

# Training, training, and more training...

49 CFR 171.8

A **“hazmat employee”** is a person who is employed full-time, part-time, or on a temporary basis by a hazmat employer and who directly affects hazardous materials management safety.

This term includes individuals who:

- ▶ Load, unload, or handle hazmat
- ▶ Design, manufacture, fabricate, inspect, mark, maintain, recondition, repair, or test packages, containers, or packaging components that are represented, marked, certified, or sold as qualified for use in transporting hazmat in commerce
- ▶ Prepare hazmat for transportation
- ▶ Are responsible for the safety of transporting hazmat
- ▶ Operate a vehicle used to transport hazmat

49 CFR 172.704

Hazmat employers are **required to provide training to employees.**

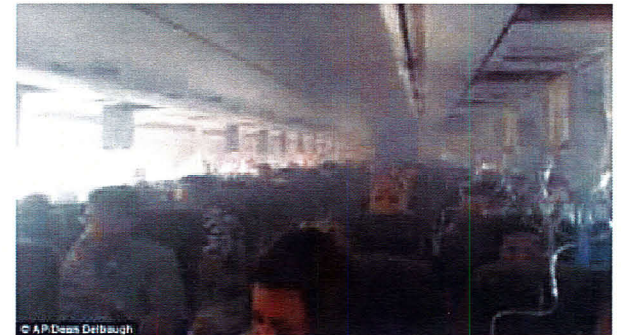
This training includes:

1. General awareness/familiarization training
2. Function-specific training
3. Safety training
4. Security awareness training
5. In-depth security training (within 90 days after employment)



# What could go wrong?

- Quarantined shipments
- Intentional diversion
- Over-the-road, shipboard, or mid-air disasters.

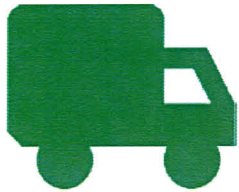




# What am I (most likely) doing wrong?

- Not understanding regulatory differences between modes of transportation;
- Not considering implications of returned and self-transported goods;
- Mistakenly assuming that common articles and substances are non-hazardous;
- Failing to ensure that people who are responsible for shipping hazardous materials are trained and competent.
- Not aware of the Security Plan and Training requirements.

# Mode of Transportation Affects Rules



[49 CFR Parts 100-185](#) including  
specific provisions of [Part 177](#)

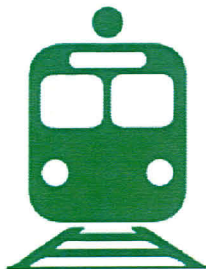


using non-IATA operator:  
[49 CFR Parts 100-185](#)  
including specific  
provisions of [Part 175](#)

using an IATA operator:  
[IATA Dangerous Goods  
Regulations](#)



[49 CFR Parts 100-185](#)  
including specific  
provisions of Part 176



[49 CFR Parts 100-185](#) including  
specific provisions of [Part 174](#)



[ICAO Technical Instructions](#) or  
[IATA Dangerous Goods  
Regulations](#) (if operator  
policy)



International Maritime  
Dangerous Goods  
([IMDG](#)) Regulations





# Returned and self-transported goods

- YOU are now the shipper.
- Bill of Lading paperwork must compliant
  - Proper Shipping Name
  - Packaging designation
  - RQ status
  - 24 hour contact number
- Shipping method must be authorized
- Packaging must be correct
- Placarding (when required)
- Security Plan (when required)
- Handled and Managed by trained and competent personnel only

**NOTE:** Shipment may qualify as a “material of trade” subject to the exception under 49 CFR 173.6

SHIPPING PAPER				
TO:	ABC Corporation 88 Valley Street Anywhere, VA	FROM:	DEF Corporation 55 Mountain Street Nowhere, CO	Page 1 of 1
Quantity	HM	Description		Weight
1 cylinder	RQ (*RQ* means that this is a reportable quantity)	UN1076, Phosgene, 2.3 Poison, Inhalation Hazard, Zone A (UN1076 is the Identification Number from Column 4 of the Hazardous materials Table.) (Phosgene is the proper shipping name from Column 2 of the Hazardous Materials Table.) (2.3 is the Hazard Class from Column 3 of the Hazardous Materials Table.)		25 lbs
This is to certify that the above named materials are properly classified, described, packaged marked and labeled, and are in proper condition for transportation according to the applicable regulations of the United States Department of Transportation.				
Shipper:	DEF Corporation		Carrier:	Safety First
Per:	Smith		Per:	
Date:	October 15, 2003		Date:	

Special Instructions: 24 hour Emergency Contact, John Smith 1-800-555-5555  
Figure 9.6

# Just because it is common doesn't mean it isn't hazardous...

- Watch out for things such as:
  - Patient specimens
  - Genetically-modified micro-organisms and organisms
  - Environmental samples for analysis
  - Dry ice
  - Batteries (lithium, button, or gel cell)
  - Equipment with compressed air or gas cartridges/cylinders
  - Pneumatic accumulators
  - Charged capacitors
  - Magnetized materials
  - Devices with fuel cells



# Training, Training, and More Training...

## INITIAL TRAINING

- A new hazmat employee who changes job functions may perform those functions prior to completion of training, ***provided the employee performs those functions under the direct supervision of a properly trained and knowledgeable hazmat employee***; and
- the training is **completed within 90 days** after employment or job function.

## RECURRENT TRAINING

- Employees must receive the required training every three years and any time there is a change in job function.

# Training, Training, and More Training...

- **General awareness/familiarization:** All hazmat employees must have this.
- **Function-specific training:** Knowledge, skills and abilities for individual job.
- **Safety training:** Hazards posed by materials in the workplace and personal protection measures. May include basic emergency response procedures.
- **Security Training:** Each hazmat employee must receive security awareness training, includes risks and control methods, within 90 days of employment or assignment to HAZMAT duties
- If a security plan is required, employees must also receive in-depth security training on the plan and its implementation.
- **Modal specific requirements:** Additional training required by 49 CFR PARTS 174, 175, 176, and/or 177.



# Security Plan? What Security Plan???

Since 2003, shippers and carriers of certain highly hazardous materials are required to develop and implement security plans.  
(49 CFR 172, Subpart I)

Security plans must be:

- written down
- kept in a safe place
- reviewed annually and updated/revised as needed
- available to the people who must implement it (and to DOT or DHS inspectors)

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# Other Common Causes of Errors

- Trusting the SDS shipping information; it is often wrong!
  - Relying on other companies to prepare shipping paperwork
  - Not limiting shipping activities to trained employees
  - Shipping by more restrictive modes (especially by air)
  - Not using proper packing materials
  - Not hiring trained couriers
- 
- We haven't even discussed packaging requirements and performance testing! Learn about those in
  - **Both shippers and carriers are responsible for compatibility.** The requirement for shippers to comply with compatibility considerations is contained in 49 CFR 173.22.

# HAZMAT Shipper Responsibilities

- |  |   |
|--|---|
| <ul style="list-style-type: none"><li>• DETERMINE WHETHER A MATERIAL MEETS THE DEFINITION OF A "HAZARDOUS MATERIAL"</li><li>• PROPER SHIPPING NAME</li><li>• CLASS/DIVISION</li><li>• IDENTIFICATION NUMBER</li><li>• HAZARD WARNING LABEL</li><li>• PACKAGING</li><li>• MARKING</li><li>• EMPLOYEE TRAINING</li></ul> | <ul style="list-style-type: none"><li>• SHIPPING PAPERS</li><li>• EMERGENCY RESPONSE INFORMATION</li><li>• EMERGENCY RESPONSE TELEPHONE NUMBER</li><li>• CERTIFICATION</li><li>• COMPATIBILITY</li><li>• BLOCKING AND BRACING</li><li>• PLACARDING</li><li>• SECURITY PLAN</li><li>• INCIDENT REPORTING</li></ul> |
|--|---|

Remember - You cannot outsource your responsibility and legal liability!



# Questions

