



# Lead – the Cumulative Killer

Lead poisoning is one of the oldest known occupational diseases in the world, yet it continues to affect workers today. Lead is a highly toxic element that can cause permanent and deadly damage to the human body.

For many years, lead was an important ingredient in paint. Although it is rarely used in paint now, except for special purposes, there are plenty of items in the workplace still covered with lead-based paint, including window and door frames, pipes, girders, and metal objects of all kinds. Scraping, sanding, sandblasting, or even flaking of lead-based paint creates a dust that can be easily breathed in.

Of course, paint isn't the only source of lead. Various types of construction materials, including bricks and mortar, roofing material, insulation, pipes, and solder, can all contain lead.

Lead is a cumulative poison, meaning once it enters the body; it accumulates in areas such as the blood, kidneys, liver, and brain.

## **Signs of Poisoning**

Inhaling lead dust or fumes is the most common way lead poisoning occurs. Inhaling or swallowing lead (often due to contaminated hands touching food or the face) can introduce lead into the body.

The symptoms of lead poisoning can be different with different individuals. A low level of lead in the blood can cause flu-like symptoms, weakness and numbness in the arms and legs, poor circulation, forgetfulness, or anemia (low blood count). Other signs of poisoning include tiredness, insomnia, stomach problems, constipation, and headaches. It can also cause reproductive problems.

Higher levels of lead in the blood can lead to kidney damage, problems with the brain such as seizures and coma, and even death.

## Get the Lead Out

Since lead is so highly toxic, the ideal situation would be to eliminate it from the









workplace and substitute materials that do not contain lead. However, this is not always possible.

Levels of lead can be brought down by ventilation and workplace changes. So if you know you work with lead-containing materials:

- Follow the safety practices given to you by your supervisor.
- Check the material safety data sheets and chemical labels on materials you come into contact with at the job site.
- Read warning signs and any printed material that your employer has posted in the work area concerning exposure to lead.
- Rotate jobs or duties if instructed to do so by your employer.
- Cooperate with any medical surveillance measures taken by your employer, such as blood tests and physical exams.

### Good Hygiene Can Help

If you understand how dangerous lead can be, then you know that following safety procedures involving lead is very important to your health - and the health of your family!

- Use any personal protective equipment, such as gloves, face shields, or respirators, as instructed by your employer.
- Keep the work area as free as possible from lead contamination by regular cleaning with a toxic-dust HEPA filtered vacuum or with safe wet-mopping methods. Don't use compressed air, a shovel brush, or dry sweeping.
- Try not to touch your face, hair, or other parts of your body when you are working with lead-containing materials.
- Wash your hands and face thoroughly before lunch breaks or any break when you will be eating, drinking, smoking, applying makeup, or touching contact lenses, even if you have been wearing gloves.
- Don't keep your lunch box, purse, snacks, cigarettes, or makeup near your work area.





- Take showers at the end of your shift. You must change clothing before leaving work.
- Don't bring your work clothes home! This will bring lead contamination back to your house and your family.

Children of workers who bring home lead dust on their bodies and clothing may be affected from very low levels of exposure. Such exposure can result in behavioral disorders and even mental retardation.

## Warning

If your job exposes you to lead, immediately report symptoms such as:

- A metallic taste in the mouth.
- Tremors, convulsions, or numbness.
- Vomiting, nausea, or other flu-like symptoms.
- Tiredness, weaknesses, headaches, or nervous irritability.
- Chronic sleep problems.
- Poor memory or a general feeling of mental dullness.

