

ENVIRONMENTAL HEALTH PROJECT

DEFENDING PUBLIC HEALTH SINCE 2012

environmentalhealthproject.org

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Environmental Health Project Statement on Train Derailment and Fire in East Palestine, Ohio

Background

Approximately 50 Norfolk Southern freight train cars [derailed and caught fire](#) while traveling through East Palestine, Ohio, at about 9 p.m. on Friday, February 3. In the following days, East Palestine Mayor Trent Conaway declared a state of emergency and ordered the evacuation of a one-mile zone around the crash site, which lies approximately 50 miles northwest of Pittsburgh, PA.

Officials of the National Transportation Safety Board reported that 20 of the train's derailed cars were carrying hazardous materials, with 5 of them transporting vinyl chloride. Vinyl chloride is used to make the hard plastic resin used in a variety of plastic products, such as PVC.

A [controlled vent and burn](#) of toxic chemicals took place on February 6 to reduce the risk of a catastrophic explosion. Six days later, the fire was still burning. Residents were permitted to return to the area on February 8. The Pennsylvania Department of Health has provided [health guidance](#) for residents returning home after the evacuation order was lifted.

EHP has provided [health information](#) for residents concerned about hazardous materials that may be present nearby.

Train derailments have become commonplace in the region. At least seven other major derailments have occurred in the Southwestern Pennsylvania/Western Ohio area over the past five years. According to the Federal Rail Administration, at least one train “slips off” the tracks every day in the United States.

EHP's Statement

Whenever highly toxic, highly flammable chemicals intersect with human populations, there can be lethal consequences. The transportation of these chemicals—whether by train, truck, pipeline, or barge—always raises the risk that accidents will happen and leaks will occur.

These toxic emissions can threaten public health not only in the immediate vicinity but for many miles away, particularly downwind. Breathing high levels of vinyl chloride, for example, can cause unconsciousness or death. Short-term exposure can lead to dizziness and sleepiness. Additionally, as greenhouse gases, many emitted substances contribute heavily to climate warming.

While accidents get immediate attention in the news, toxic emissions that contaminate air, water, and soil can harm people for years afterwards, causing any number of health issues, including asthma, heart complications, birth defects, and cancer, among others. Vinyl chloride in particular is associated with increased risk of cancer in the liver, brain, lungs, and blood, according to the [National Cancer Institute](#).

Government agencies must hold transporters to strict standards of operation in order to reduce the likelihood of potentially tragic and chronic health outcomes. This is especially true in Southwestern Pennsylvania and throughout Appalachia, where existing industry relies heavily on rail for transporting toxic chemicals and where many policymakers are currently promoting the creation of petrochemical and hydrogen hubs.

By way of example, the recently started Shell ethylene cracker plant in Beaver County, Pennsylvania, requires large quantities of climate-warming methane gas as well as significant amounts of toxic chemicals to make plastics. Last fall, in just two months of operation, the plant [exceeded yearly state emissions](#) limits, and the Pennsylvania Department of Environmental Protection issued the plant a notice of violation. The plant is [the second largest emitter](#) of volatile organic chemicals in the state. These operating emissions, combined with the very real threat of accidental spills and leaks from the transportation of raw materials, increase the risk of public health impacts.

EHP encourages all residents to follow local and state precautions if they are living in areas impacted by this train derailment. If individuals are concerned about health impacts, they should reach out to a trusted healthcare professional. More information on [how to protect your health](#) from toxic emissions can be found on our website.

**Alison L. Steele, Executive Director
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About EHP

The Environmental Health Project (EHP) defends public health in the face of oil and gas development. We provide frontline communities with timely monitoring, interpretation, and guidance. We engage diverse stakeholders: health professionals, researchers, community organizers, public servants, and others. We do so because knowledge protects health.