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# Household Food Insecurity in Canada, 2013

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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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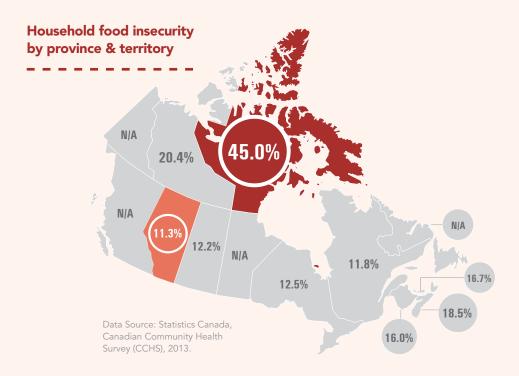


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# **Executive Summary**

Household food insecurity, inadequate or insecure access to food because of financial constraints, is a significant social and health problem in Canada. Not all provinces and territories chose to measure food insecurity in 2013 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, 12.5% of households experienced some level of food insecurity during the previous 12 months in 2013. This represents 1.4 million households, including 2.4 million adults and nearly 1 million children under the age of 18. This means that 17.4% of children under 18, or more than 1 in 6 lived in households that experienced food insecurity in 2013.

Food insecurity was most prevalent in Canada's North (especially Nunavut) and the Maritimes in 2013. With the exception of Quebec, food insecurity prevalence rose or held steady in every province and territory with data in 2013. The lowest rates of food insecurity were found in Alberta and Quebec, but even in these provinces, the rate of food insecurity was over 11%.





Households with children under the age of 18 were at greater risk for food insecurity than households without children (16.5% versus 10.8%). Most vulnerable were lone parent families headed by women; 38.2% of these families were food insecure in 2013. Among households without children under 18 years old, the rate of food insecurity rate was 16.3% among unattached individuals.

Sixty-eight percent of households whose major source of income was social assistance were food insecure, as were 33.7% of those reliant on Employment Insurance or Workers' Compensation. However, the majority of food insecure households (61.1%) 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 (30.4%), being Aboriginal (29.2%), being Latin American (29.8%), being Black (28.5%), and renting rather than owning one's home (25.9%).

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. In fact, it has grown or persisted



68% of households whose major source of income was social assistance were food insecure.

However, the majority of food insecure households (61.1%) were reliant on wages or salaries from employment.

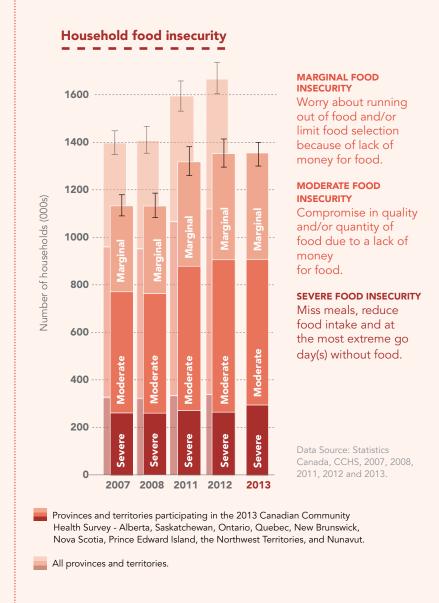


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in every province and territory.

Among the provinces and territories surveyed in 2013, there are no significant drops and even indications of upward trends in certain places.

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 by all sectors aimed at tackling food insecurity in Canada.



# Introduction

In 2013 and 2014, the Household Food Security Survey Data from Alberta, Saskatchewan, Ontario, Module was optional on Statistics Quebec, New Brunswick, Canada's annual Canadian Community **Nova Scotia, Prince Edward Island, Nunavut** Health Survey (CCHS), and and Northwest British Columbia, Manitoba, Territories. 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 2013. 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 the Office of Nutrition Policy and Promotion at Health Canadai and Statistics Canadaii 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 third in a series of annual report 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"iii. 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' 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 adulthoodiv. 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 insecurityvi. The toll that food insecurity takes on the health of Canadians is evident through their heightened health care costsvii.

## Responses to items in the Household Food Security Module, Canadian Community Health Survey, Canada 2013\*

Canadian	Commun	ity Heal	ealth Survey, Canac		a 2013*		
	All Hous	Households with children			Households without children		
Adult food security scale:	Number (000s)	%	Number (000s)	%	Number (000s)	%	
Worried food would run out	1,007.9	9.3%	401.6	12.7%	606.3	7.9%	
No food, and no money for more	771.1	7.1%	286.4	9.0%	484.7	6.3%	
Could not afford balanced meals	852	7.8%	281.3	8.9%	570.7	7.4%	
Adults cut or skipped meals (Y/N)	424.5	3.9%	156.5	4.9%	268	3.5%	
Adults cut or skipped meals (frequency)	311	2.9%	107.1	3.4%	203.8	2.7%	
Ate less than felt should	471.8	4.3%	176.2	5.6%	295.6	3.8%	
Was hungry but could not afford to eat	286.5	2.6%	93.5	3.0%	193	2.5%	
Lost weight, no money to buy food	195.3	1.8%	54	1.7%	141.4	1.8%	
Adults did not eat for a whole day (Y/N)	117	1.1%	27.2	0.9%	89.8	1.2%	
Adults did not eat whole day (frequency)	92.9	0.9%	22.1	0.7%	70.8	0.9%	
Child food security	scale:						
Relied on a few kinds of low cost foods to feed children	284.9	2.6%	284.9	9.0%	n/a	n/a	
Couldn't afford to feed children a balanced meal	188.1	1.7%	188.1	5.9%	n/a	n/a	
Children were not eating enough because couldn't afford food	80.5	0.7%	80.5	2.5%	n/a	n/a	
Adults cut the size of children's meals because they couldn't afford food	25.8	0.2%	25.8	0.8%	n/a	n/a	
Child ever skip meals because there wasn't enough money for food	12.8	0.1%	12.8	0.4%	n/a	n/a	
Child skipped meals almost every, or some months	10.7	0.1%	10.7	0.3%	n/a	n/a	
Children were hungry but could afford to buy more food	19.9	0.2%	19.9	0.6%	n/a	n/a	
Children did not eat for a whole day	2.1	0.0%	2.1	0.1%	n/a	n/a	

<sup>\*</sup> Participating provinces only. In 2013 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 viii, but it excludes full-time members of the Canadian Forces, individuals living on First Nations reserves , 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 have reported more extensive compromises, including reduced food intake among adults and/or children because of a lack of money for food.



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.

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 2013. Our estimates are larger than those released in earlier reports by Health Canadai and Statistics Canadaii 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 2013 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.

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

of CCHS where it has

of all respondents and

some

out

optional provinces and territories have opted participation. Starting in 2015, the survey module is considered two-year common content. That is, the module will be asked

data will be collected for two years (2015 and 2016), and re-introduced every four years (collected again in 2019 and 2020); it will be optional in 2017 and 2018, and so forth.

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 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 2013.

> In this report, we describe household food insecurity in the jurisdictions for which 2013 data are available. We also report on household food insecurity from 2007 to 2013 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 2013xiii. 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 2013 cannot be compared directly with the results we have reported in our 2011 and 2012 reports.

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

### **▶ VISIT**

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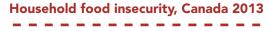


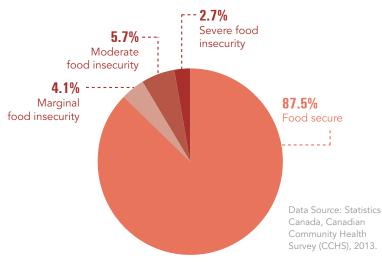
## **Prevalence of Household Food Insecurity – Canada 2013**

When the results for all of the territories provinces and measured food insecurity in 2013 are considered together, 12.5% of householdsxiv in the country in 2013 experienced some level of food insecurity during the previous 12 months. This represents 1.4 million households, including 2.4 million adults and nearly 1 million children under the age of 18. This means that 17.4% of children under 18, or more than 1 in 6 lived in households that experienced food insecurity in 2013. (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 2013.)

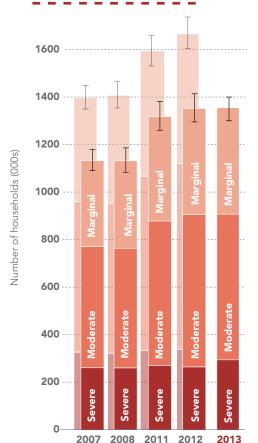
The levels of deprivation documented were substantial, with 5.6% of households (i.e. 613,000 households) classified as *moderately food insecure*, indicating compromises in the quality and possibly the quantity of food consumed over the past 12 months, and 2.7% (i.e. 296,700 households) severely food insecure, reporting clear indication of food deprivation among household members.

Among the participating provinces and territories, household food insecurity rose significantly between 2008 and 2011, and then remained persistently high in 2012 and 2013.





## Household food insecurity



# MARGINAL FOOD INSECURITY

Worry about running out of food and/or limit food selection because of lack of money for food.

# MODERATE FOOD INSECURITY

Compromise in quality and/or quantity of food due to a lack of money for food.

## SEVERE FOOD INSECURITY

Miss meals, reduce food intake and at the most extreme go day(s) without food.

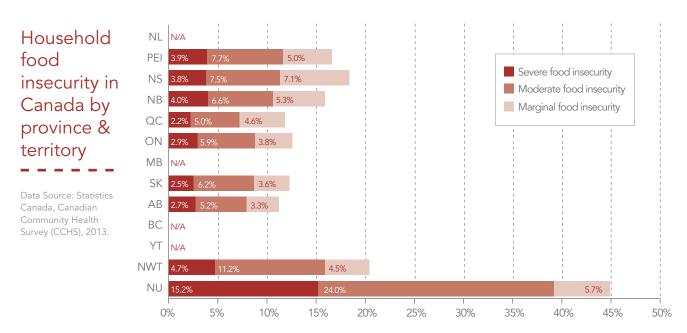
Data Source: Statistics Canada, CCHS, 2007, 2008, 2011, 2012 and 2013.

Provinces and territories participating in the 2013 Canadian Community Health Survey - Alberta, Saskatchewan, Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, the Northwest Territories, and Nunavut.

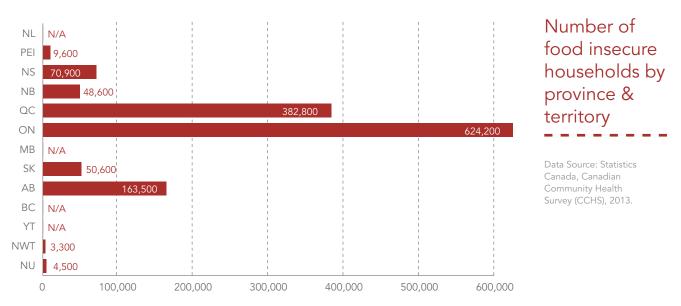
All provinces and territories.

## Food Insecurity 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 2013 remained at or above the levels experienced in prior years. The Maritimes and the North have stood apart from the rest of the provinces with extremely high rates of food insecurity that have persisted since monitoring began.



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 642,200 food insecure households in 2013; this number rose from 571,300 in 2012. In contrast, the number of food insecure households in Quebec fell from 437,700 in 2012 to 382,800 in 2013.



Но	usehold f	ood inse	curity –	Canada	, 2005-20	013		
	2005	2007	2008	2009	2010	2011	2012	2013
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%
Nova Scotia	16.1%	14.4%	13.5%	15.9%	14.9%	17.1%	17.5%	18.5%
New Brunswick		13.8%	15.1%			16.5%	15.6%	16.0%
Quebec	11.3%	10.9%	9.4%	11.3%	9.7%	12.5%	13.5%	11.8%
Ontario	11.6%	11.8%	12.1%	12.5%	11.3%	11.9%	11.7%	12.5%
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%
Alberta	10.4%	9.1%	10.0%	10.8%	10.9%	12.3%	11.5%	11.3%
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%
Nunavut	38.0%	35.4%	34.6%	31.0%	31.0%	36.4%	45.2%	45.0%

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

The following table presents the prevalence of total (marginal, moderate and severe) food insecurity in the provinces and territories form 2005 to 2013, 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 2013 are presented in Appendix E.

With the exception of Quebec, food insecurity prevalence rose or held steady in every province and territory in 2013. In Quebec the prevalence dropped from 13.5% in 2012 to 11.8% in 2013, although the decline did not reach statistical significance.

Of particular concern are the persistently high rates of food insecurity in Nunavut, and the severity of food insecurity documented in this territory. Food insecurity in Nunavut remained extraordinarily high with a prevalence of 45% in 2013 and 15.2% of households experiencing severe food insecurity. Food insecurity rose from 36.4% to 45.2% in Nunavut from 2011 to 2012. This increase was not statistically significant, but even for such a large increment, statistical significance is difficult to attain for

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regions with a small population. The second highest prevalence (20.4%) of food insecurity in the country in 2013 was found in the Northwest Territories.

Food insecurity rates topped 15% in the Maritimes in 2013, with a peak of 18.4% in Nova Scotia, the highest prevalence yet for that province. The prevalence of food insecurity in Prince Edward Island has continued to climb each year that it has been measured. The most recent estimate, 16.7%, is significantly higher than in 2005 (12.9%). The prevalence in New Brunswick in 2013 was 16.0%, up from 15.6% in 2012.

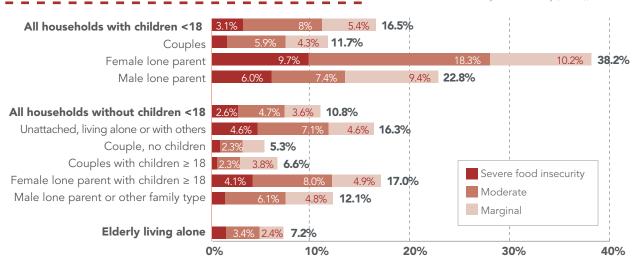
In 2013, Alberta remained the province with the lowest prevalence of food insecurity, at 11.3%. In Ontario the prevalence was 12.5% in 2013, up from 11.7% in 2012. In Saskatchewan, the prevalence was 12.2%, similar to the 2012 rate, 12.5%.

## 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.) Looking at the pattern of vulnerability among all of the provinces and territories that participated in food insecurity measurement in 2013, we found that food insecurity was more prevalent among households with children under the age of 18. Most vulnerable to were lone parent families headed by women. Among this group, the prevalence of food insecurity was 38.2%. Among households without children under 18 years old, food insecurity rates were 16.3% among unattached individuals and 17.0% among female lone parents living with adult children In contrast, the prevalence of food insecurity among couple without children was 5.3% and among elderly individuals living alone, it was 7.2%.

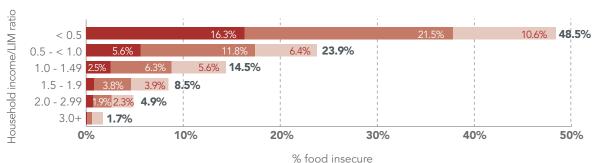
# Food insecurity by household composition

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



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 membersxvi. The lower household income is in relation to the LIM, the greater the likelihood of severe food insecurity. In 2013, 48.5% of households with incomes under half of the LIM were food insecure.

# Relationship between income and household food insecurity\*



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

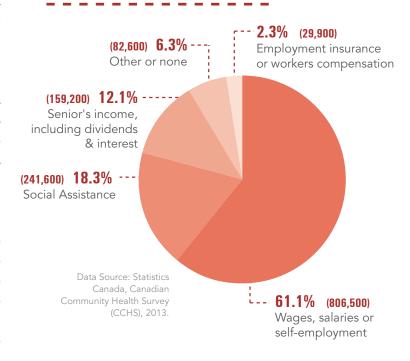
\* Participating provinces only. In 2013 Newfoundland and Labrador, Manitoba, British Columbia and Yukon Territory did not participate in the Food Security module of the Canadian Community Health Survey. The source of a household's income is strongly related to food insecurity. Households whose main source of income was either pensions or dividends and interest had the lowest rate of food insecurity. In contrast, food insecurity affected 68.0% of households reliant on social assistance (i.e. welfare and disability support programs). Although the prevalence of food insecurity among households whose main source of income was wages and salaries was 10.9% in 2013, this group made up the majority (61.1%) of food insecure. The percentage of food insecure households who were reliant on wages and salaries differed by province, with a low of 57.5% in Ontario and high of 71.1% in Prince Edward Island.

The proportion of households on social assistance who were food insecure also varies among the provinces and territories but because of small sample sizes in some jurisdictions, we are unable to provide reliable provincial and territorial estimates for 2013. The rates of food insecurity among social assistance recipients for 2013-14 will be presented by province and territory in our 2014 report.

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

- 25.9% of households renting their accommodation experienced food insecurity, versus 6.2% of homeowners.
- Households where the respondent was Latin American, Aboriginal or black had an elevated rate of food at 29.8%, 29.2%, and 28.5% respectively.
- The prevalence of food insecurity among households where the respondent was a recent immigrant to Canada (less than 5 years) was 19.7%, but the rate for households where the respondent had immigrated to the country five or more years ago was 13%, similar to the rate for Canadian-born respondents (12.1%).
- Households who lived in rural areas experienced a rate of food insecurity that was slightly lower than that of households in population centres (9.1% versus 13.2%), but this difference was not statistically significant.

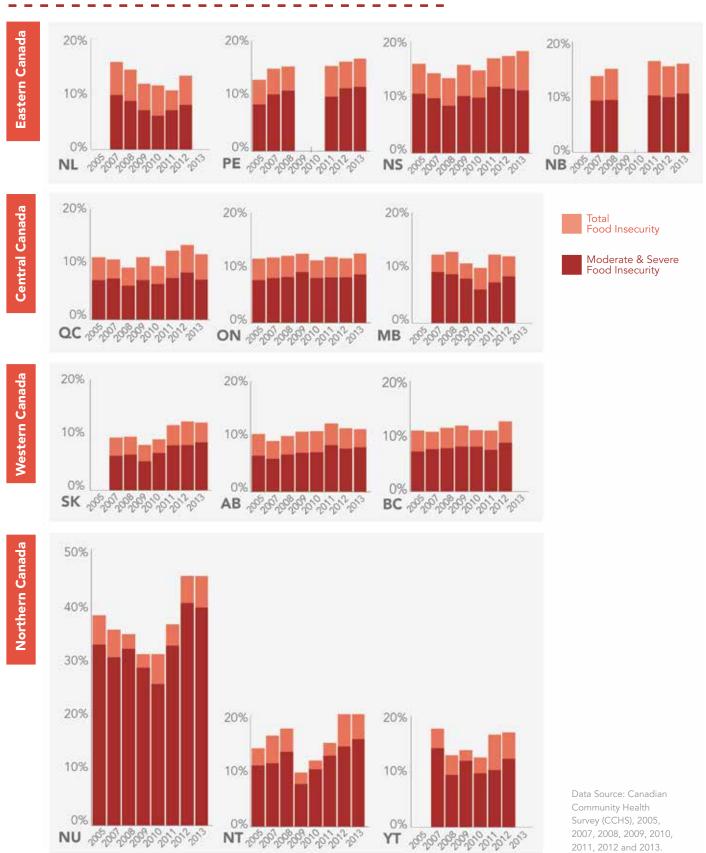
# Food insecure households' main source of income



Food insecure households with wages and salaries or self-employment as main source of income by province/territory, 2013								
Province	Percent							
Newfoundland and Labrador	N/A							
Prince Edward Island	71.1%							
Nova Scotia	60.5%							
New Brunswick	61.4%							
Quebec	59.5%							
Ontario	57.5%							
Manitoba	N/A							
Saskatchewan	66.2%							
Alberta	76.4%							
British Columbia	N/A							
Yukon	N/A							
Northwest Territories	65.1%							
Nunavut	66.7%							

Source: Canadian Community Health Survey, 2013. Newfoundland and Labrador, Manitoba, British Columbia and the Northwest Territories did not participate in the food security module of the 2013 CCHS. Includes only those households with complete food security modules.

# Prevalence of household food insecurity, 2005-2013



# 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 2013, there

are no significant drops and even indications of upward trends in certain places. 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 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 suggest 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>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 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 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									

<sup>\*</sup> 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 D - Prevalence of household food security and insecurity, by selected household characteristics

Preval	ence of hous	ehold foo	d securit	y and inse	curity, b	y selected	d housel	nold chara	acteristic	CS	
		Cana	adian Co	mmunity I	Health S	urvey 201	3 <sup>1</sup>				
		Food secure Food insecure insecurity insec					Severe insect				
Characteristic	Total households (000s) <sup>1</sup>	Number (000s)	%	Number (000s)	%	Number (000s)	%	Number (000s)	%	Number (000s)	%
Household composition:		·		1		l .		ı		1	
With children under 18	3170.6	2647.6	83.5%	523	16.5%	172.1	5.4%	252.3	8.0%	98.6	3.1%
With children under 6	1379.9	1140.5	82.7%	239.3	17.3%	76.9	5.6%	118.5	8.6%	43.9	3.2%
Couple, with children	2489.6	2198.4	88.3%	291.2	11.7%	106.4	4.3%	146.7	5.9%	38.1	1.5%
Female lone parent	511.2	316.1	61.8%	195	38.2%	52.4	10.2%	93.3	18.3%	49.4	9.7%
Male lone parent	106.5	82.2	77.2%	24.3	22.8%	10	9.4%	7.9	7.4%	6.4	6.0%
Other <sup>3</sup>	45.6	36	79.0%	9.6	21.0%	2.4	5.3%	3.4	7.4%	3.8	8.3%
With no children < 18	7696	6861.3	89.2%	834.8	10.8%	275.9	3.6%	360.7	4.7%	198.2	2.6%
Unattached, living alone or with others	3376.1	2826.1	83.7%	550	16.3%	156.2	4.6%	239.8	7.1%	154	4.6%
Couple, no children	3006.9	2848.8	94.7%	158.1	5.3%	65.3	2.2%	68	2.3%	24.8	0.8%
Couple, with children	852.7	796.2	93.4%	56.5	6.6%	32.7	3.8%	19.5	2.3%	4.3	0.5%
Female lone parent	317.8	263.7	83.0%	54.1	17.0%	15.6	4.9%	25.6	8.0%	12.9	4.1%
Male lone parent	125.5	110.3	87.9%	15.2	12.1%	6	4.8%	7.7	6.1%	1.6	1.3%
Elderly living alone	1026.8	952.5	92.8%	74.3	7.2%	24.9	2.4%	35.3	3.4%	14.1	1.4%
Education: <sup>2</sup>	'	<b>'</b>	•	<b>'</b>	'			1	•	<b>'</b>	
Less than secondary	986.9	801.4	81.2%	185.5	18.8%	44.5	4.5%	84.3	8.5%	56.7	5.7%
Secondary school graduate, no post-secondary	1447.2	1199.8	82.9%	247.4	17.1%	66	4.6%	121	8.4%	60.4	4.2%
Some post-secondary, not completed	414.6	320.2	77.2%	94.4	22.8%	30.5	7.4%	35	8.4%	28.9	7.0%
Completed post- secondary, below Bachelor's degree	4107.3	3531	86.0%	576.3	14.0%	208.4	5.1%	254.4	6.2%	113.5	2.8%
Completed Bachelor's degree or higher	3552.3	3349.5	94.3%	202.8	5.7%	82.2	2.3%	93.3	2.6%	27.2	0.8%
Main source of househo	ld income:										
Wages, salaries or self- employment	7411.9	6605.4	89.1%	806.5	10.9%	305.4	4.1%	373.2	5.0%	127.9	1.7%
Senior's income, including dividends & interest	2218.7	2059.5	92.8%	159.2	7.2%	53.7	2.4%	71.6	3.2%	33.9	1.5%
Employment insurance or workers compensation	88.6	58.7	66.3%	29.9	33.7%	7.7	8.7%	12.6	14.2%	9.5	10.8%
Social Assistance	355.2	113.6	32.0%	241.6	68.0%	39.9	11.2%	103.4	29.1%	98.4	27.7%
Other or none	285	202.4	71.0%	82.6	29.0%	23.8	8.3%	35.4	12.4%	23.4	8.2%

		Food s	ecure	Food ins	ecure	Margina insecu		Moderat insect		Severe insect	
Characteristic	Total households (000s) <sup>1</sup>	Number (000s)	%	Number (000s)	%	Number (000s)	%	Number (000s)	%	Number (000s)	%
Housing Tenure:											
Dwelling owned by member of household	7374.6	6916.7	93.8%	457.9	6.2%	203.9	2.8%	188.8	2.6%	65.2	0.9%
Dwelling rented	3468	2569.4	74.1%	898.5	25.9%	243.7	7.0%	423.7	12.2%	231.1	6.7%
Cultural/racial group:3											
White	8636.6	7715.6	89.3%	921.1	10.7%	317.9	3.7%	396.2	4.6%	207	2.4%
Black	313.9	224.6	71.5%	89.3	28.5%	27.6	8.8%	44	14.0%	17.7	5.6%
East and southeast Asian	544.1	479.2	88.1%	64.9	11.9%	30.3	5.6%	32.1	5.9%	2.5	0.5%
Arab and West Asian	176.1	151.7	86.1%	24.4	13.9%	7.1	4.0%	13.3	7.6%	4	2.3%
South Asian	353.3	311.1	88.1%	42.1	11.9%	14.3	4.1%	23.6	6.7%	4.2	1.2%
Latin American	159.8	112.1	70.2%	47.7	29.8%	8.9	5.6%	27.2	17.0%	11.6	7.2%
Other or multiple origins	261.2	211.9	81.1%	49.3	18.9%	19.4	7.4%	21.7	8.3%	8.2	3.1%
Aboriginal	343.7	243.3	70.8%	100.4	29.2%	19.7	5.7%	45	13.1%	35.7	10.4%
Immigrant/Canadian bo	rn:										
Canadian born	8421.7	7402.5	87.9%	1019.3	12.1%	328.9	3.9%	446.5	5.3%	243.8	2.9%
Immigrant < 5 years	346.8	278.4	80.3%	68.4	19.7%	30.1	8.7%	32.4	9.3%	6	1.7%
Immigrant 5+ years	2025.5	1761.7	87.0%	263.7	13.0%	85.9	4.2%	131	6.5%	46.8	2.3%
Urban/rural:											
Population centre	8909.1	7728.9	86.8%	1180.2	13.2%	377.3	4.2%	541.3	6.1%	261.5	2.9%
Rural	1957.5	1779.9	90.9%	177.6	9.1%	70.6	3.6%	71.7	3.7%	35.2	1.8%
Household income/LIM	ratio:4										
< 0.5	684.1	352.5	51.5%	331.5	48.5%	72.8	10.6%	147	21.5%	111.7	16.3%
0.5 - < 1.0	1906.2	1451.1	76.1%	455.2	23.9%	122.9	6.4%	224.9	11.8%	107.4	5.6%
1.0 - 1.49	1768.1	1512.2	85.5%	255.9	14.5%	99.7	5.6%	111.7	6.3%	44.5	2.5%
1.5 - 1.9	1847.2	1690.5	91.5%	156.7	8.5%	72.1	3.9%	70.5	3.8%	14.2	0.8%
2.0 - 2.99	2220.4	2111.2	95.1%	109.2	4.9%	52	2.3%	42.3	1.9%	14.9	0.7%
3.0 +	2414.7	2373.1	98.3%	41.5	1.7%	27.2	1.1%	12.5	0.5%	1.9	0.1%

<sup>1.</sup> Participating provinces only. In 2013 Newfoundland and Labrador, Manitoba, British Columbia and Yukon Territory did not participate in the Food Security module of the Canadian Community Health Survey.

Source: Canadian Community Health Survey, 2013.

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

Provincial and territorial rates of household food insecurity, 2005-2011													
		2005¹			2007		2008						
Province/ Territory	Moderate & severe food insecurity (%)	Total food insecure (%)	95% Cl <sup>2</sup>	Moderate & severe food insecurity (%)	Total food insecure (%)	95% Cl <sup>2</sup>	Moderate & severe food insecurity (%)	Total food insecure (%)	95% Cl <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%				

		20091			2010			2011		
Province/ Territory	Moderate & severe food insecurity (%)	Total food insecure (%)	95% Cl <sup>2</sup>	Moderate & severe food insecurity (%)	Total food insecure (%)	95% Cl <sup>2</sup>	Moderate & severe food insecurity (%)	Total food insecure (%)	95% Cl <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%	

<sup>1</sup> 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.

<sup>2 95%</sup> 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		20131				
Province/Territory	Moderate & severe food insecurity (%)	Total food insecure (%)	95% Cl <sup>2</sup>	Moderate & severe food insecurity (%)	Total food insecure (%)	95% Cl <sup>2</sup>		
Newfoundland and Labrador	8.1%	13.4%	10.6% - 16.1%	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%		
Nova Scotia	11.6%	17.5%	15.0% - 20.0%	11.3%	18.4%	16.1% - 20.9%		
New Brunswick	10%	15.6%	13.4% - 17.7%	10.6%	16.0%	14.0% - 17.9%		
Quebec	8.5%	13.5%	12.4% - 14.6%	7.2%	11.8%	10.7% - 12.9%		
Ontario	8.2%	11.7%	10.9% - 12.5%	8.7%	12.5%	11.5% - 13.5%		
Manitoba	8.4%	12.1%	10.2% - 14.1%	n/a	n/a	n/a		
Saskatchewan	8.1%	12.5%	10.4% - 14.5%	8.6%	12.2%	10.4% - 14.0%		
Alberta	7.8%	11.5%	10.0% - 13.1%	8.0%	11.3%	9.7% - 12.9%		
British Columbia	8.8%	12.7%	11.3% - 14.1%	n/a	n/a	n/a		
Yukon	12.4%	17.1%	14.0% - 20.3%	n/a	n/a	n/a		
Northwest Territories	14.5%	20.4%	15.7% - 25.0%	15.9%	20.4%	16.3% - 24.5%		
Nunavut	40.3%	45.2%	37.0% - 53.5%	39.3%	45.0%	38.0% - 52.0%		

## **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-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.
- 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: 2014-09-26. 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 2013 Canadian Community Health Survey, and these households have been excluded.
- 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 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.
- xvii 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.