

## Lead and health

### What is lead?

Lead is a metal that occurs naturally in the environment. Everyone is exposed to very small amounts of lead through foods and water, but certain activities and jobs can expose people to higher than normal amounts. Lead is not needed by our bodies. It can enter bodies through breathing air or by swallowing food or objects contaminated with lead. Lead can cause a variety of health problems depending on the amount, age of the person and other health conditions.

### Where is it found?

In Australia, the amount of lead around us has greatly decreased due to the removal of lead from petrol, house paint and other goods. Lead is still used in many industries. Around the home, lead may be found in: fishing sinkers, curtain weights, imported items such as food or drink containers, jewellery, traditional medicines and cosmetics, old pipes, solder and plumbing fittings, soil contaminated with old lead car batteries and old paint.

Activities and hobbies that may involve lead include: hunting or eating game shot with lead shot, making fishing sinkers or ammunition, car/boat restoration, soldering, stained glass making and exposure to lead containing fuels (Avgas and some racing fuels).

### What are the symptoms of lead poisoning?

At low levels, there may be no symptoms at all. Most elevated blood levels are due to longer term exposure to small amounts of lead. Levels between 5 to 10 mcg/dl are associated with increased blood pressure in adults and behavioural problems and learning difficulties in children. Blood lead levels over 10mcg/dL can cause anaemia, kidney damage and abnormal brain function. Higher levels in both children and adults can cause balance and coordination problems, abdominal pain, tiredness and poor growth.

Acute lead poisoning is caused by a recent exposure to a high amount of lead. It can cause symptoms such as drowsiness, nausea, vomiting, headache, fits and coma.

### Who is at risk?

Children under 5 years of age are particularly at risk of harmful effects of lead. Pregnant women are at risk of passing lead onto their unborn child. Iron deficiency can increase the amount of lead absorbed by the body.

### Who should be tested for lead exposure?

A blood lead test should be done if there is a concern a person has been exposed to lead. For example, they have been involved in lead-related activities or behaviours that put them at increased risk of lead exposure (e.g. children who swallow items such as soil).

### What is the management of elevated blood lead levels?

The key aim is to find the likely source of lead and take actions to remove or reduce future exposure. Environmental risk assessment and testing can be undertaken when there is no obvious source of lead or when there is wider public health concern.

Medical intervention and hospitalisation is rarely required. Testing of family members or people who may have also been exposed to lead should be considered.

### How can lead exposure be prevented?

Removing lead sources is the most effective way to prevent lead exposure. Lead containing items can be substituted (e.g. replace lead shot with steel shot) or avoided. Lead related hobbies or activities should be carried out with care to prevent swallowing/breathing in lead and contaminating surrounding areas. Washing hands is important.

### For more information contact the Centre for Disease Control in your region

Alice Springs	89517540
Darwin	89228044
Katherine	89739049
Nhulunbuy	89870357
Tennant Creek	89624259

<https://health.nt.gov.au/professionals/centre-for-disease-control/cdc-contact>