

## Lead Poisoning Prevention in Missouri

Missouri Department of Health  
& Senior Services  
Bureau of Environmental Epidemiology

Cathy Wood, MPH

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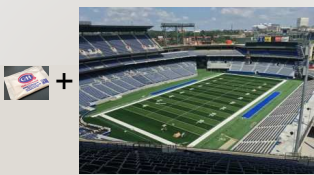
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### Picture this...



- **5** mcg/dL is considered elevated
  - EBL: Elevated Blood Lead Level
- A real threat
- **NOT** a thing of the past

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### Prevent Childhood Lead Poisoning

#### The Impact

**535,000**  
U.S. children ages 1 to 5 years have blood lead levels high enough to damage their health.

**24 million**  
homes in the U.S. contain deteriorated lead-based paint and elevated levels of lead-contaminated house dust.  
**4 million** of these are home to young children.

It can cost  
**\$5,600**  
in medical and special education costs for each seriously lead-poisoned child.

 Visit [www.cdc.gov/nceh/lead](http://www.cdc.gov/nceh/lead) to learn more.

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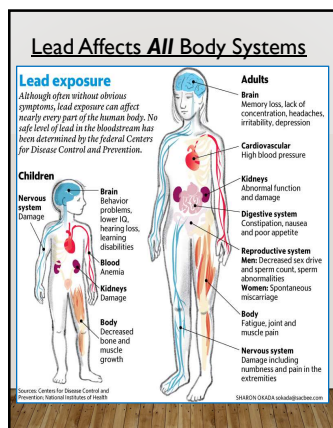
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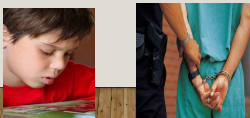
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**Neurological:**

- IQ is lowered
- ADHD
- Hearing and speech impairment
- Balance is disrupted
- Impaired peripheral nerve function
- Developmental delay
- Learning disabilities
- Behavioral disorders and increased aggression
- Encephalopathy, ataxia, coma, stupor
- Convulsions, hyper irritability, and death




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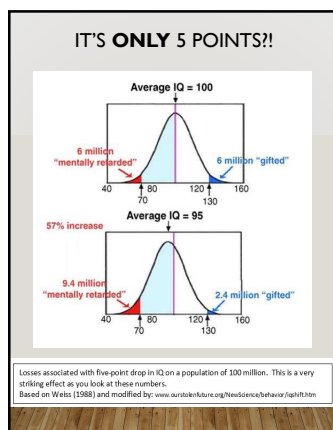
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### WHY CHILDREN UNDER 6?



Young children and infants are growing and developing quickly and can absorb a very high percentage of lead if ingested.

Due to increased hand to mouth behaviors at ages 6 months to 3 years, this is an especially likely time for a child to ingest lead and become lead poisoned.



Also consider: Teething, thumb sucking, nail biting, atypical eating disorders such as pica.

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### Preventative Steps

- ✓ Eat a nutritious diet high in iron, calcium, zinc, and Vitamin C.
- ✓ Take vitamins or iron supplements if ordered.
- ✓ Frequent washing of hands and toys.





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### Child has an EBL, now what?

Depends on factors such as:

- Age
- Blood lead level
- County of residence
- Medicaid status
- Suspected or known lead exposure source



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Isn't lead testing in children routine?

**NO**

In 2019:

- <19% of MO children under 72 months of age, received a blood lead test.
- Roughly 25% of 12 & 24 month old children enrolled in Medicaid, received a blood lead test.
- Testing is as low as 7% in some counties

Important to fill in the gaps!




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What can you do?

- Encourage blood lead testing in children under the age of 6 😊
- Ask for lead testing documentation at enrollment and annually 😊
- Provide information to families 😊
- Add lead history to childcare health forms 😊

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First Steps is Missouri's Early Intervention system

- provides services to families with children, birth to three years of age, with disabilities or developmental delays.
- designed to meet the needs of families related to enhancing their child's development, learning, and participation in family and community life.
- children **under 36 months** with a **VENOUS** lead level of **10 mcg/dL or greater** may qualify.

For more information, visit: [dese.mo.gov/special-education/first-steps/contact-information](https://dese.mo.gov/special-education/first-steps/contact-information). To make a referral, call 1-866-583-2392 or visit: [www.mofirststeps.com/](http://www.mofirststeps.com/).

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**Parents as Teachers.**

Parents as Teachers (PAT) is a parent education program offered by your local school district, serving children **up until kindergarten entry**.

- Family personal visits
- Developmental screenings
  - Detects developmental delays and health problems early
- Group connections
- Resource networks

Promotes the optimal early development, learning and health of children by supporting and engaging their parents and caregivers.

Contact your local school district for more information about their PAT Program. You can also call 573-751-2095 or contact: [EarlyLearning@doese.mo.gov](mailto:EarlyLearning@doese.mo.gov).

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**"Working together for Missouri's children and families!"**

**Head Start** is a national child development program for children from **birth to age 5**, which provides services to promote academic, social and emotional development, as well as providing social, health and nutrition services for income-eligible families

- Enhance children's physical, social, emotional and cognitive development
- Enable parents to be better caregivers and teachers to their children
- Help parents meet their own goals, including economic independence
- Developed in 1965 to help low-income families provide their children with developmentally appropriate education, health and social services to better prepare them to achieve in school and society.

For more information, visit: <http://www.mohheadstart.org>

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**Add blood lead history to childcare and school health forms**



- Similar to vaccination records

**Knowledge is Power**

Developmental milestones at: 1<sup>st</sup>, 4<sup>th</sup>, & 6<sup>th</sup>/7<sup>th</sup> grades

- If EBL history is known & documented child may qualify for special services sooner

**Early Intervention!**

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**ENVIRONMENTAL Lead Risk Assessments**

- Can be **OFFERED** @ **Venous** 10 mcg/dL by DHSS lead risk assessors for their jurisdiction/regions
- **REQUIRED** @ the second **Venous** 15-19 mcg/dL result at least 3 months apart
- **REQUIRED** @ a single **Venous** result of 20 mcg/dL or greater

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**There are MANY environmental issues to discuss:**



Degrading paint is the most typical lead source causing elevated blood lead levels in children.



Houses & other structures built prior to **1978**, or especially prior to **1950**, are at high risk of having lead paint hazards.

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Is there **remodeling** of an older home?

*Where does the child play?*

Are there pets ?

*Is there bare soil?*

**Chipping, peeling or flaking paint?**

**What are parental jobs, hobbies, recreation?**

**Any cultural associations?**



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**MISSOURI HAS MANY POTENTIAL LEAD SOURCES**

- Older Housing: Paint/Plumbing
- Occupational
- Lead Mining & Smelting
- Soil
- Water
- Toys
- Spices
- Cosmetics & Jewelry
- Keys
- Ammunition
- Lead Fishing Sinkers
- Stained Glass




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**More Potential Lead Sources**  
Watch for FDA and CPSC recalls....




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**Encourage blood lead testing!**

Wash child's hands frequently using soap, friction, & lots of running water.



Keep children's toys and clothes washed frequently.



Use a vacuum with a HEPA filter.  
Wet mop and clean often.

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**It's a  
TEAM effort!**

DHSS Bureau of  
Environmental  
Epidemiology  
930 Wildwood Dr.,  
Jefferson City, MO  
65109  
Fax: 573-526-6946  
Phone: 573-751-6102



**Thanks for your part in making a  
difference in the lives of  
families and children!**

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