

## What are our priorities?

The National Institute for Occupational Safety and Health (NIOSH) Construction Program works with partners in industry, labor, trade associations, professional organizations, and academia. The program focuses on these areas:

- Preventing injuries and fatalities related to falls from roofs, ladders, and scaffolds
- Reducing hearing loss among construction workers
- Reducing hazardous respiratory exposures among construction workers, especially silica
- Reducing injuries and musculoskeletal disorders related to emerging or new technologies

## What do we do?

- Raise awareness of evidence-based ways to prevent falls in the construction industry:
  - Promote the NIOSH research-based national [Campaign to Prevent Falls in Construction, and the Safety Stand-Down](#).
  - Evaluate the success of the Campaign in collaboration with the NIOSH-funded Center for Construction Research and Training (CPWR) and the Occupational Safety and Health Administration (OSHA).
  - Develop tools, educational materials, trainings, and other resources related to preventing falls, and disseminate through electronic, web, and social media.
- Provide information, tools, and resources to advance hearing loss prevention and encourage manufacturers to design and produce quieter equipment, and encourage companies to purchase or rent quieter machinery.
- Increase availability and use of silica dust controls and practices. The Program focuses on the tasks that involve the highest and most common silica exposures, such as installing stone countertops.
- Expand the availability and use of effective interventions and advance the interventions so that they affect practice (research-to-practice or r2p) in the construction industry.
- Advance research to practice through active partnerships with stakeholders.

## What have we accomplished?

- Produced several products on emerging issues in construction including a journal article and blog on [drones in construction](#), a blog and presentation on [automation and robotics](#), a blog on [exoskeletons](#), and a blog on [cured-in-place-pipe](#).
- Developed five videos and four infographics in support of the [National Falls Campaign and Stand-down](#) in collaboration with CPWR.
- Contributed to safer construction tools and equipment by conducting construction research on engineering controls. This research was included in Table 1 of the OSHA silica standard.
- Conducted a series of five webinars concerning the role of insurance and workers' compensation in construction. These webinars were well-attended and are [posted](#) on the NIOSH construction webpage.

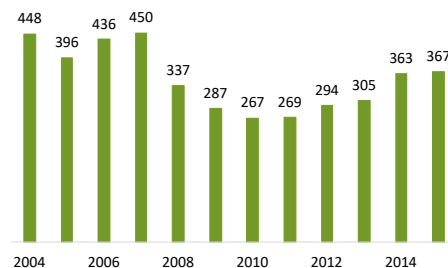
## What's next?

- Investigate better ways to deliver occupational safety and health messages to small construction businesses.
- Collaborate with the American National Standards Institute (ANSI) on ANSI A10 standards and related guidance for construction.
- Work with stakeholders and partners in the nailgun industry to advance safer use of power tools.
- Encourage use and application of the [Leadership in Energy & Environmental Design \(LEED®\) Pilot credit](#) for Prevention through Design (PtD).
- Conduct research on use of exoskeletons or other emerging technologies in construction to determine if they improve health and safety.
- Conduct research activities to improve surveillance, sampling, and control of silica exposures and document trends since the new OSHA standard.

## At-A-Glance

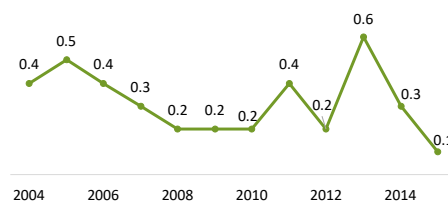
The Construction Program aims to eliminate work-related injuries, diseases, and fatalities among construction workers. This snapshot shows recent accomplishments and upcoming work.

### Number of fatalities from falls in construction, 2004-2015 (All employment)



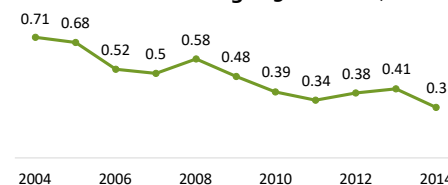
Source: U.S. Bureau of Labor Statistics, 1992-2015 Census of Fatal Occupational Injuries. Numbers are from the online CFOI database.

### Rate of hearing loss in construction (Private wage-and-salary workers, per 10,000 workers)



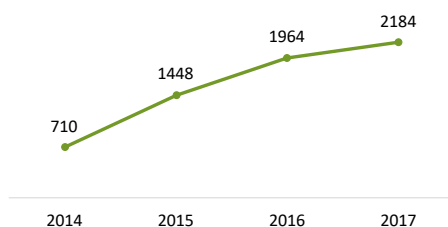
Source: CPWR. *The Construction Chart Book*, 5th ed. 2013

### Age-adjusted silicosis death rate (per million U.S. residents age 15 and over)



Source: NIOSH Work-Related Lung Disease Surveillance System (eWoRLD)

### Cumulative downloads of "Safety Culture and Climate in Construction: Bridging the Gap Between Research and Practice"



Source: NIOSH and CPWR program records

To learn more, visit  
<https://www.cdc.gov/niosh/programs/const>

<https://doi.org/10.26616/NIOSH PUB2019104>  
DHHS (NIOSH) Publication No. 2019-104