Lead

What is lead?

Lead is a bluish-gray metal that naturally occurs in small amounts in the environment. In the past, it was used in products such as pencils, paint and gasoline. Today, lead has many industrial uses including the production of batteries, ammunition, metal products, and devices to shield x-rays.

Lead has no obvious taste or smell; however, small amounts of lead can be hazardous to human health.

How does lead affect my health?

Lead can be harmful to people of all ages. Low-level exposure may have subtle effects on the intellectual development and behaviour of infants and children. They are particularly vulnerable to the harmful effects of lead because their growing bodies absorb lead more easily and get rid of it less efficiently than adults. Also, infants and young children are more likely to ingest lead because of their normal habit of putting things in their mouths. In adults, the strongest scientific evidence to date suggests low levels of lead exposure may cause a small increase in blood pressure. It is particularly important for pregnant women or women considering becoming pregnant to reduce exposure to lead. Unborn children can be exposed to lead through their mothers. Lead can move across the placenta and affect the neurodevelopment of a growing fetus.

Ongoing exposure to even small amounts of lead may eventually result in harmful levels in the body. Once lead is absorbed into your blood, it is either eliminated from your body (mostly in urine) or builds up in your bones. It can remain stored in your body for over 30 years.

Health effects associated with exposure to high levels of lead include vomiting, diarrhea, convulsions, coma or even death. However, such severe cases of lead poisoning are rare in Canada.

What are the sources of lead exposure?

Lead exposure can occur in both outdoor and indoor environments. Everyone is exposed to trace levels of lead through food, drinking water, air, household dust, and soil. Before leaded gasoline was phased out in Canada in the 1990s, lead in the air was the main source of exposure for Canadians. It is still a source of low-level lead exposure, but now adults are exposed mainly through food and drinking water.

For infants and children, the main sources are:

- food and drinking water
- household dust
- soil
- mouthing of products containing lead
- crystal ware, lead-glazed ceramic, costume jewellery, art supplies lead shot or fishing weights, material for automotive work or making stained glass

Lead-contaminated soil can be tracked into your home. Lead can also enter household dust from sources already in your home, especially in older homes that contain lead-based paints. Children can be exposed to lead in soil or household dust through normal hand-to-mouth activity.

Houses built before 1960 are likely to have been originally painted with lead-based paint, although that paint may have been removed. There is little need for concern about lead levels for homes built after 1980 and as of 1992, all paints for indoor use in Canada are virtually lead free.

How can I reduce the risk of exposure to my family?

If you feel you or anyone in your family has been exposed to lead contact your family physician. The following tips can help you to decrease your family's risk of lead exposure.

- See Health Canada's fact sheet <u>Lead-based Paint</u> for important safety information about paint removal before starting any renovation project in an older home.
- Do not keep food or beverages in <u>lead crystal</u> containers for any length of time. Do not serve pregnant women or children drinks in crystal glasses. Infants and children should never drink from lead crystal.
- If you own glazed glass or ceramic dishes bought outside of Canada, do not use them to serve food or drinks. They may have higher levels of lead than are allowed in Canada.
- If you work in a smelter, refinery or any other industry where you are exposed to high levels of lead, protect your family by showering and changing clothes before going home. Get your blood levels checked regularly.
- Never burn waste/old oil, battery casings or wood covered with lead paint, as lead fumes may be released. Dispose of hazardous wastes through your municipality's Hazardous Waste program.
- If you use lead solder in a hobby like stained glass-making, use a good quality breathing mask, keep surfaces clean, and keep children and pregnant women out of the area. Wash your hands after handling lead solder.
- Avoid eating animals and birds that were killed with lead shot. Use non-lead shot when hunting for food.
- Do not store lead fishing weights, lead stripping for stained glass work, or other items made of lead where children can reach them.
- Do not allow children to chew or suck on jewellery.
- Damp-mop floors and vacuum carpets frequently.
- Remove shoes at the door to avoid tracking soil and dust into the home.
- Keep play areas dust-free by wet dusting frequently (weekly or more often). Wash dust mops separately from other laundry
- Have children wash hands frequently, but especially before eating, at bedtime and after playing outdoors.

Click here for information on lead and drinking water.

Where can I find more information on lead?

For more information call Your Health Connection at 705-721-7520 (1-877-721-7520) or visit the following websites:

Simcoe Muskoka District Health Unit

Government of Canada Chemical Substances

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