

LEAD POISONING

New Hampshire
HEALTHY HOMES
& Lead Poisoning Prevention Program

LEAD AND CHILDREN

Children are at a Special Risk for Lead Poisoning



Is My Child At Risk For Lead Poisoning?

The only way to know if your child is poisoned is to get a blood lead test. Many factors can put your child at risk for lead exposure.

- Living in a home built before 1978 with ongoing repair or remodeling
- Attending a daycare built before 1978 with deteriorating paint or ongoing repairs
- Spending time with a sibling, relative, or playmate with lead poisoning
- Spending time with an adult who works with lead in a job or hobby (ex. fishing, painting, auto repair)
- Eating or drinking food stored in glazed pottery or leaded crystal
- Using traditional home remedies and imported products (ex. Kohl, Azarcon, Alarcon, Greta, Pay-loo-ah)
- Swallowing or mouthing small metal charms, trinkets & jewelry
- Playing in contaminated soil

SYMPTOMS OF LEAD POISONING

Most children with lead poisoning DO NOT look sick

The only way to know if your child has lead poisoning is to get tested. Some children might experience:

- Stomach ache
- Headache
- Trouble paying attention
- Trouble eating or sleeping
- Irritability

LONG-TERM EFFECTS

Lead can affect all parts of the body and mind



- Lower IQ
- Hearing & speech problems
- Slowed growth & development
- Hyperactivity & attention problems
- Damage to the brain, kidneys & nerves

PROTECTING YOUR CHILD

Remove the lead source and look out for lead hazards

Lead poisoning occurs when children ingest lead

- Keep your house clean & dust free
- Keep children away from lead paint & dust
- Have your home tested for lead
- Look out for contaminated soil or water
- Avoid imported foods & candies
- Be careful with small metal charms, trinkets & jewelry
- Don't use recalled products & toys

Provide early intervention & stimulation

Engaging children in activities may stimulate learning

- Enroll children in reading programs, play groups, classes & learning activities
- Read to & play games with your child



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What Do Blood Lead Levels Mean for Your Child's Health

Any amount of lead is dangerous and can cause health and behavioral problems at all ages. A blood test is the only way to tell if your child has lead poisoning. A capillary finger stick is quick and can be done in the doctor's office, but is not as sensitive as the venous arm test. **Confirm a capillary blood lead test with a venous test.**

Blood Lead Level (micrograms/deciliter)	Capillary or Venous	When to Retest	What can I do to help?
<5	C	Retest annually from the time they crawl to 6 years based on risk	<ul style="list-style-type: none"> • Talk to your child's doctor • Feed child foods high in Calcium, Iron & Vitamin C • Wash hands frequently • Clean floor and window sills with disposable wipes or wet mop • Look out for "Take-Home" lead and other lead sources
	V		
5-9	C	Retest in 3-6 months if under 3 years, otherwise retest based on risk	Continue with above AND <ul style="list-style-type: none"> • Control known lead hazards • Keep up good nutrition (Calcium, Iron & Vitamin C) • Consider testing other children in the home
	V		
10-19	C	Confirm within 1 month	Continue with above AND <ul style="list-style-type: none"> • Test siblings younger than 6 yrs • Ensure child has proper diet • Follow up by NH HHLPPP will provide education, case management, and environmental assessment • Consider developmental evaluation if elevated blood lead levels persist
	V	Retest within 3 months if under 3 years, otherwise retest based on risk	
20-44	C	Confirm within 1 week	Continue with above AND <ul style="list-style-type: none"> • Remove child from lead hazards
	V	Retest every 1-2 months until <20 mcg/dL	
45-69	C	Confirm within 48 hours	Continue with above AND <ul style="list-style-type: none"> • Child needs immediate treatment and may need hospitalization • Chelation may be necessary • Ensure child returns to a lead safe environment
	V	Seek immediate medical attention and test weekly afterwards	
≥70	C	Confirm IMMEDIATELY	Continue with above AND <ul style="list-style-type: none"> • TAKE CHILD TO HOSPITAL FOR TREATMENT!
	V	Medical emergency, chelation treatment	



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LEAD AND NUTRITION

Feed Your Child Foods That Get Ahead of Lead



Protecting Your Child

Good nutrition and hygiene can help reduce the amount of lead a child absorbs in their body.

Prevent lead from mixing with food

- Wash hands after play and before meals, snacks & naps
- Don't eat food off the floor
- Eat meals & snacks at the table
- Avoid using dishes that contain lead (ex. glazed pottery)
- Use cold water for cooking, drinking & making formula

Give your children healthy snacks

- Fresh fruits & veggies
- Whole grain crackers
- Cheese slices
- Yogurt

Feed your children 4-6 small meals daily

- Children absorb less lead on a full stomach

Bake or broil foods, don't fry

- Avoid high fat foods which make the body absorb more lead

Wash toys and play spaces often

- Clean child's toys, bottles & pacifiers often
- Keep child's play areas free of dust and dirt

CALCIUM

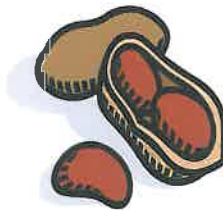
Protects against storing lead in the bones



- Milk & yogurt
- Cheese & tofu
- Juice with added calcium
- Leafy green veggies (kale, broccoli & spinach)
- Food made with milk (hot cereal & pudding)
- Ice cream
- Cottage cheese

IRON

Iron deficiency associated with lead poisoned children



- Lean meats
- Iron fortified cereals (Cheerios & Kix)
- Fish* (tuna, clams, oysters & sardines)
- Dried fruits (raisins & apricots)
- Bread & pasta
- Peanut butter & nuts
- Beans
- Molasses
- Leafy green veggies
- Eggs

VITAMIN C

Helps the body take in iron



- Oranges & grapefruit
- Melons & berries
- Tomatoes
- Cauliflower & broccoli
- Green peppers & sweet potatoes
- Juices (orange, grapefruit & tomato)

*Mercury in fish can damage a growing brain. Children under 7 can safely eat 1/2 can of tuna or 1 can of light tuna per week

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LEAD HAZARDS

Looking for Lead Paint Hazards in Your Home

Lead Paint Hazards

Simple steps can help reduce the lead hazards in your home. Create a barrier between lead hazards and your family.

Lead painted windows are especially dangerous and accessible to children

- Cover deteriorated window paint with duct tape or contact paper
- Keep the lower part of the window closed & only open the top part

Opening and closing doors can produce lead dust and paint chips

- Put felt bumpers on door edges to prevent banging
- Cover edges of door with duct tape
- Remove doors entirely where possible

Baseboards are constantly bumped into and easily reached by children

- Block access to chipped areas with large furniture
- Cover chips and cracks with duct tape or contact paper

Walking causes paint to wear off floors and stairs and can produce lead dust

- Cover floors with area rugs
- Install a runner on stairs to reduce lead dust

People can bring lead dust in from outside on their shoes

- Remove shoes when coming inside
- Put a shoe mat outside to avoid tracking in lead dirt

OLDER HOMES

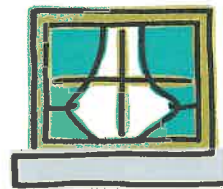
Homes built before 1978 may contain lead paint

Lead paint was banned from residential use in 1978. While not all paint is a lead exposure hazard, the condition or location of lead paint is what puts a child at risk for lead poisoning.

LOOK OUT FOR LEAD

Looking for lead paint in your home

Lead paint was inexpensive, durable and used mostly on:



- Woodwork and trim
- Walls in bathrooms and kitchens
- Doors, windows, baseboards
- Floors and stairs
- Exteriors and porches

MAINTENANCE

Keeping paint in good condition

Follow these guidelines to prevent lead hazards in your home:

- Touch up chipping paint in your home
- Avoid paint removal that makes lead dust
- Watch out for moisture which causes paint to deteriorate
- Follow EPA guidelines when doing work on your home
- Look into using certified lead abatement contractors for high risk lead hazards

LEAD SAFE CLEANING

Proper clean up can reduce lead dust in your home

- Wear gloves when working with lead
- Use a spray bottle with all-purpose cleaner & wet wipes
- Use disposable paper towels— sponges will only spread dust
- Only use a HEPA vacuum, do not use a regular vacuum or broom, to clean up lead paint
- Rugs, carpets, and upholstery need to be steam cleaned



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LEAD HAZARDS

Other Possible Sources of Lead

Though the dangers of lead have been known for years, many common items still contain lead. Here are some sources of lead that may exist in your home.

Home Environment

- Soil near lead industries, roads, lead-painted houses
- Plumbing and solder
- Vinyl miniblinds
- Ceramic floor or wall tiles for kitchens & bathrooms
- Building materials like gutters, flashing & window glazing
- Old fashioned claw-foot bathtubs
- Leaded glass, crystal & pewter
- Lead arsenate pesticide
- Plastic insulation on electrical wiring

Products

- Imported candy & candy wrappers
- Supplements
- Imported cosmetics and hair dye
- Imported crayons
- Some rechargeable batteries
- Metal-cored candle wicks

Mexican/ Central American Home Remedies

- Azarcon- bright orange powder used for treating stomach aches
- Other names for Azarcon are Rueda, Corol, Alarcon, Maria Luisa, Ligo
- Greta - yellow powder used for stomach aches

Asian Indian/Middle Eastern Home Remedies

- Ghasard -brown powder used for stomach aches
- Bala Goli -round black bean dissolved in "gripe water" used for stomach aches
- Kandu -red powder used for stomach aches
- Kohl -powder used for eye make-up & teething

Asian Home Remedies

- Pay-Loo-Ah -Vietnamese red powder used for rashes
- Ba-Baw-San -Chinese herbal medicine used to treat colic



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LEAD IN THE ENVIRONMENT

Lead in Soil

Ways To Reduce Lead In Soil

Focus on these risk areas when looking for lead in your soil.

Play Areas

- Keep play areas away from structures with lead paint
- Cover bare dirt & play areas with ground cover
- Provide a clean sandbox for children

Vegetable Gardens

- Replace top 10" of soil with clean soil
- Keep soil moist to limit dust
- Scrub any vegetables grown in the garden before eating
- Keep soil from being too acidic
- Wear gloves when working in soil

Drip zone

- A drip zone is the 3-foot area that surrounds the house
- A drip zone usually has the highest levels of lead because of exterior paint chipping and falling
- Remove the top 10" of drip zone soil
- Plant shrubs right around the house to keep kids out of the drip zone
- Fence up the area or cover with landscape fabric and mulch

Walkways

- Lead contaminated dirt from walkways can be brought into the home
- Cover dirt walkways with gravel, stone, brick, or concrete

LEAD IN SOIL IS A PROBLEM

The only way to know if there is lead in your soil is to get it tested

Most people think of old paint when they hear about lead poisoning, but lead in soil can also be harmful to children. Lead in soil comes from flaking paint, years of factory pollution and leaded gasoline in cars. Lead arsenate was also used as a pesticide in orchards. When lead gets in soil it does not wash away or dissolve; it lasts forever.

RISKS FOR YOU AND YOUR FAMILY

You can be exposed to lead in soil in many ways



- Children often play in soil and mud, and may put leaded dirt in their mouths, hands & faces
- People bring in lead from outside on their shoes
- Pets can bring home leaded dirt on their fur & paws

PROTECTING YOUR FAMILY

lead in soil is dangerous and can enter your home

- Choose plants, shrubs, and ground cover that will keep children away from bare soil
- Place a rug at each entry door to stop dirt from tracking in
- Take shoes off at the door
- Wash hands and fingernails after playing outside
- Wash yard toys before bringing them inside, or just leave the yard toys outside
- Wipe pets off when they come inside
- Park cars on a paved area or in one place, as parking cars in the yard stops grass from growing, which creates dirt and dust



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Limit the Risk

Lead rarely found in the public drinking water supply, and is mostly likely entering your water because of pipes and plumbing in your home.

- Use only cold water for cooking and drinking
- Never use hot water from the tap for cooking baby formula
- Never boil water to remove lead. Boiling water may cause the lead to become more concentrated
- Use filtered or bottled water if necessary
- If you use a water filter, make sure it is certified to remove lead by the NSF International
- Replace home plumbing parts containing lead
- Make sure repairs to pipes do not use lead solder
- Make it a habit to run the water at each tap before use
- Keep children from drinking water out of hoses, as vinyl in hoses may contain lead

LEAD IN THE ENVIRONMENT

Lead in Water

SOURCES OF LEAD IN WATER

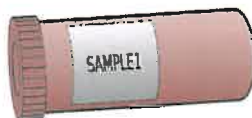
Lead can enter your water through pipes

Lead pipes were commonly used until the 1940's. Lead solder was used in pipes until 1986. It is still found in the pipes of many older homes. In an old home with lead pipes and solder, this lead can get into your water and be ingested by you and your family.

TESTING

You can not see, smell, or taste lead in your water

The only way to know if lead is in your water is to have it tested. If you want to test your home's water supply for lead, contact the NH Dept of Environmental Services Lab at (603)-271-3445. Lead can enter water through home sources such as:



- Wearing down of pipes, faucets, fittings & solder
- Brass & chrome-plated faucets
- Old claw foot tubs

If your test is positive for lead, make sure to remove such sources of lead contamination immediately.

WHAT YOU CAN DO

Flush your pipes

- When water is not used for 6-8 hours it can absorb lead from the water tank and pipes
- Make sure to let cold water run for at least 30 seconds to 1 minute before using water that has sat for a long time
- For hot water, let water run another 45 seconds after the water has heated up

Use a filtration system

- Filter drinking water using a faucet or pitcher filter
- Sediment filters do not remove lead



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