1411

DOT In-Depth HazMat Security Training

Leader’s Guide

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INTRODUCTION TO THE PROGRAM

Structure and Organization

Information in this program is presented in a definite order so that employees will see the relationships between the various groups of information and can retain them more easily. The sections included in the program discuss:

- The need for HAZMAT Security Training.
- The Security Plan.
- Internal vulnerabilities.
- Targeted materials.
- Facility security.
- Preparing to ship hazardous materials.
- Shipping HAZMATS.
- Tips to avoid a hijacking.
- Unloading hazardous material shipments.
- Unloading hazardous materials shipments.
- Actions to take in the event of a security breach.

These sections include examples and other references that will help employees to relate the information in the program to their work environments, recognize the security risks associated with handling and transporting hazardous materials and know how their facility’s HAZMAT Security Plan addresses these risks.

Background

Every day millions of tons of hazardous materials are safely transported by trucks, trains, planes, ships and pipelines to facilities throughout the country. In the "wrong hands," however, they can... and have... been used as weapons against us.

Unfortunately, it took the September 11th tragedy for the country to realize that we need to protect ourselves every day from terrorists who have found ways to wreak havoc using common hazardous materials.

As part of a comprehensive strategy to protect the United States from future terrorist attacks
the Department of Transportation requires all companies that transport or cause the transportation of hazardous materials to provide security training for their employees.

There are two levels of HAZMAT security training required by the DOT.

- "Security Awareness Training".
- "In-Depth Security Training."

"In-Depth Security Training" must be provided to employees when a company is required by the DOT to have a written "Security Plan." This training ensures that they understand the areas covered by their company’s Security Plan, including:

- Knowing the security risks that may be involved in transporting specific hazardous materials.
- Recognizing possible security threats at their facility.
- Knowing their company’s security objectives.
- Understanding how security is managed and organized at their facility.

"In-Depth Security Training" also focuses on how to perform specific security procedures, and spells out employees' responsibilities in the event of a security breach or attack. This training is critical. A company's employees may well be the first line of defense in preventing a terrorist attack.

**Objectives**

This training program is designed to do four things… make employees aware of DOT regulations on handling and transporting hazardous materials, help employees to understand the security risks associated with hazardous materials, make employees aware of the contents of a "Security Plan" and how this plan addresses the security risks associated with hazardous materials, give employees a sense of what their responsibilities are in keeping HAZMATs safe and secure. Upon completion of the program, employees should:

- Understand the DOT’s HAZMAT security requirements.
- Understand the security risks associated with transporting hazardous materials.
- Know the contents of a HAZMAT Security Plan.
- Understand the issues of organizational security structures.
- Be able to understand their company’s security objectives.
- Recognize and understand common security procedures.
- Understand what their security responsibilities may be.
- Know what types of actions to take in the event of a security breach.
OUTLINE OF MAJOR PROGRAM POINTS

The following outline summarizes the major points of information presented in the program. The outline can be used to review the program before conducting a classroom session, as well as in preparing to lead a class discussion about the program.

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  - "Security Awareness Training".
  - "In-Depth Security Training".

- "Security Awareness Training" must be given to all "HAZMAT employees," including workers who:
  - Load
  - Deliver
  - Otherwise directly affect the transportation of hazardous materials.

- This "awareness" training:
  - Explains how terrorists might use hazardous materials to carry out an attack.
  - Helps workers recognize the signs of a security threat.
  - Teaches them how to respond to security breaches.

- "In-Depth Security Training" must be provided to employees when a company is required by the DOT to have a written "Security Plan." This training ensures that you understand the areas covered by your company's Security Plan, including:
  - Knowing the security risks that may be involved in transporting specific hazardous materials.
  - Recognizing possible security threats at your facility.
  - Knowing your company’s security objectives.
  - Understanding how security is managed and organized at your facility.

- "In-Depth Security Training" also focuses on how to perform specific security procedures, and spells out your responsibilities in the event of a security breach or attack.
• This training is critical.
  — You and your coworkers may be the first line of defense in preventing a terrorist attack.

• Years ago terrorists tended to rely on conventional military weapons.
  — But today, because of their availability and ability to cause major damage and mass casualties the weapons of choice are often hazardous materials.

• To prevent hazardous materials from being used as weapons of mass destruction the Department of Transportation requires most HAZMAT shippers to create and maintain a written “Security Plan.”

• Your company must have a written Security Plan in place if it ever:
  — Transports hazardous materials in an amount that requires DOT Placards to be displayed on vehicles or containers.
  — Ships hazardous materials in bulk packaging that has a capacity of 3,500 gallons (13,248 Liters) for gases and liquids…or over 468 cubic feet (13.24 cubic meters) for solid materials.
  — Transports division 1.1, 1.2, or 1.3 explosive materials, Class 7 radioactive materials, or "Select Agents and Toxins" that are regulated by the Centers for Disease Control and Prevention.

• Whether you are a dispatcher, truck driver, warehouse worker or you order hazardous materials, an important part of your job is to know the security measures that you must follow.
  — For this reason the DOT requires your employer to provide you with the written portions of the Security Plan that pertain to your job.

• Your employer must also make sure that you are trained to fully understand the plan, including:
  — Your company’s security objectives.
  — The overall structure of how security is conducted at your facility
  — Security measures that you are responsible for.
  — The actions to take during a security breach or attack.

• Your facility’s Security Plan must be kept confidential, since it contains detailed information that could be useful to terrorists and other criminals.

• Never talk about the Plan with "outsiders," friends or family.
  — You need to be careful discussing details of the plan with coworkers as well, since parts of the Security Plan may have been shared with you on a "need-to-know" basis only.

• To get a better understanding of potential security threats and general security objectives, let’s look at how a typical HAZMAT Security Plan is created.

• The first step is to perform a "Security Vulnerability Analysis."
— This "risk assessment" of your facility and the way that hazardous materials are currently handled will help to pinpoint "targets of opportunity," and can identify security measures that need to be improved.

- **There are three main areas to look at when performing a Security Vulnerability Analysis:**
  - Ensuring that company employees will not cause intentional, or unintentional, security breaches.
  - Looking at ways that a terrorist could enter a facility to sabotage it or steal hazardous materials.
  - Analyzing how HAZMAT shipments are protected from theft, sabotage and hijacking.

- **The easiest way for a facility's security to be compromised is from the inside.**
  - Internal threats can be the most dangerous, since employees have knowledge of the facility’s layout and security procedures, and may even have access to sensitive areas.

- **So it's important for all facilities that deal with hazardous materials to conduct background checks on everyone who works there, including:**
  - New Employees.
  - Temporary Workers.
  - Contract Employees.

- "Security checks" should also be performed on all employees periodically.

- **Additional measures that can help to prevent a security breach from within include:**
  - Conducting spot checks of personal vehicles and lockers.
  - Having visitors show identification and sign in.
  - Accompanying visitors while they are at the facility.

- **You should notify your company’s management or the police if you:**
  - See something suspicious.
  - Suspect that someone at your facility may be involved in criminal or terrorist activity.

- **Unintentional security breaches can provide terrorists with information that is useful to their plots, as well.**
  - So never talk about your facility's operations in public places.
  - Don’t discuss sensitive information on cell phones, or send confidential information using unsecured email accounts.

- **The second step in performing a "Security Vulnerability Analysis" is to create a list of all of the different hazardous materials that are stored at and transported to and from your facility.**
  - Include the quantities and "physical state" of the materials on your list.
  - Then determine which substances could be used as "weapons of mass destruction."

- **Materials to look for include:**
  - Flammables.
— Explosives.
— Corrosives.
— Reactive materials.
— Substances that are toxic to people or the environment.

• The DOT "Emergency Response Guide Book" is an invaluable resource for determining the characteristics and hazards of these types of materials. By referring to the "green" section it's easy to see how one of these substances could threaten the health and welfare of an entire community.

• If your company handles biological materials or infectious waste you will also need to determine if these substances could be used as weapons.

• Once the hazardous materials in your facility have been listed, and their potential for use has been analyzed, the next step is to look at the security measures that are currently in place. You can then determine what can be done to improve security, both at your facility and while HAZMATs are being transported.

• In many ways protecting a facility from terrorism is much easier than protecting individual HAZMAT shipments, since barriers like fencing and walls can be used to prevent unauthorized access.

• Frequent patrols by security guards and other employees can help to discourage people from breaking into a facility as well. Other deterrents include:
  — Bright lights.
  — Security cameras.
  — Alarm systems.

• It’s also important to have secured gates at all access points. They should be locked when not in use and closely monitored for signs of trespassing.

• If possible, entry to the facility should be through a single, well-guarded accessway. Parking for visitors should be outside the main perimeter of the facility.

• Before allowing a delivery vehicle on the premises:
  — Make sure that the shipment is expected.
  — Ask to see the vehicle operator’s commercial drivers’ license or other photo identification.
  — Verify the driver’s name and vehicle number with the company that they say they work for.
  — Make sure that shipping papers and other documentation are in order.
  — Thoroughly inspect the vehicle and its cargo.

• Gates should be closed immediately after a vehicle passes, to prevent another vehicle from entering the facility without stopping for security clearance.

• At "high risk" facilities, concrete barriers, perimeter trenches and other obstacles can be used to prevent "suicide attacks."
In addition to controlling access and protecting the perimeter of a facility, it is equally important to safeguard hazardous materials by locking them inside of buildings or other secure areas.
— Valves on tanks and storage vats should also be locked.

Other security measures that should be considered include:
— Using a sign-out system for keys to restricted areas.
— Performing frequent inspections to make sure that no one has tampered with locks or other security equipment.

Inventories of hazardous materials should be conducted regularly as well, to determine if there are any shortages.

Hazardous materials are most vulnerable to theft and sabotage while they are being transported.
— But there are several things that can be done to protect them before they even "hit the road."

One of the best is to establish a "crisis communication system" so that vehicle operators know how to communicate problems to:
— Their home terminal.
— Emergency responders.
— Law enforcement officials.

If hazardous materials are routinely shipped to the same facility, it’s a good idea to vary the schedule and the route that the deliveries will take.
— This makes it more difficult for someone to plan a hijacking.

In general, it’s better to make several smaller deliveries of hazardous materials rather than one large delivery.
— This limits the amount of material that might fall into the hands of a terrorist group.
— It also reduces the likelihood of the substances being used as "weapons of mass destruction."

Shipments of highly hazardous materials, such as biological agents or explosives, may need to have guards assigned to them from an internal security force or an outside agency.

If your facility uses other companies to transport hazardous materials.
— Check the security measures that they have in place.
— Make sure that they have performed background checks on their employees.

Regardless of who’s driving, all drivers must undergo a security threat assessment that is conducted through the Transportation Security Administration’s "Hazardous Materials Endorsement Threat Assessment Program."
• The way that hazardous materials are protected during transportation will largely depend on how they are shipped.
  — Be particularly aware of “last minute” shipments that require rush processing and shipments that are going to unfamiliar customers, or suspicious destinations.
  — If you have any concerns about a shipment, tell your supervisor.

• Once HAZMAT shipments are en route, they become easy targets for sabotage, theft and hijacking unless there are security measures in place to protect them.

• Trains and ships are not usually hijacked and planes are not normally taken for their hazardous cargos, but all possible scenarios must be considered.

• Since HAZMAT shipments that are sent by truck are especially easy targets, let’s look at how to secure these loads.
  — Many of these principles will apply to other forms of transportation as well.

• If you’re a HAZMAT truck driver you will need to be extra cautious, especially when you’re working alone.
  — Always perform a pre-trip inspection.
  — Check to see that the load and the doors on your trailer are secured properly and locked.
  — Install “security seals” on trailer doors so that you can easily see if anybody tries to tamper with your load.

• If you make regular deliveries to the same facility, choose routes that are as short as possible.
  — Try to vary the roads that you take.
  — Travel on major roadways when you can, but avoid going through tunnels, over bridges and past heavily populated areas.

• Check in with your dispatcher frequently.
  — Inform them of any delays, or detours that you have to take.
  — But don’t talk about your loads or give details about your route over CB radios or cell phones, since terrorists could be eavesdropping.

• Many HAZMAT shippers use satellite positioning technology to monitor the locations of their vehicles.
  — This can alert a dispatcher to a hijacking.
  — It also gives law enforcement officials invaluable assistance in finding a hijacked vehicle.

• When transporting hazardous materials you should avoid stopping for breaks.
  — If you must stop, select locations on well-traveled roads.
  — If you are stopping at night, make sure that you park in a well-lit area.
  — Lock your vehicle whenever you leave it.

• While you’re stopped, keep an eye on your vehicle.
  — Don’t talk about what you’re carrying or where you’re heading.
• Check your vehicle after each stop to make sure nothing has been tampered with, but don't let anyone sneak up on you.
  — If a stranger does approach, calmly walk to a well-lit area where there are other people around.

• You should also avoid layovers.
  — Use two drivers when possible, so you don't have to stop for the night.

• When you are on the move, keep an eye out for vehicles that may be following you.
  — If you think that you are being followed, call 911 immediately and give your location.
  — Stay off back roads.
  — Give yourself room to maneuver so that you can't be "sandwiched" between other vehicles.

• You can also help prevent problems for other shippers and manufacturers of hazardous materials by keeping an eye out for suspicious activity:
  — Along highways.
  — On bridges.
  — Along railroads
  — At facilities that you deliver to or pass by.

• Report anything unusual to law enforcement officials, no matter how inconsequential it may seem.
  — Sometimes it takes several "small" tips for authorities to be able to piece together the "big picture" that points to a terrorist plot.

• If you are involved in unloading hazardous substances, you should verify that the materials you’re receiving have not been tampered with in any way.
  — This is important even if the shipment has been checked at the "front gate," since your experience can help you recognize things that a security guard may have missed.

• Make sure that Shipping Papers are in order.
  — If you find anything unusual, verify the driver's identity and check with your supervisor.

• Look for signs of tampering with locks and valves, and check to make sure that containers have not been damaged or opened.
  — Keep an eye out for unusual containers, and carefully check shipments that come from unfamiliar suppliers or locations.

• Give special attention to containers that have entered the United States from other countries, since there may not have been much security at their points of origin.
  — You should be particularly vigilant if you work at a port, or in a facility that receives shipments that come across the Mexican or Canadian border.

• If a container is damaged in any way refuse it.
  — Report any evidence of tampering or theft to your management, so that they can contact law enforcement officials.
• Once a shipment has been unloaded, make sure to close warehouse doors. —Remember, keeping terrorists "locked out" is one of the simplest ways to protect HAZMATs throughout the transportation process.

  *** SUMMARY ***

• By keeping the hazardous materials that you deal with out of the hands of terrorists, you are disarming them of the weapons that they need to carry out their plots.

• Understand your company’s security objectives.

• Know your role and responsibilities in implementing your facility’s HAZMAT Security Plan.

• Look for signs of terrorist activity, and report anything suspicious to management or law enforcement officials.

• Don’t talk about your company’s Security Plan, or the hazardous materials you handle.

• Make sure that HAZMATs are secured at all times.

• Use delivery routes that minimize opportunities for theft, hijacking or sabotage.

• Maintain contact with vehicle operators while shipments are on the road.
QUIZ

"DOT IN-DEPTH HAZMAT SECURITY TRAINING"

Name: ________________________________ Date: __________________

1. True or False? … Employees must only undergo "In-Depth Security Training" if their company is required by the DOT to have a written Security Plan.
   ____ True
   ____ False

2. True or False? … Your company must only have a written Security Plan in place if it ships hazardous materials in bulk packaging or transports extremely hazardous materials, such as explosives or toxins.
   ____ True
   ____ False

3. True or False? … The Department of Transportation requires employers to provide their employees with the written portions of a Security Plan that pertain to their jobs.
   ____ True
   ____ False

4. True or False? … The first step in creating a Security Plan is to perform a "Security Vulnerability Analysis".
   ____ True
   ____ False

5. The easiest way for a facility's security to be compromised is:
   ____ From the inside.
   ____ From outsiders entering the facility in vehicles.
   ____ Through the air.

6. Background checks should be performed on which of the following types of employees?
   ____ New employees.
   ____ Temporary workers.
   ____ Contract employees.

7. Which of the following types of materials should appear on a hazardous substance security checklist?
   ____ Flammables.
   ____ Combustibles.
   ____ Reactive materials.
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PRESENTER'S COPY...WITH ANSWERS

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