Lead 101

SCHOOL OF PUBLIC HEALTH
CHILDREN'S ENVIRONMENTAL HEALTH CENTER
UNIVERSITY OF MICHIGAN

Healthy Homes
Coalition of West Michigan

Who am I?

Getting to know you!

- Verify contact information
- What do you want to know?

Today's Goals

Our goal today is to be proactive.
We can't change the past, but we can change the future.

Part I: What is lead?

Part II Where is lead?

Part III: What can you do about it?

Part I :

What is lead?

What is lead and where does it exist?

- Naturally occurring metal
- Remains in the environment for long periods
  - Used in house paints (pre-1978) and gasoline (pre-1986)
  - Also found in pipes, pottery, fishing weights, and ammunition

What is lead poisoning?

- Lead poisoning occurs when lead builds up in the body through swallowing or breathing in lead

- **Young children are most vulnerable**
  - They play on the ground/floor
  - May come into contact with lead in the soil or dust

Children love to play and explore

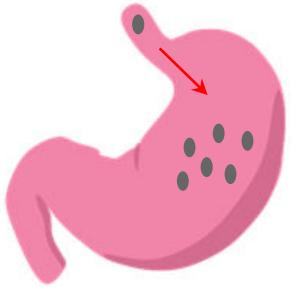
These behaviors are good, however….

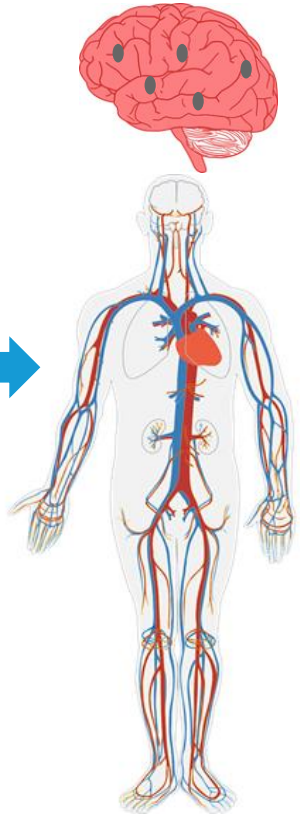
these typical behaviors may expose children to lead

Sweet’n Low

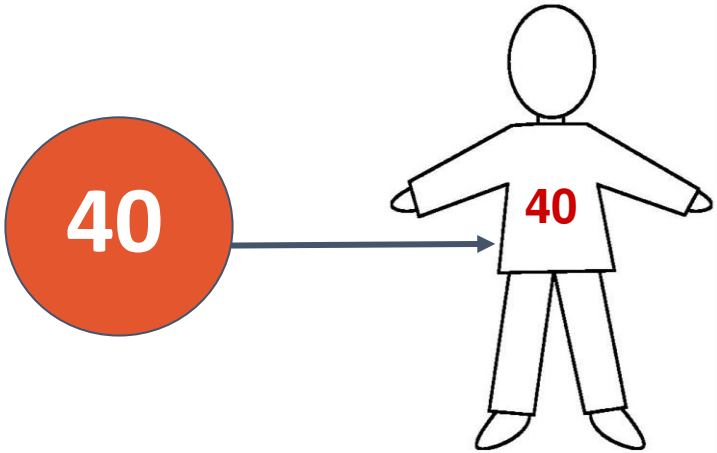
- **One** gram = **One million** micrograms
- Experts agree that one square foot of a floor is hazardous when lead dust exceeds **ten** micrograms.
- **One** gram of lead dust can make **100,000** square feet hazardous.
- The typical US house is **2,700** square feet.
- **One gram of lead dust is enough to make all the floors in 37 US homes hazardous.**

Pathway to the Brain

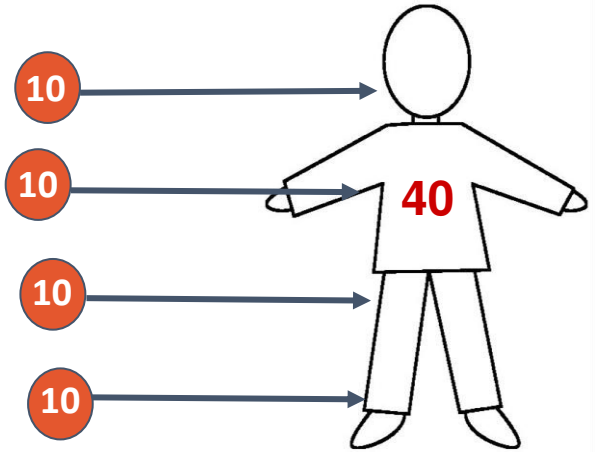




Exposure to large amounts of lead is rare



Exposure to small amounts over a long time is common and just as dangerous

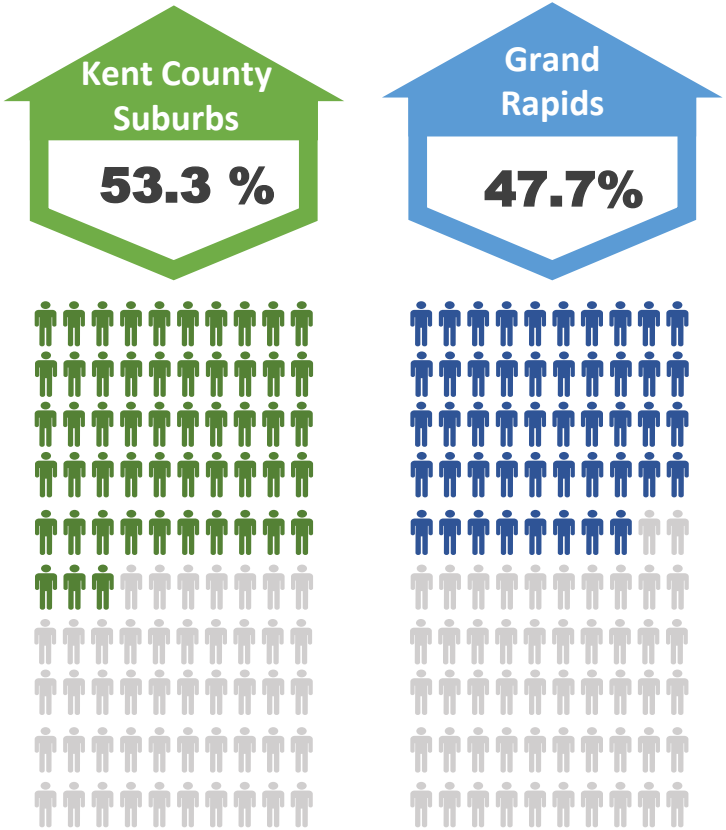


High Risk Zip Codes

High risk areas for childhood lead poisoning in **Grand Rapids** include:

- 49504
- 49503
- 49507

Percent of children < 6 years old in Kent County screened for blood lead 2010-2015



Who is at the Greatest Risk?

Infants and Children

Hands and objects frequently placed into mouth

Children play and crawl on the ground and floor

Developing brains and nervous systems more sensitive to damaging effects of lead

Children's growing bodies absorb more lead than adults

Exposure to Lead Can Seriously Harm a Child's Health

Damage to brain and nervous system

Learning and behavior problems

Slow growth and developmental delays

Hearing and speech problems

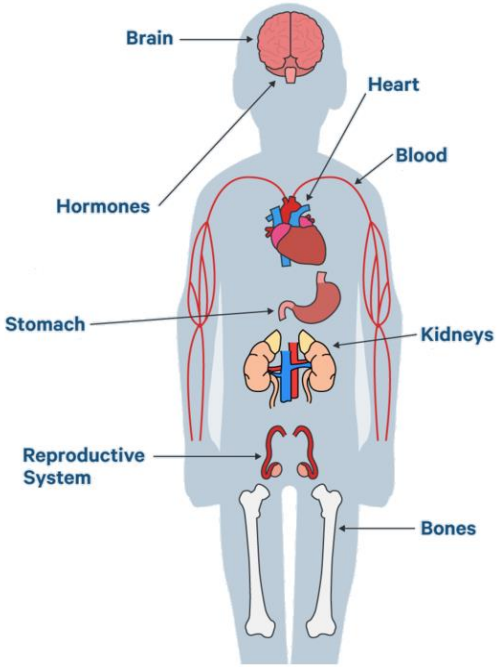
Potential effects/outcomes of lead poisoning

Prenatal Exposure(refer to Tab 6):

- Premature birth
- Lower birth weight
- Slowed physical growth
- Impaired brain development

Childhood Exposure:

- Developmental delays
- Learning difficulties
- Seizures
- Irritability or fatigue
- Loss of appetite, vomiting, weight loss
- Abdominal pain
- Constipation
- Hearing loss
- Eating non-food items



Unfortunately, lead has been in the news a lot lately

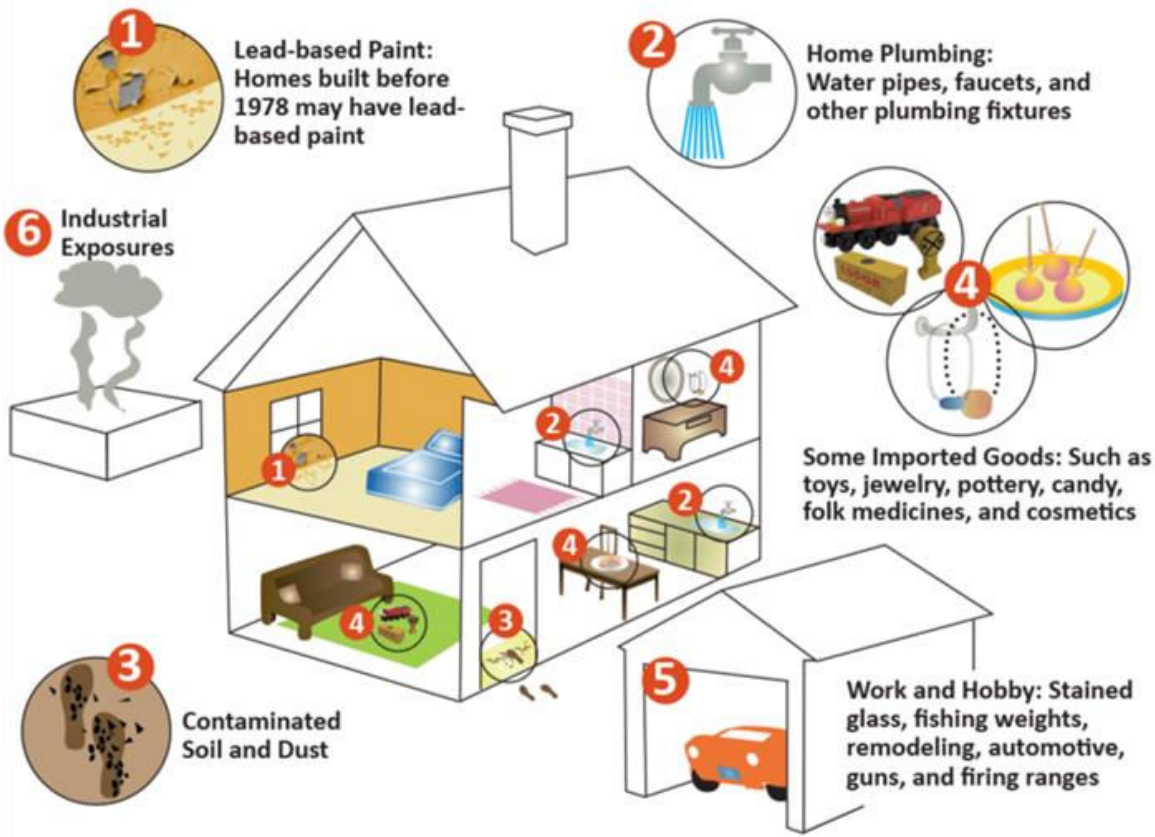
But remember...

Lead can be in more than just the water!

Part II :

Where is lead?

Let’s do a walkthrough!



Dust

- **Household dust may contain lead from:**
  - Deteriorating lead paint
  - Home repair activities
  - Tracking from the outdoors
  - Lead dust on clothing

- **Limit lead dust in your home by:**
  - Repair sources
  - Cleaning often
  - Removing paint chips
  - Not wearing shoes indoors

Paint

- Older homes (built before 1978) are more likely to contain lead-based paint
  - Paint may chip from window sills, door frames, and porches
- Promptly remove paint chips or cover damaged paint until repairs can be made

Soil

- Exterior lead paint, leaded gas, and industrial sources contaminate soil
- Lead exposure can be mitigated by:
  - Washing hands after outdoor play
  - Not wearing shoes indoors

Part III :

What can YOU do?

Ways to reduce risk & exposure

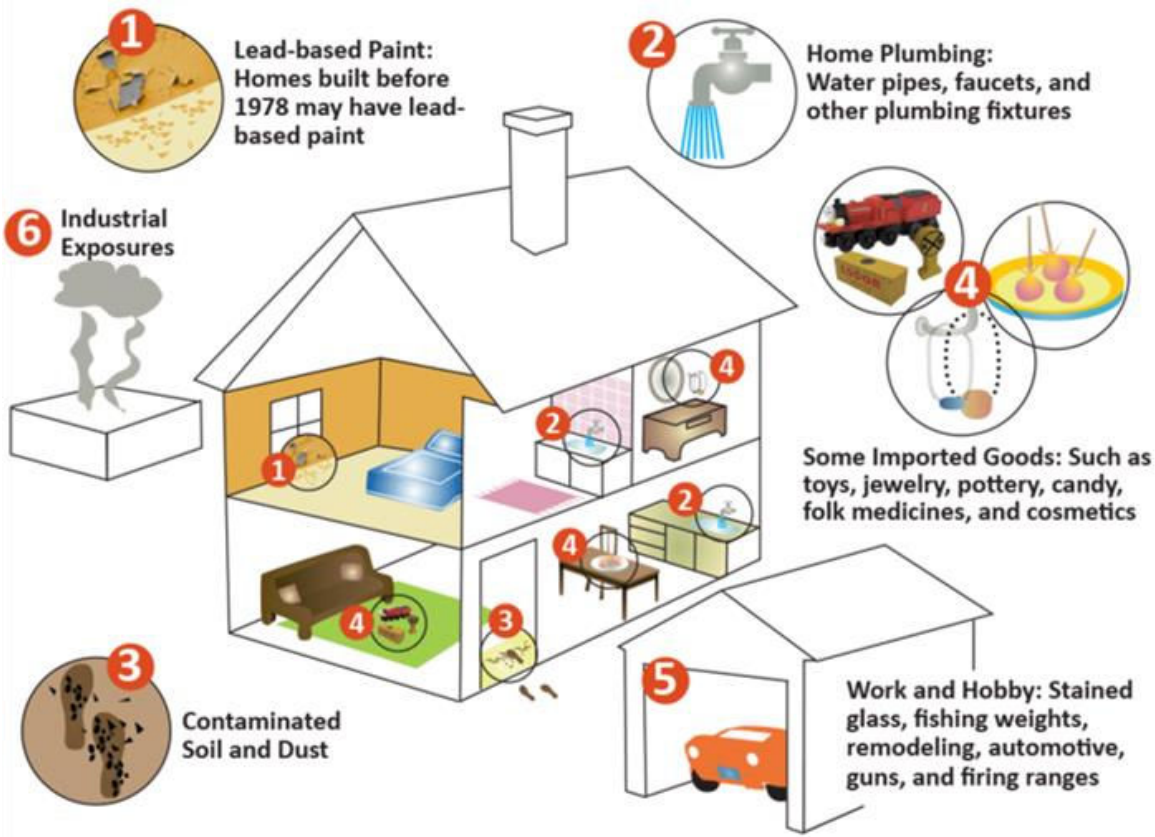
How can I assess hazards in the home?

- Types of assessments:
  - Visual assessment
  - Dust & soil samples ($$)
  - LIRA ($$$)

Helpful resources:

- ***MDHHS Is Your Child Safe From Lead Poisoning?***
- **List of state-certified inspectors/assessors-MDHHS website**
- ***MDHHS* What to Expect from a Lead Inspection**

Let’s do a walkthrough!



Water

- Run water before using
- Clean the aerator
  - ***How to clean aerator*** **handout**
- Filter
  - Cheaper than testing
  - ***Where to get water filter*** **handout**

Where else does lead exist?

How can I address home hazards?

Lead-Safe Cleaning Demonstrations

Shoes Off at the Door Policy

What strategies could you use?

Low-cost solutions

- Duct tape and contact paper
- Close the door
- Plant grass and apply mulch
- Put couch in front of lead hazards
- Don’t open windows with chipping paint

What methods could you use?

Repairing Lead Hazards

- Go over binder resources
  - *Get the Lead Out!*
  - RRP-certified contractors
  - DIY = LSWP
- Screen for GTLO eligibility (Intake form)

What will you most likely do?

How can I test my child for lead?

How can I test my child for lead?

- **Where can I get my child tested?**
  - Primary care provider
    - Ask your primary care provider to test if they haven't
  - WIC
  - Kent County Health Department can help

- **When to test?**
  - See *MDHHS Provider Quick Reference* handout

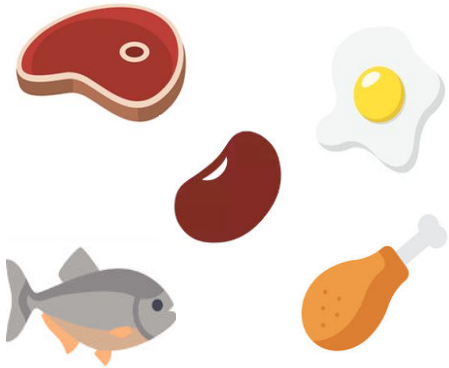
- **What do the test results mean?**
  - *See MDHHS What Your Child's Blood Test Means* handout

How else can I reduce lead poisoning risks?

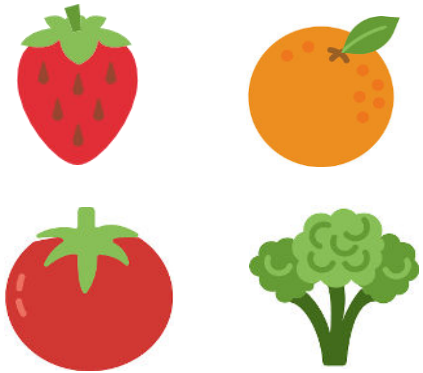
Limit lead absorption by eating foods high in:

Calcium

Iron



Vitamin C



Reduce the impact of lead poisoning through nurturing

- Positive childhood experiences stimulate your child's brain development
- Limit the effects of lead through:
  - Reading with your child every day
  - Engaging in learning activities
  - Promoting social skills
  - Preschool high-quality, state-licensed

QUESTIONS?

Go back to Resource Binder

www.healthyhomescoalition.org/PeerEdLead

Collect Demographics

Parent Post Home Visit Survey