

Manufacturing covers a wide range of industries, with a wide range of safety concerns. One thing they all have in common is the need for proper safeguarding when it comes to dangerous machinery and equipment.

Workers operating machinery that hasn't been properly safeguarded are playing a high-stakes game each time they hit the "on" button, says William Shepherd OHS resources and development manager for the Manufacturing Safety Alliance of BC (MSABC). And the consequences of losing this lottery are literally life and limb.

"When I'm doing hazard assessments I quite often hear workers say 'I've been doing this job for 20 years and I've never hurt myself," says Shepherd.

"But that doesn't necessarily mean the machine you're working on is properly safeguarded. A huge percentage of safeguarding incidents are serious ones and the statistics don't lie."

WorkSafeBC's incident statistics for the manufacturing sector show just how dire losing the safeguarding lottery can be. Manufacturing has the second highest number of work-related deaths, after construction. And from 2012-2016, WorkSafeBC processed 377 time-loss claims for amputations in manufacturing. Behind each of those claims is a worker whose life was forever changed.

New booklet aims to help employers address hazards

Shepherd was part of a team that developed an updated safeguarding in manufacturing booklet to help employers and workers identify and address hazards in the workplace. Safeguarding Machinery and Equipment is the result of a collaboration between safety experts from industry, WorkSafeBC, and associations like MSABC, and builds on the previous 2006 guide.

"I think it's unique," says Ian Rood, principal of UBSafe Inc., who was also part of the publication team. "It's something that's going to be very functional and useful for people."

The new manual includes sections on identifying hazards, assessing risks using the CSA's risk assessment process, and controlling hazards, as well as expanded appendices featuring updated safeguarding checklists. WorkSafeBC industry specialist in manufacturing Phil Vernon says it will be helpful to both younger and more experienced workers.

Young workers are vulnerable

"Younger workers are vulnerable if they aren't properly trained, but it's not just young workers. We also have those workers who have been around for a while but have become complacent or take shortcuts," says Vernon.

"They remove guards and leave them off because it's too hard to get into the machine to clear jam-ups or because it breaks down all the time. But eventually you get caught and the consequences can be pretty nasty."

The vast majority of those nasty injuries are to the fingers and hands (98 percent), of which 79 percent resulted from machines, conveyors, and power tools.

Rood says deaths and injuries can be avoided by doing proper risk assessments, which are fundamental to improving safety levels.

"People have to get out there and do their assessments," says Rood. "It's about recognition of the hazard. Quite frequently, people aren't recognizing the hazards and often they're putting together unreliable methods to safeguard."

Manufacturing has a wide range of operations

Andy Lim, WorkSafeBC supervisor and instructor, Prevention Field Services, says one of the challenges to improving safeguarding in the manufacturing sector is its sheer diversity. Operations range from traditional sawmills to high-tech businesses using radiation. But whether you're running a food processing plant or developing the latest in battery technology, safeguarding challenges are fundamentally the same.

"Everyone has safeguarding issues," says Lim. "People in these industries are pretty good at knowing what kinds of machines they need to produce their products, but they're not so good at understanding the hazards around the use of that machinery, and doing an assessment to make sure they have proper safeguarding in place. That's the gap."

"I guarantee you that if you do machine guarding the way it's intended, if you follow the standard, if you follow the manual that we put out there. you're going to save someone's life. It's going to happen."

> -William Shepherd, OHS resources and development manager for the Manufacturing Safety Alliance of BC

Lim is optimistic the updated manual will help bridge that gap. And Shepherd believes the new publication will help improve other safety stats like the 244,349 days lost from work in B.C.'s manufacturing sector in 2016.

"If the owners/employers get together with their operations and maintenance teams and use this manual in the way that it was intended, there's no reason the machine guarding level of the province won't improve," says Shepherd.

"I guarantee you that if you do machine guarding the way it's intended, if you follow the standard, if you follow the manual that we put out there, you're going to save someone's life. It's going to happen."

For more information

You can find the new manufacturing booklet, Safeguarding Machinery and Equipment at worksafebc.com. @

