Hazardous Substances Emergency Events Surveillance

FAST FACTS

What's being done to protect Oregonians from chemical spills?

The Oregon Department of Human Services Public Health Division operates the Hazardous Substances Emergency Events Surveillance (HSEES)¹ system to identify and describe immediate health effects associated with spills or releases of hazardous substances into the environment.

Oregon's HSEES works with other government agencies to monitor these releases, investigates factors leading to spills and injuries, and reports the results to state and local organizations as well as the Agency for Toxic Substances and Disease Registry (ATSDR)² for inclusion in a national database.

Investigation of an incident attempts to determine what specific substances may have been released to the environment, whether anyone was exposed to these substances, what immediate injuries or health problems may have resulted from exposure, and what efforts were made to evacuate people or to shelter them in homes, workplaces, or businesses in the area.

How does this help to protect the public?

These monitoring efforts provide valuable incident-specific information on:

- What substances are released
- Who is injured
- Types of injuries or illnesses
- How the incident happened

This information allows HSEES to provide data driven recommendations on effective ways to handle incidents for:

- Emergency responders
- Health care personnel
- Planners
- Public health personnel
- Others who play a role in protecting the public

The goal of HSEES is to reduce deaths and injuries for responders, workers, and the general public due to acute releases of substances into the environment.

What kinds of spills and releases does HSEES monitor?

The Oregon HSEES monitoring program focuses on spills and releases that qualify as hazardous substance emergencies. These incidents may include any uncontrolled or illegal releases — or threatened releases — of potentially hazardous substances except petroleum.*



The materials released can be gases, vapors, solids or particles into the air, water, or soil. Threatened releases are also important to understand the factors that lead to a release.

Oregon HSEES monitors spills and releases whenever the amount of material released makes it necessary to take protective or remedial action — that is, when it becomes necessary to clean up, remove or neutralize the spilled or leaked chemicals, or to evacuate people from the area.

What kinds of problems are most likely to result from a leak or spill?

Releases and spills are most often relatively brief events, and any human exposure to hazardous materials is also usually brief. If they do have any impact on health, these events are most likely to result in acute health effects — that is, they are most likely to cause immediate illness or injury. The short-term health problems associated with chemical spills or leaks can vary in severity — ranging from headaches to potentially fatal illnesses and injuries.

How does Oregon HSEES learn about leaks and spills?

The HSEES system obtains information about a hazardous substance emergency from a variety of sources. Incident reports are sent to HSEES by the Oregon Emergency Response System (OERS), the National Response Center, the Oregon State Fire Marshal, and the U.S. Department of Transportation. HSEES staff follow-up to find out more about the incident by examining the reports and by talking with personnel engaged in environmental protection activities, law enforcement, fire fighting, and health care who are directly involved in the incident.

Although reports to HSEES are voluntary, OERS is the designated agency in Oregon to receive required reports of spills.

TO REPORT A SPILL OR RELEASE, CALL the Oregon Emergency Response System (OERS) 1-800-452-0311.

How does Oregon use the data from the monitoring program?

Oregon is one of 14 states currently contributing information to the ATSDR national database. Oregon HSEES uses this information to monitor state trends regarding specific hazardous materials and their adverse health effects, to develop effective strategies to prevent releases or exposures to materials released, and prevent future releases and adverse effects. The data are also used to identify factors that increase health risks and to develop effective strategies to prevent injuries, illness, and deaths. Oregon HSEES staff compare our data with that from other states to see if the differences can give clues to causes of spills and releases.

The HSEES data can be used to help various agencies draft legislation, develop rules and regulations, create guidelines for responding to hazardous substance emergencies, and develop better procedures for protecting workers. These efforts help to minimize the health impact from hazardous substance that may be released to the environment during future spill incidents. If you have questions or comments about the role of Oregon HSEES in monitoring chemical or other hazardous substance releases and spills, or report about a release, please contact Oregon HSEES staff at 971-673-0400.

For more information, publications and reports, please visit our Web site: http://egov.oregon.gov/DHS/ph/hsees/.

^{*}The Petroleum Exclusion clause of the CERCLA legislation excludes any forms of petroleum that have not been refined to the point of becoming single-chemical products such as xylene.

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² Agency for Toxic Substances and Disease Registry, U.S. Public Health Service