



## FACT SHEET

# Hazardous Substances Emergency Events Surveillance System

## Overview

In 1990, ATSDR established the Hazardous Substances Emergency Events Surveillance (HSEES) system to collect and analyze information about 1) sudden uncontrolled or illegal releases of hazardous substances that require cleanup or neutralization according to federal, state, or local law and 2) threatened releases that result in public health action, such as evacuation. The HSEES system aims to reduce injury and death among first responders, employees, and the general public that result from releases of hazardous substances. It is the only federal database designed specifically to address the public health effects from releases of hazardous substances.

## What a hazardous substance event is

A HSEES event is any release or threatened release of at least one hazardous substance (excluding releases involving only petroleum products). A substance is considered hazardous if it might reasonably be expected to cause adverse health effects to humans. Events are included in the system, if the amount released, or threatened to be released, is required to be cleaned up according to federal, state, or local law. In addition, for threatened releases to be included in HSEES, they must result in an action to protect public health, such as evacuation.

## Who provides information to the HSEES system

Fifteen state health departments participate in HSEES through cooperative agreements with ATSDR. These states are Colorado, Florida, Iowa, Louisiana, Michigan, Minnesota, Missouri, New Jersey, New York, North Carolina, Oregon, Texas, Utah, Washington, and Wisconsin. Participating states provide information about the release, such as time and place, circumstances, substances involved, persons affected, and public health action taken.

## What HSEES system information has shown

- Approximately 9,000 hazardous substances releases occur annually in the 15 states reporting.
- Releases at facilities account for 70%–75%, and transportation-associated releases account for 25%–30%, of reported events.
- Most releases occur on weekdays between 6 AM and 6 PM.
- Releases tend to increase in spring and summer when more shipments occur of pesticides and fertilizers for agricultural activities.
- Equipment failure and human error cause most releases at facilities.
- Human error and equipment failure cause most releases during transport.

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- More than 90% of events involve the release or threatened release of only one hazardous substance.
- Releases of hazardous substances most often injure employees, followed by the general public and—less frequently—first responders and school children.
- Respiratory irritation and eye irritation are the most commonly reported symptom or injury.
- Approximately 50% of people who reported developing symptoms or injuries from a HSEES event are treated at a hospital and released.

### **How HSEES system data are used**

States use information from the HSEES system to develop strategies for reducing injuries and death. Appropriate prevention outreach activities can provide industry, responders, and the general public with knowledge to prevent chemical releases and to reduce injuries and death when such releases occur. Researchers and other government agencies request HSEES data for their prevention activities.

### **For additional information**

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For more information, visit [www.bt.cdc.gov](http://www.bt.cdc.gov) or call the CDC public response hotline at 888-246-2675 (English), 888-246-2857 (español), or 866-874-2646 (TTY)