

TITLE: 9701 HIGH-IMPACT FALL PREVENTION

VIDEO PLAYING TIME: 19 MINUTES

YEAR PRODUCED: 1997

PROGRAM SYNOPSIS:

Falls are one of the most underrated hazards on the job. After motor vehicle accidents, falls represent the greatest hazard to our safety in the workplace. Fall injuries account for a great deal of personal suffering as well as substantial losses in productivity. Employees can prevent most of these accidents if they make a conscious effort to protect themselves in every situation where slip, trip and fall hazards are present.

The 10 accidents re-created in this video will show employees that short cuts and other common safety mistakes can lead to painful and sometimes fatal falls. Ladder safety, housekeeping, aerial lifts, fall arrest systems, proper footwear, recognizing hazards and other topics related to fall prevention are also featured in the program.

SHOOTING LOCATIONS: Chemical processing plant, automobile assembly operation, smelting facility, manufacturing operation and other industrial sites

PROGRAM OBJECTIVES: After watching the video, the viewer will be able to identify the following:

- How short cuts and other safety errors lead to falls that result in serious injury and death;
- How to properly select, inspect, place and climb different types of ladders;
- Components of the fall arrest system and other forms of fall protection;
- Hazards associated with aerial lifts and other lifting devices;
- Common causes of slips, trips and falls and how to prevent them.

PROGRAM COMPONENTS: Videotape and leader's guide

PROGRAM OUTLINE

THREE FACTORS THAT AFFECT ALL FALLS

- The amount of *friction* that exists between your shoes and the surface on which you are walking is a major factor in falls.
- *Momentum* affects falls because the more a person weighs and the faster he is moving, the harder he will fall.
- The force of *gravity* continually pulls you to the lowest point possible.

SLIPS

- Slips are loss of balance caused by lack of friction between your feet and surface on which you are walking or working.
- Substances that reduce traction and cause slippery surfaces include water, ice, snow, oil and loose granules.
- Always pay attention to the surface ahead and the manner in which you walk.
- Improper footwear can cause loss of traction; choose shoes or boots with the correct sole composition for the area in which you work.
- Neoprene soles work well on wet or dry surfaces, but not on oily ones.
- Crepe soles are best for wet or dry concrete, but are not recommended for tile, smooth concrete or wood surfaces.
- Attachments can be worn with shoes to increase your traction. These include strap-on cleats for ice and boots that pull over your shoes that have the proper sole composition and tread.

TRIPS

- Trips occur when your feet strike an object while your body is moving with enough momentum to be thrown off balance.
- Haste is responsible for many trips; take your time when moving about an area and keep your work area free of clutter.
- If you are using extension cords or air lines, be sure to tape them to the floor or secure them out of the way of co-workers.
- Always store materials and tools when you are not using them to keep others from tripping over them.

SELECTING AND INSPECTING LADDERS

- Select ladders according to the load rating. The load rating should include your weight and that of the equipment to be carried.

- Use a non-conductive ladder when electrical energy is involved; other environments may require other choices of ladder types.
- Before erecting a step ladder, inspect it for broken rungs or footings, slippery or oily steps and check the locking hardware for wear.
- Choose another ladder if the one you have has been painted. Paint covers defects that can cause problems.
- If a ladder is not up to standard, tag it out of service and report it to your supervisor. Don't attempt to repair it unless you are authorized to do so by your company.
- Never assemble makeshift ladders out of chairs, benches, boxes or pallets.

PLACING LADDERS

- Try to avoid passageways, doorways and aisles when placing ladders; if this is not possible, erect barricades to protect pedestrians and lock or secure doorways to prevent the ladder from being struck.
- Place the ladder on a firm, level surface. Avoid oily or wet surfaces if possible.
- Spread the ladder to the maximum open position and make sure the locking device is secure.
- Don't place ladders or risers of any kind. Tie them off when possible.

CLIMBING LADDERS

- Before climbing a ladder, check your personal condition. It's not a good idea to climb a ladder if you are overly tired or taking prescription medication.
- Make sure you have the materials and tools necessary for the task at hand before climbing the ladder; leaving the erected ladder unattended could be hazardous to co-workers.
- When climbing the ladder, always face forward and use both hands to secure yourself.
- Keep your belt buckle between the two rails of the ladder.
- Never stand on the last two rungs or use the top of the ladder as a standing surface.
- Once in position, don't overreach the vertical members of the ladder.

STRAIGHT/EXTENSION LADDERS

- Use the one-to-four rule when placing a straight ladder. For every four vertical feet between the resting point and the floor, the base should be one foot horizontally away.
- Make sure the surface where the ladder will rest is secure, level and provides good traction. If it is wet or slippery, secure the feet to ensure good traction.
- Never put wedges or other leveling devices under a foot or use a stepladder as a straight ladder.
- When reaching the top, secure the ladder with a rope or chain to prevent it from slipping.
- If the job requires parts or supplies, hoist them up with a rope after you're in position.

THE FALL ARREST SYSTEM

- The body harness will provide a slow, controlled stop when used correctly with the other fall arrest components.
- The basic fall arrest system is comprised of three elements: the body harness, the lanyard with shock absorber and the tie-off point.
- The tie-off point will be located over your head and must be able to support 5000 pounds of dead weight per person that is tied off to it.
- Objects such as conduit, water pipe and two-by-fours cannot withstand the shock load.
- A lanyard must not exceed six feet in length. If you use a shock absorbing device, you must add three and a half feet for its elongation.
- Make sure there are no knots in the lanyard.
- When attaching the lanyard to a tie-off point, use a choker or a strap that is designed for this purpose.
- Make sure interlocking snaphooks are compatible with the equipment.

AERIAL LIFTS

- You must be trained and authorized to use an aerial lift.
- When using the lift, never exit the cage while it's elevated. Keep both feet on the cage floor at all times.
- Before moving the basket, check for overhead hazards. You must wear a hard hat and other required PPE when using the lift.

STAIRS AND STEPS

- The leading cause of falls on stairs and steps is loss of traction; poor housekeeping is another contributor.
- Keep one hand on the stairway rail for added security. Never carry loads that block your vision.
- If you see oil, water or any other substance that could cause a fall, attend to it immediately or notify the proper supervisor.