



# Fall Protection Equipment Inspections

Welcome to the first day of Fall Prevention Week, presented by AFPM. We sincerely appreciate your **dedication to safety**, which is the cornerstone of our industry. Let's continue working together to prioritize the safety and well-being of our workforce, and to positively affect our industry.

“  
*I inspect fall protection equipment before use.*”

To protect themselves from falling when working at height, workers should inspect fall protection equipment before use. Equipment should be inspected annually by a competent person, and before every use by the worker using the equipment. The resources shared in this package provide an overview of the basic components of fall protection and can be used to explain how they work together to form a fall protection system focused on avoiding injuries.

At the end of this packet, you will find a discussion guide on the ABCD's of Fall Protection. Use that guide to help spark productive conversations at your company.

Check out the following video for a **quick overview** of the importance of inspecting your fall protection system.



## AFPM Resources

- Personal Fall Protection
- Equipment Inspections
- Fall Protection Systems: Harnesses
- The ABCD's of Fall Protection

## Other Industry Resources

- IOGP's Life Saving Rules—[iogp.org/workstreams/safety/safety/life-savingrules/](http://iogp.org/workstreams/safety/safety/life-savingrules/)
- Toolbox from Energy Institute—[toolbox.energyinst.org/home](http://toolbox.energyinst.org/home)

## Questions for Leaders and Supervisors

- What process do you use to ensure that the type of fall protection equipment is appropriate for your specific work environment/s?
- How do workers at your company, who work at height, learn the proper way to inspect, don, and doff fall protection equipment? How often is this done?

After reviewing the resources—**test your knowledge.**



*Practice sharing documents are meant to share information on process or occupational safety practices in order to help improve safety performance and awareness throughout industry. The goal is to capture and share knowledge that could be used by other companies or sites when developing new safety practices or improving existing ones. The practices being shared have been used by an industry member, but this does not mean they should be used or that they will produce similar results at any other site. Rather, it is an option to consider when implementing or adjusting programs and practices at a site. This remains true even if a practice sharing document uses mandatory language, such as shall, must, never, etc., which only reflects a potential option to consider.*

*By themselves, the practice sharing documents are not standards or recommended practices. They are not intended to replace sound engineering judgment. They do not preclude the use of alternative methods that comply with legal requirements. A subject matter expert should be consulted prior to determining whether a practice sharing document can be used in any specific situation.*



# SAFETY focus

## Personal Fall Protection

Fall hazards are present all around us in the Refinery, and many of us are exposed to them on a daily basis. A fall hazard is any exposure condition at the worksite that could cause a worker to lose his/her balance or to lose bodily support and fall. Any elevated walking or working surface can pose a potential fall hazard.

Any time we are working on elevated platforms, docks, or near edges where we could fall more than four feet, they must be protected by **guardrails** or **railing**. When working in aerial lift devices (scissor lifts, aerial lifts, man baskets), working from a ladder more than 6' off the ground, or any locations without adequate guardrails you must wear personal fall protection and be secured to an anchorage point capable of holding 5,000 pounds.

### Work at Heights

Below we highlight some of the key points.

- Be prepared to work safe when you approach Scaffolds. You **should wear** your **full body harness and twin-leg lanyard** to access any scaffold or temporary platforms taller than 6'.
- When working from scaffolds or temporary platforms, you should be tied-off if required by the tag, if your work task requires you to lean or reach exposing you to a fall hazard, or if you go beyond the confines of the scaffold guardrails.
- Use a Self-retractable type lanyard when the fall clearance is not adequate using your standard twin-leg lanyard.
- **Employees:** Complete your company's required training on Work at Height.
- **Contractors:** Complete your company's Work at Height training and follow any additional/specific requirements at your worksite.





## Fall Protection Week: EQUIPMENT INSPECTIONS

Personal Fall Protection Equipment should be inspected **ANNUALLY** by a competent person, and **PRE-USE** by the user. Items to look for when completing a pre-use inspection include:

- |                                    |                               |  |
|------------------------------------|-------------------------------|--|
| 1. Cuts, nicks, tears              | 4. Rust or corrosion          | 8. Double locking gates are functional   |
| 2. Chemical or UV damage           | 5. Broken/distorted grommets  | 9. If using a Self Retracting Lanyard (SRL) ensure that the stopping mechanism is functional |
| 3. Burnt, charred or melted fibers | 6. Deformed D-Ring            |  |
|                                    | 7. Shock absorbers are intact |  |

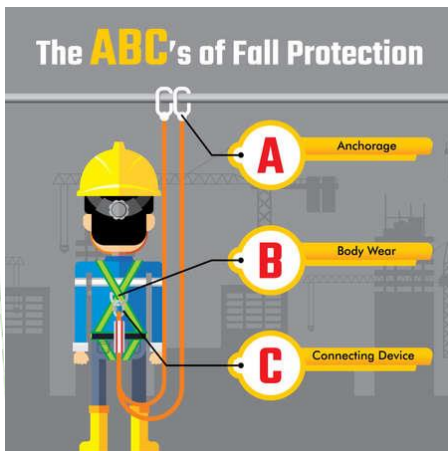
### What is wrong with these pieces of fall protection equipment?



If any equipment fails a pre-use inspection, remove from service and tag **"DO NOT USE"**

## Focus on the Little Things...

Remember to not lose sight of the little things and keep our focus to avoid injury.



- Inspection equipment before each use
- Secure tools and work materials to prevent dropped objects
- Tie off to approved anchor points when outside of the protected area

**When You Work at Height,  
 Always Keep Safety Rules Tight**

**...Because the Little Things Make a Big Difference!**



## HAZARD ALERT

**CPWR**   
 THE CENTER FOR CONSTRUCTION  
 RESEARCH AND TRAINING

# FALL PROTECTION SYSTEMS: HARNESSSES



## Am I in danger?



**Falls are the leading cause of death in construction.**

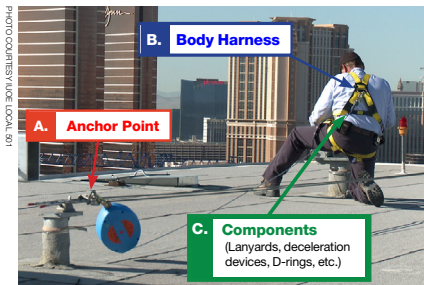
Almost every workday, somewhere in the United States, a construction worker dies as a result of a fall.

## When do I need a fall protection harness?

If you are working ...

- more than 6 feet above the ground, and
- you are not protected by a system of guardrails or safety nets.

Know the **ABC's** of Personal Fall Arrest Systems.\*



**You are not safe from a fall unless you tie off.**

\*Source: OSHA 29CFR 1926.502

## To learn more visit:

- ▶ [www.StopConstructionFalls.org](http://www.StopConstructionFalls.org)
- ▶ OSHA's eTool: Falls - Personal Fall Arrest Systems <https://tinyurl.com/OSHA-eTool-Falls>

To receive copies of this Hazard Alert and cards on other topics: call **301-578-8500** or visit **www.cpwr.com**.

## To stop a fatal fall ...



PHOTO COURTESY OF ED REHFELD, LEGET

### 1 Wear a full-body harness

A proper fall protection harness has straps worn around the trunk and thighs. If you fall, it will distribute "stopping force" across your thighs, pelvis, chest and shoulders to prevent severe injury.



PHOTO COURTESY OF MILLER® FALL PROTECTION

### 2 Inspect your harness It must be worn properly and be in good condition

- Inspect your harness for worn or damaged straps, buckles, D-ring and lines.
- Follow the manufacturer's instructions when you put on your harness.
- Make sure all straps are fastened and adjusted correctly.
- **Don't start work** until you are satisfied with the condition and fit of your fall protection harness.

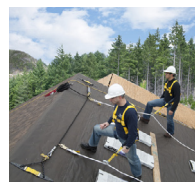


PHOTO COURTESY CAPITAL SAFETY

### 3 Make sure you are connected

Your lanyard should be attached to the D-ring on your fall arrest harness, then **anchored securely** to an anchor point. The anchorage must be capable of supporting at least 5,000 pounds per worker attached.\* Ask your supervisor if your anchor point can sustain the load without failure. **Guardrails are not anchor points.**

\*Source: Source: OSHA 3146-05R 2015

## It's not over when the fall stops!

It only takes a short time for the harness to restrict blood circulation, which can lead to unconsciousness or even death.

OSHA requires employers to have a plan to

**"provide for prompt rescue of employees in the event of a fall."**

**If you think you are in danger:**

Contact your supervisor.  
 Contact your union.

Call OSHA  
**1-800-321-OSHA**





**Module:** Working at Heights  
**Topic:** ABCD's of Fall Protection

**Objective:**

This lesson will provide employees with an overview of the basic components of fall protection and use.

**Key learning objectives:**

- The basic components of fall protection
- Purpose and use of fall protection components
- How the components work together to form a fall protection system

**Group Discussion:**

A typical Personal Fall Arrest System (PFAS) incorporates three components often described as the ABC's of fall protection. The anchorage/anchorage connector, body support and connecting device, when used together, form a complete system for maximum worker protection. But don't forget about another required component of any fall protection program — the descent, rescue and retrieval of a fallen worker.

**Ancorage**

The anchorage is the secure point of attachment for the fall arrest system. The appropriate type of anchorage varies by industry, the job being performed, the type of installation and the structure available, but it must be able to withstand fall arrest forces.

**Body Support**

The full-body harness provides the necessary body support with straps that fasten around the user and distribute fall arrest forces over the upper thighs, pelvis, chest and shoulders.

**Connectors**

A connector, such as a shock-absorbing lanyard or self-retracting lifeline, is a device that links the user's full-body harness to an anchorage. When used with a fall restraint system, the connector should be short enough so that the worker cannot reach a fall hazard.

**Descent/Rescue**

Descent and rescue devices, an essential part of the fall protection program, are used to retrieve or lower a fallen worker to the ground.

**Key learning knowledge check:**

1. What are the three components often described as the ABC's of fall protection?
2. What is the D component of fall protection?
3. What do the ABCD's of fall protection form when used together?



**“There is no place for spectators.” We will Break the Trend!**

Answers: 1. Anchorage, Body Support, Connectors; 2. Descent/Rescue; 3. A complete system for maximum worker protection.