

VIRTUAL

# *Learning Collaborative*

ON CHILDHOOD LEAD  
POISONING PREVENTION

# Disclosures

- This event was requested by the Iowa Department of Public Health (contract number 5880LP20) and supported by the Centers for Disease Control and Prevention grant funds under Cooperative Agreement Number, NUE2EH001367-02-02. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.
- All presenters and moderators do not have any conflicts of interest to disclose.
- This event has no commercial or sponsorship to disclose.

# Meet Our Team



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IIPHRP Director  
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**Alexa Andrews**  
Program Coordinator  
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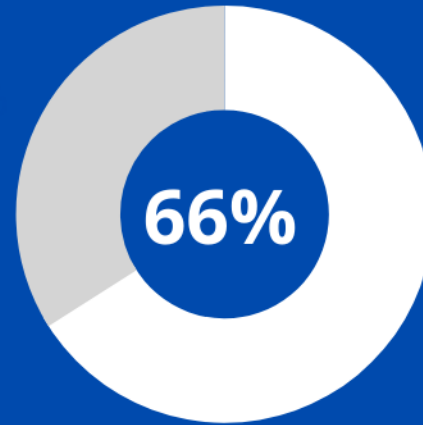
**Kevin Officer**  
Community Health Consultant  
kevin.officer@idph.iowa.gov

OF ALL IOWA CHILDREN  
0 TO 6 YEARS OLD ONLY

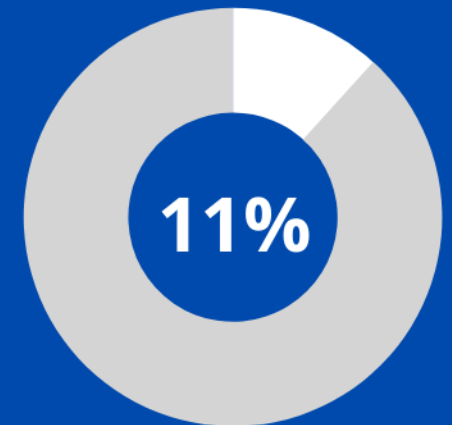
**26.5%**

WERE TESTED FOR LEAD

## RISK FACTORS

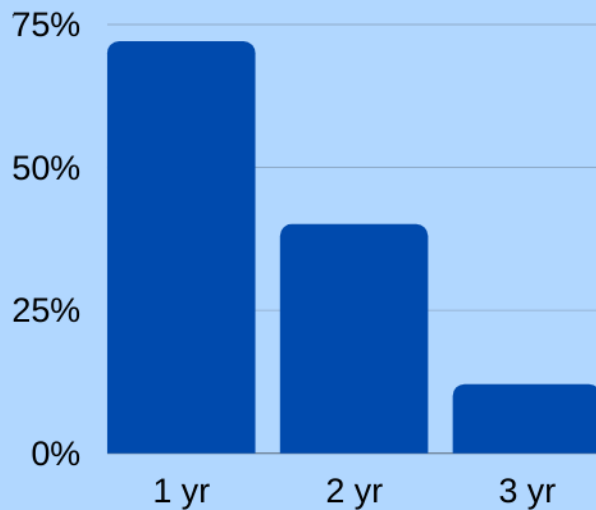


Pre-1979 Housing



Population Below  
Poverty Level

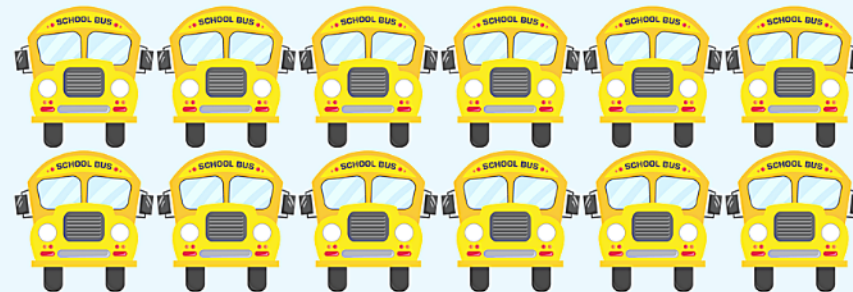
Percent of Children Receiving a  
Blood Lead Test By Age



**2,436  
KIDS**

of the under 6  
population tested  
in 2018 had an  
elevated blood  
lead level\*

890 children under 6 had a  
confirmed elevated blood lead level  
above 5  $\mu\text{g}/\text{dL}$  in Iowa in 2018



That is enough to fill 12 school buses

Iowa Public Health Tracking Portal. (2018). Children Tested. Retrieved from <https://tracking.idph.iowa.gov/Health/Lead-Poisoning/Annual-Blood-Lead-Testing-Children-Under-6/Children-Tested>

**CHILDHOOD  
LEAD  
POISONING IS**



**PREVENTABLE**



# Learning Objectives

- Attendees will learn firsthand the importance of their role in working with the family of a lead poisoned child and gain a clearer understanding that what each sector does matters.
- Attendees will gain an understanding of the work other sectors complete and how it is beneficial to collaborate to prevent childhood lead poisoning.
- Medical providers will learn the importance of not only testing for lead poisoning, but testing a child early and often to determine if a child is being exposed to lead.
- Housing professionals will gain a better understanding of the importance of maintaining the interior and exterior homes to prevent lead exposures to children.



# Agenda

**9:00am - 9:30am** Welcome & Overview

**9:30am - 10:30am** Keynote Presentation - Iowa Parents Against Lead

**10:30am - 10:40am** Break

**10:40am - 11:25am** Blood Lead Testing Clinical Study

**11:25am - 12:00pm** Morning Wrap-Up Activity

**12:00pm - 1:00pm** Lunch Break

**1:00pm - 1:45pm** Making the Connection Between Housing, Hazards, and Health

**1:45pm - 2:30pm** Improving Prevention, Early Screening and Detection of Childhood Lead Poisoning in Primary Care Offices

**2:30pm - 2:40pm** Break

**2:40pm - 3:25pm** The Impacts of COVID-19 on Lead Poisoning Prevention

**3:25pm - 4:00pm** Discussion & Wrap-Up



# Technology Troubleshooting

- If at any point you become disconnected, log back in with the same webinar link
- If you are having a difficult time with your audio, try switching from computer audio to phone audio
- If you are having difficulties, you can chat with us or email [alexa-andrews@uiowa.edu](mailto:alexa-andrews@uiowa.edu)

# Technology Troubleshooting

The screenshot shows a virtual meeting interface. At the top, a black bar contains the text "You are viewing IIPHRP CPH's screen" and "View Options". The main content area features a white box with the text "VIRTUAL Learning Collaborative ON CHILDHOOD LEAD POISONING PREVENTION". The background is a colorful pattern of overlapping circles. At the bottom, a black bar contains icons for "Chat", "Raise Hand", and "Q&A", which are circled in red. A red arrow points from the "Q&A" icon to the text in the adjacent box. In the bottom right corner, there is a red "Leave" button. Logos for "The University of Iowa" and "Institute of Public Health Research and Policy" are visible in the bottom left corner.

During presentations, the chat will only go to panelists. During breaks and discussion sections, we will open the chat to everyone.

You are muted but have the ability to speak, if you raise your hand, we can grant you access

Use the Q&A feature to ask questions to the presenters





# CEUs

## **Nursing Accreditation**

This continuing nursing education activity was approved by APHA/PHN, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

## **Medicine (CME) Accreditation Statement**

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the American Public Health Association (APHA) and the National Center for Disaster Medicine and Public Health. The APHA is accredited by the ACCME to provide continuing medical education for physicians.

**Designation Statement:** The APHA designates this (insert type of activity-live, enduring, web) educational activity for a maximum of 4.0 AMA PRA Category 1 Credit (s)<sup>™</sup>.

## **Health Education (CHES) Statement**

Sponsored by the American Public Health Association (APHA), a designated approver of continuing education contact hours (CECH) in health education by the National Commission for Health Education Credentialing, Inc. This program is designated for Certified Health Education Specialists (CHES<sup>®</sup>) to receive up to 4.0 total Category I contact education contact hours

**In the coming days, you will receive an email from APHA with instructions to obtain your CE. Please keep an eye out for this and complete it by the assigned deadline, if you do not complete it by the deadline you will not be eligible for CE.**



*Virtual*  
**Learning  
Collaborative**

- Childhood Lead  
Poisoning Prevention  
August 5, 2020

Keynote Presenter:

Brenda Music

- Mother
- Founder & President
- Iowa Parents Against  
Lead Poisoning (IPAL)

# Sean's Story – Overcoming the Impacts of Lead Poisoning



# Sean's Story – Overcoming the Impacts of Lead Poisoning

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## The Move



- The Summer of 2001 moved from California to Independence, Iowa.
- 1930 single family home



- Sean was a year old
- He had not been tested for lead exposure

## The First Test



- In 2003, Damon lost job and was unemployed.
- Qualified for WIC where Sean received his first BLL test
- 3.5 years old
- Capillary of 26  $\mu\text{g}/\text{dL}$



- Later confirmed at 40  $\mu\text{g}/\text{dL}$
- 4 times higher than CDC level of concern 10  $\mu\text{g}/\text{dL}$
- 4 years of blood lead testing

# Sean's Story – Overcoming the Impacts of Lead Poisoning

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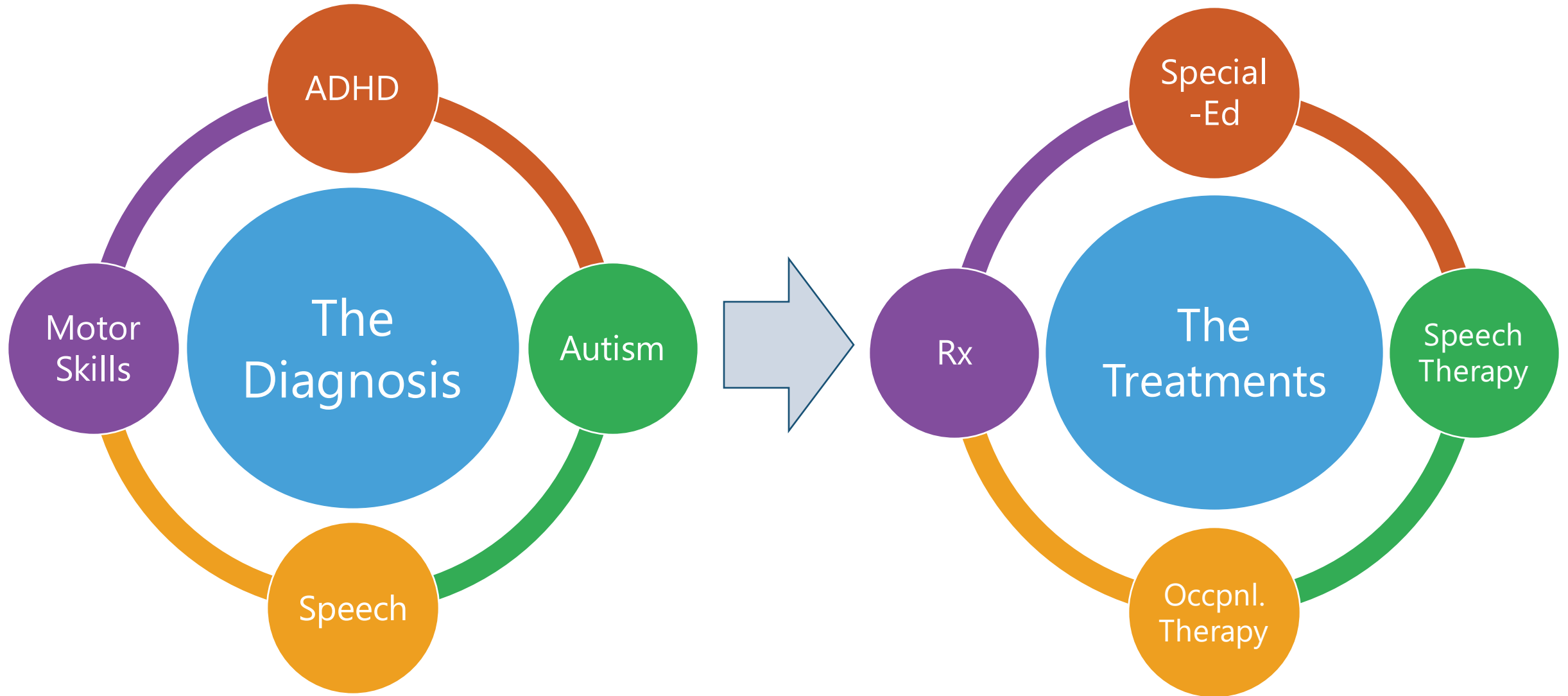
## The House



- Home inspection for lead hazards.
- High lead levels on exterior siding.
- Sean played in sandbox next to home.
- Exterior power washing cancelled.
- County lead hazard repair funds used to make home lead safe.

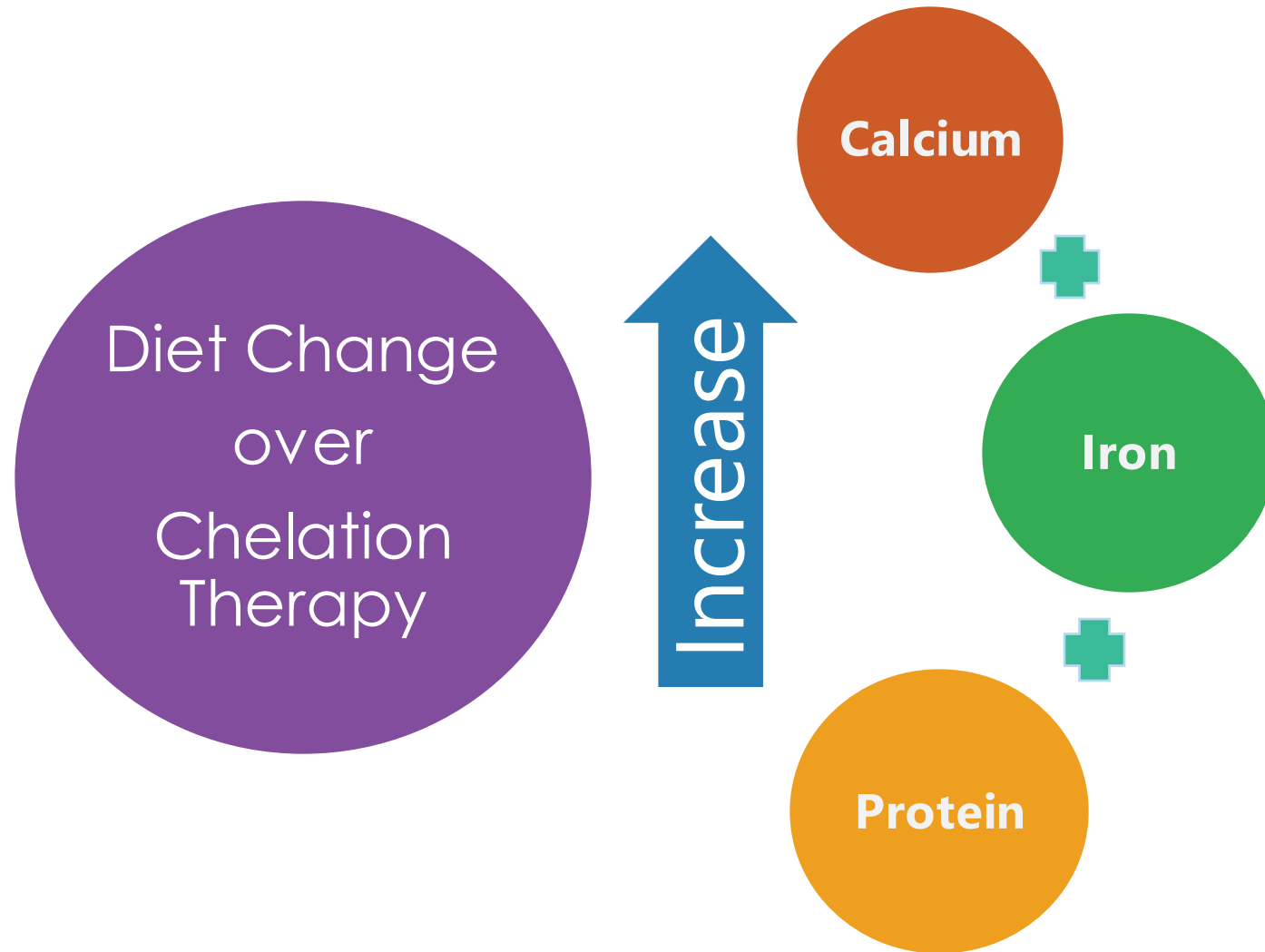
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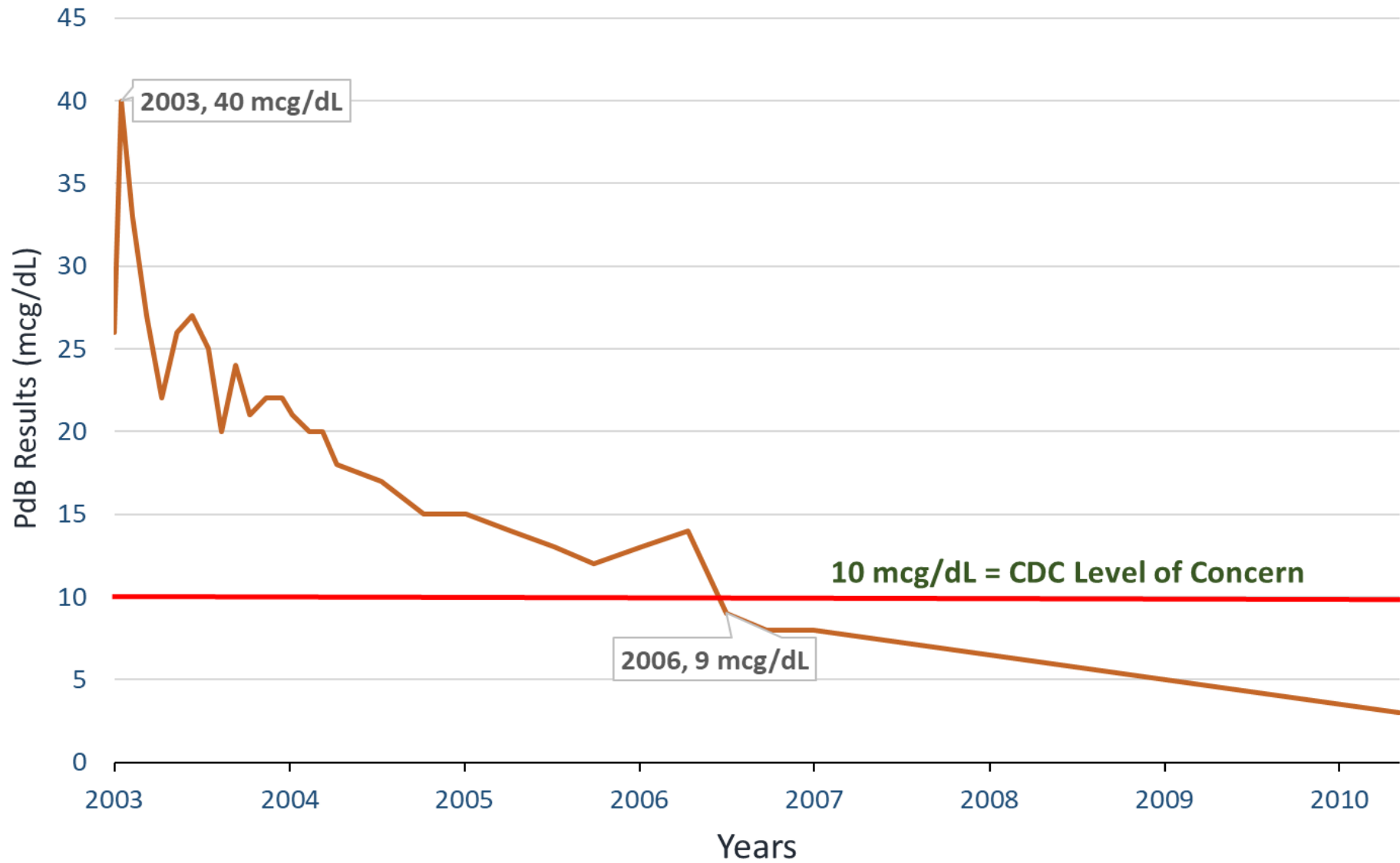
# Sean's Story – Overcoming the Impacts of Lead Poisoning

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# Sean's History of Blood Lead Testing 2003 - 2010



# Sean's Story – Overcoming the Impacts of Lead Poisoning

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- 2003 – Iowa Parents Against Lead Poisoning (IPAL) founded
- Share our experience and educate other on impacts of lead poisoning
- 2012 – Lobby Congress to restore CDC funding

## The Advocacy Work



# Sean's Story – Overcoming the Impacts of Lead Poisoning

- Sean's letter to Senator Harkin



# Sean's Story – Overcoming the Impacts of Lead Poisoning

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- Black Hawk County Coalition Board member
- 2013 – National Center for Healthy Housing Steering Committee
- 2016-2017 sat on Pew Charitable Trust Committee
  - 2017 Policy Manual Report – *10 Policies to Prevent & Respond to Childhood Lead Exposure*
  - Download at [Pewtrusts.org](https://www.pewtrusts.org)

# Sean's Story – Overcoming the Impacts of Lead Poisoning

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- 2017 – Sean decided to stop medications
- By 2018 – Sean graduated out of IEP program
- Graduated with his high school classmates
- Sean is currently working and planning on taking college courses in the future

# Thank you!

Brenda Music, Mother  
Founder & President: Iowa Parents  
Against Lead Poisoning (IPAL)

<https://www.ipalkids.com/>

VIRTUAL

*Learning Collaborative* | *Morning Break*

ON CHILDHOOD LEAD  
POISONING PREVENTION

# Using State & Local Collaboration to Improve Blood Lead Testing in Clinical and Medical Practices



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*Virtual* Learning Collaborative -  
Childhood Lead Poisoning Prevention  
August 5, 2020



# Presenters:



Jason Kessler, MD, FAAP  
Interim Medical Director,  
Pediatrician  
Primary Health Care, Inc.  
Des Moines



Kevin Officer, BS  
Childhood Lead Poisoning  
Prevention Program

Analisa Pearson, MSN, RN  
EPSDT, Child & Adolescent Health

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*Virtual* Learning Collaborative -  
Childhood Lead Poisoning Prevention  
August 5, 2020

# Background

- Participation in 3-Year Maternal & Child Health CoIIN Project
  - *Collaborative Improvement and Innovation Network*
- Funding: Department of Health & Human Services
- To support and improve coordinated systems of care within states to address the needs of maternal, infant, and child populations within those states that are at risk for or experience exposure to lead.

# Background

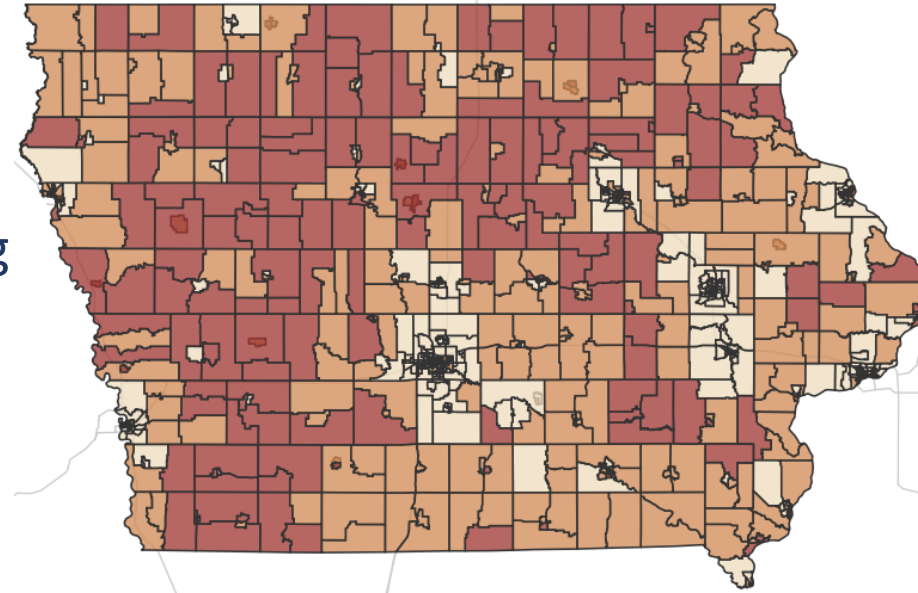
- Goals
  1. Decrease maternal and child morbidity and mortality associated with exposure to lead.
  2. Increase the number of infants and children that have access to a system of coordinated care to address their needs due to lead exposure.
- Effect change through:
  - Quality improvement strategies and
  - Collaborative impact

# Collaborative Effort = Collective Impact

<https://tracking.idph.iowa.gov/>

## 1. Primary Source:

- Housing - #1 source of child lead exposure in Iowa
- Lead risk map - Pre-1950 housing
- Primary Prevention, Healthy Housing Practices

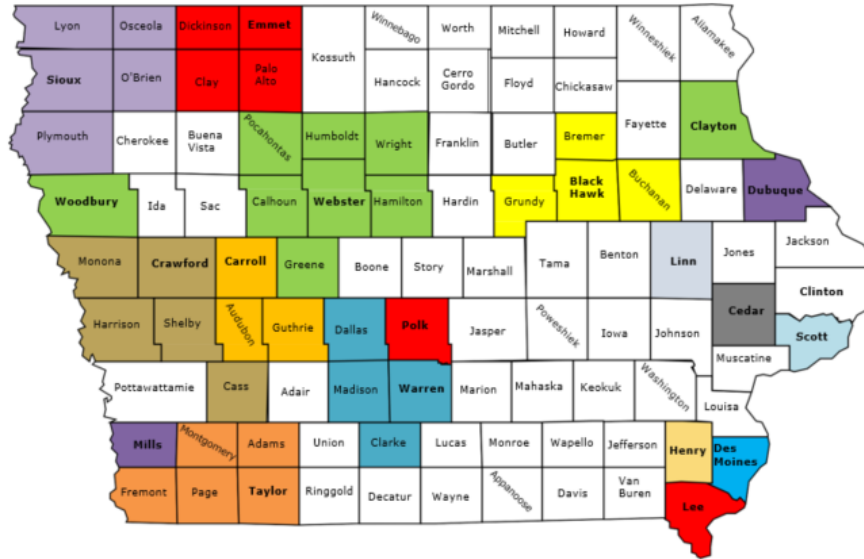


## 2. Diagnosis:

- Blood lead testing
- Early & often starting at 12 mo.

# Collaborative Effort = Collective Impact

Map of lead program service areas



### 3. Intervention:

- Direct support & referral services
- Health equity in all Iowa counties

### 4. Education & outreach:

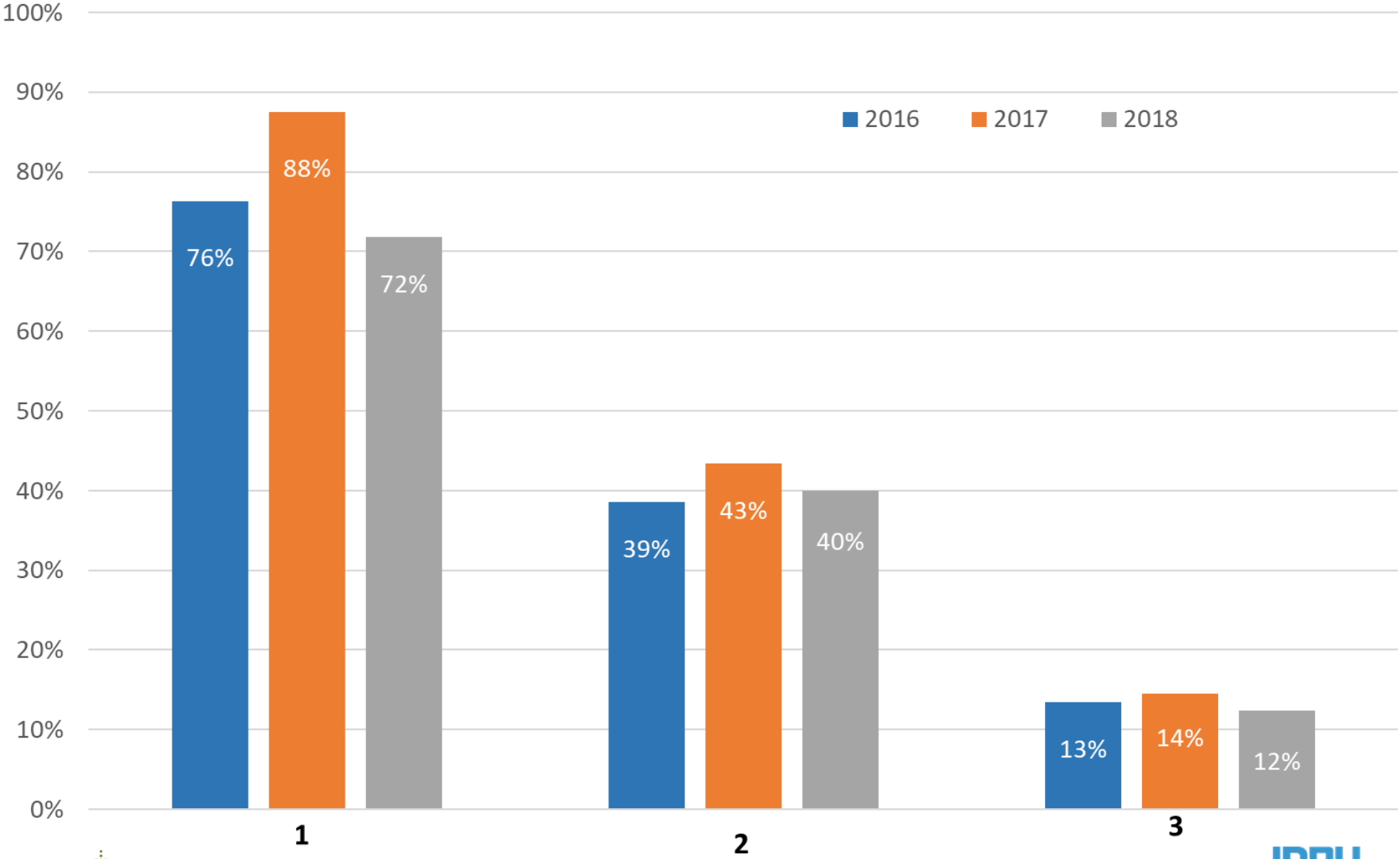
- Community events
- Minority & Dis-advantaged populations



# Our Aim

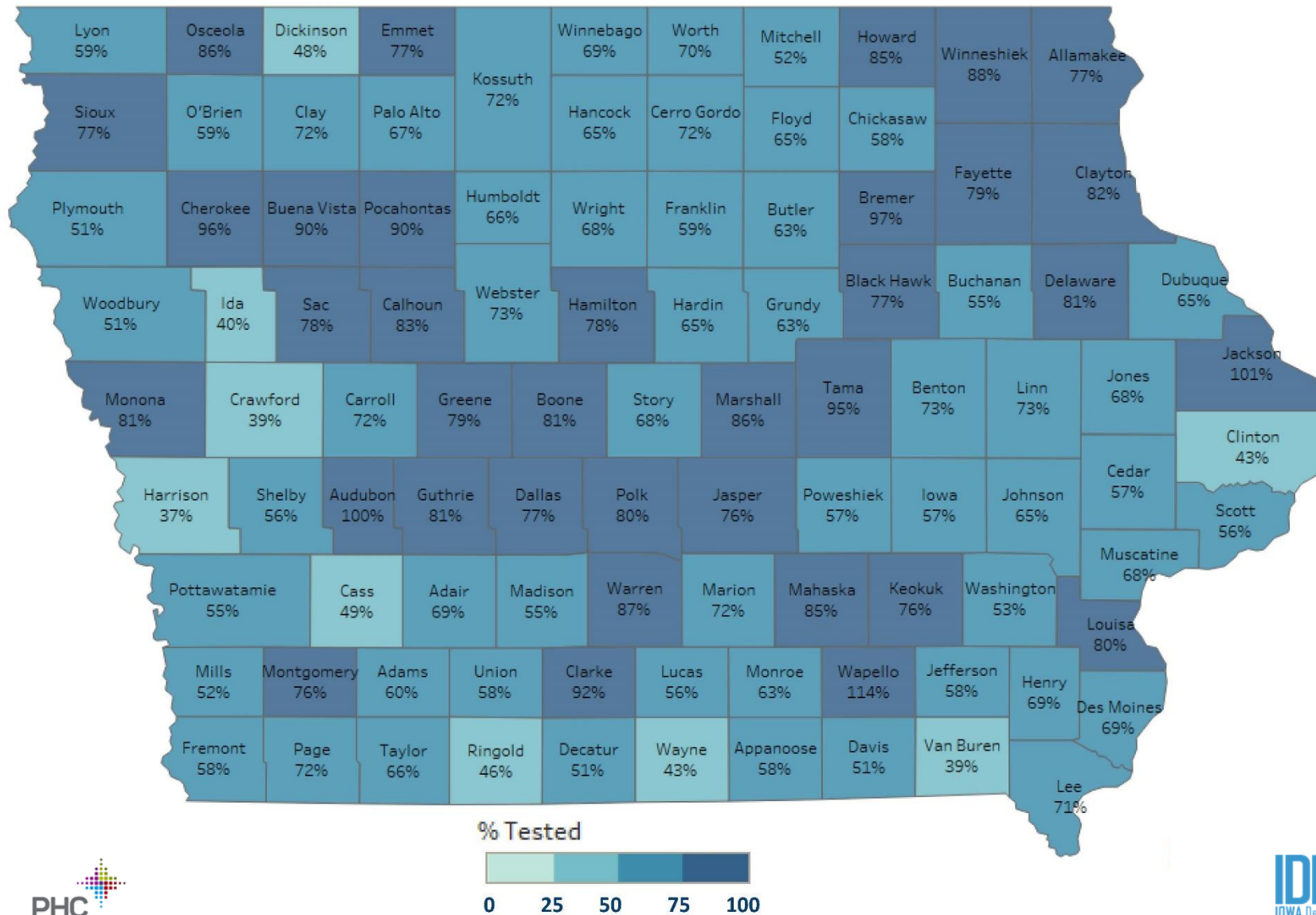
Increase medical provider lead testing of children at ages 1, 2, and 3 years.

# Percentage of Children 1, 2, and 3 Years of Age Receiving a Blood Lead Test, 2016 - 2018



# Percent of Children 12–23 months of age Receiving a Blood Lead Test

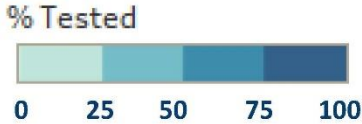
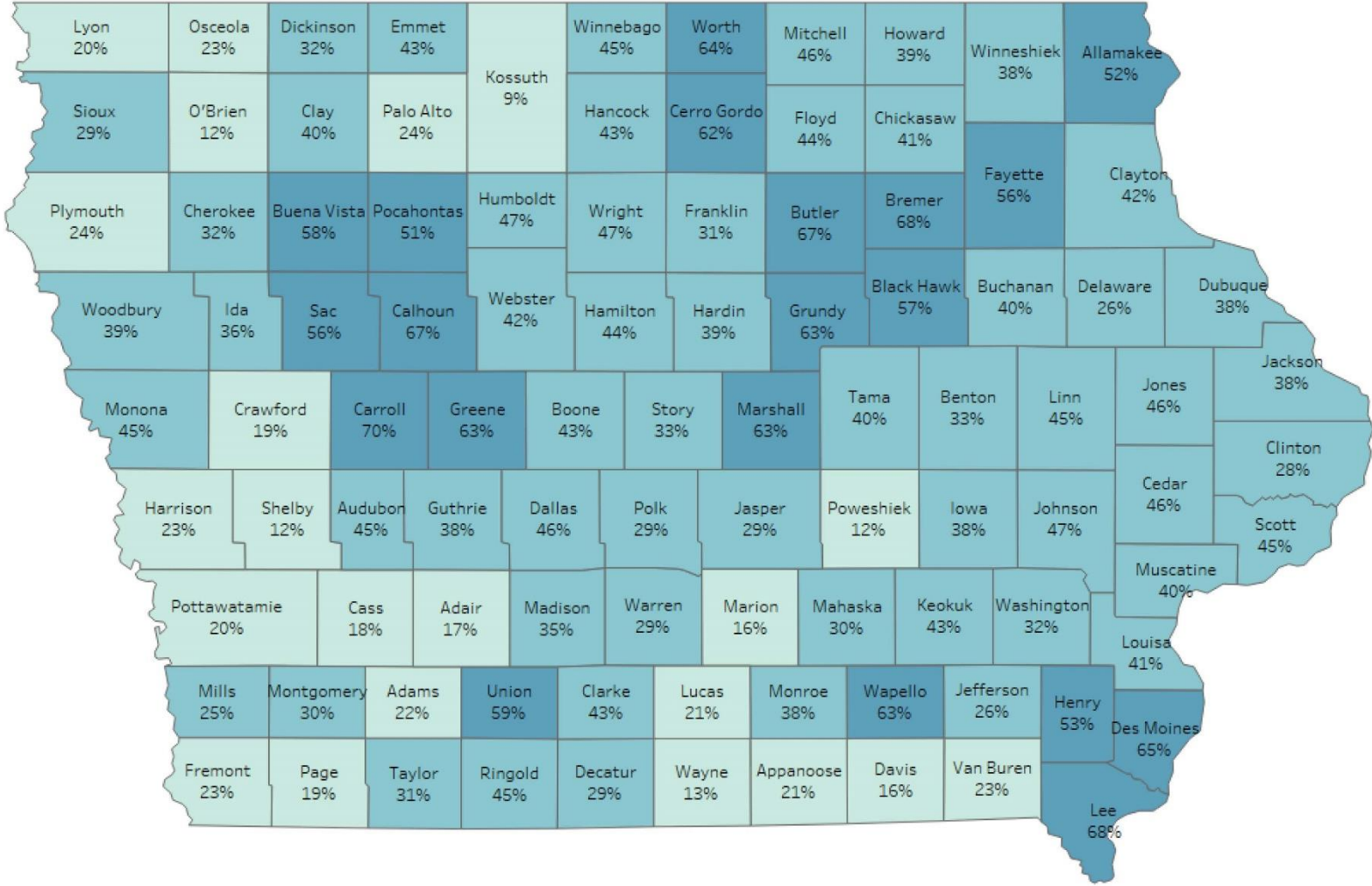
## 2018 County Data





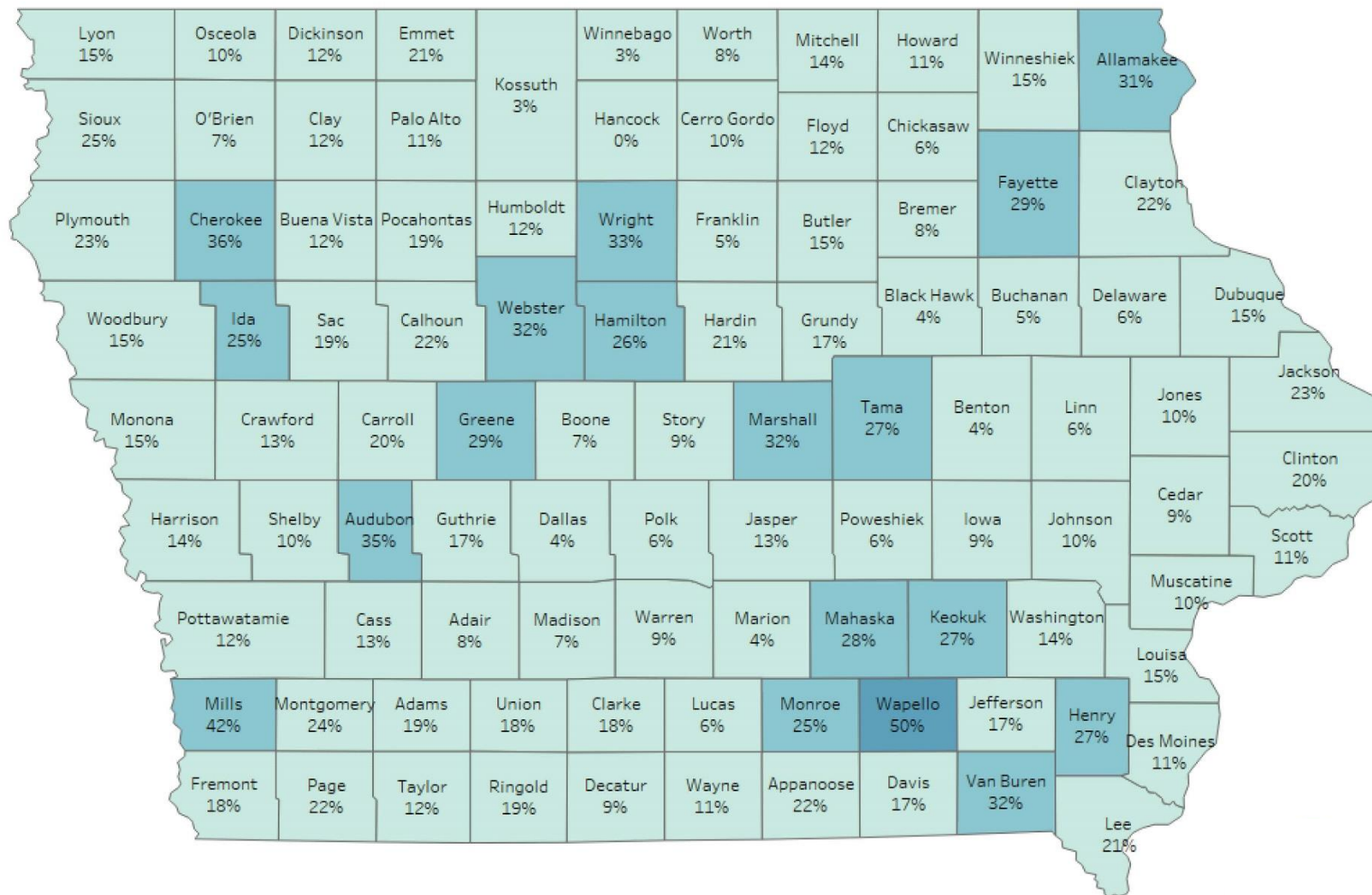
# Percent of Children 24—35 months of age Receiving a Blood Lead Test

## 2018 County Data



# Percent of Children 36—47 months of age Receiving a Blood Lead Test

## 2018 County Data



% Tested



# Clinic Survey

- Goal: Increase testing of 1 & 2 year olds
  - Determine clinic testing practices
    - Surveyed:
      - 7 large medical network clinics
      - 6 small rural clinics
  - What we were looking to find out:
    1. What blood lead testing guidelines are being followed?
    2. What are the barriers to testing?
    3. Does clinic/provider have ability to determine rate of testing?
    4. What are best means of educating parents on testing and prevention?
    5. Does clinic/provider have EMR system capable of sending reminders?



# Clinic Survey



- Survey results:
  - No difference in responses between large network and small rural clinics
  - Within one major network at least three different BLL testing guidelines were being used
  - Brochures are main means of educating parents, followed by in-person office visits & social media
  - 64% of respondents had EMR system for follow up reminders

# Clinic Survey

- Survey results:
  - Barriers identified:
    - Parental compliance with follow through of lab orders
      - No POC system (LeadCare II) on-site for testing
    - Belief that no further testing is required if initial BLL low & no change in environment (providers/parents)
      - Questionnaire only focuses on home environment



# Clinical Pilot

## Pilot Project

- Federally Qualified Health Centers
  - Existing Title X contracts - easier administrative process
  - Urban and Rural Practices
  - Primary Health Care (Des Moines & Marshalltown)
  - River Hills Community Health Center (Ottumwa)



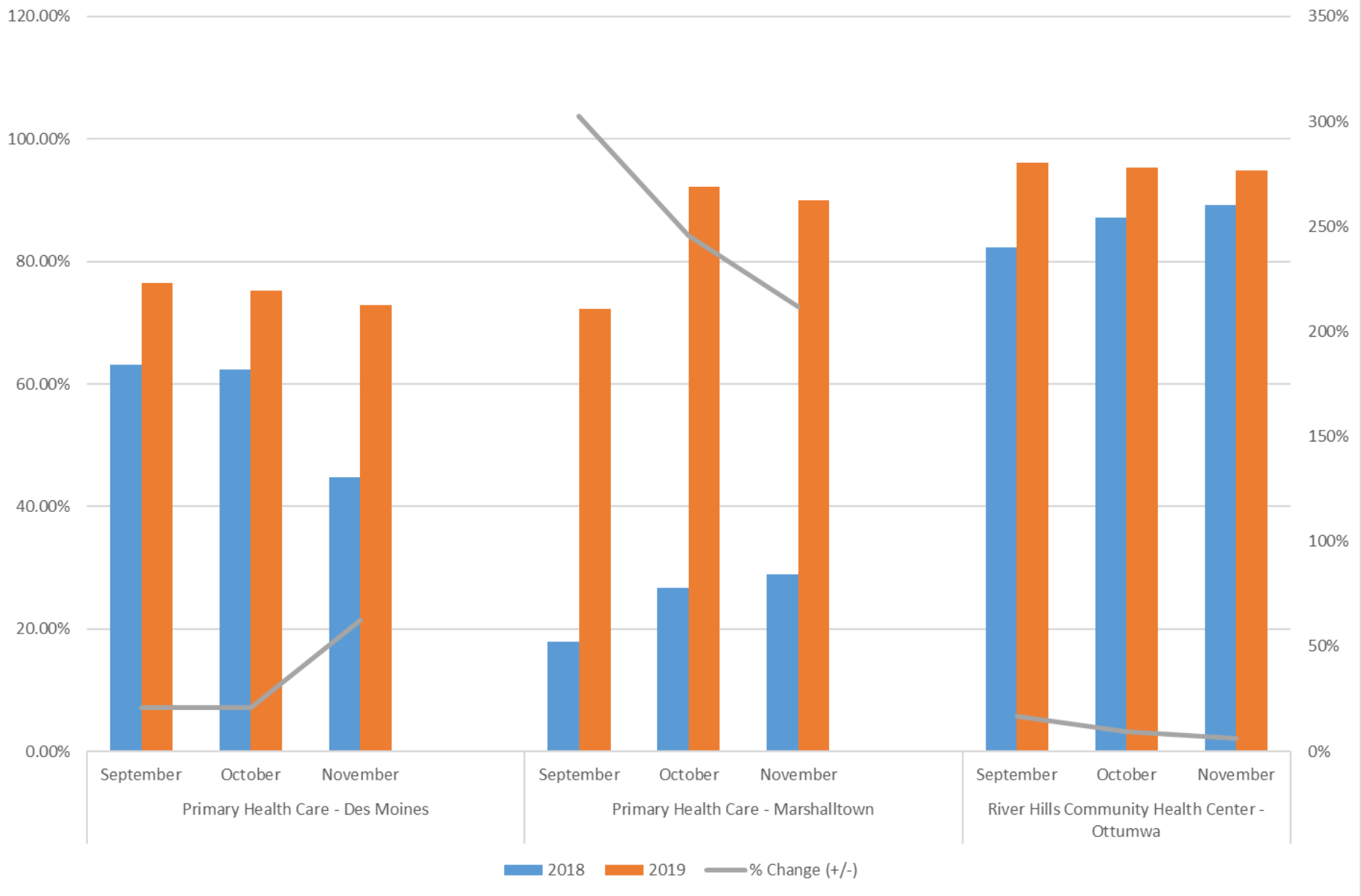
# Clinical Pilot



## Pilot Process:

- Increase blood lead testing of children 12-35 months
  - Every opportunity – well visit, sick visit, medication, chronic condition, etc.
  - Pre-interview
  - Implement
    - Pay for Performance Incentive
  - Post-interview
    - For each child ages 12-35 months seen, but not tested, identify the reason they were not tested.

### 3-Month Blood Lead Testing Pilot on Children 12 - 35 months in age, 2018 & 2019 Testing Rates





# PHC Standard Procedure

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Standing orders permit nursing staff to initiate testing at:

- 12 months
- 18 months
- 24 months
- 3 years
- 4 years
- 5 years

Based on IDPH recommendations  
We also follow-up abnormal tests.



# Baseline Data: Pre-Project Implementation

PHC at Mercy				Marshalltown Medical			
Month/Year	Number of appointments for children ages 12-35 months who had a lead test within the last 12 months	Total number of appointments for children ages 12-35 months	Percent	Month/Year	Number of appointments for children ages 12-35 months who had a lead test within the last 12 months	Total number of appointments for children ages 12-35 months	Percent
Sept. 2018	36	57	63%	Sept. 2018	7	39	18%
Oct. 2018	53	85	62%	Oct. 2018	20	75	27%
Nov. 2018	30	67	45%	Nov. 2018	15	52	29%
Total	119	209	57%	Total	42	166	25%

## PHC at Mercy

Reporting Period	Number of appointments for children ages 12-35 months who had a lead test within the last 12 months	Total number of appointments for children ages 12-35 months	Percentage
Sept. 2019	39	51	77%
Oct. 2019	70	93	75%
Nov. 2019	43	59	73%
Total	152	203	75%

# Impact on Unduplicated Patients PHC at Mercy

Reporting Period	Unduplicated count of unique patients seen during the project period & had a lead test within the last 12 months	Total number of appointments for children ages 12-35 months and seen during the specified reporting period	Percentage
Sept. 2019 - Nov. 2019	121	157	77%

# Marshalltown Medical

Reporting Period	Number of appointments for children ages 12-35 months who had a lead test within the last 12 months	Total number of appointments for children ages 12-35 months	Percentage
Sept. 2019	26	36	72%
Oct. 2019	71	77	92%
Nov. 2019	45	50	90%
Total	142	163	87%

# Impact on Unduplicated Patients – Marshalltown Medical

Reporting Period	Unduplicated count of unique patients seen during the project period & had a lead test within the last 12 months	Total number of appointments for children ages 12-35 months and seen during the specified reporting period	Percentage
Sept. 2019 - Nov. 2019	88	103	85%

# Title V – Child Health



- Beginning in FFY 2015 under Title V MCH 3.0, Lead Poisoning Prevention was no longer included as a National Performance Measure.
  - 65% of Title V Contractors continued to provide blood lead testing.
  - No longer required to work on enabling and infrastructure building in service area
- Title V needs assessment for planning and implementation of Child Health Program for 2021-2026

# Title V Needs Assessment

- CoIIN highlighted the need for increased testing for 1 and 2 year olds
- Adopted State Performance Measure 2: Percent of children ages 1 through 2 years, with a blood lead test in the past year.
- Environmental scan to assess provider practices
- Require testing of 1 and/or 2 year olds if a low testing county
- Require collaboration with CLPPP
- Health Equity





# Outcomes



- Develop “Tips” for improving blood lead testing practices in clinical settings document
- CoIIN has highlighted the need for increased testing of 1 and 2 year olds
- Adoption of SPM 2 blood lead testing as a State Performance Measure (SPM) for the 2021-2026

# Contact Information:



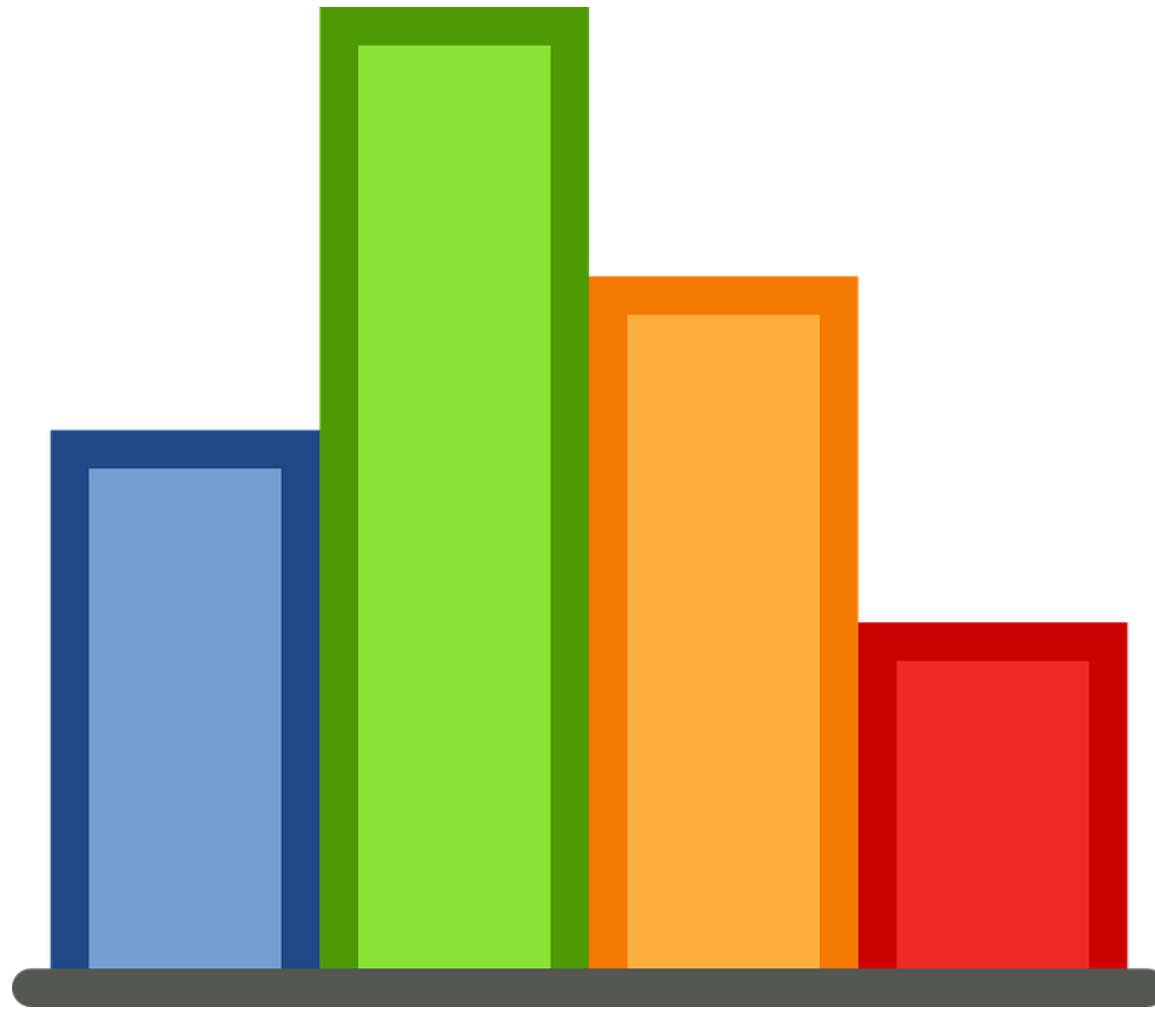
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# Morning Discussion

What are your key takeaways from Brenda's story?

What are the barriers in our system to assisting the family today?

What are the strengths in our system to assisting the family today?

# MAKING THE CONNECTION BETWEEN HOUSING, HAZARDS, AND HEALTH

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Jerry Freese, Healthy Homes Field Representative  
Office of Lead Hazard Control and Healthy Homes (OLHCHH)  
*U.S. Department of Housing and Urban Development (HUD)*



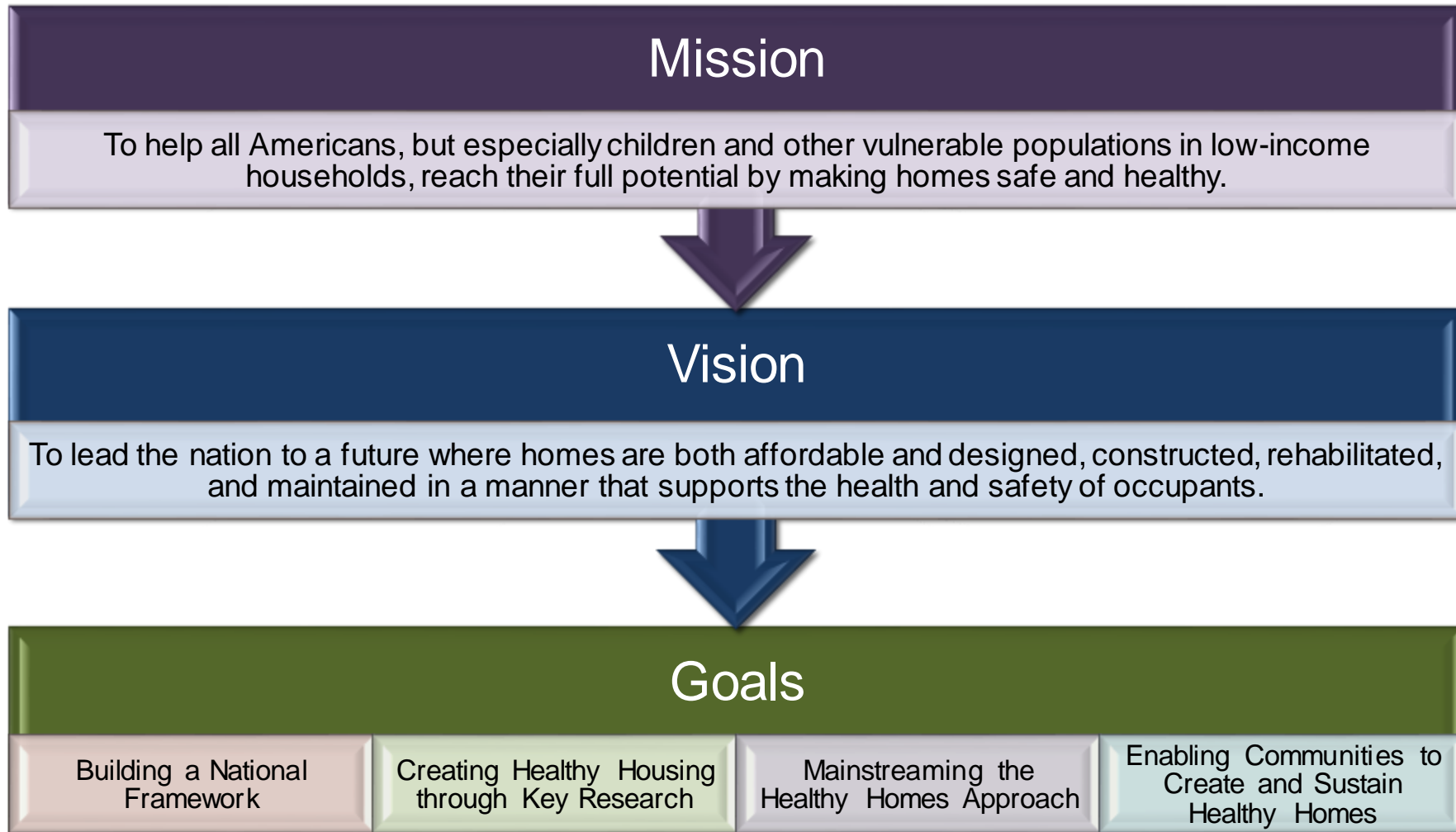
# Session Objectives

- Provide overview of the OLHCHH
- Address housing related hazards that impact health in housing such as lead based paint, mold/moisture, pests, radon, ETS, safety hazards (8 Principles and Healthy Homes Rating System)

# What is OLHCHH?

- The Office of Lead Hazard Control and Healthy Homes (OLHCHH) is an office within the Department of Housing and Urban Development (HUD) that protects children and families from health and safety hazards in housing.
- The Office was established in 1992
- 5 Divisions:
  - Lead and Healthy Homes Programs Division
  - Grant Services Division
  - Program and Regulatory Support Division
  - Policy and Standards Division
  - Business Operations Division

# OLHCHH's Mission, Vision, and Goals





# What Does OLHCHH Do Now?

## Grants for Producing Lead-Safe and Healthy Housing Units

- OLHCHH provides and monitors funding to states and local governments to produce lead-safe and healthy housing units

## Technical Studies Grants (a.k.a. Research Grants)

- OLHCHH provides and monitors funding to grantees to research methods, costs, and health benefits of making homes safe and healthy

## Enforcement

- OLHCHH enforces the Lead-Based Paint Disclosure Rule and works with HUD program offices on compliance with the Lead Safe Housing Rule

## Guidance and Performance Criteria

- OLHCHH develops and promotes development of healthy homes guidance and performance criteria

## Outreach

- OLHCHH provides education and outreach to homeowners, tenants, and stakeholders on how to make homes safe and healthy

# OLHCHH Grant Programs

- **Grants for Producing Lead-Safe and Healthy Housing Units**
  - Grant programs:
    - Lead Hazard Control Grants
    - Healthy Homes Grants
  - Grantees (“Lead & Healthy Homes Grantees”)
    - Grantees of these programs are state, local, or tribal governments.
- **Technical Studies Grants (a.k.a. Research Grants)**
  - 2 grant programs:
    - Healthy Homes Technical Studies Grants
    - Lead Technical Studies Grants
  - Grantees (“Technical Studies Grantees”)
    - Grantees are academic institutions and state, local, and tribal governments.


# Our Lead & Healthy Homes Grantees

- Currently, there are over 125 active lead hazard control grantees
- Since 1993, our grantees have made over 200,000 housing units lead-safe and healthy for residents.

# Compliance and Enforcement

**Protect Your Family From Lead in Your Home**

 United States Environmental Protection Agency

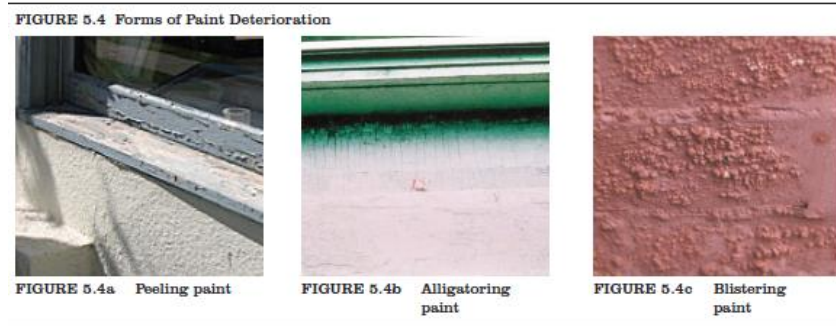
 United States Consumer Product Safety Commission

 United States Department of Housing and Urban Development

September 2013

- The Regulatory and Program Support Division...
  - Provides training and technical assistance
  - Enforces the **Lead-Based Paint Disclosure Rule**
  - Works with HUD program offices on compliance with the **Lead Safe Housing Rule**
- Since 1999, OLHCHH’s enforcement efforts have resulted in:
  - Over **188,000** units made lead-safe and
  - Almost **\$1.5 million** in penalties

# Guidance and Performance Criteria



- **Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing**

- OLHCHH has published two editions of The Guidelines, which is a technical manual for lead hazard evaluation and control in federally-assisted housing.

- **The Healthy Homes Guidance Manual**

- OLHCHH promulgated a Healthy Homes Program Guidance Manual to provide practical guidance for successfully developing and implementing a local healthy homes program.

- **The Healthy Homes Rating System**

- OLHCHH developed the Healthy Home Rating System (HHRs), a risk assessment system to identify the likelihood and impact on resident health from housing-related health hazards such as radon, lead-based paint, carbon monoxide, fall hazards, and more.

*Pictures from Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*

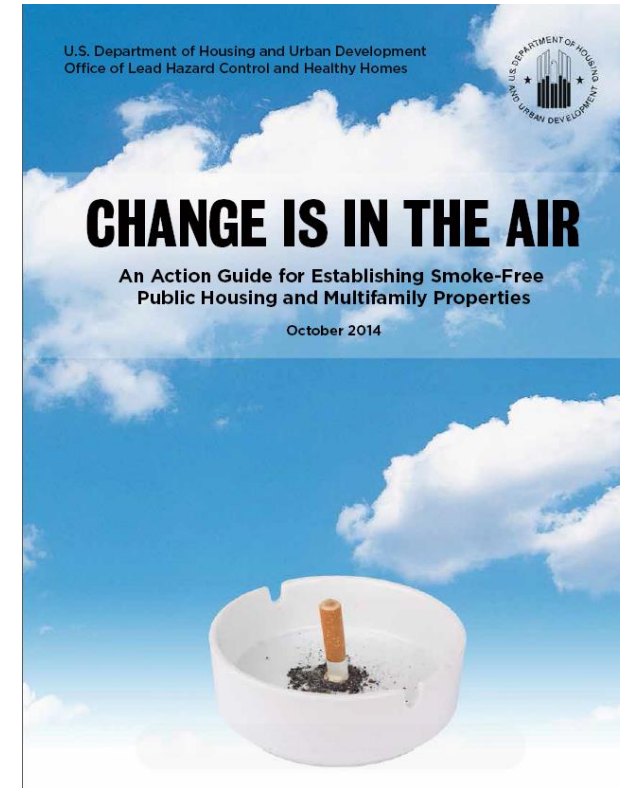
# Cross-Cutting Initiatives

- **Smoke-free Public Housing**

- PIH proposed a rule on November 17, 2015 that would make the Nation's public housing smoke-free.
- OLHCHH and Public & Indian Housing (PIH) are working together to promote smoke-free public housing.
- As of September 30, 2015, 612 PHAs have voluntarily implemented smoke-free housing policies.
- OLHCHH and PIH developed smoke free tool kits for public housing agency management and residents
- OLHCHH and PIH published "Change is in the Air" Action Guide (<http://portal.hud.gov/hudportal/documents/huddoc?id=SMOKEFREEACTIONGUIDE.PDF>)

- **Medicaid Reimbursements for In-Home Interventions for Asthma and Lead Poisoning Prevention**

- OLHCHH has collaborated with other agencies, practitioners, and insurance payers to expand Medicaid services and private insurance to provide healthcare financing for lead poisoning follow-up and home-based asthma services.
- OLHCHH is conducting summits to promote insurance reimbursements for asthma home assessments and interventions



# Outreach

- **OLHCHH's Website**

- OLHCHH maintains a website that has information about upcoming events; information about our programs; and resources for homeowners, tenants, and stakeholders.

[http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/healthy\\_homes/](http://portal.hud.gov/hudportal/HUD?src=/program_offices/healthy_homes/).

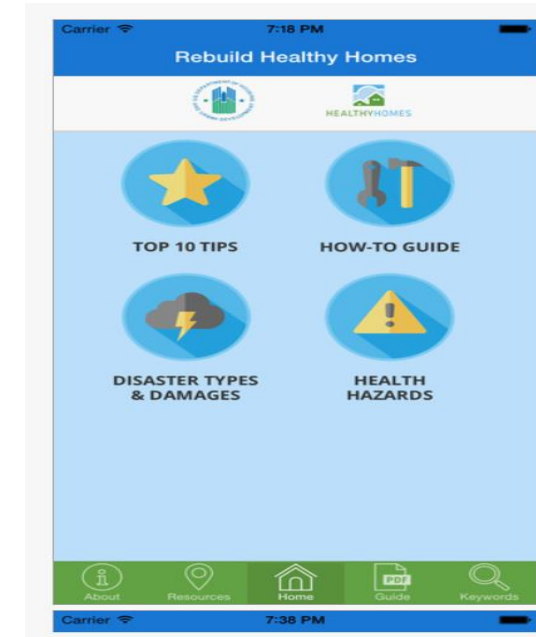
- **The Healthy Homes eNewsletter**

- **Disaster Recovery**

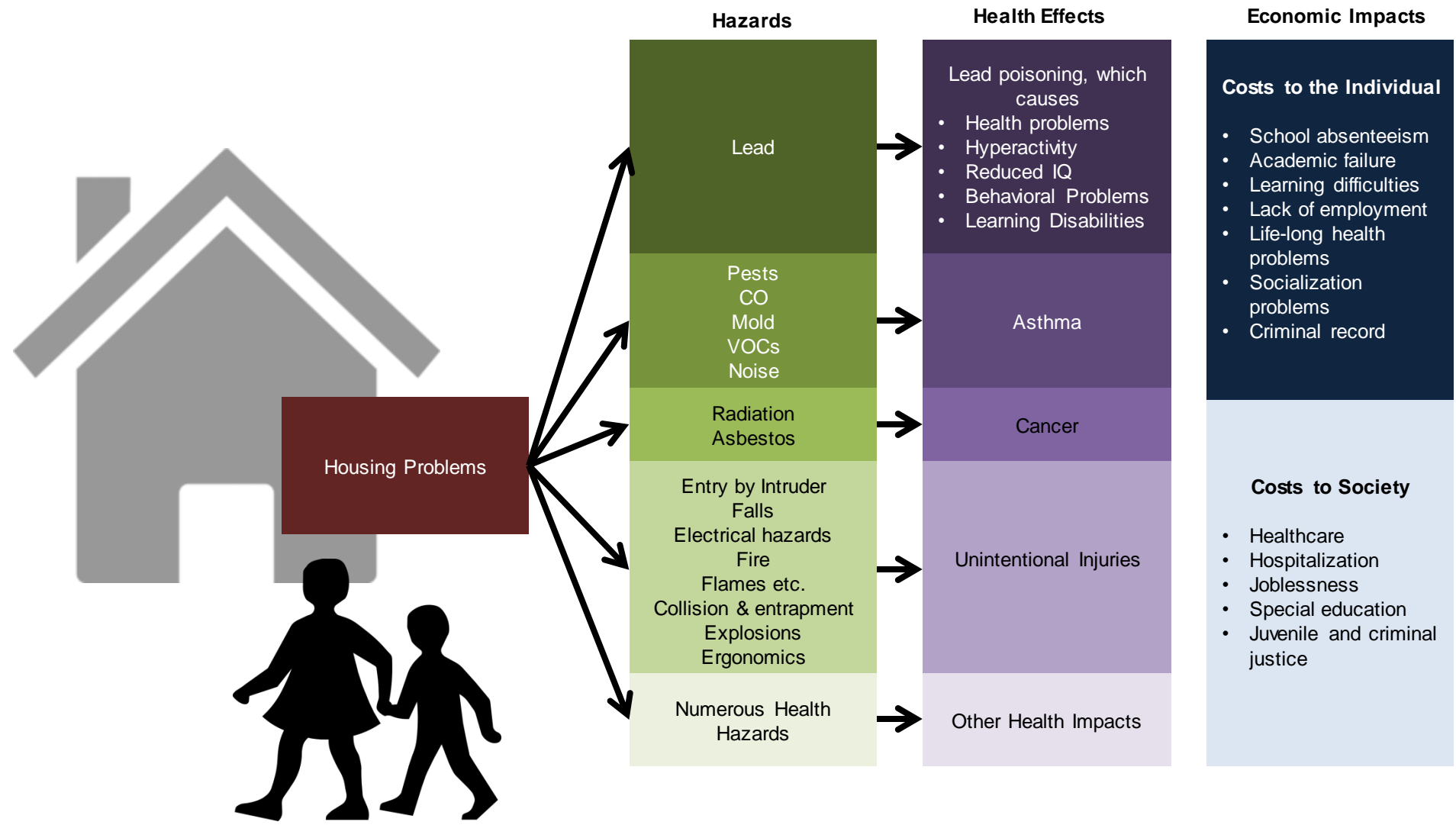
- OLHCHH is working with FEMA, EPA, HHS, OSHA, other offices within HUD, and external partners to integrate healthy homes principles into disaster recovery materials. OLHCHH's disaster recovery materials are available at [http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/healthy\\_homes/outreach](http://portal.hud.gov/hudportal/HUD?src=/program_offices/healthy_homes/outreach).

- **Rebuild and Healthy Homes Apps**

- OLHCHH developed an application titled Rebuild Healthy Homes. It is a "how-to-guide" on safely reentering your home after a disaster. It is available in iTunes and Google Play.



# What is Unhealthy Housing?



(Based on: OLHCHH, 2014, Healthy Homes Rating System Operating Guidance; Loyola University 2015)



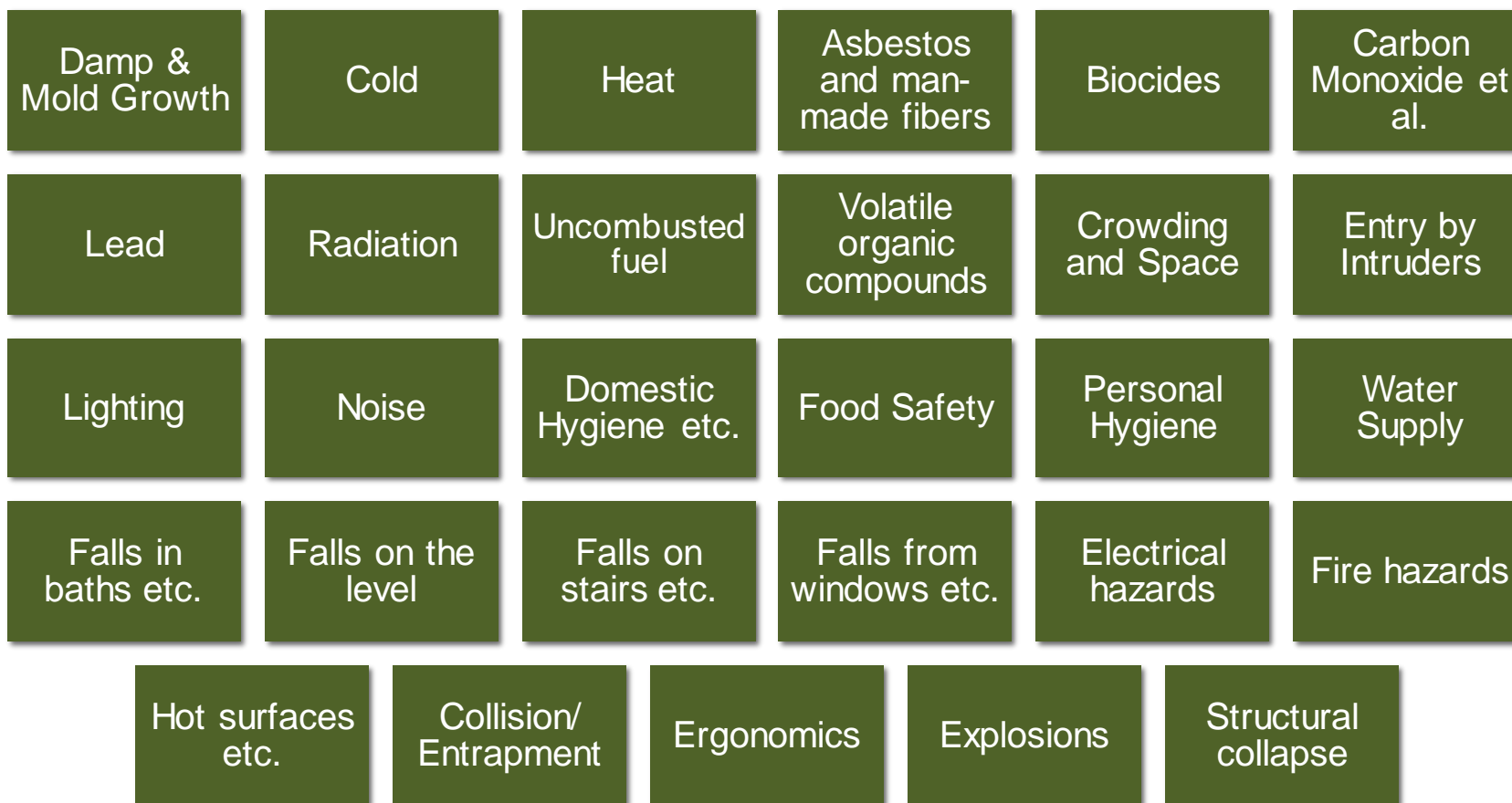
# Housing Problems

**These are some examples of housing problems surveyed in the American Housing Survey:**

Signs of rats	Signs of mice	Signs of cockroaches	Holes in floors
Open cracks or holes (interior)	Broken plaster or peeling paint (interior)	No electrical wiring	Exposed wiring
Room without electric outlets	Flush toilet breakdowns	Heating problems	Electric fuses or breakers blown
Water supply stoppage	Water leaks	Exterior building condition problems	Sewage disposal breakdowns

# Hazards

**These are the health and safety hazards examined by Healthy Homes Inspections:**

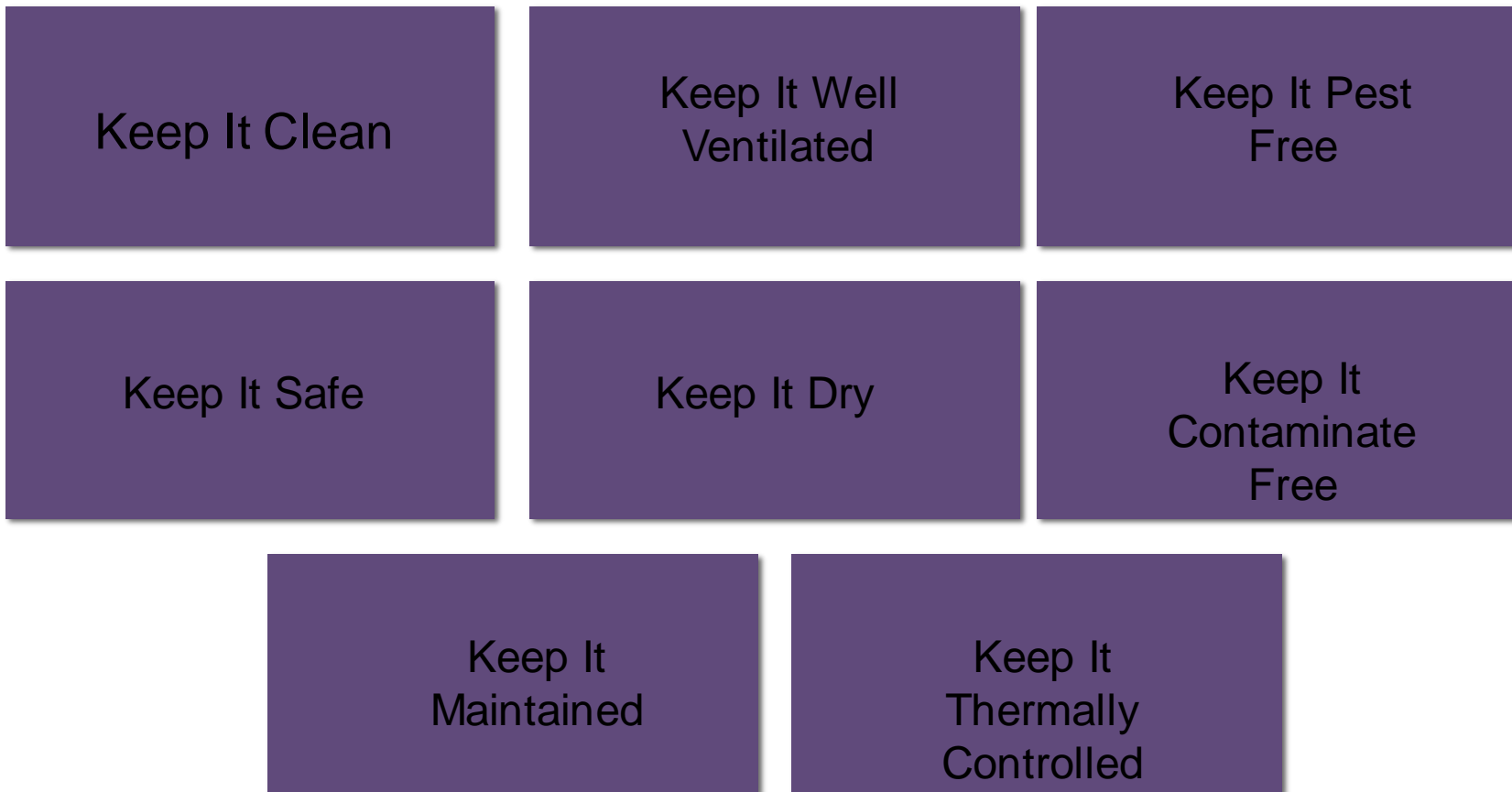


# Health Effects

**Health and safety hazards trigger, worsen, or cause a wide range of health effects. Here are some of the most prevalent housing-related health effects:**

Asthma & allergies	Cancer	Lead poisoning	Unintentional injuries	Death
Depression	Anxiety	Cardiovascular conditions	Arthritis	Respiratory conditions
Genitourinary disease	Unconsciousness	Cognitive impairment	Headaches	Mental disorders
Gastrointestinal illness	Skin infections	Neurological problems	Intellectual Disability	Behavioral problems

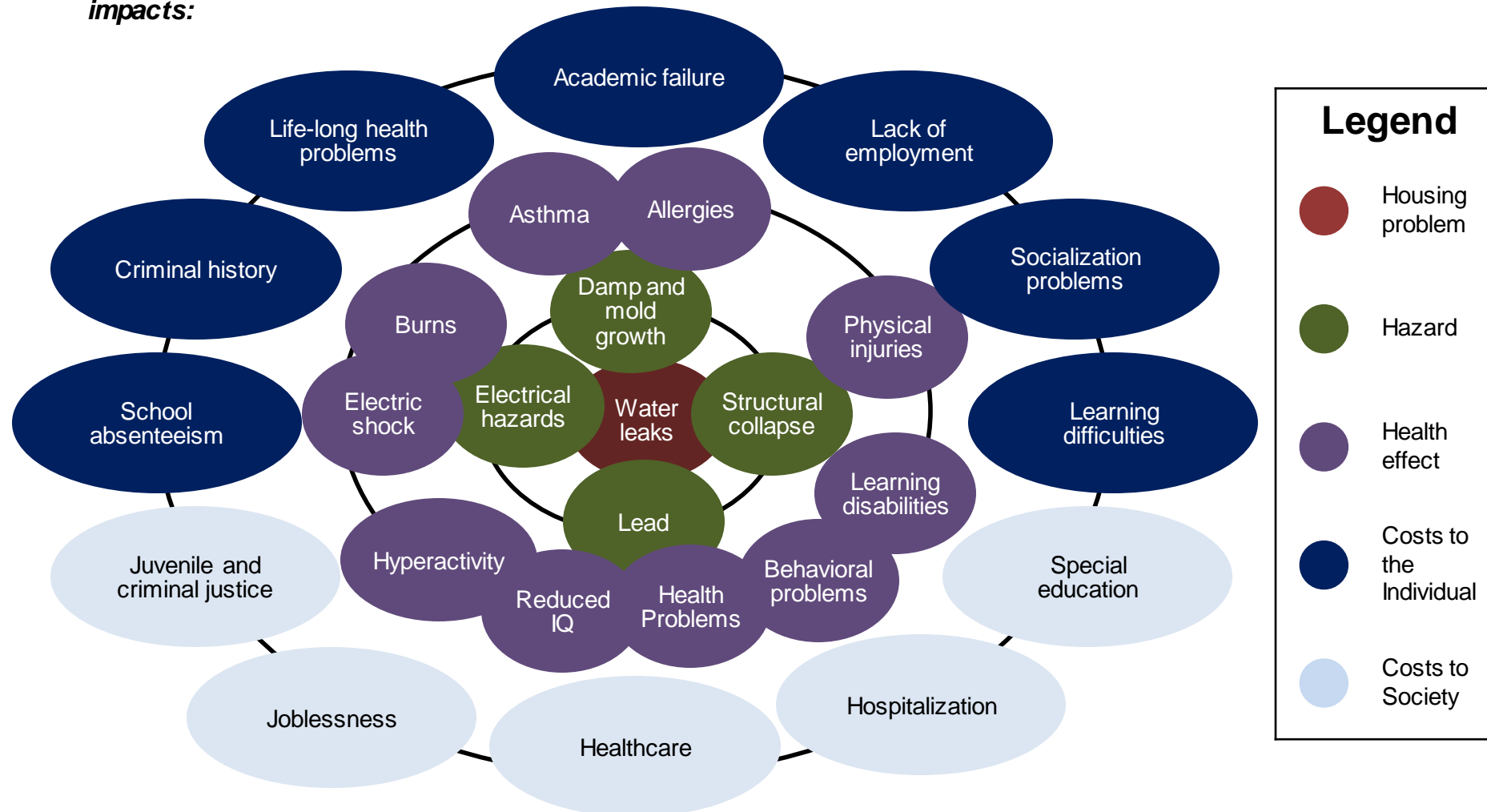
# 8 Principles of a Healthy Home



# Multiple Impacts

*Housing problems cause a ripple effect of impacts.*

**Here is an example of how a single housing problem can lead to multiple health effects and economic impacts:**



# Housing Quality and Health: *Asthma & Allergies*

## Related Hazards<sup>1</sup>

Domestic hygiene, pests,  
and refuse

Carbon monoxide and fuel  
combustion products

Damp & mold growth

VOCs

Noise<sup>4</sup>

## Extent of the Problem<sup>2</sup>

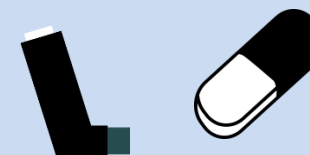
**~24 million homes**  
*have elevated levels of four or  
more allergens that have  
been associated with  
symptoms of allergic asthma  
among residents.*

**Asthma**  
*affects*  
**18.7 million**  
*U.S. adults and*  
**6.8 million**  
*U.S. children.*



## Economic Impact<sup>3</sup>

**\$3.5 billion per year**  
*for asthma due to dampness  
and mold in the home.*



1. (OLHCHH, 2014, Healthy Homes Rating System Operating Guidance)
2. (The number of homes was calculated by multiplying 18% (Salo et al., 2008) by 133 million (HUD & Census, 2013, American Housing Survey); CDC, 2012)
3. (Mudarri & Fisk, 2007)
4. Children under combined exposure to traffic related noise and air pollution have been found to have relative risks of chronic bronchitis, asthma and skin allergies, which cannot be explained by air pollution alone.

# Housing Quality and Health: *Cancer*

## Related Hazards<sup>1</sup>

Radiation

Asbestos

## Extent of the Problem<sup>2</sup>

**6.8 million homes**  
*have radon exposures above  
the current EPA action level.*

**Lung cancer**  
*from radon exposure causes*  
**21,000 deaths**  
*in the U.S. each year.*



## Economic Impact<sup>3</sup>

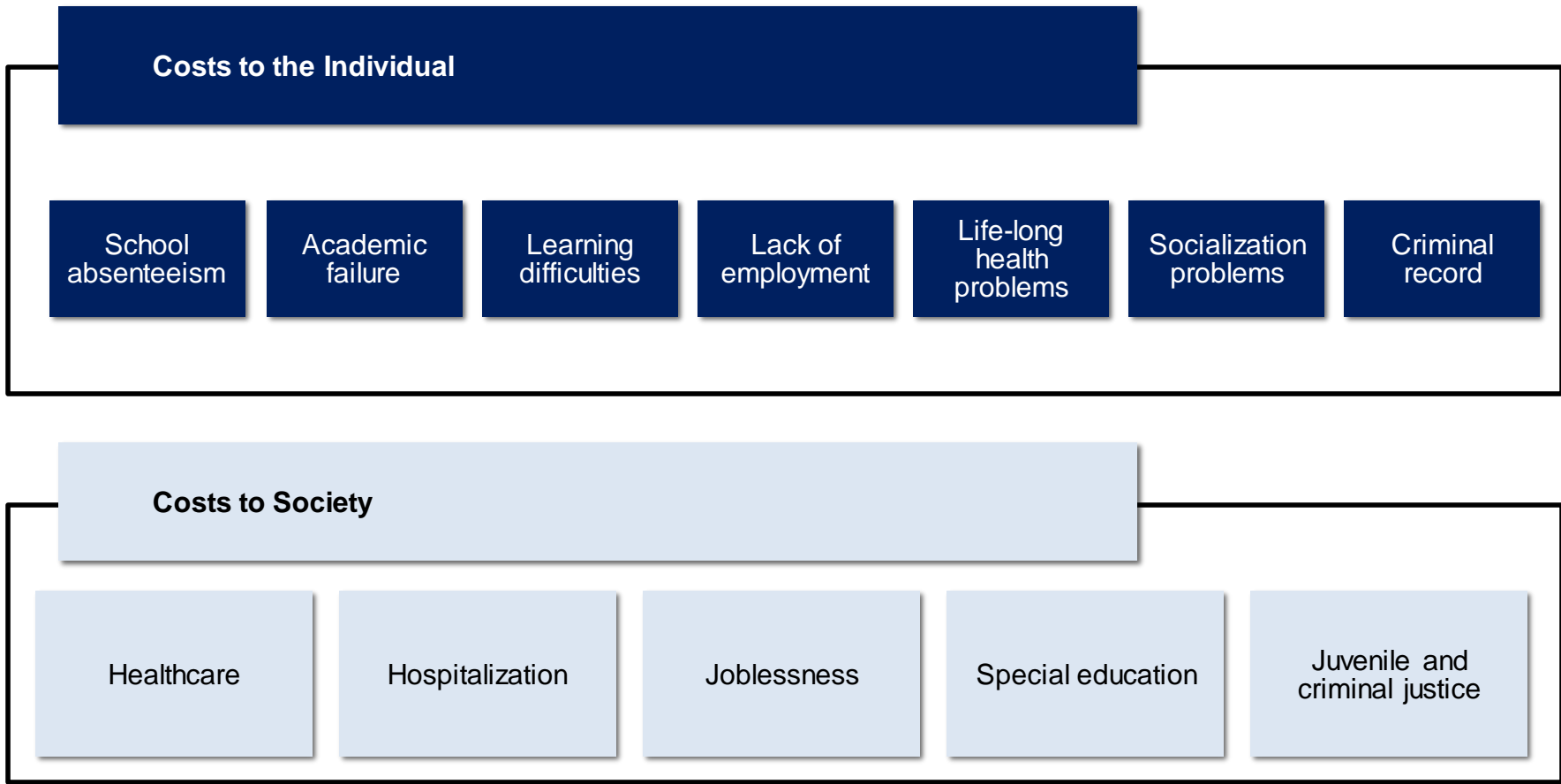
**> \$2 billion per year**  
*for radon-induced lung  
cancer deaths*



1. (OLHCHH, 2014, Healthy Homes Rating System Operating Guidance)
2. (EPA, 2013; EPA, 2003)
3. (Oster, Colditz, Kelley, 1984)

# Economic Impacts

**Health and safety hazards impose a considerable economic burden on Americans living in unhealthy housing and on society as a whole.**



(See Gould, 2009; Trasande & Lui, 2011; Loyola University 2015)



# Housing Quality and Health: *Lead Poisoning*

## Related Hazards<sup>1</sup>

### Lead hazards, from

- Chipping, peeling, flaking, chalking paint in houses built before 1978
- Lead contaminated soil
- Lead containing household items or products

## Extent of the Problem<sup>2</sup>

### 23.2 million homes

*have at least one lead-based paint hazard.*

### Lead poisoning

*affects*

**535,000**

*U.S. children ages 1-5.*



## Economic Impact<sup>3</sup>

### \$5.9 billion

*per year in medical costs and*

### \$50.9 billion

*per year in lost productivity due to cognitive impairment.*



1. (OLHCHH, 2014, Healthy Homes Rating System Operating Guidance)  
2. (Dewalt et al. 2015; Jacobs et al. 2002)  
3. (Trasande & Lui, 2011)

# Housing Quality and Health: *Unintentional Injuries*

## Related Hazards<sup>1</sup>

Entry by Intruder

Falls

Electrical hazards

Fire

Flames, hot surfaces, etc.

Collision & entrapment

Explosions

Ergonomics

## Extent of the Problem<sup>2</sup>

**18,000 deaths**  
*related to injuries occur  
annually in U.S. homes.*

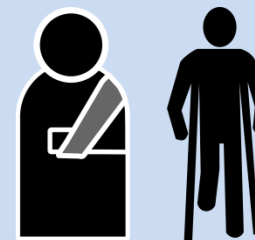
**12 million nonfatal  
injuries**  
*occur annually in U.S. homes.*



## Economic Impact<sup>3</sup>

**> \$200 billion**  
*annually in direct and indirect  
costs, with*

**\$90 billion**  
*due to falls alone.*



1. (OLHCHH, 2014, Healthy Homes Rating System Operating Guidance)

2. (Mack & Liller, 2012)

3. (Zaloshnja et al., 2005)

# American Housing Survey

- According to the American Housing Survey (2013), almost **6.0 million** homes (or 5% of all occupied units) have moderate or severe physical problems.
- Most common housing problems:

Signs of cockroaches in the last 12 months

• 11.9 million homes (10% of all occupied units)

Signs of mice in the last 12 months

• 10.6 million homes (9% of all occupied units)

Water leakage from outside structure

• 9.5 million homes (8% of all occupied units)

Fuses or breakers blown in the last 3 months

• 8.2 million homes (7% of all occupied units)

Water leakage from inside the structure

• 7.9 million homes (7% of all occupied units)

# American Housing Survey (Cont.)

- The American Housing Survey also identified housing and appliance characteristics. Some of these housing and appliance characteristics may cause or contribute to hazards, including:

Gas fuel used	• 88.9 million units (67% of all housing units)
Lacking complete kitchen facilities	• 5.6 million (4% of all housing units)
Gas clothes dryer	• 21.1 million (16% of all housing units)
Use of steps required to enter from outside	• 20.7 million (16% of all housing units)

# Top Housing Hazards that Effect Health

- Lead based paint
- Improper ventilation/Indoor Air Quality
  - Inadequate HVAC
  - Radon
- Asthma/Allergy Triggers
  - Mold/moisture
  - Pests/Rodents
- Overcrowding
- Home Safety
  - Slips/trips/falls
  - Hazardous household products
  - Missing or Improper Working CO and Smoke Detectors
  - Electrical Issues/Fires

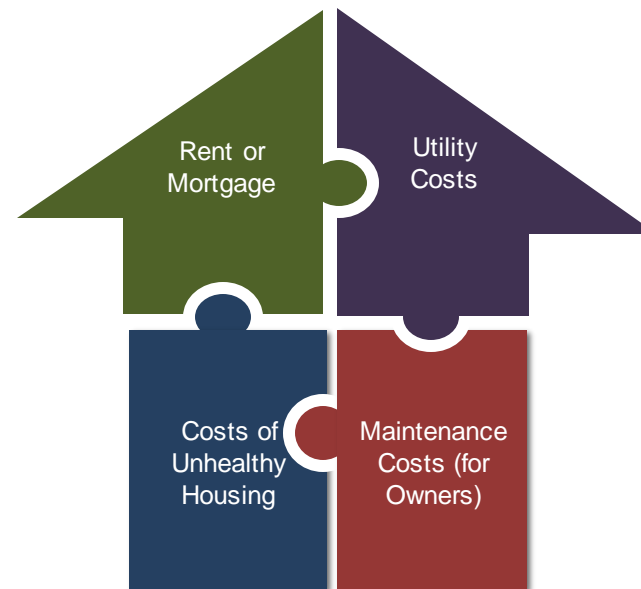
Why is it so important to address housing related health hazards?

- The most vulnerable populations spend up to 90% of their time indoors

# Housing Costs as a Percent of Income

- Both owners and renters spend a high percent of their income on housing costs\*.

	All occupied units	Owner-occupied	Renter-occupied
Median monthly housing <sup>1</sup> cost	\$891	\$929	\$850
Median monthly housing cost as a % of income	23%	19%	33%



***The costs of living in unhealthy housing are a piece of the housing cost puzzle.***

\* Housing costs include rent or mortgage payments, utility costs, property insurance, etc.

# Lead

- Lead poisoning is entirely preventable through prevention and remediation.
- Once a child has been poisoned, the impairment it causes may be irreversible:
  - Reduced IQ
  - Behavioral problems
  - Learning disabilities
  - Damage hearing and the nervous system; including the brain
- There is no safe blood lead level.
- Dust from lead base paint is the biggest threat to young children.



# Indoor Air Quality

- Poor indoor air comes from:
  - What people do in their homes (smoking, pets, hobbies) and
  - What people have in their homes (products, new furniture, carpet)
- Poor Indoor Air Quality can be effected by:
  - Inadequate ventilation
  - Improper or inadequate HVAC systems
  - Radon
    - 2<sup>nd</sup> leading cause of lung cancer deaths in the U.S.
- Test for Radon
- Do not smoke commercial tobacco inside the home/car
- Open Windows
- Keep pets out of bedrooms and off furniture

# Asthma and Allergy Triggers

- More than 6 million children in the U.S. have asthma
- Another 40-50 million people have allergies
  
- Asthma can be controlled
  
- Triggers include:
  - Pet dander
  - Mold/moisture
  - Pests/rodents
  - Dust mites
  - Commercial Tobacco Smoke
  - Cleaning products

# Home Safety

- Leading cause of death in the home are:
  - Falls (slips, trips)
  - Drowning
  - Fire
  - Poisoning (hazardous products)
  - Suffocation
  - Choking
  - Firearms
- The very young and older adults are the most likely to get hurt at home.

# Return on Healthy Homes Investments

## Inputs

For every \$1 spent on  
**asthma reduction**  
programs<sup>1</sup>

For every \$1 spent on  
**lead hazard control**  
programs<sup>2</sup>

For every \$1 spent on  
**radon mitigation**  
programs<sup>3</sup>

## Return On Investment (ROI)

...there is a return of  
between \$5.30 and  
\$14.00.

...there is a return of  
between \$17 and \$221.

...there is a return of  
\$4.95.

## Outcomes

- Reduced healthcare costs
- Increased school attendance
- Increased employment attendance
- Increased income due to attendance
- Fewer deaths

1. (Nurmagambetov et al., 2011)
2. (Gould, 2009)
3. (Healthy Housing Solutions, 2014)

# Tips to Keep Your Home Safe and Healthy

## Tips to Keep Your Home Safe and Healthy

- A home has a unique place in our everyday lives. Homes are where we start and end our day, where our children live and play, and where friends and family to celebrate.
- It is well established that a person's health is directly related to the home, since poor housing conditions can cause or contribute to numerous illnesses and injuries. Poor housing conditions are associated with a wide range of health conditions, including lead poisoning, asthma, respiratory infections and injuries.
- *You can create a healthier home for your family by following these tips*
  - Install smoke and carbon monoxide detector. Test batteries monthly and replace at least twice a year.
  - Clean and replace air filters every 90 days. If you have pets, you should replace more frequently.
  - Do not allow smoking in your home or car. Ask family members or guests to smoke outside.
  - Test your home for radon. Install a mitigation system if the test results is 4 pCi/L or higher.
  - Keep chemicals, including cleaning products and pesticides, away from children.
  - Remove shoes before entering your home to keep contaminants and toxins outside of the house.
  - Clean and maintain gutters, downspouts and the roof to prevent moisture from entering your home. Fix leaks right away
  - If you live in a home built before 1978, test your home for lead paint. Ask your doctor to test your child's blood for lead.
  - Prevent slips, trips and falls by keeping floors clear, cleaning up spills and installing handrails on stairs and ramps.
  - Install properly working locks on doors and windows. Install window guards and stops.

# What's Next for the OLHCHH?

- National Lead Poisoning Prevention Week  
October, 2020
- 2 NOFAs out for funding; Lead Hazard Reduction grant  
and Healthy Homes Production Grant for Tribal Housing,  
applications due August 24, 2020
- Building public, private and philanthropic partners
- Share data and identify “gaps” in data and information to  
develop Research Needs

# What's Next for the OLHCHH?

- Healthy Homes resources

[https://www.hud.gov/program\\_offices/healthy\\_homes/outreach\\_materials\\_publications](https://www.hud.gov/program_offices/healthy_homes/outreach_materials_publications)


# Contact Information

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# Improving of Prevention, Early Screening and Detection of Childhood Lead Poisoning in Primary Care Offices

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*Clinical Assistant Professor*

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*EPSDT Team: Tope Awelewa, Elizabeth Cramer, Tewa Shruti*



# Objectives

1. Describe primary, secondary, and tertiary prevention of lead exposure in the primary care office
2. Describe ways to increase provider engagement in lead poisoning prevention efforts
3. Discuss ways to improve communication between provider offices and agencies involved in lead poisoning prevention efforts

# Childhood Lead Exposure

*Amid growing evidence that even low levels of lead exposure can cause long-term damage to children's development, the American Academy of Pediatrics urges stronger federal action to eliminate exposure.*



## Common sources of lead in the home:

- Dust
- Soil
- Water in lead pipes
- Toys
- Nutritional supplements
- Dishware
- Fishing sinkers
- Bullets
- Residue from parent occupations
- Paint/hobby materials

**37 million**

Estimated number of housing units in United States that contain lead-based paint

U.S. housing built from 1940-1959: **39 percent**



U.S. housing built from 1960-1977: **11 percent**

U.S. housing built from 1978-1998: **3 percent**

**None**

Level of lead exposure considered safe for children

**\$50 billion**

Annual cost of childhood lead exposure in the United States

**\$17 to \$221**

Money saved for every \$1 invested to reduce lead hazards in U.S. housing

**535,000**

Estimated number of U.S. preschool children with blood lead levels high enough to call for medical management (more than 5 ug/dl)

**23 million**

Estimated total loss of IQ points among U.S. children today from lead toxicity

**1 in 5**

Attention Deficit Hyperactivity Disorder cases attributed to lead exposure

# Adverse Health Effects

- Cognitive, cardiovascular, immunologic effects
- Reproductive, developmental and endocrine effects
- Anemia, Abdominal pain
- Kidney damage
- Brain damage/encephalopathy
- Are these real???



2.5 year old with autism and ADHD referred to the ED to rule out leukemia: extreme pallor and lethargy; BLL greater than 100mcg/dl



AAP Lead testing Webinar series by Alan Woolf, Director, Pediatric Environmental Health Center, Boston Children's Hospital, Professor of Pediatrics, Harvard Medical School

15 month old with elevated BLL >90mcg/dL, anemia, poor appetite, repeated spitting up food, little weight gain in past month, and irritability;



### Tumeric Recalled Due To Excessive Levels of Lead

PRAN brand Tumeric spice powder is being **RECALLED** because it contains high levels of lead.



The recalled spice powder was distributed in New York and New Jersey through retail stores and direct delivery.

The recalled product is packed in 250 and 400 gram clear plastic jars with yellow lids and "Best Before" dates Oct. 26, 2014 and Jan. 15, 2015. Consumers who have purchased PRAN Tumeric are urged not to consume the product



# Why Lead Prevention



- In 2012, CDC established a new “reference level” for blood lead levels ( $\geq 5 \mu\text{g}/\text{dL}$ ) lowering the level at which evaluation and interventions are recommended
- National Toxicology Program and U.S. Environmental Protection Agency’s (US EPA) Lead Integrated Science Assessment concluded that adverse neurodevelopmental cognitive impacts occur at blood lead levels less than  $5 \mu\text{g}/\text{dL}$



# Why Lead Prevention

- No measurable level of blood lead is known to be without deleterious effect
- No therapeutic interventions currently exist for low blood lead concentrations; therefore, primary prevention of exposure is paramount
- *Why primary care clinician?*



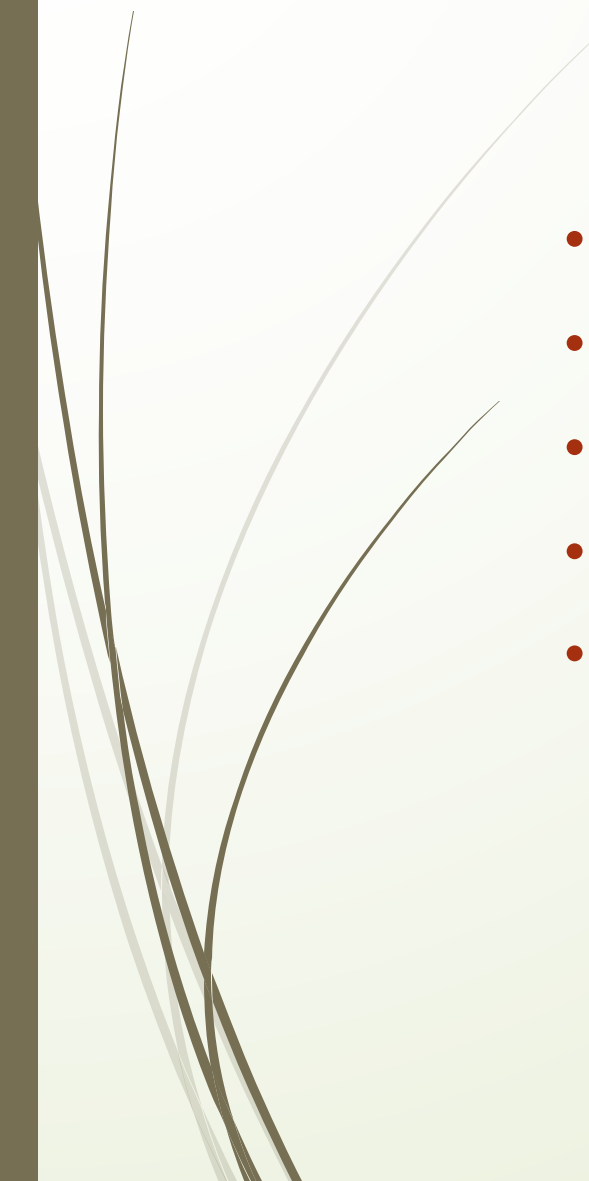
# Role of Primary Care Clinicians

- Primary care clinicians are in a unique position to **promote safe and healthy environments** for children
- Primary care providers play a key role in **preventing** lead exposure, identifying and treating lead poisoning



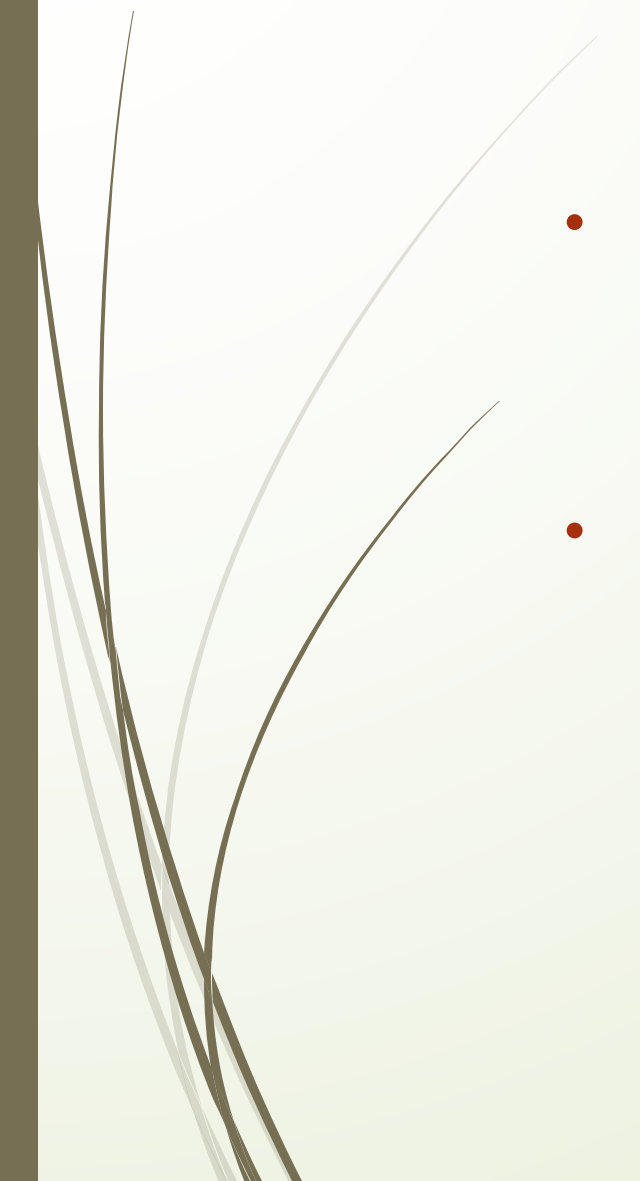


# Role of Healthcare Providers

- Dietary counseling
  - Hazard reduction
  - Neurodevelopmental assessment
  - EIP/Head Start referral
  - Social management
- 



# Improving Lead Prevention in the Primary Care Office

- Improve provider engagement in counselling at prenatal and well child visits
    - Provide key messages
  - Advocate for lead prevention public health measures
  - Collaboration for public health, environmental, housing and school policies are essential to lead exposure prevention
- 

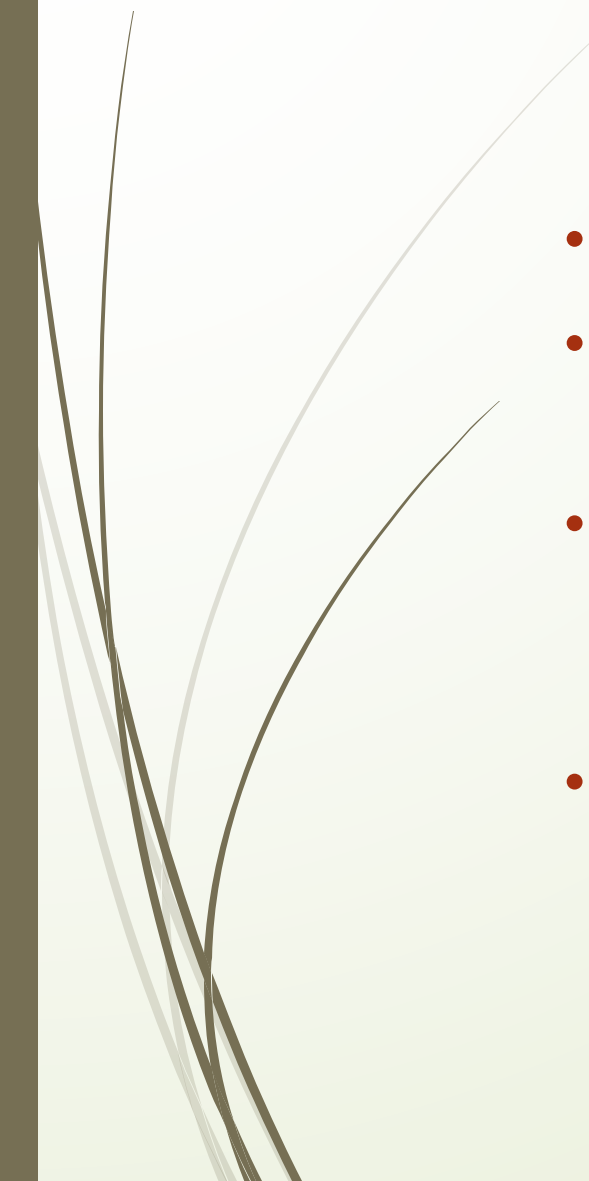


# Key messages in the primary care office

- Primary source of childhood lead exposure - lead in dust and soil from deteriorated paint in pre-1978 housing
- Drinking water constitutes up to 20% or more of a person's total exposure to lead
  - Typically not a major source of exposure to lead as lead in water is regulated, **except communities with lead service lines** and unsatisfactory corrosion control
- Can be higher for young infants who consume mostly mixed formula

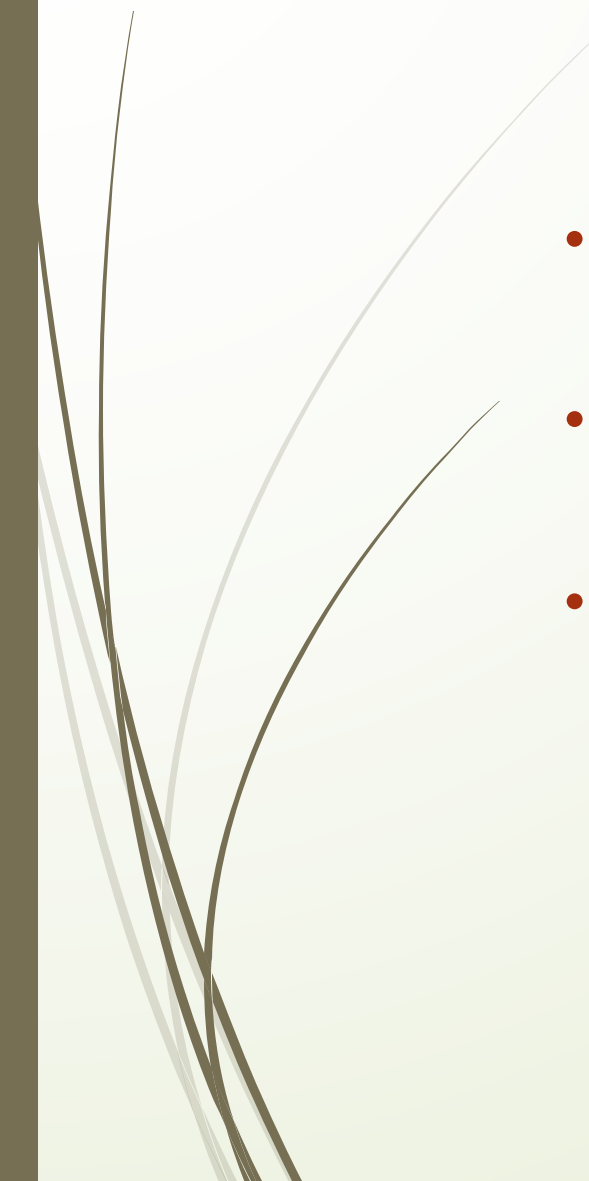


# Key messages on lead in drinking water

- Flush water pipes before drinking or drawing water
  - Recommend families learn more about the water coming into their home, in schools or childcare facilities
  - Encourage families to discuss the need for water testing with local public health officials when risk factors are present (e.g., infants on formula made with tap water)
  - Minimum of annual testing and more frequent testing as indicated based on well and household changes
- 



# Key messages on reducing lead in water

- Use only cold water tap for drinking, cooking, and especially for making baby formula
  - Regularly clean and remove any debris from faucet aerators to clear out any trapped particles of lead
  - Identify a pitcher or faucet device to remove soluble and particulate lead, families can be referred to NSF International
- 



# Ways to improve prevention in primary care offices

- Prevention should start in pregnancy as part of prenatal visits, continue on to well child visits
  - *Provider education- State Lead Champions*
    - *Educate Peds, OB and FM clinicians*
- Recommend environmental evaluations and home testing
- Routine *patient education and counseling*
- Distribute lead test kits in the office



# Ways to improve prevention in primary care offices

- Integrate demographic data (patient's address, risk factors) in electronic health records with geographic data on high risk communities
  - automatically recommend home lead testing and lead screening based on risk
- Recommend water screening for all formula fed infants using home/city water



# Special Considerations: At-Risk Populations



- Medicaid WIC
- Iron deficiency
- Pre-1978 home? Renovations?
- Visits pre-1978 home or day care
- Sibling/playmate with eBLL
- Immigrants with Products from other countries?
- Refugees

# Educate families, display pictures of potential lead hazards




- Pots & pans
- Jewelry
- Glazed pottery
- Herbs & botanicals
- Baby powder



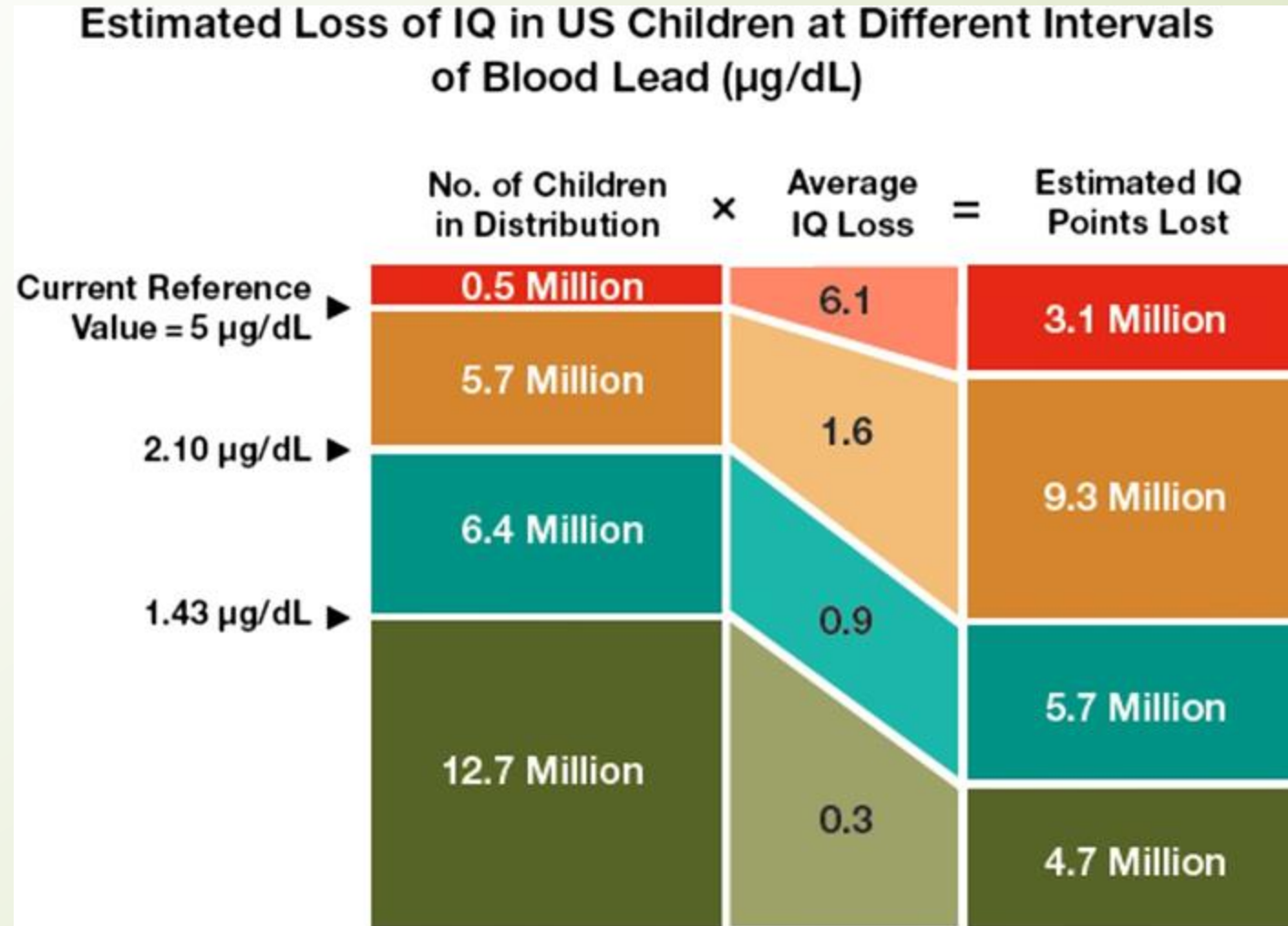
- Toys Antique cribs
- Cosmetics (Kohl)
- African & Middle Eastern infant eye cosmetics (Tiro)
- Religious powders
- Ethnic Medicines
- Dietary supplements
- Spices



# Secondary prevention

- Perform structured developmental screening evaluations at child health maintenance visits per the recommendations in Bright Futures
  - Refer to therapeutic programs such as Early Intervention Programs and Individualized Education Programs as appropriate, since the effect of lead on development may manifest over years
- 

# Prevention Paradox





# Prevention Paradox

- Focusing efforts on children who have blood lead concentrations  $\geq 5 \mu\text{g}/\text{dL}$  is efficient but will fail to preserve the majority of lost IQ points in US children.
- Most disease or disability occurs in low- to moderate-risk groups due to cumulative loss of IQ



# Prevention Paradox

- If the focus is only on reducing exposures for children who have a blood lead concentration  $\geq 5 \mu\text{g}/\text{dL}$ , we will fail to preserve more than 20 million (**>80% of total**) of the 23 million IQ points lost among US children with lower lead exposure because there are so many more children who have low to moderate blood lead concentrations



# Lead Screening Guidelines


- In 2005, the AAP recommended that states and cities formulate their own lead screening recommendations on the basis of local data because of the wide variation in lead exposure.
- The AAP, consistent with the CDC, recommended universal screening of children's blood for lead if **they lived in communities with more than 27% of housing built before 1950 or a prevalence of blood lead concentrations  $\geq 10$   $\mu\text{g}/\text{dL}$  in children 12 to 36 months old of 12% or greater**





# Lead Screening Guidelines

- This is where communication between primary care providers and public health breaks down
  - What is the definition of community? State? Local areas?
  - Are there spots in the state of Iowa where kids absolutely do not need lead screening?
  - Provide reports to individual PCP offices about the communities they serve
- Recommendations need to be updated to conform with our new understanding of lead toxicity




# Other ways PCP's promote secondary prevention

- Incorporate a standardized lead exposure risk assessment tool in clinic note template
- Care gap order set
- Lead screening advisory in the health maintenance tab in the electronic health record
- Improve communication between WIC and PCP's lead screening



# Ways PCP can improve screening

- Increase PCP access to blood lead surveillance data
    - Technologies using geographic information system-based analyses and surveillance from electronic medical records are important tools to identify at-risk children who should have their blood lead concentration measured.
    - Part of IRIS?
- 




# Tertiary Prevention

- Prevent further exposure and case finding
- Lead shares common absorptive mechanisms with iron, calcium, and zinc. Nutritional deficiencies in these minerals promote lead absorption
- Ensure iron sufficiency with laboratory testing and treatment per AAP guidelines
- Manufacturers of dietary supplements are not required to demonstrate that a product is lead-free prior to marketing. Exercise caution with “dietary supplements.”



# Tertiary Prevention

- Reduce missed follow up testing for abnormal lead levels
- Use electronic medical record to help with follow up
- Make sure siblings get evaluated, contacting IDPH for recommendations, etc




# Opportunities to Improve Tertiary Prevention

- PCP's and IDPH should work together to make sure follow up testing gets done
- Computerized system to help with reminders




# Special Considerations: At-Risk Populations

- Children less than six years old, including the developing fetus vulnerable to health problems from lead exposure
  - Children of racial-ethnic minority groups
  - Children who live in poverty, in substandard housing
  - Recent immigrants
  - Children whose parents are exposed to occupational sources of lead
- 



# Challenges to lead prevention

- Poor provider engagement
  - Provider counseling
  - Lead screening at primary care offices
  - Parental perception of risk
  - Access to data
- 





# Barriers

- Time Pressures
- Confusion about community risk
- Confusion about eligibility
- Too many steps
- Complacency
- Poor staff compliance
- Poor family compliance



# Summary

- Pediatric Vulnerabilities: Kinetic differences, immaturity, behaviors, diet, built environment
- Hazards: Ethic remedies, religious powders, cosmetics,
- Special Populations: Foster children, international adoptees, immigrants, refugees, children with ASD & Pica
- Prevention/Solutions: counsel families, test early, support families and fix the environment



# Future directions



- Improve communication of environmental lead risk assessment between health care agencies and the medical home
- Improve provider visualization and access to data on statewide geographic disparities in lead poisoning
- Explore statewide health initiative to improve challenges to provider counseling and lead screening at primary care offices



# References

- AAP Lead testing Webinar series by Alan Woolf, Director, Pediatric Environmental Health Center, Boston Children's Hospital, Professor of Pediatrics, Harvard Medical School
- AAP Lead and Drinking Water: Information for Health Professionals Across the United States
- Prevention of Childhood Lead Toxicity.  
<http://pediatrics.aappublications.org/content/138/1/e20161493>)
- Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention. [https://www.cdc.gov/nceh/lead/ACCLPP/Final\\_Document\\_030712.pdf](https://www.cdc.gov/nceh/lead/ACCLPP/Final_Document_030712.pdf))
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  - [Elizabeth-cramer@uiowa.edu](mailto:Elizabeth-cramer@uiowa.edu)



Thank you

????

VIRTUAL

*Learning Collaborative* | *Afternoon Break*

ON CHILDHOOD LEAD  
POISONING PREVENTION

# The Impact of COVID-19 on Lead Poisoning Prevention



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# CONTENT

- IDPH guidelines during COVID 19 emergency
- COVID-19 impact on lead testing and outreach
- IDPH's virtual inspection protocol & my experience
- Health equity for vulnerable populations through COVID-19 emergency




# IDPH guidelines during COVID 19 emergency

- Blood lead levels that are  $\geq 15$  mcg/dL or children with confirmed BLL that are  $\geq 20$  mcg/dL:
  - Mail, phone or video chat.
- Children that require blood lead retesting or confirmation testing:
  - Referred to their medical provider // Testing may need to be deferred.
- In-home environmental inspections:
  - Deferred to a later date if family receives remote guidance on identification of possible lead hazards and interim steps for intervention.

# IDPH guidelines during COVID 19 emergency

- BLL that are  $\geq 40$  mcg/Dl:
  - In-home environmental investigations and consultations on a case-by-case basis.
  - IDPH CLPPP, Iowa Poison Control Center (800-222-1222), and management at the local CLPPP.
- If services need to be conducted in person, then the Iowa Department of Human Services guidelines for home visitation are applicable.
- All contact efforts and services provided – remotely or in-person – must be documented in HHLPSS for state and local CLPPP contract obligations.

# DHS Home Visitation and Contact Guidance in Response to COVID-19

 When preparing or scheduling appointments for in-person visits, ask for COVID-19 SYMPTOMS:

Fever or chills

Headache

Cough

New loss of taste or smell

Diarrhea

Sore throat

Fatigue


Congestion or runny nose


Muscle or body aches

Nausea or vomiting

Shortness of breath

difficulty breathing

 Were you in contact or exposed to an ill or potential COVID 19 exposed person in the last 14 days?

 Are you at home (quarantine) due to a possible contact with someone with possible or confirmed COVID-19 or due to travel?

 Have you or anyone in the household been recently discharged from a hospitalization due to confirmed COVID-19?

# If the answer is negative, THEN

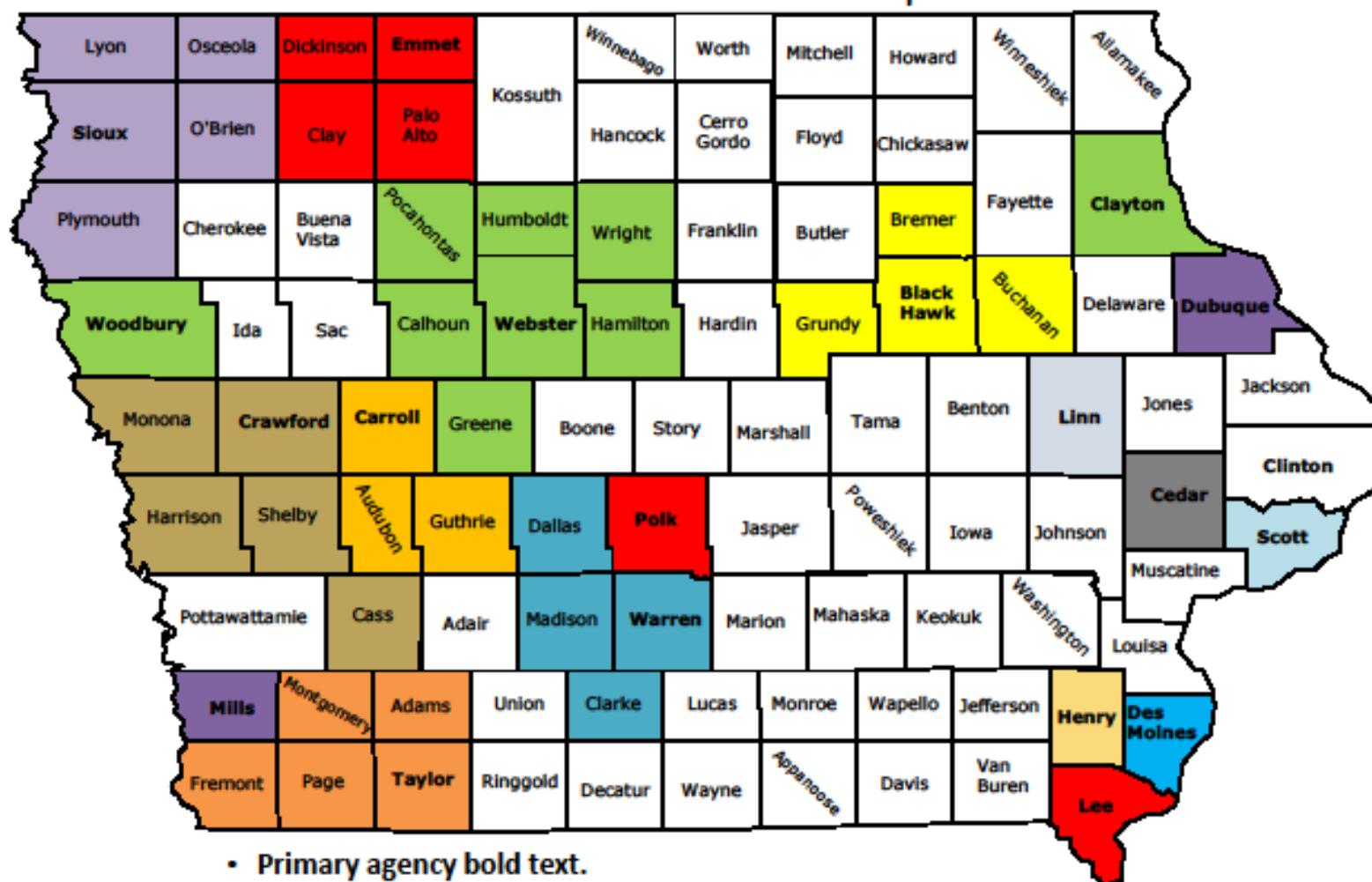
- Call in advance of conducting home visits or other in-person meetings.
- If no pre-screening phone call is made in advance, conduct the screening questions outside of the family home within a safe distance from one another.
- Wear a face mask/cloth covering.
- During in-person meetings, do not be within 6 feet of anyone in the home.
- Avoid handling paperwork during the meeting.
- Avoid touching your face or hair during the meeting.
- Wash hands for at least 20 seconds with warm, soapy water or hand sanitizer before and after the meeting.

# If the answer is positive, THEN

- Direct the household member to visit [www.testiowa.com](http://www.testiowa.com)
- Advise the household member to stay home, except to get medical care.
- Direct the household member to avoid sharing personal household items.
- As appropriate, suggest other household members stay in another room or be separated from that household member as much as possible.
- Suggest that the household member limits non-essential visitors in the home.
- Do not conduct any in-person visits. Contacts may be made through phone, videoconferencing (\*HIPAA compliance issues), and teleconferencing.
- Include screening data within the required documentation for the respective service being provided to the family.
- In-person contact and visitation should resume once the symptoms of illness are clear.

# COVID-19 impact on lead testing and outreach

## Childhood Lead Poisoning Prevention Program 2019 - 2020 Service Area Map

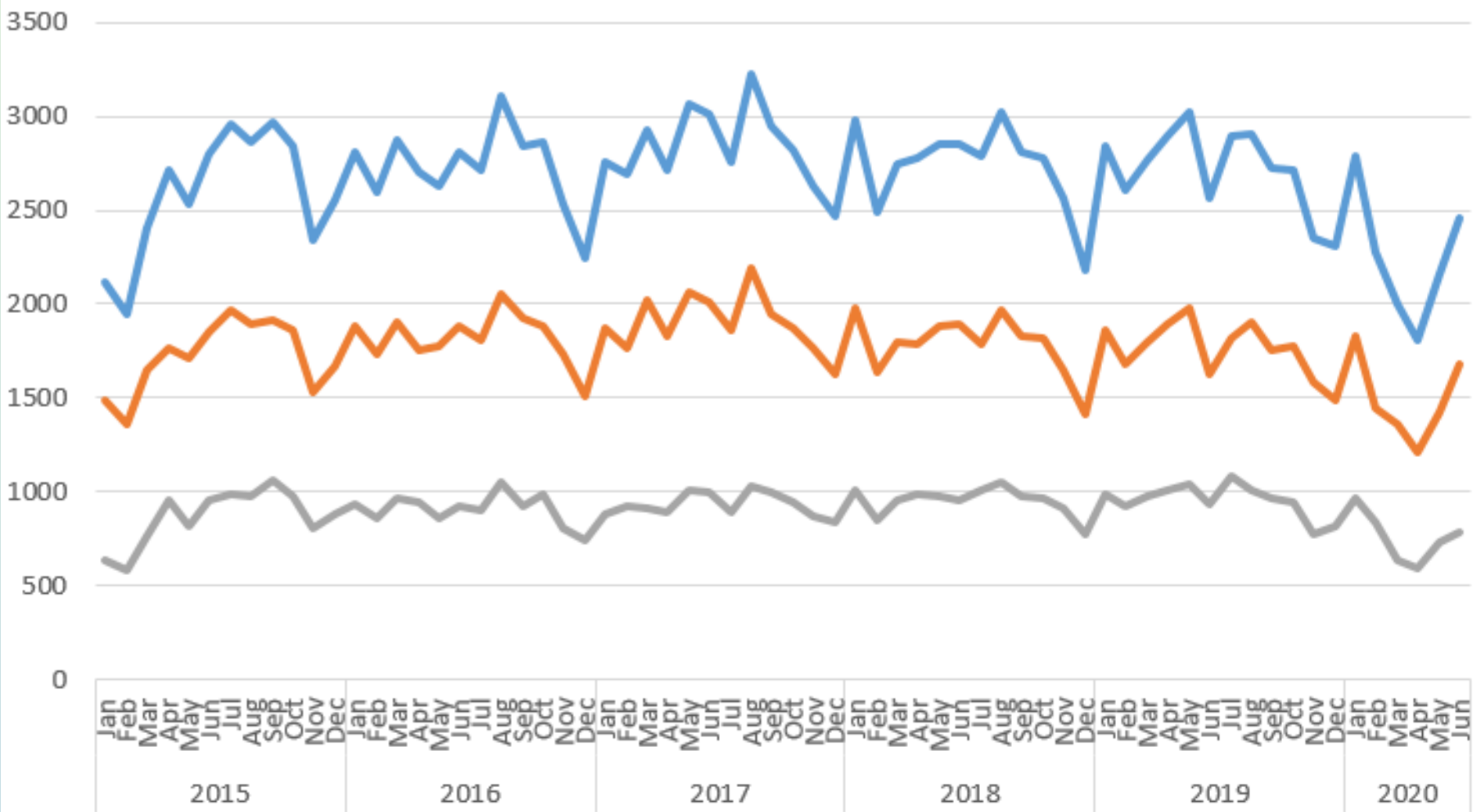


- Primary agency bold text.
- Primary agency county service area in color.
- IDPH Lead Program service area non-colored counties.



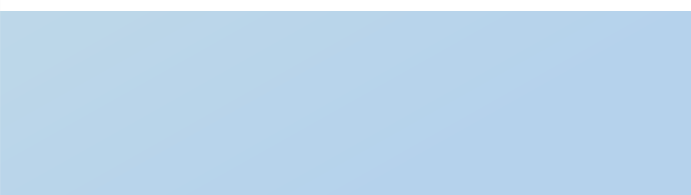
Source: Iowa Department of Public Health, Childhood Lead Poisoning Prevention Program, July 2019

Sum of Number of children tested per month (1-2 years) Sum of Local CLPPP Sum of IDPH



Year Month

Sum of Number of children tested per month (1-2 years)  
 Sum of Local CLPPP  
 Sum of IDPH



Sum of Number of children tested per month (1-2 years)  
 Sum of Local CLPPP  
 Sum of IDPH

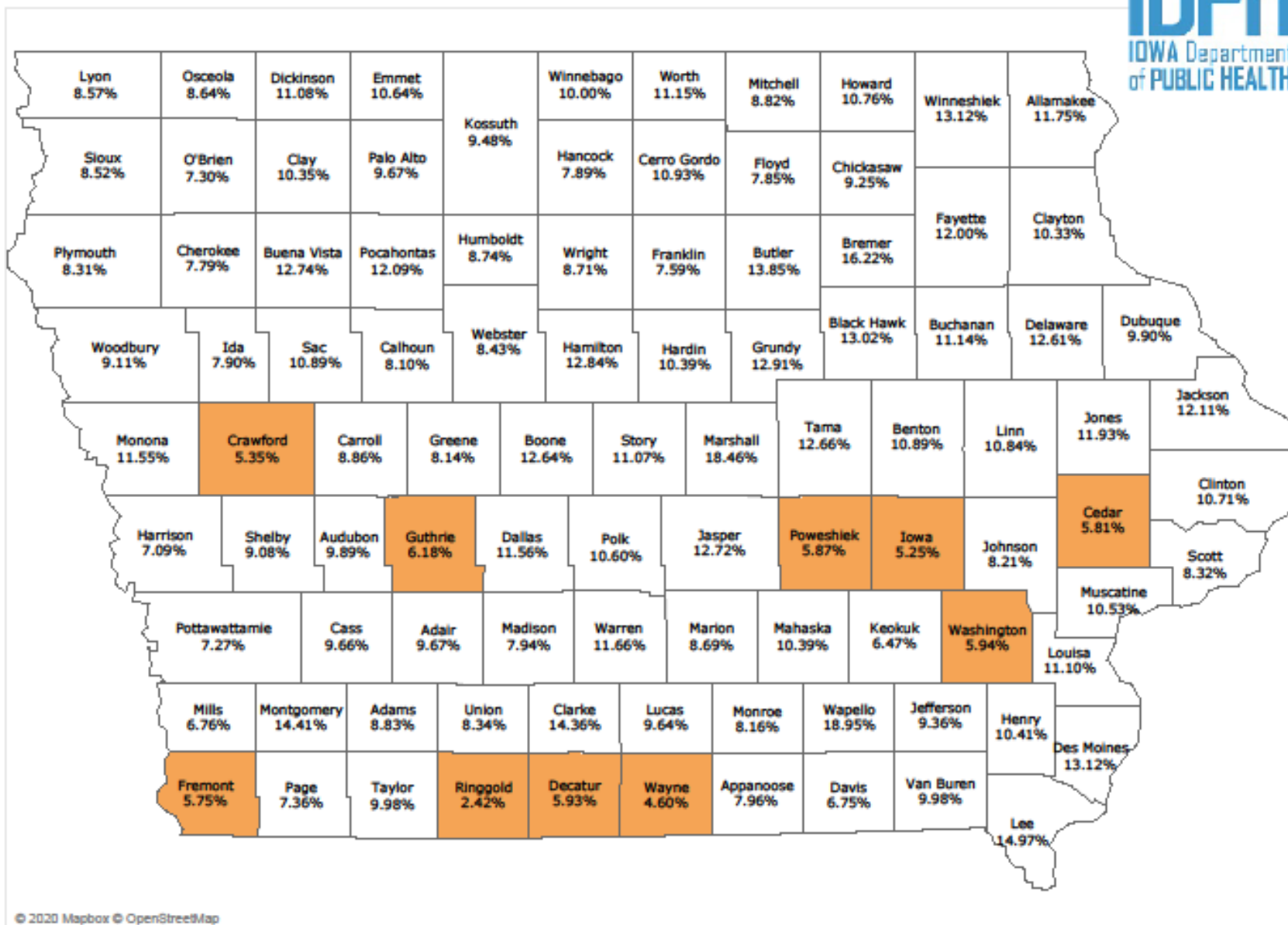


## Difference of children tested per month in 2019 & 2020

	2019	2020	Difference % Change	
Month	Number of children tested per month (1-2 years)	Number of children tested per month (1-2 years)	-3384	-24%
January	2847	2790	-57	-2%
February	2602	2247	-355	-14%
March	2771	1977	-794	-29%
April	2900	1759	-1141	-39%
<b>May</b>	<b>3023</b>	<b>1986</b>	<b>-1037</b>	<b>-34%</b>
Month	Number of children tested per month (Total < 6 years)	Number of children tested per month (Total < 6 years)	-9066	-31%
January	5396	5241	-155	-3%
February	5066	4361	-705	-14%
March	5616	3567	-2049	-36%
April	5937	2472	-3465	-58%
<b>May</b>	<b>5969</b>	<b>3277</b>	<b>-2692</b>	<b>-45%</b>
Month	Total Number of children tested per month (Total < 16 years)	Total number of children tested per month (Total < 16 years)	-9333	-39%
January	5537	5363	-174	-3%
February	5179	4472	-707	-14%
March	5745	3654	-2091	-36%
April	6083	2505	-3578	-59%
<b>May</b>	<b>6113</b>	<b>3330</b>	<b>-2783</b>	<b>-46%</b>
		<b>2151.8</b>		
Note:	Use date sample was drawn, not report date			
	Use number of individual children tested, not number of tests.			

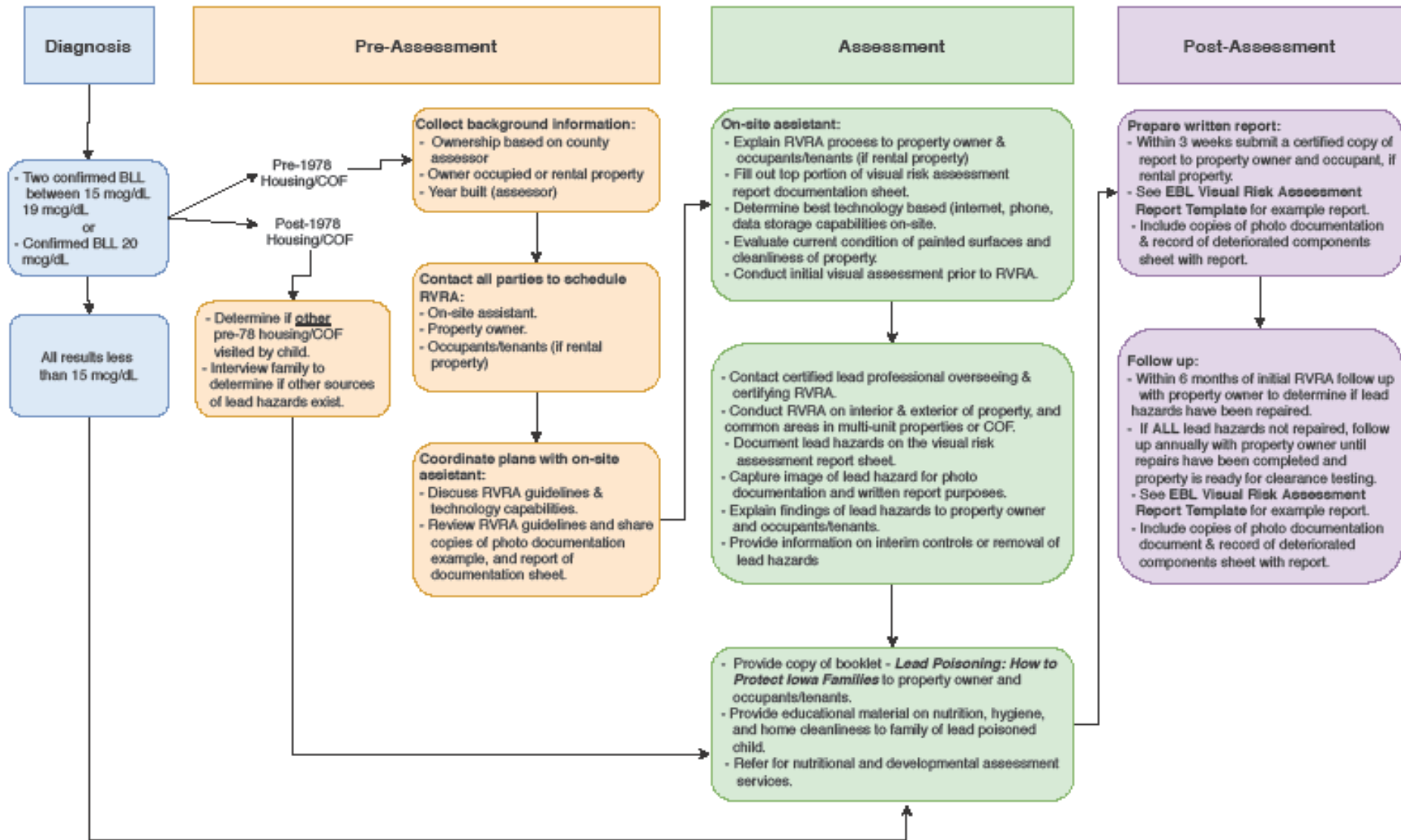
## Percent of Children Under 6 Year of Age Tested for Blood Lead Levels - 2020

The Ten Counties with the Lowest Testing Rates are shown in Orange.



# IDPH's virtual lead inspection protocol

# Remote Visual Risk Assessment Flowchart



**Acronyms**

- BLL - Blood Lead Level
- mcg/dL - micrograms per deciliter
- COF - Child Occupied Facility
- RVRA - Remote Visual Risk Assessment

Area Description			Paint Condition				Photo of lead hazard? (Y or N)	Notes <sup>1</sup>
Interior or Exterior	Room Type <sup>1</sup>	Building Component <sup>2</sup>	Deteriorated Paint (Y or N)	Probable Cause(s) of Deterioration, if known <sup>3</sup>	Visible paint chips or dust on component? (Y or N)	Visible Teeth Marks? (Y or N)		
Interior	Dining	Paneling	Yes	Lack of maintenance, nail holes	No	No	Yes	Father indicated room was not used.
Interior	Dining	Door Jamb	Yes	Lack of maintenance.	Yes	No	Yes	Blocked access, blanket and stuff
Interior	Bedroom	Window	Yes	Lack of maintenance.	Yes	No	Yes	Blocked access, blanket and stuff
Exterior	East side	Window	No	Lack of maintenance.	Yes	No	Yes	Window was in process of being replaced at time of inspection
Exterior	Backyard	Shed	Yes	Lack of maintenance.	No	No	No	Metal shed

<sup>1</sup>Room Type = Interior room equivalent (i.e., living room, kitchen, bedroom, ect.) or exterior side wall (i.e, North exterior of home, South side of garage, ect.).

<sup>2</sup>Building component (i.e., window, window sill, window trough, door, door frame, etc.). Based on the age of the property (pre-1978) all painted or finished components are assumed to contain lead-based paint.

<sup>3</sup>Common causes of paint deterioration are: moisture (indicate source if apparent), mildew, friction or abrasion, impact, damaged or

# An EBL child & my RVRA experience

Select	Tiered Date	Result	Sample Type	Patient Address on Draw Date
<a href="#">1017400</a>	6/19/2020	17.5	Venous	[REDACTED]
<a href="#">1010040</a>	5/27/2020	22.5	Venous	[REDACTED]
<a href="#">1012720</a>	5/26/2020	‡29.6	Capillary	[REDACTED]

No Result      Result Type:

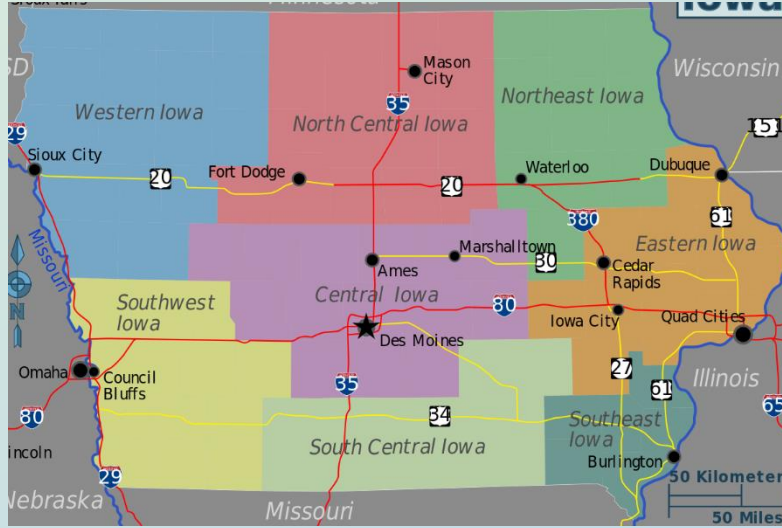
Test Type: **Blood Lead Test**      Detection: Equal To      Result: 17.5 <sup>\*</sup> µg/dL      Lab Smpl #: F319009718

Sample Type: Venous      Sample Description:      Screening Site:

Date Drawn: 06/19/2020      Date rcvd at Lab:      Date Analyzed: 06/20/2020      Date received at LHD: 06/21/2020      Tiered Date (Calculated): 6/19/2020

Patient Address (at time of draw):       Age reported by lab:  Yrs.

# Pre-assessment of lead-poisoned child



Don't  
take  
**LEAD**  
home  
from  
your  
job!

■ How can I protect my family from lead poisoning?



Change into clean clothes and shoes at work **before** you get into your car or go home. Put dirty work clothes and shoes in a plastic bag.



Wash your face and hands with soap and warm water before leaving work.



Take a shower and wash your hair as soon as you get home. (It is better to shower at work if you can.)



Wash work clothes separately from all other clothes. Empty your work clothes from the plastic bag directly into the washing machine and wash them. Run the empty washing machine again to rinse out the lead. (It is better if your employer washes the work clothes.)

The law says your employer must provide a place to wash your hands. In jobs where workers are exposed to high levels of lead, employers must also provide work clothes and a shower.



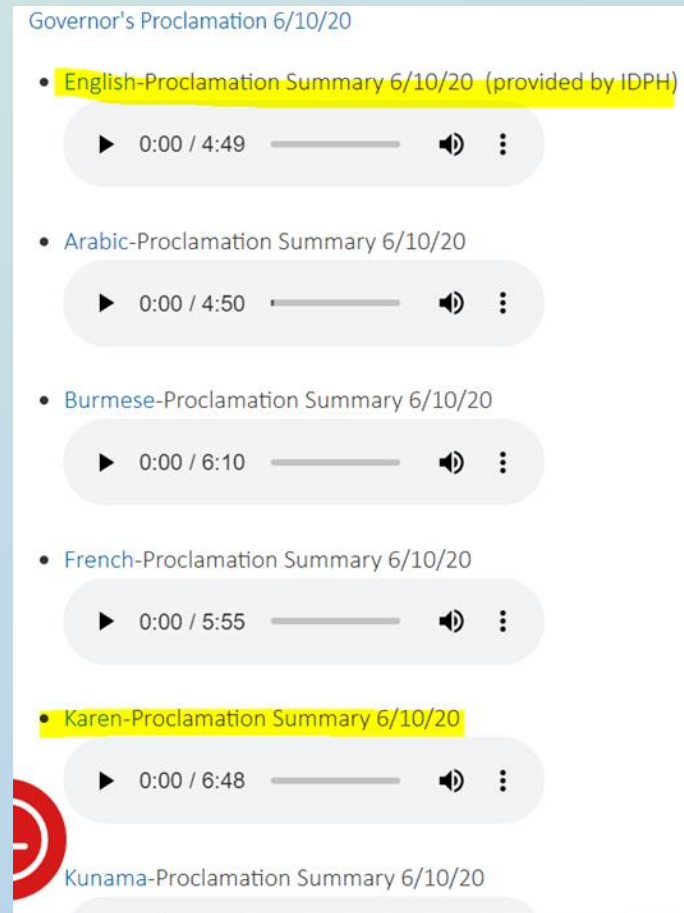
# Health equity for vulnerable populations through COVID-19 emergency



- Health Equity Drives Forum, a group of four people started conversations on COVID 19 and vulnerability.
- Governor's proclamations:
  - <https://humanrights.iowa.gov/covid-19/language-access>

Governor's Proclamation 6/10/20

- English-Proclamation Summary 6/10/20 (provided by IDPH)  
▶ 0:00 / 4:49
- Arabic-Proclamation Summary 6/10/20  
▶ 0:00 / 4:50
- Burmese-Proclamation Summary 6/10/20  
▶ 0:00 / 6:10
- French-Proclamation Summary 6/10/20  
▶ 0:00 / 5:55
- Karen-Proclamation Summary 6/10/20  
▶ 0:00 / 6:48
- Kunama-Proclamation Summary 6/10/20



- Governor's press conferences

<http://www.iowapbs.org/video/story/36341/recursos-sobre-el-coronavirus-en-espanol>

- IDPH and Hispanic media collaboration



# Agencies responding to COVID 19

Re: **CDC Social Media toolkit**

Catholic Charities, EMBARC,  
LSI, LUNA, Monsoon, NISAA,  
USCRI, Latino Affairs (Human  
Rights Department), Iowa AIR

**COVID-19: Central Iowa  
Immigrant Emergency Fund**

## **Immigrant Emergency Fund :**

Many in our communities have been left out of COVID-19 relief programs. AFSC Iowa, Al Exito and Proteus, Inc. are partnering to offer relief and support for basic needs for families who do not qualify for government assistance. **The Central Iowa Immigrant Emergency Relief Fund will provide support for undocumented families and individuals.**

Individuals can fill out the application form online or contact one of the partnering organizations. Funds will be dispersed on a weekly basis and will continue as funding is available.

If you want to request funds call Gabby Guerra, Assistant Director, Al Exito 515-494-6564  
or visit <https://tinyurl.com/CentrallACOVID19Fund>

## **COVID-19 resources**

1. Multilingual Hotline: **1-877-558-2609**: Interpreters will be available 8:30-5:00 with a 24 hour voicemail. For more information [click here](#).
2. **Iowa Spanish Helpline: 515-344-3936**; Monday-Saturday 8:00 am a 8:00 pm
3. Iowa Department of Human Rights information and weekly COVID-19 update newsletter: <https://humanrights.iowa.gov/covid-19> (sign up at bottom of webpage)
4. Society of Refugee Healthcare Providers: <http://refugeesociety.org/covid-19-resources>
5. Guidance on [COVID-19 in Newly Resettled Refugee Populations](#) - audience includes: public health professionals, community based organizations, resettlement agencies, and healthcare providers.

# Agencies responding to COVID 19



Latino Service Providers Coalition



RACI Multilingual Hotline: 1-877-558-2609

## RACI Health Work-Group Meeting Co-chairs: Jessica Schultz & Nola Aigner Davis

a.



b. Introductions & Group updates

Laura Barnett, Proteus, Inc.	Alyssa Clayden, ABC'd Therapy & Consultation	Nola Aigner Davis, PCHD
Olga Esparza, Iowa Total Care	Laura Housel, Rebelle House, LLC	Tira Mays, Broadlawns Medical Center
Mae McCarty, ISU Extension	Jacque Easley McGhee, MercyOne	Stephanie McFarland, DMPS Behavioral Health
Stephanie Moris, RACI	Jim Pender, IDPH	Annie Randolph, Brain Injury Alliance of Iowa
Jessica Schultz, IDPH	Heather Strachan, NAMI Iowa	Kay Tannatt, Iowa Total Care
Liz Thill, Dental Connections	Sarah Van Gorp, LSI	Wasan Waham, Catholic Charities
Barbara Wells, Blank Children's		

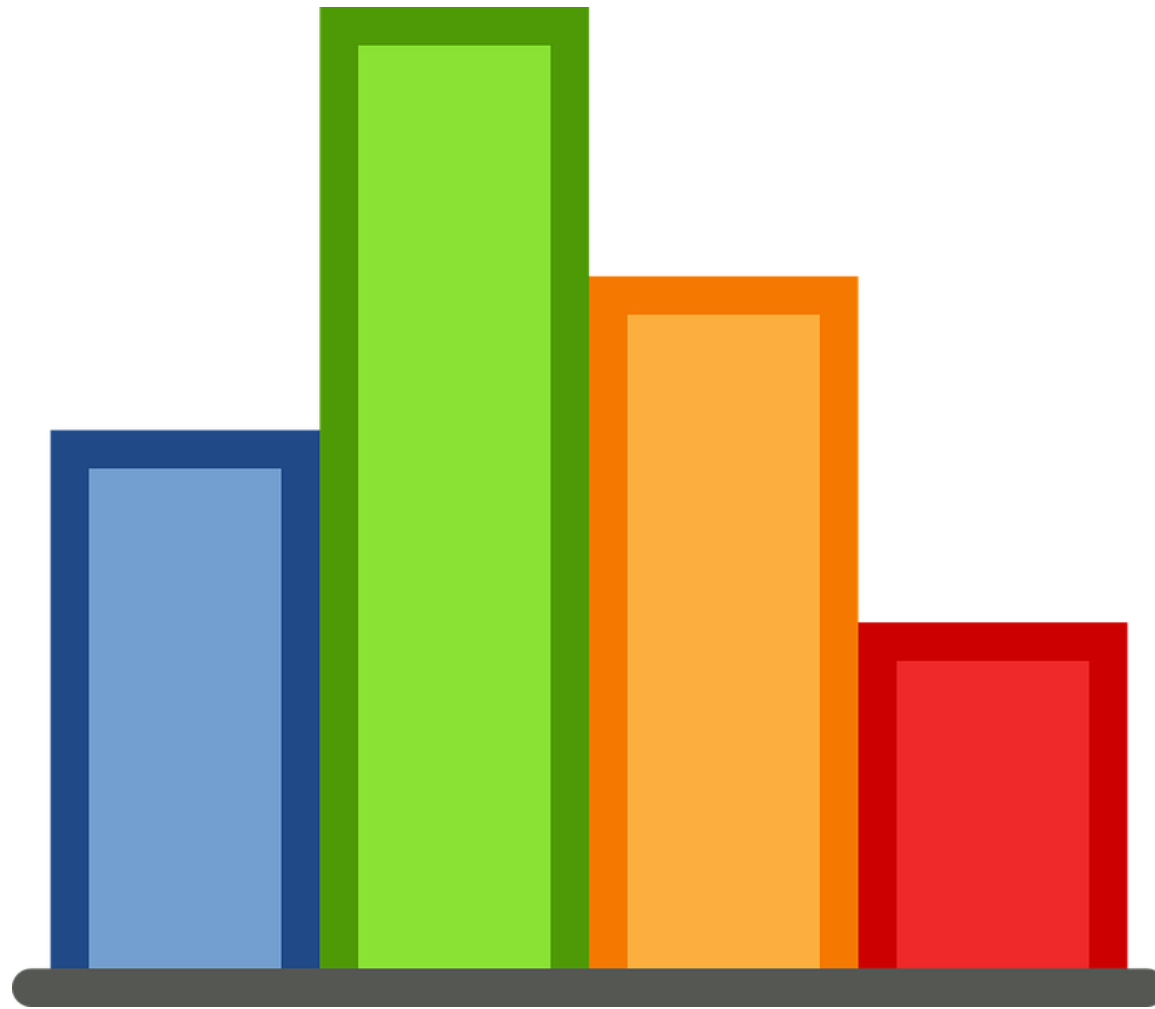
# Bibliography

- COVID-19 Guidance to Childhood Lead Poisoning Prevention Programs (IDPH/Childhood Lead Poisoning Prevention)
- [https://dhs.iowa.gov/sites/default/files/DHS\\_COVID19\\_HomeVisitationGuidance.pdf](https://dhs.iowa.gov/sites/default/files/DHS_COVID19_HomeVisitationGuidance.pdf).
- Impact of COVID -19 Pandemic on Pb (HHLPPS-IDPH Data)
- Remote Visual Risk Assessment (IDPH/Childhood Lead Poisoning Prevention)
- EBL data from HHLPPS & Lead Inspector Rossany Brugger
- Don't take lead home from your job! California Department of Public Health/Childhood Lead Poisoning Prevention Program
- <https://www.refugeeallianceofcentraliowa.org/>
- iowa-air@googlegroups.com
- [jessica.schultz@idph.iowa.gov](mailto:jessica.schultz@idph.iowa.gov) (RACI Updates)
- [iowa.immigrant.refugee.coalition@gmail.com](mailto:iowa.immigrant.refugee.coalition@gmail.com)
- La Reina magazine, Salud, IDPH; Rossany Aceda. July 2020.

# Thank YOU!



[www.menti.com](http://www.menti.com)





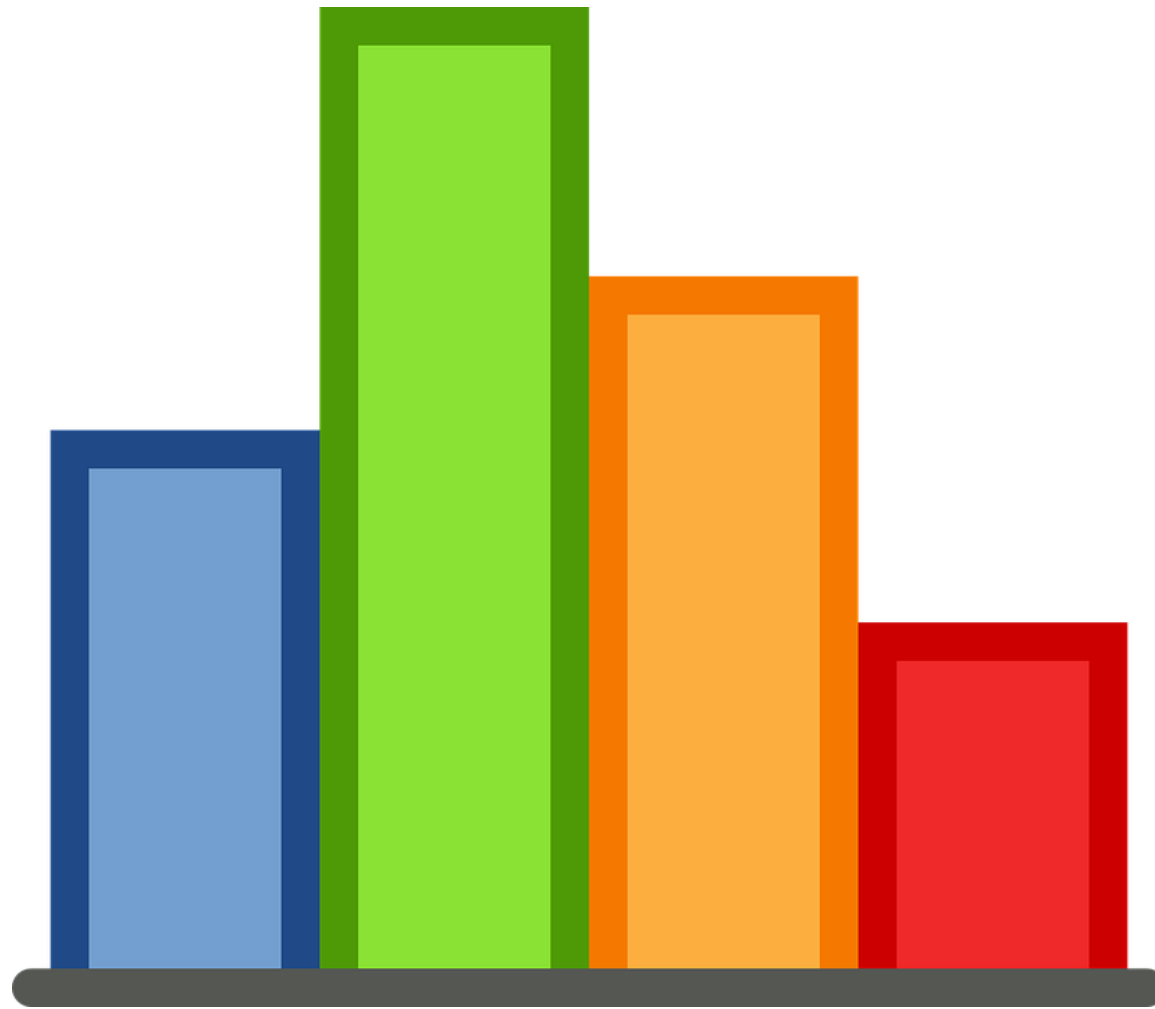
The slide features decorative elements consisting of overlapping circles in shades of light blue, yellow, orange, and grey. These circles are positioned in the top-left and bottom-right corners of the slide, framing the central content.

# Afternoon Discussion

Who has had success in communicating with these harder to reach populations? Describe what you did.

Those who haven't had success, share your challenges.

[www.menti.com](http://www.menti.com)





# Thank you!

- **Reminder:** CEU link will be coming in email
- Feedback
- Educational Resources
  - Training Modules <https://iiphrp.thinkific.com/>
  - Childhood Lead website <https://idph.iowa.gov/Environmental-Health-Services/Childhood-Lead-Poisoning-Prevention>
  - IIPHRP website <https://www.public-health.uiowa.edu/childhood-lead-poisoning-prevention/>
  - Tracking Portal <https://tracking.idph.iowa.gov/>
- **Coming soon!**
  - County specific data templates