

Regulatory Compliance

Workplace Injury Infographic: Take Fall Protection Seriously

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After transportation deaths, falls remain the most serious and fatal risk for manufacturing, maintenance and construction workers. Learn about fall arrest systems, clearance levels and how to calculate fall distances in our handy infographic.

Protecting workers from falling from heights on the job is consistently a top-rated problem area by the Occupational Safety and Health Administration. Fall protection was the No. 1 violation the regulator gave to companies in 2017—and in 2016, according to *Safety+Health magazine*. The rest of the top five OSHA violations (*hazard communication*, scaffolding, *respiratory protection* and *lockout/tagout*) also remained unchanged over those years.

But the fall protection violations do not end there: The newest area to creep into OSHA's Top 10 annual violations list is *fall protection training*, which ranks ninth with more than 1,500 violations. OSHA is concerned that companies are not following rules in fall protection and in properly and formally educating workers about the equipment they need to use.

Violations are intended to help prevent future accidents and to warn companies of their gaps in protection. To understand the business impact of on-the-job falls, it helps to look at the cost of injuries. Nonfatal falls account for roughly 27 percent of the top 10 most disabling injuries that cause workers to miss six or more days at work: "The top three causes—which collectively represent almost half of the cost of the leading accidents—are overexertion (\$13.8 billion, 23 percent), **falls on same level** (\$10.6 billion, 17.7 percent) and **falls to lower level** (\$5.5 billion, 9.2 percent)," *reports* Liberty Mutual Insurance in a post about its 2017 Workplace Safety Index findings.

Here are some of the most important things to know about fall protection.

Take Fall Protection Seriously



After transportation deaths, falls remains the most serious and fatal risks for manufacturing, maintenance and construction workers. Falls from height and injury from fallen objects require plenty of training, protective equipment and a clear, detailed written plan for all potential work scenarios.

OSHA STANDARD: 1926.501, 1926.502

Key Fall Fatality Data:

#1

Rank
in violations
6,072 in 2017



Fatalities from falls, slips, trips
849 in 2016
+25% since 2011



Fatalities from falls (construction)
384 in 2016



Fatalities from fallen objects
94 in 2016

Risky Occupations

+25% in 2016 for:

- Carpenters
- Heavy, tractor-trailer truck drivers
- Tree trimmers

Clearance Levels for Falls from Heights

Unprotected sides/edges 6' above lower levels must use:



GUARDRAILS



SAFETY NETS



FALL ARREST SYSTEMS

Longshore Operations

8'

Construction

6'

Shipyards

5'

General Industry

4'



WHAT MAKES UP A FALL ARREST SYSTEM?

A

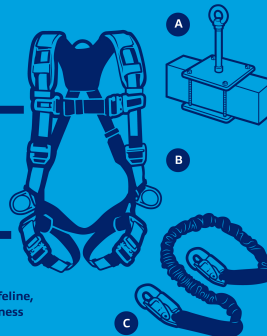
is for "Anchorage":
A secure point of attachment (a structure) to tie off.

B

is for "Body Support":
A full-body harness and body belt.

C

is for "Connectors":
The shock-absorbing lanyard, retractable lifeline, that connects the harness to the anchorage.



To Calculate Fall Distance

Add up the following:



Deceleration Distance



Height of Suspended Worker



Clearance of Obstruction During Fall Arrest



Required Distance Below Anchor Point to Nearest Obstruction



SOURCES: Department of Labor, Occupational Safety and Health Administration; Bureau of Labor Statistics, 2017; Creative Safety Supply, 2016; International Safety Equipment Association, 2015

Spotlight on Fall Protection

Here is a collection of the best articles on fall protection.

5 Things About Fall Protection You Need to Think About

How to Choose the Right PPE: Fall Protection Harness

3 Tips for Preventing Falls From Height at Work

5 Must-Know Tips for Fall Protection Training

What have you learned about fall protection on the job? Have you received formal training? Share your experiences.

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