

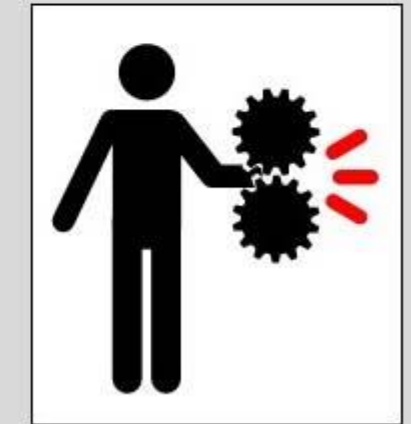
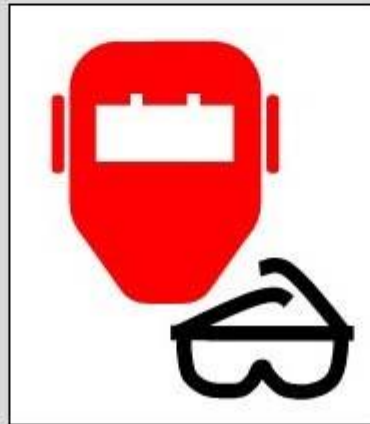


Fall Protection In General Industry

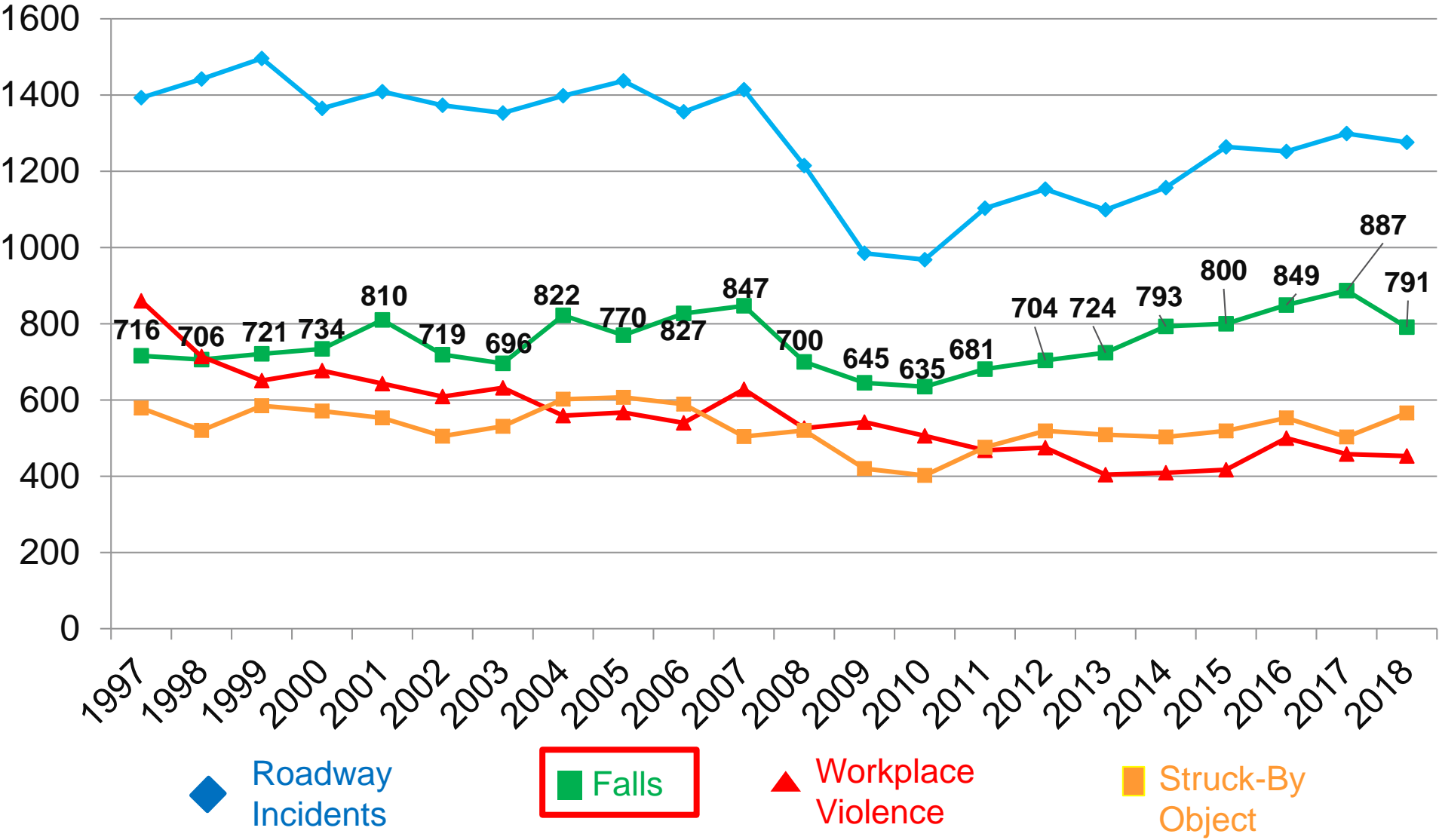
Spencer Hunter, MSA North American Training Instructor



OSHA's 2021 Top 10 Most Frequently Cited Violations



BLS – Census of Fatal Occupational Injuries



Subpart D: Walking-Working Surfaces

Walking-Working Surface:

“Means any horizontal or vertical surface on or through which an employee walks, works, or gains access to a work area or workplace location” (1910.21(b))

- ☐ **1910.21** – Scope and Definitions
- ☐ **1910.22** – General Requirements
- ☐ **1910.23** – Ladders [General Reqs. for Temp. & Perm. Const. / Use]
- ☐ **1910.24** – Step bolts and Manhole Steps
- ☐ **1910.25** – Stairways
- ☐ **1910.26** – Dockboards
- ☐ **1910.27** – Scaffolds and Rope Descent Systems
- ☐ **1910.28** – Duty to Have Fall Protection & Falling Object Protection
- ☐ **1910.29** – F.P. Systems & Falling Object Protection-Criteria & Practices
- ☐ **1910.30** – Training Requirements

Situations & Prescribed Options

1910.28(b) – Duty to Have Fall Protection [@4'] & Falling Object Protection	
Unprotected Sides & Edges	✓ Guardrail / Net / PFPS
Hoist Areas	✓ Guardrail / PFAS / Travel Restraint
Holes (>2" in Least Dim.)	✓ Covers / Guardrails / Restraint / PFAS
Dockboards	✓ No Guardrails if Solely using Motorized Equipment
Runways & Similar Walkways	✓ Guardrails or Guardrails + PFAS or Restraint
Dangerous Equipment < 4'	✓ Guardrail / Travel Restraint
Openings (>30" Tall & 18" Wide)	✓ Guardrail / Travel Restraint / PFAS
Vehicle Repair, Serv. & Assembly Pits.	✓ < 10' in Depth – Limit Access w/in 6'
Fixed Ladders	✓ >24'
Outdoor Advertising (Billboards)	✓ Qualified Climber until Nov. 19, 2018
Stairways	✓ Guardrails @ Platform & on Risers w/ 4+ Steps
Scaffolds & Rope Descent Systems	✓ Ensure compliance with 1926, Subpart L
Work on Low-Sloped Roofs	✓ Various Options Exist
Slaughtering Facility Platforms	✓ Guardrails or Restraint unless Infeasible

- ☐ 1910.29(b): Guardrails – 42” +/-3”
- ☐ 1910.29(c): Safety Net Systems – Meet 1926 Subpart M
- ☐ 1910.29(d): Designated Areas
- ☐ 1910.29(e): Covers
- ☐ 1910.29(f): Handrails and Stair Rail Systems
- ☐ 1910.29(g): Cages, Wells, & Platforms used w/ Fixed Ladders
- ☐ 1910.29(h): Outdoor Advertising
- ☐ 1910.29(i): Ladder Safety Systems
- ☐ 1910.29(j): Personal Fall Protection Systems
- ☐ 1910.29(k): Protection from Falling Objects
- ☐ 1910.29(l): Grab Handles

1910.30 – Fall Hazards [Training]

- ☐ Before exposure to a fall hazard, employees must be trained.
 - ☐ Must occur before May 17, 2017
- ☐ Training to be done by a “qualified person”
- ☐ Topics:
 - ☐ Nature of fall hazards in work area and how to recognize them;
 - ☐ Procedures to follow to minimize those hazards;
 - ☐ Correct procedures for installing, inspecting, operating, maintaining, & disassembling the systems the employees will use; &
 - ☐ The correct use of PFPS’s, including proper hook-up, anchoring, tie-off techniques, inspection, and storage as specified by MFR.
- ☐ Retraining
- ☐ Training must be understandable.

Prior to November 2018

- ☐ When was fall protection required?
 - ☐ *Ladder Height > 20'*

- ☐ Fall Protection Methods:
 - ☐ Cage + Well

After November 2018

- ☐ When is fall protection required now?
 - ☐ *Potential Fall Distance > 24'*

- ☐ Fall Protection Methods:
 - ☐ 100% Connection (Twin Leg Lanyard/PFL)
 - ☐ Overhead Mounted SRL
 - ☐ Vertical Lifeline

- ☐ How will people try to eliminate the need for fall protection on fixed ladders?

Is Additional Fall Protection Required?

- ☐ Additional fall protection is **not required** if the ladder is 23' tall and following three areas apply:
 - ☐ Platform dimensions are at least (24" X 30")
 - ☐ The platform is equipped with a compliant guardrail system
 - ☐ Ladder is equipped with a cage and well
- ☐ Additional fall protection is **required** if the above three areas do not apply, and your potential fall distance is >24'.



Portable Ladders

Various types

- ❑ Self Supporting Ladder
 - ❑ Standard A Frame
- ❑ Non-Self-Supporting Ladder
 - ❑ Extension Ladder
 - ❑ Single Ladder



Common Misuses on Portable Ladders



Can you see the risk?



Do you have to use a Portable Ladder?



Performance Duty Ratings

200-225lb

LOAD CAPACITY
TYPE III - TYPE II

LIGHT DUTY - BASIC DESIGNS

250lb

LOAD CAPACITY
TYPE I

MEDIUM DUTY - LIGHTWEIGHT DESIGNS

300lb

LOAD CAPACITY
TYPE IA

HEAVY DUTY - RUGGED & DURABLE

375lb

LOAD CAPACITY
TYPE IAA

COMMERCIAL GRADE - MOST DURABLE

	YES	NO
Rungs:		
Loose, cracked, bent, or missing	<input type="checkbox"/>	<input type="checkbox"/>
Rails:		
Cracked, bent, split, or frayed	<input type="checkbox"/>	<input type="checkbox"/>
Labels:		
Missing or not readable	<input type="checkbox"/>	<input type="checkbox"/>
Rung Locks:		
Loose, bent, missing, or broken	<input type="checkbox"/>	<input type="checkbox"/>
Hardware:		
Damaged, loose, or missing	<input type="checkbox"/>	<input type="checkbox"/>
Shoes:		
Worn, broken, or missing	<input type="checkbox"/>	<input type="checkbox"/>
Rope / Pulley:		
Loose, bent, or broken	<input type="checkbox"/>	<input type="checkbox"/>
General:		
Rust, corrosion, or loose	<input type="checkbox"/>	<input type="checkbox"/>
Other:		
Bracing rivets	<input type="checkbox"/>	<input type="checkbox"/>

	YES	NO
Steps:		
Loose, cracked, bent, or missing	<input type="checkbox"/>	<input type="checkbox"/>
Rails:		
Cracked, bent, split or frayed rail shields	<input type="checkbox"/>	<input type="checkbox"/>
Labels:		
Missing or not readable	<input type="checkbox"/>	<input type="checkbox"/>
Pail Shelf:		
Loose, bent, missing, or broken	<input type="checkbox"/>	<input type="checkbox"/>
Top:		
Cracked, loose, or missing	<input type="checkbox"/>	<input type="checkbox"/>
Spreader:		
Loose, bent, or broken	<input type="checkbox"/>	<input type="checkbox"/>
General:		
Rust, corrosion, or loose	<input type="checkbox"/>	<input type="checkbox"/>
Other:		
Bracing, shoes, or rivets	<input type="checkbox"/>	<input type="checkbox"/>

Self Supporting

- ☐ Fully open and lock spreader arms.
- ☐ If you have tools attached to your ladders remove them before adjusting or use an accessory to secure them.
- ☐ Be careful moving objects. (Pushing / Pulling)
- ☐ Do not climb on the back side of a single sided ladder.
- ☐ Don't stand or sit on the following areas:
 - ☐ Top two rungs
 - ☐ Pail Shelf



Non-Self-Supporting

- ☐ Block the ladder feet against the structure and walk the ladder upward into a vertical position.
- ☐ Move the ladder into position
 - ☐ 4:1 Ratio
- ☐ Ensure the top rung extends at least 3 feet past the landing surface.
- ☐ Ensure the ladder is properly secured:
 - ☐ Feet
 - ☐ Top Rungs



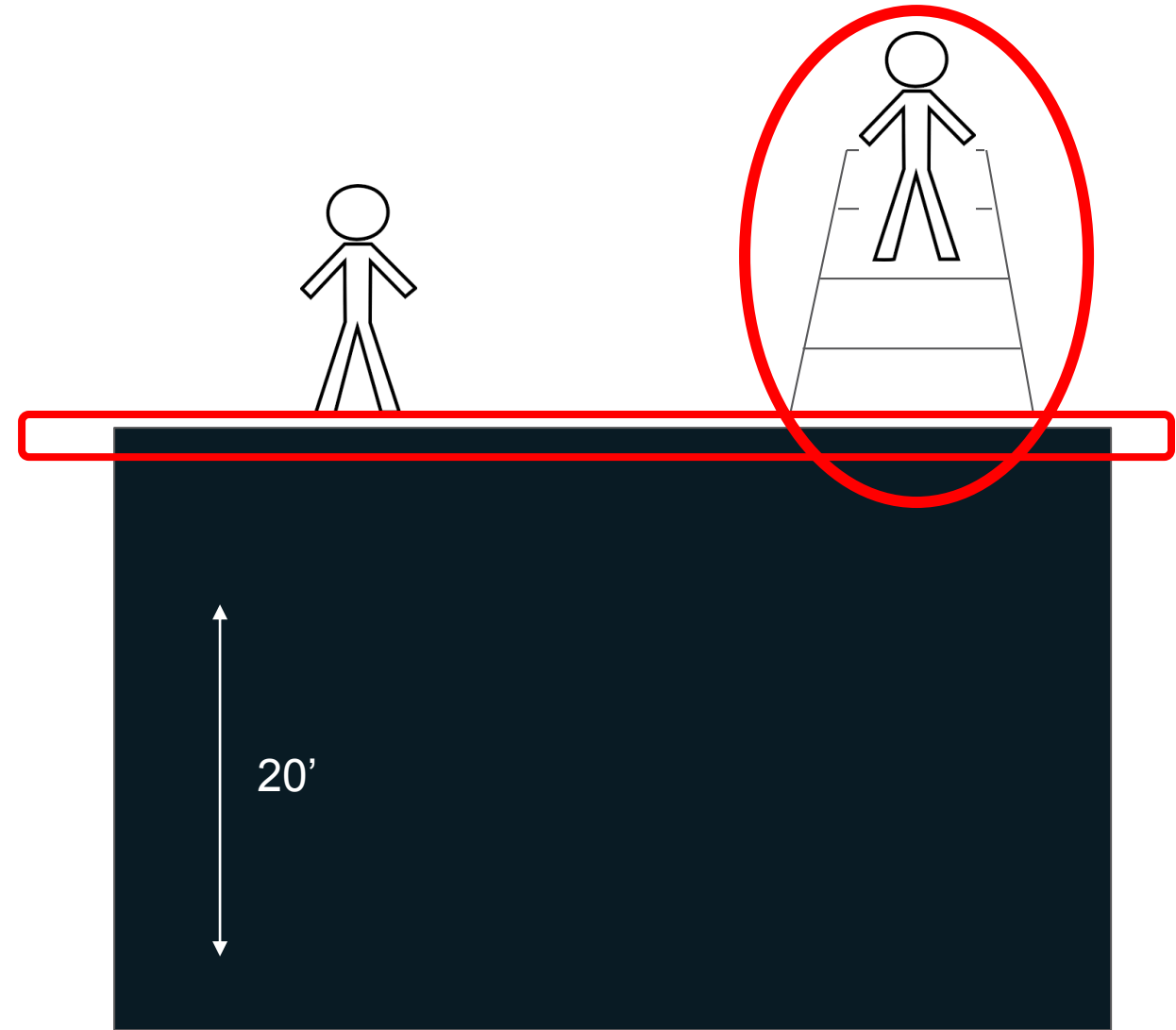
To complete a construction project, a worker places a portable ladder on top of a piece of equipment or on the roof of a structure that is inside a large building.

- ☐ The top of the equipment or *structure is at least 10' x 10' and at least 10' above the ground*. It is stable, level, and sufficiently strong to support the loads imposed by the worker, materials, and tools needed for the job.
- ☐ The worker will then do the construction task while on the ladder.

Is fall protection required for this worker?

Is Fall Protection Required?

- ☐ While on the structure? = Yes
- ☐ How about on the portable ladder?
 - ☐ Falls under Subpart X
(No fall protection required)
- ☐ But is there a hazard?
 - ☐ General Duty Clause 5(a)(1)



“Section 1926.501(b)(1) states:

- ☐ *Unprotected sides and edges. Each employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge which is 6 feet or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest systems.*
- ☐ *The 10' x 10' top surface of the equipment and the roof the structure that is inside the large building both meet this definition and would be considered a walking/working surface. The requirements of Subpart M would apply to a worker who is on those surfaces.”*

“However, with respect to fall protection requirements for a worker on the ladder, §1926.500(a)(2)(vii) states:

- ☐ *Subpart X (29 CFR 1926.1050 et seq.) **does not require fall protection for a worker on a portable ladder.** Therefore, no additional fall protection is required while the worker is on the ladder.*
- ☐ *The fact that the ladder is on either of the surfaces you describe, rather than on the ground, does not alter this conclusion.”*

**We thank you for your participation
and for allowing us to help you and
keep your employees safe.**



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