Spot The Safety Violation: Get the Lead Out

These beams are covered in lead dust and chips. Why is that a problem’

Lead is used in the manufacture of many consumer and industrial products and can be found in various workplaces. Workers can be exposed to lead fumes and particles from many work activities, including abrasive blasting, sanding, torch cutting, scraping, welding and loosening old paint with a

propane torch. Lead can also get into the body by being transferred from dirty hands to food and drink, which workers then ingest.

For example, in this picture from elCOSH, workers working near these beams are exposed to the lead dust and chips. If they inhale these harmful substances, they're at risk of damaging their nervous, renal, cardiovascular, gastrointestinal, hematological and reproductive systems. Even short-term exposure to lead at high levels can have serious health consequences.

In addition, workers can carry this lead dust home on their clothes and shoes, exposing their family members'and children are especially vulnerable to lead.

Take 4 Steps to Protect Workers from Exposure to Lead

Naturally, you must comply with any requirements in the OHS regulations in your jurisdiction that pertain to protecting workers from exposure to lead. Employers should take the following steps, which are a good basic approach:

1. Determine if lead poses a hazard in the workplace. Find out where and how lead is used, remembering that lead may be found in places that aren't immediately obvious such as tools, weights and old paint. Ask the following questions:

- Where may lead be present'
- Do the workers' tasks involve materials containing lead'
- Do workers potentially come into contact with lead'

2. Develop an exposure control plan. If lead *is* a workplace safety hazard, you'll need to develop an exposure control plan designed to minimize worker exposure to lead. The plan should cover the following:

- A statement of purpose and responsibilities
- Written safe work procedures to control exposure

- Worker education about the hazards of lead and safe work procedures
- Engineering controls, such as ventilation and dust collection systems
- Administrative controls, such as washing and changing facilities
- PPE, especially respiratory protection but also including protective clothing and gloves
- Health monitoring
- Air sampling and surface testing
- Documentation and record keeping
- Follow up procedures to evaluate how well the program is working and determine if changes are needed.

3. Train workers. Once you've established procedures to minimize workers' exposure to lead, ensure they're trained on these procedures and the health hazards associated with lead, and apply this training on the job.

4. Conduct medical monitoring. When lead is a serious safety problem in your workplace, implement a medical monitoring program to protect workers from developing adverse health effects from exposure to lead through early identification of symptoms of overexposure or blood lead levels by tests and physical exams. If a worker has been exposed to lead above acceptable levels, monitoring allows you to take steps to keep the worker from actually getting ill and to reassess the effectiveness of the lead exposure controls you have in place.

And here are some steps workers should take to reduce their and their family's risk of exposure to lead:

- Never abrasive blast or torch cut painted metal structures until they're tested for lead-based paint.
- Wash your hands and face before eating, drinking, smoking or biting your nails.
- Never eat, drink or use tobacco products in work areas where lead is present.

- Wear appropriate PPE when there’s a risk of exposure to lead.
- Don’t enter your home until you’ve showered and changed into clean clothes and shoes.
- Keep work clothes separate before, during and after washing.
- Don’t pick up a child while in your work clothes.