

Fall Protection

OSHA 10-hour Outreach Training General Industry

Introduction

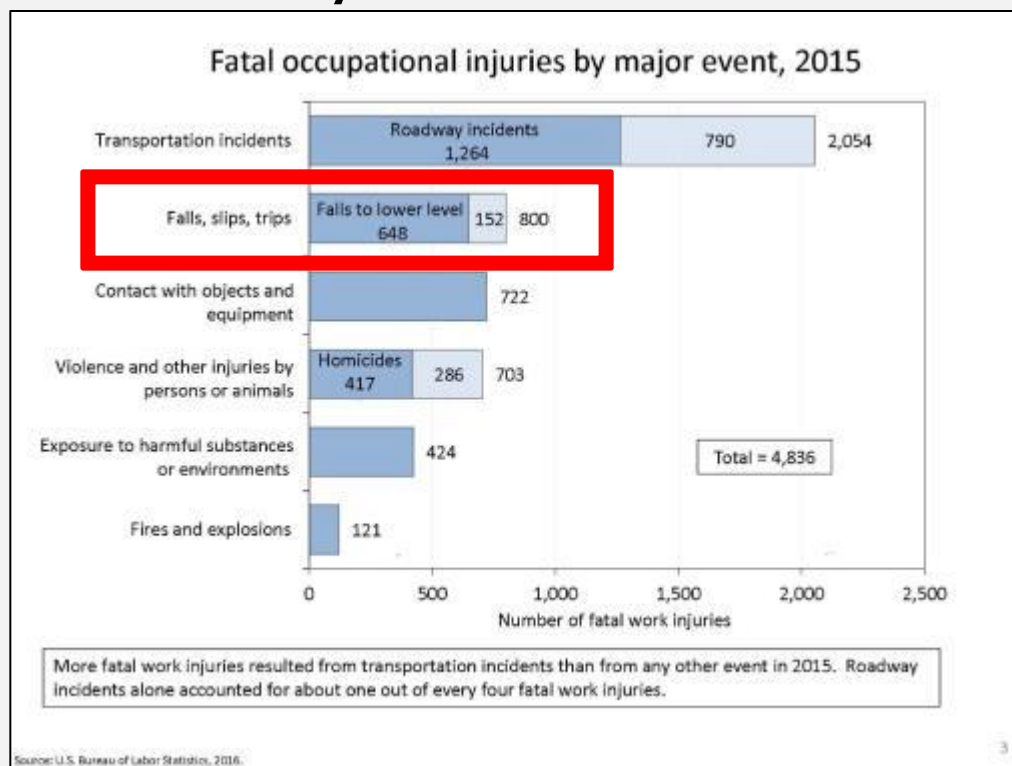
Fatal Fall

Eighteen-Year-Old Sporting Goods
Retail Store Worker Dies in a Fall From
a Shelving Unit - Pennsylvania

NIOSH In-house FACE Report 2001-06

Introduction

- Slips, trips, and falls make up the majority of general industry accidents
- Are second only to motor vehicle crashes



Introduction

- Unless working on a ladder, scaffold or scissor lift, OSHA requires fall protection when exposed to a 4-foot fall or greater.



Source: OSHA

Introduction

Lesson Objectives

1. Identify types of fall hazards associated with workplace environments.
2. Identify methods to eliminate or protect against fall hazards.

Common Fall Hazards

- Overhead Platforms
- Overhead Runways
- Elevated Work Stations



Source of photos: OSHA



Common Fall Hazards

- Floor Openings/Pits
- Wall Openings
- Shelving Units



Source of photos: OSHA

Common Fall Hazards

- Stationary Storage Tanks
- Tanker Trucks
- Industrial Production Units



Source: WVU



Source: OSHA



Source: OSHA

Fall Hazard Controls

Hierarchy of Fall Hazard Control:

- First line of defense
 - **Eliminate** the fall hazard
- Second line of defense
 - **Prevent** the fall
- Third and last resort
 - **Control** the fall

Fall Hazard Controls



Source: WVU

- Eliminate** fall hazards
 - work from the ground
 - Gauge at top of tank moved to ground level
 - Use drone, equipped with camera, for inspections at heights

Fall Hazard Controls

Eliminate fall hazards – hole covers/grates



Source: WVU

- Very effective way to eliminate a fall hazard.
- Designed to withstand intended load.
- Secured-bolted, hinged, latched, locked

Fall Hazard Controls



Source: OSHA

Prevent the fall – guardrails

- Standard railing
 - Top rail, mid rail, and posts
 - Height from upper surface of top rail to floor level is 42" (+/- 3")
 - Mid-rail height is 21"
- Standard toeboard
 - 3.5" high
 - Not more than 1/4" clearance above the floor

Fall Hazard Controls

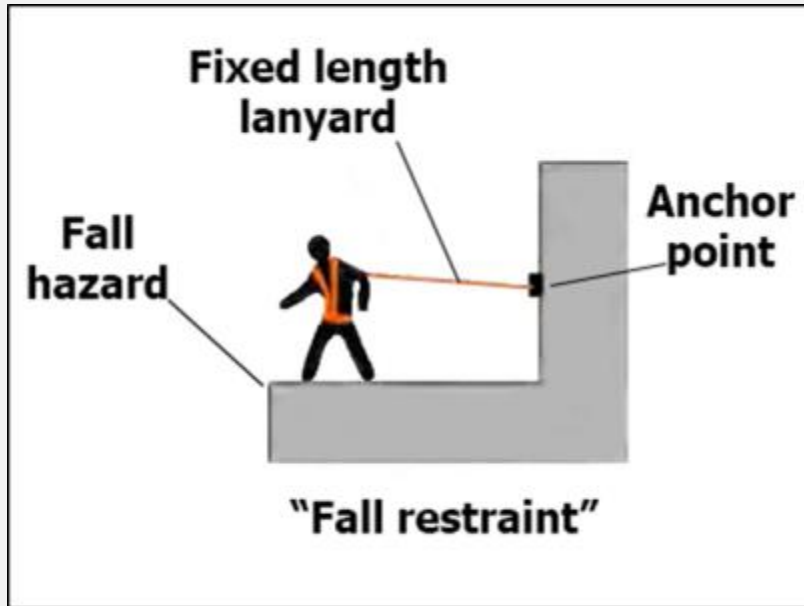


Source: WVU

Prevent the fall – fences and barricades

- Prevents unauthorized employee exposure to fall hazard
- Employer authorizes access
- Authorized personnel must then be protected from the fall hazards within

Fall Hazard Controls



Source: OSHA

Prevent the fall –
personal all restraint

- Prevent falls by keeping worker from reaching fall hazard
- Comprised of a body belt or body harness, an anchorage, connectors
- Often used when section of guardrail or hole cover is temporarily removed

Fall Hazard Controls



Source: Honeywell/Miller; used with permission.

Know the A, B, Cs of Personal Fall Arrest Systems

- Anchorages
- Body harness
- Components
(connectors like snaphooks or Dee-rings, connection points, lanyards, deceleration devices, lifelines, etc.)

Installed, used, and maintained according to the manufacturer

Fall Hazard Controls

PFAS – temporary anchorage



Source of photos: Honeywell/Miller; used with permission.

Fall Hazard Controls

PFAS – permanent anchorage



Source of photos: Honeywell/Miller; used with permission.

Fall Hazard Controls

PFAS – full-body harness



Source of photos: Honeywell/Miller; used with permission.

Fall Hazard Controls

PFAS – connecting components



Source of photos: Honeywell/Miller; used with permission.

Fall Hazard Controls



Source: OSHA

Control the fall –
positioning devices

- Consists of a body belt and connecting device
- Keeps workers from falling, while allowing their hands to be free to perform work

Fall Hazard Controls



Source: OSHA

Control the fall –
safety net systems

- Consists of specially designed mesh nets, panels, and connecting components
- Must be designed, installed and maintained properly

Employer Requirements

Training – your employer must train you on the following:

- Fall hazards associated with your facility and your work
- Methods used to protect you from those hazards
- Proper and safe use of any personal fall arrest, positioning, or fall restraint systems
- Applicable OSHA standards

Employer Requirements

Inspection

- Your employer must inspect the:
 - workplace for existing and potential fall hazards
 - fall hazard controls used; such as guardrails, covers, grates, and anchorage points
- You must inspect your PFAS, Positioning and Fall Restraint hardware before each use.

Employer Requirements



Source: OSHA

Rescue

- Personal Fall Arrest Systems require a rescue plan
- Employer must develop and communicate the rescue plan to all involved

Hazard Recognition



Source of photo: OSHA

Hazard Recognition



Source of photo: OSHA

Hazard Recognition



Source of photo: OSHA

Hazard Recognition



Source of photo: OSHA

Knowledge Check

1. What is the first line of defense when it comes to falls in the workplace?
 - a. Control the fall itself once it occurs
 - b. Eliminate the fall hazard completely
 - c. With the fall hazard present, prevent the fall.
 - d. Use personal protective equipment

Answer: b. Eliminate the fall hazard completely

Knowledge Check

2. A worker is required to remove a section of guardrail in order to receive materials from a fork truck; which of the following provides the best protections to prevent a fall?
- a. Avoid the edge
 - b. Use a personal fall arrest system
 - c. Use a fall restraint system
 - d. Use grab handles

Answer: c. Use a fall restraint system

Knowledge Check

3. A personal fall arrest system (PFAS) anchorage point must be capable of handling ____ pounds.
- a. 2,000
 - b. 3,000
 - c. 4,000
 - d. 5,000

Answer: d. 5,000