

Climate Change: Experience & Impact on Health

Health indicator report

Background

- The purpose of this health indicator report is to assess Halton residents' perception of local experience of climate change, including personal impacts on physical and mental health.
- Extreme climate and weather events, such as droughts, floods and heatwaves, are increasing in severity and frequency globally. Recent studies suggest that climate change is associated with worsened impacts on human health.¹ With this warming trend, it is expected to increase the risk of illnesses from extreme climate events.
- This health indicator report uses data from the Rapid Risk Factor Surveillance System (RRFSS).
- The results from this report will be used to inform Halton Public Health's Climate Change and Health vulnerability assessment and/or adaptation planning, as required in the Ontario Public Health Standards *Healthy Environments and Climate Change Guideline, 2018*.

Key findings

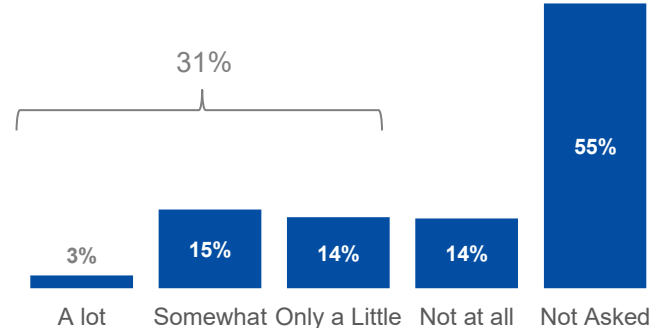
- In 2020/21, 43% of Halton respondents (n=331 out of 769) reported that they had experienced the impacts of climate change
- At least 31% of Halton respondents reported that climate change has negatively impacted their physical health
- At least 33% of Halton respondents reported that climate change has negatively impacted their mental well-being
- Females were more likely to report that climate change has negatively impacted their physical health compared to males
- Females were more likely to report that climate change has negatively impacted their mental well-being compared to males
- Adults aged 18-24 and 45-64 were more likely to report that climate change has negatively impacted their mental well-being compared to adults aged 65+



Impact of climate change on physical health

Overview

- In 2020/21, 31% of Halton adult respondents said that climate change has negatively impacted their physical health a lot (3%), somewhat (15%) or only a little (14%). 14% said climate change has not negatively impacted their physical health at all.
- 55% of respondents were not asked whether climate change had impacted their physical health, as they did not report ever experiencing the influences of climate change in Halton. However, it is possible that if asked, they would have reported a physical health impact. Therefore, 31% may be an underestimate.



Percentage of adults aged 18 and over who reported that climate change negatively impacted their physical health, Halton Region, 2020/21

Sex

- Females were more likely to report that the climate change has negatively impacted their physical health compared to males, and this difference was **statistically significant**.



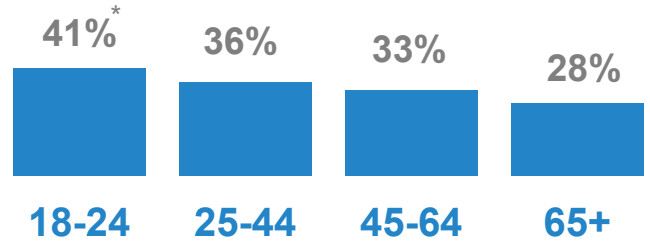
Percentage of adults aged 18 and over who reported that climate change has negatively impacted their physical health, Halton Region, by sex, 2020/21



Impact of climate change on physical health

Age

- Adults aged 18-24 were more likely to report that climate change has negatively impacted their physical health compared to adults aged 65+, but this difference was not statistically significant.

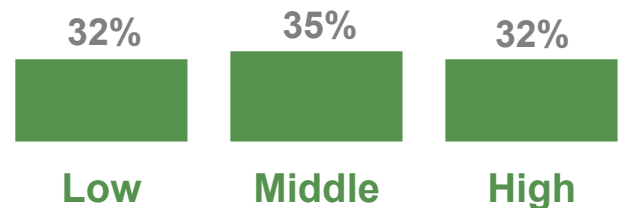


Percentage of adults aged 18 and over who reported that climate change has negatively impacted their physical health, by age group, Halton Region, 2020/21

Estimates marked with an asterisk (*) should be interpreted with caution due to high variability.

Income

- There were no statistically significant differences by income in the percentage of Halton adult respondents who reported that climate change has negatively impacted their physical health.



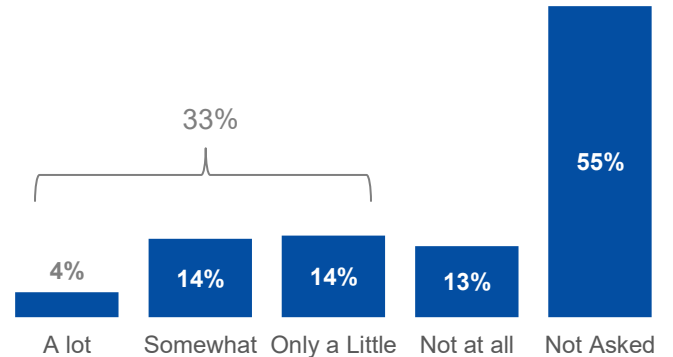
Percentage of adults aged 18 who reported that climate change has negatively impacted their physical health, by income, Halton Region, 2020/21



Impact of climate change on mental well-being

Overview

- In 2020/21, 33% of Halton adult respondents said that climate change has negatively impacted their mental well-being a lot (4%), somewhat (14%) or only a little (14%). 13% said climate change has not negatively impacted their mental well-being at all.
- 55% of respondents were not asked whether climate change had impacted their mental well-being, as they did not report ever experiencing the influences of climate change in Halton. However, it is possible that if asked, they would have reported an impact on mental well-being. Therefore, 33% may be an underestimate.



Percentage of adults aged 18 who reported that climate change negatively impacted their mental well-being, Halton Region, 2020/21

Sex

- Females were more likely to report that climate change has negatively impacted their mental well-being compared to males, and this difference was **statistically significant**.



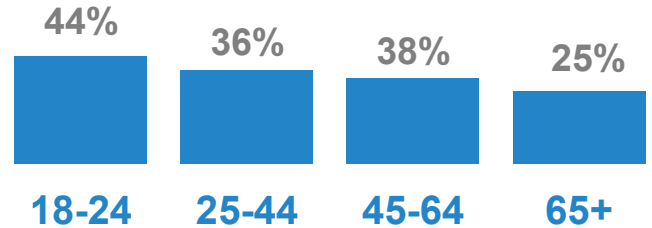
Percentage of adults aged 18 and over who reported that climate change has negatively impacted their mental well-being, Halton Region, by sex, 2020/21



Impact of climate change on mental well-being

Age

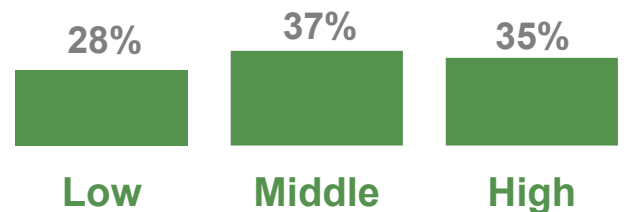
- Adults under age 65 were more likely to report that climate change has negatively impacted their mental well-being. This difference was **statistically significant** when comparing 18-24 to 65+ and 45-64 to 65+.



Percentage of adults aged 18 and over who reported that climate change has negatively impacted their mental well-being, by age group, Halton Region, 2020/21

Income

- There were no statistically significant differences by income in the percentage of Halton adult respondents who reported that climate change has negatively impacted their mental well-being.



Percentage of adults aged 18 who reported that climate change has negatively impacted their mental well-being, by income, Halton Region, 2020/21

About RRFSS

- The Rapid Risk Factor Surveillance System (RRFSS) is an on-going telephone survey (land line and cell phone) used to collect information on attitudes, behaviours, knowledge and awareness of issues related to health in Halton. RRFSS is conducted by the Institute of Social Research and York University.
- Halton Region purchased an additional 800 responses to specifically focus on climate change attitudes, behaviours, knowledge and awareness among Halton residents aged 18 and over. Responses were collected from January to March 2020. Data collection was then paused due to the COVID-19 pandemic, and resumed from April to December 2021.
- For more information on RRFSS methodology, limitations and statistical terms see the Data Notes and Data Interpretation Guide at www.halton.ca/For-Residents/Public-Health/Health-Statistics.

Data notes

Definitions:

Negatively impacted by climate change

includes Halton adult respondents who indicated climate change has negatively impacted their physical health or mental well-being a lot, somewhat, or only a little.

Data Source: Rapid Risk Factor Surveillance System [2020-2021], Halton Region Public Health and Institute for Social Research, York University.

Estimates marked with an asterisk (*) should be interpreted with caution due to high variability. Estimates marked with a double asterisk (**) are not reportable.

Please note that numbers may not add up to 100% due to rounding.

References

1. Rocque, R. J., Beaudoin, C., Ndjaboue, R., Cameron, L., Poirier-Bergeron, L., Poulin-Rheault, R. A., Fallon, C., Tricco, A. C., & Witteman, H. O. (2021). Health effects of climate change: an overview of systematic reviews. *BMJ open*, 11(6), e046333. <https://doi.org/10.1136/bmjopen-2020-046333>

For more health indicator and health status reports, visit the Halton Health Statistics webpage at halton.ca.