

## Prevent Struck-By Incidents When Using Excavator Quick Couplers

Excavators are dangerous to work around. The arms of an excavator move quickly and can carry extremely heavy loads. An empty excavator bucket can weigh 900 pounds. A quick coupler on an excavator is a time-saver for the construction industry. Using this equipment, workers can change buckets and attachments with ease, but a quick coupler failure can cause the attachment to fall suddenly, causing injury or death. According to [The Center for Construction Research and Training](#), struck-by incidents are a leading cause of death among construction workers, with more than half of fatalities were caused by falling objects or equipment.

These injuries and deaths are preventable. Training, personal protective equipment, engineering controls, safety protocols, and other solutions may be implemented to prevent struck-by injuries among construction workers. Employers need to train operators to use caution when other workers are nearby, maintain and inspect equipment properly, and ensure the attachments are correctly secured prior to use. When working around excavators, workers should always assume that a quick coupler could fail. Employers must ensure that workers are never beneath a bucket, attachment, or load, or within the swing radius of an operating excavator.



The following are recommendations from the [NIOSH Science Blog](#) on how to prevent injuries or fatalities from excavators with quick coupler devices:

First and foremost, maintain work practices and administrative procedures to keep workers away from an elevated load and out of the swing radius of both the excavator dipper arm and the excavator superstructure. Ensure a training program has been implemented for operators who use quick couplers.

Adhere to regular maintenance of the quick coupler device according to manufacturer guidelines. Before using an attachment, always perform a connection test as specified by the manufacturer.

Check that the quick coupler is properly engaged by using approved safety checks, visual indicators, and/or warning devices. If required by the manufacturer, the safety locking pin must be in place prior to lifting the attachment off the ground.

If a quick coupler or an attachment needs to be inspected, do not approach the device unless the attachment is lowered and resting on the ground. This is equally important for manually

attached quick couplers that require a worker to secure the attachment or manually place a manufacturer-specified safety locking pin.

Use only manufacturer-approved and compatible attachments. Install retrofit safety kits on older quick coupler devices or upgrade to newer quick couplers with built-in safety mechanisms. Human detection systems may also be available in some newer excavators to prevent contact with a worker who is within the swing radius.

**Looking for more resources?** [Preventing Struck-by Fatalities Related to Excavator Quick Couplers, Buckets, and Attachments](#); [CPWR on Struck-By Hazards](#); [OSHA Struck-By Construction eTool](#)



## National Stand-Down to Prevent Struck-by Incidents

The 3rd annual [National Stand-Down to Prevent Struck-by Incidents](#) is taking place April 11 – 15, 2022. This year there will be free webinars on work zone safety, lift zone/heavy equipment safety, and dropped objects to raise awareness on these hazards and what companies can do to prevent these struck-by incidents. Companies are encouraged to conduct a Safety Stand-Down by taking a break to have a toolbox talk, conducting safety equipment inspections, or discussing job specific hazards. Managers are encouraged to plan a stand-down anytime that works best for their workplace.



## Work Zones Safety Awareness

According to the [Federal Motor Carrier Safety Administration](#) (FMCSA), over 700 fatalities occur in work zones each year. Drivers of both commercial and passenger vehicles need to be especially careful when driving through work zones.

It's always important to pay attention while driving, keeping your eyes on the road and avoiding distractions. When traveling through a work zone, it's especially important. Distractions such as using your cell phone, eating, drinking, adjusting the radio, or making phone calls increases the risk of an accident.

Slow down and be prepared to stop. Work zones can present sudden changes in traffic as lane closures, traffic pattern shifts, and reduced speeds are common in work zones. If you see workers present, give them extra room and slow down as you approach them.

Due to changes in traffic patterns, rear-end crashes are extremely common in work zones. Keep your distance from the vehicle in front of you, allowing extra space in case of a quick stop.

**Additional Info:** [US DOT National Work Zone Awareness Week](#); [Work Zone Safety Tips](#); [Work Zone Safety OSHA Fact Sheet](#)

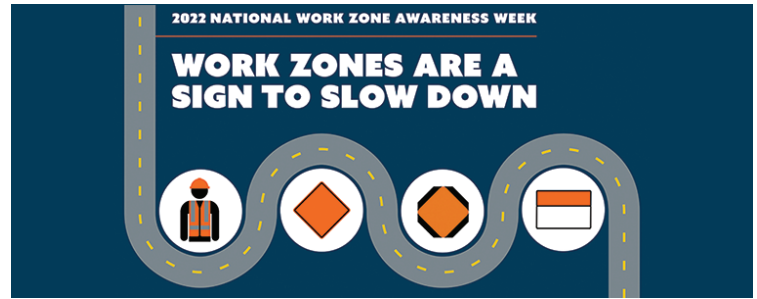
## Stand-Down to Prevent Falls in Construction | May 2-6

Fatalities caused by falls from elevation continue to be a leading cause of death for construction employees, accounting for 351 of the 1,008 construction fatalities recorded in 2020 (BLS data).

Those deaths were preventable. The [National Safety Stand-Down](#) raises fall hazard awareness across the country in an effort to stop fall fatalities and injuries.

## National Public Health Week | April 4-10

National Public Health Week 2022 will take place April 4-10. Check out the events page for a list of events taking place each day. Join the conversation on social media with the #NPHW tag. Working together, we can build healthier communities and the healthiest nation. You can learn more about National Public Health Week at [www.nphw.org](http://www.nphw.org).



[National Work Zone Awareness Week](#) (NWZAW) is held each spring with a mission to bring national attention to worker and motorist safety in work zones. This year, National Work Zone Awareness Week is scheduled for April 11-15 with the theme "Work Zones are a Sign to Slow Down". Information on how you can participate can be found at [nwzaw.org](http://nwzaw.org).

### Make plans to join the weeklong commemoration:

Work Zone Safety Training Day - April 11

National kickoff event - April 12

Go Orange Day - April 13

Social media storm - April 14

Moment of Silence - April 15

If you are looking to dive deeper into the topic, the [Iowa DOT](#) website features a page on [work zone safety awareness](#). The page offers safe driving tips, Quick facts, crash statistics, and more.

## OSHA's Top 10 Violations

The Top 10 most frequently cited workplace safety standards for FY 2021 are:

1. **Fall Protection – General Requirements** (1926.501): 5,295 violations
2. **Respiratory Protection** (1910.134): 2,527 violations
3. **Ladders** (1926.1053): 2,026 violations
4. **Scaffolding** (1926.451): 1,948 violations
5. **Hazard Communication** (1910.1200): 1,947 violations
6. **Lockout/Tagout** (1910.147): 1,698 violations
7. **Fall Protection – Training Requirements** (1926.503): 1,666 violations
8. **Personal Protective and Lifesaving Equipment – Eye and Face Protection** (1926.102): 1,452 violations
9. **Powered Industrial Trucks** (1910.178): 1,420 violations
10. **Machine Guarding** (1910.212): 1,113 violations

## Occupational Health Symposium

March 31 - April 1 | Coralville, IA

We're less than a week away from [Occupational Health Symposium 2022](#). Geared toward occupational health workers, the symposium addresses the ever-changing nature of work and the implications of these changes for the health, safety, and well-being of workers.

Nursing credits are available. The full agenda and registration information can be found [here](#) or at [heartlanderc.org](http://heartlanderc.org).

## 7th Annual OSH Student Research Conference

Registration is now open for the 6th Annual [Occupational Health and Safety Student Research Conference](#) which will take place at the University of Iowa College of Public Health on Friday, April 22, 2022, at 9:30 A.M.

This event provides an opportunity for students, faculty, staff, and collaborators across campus and the region to learn about innovative occupational health and safety research being conducted by students, postdocs and professionals and gives students an opportunity to showcase their research in this important field.

## Rohlman Named Associate Dean for Research

Diane Rohlman, MA, PhD, Director of the Agricultural Safety and Health Program, was recently named as the UI College of Public Health Associate Dean for Research. As associate dean for research, Rohlman will be responsible for providing leadership to establish and nurture interdisciplinary research collaboration within and outside the College of Public Health.

## Bill Field Recognized as National Radon Hero

Dr. Field, former Heartland Center Deputy Director, has been selected by The [Conference of Radiation Control Program Directors](#) to receive the 2022 Radon Hero Award. The award recognizes an individual who has demonstrated leadership in reducing the health effects of radon exposure. Field is recognized as one of the foremost authorities on radon, not only for his research into the radioactive gas, but because of his advocacy and outreach efforts. He helped identify radon as the leading environmental cause of cancer deaths in the United States, and remains dedicated to educating the public about the health risks of radon and ways to reduce exposure in homes, schools and at work.



## Continuing Education Programs

Check out the Heartland Center's online events calendar at [HeartlandERC.org](http://HeartlandERC.org) to keep track of our upcoming continuing education events.

Follow the Heartland Center on social media for regular occupational health and safety updates:



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APRIL 4-10, 2022  
**PUBLIC HEALTH IS WHERE YOU ARE**