

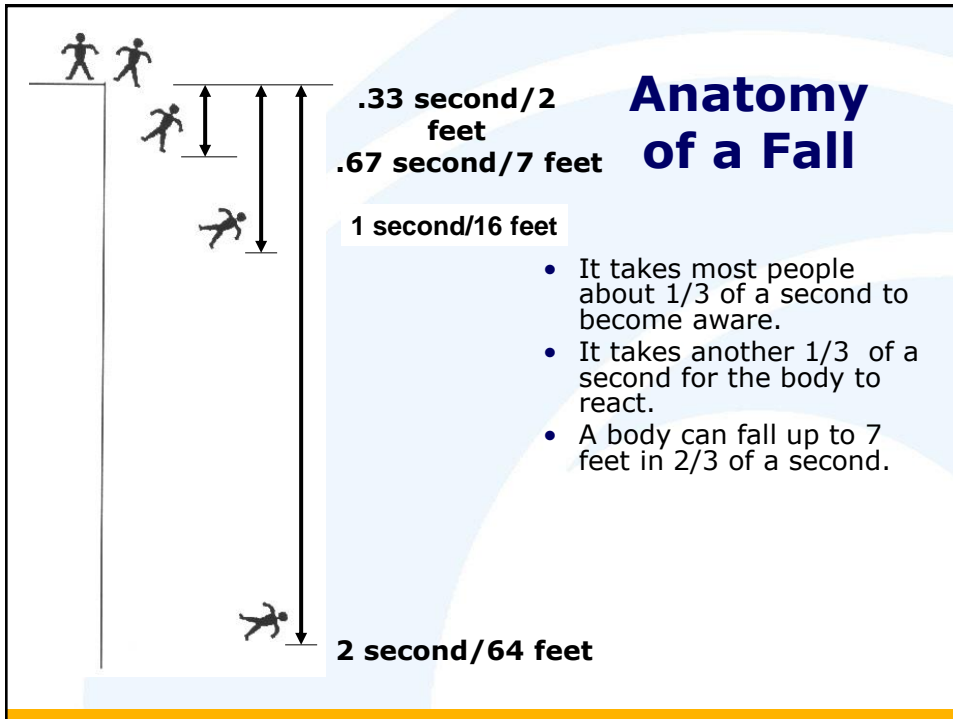
Fall Hazard Awareness Course for the Construction Industry

Course # 7405



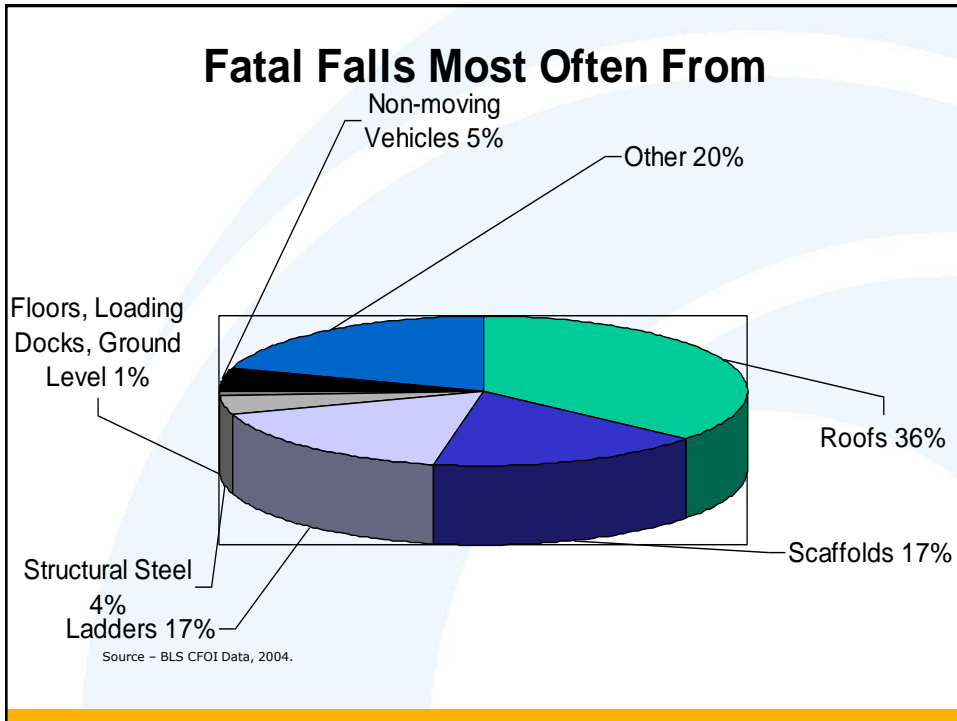
Objectives

- Identify factors that contribute to common fall hazards
- Explain how to analyze work areas for fall hazards
- Discuss hierarchy of controls for fall hazards
- Describe OSHA regulations and resources that address fall protection



Falls

- Falls consistently account for the greatest number of fatalities in the construction industry each year
- In 2004, the Bureau of Labor Statistics reported that 1,224 workplace fatalities resulted from falls
- In addition, the hardship and cost of care for injuries related to falls is an emotional and financial burden for workers and the entire construction industry



Identifying Fall Hazards

- Examples of factors contributing to fall hazards:
 - Scaffolds
 - Ladders
 - Roofs
 - Other elevated work surfaces

Scaffolds



Photo Source Credit: Associated General Contractors of America, Fall Protection Training in the Construction Industry, 2004.

Scaffolds -Subpart L 1926.450-454



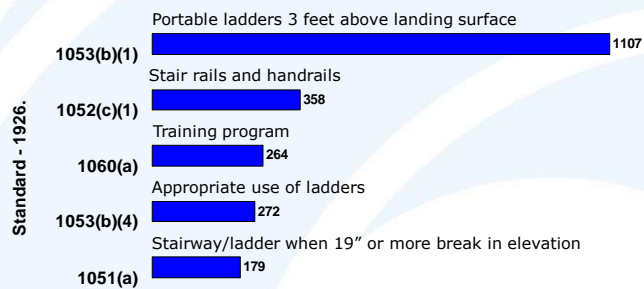
Number of Serious Violations - FY 2005

Ladders



Photo Source Credit: Associated General Contractors of America, Fall Protection Training in the Construction Industry, 2004.

Ladders - Subpart X 1926.1050-1060



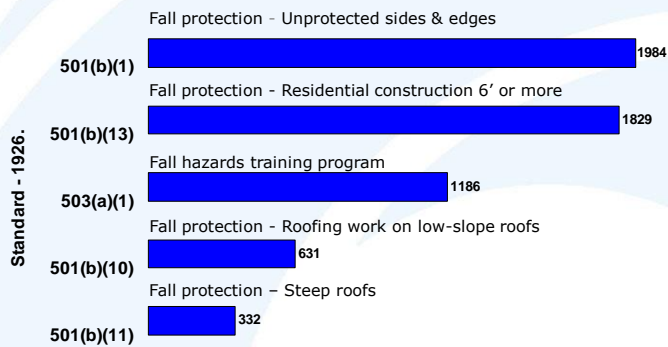
Number of Serious Violations - FY 2005

Roofing



Photo Source Credit: Associated General Contractors of America, Fall Protection Training in the Construction Industry, 2004.

Fall Protection-Subpart M Roofing 1926.500-503



Number of Serious Violations - FY 2005

Falls From A Floor (One Level to the Next)

- Falls from one level to the next is a leading cause of fatalities in construction.
- Floor holes are a common hazard.



Can You Identify The Fall Hazards?



Photo Source Credit: Associated General Contractors of America, Fall Protection Training in the Construction Industry, 2004.

Can You Identify The Fall Hazard? (Continued)



Analyze Work Area

- Analyzing work area for fall hazards may include:
 - Reviewing blueprints before work begins
 - Anticipating upcoming fall hazards as work progresses
 - Reviewing for current hazards on site
 - Pre-planning for fall protection
 - Walk around and look

Could These Exposures Been Prevented?



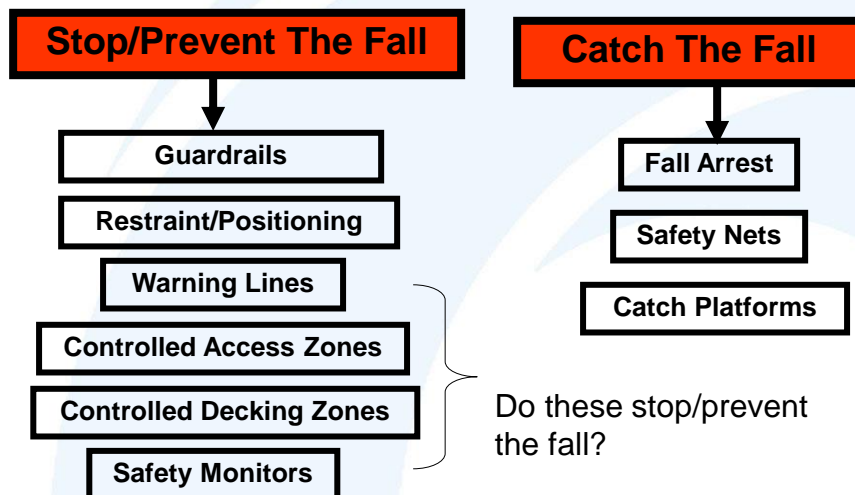
Could These Exposures Been Prevented? (Continued)



Hierarchy of Fall Hazard Control

- Engineer out and structural integrity
- Administratively prohibit exposure
- Personal protective equipment
 - Prevention of falls – restraint systems
 - Personal fall arrest/positioning device systems

Philosophies of Fall Protection



The Steps of Fall Protection?



Graphic Source Credit: Associated General Contractors of America, Fall Protection Training in the Construction Industry, 2004.

Eight Step Approach to Fall Protection

- Determine walking/working surfaces structurally sound
- Conduct fall assessment
- Eliminate need for fall protection
- Select type of fall protection system
- Develop rescue/retrieval procedures
- Develop equipment inspection, maintenance storage program
- Provide fall protection training
- Monitor fall protection program

Step 1

- Determine if walking/working surfaces are structurally safe



Step 2

- Conduct a fall hazard assessment



Step 3

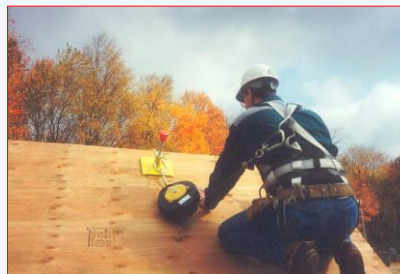
- Eliminate the need for fall protection, if possible



Photo Source Credit: Oregon OSHA Fall Protection Workshop Materials, 2004.

Step 4

- Select the appropriate types of fall protection systems



Fall Protection Systems

- Guardrail systems
- Personal fall-arrest systems
- Safety-net systems
- Positioning-device systems
- Warning-line systems
- Safety-monitoring systems
- Controlled-access zones

Personal Fall Arrest Systems



Lanyards



Harnesses



Beam Wraps



Carabiners



Rope Grabs



Positioning

Photo Source Credit: Associated General Contractors of America, Fall Protection Training in the Construction Industry, 2004.

Guardrail Systems

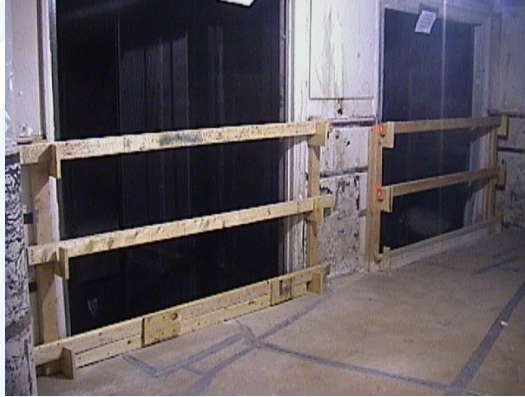


Photo Source Credit: Associated General Contractors of America, Fall Protection Training in the Construction Industry, 2004.

Safety-Net Systems



Photo Source Credit: Associated General Contractors of America, Fall Protection Training in the Construction Industry, 2004.

Positioning Device Systems



Photo Source Credit: Associated General Contractors of America, Fall Protection Training in the Construction Industry, 2004.

Warning-line System



Photo Source Credit: Associated General Contractors of America, Fall Protection Training in the Construction Industry, 2004.

Safety Monitoring Systems

- Safety-monitoring system is a set of procedures assigned to a competent person for monitoring or warning workers who may be unaware of fall hazards. [See other additional requirements in 29 CFR 1926.501 (b)(10)]

Controlled Access Zone Systems

- A work area designated and clearly marked in which certain types of work (such as overhand bricklaying) may take place without the use of conventional fall protection systems – guardrail, personal arrest or safety net – to protect the employees working in the zone

Step 5

- Develop rescue/retrieval systems



Photo Source Credit: Oregon OSHA Fall Protection Workshop Materials, 2004.

Step 6

- Develop an equipment inspection, maintenance and storage program



Step 7

- Provide fall protection training



Photo Source Credit: Associated General Contractors of America, Fall Protection Training in the Construction Industry, 2004.

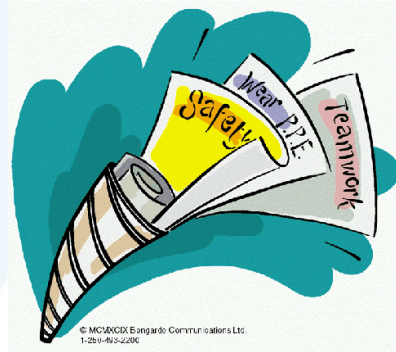
Step 8

- Monitor the fall protection program
- Investigate incidents to determine if program needs to be revised



Promote Your Fall Protection Program

- Managers, supervisors and other staff need to actively support the use of fall protection systems and equipment and encourage employee involvement and support of program



OSHA Resources

A screenshot of a web browser displaying the OSHA website. The browser's address bar shows 'http://www.osha.gov/SLC/construction/fallprotection/index.html'. The page title is 'Safety and Health Topics: Construction - Fall Protection'. The main content area features a header for 'U.S. Department of Labor Occupational Safety & Health Administration' and 'www.osha.gov'. Below this, there is a section titled 'Safety and Health Topics Construction - Fall Protection'. The text states: 'In 1995, 1,048 construction workers died on the job, with 22 percent, or 335 of them, resulting from falls. Each year, falls consistently account for the greatest number of fatalities in the construction industry. Falls may result from a number of factors, including unstable working surfaces, misuse of fall protection equipment, and human error. Studies have shown that the use of guardrails, fall arrest systems, safety nets, covers, and travel restriction systems can prevent many of the deaths and injuries that result from falls.' To the right of this text is a 'In Focus' box with the following items: 'What's New', 'OSHA Alerts', and 'OSHA eTools'. Below the text are three questions with links: 'What standards apply? OSHA | ANSI', 'What are the fall hazards and possible solutions associated with construction? Hazards | Possible Solutions', and 'Where can I find additional information? Related Safety and Health Topics | Training | Additional Resources'. On the right side of the page, there is a 'Safety and Health Topics' sidebar with a 'Construction Industry' section containing links for 'Construction Fall Protection', 'Standards', 'Hazards and Possible Solutions', 'Additional Information', and 'Credits'. The browser's taskbar at the bottom shows several open windows, including 'start', 'Inbo...', 'Fall Hazards Course...', 'Microsoft Word', and 'Safety and Health T...'. The system clock in the bottom right corner shows '12:52 PM'.

Course Summary

- During this session, you have been introduced to:
 - Factors that contribute to fall hazards
 - Analysis of work areas for fall hazards
 - The eight-step approach to fall protection
 - OSHA resources addressing fall protection

Thanks for Your Participation

Questions!!!!!!!!!!