

Senior Research Outline, Figures, and References  
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Intro to Geologic Research  
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## Introduction

Radon is a naturally-occurring gas...

## Research Question and/or Hypothesis

Radon can be a real danger, and is something the general public should learn more about. How can radon be communicated to the public most effectively?

## Geologic Setting or Background

- What is radon?
  - An explanation of what radon is / how it forms
  - An explanation of how radon can cause cancer
- Overview of prior radon research in Williamsburg
  - Williamsburg has been described as low-risk for radon, which is generally true, but there are areas of high risk

Research on radon at William and Mary started around 1989 when Jennifer M. Cooper wrote her thesis investigating the Yorktown Formation as a potential source of radon in the Williamsburg area.

her big discovery was that a house had 30 picocuries per Liter, and even more underneath!

(???)

The second person to work on this was Tracy Whitesil

Borne (94?) – summarized earlier work, compared Yorktown formation to different formation

In 2020, Dorian Miller created a “risk map” of + Mapping of risk levels in Williamsburg area

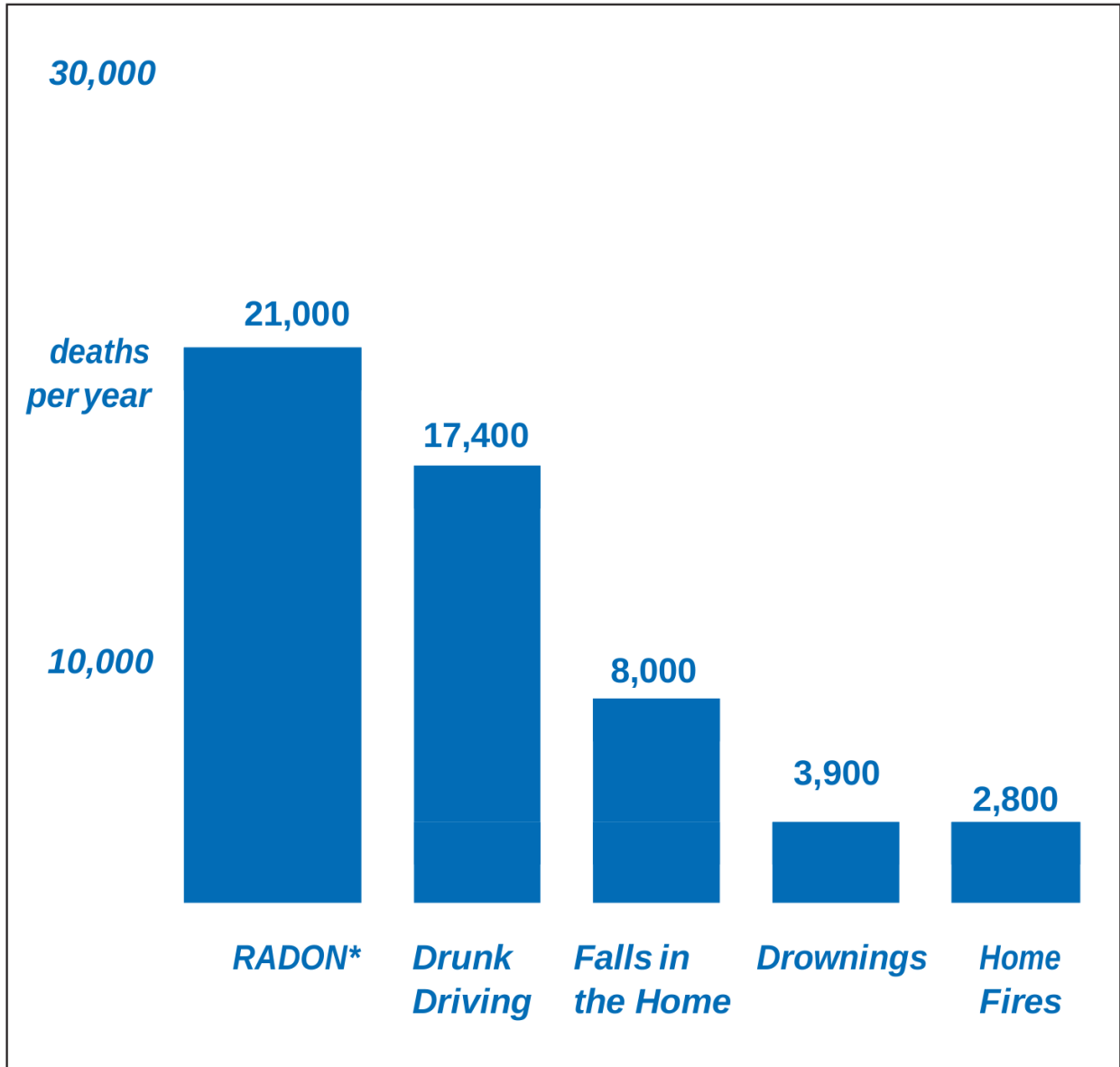


Figure 1: Radon risk assessment map made by Dorian Miller (Berquist et al. (2020))

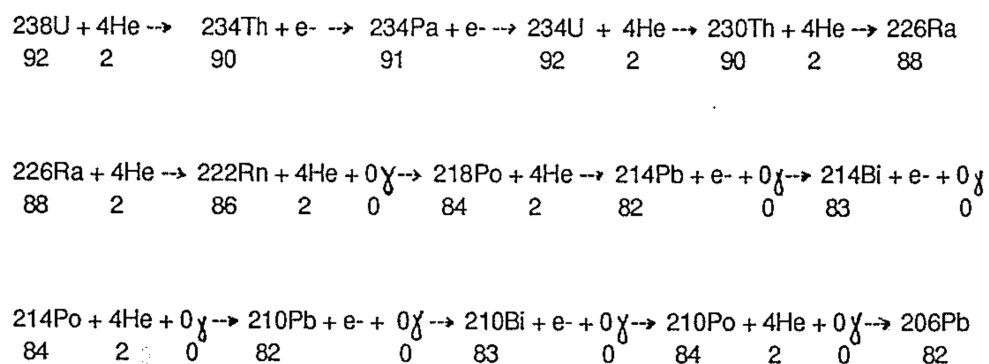
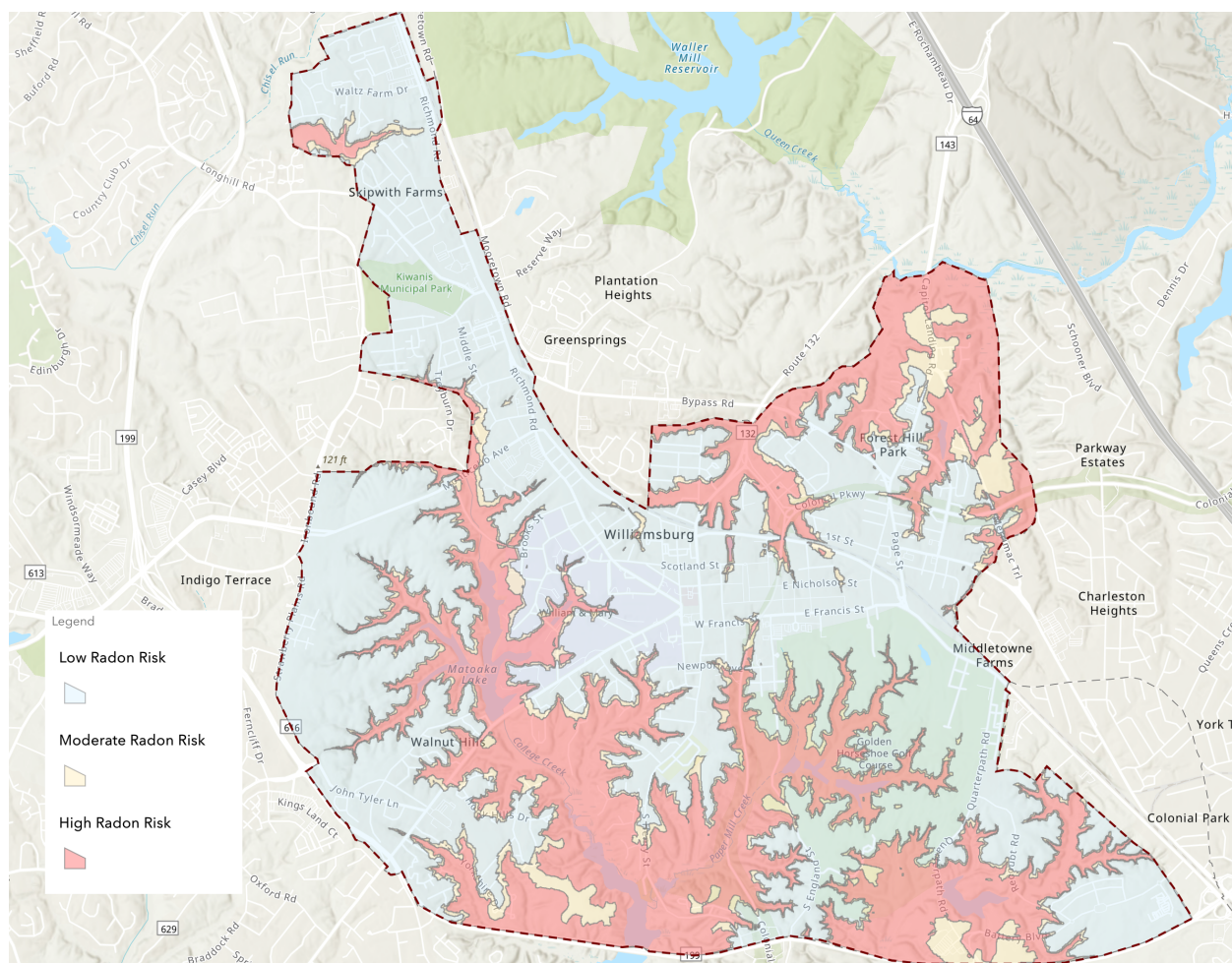


Figure 2: Radon risk assessment map made by Dorian Miller (Berquist et al. (2020))



(Berquist et al., 2020)

In 2021, Zoey Mondshine worked to confirm the risk map, i

## Materials and Methods

2-4 paragraphs

## References

Berquist, R., Kaste, J., and Miller, D., 2020, Radon in Williamsburg Area Homes (DRAFT): <https://storymaps.arcgis.com/stories/10f6d3d7c0014a1087fe3ef14f306520> (accessed April 2021).

## Budget

(table outlining expected project costs)

## Timeline

(list of dates to finish (if applicable): field work, sample collection, lab work, data collection, data analyses)