

# Lead in Drinking Water

Alaina Ungarini

New Jersey Department of Environmental  
Protection





# Lead in Drinking Water

## Brief History of Lead in Drinking Water

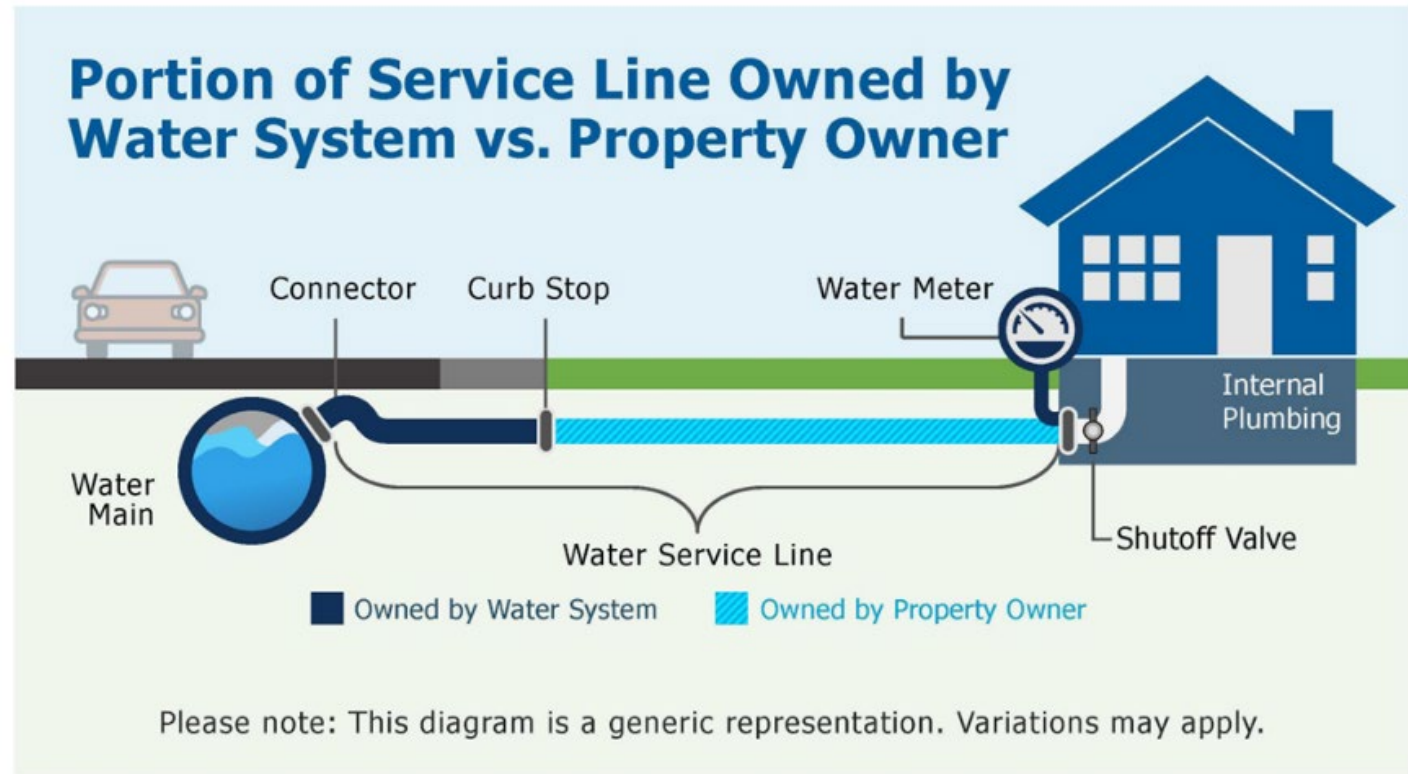
- Lead has a long history of use in plumbing
- EPA banned lead from use in plumbing in the late 1980s
- Many lead service lines are still in use today all over the nation, including NJ

## Health effects

- Health of all age groups can be effected
- Children and infants can have decrease IQ and attention span
- Can lead to new learning and behavior problem or exacerbate existing learning and behavioral issues in children
- Women who are exposed during pregnancy have increased risk of these adverse health effects
- Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.



## What is a Service Line?



# Lead Service Line Replacements in NJ



- NJ Lead Service Line Replacement Law passed in 2021. Requires all lead service lines to be replaced by 2031
- EPA's LCRR/LCRI requires many of the same things as NJ's law, plus more
- Statewide effort to identify and replace service lines is ongoing in NJ
- Recent data shows over 100,000 known LSLs and over 800,000 service lines still need to be identified

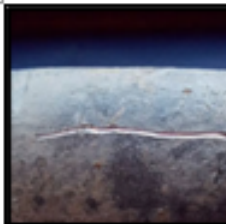




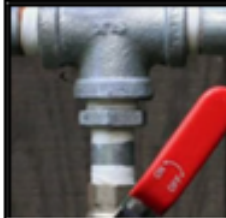
**What Can You Do To Help?**



## Identifying Service Line Materials



**Lead** pipes reveal a shiny silver color when gently scratched with a coin or key and are **not** magnetic. Lead service lines contribute to lead in your water supply and need to be replaced.



**Galvanized Iron or Steel** pipes are silver or gray in color and are magnetic. Galvanized pipes can contribute to lead in your water supply and are considered lead service lines. Any galvanized iron or steel service lines need to be replaced.



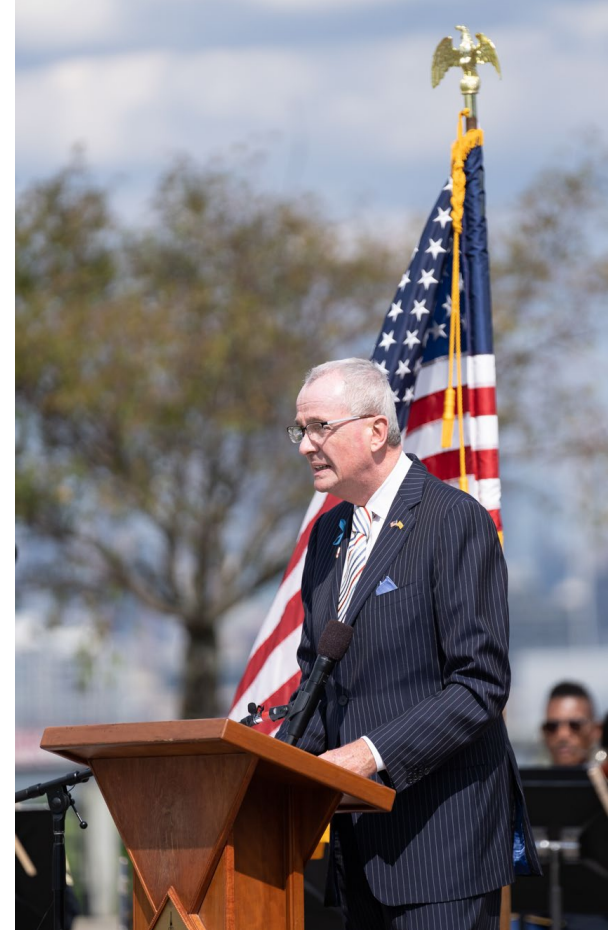
**Plastic** pipes are often white or gray but can also be other colors. Plastic pipes do not contribute to lead in your water supply.



**Copper** pipes will reveal a shiny penny color when gently scratched with a coin or key. A magnet will not stick to copper pipe. Copper pipes do not contribute to lead in your water supply.

Contact your water system and report  
your service line materials!





Thank you!





# DCA Resources for Lead Remediation/Lead Abatement

Jennifer Barrientos, Program Specialist



# Lead Remediation and Abatement Program

- New Jersey In the SFY23 budget, the Murphy-Oliver Administration made an unprecedented commitment of \$180 million to address the ongoing threat of childhood lead poisoning.
- These funds will be used to fund community-based organizations and units of local government to conduct lead-safe repairs and energy efficiency improvements in residential units.
- Through recruitment of trusted organizations from underserved and disproportionately impacted communities to participate in the NJ Lead Training Institute and seed capital pool, this funding will create new capacity in an equitable way to invest in the improvement of health and remediation and abatement of lead hazards in affordable housing across the state.



# Office of Lead Prevention

- OLP = Office of Lead Prevention

- Lead Assistance Programs

- Lead Remediation and Abatement Program  
(Funded by Federal SFRF dollars) \$180 Million
      - ❖ 58 Grantees
      - ❖ 2 Undergoing Training

- Summary of Program:

- Remediating or abating lead-based paint hazards in pre-1978 homes
    - Lead remediation/abatement measures includes window / door replacements, wet scrape and painting, encapsulation, etc.





# Examples of Allowable Measures

## Some Examples of Allowable Lead Hazard Reduction Measures

- Window Replacement / Scrape and Repaint
- Door Replacement / Scrape and Repaint
- Baseboard Replacement / Scrape and Repaint
- Stair tread Replacement / Scrape and Repaint
- Handrail Replacement / Scrape and Repaint
- Closet Component Replacement / Scrape and Repaint
- Wall repair / Encapsulation
- Minor Roof / Plumbing Leak Repair (if protecting other LHR work)
- Temporary Relocation of occupants (if applicable) for maximum of 15 days





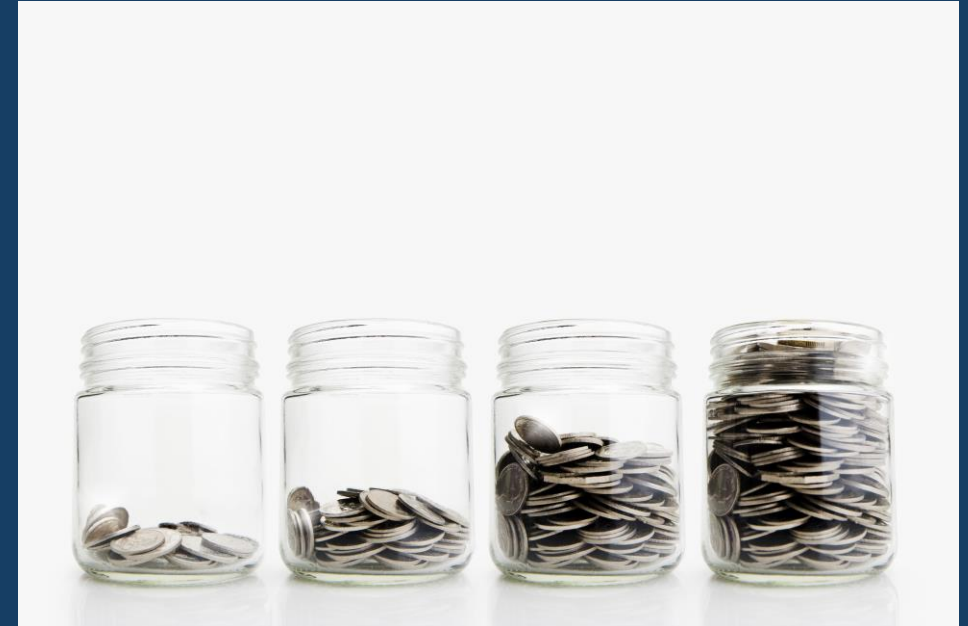
# Office of Lead Prevention

- Allowable Cost Per Unit (ACPU)

- Up to \$13,000 per unit for remediation cases
- Up to \$25,000 per unit for lead abatement cases (when NJDOH issues a Notice of Violation, responsive to a child with an elevated blood lead level)

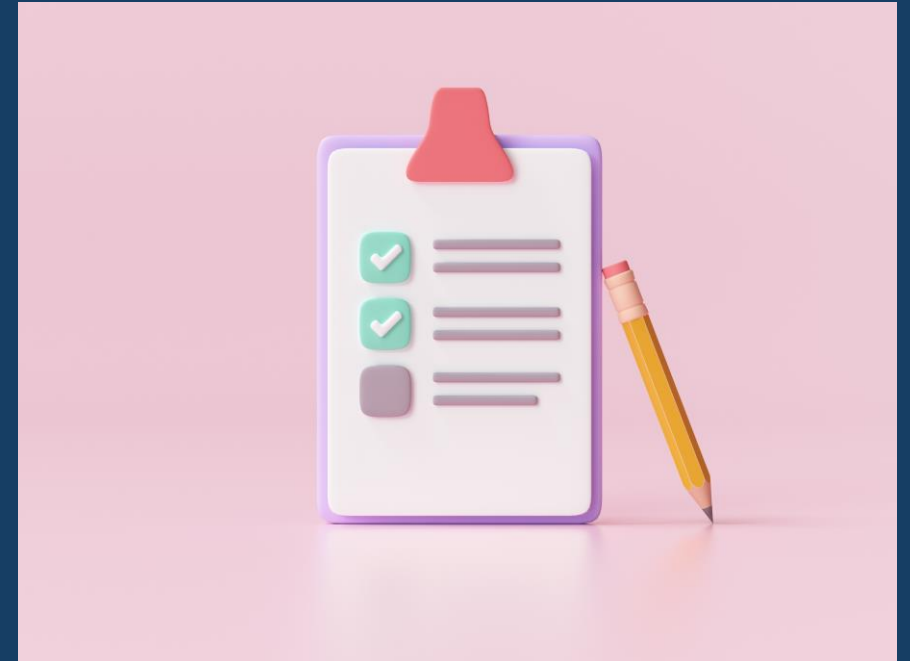
- Basic Eligibility Criteria

- Property was built prior to 1978
- Household occupants are low to moderate income (80% of area median income)



# Info for Landlords- Lead-Paint Inspection Law

- P.L. 2021 c 182 (NJAC 5:28A) “Lead-Based Paint Inspection Law in Rental Dwelling Units” require units to be lead-safe for renter turnover.
- Landlords will need to ensure units are lead-safe prior to renting to new tenants.
- NJDCA’s LRAP program can help!





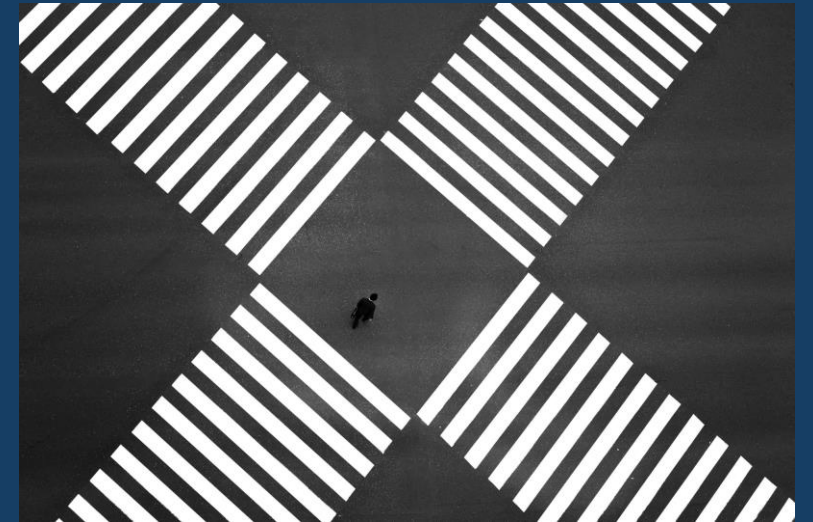
# Online Application Portal

- Landlord and Tenant Applicants are encouraged to apply through the newly created online portal.
- Extremely user friendly and documents are uploaded directly into the portal
- Visit [LeadAbatement.NJ.Gov](http://LeadAbatement.NJ.Gov) for more info!



# Eligibility from Other Programs

- LRAP Program utilizes eligibility from other DCA income tested programs (Section 8 Housing Choice Voucher, LIHEAP, USF, Weatherization)
- Other Automatic Categorical Eligibility Programs are SSI, TANF, SNAP, Adoption Subsidies.





# Building Contractor Capacity

- DCA has partnered with ISLES Inc. to provide training to contractors to build capacity.
- Classes such as the EPA Renovate Repair and Painting (RRP) will be provided at no cost to the contractors.
- Training will commence soon.
- Interested Contractors should email [LRAPContractors@dca.nj.gov](mailto:LRAPContractors@dca.nj.gov)



# Questions and Contact

- Questions?

- Xin.Li@dca.nj.gov

- Jennifer.Barrientos@dca.nj.gov







# What can municipalities do to get the lead out of our communities?

Melanie McDermott, Senior Researcher  
Sustainable Jersey  
October 23, 2024

# Municipal responsibilities related to lead:

- Housing
- Water delivery infrastructure
- Code enforcement
- Public health
- Education and Outreach
- Connecting residents with resources and help





**Sustainable Jersey** is a voluntary certification program designed for municipalities in New Jersey.

- Identifies **actions** to help towns become more sustainable
- Provides tools, resources, and guidance to make progress
- Provides access to grants and funding for municipalities

**Sustainable Jersey for Schools** certifies schools & school districts.

# Participating Communities

2009 Program  
Started

466 (82%)  
Municipalities  
Participating

89%  
Population

46% of  
Participants  
Certified



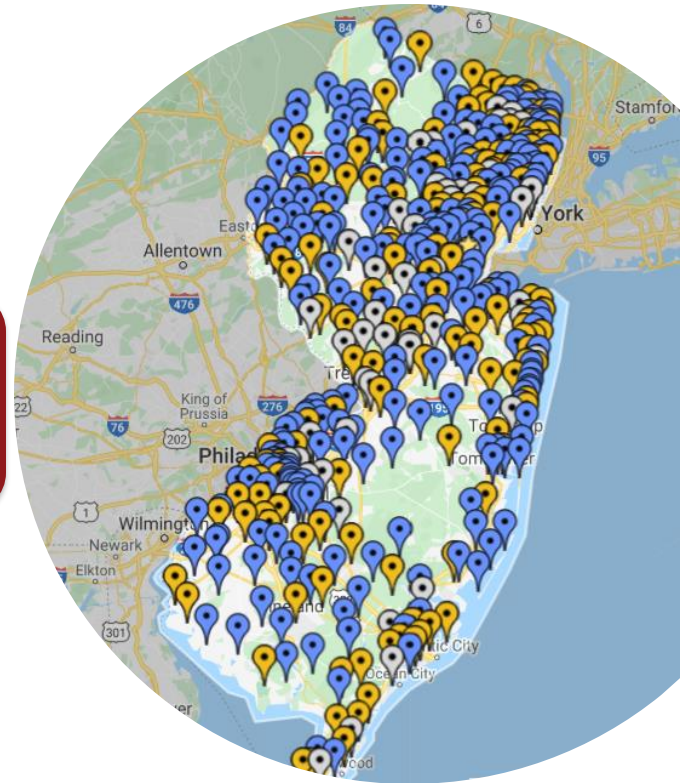
147  
Certified



67  
Certified



2  
Star





PROSPERITY	ENERGY EFFICIENCY	POINTS
	Energy Audits for Municipal Facilities*	20-50
	High Efficiency Municipal Buildings	10-20
	FOOD	
	Farmland Preservation	
	Food Production	
	Planning for Local Food Production	
	Support Local Food	
	LOCAL ECONOMIES	
	Buy Local Programs	
PEOPLE	Green Business Recognition Program	
	Green Jobs/Economic Development	
	OPERATIONS AND MAINTENANCE	
	Green Fleets*	
	Adopt Behavioral Policies	
	Green Purchasing Program	
	Grounds and Maintenance	
	ARTS/CULTURE/HISTORIC PRESERVATION	
	Historic Preservation	
	Strengthening School Arts Programs	
PLANET	COMMUNITY PARTNERSHIP AND OUTREACH	
	Create Green Team*	
	Community Education and Outreach	
	Energy Outreach and Incentives	
	Education for Sustainability Programs	
	School-Based Energy Conservation	
	GREEN DESIGN	POINTS
	Green Building Policy/Resolution	5
	Green Building Training	5
	Green Design Commercial and Residential Buildings	5-20
	Green Design Municipal Buildings	10-20
	GREENHOUSE GAS	
	Municipal Carbon Footprint*	10
	Community Carbon Footprint	10
	Climate Action Plan	10
	Wind Ordinance	10
	INNOVATIVE DEMONSTRATION PROJECTS	
	Geothermal	10
	Green Roofs	10
	Raingardens	10
	Solar	10
	Wind	10
	Other	10
	LAND USE & TRANSPORTATION	
	Sustainable Land Use Pledge*	10
	Complete Streets Program	20
	Municipal Planning & Zoning Self-Assessment	10
	Sustainability Master Plan Revision	20
	NATURAL RESOURCES	
	Natural Resource Inventory*	20
	Water Conservation Ordinance*	20
	Conservation Easements	10-15
	Environmental Commission	10

Municipalities choose from a menu of 150+ actions to accumulate the required points for certification

# A Municipal Guide to a Lead-Safe Community



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





# Lead Reduction Actions

---

- Lead Education & Outreach Programs
- Lead Blood Screening Campaign
  - to increase % of children who have had mandated blood lead level screening tests
- Healthy Homes Inspection & Training
  - Training on environmental home health hazards
  - Integrate lead & healthy homes inspections
  - Voluntary healthy home evaluations or testing

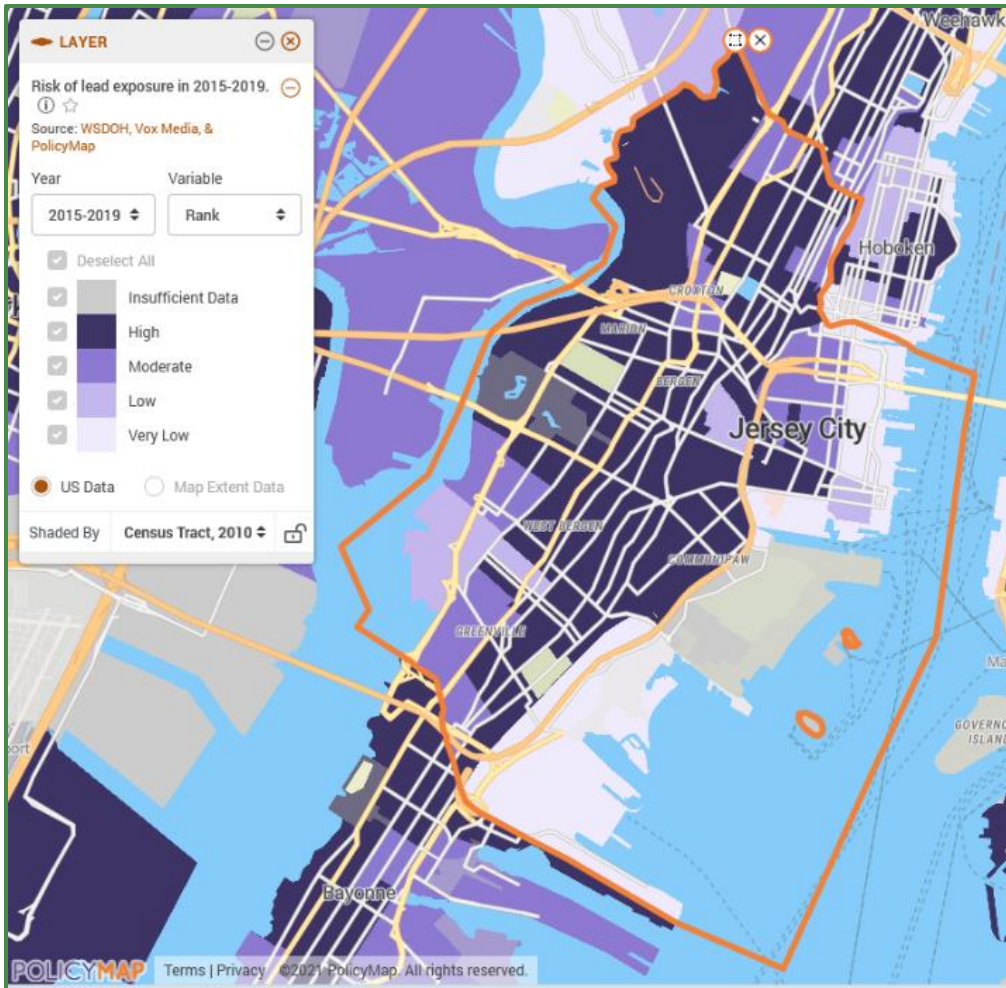
# Lead Reduction Actions

---

- Lead and Housing Hazards Data-sharing
  - interdepartmental (housing, health+) sharing of data related to lead hazards in buildings
  - Report *property-linked* data in accessible database or spreadsheet
- Comprehensive Lead Strategy
  - data on sources & distribution of lead exposure >>
  - risk-based, comprehensive strategy for lead exposure prevention
  - regular meetings of Lead-safe Action Team to coordinate action



# Risk of Lead Exposure



# Lead Reduction Actions

---

- Removing Lead in Drinking Water
  - Free/reduced-cost voluntary tap water testing program
  - ordinance requiring lead testing or remediation of drinking water before ownership or tenancy change
- Private Well Outreach and Testing
- Access to Healthy Water in Schools

Resources, e.g., [New Jersey Lead Poisoning Prevention Toolkit](#)

# Questions? Comments? Get in touch!

[mcdermom@tcnj.edu](mailto:mcdermom@tcnj.edu)

[info@sustainablejersey.com](mailto:info@sustainablejersey.com)







# Preventing Lead Exposure in Your Community: A Collective Impact Approach

*Nudar Chowdhury, Southern Regional Childhood Lead Coalition Coordinator, The Cooperative*



# The Cooperative

- ▶ The Cooperative is the state-licensed maternal and child health consortium which coordinates and supports maternal-fetal and newborn care throughout the seven-county region of Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester and Salem counties. Through the collaborative efforts of hospitals, public health agencies, universities, healthcare professionals and consumers, the Cooperative's activities that are directed toward improving the health of pregnant and birthing individuals, infants and families and decreasing perinatal mortality and morbidity include

## *Southern Regional Lead & Healthy Homes Coalition*

In 2008, SNJPC assumed leadership of the Southern Regional Lead and Healthy Homes Coalition. Since then, we have served as the host agency for the coalition for over a decade. The goal of the Coalition is to bring awareness to and eliminate childhood lead poisoning in South Jersey and to get as many children tested as possible. And in doing so, increase childhood lead testing rates across Southern Jersey. The Coalition covers the seven southern counties: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Salem. Members of the Coalition are made up of professionals from local health departments, health care providers, various hospital staff, Medicaid organizations along with other community-based organizations and non-profits. We host quarterly coalition meetings in which we have

# Professional and Consumer Education

- ▶ Our lead and healthy homes workshops focus heavily on primary prevention.
  - ▶ Workshops are tailored to focus on the health of children under 6 and pregnant women.
  - ▶ Tailored for the respective county of community members receiving the information.
- ▶ Healthy Homes Professional Training
  - ▶ Opportunity to earn CHES®/MCHES® continuing education credit provider.
- ▶ Healthy Homes Bags are distributed out to the community free of charge. Contain Healthy Home Cards that detail how to make green cleaning products.
- ▶ Healthy Homes Model.
- ▶ CLPP Week.





# Lead and its Impact on a Child's Health

- ▶ A natural and toxic metal found in many things:
  - ▶ Old paint from homes built before 1978
  - ▶ Old plumbing fixtures and pipes from homes built before 1986
  - ▶ Soil
  - ▶ Gasoline
  - ▶ Foreign made products (packaged food products, makeup, toys, pottery, folk remedies, jewelry, religious items)
  - ▶ Bullets and fishing sinkers
  - ▶ Hobbies (stained glass and candle making)
  - ▶ Occupations (construction, engineering, automotive repairs)

There is no safe amount of lead in a person's body.

- The national blood reference level is 3.5 micrograms per deciliter (ug/dl).
- The CDC recommends anyone who has a BLL of 3.5 ug/dl to 9 ug/dl get blood tested every 3 months until it is below 3.5 ug/dl.
- Pregnant women with a BLL of 5 ug/dl can result in reduced fetal growth.



# Health Effects of Lead Poisoning

- ▶ Learning disabilities
  - ▶ Poor grades, low standardized test scores, lower IQ, need for special education services
- ▶ Behavior problems
  - ▶ ADHD, aggressive behavior, difficulty socializing with peers, poor decision making, dropping out of school, juvenile delinquency, incarceration in adulthood
- ▶ Permanent brain damage and hearing loss
- ▶ Anemia
- ▶ Kidney damage
- ▶ Coma and convulsions
- ▶ High blood pressure and hypertension
- ▶ Death



# Signs and Symptoms of Lead Poisoning

- ▶ Signs and symptoms of lead poisoning can be easily overlooked in children because they mimic other types of illnesses:

- ▶ Stomach pain and cramps
- ▶ Aggressive behavior
- ▶ Constipation
- ▶ Sleep problems
- ▶ Headaches
- ▶ Crankiness
- ▶ Loss of appetite
- ▶ Feeling tired most of the time
- ▶ High blood pressure
- ▶ Numbness or tingling in the arms and legs
- ▶ Memory loss
- ▶ Low iron levels in blood

New Jersey law requires ALL children be tested for lead at ages 1 and 2. If a child has not been tested at required ages, it is recommended that they be tested before they turn 6. Blood is drawn either through a vein in the arm or a finger stick. Currently, the NJ DOH recognizes a blood lead level (BLL) of 3.5 (micrograms per deciliter) or higher high.



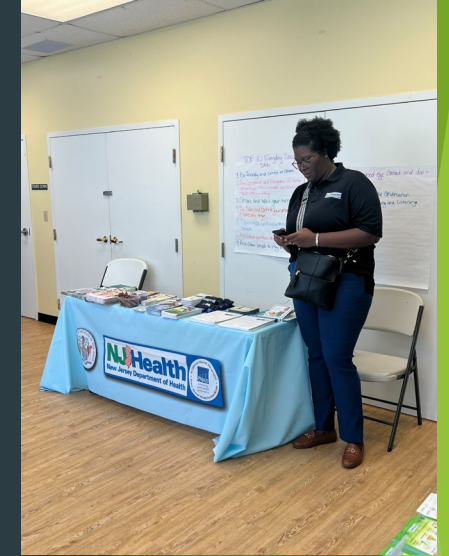


# The Role of Health Departments

- ▶ **Free Testing:**
  - ▶ HDs support blood testing and reporting
  - ▶ Identify areas in each county where children are likelier to be exposed to lead
- ▶ **Linking Children to Services:**
  - ▶ HDs ensure that children who are exposed to lead have access to recommended follow up services, parental education, counseling and medical intervention
- ▶ **Identifying Hazards:**
  - ▶ HDs identify lead hazards in homes and oversee the abatement process
- ▶ **Educating the Public**

# Increasing Lead Screening Rates Through Subgrantee Contracts

- ▶ The Cooperative has established subgrantee partnerships over the last few fiscal years.
- ▶ Objective
  - ▶ Increase lead screening rates among children 0-6 in the county of the Subgrantee by raising awareness on the importance of screening, simplifying the process of obtaining screening services, and hosting lead screening events.
  - ▶ Subgrantees organize lead screening events in the respective county.
  - ▶ Rinsey the Raccoon in the schools.
- ▶ Notable Partnerships
  - ▶ Virtua Pediatrics Mobile Services
  - ▶ Jefferson Health Services
  - ▶ Green and Healthy Home Initiative



# Thank You!

Nudar Chowdhury, Program Manager

E-mail: [nchowdhury@snjpc.org](mailto:nchowdhury@snjpc.org)

Phone: 856-404-8264

