

Episode 8: Fall protection quick facts

Host: Michelle Roberts **Guest:** Brian Barron



Announcer:

It is time for the IHSA Safety Podcast.

Enzo Garritano:

Welcome to *IHSA Safety Podcast*. I'm Enzo Garritano. We continue our series about fall protection and construction. This series of podcasts features Brian Barron, Senior Manager of the Construction Health and Safety Program with the Ministry of Labour, Training, and Skills Development. Let's continue the conversation with Brian. Here's your host, Michelle Roberts.

Michelle Roberts:

So Brian, if you can, let's talk about some of the most common issues identified from, whether that's either during a reactionary site visit, proactive visit, or maybe during one of the blitzes that's scheduled with heightened enforcement on fall protection.

Brian Barron:

Yeah, so what I would say is one of the biggest misnomers is especially when we're doing a blitz, so let's say it was a fall related blitz or initiative in the construction sector, is that we're only looking at that particular hazard. Now, obviously that's going to be a focus of our visit when we're doing that blitz or initiative, but we will take a look at really a lot of different types of hazards. Usually what we do is regardless of whether it's a proactive or a reactive visit, we are always looking for contraventions that we know have really a higher frequency or really a higher chance of leading to serious injury or death. So good examples of that would be falls, obviously. That is a major, major focus for us, but there's also the struck-bys or hit-bys so that could be struck by equipment or material.

So even equipment moving backing into a worker, or even the bucket of a piece of equipment hitting a worker. There's also excavations. Excavations can be very unstable, so workers working in an excavation that doesn't have an appropriate support system in place is a significant concern for us. And then even electrical issues, so workers being electrocuted or even receiving an electrical shock, and that's really just to name a few. Some other things that we look at when we're on the site is really access to an egress from work areas. So can the workers pass safely from say the job site trailer or where they're parked or where their equipment's stored to the area that they're working, as well as housekeeping issues, they run hand in hand. So is the site kept in good shape? Is there a lot of material laying around? Is the ground uneven?

Is the snow and ice maintained in the winter? All of those fall under those housekeeping issues, and those also lead to a lot of slips and trips which result in broken ankles, broken wrists, that type of thing. We also take a look at administrative controls that directly impact the internal responsibility system. So things like having a functioning joint health and safety committee or health and safety representative in place or in the case of a larger site, a workers' trade committee, but then also looking at training and supervision.

So are the supervisors actively supervising the workers? So when they see an issue, when they see a worker who isn't following either the site policies or procedures or the Act or the regulations, are they dealing with it? But then also having the appropriate level training in place is obviously a really big concern for us. So a highly trained worker or a worker who knows how to adapt to certain situations and deal with hazards so that they don't become an issue is obviously a safe worker. So those are all things that we look for on really a typical site visit.

Michelle Roberts:

Okay, thanks for that, Brian, and expanding on the most common hazards or issues that are identified. Can you also touch on what are the most frequently issued orders?

Brian Barron:

Yeah, definitely. So there's two groupings of orders really. So you've got orders out of the Act and regulation, which are usually sort of physical contravention, so you would say a lack of head protection, and that's sort of our number one order. It has been for a long time. So not wearing a hard hat, which is required at all times on a construction project. But then you also have other types of orders, and one of our main orders that we see all of the time or one of the most frequently issued is called a stop work order. Now that stop work order is known one as a companion order and it's issued alongside of a physical contravention. So if a worker was not wearing their fall protection equipment well up on a roof, we would issue them an order for fall protection, which is also in our top couple of orders.

But then we would issue a companion order that says you have to stop work until you correct that. And what that stop work order really does is it indicates to us that there was an imminent danger that the inspector felt needed to be stopped at that time, which is concerning to us. So anytime that we see that type of an order being issued, regardless of the physical contravention that it accompanies, it tells us that there was an imminent danger that an inspector had to stop at the time. So when we see those types of things, we are very concerned about it. Now, getting back to that physical contravention side of it, so we've got hard hats or headwear is really the number one, and it has been for quite a long time, but then we get into fall protection and failure to have guardrails in place. So you've got those fall protection orders.

Then we've also got some administrative orders, so you've got notice of projects. So a notice of project is where we get notified that a construction project is ongoing, and when we don't receive that notice of project, usually it's just that either the constructor wasn't aware of their responsibility to notify us or they were trying to not notify us so that we wouldn't know where they were, which is of obvious concern. But then we also get into failing to wear adequate protective footwear, so wearing the appropriate footwear with steel toe and shank to protect the workers' feet on a construction project.

And then we've also got one of our major issues, our failure to provide really the appropriate grade ladder, and then there's a whole series of orders that go along with that as well, which really get into how it's set up on site, how it's used and that sort of thing. So ultimately those are really our major ones. We also get a lot into scaffolding, so scaffold use on construction projects, so if scaffolding isn't erected appropriately or it's missing cross bracing, that type of thing, we see a lot of orders for that as well.

Michelle Roberts:

Okay, thanks. If we can, I'd like to expand a little bit more on ladders because I know that that tends to be either a contributing factor when we're reviewing stats related to falls and something that we want to prevent as falls. So can you expand on ladders and what you're seeing on ladders and what's not happening properly with them?

Brian Barron:

Yeah, absolutely I can. So ladders are probably, I'm going to say it's probably the most abused piece of construction equipment that's out there. So what we end up seeing is every ladder, number one on a construction project has to either be a Grade 1, Grade 1A, or Grade 1AA ladder, and that's under the CSA [Canadian Standards Association] standard. And the reason that's in place is that the weight requirements as well as the stability requirements for the actual ladder need to be maintained for the use on a construction project. Now, some of the things that we see pretty regularly is the ladder number one isn't set up at the right angle. So every ladder, usually it has to be set up between a one to three to a one to four ratio against a structure, a house, whatever it's being set up against. Or in the case of something like a step ladder, making sure that the legs on it are fully extended and the spreader bars are locked, that type of thing.

So they're not set up properly. When we get into extension ladders quite frequently what we see is the ladder is not tied off or secured at the top and bottom, so they'll just put the ladder up against the building or structure and start working. The problem with that is that the ladder starts to shift or move, there's nothing to stop it. Then we also get into fall protection issues with ladders as well. So any worker working off of a ladder above three meters or 10 feet in height needs to be still attached to an approved fall arrest system, okay, so it's still full body harness with a lanyard, a rope grab, a lifeline, and then an anchor system somewhere.

Those are some of the things that we see. Now what we also see a lot of the time is workers over extending on the ladder. When I say that, what I mean is if you can picture yourself standing in the middle of a ladder, you've got the rails running up on either side of the ladder, you're standing on the rung and the worker has to overreach, so they go outside of the rails of the ladder to reach over to do something else versus actually moving the ladder to a more appropriate location. Now, ladders have the ability to become very unstable when that happens. So as soon as you move, sort of the common test is really moving your belt buckle outside of the rails of the ladder. So your midsection or your center of gravity has now moved outside the rails of the ladder, it causes the ladder become unstable, you can fall off, the ladder can overturn or twist as a result of it.

So there's a lot of hazards now with the use of ladders. Another thing that is making sure that you maintain 3-point contact when climbing a ladder, which means two hands and a foot or two feet and a hand, and then if you're working from the ladder, it's the ability to maintain or achieve three point contact. So you may be working with both of your hands leaning up against the ladder, but let's say something shifts, you become unstable, you have the ability to grab the ladder again with your hands. That's very important from a stability standpoint. The other point that I'd like to raise with it as well is also material. So carrying material up a ladder, you really can't carry material up a ladder.

Anything that you go up a ladder with should be on your tool belt. There's a couple of reasons for that. One is not being able to maintain that three point contact or achieve the three point contact, but the other is also overloading the ladder. When you consider the fact that most ladders sit, and a construction grade ladder is 250 lb. to 275 lb., you add a construction worker, a work belt with tools plus material to it, you're actually overloading that ladder pretty considerably. So you have to find another way to get the material up to the area where you're working and be able to climb that ladder independent of that.

Michelle Roberts:

So as you described, ladders are a key concern. So what are some of the alternative methods that could be used on a construction site instead of a ladder?

Brian Barron:

Yeah, so with that, there's a few different options, one of which is a power elevating work platform. There's a couple different types. There's scissor lifts or cherry pickers or boom elevating type work platforms. Or you could also use scaffolding. Both of those provide great platforms for workers. They are more ergonomically correct. Generally speaking, they're much safer than a ladder and it provides a good work area for workers to work from.

Michelle Roberts:

Well, that's been some great examples. So thank you very much in expanding on what you're seeing out there with the ladders and as you said, properly not being used or the correct ladder, not following proper setup or you say being tied off when required or overextending and reaching, and it's important, I think, one of the key topics we want to reinforce with the Falls Awareness Week is certainly ladder safety and one of the toolkits that IHSA has put together in support of Falls Awareness Week and beyond the designated week in May. It does include several safety talks, hazard assessments, risk associated sheets that you can apply in your workplace to assess the hazards in particularly when it comes to ladder use and designated safety talks on the different types of ladders and how to properly utilize them and the controls that should be put in place. So thanks so much, Brian, for expanding on that.

Enzo Garritano:

Thanks for listening to this episode. In support of preventing falls from heights on construction projects, we recommend you take action, deliver a safety talk, have a meaningful conversation with your workers about the hazards relating to working at heights, but most importantly about safety tips, practices, and expectations to ensure they get home safe to their loved ones each and every day. For more on this topic, visit ihsasafetypodcast.ca for your link to fault prevention tools and resources.

I'm Enzo Garritano, and thanks again to our host, Michelle Roberts and special guest, Brian Barron, Senior Manager with the Construction Health and Safety Program of the Ministry of Labour, Training and Skills Development. Thanks for listening.

Announcer:

The *IHSA Safety Podcast*. For more episodes, tips and all things safety, go to ihsasafetypodcast.ca. Thanks for listening.