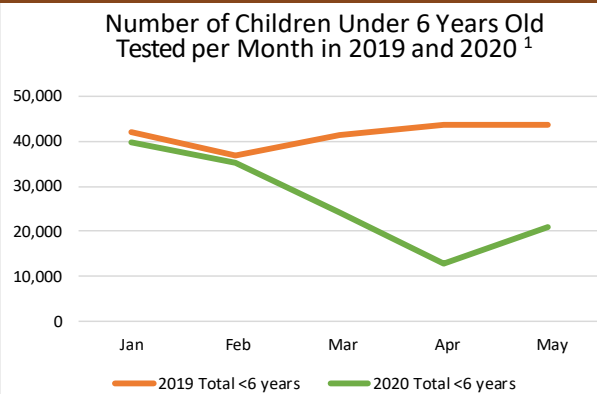


CHILDHOOD LEAD POISONING PREVENTION BRANCH

Information for Medical Providers: Assessing and Testing for Lead During COVID-19

Mandated blood lead testing has declined during COVID-19, putting children at risk



Background

- ▶ Childhood lead poisoning is one of the most common and preventable environmental health issues in California.
- ▶ Blood lead testing at-risk children is the best way to identify children with elevated levels of lead.
- ▶ Children are more susceptible than adults due to:
 - ▶ Increased hand-to-mouth behavior.
 - ▶ Five times greater lead absorption via the gastrointestinal tract.
 - ▶ Rapid growth and development.
 - ▶ Blood brain barrier still developing.

Lead Affects Multiple Systems

- ▶ **Hematologic:** Anemia
- ▶ **Neurologic:** Intelligence Quotient, Memory, Cognition, Behavior, Learning, Attention Deficit Hyperactivity Disorder
- ▶ **Cardiovascular:** Hypertension, Cardiovascular Mortality
- ▶ **Renal:** Lead Related Nephritis, Elevated Uric Acid
- ▶ **Reproductive:** Fertility, Preeclampsia, Intrauterine Growth Restriction, Preterm Birth, Spontaneous Abortion

Who is Required to be Blood Lead Tested?

- ▶ Children enrolled in publicly funded programs for low income children, such as Medi-Cal, Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and Child Health and Disability Prevention Program (CHDP).
- ▶ Children living in, or spending a lot of time in, buildings with deteriorated paint or recent renovation or remodeling, either built before 1978 or when the age of the buildings is unknown.

Other Indications for Blood Lead Testing

- ▶ Sibling, playmate or other close contact with increased blood lead level (BLL)
- ▶ History of living in or visiting a country with high environmental lead
- ▶ Change in circumstances has put child at risk for lead exposure
- ▶ Children with pica
- ▶ Parental request
- ▶ Mother with elevated BLL while pregnant or breastfeeding
- ▶ Suspected lead exposure (**see other side for possible sources of lead exposure**)

Test At-Risk Children At 12 and 24 Months

If there is lead in their environment, crawling, teething, and hand-to-mouth behavior put them at increased risk.

Age 12 months:

- ▶ Testing allows early identification of, and intervention for, lead-exposed children.
- ▶ If 12-month BLL test is missed, catch-up testing is required up to age 24 months.

Age 24 months:

- ▶ BLLs can be increased, even if not increased at age 12 months.
- ▶ If 24-month BLL test is missed, catch-up testing is required up to age 72 months.

Children with behavioral risk factors may need ongoing testing after age 24 months (e.g., autism, autism spectrum disorder, Down's syndrome, developmental delay, and some chronic medical conditions, such as sickle cell disease).

Implement Lead Test Reminder and Tracking System

- ▶ Send patient reminders: phone, mail, email, text.
- ▶ Set automatic lead test reminder in electronic records

For free provider guidelines and patient education materials, visit www.cdph.gov/programs/clppb and click on "Health Care Providers."

¹ CLPPB RASSCLE surveillance data; 7/29/2020. Each child is counted only once during a month and deduplicated using first name, last name, date of birth, and ZIP code.

Potential Sources of Lead: Educating Families to Prevent Childhood Lead Exposure

Potential Sources of Lead	Guidance for Families
Old paint inside or outside the home (Most lead paint is in homes built before 1978)	<ul style="list-style-type: none"> ▶ Move cribs, high chairs, and playpens away from cracked or peeling paint. ▶ Do not allow children to chew on windowsills or other painted surfaces. ▶ Call local lead poisoning prevention program about testing paint for lead.
Dust on windowsills, floors, and toys	<ul style="list-style-type: none"> ▶ Wet mop floors and wet wipe windowsills and other surfaces. ▶ Wash toys often. ▶ Wash children's hands before eating and sleeping.
Dirt outside the home	<ul style="list-style-type: none"> ▶ Cover bare dirt with stones, grass, plants, or gravel. ▶ Wipe shoes or take them off BEFORE going in the house.
Drinking Water	<ul style="list-style-type: none"> ▶ For cooking or drinking, let water run until cold before using. ▶ Do not use a water crock unless it has been tested and found to be lead free.
Take-home exposure from shoes/clothing/hair if family member works around lead or performs auto repair at home	Shower and change clothes BEFORE coming home from work, if possible, and BEFORE holding children. Remove work clothes and shoes and store them in a plastic bag. Wash work clothes separately from other clothes.
Some dishes or pots that are worn or antique, from a discount or flea market, made of crystal, handmade, or made outside the USA	Call local lead poisoning prevention program for more information about testing dishes and pots for lead.
Traditional remedies, such as: <ul style="list-style-type: none"> ▶ Azarcon and Greta – orange or yellow powder ▶ Paylooaah – red powder ▶ Some Ayurvedic remedies ▶ Some traditional Chinese remedies 	Do not let anyone give “natural” or traditional remedies to your child without talking to your health care provider first.
Some traditional cosmetics and other substances applied to the skin, such as: <ul style="list-style-type: none"> ▶ Surma ▶ Kohl ▶ Sindoor 	<ul style="list-style-type: none"> ▶ Do not use these products on children. ▶ Call local lead poisoning prevention program about testing traditional cosmetics, ritual powders, and other substances applied to the skin.
Altars for religious ritual containing: <ul style="list-style-type: none"> ▶ Ritual powders ▶ Brass and some other metal, ceramic, or painted items 	<ul style="list-style-type: none"> ▶ Place altars with these types of items in areas not accessible to children. ▶ Don't let children handle or mouth these items. ▶ Use separate cleaning supplies to clean these items.
Some costume jewelry, amulets, and keys	Do not allow young children to play with, mouth or touch these items.
Some foods and spices, such as: <ul style="list-style-type: none"> ▶ Some candies (especially imported) ▶ Chapulines (grasshopper snacks) ▶ Some imported spices, such as turmeric, chili powder, Khmeli Suneli ▶ Game meat containing lead shot 	<ul style="list-style-type: none"> ▶ Be aware of foods and spices that might contain lead. ▶ Offer children meals and snacks including a variety of vegetables, fruit, legumes, seeds, nuts, whole grains, unprocessed meats, and dairy products or dairy substitutes without added sugar.
Other items, such as: <ul style="list-style-type: none"> ▶ Fishing sinkers, bullets, pellets, and solder ▶ Some art supplies and sewing chalk 	<ul style="list-style-type: none"> ▶ Keep these items away from children. ▶ Wash hands well after touching these items. ▶ Do not heat, melt, cast or file any metal items at home.
Spends time at firing ranges	<ul style="list-style-type: none"> ▶ Children who spend time at firing ranges should be tested for lead. ▶ Use lead free ammunition. ▶ Do not eat or drink at a firing range. ▶ When finished shooting, immediately wash your hands and face with soap and water. ▶ Change clothes and shoes before going home and wash those clothes separately.
Retained bullets and shrapnel	Consult with your healthcare provider about ongoing testing and monitoring.
Lives or spends time near: <ul style="list-style-type: none"> ▶ Major roadways or freeways ▶ A former or current lead or steel smelter ▶ A foundry or industrial facility that historically emitted or currently emits lead ▶ A general aviation airport used by small aircraft 	<ul style="list-style-type: none"> ▶ Tell your healthcare provider if your children live or spend time near these types of roadways or facilities. ▶ Do not let children play or spend time near these types of roadways or facilities.