



NRCA

PREVENTING

FALLS

sponsored by:

DURO-LAST
THE WORLD'S BEST ROOF®

WATCH NOW



MODERATOR

Heidi J. Ellsworth

Partner
RoofersCoffeeShop



PANELIST

Rich Trewyn

Director of Enterprise Risk
Management for NRCA



PANELIST

Cheryl Ambrose

Vice President of Enterprise
Risk Management for NRCA

Heidi Ellsworth:

Hello, this is Heidi Ellsworth and welcome to another RoofersCoffeeShop Lunch and Learn. This Lunch and Learn is a lifesaver. I'm telling you this is going to be a lunch and learn that you and your company are going to want to take the time to watch several times. We are talking today about fall prevention and I'm very proud to say that this Lunch and Learn is sponsored by Duralast Roofing. Duralast cares so much for their contractors and has such an amazing, amazing group of roofing contractors across the country, and they care about the industry overall. So thank you for your sponsorship of this Lunch and Learn, Duralast. We have the experts from the National Roofing Contractors Association, NRCA, Cheryl Ambrose and Rich Trewyn, who are here today to talk about fall prevention. Rich, Cheryl, thank you so much for being with us today.

Rich Trewyn:

Thanks for having us.

Cheryl Ambrose:

Thanks, Heidi. It's great to be here. It's always great to be with you.

Heidi Ellsworth:

Oh, this is such an important topic. It's just number one in roofing. There's nothing more important than fall prevent prevention. So I really wanted today to dive into this. You are both such experts on this, and training and how to prevent it. So before we get started with our learning objectives, I would love to have you each introduce yourself, tell us about your role with NRCA and your history working with safety and risk. So Cheryl, let's start with you. If you could introduce yourself.

Cheryl Ambrose:

Well, thanks Heidi. Yes, Cheryl Ambrose. I'm the Vice President of Enterprise Risk Management for NRCA and have been in occupational safety and health for close to 30 years in the construction industry. I've served in various roles from the project safety manager right on up to the corporate safety director and was most recently the National Safety Director for the Plumber and Pipe Fitters Union prior to joining NRCA in 2021. So it's a great opportunity. I absolutely love anywhere I can advocate for worker safety and health, and NRCA was just the perfect place to be able to do that.

The membership is great. We have so many members that care about safety, so I hate to say it makes our job a little easy. You hit it the nail right on the head. We'll talk more about it, but this is the number one thing in construction and in the roofing industry that is causing the deaths and injuries. So we want to talk about how to prevent those and make these numbers go down, because it's been like this for my entire career, I'm sad to say. So we're always looking for ways and we really appreciate the opportunity to come out here today and do the Lunch and Learn.

Heidi Ellsworth:

Thank you. We want to get all of our roofing professionals home safe and sound. There's nothing more important. So Rich, if you could introduce yourself and tell us about you and your history in NRCA.

Rich Trewyn:

Sure. My name is Rich Trewyn. I'm the Director of Enterprise Risk Management for NRCA. I've been with NRCA for about eight years. Prior to that, I was in the safety industry, and specifically in roofing, for

about 27 years. So Cheryl and I have a wealth of knowledge from the safety side of things. Definitely, this is one of those topics that's always been important since me graduating from college and becoming a safety professional.

It's been one of the hot topics, so to speak, for the roofing industry and is something that is near and dear to my heart. I've done training all the way back since I started my career in fall protection and I've done this faithfully throughout those years. With NRCA, I've taken on a new role with the training profession and we've gone into a full day training of fall protection and we've also done a two day competent person or fall protection for the competent person or for the trainer type of training program. So we're really excited about this today and the importance of it is there, for sure.

Heidi Ellsworth:

Me too. This is so important. So thank you both. Let's get started with our three learning objectives. They are understanding underlying causes of falls from heights, training and self rescue, and fall prevention. So we're going to get started with our first learning objective, which is understanding underlying causes of falls from heights. So Cheryl, I understand there has been a very important safety industry survey that came out really helping us to understand the overall experience and why falls are happening from people who have experienced falls. Can you tell us about that?

Cheryl Ambrose:

This has been the number one cause of death and injury in construction for my entire career. Although as safety professionals we know it's happening, and we probably know that there's reasons, but it's never really been quantified. So CPWR, which is the Center for Construction Research and Training, they recently came out, and I say recently, within the last six months or so, so it was back in August of 2022, and they published their highlighted findings of their survey titled, Underlying Causes of Falls from Heights.

So of course this was something that we were very happy to see, but these key findings really were like that aha moment, where we say, yeah, we know this is an issue, we continue to see the statistics, and yet what is the reason for this? So just to hit on a few of those, right off the bat, was the lack of adequate planning was a key underlying cause of falls to the extent that it was the number one at 27%.

Lack of planning, again associated with a lower likelihood of fall protection, which was a very interesting correlation. So if the employer wasn't planning well for fall protection or the respondents didn't think that it was required, they didn't do it. One half of those surveyed said that at the time of the fall, no fall protection was being used. That didn't really surprise us. It did, but it's like after all the efforts that the industry has gone through, we're still seeing numbers like that.

The odds of the fall being fatal were 76% lower if someone had had some type of self rescue training, compared to those that didn't know how to self rescue or prevent the orthostatic shot, which Rich will talk a little bit more about. More of the fatal falls were occurring in the subcontractor level, but as we all know, most of the subcontractors is where the work is occurring. So it would make sense because many general contractors don't self-perform work.

Rich Trewyn:

One of the biggest things that we saw from the survey was the lack of adequate training and it over so many different levels. Unfortunately, what we were seeing is that most companies didn't really take the time to onboard correctly. They didn't take the time to actually get their employees up to par with where they should be for having a safe workplace, and that was the problem. We hear it over and over again and we receive calls over and over again, from members and non-members alike, that say, is there

anything out there that we can do? Is there a half hour program that we can show people before they get onto the rooftop how they can be safe?

I always question them right away. So one half hour, you want to spend a half hour on the training that is going to prevent somebody from dying. Unfortunately, a lot of these companies feel that that's adequate training. When they're roofers get out on the job site, of course they find out that it's not. Some of the numbers are staggering here, but definitely the lack of rescue training, the lack of training from a competent person is going to be some of those key factors in what leads to problems down the road for these companies. I'll explain some of that in a little bit.

Cheryl Ambrose:

Construction companies with fewer than 20 employees account for, and this was in 2020, so this statistic is probably about the same, 75% of the fatal falls in the construction industry. Then when we look at the construction industry as a whole, 91% of them have fewer than 20 employees. They typically may lack the resources. They don't necessarily have a Cheryl or a Rich on their staff.

So that's why we're so happy that we have the membership that we do because our average membership is 40 employees in a company. So we see all those companies as taking their situation very seriously. They look for the resources. They come on board in part to take advantage of all the NRCA resources.

When we looked at the falls from Heights, 27% of the falls were fatal and 64% required 911 emergency services. Nearly 60% required immediate medical attention. So it was severe. It wasn't like, okay, I got hurt and I can go to the doctor tomorrow or the emergency room later that night. When we looked at how far did they fall, it would stand to reason that the farther they fall, the higher the number would be.

So a large percentage of the falls, or the fatalities I should say, happened at 20 feet or greater. Interestingly enough, at less than six feet, 5%. There was still 5% fatal falls at less than six feet in height. We all say it's not the fall that kills someone. It's the sudden stop or the impact at the bottom or on the way down that does the damage.

Then what were they doing? It was interesting. They were able to ask that question and they got some fairly good responses. In one of the top categories, 14%, the activity was roofing. So we were in the top three in terms of activities. The working on ladders, scaffolds, elevated platforms or doing some other similar task at height accounted for the other portion of that top percentage. There was no fall protection of any kind being used in almost 50% of the fatal falls, or the falls in general. So that's probably a great place for Rich to pick up.

Heidi Ellsworth:

I do want to note to everyone that we are on, you probably are seeing across your screen right now, the website for this survey, so that you can go and look at it more in depth and share that with your employees to really show them how critical it is to understand falls. Let's go to our second learning objective training and self rescue, just as Cheryl said. Rich, I would love to turn this over to you to talk about the importance of training end users and competent person. So take it off, please.

Rich Trewyn:

Thank you so much. Definitely, the lack of training, it's just a big part of that. Like I mentioned earlier, we get so many calls in saying, do you have a solution for us? Do you have a quick solution that we can maybe put a video on, that we can put a DVD on, that we can have somebody sit in front of a computer for a short period of time to be able to be trained properly for fall protection?

I always tell them, we have the resources, we have some very good resources that you can utilize to help your training program, but a half hour program just isn't going to cut it. Unfortunately, we found significant associations between not using fall protection and the lack of training an individual that had that fall. So the end user of that wasn't getting the proper information.

We also found out that among those who didn't have the training, that almost 74% didn't use fall protection at all, whatsoever. So that's a big number there. That's a scary number to think of that these people were being sent out to onto a job with inadequate training, and of course that led to a fatal fall or a fall that ended up injuring them in some way, shape, or form.

We get the fact that many companies don't have a lot of time or they don't have that in-house person to do the training, and therefore they squeeze together some type of a program, or maybe in some cases they don't even do that. They just rely on the manufacturer that's creating these harnesses to do some type of training, and it's not always the greatest thing.

We've also seen an uptick in the number of OSHA 10 and 30 hour classes that have been trained, and they're fantastic. We do them ourselves. We do OSHA 10 hours and we do OSHA 30 hours. However, it's not enough and it was never meant to be the end product. The 10 hour and 30 hour, they're fantastic as an awareness program, but they aren't the end product and shouldn't be used as such.

The other thing that we've seen is that there's been such a lack of competent persons doing the training. That's a critical part of it, is that we need to have somebody that understands and has the authority not only to recognize those hazards, but also to stop those hazards if they occur on the job site. They should be doing the training. They're the ones that are out there, that have the knowledge, that have the understanding of actually how to do that training in house. Unfortunately, we haven't seen that a lot.

Some of the other parts of this as well require pre-job or pre-task planning, and we don't see that either. Unfortunately, many companies don't have the time or they don't have the personnel to go out and actually inspect a job prior to people coming up onto that rooftop to be able to perform that work. We always recommend that even salespeople, estimators, or the safety directors themselves go through some type of fall protection training, so that they can recognize the hazards prior to their people stepping on the job.

That can include something such as a JHA, which is a Job Hazard Analysis, prior to the job being done. It can include daily safety huddles or weekly toolbox talks, some form of training that can actually increase the awareness for participants. Of course, the best thing that can be done is a competent person training specific for fall protection, so that they can understand all the ins and outs of exactly what needed to be done on that job. So that employees understand how to be a safety monitor properly, how to actually use the proper use and limitations of their equipment, how to inspect that equipment and how to, again, perform self rescue.

This is one that's near and dear to my heart. Unfortunately, in many cases, I'm the one up there hanging and showing these people how to do it. I'll tell you this, over the years I've been up in classroom situations for over a half hour periods of time just trying to train self rescue. I can tell you I typically need a day of rest, or at least a half day of rest, after these training programs that I perform. It's not a very comfortable feeling.

Unfortunately, most companies don't think about the fact that they should be practicing the what ifs. What if I fall off the roof? What can I do to prevent further damage? What can I do to prevent orthostatic shock, as Cheryl mentioned before? That comes with that rescue training, and unfortunately, we don't see it enough.

So what the rescue training that we do entails is actually getting up on a tripod or getting up in anything that you can get a lift off the ground and it doesn't have to be six feet, 10 feet, 12 feet up off the ground. It can be just a couple of inches off the ground to understand the use of specific equipment that's available out there, to help prevent or delay orthostatic shock. We saw some staggering numbers when

it came to that. I think Cheryl mentioned that before, that those that were not trained, I believe it's over 76%, were had more serious issues, because they weren't trained properly on rescue techniques. So it's a very, very large number.

Cheryl Ambrose:

Looking at a term that we haven't even talked about, and it's getting a lot of traction, it's prevention through design. So when in the pre-bid planning, where do we need to know that there's anchor points? Where do we need to know that there are those areas that we may need to erect a guardrail? How do we get access to the roof safely? So there's a number of things pre-planning, and that doesn't happen, as we know, at the worker level. That happens at a higher level.

So of course those project managers, business owners, all those people that have that input into that type of planning, that's a critical piece and we welcome all those folks into our training classes. Rich talked about the training and the end user. So the end user is very critical, and that competent person, OSHA even requires that the end user be trained or the worker be trained in fall protection by the competent person.

Again, that's another leadership or piece that's tied back to the employer, because NRCA, or any organization that does training, can't issue a certificate that says, we waved the magic wand over two or three days and you're suddenly a competent person. We don't hand out a certificate that says you are the competent person. That's a designation that OSHA requires the employer to make, so that's something the employer has to plan for.

Looking ahead, who is that right person? It's oftentimes a supervisor, because they have the field experience, they're out there in the field with the folks, they're more experienced in the falls, and assessing those hazards as they go through what's required. Then making sure that the Job Hazard Analysis, not only that that's being talked about, but that planning piece and the leadership around that, that again gets driven, because if upper management and the leadership in the company wants to make sure that's happening, then it'll happen. Right?

Heidi Ellsworth:

Right.

Cheryl Ambrose:

It should be happening. Oftentimes, unfortunately after the fact, they go back and find that one wasn't done, or it was I hate to say it, pencil whipped. They went through, checked the box real quick, and went to work and no one really talked about it. We have some companies out there doing some really amazing things, doing videos and really getting their guys together and talking about those daily task assessments, creating written fall protection plans. Those are types of things that we can help with samples.

Then of course the rescue plan being even part of that, not just the written plan, but then what is that in practice? Each job site's different. Rich can attest to that, because every single time you step on a job site, how you have to rescue someone from a fall from heights could be very, very different and how you can get equipment in there or what's needed. 911, that can't be just the answer. Well, we'll just call 911, because those minutes are critical to get that person down if they can't self rescue.

Rich Trewyn:

Cheryl, I think you said this wonderfully. I think part of the allure of being in the roofing industry is that there's so much diversity on job sites. You're not just in a stagnant position. Unfortunately, that comes

with its specific safety hazards as well. Every job isn't the same. Every fall plan isn't going to be the same. So it does require somebody out there that has the ability to recognize particular hazards on specific job sites.

Unfortunately for us, we saw that the number out there just was crazy high. Individuals who believed that fall protection rooms were required by the company were eight times more likely to use fall protection than those that didn't believe it. That's a big part of that training plan, and unfortunately, the end user, again, was missing the boat. They weren't getting that information down to that last person all the way down the line, and that was the person that was going to have to be using. So it's really important to understand that those people need to be trained and those people need to have that information before they even step onto a rooftop.

Heidi Ellsworth:

Let's talk about really being able to communicate in your first language. So we have a very strong Latino culture in roofing, and if you are not training in Spanish, that end user, there is a good possibility they are not going to understand.

Rich Trewyn:

That's so important. I train classes all the time, bilingually. Now, I typically have a translator in the class with me and it's so important to have that. You want to have those people in the classroom. You want to make sure that they're understanding and that they're just not nodding their head to say, oh yeah, we understand. You want to make sure that there's some type of relevant testing, some relevant information that you can ensure that they're getting the information properly. Because again, that end user needs to have that training. They need to understand that their company wants them to use the fall protection. If you're not training in their native language and if they're not understanding what you're giving them, you're not being fair to anybody there.

Cheryl Ambrose:

OSHA actually states that any training given has to be communicated in the language in which the employee understands. That's a huge piece of just building the culture around how to prevent falls. It's not just knowing the specifics and the requirements and having the training, but that the employer is encouraging that there is a culture in which they can speak up and say, hey, this isn't right. I don't feel safe doing this. Let's take another look at how we can do this better.

Heidi Ellsworth:

Let's continue on with that thought for our third learning objective, which is fall prevention, and let's talk about how companies can engage at all levels. So we've really talked about from leadership to end user, how they can engage, and what are some of the ongoing solutions from NRCA that is being on presented. then I'd love to go from there and talk about our National Safety Stand-Down Week, which is going to be May 1st through the 5th and your upcoming trainings. So Cheryl, can you start us off with getting companies engaged and the resources?

Cheryl Ambrose:

Well, and I think that you said it right there is getting engaged. So that's the key word. Employers need to take those proactive steps. We've mentioned several of them. To prevent the falls, it starts early in the process, in the bidding process, in the pre-job planning, before they may even step foot on the job site,

with the exception of maybe the estimators or the sales folks. They need to know what to look out for too.

One of the tools that we didn't actually talk about, but NRCA has developed and we're looking at actually revising it a bit, but is the roof deck integrity. Because one of the things, we're not just seeing falls from heights, we're seeing fall throughs, whether it's a skylight. Obviously understanding that hazard, but when you have a roof deck that is, I don't want to say disintegrated, but defective, deteriorated, I guess is the word I'm looking for, a deteriorated roof deck, it may not be visible. Next thing you know they're starting to do tear off and then, whoa, we got Swiss cheese underneath here. So there's a lot of things to look at there. So those are all proactive steps.

Then there's the daily stuff. So again, from the employer down to the supervision, what happens on a daily basis? Are we huddling up in the morning? Are we talking about what the hazards are, and falling being one of them? Then there's of course other hazards associated around that, so they all get talked about. Looking at that from maybe at the end of the day even, which is a little bit of a novel idea.

Hey, we did this job hazard analysis at nine o'clock in the morning. Well, I'm sorry, five o'clock in the morning and by nine o'clock in the morning it's out the window. The day has changed, everything's had to shift. So we know that workers are managing risk in real time on a daily basis. We want to give them the tools to make sure that they're constantly thinking in that proactive mode.

Rich Trewyn:

Cheryl, I think that's a really good point. Safety doesn't just start and end in the morning. We can't just do a toolbox talk in the morning and say, that covers us for the rest of the day. I think some of the best planning that I've seen and engagement I've seen is prior training to stepping on the job, ensuring that the salesmen and estimators have been trained about safety as well, and then when we get to that job, having that toolbox talk in the morning about what they're going to be doing and what they're going to see.

Then at the end of the day, going over the next day's plan. Actually saying, hey, before you go home tonight, we want you to understand exactly what you're going to be seeing tomorrow. It's been a huge part of that program, to make sure that they understand that there's going to be some risks on this job.

Cheryl Ambrose:

Yeah. I think one of our students who came through one of our training classes put it best when he did a talk in front of his employees, was that every time you step on the roof, you're putting your life at risk. Guys can't think about that, because then they would never want to get up on the roof, but that is the reality because you're working at heights.

I would just go back to one of the stats from the survey, which was that among those whose employers are competent persons, and/or competent persons, did not do any planning, almost 78% did not use fall protection. Rich touched on this. What I would love to see is that we flipped that number on its head. So that we're now saying, hey, 78% used it and only this small number didn't. I guarantee you we would see a decline in the number of injuries and deaths that we're seeing as a result of falls.

Heidi Ellsworth:

Talk a little bit about the National Safety Stand-Down. This is from OSHA, and they have done this to bring this to the forefront. They actually wanted a week where people talk about this, but I love what Rich said. This isn't just one week a year. This isn't just one toolbox talk a week. This is every single day. To bring this kind of focus into it, talk a little bit about that National Safety Stand-Down Week, which is May 1st through the 5th.

Cheryl Ambrose:

Yes, absolutely. That is National Safety Stand-Down to Prevent Falls in Construction and OSHA set this program out a number of years ago. NRCA has been fortunate enough to have a very significant role in helping OSHA plan that along with CPWR and NIOSH. This actually stemmed from an even broader campaign, which is called Construction Safety Week, which started a number of years ago. Then they reached out to OSHA and said, hey. Because OSHA was doing a stand down for falls, but it was falling on a different week. So what they did was they got OSHA to help align that with Construction Safety week.

So this is a week across the industry where they focus on safety, but falls is always going to be in the forefront because of the significance of how many, of course, deaths and injuries we're seeing. So if you go to OSHA's website, [osha.gov/preventfalls](https://www.osha.gov/preventfalls), you'll find all the information. CPWR has a website as well called, [stopconstructionfalls.com](https://www.stopconstructionfalls.com). There's tons of resources you can order, hardhat stickers, hazard alert cards, lots of things that you can use to supplement. There's a number of webinars that are going to be kicking off in the next few weeks and to get this out, the word out there, including what we're going to be doing at NRCA.

During that week, we have a three-part webinar series on Tuesday, Wednesday, and Thursday on some different topics that are very important in terms. One of them is going to be self rescue, so if you want to see a whole webinar on self rescue, you can come watch Rich do that. Then of course, we're going to keep focusing on these underlying causes, because I feel like we need to continue to talk about this and make sure the word's getting out there. So we are going to do one webinar on that.

Then we're going to talk about web warning line systems. Everybody seems to think in the roofing industry, that's something that really is fairly specific in how the roofing industry can utilize a warning line system. There's a lot of myths, and we're going to try and share some of the myths and straighten out with some of the truth on that.

Heidi Ellsworth:

Excellent. So much of these resources you can find on NRCA. You'll be able to find out how to attend these webinars, all the materials that Cheryl and Rich put together. Let's talk a little bit about your Fall Protection Trainer two day course coming up May 11th through the 12th. Rich, what is that?

Rich Trewyn:

Yeah. It's a fantastic course. What we're trying to do is develop courses that really hit the heart of the safety issues in the roofing industry. This two day course is a really beefed up safety course specific to fall protection, and it really does that. Does a lot of good for companies, does a lot of good for trainers. So what we're doing is trying to develop a program that covers every subject area in fall protection.

Not only does it do that, but the end user, it allows that person to come back to their own company and train their personnel in the proper way, in the proper techniques for fall protection training.

Unfortunately, as we talked about, many companies don't do this. Many companies don't have a specific person to train. So what this is doing, is it's developing that person into a proper trainer, and to give them a proper training program. So the package that we do, it's two days and it's intense, but what it does is it lets them leave with a feeling of knowing how to train and giving them the information that is needed to train their crew properly.

Heidi Ellsworth:

Yeah.

Cheryl Ambrose:

I would just add to that, the course started off as a three day course and we heard from the members that they really loved it, but would be better if we could... So we did. We found a way to keep all the content. We've been working on making some adjustments to that just recently, but we're super excited. Because the other thing that it does is it gives that, for lack of a better term if, the advanced level of training, the competent person level of training. We've seen people who've taken the class already go back to their companies and do some really fantastic things with the knowledge that they gained in the course. So we're just really excited to see where it goes.

I will say, you can go to nrca.net/events. You'll find it right there. You can go register. There is limited space in the class. So we would encourage you to, if you have an interest in taking the class. It's being held at the Building and Fire Academy in Elgin, Illinois. We want to be able to look out across the room and see every seat filled, so run and sign up.

Heidi Ellsworth:

I want to say for everyone out there listening and watching this Lunch and Learn, whether you're a member of NRCA or not, there are many, many, many resources out there as we just talked about, OSHA, your local associations, your regional associations. We highly recommend consider becoming a member of National Roofing Contractors Association, because the resources that you will get for your company and that you have at your fingertips every single day are amazing for safety. Rich and Cheryl are saving lives every single day.

So last, as we covered all three of our learning objectives, understanding underlying causes of falls from heights, training and rescue, and third fall prevention. Cheryl, Rich, thank you so much for being on this and sharing all of your wisdom. Such an important topic.

Rich Trewyn:

Thanks for having us.

Cheryl Ambrose:

Thank you, Heidi. It's great to be here and it's always a privilege to be with you and RoofersCoffeeShop.

Heidi Ellsworth:

It's a huge privilege to have both of you. Thank you. I want to again, encourage everyone to participate in National Safety Stand-Down Week, which is May 1st through the 5th. As Cheryl said, you can find that on the OSHA website. You probably are seeing these websites scrolling across right now. Also, please sign up as soon as you can for the Fall Protection Trainer two day course for roofing, May 11th through the 12th.

I also want to thank Duralast again for being a sponsor of this very important Lunch and Learn, with a full commitment to safety. Please check out the Duralast site, both on RoofersCoffeeShop, and overall. They are a leader in safety, not only for with fall protection, but in manufacturing and across the board.

So thank you all for being on this Lunch and Learn. Remember, take a picture, send it in, and send one of you a free lunch. So enjoy, be sure you have your documents, your learning guides, so that you can discuss this afterwards, and I hope you enjoyed it as much as I did. We'll see you next time on RoofersCoffeeShop Lunch and Learn.