

Dangers of take-home lead from work and hobbies

Those who work with lead or have a lead related hobby can put their families at risk of exposure.

Any level of lead exposure can be harmful to people of all ages. The health risk, however, is highest for unborn babies, infants and young children.

Lead can enter your body by breathing air that contains very small particles or fumes, or by swallowing lead-contaminated dust or paint chips. Lead-contaminated dust from your workplace or hobby space can attach to your clothes, shoes, hair, skin, work gear and other items such as bags, mobile phones, water bottles and lunch containers.

This dust can readily transfer into your vehicle and baby/child car seats, and onto your carpets, floors, furniture and other surfaces at home. This transfer is known as take-home lead.

Precautions to prevent take-home lead

It is important to take precautions to protect you and your family from the dangers of take-home lead. These precautions include:

- Taking care throughout your workday or hobby activity by:
 - washing and drying your hands thoroughly before eating, drinking and touching your face and personal items
 - keeping your personal items out of the work area
 - preventing transfer of lead dust to your vehicle during breaks
 - not going home for lunch in work clothing.
- Showering and changing into clean clothes before going home or before contact with your family after your hobby activity.
- Changing your shoes before leaving work or your hobby area and leaving work shoes at work or in your hobby area, if possible.
- Avoiding activities that may re-contaminate you and your clothes, once clean.
- Not having baby/child car seats or any baby/child equipment in vehicles that you take to your workplace.
- Keeping your family and pets out of your hobby area.
- Washing your hobby clothes separately from all other regular washing, especially children's clothes and bed linen.
- Using your work's facilities to wash and store work clothes and shoes.
- Keeping your work or hobby equipment and personal items you take to work or your hobby area (food containers, mobile phones, car keys and work gear) away from children.
- Avoiding eating, drinking, chewing gum or touching your face in the work or hobby area, particularly if you're pregnant.

High risk lead-related jobs and hobbies

- lead mining and smelting and other industries that use lead
- dry machine grinding, discing, buffing or cutting lead
- manufacturing or recycling lead-acid batteries
- repairs to radiators or vehicle exhaust systems
- melting or casting lead or alloys containing lead (dampcourses, trophies, yacht keels and leaded brass)
- removing lead paint from surfaces by dry sanding, heating or grit blasting
- handling lead-insulated cabling
- construction, renovation and demolition involving oxy-cutting of structural steel primed with lead paint and areas where lead contaminated dust is present
- fire assay involving lead
- handling lead compounds causing lead dust, including dry lead pigments, lead UV stabilisers
- spray painting with lead paint (> 1% lead by dry weight)
- restoring homes, boats, cars and furniture that are coated with lead-based paints
- casting lead (to make ammunition, fishing sinkers/tackle)
- burning of lead-stabilised plastics or materials coated with lead-based paints
- soldering (radiators, stained glass and electronics)
- exposure to lead dust and fumes at firing/shooting ranges and during hunting
- recycling of objects containing or coated with lead products (motor vehicle bodies, batteries and electronic/computing equipment)
- antiques and furniture restoration
- glazing and firing pottery and ceramics
- lead-lighting/stained-glass making
- eating animals hunted using lead bullets.

How can lead affect my health

The central nervous system is the main target for lead toxicity in both adults and children. In adults, long-term exposure to low levels of lead may be associated with weakness in fingers, wrists and ankles, headaches, fatigue, small increases in blood pressure, anaemia and damaged nerve and renal function. People with diabetes have a higher risk of adverse effects associated with the kidney.

In pregnant women, high levels of exposure may cause decreased birth weight or miscarriage. In men it can damage the organs responsible for sperm production. In children, long-term exposure to low levels of lead may be associated with reduced growth, learning difficulties, behavioural problems and reduced IQ. It can cause hearing difficulties and affect the nervous system outside the brain. These effects are most likely not reversible.

Effects of high blood lead levels may include colic, muscle weakness, lack of appetite and brain damage with seizures. At very high levels, lead can severely damage brain and kidney function and ultimately cause death.

Risk of health effects from lead exposure is highest for unborn babies, infants and children.

What do I do if I think I have been exposed to lead?

If you think that you or your family have been exposed to lead, it is important to see your doctor and discuss having a blood lead test. This assesses the level of exposure and determines if further steps are necessary to reduce the health effects and minimise further exposure.

Occupational exposure

You and your employer must comply with work health and safety regulations (lead process control measures, decontamination practices, notifications to the Regulator and health monitoring) and occupational exposure standards for lead (airborne lead in the workplace and workers blood lead levels).

To prevent and reduce exposure to lead dust and fumes, you must:

- participate in health monitoring if your employer assesses the work to be 'lead risk work'
- follow lead-aware work and hygiene practices
- wear appropriate Personal Protective Equipment (PPE).

For information about these laws and your legal responsibilities relating to lead risk work, contact [SafeWork SA](#).

