Name

STUDENT

HANDOUT

Air Toxics in the Community

|  |  |
| --- | --- |
| Scenario 1: Portland, Oregon | Scenario 2: Addyston, Ohio |
| What are the toxic chemicals?  Where did they came from?  What are the health effects?  Who first identified the pollution problem?    How did they discover the problem?  How did scientists study the pollution?  How did the government follow up?  How did the community respond (what did they do?) | The specific names of the toxic chemicals are not mentioned in this video.  Where did they came from?  What are the health effects?  Who first identified the pollution problem?    How did they discover the problem?  How did scientists study the pollution?  How did the government follow up?  How did the community respond (what did they do?) |

**Compare & Contrast**

What is similar the air pollution problems in Portland and Addyston?

What is different about the air pollution problems in Portland and Addyston?

**What would YOU do?**

If you believed there was toxic air pollution in your community, who would you talk to?

What would you ask them to do?

What kinds of things could your community do if they found out there was toxic air pollution?

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Air Toxics and Criteria Pollutants

**What are Air Toxics?**

Hazardous air pollutants, also known as toxic air pollutants or air toxics, are pollutants that cause or may cause cancer or other serious health effects. They may also cause damage to the environment. Toxic air pollutants are in things like gasoline and paint strippers. They are also used by different businesses such as dry cleaners. The US Environmental Protection Agency (EPA) is required to control [187 different hazardous air pollutants](https://www.epa.gov/haps/initial-list-hazardous-air-pollutants-modifications).

**Where do Air Toxics Come From?**

Most air toxics come from human-made sources, including [mobile sources](https://www.epa.gov/OMSWWW/toxics.htm) (e.g., cars, trucks, buses) and stationary sources (e.g., factories, refineries, power plants), as well as [indoor sources](https://www3.epa.gov/iaq/) (e.g., building materials and activities such as cleaning).

**How are Air Toxics Different from Criteria Pollutants?**

Criteria air pollutants are more common than air toxics, and they are less harmful in small amounts than air toxics. They are found all over the world, and they come from many different sources. There are only 6 criteria pollutants: particulate matter, ground-level ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, and lead. Like air toxics, the criteria pollutants can hurt human health and cause environmental damage, so they are also regulated by the EPA.

Fill in the Venn diagram below based upon what you know about air toxics and criteria pollutants.

Criteria Pollutants

Air Toxics

**Sources:** Pollutants and Sources, US EPA**:** <https://www3.epa.gov/airtoxics/pollsour.html>

Managing Air Quality – Air Pollutant Types, US EPA: <https://www.epa.gov/air-quality-management-process/managing-air-quality-air-pollutant-types>