

Lead Exposure from Bathtubs and other porcelain fixtures; A practical guide.

On April 19, 1995, The Good Morning America Television Show reported on the Thomas Family, in the state of Massachusetts. The Thomas 2 children were diagnosed as having dangerously high blood lead levels, and were forced to undergo medical treatments known as chelation therapy. The Thomas family embarked on a mission to rid their home of lead contamination, and after exhaustive efforts to find the source of lead poisoning, the main source of dangerous leaching lead was finally discovered their porcelain bathtub.

This pamphlet examines the latest dangerous, yet surprisingly common, source of lead poisoning to the American Family, and simple steps that may be taken towards detecting and correcting the problem.

Lead: the silent enemy in your home

Lead, though a highly toxic poison, has been used as a building material for hundreds of years. For the past 30 years, thanks to the development of new lead-free paints, and safer lead-free pipes, homeowners have systematically removed or safely encapsulated most lead hazards from their families.

Lead poisoning from bathtubs?

Naturally, when the latest source of lead contamination in the bathroom was discovered, most people were surprised. Most people thought of lead exposure coming only from flaking, old lead-based paint, or lead water pipes. However, the threat of lead contamination from older porcelain fixtures, including bathtubs, is quite real.

What are the causes?

Lead containing glazes have been used in the production of porcelain fixtures for decades. When proper temperatures are maintained during the porcelain production process, called firing, the lead is sealed inside the porcelain layer, and the result is a safe, smooth, glossy surface. But when the proper firing temperatures are not maintained, or the porcelain surface is damaged, due to drain cleaners or erosion, lead can leach from the surface, and poison the people who ingest it.

What are the effects of lead?

Lead is a poison. It has no positive effect or beneficial purpose in the human body. The effects of lead exposure vary, depending on the amount of lead ingested, and the age of the person contaminated. The most profound and serious effects are seen on small children and pregnant women. These symptoms include:

- ✓ **Learning Disabilities**
- ✓ **Colic**
- ✓ **Delayed Motor Development**
- ✓ **Hearing Problems**
- ✓ **Memory Impairment**
- ✓ **Paralysis of the wrists and/or ankles.**

The threat to children is compounded, when it is considered that the most frequent route of entry of lead into the body is through ingestion. Lead can leach into the bath water, and can be ingested into the body when children drink the bath water, or suck their fingers while in the tub.

Lead is a cumulative poison. This means that exposure takes place over a period of time, from days to years. Lead does not leave the body, except through a decontamination process called Lead Chelating, which must be administered over a period of time.

Encapsulation: the safe, cost effective solution.

Encapsulation is essentially the permanent, or semi-permanent covering of the source of lead. Having your bathtubs and sinks professionally refinished will safely and effectively encapsulate the old porcelain, and restore the surface to a glossy, beautiful finish.

Hawk Research Laboratories formulates a synthetic porcelain compound, called **Glas-Tech 9000**. This system will safely encapsulate lead based surfaces, whether they are porcelain or ceramic. This glaze is professionally applied, and its synthetic composition is acid resistant. This means that it will not break down when exposed to acids and drain cleaners, like the original porcelain.

The development of this system provides homeowners with a safe, easy, and effective alternative to removing and replacing fixtures that leach lead poisons into the environment and people. The resulting surface is lead-free, non-toxic, and safe for children and adults alike. After reglazing with Glas-Tech 9000, your bathtub has the look and feel of a brand new bathtub, and is available in a wide range of colors, including the latest designer colors.

Find out if you and your family are at risk.

Educating yourself and your family is the first step. Simple tests are available, that you can use yourself, in your home. These tests will give you instant results. Secondly, being aware of the symptoms of lead poisoning, and medical testing as necessary, will ensure your family's health and safety. Call Hawk Research Laboratories at (800) 321-4295 for more information on free lead testing for your bathroom fixtures, and for information on the Hawk Laboratories authorized porcelain refinisher in your area. More information may also be obtained from the following sources:

Centers for Disease Control (CDC)

Lead Poisoning and Prevention Branch 1600 Clifton Rd. N.E.

Atlanta, GA 30333 or

CDC, Div. of Environmental Hazards and Health Effects

1600 Clifton Rd. N.E. Atlanta GA 30333

United States

Environmental Protection Agency (EPA)

401 M Street S.W.

Washington. DC 20460