

CUYAHOGA COUNTY BOARD OF HEALTH

YOUR TRUSTED SOURCE FOR PUBLIC HEALTH INFORMATION

5550 Venture Drive Parma, Ohio 44130
216-201-2000 www.ccbh.net

Data Matters: Childhood Lead Poisoning in our Community

Federal Reserve Bank of Cleveland
Addressing the Impacts of Lead Exposure: Moving toward Prevention
Friday, November 18, 2016

Terry Allan, Health Commissioner
Cuyahoga County Board of Health
(216) 201-2000
tallan@ccbh.net
www.ccbh.net

Objectives



- Define the scope of the problem
- Review relevant data on progress over time
- Describe where our community stands against national data on lead poisoning rates



What wrong with these pictures?



Compounding Disadvantages

- Minority children on Medicaid and living in poverty disproportionately at risk
- Children may need speech therapy and special education services.
- Deficits in reading, writing, drawing and construction skills
- Emerging difficulty at critical transition points including first, fourth, and sixth/seventh grades.
- Behaviors such as: inattention and distractibility interfere with learning.
- Needleman et al, found children with elevated lead levels seven times as likely to drop out of school.



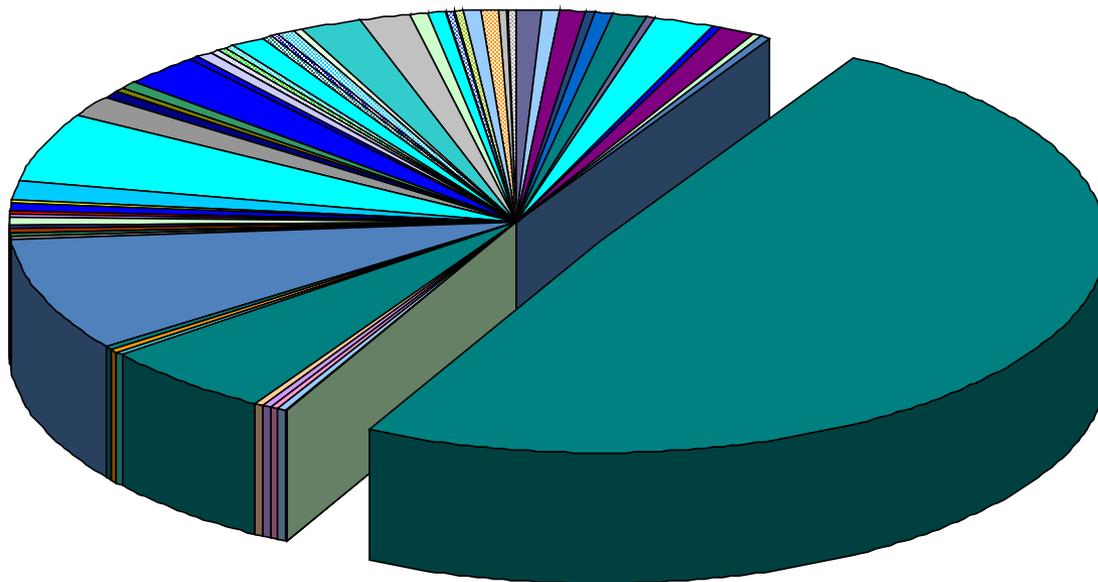
Defining Lead Poisoning

- **Since 2007:** Cuyahoga County Board of Health, Cleveland Department of Public Health and Shaker Heights Health Department: 5 µg/dL

“New Level of Awareness”

There is **NO SAFE LEVEL OF LEAD.**

2014: 4,596 children had lead levels $\geq 5 \mu\text{g}/\text{dL}$ in Ohio

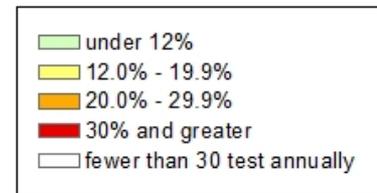
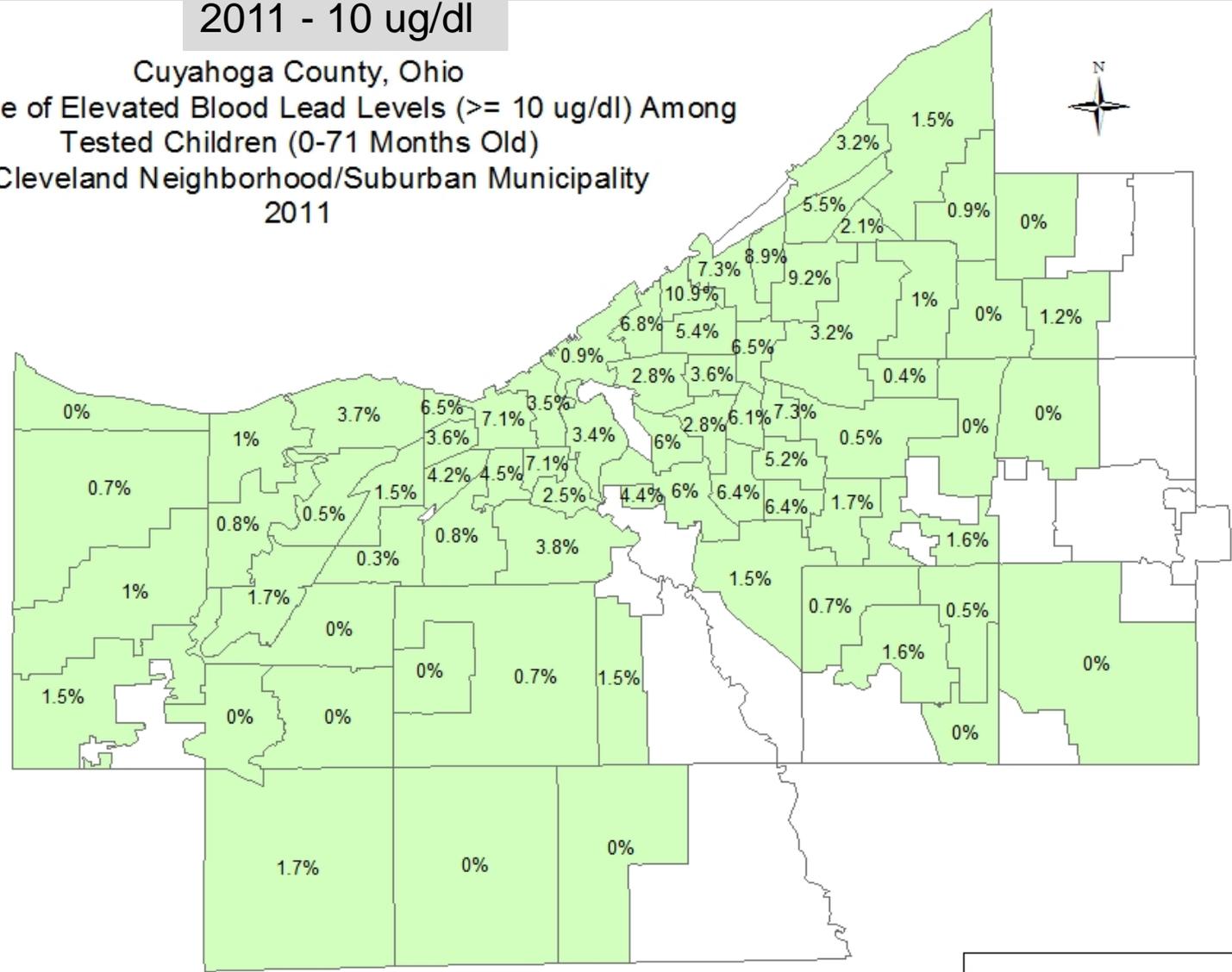


49% (2278) of those children live in Cuyahoga County, and of those **75% (1,744)** live in Cleveland



2011 - 10 ug/dl

Cuyahoga County, Ohio
 Percentage of Elevated Blood Lead Levels (≥ 10 ug/dl) Among
 Tested Children (0-71 Months Old)
 By Cleveland Neighborhood/Suburban Municipality
 2011



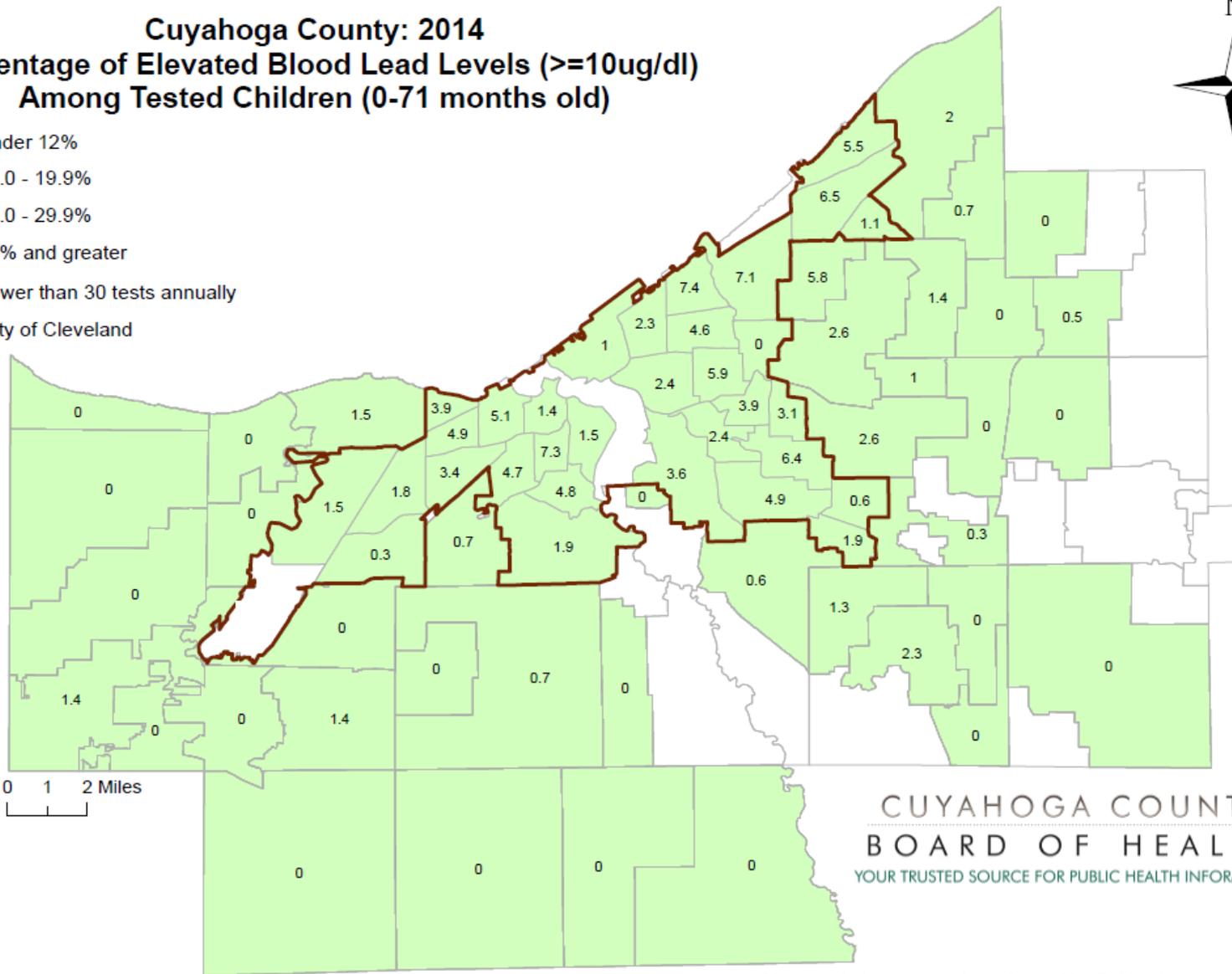
Cuyahoga County Board of Health
 Office of Epidemiology, Surveillance, and Informatics
 Data Source:
 The Ohio Department of Health
 Childhood Lead Poisoning Prevention Program
 State Plane Ohio North
 January 30th, 2013

Public Health
 CUYAHOGA COUNTY
 Board of Health
 PREVENT • PROMOTE • PROVIDE

Cuyahoga County: 2014 Percentage of Elevated Blood Lead Levels ($\geq 10\mu\text{g}/\text{dl}$) Among Tested Children (0-71 months old)



- Under 12%
- 12.0 - 19.9%
- 20.0 - 29.9%
- 30% and greater
- Fewer than 30 tests annually
- City of Cleveland



CUYAHOGA COUNTY
BOARD OF HEALTH
YOUR TRUSTED SOURCE FOR PUBLIC HEALTH INFORMATION

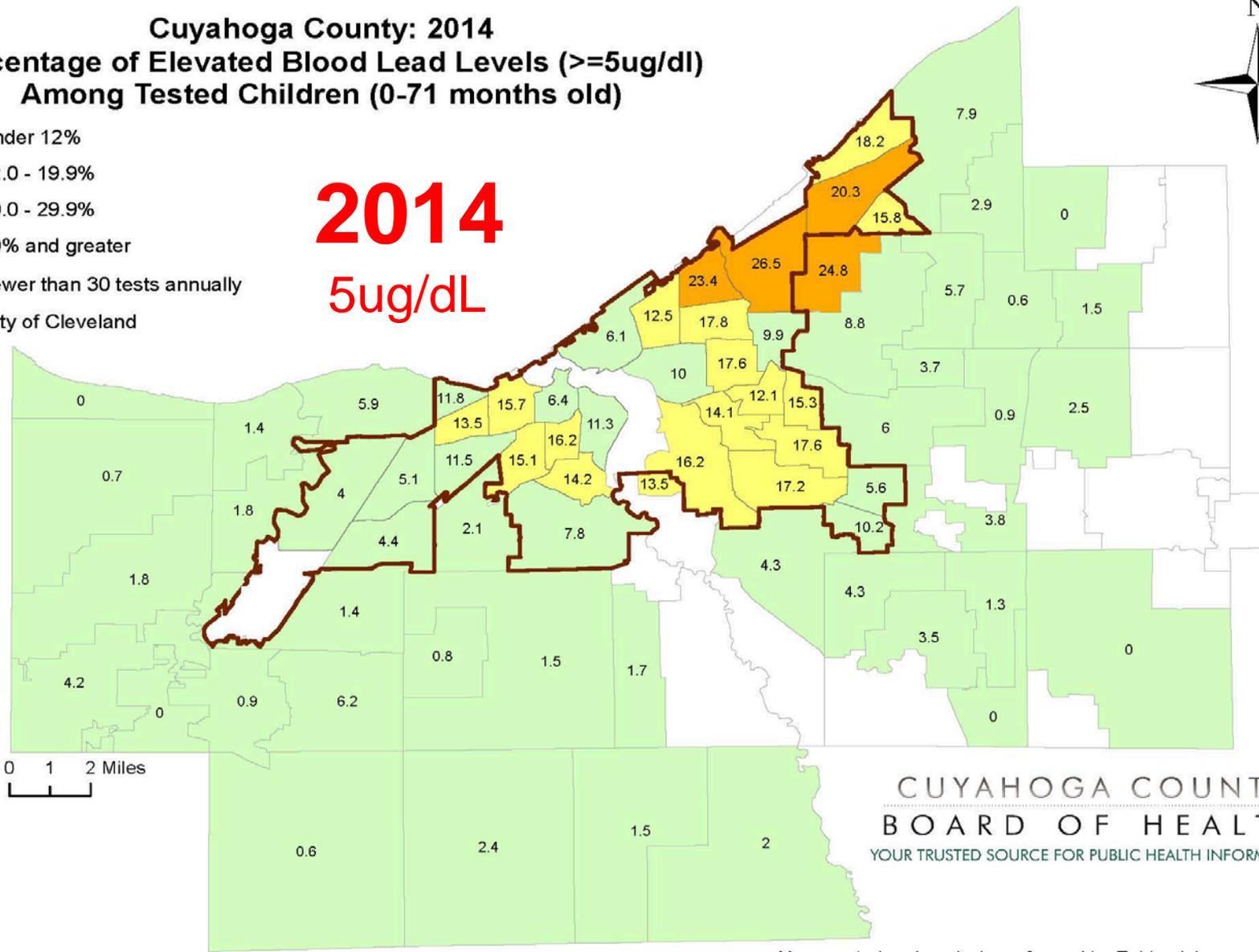
Map created and analysis performed by Epidemiology, Surveillance and Informatics at the Cuyahoga County Board of Health, February 2016.
Data Source: The Ohio Department of Health Ohio Healthy Homes and Lead Poisoning Prevention Program (OHLPPP)

Cuyahoga County: 2014 Percentage of Elevated Blood Lead Levels (>=5ug/dl) Among Tested Children (0-71 months old)



- Under 12%
- 12.0 - 19.9%
- 20.0 - 29.9%
- 30% and greater
- Fewer than 30 tests annually
- City of Cleveland

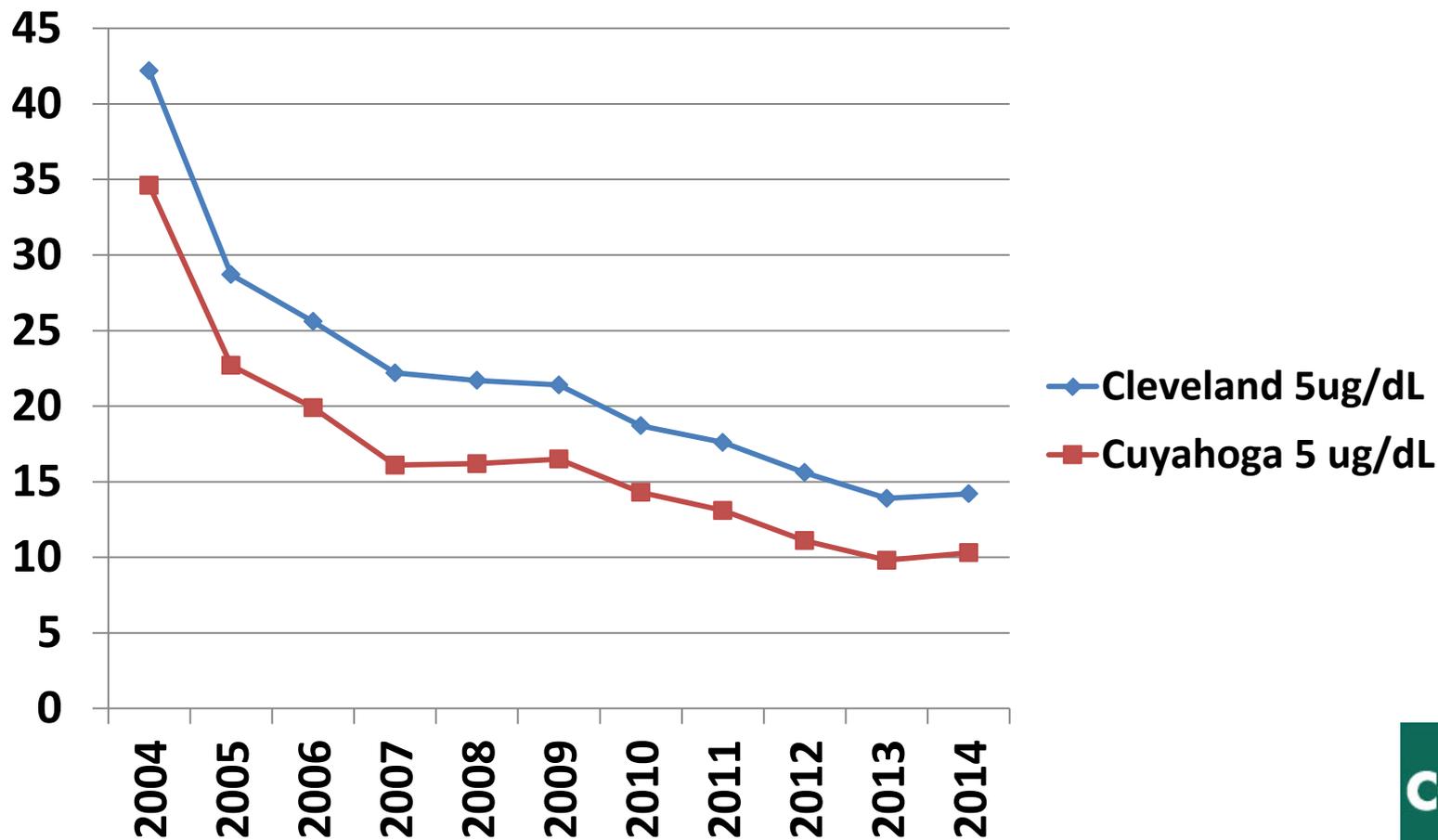
2014
5ug/dL



CUYAHOGA COUNTY
BOARD OF HEALTH
YOUR TRUSTED SOURCE FOR PUBLIC HEALTH INFORMATION

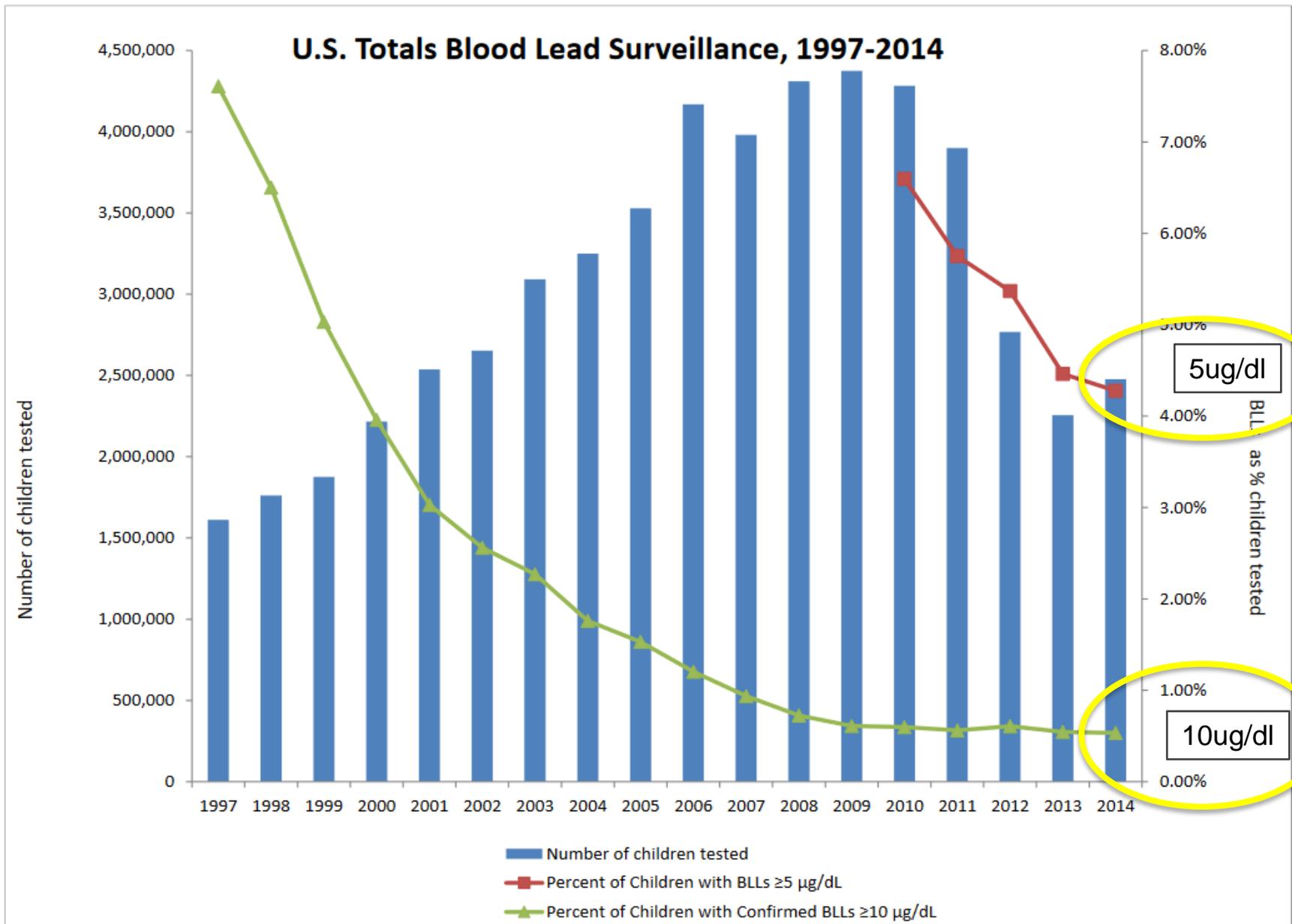
Map created and analysis performed by Epidemiology, Surveillance and Informatics at the Cuyahoga County Board of Health, February 2016.
Data Source: The Ohio Department of Health Ohio Healthy Homes and Lead Poisoning Prevention Program (OHHLPPP)

HISTORY OF PERCENT CHILDREN WITH EBL CLEVELAND & CUYAHOGA COUNTY



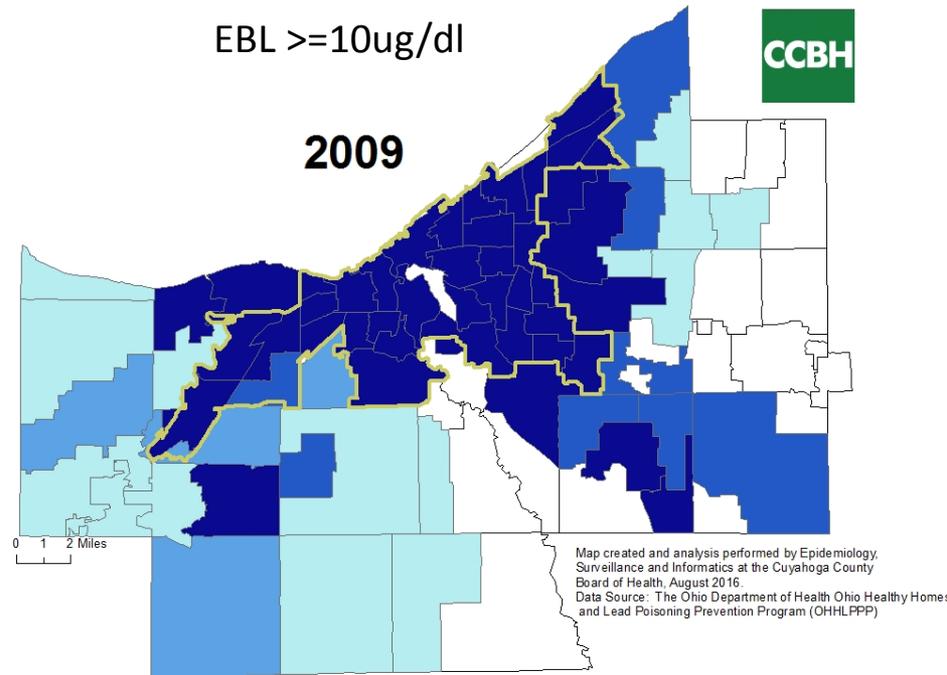
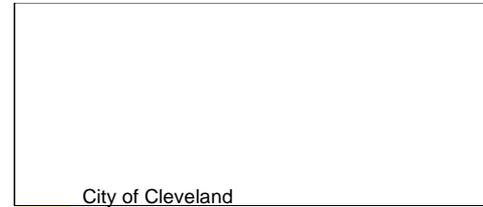
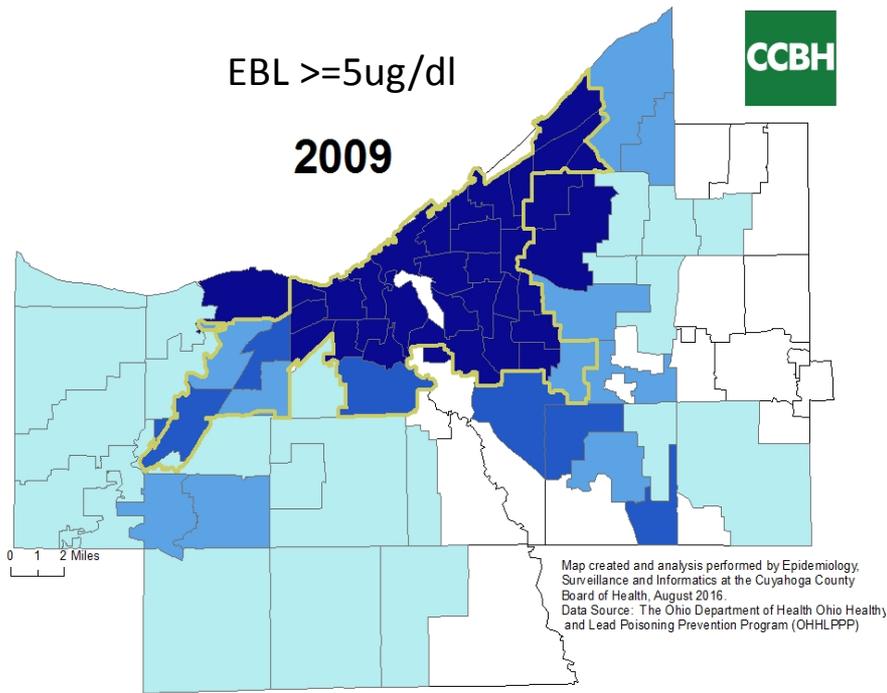
Data from Cuyahoga County Board of Health

CCBH

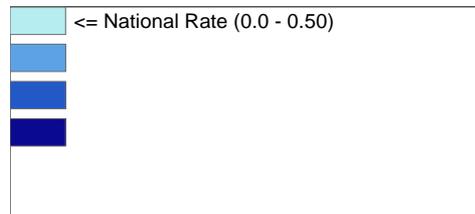
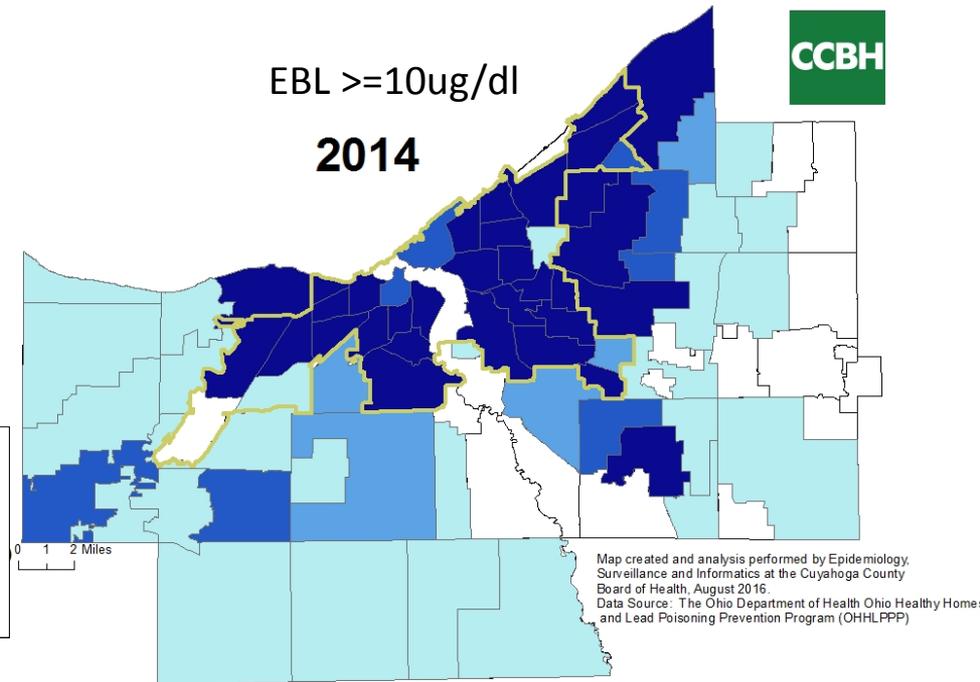
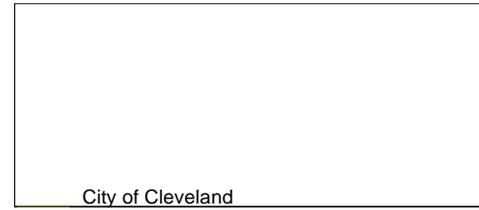
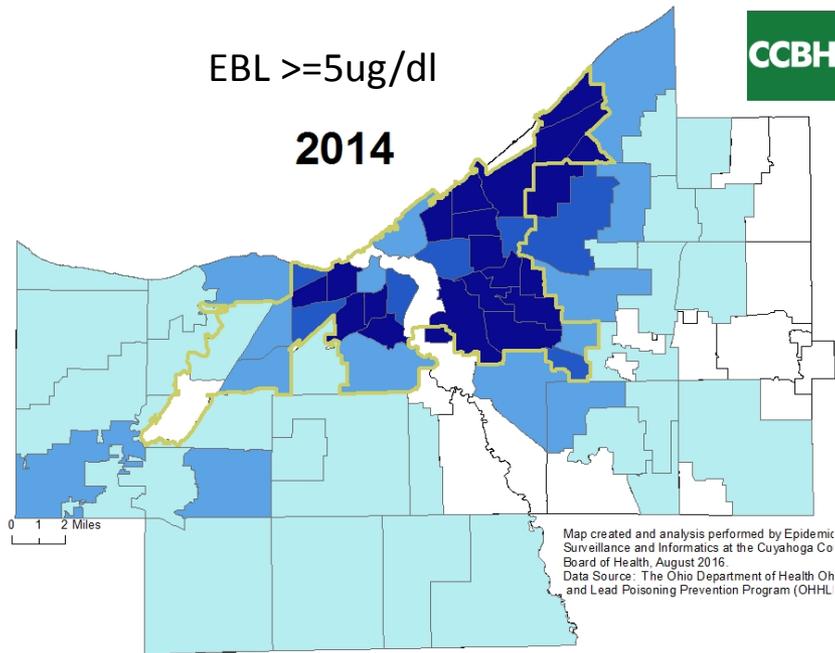


CDC's National Surveillance Data (1997-2014)

Cuyahoga County: Percentage of Elevated Blood Lead Levels (EBLs) Among Tested Children (less than 6 years old)



Cuyahoga County: Percentage of Elevated Blood Lead Levels (EBLs) Among Tested Children (less than 6 years old)



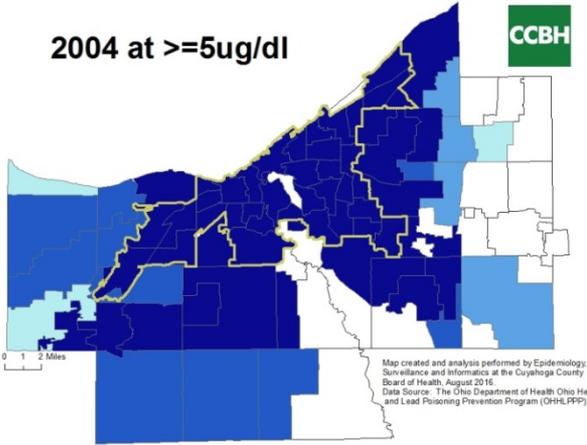
City of Cleveland neighborhoods were rezoned in 2012. Comparisons to the previous neighborhoods should be made with caution as boundaries may have changed.

Cuyahoga County: Percentage of Elevated Blood Lead Levels Among Tested Children (0-71 months old)

12.01 and greater

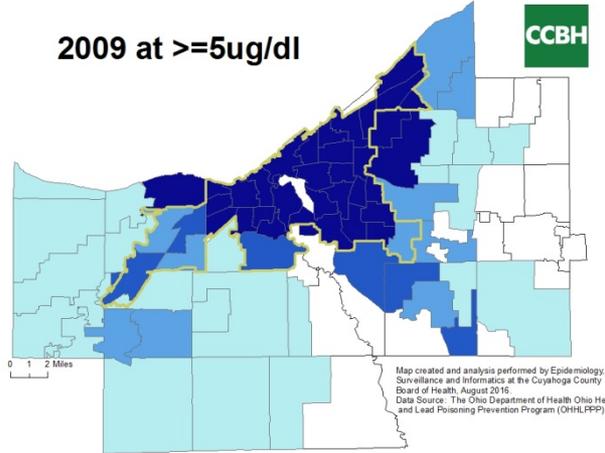
2004 at $\geq 5\mu\text{g}/\text{dl}$

CCBH



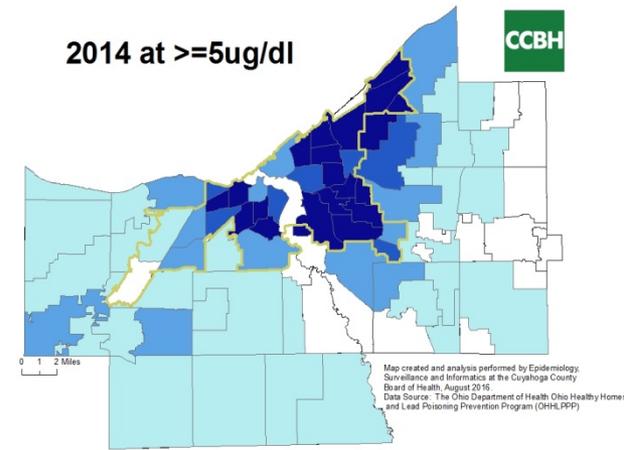
2009 at $\geq 5\mu\text{g}/\text{dl}$

CCBH



2014 at $\geq 5\mu\text{g}/\text{dl}$

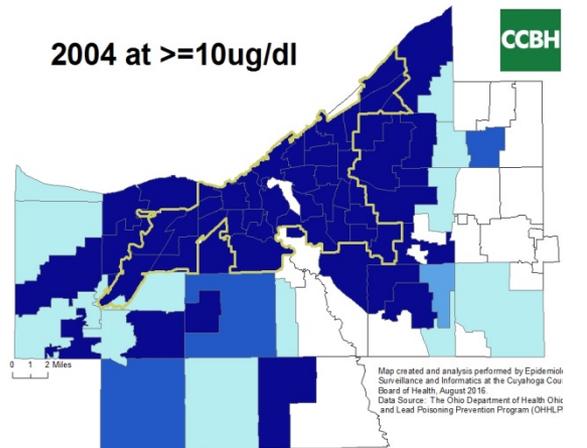
CCBH



0.51 - 1.00

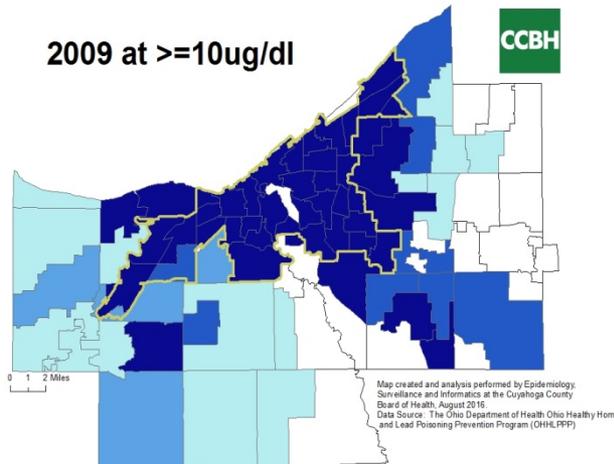
2004 at $\geq 10\mu\text{g}/\text{dl}$

CCBH



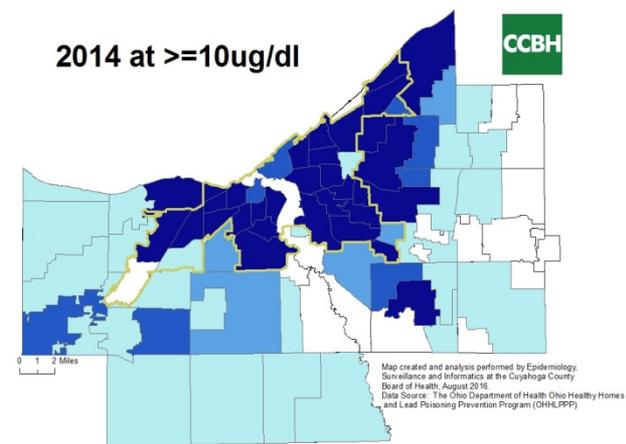
2009 at $\geq 10\mu\text{g}/\text{dl}$

CCBH



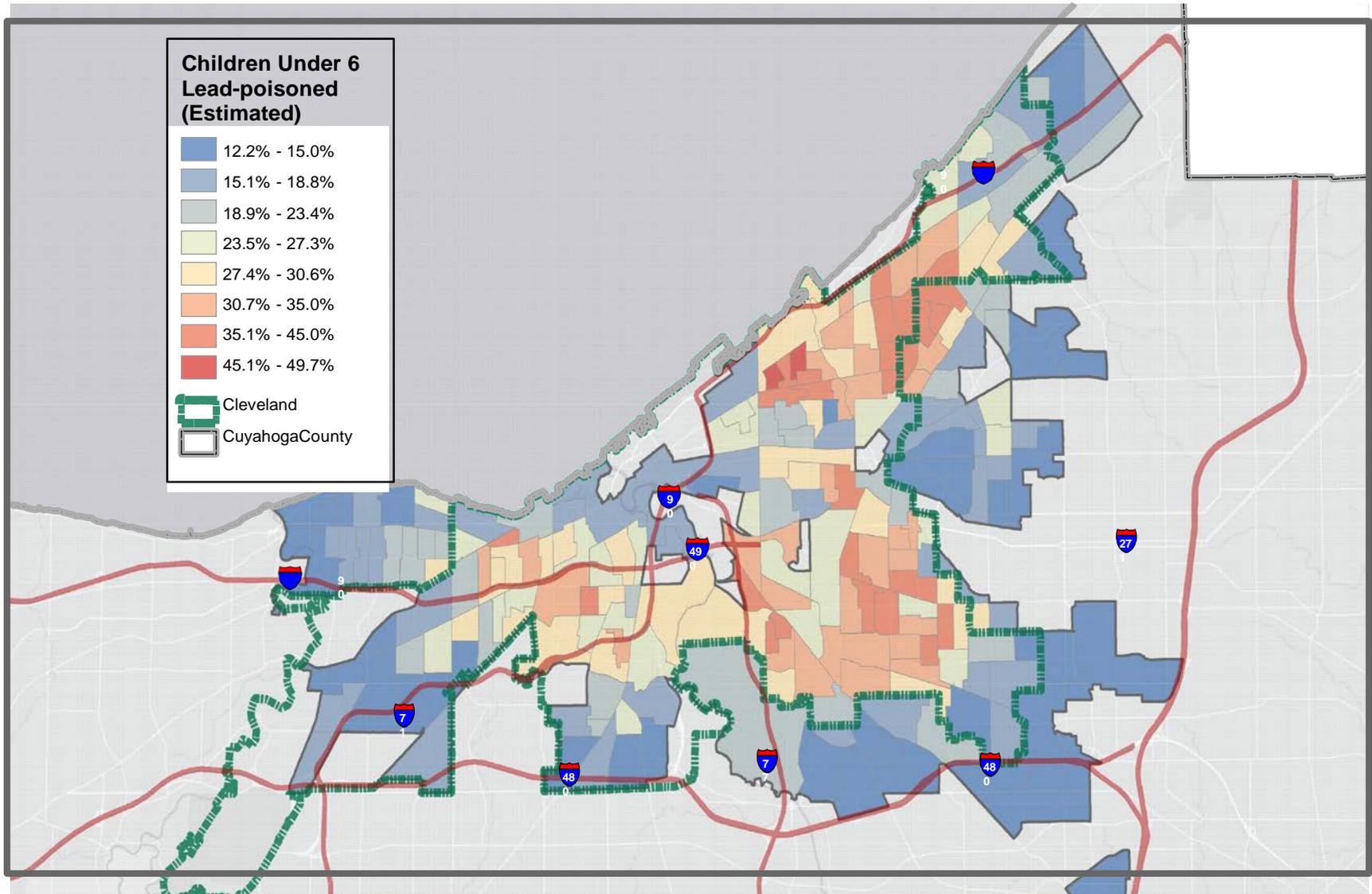
2014 at $\geq 10\mu\text{g}/\text{dl}$

CCBH



City of Cleveland neighborhoods were rezoned in 2012. Comparisons to the previous neighborhoods should be made with caution as boundaries may have changed.

Children Under 6 Estimated Lead-poisoned in "Hot" Census Tract Areas in Cleveland and Northern Cuyahoga County



Source: Ohio Healthy Homes and Lead Poisoning Prevention Program, Ohio Department of Health. ODH defines a "hot" census tract as one where the estimated percentage of children lead-poisoned (5 ug/dL blood) is 12% or greater. Map by The Kirwan Institute.

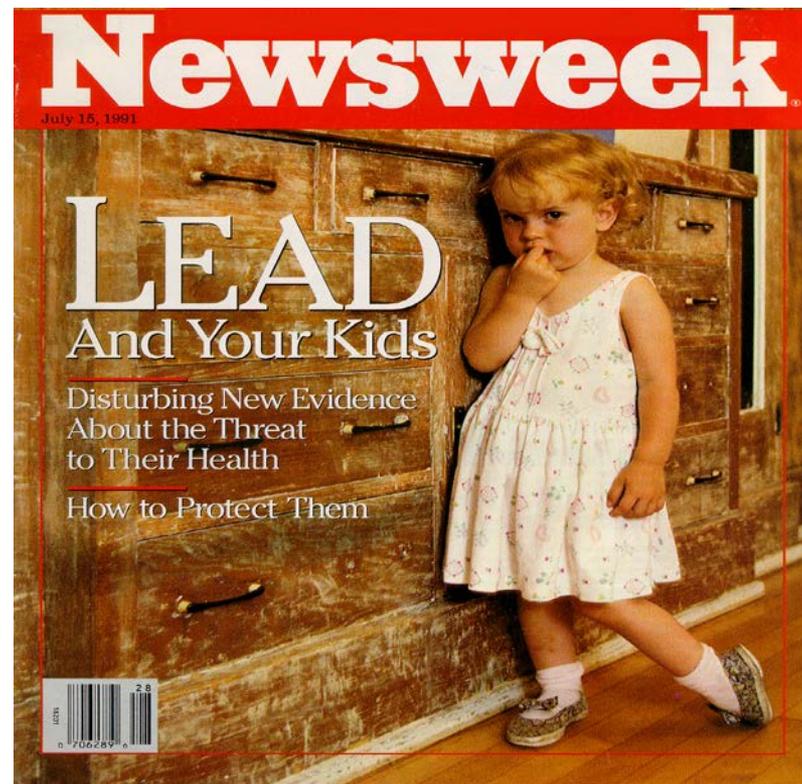
Barriers to Testing

A study of barriers to testing in Ohio found conflicts between the reasons cited by healthcare providers vs. reasons cited by parents on why lead testing is not performed.

Reasons cited by HCPs	Reasons cited by Parents
Parents not following through with blood lead testing	Providers did not make parent aware that lead test was needed
Parents refusing the test	Not living in an older home
Parents not seeing the importance of testing	Not knowing the test was important
Children tested elsewhere	Not being told where to go for the test
Not seeing enough EBL children in practice to justify testing	Parent afraid of being evicted
Parents not requesting testing	Parent did not have transportation



In Memoriam: Congressman Louis Stokes





CUYAHOGA COUNTY

BOARD OF HEALTH

YOUR TRUSTED SOURCE FOR PUBLIC HEALTH INFORMATION

5550 Venture Drive Parma, Ohio 44130
216-201-2000 www.ccbh.net

