



We Can Help

Here is how the
Texas Department of State Health Services

Childhood Lead Poisoning Prevention Program

helps providers and families manage lead exposed children:

Texas requires that *all* blood lead tests be reported to the Texas Department of State Health Services Child Lead Registry. By tracking every child's blood lead test and following every lead poisoning case, the state can better identify risk factors for all children as well as offer individual follow-up to a family.

Education is available from the state and from local health departments to help families learn how to reduce a child's blood lead level and prevent a recurrence. The Texas CLPPP stresses the importance of identifying and removing the sources of lead exposure in the child's environment as quickly as possible.

If a case requires immediate medical intervention, the Texas CLPPP can provide the child's physician with a referral to an expert in medical management of lead poisoning.

Please contact us if you have any questions about lead poisoning or would like to order printed materials.

1-800-588-1248 • 512-458-7269 (fax)

<http://www.dshs.state.tx.us/lead>



This publication was supported by a grant from the Centers for Disease Control and Prevention (CDC).
Contents are solely the responsibility of the authors and do not necessarily represent the view of CDC.

What All New Parents Need to Know...



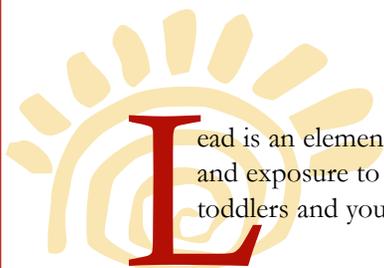
A Guide for Educators:

Childhood Lead Poisoning— and How You Can Help Families Prevent It.



Texas Childhood Lead Poisoning Prevention Program

Texas Department of State Health Services



Lead is an element found throughout our environment, and exposure to it is highly toxic – especially to babies, toddlers and young children.

Exposure to lead harms a child in many ways. Lead can harm the kidneys, stunt growth and affect balance and hearing. Children exposed to lead can experience permanent neurological damage including learning difficulties, behavior disorders and a lower IQ.

Lead collects in the blood, tissues and bones, and can be detected by a blood test. Unlike other elements, iron or calcium for example, we have no biological need for lead and, in fact, there is no known “safe” level in the body.

Symptoms of lead poisoning, if present at all, can be vague and include abdominal pain, vomiting, constipation, change in appetite, lethargy and irritability. Symptomatic lead poisoning is a medical emergency.



Even babies are diagnosed with lead poisoning. From 2000 through 2004 in Texas—

188,786 babies less than a year old had a blood lead test

2,557 of those babies had an elevated blood lead level

384 of those babies had a blood lead level high enough to meet the requirements for an environmental investigation

How Children are Screened for Lead:

The Texas CLPPP recommends that all children have a blood lead test at age 12 months and again at age 24 months. This testing schedule is *required* for children enrolled in Texas Health Steps.

Tell parents:

- to ask about a lead test if their child’s healthcare provider doesn’t mention it.
- in addition to blood testing at 12 and 24 months, at other ages healthcare providers may use questionnaires with the parent to help determine if a child is at risk for lead exposure.
- it’s important to return to the healthcare provider for follow-up if their child has an elevated blood lead level.
- if a child’s blood lead level is elevated, the immediate goal is to find and remove sources of exposure as quickly as possible.
- when warranted, the local health department may perform an environmental investigation to find the source of exposure.
- if their child has very high blood lead levels or has already become seriously ill, hospitalization may be necessary.



Some things to avoid around the house:

- glazed pottery not marked “lead free”
- certain imported candies – sometimes shipped in small lead glazed containers
- any remedies not recommended by a doctor – some home remedies are almost 100% lead and very dangerous
- water that may be lead contaminated from old plumbing – use only cold water for cooking or drinking and let it run a few minutes before using (and keep a lead-free pitcher full in the refrigerator)
- hobbies that may contain lead products – such as working with stained glass or fishing weights

What to tell parents about how lead in the workplace can transfer exposure to children:

Here are some possible sources of lead exposure parents might come into contact with at work:

Ammunition	Explosives
Printing ink	Refrigeration/heating equipment
Industrial inorganic chemicals	Pottery products
Mechanical rubber goods	Metal cans with raised seams
Tires and inner tubes	Metal foil and leaf
Vitreous table china	Adhesives and sealants
Paint removal/renovation	Ceramic wall and floor tile
Scrap and waste materials	Motor vehicle parts
Storage batteries	Valves and pipe fittings, solder

If a parent works in an industry that exposes him or her to lead, it is important that they change clothes before returning home, and that they wash work clothes separately from other family laundry.

If you think a parent or other family member is being exposed to lead at work, encourage them to contact a health care provider for testing.

Information on adult (age 15+) lead poisoning is available from the Texas Department of State Health Services:
<http://www.dshs.state.tx.us/epitox/adultlead.shtm>



There are treatments for high blood lead levels, but in all cases, the most important first step is to remove the source of lead exposure from the child.

What to tell parents about how babies and children are exposed to lead:

■ **Maternal-fetal transfer (mother transfers lead to unborn baby):**

If a pregnant woman has a high level of lead in her own blood, she could transfer it to her unborn baby's blood through the placenta. Adults can be exposed in their home or workplace. Look at the "lead in the workplace" table on page 6 of this brochure to see if you might be at risk – and take action if you are.

■ **Breastfeeding:**

There is some evidence that a mother with high lead levels can transfer lead to her baby through breast milk. If you are at risk for high lead levels or have been diagnosed with high levels, discuss breastfeeding with your doctor – it is important to weigh the risks and benefits.

■ **Exposure at home and in the environment:**



The primary source of lead exposure for children continues to be lead-based paint.

Lead was banned as a paint additive in 1978, but many older homes still pose a threat. As old lead paint flakes, chips, or turns to dust, it can contaminate surfaces in the home and exposed soil areas outdoors. Bare soil near high-traffic areas may also be contaminated by automobile emissions deposited before leaded gasoline was banned.

- Page 5 lists ways to protect children from lead chips and dust.
- Pages 6 and 7 list exposure sources other than lead paint.

What to tell parents about nutrition and lead exposure:

Providing good nutrition is an important part of protecting your child from lead poisoning.

You already know how nutrition supports your child's growth and health. But regular meals and certain nutrients also help protect your child from absorbing lead in the environment.

- More lead is absorbed by an empty stomach – if your child eats regular, healthy meals and snacks, he will absorb less of any lead he may be exposed to.
- Minerals like iron, calcium, zinc, phosphorus and magnesium “compete” with lead for absorption in the body. Making sure your child's diet includes these minerals helps lessen lead absorption.
- There is some evidence of a relationship between blood lead levels and **iron** deficiency. Though more study about this relationship is needed, there is no question that it is important for your child to get enough iron (from dietary sources, not supplements).
- **Vitamin C** provides many health benefits, but is also important because it helps in the absorption of iron.
- Many children do not get enough **calcium**. It is especially important for children to have adequate calcium intake since it is known to inhibit lead absorption.

All of these nutritional needs should be met through a well-planned diet, not supplements (unless ordered by your health care provider).



Lead levels in the blood are measured in micrograms per deciliter ($\mu\text{g}/\text{dL}$). The CDC-defined “level of concern” is 10 $\mu\text{g}/\text{dL}$ or greater. There is recent evidence that the adverse effects of lead may occur at even lower levels.

What to tell parents about hand washing and keeping lead out of the house:

It's important to keep your child's toys and hands clean and to wet-clean places where lead chips or contaminated dust can collect.

Here are some normal toddler behaviors that can expose children to lead paint chips and contaminated dust:

- Chewing on painted surfaces or eating non-food items
- Eating food that has fallen on the floor or onto a windowsill
- Picking toys or pacifiers up from the floor or a windowsill and putting them into their mouths
- Putting unwashed hands into their mouths or eating without washing their hands
- Playing with household pets that may have picked up lead dust on their fur from the floor or outdoors
- Crawling on floors inside the house or playing in soil outdoors

Tips:

- Pay close attention to windows – the movement of the sash dislodges old paint. Doorways are another problem area.
- Wash your child's hands with soap and water often, and use household cleaner and lots of rinse water on hard surfaces.
- Help prevent lead dust from entering your home by using small washable rugs at each entrance and asking everyone to leave shoes at the door.
- Cover areas of lead paint with wallpaper or wallboard to keep your child away from it. Do not try to remove lead paint yourself!



Remember, a child's “environment” includes:

- the homes of caregivers, friends or relatives
- play areas
- school or daycare
- other places where a child spends a lot of time