

Milwaukee Childhood Lead Poisoning Prevention Program



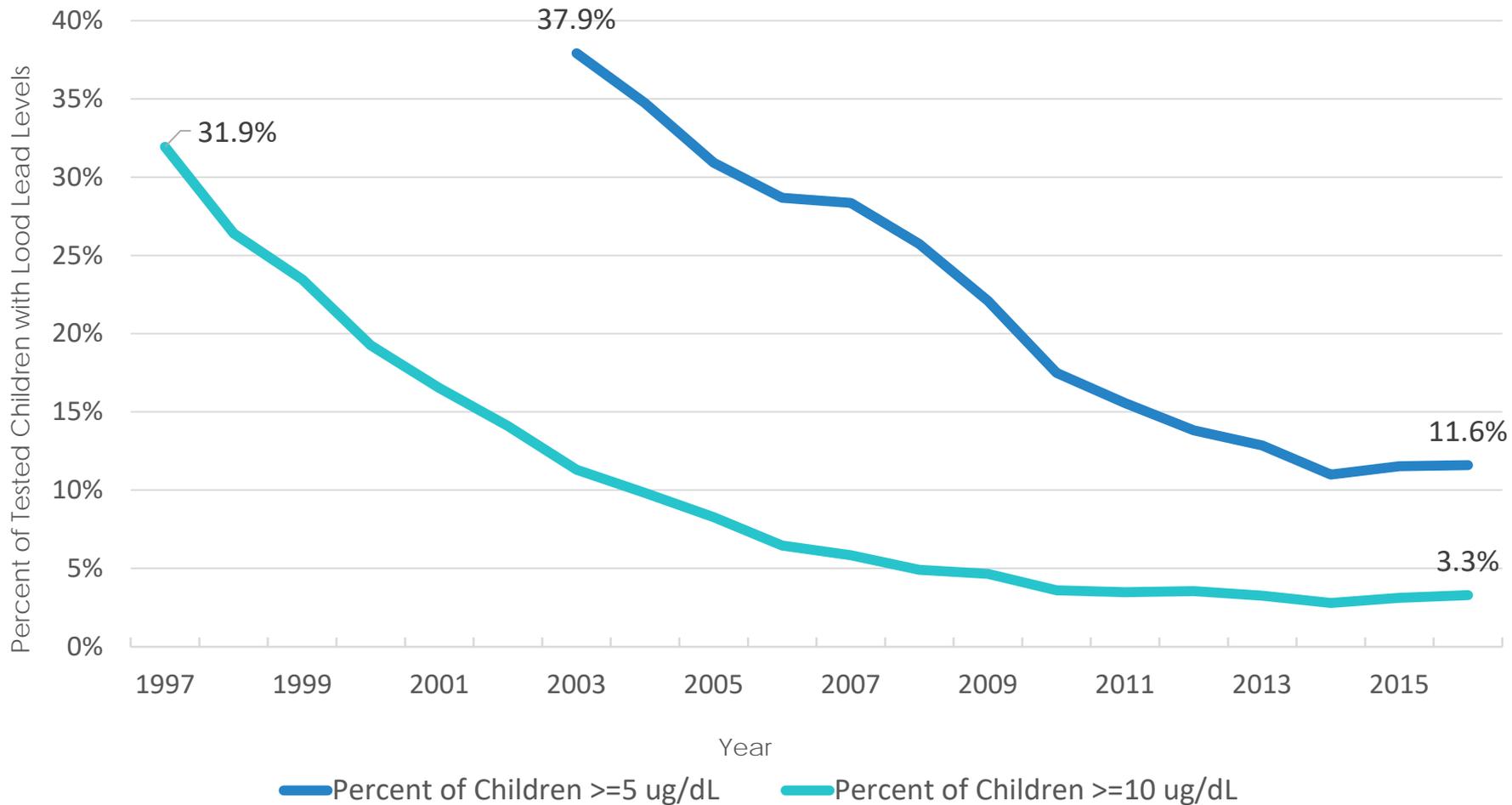
Steering and Rules Committee
January 31, 2018

Problem

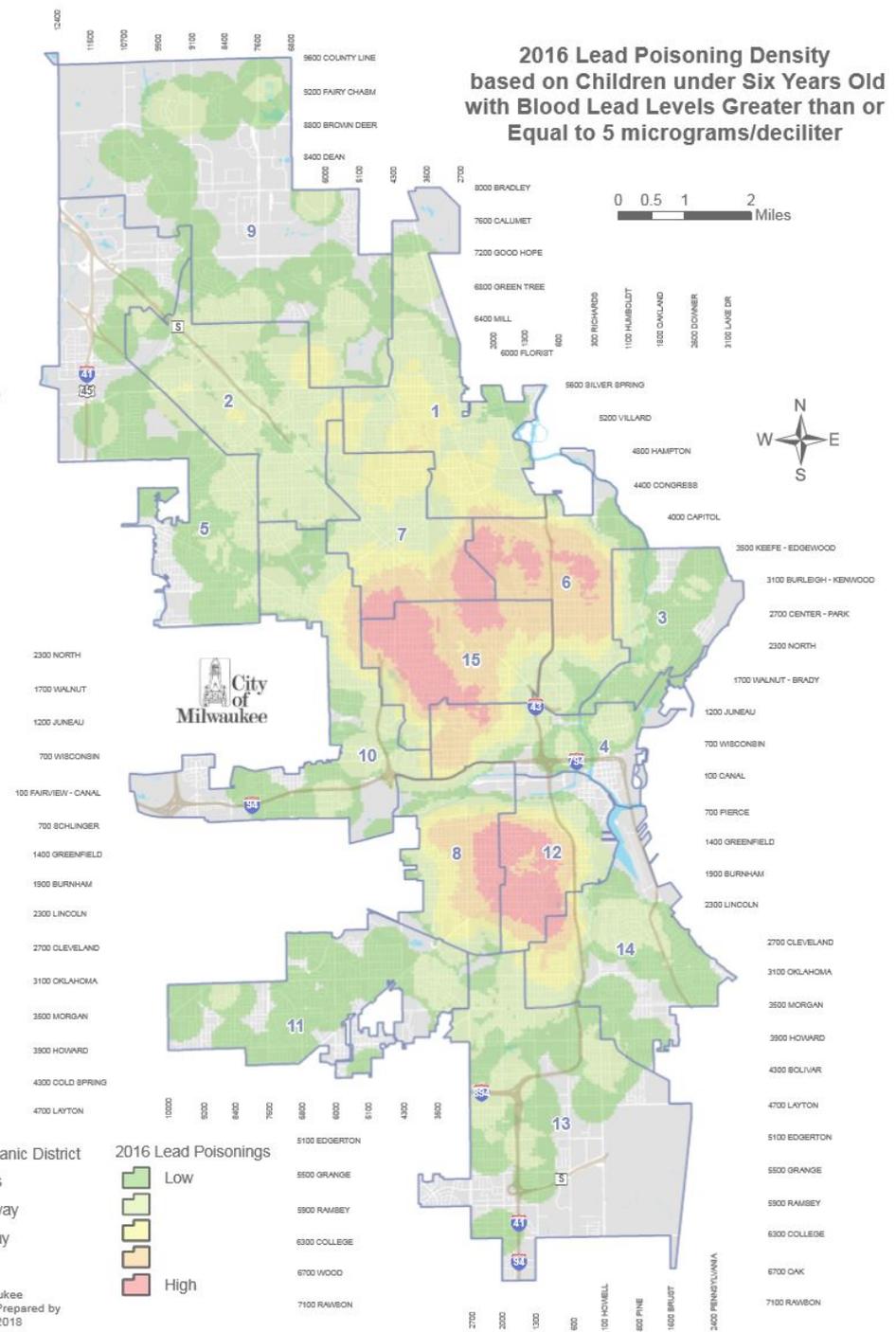
The City of Milwaukee Health Department (MHD) has identified multiple areas for improvement in its Childhood Lead Poisoning Prevention Program (CLPPP). The report finds:

1. The MHD has significant opportunities to strengthen effective primary prevention efforts.
2. The MHD did not provide appropriate follow-up to assure required services were being offered to elevated blood lead level cases.

City of Milwaukee Blood Lead Level Prevalence for Children Less Than 6 Years Old



Lead Poisoning by Aldermanic District



Housing Units Abated by Aldermanic District

CITY OF MILWAUKEE Lead Safe Housing Units as of 06/30/15

Legend

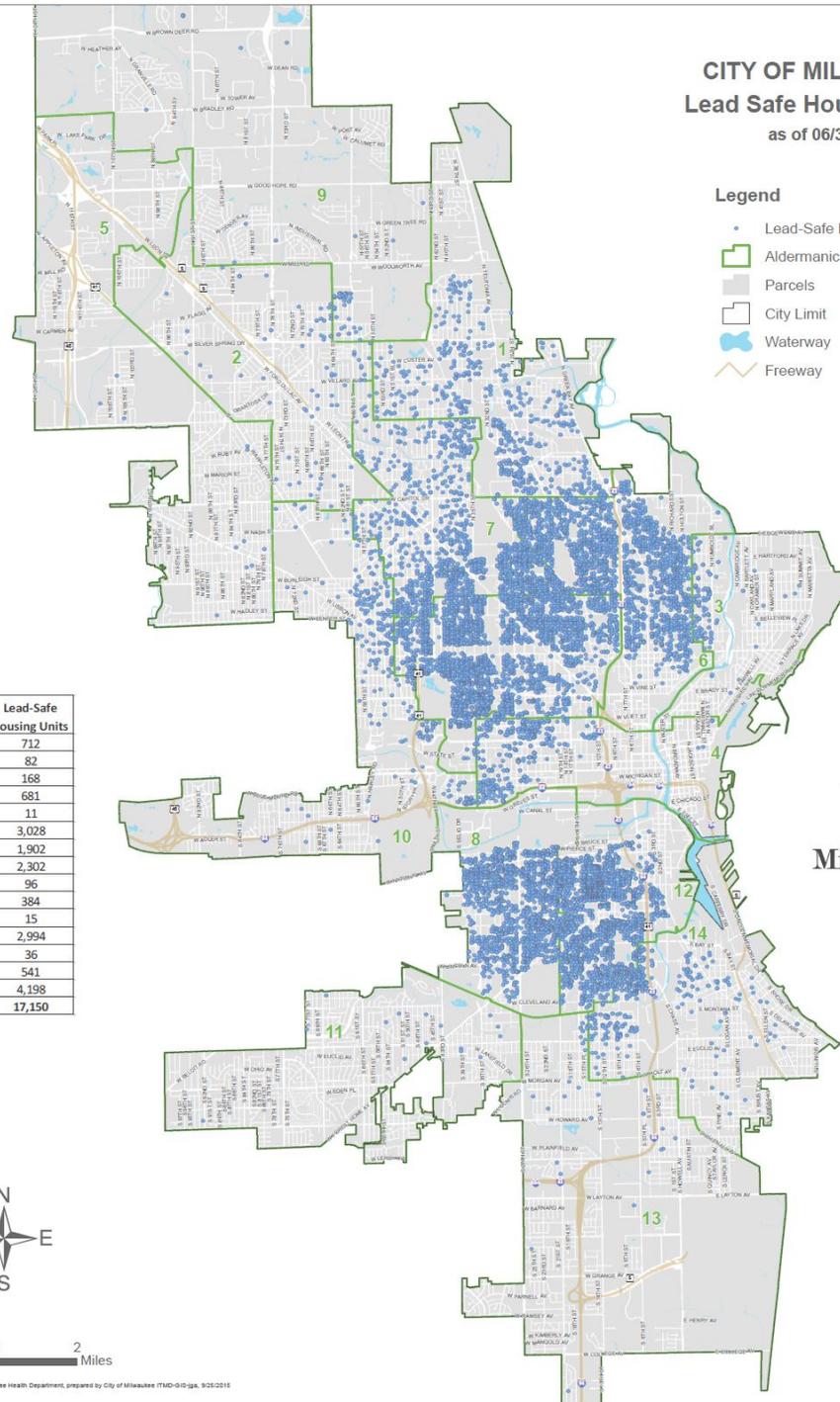
- Lead-Safe Housing Units
- Aldermanic District
- Parcels
- City Limit
- + Waterway
- + Freeway

Aldermanic District	Lead-Safe Housing Units
1	712
2	82
3	168
4	681
5	11
6	3,028
7	1,902
8	2,302
9	96
10	384
11	15
12	2,994
13	36
14	541
15	4,198
TOTAL	17,150



0 0.5 1 2 Miles

Data Source: City of Milwaukee Health Department, prepared by City of Milwaukee ITMD-GD-ga, 9/20/2015



Childhood Lead Poisoning Prevention Program (CLPPP)

- Primary Prevention (Property)
 - Eligible property owners provided grant to replace original windows that have lead-based paint
 - Abate before poisoning occurs

- Secondary Prevention (EBLLs: child and property)
 - Children who have elevated blood lead levels receive interventions from the MHD based on level of exposure
 - Response to poisoned children

Summary of Findings

- Deficiencies found in:
 - Department/Division
 - Primary Prevention
 - Secondary Prevention
 - Policy

Summary of Actions To Date

- Program restructure
- Cross-training of staff
- Letters sent to 5-19 $\mu\text{g}/\text{dL}$ cases (6,428 sent, 976 returned as of 1/30)
- Follow up calls being made by PHN to ≥ 20 -39 $\mu\text{g}/\text{dL}$ cases (320 cases), letters being sent to unsuccessful calls
- Established hotline 286-8800 (163 calls as of 1/30)
- Expanded clinic offerings to include lead testing (72 visits as of 1/30)
- Initiating contact with property owners to offer abatement services
- Coordination with Milwaukee HUD office and CDGA on expediting backlog and future cases
- Asked for data support and validation from WI DHS
- Creating an additional PHN and Health Service Assistant position for EBLL-requires council authorization

Department and Division Operations

Operations Findings

- A.1: Program capacity was limited due to both insufficient staffing and existing staff responsibilities not reflecting functional duties.
- A.2: Program staff are inadequately trained for job duties. In addition, the program has insufficient policies and procedures in place to support ongoing program operations.
- A.3: Program infrastructure decreased program accountability.
- A.4: Department primary and secondary prevention activities were not fully coordinated and integrated.
- A.5: Low program morale has led to high turnover among program staff (particularly Lead Risk Assessors), further decreasing program capacity.

DCEH Director

Preparedness Coordinator - Workforce Development

Home Environmental Health Manager

Environmental & Disease Control Specialist

Lead Project Coordinator - CDGA

Data Coordinator

Environmental Health Field Supervisor

Public Health Nurse Coordinator

Public Health Nurse - (1)

Public Health Nurse - (2)

Health Services Assistant- (1)

Environmental Hygienist

Lead Risk Assessor - (1)

Lead Risk Assessor - (2)

Lead Risk Assessor - (3)

Lead Risk Assessor - (4)

Lead Risk Assessor - (5)

Lead Risk Assessor - (6)

Lead Risk Assessor - (7)

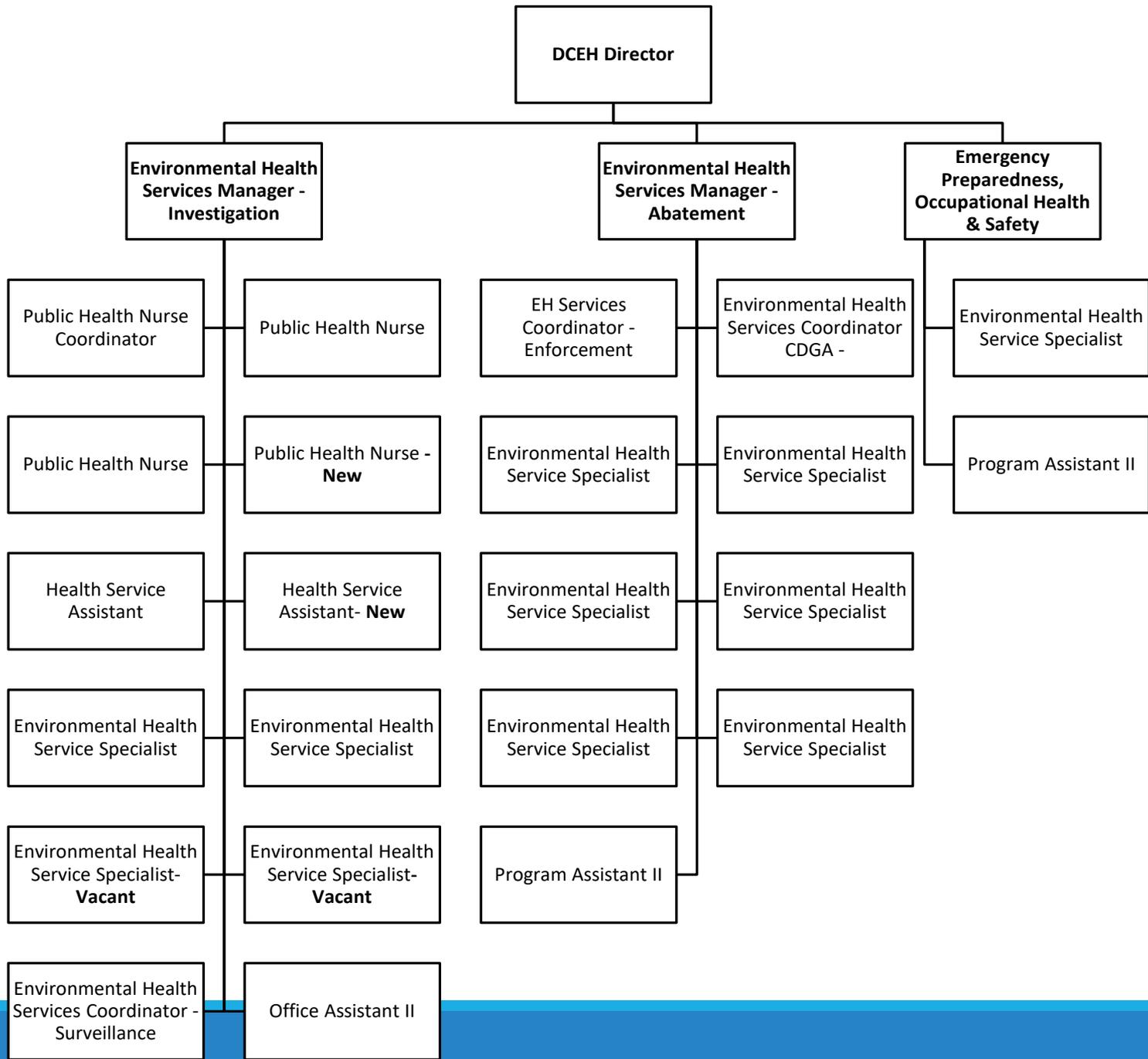
Lead Risk Assessor - (8)

Office Assitant/Program Assistant - (1)

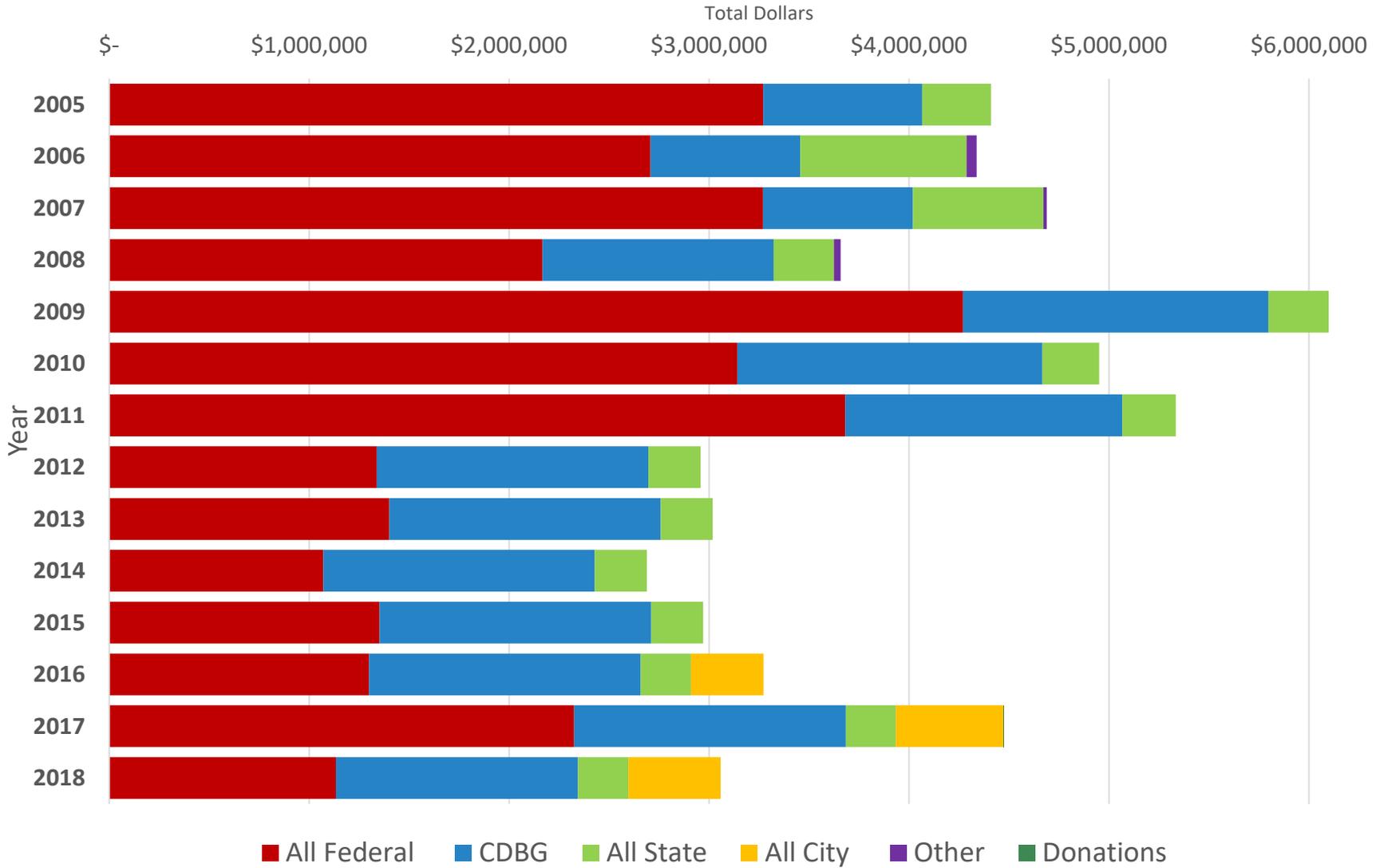
Office Assitant/Program Assistant (2)

Office Assitant/Program Assistant - (3)

Office Assitant/Program Assistant - (4)



Lead Program Funding Source, 2005-2018



Primary Prevention

Lead Hazard Reduction Grants

■ HUD Grant (2016)

Date Received	Funding Quarter	Performance Period	Score
6/8/17	Y1 Q2	January to March 2017	46
9/22/17	Y1 Q3	April to June 2017	58
11/17/17	Y1 Q4	July to September 2017	65
TBD	Y2 Q1	October to December 2017	Pending

■ HUD Grant (2014)

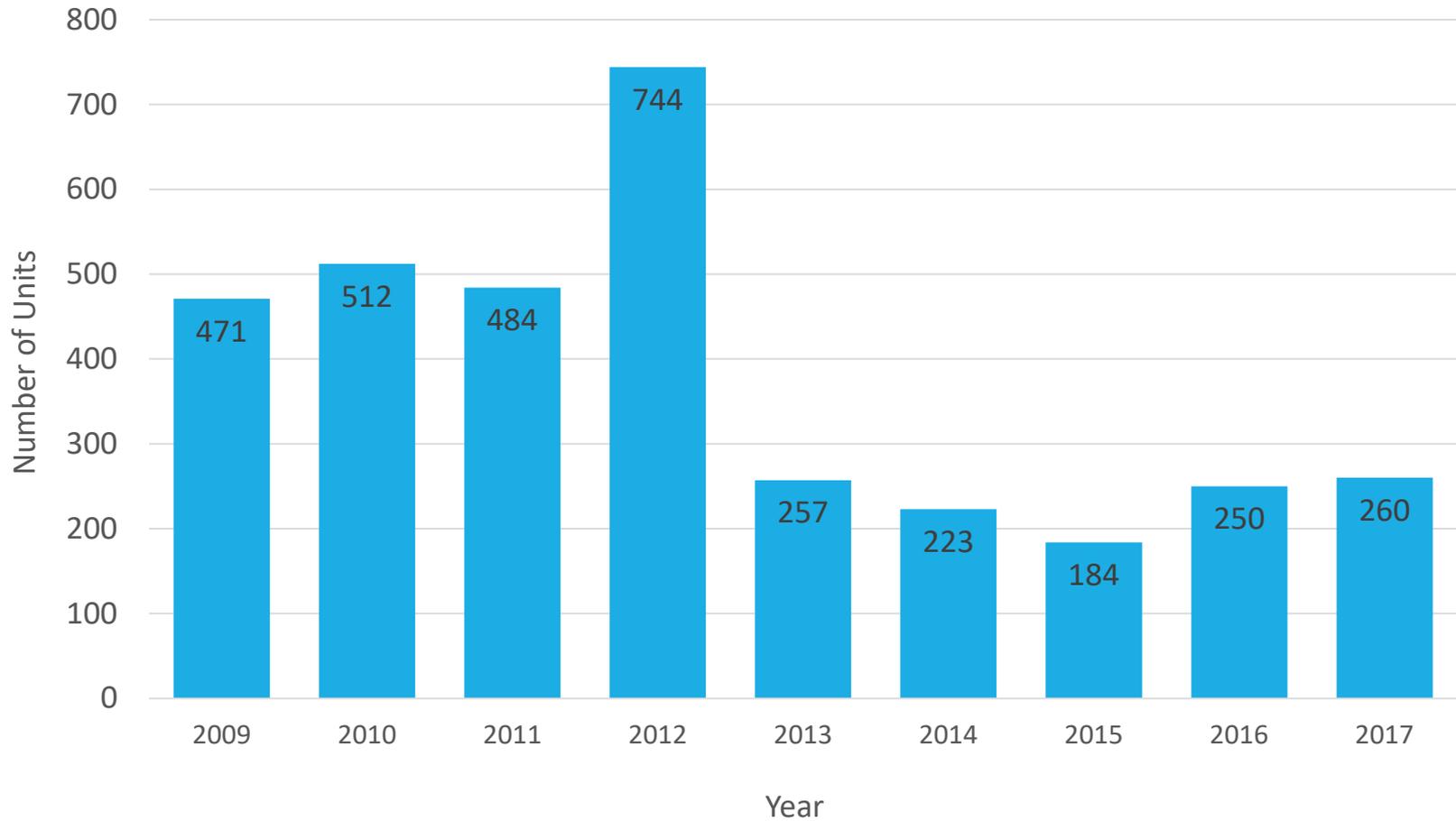
- Unspent funds

■ CDBG

- City match to HUD, supports PHN, EBLL environmental investigations, clearance testing

Lead Hazard Abatement

Total Units Abated with Grant Funding, 2009-2017



Lead Hazard Abatement

- Childcare Lead Service Line Replacement

Total child care facilities licensed in city of Milwaukee	360
Full replacement completed	146
Full replacement in progress/scheduled	110
No response to initial outreach	104

- Water filter distribution

- 2016 total distributed: 1,611
- 2017 – 1/29/18 total distributed: 1,769

- Lead education and awareness

- Program outreach and awareness
- Public awareness campaign (more than 6 million impressions)

Primary Prevention Findings

- B.1: Program promotional and education materials require updating and enhancements.
- B.2: Relationships with community partners deteriorated, reducing the MHD's reach in the community.
- B.3: The program has developed adversarial relationships with contractors who carry out abatement work.
- B.4: The program did not consistently meet HUD grant performance benchmarks and assure an adequate spend down of funds.
- B.5: The program established unnecessary and burdensome eligibility criteria on property owners.
- B.6: The program failed to create a pipeline of homes to enroll in primary prevention, leading to gaps in workload.
- B.7: The program should explore additional funding sources and opportunities to improve the distribution of drinking water filters certified to remove lead.

Secondary Prevention

Data: 2015-2017

- Testing is primarily done by primary care provider or clinic
 - Small number done by MHD
- Why are we concentrating on years 2015-2017
 - Significant drop in documentation of service levels in 2015
- On average, about 25,000 children under 6 are tested
- Based on highest reported test for a child in that year,
 - 10% for BLL \geq 5 $\mu\text{g}/\text{dL}$
 - Largest proportion in 5-9 $\mu\text{g}/\text{dL}$ (7.5% - 8.3%)
 - On average, 2.5% in 10-19 $\mu\text{g}/\text{dL}$
 - Less than 1% in 20-39 and about .1%-.2% in >40 $\mu\text{g}/\text{dL}$

5-9 $\mu\text{g}/\text{dL}$ Case Management

Venous BLL	Intervention for confirmed cases	Form
5-9 $\mu\text{g}/\text{dL}$	Letter with test result mailed to family providing educational materials, prevention information, and contact information for MHD to provide further information.	Letter

- Population size: 6,022
- Intervention: Letter
- Level of service: 1,500 of 6,022 records found
- MHD Response
 - 1) Letters

10-19 $\mu\text{g}/\text{dL}$ Case Management

Venous BLL	Intervention for confirmed cases	Form
10-19 $\mu\text{g}/\text{dL}$	A Public Health Services Assistant conducts a home visit to provide educational information, conduct a walk-through home assessment, and conducts wet washing and/or HEPA vacuuming to remove immediate lead hazards. These services are delivered in the client's home until the service goals are met.	PHSA

- Population size: 1,897
 - Confirmed: 522
- Intervention: Visit from Health Services Assistant (HSA)
- Level of service: 234 of 522 received referral
- MHD Response
 - 1) Letters
 - 2) HSA (288)
 - 3) Environmental Investigations (see later slide)

20-39 µg/dL Case Management

Venous BLL	Intervention for confirmed cases	Form
20-39 µg/dL	A Public Health Nurse (PHN) Case Manager conducts a home visit to provide educational information, conduct a growth and development assessment of the child, and provides ongoing monitoring of the child. The PHN will coordinate closely with a Lead Risk Assessor who will inspect the child's home for lead hazards. These services are delivered in the client's home until the service goals are met.	PHN + LRA

- Population size: 465
 - Confirmed: 145
- Intervention
 - Preliminary: Outreach from Public Health Nurse (PHN)
 - Confirmed: PHN case management and environmental investigation
- Level of service: 142 of 145 received referral for PHN case management
- MHD Response
 - 1) PHN call or letter
 - 2) Environmental Investigations

Greater than 40 µg/dL Case Management

Venous BLL	Intervention for confirmed cases	Form
≥40 µg/dL	At this level, an immediate MHD lead poisoning response will be initiated. A Public Health Nurse (PHN) Case Manager conducts a home visit to provide educational information, conduct a growth and development assessment of the child, and provides ongoing monitoring of the child. The PHN will coordinate closely with a Lead Risk Assessor who will inspect the child's home for lead hazards. These services are delivered in the client's home until the service goals are met.	PHN + LRA

- Population size: 54
 - Confirmed: 48 (32 received chelation)
- Intervention
 - Preliminary: Call from Public Health Nurse (PHN)
 - Confirmed: PHN case management (possible chelation coordination) and environmental investigation
- Level of service: 48 of 48 received referral for PHN case management
- MHD Response:
 - 1) Letters
 - 2) Additional case management referral (PHN)
 - 3) Environmental Investigations

Environmental Investigations

- Audit of environmental investigations still taking place
- Based on preliminary audit, 320 housing units should have received an investigation
 - 201 had paperwork indicating that an environmental investigation referral was made
 - At least 30 had no record of referral

Secondary Prevention Findings

- C.1: The program had insufficient documentation practices, making it difficult to determine what level of service was provided to children with confirmed elevated blood lead levels.
- C.2: More focus should be placed on increasing community capacity for confirmatory tests so proper interventions can be provided without delay.
- C.3: The program was not consistently delivering interventions to children with elevated blood lead levels.

Policy Recommendations

Policy Findings

- D.1: City of Milwaukee policies around lead poisoning prevention could be strengthened and better coordinated with other city departments to ensure public health goals are met.
- D.2: Local policies related to lead in water are not aligned with federal funding streams and federal guidance documents. This creates a disconnect between public health recommendations, local expectations, and resources available for implementation.

Think Health 

Act Now!

CITY OF
MILWAUKEE
HEALTH DEPARTMENT