

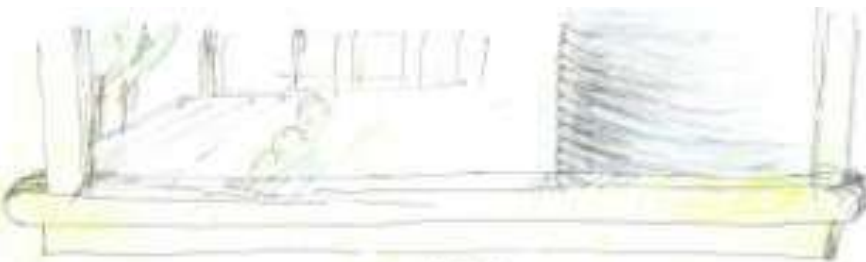


A Factsheet For Schoolkids From Professor Knowlead About Lead

*By Margaret Etherton, Edited by Elizabeth O'Brien and Anne Roberts.
Colour drawings by Anne Roberts, The LEAD Group Inc. Australia. July 2010 .*

Professor Knowlead has some important information to tell you about lead:

- ❖ Lead is an element heavier than tin and lighter than uranium.
- ❖ It is found in the ground as an ore mixed with silver, zinc and copper.
- ❖ When it contaminates food or drinks, you cannot smell, see or taste it.
- ❖ In the body or the environment lead does not break down into a safe element.
- ❖ It has been used in petrol but is being replaced by unleaded petrol which is safer for the environment and all living organisms.
- ❖ Paint is often made with lead because it is the cheapest pigment to 'fix' the colour in the paint and help paint stick to walls. Today, lead-based paint is banned in Australia but not in all countries.
- ❖ Lead is not needed by the human body, in fact, it is poisonous to all life. Lead can be absorbed by breathing it, swallowing it or through the skin. The body cannot tell the difference between lead and some other minerals like calcium and iron, which means that you will absorb lead quite easily if it is present in air or things that you swallow.
- ❖ You will absorb less of the lead that gets into your stomach if your tummy is full of food and if you have plenty of calcium and iron in your diet.



Possible lead sources in this picture include: dust, soil, old paint or varnish, rainwater, air (if near a lead mine or smelter), paint on toys or furniture or on zips or clothing snaps, PVC shoes.

Q & A

How do you become lead poisoned?

If you inhale air polluted with lead, the lead can be absorbed by your lungs into your bloodstream. Another way to absorb lead is by licking, sucking or swallowing a product with lead in it. Products with lead in them, such as lead sinkers used for fishing lines, or metallic jewellery made of lead, are sometimes swallowed by children. In other situations the risk is less obvious, like breathing when someone is dry-sanding old paint nearby, or living in a house with old lead-based paint peeling off the walls. The most common ways you can get lead poisoning are:

- ❖ when lead in dirt or dust sticks to your fingers and you then put your fingers in your mouth
- ❖ if you put anything in your mouth that is painted with leaded paint
- ❖ from breathing the exhaust of old cars which previously used leaded petrol
- ❖ if you live near a lead mine or smelter - the air and soil around your home or the dust in your roof cavity will be contaminated
- ❖ sucking or chewing dyed cloth books or fabrics
- ❖ inhaling fumes from candles with a lead core in the wick
- ❖ drinking water from rainwater tanks where the roof has lead flashing or lead paint
- ❖ making lead-light stained glass windows and not following proper safety precautions



What happens if you become lead poisoned?

If you get high levels of lead in your blood, at first you will not experience any problems unless the lead is very high, causing stomach cramps and vomiting. But, over time, with even low blood lead levels, you may have difficulties associated with the nervous system and the brain, such as learning difficulties, mental illness, hearing loss, poor memory and reasoning ability, slowed growth and problems moving muscles. In particular, lead alters the functioning of a child's growing brain, and can cause aggressive behaviour later in life, headaches and poor hand coordination and handwriting. Osteoporosis, Alzheimers disease and early death from heart attack or stroke are all later-life risks of lead poisoning earlier in life.

What is the treatment for lead poisoning?

The first thing to do is to avoid further contact with lead. Your home or school may need to be tested to find out where your lead sources are. You can take away the sources of lead such as dust, dirt and paint, but these should be removed by an expert. If poisoning is severe, harsh chemicals are given to the person to bind to the lead and make it pass out of the body.

Acute lead poisoning is a medical emergency. If you swallow a lead sinker or lead jewellery, ask your parents to take you straight to hospital to avoid:

- ❖ severe stomach pains
- ❖ nausea and vomiting
- ❖ seizures, coma and death



Did you know that 3.7 million Australian homes contain leaded paint, but for 2.5 billion people in other countries like China and India, nearly all the paint in all the houses is leaded?



Did you know that the lead in all the leaded petrol sold in the world is mined in Mount Isa, Queensland, Australia?

Products that may contain lead

- ❖ paint
- ❖ ceramic pots
- ❖ fishing sinkers and bullets
- ❖ jewellery
- ❖ toy soldiers or other mi
- ❖ petrol in some countrie:
- ❖ some painted toys
- ❖ water pipes
- ❖ pewter
- ❖ lead-acid batteries
- ❖ PVC footwear and PVC pipes
- ❖ PVC coatings on things like fences, coat hangers and electrical cables
- ❖ lipstick and hair colour restorers



REMEMBER what Professor Knowlead says:

DO	DO NOT
<ul style="list-style-type: none"> ❖ always eat before you play outside (so you have a full tummy) and wash your hands after play and before you eat or sleep 	<ul style="list-style-type: none"> ❖ put lead sinkers, empty bullet cases, painted toys or other dangerous objects in your mouth
<ul style="list-style-type: none"> ❖ watch that small children don't put possibly leaded things in their mouths when they are playing on the floor or grass or with metal objects or painted toys 	<ul style="list-style-type: none"> ❖ leave small toys or dangerous objects around for little brothers and sisters to pick up and suck
<ul style="list-style-type: none"> ❖ play on the lawn or where there's good mulch or rubber matting 	<ul style="list-style-type: none"> ❖ play in dirt or places which may be contaminated with lead
<ul style="list-style-type: none"> ❖ protect your pet from chewing objects and keep your pet clean and off your bed 	<ul style="list-style-type: none"> ❖ serve food on pottery or plates which are meant for decorative purposes only 

DISCLAIMER:

The views expressed herein are not necessarily the views of the Australian Government, and the Australian Government does not accept responsibility for any information or advice contained herein.