IHSA SAFETY Podcast

transcription

Episode 121: The Role of Personal Protective Equipment (PPE) in Workplace Safety

Host: Adam Carruthers
Guest: Ryan Smith

Adam Carruthers:

Every day on construction sites, workers face real risks and the difference between a close call and a critical injury could often down to one thing: PPE. Are you wearing the right gear? Is it being worn properly? Are your workers protected the way they should be?

Announcer:

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

Adam Carruthers:

Welcome to the IHSA podcast, the podcast where safety isn't just a policy, it's a culture. I'm your host, Adam Carruthers, and we're here to dig into the real talk behind staying safe on the jobsite, one conversation at a time.

In this episode we're strapping in literally to talk about PPE, personal protective equipment, why the right fit, the right gear, and the right training could mean the difference between going home safe or not going home at all. From hard hats to hearing protection, gloves to goggles, we're breaking down some of the dos and the don'ts and the "why it matters" in the construction industry. Whether you're a site supervisor, a safety rep, or just starting your first day on the job, this episode is for you.

I'm joined by Ryan Smith, a Health and Safety Consultant with the IHSA out of Kingston. With over a decade of experience in construction, engineering, and safety leadership, Ryan has worked across sectors from civil construction to mining and even nuclear auditing. He's helped companies align with COR®, develop safety programs, and train teams to build safer workplaces. Since 2019, he's been supporting the organization in Kingston and Belleville through his role at the IHSA, where he brings both technical expertise and a practical on-the-ground perspective to health and safety. Ryan, it's a pleasure to have you here with us today.

Ryan Smith:

Thanks, Adam.

Adam Carruthers:

So let's gear up and get right into it. So Ryan, why do you think PPE is sometimes treated as an afterthought, and how can we shift that mindset?

Ryan Smith:

Well, I wish PPE was an afterthought for the right reasons. In any hierarchy of controls, PPE is always the last resort because it's the least effective control. If constructors and employers tried to implement better controls to begin with, we wouldn't have to rely on protection at the worker. Having said that, there are many jobsites where protective measures in general are not an afterthought, and what I typically notice on these sites is consistent enforcement from leadership.

Changing culture has to be driven from the top down and leaders have to practice what they preach.

Adam Carruthers:

Couldn't agree more, Ryan. By having the leadership actually set the example, it can encourage workers to actually step forward and ensure that they are wearing the PPE that's required of them, whether through best practices or even through legislation. Now, in your experience, what are some of the most common mistakes that we see when it comes to PPE use on a construction site?

Ryan Smith:

In my experience, the most common mistakes include workers not wearing or using the appropriate PPE for the site or the task. This could include not wearing hard hats as required by Section 22 of the Construction Projects regulation, which states they have to be on at all times, not wearing appropriate eye protection where there's a risk to the worker's eye, not using fall prevention or fall protection as required by Section 26 of the Construction Projects regulation, or not wearing respiratory protection appropriate to exposures.

And on that note, I want to point out that sections 46, 47 and 59 of the construction regulations require that employers use engineering controls, like ventilation and dust suppression before requiring workers to wear or use a respirator. And additionally sections nine through 12 of the Control of Exposure to Biological or Chemical Agents regulation, Regulation 833, requires that workers who have to use respirators be trained in the selection, use, and care of the respirator and also be fit-tested as defined.

Adam Carruthers:

I like how you quoted specific regulations related to certain tasks that are in the workplace and even in the regulations. When we talk about PPE, we look at a hierarchy of controls and that hierarchy of controls will usually have PPE always at the very bottom. So it's nice to see that the legislation is trying to encourage people to look at engineering controls and administrative controls before we get down to PPE.

Now when we talk about PPE, we have to talk about that comfort. So what role does comfort play in consistent PPE use and especially when we have to wear them for long durations during hot shifts in the summer or even cold shifts during the winter?

Ryan Smith:

I believe comfort is something that employers have to consider in the PPE they provide if they want it to be used. With my previous employer, we tested this with safety glasses after releasing a policy that

made them mandatory at all times on jobsites. Unknown to the workers, we gave some crews very cheap safety glasses, other crews slightly more expensive pairs. And what we found is that the sites with the cheap safety glasses were not only far less compliant with the policy, but because workers weren't wearing them, they would set them down, which caused them to get scratched, damaged, stepped on, meaning they also had to be replaced far more frequently than the nicer safety glasses, which also meant the safety glasses were actually costing us more money due to the more frequent replacement.

In summary, comfort can not only increase use and compliance on sites, but can also cause workers to take better care of the equipment.

Adam Carruthers:

That's an interesting point to make. I don't think a lot of employers think about, if I buy cheaper stuff and I have to replace it more often, then it's actually going to cost me more than if I were to invest in an actual piece of equipment that the workers will wear and maintain and use on a very regular, frequent basis.

So we talk about some of the stuff with our constructors, but when we talk about construction companies, we talk about the size and the gear. So how can construction companies ensure that workers get that properly sized gear, especially for seasonal or temporary staff that we may not see on our construction projects for five, 10, 15 years at a time in a row?

Ryan Smith:

Unfortunately, I'm not aware of any shortcuts in this regard. Section 25(1)(b), point 1 of the *Occupational Health and Safety Act* requires that employers provide workers with PPE that fits them. My recommendation here is that sticking to one manufacturer for each type of PPE will help employers and supervisors comply with requirements to train workers on the use of specific PPE that they've provided the workers, but no specific shortcuts.

Adam Carruthers:

And I think I can echo that with having worked with employers where they're looking at what type of PPE would be needed, and instead of purchasing, and you used the example earlier, different styles or different brands of safety glasses, depending on how many people you have, looking at can you find one manufacturer or one supplier or one model that works for what you have?

Obviously taking into consideration the fact that not every task is the same and some tasks will require specific PPE for the tasks that they're looking at, but the more simple you can make the selection process for your organization, the better you're going to be able to have that compliance, especially when it comes to training people on specific standards as long as you're taking in account other specific tasks or functions that the company has to do.

Now we talk about PPE. Now, there have been a lot of innovations in PPE and equipment in whatever we're doing in the workplace. Now, have there been any recent innovations in PPE that you're aware of that have made an impact on safety or the comfort in construction?

Ryan Smith:

Yeah, of course. Like all things, PPE is constantly evolving. There are new and better innovations every day. When I'm consulting, I frequently run into difficult to solve issues on jobsites, and workers will tell me, "There's no safe way to do this, and this is how it's done." However, it usually turns out that there is a solution because no matter how unique your situation is, someone has already experienced something similar. And if enough people reach out to manufacturers regarding their experiences, manufacturers will see a demand and develop a solution.

Adam Carruthers:

I like that and I've heard that a lot from the industry, especially for individuals that you and I train. They come in and they say, "Hey, is there something over here or something that we could do?" And you see hands go up in the room and say, "Well, this is something new that we use over here, or something that we're testing over here." And we see a lot of those conversations going around where PPE has made those leaps and bounds, equipment has made those leaps and bounds. So when we talk about legislation requirements, I don't think enough people understand that those are minimum requirements when we look at PPE in the workplace. Companies, organizations, manufacturers have looked at this and said, "Hey, how can we make safety glasses more comfortable, gloves more efficient?"

Because I think of cut-resistant gloves where a level two to a level four, to a level six, the thickness of the glove changes drastically. But recently I've seen a level six glove that was almost as dexterous as a level two, a level four glove, as opposed being heavy, thick leather. So that's a nice innovation that has made it more comfortable for workers. Now, when we talk about PPE, it's important to have that initiative from the employer to say, "Hey, how can we make sure our workers will wear that?" So how can leadership influence that on-site PPE compliance in their workplace?

Ryan Smith:

As noted previously, any positive change in site culture has to come from the top down. If you want 100 per cent PPE compliance on your jobsites, you have to put in the work. No leader enjoys the enforcement part of their role, but it's essential for compliance.

Adam Carruthers:

Now, what's really important to understand is, like you said, no one likes to hold people accountable, but if we don't hold people to a standard, then unfortunately non-compliance can become the new norm, which can increase people's risks of having an injury. So by having that on-site leadership do the accountability, like you said, creates a standard, builds that culture in terms of what is and is not acceptable in the workplace.

Now we have to talk a little bit about the worker knowledge, the compliance in terms of what the workers are doing. Now, how confident would you be that workers know how to properly wear and maintain their own PPE in the workplace?

Ryan Smith:

Great question. In short, it depends on the jobsite and the employer. There are sites I can visit with high levels of confidence that workers will not only be wearing the PPE but also be using it and caring for it

properly. Unfortunately, the opposite is also true. Safety talks, in my opinion, are incredibly valuable resource to educate workers on many things including the care and use of tools and PPE.

My recommendations to site leaders delivering these safety talks is to review the owner's manuals for your equipment, highlight the key points, and discuss them with workers as appropriate to the tasks on hand.

Adam Carruthers:

I like that communication, making sure people are on board, participating. Now, I know the IHSA, we have a couple of fantastic resources. We have a free safety talk book loaded with safety talks that people can use with their crews, especially if they've never done a safety talk before. We have a health and safety manual filled with information from subject matter experts from the field that will go through the basic requirements, the good practices, PPE requirements for doing certain tasks on the jobsites, whether it's working with asbestos, working in confined spaces, or any other number of things. Those are fantastic resources if you're not familiar with your own PPE or your own tasks, and developing those policy procedures, and those talks around there to keep people safe as we work our way through.

Now, we talk about communication, we talk about training. Are there any gaps that you have seen between training, communication, and on-the-job practice when it comes to PPE compliance?

Ryan Smith:

Absolutely. Most notably, many employers make the mistake of getting workers generic training, thinking they've satisfied a legal requirement when more often than not the law requires site-specific or application-specific training. One of the most common examples here is WHMIS. Regulation 860 requires that workers be trained on the specific products they could be exposed to at work. But still, many employers provide the workers with generic training that does not address the specific hazards of their workplace.

Adam Carruthers:

And that's really important to understand. There can be generic training for certain individuals, but when we talk about doing specific tasks, we want to ensure that workers know how to do their job, how to do it safely, and how, if required, to use their PPE, maintain their PPE, and even select the appropriate PPE for the job at hand.

So we look at that initial training as a starting point, but we have people that are in the industry for five years, 10 years, 20 years, 30 years. Is there a specific role that maybe refresher training might play in reinforcing PPE in use, and how often do you think that that should be happening?

Ryan Smith:

Great question. Refresher training in my opinion, is vital to continued compliance and proper use of PPE. We all pick up bad habits. We forget specific requirements. Refresher training reminds us of manufacturer and legislative requirements. Frequency of refresher training though can vary, depending on the hazards workers are exposed to, jobsite observations and any other number of other factors. But in general, the training should result in workers being able to answer specific questions and

demonstrate compliance. When workers begin losing this ability, site leadership should look at providing refresher training.

Adam Carruthers:

I like that because as somebody who has gone over the age of 40, there's a lot of stuff that I used to do way back when I started my career 20-plus years ago, that it's what we always used to do. And as I've gotten older and hopefully gotten a little bit wiser, understanding that things change, legislation changes, the PPE requirements change as we work our way through. So like that things that we used to do are not acceptable to how we do it now. And in order for us to stay safer, because we learn things as we go, we want to ensure that we're updating people with the different things.

Some of it is legislated training. Example would be working at heights training where we have people come in and they have to relearn or refresh how to put on a harness, how to do our proper travel restraint, working its way through. So refresher training, I couldn't agree more in terms of, we just need to remember some stuff because we do forget stuff. We're all human and we all have very busy lives as we work our way through. Now when it comes to PPE, there are maintenance requirements, especially when it comes through reusable PPE. So are there any issues or how can improper maintenance of our PPE become a hazard in the workplace?

Ryan Smith:

In my opinion, improper maintenance can dramatically increase risk to a worker. Let's look at respiratory protection for example. If a worker doesn't care for their reusable respirator, they could have debris or damage, cause valves to leak in the mask. The mask could become deformed and not seal to the worker's face properly. Mold could develop inside the mask and expose the worker to a hazard they weren't even aware of. Additionally, the worker may think that their mask is sealing and working properly, causing them to take additional risks because they think they're protected, when in reality they're being exposed to unfiltered air.

Adam Carruthers:

I agree, and I don't think enough people think about things like the respirator, where it's so important to make sure that we know how to wear it properly, we know how to clean it, we know how to store it. And if we aren't doing those things, how dangerous it can actually be. The respirator in particular is designed to keep those hazardous chemicals out of us, but if we're not storing, maintaining them properly, those chemicals can actually get on the inside of the respirator.

So when we go to put it back on our face the next time, now we're inhaling the chemicals, the mould, the debris, whatever the case may be. So understanding the proper selection care, maintenance use of our equipment, so important to make sure that they're using properly to keep us as safe as possible, as safe as they're designed to do.

Now we talk about support when it comes to programs, policy, procedures, are there any ways that a supervisor, a safety rep, JHSC, a committee member, can they help encourage better compliance with, say, hearing protection rules?

Ryan Smith:

Yeah. In my experience, this is going to come down largely to worker education and supervisor enforcement of Regulation 381/15, the noise regulations, which unfortunately defines hearing protection requirements in a very confusing manner. They have that big mathematical equation in there. Thankfully though for the record, the hearing protection requirements defined in this regulation are further defined or further explained in the Ministry of Labour, immigration, Training, and Skills Development document called *A Guide to the Noise Regulation under the Occupational Health and Safety Act*.

And in my training and consulting, I actually find that it's far less common for me to have workers correctly explain how to insert earplugs, which is a reflection, in my opinion, of worker education that should have been provided by employers and supervisors.

Adam Carruthers:

There's a lot of stuff in legislation. There's a lot of stuff that the employer needs to do. I like when you talked in there, you talked about the regulation. Then you also talked about how the ministry also has a guideline. So for a lot of people that may not know is, there are legislations, but with the guidelines, the ministry has tried for some of these hazards, some of these tasks, they've gone through and they've tried to make it a little bit easier for people to understand, people that don't have a law degree who know the regulations inside and out.

So it's always nice to see those guidelines supporting it. The employer, like you said, there is that responsibility that they need to do to keep people safe, especially when we talk about things with noise-induced hearing loss, the number one non-fatal occupational illness in construction, right? We're all exposed to noise every day. So it's really nice to understand that there are some supporting documents out there that's going to help the safety reps, the supervisor and everybody get involved with as they go.

Now, what's kind of maybe the best or the worst PPE that you've ever been issued? Has anything made the difference for you whenever you were in the field?

Ryan Smith:

Sure. My struggles in the field often came down to PPE compatibility. My past employers would provide me with a hard hat, earmuffs, safety glasses, etcetera, but they were not designed to be used together, causing each piece to make the next less effective. My recommendation is that employers should consider all of the PPE a worker might be required to use for a specific task and then ensure and consult manufacturers about the best options for their application.

Adam Carruthers:

So it's always important to understand our own requirements as we go. Now, what would you say to an employer in the industry looking to select PPE for their own workers?

Ryan Smith:

I think ideally they should consult various manufacturers who provide the PPE you need, weigh the pros and cons of their offerings, and most importantly, perhaps consult field staff who have to use the equipment to gain insights into what will make them more likely to use it and take care of it. But in general, again, stick to one manufacturer for each type of equipment to make training easier to administer and make sure that we train the workers on the equipment they're required to use.

Adam Carruthers:

I agree. Not always easy to do, but again, when you talk about standards, you talk about safe work practices, standard operating procedures, policies for the organization. The more you can standardize your selection of your PPE, the easier it's going to be for your individuals to understand how to use it, when to use it, how to maintain it, but not always an easy thing to do, but it is something that if they can, that they should aim for.

And finally, let's talk about the workers. So what would you say to a new worker who's just entering the industry, about choosing and using their personal protective equipment?

Ryan Smith:

I find often, obviously a new worker has limited financial means. So I'd recommend that you consult your employer about what they'll provide for you and what you're expected to provide. First, remember, the equipment you wear must meet any expected standards. We're usually talking about CSA, so don't buy equipment that doesn't meet those requirements. For example, I find workers all the time who bought their own high visibility t-shirts, but it turns out they don't meet any CSA standards and therefore can't be used at work. Remember, you're likely going to wear this equipment for most of every workday. So consider the fit of the equipment as well as some creature comforts that'll make it nicer to wear. And if you have to, look to upgrade down the road.

Adam Carruthers:

That's excellent. Really important to remember, anybody can go out and buy PPE, but is it actually going to be compliant in the area that you're working in? So always important to, like you said, check with the employer, check with legislation as you work your way through. You can always reach out to the IHSA. We're more than willing to help people understand the different requirements for the specific tasks that they're working in. So that's excellent, and I want to thank you a lot for the information you provided.

So that wraps up our conversation on the importance of personal protective equipment in the workplace. Today we explored the real world challenges of personal protective equipment on construction sites, from common mistakes and comfort issues to the importance of fitting, training and leadership. The big takeaway: PPE is the last line of defense, but when chosen well, enforced consistently, and backed up by proper training, it can make all the difference in keeping workers safe.

I'd like to thank Ryan for sharing their wealth of knowledge and experience in the industry and how we can make it a big impact in the workplace. It's not just about checking a box, it's about protecting lives, including your own. So thanks for tuning in, and if you'd like to get in touch with us at the *IHSA Safety Podcast*, or have any topic ideas, please reach out to us at podcast@ihsa.ca. I'm your host, Adam Carruthers, and remember, safety culture isn't something you have. It's something you live.

Announcer

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