

# Hazard Risk Analysis

## *Food Shortages*

Food Shortages: For Communities that depend mostly on local food for sustenance  
For Communities that depend mostly on food grown elsewhere for sustenance

### Food Shortages

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This section discusses the potential food shortages in a community. There are a number of situations in Canada where isolated communities have run out of food, which becomes a greater problem during a disaster.

#### Definition

Food shortages occur when the population of a community undergoes a severe shortage of food. A severe shortage of food can lead to starvation, illness and, in extreme cases, death.

#### Discussion

When communities only have one supply route (e.g., train, airplane) to provide food and that supply route is interrupted, it can cause serious food shortages in the community. Supply routes are typically interrupted by disasters (e.g., landslides) or repairs (highway closures).

Additionally, many residents in remote communities, especially during the winter months, are dependent upon game and locally produced food. Long-term power outages can reduce the community's ability to keep food frozen and jeopardize stored food supplies. There are increasing concerns that climate change will impact the ability to northern Inuit communities to hunt and trap sufficient food to meet their needs.

#### It Happened Here...

From October 6-14<sup>th</sup>, 1991, 3,000 people were stranded in the Nass Valley, British Columbia, in what was called the worst flooding in thirty years of the north coastal area. More than 1,000 people of the Nisga Nation in New Aiyansh were cut off from fresh food supplies and schools because of these floods. Clear-cut logging in the area was attributed to have contributed to the situation. Estimated cost of damage was \$1.6 million.

In September 2008, the northern Manitoba town of Churchill (pop 930) was facing food shortages after repairs to a major railway line resulted in a month of train service disruptions. Fresh produce, eggs and milk were all scarce in the community, which is about 1,000 km north of Winnipeg on the Hudson Bay. The railway track that provides the only ground access to the town was under repairs for a month. This was the worst food delay that had been seen in last 21 years, with stores closed because meat, eggs, and fresh produce had run out.

**For Communities that depend mostly on local food for sustenance** - Human-caused

Hazard Rating		High Risk	<input type="checkbox"/> Low Risk	<input type="checkbox"/> Need More Info	<input type="checkbox"/> Not Applicable
Yes	No	Need More Info	Not Applicable	FACTORS	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	With increased temperatures due to climate change, scientists have noted that with permafrost and ground ice melting there will be loss of migrating birds (such as wildfowl) a reduction in mammal breeding (such as caribou) and a loss of natural habitat within the southern Arctic region. Is your community dependent upon local animals for food and located within the Canadian Arctic?	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Communities that rely on locally obtained food (like seasonal hunting) and then freeze this food for later, might run out of food if there are long power outages and freezers stop working. Does your community depend on locally obtained food and does it have long-term power outages?	

**For communities that depend mostly on food grown elsewhere for sustenance** - Human-caused

Hazard Rating		High Risk	<input type="checkbox"/> Low Risk	<input type="checkbox"/> Need More Info	<input type="checkbox"/> Not Applicable
Yes	No	Need More Info	Not Applicable	FACTORS	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Communities that only have one food source (for example, if food arrives only by air or boat) can face food shortages if the supply route is cut off due to storms, landslides, earthquakes, etc. Does your community's food supply come from only one source?	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	In the winter some communities, especially if they are remote and/or northern, depend on air transport to deliver food to feed the community. If there is bad weather and planes can't land, food shortages may happen. Does your community's food supply arrive infrequently during certain times of the year?	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	**Has your community experienced food shortages in the past?	

## Historical Events – General Information

**Please Note:** See your Provincial/Territorial Risk and Resilience Information Guides for additional resources, including information regarding your community emergency manager, contact with Aboriginal Affairs and Northern Development Canada, and provincial or territorial Emergency Management Organization (EMO). EMO websites generally provide information specific to the hazards in your territory or province. Band websites or regional Aboriginal community websites can provide more information.

Resources
<p>The “Canadian Disasters - An Historical Survey” website by Robert L. Jones provides a great list of past disasters which have occurred since the 1500s in Canada and have resulted in at least 20 deaths.</p> <p style="text-align: center;"><a href="http://web.ncf.ca/jonesb/DisasterPaper/disasterpaper.html">http://web.ncf.ca/jonesb/DisasterPaper/disasterpaper.html</a></p> <p><b>Keywords:</b> Canadian disasters historical survey</p>
<p>The Public Safety Canada “Canadian Disaster Database” contains a list of past disasters in Canada.</p> <p style="text-align: center;"><a href="http://www.publicsafety.gc.ca/prg/em/cdd/srch-eng.aspx">http://www.publicsafety.gc.ca/prg/em/cdd/srch-eng.aspx</a></p> <p><b>Keywords:</b> Canada disaster database</p>
<p>Wikipedia has a list of disasters in Canada and links to various events; however, it does not have a lot of information about British Columbia.</p> <p style="text-align: center;"><a href="http://en.wikipedia.org/wiki/List_of_disasters_in_Canada">http://en.wikipedia.org/wiki/List_of_disasters_in_Canada</a></p> <p><b>Keywords:</b> Canada disasters wiki</p>
<p>SOS! Canadian Disasters is supported by Library and Archives Canada, and provides some interesting stories on historical events and also has a great website on an education program (Grades 7 to 12) on understanding hazards and disasters in Canada.</p> <p style="text-align: center;"><a href="http://www.collectionscanada.gc.ca/sos/index-e.html">http://www.collectionscanada.gc.ca/sos/index-e.html</a></p> <p><b>Keywords:</b> sos! Canada library archives</p>
<p>CBC Archives have a wide variety of news clips on historical and current disasters in Canada as well as educational information on hazards for teachers. On the CBC Digital Archives webpage, search for “disaster” in their own keyword search bar.</p> <p style="text-align: center;"><a href="http://www.cbc.ca/cgi-bin/MT4/mt-search.cgi?search=disaster&amp;IncludeBlogs=777&amp;limit=20">http://www.cbc.ca/cgi-bin/MT4/mt-search.cgi?search=disaster&amp;IncludeBlogs=777&amp;limit=20</a></p> <p><b>Keywords:</b> CBC archives, Disaster</p>

## References

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