

Fact Sheet

Dangers of take-home lead from workplaces and hobbies

Working in a lead-related industry or hobby can also put your family at risk of lead exposure. There is no 'safe' level of lead exposure. Lead can be harmful to people of all ages, but the health risk 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 that you take precautions to protect yourself and your family from the dangers of take-home lead.

These precautions include:

- > taking care throughout your work day or hobby activity by:
 - washing and drying your hands thoroughly before eating, drinking, smoking 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 work or hobby clothes separately from all other regular washing, especially children's clothes and bed linen
- > keeping your work or hobby equipment and personal items you take to work or your hobby area, including food containers, mobile phones, car keys and work gear, away from children.



High risk lead-related jobs and hobbies

High risk jobs and hobbies include:

- > 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, such as lead dampcourses, trophies, yacht keels, leaded brass
- > Removal of lead paint from surfaces by dry sanding, heat or grit blasting
- > Construction, renovation, demolition involving oxy-cutting of structural steel primed with lead paint
- > Fire assay involving lead
- > Handling lead compounds causing lead dust, such as from 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 (e.g. to make ammunition, fishing sinkers/tackle)
- > Burning of lead-stabilised plastics or materials coated with lead-based paints Soldering (radiators, stained glass, electronics)
- > Exposure to lead dust at firing/shooting ranges and during hunting
- > Recycling of objects containing or coated with lead products (e.g. motor vehicle bodies, batteries, electronic/computing equipment)
- > Antiques and furniture restoration
- > Glazing and firing pottery and ceramics
- > Lead-lighting/stained-glass making
- > Eating animals hunted using lead shot.

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 or may have lead poisoning, 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 legislation (lead risk work notifications and blood monitoring) and occupational exposure standards for lead (airborne lead in the workplace and workers blood lead levels) to prevent and reduce lead fumes and lead dust by:

- > monitoring your lead exposure by blood testing (discuss with your employer and doctor)
- > following Lead-Aware Work & Hygiene practices
- > wearing appropriate Personal Protective Equipment (PPE).

For information about these laws and your legal responsibilities relating to lead risk work contact SafeWork SA (ph: 1300 365 255)

More information

SafeWork SA

www.safework.sa.gov.au/workplaces/work-tasks-and-projects/lead-risk-work

SA Health

www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/conditions/chemicals+and+contaminants/lead

www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/healthy+living/protecting+your+health/environmental+health/lead+reducing+your+exposure/lead+reducing+your+exposure

For more information

**Scientific Services Branch
Health Protection and Licensing Services
PO Box 6, Rundle Mall
Adelaide SA 5000
Telephone: 08 8226 7100
www.sahealth.sa.gov.au**

Public-I1-A1

Last updated 7 July 2020

© Department for Health and Wellbeing, Government of South Australia. All rights reserved.



www.ausgoal.gov.au/creative-commons



Government
of South Australia

SA Health