

# AVOIDING FALLS IN



# HORIZONTAL CONST





by Brad Sant



# CONSTRUCTION

In the heavy and highway construction industry, we don't often talk about fall hazards. While falls from heights are the leading cause of accidents and deaths in other segments of the construction industry, many of us who work on roads, ports, tarmac and other un-elevated projects have the impression we are immune from falls on the jobsite.

That perception is wrong.

Insurance claims data show falls (from heights and resulting from slips and trips) account for approximately 25 percent of our workers' compensation claims. They are one of the most frequent sources of injury and death. This fact alone should command our attention.

## Business Case for Preventing Falls

The hard or tangible costs resulting from falls are things, such as medical treatment, equipment repair, or worker compensation accrual rates, and they are fairly easy to track. However, the larger and less clear financial impact can result from indirect costs such as lost time of a supervisor and crew around the accident scene, dropped tools, and contract delays that can run between four to 10 times those of direct costs.

Also, increases in the frequency of incidents or accidents will lead to a potential increase in the severity. This increase in frequency and severity can lead to a higher Experience Modifier Rate (EMR) for your insurance. While this rate may appear as a complex calculation from your actual loss data, every business owner, manager and foreman should understand the implications. Each contractor starts with an EMR of 1.00. Good experience (fewer claims) will result in an EMR less than 1.00. Poor experience (frequent claims) will result in an EMR higher than 1.00. Insurance rates start as an industry average, and then are multiplied by your company's individual EMR. As such, a low EMR lowers the rate, and a high EMR raises the rate. This alone can affect how you compete in the bidding process. There are some owners or contract holders that will not accept bids from companies with an EMR above 1.00.

In the heavy and highway construction industry, most falls are from vehicles. When combining falls from trucks, trailers, construction equipment and other vehicles, they make up about 45 percent of our fall incidents. Such incidents are easily preventable when using standard mounting/dismounting safety practices, such as maintaining three points of contact and keeping steps and ladders clean. Other major sources of falls include ladders, stairs and scaffolding, for a combined 20 percent of industry fall incidents. Falls on walking and working surfaces round out the top causes at six percent.

## My Friend, Jeff

While these numbers and percentages help us understand the size and scope of the problem, they do not tell the personal side of the story. They do not help us understand the life-long consequence of a severe fall incident. My friend, Jeff, has one such story.



Jeff loved his job as a construction worker, because it gave him the opportunity to be outside. When Jeff wasn't at the jobsite, he was hunting, fishing and enjoying the great outdoors.

One day, the scaffold on which he was working collapsed, and Jeff fell, severely breaking bones in both legs and injuring his back. As far as statistics go, Jeff would be one of those thousands injured each year.

As a person, however, we see a much different story. Because of his fall, at age 26, Jeff could no longer work construction. His bones healed, but the pain never left. He could not stand for very long, nor could he sit comfortably. The constant pain impacted every aspect of his life.

Jeff had difficulty holding down a good job because of his physical problems, which meant his wife and kids did without a lot of the things most people take for granted. And he could no longer enjoy the outdoor activities he loved so much.

To withstand the pain, Jeff took a lot of medicine, which damaged his heart and kidneys. At the end of the day he would collapse into bed, missing out on quality time with loved ones. Jeff's injury as a construction worker not only impacted his life, but had long-lasting consequences for his wife, children, siblings, and friends.

In short, Jeff was left with a difficult life. Finally, at age 57, his body gave into the stress and the pain.

I know this story well because Jeff was my brother-in-law. It has only been one year since I attended his funeral and comforted his wife, my sister.

Jeff is just one story. Each year, 10,000 construction workers are injured as a result of falls from heights. Many, like my brother-in-law, are permanently disabled. Sadly, over 200 are killed each year —just about one every work day.

## "Stop Falls" Campaign

To reduce the number of falls, OSHA recently teamed with the National Institute for Occupational Safety and Health (NIOSH) to promote fall prevention. The campaign aims to draw attention to these hazards and to encourage contractor supervisors to plan for fall safety while providing the right equipment and necessary training. The campaign's outreach encourages all employers to take a helpful, proactive stance in calling attention to fall dangers, and provides support for contractors who embrace the message.

The campaign materials—in English and Spanish—include a poster showing a worker who had a fall that "shattered his body and livelihood." It urges contractors and workers to plan ahead to get the job done safely, provide the right equipment and train everyone to use the equipment safely. It also includes a four-page fact sheet with tips for ladder, scaffold and roof safety. The materials can be downloaded from OSHA's new "Stop Falls" website ([www.osha.gov/stopfalls.com](http://www.osha.gov/stopfalls.com)).

NIOSH also has a new website ([www.cdc.gov/Features/PreventingFalls](http://www.cdc.gov/Features/PreventingFalls)) related to the campaign. It includes links to its fatal fall investigations, "Fatality Assessment and Control Evaluation Reports," in which each fatality is described and NIOSH's prevention recommendations are listed.

With OSHA and NIOSH accepting leadership roles, a broad array of partners have joined in support of the campaign. The main campaign website ([www.stopconstructionfalls.com](http://www.stopconstructionfalls.com)) is maintained by CPWR—the Center for Construction Research and Training. It contains additional materials useful in fall prevention and was started by the NORA Construction Sector Council, an industry-labor-government group organized by NIOSH to identify the best research opportunities for improving construction safety and health. ARTBA has been an active partner with NORA for over a decade.

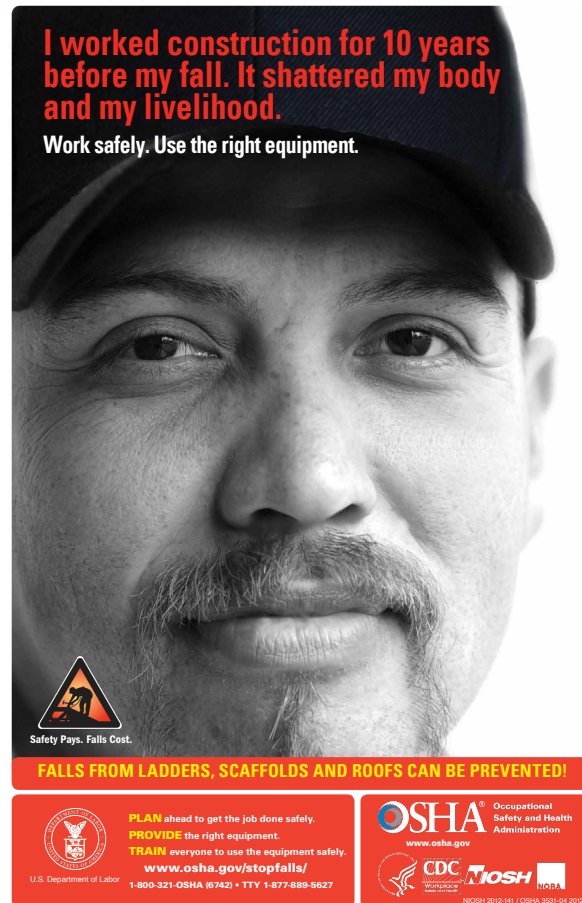
To plan the campaign, the Sector Council created a work group and asked OSHA to take a lead role in the effort, much as it did in 2011 in its heat stress campaign. The campaign now aims to raise awareness throughout the industry and change the expectation of workers and contractors. Many of the campaign materials will soon be available through the ARTBA Foundation-

managed National Work Zone Safety Information Clearinghouse ([workzonesafety.org](http://workzonesafety.org)).

Through awareness and outreach campaigns such as these, we can reduce the number of avoidable fall incidents on the jobsite, and hopefully prevent injuries to other people, so workers like Jeff and their families are spared decades of pain.

---

Brad Sant is ARTBA senior vice president of safety & education: [bsant@artba.org](mailto:bsant@artba.org).



Industry campaign poster to prevent falls in construction.