

U.S. Hazardous Material Laws

- > **The USA Patriot Act of 2001** passed soon after 9/11. A state may not issue a hazmat license to any individual unless the U.S. Transportation Secretary determines that the individual poses no security risk, this includes license renewals. Also, the U.S. Attorney General must conduct an international background check.
- > **Hazardous Material Transportation Uniform Safety Act of 1990 (HMTUSA)** clarified the confusing and conflicting state, local and federal hazardous materials regulations.
- > **Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA/Superfund)** oversees the cleaning up of thousands of known contaminated sites across the U.S.
- > **Resources Conservation & Recovery Act of 1976 (RCRA)** was the first national hazmat law. It identified hazardous wastes, listed guidelines for using and treating them and developed a method to track the hazardous wastes from origin/creation to eventual disposal.
- > **Toxic Substances Control Act (1976)** This law allows the EPA to monitor production, use and health and environmental effects of various chemicals.
- > **The Hazardous Materials Transportation Act of 1975** Involving the Energy Department, "it improves the regulatory and enforcement authority of the Transportation Secretary to protect against risks to life and property which are inherent in the transportation of hazmats in commerce."

The American Society of Safety Engineers (ASSE)

Provides technical publications, training courses and seminars on these issues as well as having transportation and environmental practice specialty sections. Information can be found at: www.asse.org, customerservice@asse.org or by calling 847-699-2929.

Founded in 1911, the Des Plaines, Illinois-based American Society of Safety Engineers (ASSE) and its more than 30,000 individual occupational safety, health and environmental professional members located globally believe that providing key resources, such as this educational brochure, and safety information will help prevent tragedies, injuries and illness.



AMERICAN
SOCIETY OF
SAFETY
ENGINEERS



Hazardous Materials - Safety Information Guide



North American
Occupational Safety
and Health Week

AMERICAN SOCIETY OF SAFETY ENGINEERS
1800 E. Oakton St., Des Plaines, Illinois 60018
847.699.2929 | fax 847.296.3769 | www.asse.org
www.asse.org/haosh
email customerservice@asse.org

Hazardous Materials:

A Safety Information Guide

Each year 3.1 billion tons of hazardous materials (hazmats) are transported throughout the U.S. by truck, rail, pipeline and water, the majority without incident. The tonnage of hazmats being transported is increasing and with our changing world the American Society of Safety Engineers (ASSE) has developed this guide to provide key information on what hazmats are, the hazmat laws and who to contact should an emergency occur. It is important to know that not just anyone or any company can clean up a hazmat spill or accident area. This guide provides the information needed on this and more.

In addition to the federal government, every state and local community has key information and contingency plans in place, updated regularly, on hazmats and hazmat emergencies. We urge you to review them now by going on-line or calling your local government.

At work and in your community, you can always turn to your workplace safety, health and environmental officer, fire department and emergency service personnel for guidance on safety and health issues. **For more info, contact us at www.asse.org or 847-699-2929.**

Facts and statistics

According to the U.S. Department of Transportation (DOT), in the past 10 years there has been major growth in the amount of hazmats transported on a daily basis resulting in a high level of risk. According to the DOT:

- > In 2005 there were a total of 15,798 hazmat incidents in the U.S. resulting in 33 fatalities, 866 injuries and causing \$50,719,094 in damages
- > Illinois had the most incidents in 2003 followed by Texas (2) and Ohio (3)
- > 3.1 billion tons of hazmats are transported annually
- > More than 800,000 hazmat shipments are transported daily
- > 500,000 daily shipments involve chemical and allied products
- > 300,000 daily shipments involve petroleum products
- > 10,000 daily shipments involve hazardous and medical waste
- > 94 percent of individual shipments are carried by truck
- > 5 percent of individual shipments are carried by air

> Less than 1 percent of individual shipments are carried by rail, pipeline and water — however, these shipments are the largest

What are hazardous materials (hazmats)?

Many hazmats do not have a taste or an odor. Hazmats are any material that has properties that may result in risk or injury to health and/or destruction of life or facilities. Some can be detected because they cause physical reactions such as watering eyes or nausea. Some exist beneath the ground surface and have an oil or foam-like appearance. The substance can be identified from placards, labels or markings on the transporter. Hazmats can be:

- > **Corrosive** — strong enough to eat away at steel drums or human skin
- > **Ignitable** — present a fire hazard because they are flammable at relatively low temperatures
- > **Reactive** — can explode or release deadly fumes by mixing with water or reacting with heat or pressure
- > **Radioactive** — both high and low radioactivity that can lead to dangerous side effects for thousands of years
- > **Toxic** — are poisonous; exposure to these types of materials can result in severe health problems
- > **Infectious** — are also toxic wastes, but in a different category, they are infected with some type of germ, bacteria or virus that could cause disease in humans and animals

Hazmat emergency response information

Federal officials say the **general public should first call 911** if they witness a hazardous material emergency, such as a truck accident or a train derailment involving hazmats. Without putting yourself in danger, report the size and markings on the vehicles, specifically the color of the placards and the identification number, if possible. **Please note the following organizations, which have important information on hazmats:**

National Response Center (NRC)

This is the national point of contact for reporting all chemical, radiological and etiological discharges into the environment anywhere in the U.S. and its territories. Employers are required to notify the NRC whenever reportable quantities of hazmats are spilled or released into the environment. The NRC never closes, operating 24/7, every day of the year.

Contact them at: 1-800-424-8802 or <http://www.nrc.uscg.mil/nrchp.html>

Department of Transportation's Office of Hazardous Materials Safety (OHM)

A national safety program charged with minimizing the risks to life and property inherent in the commercial transportation of hazmats. The OHM provides information regarding proper shipment of hazardous substances, including labeling of packages and placarding of vehicles. Contact: U.S. DOT, Research and Special Programs Admin., Office of Hazardous Materials Safety, 400 7th St., S.W., Washington, DC 20590, or call the hazmat information center at 1-800-HMR-4922 (1-800-467-4922) - <http://hazmat.dot.gov>. Training info can be found at <http://hazmat.dot.gov/training/training.htm>

U.S. Environmental Protection Agency (EPA)

Works with businesses, state and local authorities to make sure hazmats are properly treated and disposed of and oversees cleanup of hazardous waste sites. Contact: <http://www.epa.gov> and for recognizing hazmats go to www.epa.gov/epaoswer/osw/hazwaste.htm#hazwaste. A list of 300 hazmats can be found at: http://www.epa.gov/enviro/html/emci/chemref/complete_index.html

State Emergency Response Commissions (SERC)

They are required in each state by the Superfund Act. They designate the emergency planning districts, appoint local emergency planning committees and supervise and coordinate all activities. **Contact:** <http://www.epa.gov/ceppo/serclist.htm>

Local Emergency Planning Committees (LEPC)

They are appointed by SERCs and develop emergency plans that prepare for and respond to chemical emergencies. To locate and contact your LEPC visit: <http://yosemite.epa.gov/oswer/lepcdb.nsf/HomePage?openForm>

National Institute for Occupational Safety and Health's (NIOSH) Pocket Guide to Chemical Hazards Information for employers/employees. Available on line at www.cdc.gov/niosh/npg/ or by calling 202-512-1800 or 1-866-512-1800 (toll free), the U.S. Superintendent of Documents.

U.S. Occupational Safety and Health Administration's (OSHA) Hazmat standard can be found at: www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9765

U.S. National Transportation Safety Board (NTSB) <http://www.nts.gov/default.htm>