

# State of the City and County: An Issue Briefing on Lead Poisoning in Chicago and Cook County

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Cook County DEPT.  
of  
Public Health

Promoting health. Preventing disease. *Protecting you.*

# Suburban Cook County Review of Current Data



Cook County DEPT.  
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**Public Health**

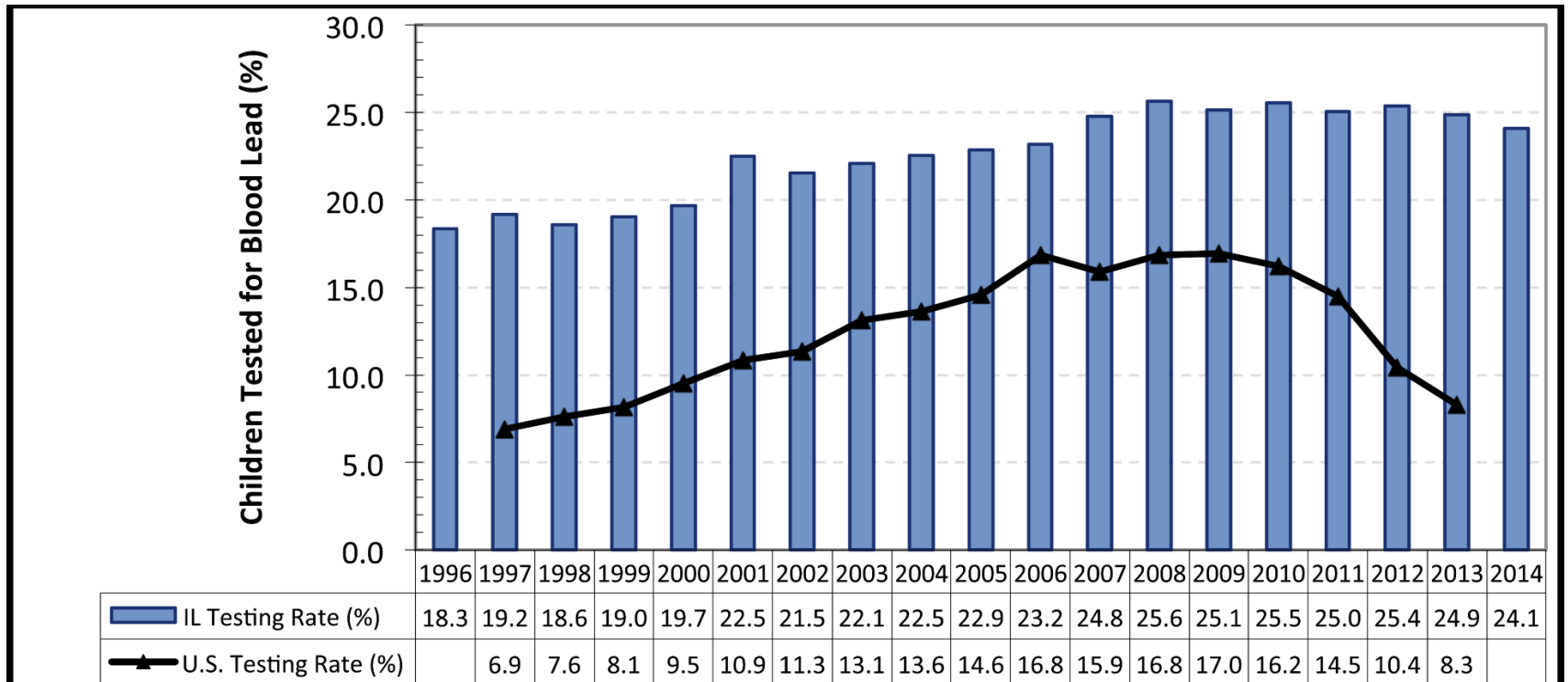
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# Lead Poisoning Prevention Act and Part 845 Lead Poisoning Prevention Code

- Sec. 6.2. Testing children and pregnant persons.

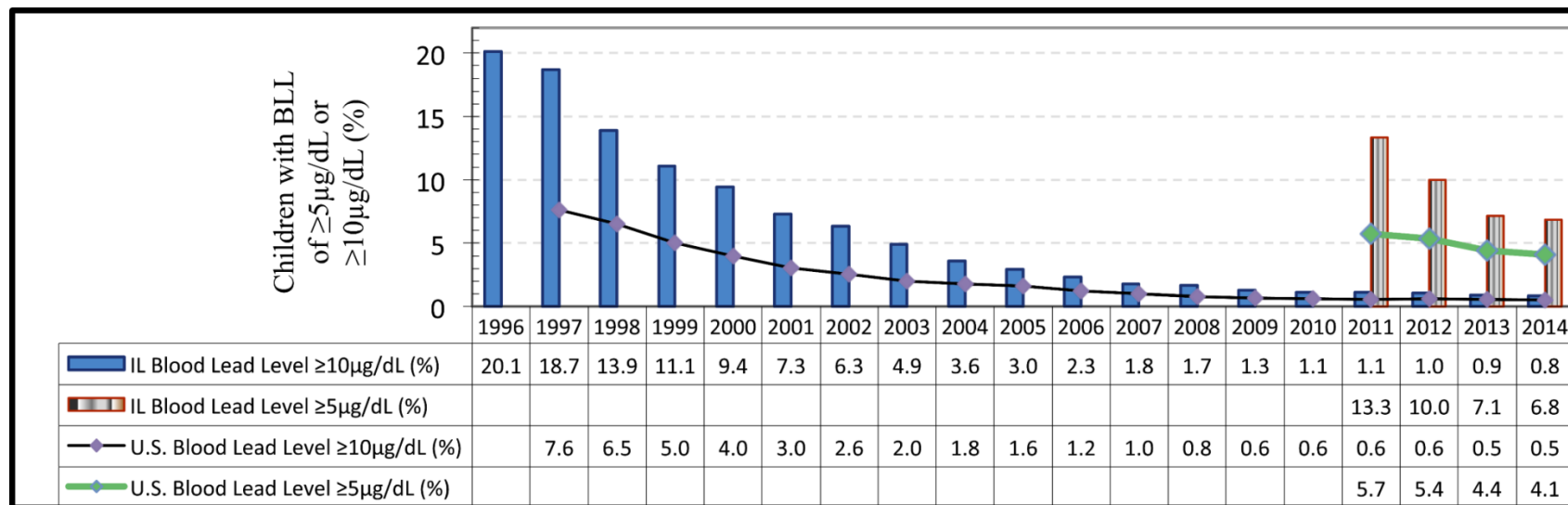
(a) Any physician licensed to practice medicine in all its branches or a health care provider who sees or treats children 6 years of age or younger **shall test those children for lead poisoning when those children reside in an area defined as high risk** by the Department. Children residing in areas defined as low risk by the Department shall be evaluated for risk by the Childhood Lead Risk Questionnaire developed by the Department and tested if indicated.

# Statewide trends – lead testing



# IL and U.S. Children Tested - BLLs at 5mcg/dL and 10 mcg/dL 1996 - 2014

Venous BLLs of 10µg/dL or greater trigger a public health intervention in Illinois. Recommended reference value - 5mcg/dL



**Source:** Illinois Lead Program Surveillance Data, 1996-2014, The United States average is based on the data reported by the CDC at:  
[http://www.cdc.gov/nceh/lead/data/Website\\_StateConfirmedByYear\\_1997\\_2014\\_12092015.htm](http://www.cdc.gov/nceh/lead/data/Website_StateConfirmedByYear_1997_2014_12092015.htm)

# Children tested in suburban Cook County

**Evaluation (not blood testing)** is performed:

- Using Childhood Lead Risk Questionnaire (CLRQ)
- On children before they attend a licensed day care, school, or kindergarten as required by law

**Lead testing** is required for:

- Children residing in in IDPH-designated High Risk ZIP Codes (12 in CCDPH jurisdiction)
- Children who answer "YES" or "I DO NOT KNOW" to any question on the CLRQ
- Children receiving services from Medicaid, Head Start, All Kids, Women, Infants and Children (WIC), prior to 12 and 24 months

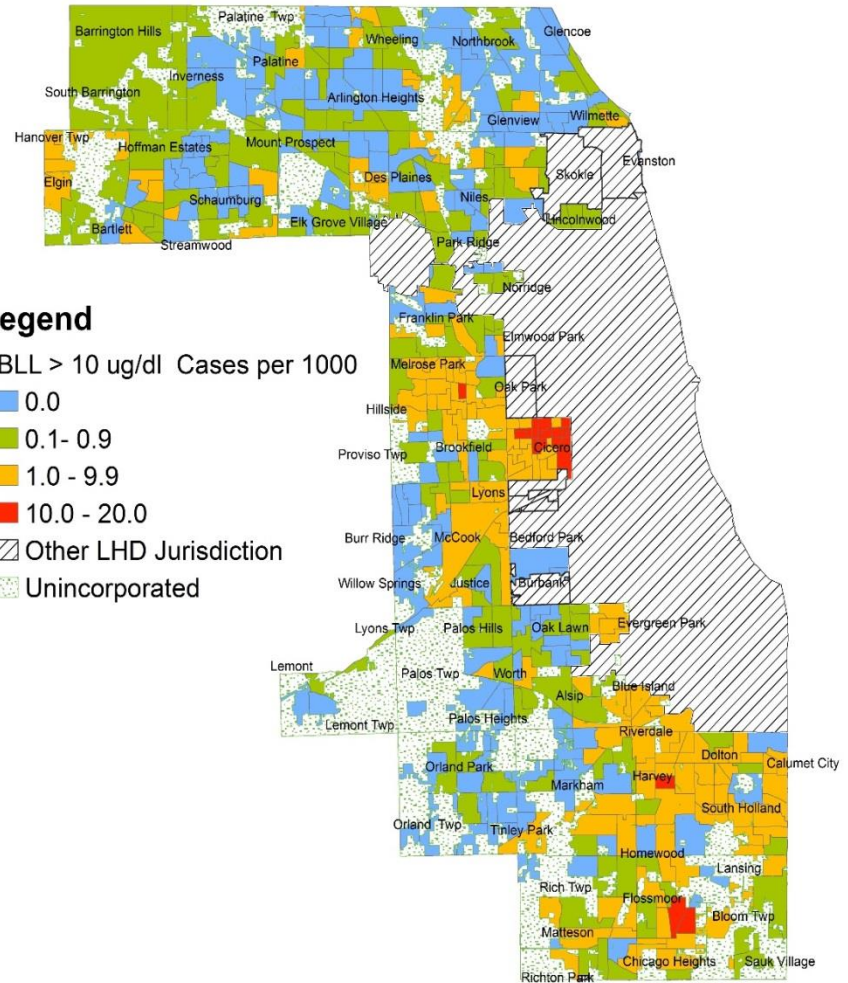
**CCDPH program:** Nursing home visit and environmental lead risk assessment for all children 10mcg/dL and greater, and any child referred by physician, regardless of blood lead level.

# Blood lead tests– SCC by level and age, 2004-2013

EBL result	Number of tests	% of tests
5-9mcg/dL	45,062	85.7%
10mcg/dL and greater	7,514	14.3%
Total	52,576	
AGE		
Younger than 3	26,245	50%
3-6	22,359	42.5%
Older than 6	3,972	7.5%
Total	52,576	

# Blood Lead Incidence $\geq 10\mu\text{g/dL}$

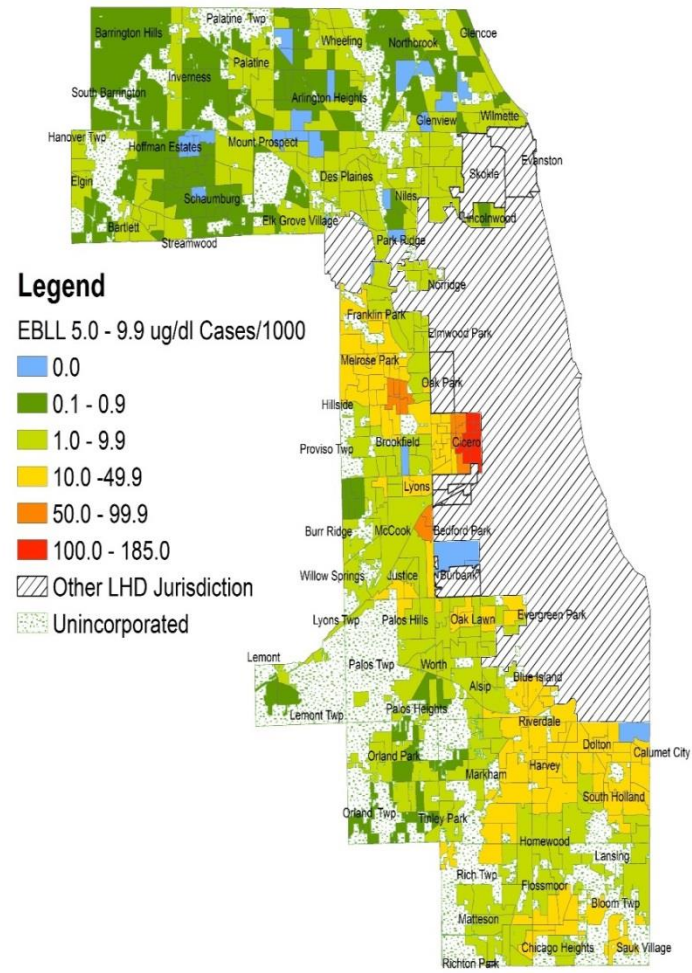
Cook County Department of Public Health - 2004-2013  
 Average Annual Lead Cases per 1000 Population (0.5 - 6 Yrs)  
 by Census Tract  
 (EBLL  $\geq 10 \mu\text{g/dl}$ )





# Blood Lead Incidence – 5-9ug/dL

Cook County Department of Public Health - 2004-2013  
Average Annual Lead Cases per 1000 Population (0.5 - 6 Yrs)  
by Census Tract  
(EBLL 5.0-9.9 ug/dl)



# Risk by selected ZIPs in SCC

High Risk ZIPs		Est # kids under 6 living in per 1980housing	% pre-1980 housing	Est % EBL 5mcg/dL or greater
60043	Kenilworth	181	94.62	11.6
60104	Bellwood	1,406	96	19.3
60153	Maywood	2,025	94.7	19.8
60305	River Forest	688	96.6	12
60402	Berwyn	5,744	96.3	13.8
60406	Blue Island	2344	89.5	16.3
60456	Hometown	265	99.2	12.2
60501	Summit	1,134	92.5	14.5
60513	Brookfield	1361	95.4	12.3
60534	Lyons	785	90	13.2
60546	Riverside	1,055	97.4	12
60804	Cicero	9,333	95.3	14.50%
Not High Risk				
60426	Harvey	2,615	90.6	21.2
60472	Robbins	448	96.7	25
60411	Chicago Heights	4,789	86.2	18.6
60165	Stone Park	521	85	14.4
60707	Elmwood Park	3,046	94.6	13.3
60068	Park Ridge	2,156	90	11

# Predictors for Prevalence in SCC

Using data from 2004-2013, preliminary analysis shows that

- Educational attainment (low)
- Median income (low)
- Minority communities (high)

were statistically significant predictors for prevalence of lead poisoning.

High vs. low educational attainment

High vs. low median income

High vs. low % of minority residents

# Implications – High Risk ZIP codes (HRZ)

- Working group at IDPH revisited HRZ designation – discussed better/other approaches
- In SCC, not all HRZ are created equal; current designation doesn't account for where we see risk factors, referrals
- Screening required for HRZs could mean less screening in non-HRZ, even if risk is similar

# CCDPH Provider Outreach

- Contact with over 150 practices in last 3 years
- Encourage screening through provider education re:
  - Requirements and recommendations (High risk ZIPs, Medicaid-eligible, etc.)
  - Rewards (Medicaid pay-for-performance)
  - Remediation assistance – alert providers to SCC funds to address hazards for their patients

# Housing Units – Suburban Cook County

Units	Pre-1980 Units – Number	Pre-1980 Units %	Pre-1940 Units Number	Pre-1940 Units %
985,302	733,194	74.4%	147,074	15%

Housing Type	Number	Percentage
Renter occupied	256,654	26%
Owner occupied	647,273	65.7%

Source: 2012 ACS one year estimates

# Public Housing in SCC

- In fall 2015, data from STELLAR was examined to identify past cases residing in Housing Authority of Cook County (HACC) developments
- NO HACC-owned properties were the residence of record for an open lead poisoning case
- Opportunities exist to work with HACC regarding voucher housing
  - Inspections
  - Move rules

# Sources of Lead Exposure

- Overwhelmingly paint-based hazards
- Also see exposure through makeup, pottery, spices, homeopathic remedies
- Water?
  - Pilot to examine if water is source when no other source of lead is found during environmental risk assessment



# Water Testing – Suburban CC

- IDPH – program jurisdiction over non-community water supply and testing (parks, schools)
- EPA – program jurisdiction over community water supply (municipalities)
  - Serve at least 25 people or 15 service connections

# Community Water Systems

- Among other contaminants, test for lead and copper
- Test every 6 months
  - Can become less frequent if history of no violations
- CWS chooses locations (addresses of residential properties)
  - When have lead service lines, must test those first
- Compliance based on 90<sup>th</sup> percentile
  - If 90% of their samples are below 15ppb then in compliance
  - Drinking Water Watch - <http://water.epa.state.il.us/dww/index.jsp>
- Opportunities?
  - Collaboration with municipalities re: information, education, outreach
  - South Suburban Mayors and Managers Association
  - Metropolitan Mayors Caucus – meeting April 12

# Looking Ahead

- Collaborations with
  - Housing Authority of Cook County
  - CC Bureau of Economic Development
  - Municipalities/Municipal Groups
    - South Suburban Mayors and Managers Association
    - Metropolitan Mayors Caucus
    - CDBG lead paint element
    - National Healthy Housing Standards
  - Community-based orgs re: both paint and non-paint risk
  - University of Chicago – housing risk factor model
  - CDPH – based on Summit recommendations – visual inspections
- Surveillance and Risk Data and Program development
  - Policy (ex: Prospective rental inspection programs?)
  - Practice (ex: lowering lead intervention level?)