

# Hazardous Materials (HAZMAT) Transportation Overview

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Safely handling hazardous materials and getting them to their destinations is why U.S. DOT requires hazardous materials training.

## Uses and Risks

We use hazardous chemicals to:

- Clean and disinfect our homes
- Kill insects and rodents
- Fuel cars, equipment and tools
- Fertilize our lawns

Hazardous materials can be dangerous. For example, they can be:

- Poisonous
- Toxic
- Flammable
- Explosive
- Corrosive

Examples of hazardous materials include:

- Paint
- Gasoline
- Pesticides
- Bleach

## Transportation

The U.S. transports billions of tons of HAZMAT (worth trillions of dollars) annually by:

- Highway
- Air
- Rail
- Vessel
- Pipeline

We transport most of the hazardous materials by highways and ships; most HAZMAT incidents occur on our highways and in our waterways. A release can:

- Damage and destroy physical property
- Harm the environment
- Injure or potentially kill people

## Regulation

The U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) is responsible for developing, issuing, updating and enforcing the **Hazardous Materials Regulations (HMR)**. Your employer must have and operate by the current copy of the HMR, which can be found in Title 49 of the Code of Federal Regulations (CFR).

The Federal Motor Carrier Safety Administration (FMCSA) partners with PHMSA to enforce the highway transport of hazardous materials. Other enforcement support comes from:

- Federal Aviation Administration (FAA)
- U.S. Coast Guard
- Federal Railroad Administration (FRA)

## **HMR Contents**

The HMR breaks down the rules that companies follow to package, mark, label, offer, transport and accept HAZMAT. Specifically, the HMR addresses HAZMAT:

- Classification
- Packaging
- Communication
- Emergency response information
- Training
- Transportation
- Incident reporting
- Security

## **Signs of a HAZMAT Shipment**

KEY indicators that the shipment has hazards are markings on the materials and placards on vehicles. These markings identify the primary or secondary hazards as required by the HMR.

## **Responsibilities**

### **Employers**

The HMR requires your employer to train and certify any employees who handle or ship hazardous materials. Your employer must provide HAZMAT employees with:

- General and function- or job-specific HAZMAT training
- Safety and security training according to your company's security plan
- Refresher HAZMAT training at least every 3 years



Employers must comply, or they can receive criminal and civil penalties.

Beyond the initial training:

- Department of Transportation (DOT) requires HAZMAT employees to complete recurrent or refresher training every 3 years
- Federal Aviation Administration (FAA) requires air carrier employees to complete annual HAZMAT training
- FMCSA requires HAZMAT employees to receive training every three years or anytime there is a change in job function

HAZMAT employees must be trained within 90 days. Within that time, they can still perform HAZMAT functions, as long as they are supervised by a trained employee.

### **Employees**

Once HAZMAT employees have been trained and certified, they are responsible for performing HAZMAT functions according to the HMR. Depending on their job, they may have to:

- Ensure HAZMAT packaging, cargo and paperwork meet the HMR requirements
- Know how to handle exemptions or "Special Permits" as applicable to their job

***Shippers***

The individual or agency shipping a hazardous material must:

- Package it in containers that meet the HMR
- Mark and label it properly
- Complete the shipping papers that describe it
- Provide placarding to the carrier

***Carriers***

The carrier must:

- Verify the shipper complies with the HMR before agreeing to transport HAZMAT
- Transport the cargo according to regulations
- Unload and sign it over to the person or company receiving it