

Climate Change Awareness & Perceived Impact in Grey Bruce

Analysis of data from the Rapid Risk Factor Surveillance System

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Suggested Citation:

Grey Bruce Health Unit. (2017). *Climate Change Awareness and Perceived Impact in Grey Bruce*. Owen Sound, Ontario: Grey Bruce Health Unit.

About RRFSS

The Rapid Risk Factor Surveillance System (RRFSS) is a public health surveillance survey that initiated with a pilot project through the Durham Region Health Department in 1999. It is coordinated by the Institute for Social Research at York University, and has been a multi-health unit collaborative surveillance project since 2000. Health units across Ontario have had the option of participating in RRFSS for an annual fee, and are able to participate in the development and revision of topic-based interview modules in RRFSS (RRFSS Working Group, 2010).

RRFSS is administered as a 20-minute telephone survey using random digit dialing. It targets 80 to 100 respondents per month from each participating health region. At present, it does not include cell phones in its sampling frame, so respondents are only reached if they have landlines.

This report presents data analysed only for the Grey Bruce region.

About this Document

The rates and figures presented in this document are estimates based on RRFSS survey results. These are presented with the upper and lower limits of their 95% confidence intervals following in parentheses.

Figures noted with an asterisk (*) should be used with caution.

For more information and explanation of any of the concepts included in this report, contact Virginia at extension 1522.

Findings: Knowledge of Climate Change and Causes of Climate Change

The *Knowledge of Climate Change and Causes of Climate Change* module asks five questions about respondents' awareness of climate change, their concern about climate change, and their belief in the causes of climate change (RRFSS Working Group, 2014). This module was asked from May to August 2014 to a total of 401 RRFSS respondents.

Module Questions

1. Would you say that you strongly agree, somewhat agree, somewhat disagree or strongly disagree that the world's climate is changing?
2. And would you say that you are very concerned, somewhat concerned, not very concerned, or not at all concerned about climate change?
3. Some people think that climate change is caused mainly by human activity, while others think that it is caused mainly by natural changes. Which is closest to what you think?
 - a. Climate change is caused mainly by human activity
 - b. Climate change is caused mainly by natural changes
 - c. R volunteers: Both human activity and natural changes cause climate change
4. Does exhaust from vehicles such as cars, trucks and buses contribute to climate change, or is this something you are not sure about? Yes/No
5. Does energy use at home, including heating and cooling your home and using electricity contribute to climate change, or is this something that you are not sure about? Yes/No

Awareness of Climate Change

Nineteen out of twenty adult residents of Grey Bruce (95.0%, 92.1%–96.8%) somewhat or strongly agree that the world's climate is changing.

Concern about Climate Change

Seventeen out of twenty adult residents of Grey Bruce (86.3%, 82.3%–89.5%) are somewhat to very concerned about climate change.

Belief that Climate Change is Mainly by Human Activity

Just over half of adult residents of Grey Bruce (52.9%, 47.6%–58.2%) believe that climate change is caused mainly by human activity.

Belief that Vehicle Exhaust Contributes to Climate Change

Almost nineteen out of twenty adult residents of Grey Bruce (92.8%, 88.8%–95.4%) believe that vehicle exhaust contributes to climate change.

Belief that Home Energy Use Contributes to Climate Change

Just under two thirds of adult residents of Grey Bruce (60.9%, 55.0%–66.6%) believe that home energy use contributes to climate change, and 27.7% (22.7%–33.3%) couldn't say whether they did or did not believe that home energy use contributes to climate change (their response was that they "didn't know", rather than a definitive yes or no).

Findings: Impact of Climate Change on the Local Community

The *Impact of Climate Change on the Local Community* module asks six questions about respondents' perception of the impacts that climate change will have on their community and on human health in general (RRFSS Working Group, 2017). This module was asked from May to August 2016 to a total of 331 RRFSS respondents.

Module Questions

1. Do you think that climate change is very likely, somewhat likely, not very likely or not at all likely to cause more extreme weather such as violent thunderstorms, tornadoes, and heavy snowstorms in Grey Bruce, or is this something you are not sure about?
2. Do you think that climate change is very likely, somewhat likely, not very likely or not at all likely to cause more frequent and severe heat waves in Grey Bruce, or is this something you are not sure about?
3. Do you think that climate change is very likely, somewhat likely, not very likely or not at all likely to cause more days with poor air quality or smog in Grey Bruce, or is this something you are not sure about?
4. Do you think that climate change is very likely, somewhat likely, not very likely or not at all likely to result in more insects carrying diseases in Grey Bruce, or is this something you are not sure about?
5. Do you think climate change will have an effect on human health, or are you not sure about this?
6. Would you say the effect of climate change on health is very positive, somewhat positive, both positive and negative, somewhat negative, or very negative, or are you not sure about this?

Extreme weather

Thirteen out of twenty adult residents of Grey Bruce (65.8%, 60.1%-71.0%) believe it is somewhat or very likely that climate change will cause more extreme weather in their region.

Heat waves

Sixteen out of twenty adult residents of Grey Bruce (79.1%, 74.2%-83.3%) believe it is somewhat or very likely that climate change will cause more frequent and severe heat waves in their region.

Poor air quality

Twelve out of twenty adult residents of Grey Bruce (61.6%, 55.8%-67.1%) believe it is somewhat or very likely that climate change will cause more poor air quality/smog days in their region. Women (at 67.1%) were more likely than men (at 54.5%) to believe climate change will cause more poor air quality days in Grey Bruce.

Table 1. People who believe climate change will cause poor air quality in Grey Bruce, by gender

Overall	61.6% (55.8%-67.1%)
Males	54.5% (45.6%-63.2%)
Females	67.1% (59.9%-73.8%)

Insects carrying diseases

About fourteen out of twenty adult residents of Grey Bruce (68.2%, 62.5%-73.4%) believe it is somewhat or very likely that climate change will cause more insects carrying disease in their region. Around four out of twenty were unsure whether climate change will cause more insects carrying disease (22.0%, 17.6%-27.2%).

Effect on Human Health

Six percent* of adult residents of Grey Bruce do not think climate change affects human health (5.9%*, 3.3%-10.1%). Around 30% think climate change has a somewhat or very negative impact on human health (29.4%, 24.1%-35.3%). Twelve percent* think it has a somewhat or very positive effect, (12.3%*, 8.9%-16.8%) and sixteen percent think it has both positive and negative effects on human health (15.9%, 11.8%-21.0%). About 37% are unsure how climate change affects human health (36.5%, 30.8%-42.7%).

Table 2. Perceived impact of climate change on health in Grey Bruce, by sex

Positive impact	12.3% (8.9%-16.8%)
Negative impact	29.4% (24.1%-35.3%)
No effect	5.9%* (3.3%-10.1%)
Positive and negative impact	15.9% (11.8%-21.0%)
Don't know	36.5% (30.8%-42.7%)

* interpret with caution

References

RRFSS Working Group. (2010). History. Retrieved from <http://www.rfss.on.ca/index.php?pid=3#History>

RRFSS Working Group. (2014). Knowledge of Climate Change and Causes of Climate Change (Data Dictionary).

RRFSS Working Group. (2017). Impact of Climate Change on the Local Community (Data Dictionary).

