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Public perceptions of the health impacts of climate change in Canada 2022

Final Report

Prepared for Health Canada

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Canada 

Public perceptions of the health impacts of climate change in Canada 2022 - Final report

Prepared for Health Canada by Environics Research

March 2022

This public opinion research report presents the results of a dual-mode telephone and online survey conducted by Environics Research from February 10 to March 13, 2022.

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Executive summary

Background and objectives

Health Canada identified the need for public opinion research to understand the current views of Canadians on climate change, including the risks and impacts they believe are associated with their health, and how best to adapt and be more resilient in the future.

The primary objective of this research was to determine whether, and to what extent, public understanding and perceptions of climate change have evolved over time, based on comparisons to research conducted in 2008 and 2017. Specific research objectives were to understand:

- The level of awareness of climate change and its health risks and impacts;
- Actions taken to adapt/be more resilient to the health risks or impacts of climate change;
- Trusted sources of media used and other means and opportunities for education and awareness raising; and,
- The public's views on role(s) of government and non-government organizations.

Methodology

To address the research objectives, a dual-mode telephone and online survey was conducted with a total of 1,905 Canadians (aged 18 and over) from February 10 – March 13, 2022.

- The telephone survey consisted of interviews with a representative sample of 1,520 Canadians (1,070 land line and 450 cell phone only households). The margin of error for the full sample of 1,520 is plus or minus 2.5 percentage points, 19 times in 20.
- The online survey was conducted with 385 Canadians surveyed via an online panel, to allow for comparisons across mode should Health Canada wish to move this study to a fully online methodology in the future. Because an online survey is not a random probability sample, a margin of sampling error cannot be reported.

The results described below are based on the telephone data only. Where possible, the results from the 2022 survey have been compared to the 2008 and 2017 Health Canada surveys about climate change and health.

Cost of research

The cost of this research was \$119,776.84 (HST included).

Key findings

Climate change (impact) perceptions and concerns

- Canadians are increasingly convinced about the phenomenon of climate change. More than eight in ten (85%) say climate change is definitely happening, and this belief has steadily increased over time (from 69% in 2008 and 79% in 2017).
- Canadians who believe in climate change (definitely or probably) express widespread concern about it (79% are at least somewhat worried), although their concerns focus mainly on environmental impacts,

as well as impacts on their future and on extreme weather events, rather than on health impacts. Nonetheless, awareness of the health impacts of climate change has improved, with three-quarters (75%) of climate change believers able to identify at least one health-related impact (up from 69% in 2017).

- Climate change is contributing to a range of environmental and other impacts that affect Canadians' health. Since 2017, public perceptions that climate change impacts are a major health risk have increased, most notably for forest fires (59%, up 12 percentage points) and forest fire smoke (56%, up 11), but also for extreme heat events (51%, up 8), flooding (48%, up 5) and food security (44%, up 8).
- Canadians who believe in climate change increasingly accept it is a health risk now (57%, up from 53% in 2017) rather than in the future (34%); very few (7%) deny a link to health. However, the public's sense of their own vulnerability has not changed substantially: similar to 2017, in 2022 more than half (58%) feel personally vulnerable (either definitely or likely), and four in ten (40%) say there is someone in their household who is especially vulnerable.
- There has been a substantial jump in the proportion of climate change believers who say they have taken steps to protect against the health impacts of climate change (from 38% in 2017 to 59% in 2022). However, many of their reported actions actually relate to mitigation efforts (i.e., reducing the impacts of climate change) rather than protective or adaptive measures. To date, seven percent of Canadians have sought medical attention because of a climate change event.

Extreme weather

- Public perceptions of the health risk posed by extreme weather have increased since 2017: half of Canadians (52%) believe extreme weather events present a major or moderate health risk to them and their family (up from 42% in 2017). There has also been a shift in the type of extreme weather events linked to health risks, with greater mentions of extreme heat events and forest fires (that took place in summer 2021), and fewer mentions of winter storms (that occurred prior to the 2017 survey).
- Despite increased awareness of the health risks of extreme weather events, the proportion of Canadians who regularly or occasionally change their daily routines in response to an extreme weather alert (52%) has not changed significantly since 2017. There has been a jump in the proportion who have specifically changed their plans in response to a heat warning (from 51% in 2017 to 59%), due mainly to increases in BC and the Prairies.
- As in 2017, most Canadians can identify at least one symptom of heat illness, particularly dizziness and excessive thirst. Understanding how to protect against heat illness also remains similar to 2017; staying indoors (53%) and drinking fluids (52%) remain the most widely mentioned preventive measures. Canadians remain most likely to consult the Internet, followed by their doctor, for information about heat illness.
- There is scientific evidence that the annual average temperature in Canada has been rising, and the survey results indicate a majority of Canadians (68%) believe temperatures are increasing at least a little in their own community.

Indoor temperatures

- Increasing temperatures due to climate change and extreme heat events can create difficulties in cooling indoor spaces, which can be harmful to health. One in five Canadians find it difficult to regulate

the indoor temperature in their main living space in the summer. This skews to residents of apartments and condominiums and those who rent their home, and accordingly, to younger Canadians (under 35 years of age) and those with lower household incomes who comprise a greater proportion of renters and apartment dwellers.

- Almost three-quarters (73%) of Canadians report having a working air conditioner, a substantial jump from 2008 (52%). Only one percent who have air conditioning say they do not use it.

Role of federal government

- The federal government receives modest ratings for protecting Canadians' health from climate change. One in ten (10%) feel the government is doing a good job (rating between 8-10 out of 10), while six in ten give moderate ratings and one-quarter give negative ones.
- Almost one in five (18%) Canadians report having visited Health Canada's website in the past year to learn how to protect themselves and their family from climate change; this is higher among BC residents (26%) who disproportionately experienced the impacts of climate change throughout 2021.

Political neutrality statement and contact information

I hereby certify as a Senior Officer of Environics Research that the deliverables fully comply with the Government of Canada political neutrality requirements outlined in the Communications Policy of the Government of Canada and Procedures for Planning and Contracting Public Opinion Research. Specifically, the deliverables do not contain any reference to electoral voting intentions, political party preferences, standings with the electorate, or ratings of the performance of a political party or its leader.

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Introduction

Background

The Government of Canada is committed to protect the health of Canadians from the health impacts of climate change. To be effective in its commitment it is therefore important for the Government to understand the current views of Canadians on climate change, and of the risks and impacts they believe are associated with their health and how best to adapt and be more resilient in the future.

Health Canada has been supporting public and professional education and awareness raising activities (e.g., impacts of heat on health, Heat Alert Response System (HARS) implementation, developing infographics to communicate health effects of extreme heat). This research will support departmental efforts to assess whether these activities have been effective, and if adjustments need to be made, and to support future programs. It takes place in the context of ongoing public discussion of climate change and the increasing frequency of extreme weather events.

Research rationale and objectives

The primary objective of this research was to determine whether and to what extent public understanding and perceptions of climate change have changed over time, based on comparisons to research conducted in 2008 and 2017. Specifically, the objectives of the survey include the following, but are not limited to, understanding the:

- level of awareness of climate change (and its health risks and impacts);
- actions taken to adapt/be more resilient to the health risks or impacts of climate change;
- trusted sources of media used and other means and opportunities for education and awareness raising; and,
- public's views on role(s) of government and non-government organizations.

This research provides useful information to inform the activities of departmental programs, including awareness programs and how best to target actions, interventions and messaging (e.g., climate change adaptation, protection methods during heat wave). It will be used to inform the effectiveness of the ongoing heat-health promotion and other prevention work carried out by Health Canada.

Report

This report begins with an executive summary outlining key findings and conclusions, followed by a detailed analysis of the survey data. **The results (including discussion of subgroup differences) are based on the telephone data only, with the exception of the table columns that present the combined telephone and online results.**

Provided under a separate cover is a detailed set of “banner tables” presenting the results for all questions by population segments as defined by region and demographics. These tables are referenced by the survey question in the detailed analysis. A detailed description of the methodology used to conduct this research is presented in Appendix A.

In this report, results are expressed as percentages unless otherwise noted. Results may not add to 100% due to rounding or multiple responses. Net results cited in the text may not exactly match individual results shown in the

charts due to rounding. Subgroup differences are only reported if they are statistically significant at the 95% confidence level.

Detailed findings

I. Climate change (impact) perceptions and concerns

Since the last survey on this topic in 2017, climate change has remained a high-profile topic. Relevant events include the global climate strikes led by Greta Thunberg in 2019, the biennial United Nations Climate Change Conference, and major extreme weather events that have been linked to climate change, such as the heat dome, forest fires and forest fire smoke in BC and Alberta in summer 2021, and flooding in BC in fall 2021. The first section of the survey explored the Canadian public's perceptions of the reality of climate change and their concerns about its potential health impacts. *NOTE:* Most questions in this section are asked only of a subgroup who initially responded that they believe in climate change (either definitely or maybe).

Belief in climate change

The proportion of Canadians convinced that climate change is happening continues to increase.

To understand the issue of climate change and health risk, it is important to know whether or not people believe that climate change is a real phenomenon. More than eight in ten Canadians (85%) say climate change is definitely happening, and this belief has increased steadily since 2008. Currently, ten percent say climate change is not yet proven, and only three percent deny its existence.

Belief in climate change
Base: Total sample

Belief in climate change	Phone only			Phone and online
	2008 (n=1,600)	2017 (n=1,425)	2022 (n=1,520)	2022 (n=1,905)
Climate change is definitely happening	69%	79%	85%	84%
Climate change may be happening but is not yet proven	27%	16%	10%	11%
Climate change is not happening at all*	n/a	5%	3%	4%

*This response category was not offered in 2008

Q1. *There has been a lot of discussion lately about the issue of climate change. Do you believe that climate change is something that is definitely happening, or something which may be happening but is not yet proven, or climate change is not happening at all?*

Since 2017, the overall increase in belief that climate change is definitely happening is evident in all regions but is most notable in the Prairie provinces (79%, up 14 percentage points); nonetheless, this belief remains less widespread in the Prairies compared to other regions (where it ranges from 83% to 92%).

Belief that climate change is definitely happening is higher among:

- Canadians aged 18-34 (89%)
- Those with a university education (90%)
- Women (88%, vs. 83% of men).

Concerns about climate change

The degree of concern about climate change varies, but almost half of climate change believers are extremely or very worried. Those who are at least somewhat worried express a range of concerns, including about the impacts of climate change on the environment, on their future, and on extreme weather events.

There is widespread worry among those who believe in climate change. Close to half (47%) of climate change believers are extremely or very worried, and another third (32%) are somewhat worried. One in five (21%) are not worried.

How worried about climate change
Base: Believe in climate change

Level of worry	Phone (n=1,464)	Phone and online (n=1,834)
Extremely worried	19%	20%
Very worried	28%	29%
Somewhat worried	32%	32%
Not very worried	12%	11%
Not at all worried	9%	8%

Q2. How worried are you about climate change?

The proportion most worried (extremely or very) about climate change is higher among:

- Those with a university education (57%)
- Women (52%, vs. 42% of men)
- Those who believe climate change is definitely happening (53%, vs. 5% who say it may be happening).

The degree of concern is lower in the Prairie provinces (30% extremely or very worried, compared to 46% to 53% elsewhere).

What causes the most concern about climate change. Those who are at least somewhat worried about climate change express a range of concerns (when asked unprompted, without providing response options). The most widespread of these are concerns about environmental impacts (52%). Some also express concerns about the future (19%), the impacts of extreme weather events (16%) and the economic and societal implications (10%). Comparatively few express specific concerns about the impact of climate change on health (6%).

What worries you the most about climate change? (top mentions)
Base: Worried about climate change

Concerns about climate change	Phone (n=1,149)	Phone and online (n=1,479)
Environment (net)	52%	49%
<i>Impacts on the environment</i>	42%	34%
<i>Impacts on animals/loss of habitat</i>	7%	8%
<i>Impacts on planet/earth dying</i>	5%	8%
Impacts on my future/future of my family	19%	16%
Impacts of natural disasters/extreme weather (net)	16%	18%
Economic and societal impacts (net)	10%	8%
Changes in temperature/weather (general)	9%	13%
Lack of action/inevitability of climate change (net)	8%	9%
Impacts on food supply/water sources (net)	7%	6%
Impacts on health (net)	6%	5%

Q3. What worries you the most about climate change?

These concerns are relatively similar across subgroups, with a few exceptions:

- Canadians under 55 are more likely to express concerns about the impact of climate change on their future or that of their family (22%, vs. 14% of those aged 55 or older)
- Quebecers are more likely than residents of other provinces to express concerns about environmental impacts (64%).

Similar types of concerns are raised by Canadians most concerned about climate change (i.e., extremely or very concerned) and by those who are only somewhat concerned; the only difference is that concerns about environmental impacts and the impacts of extreme weather are more widely mentioned by the former.

How climate change may affect health

Awareness of the health impacts of climate change has grown among climate change believers, with three-quarters who identify at least one health-related impact.

Three in four (75%) climate change believers are able to identify (without prompting) at least one way in which climate change potentially affects the health of Canadians, up from 2017 (69%). There have been notable increases in the proportions that mention weather fluctuations (25%, up 11 percentage points) and drought (18%, up 10), as well as new mentions of the impacts of extreme weather (12%) and economic impacts that exacerbate poverty (6%). One in four either cannot think of any impacts (11%) or maintain that there are none (14%).

Perceptions about how climate change affects health of Canadians (top mentions)

Base: Believe in climate change

Health impacts	Phone		Phone and online
	2017 (n=1,379)	2022 (n=1,464)	2022 (n=1,834)
Any impacts	69%	75%	76%
Weather fluctuation/warmer/colder	14%	25%	24%
Net: Air Quality Impacts	21%	22%	19%
<i>Poor air quality</i>	11%	12%	11%
<i>Increased air pollution</i>	11%	13%	11%
Drought/affects food supply/agriculture	8%	18%	17%
Impacts of extreme weather/natural disasters	-	12%	14%
Net: Water Quality Impacts	11%	9%	8%
<i>Decreased water quality</i>	7%	5%	4%
<i>Decreased drinking water supply</i>	4%	4%	4%
Net: Infectious Diseases	10%	6%	6%
<i>Other infectious diseases</i>	6%	4%	4%
<i>Flu/influenza virus</i>	4%	1%	1%
<i>COVID-19/Omicron</i>	n/a	1%	1%
Respiratory/breathing problems	9%	8%	7%
Economic impacts/poverty	-	6%	6%

Q4. *In what ways, if any, do you think climate change poses a risk to the health of Canadians?*

The proportion able to identify at least one potential health impact of climate change is higher among:

- Women (79%, vs. 71% of men)
- Those with a university education (81%, vs. 69% with a high school diploma or less education)
- Those who believe climate change is definitely happening (79%, vs. 44% who say it may be happening) and those who are extremely or very concerned (91%, vs. 78% somewhat concerned and 34% not concerned).

Residents of the Prairie provinces remain less likely than others to name at least one health impact of climate change (64%), and more inclined to say there are none, although this proportion has declined since 2017 (18%, down from 32% in 2017).

Ratings of health risks

Belief that environmental events are a health risk has trended upwards, most notably for forest fires and smoke, extreme heat and flooding.

Those who believe climate change is happening were asked the extent to which different factors are a health risk for Canadians. Most of these factors are widely considered to be health risks, with roughly eight in ten or more who say they pose at least a moderate risk to health, with the exception of extreme cold (71% major or moderate risk).

Since 2017, there has been a substantial jump in the proportion who consider forest fires (59%, up 12 percentage points) and forest fire smoke (56%, up 11) to be a major health risk. These are now ranked as a greater health risk than any other issue, likely due at least in part to awareness of the BC wildfires in summer 2021. Belief that extreme heat events (51%, up 8 percentage points), flooding (48%, up 5) and food security (44%, up 8) are major health risks has also increased since 2017.

Major risk to health of Canadians Base: Believe in climate change

Major risk	Phone		Phone and online	
	2017 (n=1,379)	2022 (n=1,464)	2017 (n=1,751)	2022 (n=1,834)
Forest fires	47%	59%	46%	58%
Forest fire smoke	45%	56%	44%	55%
Changes in water quality	49%	51%	48%	50%
Extreme heat events	43%	51%	42%	52%
Changes in air quality	48%	49%	47%	50%
Flooding	43%	48%	42%	48%
Food security	36%	44%	34%	44%
Extreme cold	n/a	31%	n/a	34%

Q5. *How much of a risk to the health of Canadians is there from each of the following? [Note: In 2017, Indigenous respondents were asked this question specifically about the risk to the health of Indigenous people].*

Overall, perceived health risk from forest fires, smoke and extreme heat events is higher in BC and Quebec than in other regions. Although major extreme weather events occurred recently in BC (heat dome, forest fires and flooding, all in 2021), increased belief since 2017 in the health risks caused by these events is not limited to BC:

- Increase in the belief that forest fires are a major health risk is evident in all regions;
- Belief in the health risk from forest fire smoke and extreme heat events increased in all regions except the Atlantic provinces;
- Belief that flooding poses a health risk increased mainly in Ontario, Quebec and the Atlantic provinces.

Generally speaking, but not in all cases, the following groups are more likely to say that these environmental events cause a major health risk for Canadians:

- Women
- Those who definitely believe in climate change (compared to those who say it is not yet proven).
- Those who are extremely or very worried about climate change (compared to those who are somewhat or not worried).

Current versus future health risks of climate change

The view that climate change already poses a health risk has inched upwards and is now held by more than half of climate change believers.

Canadians who believe in climate change were asked if they think that it already poses a health risk today, or if this is something that will happen in the future. More than half (57%) believe that climate change poses a current health risk, up slightly but significantly from 2017 (53%). One-third (34%) say it will pose such a risk in the future, and seven percent insist there are no health risks from climate change, either now or in the future.

Does climate change pose a health risk to Canadians?
Base: Believe in climate change

When climate change will pose a risk	Phone		Phone and online
	2017 (n=1,379)	2022 (n=1,464)	2022 (n=1,834)
Poses a risk today	53%	57%	58%
Will pose a risk in the future	40%	34%	34%
No risks now or in the future	5%	7%	7%
Depends	2%	1%	<1%

Q6. *Do you think that climate change already poses a health risk to Canadians today, or do you think this is something that will happen in the future or it poses no risk now or in the future? [Note: in 2017, the question referred only to “risk”, not to “health risk”].*

Belief that climate change poses a health risk today is significantly higher among:

- BC residents (67%), and lower in the Prairies (49%) and Quebec (51%)
- Those with a university education (67%)
- Those without household incomes of \$60K or more (62%)
- Women (63%, vs. 50% of men)
- Those who believe climate change is definitely happening (62%) and are extremely or very worried (77%).

This belief is also linked to perceived vulnerability to climate change. Individuals who feel they are definitely personally vulnerable to climate change, or who have someone in their household who they consider to be vulnerable, are more likely to say climate change poses a health risk today (85%, and 73%, respectively).

Vulnerability to climate change health impacts

Consistent with 2017, over half of climate change believers feel personally vulnerable to climate change health impacts; four in ten have someone in their household who is considered vulnerable.

Personal vulnerability. A majority (58%) of climate change believers feel they are either definitely (22%) or likely (36%) vulnerable to the potential health impacts of climate change, which is statistically stable compared to 2017.

Whether personally vulnerable to climate change health impacts
Base: Believe in climate change

If vulnerable personally	Phone		Phone and online
	2017 (n=1,379)	2022 (n=1,464)	2022 (n=1,834)
Definitely vulnerable	18%	22%	23%
Likely vulnerable	37%	36%	39%
Top 2 box (net)	55%	58%	62%
Likely not vulnerable	28%	25%	24%
Definitely not vulnerable	15%	15%	12%

Q7. What about your own health? Do you believe that you personally are definitely, likely, likely not, or definitely not vulnerable to the potential health impacts of climate change?

Belief in one’s own personal vulnerability (definitely or likely) is significantly higher among:

- Those with a university education (64%)
- Women (64%, vs. 52% of men)
- Those in fair or poor health (75%)
- Those who believe climate change is definitely happening (62%) and who are extremely or very worried about it (76%).

The proportion who feel personally vulnerable is lower in the Prairies (49%) and the Atlantic provinces (51%) than elsewhere (58% to 64%).

Household vulnerability. Four in ten (40%) say there is someone in their household who would be particularly impacted by climate change, also statistically similar to 2017.

Someone in household especially vulnerable to climate change health impacts
Base: Believe in climate change

If household member is vulnerable	Phone		Phone and online
	2017 (n=1,379)	2022 (n=1,464)	2022 (n=1,834)
Yes, have vulnerable household member	37%	40%	41%

Q8. *Is there anyone else in your immediate household who you think would be especially vulnerable to the potential health impacts of climate change?*

The proportion with an especially vulnerable household member is significantly higher among:

- Those under the age of 55 (43%, vs. 33% aged 55+)
- Women (43%, vs. 36% of men)
- Those with household incomes of \$100K or more (44%)
- Those who themselves are in good, fair or poor health (47%) compared to those in excellent or good health (34%)
- Those who believe climate change is definitely happening (42%) and are extremely or very worried about it (54%).

This proportion is lower in the Prairie provinces (31%) than elsewhere (36% to 46%).

Especially vulnerable populations

Seniors are felt to be particularly vulnerable to climate change, as well as children and people who are poor or ill.

Climate change believers were asked (unprompted) what types of Canadians (if any) would be most likely to experience the negative effects of climate change. Canadians are most likely to volunteer that seniors (35%) would be especially vulnerable to climate change. Other groups cited as potentially vulnerable include children (23%), poor people (19%) and people who are chronically ill (18%). About one in ten say everyone is equally likely to be affected (13%). Other individual mentions are provided by fewer than one in ten and include coastal residents, Indigenous people, northern residents and our descendants.

Canadians most likely to be affected by climate change (top mentions)

Base: Believe in climate change

Vulnerable types of Canadians	Phone	Phone and online
	2022 (n=1,464)	2022 (n=1,834)
Seniors/old people	35%	35%
Children	23%	21%
Poor/homeless people	19%	17%
Sick/ill people	18%	16%
Everyone equally vulnerable	13%	13%
People living near oceans/coasts	9%	8%
Indigenous people	7%	7%
People in the North/Arctic	6%	5%
Our children/grandchildren/descendants	5%	4%
People in big cities	3%	2%
Farmers	3%	2%

Q9. What types of Canadians, if any, do you think might be most likely to experience the negative effects of climate change?

Views about especially vulnerable populations are largely consistent across subgroups, with a few exceptions:

- Quebec (53%) and BC (42%) residents are the most likely to identify seniors as vulnerable to climate change; Quebecers and women are more likely than others to mention children (40%).
- Mentions of coastal residents as being vulnerable are higher in the Atlantic provinces (16%) and Ontario (13%).
- Mentions of poor/homeless people as vulnerable to climate change are more widespread among Canadians under 35 years of age (24%), those with a university education (23%), and those with incomes of \$100K or more (23%).

Steps taken to protect against potential health impacts of climate change

Six in ten climate change believers say they have taken action to protect themselves and their families from the impacts of climate change, although many of these actions relate to mitigation efforts rather than protective or adaptive measures.

The proportion of climate change believers who say they have taken steps in the past year to protect themselves and to protect themselves and their families from the potential health risks and/or impacts of climate change has increased considerably, from four in ten (38%) in 2017 to six in ten (59%) in 2022.

However, these actions are as likely to reflect mitigation efforts (reducing the impacts of climate change) through sustainable habits (31%), such as reduced energy use (21%), as they are to reflect protective or adaptive measures such as protecting their health (20%), installing air conditioning (6%), or preparing for extreme weather (2%).

Steps taken in past year to protect from climate change health impacts Base: Believe in climate change

Steps taken	Phone		Phone and online
	2017 (n=1,379)	2022 (n=1,464)	2022 (n=1,834)
Any protective steps	38%	59%	55%
Sustainable habits (net)	n/a	31%	29%
<i>Recycling</i>	7%	21%	19%
<i>Reduce waste/buy less</i>	-	6%	6%
<i>Reduce carbon footprint</i>	-	5%	6%
Protect/improve health (net)	n/a	20%	18%
<i>Better eating habits/gardening</i>	8%	11%	10%
<i>Use more sunscreen</i>	7%	3%	3%
<i>Stay indoors/stay at home more</i>	-	3%	3%
<i>Flu shot/immunization</i>	2%	<1%	<1%
Reduce energy use (net)	n/a	21%	18%
<i>Increase home's energy efficiency</i>	6%	9%	8%
<i>Drive less</i>	3%	9%	8%
<i>Use electric/hybrid vehicle</i>	-	3%	3%
Installed/upgraded air conditioning	2%	6%	5%
Preparation (net)	n/a	2%	1%
<i>Have an emergency plan/kit</i>	1%	2%	1%
<i>Prepare for storms</i>	1%	<1%	<1%
Watch weather more closely	5%	1%	1%
Being more informed/taking political action	-	4%	3%
Other mentions	10%	3%	3%
None/not sure	62%	41%	45%

Q10. What steps, if any, have you personally taken any steps in the past year to protect yourself or family members from the potential health risks and/or impacts of climate change?

The proportion to have taken any protective actions does not vary by region, but is significantly higher among:

- Women (65%, vs. 53% of men).
- Those with a university degree (63%, vs. 55% with a high school diploma or less).
- Those who believe climate change is definitely happening (62% vs. 42% who say it may be happening but is unproven).

Medical attention sought as a result of a climate change event

Fewer than one in ten households have sought medical attention because of a climate change event.

To date, few Canadians (7%) say someone in their immediate household has sought medical attention for any physical or mental health issue that could have been driven by a climate change event – the most common such events being extreme heat (3%) and forest fires (2%). However, the likelihood to have sought medical attention does not vary by region.

Sought medical attention as a result of a climate change event
Base: Believe in climate change

Advice sought	Phone (n=1,464)	Phone and online (n=1,834)
Yes, someone in household sought medical attention due to...	7%	8%
Extreme heat/heat waves	3%	3%
Forest fires	2%	2%
Other	2%	3%

Q11. Have you or anyone in your immediate household sought medical attention for any physical or mental health issue that could have been driven by a climate change event, such as a heatwave, flood, wildfire, etc.?

Q12. What climate change event led you or someone else in your immediate household to seek medical attention?

The proportion that sought medical attention is significantly higher among:

- Women (10%, vs. 5% of men)
- Indigenous people (18%, vs. 7% of non-Indigenous people)
- People who rent their home (10%, vs. 6% who own their home)
- People in good, fair or poor health (11%, vs. 5% in excellent/very good health).

II. Extreme weather

While many of the efforts to adapt to climate change will require action by communities and varying levels of government, there are also many adaptive actions individuals and households can take. As such, it is important to assess what Canadians know about the risks of extreme weather events and what, if any, preventive steps they may be prepared to undertake. The survey asked opinions about extreme weather events as a health risk; about actions taken in response to extreme weather; and about awareness of and protection against heat illness specifically.

Health risk from extreme weather events

Half of Canadians now believe extreme weather events pose at least a moderate health risk, up from four in ten in 2017. There has also been a shift in the types of extreme weather events linked to health risks, with greater mentions of extreme heat events and forest fires, and fewer mentions of winter storms.

Perceptions of the health risk associated with extreme weather events have increased. The proportion of Canadians who believe the risk to their health and that of their family from extreme weather events is either major or moderate has grown from four in ten (42%) in 2017 to one in two (52%); just under half (47%) now say the risk is minor, or there is no risk at all.

Risk to health from extreme weather events
Base: Total sample

Extent of risk	Phone		Phone and online
	2017 (n=1,425)	2022 (n=1,520)	2022 (n=1,905)
A major health risk	12%	14%	15%
A moderate health risk	30%	38%	39%
Top 2 box (net)	42%	52%	53%
A minor health risk	40%	32%	33%
No health risk at all	17%	15%	13%

Q13. How much of a health risk do you believe extreme weather events present to you and your family? Do they present...?

Belief that extreme weather events pose at least a moderate health risk increased mainly in Quebec (68%, up 17 percentage points) and BC (58%, up 19) since 2017, and is now higher in these provinces than in other regions.

Belief that extreme weather events pose at least a moderate health risk is also significantly higher among:

- Women (57%, vs. 47% of men).
- Those with lower household incomes (58% earning less than \$60K, vs. 50% with \$60K or more).

Types of events that pose health risk. The large majority of Canadians (87%) can identify (without prompting) at least one extreme weather event that poses a health risk. These are now most likely to include extreme heat events (26%, up 9 percentage points) and forest fires (13%, up 8), both of which are more widely mentioned than in 2017, likely as a result of the heat dome and forest fires in western Canada in summer 2021. Winter storms were the top mention in 2017 (22%) - reflecting winter storms that occurred in early 2017 - but mentions are now considerably lower (down 15 percentage points to 7%). These results demonstrate the impact of recency bias on how people remember extreme weather and its potential impacts on health.

Extreme weather events that pose greatest risk to health
Base: Total sample

Events	Phone		Phone and online
	2017 (n=1,425)	2022 (n=1,520)	2022 (n=1,905)
Extreme heat/heat waves	17%	26%	26%
Forest fires	5%	13%	13%
Floods	11%	10%	10%
Winter storms/blizzards	22%	7%	7%
Extreme cold	2%	7%	7%
Wind storms	9%	7%	6%
Tornadoes	4%	5%	5%
Hurricanes	10%	4%	3%
Drought	2%	2%	1%
Earthquake	3%	1%	1%
Other	7%	6%	8%
None/dk/na	8%	13%	13%

Q14. Which extreme weather events do you feel pose the greatest risk to your health and the health of your family?

As in 2017, the types of extreme weather events identified as health risks vary primarily by region:

- Mentions of extreme heat are higher in QC (36%) and BC (29%)
- Forest fires are more widely mentioned in BC (32%) and the Prairies (20%)
- Prairie residents are more likely than others to mention extreme cold (11%), and less likely than others to mention floods (5%)
- Residents of Atlantic Canada are more likely than others to mention hurricanes (18%).

Taking action in response to extreme weather

Half of Canadians say they regularly or occasionally change their daily routines as result of extreme weather alerts, which is on par with 2017. The proportion taking action or changing plans specifically due to a heat warning has increased to six in ten Canadians, due mainly to increases in BC and the Prairies.

Extreme weather alert. To what extent do Canadians take action to reduce their health risk from extreme weather by changing their daily routines? Half (52%) say they do so regularly (19%) or occasionally (32%), statistically unchanged from 2017 (55%). Under half (46%) say they rarely or never change their routines as a result of an extreme weather alert.

How often change daily routines as a result of an extreme weather alert
Base: Total sample

How often changed	Phone		Phone and online
	2017 (n=1,425)	2022 (n=1,520)	2022 (n=1,905)
Regularly	23%	19%	19%
Occasionally	32%	32%	34%
Top 2 box (net)	55%	52%	54%
Rarely	27%	30%	30%
Never	16%	16%	15%

Q15. How often do you take steps or make changes in your daily routine as a result of an extreme weather alert?

The proportion that regularly or occasionally change their daily routine in response to extreme weather alerts is significantly higher among:

- Women (55%, vs. 48% of men)
- Canadians who believe extreme weather presents a major health risk (76%, vs. 36% who say such weather presents a minor or no health risk).

This proportion has dropped substantially among Ontario residents (from 60% in 2017 to 48%), and together with Prairie residents (46%), is now lower than in other provinces.

Heat warnings. Specifically in response to an extreme heat warning or heat wave, six in ten Canadians (59%) say they have taken action or changed their plans, which is up significantly from 2017 (51%). This overall increase is due mainly to increases in BC (70%, up 28 percentage points) and the Prairies (55%, up 17).

Ever taken action/changed plans as a result of a heat warning
Base: Total sample

If action taken	Phone		Phone and online
	2017 (n=1,425)	2022 (n=1,520)	2022 (n=1,905)
Yes, ever taken action	51%	59%	59%

Q16. *When thinking specifically about extreme heat or heat waves, have you ever taken action or changed your plans as a result of hearing a heat warning?*

The proportion that has changed plans due to a heat warning is significantly higher among:

- Women (65%, vs. 53% of men)
- Residents of BC (70%), and lowest in the Atlantic provinces (40%)
- Those with a postsecondary degree (61%, vs. 53% with high school education or less)
- Those who say they regularly change their daily routines as a result of an extreme weather alert (80%, vs. 43% who rarely or never change routines)
- Canadians who believe extreme weather presents a major health risk to them or their family (80%, vs. 46% who say such weather presents a minor or no health risk).

Symptoms of heat illness

As in 2017, Canadians are most likely to mention dizziness and excessive thirst as symptoms of heat illness.

Most Canadians can identify (without prompting) at least one symptom of heat illness, the most common being dizziness (32%), followed by excessive thirst (26%), nausea (21%), headache (21%), and fainting (21%). There has not been a meaningful change in mentions of any of these symptoms compared to 2017.

Symptoms of heat illness
Base: Total sample

Symptoms	Phone		Phone and online
	2017 (n=1,425)	2022 (n=1,520)	2022 (n=1,905)
Dizziness	35%	32%	31%
Excessive thirst/dry mouth	29%	26%	25%
Nausea	25%	21%	19%
Headache	19%	21%	20%
Fainting	19%	21%	19%
Weakness	16%	17%	18%
Confusion/disorientation/staggering	14%	13%	12%
Difficulty breathing	10%	13%	12%
Sweating	n/a	13%	13%
Lack of sweating (despite heat)	7%	5%	4%
Heat rash	7%	7%	6%
Rapid heartbeat	3%	5%	4%
Swelling of hands, feet, ankles	2%	1%	1%
Muscle cramps	2%	1%	1%
Decreased urination/unusually dark yellow urine	1%	<1%	<1%
Other (not specified)	44%	40%	39%
dk/na	6%	9%	10%

Q17. To the best of your knowledge, what are the symptoms of heat illness?

Broadly speaking, these results are similar across the population. However, Canadians under 55 and those with higher socioeconomic status (as represented by education and household income) are more likely than others to identify more than one symptom of heat illness.

Protection from heat illness

As in 2017, Canadians are most likely to stay inside and drink liquids to protect themselves against heat illness.

The efforts Canadians say they would make to protect themselves and their families from heat illness are largely consistent with 2017. More than half say (unprompted) that they would stay inside when it's too hot (53%) or would drink lots of liquids (52%). One-third (33%) say they would use air conditioning, which is up from 2017 (27%), while others mention finding outdoor shade (19%).

Things would do to protect against heat illness

Base: Total sample

Protective actions	Phone		Phone and online
	2017 (n=1,425)	2022 (n=1,520)	2022 (n=1,905)
Stay inside when it's too hot	58%	53%	48%
Drink liquids/water	57%	52%	49%
Turn on air conditioning	27%	33%	31%
Find an outdoor shaded location (e.g., under a tree)	18%	19%	16%
Wear a hat	11%	8%	7%
Go to air conditioned public location (e.g., mall, community centre, library)	7%	6%	5%
Go to a swimming pool/beach	7%	8%	7%
Wear loose fitting clothing	6%	6%	5%
Turn on fan	4%	6%	5%
Take a shower	2%	3%	3%
Close curtains/blinds	2%	3%	2%
Other (not specified)	25%	25%	29%
dk/na	4%	5%	9%

Q18. What kinds of things would you do to protect yourself and your family from heat illnesses?

These results vary across regional and demographic subgroups as follows:

- Mentions of drinking fluids and staying inside to protect against heat illness are higher in BC, the Prairies and Ontario than in other provinces, as well as among women and those with higher household incomes
- Mentions of air conditioning are higher in Quebec (45%) and among older Canadians (40% aged 55+)
- Drinking fluids (62%) and finding outdoor shade (21%) are more widely mentioned by Canadians under age 55.

Source of information about heat illness

As in 2017, Canadians are most likely to turn to the Internet, ahead of their doctor, for information about heat illness.

The Internet remains the main source that Canadians say they would turn to get more information on heat illness (41%), although mentions have declined since 2017 (51%). The second most common source for this information is their doctor (31%). Fewer would turn to Health Canada (9%), another government website (6%), or a health clinic or public health unit (7%) for this purpose.

Source for information about heat illness
Base: Total sample

Information source	Phone		Phone and online
	2017 (n=1,425)	2022 (n=1,520)	2022 (n=1,905)
Internet	51%	41%	39%
Doctor	30%	31%	30%
Health Canada	11%	9%	8%
Hospital/health clinic/public health unit	3%	7%	8%
Other government website	4%	6%	6%
Other health professional	8%	5%	5%
Friends/Family	7%	4%	4%
Nurse	2%	3%	3%
TV/radio	5%	3%	3%
Local weather forecasters/Meteorologists	3%	2%	3%
Pharmacist	2%	2%	2%
Social media	1%	2%	2%
Other	7%	9%	12%
dk/na	3%	8%	9%

Q19. Who would you turn to in order to obtain more information on heat illness?

- The Internet remains the primary source for heat illness information in all regions and across all population segments. However, it is more widely mentioned by Canadians under 55, those with a postsecondary education and those with household incomes over \$60,000
- Residents of Ontario and Quebec are more inclined than others to turn to their doctor
- Mentions of Health Canada are higher among Ontarians (13%) and younger Canadians (12% under 35).

Perceived changes in average temperature in community

Two-thirds of Canadians believe that average temperatures have increased over the past decade.

Scientific evidence indicates the annual average temperature in Canada has been rising and the majority of Canadians have observed this increase in their own community. Two in three (68%) say the average temperature in their community over the past ten years has increased a lot (20%) or a little (48%). Most of the remainder (23%) say temperatures have remained the same, with few (4%) who say they have decreased.

Perceived changes in average temperature in community
Base: Total sample

Change perceived	Phone (n=1,520)	Phone and online (n=1,905)
Increased a lot	20%	20%
Increased a little	48%	49%
Stayed about the same	23%	23%
Decreased a little	3%	3%
Decreased a lot	1%	1%
Not sure	5%	4%

Q20. Would you say the average temperature in your community over the past 10 years has...?

Belief in temperatures increasing at least a little is higher among:

- Quebec residents (79%), and lowest in the Prairies (52%)
- Those with a university education (72%, vs. 63% with a high school education or less)
- Those who believe climate change is definitely happening (74%) and are extremely or very worried about it (85%)

VI. Indoor temperatures

Increasing temperatures due to climate change and extreme heat events can create difficulties cooling indoor spaces, which can be harmful to health. A series of questions was asked to gauge the ease or difficulty Canadians have regulating indoor temperatures at home and their use of air conditioning.

Temperature regulation in main living space at home

Although they represent a minority, one in five Canadians find it difficult to regulate their home temperature in the summertime.

Most Canadians (77%) find it very or somewhat easy to regulate the temperatures in their main living space in the summer. However, one in five (21%) say it is somewhat or very difficult; this proportion is higher among those without air conditioning (38%, vs. 14% with air conditioning).

Ease of regulating temperature in main living space at home
Base: Total sample

Level of ease	Phone (n=1,520)	Phone and online (n=1,905)
Very easy	47%	43%
Somewhat easy	30%	34%
Top 2 box (net)	77%	77%
Somewhat difficult	15%	15%
Very difficult	6%	6%
Bottom 2 box (net)	21%	21%
Not sure	2%	1%

Q21. How easy or difficult is it to regulate the temperature in your main living space at home in the summer?

Difficulty regulating temperatures at home during the summer is more widespread among:

- Those who live in an apartment or condominium (31%) rather than a single-family dwelling (18%)
- Those who rent their home (31%, vs. 17% who own)
- Those without air conditioning (38%, vs. 14% with air conditioning)
- Younger Canadians (33% aged 18-34) and those with household incomes under \$100K (25%), both of whom are more likely than other to rent their home and live in an apartment or condo.

Actions taken to keep space comfortable. By far the most common action taken to keep their living space at a comfortable temperature is using an air conditioner (61%). Other widely mentioned actions include closing curtains and blinds (37%), opening windows to catch a cross breeze (29%) and using fans (27%). A range of other actions are mentioned, but none by more than four percent of respondents.

Actions taken to keep space comfortable
Base: Total sample

Actions	Phone (n=1,520)	Phone and online (n=1,905)
Use air conditioner	61%	59%
Close curtains/blinds	37%	34%
Open all windows/try to get cross breeze	29%	27%
Use fan	27%	26%
Close windows and doors	4%	5%
Install/use thermostat	3%	3%
Don't use the oven to cook	2%	2%
Move to the basement	2%	2%
Other	8%	9%
Not sure	3%	3%

Q22. *What kinds of things do you do to try to keep your main living space at home at a comfortable temperature in the summer?*

Use of air conditioning is more widely reported by those who find it very easy to regulate their indoor temperature (73%) than by those who find somewhat easy (57%) or difficult (41%). In turn, actions such as closing curtains/blinds, opening windows and using fans are more widely reported by those who find it difficult to regulate indoor temperatures.

Air conditioning

Almost three-quarters of Canadians have a working air conditioner, up from half in 2008. Those with air conditioning report keeping their home at an average of 21.5 degrees Celsius during the summer.

More than seven in ten (73%) Canadians report that their home has a working air conditioner, which represents a substantial increase from 2008 (52%).

Almost all of those who have a working air conditioner say they use it; only one percent of Canadians have but do not use their air conditioner.

Home has working air conditioner
Base: Total sample

Air conditioner status	Phone		Phone and online
	2008 (n=1,520)	2022 (n=1,520)	2022 (n=1,905)
Have air conditioner (net)	52%	73%	74%
Use air conditioner	n/a	72%	72%
Have but do not use	n/a	1%	2%
Do not have	48%	26%	26%

Q23. Does your home have a working air conditioner?

Q24. Do you use your home air conditioner?

Having a working air conditioner is more widely reported among:

- Residents of Ontario (85%) and Quebec (78%)
- Canadians under 55 (75%, vs. 69% of those 55 and older)
- Those with household incomes over \$100K (82%).

It does not vary significantly by home type (single family dwelling or apartment/condominium) or by whether one owns or rents their home.

The sample size of respondents who have a working air conditioner but do not use it (n=23) is too small to report quantitatively. When asked why they choose not to use their air conditioner, the main reasons given include there is no need to use it, it is too expensive to run, or it is uncomfortable or inconvenient in terms of being too cold, too noisy or affecting the home’s air quality.

Those who use air conditioning say they keep the temperature at an average of 21.5 degrees Celsius during the summer. The average temperature (in degrees Celsius) is lower in the Atlantic provinces (19.9), among younger Canadians under 35 (20.8) and women (21.3); it is higher among those with a university education (22.1).

Home temperature in summer with air conditioner
Base: Those who use an air conditioner

Temperature	Phone (n=1,049)	Phone and online (n=1,332)
15-20 °C	26%	24%
21-25 °C	52%	47%
26-30 °C	3%	2%
Mean (in °C)	21.5	21.5
Depends	7%	15%
Not sure	13%	12%

Q26. When your air conditioning is on, what temperature do you usually keep your home at during the summer?

V. Role of federal government

The survey included a couple of questions about the federal government’s role, in terms of its efforts to protect Canadians’ health from climate change and providing climate change information on Health Canada’s website.

Rating Government of Canada performance

Canadians give the federal government modest ratings for protecting their health from the effects of climate change.

Canadians were asked to rate the Government of Canada’s performance at protecting the health of Canadians from the effects of climate change. One in ten (10%) feel the government is doing a good job (ratings of 8-10 out of 10); a majority (58%) give a moderate rating (score of 4 to 7), while one-quarter (26%) rate the federal government’s efforts negatively (score of 1 to 3).

Rating Government of Canada on protecting the health of Canadians from effects of climate change
Base: Believe in climate change

Rating	Phone (n=1,464)	Phone and online (n=1,834)
Good job (8-10)	10%	11%
Moderate job (4-7)	58%	61%
Poor job (1-3)	26%	24%

Q27. How would you rate the performance of the Government of Canada at protecting the health of Canadians from the effects of climate change? Please use a 10-point scale where “1” means a very poor job and “10” means a very good job.

The minority that gives the Government of Canada a good rating is notably higher among:

- Ontario residents (14%)
- Men (13%, vs. 8% of women)
- Those with lower household incomes (15% with incomes under \$60,000).

Visited Health Canada website

Almost one in five Canadians say they have visited Health Canada’s website in the past year for information on protecting against climate change.

When asked how often in the past year they have visited Health Canada’s website for information on how to protect themselves and their family from climate change, most Canadians (81%) say they have not. Close to one in five (18%) visited the website at least once, including 12 percent who indicate they did so more than once.

Visited Health Canada website in past year for climate change information
Base: Believe in climate change

Number of HC website visits	Phone (n=1,464)	Phone and online (n=1,834)
Never	81%	77%
At least once (net)	18%	22%
Once	6%	8%
2-3 times	9%	11%
4 times or more	3%	3%
Don’t have computer access	1%	<1%
Not sure	1%	1%

Q28. Over the past 12 months, how many times have you visited Health Canada’s website for information on how to protect yourself and your family from climate change?

The proportion who visited the website at least once in the past year is higher among:

- BC residents (26%)
- Younger Canadians (30% aged 18-34).

VI. Conclusions

The research reveals that, in 2022, Canadians are largely in agreement climate change is real. Now what varies is the public's degree of concern about this phenomenon, which is linked mainly to concerns about environmental impacts; top-of-mind concerns about health impacts are limited.

Nonetheless, there is clearly growing public recognition of the health risks associated with climate change and extreme weather. This is particularly true for forest fires and extreme heat, likely driven by these prominent events in western Canada in summer 2021. However, this greater understanding has not yet translated into a different assessment of their own personal vulnerability nor substantially greater efforts to take protective action.

Building the case for protective actions will be challenging, for a couple of reasons. First, the perceived urgency of the health risk has not shifted substantially: only about half of climate change believers say health impacts are already happening. Secondly, efforts to mitigate climate change (i.e., reduce its impacts) are conflated with adaptive efforts, and other public opinion research has shown that Canadians prioritize mitigation over adaptation.

The research also provides evidence that we cannot rely entirely on experience with extreme weather events to drive risk perceptions and behaviours. This connection is hindered by a recency bias: for example, risk perceptions for winter storms, which prominently occurred just prior to the 2017 survey, have declined since then. The connection may also be affected by the rarity and/or perceived severity of the event: the perceived risk of forest fires and extreme heat have increased following the 2021 fires and heat dome in western Canada, but less so for flooding, despite the extent of the 2021 BC floods – it is possible less attention was paid because of the growing frequency of flood events. Ultimately, risk perceptions and protective behaviours are not always higher in BC than in other provinces despite residents' recent experiences, indicating other mitigating factors in how individuals evaluate and respond to risk.

Appendix A: Methodology

Background and research objectives

Health Canada identified the need for public opinion research to determine whether and to what extent public understanding and perceptions of climate change have changed over time, based on comparisons to research conducted in 2008 and 2017. Specific research objectives were to understand:

- The level of awareness of climate change (and its health risks and impacts);
- Actions taken to adapt/be more resilient to the health risks or impacts of climate change;
- Trusted sources of media used and other means and opportunities for education and awareness raising; and,
- The public's views on role(s) of government and non-government organizations.

Methodology

To address the research objectives, a dual-mode telephone and online survey was conducted with a total of 1,905 Canadians (aged 18 and over) from February 10 to March 13, 2022. The sample was designed to include 80% telephone and 20% online completions, to match the ratio from the 2017 survey.

- The telephone survey consisted of interviews with a representative sample of 1,520 Canadians (1,070 landline and 450 cell phone only households). The margin of error for the telephone survey is plus or minus 2.5 percentage points, 19 times in 20.
- The online survey was conducted with 385 Canadians surveyed via an online panel, to allow for comparisons across mode should Health Canada wish to move this study to a fully online methodology in the future. Because an online survey is not a random probability sample, a margin of sampling error cannot be reported.

Sample design and weighting

Telephone. The telephone sampling method was designed to complete 1,520 interviews with the target audience of Canadians aged 18 and older. Environics employed industry-standard random-digit-dialling (RDD) methods as a basis for drawing a national sampling frame for this survey and used an industry-standard “most recent birthday” selection technique to randomly select a respondent within each selected household. Cell phone only (CPO) sample was also included.

The sample was stratified by region to allow for meaningful coverage of lower population areas:

Sample design

Region (% of population)	Telephone unweighted sample size	Margin of error (Phone sample only)*	Online unweighted sample size
Atlantic Canada (7%)	185	± 7.2	50
Quebec (24%)	375	± 5.1	95
Ontario (38%)	475	± 4.5	127
Prairies/NWT/Nunavut (17%)	300	± 5.7	62
B.C./Yukon (13%)	185	± 7.2	51
CANADA (100%)	1,520	± 2.5	385

* In percentage points, at the 95% confidence level

Online. The online sample was designed to achieve completed surveys with 385 adult Canadians. Survey participants were recruited via an online panel, and quotas were set to ensure the sample were generally representative of the Canadian population by age and gender. As with the telephone sample, the online sample was stratified by region to allow for meaningful coverage of lower population areas (see table above).

Weighting. At the analysis stage, the telephone and online survey data were each weighted separately to the national adult population (by region, age and gender), and then combined.

Questionnaire design and pre-testing

The questionnaire was designed by Environics in consultation with representatives from Health Canada. It includes relevant tracking questions from the 2008 and 2017 surveys and incorporates new questions to address Health Canada's current issues of interest. The telephone and online versions of the questionnaire were developed simultaneously, to ensure comparability across modes. The final study questionnaire is included in Appendix B.

Pre-test. An initial pretest of 11 English and 12 French completes was conducted by telephone on February 10, 2022 and included standard Government of Canada pretest probing questions. One small edit was made to improve the comprehension of a single question. The online soft launch took place February 12-13, 2022. No further questionnaire changes were identified.

Fieldwork

Telephone. Telephone interviewing was conducted by Elemental Data Collection (EDCI) using Computer Aided Telephone Interviewing (CATI) technology. Field supervisors were present at all times to ensure accurate interviewing and recording of responses. A minimum of ten percent of each interviewer's work was unobtrusively monitored for quality control in accordance with industry standards.. The telephone survey averaged 16.4 minutes to deliver.

Data analysts programmed the questionnaire in CATI then performed thorough testing to ensure accuracy in set-up and data collection. This validation ensured that the data entry process conformed to the survey's basic logic. The CATI system handles sampling dialling, quotas and questionnaire completion (skip patterns, branching, and valid ranges). The system also ensures that callbacks are conducted in a timely manner. No number is called

twice in a two-hour period. Call-backs are conducted on different days of the week and at different times of the day (i.e., morning, afternoon). This system ensures all scheduled appointments are kept, maximizing the response rate and sample representativeness. A minimum of five call-backs were made to reach each household selected in the sample.

Online. The online survey was conducted by EDCI using a secure, fully featured web-based survey environment. EDCI's data analysts programmed the questionnaires then performed thorough testing to ensure accuracy in set-up and data collection. This validation ensured that the data entry process conformed to the surveys' basic logic. The data collection system handles sampling invitations, quotas and questionnaire completion (skip patterns, branching, and valid ranges).

Quality control

All respondents were offered the opportunity to complete the survey in their official language of choice. All research work was conducted in accordance with Government of Canada standards for telephone and online public opinion research, as well as applicable federal legislation (Personal Information Protection and Electronic Documents Act, or PIPEDA). The survey was registered with the Canadians Research Insights Council's Research Verification System, which permits the public to verify a survey call, inform themselves about the industry and/or register a complaint.

Completion results

Telephone. The telephone sample for this survey consisted of 1,520 interviews with adult Canadians. The effective response rate for the survey is five percent.¹ This is calculated as the number of responding participants (completed interviews plus those disqualified because of survey requirements and quotas being filled), divided by unresolved numbers (e.g., busy, no answer) plus non-responding households or individuals (e.g., refusals, language barrier, missed callbacks) plus responding participants $[R/(U+IS+R)]$. The disposition of all contacts is presented in the following table:

Telephone completion results

Total numbers attempted	65,155
Out-of-scope - Invalid	34,449
Unresolved (U)	21,629
<i>No answer/Answering machine</i>	21,629
In-scope - Non-responding (IS)	7,496
<i>Language barrier</i>	248
<i>Incapable of completing (ill/deceased)</i>	140
<i>Callback (Respondent not available)</i>	2,418
<i>Refusal</i>	4,388
<i>Termination</i>	302
In-scope - Responding units (R)	1,581
<i>Completed Interview</i>	1,520
<i>NQ - Quota Full</i>	17
<i>NQ - Age</i>	44
Response Rate	5.15%
Incidence	97.22%

Online. The online completion results are presented in the following table.

Contact disposition

Total invitations	5,000
Unresolved (U)	4,304
<i>Did not respond</i>	4,304
In-scope - Non-responding (IS)	73
<i>Qualified respondent break-off</i>	73
In-scope - Responding units (R)	623
<i>Disqualified</i>	1
<i>Quota filled</i>	237
<i>Completed</i>	385
Contact rate $[(R+IS)/(U + IS + R)]$	14%
Participation rate $[R / (U + IS + R)]$	12%

Non-response bias analysis

The table below presents a profile of the final telephone sample, compared to the actual population of Canada (2016 Census information). As is typically the case for general population telephone surveys, older individuals are easier to reach, so the survey overrepresented those age 55+ (this was corrected with age weighting). The final sample also somewhat under-represents those with high school or less education, which is a typical pattern for telephone surveys in Canada (e.g., individuals with more education are more likely to respond to telephone surveys).

Sample profile

Profile	Unweighted phone Sample* %	Canada (2016 Census) %
Gender (18+)**		
Male	49	48
Female	51	52
Age		
18-34	14	28
35-54	26	37
55+	60	35
Education level ^α		
High school diploma or less	25	35
Trades/college/post sec no degree	39	36
University degree	37	29

* Data are unweighted and percentaged on those giving a response to each demographic question

** Excludes those who identified as a gender other than male or female (1%)

^α Actual Census categories differ from those used in this survey and have been recalculated to correspond. Statistics Canada figures for education are for Canadians aged 25 to 64 years.

¹ This response rate calculation is based on a formula developed by MRIA in consultation with the Government of Canada (Public Works and Government Services).

Appendix B: Survey questionnaire

Environics Research

February 11, 2022

Health Canada 2022 Climate Change Survey FINAL Questionnaire

TELEPHONE INTRODUCTION

Hello/Bonjour, my name is _____ and I am calling from Environics Research, a public opinion research company, on behalf of the Government of Canada.

Would you prefer that I continue in English or French? Préférez-vous continuer en français ou en anglais? **(IF NEEDED: Je vous remercie. Quelqu'un vous rappellera bientôt pour mener le sondage en français.)**

RECORD Language of interview

- 01 Anglais
- 02 Français

We are conducting a study to find out what people think about issues facing Canada today. We are not selling or soliciting anything. The survey is voluntary and your responses will be kept entirely anonymous. This survey is registered with the national survey registration system and will be administered in accordance with the Privacy Act. It will take about 20 minutes to complete.

[IF ASKED: This study has been registered with the Canadian Research Insights Council's Research Verification Service so that you may validate its authenticity. If you would like to enquire about the details of this research, you can visit CRIC's website: www.canadianresearchinsightscouncil.ca and reference project code 20220209-EL315.]

[IF ASKED: **READ THE ENVIRONICS PRIVACY STATEMENT**]

< PROGRAMMING NOTE: All questions are mandatory unless otherwise indicated.>

< PROGRAMMING NOTE: SURVEY TO BE PROGRAMMED IN ACCESSIBLE FORMAT.>

IF LANDLINE SAMPLE: We choose telephone numbers at random and then select one person from each household to be interviewed. To do this, we would like to speak to the person in your household, 18 years of age or older, who has had the most recent birthday. Would that be you?" **[IF THAT PERSON IS NOT AVAILABLE ARRANGE CALLBACK]**

IF CELLPHONE SAMPLE: Are you at least 18 years old?

IF CELL PHONE SAMPLE ASK A AND B

A Are you in a safe place to talk – for example not operating a motor vehicle?

- Yes **[RE-INTRODUCE YOURSELF, IF NECESSARY]**
- No **[ARRANGE CALLBACK DATE/TIME]**

B At home, do you have a traditional telephone line other than a cell phone?

Yes CHECK AGAINST QUOTA

No CHECK AGAINST QUOTA

WEB INTRODUCTION

Welcome and thank you for your interest in our questionnaire / Bienvenue et merci de l'intérêt que vous portez à ce questionnaire.

Please select your preferred language for completing the survey / SVP choisissez votre langue préférée pour remplir le sondage.

01- English / Anglais

02- Français / French

Welcome to this survey being conducted by Environics Research, an independent research company, on behalf of the Government of Canada. The survey will take about 20 minutes of your time.

Note: If you genuinely have no opinion about a question or cannot answer it, please click through to the next question. There are only a few key questions where your answer will be required in order to move forward.

We are not selling or soliciting anything. The survey is voluntary and your responses will be kept entirely anonymous and will be administered in accordance with the Privacy Act.

This study has been registered with the Canadian Research Insights Council's Research Verification Service so that you may validate its authenticity. If you would like to enquire about the details of this research, you can visit CRIC's website www.canadianresearchinsightscouncil.ca and reference project code 20220209-EL315.

Thank you in advance for your participation.

[IF LANDLINE RECORD REGION FROM SAMPLE]

[IF CELL PHONE SAMPLE OR ONLINE ASK C]

C. In which province or territory do you live?

PHONE: DO NOT READ LIST

MANDATORY ONLINE – DROP DOWN LIST: *Select one only.*

01-Newfoundland and Labrador

02-Prince Edward Island

03-Nova Scotia

04-New Brunswick

05-Quebec

06-Ontario

07-Manitoba

08-Saskatchewan

09-Alberta

10-British Columbia

11-Yukon

12-Northwest Territories

13-Nunavut

D. *In what year were you born?*

RECORD YEAR – TERMINATE IF UNDER 18 (MIN VALUE 1900, MAX VALUE 2004]

D2. **IF RESPONDENT DECLINES TO PROVIDE A PRECISE BIRTH YEAR:** Would you be willing to indicate in which of the following age categories you belong?

PHONE: READ UNTIL CATEGORY REACHED

MANDATORY ONLINE – DROP DOWN LIST: Select one only.

01-18 to 24

02-25 to 34

03-35 to 44

04-45 to 54

05-55 to 64

06-65 to 74

07-75 or older

99-Prefer not to say

E. *How do you identify your gender?*

PHONE IF NECESSARY/SHOW ONLINE: Gender refers to current gender which may be different from sex assigned at birth and may be different from what is indicated on legal documents.

PHONE: DO NOT READ LIST EXCEPT TO CLARIFY/ONLINE: MANDATORY

01-Female

02-Male

98-Other (DO NOT CODE)

99-Prefer not to say [SINGLE MENTION]

Main survey

Climate change perceptions/concerns

2008/Q4a, 2017/Q1

1. There has been a lot of discussion lately about the issue of climate change. Do you believe that climate change is something that is definitely happening, or something which may be happening but is not yet proven, or climate change is not happening at all?

01-Climate change is definitely happening

02-Climate change may be happening but is not yet proven

03-Climate change is not happening at all - **SKIP TO NEXT SECTION (Q13)**

VOLUNTEERED/DO NOT SHOW ONLINE

99-Not sure

NEW

2. **[IF Q1=01,02,99]** How worried are you about climate change? **READ**

01-Extremely worried

02-Very worried

03-Somewhat worried

04-Not very worried

05-Not at all worried

VOLUNTEERED/DO NOT SHOW ONLINE

99-Not sure

NEW

3. **[IF Q2=01-03]** What worries you the most about climate change?

ONLINE: TYPE IN RESPONSE. USE LIST BELOW AS POST CODES.

PHONE: DO NOT READ LIST – RECORD ALL THAT APPLY

01-Impacts on the economy

02-Impacts to my future or the future of my family

03-Impacts to my home/dwelling

04-Impacts on the environment

05-Impacts on my health/my family's health

06-Disproportionate risks to at-risk communities

07-Impacts to my job/work

98-Other (Specify _____)

99-Not sure

2008/Q9, 2017/Q6

4. [IF Q1=01,02,99] In what ways, if any, do you think climate change poses a risk to the health of Canadians? Please be as specific as possible.

ONLINE: TYPE IN RESPONSE. USE LIST BELOW AS POST CODES.

PHONE: DO NOT READ LIST – CODE ALL THAT APPLY – LIMIT PROBING

01-Air quality impacts

xx-Increased air pollution

xx-Poor air quality

xx-Increased smog

02-Respiratory/breathing problems

03-Infectious diseases

xx-COVID-19/Omicron

xx-West Nile

xx-Flu / Influenza Virus

xx-Lyme Disease

xx-Other Vector Borne Disease

xx-Other infectious diseases

04-Diseases transmitted from animals/nature to people

05-Water quality impacts

xx-Decreased water quality

xx-Decreased drinking water supply

xx-Impact on water species

xx-Impact on recreational waterways

06-Water-borne diseases

07-Food-borne disease

08-Heat stroke

09-Sunburn

10-Skin cancer

11-Cancer

12-Frostbite/frozen skin

13-Stress/anxiety

14-Nutrition

15-Allergies (related to pollen/mould)

xx-Weather fluctuation/warmer/colder

xx-Respiratory/breathing problems

xx-Drought/affects food supply/agriculture

98-Other (SPECIFY _____)

97-None [EXCLUSIVE]

99-Not sure [EXCLUSIVE]

2017/Q7

5. [IF Q1=01,02,99] How much of a risk to the health of Canadians is there from each of the following?

GRID-RANDOMIZE.

- a. Forest fires
- b. Flooding
- c. Extreme heat events
- d. Food security
- e. Changes in air quality
- f. Changes in water quality
- g. Forest fire smoke
- h. Extreme cold [new]

01-Major risk

02-Moderate risk

03-Minor risk

04-No risk at all

PHONE: VOLUNTEERED/ONLINE: SHOW

99-Not sure

2017/Q9 – slightly revised text

6. [IF Q1=01,02,99] Do you think that climate change already poses a health risk to Canadians today, or do you think this is something that will happen in the future or it poses no risk now or in the future?

01-Poses a risk to health today

02-Will pose a risk in the future

03-No risks now or in the future

VOLUNTEERED/DO NOT SHOW ONLINE

04-Depends

99-Not sure

2008/Q14, 2017/Q11

7. [IF Q1=01,02,99] What about your own health? Do you believe that you personally are definitely, likely, likely not, or definitely not vulnerable to the potential health impacts of climate change?

01-Definitely vulnerable

02-Likely vulnerable

03-Likely not vulnerable

04-Definitely not vulnerable

VOLUNTEERED/DO NOT SHOW ONLINE

05-Depends

99-Not sure

2008/Q15, 2017/Q12

8. [IF Q1=01,02,99] Is there anyone else in your immediate household who you think would be especially vulnerable to the potential health impacts of climate change?

01-Yes

02-No

VOLUNTEERED/DO NOT SHOW ONLINE

99-Not sure

2008/Q16

9. [IF Q1=01,02,99] What types of Canadians, if any, do you think might be most likely to experience the negative effects of climate change?

ONLINE: TYPE IN RESPONSE. USE LIST BELOW AS POST CODES.

PHONE: DO NOT READ – CODE FIRST AND OTHER MENTIONS SEPARATELY, UP TO THREE

- 01-Poor/homeless people
- 02-Seniors/old people
- 03-Sick/ill people
- 04-Children
- 05-Our grandchildren/descendants
- 06-People living near oceans/coasts
- 07-People in the North/arctic
- 08-People in big cities
- 09-Farmers
- 10-People in long-term care/hospital
- 11-Workers
- 12-Everyone equally vulnerable
- 97-No one is vulnerable
- 98-Other (Specify _____)
- 99-Not sure

2008/Q17, 2017/Q14

10. [IF Q1=01,02,99] What steps, if any, have you personally taken in the past year to protect yourself or family members from the potential health risks and/or impacts of climate change?

ONLINE: TYPE IN RESPONSE. USE LIST BELOW AS POST CODES.

PHONE: DO NOT READ – CODE UP TO 3 RESPONSES – LIMIT PROBING

- 01-Installed air conditioning
- 02-Use DEET
- 03-Have an emergency plan/kit
- 04-Vigilant for ticks on person/pets
- 05-Increase home's energy efficiency
- 06-Watch weather more closely
- 07-Prepare for storms
- 08-Recycling
- 09-Riding your bike to work
- xx-Better eating habits/gardening
- xx-Use more sunscreen
- xx-Drive less
- 98-Other (SPECIFY)
- 97-No/None [EXCLUSIVE]

NEW

11. [IF Q1=01,02,99] Have you or anyone in your immediate household sought medical attention for any physical or mental health issue that could have been driven by a climate change event, such as a heatwave, flood, wildfire, etc.?

01-Yes

02-No - SKIP TO Q13

VOLUNTEERED/DO NOT SHOW ONLINE

99-Not sure - SKIP TO Q13

NEW

12. [IF Q11=01] What climate change event led you or someone else in your immediate household to seek medical attention?

ONLINE: SHOW LIST

PHONE: DO NOT READ LIST

01-Extreme heat/heat waves

02-Tornado/hurricanes

03-Wind storms

04-Floods

05-Winter storms/blizzards

06-Cold

07-Forest fires

08-Drought

98-Other (SPECIFY BUT DO NOT CODE _____)

99-Not sure

Climate change and health – extreme weather

[ASK ALL] I would now like to ask you about extreme weather events, such as hurricanes, violent wind storms, heat waves, floods and major blizzards.

2008/Q18, 2017/Q21

13. How much of a health risk do you believe extreme weather events present to you and your family? Do they present: READ

01-A major health risk

02-A moderate health risk

03-A minor health risk, or

04-No health risk at all

VOLUNTEERED/DO NOT SHOW ONLINE

99-Not sure

2017/Q22

14. Which extreme weather events do you feel poses the greatest risk to your health and the health of your family?

ONLINE: TYPE IN RESPONSE. USE LIST BELOW AS POST CODES.

PHONE: DO NOT READ LIST – CODE ONE ONLY

01-Extreme heat/heat waves

02-Hurricanes

03-Wind storms

04-Floods

05-Winter storms/blizzards

06-Forest fires

07-Drought

xx-Tornados

xx-Earthquake

xx-Extreme cold

98-Other (Specify _____)

97-None

99-Not sure

2017/Q28

15. How often do you take steps or make changes in your daily routine as a result of an extreme weather alert? **READ**

01-Regularly

02-Occasionally

03-Rarely

04-Never

VOLUNTEERED/DO NOT SHOW ONLINE

05-Depends

99-Not sure

Extreme heat**2017/Q29**

16. When thinking specifically about extreme heat or heat waves, have you ever taken action or changed your plans as a result of hearing a heat warning?

01-Yes

02-No

VOLUNTEERED/DO NOT SHOW ONLINE

99-Not sure

2017/Q30

17. To the best of your knowledge, what are the symptoms of heat illness?

ONLINE: TYPE IN RESPONSE. USE LIST BELOW AS POST CODES.

PHONE: DO NOT READ LIST

- xx-sweating
- 01-headache
- 02-difficulty breathing
- 03-heat rash
- 04-dizziness
- 05-excessive thirst / dry mouth
- 06-weakness
- 07-fainting
- 08-muscle cramps
- 09-rapid heartbeat
- 10-confusion / disorientation / staggering
- 11-lack of sweating (despite heat)
- 12-nausea
- 13-swelling of hands, feet, ankles
- 14-decreased urination/unusually dark yellow urine
- 98-Other (do not specify)
- 99-Not sure [EXCLUSIVE]

2017/Q31

18. What kinds of things would you do to protect yourself and your family from heat illnesses?

ONLINE: TYPE IN RESPONSE. USE LIST BELOW AS POST CODES.

PHONE: DO NOT READ LIST

- 01-Stay inside when it's too hot
- 02-Turn on air conditioning
- 03-Turn on fan
- 04-Go to air conditioned public location (e.g. mall, community centre, library cooling centre)
- 05-Drink liquids/water
- 06-Wear loose fitting clothing
- 07-Wear a hat
- 08-Close curtains/blinds
- 09-Take a shower
- 10-Find an outdoor shaded location (e.g. under a tree)
- 11-Go to a swimming pool/beach
- 98-Other (do not specify)
- 99-Not sure [EXCLUSIVE]

2017/Q32

19. Who would you turn to in order to obtain more information on heat illness?

ONLINE: TYPE IN RESPONSE. USE LIST BELOW AS POST CODES.

PHONE: DO NOT READ LIST

- 01-Doctor
- 02-Nurse
- 03-Pharmacist
- 04-Other health professional
- 05-Health Canada
- 06-Other government website
- 07-Local weather forecasters/Meteorologists
- 08-Friends/Family
- 09-Social Media
- 10-TV
- 11-Radio
- 12-Internet
- xx-Hospital/health clinic
- xx-Local public health department/unit
- 98-Other (Specify _____)
- 99-Not sure [EXCLUSIVE]

NEW

20. Would you say the average temperature in your community over the past 10 years has...? READ

- 01-Increased a lot
- 02-Increased a little
- 03-Stayed about the same
- 04-Decreased a little
- 05-Decreased a lot
- VOLUNTEERED/DO NOT SHOW ONLINE
- 99-Not sure

Indoor temperatures

The next set of questions is about the indoor temperature in your home.

NEW

21. How easy or difficult is it to regulate the temperature in your main living space at home in the summer?
READ

- 01-Very easy
- 02-Somewhat easy
- 03-Somewhat difficult
- 04-Very difficult
- VOLUNTEERED/DO NOT SHOW ONLINE
- 99-Not sure

NEW

22. What kinds of things do you do to try to keep your main living space at home at a comfortable temperature in the summer?

ONLINE: TYPE IN RESPONSE. USE LIST BELOW AS POST CODES.

DO NOT READ LIST

01-Use air conditioner [if they mention AC – skip to Q26]

02-Use fan

03-Close curtains/blinds

04-Don't use the oven to cook

05-Open all windows/try to get cross breeze

98-Other (Specify _____)

99-Not sure

2008/Q32

23. [IF Q22≠01] Does your home have a working air conditioner?

01-Yes

02-No – SKIP TO NEXT SECTION

VOLUNTEERED/DO NOT SHOW ONLINE

99-Not sure – SKIP TO NEXT SECTION

PROGRAMMING NOTE: CALCULATE ANALYSIS VARIABLE "HAVE AC" [Q22=01 OR Q23=01]

NEW

24. [IF Q23=01] Do you use your home air conditioner?

01-Yes – SKIP TO Q26

02-No

VOLUNTEERED/DO NOT SHOW ONLINE

99-Not sure

NEW

25. [IF HAVE BUT NOT USE AC, Q24=02] Is there a reason you choose not to use your home air conditioner?

ONLINE: TYPE IN RESPONSE. USE LIST BELOW AS POST CODES.

DO NOT READ LIST

01-Too expensive/can't afford it

02-Too noisy

03-Don't feel comfortable

04-Affects air quality

05-Health condition

06-Worry it will make me sick

07-Feel too cold

08-No need to use it

09-Use other method (fan, open window, take shower)

10-Don't know how to turn AC on

11-AC doesn't work well/inefficient

98-Other (Specify_____)

99-Not sure

NEW

26. [IF USE AC, Q22=01 OR Q24=01] When your air conditioning is on, what temperature do you usually keep your home at during the summer?

_____ degrees Celsius [range 15-30]

98-Depends/varies

99-Not sure

Role of federal government

ASK Q27-28 IF Q1=01,02,99. IF Q1=03, SKIP TO DEMOGRAPHICS.

NEW

27. How would you rate the performance of the Government of Canada at protecting the health of Canadians from the effects of climate change? Please use a 10-point scale where “1” means a very poor job and “10” means a very good job.

A very	2	3	4	5	6	7	8	9	A very	Not
poor job									good job	Sure
1									10	98

NEW

28. Over the past 12 months, how many times have you visited Health Canada’s website for information on how to protect yourself and your family from climate change?

DO NOT READ

01-Never

02-Once

03-2-3 times

04-4-5 times

05-6 times or more

VOLUNTEERED/DO NOT SHOW ONLINE

98-Don’t have computer access

99-Not sure

Respondent Demographics

We have a few last questions about you to help us analyze the results of this survey. Your answers will remain anonymous.

2017/D1

29. Compared to other people your age, would you say your health is generally...? **READ**

01-Excellent

02-Very good

03-Good

04-Only fair

05-Poor

VOLUNTEERED/DO NOT SHOW ONLINE

99-REFUSE/NA

2008/Q31

30. Which one of the following categories best describes your home?

READ – CODE ONE ONLY – STOP AS SOON AS CATEGORY IS IDENTIFIED

01 – A single-family house detached from any other house

02 – A single-family house attached to one or more houses, for example a townhouse or duplex

03 – An apartment building or condominium no more than four stories

04 – An apartment building or condominium five or more stories, or

05 – A mobile home or trailer

VOLUNTEERED/DO NOT SHOW ONLINE

98 – Other (SPECIFY _____) **[DO NOT CODE]**

99 – REFUSE/NA

NEW

31. Do you own or rent the home you are currently living in?

01-Own

02-Rent

VOLUNTEERED/DO NOT SHOW ONLINE

99-REFUSE/NA

2017/D5

32. How many people, including yourself, currently live in your household?

____ **[RANGE 0-10]**

99 – NA/REFUSE

2017/D4

33. What is the highest level of formal education that you have completed?

PHONE: DO NOT READ LIST EXCEPT TO CLARIFY

ONLINE: SHOW 1-9

01 – Less than a high school diploma or equivalent

02 – High school diploma or equivalent

03 – Registered Apprenticeship or other trades certificate or diploma

04 – College, CEGEP or other non-university certificate or diploma

05 – University certificate, diploma or degree below the bachelor's level

06 – Bachelor's degree

07 – Post graduate degree above the bachelor's level

VOLUNTEERED – DO NOT SHOW ONLINE

99 - Don't know/Refused

2017/QI

34. What language do you speak most often at home?

PHONE: DO NOT READ LIST – ACCEPT ALL THAT APPLY

SHOW 1-3 ONLINE: *Select any that apply*

01 - English

02 - French

03 – Another language (Please specify) **(DO NOT CODE)**

VOLUNTEERED – DO NOT SHOW ONLINE

99 - Don't know/Refused **[SINGLE MENTION]**

2017/QF

35. Which of the following best describes you? Are you...?

PHONE: READ UNTIL CATEGORY REACHED

01 - First Nations

02 - Inuk

03 - Métis

04 - or, a non-Indigenous person **[SINGLE MENTION]**

VOLUNTEERED/DO NOT SHOW ONLINE

98 - Other (SPECIFY _____) **(DO NOT CODE)**

99 – REFUSE **[SINGLE MENTION]**

PHONE VOLUNTEERED

05 - Inuit

06 – Inuvialuit

IF INDIGENOUS AT Q35 (CODE 01, 02, 03, 05, 06) DO NOT ASK Q36

NEW

36. People in Canada have a variety of ethnic backgrounds and identities

ONLINE: Which of the following best describes your ethnic identity?

Please select all that apply:

TELEPHONE: What do you consider to be your ethnic identity? **READ EXAMPLES IF NEEDED**

PHONE: DO NOT READ LIST EXCEPT TO CLARIFY

ONLINE: SHOW ALL

Asian [DO NOT SHOW HEADING ONLINE]

01 – East Asian (e.g., Chinese, Korean, Japanese, etc.)

02 – South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.)

03 – Southeast Asian (e.g., Filipino, Vietnamese, Cambodian, etc.)

Black [DO NOT SHOW HEADING ONLINE]

04 – Black African (e.g., Nigerian, Ethiopian, Congolese, etc.)

05 – Black Caribbean (e.g., Jamaican, Haitian, Trinidadian/Tobagonian, etc.)

06 – Black, not listed above

07 – Latin American (e.g., Colombian, Salvadoran, Peruvian, Mexican, Chilean etc.)

08 – Middle Eastern, West and Central Asian (e.g., Iranian, Lebanese, Afghan, etc.)

10 – North African (e.g. Egyptian, Moroccan, Algerian, etc.)

11 – White (e.g. English, French, Italian, Russian, Swedish, etc.)

98 – Other not listed above (Please specify _____) **[DO NOT CODE]**

99 – Prefer not to say **[SINGLE MENTION]**

2017/D10

37. Which of the following categories best describes your total household income? That is, the total income of all persons in your household combined, before taxes.

PHONE: READ LIST – STOP WHEN REACH RESPONDENT'S CATEGORY

ONLINE: SHOW 1-7

01 - Under \$20,000

02 - \$20,000 to just under \$40,000

03 - \$40,000 to just under \$60,000

04 - \$60,000 to just under \$80,000

05 - \$80,000 to just under \$100,000

06 - \$100,000 to just under \$150,000

07 - \$150,000 and above

VOLUNTEERED – DO NOT SHOW ONLINE

99 – Refuse/NA

38. What are the first three digits of your postal code?

___ **(ALLOW SKIP)**

TELEPHONE ONLY

This completes the survey. In case my supervisor would like to verify that I conducted this interview, may I have your first name?

First Name: _____

PRETEST ONLY: ADD PRETEST PROBING QUESTIONS.**END PAGE MESSAGES SHOWN TO RESPONDENTS**

[SHOW ALL RESPONDENTS WHO COMPLETE/READ ON TELEPHONE] This survey was conducted on behalf of Health Canada, and is registered under the Federal Access to Information Act. Thank you very much for your participation.

[SHOW TO ALL RESPONDENTS WHO DO NOT QUALIFY] We're sorry. You do not meet the qualifications for this survey. We sincerely thank you and appreciate your time, dedication, and continued participation in our online surveys.

[SHOW TO ALL RESPONDENTS WHO RECEIVE QUOTA FULL] Unfortunately the quota has been reached for your demographic and/or region. We sincerely thank you and appreciate your time, dedication, and continued participation in our online surveys.