

The Lead Education and Abatement Design Group Working to eliminate lead poisoning globally and to protect the environment from lead in all its uses: past, current and new uses ABN 25 819 463 114

Pregnant or planning a pregnancy?

Are you at risk from lead?

When you are planning a pregnancy, are pregnant or breastfeeding, your health and that of your baby will be very much on your mind. To minimise the risk to you and your unborn child from lead, take a moment to educate yourself about making your environment more "lead safe."

Why is lead a concern?



Lead is poisonous. During pregnancy, lead in the mother's blood can pass freely to her unborn child. High blood lead levels can affect the unborn child's developing brain and cause developmental problems. If a mother has been exposed to lead in the past it may have been stored in her bones and can be released, along with calcium, during pregnancy. In men, even low blood lead levels can affect libido and fertility. *Keep your lead levels low to give your unborn child the opportunity to*

reach his or her full potential.

Where is the lead?

Large amounts of lead can be found around the home in paint, dust, soil, building products, wall and ceiling cavities and carpets.

You are most likely to be exposed to lead by:

- Unsafe home renovations such as sanding or burning pre 1970 paint; demolishing ceilings or wall cavities which release lead dust into the environment
- hobbies which use lead (leadlighting, restoring old furniture, indoor shooting)
- cleaning or entering areas containing lead dust (sheds, ceiling voids, verandahs, garages)
- work clothes and shoes covered in lead dust
- dry sweeping and dusting which disturbs lead laden dust

Who should have a blood lead test?

The blood lead level of an unborn child will be similar to the mother's. To ensure your unborn child's blood lead level is low, it is important to keep **your** blood lead level as low as possible.

One of Australia's leading lead researchers, Dr Peter Baghurst, believes that the new acceptable level should be 2 micrograms per decilitre (2 μ g/dL), equivalent to 0.1 micromoles per litre (0.1 μ mol/L). [Ref: "Water cost link to high level in kids" 15th March 2007, online at www.theaustralian.news.com.au/story/0,20867,21384704-23289,00.html]

A simple blood test is the best way of finding out the level of lead present in your blood.

Testing for lead can be done as part of standard ante-natal blood tests. If you are having a blood test anyway, ask your doctor or obstetrician about lead and blood tests. Umbilical cord blood can be painlessly tested for lead at birth – ask your physician to arrange it.

Pre-pregnancy blood lead tests will help identify any lead-related fertility problems a couple may be experiencing. Blood lead levels below the US guideline [Ref: "Medical Management Guidelines for Lead-Exposed Adults" at www.aoec.org/documents/positions/MMG_FINAL.pdf] of 5 μ g/dL, equivalent to 0.24 μ mol/L, are recommended for healthy eggs and sperm. Male partners should be below this level for at least three months before conception as sperm take this long to develop.

What is home assessment?

Environmental home assessments identify how much lead is in your home. Soil, paint, ceiling dust, vacuum cleaner dust and water can be tested. See

Undertaking a home renovation is a major cause of lead poisoning.

www.lead.org.au/clp/products/Do It Yourself Lead Safe Test Kits Ad.html for DIY-sampling kits available for purchase from The LEAD Group. Problem areas can be identified around your home. The **Global Lead Advice & Support Service** (GLASS) can provide details of reputable firms to carry out professional home lead assessments. If a renovation has been undertaken unsafely a baby could be brought home to a contaminated environment. We give free advice on how to undertake a safe renovation, what to require of tradespeople and how to protect yourself.

How to protect your unborn child.....

Move out during renovations until clean up is finished. Avoid exposure to:

- dirt and dust from home renovations
- dust or fumes from paint removal
- house, ceiling and vacuum cleaner dust
- · dust from work clothes

 dirt and dust from landscaping or bare garden soil



How to minimise your lead risk.....

Maintain good personal hygiene.

- wash hands after playing outside and touching pets (pet hair can hold lead dust) and keep pets <u>out</u> of the house
- wash toys, dummies and bottles frequently
- People who smoke often have higher blood lead levels than non smokers.
 Cigarettes contain small amounts of lead and smoking in contaminated environments can be hazardous. Talk to your doctor about quitting.

Wet wipe

- surfaces before preparing food or drinks
- furniture and fittings after vacuuming
- wet mop rather than sweep floors (so dust is not just stirred up and allowed to resettle)
- windowsills, ledges and flat surfaces at least weekly and <u>after</u> vacuuming (liquid sugar soap in the water is effective in picking up lead particles)

Child care

- keep fingernails short & use a nail brush
- discourage sucking fingers or toys
- build a sand pit and cover when not in use

Nutrition and Food Preparation

Our bodies substitute lead for calcium and we store that lead in our bones for our lifetime and beyond. Iron is also vitally important to minimise damage from lead. So you should:



- wash fruit and vegetables before eating
- wash hands before preparing or eating food and after being in contact with dust or dirt
- eat fruit, vegetables, dairy products and some red meat
- avoid high fat foods and use minimal fat when cooking
- Empty stomachs absorb more lead feed children regular healthy meals and snacks – up to six per day

A diet high in iron, calcium and zinc will help protect you and your baby from lead.

Home care

- Take particular care when renovating a pre 1970 home
- seal cracks in walls and ceilings
- check toys, cots and chewable surfaces for lead based paint
- repair peeling or chalking paint
- vacuum once a week and then wet wipe avoid having children present

Garden and Yard care

- use a door mat to trap lead laden dust
- leave dusty shoes outside
- plant trees and tall shrubs add "clean" soil to vegetable patches
- cover bare soil areas with plants, mulch, compost or ground cover
- hose flyscreens, window sills, paths and paved areas regularly

This project was assisted by the NSW Govt as part of the Lead Education Program in 1998. This factsheet was updated 26th Feb 2008 under a DEWHA Federal Govt grant to GLASS.



For further free information contact: **Global Lead Advice & Support Service,** see www.lead.org.au or phone (02) 9716 0132 or 1800 626 086.