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The Effects of Chemical Water Contamination on Public Health

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The Effects of Chemical Water Contamination on Public Health

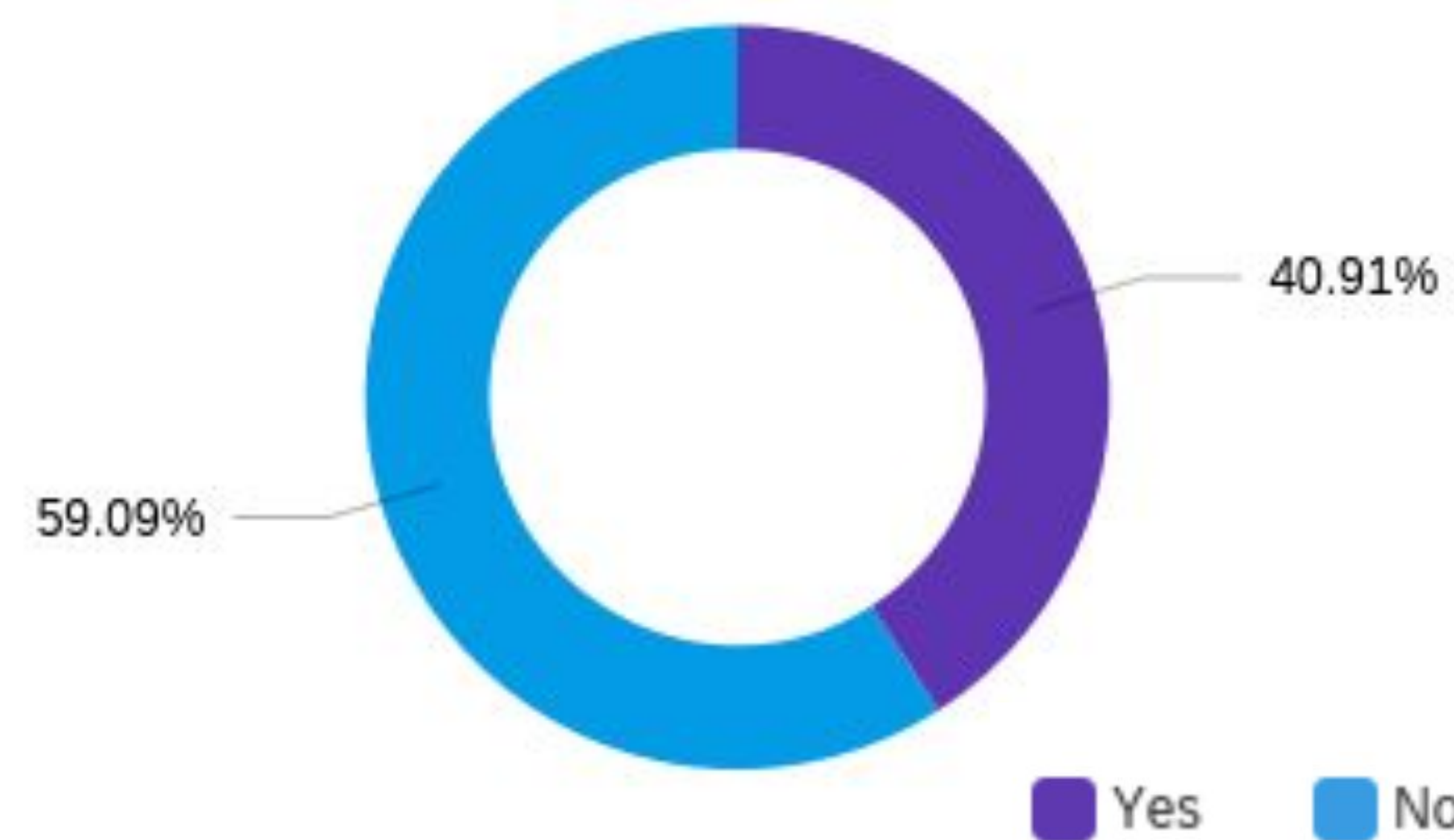
Background

The greater Binghamton area has a history of chemical water contamination and it is affecting the area's public health. This history includes something as drastic as an 81,000 gallon chemical plume in Endicott that pollutes the groundwater and air. Negative health effects ranging from as dire as heightened cancer occurrence to as mundane as dryer skin have been observed, and I believe that the water is the cause.

Methods

- Reviewing literature and news articles to compare and contrast the greater Binghamton area to Flint, MI and Love Canal in Niagara Falls, NY
- An online survey aimed at students, faculty/staff, and residents who are 18 and up in the greater Binghamton area

Chemical water contamination is negatively affecting public health in the greater Binghamton area.

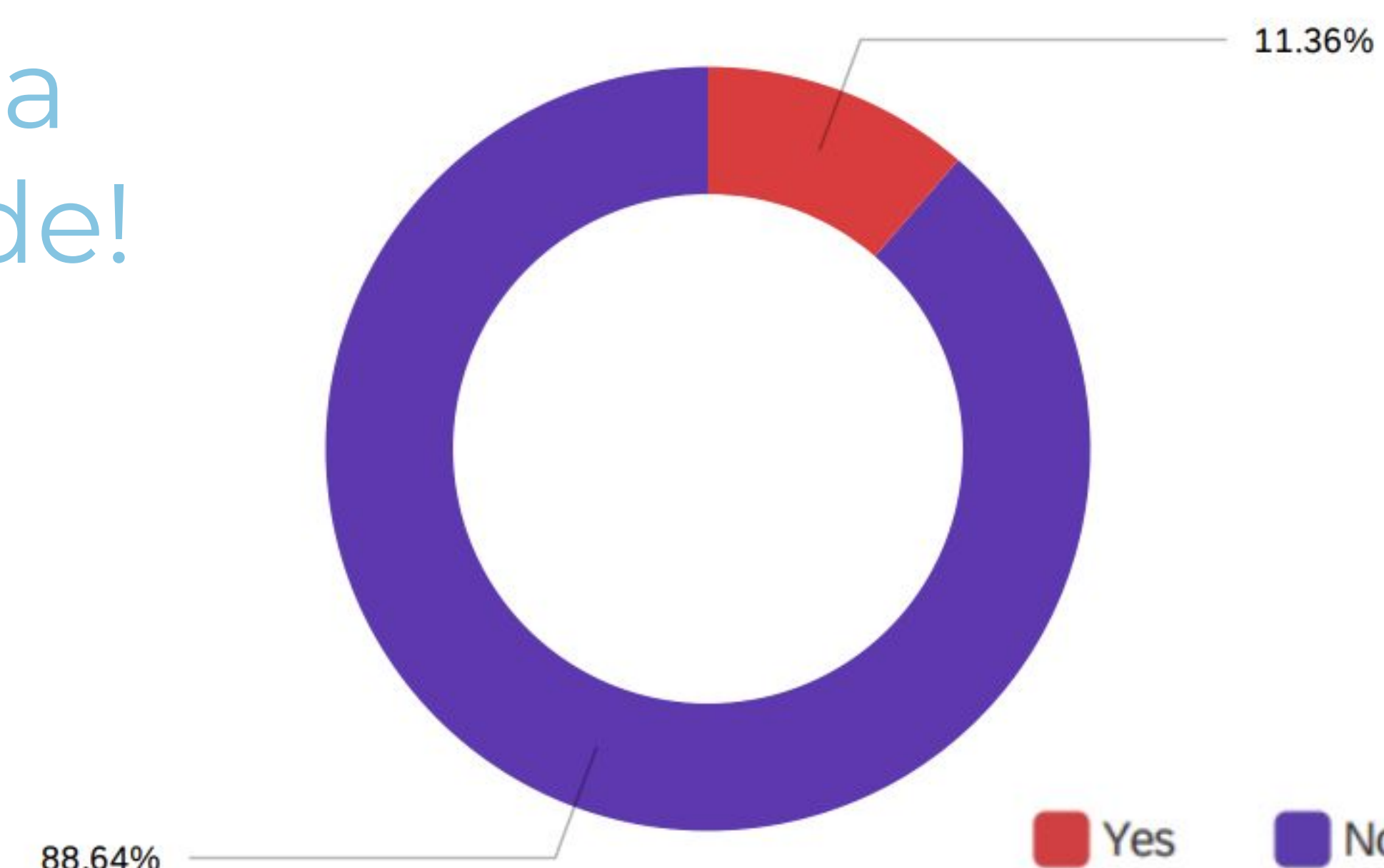


(Left) Awareness of the IBM Endicott chemical spill in 1979, with "Yes" indicating a survey taker's awareness of the event prior to being told in the survey, and "No" indicating unawareness.



My survey can be taken via this QR code!

(Below) Awareness of the United State's Environmental Protection Agency's placement of two Vestal water supply wells on the National Priorities List due to chemical contamination, with "Yes" indicating a survey taker's awareness of the event prior to being told in the survey and "No" indicating unawareness.



My survey data as of now compared to other existing literature on Flint, MI and Love Canal and news articles suggests that the greater Binghamton area is still dealing with negative public health effects of chemically contaminated water.



"One of the original buildings at the IM Endicott campus" by Wikimedia Commons user Rosemaryetoufee, licensed under CC BY-SA 4.0

Results

My survey is still ongoing and therefore my results are in progress, however, a general trend of negative health effects (though mild) has been noticed. These include dryer skin, scalp, and gastrointestinal issues.

Currently, most surveyees have responded "No" in most awareness questions, two of which are shown in the pie charts to the left. The blue/purple one is surveyee awareness of the IBM Endicott spill, and the purple/red one is surveyee awareness of two Vestal wells being on the U.S. Environmental Protection Agency's National Priorities List.

References and the full proposal can be found here:

