
Mercury - Emergency Spill & Release Facts

Introduction

The United States Environmental Protection Agency (EPA) has prepared the following information for the benefit of communities affected by mercury spills or releases. Teachers, school administrators, parents, and other citizens will learn how to protect themselves from the hazards of mercury. Included are basic definitions, health concerns, routes of exposure, procedures EPA uses in responding to mercury spills and releases, and ways communities can avoid exposure to mercury contamination.

What Is Mercury And How Is It Used?

Mercury is a naturally occurring element that exists in a variety of forms. It is found in soil, water, rocks, and living organisms, and it can exist as a gas, a liquid, or a solid.

The most common form of mercury is metallic, also known as threat comes from the vapors of liquid mercury, which are readily absorbed by the lungs and could potentially reach the brain. Mercury can also enter the body through the skin.

Levels of mercury can be measured in blood, urine, and scalp hair. Although it can take months for mercury to be eliminated from the system, tests may be helpful in predicting and treating potential health effects.

How Does EPA Respond?

EPA responds to emergency spills and releases that threaten public health and the environment. Examples of such scenarios are: chemical fires or explosions; uncontrolled hazardous substance releases resulting from accidental spills; contamination of a water supply; or substance releases from abandoned industrial facilities.

The National Hazardous Substances and Oil Emergency Response Program consists of a network of federal, state, and local officials. It includes scientists, engineers, contractors, and other emergency response personnel trained to protect public health and the environment in a crisis situation. This team performs a broad range of protective response measures on emergencies ranging from large oil spills to chemical accidents in the home or school. The response process begins when a spill is discovered or the National Response Center (NRC) is notified of a possible hazardous substance release. The NRC then notifies a Federal On-Scene Coordinator (OSC), who determines what level of response is necessary based on conditions at the emergency site. The OSC calls on a network of technical experts and coordinates closely with various state and local agencies and organizations.

At times, an OSC may determine that federal response assistance is not required. This can occur if the party responsible for the release is performing the necessary cleanup, or if the situation is being adequately addressed by state or local response personnel. The OSC may assign responsibility to state and local groups such as health and environmental officials, poison control centers, substance and disease specialists, or local fire departments.

What Takes Place At A Mercury Spill Site?

Once EPA is contacted, the OSC and a team are sent to investigate and remedy the situation. Activities may include sealing off the spill site, blocking vapor release from ventilation systems into other areas of a building, covering floor drains, and heading off other potential threats of environmental release. The public is not allowed back in a contaminated area until the OSC determines that the contamination has been removed.

What Precautions Can People Take To Avoid Mercury Contamination?

Here are some tips to avoid contamination in the event of a small mercury spill:

- Contact your local poison control center, fire department, or public health board for advice on cleanup

- Ask everyone to leave the area

- Open windows and doors in the area of the spill to ventilate the area during cleanup; otherwise, seal off the area as well as

possible

Do NOT use a vacuum cleaner to clean up a mercury spill. A vacuum cleaner will spread the mercury vapors throughout the area, thereby increasing the chance of exposure.

In the event of a large mercury spill (more than a broken thermometer's worth), immediately evacuate everyone from the area, seal off the area as well as possible, and call your local authorities for assistance.

How Can People Help Prevent Mercury-Related Contamination?

EPA encourages public participation in preventing mercury-related emergencies. EPA conducts informational workshops and seminars, prepares written materials, and offers lectures and question and answer sessions to keep the public informed about protecting human health and the environment.

What Other Information Is Available?

You can contact the following local authorities in your area:

Poison Control Center

Fire Department

Public Health Department

Other Resources

EPA Superfund Hotline: (800) 424-9346

Superfund Home Page (<http://www.epa.gov/superfund/>)

Portions of the material in this fact sheet courtesy of the Illinois Department of Public Health

URL: <http://www.epa.gov/superfund/tools/merc/index.htm>
Web Page maintained by Office of Emergency and Remedial Response
Comments: carey.pat@epa.gov.