



Hazardous materials **don't** have to be dangerous

Marc Cousineau,
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Infrastructure development in Ontario has seen a lot of innovations and technological advances in recent years. Workers are using new tools, equipment, processes, and materials, and there are more efficient ways of getting the job done.

However, with these advancements in the way work is carried out, materials installed many years ago may need to be removed. This can expose workers to hazards from the past that they may not be aware of or create new hazards that no one has ever had to deal with before.

For example, a dangerous material such as asbestos may not be used anymore, but sometimes it has to be removed. So workers who are renovating or demolishing buildings that were constructed before the 1980s may be exposed to asbestos.

Asbestos

Every day the Ministry of Labour (MOL) has over 20 industrial hygienists in the field, where they evaluate things such as work processes, air quality (occupational exposure limits), noise, WHMIS, chemicals like silica and lead, and the proper use of personal protective equipment (PPE). They are continually dealing with asbestos exposure in the maintenance, renovation, and demolition of older buildings.

Marc Cousineau is the Provincial Hygienist for the MOL. The data that the industrial hygienists in the field obtain suggests that asbestos is a huge concern, particularly in the construction industry.

“Mesothelioma and other types of asbestos-related diseases are still prevalent today,” Cousineau said in a recent interview with IHSA.

“Asbestos will continue to be a problem due to the improper procedures that are being used to remove friable asbestos insulation from boilers and pipes, as well as not wearing the required respiratory protective equipment. Regulation 278/05 Asbestos on Construction Projects and in Buildings and Repair Operations is applicable to those operations, but there are many times where workers are involved yet not knowing what these hazardous products look

like. So they're not even thinking about something being asbestos.”

Although building owners are required to identify any designated substances on a construction site, sometimes workers encounter hazardous material on the job unexpectedly. PPE such as respirators are a worker's last line of defence against asbestos and other airborne hazards. However, workers need to be trained to recognize a hazard and how to protect themselves against it. Employers must supply workers with the PPE necessary to protect themselves and also train them in the proper use, fit, and care of a respirator.

Isocyanates

In addition to asbestos, the construction sector must also deal with new hazardous materials like isocyanates.

“We now use foam insulation, and people think that it's just foam, not realizing it is isocyanate-based foam. Isocyanates are also being used as adhesives because they stick to most things and have a strong bond and short setup time. Isocyanates are sensitizers to the lungs and if they contact your skin, you can also become sensitized,” said Cousineau.

If you become sensitized, complications can emerge in the form of allergic-type reactions or asthma.

“So again, there are procedures and personal protective equipment that needs to be worn when working with isocyanates.”

Whether it's because old hazardous materials are being removed or that new processes, materials, tools, or equipment are being used to increase efficiency, these products are harming workers on the job. However, Cousineau believes that complying with regulations and having the proper procedures, training, and PPE can control these hazards.

“In regard to industrial hygiene best practices, workplaces should ensure that worker exposures are not only within our exposure limits but also as low as you can reasonably have them. That's the key point when working with or around any hazardous materials.”

For more information, visit the MOL website at: labour.gov.on.ca