



# New Actions to Reduce Exposure to Lead & Promote Healthy Homes

*Generously supported by the NJ Department of Health, Jersey City Department of Health & Human Services, and the Robert Wood Johnson Foundation*





# Speakers

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**Elyse Pivnick**, Senior Director of Environmental Health, Isles, Inc.



**Melanie McDermott**, Senior Researcher, Sustainable Jersey



# Health Gold: New Actions to Reduce Exposure to Lead

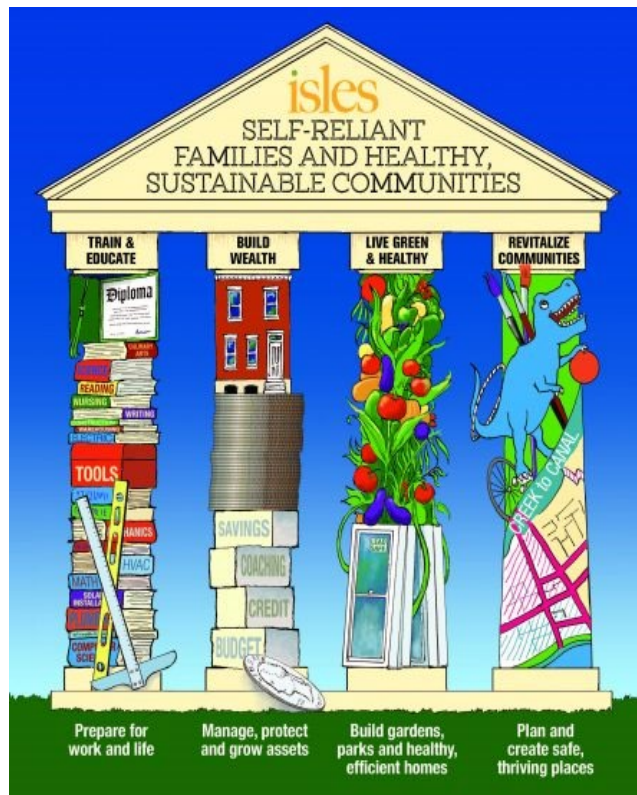
Sustainable New Jersey

October 7, 2021

Elyse Pivnick, MCP, Isles, Inc.



# Isles Mission



Founded in 1981, Isles, Inc. is a community development and environmental organization based in Trenton, New Jersey.

With a mission to foster self-reliant families and healthy, sustainable communities, we design and develop effective services that support this mission and share what we learn with others who can make a difference.

## NYT Quote of the Day

“If you were going to put something in a population to keep them down for generations to come, it would be lead.”

(NYT January 30, 2016)

Dr. Mona Hanna-Attisha, of Flint MI, who has studied lead poisoning and the effects of lead exposure, for which there is no cure.



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# Lead, Race and Inequality

Lead toxicity ...is a pathway through which racial inequality literally gets into the body.

Dr. Robert Sampson, Harvard Researcher.  
2016

[https://scholar.harvard.edu/files/alixwinter/files/sampson\\_winter\\_2016.pdf](https://scholar.harvard.edu/files/alixwinter/files/sampson_winter_2016.pdf)



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## Legacy of Lead Paint



Robs a child of their potential in life

# Dangers of Lead Exposure

- Lead poisoning remains the **#1 environmental threat** to the health of America's children (learning problems, hearing, behavior)
- Nearly 50% of all children tested (2018-2020) had detectable lead in their bodies. ---- research tracked more than 1.1 million children under the age of 6 years, (JAMA Pediatrics 2021)
- Adult impacts: High blood pressure, joint and muscle pain, kidney and heart disease, memory and concentration, headaches, pain, Mood disorders, reduced sperm count and abnormal sperm, miscarriage, stillbirth or premature birth in pregnant women
- Lead is so toxic that it is unsafe at any level.



Toxic





## Lead Exposure is Cumulative

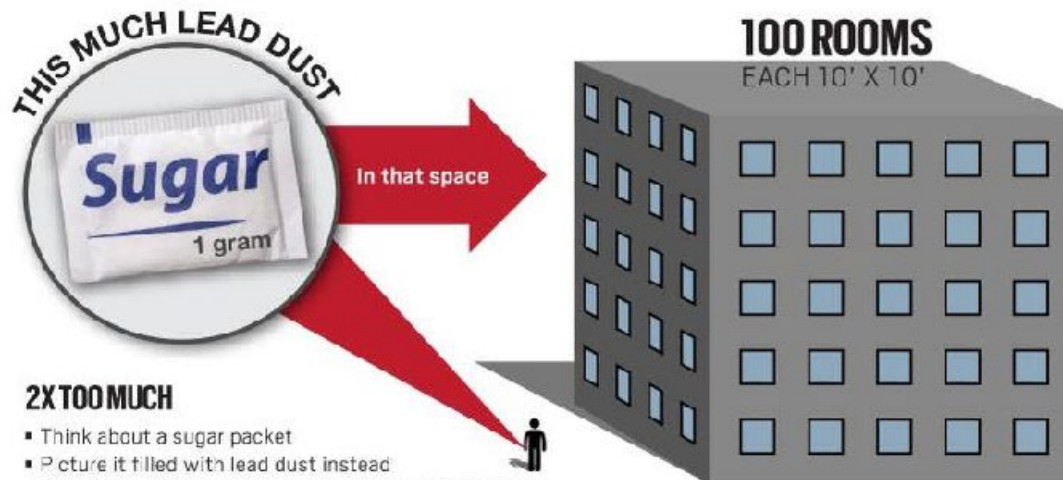
It typically comes from these main sources



# How Much Lead Dust?

## HOW MUCH LEAD IS DANGEROUS?

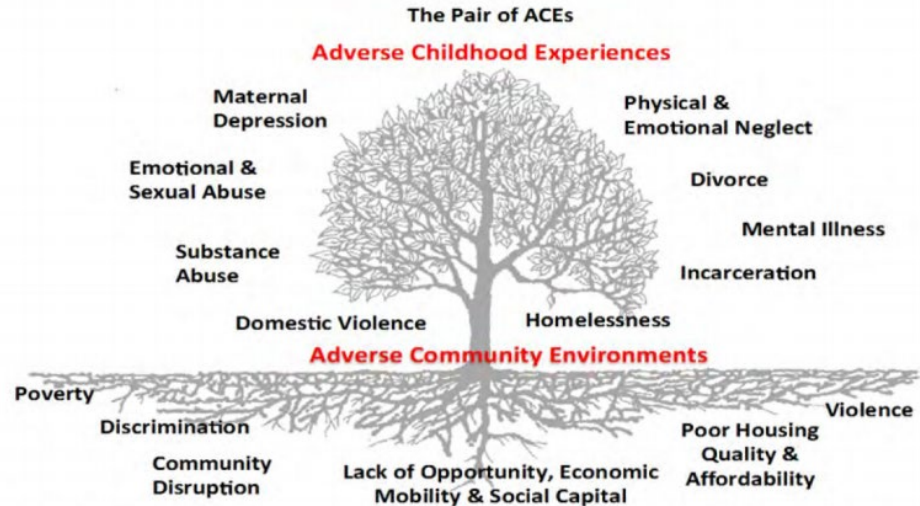
Even low levels of lead exposure can damage the nervous system, and high levels of exposure can lead to coma or death. The Centers for Disease Control and Prevention say there is no safe blood lead level in children. Paint containing lead can deteriorate or chip, leaving traces of lead dust at dangerous levels.



### 2X TOO MUCH

- Think about a sugar packet
- Picture it filled with lead dust instead
- Spread that little packet equally through 100 10x10 rooms
- That amount of lead dust in each room would still be two times higher than the federal hazard level.

# Adverse Childhood Experiences Adverse Community Environments Social Determinants of Health



Ellis, W., Dietz, W. (2017) A New Framework for Addressing Adverse Childhood and Community Experiences: The Building Community Resilience (BCR) Model. *Academic Pediatrics*. 17 (2017) pp. S86-S93. DOI information: 10.1016/j.acap.2016.12.011

# Important to Know

- About 80% of NJ housing was built before 1978—the year lead was removed from new house paint
- In 2019, about 4,000 children in New Jersey had lead level of 5 or greater for the first time
- 75% of children with EBLs poisoned by lead paint (DOH, 2021)
- Elevated BLL: Nationally, 36% of inner-city black children vs 4% for suburban white children
- Forgotten in child development and education reform- **My Brothers Keeper**



# Lead Poisoning & School Performance

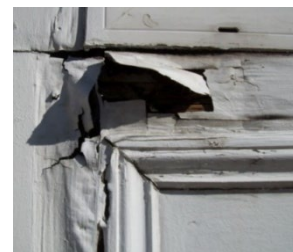
- Compromised long-term memory---for example, a student can't recall multiplication tables from one day to next
- Reduced auditory processing makes it difficult, for example, to hear the difference between "s" and "f" impeding the ability to read
- Inability to control behavior
- Inability to learn no matter how hard a child tries
- Disruption in classrooms by children frustrated by their failure to learn make it difficult for *other* children to learn.
- Lower test scores for individuals and entire school districts that have a disproportionate number of children with lead poisoning
- Disproportionate number of low-income males incarcerated, unemployed and aimless



# School Suspensions, Reading, Juvenile Detention, Poverty

- FLINT: Suspension rates increased from 2.5% (before Flint water change) to 13.56% (after water exposure)
- FLINT: Delays in reading: 40% proficient *before* water change; reduced to 10% *after* water change.
- RI: Children with EBL 7X more likely to be suspended from school
- RI: Suspended children were also 10X more likely to end up in juvenile detention.
- RI: Relationship between lead and suspensions was much stronger for kids who received free lunches suggesting its interconnection with poverty, relates to housing

Currie and Aizer, 2017; Kristen Totten, MI ACLU





# Sources of Lead Exposure: Paint/Dust



# Lead Connection to Housing Paint, Water, Soil, Toys, Cultural



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# Context for Sustainable NJ Actions to Reduce Exposure to Lead

- New Jersey' **NEW Lead Safe Certificate Law**
- All landlords will be required to assess their rental units for hazardous lead and correct the hazards before entering into a rental agreement with tenants.
- Implementation regulations to be issued in ten months; bill takes affect July 2022.

# Sustainable NJ Can Help Prevent Lead Poisoning

## NEW ACTION ENCOURAGES HOUSING CODE ENFORCEMENT



This checklist was developed for the National Center for Healthy Housing (NCHH) as a tool for healthy housing. A healthy home is one that is maintained, and rehabilitated in a manner conducive to good occupant health.

In a healthy home, occupants should keep it clean, well-ventilated, free from contaminants, well-maintained, and thermally controlled.

Good home maintenance can act to reduce allergens, prevent illness, and prevent accidental injuries. This checklist provides basic guidelines; items may need to be checked more often depending on local conditions and manufacturer recommendations.

Developed by Terry Brennan and Ellen Tohn, technical advisors to NCHH. Revised by NCHH staff, May 2018.

	Spring	Fall	Annual	As Needed	Pro Needed?
<b>INTERIOR</b>					
away from house	●				
sing/falls, choking, or sharp-	●	●			
fence is intact	●	●			
odents, bats, roaches, or	●	●			
its and hoses	●	●			
and check for drainage	●	●			
downspouts	●	●			

	Spring	Fall	Annual	As Needed	Pro Needed?
<b>UNDER CRAWLSPACE</b>					
odors, or musty odor	●	●			

	Spring	Fall	Annual	As Needed	Pro Needed?
<b>EXTERIOR ROOF, WALLS, AND WINDOWS</b>					
Ensure that the shingles are in good condition	●				
Inspect the chimney valley, plumbing vent, and skylight flashing for damage or leaks	●				
Inspect the chimney and clean if needed	●				
Ensure that gutters discharge water away from building	●				
Inspect the attic vents	●	●			
Inspect attic for signs of roof leaks	●				
Inspect for icicles and ice dams				●	
Look for peeling paint	●				
Look for signs of leaks where deck attaches to house	●				
Check below windows and doors that the flashing is intact	●				
Remove and replace any cracked or broken glass	●				
Look for signs of leaks at window and	●				

- HEALTHY HOMES TRAINING FOR HOUSING AND HEALTH INSPECTORS
- Empower them to inspect whenever they are in a home
- Leave behind a healthy homes checklist

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# Create a Culture of Health for Lead Poisoning Prevention

- Even better?
- Encourage lead and healthy homes training for Mayors, city council members, school superintendents, school boards, child study teams, community health workers, faith and civic leaders, state and local elected officials, parents, and more.







## CREATE A LEAD AND HEALTHY HOMES ADVISORY COMMITTEE

Improve  
coordination of lead  
and healthy homes  
efforts: Code enforcement,  
CHWs, data, Section 8,  
Medicaid, education, legislation,  
energy efficiency



# Call to Action: EQUITY

All children should proceed through life unburdened by lead.

Support new Sustainable NJ actions.



## Contact Us

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## Find Us Online



[www.isles.org](http://www.isles.org) and [www.isles.org/lppp](http://www.isles.org/lppp)



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## Q&A





# Gold Star Standard in Health

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- Municipalities play important role in shaping **social determinants of health** ... & health equity
- Key authorities include:
  - Planning & zoning, housing, clean water, transportation, economic development, access to healthy food, etc.
- High-impact health strategies = SJ actions
- **Healthy homes** = key factor in individual & community health & therefore sustainability



## **A Municipal Guide to a Lead-Safe Community**





# Lead & Healthy Homes Actions

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- **Lead Education & Outreach Programs (updated)**
- **Lead Blood Screening Campaign**
- **Healthy Homes Inspection & Training**
- **Lead and Housing Hazards Data-Sharing**
- **Comprehensive Lead Strategy**
- Removing Lead in Drinking Water
- Private Well Outreach and testing
- Tobacco-Free Community





# Lead Education and Outreach Programs

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- What's new?
- 5 points for E &O on top lead n pathways
- + 5 for targeting specific high-risk group or neighborhood
- + 5 points for second high-risk group
- *Who* is high-risk for lead &/or underserved?
- What are some ways to “target” those groups?



# Lead Blood Screening Campaign

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- Purpose: increase % children completing blood lead level (BLL) tests
- NJ Law: all providers must screen children for BLLs > threshold at both 12 & 24 months + all < 6 y.o. not already screened
- Yet under **40%** NJ kids screened in 2018!
- Four action “tiers” for 5 points each



# Tier 1: Screening Events

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- Sponsor free BLL screening events
  - Provide info on where & how to follow up
  - Promote event
    - Bonus: competitions, free giveaways
- Collaborate in holding screenings
  - Demonstrate key municipal role!



## Tier 2: Targeted Outreach

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1. Identify 1 or 2 high-risk neighborhoods or groups
  - Use existing data (Master Plan, other SJ actions)
  - Use census data (pre-1978 housing, % low English, etc.)
2. Consult groups re barriers to screening
3. Reduce barrier(s)
  - Neighborhood screenings
  - Free transportation
  - Translations in appropriate languages



## Tier 3: Outreach to healthcare providers

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1. Consult local pediatricians, school nurses, & other healthcare providers re constraints/needs
2. Conduct outreach to providers, e.g.:
  - Send annual letter w/screening questions



## Tier 4: Report screening rate

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- *Only* municipalities w/ population > 20,000
  - Calculate municipal rate of BLL screening
  - Publicly report rate annually





# Healthy Homes Inspection & Training

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- Purpose: promote culture & practice of *healthy homes & lead poisoning prevention* across all departments & contracted services
- Three independent action “tiers”
- Tier 2 required for **Gold Star in Health**
- Coordinate through multi-stakeholder group
  - Local Boards & Depts of Health (municipal &/or county/regional), housing, code enforcement
  - Partners: community-based groups, Landlord & tenants' associations



# Training

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- Training must cover:
  - environmental home health hazards,
  - how to address them,
  - How/where to refer follow-up
- Leading examples: [Center for Energy and Environmental Training \(CEET\)](#), Isles
  - Healthy Homes for Community Workers
  - 7 hour in person or online self-paced



# Tier 1: Training policy

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**Option 1:** Mandate healthy homes training for all housing, health, & environmental health inspectors employed or contracted by municipality

- Inspectors work for muni >> Resolution, ordinance
- Inspectors contracted >> MOU or annual services contract

**Option 2:** Submit certificates for each training completed



## Tier 2: Healthy Homes Inspections

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### 1. Policy on lead & healthy homes inspection protocol

- *housing & health inspectors* apply a **healthy homes checklist** to conduct rapid assessment for significant health hazards in *every* residence they inspect
- Inspectors must provide info on how to remediate hazards & refer to appropriate departments

### 2. Enact by resolution, ordinance or MOU/shared services agreement



## Tier 3: Voluntary Inspections & Testing

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**Option 1:** Municipality offers voluntary healthy home evaluations w/info on how to refer & remediate hazards

**Option 2:** Municipality offers free testing or test kits for lead in paint chips/dust &/or exterior soil



# Q&A





# Lead & Housing Hazards Data-sharing

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- Policy on interdepartmental (housing, health, code enforcement) sharing of data related to lead hazards in buildings
- Regular meetings to review housing hazards data
- Report *property-linked* data in accessible database or spreadsheet
- Interdepartmental group annually presents summary of data, trends & implications to governing body





# What data to include?

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- **Required data:**
  - building ownership and tax status
  - lead & other housing inspection dates
  - findings of lead contamination or code violations
  - complaints or summons
  - certificates of occupancy/habitability
- **Beneficial additional data:**
  - Compliance, lead-safe clearance



# Comprehensive Lead Strategy

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1. Form Lead-safe Action team (internal & external)
2. Collect & analyze data
  - Experiential data (quantitative recommended for extra points)
  - Most important pathways of lead exposure
  - What populations/areas most vulnerable, hotspots
  - Challenges, coordination issues
3. Develop Lead Strategy
  - Select SJ actions & other municipal interventions (see matrix)
  - Use evidence to focus resources on most at-risk groups/areas
  - Timeline
  - Responsible parties



# Comprehensive Lead Strategy

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## 4. Present strategy

- To public for input &
- To governing body & local board of health for input & endorsement

## 5. Lead-safe Action team meets 2x/year

- Monitors & troubleshoots strategy
- Adapts strategy as needed
- Report annually to governing body &/or LBOH



## Extra points:

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- Expand >> quantitative & geographic (spatial) data
- Indicators of lead exposure risk at census tract or building/address level
  - Age of structures, children < six, poverty
  - Racial & ethnic composition, English proficiency
  - Link to lead & housing hazards database building-level data
- Use data to ID & prioritize high-risk areas, track outcomes



## Q&A





# Questions or Comments?

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*Upcoming webinar:*

# Health Gold: New Actions to Increase Access to Healthy Food

Oct. 12, 2 – 3:00 PM

