

Is your child at risk of Lead Poisoning?

THE YOUNGER THE CHILD, THE GREATER THE RISK.

Lead is a useful, but toxic, heavy metal that is used in petrol, paint, computers, television sets, electrical appliances, motor cars, batteries and many other products. Because of its widespread use, lead has caused environmental contamination throughout the world. Lead particles tend to concentrate in dust and soil, but may also be found in the air.

IMPORTANT SOURCES OF LEAD EXPOSURE IN SOUTH AFRICA

Lead in petrol

Lead in paint peeling or flaking from old houses, schools and other buildings

Lead-related activities at home such as fixing television sets, toasters and other appliances, fixing motor cars, and spray painting

Bringing lead particles into homes from work settings in which lead is used

Children may get lead particles into their bodies when they chew their nails, suck their fingers or put toys, sticks, stones and other items into their mouths (the "hand-to-mouth" pathway). Children who eat non-food items such as soil, paint chips and cigarette butts (also known as pica) are at particular risk of lead exposure. Because lead is added to petrol, children living or attending schools close to busy roads tend to have high blood lead levels. When lead solder is used at home, for example in fixing television sets, toasters and other appliances, or if car repairs or spray painting is undertaken, the living environment

can become contaminated and result in high blood lead levels in children. Adults who work with lead, for example in a battery factory or lead mine, may bring lead particles from work into their homes on their clothes, shoes, skin or hair.

Studies done in cities and certain rural areas have shown that many South African children have high blood lead levels, well above the internationally accepted action level of 10 µg/dl. High lead levels in children have been linked to lowered IQ scores, learning difficulties and poor performance at school, hyperactivity, short concentration

spans, hearing problems, decreased growth, anaemia and even brain damage. High lead levels have also been associated with lowered lifetime achievement and earnings. In pregnant women lead can pass to the growing baby, and cause development problems. In adults high lead levels have been linked to high blood pressure and sperm abnormalities.

Children can have high blood lead levels without anyone knowing it, because you can't taste or smell lead. Only a blood test can tell whether a child's blood lead level is too high.

The good news is that simple steps can be taken to protect children from exposure to lead in the environment – turn over the page to learn more.



PREVENT LEAD POISONING IN CHILDREN

Keep children's living, learning and play areas as clean and dust-free as possible.

Try to use damp cloths and mops (rather than dry cloths or brooms) to remove dust from floors and surfaces at home or school. If possible, use a tri-sodium phosphate-based detergent in the water for dusting & mopping (many washing powders contain tri-sodium phosphate). Pay particular attention to removing dust on windowsills, floors and painted children's toys or furniture.

Ensure that children regularly wash their hands with soap, especially before eating, after playing in dusty areas and before nap or bed-time.

Keep children's fingernails short & clean.

Try to ensure that children eat a healthy, balanced diet, and do not skip meals. Foods that are rich in the following nutrients are particularly helpful in protecting children against the harmful effects of lead:

- calcium (found in green vegetables such as spinach, yoghurt, milk, cheese and nuts – especially almonds)
- iron (eggs, lean red meat & chicken, liver, fish, cereal, beans, peas, lentils, dark green leafy vegetables such as spinach)
- zinc (red meat, liver, fish, eggs, chicken, cheese, milk, peanut butter).

Discourage children from chewing their nails, sucking their fingers or putting non-food objects (sticks, stones, toys etc) into their mouths. Some children eat soil, paint chips, putty, cement, cigarette ends or other non-food items; this should be discouraged.

Don't burn painted wood – it may contain lead.

People undertaking repairs or renovations of old buildings should take care not to cause contamination of the home or school environment from lead in paint.

Adults working with lead (for example those involved in construction, demolition, radiator repairs, batteries, repairing electrical appliances with lead solder) should prevent bringing lead-dust from work into their homes on their clothing, hair, skin or boots by washing and changing their clothes before returning home or immediately on arrival at home.

People working with lead at home should try to work in a safe environment or take precautions to ensure that the home environment does not become lead-contaminated.

Use only unleaded petrol

If you think that your child may have a problem with lead, ask your doctor for a blood lead test.



kids run better with unleaded

For more information on children and lead in South Africa contact:

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