



Announcer

It's time for the *IHSA Safety Podcast*.

Enzo Garritano:

Welcome to this podcast series on supervisors. I'm Enzo Garritano, President and CEO of IHSA. This episode is hosted by Ken Rayner, IHSA's Vice President of Customer Relations, Market Development and Labour Relations. Joining Ken today will be IHSA Health and Safety Consultant, Alana Stewart, as they discuss how identifying and addressing hazards are key components that contribute to a safe and healthy workplace.

Ken Rayner:

Thanks very much, Enzo Garritano. Welcome to the *IHSA Safety Podcast*, Alana Stewart. Alana, to start, could you share with our listeners your own personal experience in identifying and addressing hazards, along with a bit about your role and responsibilities at IHSA, and perhaps your background.

Alana Stewart:

Hi, Ken, thanks for having me. Let's see, to start with, I'm a carpenter by trade. I mostly did scaffolding. I was working with tube and clamp system, shoring, stair towers, I built hangars. I've worked in potash mines, worked underground in the largest uranium mine in the world. I've been in nuclear plants, power stations, cement plants, wastewater treatment plants, tons of confined spaces, and was pretty much exposed to most of the hazards out there. There was also this mentality of, okay, we've just got to get the job done, so not too much focus was on health and safety. I took all my health and safety certifications, but because I wanted to get a little more information on, how do we actually use these in the workplace? That's why I joined the Carpenters Union. So it was interesting, because everything that I had just learned kind of went out the window.

Then I ended up working as an operations manager for a scaffold company in Ontario when I was running the Ontario division, and so I kind of went looking back into my past and thinking, what would I have changed or how could I have made this better? And I really wanted to go into this kind of teaching mode where I trained all the workers on, how do we work safely? I want to make sure that we have no injuries, we don't have any incidents, and I was pretty much responsible for all of the health and safety for this Ontario division. So, I took the time to actually train all the workers. So you get your new people out in the field, I wanted them to know what a hazard is and how do I recognize that and what can I do to make sure that I'm working safely?

Then I came to IHSA, and that's pretty much exactly what I get to do. So, I love it. Working as a Health and Safety Consultant, I do a lot of training with all of our different programs. And again, I get to teach people how to do things properly because I've seen how to do things not properly and I've actually been injured because of it. So, now I can hopefully help our people work safely.

Ken Rayner:

Awesome. Alana, you talked about a few things there, being a teacher and sort of the definition of hazards. Why don't we start there? We recently had Jody Young from the Ministry of Labour, Training and Skills Development on the podcast, and we talked about how the hazards have really evolved when it comes to what you have to address in the workplace. I mean, going back years, primarily it was physical hazards that supervisors were looking to address in employers, and now we're looking at more than just physical hazards. We're looking at psychosocial, we're looking at mental health, we're looking at occupational disease. So, maybe when we first, talking about hazards, we can ensure that our listeners are aware of the various types of hazards that supervisors are expected to identify and address. So, what are some of those hazards? I know you've named a couple of them, but let's maybe get into them in a little bit more detail so people are really clear.

Alana Stewart:

Actually, you mentioned physical hazards. They've actually, when most people think about physical hazards, they think about the safety hazards, like things that impact you immediately and things that you can picture happening, like working at heights, which can obviously cause falls, or housekeeping, which could cause trips and slips, working around moving equipment or machinery, which can lead to being struck by or crushed. But all those other hazards as well. They talk about physical hazards, but they use that in temperature extremes, like working in extremely cold or extremely hot temperatures. I actually worked in minus-55 degree weather and I've worked in plus-55 degree places where we're working by steam pipes. So definitely exposed to those, which was not comfortable at all. They talk about radiation, vibrations, and noise, and actually, noise-induced hearing loss is the number one non-fatal occupational illness in Ontario. So because of this, they actually introduced a Noise Regulation, 381/15, and it was introduced in 2016, so that helps people work around noise and try to put controls in place. It can hopefully mitigate that hearing loss.

There's also biological and chemical hazards. Not only can they cause injuries, but obviously serious health effects as well. Exposure to asbestos can cause mesothelioma, which is still the number one killer in construction in Ontario to this day, and it's significantly higher than fatalities from falls. Most occupational illnesses though, have quite a long latency period. So, mesothelioma can take anywhere from five to 40 years to develop and present symptoms. So again, people aren't normally looking at the health hazards and the health effects because it's not something that's immediate and that they can see right away.

We do have some resources available that can help in any kind of biological or chemical hazards, like Regulation 833. There's also Regulation 490/09, designated substances. Regulation 278/05, which is designated substance asbestos on construction projects and in building and repair operations. Regulation 860, so WHMIS or Workplace Hazardous Materials Information System.

There's also MSD hazards or musculoskeletal disorders which are injuries to the muscles, joints, ligaments, tendons, and they're the number one cause of lost-time injury claims in Ontario, which can obviously become very costly. I actually read a study where a company implemented a stretching program, and when they looked at their year-over-year statistics, they had reduced their MSD claims by 30 per cent. I also worked for a company who made every single trade, we had about 2,500 people on site, they made every single trade go out in the morning at 7 in the morning and they had to do

stretching, and you would hear about it if nobody was doing it. So, it was a really good thing to put in place. We also have some ergonomists on our staff who would be more than happy to come out and help anybody if you want to put together a MSD prevention processes or procedures in place.

And then we have the psychosocial, which you mentioned, Ken. So mental health is getting a lot of focus lately, with good reason. So obviously, the pandemic has had serious impact on peoples' well-being, but there is also a number of other stressors in the workplace like bullying, harassment, job pressures, budgets and deadlines. So not only can those be distracting, but they can also be perfectly debilitating. Last year, someone did a study and they realized that of all the opioid related deaths last year, 30 per cent of those were from people who worked in construction. So that's a horrible, horrible statistic. And again, I can't necessarily just attribute that to the mental health things, it could also be due to muscle fatigue, pain issues that they've had from previous injuries. But regardless, whatever it is, that's a horrible statistic and something that we need to bring down.

Most companies have an EFAP program, Employee Family Assistance Plan, so at least there's somewhere to go to talk about this if you are struggling from any kind of psychosocial hazards. So you as a supervisor, make sure you talk to your workers, find out what's going on in their life, watch them, observe their work, see if you can notice anything, maybe do some surveys. But there are people out there to talk to. Again, we have a mental health specialist on our staff as well. So, reach out to safe work associations and subject matter experts.

Ken Rayner:

Wow. So that's, I mean, you've just alluded to a whole host of hazards. So when one of our listeners is going, how do I wrap my arms around all of those hazards, is there some sort of established process that workplaces in Ontario can utilize to ensure that work has been properly planned and that workers can do it safely? Because I mean, with all these hazards, how do you organize them and how do you approach them?

Alana Stewart:

Great question. Well, there is a formal hazard assessment that should be part of any kind of pre-job planning. So, this formal hazard assessment basically analyzes literally all aspects of the job. So you assess the hazards and analyze everything, but this includes any kind of critical tasks, which should have their own assessments. You'll do your assessment, your risk rating, your controls, and then you have to develop safe work practices and procedures in order to perform those ones safely.

But it doesn't just end with the planning part, you also have to monitor work. So this is the one thing that a lot of people don't realize is once you've put these controls in place and put these procedures in place, you can't just say, "Okay, now go to it." You have to monitor and observe, make sure that people are actually following these processes, doing things properly. And then again, talk to the workers. Is this working for you? Can you think of a better way? Is it instigating any new hazards that we didn't think of when we first proposed this? So, always talk to your workers and when you're doing any kind of inspections or procedures or anything, make sure you get your workers' feedback. They're very important.

Ken Rayner:

Right on. So speaking about feedback and inspections, I'm glad you brought that up. While supervisors are expected to be in the workplace, understand what's going on, have care and control, it's really challenging to see the entire workplace. So for a company to be able to utilize additional ears and eyes, in terms of reporting, that can be very beneficial. Maybe we could just talk about, how would a supervisor use other employees within the workplace to be able to be those eyes and ears and help with reporting? And how can that help to mitigate hazards?

Alana Stewart:

Inspections, I guess, are a great way to identify hazards. So depending I guess on the size of your company, if you have a joint health and safety committee or a health and safety rep on your site, they are required to perform monthly inspections. So those can bring up different hazards and get another look at the entire site as a whole. Also, supervisors are required to perform weekly inspections. Ask them to bring a worker with them, because workers also add a different perspective.

I look back at, I was doing an internal audit for a company I worked for, and one of the questions on the audit was, do workers assist the supervisors while they do inspections? So I asked the general foreman, "Do you take workers with you?" And he goes, "Yeah, all the time." And I said, "No, you don't. I've never seen you take anybody." And he's like, "Really? Okay, well let's go look at the inspections." So he dug a bunch out of the filing cabinet and the first one he pulled out, when it said worker accompaniment, my name was on it. So, I evidently went and did this inspection with him and then called him out saying, "You don't do inspections," but clearly I did because my signature was at the bottom. I'm sure I brought up lots of opportunities for improvement on the site. But anyway, they do offer a different perspective, and I really think it's a good idea to bring them.

Also when doing an orientation, make sure that the workers know that according to legislation, they are required to report the absence or defect of any equipment or device that may endanger someone. They have to bring up any existence of any hazards, and this also includes near misses. I don't know how many times I've had to tell my workers, "If you see something, report it." Most people forget that part of it because they're worried they're going to get in trouble. You're not going to get in trouble. It's supposed to be a method to bring to the attention, something that can hopefully be fixed so that we can prevent any future incidents or injuries.

Also, another way to look for different hazards is to do your job hazard analysis. So we've already discussed that. They're more specific to the actual job being performed, but it's still an extremely useful tool.

Ken Rayner:

Alana, we keep hearing this term, hierarchy of controls. It seems to be a buzzword over the, and be very prominent in occupational health and safety in the last 10 years. Can you share with our listeners what's meant by the hierarchy of controls, and why this process can assist employers and supervisors help control the workers' exposure to hazards?

Alana Stewart:

Yeah, for sure. When we talk about controls, it's funny because a lot of workers go straight to PPE. I have to protect myself. Okay, well, that's all well and good, except, we don't want you to even get anywhere near the hazard. So in order to do that, we put something together called the hierarchy of controls, which is basically the most effective measure of control to the least effective measure of control. So the most effective, we have at the source. Then we go down to along the path, and then we get to the worker, which is our last line of defence. So, what are some things we can do at the source? Well, we're talking about eliminating the hazard altogether because if we don't have a hazard, then there's no risk. So, that would absolutely be the very best method. So whether it's prefabbing something on the ground so that nobody has to work at heights.

Ken Rayner:

And Alana, would you maybe suggest that the elimination of the hazards at the source would take a considerable amount of planning? A supervisor or an employer is going to have to put some forethought into thinking as to, how do I then eliminate a hazard? As you talked about earlier, throwing a hard hat on somebody's head can be done fairly quickly but when we're talking about eliminating a hazard, now you're thinking about pre-planning and thinking these things through. I take it, it does take a little bit more planning from an employer or supervisor to look at it eliminating those hazards at the source.

Alana Stewart:

Absolutely, yeah. So you would have to do that job hazard analysis or task hazard analysis and take a look at, okay, what is the hazard and is there any way for me to get rid of it altogether? So, what do we have to do in order to make that happen? Do I have to, like I said earlier, prefab something on the ground? Are there tools that we can either invest in or use that can mitigate me having to work at heights in some respect? Just getting rid of it altogether.

Ken Rayner:

That's at the source, that's the first one. And if that can't be accomplished and they've gone through the planning, they've attempted to make that happen or they want to eliminate it, if that can't happen, what's the next thing they should look at?

Alana Stewart:

So if we can't eliminate it, we can maybe substitute it, so depending on what the hazard is. So if we're working with say, a toxic substance, maybe we can substitute that out for a less hazardous substance. So that would be a substitution, but you're still at the source, so it's still not going to be able to get to the worker because now you've substituted it and now this one is not hazardous. So that would be your next best method.

And then if you can't do that, maybe putting some engineering controls at the path. So let's say that that hazardous substance that I had to use, I wasn't able to substitute. There was just no other way that I could get away with doing this, it had to be that substance. So maybe I can design something or engineer something, like a ventilation system. So now what it's doing is it's picking up all of those fumes and it's ventilating it somewhere, so you can put that in place. But then, what if now that I'm ventilating

all that and say I'm ventilating it out a window or something, but now there's workers working out in that area? So now they're exposed to this hazard. So, am I helping? No.

So what can I do now? Well, there's an administrative one that we can put in place, like job rotation. So what if I have these people working with this hazardous substance now working on a night shift? So now once they're venting things out into the atmosphere, there's nobody out there that's actually being exposed to it. So, that's an administrative process. Or putting different kind of procedures in place, so finding different ways to do the job that will alleviate or mitigate the hazards as well. And then making sure that people have the proper training to either work with this substance or work around this hazard, proper lifting techniques, whatever kind of training you want to put in there.

And then again, your very, very last resort is at the worker. So, sometimes you have to rely on PPE [personal protective equipment]. So let's say that none of those things were able to happen. I couldn't eliminate it, I couldn't substitute it. The engineering didn't help because I had to ventilate it and it went out into the atmosphere. I can't do night shift now because we don't have security or something. So now all of my controls or my recommended controls are not able to happen. Well, my last line of defense would be, okay, I'm now going to put a respirator on. I'm going to put on a full Tyvek suit, gloves, all of my protective equipment, and sometimes that is the only method you can use. So it's still helpful, it's still a control. It just may not be the best control, but it might be the only one that we can use in the circumstance.

Ken Rayner:

Amazing. That was a clear and concise definition of the hierarchy of controls. Alana, that was fantastic. And I'm sure if anybody was confused before, they've got clarity and understanding on how to apply that moving forward. Terrific, thank you.

Alana Stewart from IHSA, thank you so much for joining us on the *IHSA Safety Podcast* to talk about supervisors and identifying and addressing hazards. Great to have you with us today. Thank you.

Enzo Garritano:

Thanks for listening. To hear more in this series, join Ken Rayner as he speaks to other IHSA subject matter experts at ihsasafetypodcast.ca. Thanks for listening. I'm Enzo Garritano.

Announcer

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