Hazardous Air Pollutants: Sources and Exposure

Where do hazardous air pollutants come from?

Most air toxics originate from human-made sources, including mobile sources (e.g., cars, trucks, buses) and stationary sources (e.g., factories, refineries, power plants), as well as indoor sources (e.g., some building materials and cleaning solvents). Some air toxics are also released from natural sources such as volcanic eruptions and forest fires.

How are people exposed to hazardous air pollutants?

People are exposed to toxic air pollutants in many ways that can pose health risks, such as by:

- Breathing contaminated air.
- Eating contaminated food products, such as fish from contaminated waters; meat, milk, or eggs from animals that fed on contaminated plants; and fruits and vegetables grown in contaminated soil on which air toxics have been deposited.
- Drinking water contaminated by toxic air pollutants.
- Ingesting contaminated soil. Young children are especially vulnerable because they often ingest soil from their hands or from objects they place in their mouths.
- Touching (making skin contact with) contaminated soil, dust, or water (for example, during recreational use of contaminated water bodies).

Once toxic air pollutants enter the body, some persistent toxic air pollutants accumulate in body tissues. Predators typically accumulate even greater pollutant concentrations than their contaminated prey. As a result, people and other animals at the top of the food chain who eat contaminated fish or meat are exposed to concentrations that are much higher than the concentrations in the water, air, or soil.

Can I find out about the toxics in my community?

- National Air Toxics Assessment -- This site provides emissions and health risk information on 33 air toxics that present the greatest threat to public health in the largest number of urban areas. Maps and lists are available and can be requested by state or county level.
- Toxics Release Inventory -- This database includes information for the public about releases of toxic chemicals from manufacturing facilities into the environment through the air, water, and land. You can access the data by typing in your zip code.