

The background of the slide is a blue-tinted photograph of a construction site. In the center, there is a white safety sign with blue text that reads "ALL PROTECTION REQUIRED 100% TIE OFF". The sign is slightly tilted and has some wear. The overall image has a dark blue overlay at the top and bottom where the text is placed.

# Susan Harwood Training Program Grant

## Fall Hazard Awareness

This material was produced under grant number SH-26327-SH4 from the Occupational Safety and Health Administration, U.S. Department of Labor. It does not necessarily reflect the views or policies of the U.S. Department of Labor, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

# Objectives

- After this module you should be able to
  - identify the most common fall hazards
  - take the steps necessary to avoid those hazards


# Fall Prevention and Protection

- Falls can be the result of
  - unprotected sides or edges
  - trips or slips
  - improper ladder use
  - much more
- Fall prevention examples
  - guardrails
  - hole covers
- Fall protection examples
  - personal fall arrest systems (PFAS)
  - safety nets
- Fall protection (which includes prevention and protection) is required at 4' for general industry and 6' for construction

# Fall Hazards

- Uneven working surfaces
- Unprotected sides and edges
- Ladders
- Open pits
- Climbing and working from the derrick
- Working off the bed of trucks
- Floor holes
- Stairs
- Getting on and off mobile equipment
- Equipment, materials, lines, etc. on rig floor or ground




A photograph showing a worker's feet in brown work boots standing on a rusty, square-patterned metal grate. The grate is part of a larger structure with a red-painted metal frame. Below the grate, there is a dark, muddy area with some debris, including a piece of crumpled plastic. To the right, a white sheet of paper and a yellow-handled tool are visible on the grate. The overall scene suggests a hazardous work environment with a potential fall hazard.

uneven walking/working  
surface

**Corrective Action:** inform your supervisor  
that a potential for falls exists here





walking surfaces can get slippery from oil spills during maintenance activities

**Corrective Actions:** keep walking surfaces as clean as possible; spread something down for traction



a pallet used in place of a ladder



**Corrective Action:** use only approved ladders



employee climbing a step ladder that is not set up right



**Corrective Action:** set up step ladder properly or use an extension ladder



even a good set of stairs with stair rails can be the site of a fall



**Corrective Actions:** 3 points of contact; walk; clear and clean; carry only light loads; do not jump last few steps





the v-door opening is a fall hazard if not properly guarded


a gate or barrier like this one must be installed when the opening is not in use



employees working on trailer with no means of fall protection








worker without fall protection  
with possible fall of 18'



**Corrective Action:** install a guardrail or use a PFAS





employee using the landing of a set of stairs as a working surface

**Corrective Action:** install a swinging gate (that meets guardrail requirements) on the stair opening

reserve pit fence down during frac job  
with a potential for fall into pit



**Corrective Action:** maintain reserve pit fences  
after rig leaves and until reclamation



due to the slickness and slope of the plastic, a fall into the pit can occur, likely resulting in a worker drowning



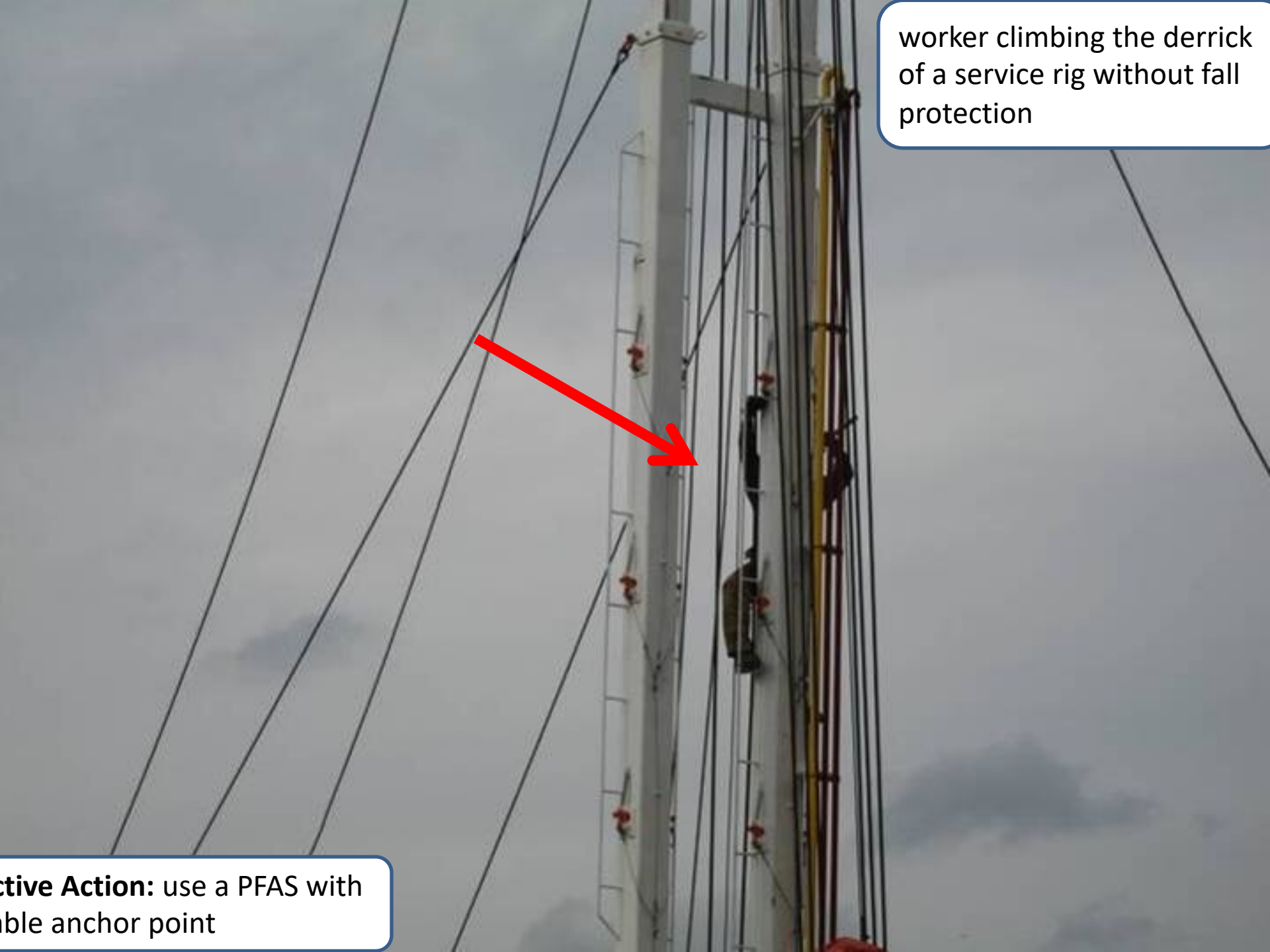
it is strongly recommended that a harness and tag line be worn by the entrant at all times in case a rescue needs to be made

if a worker falls into the fence, that worker still might fall into the pit



**Corrective Action:** set fence back at least 6' from edge of pit





worker climbing the derrick  
of a service rig without fall  
protection

**Corrective Action:** use a PFAS with  
stable anchor point

worker correctly using a boatswain's chair





work practices like these often end in tragedy for the worker and his family



**Corrective Actions:** never stand on forks or use makeshift baskets; always use proper lift baskets and a PFAS

is this any better?






a worker can be thrown from or fall out of the basket of an aerial lift



always wear a PFAS while in the basket;  
attach PFAS to a suitable anchor point






a gap in the guardrail system

**Corrective Action:** inform your supervisor that a potential for falls exists here










a floor hole that can cause a trip; materials  
can fall through and strike a worker below

**Corrective Action:** always replace covers  
over holes in rig floor when not in use





this opening can sneak up on a worker when walking backwards directing a load into position

**Corrective Actions:** place a cover over this opening





this is another example of a fall hazard

**Corrective Action:** cover the rest of the hole or cover entire hole with a larger grate



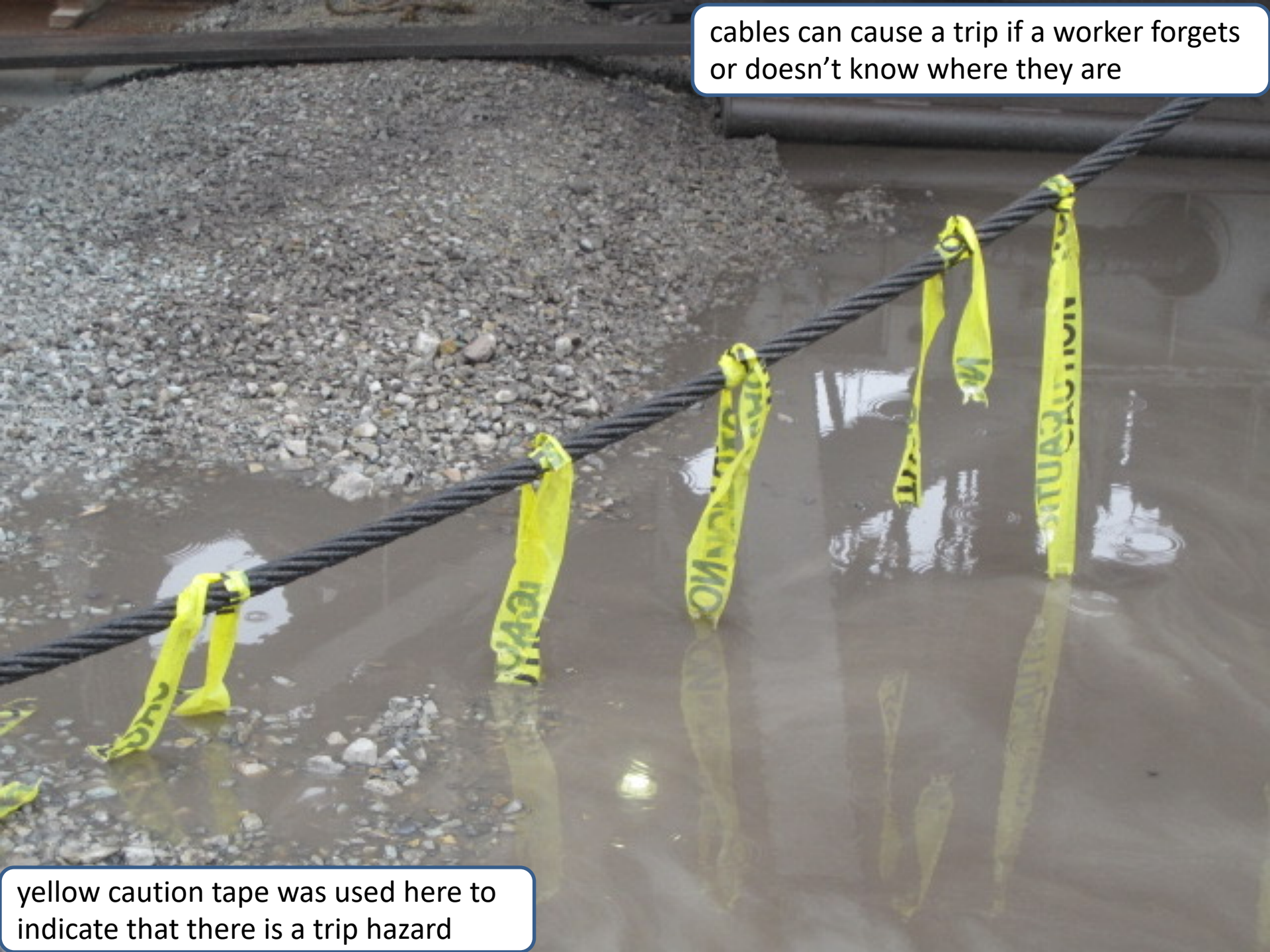
hoses and other equipment left on the rig floor are tripping hazards



**Corrective Action:** tuck away to prevent tripping or return to storage after use



cables can cause a trip if a worker forgets or doesn't know where they are



yellow caution tape was used here to indicate that there is a trip hazard



running on site is just not necessary



**Corrective Action:** walk, don't run



# **Your Employer Is Responsible For**

- Providing and maintaining safe access
- Making sure that there are no unguarded surfaces 4 feet or more in height
- Providing a personal fall arrest system (PFAS), training on and ensuring its use
- Responding to and correcting hazards pointed out by you, the worker



# **You Are Responsible For**

- Inspecting your work area for fall hazards
- Following all fall protection procedures your company has in place including wearing a personal fall arrest system (PFAS)
- Correcting the hazards you are able to correct
- Reporting to your supervisor the hazards you are unable to correct

# Case Study

- Fall from derrick board: a worker grabbed the elevator and held on for a few minutes but then let go, grasping a 4.5" vertical pipe. The worker slid partially down the pipe joint until he reached the pipe collar from where he fell about 65'.





# Always Remember

- Always use your fall protection when above 4'
- Keep walking/working surfaces as clean and clear as possible
- Walk, don't run
- Cover floor holes when not in use
- Report any concerns to your supervisor

# Memory Check

1. Fall protection is required at how many feet or more for general industry?
  - a. 4
  - b. 10
  - c. 12
  - d. 15



# Memory Check

2. What is a PFAS?

- a. Personal Fall Ascent System
- b. Partial Fall Ascent System
- c. Personal Fall Arrest System
- d. Partial Fall Arrest System

# Memory Check

3. When ascending and descending a ladder or stairs, at least how many points of contact must you maintain?
  - a. 1
  - b. 2
  - c. 3
  - d. 4