

From the Vaults

In this edition of LEAD Action News, we're bringing you a new section: "From the Vaults".

It is here that we've selected something created many years ago, but is still as relevant today as back then.

Grandma Lead (as she is known today) wrote this in 1993... 31 years on it is such important information that we're sharing it here.

Step into the time with and help keep this great information alive.



7 Point Plan for the MANAGEMENT OF LEAD by Australian parents and carers.

This 7 Point Plan was written by Elizabeth O'Brien in 1993 and first web-published at <https://lead.org.au/fs/fst26.html> but has always featured in our top 100 downloads throughout millions of views The LEAD Group's first website, and has been distributed by post, fax, email and at community events to tens of thousands of Australians

Also see the factsheet **"How would you know if you or your child was lead poisoned?"** at www.lead.org.au/fs/fst3.html

Keep reading!

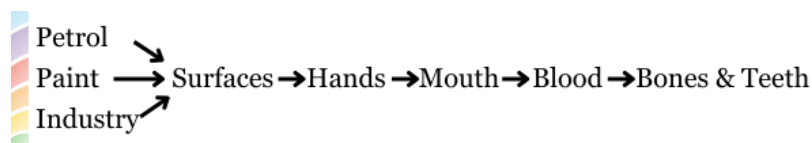


LEAD Action NEWS

7 Point Plan for the MANAGEMENT OF LEAD by Australian parents and carers

Lead Flow Chart:

Major Pathways of Child, Renovator & Worker Lead Poisoning



FOR PARENTS & CARERS

How to prevent lead ingestion by intervention at the seven points in the Lead Flow Chart (above):

Even though you may only have considered one aspect of lead poisoning prevention, we are providing information on numerous aspects of the problem, in the hope that you will find the holistic approach useful, and that you will realise how powerful you are personally in reducing the toxic lead load (and because lead is often found with other chemicals, reducing the toxic chemical load in general) on people (especially children) and the environment, now and in the future.

Point 1: Petrol → Surfaces. Australia reduced the amount of lead in petrol in 1993 and phased out leaded petrol by 1st January 2002 but stopping the flow of lead from petrol into the environment does nothing to reduce the historical lead contamination from petrol to be found in car engines, soils, dusts, waterways, sediments, etc.

- Do not undertake servicing or dismantling of old cars on your property;
- Avoid homes or child-care within 10-20 m of major roads;
- Lead from petrol and other sources builds up in the ceiling dust in houses and other buildings and can be an ongoing source (through cracks, ceiling roses, etc) or sudden source (if the ceiling falls down or is demolished) of lead contamination of interior dust. Leaded ceiling dust is just another reason (apart from leaded paint) that renovation is the most likely cause of childhood and renovator lead poisoning. See the NSW government factsheet "**Lead in Ceiling Dust**" – follow link at <https://www.epa.nsw.gov.au/your-environment/household-building-and-renovation/lead-safety> and see the website of the **Australian Dust Removalists Association (ADRA)**, www.adra.com.au for specialists in ceiling dust removal, in Melbourne, Sydney and

LEAD Action NEWS

Broken Hill. Do not attempt ceiling dust removal yourself.

Point 2: Paint → Surfaces - to stop lead particles from paint getting onto surfaces that children or pets might touch:

- Test for lead in any pre-1997 deteriorated house paint or pre-2010 industrial paint (see Point 4 for test procedures);
- Use barrier methods (like clear contact, fencing) and consistent clean-up until safe removal can be organised;
- Negotiate a contract with a professional renovator with experience (preferably training) in lead paint removal to remove lead paint hazards, guaranteeing no dispersal of lead, and approved disposal of contaminated debris;
- Protect children, adults of reproductive capacity and pets from renovation works. See "**Lead alert: Six Step Guide to Painting your Home**" on the website www.environment.gov.au : and "**Lead in Home Renovations**" link at <https://www.epa.nsw.gov.au/your-environment/household-building-and-renovation/lead-safety>
- Call on your state parliamentarians to institute training and licensing for lead abatement (paint removal) contractors and lead assessors, and for Certificates of Lead Safety for houses and childcare premises. See "**Lead hazard management in children's services**" link at <https://www.epa.nsw.gov.au/your-environment/household-building-and-renovation/lead-safety>

Point 3: Industry → Surfaces

- Avoid homes and child-care near lead industry;
- Reduce your use and purchase of all lead products and lead-containing products like plumbing products made with leaded brass or bronze (pumps, taps, etc), cars, leaded jewellery, fishing sinkers; and contribute to maximum possible recycling rates for lead, e.g. car batteries, light bulbs, flashing, pipes, wheel balancing weights, sinkers;
- As lead is one of the toxic emissions from coal burning power stations, reduce your electricity use.

Point 4: Surfaces → Hands. Whether the source is petrol, paint or industry, the major pathway of lead poisoning, especially for children (and pets) is via soil and dust (residual) contamination, to surfaces and then from hands to mouth. To stop lead getting from surfaces to hands:

- Have your home or childcare centre assessed for lead contamination by an experienced lead

LEAD *Action* NEWS

assessor or building biologist. Or if you can't afford to engage a professional to come out to the house,

- Purchase a **LEAD Group Kit** at www.leadsworld.com/shop - and follow the sampling instructions for sending soil, dust, drinking water, paint, home-grown eggs and a range of consumer products for lead content analysis to Sydney Analytical Laboratories. This is an independent NATA accredited lab which then sends the results to The LEAD Group who write you an interpretation and plan for reducing lead risks. Lead test kits which change colour to show if lead is present in paint or ceramics etc are available from some hardware stores and paint trade centres but cannot tell you how much lead is in the sample and may give false positive or false negative results. Any contractor (eg painter, roofer, demolisher) who works on paint or ceiling dust containing more than 1% lead (only a lab result can tell you) must notify the worker health authority before starting work, Dust and soil testing for lead should always follow.
- Industrial HEPA vacuum, wet down and then remove old carpets, replace with washable hard surfaces like cork;
- Carpets which remain, and drapes and soft furnishings can be delead on the surface by **Elite Maintenance Service Pty Ltd** (ph 131580). Carpets should be vacuumed with a HEPA-vacuum or when children are out of the room, and Elite-cleaned every 3 months. Never put vacuum cleaner dust or street dust in your compost/worm farm;
- Wet wipe, using liquid sugar soap and a sponge or mop, all hard surfaces your child may contact, at least fortnightly, and preferably twice weekly or even daily during the crawling phase;
- Stop track-in of dust or soil by placing washable mats or wet towels at the front and back doors (see VAP entry below);
- Cover bare soil with grass or more permanent barriers like rubber mats that let the grass grow through, gravel, etc;
- Mop paths, verandahs. See the fact sheet "**Lead Aware housekeeping**" at www.lead.org.au/fs/fst4.html and "**Lead safety at home**" – see link at <https://www.epa.nsw.gov.au/your-environment/household-building-and-renovation/lead-safety>
- Before purchasing or renting a house which is likely to be lead contaminated, use a LEAD Group Kit or have a lead assessment done and negotiate a fair price/rent for the house taking into account the cost of remedying lead hazards.

LEAD Action NEWS



Lead Flow Chart - Major Pathways of Childhood Lead Poisoning



Whether the lead source is petrol, paint or industry, the major pathway of lead poisoning is via soil and dust (residual) contamination, to surfaces and then from hands to mouth. To stop lead getting from outside to surfaces:

- Stop track-in of dust or soil by placing washable wet mats or wet towels at the front and back doors – wash when still moist in own load with liquid sugar soap as detergent;
- Cover bare soil with grass or more permanent barriers like rubber mats that let the grass grow through, gravel, etc;
- Mop paths, verandahs. See <https://lead.org.au/fs/fst26.html>

Image: 2022 Volcano Art Prize (VAP) Entry by Elizabeth O'Brien. Title: Wet towels collecting leaded soil off Harry's shoes. Lead-safety Message: Stop leaded soil track-in with wet washable towels at the back door. After washing a load and laying the towels back down wet from the machine, wet-wipe down the machine and run a cycle with no washing to clean the bowl for ordinary

clothes washing. <https://volcanoartprize.com/portfolio-item/wet-towels-collecting-leaded-soil-off-harrys-shoes/>

Point 5: Hands → Mouth

- Wash children's hands whenever they get dirty, and before eating or sleeping; wash own hands after smoking;
- Use a brush to clean under fingernails;
- Don't allow children to eat away from the table;
- Pin dummies to baby's clothing; don't create lead paint dust or allow lead dust to get onto your work clothes; change out of dusty work clothes and shower before hugging or picking up children;
- Ensure supervision sufficient to prevent the child eating old paint or contaminated soil.

Point 6: Mouth → Blood. Many individual factors influence what percentage of the lead that is eaten is absorbed from the gut, e.g. an empty stomach absorbs far more lead than a full one, children absorb 5 times more of the lead in the gut than adults. To minimise lead absorption:

- Ensure adequate iron, calcium, zinc, Vit C, protein, omega 3 fatty acids, pectin, wholegrain rice and a host of other nutrients in the diet. See www.leadsafeworld.com/solutions/foods-for-lead-detox/

LEAD Action NEWS

- Ensure that fatty fast foods (high in omega 6 fatty acids) are not consumed too frequently;
- Stick to the good food pyramid.
- Ensure children have frequent small meals, especially before playing in the morning.
- Testing the blood for lead is the best way of assessing recent exposure (over the last 3 months) to lead. See "**Childhood Lead Poisoning Risk Factor Questionnaire**" at www.lead.org.au/fs/fst10.html and "**Medical Evaluation Questionnaire for Occupational Lead Exposure**" at www.lead.org.au/fs/fst66.html . To gain some understanding of the wide range of health effects of increasing blood lead levels, see the factsheet: "**Health Impacts of Lead Poisoning**" at www.lead.org.au/fs/fst7.html

Point 7: Blood → Bones and Teeth

- Fruits with lots of pectin eg apples and pears, citrus fruit peel (eg in marmalade), plums, MAY reduce blood lead levels, ie after lead has already been absorbed from the gut. Eating fruit with lots of pectin can't hurt;
- Ensure prospective parents' blood lead levels are (well below 5 µg/dL and preferably below 1 µg/dL) before a baby is conceived, and for men for 4 months before a baby is conceived in order to avoid fertility problems or passing on lead to the foetus; test the mother's blood lead level in the first & third trimesters & the cord blood at the birth;
- Test a baby's blood for lead just after crawling begins, and at least annually until age 6. If blood lead testing was not done, testing children's shed baby teeth for lead is the best way to assess the child's lead exposure at the time of the development of the teeth, which happens to coincide with the early years of life when children are high-risk for ingesting and absorbing lead and high sensitivity to the effects of lead. Send baby teeth for tooth lead testing to a NSW Health lab. See www.lead.org.au/fs/Tooth%20analysis.html . Note: hair lead tests are uninterpretable.

