INTRODUCTION

- How do kids get lead poisoning?
  - Lead poisoning is a disease children catch from housing
  - Lead based paint/dust, and contaminated soil from deteriorated paint in housing built before 1978
  - Drinking water in the U.S. is typically not the major source of lead exposure

- Health and societal impacts
  - Hearing deficits
  - Developmental and behavioral problems
    - Cognitive impairment (as measured by decreased IQ)
    - Rage, inattention, hyperactivity, and aggression
    - Children with EBLL are at an increased risk for learning difficulties, low high school graduation rate, decreased lifetime earnings and later incarceration
      - High cost to society for social services programs
  - Pregnant women with lead poisoning can encounter:
    - Spontaneous miscarriages
    - Low birth weight
  - At very high levels, lead exposure can cause acute illness such as abdominal pain, vomiting, seizures, coma, and death.
IMPORTANT DATES

- Lead use in paint and gas
  - Lead-based paints were banned for residential use in 1978
  - Phase-out of lead in gas began in 1973, banned completely in 1996

- Other important lead use dates
  - 1992: Federal Title X (Residential Lead-based Paint Hazard Reduction Acts)
    - Comprehensive lead poisoning prevention legislation
    - Focus on hazards (no longer presence of lead paint)
    - Training and certification for workers, inspectors required
  - October 2019: NYSDOH lowered EBL action level from 15 to 5 µg/dL
    - Requires both care coordination & environmental management
NO “SAFE” LEVEL OF LEAD

- Until 2012, children were identified as having a blood lead “level of concern” if the test result was 10 or more micrograms per deciliter (µg/dL) of lead in blood. CDC is no longer using this term and is instead using the blood lead reference value to identify children who have more lead in their blood than most children.

- In 2012, the blood lead reference value (BLRV) for children corresponding to the 97.5 percentile was established to be 5 micrograms per deciliter (µg/dL) based on NHANES data from 2007-2010.

- October 2021, CDC updated the blood lead reference value to 3.5 µg/dL, which means that more children could be identified as having lead exposure allowing parents, doctors, public health officials, and communities to act earlier to reduce the child’s future exposure to lead.
Chemung County Elevated Blood Lead Levels (EBLL)

As of October 2019, NYSDOH lowered EBL action level from 15 to 5 µg/dL.
IMPACT TO CHILDREN - CHEMUNG COUNTY
IMPACT TO CHILDREN - CHEMUNG COUNTY

EBLL by Age Group 2016

- 9-<18mo: 41%
- 18-<36mo: 47%
- 36-<48mo: 6%
- 72+: 6%

EBLL by Age Group 2017

- 9-<18mo: 44%
- 18-<36mo: 56%
IMPACT TO CHILDREN - CHEMUNG COUNTY

EBLL by Age Group 2018

EBLL by Age Group 2019
IMPACT TO CHILDREN - CHEMUNG COUNTY

EBLL By Age Group 2020

EBLL By Age Group 2021
LOCAL LEAD LANDSCAPE – HOUSING, CITY OF ELMIRA (2019 DATA)

- Housing built before 1978
  - Elmira 97% Chemung 84% NY 78.4%
- High poverty rate
  - Elmira 31.7% Chemung 15.2% NY 14.7%
- Property values under $100k
  - Elmira 84% Chemung 49% NY 17%
- Property values under $50k
  - Elmira 24% Chemung 11.5% NY 5.5%
- High rates of rental housing (often in poor neighborhoods)
  - Elmira 56% Chemung 31.7% NY 46.4% renters
- Highly mobile impoverished population with few resources
LED RULES FOR PROVIDERS AND PATIENTS

- New York State Public Health Law requires providers to:
  - Test all children at age 1, and again at age 2 with a blood lead test
  - Assess all children ages 6 months to 6 years at every well child visit for risk of lead exposure
    - This includes counselling families on risk reduction, as well as obtaining a blood lead test if risks are identified.

- Both venous and capillary (finger stick) lead results are reported to the Electronic Clinical Lab Reporting System, and retrieved by local health department staff through Leadweb.

- Local health department staff follow up on EBLL received in Leadweb
  - Conduct basic intake, counsel parent/guardian, provide education, create referral to environmental health for home inspection
LEAD HOMES INSPECTION STANDARDS

- EHS staff perform “risk assessment” at home of child with EBLL \( \geq 5 \, \mu g/dL \)
  - Evaluate painted surfaces for presence of lead in hazardous condition (chipping, flaking, etc.)
    - Check furniture, dishware, jewelry, etc.
  - Evaluation is performed using an XRF machine (seen at right)
  - Provide information and guidance for hazard correction
  - Issue notice and demand to owner to correct (interior and exterior) hazards with TTOCs
  - Verify correction completed
TYPICAL EBLL WORKFLOW

**Public Health**

- Initial Elevated Venous Blood Lead test is retrieved from Leadweb and added to their electronic chart
- Parent/Guardian is contacted via phone to confirm address, provide general education, counseling, and instructions regarding follow-up testing and home inspection
- Referral is created and sent over to Environmental Health

**Environmental Health**

- Environmental Health coordinates home inspection with owner/landlord/parent/guardian
- Home inspection is conducted, education provided, hazard report is provided to the owner and parent/guardian
- Environmental health re-assesses to verify correction of hazards
- If hazards are adequately addressed, the environmental case is closed

Child’s lead tests are followed until they have two venous blood draws below 5μg/dL at least 3 months apart. Then, they qualify for discharge.
CHEMUNG COUNTY LEAD COALITION

2007

- Get the Lead Out Program
  - Program funding due to suit brought against Kennedy Valve by NYS
  - $1.5 million allocated to region in settlement
  - Provided testing for children and homes and funds for home mitigation/remediation
  - Funds expended by 2009 and lead coalition stopped meeting
  - Missed opportunity

2017

- The Health Department rebuilt the lead coalition with engagement from local groups, community partners, and government agencies
- The Coalition’s mission is “to work with community partners, leaders, agencies and residents to reduce lead poisoning in families of Chemung County.”
- Housing is the largest contributor to elevated blood lead levels in the children of Chemung County.
- HUD lead grant awarded to the City of Elmira in 2019
HOW OTHER COMMUNITIES HANDLE LEAD POISONING

- How many and what counties have the primary prevention grant?
  - Western Region- Chautauqua, Erie, Monroe, Niagara
  - Central Region- Broome, Cayuga, Jefferson, Oneida, Onondaga
  - Capital Region- Albany, Montgomery, Rensselaer, Schenectady
  - MARO Region- Dutchess, New York City, Orange, Rockland, Ulster, Westchester

- What communities have a local law?
  - City of Rochester

- Collaboration with:
  - Code Enforcement
  - Foster Care, Section 8
  - DSS, Early Intervention
  - Local businesses (hardware stores/paint shops) to provide incentives
The Childhood Lead Poisoning Primary Prevention Program (CLPPP+) is a comprehensive, community-centered approach to preventing lead poisoning, focused on:

- Building meaningful partnerships
- Enhancing identification and enforcement strategies
- Promoting community leadership
- Highlighting the value of lead-safe housing

What does it enable us to do?

- Ability to inspect units without an elevated blood lead level
- Target inspection of all units within a multifamily home where a child with an EBLL is identified

What does the funding cover?

- Staff
- Equipment and supplies
- Training

Goals?

- Lead hazards in the community are identified and controlled BEFORE children become lead poisoned
HOW WE WILL USE IT: PHASED APPROACH

- Phase 1
  - Identify partners
    - Elmira HUD Lead Grant will be key partner
  - Onboarding and training of staff
  - Kick-start community engagement

- Phase 2
  - Make connections/build relationships
  - Generate referrals
  - Enhance community involvement
  - Engage local construction and contractors
BENEFITS

- For Our Children
  - Children will no longer be used as a measure for lead detection. We will seize the opportunity to prevent lead exposure before it happens.
  - Primary prevention is the most effective way to ensure that children do not experience the harmful long-term effects of lead exposure.

- For Our Community
  - Highlight and proactively address the root cause of lead poisoning in children-housing. Every person in our community deserves the chance to live in safe housing.
  - Money spent from the grant will stay local – purchasing supplies and jobs for contractors.
  - Free training for contractors to become HUD Lead Certified for remediation.

- For Property Owners
  - Increase in property values through remediation.
  - Advertise rentals as “Lead Safe Housing.”
  - Reduced neighborhood blight.
UPCOMING REQUEST FROM THE HEALTH DEPARTMENT

- Resolution from BOH
- The Health Department is requesting approval to accept this expanded grant opportunity
- If approved, a request will be made for staffing for this grant (2 positions to start)
- All costs are covered 100% including salary, fringe, equipment, and materials. Staff positions are contingent on continued federal funding