



PIPELINE AND HAZARDOUS

MATERIALS SAFETY

ADMINISTRATION



# WE PARSA

It's a huge task to oversee the safe, reliable, and environmentally sound operation of over 2.6 million miles of energy pipelines and the movement of close to 1 million daily shipments of hazardous materials crisscrossing the United States. PHMSA employees are committed to ensuring the public and the environment receive the protections they deserve. Our safety requirements help ensure American communities remain safe, livable, and free from transportation incidents involving the essential, but sometimes harmful products we use every day.

Created in 2004, PHMSA's mission is aimed at enhancing safety, reducing pollution, increasing energy efficiency, supporting sustainable communities, and promoting environmentally responsible products and technologies for pipeline and hazardous materials transportation through:

- Aggressive Regulatory Efforts
- Effective Enforcement
- Stakeholder Partnerships and Involvement
- Transparency









## **About PHMSA**





As one of the smallest agencies within the Department of Transportation, the Pipeline and Hazardous Materials Safety Administration has a huge mission in overseeing the safety of close to 1 million daily shipments of hazardous materials within the United States and the over 2.6 million miles of pipelines that supply 64 percent of the nation's vital energy commodities.

PHMSA is dedicated to safety by working toward the elimination of transportation-related deaths and injuries in hazardous materials and pipeline transportation, and by promoting transportation solutions that enhance community and environmental protection.

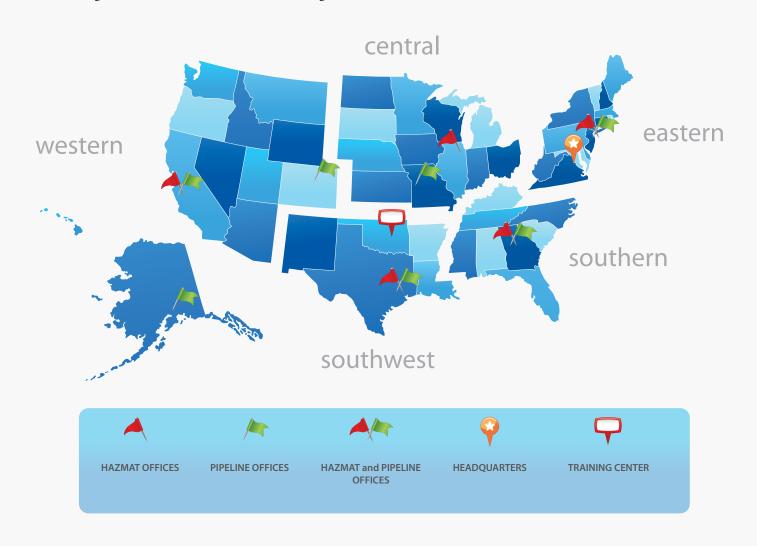
The PHMSA Administrator serves as the agency's top executive, providing direction to nearly 500 employees located in its headquarters in Washington, D.C., and in five regions across the country. The Administrator is appointed by the President, confirmed by the U.S. Senate, and is supported by an executive leadership team comprised of a Deputy Administrator, Chief Safety Officer, Chief Counsel, Associate Administrators for Hazardous Materials Safety, Pipeline Safety, and Administration, and Directors for the agency's Civil Rights and Governmental, International, and Public Affairs offices.

PHMSA's regional hazardous materials and pipeline safety program offices contain the vast majority of the agency's inspection and enforcement staff. These individuals conduct inspections and investigations of personnel, equipment, and operational procedures to ensure industry compliance with safety regulations.

In addition to regional inspection and enforcement staff, PHMSA maintains a pipeline safety training center in Oklahoma City, Oklahoma.

# **About PHMSA**

PHMSA's regional offices are located in the following areas:



Eastern West Trenton, NJ (pipeline and hazmat)

Central Kansas City, MO (pipeline only)

Des Plaines, IL (hazmat only)

Western Lakewood, CO (pipeline only)

Ontario, CA (pipeline and hazmat) Anchorage, AK (pipeline only)

Southern Atlanta, GA (pipeline and hazmat)

Southwest Houston, TX (pipeline and hazmat)

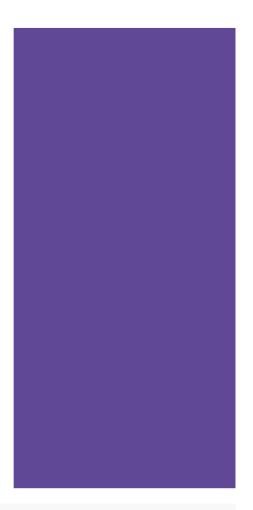
Pipeline Safety Oklahoma City, OK

Training Center

# PHMSA and You







Overseeing close to 1 million daily shipments of hazardous materials and 2.6 million miles of the nation's pipeline network is a huge task. We rely on our external partners to work with us in promoting and supporting safe practices through resource utilization, training and awareness, new technology investments and other ways to help pipeline operators and hazardous materials transporters assure safety.

You too are our partner in safety. The eyes, ears and vigilance of the public are one of PHMSA's most valuable resources ensuring that the hazardous materials and pipeline industries abide by all DOT safety regulations.

#### PROTECTING COMMUNITIES

America's expanding economy is creating new communities in rural areas where pipelines previously existed out of harm's way, putting people closer to what was once an "out of sight, out of mind" underground infrastructure. Environmental safety is a big concern when pipeline accidents and incidents occur. PHMSA provides strong safety and environmental oversight of the pipeline network that delivers energy fuels to the American public.

Digging is one of the leading causes of injuries and deaths associated with incidents from pipelines. Fortunately, this problem is almost entirely preventable. PHMSA invests considerable resources in ensuring communities understand how to practice effective pipeline damage prevention techniques to minimize the possibility of associated injuries.

# PHMSA and You

Calling before you dig is the first rule to remember when conducting underground related activities, no matter the job. The law requires anyone to contact their local "One-Call" center at least two days prior to conducting any form of digging activity. This notification provides utility operators the sufficient amount of time needed to mark underground utilities located in the area and dramatically reduces the possibility of personal injury. Contact your local One-Call center by dialing 811. It's that simple.

#### Dealing with Hazardous Materials Concerns

Hazardous materials are an integral part of our daily lives. They are the products we use in our homes, pools, gardens, cars, or the products we have stored in our garages. They are also products used in industry to keep Americans working, and to keep America's economy strong. Hazardous materials play an important role in our everyday lives. It is hard to imagine life today without these hazardous materials being present. Yet, these materials are potentially dangerous if improperly handled and transported.

PHMSA's Hazardous Materials Information Center provides useful hazardous materials transportation information and interpretations of safety rules and training, and also serves as a way to report violations of the hazardous materials regulations. Contact PHMSA's Hazardous Materials Information Center at 1-800-467-4922 or (202) 366-4488, Monday through Friday, from 9:00 a.m. to 5:00 p.m.

Also, PHMSA jointly publishes and distributes the Emergency Response Guidebook, along with our counterparts in Canada and Mexico, as an aid for first responders to quickly identify and provide protection from specific hazardous materials involved in transportation accidents and incidents.

#### IDENTIFYING HAZARDOUS MATERIALS IN YOUR COMMUNITY

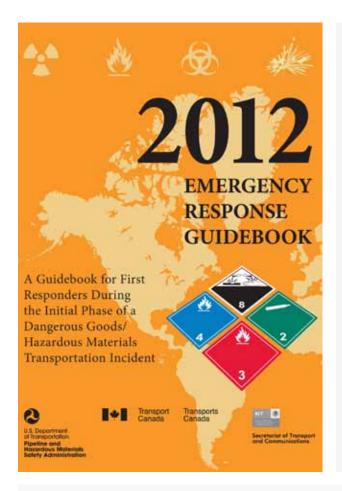
Placards serve as an easily identifiable source of reference used by millions of workers in the transportation, public safety, and hazardous materials industries. Placards are diamond-shaped and when required, they must be placed on both ends and sides of trucks, railcars, and intermodal containers that carry hazardous materials. They are coded by color and contain symbols and numbers that designate the hazard class or division of the hazardous material that is being shipped.

Placards help regulators working in compliance and enforcement ensure that hazardous materials shipments are transported in a safe manner, help transportation workers identify hazardous materials shipments so that they can be handled appropriately, and help emergency responders quickly ascertain the nature of the hazard that they face in the case of an accident or spill. Look for these symbols in your community and be sure to act cautiously when traveling near or encountering packages or containers possessing these signs.

Since pipelines are usually buried underground, line markers and warning signs are used to indicate their approximate location along the pipeline route. The markers and warning signs are in high-visibility colors (yellow or orange) and are located at frequent intervals along the pipeline right-of-way. Remember that pipelines carry both gases and hazardous liquids. Along a right-of-way, you may see dead or discolored vegetation, pooled liquid; or a cloud of vapor or mist. You may smell an unusual odor, the scent of petroleum, or the distinctive "rotten egg" smell of odorized natural gas. And you may hear an unusual hissing or roaring sound.



# Safety Resources







#### **EMERGENCY RESPONSE GUIDEBOOK**

PHMSA's 2012 Emergency Response Guidebook provides first responders with a go-to reference to help deal with hazardous materials accidents during the critical first 30 minutes. DOT's goal is to place an ERG in every emergency service vehicle nationwide.

#### GRANTS TO STATES AND COMMUNITIES

PHMSA offers a broad range of financial support through direct grants that are open to the public, in addition to funding opportunities to support various training initiatives for members of its state partnership programs. We provide funding assistance through our Hazardous Materials Emergency Preparedness, Pipeline Safety Technical Assistance, State Damage Prevention, One-Call, and Pipeline Safety Base grants programs.

#### **T**RAINING

PHMSA supports several types of multimodal education and training initiatives, all of which both enhances the nation's transportation workforce and improves the transportation systems within the United States. Our training and technical assistance seminars and workshops enhance regulations compliance, inspection techniques, enforcement uniformity, and emergency preparedness of the thousands of safety professionals shipping or carrying hazardous materials across the country.

# Safety Resources

#### PIPELINES AND INFORMED PLANNING ALLIANCE

Through the use of PIPA, PHMSA offers local governments, community developers, and pipeline operators a variety of recommendations to improve safety when making land-use decisions near or adjacent to existing transmission pipelines.

#### 811 - CALL BEFORE YOU DIG

Working with the Common Ground Alliance, PHMSA promotes the leading way to prevent damage to pipelines by calling 811 prior to conducting any underground excavation activity. Nearly one-third of all major pipeline accidents are caused by excavation damage and not calling state One-Call centers in advance.

#### NATIONAL PIPELINE MAPPING SYSTEM

The National Pipeline Mapping System is a geographic information system that contains the locations and attributes of hazardous liquid and natural gas transmission pipelines, liquefied natural gas facilities, and breakout tanks. Pipeline information in the NPMS is a valuable tool for planning community growth, emergency response, and pipeline awareness.

#### HAZARDOUS MATERIALS INFORMATION CENTER

1-800-HMR-4922

1-800-467-4922

For Washington, DC / Metro area residents: 202-366-4488

PHMSA operates the Hazardous Materials Information Center for help on use of the Hazardous Materials Regulations, 49 CFR Parts 100-185. The phone number is menu-driven when calling from a touch-tone phone. Non-touch tone phone callers must use the telephone number 202-366-8553. Callers will be directed through an automated menu that provides options to:

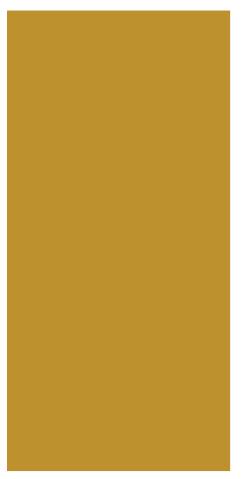
- 1. Obtain answers to questions on the Hazardous Materials Regulations, 49 CFR Parts 100-185;
- 2. Receive recent copies of Federal Register publications, DOT special permits or letters of interpretation;
- 3. Receive copies of training material, such as Chart 12 placards or information packages; and
- 4. Report violations of the HMR.

#### SAFE TRAVEL WEBSITE

Working with a broad coalition of other government agencies, individual companies, trade associations, and stakeholders, PHMSA developed a variety of educational Safe Travel materials to increase hazardous materials and battery safety public awareness. Printed guides explain safe travel with consumer-use hazardous materials, and provide a handy list of safety tips to minimize the risk of fires. These Safe Travel materials can be found on-line at http://safetravel.dot.gov.

## What We Do





PHMSA strives to meet the needs of the American public, our ultimate customers, to ensure communities remain safe, livable and free from transportation incidents involving hazardous products. Our mission is to protect people and the environment from the risks involved with transporting hazardous materials. To be effective, we establish national policy, set and enforce standards, provide extensive training, conduct research, and prepare the public and first responders to prevent incidents and reduce consequences if an incident does occur.

#### INSPECTION AND ENFORCEMENT

Our inspection and enforcement staff determines compliance with safety and training standards by inspecting entities that offer hazardous materials for transportation, and that manufacture, re-qualify, rebuild, repair, recondition, or retest packaging used to transport hazardous materials. In addition, PHMSA pipeline safety inspectors ensure that pipeline operators are in full compliance with pipeline safety regulations through independent field inspections of pipeline facilities, components, construction projects, procedures, and incident investigations.

## What We Do

#### REGULATIONS AND STANDARDS

PHMSA issues new, or updates current, hazardous materials regulations and standards to enhance public safety and minimize threats to life, property or the environment due to spills or incidents involving hazardous materials transportation in commerce. The agency also ensures safety in the design, construction, operation, maintenance, and spill response planning of America's 2.6 million miles of natural gas and hazardous liquid transportation pipelines.

#### DATA AND RISK ANALYSIS

PHMSA is a data-driven and risk-based agency that analyzes program performance, and is continuously improving its data quality and analytic capabilities in order to effectively identify, assess and manage hazardous materials safety risks.

#### RESEARCH AND DEVELOPMENT

PHMSA conducts and supports research for regulatory and enforcement activities and to provide the technical and analytical foundation necessary for planning, evaluating, and implementing the pipeline safety program. PHMSA is sponsoring research and development projects focused on providing near-term solutions that will increase the safety, cleanliness, and reliability of the nation's pipeline system. PHMSA's research priorities supply the information necessary to guide future changes in regulations, industry safety practices, and global intermodal transport efficiency demands for hazardous materials. The five hazardous materials research priorities are: package integrity, human factors, technical analysis to aid risk assessments, risk management and mitigation, and emerging technologies.

#### ADVISORY BULLETINS AND GUIDANCE

PHMSA issues safety advisory notices and bulletins to help the public understand and resolve significant safety risks. In most situations, the advisories address safety issues that pose an imminent hazard to the public, such as improperly tested compressed gas cylinders and investigations involving the improper transportation and storage of consumer fireworks. Pipeline advisory bulletins inform pipeline operators and Federal and state pipeline safety personnel of matters that have the potential of becoming safety or environmental risks.

#### TRAINING

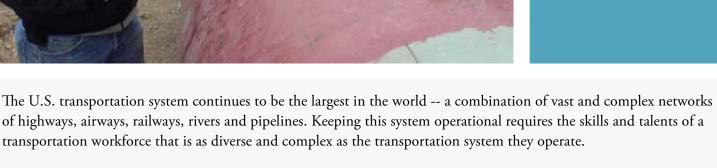
To help the shippers and carriers of hazardous materials comply with the requirements of the Hazardous Materials Regulations, PHMSA's outreach and training staff offers publications, self-training products, and in-person training opportunities. Free two-day seminars and one-day workshops are scheduled across the country for anyone who offers or transports hazardous materials in commerce or has a desire to learn more about the HMR. Also, PHMSA's Pipeline Training Center is centrally located in Oklahoma and is a vital resource for pipeline safety training and qualifications of federal and state pipeline safety partners.

#### **G**RANTS

Under its State Grants Program, PHMSA is authorized to reimburse a state agency up to 80 percent of the agency's actual cost for carrying out its pipeline safety program, including the cost of personnel and equipment. And under our Hazardous Materials Emergency Preparedness Grants Program over \$21.3 million is passed annually to states, territories and Native American Indian tribes for planning and training to improve the nation's response to hazardous materials transportation incidents.

# Careers at PHMSA





DOT's Pipeline and Hazardous Materials Safety Administration is fully committed to recruiting candidates possessing the skills and abilities needed to instill innovation and leadership into our 21st Century transportation workforce. A diverse environment helps us to better understand the needs of the people we serve. That is why DOT leadership promotes an inclusive environment full of diversity and one that values its employees for each of their distinctive contributions to accomplishing our mission. This environment helps us to recognize and utilize the strengths within each individual member of our team to meet the transportation challenges of today and tomorrow.

## Careers at PHMSA

#### A CHALLENGING JOB AND A PROMISING CAREER...

PHMSA is committed to building a diverse and highly skilled workforce to achieve the missions of the agency. PHMSA offers a broad spectrum of careers ranging in the areas of engineering, business, legal, science, administrative and other professional opportunities. The following is a list of major occupations within the agency:

- Engineers
- Scientists
- Chemists
- Transportation Specialists
- Information Technology Specialists
- Program Managers
- Data Analysts
- Human Resources Specialists
- Financial/Contract Specialists
- Attorneys

#### FELLOWSHIPS/INTERNSHIP OPPORTUNITIES

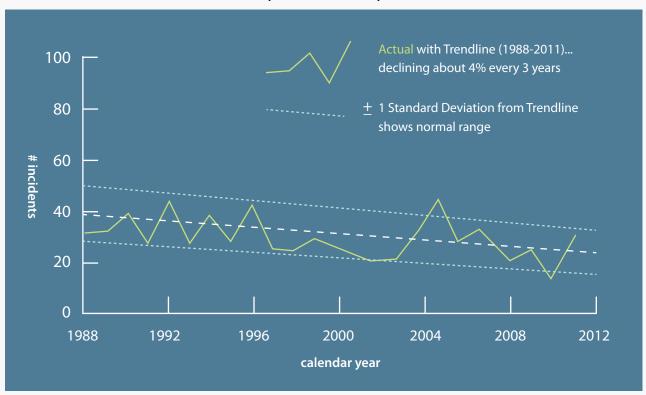
PHMSA offers various internship and fellowship opportunities for current students and recent graduates to gain vital career experience with the Federal government.

Visit our website at www.PHMSA.dot.gov or the following sites for more details on how to apply for PHMSA jobs.

- Careers in Motion - http://careers.dot.gov/
- USAJobs - www.usajobs.opm.gov

# **Data and Statistics**

# HAZMAT INCIDENTS WITH DEATH OR MAJOR INJURY (1988-2011)

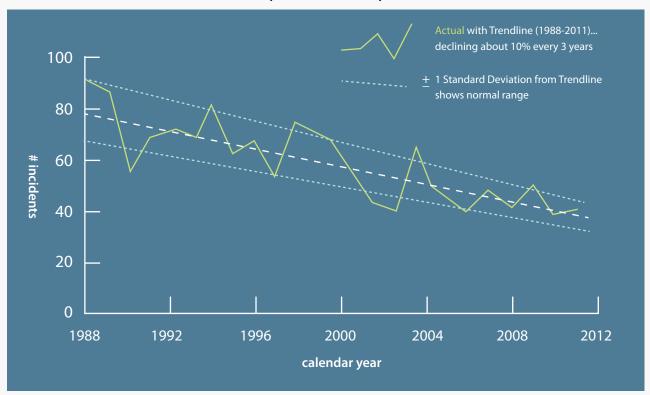


source: DOT/PHMSA Incident Data - as of June 30, 2012

Accidents in hazardous materials transportation are low probability risks. A person in the U.S. is three times as likely to be killed by lightning as by hazardous materials accidents in transportation. Of course, this is not to minimize the threat—these accidents can be very high-consequence failures when they do occur, because they involve sometimes lethal forces or toxic materials that can strike anywhere. Annual accident data do not necessarily reveal all the threats. And some groups—particularly workers—face higher risks than others.

# **Data and Statistics**

# PIPELINE INCIDENTS WITH DEATH OR MAJOR INJURY (1988-2011)



source: DOT/PHMSA Incident Data - as of June 29, 2012

Over the past 25 years, PHMSA has reduced the risk of hazardous materials transportation incidents with death or major injury by four percent every three years, and we have reduced the risk of pipeline incidents with death or major injury by about 10 percent every three years. Since 2002, the agency has reduced the risk of hazardous liquid pipeline spills with environmental consequences by an average of five percent per year. We aim to improve upon these long-term trends.



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