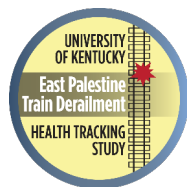




College of Public Health

Department of Epidemiology and Environmental Health



University of Kentucky East Palestine Train Derailment Health Tracking Study

Preliminary findings: August 21, 2024

In April 2023, the University of Kentucky launched the East Palestine Train Derailment Health Tracking Study. The goals of the research are to:

- Establish a cohort of residents to evaluate potential long-term health impacts related to the derailment.
- Answer residents' questions about their exposures and health.

A few representative preliminary findings are provided below.

Health Tracking Survey

Approximately 380 residents of East Palestine and the surrounding area completed the initial survey to share their experiences, concerns, and health symptoms. Most of these have continued to participate by completing a second and third follow-up survey in Fall 2023 and Summer 2024.

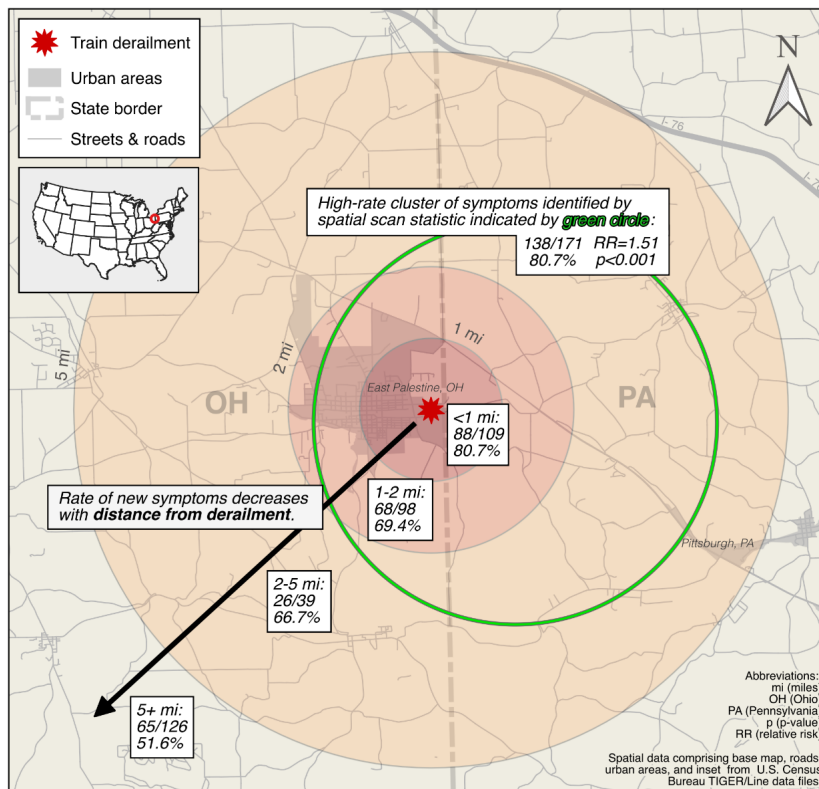
In Summer 2024

- Approximately half of the participants indicated they continue to experience upper airway symptoms and non-sinus headaches.

- Many participants, including children, continue to report lower airway symptoms, gastrointestinal issues, and rashes.
- Half continue to experience elevated levels of stress, and one third still had symptoms of PTSD.
- Nearly half are still relying on bottled water as their primary drinking source.
- 30 percent report odors in the community that they believe are related to the derailment.
- 10 percent report odors in their homes that they believe are related to the derailment.
- Some participants have not permanently returned home since the derailment.

Figure 1. New upper respiratory symptoms after train derailment

In Spring 2023, over 80 percent of participants who live within one mile of the derailment site reported new upper respiratory symptoms.



Data shown in the figure above:

Distance from derailment	Participants reporting new symptoms	Percentage
Less than 1 mile	88 of 109	80.7%
1 to 2 miles	68 of 98	69.4%
2 to 5 miles	26 of 39	66.7%
5 or more miles	65 of 126	51.6%

High-rate cluster identified by spatial scan statistic: 138 of 171 participants (80.7%), relative risk 1.51, p less than 0.001.

Funding for this research

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