



# HOUSEHOLD FOOD INSECURITY IN CANADA

2012

**PROOF**

Research to identify policy options  
to reduce food insecurity



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

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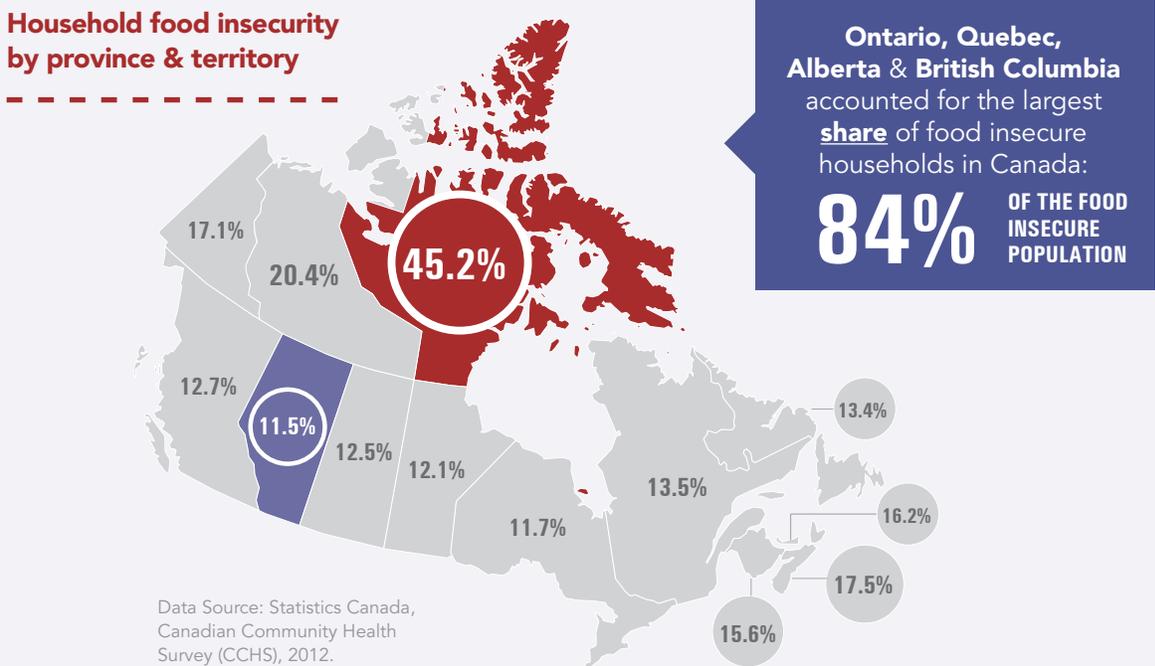
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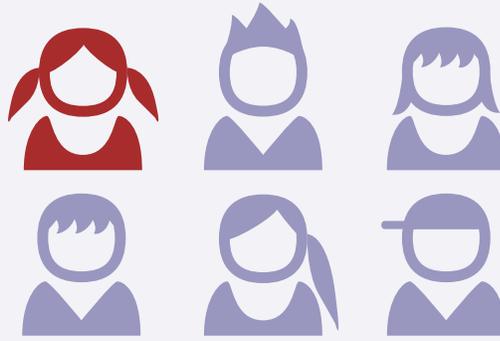
# Executive Summary

Household food insecurity, inadequate or insecure access to food because of financial constraints, is a significant social and health problem in Canada. In 2012, **4 million individuals in Canada, including 1.15 million children, experienced some level of food insecurity.** This represents nearly 13% of Canadian households.

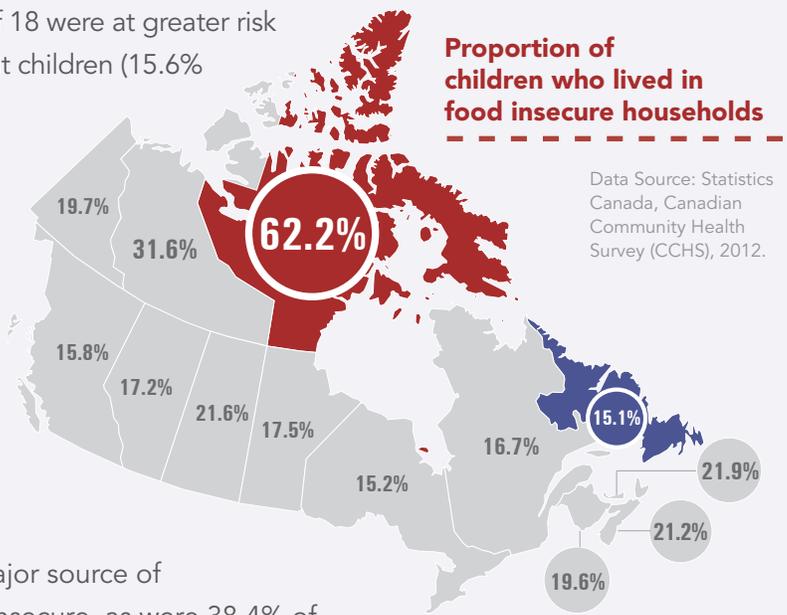
Food insecurity has only been measured on a consistent basis since 2005, and not all provinces have participated in the monitoring of food insecurity each year since then. Nevertheless, the available data suggest that in most parts of Canada, food insecurity in 2012 remained at or above the levels experienced in prior years. Food insecurity was most prevalent in Canada's North (especially Nunavut) and the Maritimes in 2012. The rates of food insecurity in half of the country's provinces (Prince Edward Island, Nova Scotia, Quebec, Saskatchewan, and British Columbia) and two of the territories (Nunavut and Northwest Territories) were the highest rates observed yet in these provinces and territories. The lowest rates of food insecurity were found in Alberta and Ontario, but even in these provinces, the rate of food insecurity was over 11%.



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 11.4%). Food insecure households include 1.15 million children, or 16% of all children under the age of 18. This means that household food insecurity affected nearly one in every six children in Canada in 2012. Nunavut and the Northwest Territories had the highest prevalence of children living in food-insecure households at 62.2% and 31.6% respectively.



Seventy percent of households whose major source of income was social assistance were food insecure, as were 38.4% 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 being a female lone parent (34.3% were food insecure), having an income below the Low Income Measure (29.0%), being black (27.8%), being Aboriginal (28.2%), and renting rather than owning one's home (26.1%).

Food insecurity was slightly more prevalent in urban areas than in rural Canada, but prevalence rates differed markedly between cities. Among the 33 major census metropolitan areas examined, **food insecurity in 2011-12 was highest in Halifax, affecting about 1 in 5 households in this city.** The lowest rates of food insecurity were in Sherbrooke, Quebec City, Hamilton and Greater Sudbury, where 1 in 11 households were food insecure.

The 4 million Canadians affected in 2012 are vulnerable to the physical and emotional hardships that underpin the experience of food insecurity, but also to the associated compromises to 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.

Food insecurity is a serious social and public health problem in our cities, provinces and territories, and in the country as a whole. The geographic patterning of food insecurity such as the alarming rates in the North and the Maritimes, and the sheer volume of affected households in our largest provinces, as well as the variation in rates that is found among cities, suggest that reducing the prevalence of food insecurity requires attention and action by all 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.

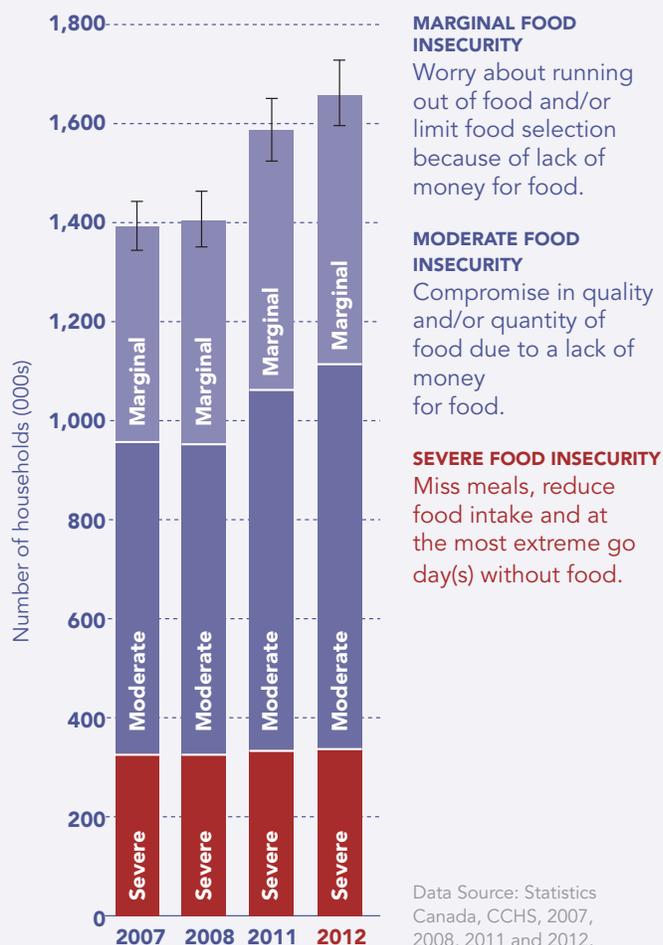
**1.7 million**  
Canadian households  
experienced food insecurity

This amounts to nearly  
**one in eight** households



**4 million**  
individuals, including  
**1.15 million children**

**Household food insecurity**



# Introduction

In 2012, the Household Food Security Survey Module was administered in all provinces and territories as a component of Statistics Canada's annual Canadian Community Health Survey (CCHS). 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, using 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 second 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 such conditions 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>.

## 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 Canadians per year. The sample is designed to be representative of the ten provinces and three territories, but it excludes individuals who are full-time members of the Canadian Forces, those living on First Nations reserves or Crown Lands or in prisons or care facilities, and persons living in the Quebec health regions of Région du Nunavik and Région des Terres-Cries-de-la-Baie-James. While nearly half of all First Nations people in Canada live on reserves<sup>vii</sup>, this report includes no data on their food security<sup>viii</sup>. The report also includes no data on food insecurity among homeless populations in Canada, because CCHS is limited to Canadians with domiciles<sup>x</sup>. Although on-reserve First Nations people and homeless people comprise relatively small proportions of the total population in Canada, their high levels of vulnerability to food insecurity must mean that the true prevalence of food insecurity in Canada 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>x</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

Responses to items in the Household Food Security Module, Canadian Community Health Survey, Canada 2012

Adult food security scale:	All Households		Households with children		Households without children	
	Number (000s)	%	Number (000s)	%	Number (000s)	%
Worried food would run out	1,219.1	9.2%	445.6	11.4%	773.5	8.3%
No food, and no money for more	951.9	7.2%	314.7	8.1%	637.2	6.9%
Could not afford balanced meals	1,039.5	7.9%	301.8	7.7%	737.7	7.9%
Adult ever skip meals because there wasn't enough money for food	522.6	4.0%	150.1	3.8%	372.5	4.0%
Adult cut or skipped meals almost every or some months	381.2	2.9%	96.2	2.5%	285.0	3.1%
Ate less than felt should	570.0	4.3%	182.0	4.7%	388.0	4.2%
Was hungry but could not afford to eat	313.4	2.4%	81.2	2.1%	232.2	2.5%
Lost weight, no money to buy food	201.9	1.5%	43.0	1.1%	158.9	1.7%
Adults did not eat for a whole day	119.8	0.9%	30.6	0.8%	89.2	1.0%
Adults did not eat for a whole day almost every or some months	88.6	0.7%	22.2	0.6%	66.4	0.7%
<b>Child food security scale:</b>						
Relied on a few kinds of low cost foods to feed children	308.8	2.3%	308.8	7.9%	n/a	n/a
Couldn't afford to feed children a balanced meal	194.7	1.5%	194.7	5.0%	n/a	n/a
Children were not eating enough because couldn't afford food	73.2	0.6%	73.2	1.9%	n/a	n/a
Adults cut the size of children's meals because they couldn't afford food	17.6	0.13%	17.6	0.5%	n/a	n/a
Child ever skip meals because there wasn't enough money for food	10.7	0.08%	10.7	0.3%	n/a	n/a
Child skipped meals almost every, or some months	6.7	0.05%	6.7	0.2%	n/a	n/a
Children were hungry but couldn't afford to buy more food	18.1	0.14%	18.1	0.5%	n/a	n/a
Children did not eat for a whole day	2.1	0.02%	2.1	0.1%	n/a	n/a

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, for this report and for subsequent issues, 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>xi</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* have reported more extensive compromises, including reduced food intake among adults and/or children because of a lack of money for food. Because we have included marginally food insecure households in our calculations, our estimates of the rate of food insecurity and number of households affected are higher than the estimates reported by Statistics Canada for 2011-2012<sup>ii</sup>.

In this report, we present estimates of the number of adults and children living in food insecure households in Canada and the rate of household food insecurity among children, based on population-weighted totals from CCHS 2012. Our estimates are larger than those released in earlier reports by Health Canada<sup>i</sup> and Statistics Canada<sup>ii</sup> because of 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 2012, applying United States Department of Agriculture's coding of the questionnaire, is presented in **Appendix C**.

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. However, this report is based on the 2012 CCHS which included the food security questionnaire as part of the core content; therefore, participation from all provinces and territories is assured.

This report is based on the 2012 CCHS, but in the examination of food insecurity in major metropolitan areas, some which have relatively small sample sizes, data from 2011 and 2012 have been pooled in order to obtain more reliable estimates.

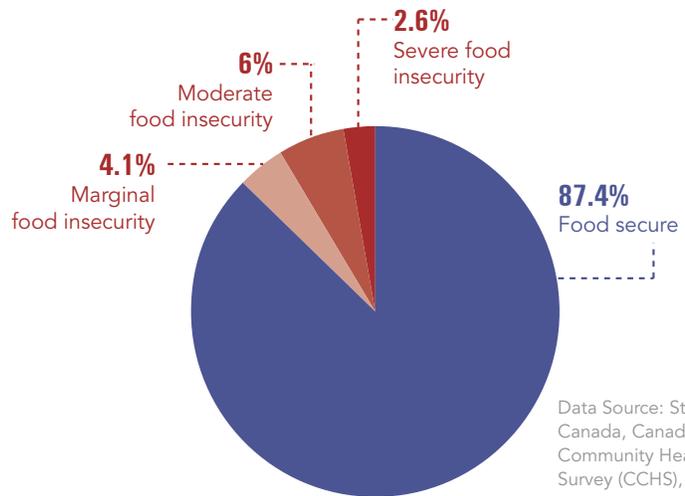
## Prevalence of Household Food Insecurity – Canada 2012

In 2012, 12.6% of Canadian households<sup>xii</sup>, or 1.7 million households representing 2.8 million adults and 1.15 million children under the age of 18, experienced some level of food insecurity during the previous 12 months. This means that 16.5% of children under 18, or about one in six, lived in households that experienced food insecurity during 2012.

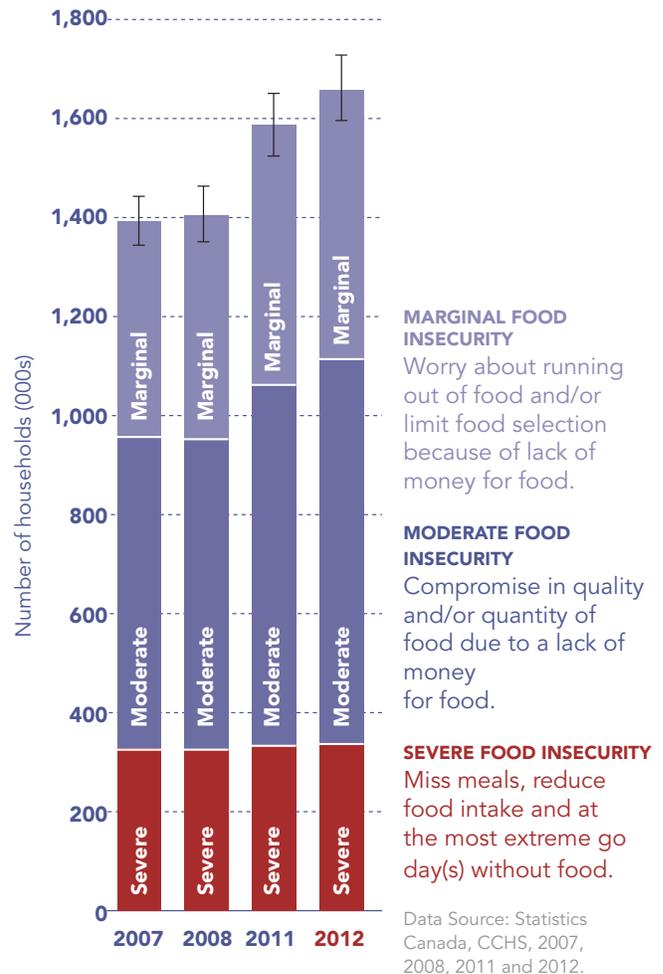
The levels of deprivation documented were substantial, with 6.0% of households (i.e., 786,100 households) classified as *moderately food insecure*, indicating compromises in the quality and possibly quantity of food consumed over the past 12 months, and 2.6% (i.e., 336,700 households) *severely food insecure*, reporting clear indications of food deprivation among household members.

Household food insecurity has risen significantly since 2008, and since 2011 an additional 130,000 Canadians were living in food insecure households, bringing the national total to over 4 million people (4,005,000) and a prevalence of 12.5%.

Household food insecurity, Canada 2012



Household food insecurity

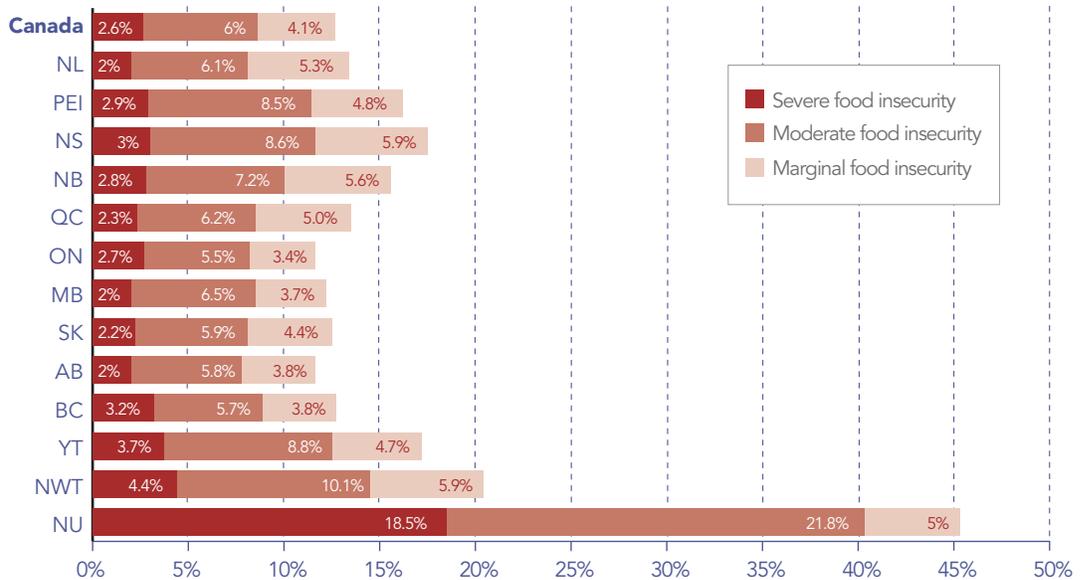


## Food insecurity, by province or territory

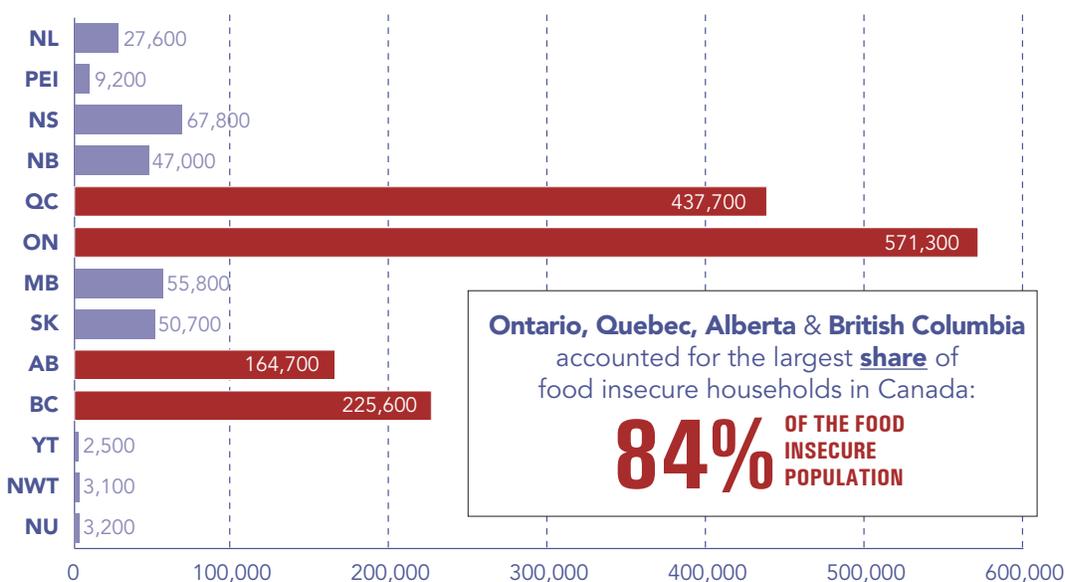
Food insecurity rose from 36.4% to 45.2% in Nunavut from 2011 to 2012, although this difference is not statistically significant. The Northwest Territories, where the second highest prevalence in the country was found, also experienced an increase in food insecurity from 2011 to 2012 (15.2% to 20.4%). Continuing from 2011, food insecurity rates also topped 15% in the Maritimes and the Yukon in 2012. The province with the least food insecurity, in 2011, was Newfoundland and Labrador. In 2012, it was Alberta with a rate of 11.5%. In both of these provinces, the changes from 2011 to 2012 were not statistically significant.

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

Data Source: Statistics Canada, Canadian Community Health Survey (CCHS), 2012.



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. In 2012, 84% of the food insecure households in Canada, 1.4 million, were located in Ontario, Quebec, Alberta, and British Columbia, Canada's most populous provinces.



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

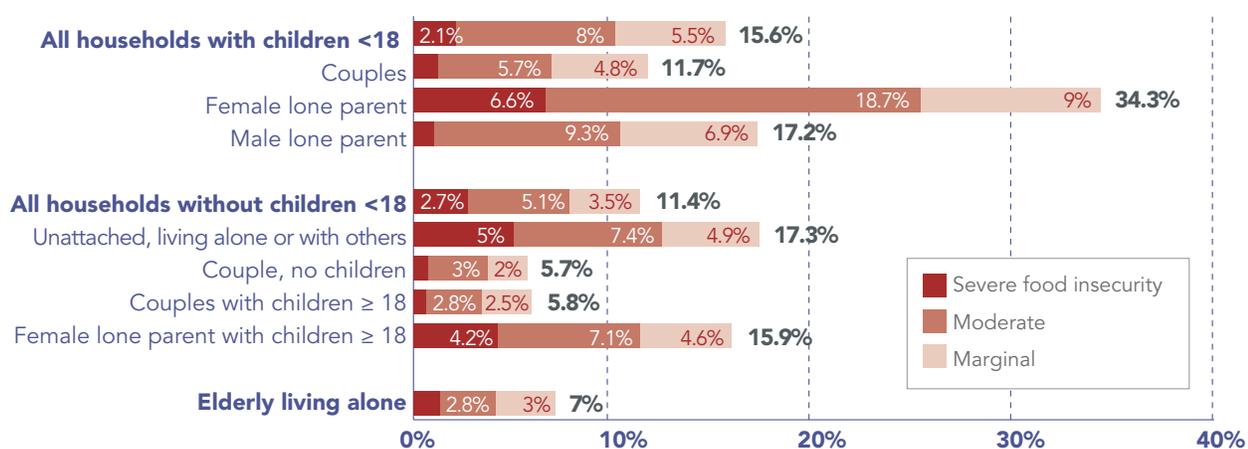
Data Source: Statistics Canada, Canadian Community Health Survey (CCHS), 2012.

## 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 D* for a detailed breakdown of food insecurity in relation to household characteristics.) 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 34.4%. Among households without children under 18 years old, food insecurity rates were 17.3% among unattached individuals and 15.4% among female lone parents living with adult children. In contrast, the prevalence of food insecurity among couples without children was 5.7% and among elderly individuals living alone, it was 7.0%.

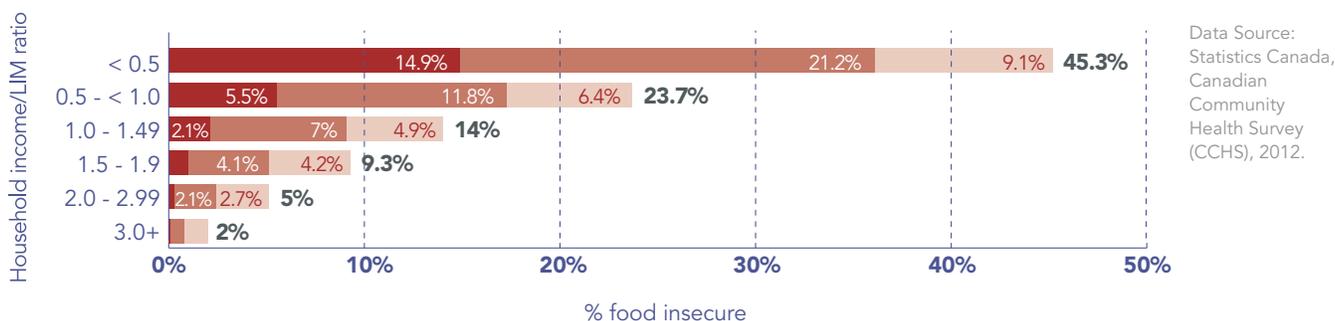
## Food insecurity by household composition

Data Source: Statistics Canada, Canadian Community Health Survey (CCHS), 2012.



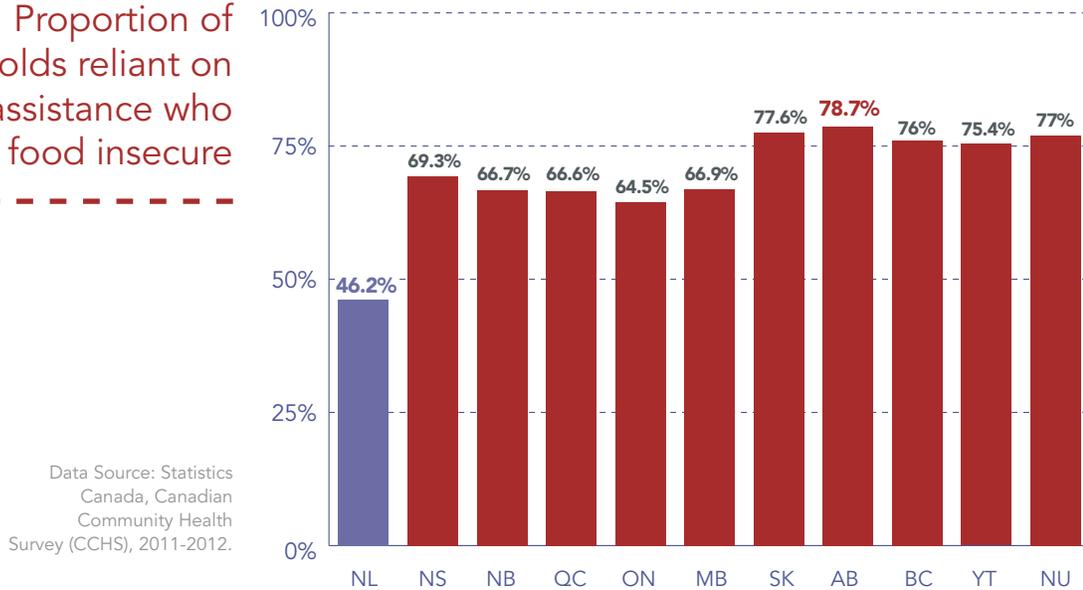
Because food insecurity results from a household's inability to access food for financial reasons, it is not surprising that income is closely related to food insecurity. While there is no official measure of poverty in Canada, Statistics Canada's Low Income Measure (LIM) is commonly used in Canada and for making international comparisons. 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>xiii</sup>. The lower household income is in relation to the LIM, the greater the likelihood of severe food insecurity. In 2012, 45.3% of households with incomes under half of the LIM were food insecure.

## Relationship between income and household food insecurity



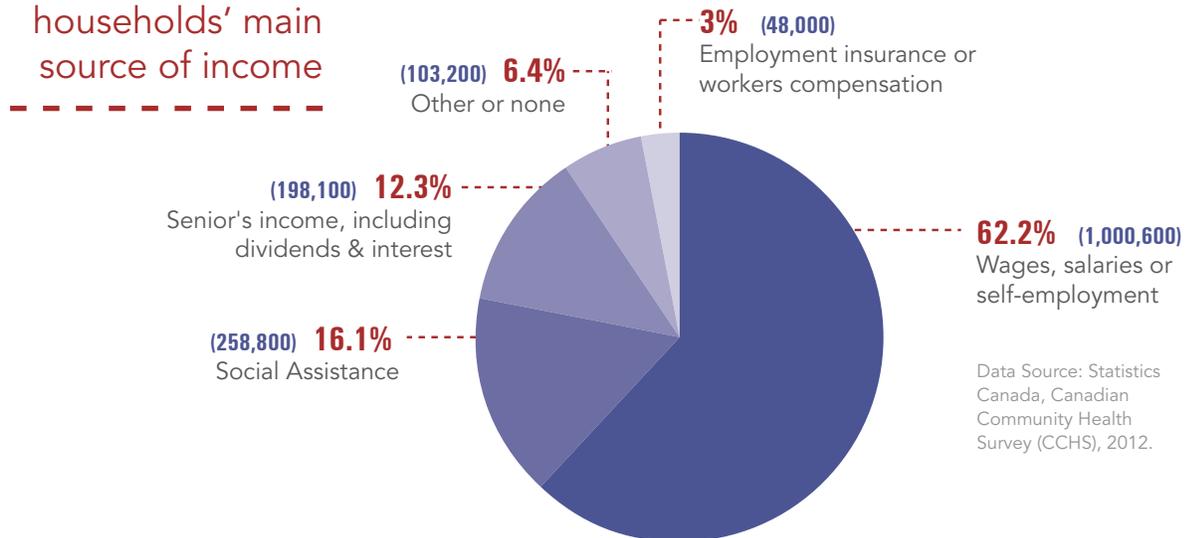
The source of a household's income is strongly related to food insecurity. Households whose main source of income was either pensions or dividends and interest had the lowest rate of food insecurity (7.4%)<sup>xiv</sup>. In contrast, food insecurity affected 69.5% of households reliant on social assistance (i.e., welfare and disability support programs). But the percentage varied greatly among provinces, with rates above 75% in the west and Nunavut and Yukon, to a low of 46.2% in Newfoundland and Labrador. 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



Although the prevalence of food insecurity among households whose main source of income was wages and salaries was 11.2% in 2012, this group made up the majority (62.2%) of food insecure households in Canada.

Food insecure households' main source of income



The percentage of food insecure households who were reliant on wages and salaries differed by province, with a low of 58.3% in Ontario and high of 79.0% in Prince Edward Island.

Proportion of food insecure households reliant on wages and salaries, by province	
Province	Percent
Canada	62.2%
Newfoundland and Labrador	58.8%
Prince Edward Island	79.0%
Nova Scotia	64.8%
New Brunswick	65.3%
Quebec	58.6%
Ontario	58.3%
Manitoba	72.4%
Saskatchewan	63.7%
Alberta	76.8%
British Columbia	63.2%
Yukon	65.4%
Northwest Territories	69.6%
Nunavut	69.0%

Data Source: Statistics Canada, Canadian Community Health Survey (CCHS), 2012.

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

- 26.1% of households renting their accommodation experienced food insecurity, versus 6.4% of homeowners.
- Households where the respondent was Aboriginal or black had a rate of food insecurity that was almost two and one-half times that of all Canadian households (28.2% and 27.8%, respectively, versus 12.6% in Canada overall).
- The prevalence of food insecurity among households where the respondent was a recent immigrant to Canada (less than 5 years) was 19.6%, but the rate for households where the respondent had immigrated to the country five or more years ago was 11.8%, similar to the rate for Canadian-born respondents (12.4%).
- Households who lived in rural areas experienced a rate of food insecurity that was slightly lower than that of households in population centres (11.0% versus 13.0%), but this difference was not statistically significant.

## ► Children in food insecure households

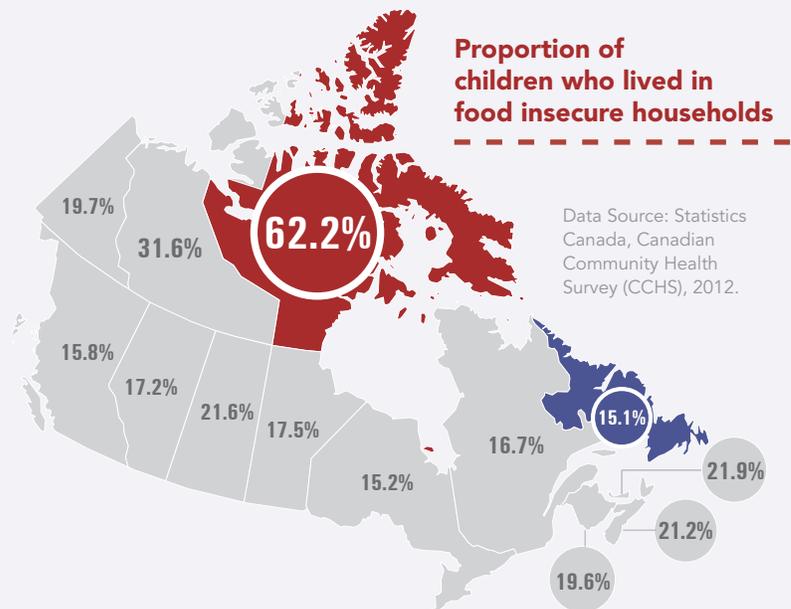
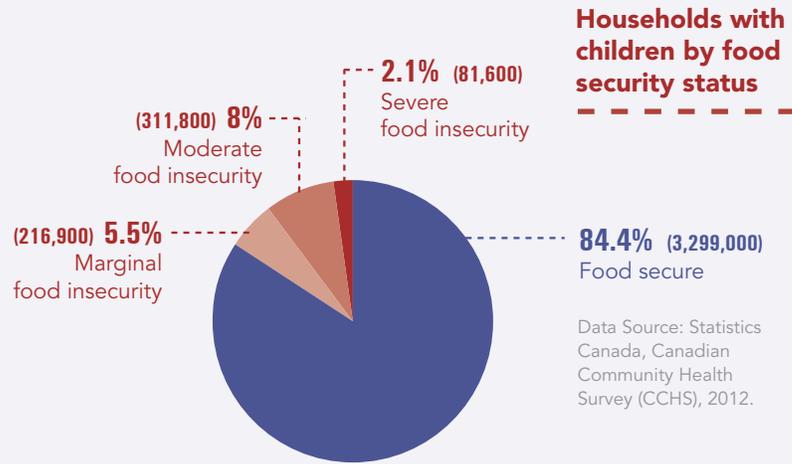
Food insecurity is more prevalent among households with children under the age of 18 than households without children.

### How many children are affected?

In 2012, 16.5% of children in Canada (an estimated 1.15 million children) lived in households affected by some level of food insecurity. Nearly two-thirds of these (nearly three-quarters of a million children) 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 62.2% and 31.6% respectively.** Prince Edward Island, Saskatchewan, Nova Scotia, New Brunswick and Yukon had rates above 20%. The lowest prevalences of children in food-insecure families were in Ontario and Newfoundland and Labrador (15.2% and 15.1% respectively), but even in these provinces, 1 in 7 children were living in a household that had reported some level of food insecurity in 2012.



## Severe food insecurity

In 2012, one in five of food insecure households in Canada were *severely food insecure*. This group, comprising 336,700 households, merits closer examination because severe food insecurity denotes such an extreme level of deprivation. Overall, like food insecurity, the prevalence of *severe food insecurity* was much higher in Nunavut (18.5%) than elsewhere in Canada. Additionally, the rate of severe food insecurity was above the national prevalence (2.6%) in Northwest Territories (4.4%), Yukon (3.7%), British Columbia (3.2%), Nova Scotia (3.0%), Prince Edward Island (2.9%), New Brunswick (2.8%), and Ontario (2.7%). Severe food insecurity was lowest in Newfoundland and Labrador, Manitoba, and Alberta, each with a prevalence of 2.0%.

An examination of the household characteristics associated with severe food insecurity highlights the particular vulnerability of people on social assistance. In 2012, 29.4% of households who reported their main source of income as social assistance were severely food insecure. See *Appendix D* 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?

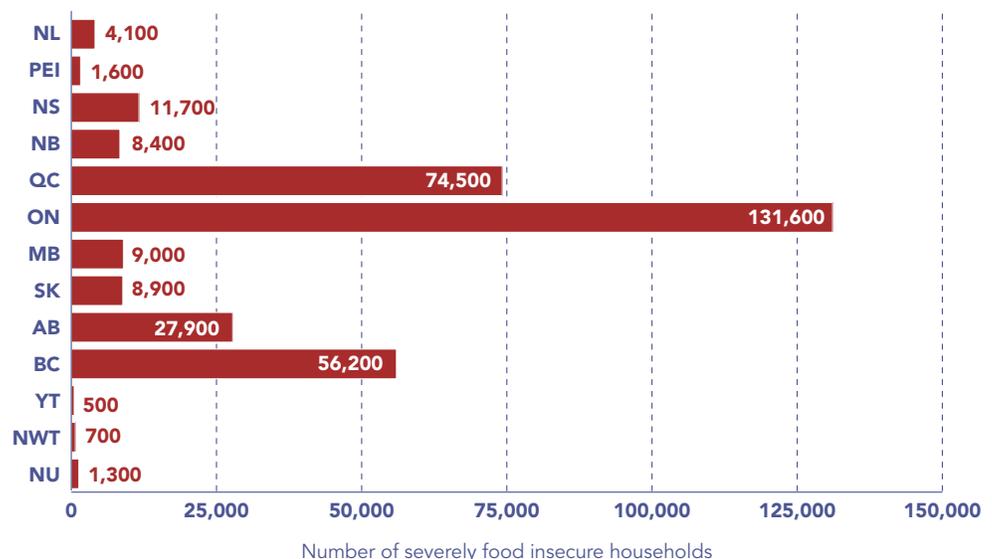
- 97.1% reported being worried that their food would run out before they got money to buy more;
- 95.7% reported that the food bought for the household did not last and there was no money to buy more.
- 96.1% reported that they could not afford to eat balanced meals.
- 98.1% reported that they had cut the size of meals, or skipped meals entirely because there wasn't enough money to purchase food; 88.0% reported that this had occurred several times.
- 96.3% felt that they had eaten less than they should because there wasn't enough money to buy food.
- 71.6% reported being hungry but not eating because they couldn't afford enough food.
- 50.1% of respondents had lost weight because they didn't have enough money for food.
- 32.8% reported that an adult did not eat for an entire day because there wasn't enough money for food; 26.2% reported that this happened several times.

#### Among households with children:

- 83.1% relied on a few kinds of low-cost foods to feed children.
- 69.4% could not afford to feed their children balanced meals
- In nearly half (41.2%) of the households, children were not eating enough because there was not enough money for food.
- 15.4% cut the size of children's meals, and in 9.5% of households children missed meals.
- 17.0% of children were hungry, and 2.5% 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), 2012.



## Food Insecurity since 2005

Food insecurity has only been monitored on a consistent basis since 2005<sup>xv</sup>, and not all provinces and territories have participated in the monitoring of food insecurity each year since then. Nevertheless, the available data suggest that in most parts of Canada, food insecurity in 2012 remained at or above the levels experienced in prior years. The following table presents the prevalence of total (marginal, moderate and severe) food insecurity in the provinces and territories from 2005 to 2012, 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 2012 are presented in *Appendix E*.

Household food insecurity – Canada, 2005-2012							
	2005	2007	2008	2009	2010	2011	2012
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%
Nova Scotia	16.1%	14.4%	13.5%	15.9%	14.9%	17.1%	17.5%
New Brunswick		13.8%	15.1%			16.5%	15.6%
Quebec	11.3%	10.9%	9.4%	11.3%	9.7%	12.5%	13.5%
Ontario	11.6%	11.8%	12.1%	12.5%	11.3%	11.9%	11.7%
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%
Alberta	10.4%	9.1%	10.0%	10.8%	10.9%	12.3%	11.5%
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%
Nunavut	38.0%	35.4%	34.6%	31.0%	31.0%	36.4%	45.2%

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

The rates of food insecurity in Prince Edward Island, Nova Scotia, Quebec, Saskatchewan, British Columbia, Northwest Territories and Nunavut (i.e. half of the provinces and 2 of the 3 territories in the country) were the highest rates observed yet.

Of particular concern as well are the persistently high rates of food insecurity in Nunavut, and the severity of food insecurity documented in this territory. Food insecurity rose from 36.4% to 45.2% in Nunavut from 2011 to 2012, although this difference is not statistically significant. Moderate and severe food insecurity rose from 32.9% in 2011 to 40.3% in 2012.

The rise in prevalence of food insecurity in Newfoundland and Labrador from 2011 to 2012 is troubling. Food insecurity had been steadily declining in that province until 2011, and while the increase over the year is not statistically significant, the direction of the shift is worrisome.

# Prevalence of household food insecurity, 2005-2012



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

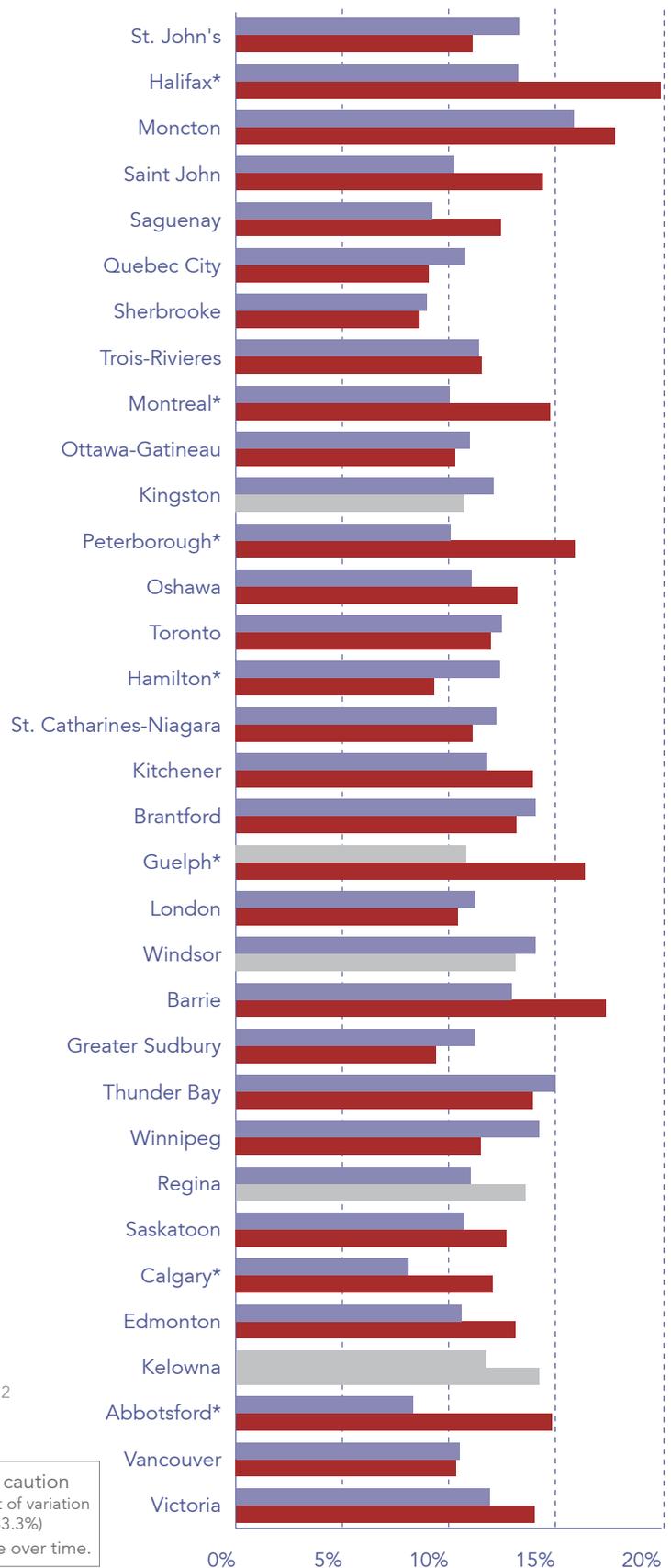
## Food insecurity – major census metropolitan areas

An examination of food insecurity in 33 major urban areas revealed considerable variation. The prevalence of food insecurity in 2011-12 was highest in Halifax (19.9%) where about 1 in 5 households experienced food insecurity. Moncton (17.8%), Guelph (16.4%) and Barrie (17.4%) also had relatively high rates.

The lowest rates of food insecurity were found in Sherbrooke (8.6%), Quebec City (9.0%), Hamilton (9.3%) and Greater Sudbury (9.4%) where about 1 in 11 households were food insecure.

Between 2007-08 and 2011-12, there was considerable fluctuation in the prevalence of food insecurity in many census metropolitan areas, but the estimates from one survey to the next have limited reliability in many areas because the sample sizes are relatively small. We conducted a statistical test to determine which changes could be considered significant. From 2007-08 to 2011-12, the prevalence of food insecurity significantly increased in Halifax, Montreal, Peterborough, Guelph, Calgary and Abbotsford. Hamilton was the only census metropolitan area to experience a significant decrease in the prevalence of food insecurity during that period. (See *Appendix F* for the prevalence estimates and confidence intervals for all census metropolitan areas shown here.)

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



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

■ 2007-2008 ■ Use with caution (coefficient of variation 16.6% to 33.3%)  
■ 2011-2012  
\* Statistically significant change over time.

# Conclusions

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. The 4 million Canadians affected in 2012 are vulnerable to the physical and emotional hardships that underpin the experience of food insecurity, but also to the associated compromises to health and well-being.

Food insecurity is a serious social and public health problem in our cities, provinces and territories, and in the country as a whole. 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, as well as the variation in rates that is found among cities, suggest that reducing the prevalence of food insecurity requires attention and action by all 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.

## Appendix A - CCHS Household Food Security Survey Module<sup>x</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
- 2. Sometimes true
- 3. Never 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
- 2. Some months but not every month
- 3. Only 1 or 2 months
- 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              | 3. Only 1 or 2 months           |
| 2. Some months but not every month | - 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              | 3. Only 1 or 2 months           |
| 2. Some months but not every month | - 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 - A comparison of food insecurity rates in Canada and the United States in 2012

In the United States, food insecurity is monitored using the same questionnaire used in Canada, but the terminology and classification scheme differs. In the US, households are classified as food insecure if they report three or more food-insecure conditions. Food-insecure households are further classified as having either *low food security* or *very low food security*. Households without children are classified as having *very low food security* if they report six or more food-insecure conditions. Households with children are classified as having *very low food security* if they report eight or more food-insecure conditions, including conditions among both adults and children. This means that the results in this report are not directly comparable to reports of food insecurity in the United States.<sup>xvi</sup> If we use the U.S. approach to measuring food insecurity here, the prevalence of household food insecurity in Canada is 6.8%.

Prevalence of Food Insecurity using USDA Measurement				
	Canada, 2012		US, 2012 <sup>xvi</sup>	
	Households (000s)	%	Households (000s)	%
Total food insecure	898.5	6.8%	17,632	14.5%
Low food security	570.4	4.3%	10,679	8.8%
Very low food security	328.1	2.5%	6,953	5.7%

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

Prevalence of household food security and insecurity, by selected household characteristics											
Characteristic	Total households (000s) <sup>1</sup>	Food secure		Food insecure		Marginal food insecurity		Moderate food insecurity		Severe food insecurity	
		Number (000s)	%	Number (000s)	%	Number (000s)	%	Number (000s)	%	Number (000s)	%
<b>All Households</b>	13,201.9	11,535.5	87.4%	1,666.5	12.6%	543.7	4.1%	786.1	6.0%	336.7	2.6%
<b>Household composition:</b>											
<b>With children under 18</b>	3,909.3	3,299.0	84.4%	610.3	15.6%	216.9	5.5%	311.8	8.0%	81.6	2.1%
With children under 6	1,676.7	1,389.7	82.9%	286.9	17.1%	101.4	6.0%	144.5	8.6%	41.0	2.4%
Couple, with children	3,072.4	2,714.3	88.3%	358.1	11.7%	146.5	4.8%	174.6	5.7%	37.0	1.2%
Female lone parent	618.4	406.3	65.7%	212.1	34.3%	55.5	9.0%	115.6	18.7%	41.1	6.6%
Male lone parent	126.5	104.8	82.8%	21.8	17.2%	8.8	6.9%	11.7	9.3%	1.3	1.0%
Other <sup>2</sup>	65.7	51.4	78.3%	14.2	21.7%	5.3	8.1%	7.5	11.5%	1.3	2.0%
<b>With no children &lt; 18</b>	9,292.6	8,236.5	88.6%	1,056.1	11.4%	326.8	3.5%	474.3	5.1%	255.0	2.7%
Unattached, living alone or with others	4,141.4	3,425.5	82.7%	715.9	17.3%	202.2	4.9%	306.3	7.4%	207.4	5.0%
Couple, no children	3,654.9	3,446.6	94.3%	208.3	5.7%	74.2	2.0%	108.7	3.0%	25.3	0.7%
Couple, with children	980.6	923.3	94.2%	57.3	5.8%	24.2	2.5%	27.4	2.8%	5.7	0.6%
Female lone parent	351.6	295.7	84.1%	55.9	15.9%	16.2	4.6%	25.1	7.1%	14.6	4.2%
Male lone parent	101.3	90.7	89.5%	10.7	10.5%	4.4	4.3%	4.5	4.5%	1.7	1.7%
Other	48.9	42.8	87.5%	6.1	12.5%	5.1	10.5%	1.0	2.0%	-	0.0%
<b>Elderly living alone</b>	1,176.8	1,094.3	93.0%	82.5	7.0%	35.2	3.0%	32.4	2.8%	14.9	1.3%
<b>Education:<sup>3</sup></b>											
Less than secondary	1,127.4	891.2	79.0%	236.2	21.0%	53.2	4.7%	118.6	10.5%	64.4	5.7%
Secondary school graduate, no post-secondary	1,531.9	1,278.4	83.5%	253.4	16.5%	64.3	4.2%	132.6	8.7%	56.5	3.7%
Some post-secondary, not completed	533.9	414.7	77.7%	119.1	22.3%	34.9	6.5%	52.1	9.8%	32.1	6.0%
Completed post-secondary, below Bachelor's degree	5,157.5	4,450.1	86.3%	707.4	13.7%	239.4	4.6%	325.9	6.3%	142.1	2.8%
Completed Bachelor's degree or higher	4,171.0	3,907.3	93.7%	263.7	6.3%	122.0	2.9%	111.9	2.7%	29.8	0.7%
<b>Main source of household income:</b>											
Wages, salaries or self-employment	8,960.7	7,960.1	88.8%	1,000.6	11.2%	382.2	4.3%	482.3	5.4%	136.1	1.5%
Senior's income, including dividends & interest	2,685.1	2,487.0	92.6%	198.1	7.4%	69.2	2.6%	85.2	3.2%	43.7	1.6%
Employment insurance or workers compensation	125.1	77.1	61.6%	48.0	38.4%	9.4	7.5%	26.8	21.4%	11.8	9.4%
Social Assistance	372.2	113.4	30.5%	258.8	69.5%	30.8	8.3%	118.5	31.8%	109.6	29.4%
Other or none	344.7	241.4	70.0%	103.2	30.0%	30.1	8.7%	45.7	13.3%	27.5	8.0%

Characteristic	Total households (000s) <sup>1</sup>	Food secure		Food insecure		Marginal food insecurity		Moderate food insecurity		Severe food insecurity	
		Number (000s)	%	Number (000s)	%	Number (000s)	%	Number (000s)	%	Number (000s)	%
<b>Housing Tenure:</b>											
Dwelling owned by member of household	9,038.4	8,455.9	93.6%	582.5	6.4%	252.6	2.8%	257.7	2.9%	72.2	0.8%
Dwelling rented	4,135.2	3,054.8	73.9%	1,080.3	26.1%	290.0	7.0%	527.2	12.7%	263.2	6.4%
<b>Cultural/racial group:<sup>4</sup></b>											
White	10,344.4	9,199.8	88.9%	1,144.6	11.1%	390.8	3.8%	519.8	5.0%	234.1	2.3%
Black	331.9	239.7	72.2%	92.2	27.8%	23.7	7.1%	51.5	15.5%	17.0	5.1%
Aboriginal	499.3	358.7	71.8%	140.6	28.2%	25.4	5.1%	73.9	14.8%	41.3	8.3%
East and South-East Asian	831.8	743.9	89.4%	87.9	10.6%	37.4	4.5%	45.4	5.5%	5.2	0.6%
Arab and West Asian	198.8	155.6	78.3%	43.2	21.7%	15.3	7.7%	14.7	7.4%	13.2	6.6%
South Asian	451.9	394.3	87.3%	57.5	12.7%	20.4	4.5%	32.0	7.1%	5.2	1.1%
Latin American	148.6	121.7	81.9%	26.9	18.1%	6.0	4.1%	16.1	10.8%	4.9	3.3%
Other or multiple origins	304.3	249.1	81.9%	55.1	18.1%	19.2	6.3%	25.5	8.4%	10.4	3.4%
<b>Immigrant/Canadian born:</b>											
Canadian born	10,286.8	9,008.8	87.6%	1,278.0	12.4%	415.7	4.0%	589.0	5.7%	273.3	2.7%
Immigrant < 5 years	445.9	358.7	80.4%	87.2	19.6%	37.2	8.3%	35.8	8.0%	14.2	3.2%
Immigrant 5+ years	2,364.1	2,084.3	88.2%	279.7	11.8%	84.1	3.6%	149.5	6.3%	46.1	1.9%
<b>Urban/rural:</b>											
Population centre	10,855.7	9,448.1	87.0%	1,407.5	13.0%	443.8	4.1%	662.2	6.1%	301.5	2.8%
Rural	2,346.3	2,087.3	89.0%	258.9	11.0%	99.9	4.3%	123.9	5.3%	35.2	1.5%
<b>Household income/LIM ratio:<sup>5</sup></b>											
< 0.5	786.8	430.6	54.7%	356.3	45.3%	71.6	9.1%	167.1	21.2%	117.6	14.9%
0.5 - < 1.0	2,440.3	1,862.1	76.3%	578.2	23.7%	156.5	6.4%	287.1	11.8%	134.6	5.5%
1.0 - 1.49	2,207.0	1,897.5	86.0%	309.5	14.0%	109.0	4.9%	154.0	7.0%	46.5	2.1%
1.5 - 1.9	2,447.4	2,219.7	90.7%	227.8	9.3%	102.3	4.2%	100.8	4.1%	24.6	1.0%
2.0 - 2.99	2,634.7	2,502.7	95.0%	131.9	5.0%	70.0	2.7%	55.1	2.1%	6.9	0.3%
3.0 +	2,648.3	2,594.5	98.0%	53.9	2.0%	32.4	1.2%	17.5	0.7%	4.0	0.1%

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

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

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

4 This refers to the status of the respondent.

5 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, 2012.

## Appendix E - Provincial and territorial rates of household food insecurity, 2005-2012

Provincial and territorial rates of household food insecurity, 2005-2011									
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.

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.

Province/Territory	2012		
	Moderate & severe food insecurity (%)	Total food insecure (%)	95% CI <sup>2</sup>
Newfoundland and Labrador	8.1%	13.4%	10.6% - 16.1%
Prince Edward Island	11.4%	16.2%	12.5% - 20.0%
Nova Scotia	11.6%	17.5%	15.0% - 20.0%
New Brunswick	10%	15.6%	13.4% - 17.7%
Quebec	8.5%	13.5%	12.4% - 14.6%
Ontario	8.2%	11.7%	10.9% - 12.5%
Manitoba	8.4%	12.1%	10.2% - 14.1%
Saskatchewan	8.1%	12.5%	10.4% - 14.5%
Alberta	7.8%	11.5%	10.0% - 13.1%
British Columbia	8.8%	12.7%	11.3% - 14.1%
Yukon	12.4%	17.1%	14.0% - 20.3%
Northwest Territories	14.5%	20.4%	15.7% - 25.0%
Nunavut	40.3%	45.2%	37.0% - 53.5%

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

Prevalence of household food insecurity by census metropolitan areas <sup>1</sup>					
CMA	2007-2008		2011-2012		Statically significant change over time <sup>2</sup>
	(%)	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%	✓
Moncton	15.87%	13.1-19.0%	17.81%	14.7-21.5%	
Saint John	10.24%	7.6-13.8%	14.41%	11.4-18.0%	
Saguenay	9.24%	7.1-12.0%	12.43%	10.0-15.5%	
Quebec City	10.78%	8.9-13.0%	9.04%	7.2-11.2%	
Sherbrooke	8.96%	6.6-12.1%	8.61%	6.4-11.5%	
Trois-Rivieres	11.42%	9.1-14.3%	11.56%	8.6-15.2%	
Montreal	10.04%	9.2-11.0%	14.75%	13.5-16.1%	✓
Ottawa-Gatineau	10.99%	9.5-12.7%	10.29%	8.8-12.0%	
Kingston	12.12%	9.4-15.3%	10.73% <sup>A</sup>	7.5-15.1%	
Peterborough	10.08%	7.4-13.8%	15.90%	12.1-20.4%	✓
Oshawa	11.06%	8.6-14.2%	13.21%	10.3-16.7%	
Toronto	12.50%	11.4-13.7%	11.96%	10.8-13.2%	
Hamilton	12.40%	10.5-14.6%	9.32%	7.6-11.4%	✓
St. Catharines-Niagara	12.24%	9.9-15.0%	11.12%	9.0-13.7%	
Kitchener	11.82%	9.6-14.4%	13.93%	11.1-17.3%	
Brantford	14.08%	10.5-18.6%	13.16%	10.4-16.6%	
Guelph	10.83% <sup>A</sup>	7.8-14.9%	16.38%	13.2-20.2%	✓
London	11.24%	9.3-13.6%	10.41%	8.3-13.0%	
Windsor	14.06%	11.5-17.1%	13.15% <sup>A</sup>	8.5-19.7%	
Barrie	12.96%	10.1-16.5%	17.37%	13.3-22.3%	
Greater Sudbury	11.25%	9.1-14.1%	9.38%	6.9-12.7%	
Thunder Bay	15.01%	12.6-18.1%	13.93%	10.9-17.7%	
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%	
Saskatoon	10.74%	8.6-13.4%	12.71%	9.8-16.3%	
Calgary	8.09%	6.8-9.6%	12.07%	10.1-14.4%	✓
Edmonton	10.58%	9.1-12.2%	13.12%	11.0-15.5%	
Kelowna	11.76% <sup>J</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. Based on a test of a difference in proportions.

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** 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>.
- viii** 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/>
- ix** See Gaetz S, et al. *The State of Homelessness in Canada 2013*. Homeless Hub Paper #4. Toronto, ON: Canadian Homelessness Research Network Press, 2013.
- x** 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).
- xi** 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.
- xii** Percentages and numbers provided in this report refer to the total population with complete responses to the food security module. In the 2012 Canadian Community Health Survey, approximately 4 percent of Canadian households did not have complete responses to the food security module, and these households have been excluded.
- xiii** 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.
- xiv** 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.
- xv** 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>
- xvi** Coleman-Jensen, Alisha, Mark Nord, Margaret Andrews, and Steven Carlson. *Household Food Security in the United States in 2012*. ERR-155, U.S. Department of Agriculture, Economic Research Service, September 2013.