

Utah State University

DigitalCommons@USU

---

Utah People and Environment Poll (UPEP)

Community and Natural Resources Institute

---

11-2023

## Utahns See Air Quality as a Problem, But Don't Feel They Can Do Much About It

Sydney O'Shay

*Utah State University, [sydney.oshay@usu.edu](mailto:sydney.oshay@usu.edu)*

Cris Meier

*Utah State University, [cris.meier@usu.edu](mailto:cris.meier@usu.edu)*

Bailey Hughlett

*Utah State University, [bailey.hughlett@usu.edu](mailto:bailey.hughlett@usu.edu)*

Follow this and additional works at: [https://digitalcommons.usu.edu/canri\\_projects](https://digitalcommons.usu.edu/canri_projects)



Part of the [Communication Commons](#), and the [Social Work Commons](#)

---

### Recommended Citation

O'Shay, Sydney, Cris Meier, and Bailey Hughlett. 2023. "Utahns See Air Quality as a Problem, But Don't Feel They Can Do Much About It." Research Brief # 2023-4. *Utah People and Environment Poll*.

This Report is brought to you for free and open access by the Community and Natural Resources Institute at DigitalCommons@USU. It has been accepted for inclusion in Utah People and Environment Poll (UPEP) by an authorized administrator of DigitalCommons@USU. For more information, please contact [digitalcommons@usu.edu](mailto:digitalcommons@usu.edu).





## Utahns See Air Quality as a Problem, But Don't Feel They Can Do Much About It

Sydney O'Shay, Cris Meier, & Bailey Hughlett

**A**ir pollution is associated with 6.7 million premature deaths worldwide each year<sup>1</sup>. Air pollution shortens Utahns' life expectancy by two years, costs Utah's economy \$1.8 billion annually, and can cause and worsen many illnesses and conditions<sup>2</sup>. Several factors play a role in people's decisions or ability to act to reduce the harms of air pollution. This study investigated Utahns' perception of risk around air pollution, confidence to enact behaviors to protect themselves against the effects of air pollution, and the actual protective behaviors in which they are engaging. Understanding how Utahns think about these factors is key for developing strategic messaging that will effectively encourage Utahns to act in response to air pollution.

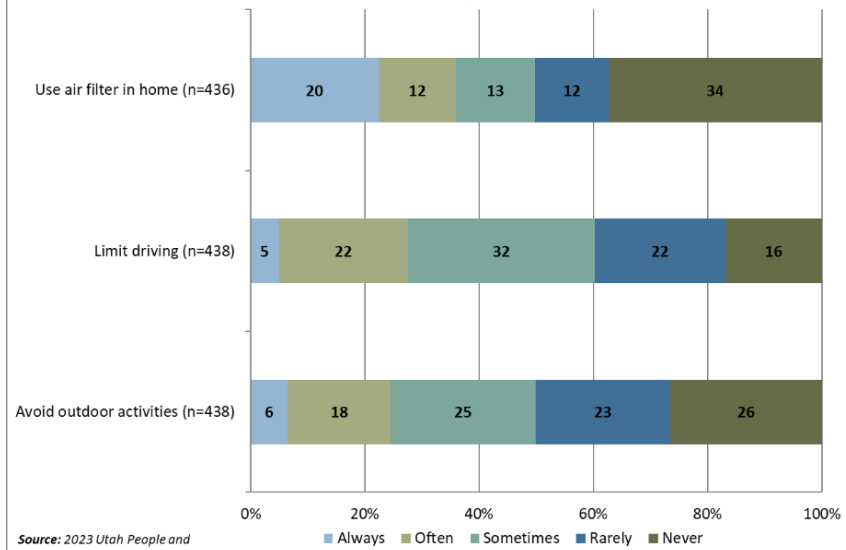
### Utahns Rarely Change their Behavior in Response to Air Pollution

Survey participants were asked a series of questions that assessed whether air quality was a concern in their daily life. Results showed that most Utahns had a moderate level of concern about air quality impacting their health.<sup>RN1</sup> Despite this concern, most

#### KEY FINDINGS

- A statewide poll indicates that Utahns tend to perceive poor air quality to be a moderate risk to their health.
- Limiting driving is the most common way Utahns reduce the health impacts of poor air quality. Utahns are less likely to use an air purifier or avoid outdoor activities.
- Utahns are only somewhat confident in their ability to act to protect themselves from harms caused by air pollution.

**Figure 1** Percentage of Utahns' Changing Behavior in Response to Poor Air Quality



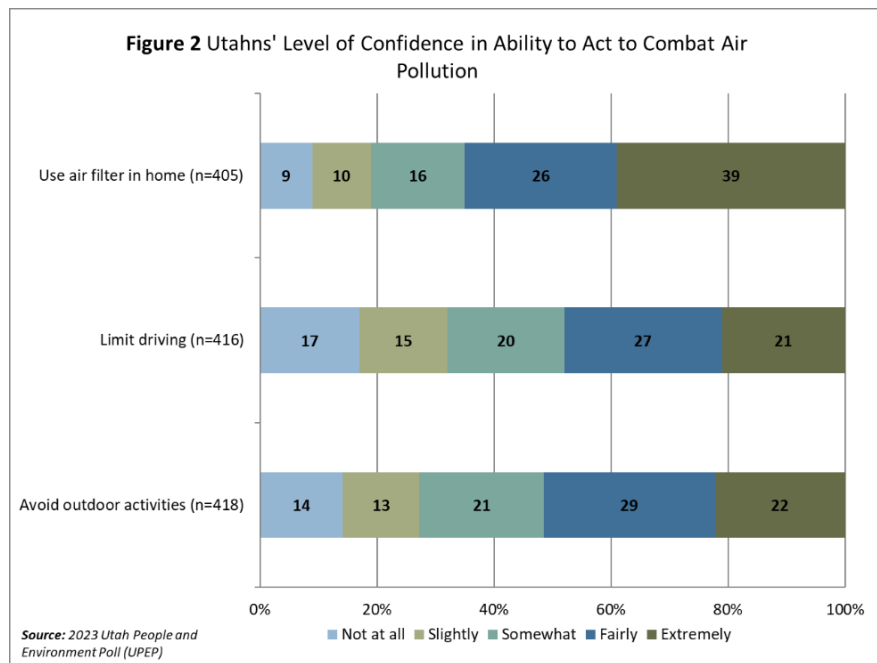


people reported that they did not change their behavior more than sometimes as a mitigation activity in response to air quality concerns (see Figure 1). For example, 32% of respondents “sometimes” limit their driving. However, 20% always use an air filter at home.

## Utahns Lack Confidence in Their Ability to Combat Air Pollution

To understand if Utahns thought they could take action to address air quality concerns, we asked a series of questions about their level of confidence in combating air pollution. We found that participants were only somewhat confident in their ability to respond.<sup>RN2</sup> Figure 2 shows select responses.

When we compare self-efficacy (or perceived ability to act) with actual behavior responses, it becomes more evident that while participants were fairly confident (29%) they could avoid outdoor activities when air quality was poor, only 18% said they often engaged in this behavior.<sup>RN3</sup>



## Conclusions

These findings have several implications for reducing the impacts of air pollution and its consequences in Utah. Utahns who have reduced belief in their ability to enact health behaviors is a key indicator for predicting if a population will take recommended actions to prevent or alleviate a health threat, even when they feel the threat of the health concern is high<sup>3</sup>. Low self-efficacy may be caused by a lack of understanding of how to enact behaviors or an inability to enact the behaviors for any given reason<sup>4</sup>. Utahn’s low self-efficacy to avoid outdoor activities and limit driving is likely related to their low rate of enacting these behaviors in response to air pollution in the state.

As such, researchers need to gain a better understanding of what makes Utahns question their ability to engage in these behaviors and provide education and tangible support to encourage Utahns to act in response to air pollution. Given that the success of strategic health messaging and campaigns hinges on the inclusion of self-efficacy information<sup>5</sup>, collecting additional data would be especially relevant for organizations seeking to mitigate the negative health impacts of air pollution on Utahns.



## Data and Methods

In spring 2023, Utah State University (USU) faculty and students started the Utah People and Environment Poll, or UPEP, to track Utahns' perceptions on environmental issues of importance to the state to help inform policy to address environmental issues. A random sample of 3,750 households were contacted using postal mail to respond to the survey online or on paper. 441 individuals responded to the survey for a final total response rate of 12%. Weights for survey design and to adjust for age, education, and gender representation are applied. To access other briefs and learn more about the UPEP, please visit: <https://chass.usu.edu/sociology/canri/upep>

## Research Notes

**RN1.** A composite measure was created from a series of questions that asked about the severity and susceptibility, which identified the level of concern participants had that air quality would impact their health.

**RN2.** A composite measure was created from a series of questions that asked about a person's self-efficacy, which identified the level of belief in their ability to enact certain behaviors.

**RN3.** Using the composite measures created for self-efficacy and actual health behaviors, a correlation was conducted and found a moderate correlation between the two variables.

## About CANRI

The Community and Natural Resources Institute, or [CANRI](#), produces and promotes interdisciplinary and applied social science and humanities research focused on challenges at the intersection of people and the environment in the Intermountain West.

## Acknowledgements

Funding for the UPEP was provided by the USU College of Humanities and Social Sciences (CHaSS), the USU Mountain West Center for Regional Studies, and [Made by Fell](#).

## Suggested Citation

O'Shay, Sydney, Cris Meier, and Bailey Hughlett. 2023. "Utahns See Air Quality as a Problem, But Don't Feel They Can Do Much About It." Research Brief # 2023-4. *Utah People and Environment Poll*.

## About the Authors

**Sydney O'Shay** ([Sydney.oshay@usu.edu](mailto:Sydney.oshay@usu.edu)) is an assistant professor of Communication Studies in the Department of Communication Studies and Philosophy at Utah State University (USU).

**Cris Meier** ([cris.meier@usu.edu](mailto:cris.meier@usu.edu))

is the Extension Community Resource and Economic Development Specialist and an Assistant Professor of Social Work at USU.

**Bailey Hughlett** ([bailey.hughlett@usu.edu](mailto:bailey.hughlett@usu.edu))

is a master's student of Communication Studies in the Department of Communication Studies and Philosophy at USU.

## References

1. World Health Organization. 2022. "Ambient (outdoor) air pollution." World Health Organization. [https://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health?gclid=Cj0KCOjw1OmoBhDXARIsAAAYGSHurRWaeTatFAGSjZH1jWwq1G3mSibPHFn8-5sEBmkzUEhCCPIG7s8aAavgEALw\\_wcB](https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health?gclid=Cj0KCOjw1OmoBhDXARIsAAAYGSHurRWaeTatFAGSjZH1jWwq1G3mSibPHFn8-5sEBmkzUEhCCPIG7s8aAavgEALw_wcB)
2. Errigo, Isabella M., Benjamin W. Abbott, Daniel L. Mendoza, Robert A. Chaney, Andrew Freeman, Jeff Glenn, Peter D. Howe, Thom Carter, Randal Martin, Logan Mitchell, James Johnston, Heather Holmes, Trang Tran, Rebecca J. Frei, Andrew Follett, Samuel Bratsman, Leslie Lange, Derrek Wilson, Audrey Stacey, and Sayedeh Sara Sayedi. 2020. "Human health and economic costs of air pollution in Utah." Retrieved October 3, 2023. (<https://pws.byu.edu/ben-abbott-lab/human-health-and-economic-costs-of-air-pollution-in-utah>)
3. Rimal, Rajiv, and Kevin Real. 2003. "Perceived risk and efficacy beliefs as motivators of change: Use of the risk perception attitude (RPA) framework to understand health behaviours." *Human Communication Research* 29(3):370-399.
4. Bandura, Albert. 1997. *Self-efficacy: The exercise of control*. New York, NY: Worth Publishers
5. Witte, Kim. 1994. "Fear control and danger control: A test of the extended parallel process model (EPPM)." *Communication Monographs* 61:113-134.