



Staying Safe on Ladders, Lifts, and Scaffolds

PLAN | PROVIDE | TRAIN



Construction
workers suffered
350
FATAL FALLS
in 1 year

BLS data 2015



Construction Fall Statistics



FALLS
account for
37%
of **deaths** in
construction

BLS data 2015



Construction Fall Statistics





Nearly
1 in 4
FATAL FALLS
in construction involve
LADDERS

[OSHA.gov/stopfalls](https://www.osha.gov/stopfalls)

BLS data 2015



Construction Fall Statistics



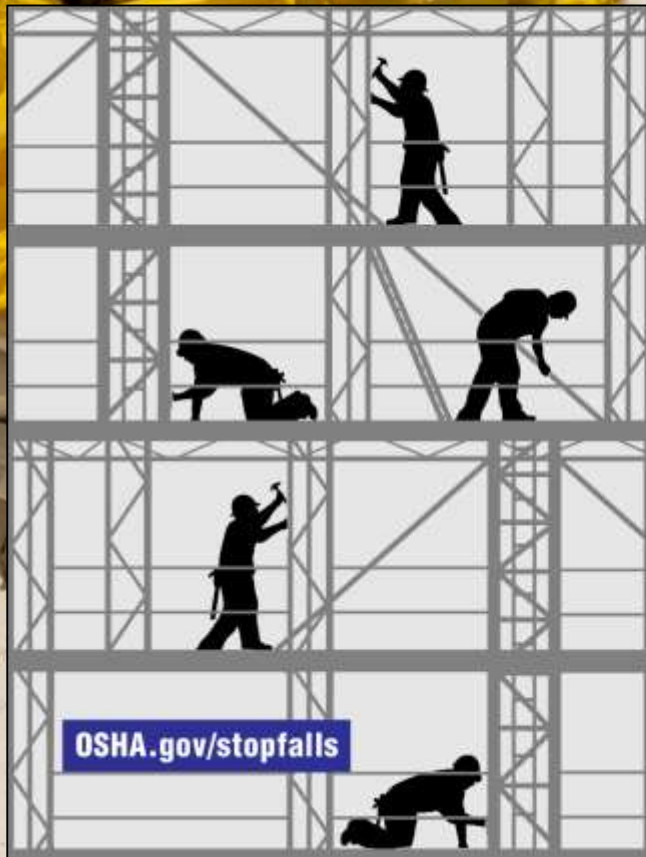
Over **1 in 3**
FATAL FALLS
in construction
happen from
15 ft or less

[OSHA.gov/stopfalls](https://www.osha.gov/stopfalls)

BLS data 2015



Construction Fall Statistics



Employees
45-54
years old
are the most likely to
die from a **fall** while
working in construction

BLS data 2015

Construction Fall Statistics



Deadliest

injury in construction:

falls

[OSHA.gov/stopfalls](https://www.osha.gov/stopfalls)

BLS data 2015



Construction Fall Statistics

The **FACTS** on **FALLS**



[OSHA.gov/stopfalls](https://www.osha.gov/stopfalls)

Falls are the leading cause of **death** among construction workers

350 construction workers suffered a **fatal fall** in 2015

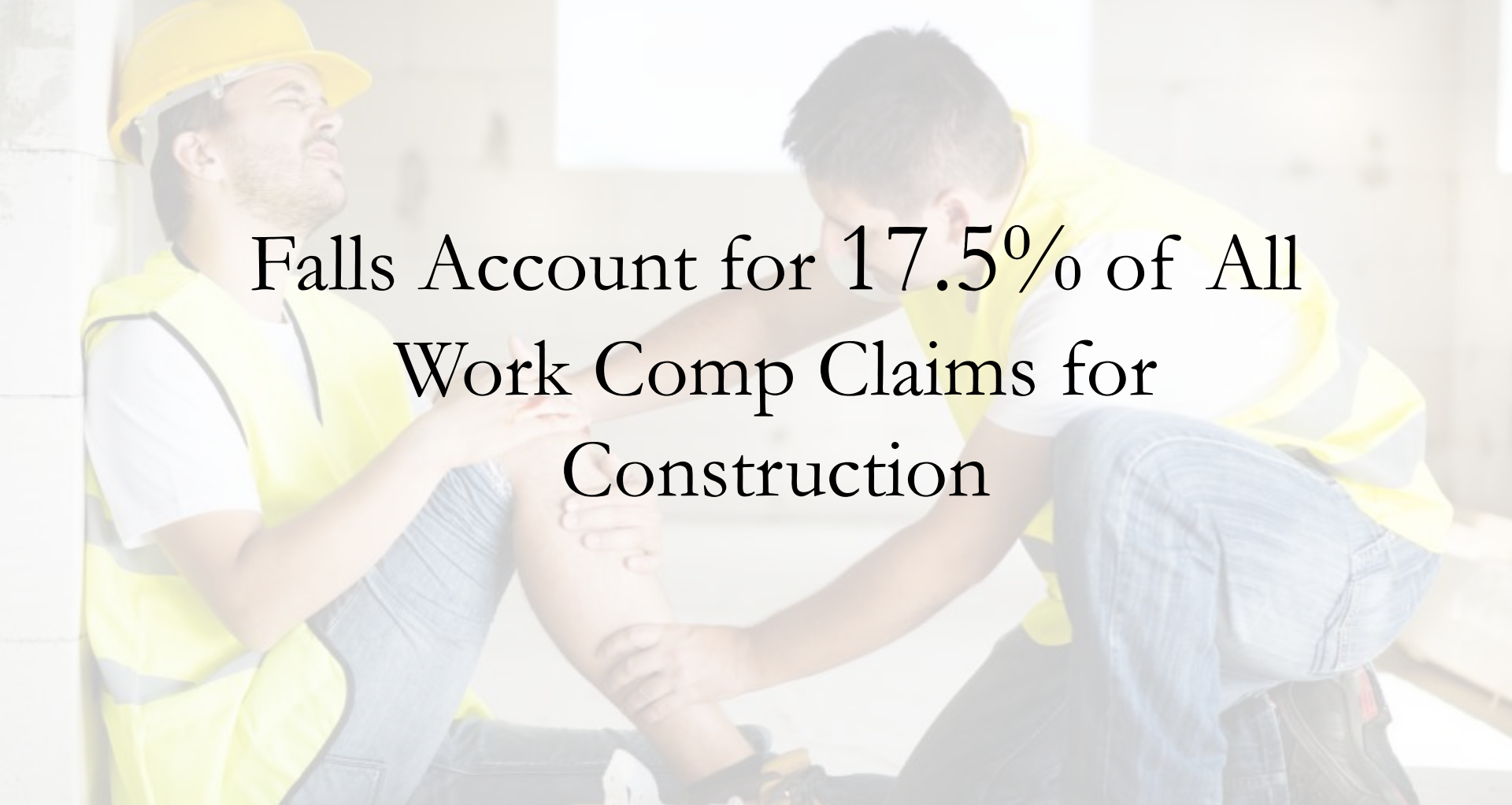
More than **1 in 3** fatal falls in construction in 2015 were just **15 feet** or less

Almost **1 in 4** fatal falls were from ladders

BLS data 2015

Construction Fall Statistics

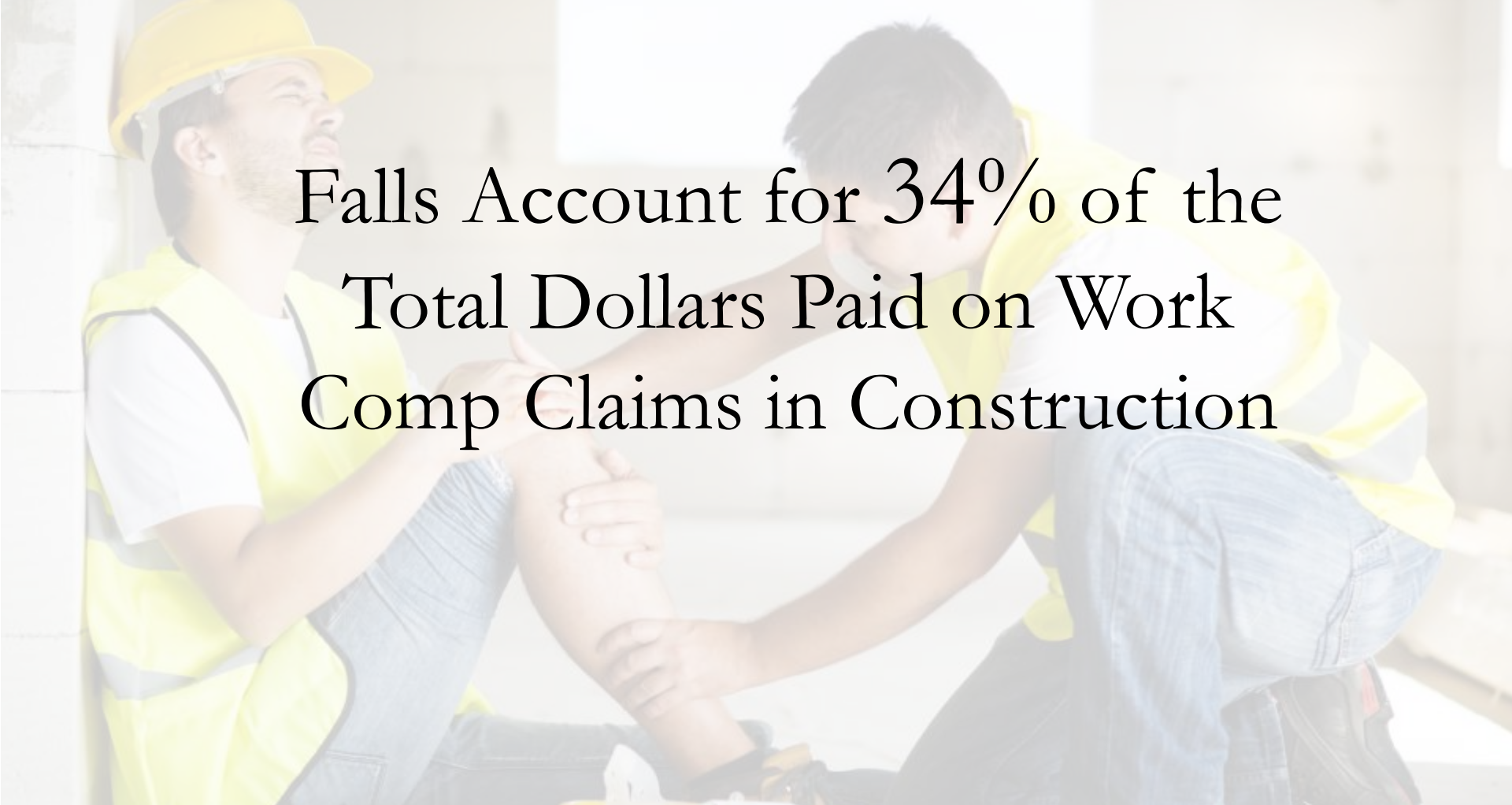




Falls Account for 17.5% of All Work Comp Claims for Construction



Frequency of Claims



Falls Account for 34% of the Total Dollars Paid on Work Comp Claims in Construction



Severity of Claims



The Average Claim Cost is More
Than \$37,000



Average Fall Claim

Areas of Focus

Ladders

- Step Ladders
- Extension Ladders
- Articulated Ladders



Areas of Focus

Scaffolds

- Fixed Scaffold
- Suspended Scaffold



Areas of Focus

Aerial and Scissor Lifts



Ladders



Ladders

It Can...and Has...Happened

Employee was on a ladder accessing an attic when he slipped and the ladder came out from under him. He fell to the concrete floor, breaking his lower leg and foot.



Ladders

It Can...and Has...Happened

Claim Amount = \$310,000

Ladders

It Can...and Has...Happened

Employee sustained hip and wrist fractures after losing his grip and falling off a permanent ladder at a job site.



Ladders

It Can...and Has...Happened

Claim Amount = \$210,000

Ladders

It Can...and Has...Happened

Employee had multiple fractures to his leg and knee and sprained shoulder after falling off ladder attempting to get on the roof.



Ladders

It Can...and Has...Happened

Claim Amount = \$165,000

Ladders

Step Ladders

- Requires level ground
- Never place upon boxes, barrels, scaffolds, or any other unstable platforms
- Spreaders must be locked
- No standing or climbing on the rear unless specifically manufactured for use
- Only one person on the ladder at a time – unless specifically manufactured for use
- Make sure you are checking weight capacities
- Make sure surfaces are clean and clear
- When working around electricity, use wood or fiberglass – no aluminum!



Ladders

Single and Extension Ladders

- Requires level ground or ladder levelers
- Top support must be provided and tied off
- Pitch should be around a 75 degree angle or 4:1 (4 foot rise to 1 foot distance from wall)
- Worker should stay within the rungs and not overreach
- Always maintain 3 points of contact (2 arms/ 1 leg or 1 arm/2 legs)
- Never carry anything while ascending a single or extension ladder
- When cresting a roof, 3 feet of clearance is required (3 rungs)
- Roofs should be accessed by exiting the ladder sideways



Ladders

Articulated Ladders

- Understand the locking mechanism of your hinges
- Understand the configuration options for your particular ladder – they are different
- Never place upon boxes, barrels, scaffolds or any other unstable platforms
- Worker should stay within the rungs and not overreach
- Always maintain 3 points of contact (2 arms/1 leg or 1 arm/2 legs)
- Only one person on the ladder at a time
- Make sure surfaces are clean and clear
- When working around electricity, use wood or fiberglass – no aluminum



Fixed and Suspended Scaffold



Fixed and Suspended Scaffold

It Can...and Has...Happened

Employee sustained a foot fracture and disc herniation after falling six feet off a scaffolding ladder.



Fixed and Suspended Scaffold

It Can...and Has...Happened

Claim Amount = \$175,000

Fixed and Suspended Scaffold

It Can...and Has...Happened

Employee was changing light bulbs overhead, stepped onto scaffold and it moved causing her to fall backwards onto concrete floor.



Fixed and Suspended Scaffold

It Can...and Has...Happened

Claim Amount = \$55,000

Fixed and Suspended Scaffold

It Can...and Has...Happened

Employee was moving scaffold over and scaffold fell and caught index finger (tore off part of finger)



Fixed and Suspended Scaffold

It Can...and Has...Happened

Claim Amount = \$20,000

Fixed and Suspended Scaffold

Qualified and Competent Training including:

- Electrical hazards training
- Fall protection system training and requirements
- Falling object training and requirements



Fixed and Suspended Scaffold

Other topics include:

- Must be erected and inspected by a competent person
- Material handling on the scaffold
- Maximum intended load capacities
- Scaffold maintenance and worksite changes
- Changes in type of scaffold, fall protection, falling object protection and other equipment hazards



Aerial and Scissor Lifts



Aerial and Scissor Lifts

It Can...and Has...Happened

Employee's knee popped when he stepped off scissor lift causing severe pain.



Aerial and Scissor Lifts

It Can...and Has...Happened

Claim Amount = \$60,000

Aerial and Scissor Lifts

It Can...and Has...Happened

Employee was climbing onto scissor lift to change bulbs, raised leg, felt it pop, then was unable to lift leg.



Aerial and Scissor Lifts

It Can...and Has...Happened

Claim Amount = \$40,000

Aerial and Scissor Lifts

It Can...and Has...Happened

Employee amputated his ring finger on his hand while he was on the scissor lift, as his finger got caught in the heating unit and cut the finger off.



Aerial and Scissor Lifts

It Can...and Has...Happened

Claim Amount = \$35,000

Aerial and Scissor Lifts

Major Hazards

- Tip overs
- Falling objects
- Overhead obstruction



Aerial and Scissor Lifts

Tip overs (over 40% of all accidents)

- Never overload the lift – know its capacity
- Keep on stable, level ground
- Use outriggers if equipped



Aerial and Scissor Lifts

Falling Objects

- Mark off your areas
- Secure tools and materials on the lift so they don't fall below
- Inform others of your work in the area



Aerial and Scissor Lifts

Overhead Obstructions

- Be aware of inside and outside obstructions
- Beams, rafters, ceilings, HVAC systems, and lighting fixtures indoors
- Trees, power lines, and weather conditions outside
- Stay at least 10 feet away from all power lines



Aerial and Scissor Lifts

Operation

- Always inspect the lift before each shift
- Secure gates and guardrails when in motion
- Attach fall protection to the lift
- Stay on the platform – don't climb on rails
- No ladders, planks, stools, etc. – stay on the platform
- Wear PPE when necessary (gloves, hardhat, etc.)
- Don't overload - #1 cause of tip over accidents



Aerial and Scissor Lifts

Several Types and Manufactures

- Understand your individual lift





Plan Ahead — Most accidents are preventable with proper planning



Provide and Use — The right equipment for the job



Slow Down — Follow safe work procedures

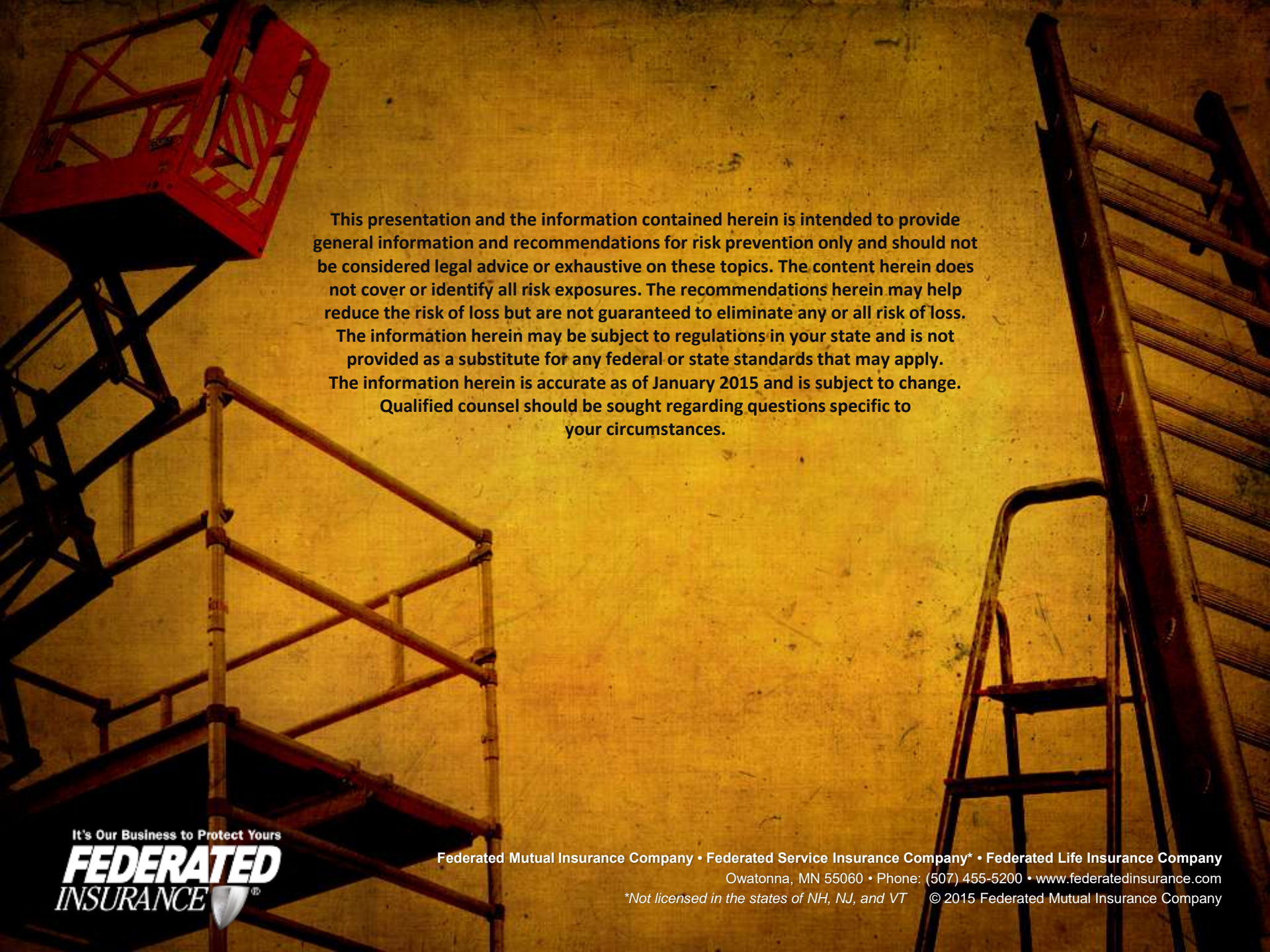


Training is the Key — Understand the risks in your workspace





QUESTIONS?



This presentation and the information contained herein is intended to provide general information and recommendations for risk prevention only and should not be considered legal advice or exhaustive on these topics. The content herein does not cover or identify all risk exposures. The recommendations herein may help reduce the risk of loss but are not guaranteed to eliminate any or all risk of loss. The information herein may be subject to regulations in your state and is not provided as a substitute for any federal or state standards that may apply. The information herein is accurate as of January 2015 and is subject to change. Qualified counsel should be sought regarding questions specific to your circumstances.