## Understanding Lead

National Lead Poisoning Prevention Week

October 22, 2024



#### National Lead Poisoning Prevention Week

- Call to bring together individuals, organizations, industry and Tribal, state and local governments to reduce childhood lead exposure by increasing lead poisoning prevention awareness.
- October is National Children's Health Month: <u>epa.gov/children/childrens-health-month</u>
- Visit <u>epa.gov/lead/nlppw</u> for outreach materials, webinar registration & more.





#### **Outline**

- Potential Sources of Lead Exposure
- Vulnerable Populations
- Impacts and Effects of Lead Exposure
- Taking Action





http://mfritz8science.wikispaces.com/file/view/lead\_1.jpg/262242078/lead\_1.jpg

#### What is Lead?

- Bluish-gray metal found in small amounts in the earth's crust.
- Impossible to identify with the naked eye.
- Does not biodegrade or disappear from the environment over time.

## Where do you think lead can be found?



#### Found in older homes built before 1978.

- Major source of exposure when not maintained.
  - i.e., peeling, chipping, cracking
- Chips and dust can scatter and become a hazard, which can be breathed in or swallowed by children, residents and workers.
- Renovation, repair, or remodeling projects in a pre-1978 home can easily create dangerous lead dust.

#### Leadbased Paint

- Painted farm equipment and boats
- Imported pottery, candles, older mini blinds
- Toys
- Ceramicware
- Solder
- Batteries
- Ammunition
- Fishing tackle
- Old cellphones in disrepair
- Cosmetics



Photo by Randy Fath on Unsplash



Imported pottery from Mexico



Toy Recall from https://www.cpsc.gov/Recalls/2007/rc2-corp-recalls-various-thomas-friends-wooden-railway-toys-due-to-lead-poisoning

 Lead can enter drinking water when plumbing materials that contain lead corrode.



Lead pipes



**Faucets** 

- Lead can enter soil
- Lead in soil can:
  - Settle on or be absorbed by plants
  - Get tracked into the house on the bottom of shoes
  - Be inhaled if resuspended in the air



Use raised garden beds

- Imported materials
  - Spices
  - Pottery
- Ammunition and fishing tackle



Let's review: What are some sources of exposure to lead?

#### **Vulnerable Populations**



Children under age 6



Adults
through jobs,
hobbies or
cultural
practices



Pregnant and nursing people

#### **Vulnerable Populations**



Children under age 6



## Health Effects: Children

- Behavior and learning problems
- Lower IQ and hyperactivity
- Slowed growth
- Hearing problems
- Anemia

#### **Vulnerable Populations**



Adults through jobs, hobbies or cultural practices



## Health Effects: Adults

- Increased blood pressure and incidence of hypertension
- Decreased kidney function
- Reproductive problems (in both men and women)

#### **Vulnerable Populations**



Pregnant and nursing people



Health
Effects:
Pregnant
People

- Lead can pass from the parent, exposing the fetus or breastfeeding infant.
- Puts the parent at risk for miscarriage.
- Baby may be born too early or too small.
- Hurts the baby's brain, kidneys and nervous system.



## Health Effects: Wildlife

- Lead can also impact wildlife species, such as birds, mammals and amphibians.
- Animals can be exposed to lead from mining, facility emissions and leadbased paint.

#### **Taking Action**

Lead exposure and lead poisoning is preventable!





#### Keep Homes Clean & Dust-Free

- Wet mop floors and hard surfaces.
- Wipe down hard surfaces with a wet cloth.
- Inspect and maintain painted surfaces.
- Wet wipe peeling, chipping, chalking or cracking paint.



#### Eat a Diet High in Iron, Calcium & Vitamin C

- Wash food thoroughly with clean water prior to eating.
- Do not eat food or drink water cooked or stored in chipped or cracked leadcrystal, lead-glazed pottery or leadporcelain cookware.



#### Wash Hands

- Use soap and water (warm or cold) to wash children's hands several times a day.
- Adults should wash their hands after participating in activities in which they may have come in contact with lead.



#### Play in Grass

- Play in grassy/non-contaminated bare soil areas.
- Use designated picnic, camping & hiking areas.
- Wipe, remove shoes and wash hands after playing outdoors.
- Wipe off pet's paws.
- Place dust mats inside and outside your home.



#### Hire Certified Lead Professionals

- Hire a certified lead professional for renovation and repair work on pre-1978 homes.
  - www.epa.gov/lead/findacontractor
- Or use do-it-yourself (DIY) lead-safe work practices to keep yourself and others safe
  - www.epa.gov/lead/rrp-diyers



### Shower & Change

- Clean or remove work clothes and shoes before entering your home.
- Wash work clothes separately.
- Shower after activities in which you may have been exposed to lead.



## Wash Toys, Pacifiers & Bottles

- Wash children's pacifiers, bottles, and toys, like stuffed animals, often.
- Do not let children chew on painted toys, window sills or other painted surfaces.



#### Run Your Water

- Before drinking, flush your home's pipes by running the tap, taking a shower, doing laundry or washing dishes
- Use a water filter that is certified to remove lead
- Clean faucet screens regularly



#### Run Your Water

- Contact your water utility or a licensed plumber to:
  - Determine if the pipe that connects your home to the water main (service line) is made from lead
    - www.epa.gov/protectyourtap
  - Test your water for lead
  - Learn about lead levels in your drinking water



#### Getting Your Child Tested

- Lead exposure often occurs with no obvious symptoms
- A blood test is the only way to know if a child has lead in their blood
- Testing is generally recommended at ages 1 and 2

## Which of these actions do you think you will start using?

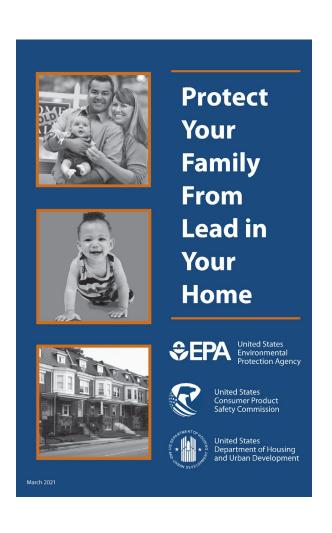


# Protect Your Family

#### Before You Buy or Rent

 Before signing a lease or contract, homebuyers and renters have the right to know whether lead is present.

#### Federal Law Requires Buyers & Renters Receive



- A copy of the Protect Your Family From Lead in Your Home pamphlet
- Any information about the presence of lead-based paint and/or lead-based paint hazards
- Disclosure of information in or attached to the contract/lease

Submit complaints to EPA at 1-800-424-5323



#### Conclusion

- We discussed:
  - Potential sources of lead exposure.
  - How lead harms children and adults.
  - Lead's impacts on the environment and wildlife.
  - Actions that can be taken to prevent potential lead exposure.

What questions do you have about the information we covered today?

## National Lead Information Center 1 (800) 424-LEAD [5323]

- Ask for information about lead, lead hazards and lead exposure prevention.
- Monday to Friday, 8:00 am to 6:00 pm ET (except federal holidays).
- Hearing- or speech-challenged individuals may access this number through TTY by calling the Federal Relay Service at 1-800-877-8339.

#### Thank You!

#### Bright futures begin lead-free

#### For more information, you can contact:

- Chloe Durand, <u>durand.chloe@epa.gov</u>
- Elliott Smith, <u>smith.elliott@epa.gov</u>

#### Visit us online at:

- www.epa.gov/lead
- https://espanol.epa.gov/plomo