RESPONSE EFFORTS IN FLINT

Michigan Department of Environmental Quality
5 Prongs of Testing

- Residential
- Schools
- Food Services
- EBL Investigations
- Sentinel Sites
Additional DEQ Efforts

- High Lead Visits
- Service Line Replacement
- CORE
Over 25,000 Residential Tests in 2016

Some Caveats
- Filtered?
- Tier 1?
- Collection Point?

Moved to a new 2 Bottle Test in the Fall
- One 250ml and One 750ml
- What does this tell us?
Schools Initial Process

- Plumbing Evaluation
- Sampling
- Report
- Corrective Action
- Follow-up Sampling
- Report
Schools Streamlined Process

- Fixture and Adjoining Brass Replacement
- Follow up Testing
- Report
- Filter Installation
- Follow up testing
  - Over 95% ND
  - In-line vs POU Devices
Issues in the Schools

- Excessive Stagnation
- Particulate
- Flushing Protocol Implemented
Food Establishments

- Headed up by MDARD
- Inspections to ensure good practices such as Flushing, Filtration and Testing
- Documentation of all Practices
Coordinated by DHHS

- Individuals with an EBL are offered the Evaluation
- Water has been incorporated as an exposure pathway
- Each point of use sampled for a P1 and P2 after minimum 6 hour stagnation
- Kitchen 10 Sequential 1 Liter Samples
- Correlation has not been strong so far
How were they Selected?

- Survey Question During Door to Door Commodities Campaign
- Likelihood of lead service line based on City’s records
- Geographic Distribution
- Focus on areas (Zip Codes) identified by Dr. Mona
- Construction Period (1940s)
Approximately 600 + Homes
Initial Study to be 5 Rounds of Testing
Frequency of every 2 weeks
Five Rounds total were sampled
Sites coming in and out for various reasons
Extended Sentinel Sites

- Subset of Sentinel Program
- Approximately 175 Sites
- Includes all Tier 1 sites
- Also includes the most sites with Copper and Galvanized Service Lines that had elevated lead results
- 9 Rounds conducted so far
Tier 1 Sites in ESP

Percent of Tier 1 Sentinel Samples at or Below 15 PPB

- Series 1
- Series 2
Service Line Replacements

- Pilot Study
  - 30 Locations
  - Chosen by Consensus with City and Researchers
  - Includes Lead, Galvanized and One Copper
  - Geographic Representation of all Wards
  - Challenges
    - Weather
    - Unexpected Field Conditions

- Progress after Pilot > 1200 lines
Community Outreach and Resident Education
Flint Residents Helping Flint Residents
Door to Door Canvassing of the Entire City
Curriculum
- Filter Installation, Use and Maintenance
- Aerator Cleaning
- Importance of Water Use and Flow
- Where to Obtain Resources
- NEW Health and Nutrition
CORE Efforts to Date

- Pilot in August
- Original Goal of 36 Team Members
- Expanded to 160 Team Members
- > 234,000 Door Knocks
- > 72,000 Conversations
Additional Efforts

- **FWICC**
  - Flint Water Interagency Coordinating Committee
    - Participation of ALL Michigan Departments
    - City of Flint
    - Researchers
    - Medical Community

- **Mission Flint**
  - Provides Outreach to Community
  - Incorporates Community Leaders

- Over 230 Million in Commitments from State
Questions?