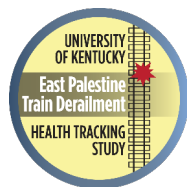




College of Public Health

Department of Epidemiology and Environmental Health



University of Kentucky East Palestine Train Derailment Health Tracking Study

Survey #4 (Spring 2025)

August 4, 2025

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 from the most recent survey are provided below.

Health Tracking Survey

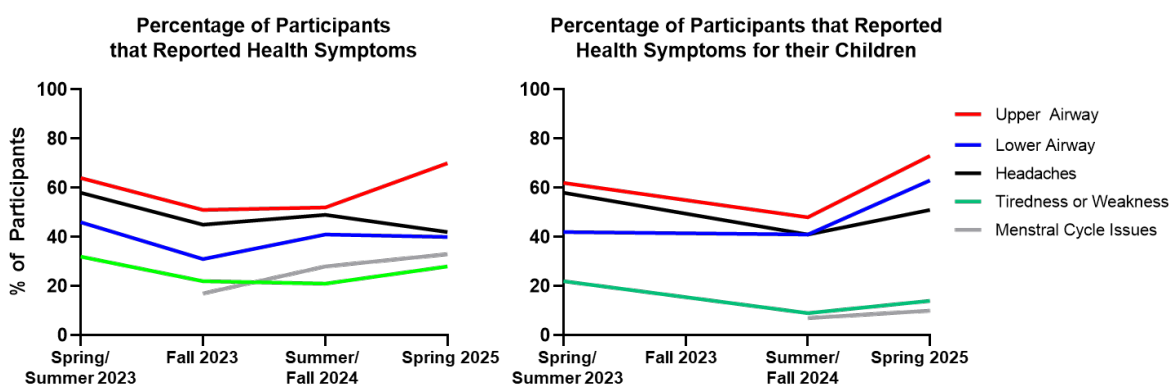
Approximately 400 residents of East Palestine and the surrounding area completed the initial survey to share their experiences, concerns, and health symptoms. Nearly 130 of these reported having at least one school-aged child living in their home. Follow-up surveys were completed in Fall 2023, Summer 2024, and Spring 2025. Below is a summary of findings from the Spring 2025 survey and trends over time.

In Spring 2025

- 70 percent of participants reported upper airway symptoms including nose irritation, sinus drainage, sinusitis, eye irritation or pain, and sore throat.
- 40 percent reported lower airway symptoms such as coughing and wheezing.
- 42 percent reported headaches, including non-sinus headaches.
- 25 percent experienced tiredness or weakness.
- 49 reported having school-age children. Of these: 73 percent reported upper airway symptoms in their children, 63 percent lower airway symptoms, and 51 percent headaches.
- 33 percent of women aged 18 to 45 reported experiencing issues with their menstrual cycle.
- 29 percent of participants screened positive for PTSD. The percentage is similar for both males and females.

Health symptom trends across surveys

Below are graphs that show the health symptoms reported for each survey. The number of participants differed for each survey.



Note: The number of participants differed for each survey

Data shown in the left chart (symptoms in participants themselves), percent reporting:

Symptom	Spring/Summer 2023	Fall 2023	Summer/Fall 2024	Spring 2025
Upper airway	64%	51%	52%	70%

Symptom	Spring/Summer 2023	Fall 2023	Summer/Fall 2024	Spring 2025
Lower airway	46%	31%	41%	40%
Headaches	58%	45%	49%	42%
Tiredness or weakness	32%	22%	21%	28%
Menstrual cycle issues	Not measured	17%	29%	33%

Data shown in the right chart (symptoms in participants' children), percent reporting:

Symptom	Spring/Summer 2023	Fall 2023	Summer/Fall 2024	Spring 2025
Upper airway	62%	—	48%	73%
Lower airway	42%	—	41%	63%
Headaches	58%	—	41%	51%
Tiredness or weakness	22%	—	9%	14%
Menstrual cycle issues	—	—	7%	11%

Note: Approximate values read from the line charts. Em dash indicates a data point not shown in the graph.

Next Steps

Our team applied for the funding opportunity issued by the National Institute of Environmental Health Sciences (NIEHS) to continue our research and collaboration with the community. Information received from our ongoing surveys, our Community

Advisory Board, and feedback from participants and other community members have enabled us to assemble a proposal to assess respiratory function, mental health, immune function, reproductive health, and kidney and liver function. Our proposal expanded our study to include children 8 years of age and older.

Funding for this research

This research is supported in part by funds held by the Principal Investigator at the University of Kentucky, a pilot grant from the National Institute of Environmental Health Sciences (NIEHS) Environmental Health Science Core Center at the University of Kentucky Center for Appalachian Research in Environmental Sciences (UK-CARES, NIEHS P30 ES026529), NIEHS R21 ES036036, and the National Center for Advancing Translational Sciences, NIH (UL1TR001998).

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