A</sup>	10.0-20.0%	-	-
Abbotsford	8.32%	6.0-11.4%	14.85%	11.0-19.7%	-	-
Vancouver	10.51%	9.4-11.7%	10.35%	9.1-11.8%	-	-
Victoria	11.92%	9.8-14.4%	14.03%	11.1-17.6%	-	-

1. Total households' excludes those households with missing values for food security.

2. Estimates should not be compared to 2007-08 and 2011-12 estimates because they are based on different, non-comparable samples; the 2013-14 estimates reflect boundaries which were redefined by the 2011 census.

A. Use with caution (coefficient of variation 16.6% to 33.3%)

## Endnotes

- i Please see the Office of Nutrition Policy and Promotion (Health Canada) website at <http://www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/insecurit/index-eng.php>.
- ii <http://www.statcan.gc.ca/pub/82-625-x/2013001/article/11889-eng.htm>
- iii United Nations Food and Agriculture Organization (1996), Rome Declaration on World Food Security, World Food Summit Plan of Action, paragraph 1, Rome: November 1996. Available at: <http://www.fao.org/docrep/003/w3613e/w3613e00.htm>, Accessed 3/11/2013
- iv McIntyre L, et al. Depression and suicide ideation in late adolescence and early adulthood are an outcome of child hunger. *J Affect Disord* 2012; <http://dx.doi.org/10.1016/j.jad.2012.11.029>. Kirkpatrick S, et al. Child hunger and long-term adverse consequences for health. *Arch Pediatr Adolesc Med* 2010; 164: 754-762.
- v Che J, Chen J. Food insecurity in Canadian households. *Health Rep* 2001; 12: 11-22. Galesloot S, et al. Food insecurity in Canadian adults receiving diabetes care. *Can J Diet Prac Res* 2012; 73: e261-e266. Gucciardi E, et al. Exploration of the relationship between household food insecurity and diabetes care in Canada. *Diabetes Care* 2009; 32: 2218-2224. Fuller-Thomson E, Nimigon J. Factors associated with depression among individuals with chronic fatigue syndrome: findings from a nationally representative survey. *Fam Pract* 2008; 25: 414-422. Muirhead V, et al. Oral health disparities and food insecurity in working poor Canadians. *Community Dent Oral Epidemiol* 2009; 37: 294-304. Vozoris N, Tarasuk V. Household food insufficiency is associated with poorer health. *J Nutr* 2003; 133: 120-126. Willows N, et al. Associations between household food insecurity and health outcomes in the Aboriginal population (excluding reserves). *Health Rep* 2011; 22: 1-6. McLeod L, Veall M. The dynamics of food insecurity and overall health: evidence from the Canadian National Population Health Survey. *Applied Economics* 2006; 38: 2131-2146.
- vi Anema A, et al. Food insecurity and HIV/AIDS: current knowledge, gaps, and research priorities. *Current HIV/AIDS Reports* 2009; 6: 224-231. Gucciardi E, et al. Exploration of the relationship between household food insecurity and diabetes care in Canada. *Diabetes Care* 2009; 32: 2218-2224. Marjerrison S, et al. Prevalence and associations of food insecurity in children with diabetes mellitus. *J Pediatr* 2010. Seligman HK, et al. Food insecurity and glycemic control among low-income patients with type 2 diabetes. *Diabetes Care* 2012; 35: 233-238.
- vii Tarasuk V, et al. Health care costs associated with household food insecurity in Ontario. *Can Med Assoc J* 2015. <http://www.cmaj.ca/content/early/2015/08/10/cmaj.150234>. Fitzpatrick T, et al. Looking Beyond Income and Education: Socioeconomic Status Gradients among Future High-Cost Users of Health Care. *Am J of Prev Med* 2015; 49: 167-171.
- viii In 2013, coverage in Nunavut was expanded to represent 92% of the targeted population, up from 71% in the preceding survey years.
- ix Nearly half of all First Nations people in Canada live on reserves, and there is a growing effort by Health Canada to collect data for First Nations living on Reserve. See for example, the First Nations Food, Nutrition and Environment Study (FNFNES) which include a food security module. <http://www.fnfnes.ca/>. For more information about Aboriginal Peoples living in Canada, see <http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-011-x/99-011-x2011001-eng.cfm>.
- x See Gaetz S, et al. The State of Homelessness in Canada 2013. Homeless Hub Paper #4. Toronto, ON: Canadian Homelessness Research Network Press, 2013.
- xi See Income related Household Food Security in Canada, Canadian Community Health Survey, cycle 2.2, Nutrition (2004) Health Canada, 2007, Cat. H164-42/2007E-PDF, ISBN 978-0-662-45455-7, HC Pub. No. 4696. [http://www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/income\\_food\\_sec-sec\\_alim-eng.php](http://www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/income_food_sec-sec_alim-eng.php).
- xii Marginal food insecurity is not a category used in Health Canada's publications on this module. Following their classification system, those with a single response are considered food secure. The marginal category is included in this report because of a growing body of literature indicating that households reporting at least some level of uncertainty over their access to food are more vulnerable than those who have affirmed no items on the 18-item questionnaire. Coleman-Jensen, A J. U.S. food insecurity status: toward a refined definition. *Soc Indic Res* 2010; 95: 215-230.
- xiii Statistics Canada, CANSIM, table 051-0001. Last modified: 2015-09-29. <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo02a-eng.htm>.
- xiv Percentages and numbers provided in this report refer to the total population with complete responses to the food security module. Approximately 4% of households did not have complete responses to the food security module in the 2014 Canadian Community Health Survey, and these households have been excluded.
- xv We measure general income adequacy by taking the household income as a ratio of Statistics Canada's Low Income Measure (LIM). Briefly, to calculate the LIM, household income is adjusted by the equivalent household size (by dividing household income by the square root of the number of household members) and the median over all individuals in the population is taken. The LIM for a single person household is 50% of the median of this adjusted household income. The LIM for households of other sizes are computed by multiplying the single person LIM by the equivalent household size. This figure excludes results for the territories because the Survey of Labour and Income Dynamics, the survey from which the LIM is derived, excludes the territories.
- xvi The number of households in the sample whose main source of income is dividends and interest is relatively small. Other research has shown that households whose main source of income is dividends and interest demographically resemble those age 65+ so they have been included in with households whose main source of income is pensions.
- xvii Although the Household Food Security Module was included in CCHS 2004, this survey has not been included in our comparison because it is not considered to be comparable to the subsequent annual surveys. See <http://www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/insecurit/prov-ter-2005-eng.php>
- xviii Sriram U, Tarasuk V. Changes in household food insecurity rates in Canadian metropolitan areas from 2007 to 2012. *Can J Pub Health* 2015; 106(5): e322-e327.