Child Care Lead Poisoning Prevention

A collaborative resource for child care providers and early childhood educators

VDH VIRGINIA DEPARTMENT OF HEALTH

VIRGINIA DEPARTMENT OF EDUCATION

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Webinar Rules

- **Please remain on mute** for the duration of the presentation
- There is a lot of content to cover, so we will **not** have a live Q&A session during this webinar. You may:
  - Put your questions in the chat - they will be recorded and answered after the webinar ends

    OR
  - Email your questions to janine.kerr@vdh.virginia.gov

About This Resource

Childhood lead poisoning is considered the most preventable environmental disease among young children. Preventing exposure to lead is an important way to keep children happy, healthy, and safe in child care and education settings.

Audience: Child care providers and early education professionals.

Objective: To give you the tools and information you need to protect the young children in your care from lead.

This toolkit covers the following content areas:

- Lead Education & Tips for Preventing Lead Exposure
- Lead Safe Policy
- Resources for Lead Testing and Removal

How to Use This Resource

This resource should be used:

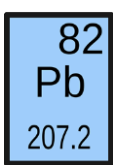
- For **onboarding** new staff.
- As an **annual** refresher training for existing staff.
- As a guide for **communicating with parents** about lead and lead exposure.

After reviewing this resource, providers will be able to…

- Understand why lead is dangerous to young children.
- Identify sources of lead in child care and early education settings.
- Describe tips for keeping child care facilities and early education settings lead safe.
- Share important lead poisoning prevention information and resources with parents and caregivers.
- Understand and adhere to Virginia lead safe policies.
- Utilize resources to help keep risk of lead exposure low.

Lead Education & Tips for Preventing Lead Exposure

What is Lead?



- A highly toxic, naturally occurring metal found in the environment
- Lead is very soft and malleable so it was historically used in many different products
- Lead paint was banned in 1978 and lead service lines were banned in 1986 (in the U.S.)
- Lead primarily enters the body through:
  - Ingestion
  - Inhalation

Why Are Young Children Most at Risk?

Childhood lead poisoning is considered the most preventable environmental disease among young children.

Young children are especially at risk because …

- They spend a lot of time on their hands and knees, crawling on the floor
- They put their hands in their mouths often
- They are rapidly growing and developing
- The bodies of young children absorb lead at a faster rate than the bodies of adults

You can learn more about the populations at higher risk of lead poisoning here. But remember, **all children can be exposed to lead and harmed by lead**.

Negative Health Impacts of Lead Exposure

How is exposure to lead dangerous for young children?

Exposure to lead can cause…

- Slowed growth and development
- Learning and behavior problems
- Hearing and speech problems
- Damage to the brain and nervous system

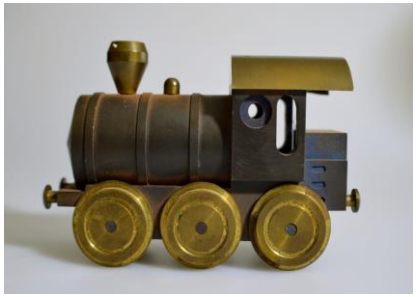
These health issues can lead to…

- Decreased IQ over time
- Inability to pay attention
- Decreased performance in school
- Increased aggressive behavior

Sources of Lead

There are many different **sources of lead,** but some of the most common are:

- Chipping and peeling paint (in homes built before 1978)
- Water from pipes and plumbing containing lead
- Lead-contaminated soil
- Imported or antique toys
- Imported candy
- Ceramics and pottery
- Traditional folk medicines and cosmetics



Blood Lead Testing

Most children that are exposed to lead don't show any signs or symptoms that they are sick. The best way to know for sure if a child has been exposed to lead is with a blood lead test.

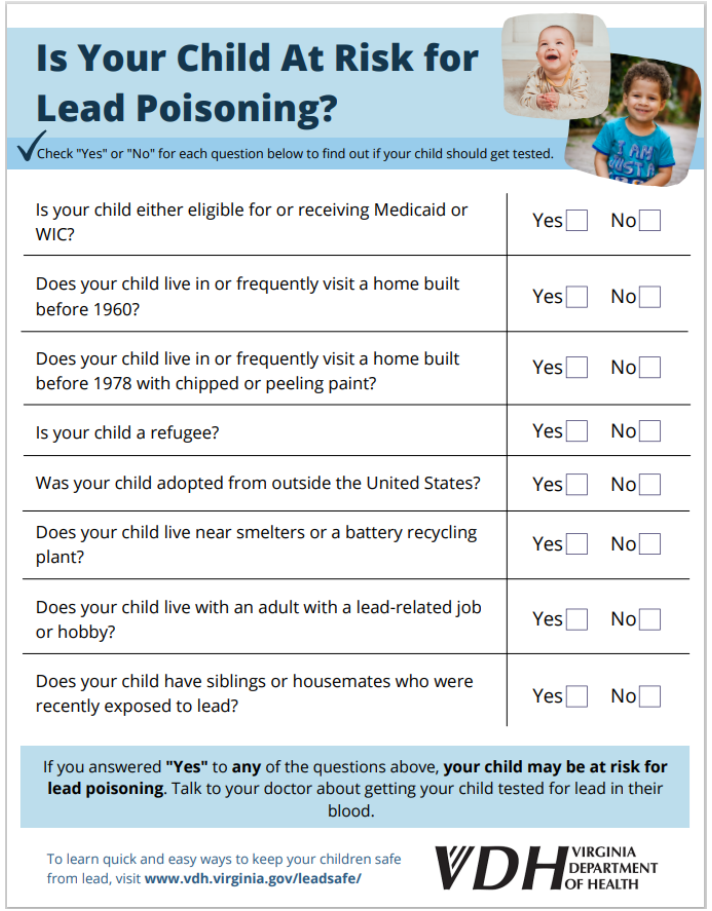
Every child that falls under any of the risk criteria listed below must get a blood lead test **at ages 1 & 2, or up to 6 years of age** if they have not yet received a blood lead test.

1. Is eligible for or receiving Medicaid or WIC
2. Lives in housing or attends a childcare facility built pre-1960
3. Lives in housing build pre-1978 with evidence of deteriorating paint or undergoing renovations
4. Lives in or visits housing where another person has evidence of lead exposure
5. Spends time with an adult whose job/hobby involves lead exposure
6. Lives near an active lead industrial site
7. Has a parent or guardian who requests testing
8. Is a recent refugee, immigrant, or adoptee from outside US

Blood Lead Testing Cont.

How can I help make sure the children in my care are getting blood lead tests?

- Give parents the VDH Lead Safe Lead Risk Checklist so they can determine if their child should get a blood lead test.
- Hand out or send parents VDH Lead Safe educational materials about lead and why blood lead testing is important.
- Explain that a blood lead test is the best way to know for sure if their child has been exposed to lead.



Is Your Child At Risk for Lead Poisoning?

Check "Yes" or "No" for each question below to find out if your child should get tested.

Is your child either eligible for or receiving Medicaid or WIC?	Yes ☐ No ☐
Does your child live in or frequently visit a home built before 1960?	Yes ☐ No ☐
Does your child live in or frequently visit a home built before 1978 with chipped or peeling paint?	Yes ☐ No ☐
Is your child a refugee?	Yes ☐ No ☐
Was your child adopted from outside the United States?	Yes ☐ No ☐
Does your child live near smelters or a battery recycling plant?	Yes ☐ No ☐
Does your child live with an adult with a lead-related job or hobby?	Yes ☐ No ☐
Does your child have siblings or housemates who were recently exposed to lead?	Yes ☐ No ☐

If you answered **"Yes"** to **any** of the questions above, **your child may be at risk for lead poisoning**. Talk to your doctor about getting your child tested for lead in their blood.

To learn quick and easy ways to keep your children safe from lead, visit **www.vdh.virginia.gov/leadsafe/**

VDH VIRGINIA DEPARTMENT OF HEALTH

Lead Poisoning Prevention

The good news is, there are also **simple and effective steps you can take** to prevent children from being exposed to lead.

Perform these simple tasks to reduce the risk of children being exposed to lead in your facility:

1. CLEAN
2. EDUCATE
3. INSPECT & ADDRESS

Lead Poisoning Prevention

1 CLEAN

- Wash toys often.
- Make sure all children wash their hands before eating.
- Wipe down counters, tables, and food preparation areas daily.
- Wet-wipe and wet-mop floors, baseboards, windowsills, and entryways weekly.

Lead Poisoning Prevention

2 EDUCATE

- Show young children how to wash their hands well.
- Encourage **good nutrition.**
- **Encourage parents to take their children to get a blood lead test at ages 1 & 2.**
- Share lead poisoning prevention education with parents and caregivers.

Nutrition & Lead

- **Nutrition** is one of the ways to protect children from the harmful effects of lead.
- A nutrient dense diet full of **iron**, **calcium**, and **vitamin c** can prevent lead from being absorbed in the body.
- **Avoid giving out imported candies - these may contain lead.**

Sources of Calcium

- Milk and yogurt
- Cheese
- Tofu
- Dark, leafy vegetables like kale and spinach

Sources of Vitamin C

- Citrus fruits (oranges, lemons, limes, grapefruit)
- Kiwis and melons
- Berries
- Broccoli and brussel sprouts

Sources of Iron

- Lean red meats
- Legumes (beans and lentils)
- Whole grains
- Fish, chicken, turkey

Lead Poisoning Prevention

3 INSPECT & ADDRESS

- Check often for chipping and peeling paint if your home or facility was built pre-1978.
  - If you find any, develop a plan to safely repair it.
- Move cribs and furniture away from possible sources of lead.
- Have your water tested for lead (more on this later).
  - In the meantime, flush pipes for 60 seconds before using water, and use only cold water for cooking and drinking.
  - Avoid using hot water from the tap for mixing infant formula.
- Have the paint and soil in and around your home or facility tested for lead by a certified lead inspector.

Lead Safe Policy

Early Childhood Care and Education:
Head Start Blood Lead Testing Requirement

- Head Start is a federally funded early childhood care and education program option that serves the most vulnerable children and families.
- Head Start programs currently follow the lead screening requirement under the **EPSDT program of the Centers for Medicare and Medicaid Services** that **requires** **all children to receive a screening blood lead test at 12 months and 24 months of age.**
- **Children between the ages of 36 months and 72 months of age must receive a screening blood lead test if they have not been previously screened for lead poisoning.**
- Lead safe policy is also incorporated into the federal Head Start Program Performance Standard **45CFR 1302.42d** that all programs must adhere to when implementing program operations.

Early Childhood Care and Education:
Head Start Blood Lead Testing Requirement

What strategies can be utilized to meet the Head Start Lead Safe Requirement?

- Build partnerships with local Health Care facilities.
- Work with your Head Start Health Advisory Committee to organize outreach to primary care physicians.
- Access resources available on the early childhood learning and knowledge center website specific to **Lead Poisoning Prevention.**
- Programs may also purchase lead screening equipment for students to be tested onsite.

Early Childhood Care and Education:

Statutes and Standards for Lead Safety

There are standards and statutes in place for child care programs to help reduce the risk of children being exposed to lead in child care settings.

- **Licensed Child Day Centers, Licensed Family Day Homes and Subsidy Vendors:** The standards **require** that areas and equipment of the child day program, inside and outside, are maintained in a clean, safe and operable condition. Unsafe conditions include chipped or peeling paint. Additional identified unsafe conditions can be found in the standards for each program. (8VAC20-780-270 A, 8VAC20-800-240 A, 8VAC20-790-630 A and 8VAC20-790-260 A)

- **Licensed Family Day Homes:** The standards also **require** that equipment and materials used by children be clean, nontoxic, and free from hazards such as lead paint, sharp edges or points, loose parts, and rust. (8VAC20-800-480 E)

Early Childhood Care and Education:
Statutes and Standards for Lead Safety Cont.

- **Voluntarily Registered Family Day Homes:** The standards **require** that the home is in good repair with no peeling lead paint. (8VAC20-850-110 C)

- **Licensed Child Day Programs and any Program Described in Subdivision A 4, B 1, or B 5 of § 22.1-289.030 that Serves Preschool-Age Children:** The Code of Virginia **requires** these programs to **develop and implement a plan to test potable water for lead** from sources identified by the U.S. Environmental Protection Agency as high priority, or instead use bottled water, water coolers or a similar water source that meets the U.S. Food and Drug Administration standards for bottled water. The plan and test results, or the decision to use bottled water must be submitted and reviewed by the Department of Health's Office of Drinking Water. (§ 22.1-289.057)

Resources for Lead Testing & Removal

For Parents & Providers

Lead Risk Assessment

What is a risk assessment?

An on-site investigation by a licensed risk assessor to determine if there are lead hazards present at your location. Lead hazards include any possible lead in the paint, dust, and soil.

The EPA maintains a list of all EPA-certified Inspection, Risk Assessment, and Abatement Firms. Use their look-up tool to find a certified firm near your location.

- **EPA Lookup Tool | Locate Certified Inspection, Risk Assessment, and Abatement Firms**

*Please note most risk assessments do **not** include water testing. The next few slides have information on methods for getting your water tested for unsafe levels of lead.*

Lead in Drinking Water

Despite significant efforts to reduce lead in drinking water, there are still many lead service lines in place today.

There are different options for finding out if there are unsafe levels of lead in your water depending on your water source.

Types of Water Systems

Public Water Systems (PWS):

- Community Water System
- Non-Transient Non-Community
- Transient Non-Community

Private Water Systems

- Private wells

Public Water Systems: Lead Rules and Regulations

- **Safe Drinking Water Act:** Established to protect the quality of drinking water in the U.S.
  - Allows the EPA to establish standards to protect tap water and requires all owners and operators of PWS to comply with said standards
- **Lead and Copper Rule (LCR):** Established to control lead and copper in drinking water.
  - The LCR requires systems to monitor drinking water and provide **action** and **education** if lead and copper concentrations exceed the LCR action level.
  - The LCR applies to all **community** water systems and **non-transient non-community** water systems
  - The LCR is a protective approach to identifying problems in an entire water system, not necessarily at single specific location
- **EPA 3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities**
  - Not a regulation, but rather a recommended framework for implementing a voluntary water testing program to reduce lead in drinking water

Public Water System: Community Water System

- *A public water system (PWS) that serves the same people year-round. Most residences (including homes, apartments, and condominiums in cities, small towns, and mobile home parks) are served by Community Water Systems.*
- **Consumer Confidence Reports (CCRs)**
  - The EPA requires community water suppliers to test water quality regularly. The results of these water quality tests can be found in CCRs, provided annually
  - Ask your water supplier (or landlord, if you live in an apartment building) for a copy of the CCR for your address
  - Understanding Your CCR

Visit the VDH Office of Drinking Water page or the CDC Consumer Confidence Report page for information about community water quality testing. The VDH Office of Drinking Water is Virginia's regulatory body for safe drinking water.

Public Water System: Non-Transient Non-Community Water System

- *A public water system that regularly supplies water to at least 25 of the same people at least six months per year. A school with its own water supply is considered a non-transient system.*
- **Healthy Babies, Bright Futures Water Testing Kits:**

Healthy Babies, Bright Futures is partnered with VA Tech to provide at-cost drinking water testing kits and high quality laboratory analysis of the water samples.

Find out if there is toxic lead in your drinking water. Healthy Babies, Bright Futures will:

1. Send you a test kit and return mailer to send your water back to the lab.
2. Provide you with detailed results based on high quality laboratory analysis at Virginia Tech.
3. Give you a clear set of customized actions you can take to reduce exposure.

Get your test kit here: Order Your Lead in Water Test Kit

Private Water System

- *Private water systems are those that serve no more than 25 people at least 60 days of the year and have no more than 15 service connections (varies by state). Most private water systems use groundwater wells.*
- EPA regulations that protect public drinking water systems **do not apply** to privately owned wells. As a result, owners of individual water systems are responsible for ensuring that their water is safe from contaminants, including lead.

Some Water Testing Options:

- Healthy Babies Bright Futures
- Virginia Household Water Quality Program (next slide)

Private Water System

- **Well Water Testing: Drinking Water Clinics**

The Virginia Household Water Quality Program hosts drinking water clinics across the state. These clinics:

1. Inform citizens of the water quality issues in the area
2. Distribute **reduced cost** water sampling kits
3. Demonstrate how to correctly collect water samples at your location.

Collected water samples are sent to VA Tech for analysis and results are sent to the homeowner. An interpretation meeting is held at the end of the clinic to walk residents through their water quality results and what follow up actions are needed. **Find a clinic happening near you:** Drinking Water Clinic Schedule

The VAHWQ Program tests for other contaminants in addition to lead, including bacteria and nitrate.

If there is no clinic happening near you, you may visit this list of private certified water testing labs or contact Erin Ling at ejames@vt.edu to submit water samples for testing and analysis.

Lead in Drinking Water Testing Resources

VDH Office of Drinking Water Lead Testing in Drinking Water Program
(Funded by the EPA Water Infrastructure Improvement for the Nation (WIIN) act)

For:

- Public PreK-12 schools
- Licensed child care programs

Enrollment to this program is **FREE**. Selection of facilities to the program will be based on the EPA recommended priority criteria where priority will be given to facilities that serve children 6 years or under, have buildings older than 1988, and are on meal plan (50% or higher).

The Virginia Department of Health (VDH) Office of Drinking Water (ODW) and its partners will **assist you and provide all materials and logistics** for your Lead Testing under US EPA's Lead Testing Grant.

Lead in Drinking Water Testing Resources

VDH Office of Drinking Water Lead Testing in Drinking Water Program
(Funded by the EPA Water Infrastructure Improvement for the Nation (WIIN) act)

This program involves six stages;

(1) Enrollment to the program
(2) Selection of Schools and Child Care facilities
(3) Prepare and Submit Lead Sampling Plans
(4) Conduct Testing
(5) Report Results
(6) Remediation Conducted

Enroll on the program website.

For additional information or questions about the program please contact:

Kendall Scott
Lead Testing Program Supervisor
(804) 316 - 2136
kendall.scott@vdh.virginia.gov

POU Water Filtration Devices

A lower cost option for reducing the risk of lead exposure via water.

Some facilities may not have the time or resources to undergo lead service line replacement. POU water filtration systems are a more budget friendly option that can still reduce the risk of lead exposure from water.

- Point-of-use water filtration devices are used to remove impurities, including lead, from water at the *point of use* (a faucet, refrigerator, pitcher, or water bottle)
- Research suggests that POU filters can be very effective at removing lead from drinking water.
- The EPA created a **Consumer Tool for Identifying Point of Use (POU) Drinking Water Filters Certified to Reduce Lead.**
- The NSF Public Health and Safety Organization has a guide of **Certified Product Listings for Lead Reduction** water filters.

DHCD Lead Hazard Reduction Program

DHCD has a free lead-based paint remediation program for pre-1978 homes

Program Eligibility:

- Residents must be at or below 80% Area Median Income
- Available for renters and homeowners; owner-occupied homes must have a child under age six living in or visiting the home often

Eligibility calculator: https://dmz1.dhcd.virginia.gov/LHREligibility/

Online referral form: https://dmz1.dhcd.virginia.gov/C4P/LHRP/Create

Program Process:

1. Completed Application
2. Lead Inspection/Risk Assessment
3. Scope of Work Created
4. Project Bid to Lead Abatement Contractor
5. Family Relocated for up to 10 Days
6. Lead Remediation Work Begins
7. Home Passes Clearance Testing
8. Family Moves Back In

Staff Talking Points for Concerned Parents

Childhood lead poisoning can be a scary and stressful topic for parents and caregivers. Here are some talking points for communicating with parents and caregivers about lead safety in your facility.

- **Know the age of the building.** If it was built before 1978, there is a high chance there is lead paint present.
  - If it was built before 1986, there is a chance there are lead service lines
- If the building has been safely and properly treated to remove lead hazards, **share the treatment history with parents.**
- If the building has received no formal risk assessment or treatment, check for deteriorating paint on walls, windowsills, and high friction areas (doorways, windows).
  - If deterioration is discovered, create a plan to safely repair the area.
  - **Share** the treatment plan with parents, including: intent to remove children from the area while work is conducted, the repair schedule, the reason for repair, etc.
- **If lead is found in your facility**, communicate with parents what the facility is going to do to safely remove the lead hazard. Sample communication for parents can be found in the toolkit resources.

Child Care & Lead Poisoning Prevention Resource Toolkit

Access the toolkit here: **VDH | Child Care Centers**

Toolkit contents:

- Webinar recording (to be added after the webinar ends)
- Webinar slide deck (to be added after the webinar ends)
- General lead safety resources
- Sample communication plan for conducting lead hazard testing at your child care location
- Resources for educating parents on blood lead testing and lead poisoning prevention
- Lead-in-water safety resources

Resources for Additional Information

CDC

- Information about sources of lead: CDC | Sources of Lead
- Information about the health impacts of lead exposure: CDC | Health Impacts
- Proper handwashing guidance and promotion material: CDC | Handwashing Health Promotion
- Information about blood lead testing: CDC | Blood Lead Levels in Children

VDH Childhood Lead Poisoning Prevention Program

- **Virginia Department of Health lead prevention in child care centers: VDH | Child Care Centers**
- Virginia Department of Health lead poisoning prevention educational materials: VDH | Lead Safe Educational Materials
- Virginia Department of Health Childhood Lead Poisoning Prevention Program: VDH | Lead Safe Virginia

Resources for Additional Information

Other

- Consumer Product Safety Commission list of recalls: CPSC | Recalls
- Certified Lead Inspector EPA Lookup Tool: EPA | Locate Certified Inspection, Risk Assessment, and Abatement Firms
- National Center on Early Childhood and Wellness: Lead Screening Well-Care Health Care Fact Sheet
- Lead Safe Renovation, Repair, and Painting: EPA | RRP Program
- EPA POU Water Filtration Devices: EPA | A Consumer Tool for Identifying Point of Use (POU) Drinking Water Filters Certified to Reduce Lead
- For any questions about private water sampling and testing, or to submit a water sample for testing, contact Erin Ling with the Virginia Household Water Quality Program at ejames@vt.edu

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