



# HYBRID SEMINAR

May 6, 2021

Thanks for joining us a few minutes early.

**We will start promptly at 10 am!**

## IMPORTANCE OF FALL PROTECTION IN THE ROOFING INDUSTRY

*A conversation with John Olaechea, CIH, CSP,  
Compliance Assistance Specialist, OSHA*



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# The Importance of Fall Protection in the Roofing Industry



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# Topics

- Why is Fall Protection Important?
- Statistics
- Case Studies
  
- Discussion
  - How can OSHA work with you to make a change in the industry?
  
- Questions



# TOTAL FATALITIES

## 2019 Fatal Injuries (Bureau of Labor Statistics)

Industry	Total Fatalities	Falls	Transportation	Exposure to Substance or Environment	Contact with Objects	Violence
Construction/ Extraction	1066	408	252	169	162	58
Construction Trades	809	349	159	133	122	39
<b>Roofers</b>	<b>111</b>	<b>93</b>	<b>4</b>	<b>8</b>	<b>-</b>	<b>4</b>

38% of construction fatalities were from falls  
83% of roofing fatalities were from falls



# TOTAL FATALITIES

## 2020 Fatal Injuries (Bureau of Labor Statistics)

Industry	Total Fatalities	Falls	Transportation	Exposure to Substance or Environment	Contact with Objects	Violence
Construction/ Extraction	976	345	213	184	167	15
Construction Trades	771	295	155	153	128	33
<b>Roofers</b>	<b>88</b>	<b>69</b>	<b>5</b>	<b>11</b>	-	<b>3</b>

35% of construction fatalities were from falls  
78% of roofing fatalities were from falls



# Fatality Rate in Roofing

## 2019 Fatal Injury Rates (Bureau of Labor Statistics)\*

Industry	Fatal Injury Rate
All Industries	3.5
Construction	12.9
Electricians	7.2
Plumbers/Pipefitters	6.1
Carpenters	7.9
Helpers (Construction Trades)	40.0
<b>Roofers</b>	<b>54.0</b>
Fishing and hunting workers	145.0
Logging	68.9
Aircraft Pilots and Flight Engineer	61.8

Roofing was the 4th  
deadliest occupation in  
2019

\*Fatal Injury Rate = number of fatal occupational injuries per 100,000 full-time equivalent workers

**At a rate of 54.0, there is one fatality for every 1851 full-time workers.**



# Fatality Rate in Roofing

2020 Fatal Injury Rates (Bureau of Labor Statistics)*	
Industry	Fatal Injury Rate
All Industries	3.4
Construction	13.5
Electricians	8.0
Plumbers/Pipefitters	5.2
Carpenters	7.8
Helpers (Construction Trades)	43.3
<b>Roofers</b>	<b>47.0</b>
Fishing and hunting workers	132.1
Logging	91.7
Aircraft Pilots and Flight Engineer	34.3

Roofing was the 3<sup>rd</sup> deadliest occupation in 2020

\*Fatal Injury Rate = number of fatal occupational injuries per 100,000 full-time equivalent workers





# Fatal Fall Incidents in Construction

## Fall Incidents in Construction – 228 (OIS CY19 Data)

Roofs	62
Holes/Skylights	33
Ladders	31
Scaffolding/Elevated Platforms	48
Walking-working Surfaces	54
➤ Communication Towers – 2 (falls only)	

# Roofing Fatality Report 2010-2020

## 650 OSHA Fatality Investigations

#	Summary Nr	Event Date	Report ID	Fat	SIC	Event Description
1	131952.01	12/23/2020	1054111	X		Employee Slips On Icy Roof And Is Killed In Fall
2	132914.01	12/22/2020	0636900	X		Employee Is Killed In Fall Off Roof
3	131938.01	12/22/2020	0854910	X		Employee Dies After Falling Through Skylight
4	131600.01	12/09/2020	0420600	X		Employee Falls From Icy Roof And Is Killed
5	131516.01	12/06/2020	0213900	X		One Employee Is Electrocuted, One Is Injured While Moving Sc
6	131652.01	11/30/2020	0418600	X		Employee Is Killed In Fall During Roof Repair
7	131223.01	11/18/2020	0626600	X		Employee Is Killed In Fall From Roof
8	131324.01	11/17/2020	0950641	X		Employee Repairing Roof Fascia Is Killed In Fall
9	131281.01	11/16/2020	0552651	X		Employee Is Killed In Fall From Roof
10	131038.01	11/11/2020	0626700	X		Employee Is Killed In Fall Through Roof Opening
11	130995.01	11/09/2020	0215800	X		Employee Is Killed In Fall When Skylight Collapses
12	130978.01	11/05/2020	0336000	X		Employee Is Killed In Fall From Roof
13	130645.01	10/22/2020	0352430	X		Employee Is Killed In Fall From Roof
14	131972.01	10/16/2020	0626300	X		Employee Is Killed In Fall From Roof

# Roofing Contractor Citations

FY 2021

## NAICS Code: 238160 *Roofing Contractors*

Listed below are the standards which were cited by **Federal OSHA** for the specified NAICS Code during the period October 2020 through rather than initial amounts. For more information, see [definitions](#).

Standard	Citations	Inspections	Penalty	Description
Total	7,418	2,936	\$25,309,474	<i>All Standards cited for Roofing Contractors</i>
19260501	2,706	2,648	\$14,360,086	Duty to have fall protection.
19261053	1,069	951	\$2,956,474	Ladders.
19260503	935	896	\$1,426,885	Training requirements.
19260102	656	655	\$1,993,342	Eye and face protection.
19260020	311	283	\$1,062,459	General safety and health provisions.
19260100	289	288	\$782,267	Head protection.
19030019	255	223	\$76,356	Abatement verification.



# Lack of Fall Protection in Roofing is Still Common



- Photo from a roofing advertisement on the internet

# Construction Fatal Fall Incidents

## Fatal Fall Incidents in Construction - From one level to another (320)

<u>Type of Construction</u>	<u>Number</u>	<u>Percent</u>
Roofing	77	23%
Residential Building	67	20%
Plumbing and HVAC	24	7%
Nonresidential Building	20	6%
Painting and Wall Covering	17	5%
Heavy and Civil Engineering	16	5%
Electrical	15	5%

Source: BLS 2018 CFI Data

# Construction Focus Four

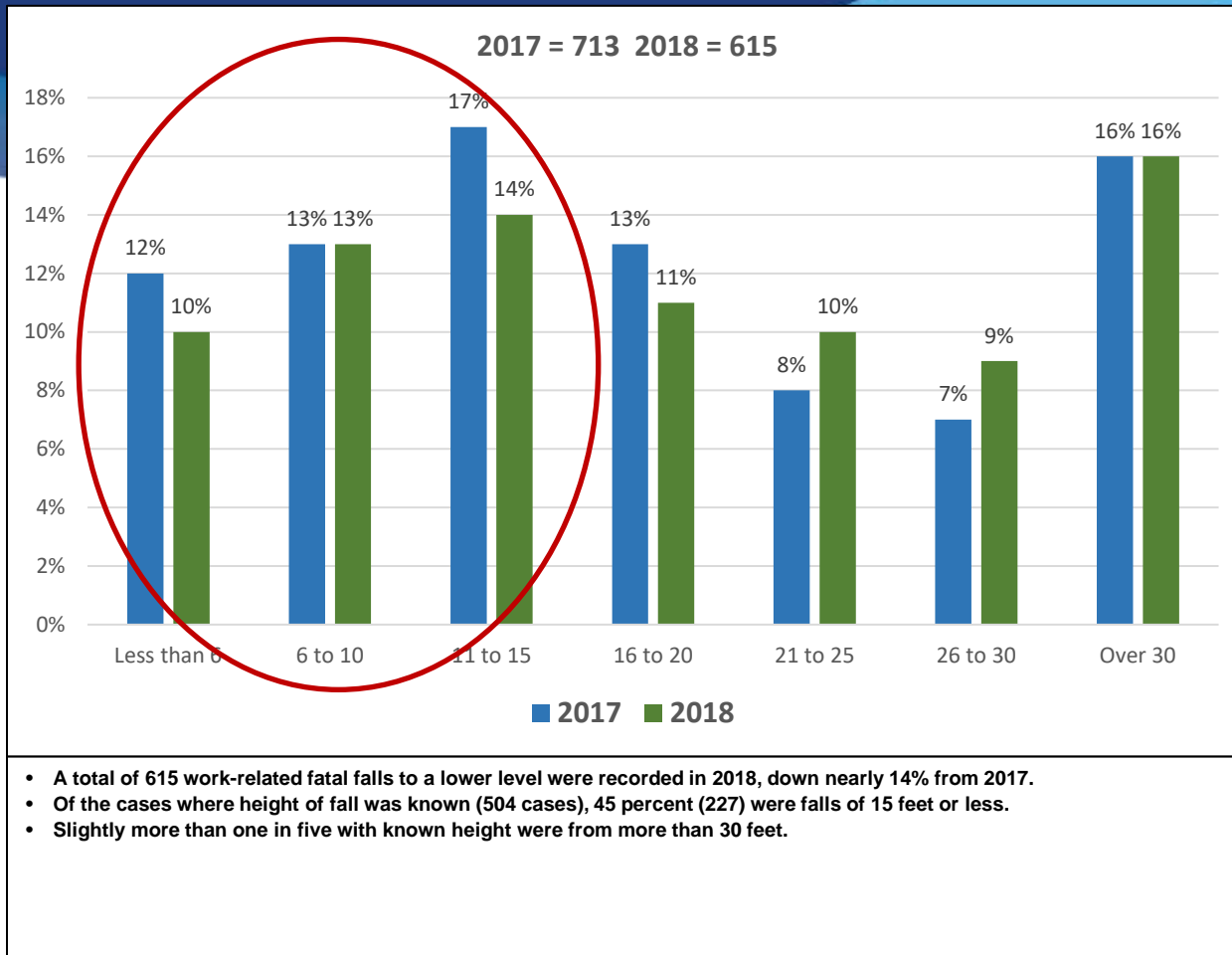
The actual breakdown of the causes of fatalities on construction sites in 2018 is as follows (numbers are a percentage of the 1,008 total construction-related fatalities that occurred in 2018):

- Falls: 338 (**33.5%**);
- Struck by object: 112 (11.1%);
- Electrocutions: 86 (8.5%);
- Caught in/between: 55 (5.5%).



Note: These "Fatal Four" were responsible for more than half (58.6%) the [construction worker deaths in 2018](#), BLS reports. Eliminating the Fatal Four would save 591 workers' lives in America every year.

# Percent of Fatal Falls to Lower Levels Comparison: 2017 vs 2018



Source: BLS Data

# Non-Fatal Injury and Illness Rates in Roofing

<b>2019 Injury and Illness Rates (Bureau of Labor Statistics)*</b>		
Industry	Total Recordable Rate	DART
All Industries	3.0	1.6
Construction	2.8	1.7
Electricians	2.2	1.2
Plumbers/Pipefitters	3.5	2.0
Carpenters	3.3	2.2
Helpers (Construction Trades)	40.0	
<b>Roofers</b>	<b>4.8</b>	<b>3.5</b>
Fishing and hunting workers	4.6	3.2
Logging	2.7	2.3

\*Number of Injuries and Illnesses per 100 full-time workers





# Costs of an Injury to the Employer

- Direct Costs
  - Doctor Fees
  - Ambulance Fees
  - Hospital and ER Fees
  - Medications
  - Rehabilitation Services
- Indirect Costs
  - Lost production time
  - Increase insurance
  - Hire, train, replace worker
  - Repairs to property/equipment
  - Accident investigation
  - Low morale, turnover

# Costs of an Injury to the Worker

- Lost Wages
- Reduced Earning Capacity
  - Unable to work during rehab
  - Diminished productivity even after recovery
  - Unable to return to same trade

# IMPLEMENTING a safety & health program



can help employers avoid the



**INDIRECT COSTS**  
that result  
from

**WORKPLACE  
INCIDENTS**

such as

**TIME  
LOST**



due to work  
stoppages and  
investigations,



training and other  
costs associated with

**REPLACING  
INJURED  
WORKERS**



and

**LOSS OR  
DAMAGE**



to material,  
machinery  
and property.

These **INDIRECT COSTS** have been estimated  
to be at least

**2.7**  
times the  
**DIRECT  
COSTS**



# Safety Pays

- Workplace injuries and fatalities cost our economy **\$171 billion** in 2019. (NSC Injury Facts)
- Even one workplace injury can have a huge financial impact on small businesses
- Employers with good safety records attract and retain good employees





# OSHA's \$afety Pays Program



Estimator Background

[Back to OSHA Small Business](#)

OSHA's "\$afety Pays" program can help employers assess the impact of occupational injuries and illnesses on their profitability. This program uses a company's profit margin, the average costs of an injury or illness, and an indirect cost multiplier to project the amount of sales a company would need to cover those costs. The program is intended as a tool to raise awareness of how occupational injuries and illnesses can impact a company's profitability, not to provide a detailed analysis of a particular company's occupational injury and illness costs.

The "\$afety Pays" program will:

- Allow users to pick an injury type from a drop-down list or to enter their workers' compensation costs
- Prompt users for information to do the analysis, including their profit margin and number of injuries
- Generate a report of the costs and the sales needed to cover those costs

BEGIN

For additional information on how "\$afety Pays" works, see [Background of the Cost Estimates](#)

[www.osha.gov/safetypays/](http://www.osha.gov/safetypays/)

# Case Studies

- Townhome complex with many structures
- Roof eaves 25 feet
- More than 50 roofers
- One ladder on the site
- How do I get down?



# Case Studies

- Kentucky FACE program
- 2 roofers with no fall protection
- 18-20mph wind, 33mph gusts
- Gust caused both to lose balance and fall off
- 1 roofer fatally injured

## Rofer Dies After Gust of Wind Knocks Him And A Co-Worker Off Roof

Incident Number: 13KY059



The fall took place from this structure. Photograph property of KY FACE Program

Kentucky Fatality Assessment and  
Control Evaluation Program  
Kentucky Injury Prevention and  
Research Center  
333 Waller Avenue Suite 242  
Lexington, Kentucky 40504  
Phone 859-323-3981 Fax 859-257-3909  
[www.kiprc.uky.edu](http://www.kiprc.uky.edu)



# Compliance Assistance Resources

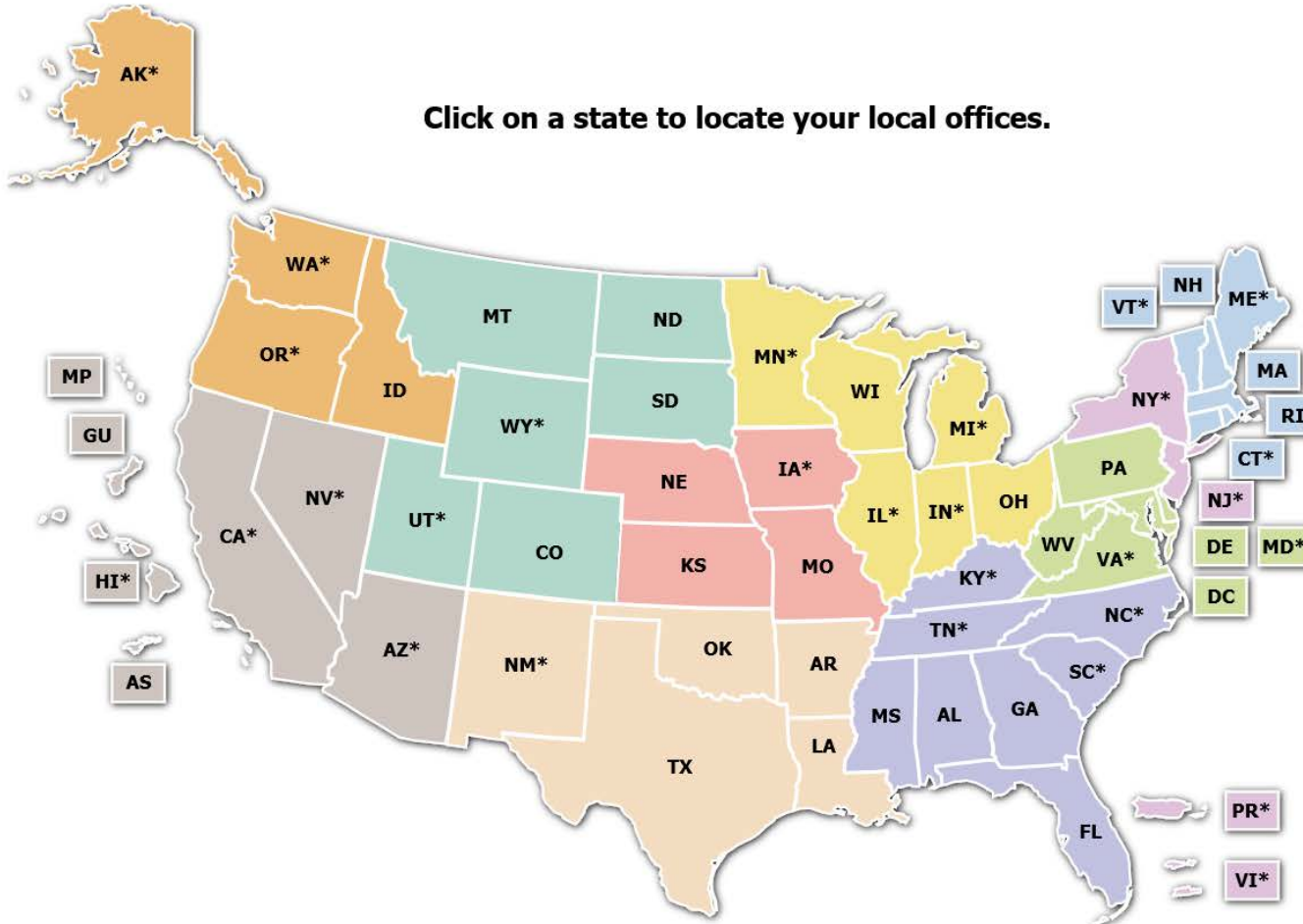




# Find an OSHA Office

## OSHA Offices by State

Click on a state to locate your local offices.



## Find Office By State

Select a State



Go

Consultation Offices

State Plans

Worker Rights (Complaints)

OSHA Office Directory

## OSHA Regional Offices

- Region 1: Boston
- Region 2: New York
- Region 3: Philadelphia
- Region 4: Atlanta
- Region 5: Chicago
- Region 6: Dallas
- Region 7: Kansas City
- Region 8: Denver
- Region 9: San Francisco
- Region 10: Seattle

<https://www.osha.gov/contactus/bystate>



# Compliance Assistance



UNITED STATES  
DEPARTMENT OF LABOR



Occupational Safety and Health Administration

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## Fall Protection in Residential Construction

[CONSTRUCTION INDUSTRY](#)



<a href="#">Home</a>	
<a href="#">Standards</a>	>
<a href="#">Presentations</a>	>
<a href="#">Compliance Assistance</a>	>
<a href="#">Additional Resources</a>	>
<a href="#">Workers' Rights</a>	>

### Compliance Assistance

#### Reducing Falls During Residential Construction

- [Erecting Exterior and Interior Walls](#). OSHA Fact Sheet. Also available in [Spanish](#).
- [Floor Joist Installation and Decking](#). OSHA Fact Sheet. Also available in [Spanish](#).
- [Working in Attics](#). OSHA Fact Sheet. Also available in [Spanish](#).
- [Roof Sheathing](#). OSHA Fact Sheet. Also available in [Spanish](#).
- [Installing Standing Seam Metal Roofs](#). OSHA Fact Sheet. Also available in [Spanish](#).
- [Re-Roofing](#). OSHA Fact Sheet. Also available in [Spanish](#).
- [Installing Tile Roofs](#). OSHA Fact Sheet. Also available in [Spanish](#).
- [Installing Roof Trusses](#). OSHA Fact Sheet. Also available in [Spanish](#).
- [Roof Repair](#). OSHA Fact Sheet. Also available in [Spanish](#).

[www.osha.gov](http://www.osha.gov)

<https://www.osha.gov/residential-fall-protection/compliance-assistance>

<https://www.osha.gov/stop-falls>





# National Safety Stand Down

Join the  
National Safety  
**Stand-Down**  
To Prevent Falls in Construction

MAY 2-6, 2022

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[Back to Construction Industry](#)

Visit <https://www.osha.gov/stop-falls-stand-down> or contact John Olaechea at [olaechea.john@dol.gov](mailto:olaechea.john@dol.gov) for more information on participating



# OSHA Consultation

- Free
- Confidential
- On-site audits
- Training
- Sampling/Monitoring
- Program review and development
- Cut medical expenses, reduce injury rates, and lower workers compensation costs



<http://csu-cvmbbs.colostate.edu/academics/erhs/osha/Pages/default.aspx>



# OSHA Compliance Assistance

- Regional Compliance Assistance Newsletter
- To be added, send a request to [olaechea.john@dol.gov](mailto:olaechea.john@dol.gov)

**OSHA Region VIII Compliance Assistance Newsletter**  
Spring 2020  
Volume 5, Issue 4

**National News**

**LATEST CORONAVIRUS GUIDANCE FROM OSHA**

**May 12** **GUIDANCE FOR MANUFACTURING WORKERS AND EMPLOYERS:** OSHA, in conjunction with the Center for Disease Control and Prevention (CDC), issued joint Interim [Guidance for Manufacturing Industries](#). This document provides guidance for all manufacturing facilities developing plans for continuing operations in the setting of COVID-19 occurring among workers or in the surrounding community.

**May 5** The U.S. Department of Labor's Occupational Safety and Health Administration recently issued a [New Respirator Video](#) (also available in [Spanish](#)) and [poster](#) illustrating steps for safely putting on/taking off a respirator in the workplace.

**May 11** **Guidance for Dentistry** The U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) recently issued new [COVID-19 Guidance for Dental Practitioners](#) (also available in [Spanish](#)).

**May 1** **OSHA ALERT FOR RESTAURANT & BEVERAGE CURBSIDE PICKUP**

**3 NEW GUIDANCE DOCUMENTS RELEASED 5/14/20**

**NURSING HOME AND LONG TERM CARE**

**RETAIL PHARMACIES**

**RIDE SHARE, TAXI, AND CAR SERVICE**

**OSHA ALERT**

**OSHA**

# DISCUSSION

- How can OSHA work with the roofing industry to increase the use of fall protection?
- What do you want to see from us?



# Disclaimer

- This information has been developed by an OSHA Compliance Assistance Specialist and is intended to assist employers, workers, and others as they strive to improve workplace health and safety. While we attempt to thoroughly address specific topics, it is not possible to include discussion of everything necessary to ensure a healthy and safe working environment in a presentation of this nature. Thus, this information must be understood as a tool for addressing workplace hazards, rather than an exhaustive statement of an employer's legal obligations, which are defined by statute, regulations, and standards. Likewise, to the extent that this information references practices or procedures that may enhance health or safety, but which are not required by a statute, regulation, or standard, it cannot, and does not, create additional legal obligations. Finally, over time, OSHA may modify rules and interpretations in light of new technology, information, or circumstances; to keep apprised of such developments, or to review information on a wide range of occupational safety and health topics, you can visit OSHA's website at [www.osha.gov](http://www.osha.gov).







**Working Together, We Can Help**

**[www.osha.gov](http://www.osha.gov)**

**800-321-OSHA (6742)**

