

890,000

Number of children nationwide who have high blood lead levels

5 Million

Tons of lead introduced into the environment by lead based paint

7 Million

Tons of lead introduced into the environment by leaded gasoline

16 ug/dL

The average lead level in children and adults in 1970

2.7 ug/dL

The average lead level in children and adults in 1994

Number 1

Lead's rank in environmental poisons for children

1978

The last year lead based paint was to be sold for residential use

2010

The year targeted for childhood lead elimination in the United States

About two-thirds

Fraction of the homes built before 1940 that contain lead-based paint

About two-thirds

Fraction of the homes built from 1940 to 1960 that contain lead-based paint

From Centers for Disease Control and The National Safety Council

www.cdc.gov

www.nsc.org

Safety Sounds

A Monthly Safety Bulletin From SPSG Safety Group

Lead Poisoning Prevention

About one in eleven children in America have high levels of lead in their blood, according to the Centers for Disease Control and Prevention. You may have lead around your building without knowing it because you can't see, taste, or smell lead. You may have lead in the dust, paint, soil, or drinking water and food. Because it does not break down naturally, lead can remain a problem until it is removed.

Lead poisoning is a serious problem! Childhood lead poisoning is still one of the most important health issues in the United States today. According to recent CDC estimates, 890,000 U.S. children age 1-5 have elevated blood lead levels, and more than one-fifth of African-American children living in housing built before 1946 have elevated blood lead levels.

Symptoms of Lead Poisoning

- Headaches
- Muscle and joint weakness or pain
- Excessive tiredness or lethargy
- Behavioral problems or irritability
- Difficulty concentrating
- Loss of appetite
- Metallic taste in the mouth
- Abdominal pain, nausea or vomiting
- Constipation

How Lead Affects Children

The long term effects of lead in a child can be severe. They include learning disabilities, decreased growth, hyperactivity, impaired hearing, and even brain damage. If caught early, these effects can be limited by reducing exposure to lead or by medical treatment. To complicate things, lead poisoning can be so subtle that the affected child may not show any clear physical signs.

How Lead Gets Into Water

Lead leaches into water through contact with the plumbing. Corrosion of pipes, solder, fixtures and faucets, and fittings contribute to lead entering

the water as do particles caught in aerators.

The longer water remains in contact with leaded plumbing, the more opportunity exists for lead to leach into the water. Facilities with prolonged periods of no water usage, such as schools, may have elevated lead concentrations in the water.



Testing Water for Lead

Testing is the only way to confirm if lead is present or absent.

The following is an overview of the sampling procedures. A more detailed protocol is contained in EPA's guidance document "Lead in Drinking Water in Schools and Non-residential Buildings" (1994).

- Determine which outlets will be sampled. Determine priorities and code outlets appropriately. Highest priority outlets include drinking fountains, kitchen sinks, home economic rooms, teacher's lounge sinks, nurse's office sink, and sinks in special education classrooms.
- Outlets must be inactive for at least 6-8 hours before testing. (Overnight is best.)
- Take a "first draw" 250 ml** sample at each outlet. A "first draw" is the water that is the first to come out of the tap after the period of inactivity.
- If lead is suspected throughout system, take a 30 second "flush" sample from outlet(s).
- Send samples to a laboratory, which is certified to test lead in drinking water.

From The Environmental Protection Agency and The National Safety Council
www.epa.gov and www.nsc.org