

'I Fell Off the Roof Today'

Those in the construction industry who need to hear the "Safety Pays, Falls Cost" message most are often the ones who are hardest to reach.

BY PETE STAFFORD



We recently received a video so remarkable that it deserves to be shared with everyone who walks onto a construction site. In "I fell off the roof today," posted on YouTube, a roofer identified only as "Isidro" shares a harrowing experience. While working on the roof of a three-story, stick-built residential project, Isidro lost his balance.

But not his life. Fortunately, his employer had supplied suitable fall protection gear, and Isidro had donned it properly. "The first thing I did on the roof is install an anchor above," he explained. "I already had my harness on. I had everything on, everything in place." His fall over the roof's edge was arrested almost immediately, and his co-workers freed him before he suffered any lasting effects. Still photographs

Two-thirds of fatal falls from roofs were suffered by employees of firms reporting 10 or fewer employees.

presented in the video show Isidro dangling after the fall, shocked but unharmed, driving the point home.

"You will never see me on a site untied," Isidro concludes. "We all have family. So protect yourself."

The Campaign to Prevent Falls – Year Two

People share such stories with me frequently because, one year ago, as envisioned by the NORA Construction Sector Council, CPWR — The Center for Construction Research and Training joined the National Institute for Occupational Safety and Health and the Occupational Safety and Health Administration to launch a nationwide initiative to prevent fatal falls in construction. Secretary of Labor Hilda Solis announced the Campaign to Prevent Falls — Falls Cost, Safety Pays at a widely attended Workers' Memorial Day observance and summit in Los Angeles in April 2012.

It couldn't have happened a moment too soon. Injuries and deaths from falls remain stubbornly high in the building trades. Construction workers represent only 8 percent of the American workforce but suffer 22 percent of all workplace fatalities, with falls as the leading cause. Almost every working day somewhere in the United States, a man or woman employed in the building industry dies in a fatal fall on the job. Every year more than 10,000 construction workers experience serious, even life-changing, injuries from falls.

As grim as those statistics were, upon launching the campaign we learned that a large cross-section of the industry shared our concerns. Dozens of leading contractor associations, labor unions, safety consultants, and others signed on as partners, hosting events and getting the word out. Under the slogan "Safety Pays, Falls Cost," we spread the message through construction expos, union events, and radio broadcasts.

Together we built a website, www.stopconstructionfalls.com, that serves as a home base for the campaign. There, the Campaign to Prevent Falls in Construction offers research reports and toolbox talks, instructional videos, and news of the campaign. You can click on a map to learn about fatal construction falls in your community. And if you are responsible for a construction project, you can learn about the latest fall prevention strategies, techniques, and tools.

"The campaign has had a wider level of support and participation than we imagined. We still have work to do to get the message out, but we have reason to be pleased with how well the campaign has been going," said Dr. Christine Branche of NIOSH.

Not All Are Equally at Risk

We must admit, however, that not all workers are equally at risk. The large commercial contractors, labor organizations, and enlightened project owners who responded first to the call were often those already doing much to protect workers on the job. Conversely, those who need to hear this message most are often the ones who are hardest to reach.

CPWR research bears this out. With generous support from

**If you work on a roof...
You could be in great danger.**



Every day on the job a construction worker is killed by a fall and about 40 are seriously injured. You could easily be one of them. All it takes is a slip or trip and down you go.

**Falls happen fast.
It takes less than
a second to
fall 10 or 20 feet.**

When you land, it can be with a force of over 4,000 pounds, easily enough to break a leg or arm or your back or cause a skull fracture. You could be out of work with little to no income for your family.

Don't take any chances. Protect yourself from a fall.

Here is what you can do:

1. Wear a full body harness and make sure it is snug. A belt is not going to protect you.
2. Connect the harness to a lifeline or lanyard. It should be long enough to do your work but not too long so it will stop you from hitting the ground.
3. Connect the lifeline to an anchor on the roof. The anchor should be nailed in or screwed into a rafter according to manufacturer's instructions. Make sure it is in securely so it will not come out if you fall.
4. Try to keep the roof clear of obstacles that might cause a slip or trip.
5. Plan the work to avoid tangled lines.
6. Make sure ladders are secure (top and bottom), at the proper angle (75° if static), on firm footing and extend 3' beyond the roof edge to make it easy to get on and off.
7. Keep three points of contact on the ladder when climbing and always face the ladder going up and down.
8. Never carry anything in your hands when climbing a ladder. Use a hoist to get materials and tools up and down.



**Falls can be
prevented by simple
precautions.**

More information on preventing falls is on the website
www.stopconstructionfalls.com.



This filer is a great handout that gives simple directions for working safely on a roof and using fall protection equipment. You can find this filer, and more training materials, on the website www.StopConstructionFalls.com. Here is a link to the PDF of this filer: <http://stopconstructionfalls.com/wp-content/uploads/2012/09/Rooftop-filer.pdf>

NIOSH, Sue Dong and the CPWR Data Center led a research team to study fatal falls from roofs in the U.S. construction industry over an 18-year period, with a special focus on 2003-2009. "Fatal falls from roofs among U.S. construction workers" appeared in the February *Journal of Safety Research*, and the article can help us grasp the size and specifics of the problem. Using data from the Census of Fatal Occupational Injuries (Bureau of Labor Statistics) and the Current Population Survey (Bureau of the Census), the authors identified several groups at particular risk, among them:

- **Employees of small construction firms.** Two-thirds of fatal falls from roofs were suffered by employees of firms reporting 10 or fewer employees.
- **Hispanics.** Hispanic construction workers have a 54 percent higher risk of experiencing a fatal fall from a roof than non-Hispanics.
- **Residential construction workers.** While residential building sites account for 18 percent of construction occupational fatalities overall, they witness more than a third of all fatal roof falls.

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If we want to put a serious dent in the number of needless deaths and injuries, we need to get to the workers identified as at particular risk — and especially to the contractors who employ them.

Resources for Residential Contractors

That's why we've steadily added resources to www.stopconstructionfalls.com with such contractors in mind. The campaign's main message to contractors — "Plan. Provide. Train." — is applicable to firms of every size and trade.

- **PLAN** ahead to get the job done safely.
- **PROVIDE** the right equipment.
- **TRAIN** everyone to use the equipment safely.

While the large commercial or industrial construction firm may have a safety department with human and material resources, the small contractor struggling with tight margins needs all the help he or she can get. The website can help. Such small contractors can stop by our page offering resources on roof falls; once there, they can pick up a Fall Prevention Fact Sheet published in English and Spanish (and for that matter, Polish and Russian!) or a well-illustrated handout showing how to properly tie off while working on a roof. Under "ladders" they can view the much-in-demand Don't

Fall for It! instructional video on ladder safety or a PowerPoint presentation useful for training site supervisors in ladder safety. And if they are working on building exteriors, I hope they won't overlook the useful "scaffold checklist" and other resources on scaffold safety. These are but a few of the free materials available online for anyone with an Internet connection and a printer.

Construction contractors, trades workers, and occupational safety professionals who don't want to stand on the sidelines are invited to join us in this campaign to save lives. On April 10, I will join Dr. Branche as well as Jim Maddux from the OSHA Directorate of Construction to host an *OH&S* webinar on the initiative. Participants can learn about the campaign's first year and how they can partner with us to make these tragedies a thing of the past. I hope you will be there to help us *stop construction falls*. **OH&S**

Pete Stafford is executive director of CPWR — The Center for Construction Research and Training (www.cpwr.com). This column was provided by CPWR, which is the research and training arm of the BCTD. CPWR's research is made possible through a cooperative agreement with the National Institute for Occupational Safety and Health, NIOSH (OH009762). The contents of this column are solely the responsibility of the author and do not necessarily represent the official views of NIOSH.

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