



Photo by Lane Construction, ARTBA

NORA Preventing Struck-by Injuries / Fatalities Workgroup

- Co-Chairs:
- Michael Mills
- Brad Sant

Status Update: November 2020



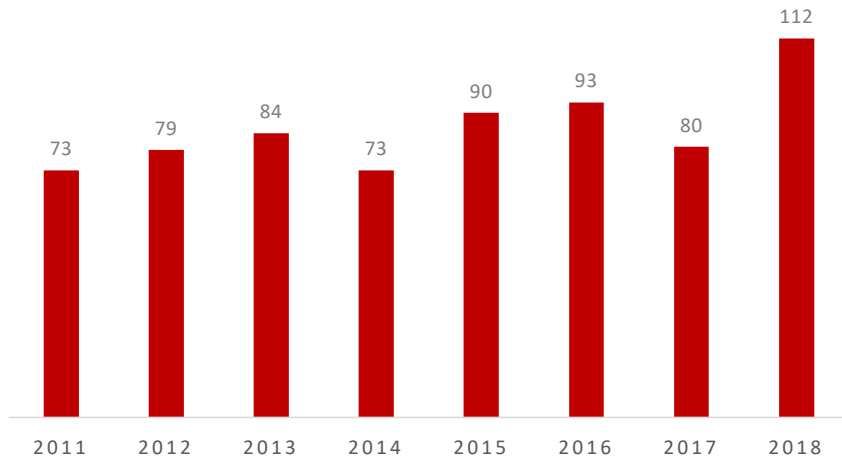
Why focus on struck-by incidents?

- Construction makes up less than **6%** of the U.S. workforce.
- *BUT* accounts for about **12%** of the **struck-by injuries** and **17%** of the fatalities.

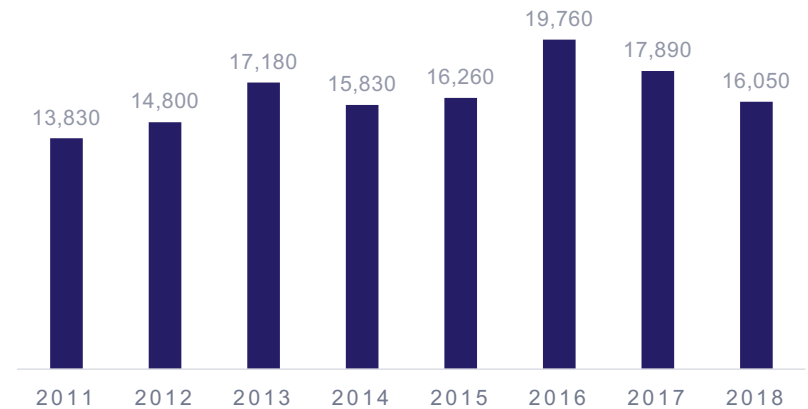


A leading cause of fatal and non-fatal injuries in construction

OF STRUCK-BY OBJECT OR EQUIPMENT CONSTRUCTION FATALITIES



OF STRUCK-BY OBJECT OR EQUIPMENT CONSTRUCTION NON-FATAL INJURIES



Initial Work Group Meeting: Identified Risks...

Sources

Cranes
Rigging
Tools
Building Material
Loads
Dump trucks
Vehicles

Causes

Swing Radius
Backing
Falling tools
Falling Material
Falling loads
Traffic entering work zone
Workers in a blind spot area
Falling rocks(trenches)

Contributing Factor

Qualified Rigger
Labor
Procedures on how it is done
Environmental factors (Weather,
noise)

Activities

Paving
Road maintenance
Handling moving load
Walking in work area
Walking under near scaffolds,
unfinished buildings and walls,
structures

... Solutions

- ✓ Pre-Planning or Risk Assessment
- ✓ Training on Line of fire
- ✓ Communicating risk
- ✓ Training to trades
- ✓ Exclusion Zones
- ✓ Spotters
- ✓ Safe distances
- ✓ Cameras
- ✓ Wearable's – RFID, Tags, radar, sonar
- ✓ Caterpillar resource
- ✓ Tool retention program
- ✓ Debris Nets/toe boards
- ✓ Back alarm frequency sound changes
- ✓ In cab controls or devices that help make the operator more aware
- ✓ Multiple warning sensory devices
- ✓ Redundant systems
- ✓ Internal Traffic Control Program
- ✓ Logistic plan for work and break activities

... and Potential Activities & Needs

1. Hold a Stand-Down on Struck-by Incidents during the National Work Zone Awareness Week (April 8-12)
2. Publish a document that helps address struck by accidents in different work zones
 - a. Work zone in traffic
 - b. Working around scaffolding
 - c. Working around building or structure
 - d. Working in around the swing radius of a crane, excavator, or other equipment
 - e. Work around over head load and drones
3. Need research into integrated systems that help prevent operators from striking workers.
4. Need research into effectiveness of backup alarms and other devices.
5. Need research into the effectiveness of spotters and their work practices.

Created central online resource:

*Resources to Prevent Struck-by Incidents and Fatalities
in Construction Work Zones*

- ✓ CPWR Materials
- ✓ NIOSH FACE Reports
- ✓ Stakeholder Resources
- ✓ Research

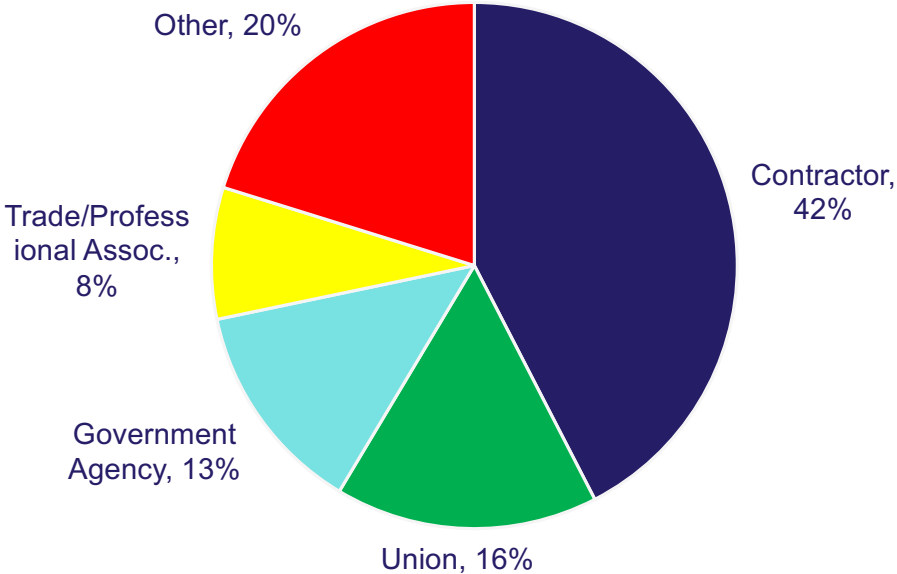
<https://tinyurl.com/r2pworkzonesafety>

Conducted an Industry Survey

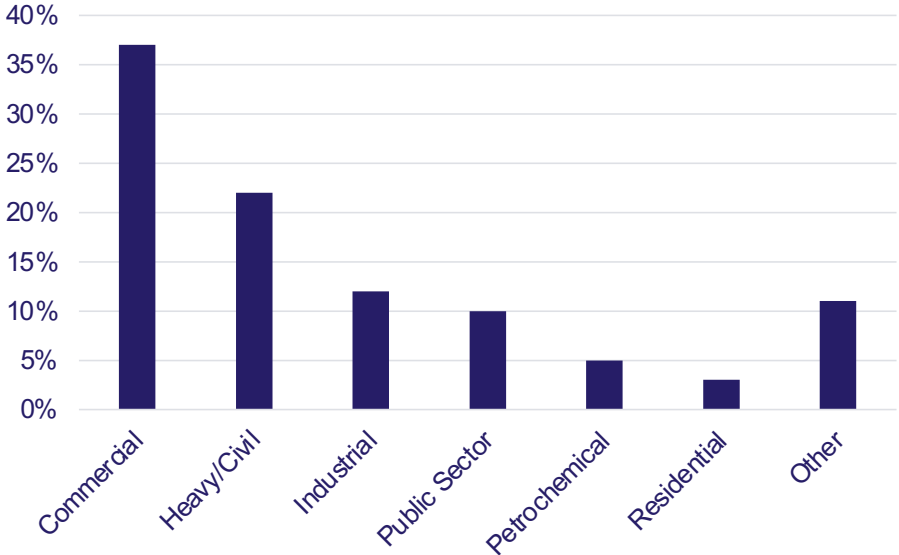
- Add to the construction industry's understanding of factors that contribute to struck-by incidents
- Assess awareness of National Work Zone Awareness Week and support a National Stand-Down to Prevent Struck-by Incidents
- Identify materials needed to support Stand-Down activities
- Inform the development of new resources and strategies to protect workers by reducing struck-by hazards

Participants (n=243)

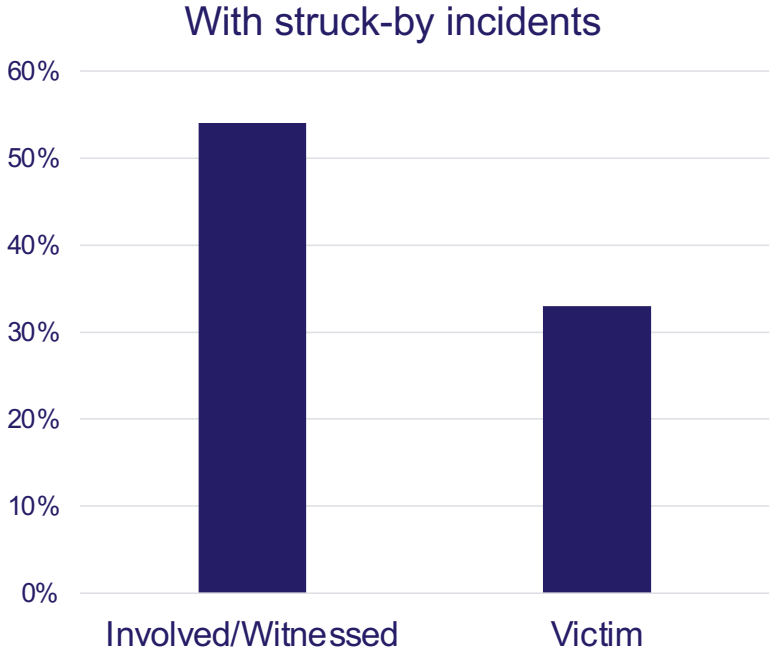
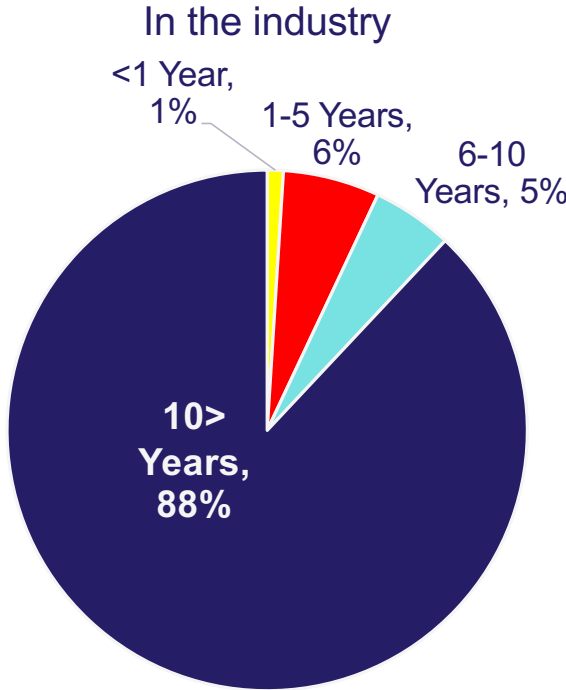
Who they work for...



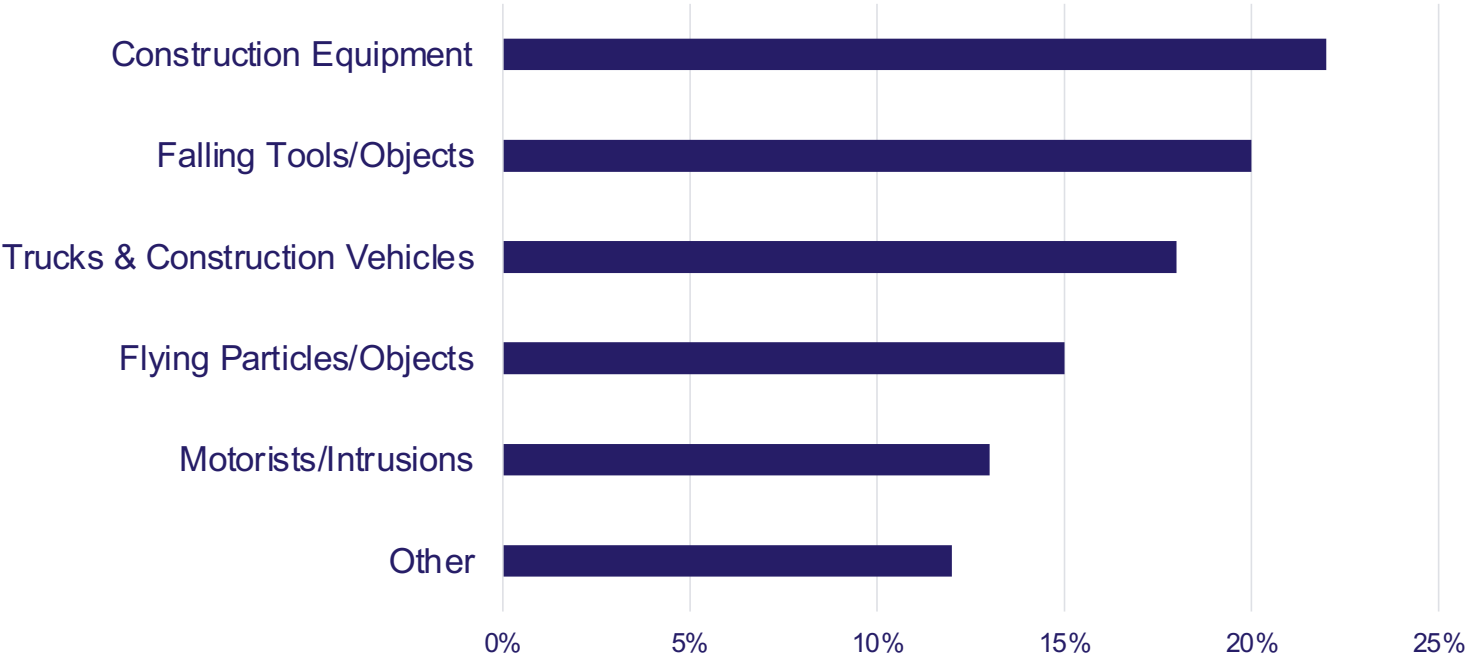
Segment of the industry worked in most frequently



Experience

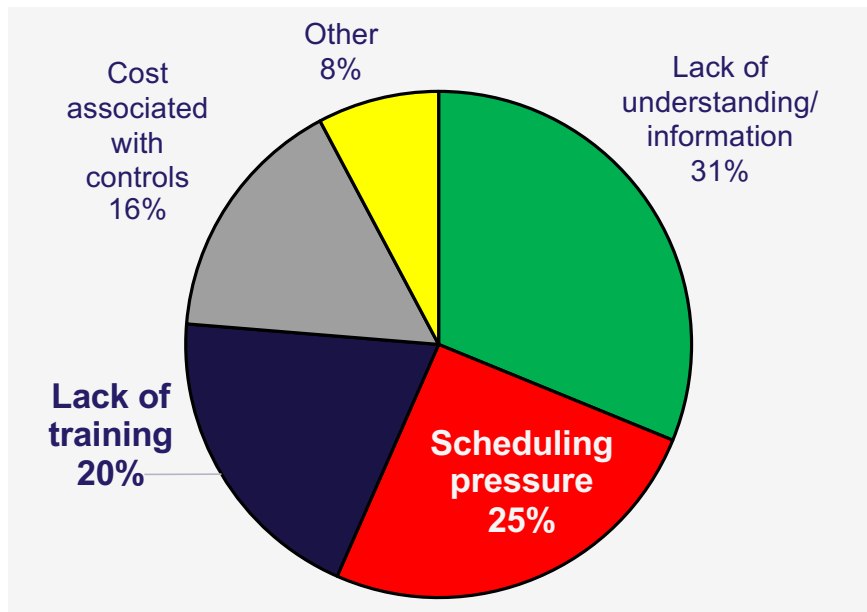


Primary Causes of Struck-by Incidents

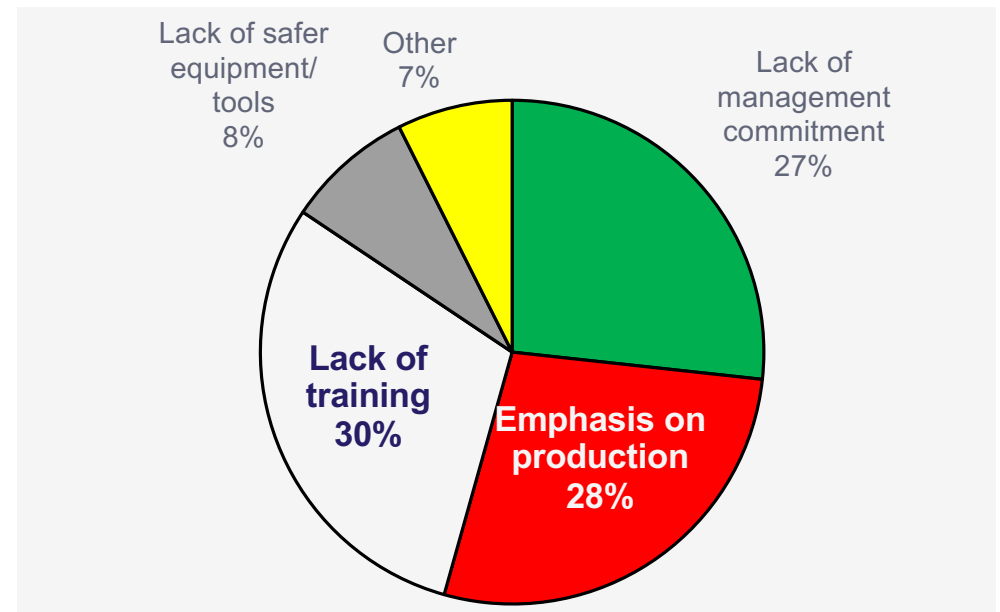


Biggest Barriers to Preventing Struck-by Incidents

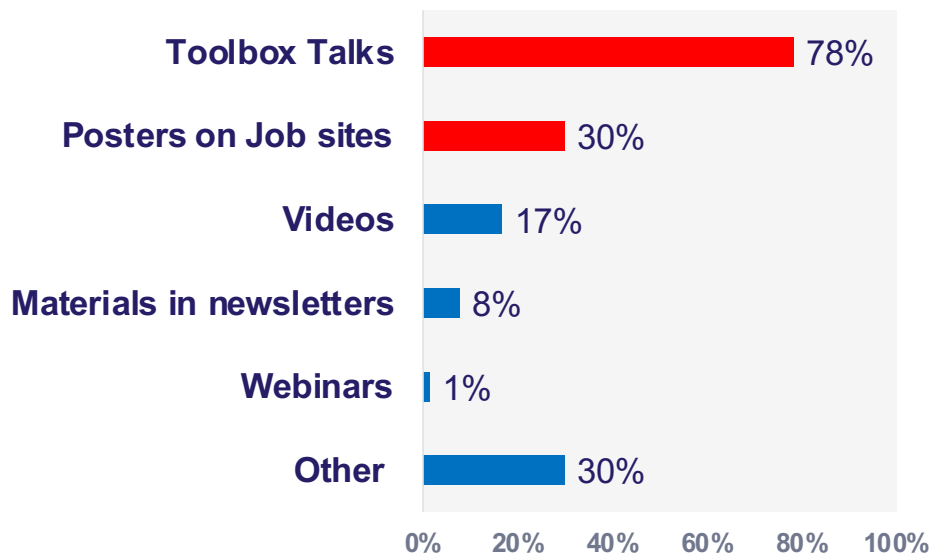
For Employers



For Workers



Most Effective Materials to Raise Awareness & Change Practices





APRIL 20, 2020
STOP TALK ACT | **NATIONAL STAND-DOWN**
TO PREVENT
STRUCK-BY INCIDENTS



NORA Construction Sector Council



www.cpw.com/research/work-zone-safety

National Stand-Down to Prevent Struck-by Incidents in Construction - April 20, 2020

Struck-by injuries are a leading cause of death,^[1] and since 1992 the leading cause of nonfatal injuries in the construction industry.^[2] According to OSHA, there are four common struck-by hazards:

- Struck-by a flying object
- Struck-by a falling object
- Struck-by a swinging object
- Struck-by a rolling object

JOIN US! On April 20th for the first National Stand-Down to Prevent Struck-by Incidents during [National Work Zone Awareness Week](#). Leading up to the event, we'll be adding resources to this site that you can use for your stand-down and information about ways you can partner with us to save lives.

To help construction contractors and their employees find resources to help reduce the risks and prevent struck-by injuries and fatalities, the NORA Construction Sector Council has developed this online resource to provide ready access to training materials and the latest research from trusted sources.



<https://www.cpwr.com/news-events/cpwr-informational-webinar-series>



Virtual National Stand-Down to Prevent Struck-by Incidents - Q&A Panel

Introduction by: G. Scott Earnest, Acting Director for the Office of Construction Safety and Health, National Institute for Occupational Safety and Health (NIOSH)

Panel Moderator: Brad Sant, Sr. Vice President, ARTBA

Panelists:

David Fosbroke, Statistician, NIOSH Division of Safety Research

Travis Parsons, Associate Director of Occupational Safety & Health, Laborers' Health & Safety Fund of North America

Jerral Wyer, (retired), Director of Occupational Safety and Health, Texas Department of Transportation

David Dostaler, Vice President of Safety, Kraemer North America, LLC

Monday, April 20, 2020

[Play Recording](#)

[Download Presentation](#)

APRIL 20, 2020
STOP NATIONAL STAND-DOWN
TALK TO PREVENT
ACT STRUCK-BY INCIDENTS



How to Hold a Stand-Down

Struck-by incidents are a leading cause of death among construction workers and, since 1992, the leading cause of nonfatal injuries in construction. In an effort to combat this, the NORA Construction Sector Council has undertaken a number of efforts to improve awareness of work zone safety, including launching this **first National Stand-Down to Prevent Struck-by Incidents** and establishing an [online source](#) for information on the Stand-Down, as well as training materials, toolbox talks, and other resources to help plan and hold an event. The goal of this National event is for employers across the country to take steps to raise their employees' awareness of work zone hazards that they may face on current or future job sites and to review ways to mitigate them. Typically, a Stand-Down would take place on a job site and involve pausing work for a group event. To prevent the spread of the coronavirus (COVID-19), we are switching gears and encouraging everyone to follow CDC guidelines, avoid gathering in groups and do Stand-Down events virtually if possible, and think creatively about how to focus attention on preventing struck-by incidents.

To participate

APRIL 20, 2020 **How to Hold a Stand-Down**

1 Schedule your event. Make them safe. Ideas away.

2 Do your research. Visit trusted sources for ideas and resources.

3 Hold Your Stand-Down Event(s)
It's the big day – get your crew(s) together **virtually or in small groups with 6 ft between your employees** to talk work zone safety, or post information or share it electronically!

4 Get a Certificate of Participation
Visit cpwr.com/research/work-zone-safety to tell us about your Stand-Down and get a certificate of participation. And don't forget to show everyone what you did on social media – use the hashtag **#StandDown4Struckby!**

Find Resources Like These Online:

- Toolbox Talks
- Other Training Materials
- Workplace Solutions
- Infographics
- Videos

JUST IN TIME

#StandDown4Struckby

Stand-Down Reach

Participation:

- Webinar 2,400+ stakeholders
- Questions 200+
- Certificates: 16

Downloads:

- Toolbox Talks 2,000+
- Infographics 1,000+



Other Efforts – Trench Safety Webinar

Thursday, May 28th, 2020 at 2:00pm EDT: Increasing Awareness of Factors that Influence Trench Safety

Moderator: Eileen Betit, CPWR's Research to Practice (r2p) Director

Presenters:

Scott Ketcham, Director, OSHA Directorate of Construction

Joe Wise, Regional Customer Training Manager at United Rentals Trench Safety

Dr. Alan Echt, Sr. Industrial Hygienist, NIOSH Office of Construction Safety and Health

Trench incidents and fatalities have increased over the past several years – so much so that OSHA, intent on reversing this trend, updated its National Emphasis Program on Trenching and Excavation in October 2018. Learn about a collaborative effort to increase awareness of the factors that may contribute to trenching incidents and ways to mitigate the risks. You will have the option of submitting questions for the panelists in advance.

<https://www.cpwr.com/news-events/cpwr-informational-webinar-series>



Figure 1 – He lived [Photo Scott Haviland, Oregon Occupational Safety and Health]



Next Steps

- National Stand-Down to Prevent Struck-by Incidents April 26, 2021
- Add new topics for the industry on struck by:
 - Working in around the swing radius of a crane, struck by load
 - Structures under construction
- Recruit more members
- December Meeting