



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

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Legal Requirements and Recommendations for Screening and Reporting

Federal Law/CMS

- Part of EPSDT benefit
- Medicaid-enrolled children 12 and 24 months of age must be screened for lead poisoning
- Medicaid-enrolled children 36 – 72 months of age must be screened if they've never been screened before
- States may apply to CMS to be granted ability to do targeted screening if they have sufficient data to support this change

Illinois Lead Poisoning Prevention Act/Code

- All children 6 months to 6 years of age should be tested for lead poisoning if the child resides in a high-risk area; children 7 years of age and older and pregnant persons may also be tested (includes older children as part of school health exam if provider feels child is at high risk of lead poisoning)
- Federal law for Medicaid-enrolled children applies
- All children must receive a screening blood lead test prior to admission to a child care facility (including kindergarten) and subsequently during required physical exams if the child resides in a high-risk area
- Child care facilities that participate in the Illinois Child Care Assistance Program (CCAP) shall annually send or deliver to the parents or guardians of children enrolled in the facility's care an informational pamphlet regarding awareness of lead poisoning

Chicago Municipal Code

- All children must receive a screening blood lead test prior to admission to a child care facility (including kindergarten) and subsequently during required physical exams (same as state law)
- Each day care center, day care home, preschool, nursery school, kindergarten or other child care facility licensed or approved by the State of Illinois or the department, including such programs operated by a public school district, shall annually send or deliver to the parents or guardians of children six years and younger an informational pamphlet regarding awareness of lead poisoning

Chicago Recommendations

- Chicago considered 'high-risk area' under Illinois Lead Poisoning Prevention Act – universal screening
- Age and risk-based:
 - Children 6 to 36 months of age:
 - Screening blood lead test at 6, 12, 18, 24 and 36 months OR at 9, 15, 24, and 36 months
 - Children 4 to 6 years of age:
 - Screening blood lead test annually unless prior history of at least two annual blood lead tests <10 ug/dl
 - Screening should occur if a child moved into a home built before 1978 that has peeling or chipping paint, the home has recently been renovated or undergone remodeling or the child has continued oral behavior
 - Additional guidelines for follow-up testing on children with abnormal levels

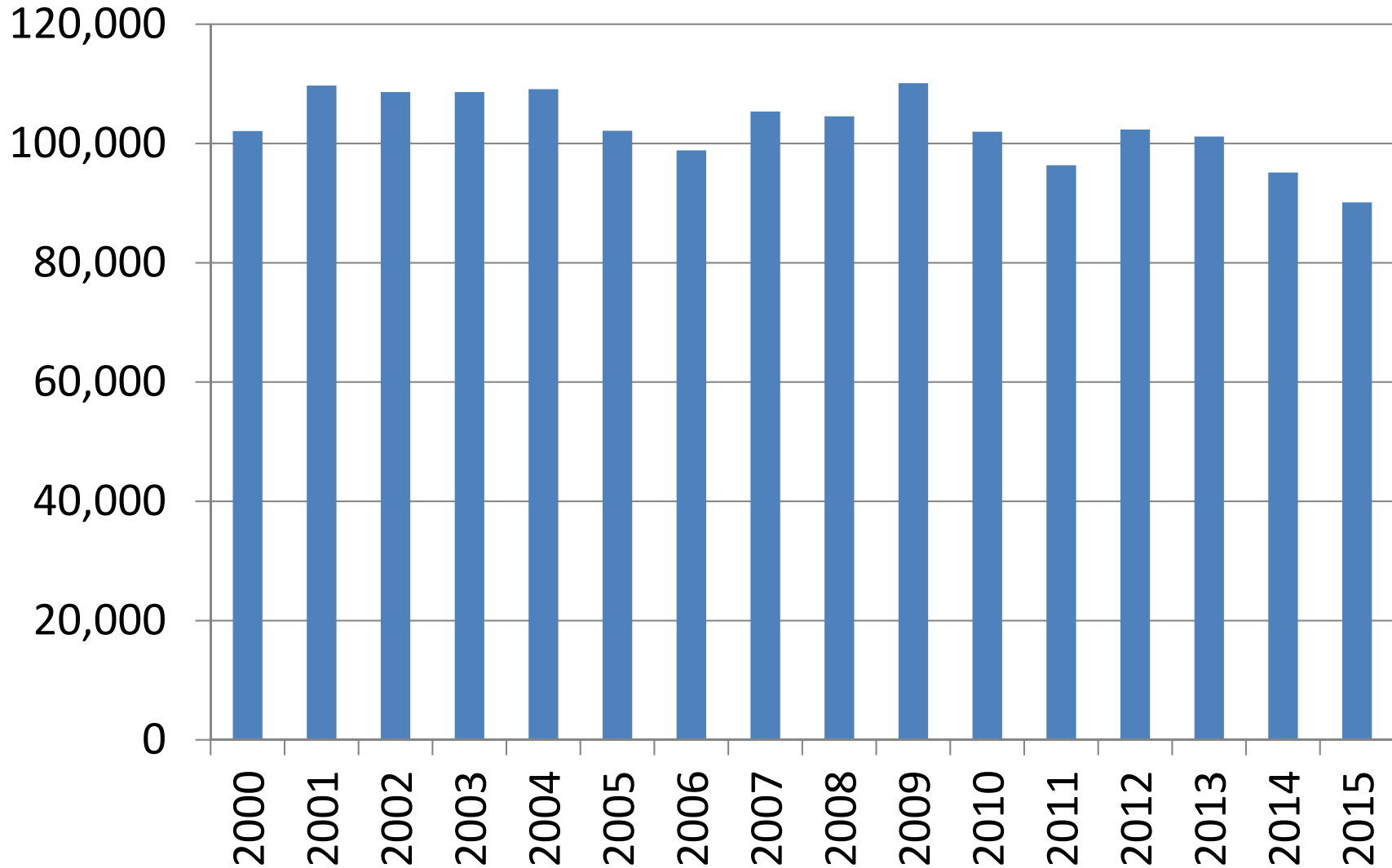
Reporting

- ALL results reportable regardless of the blood lead level
- Timeliness of reporting based on the blood lead level
- Information required in the report includes that which is helpful in locating child
- Reports go to IDPH then to CDPH

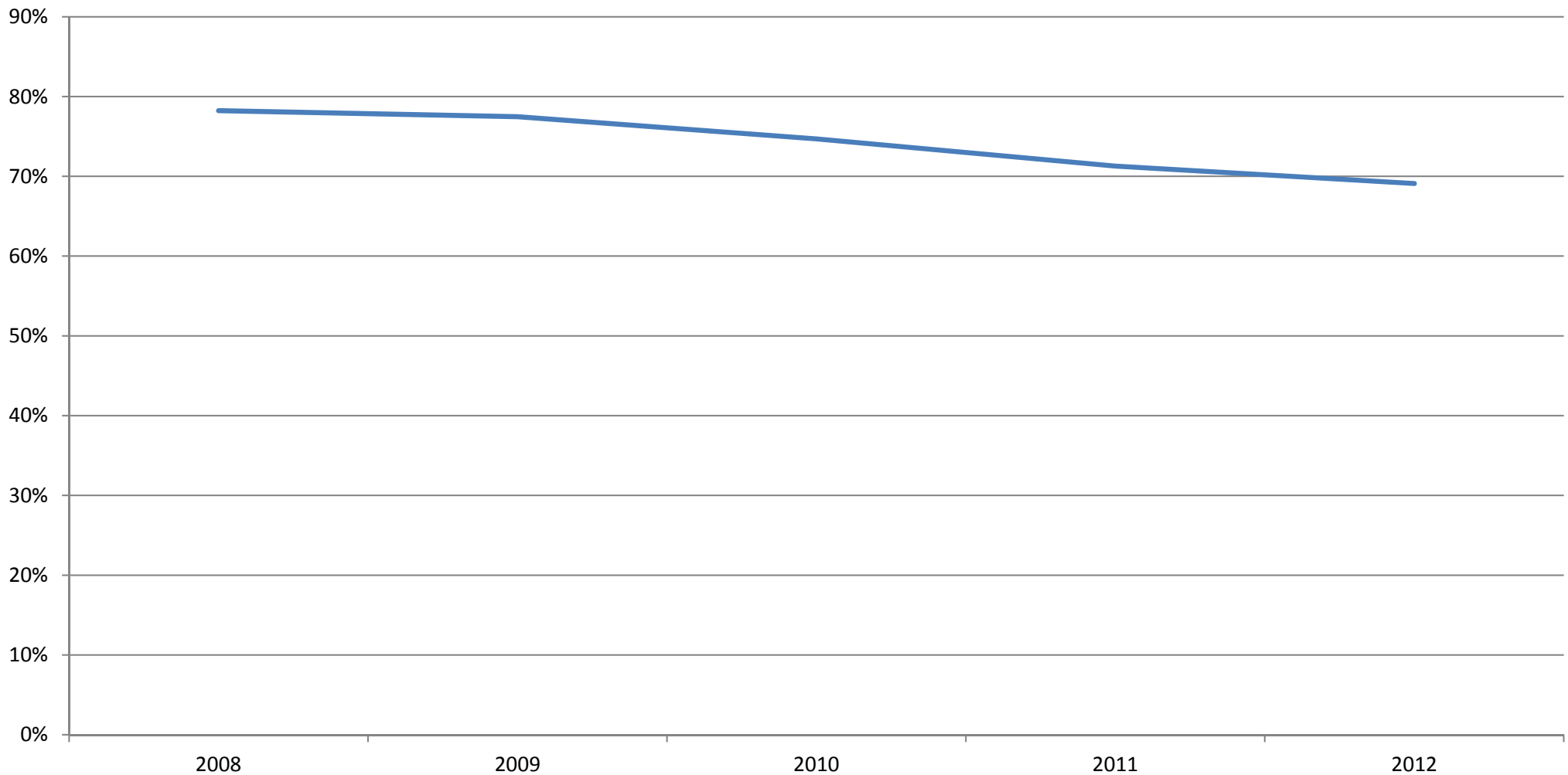
Chicago

Review of Current Data

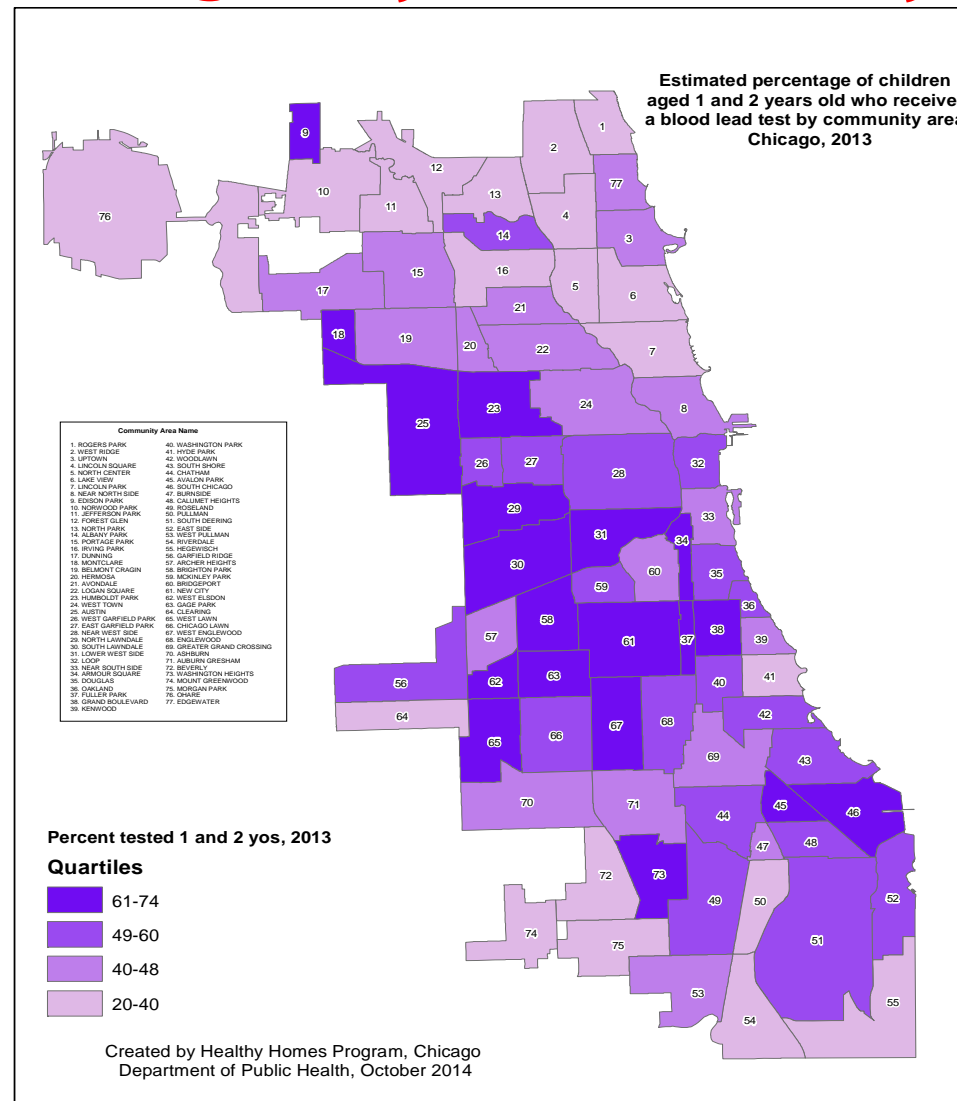
Number of children 0 to 6 years of age screened: Chicago 2000 - 2015



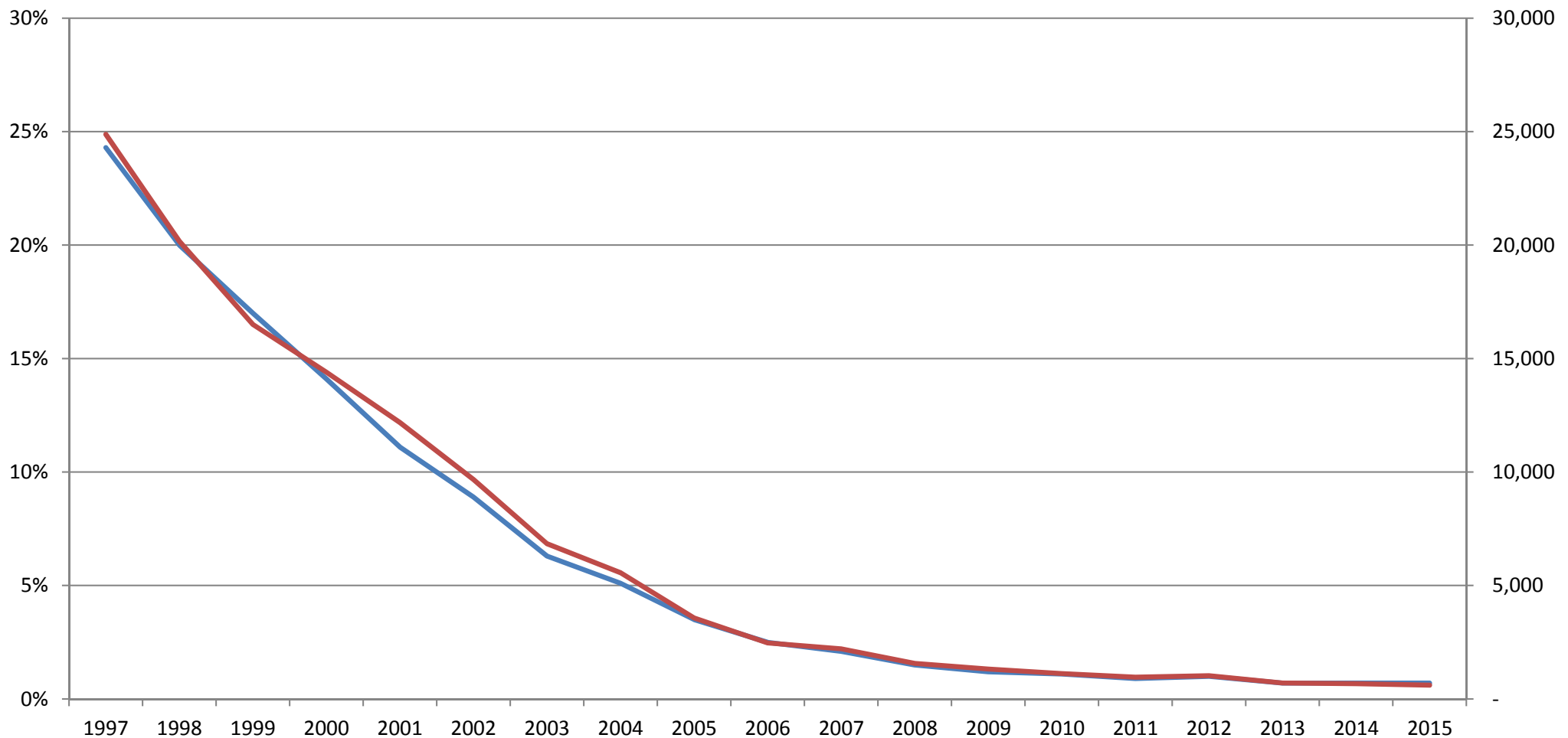
Percent of children ever screened by 3 years of age: Chicago by birth year 2008 - 2012



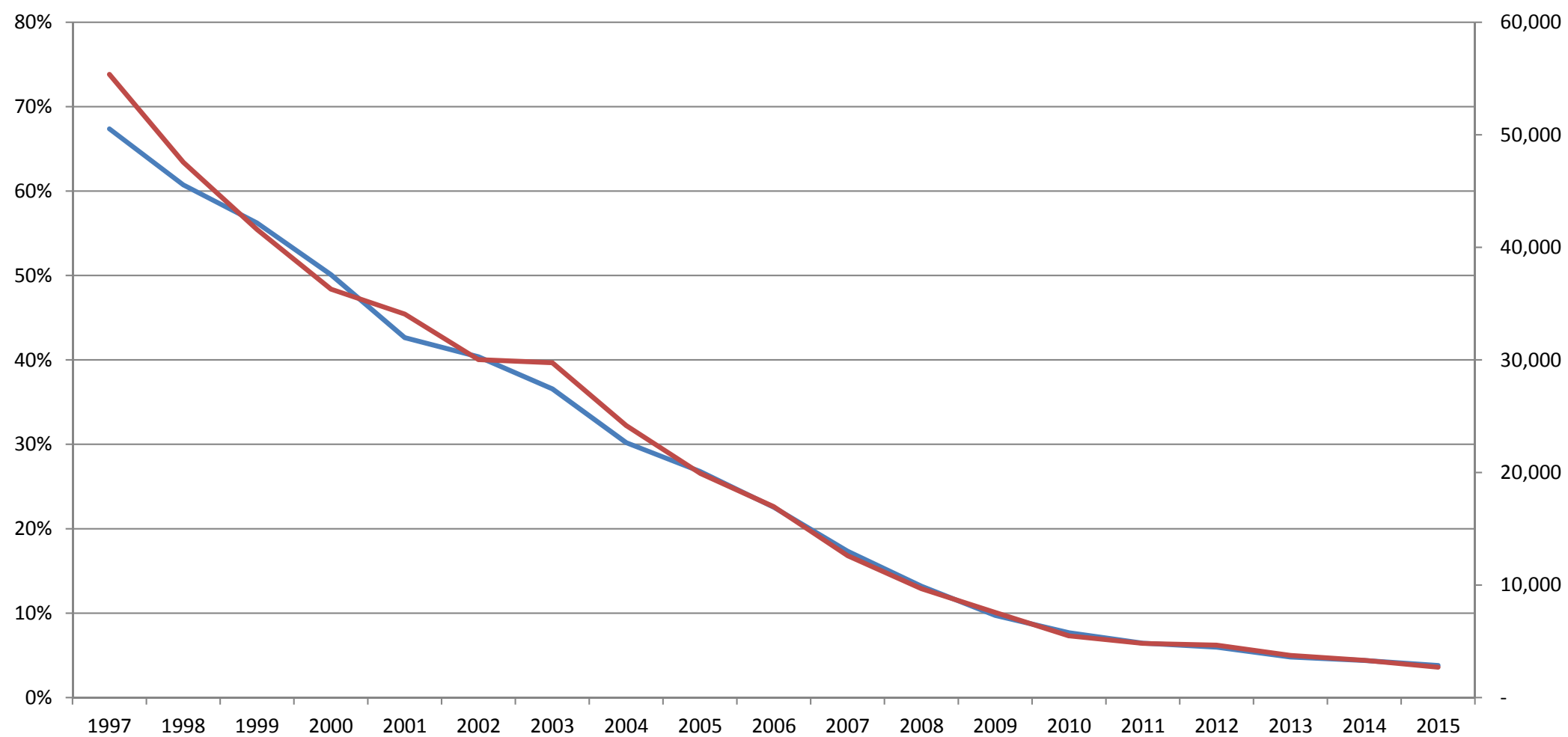
Percent of children aged 1 and 2 years of age screened: Chicago, by Community Area 2013



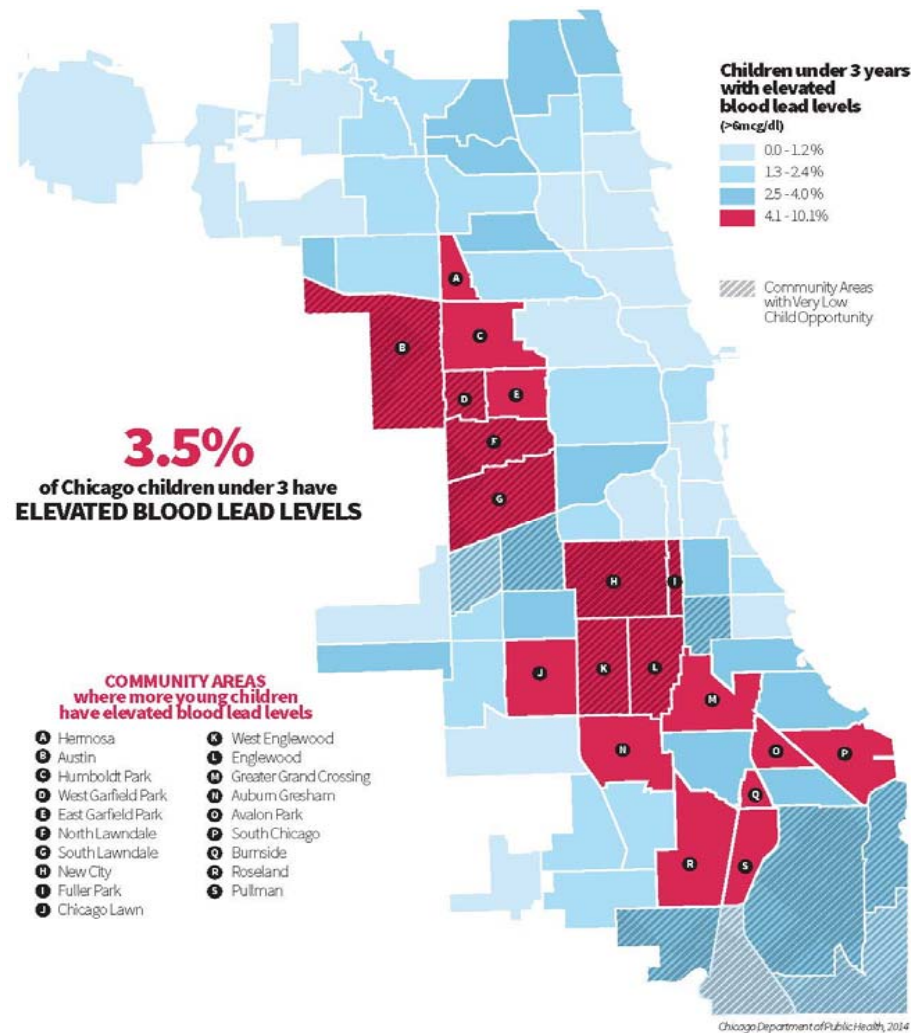
Percent/number of children 0 to 6 years of age with BLL \geq 10: Chicago 1997 - 2015



Percent/number of children 0 – 6 years of age with $BLL_{\geq 5}$: Chicago 1997 - 2015



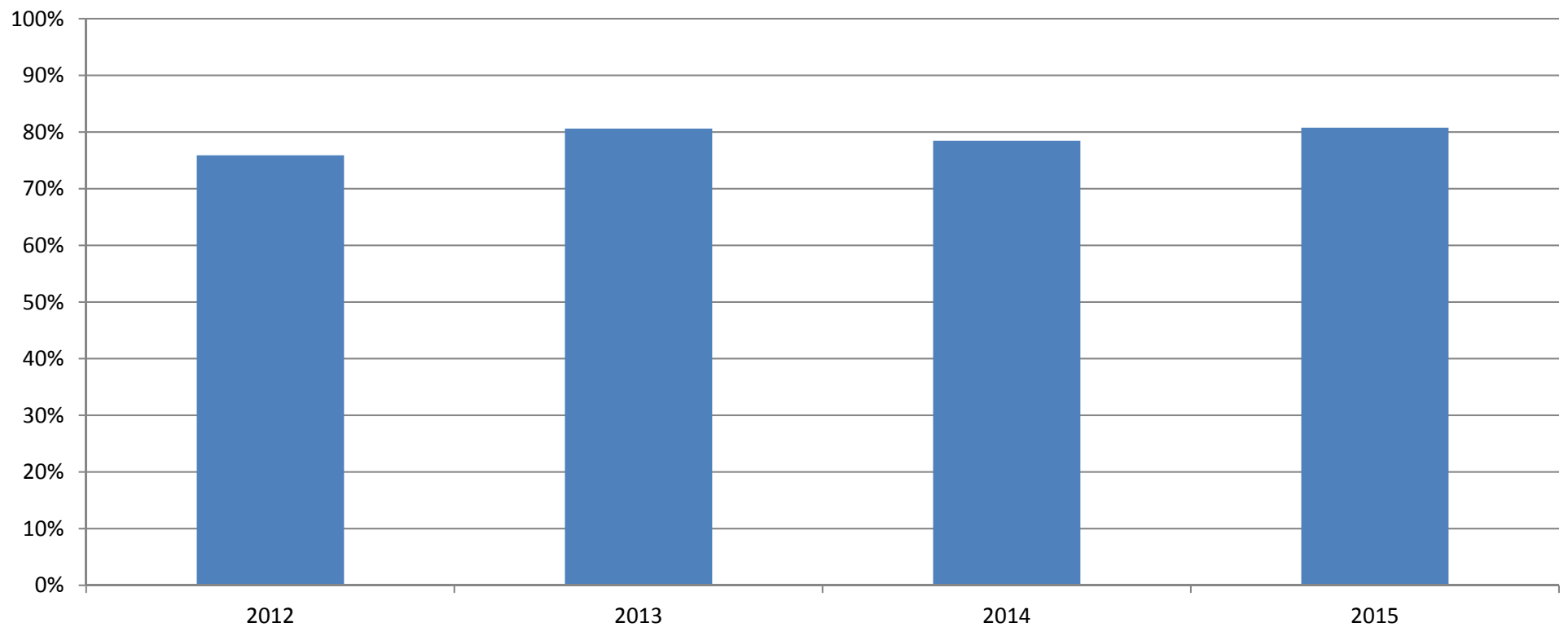
Percent of children under 3 years of age with BLL>6: Chicago, by Community Area 2014



Housing Data

- Number of units: 1,188,518
 - Pre-1940: 538,399 (45.3%)
 - 1940 – 1980: 443,317 (37.3%)
 - 1980 – post: 206,802 (17.4%)
- Occupancy:
 - 43.9% owner-occupied
 - 56.1% renter-occupied

Percent of housing units inspected with lead-based paint hazard: Chicago 2012 - 2015



2011 – 2012 Water Study

- Collaboration between Chicago Department of Water Management (CDWM) and Chicago Department of Public Health (CDPH)
- In addition to usual inspection, CDPH collected water from 173 homes of children with blood lead levels ≥ 10
 - 1st and 6th liter to try to catch potential spikes from water that had been in direct contact with the lead service
- Of 173 homes, 12 homes had levels of lead ≥ 15 ug/l and were retested by CDWM
 - Only 2 continued to have levels ≥ 15 ug/l
 - One in mid-renovation, had fixtures that contained lead, and lead-based paint hazards were identified
 - Other was unoccupied with stagnant water, so lead dropped quickly after the first draw
 - Other 10 likely contaminated during initial sampling

Other Issues

Predictive Analytics

- Predictive model developed by Center for Data Science and Public Policy at the University of Chicago
- Intends to predict children at risk of lead poisoning by identify addresses at greatest risk of having lead-based paint hazards and young children living there

Other Collaborations and Projects

- Chicago Housing Authority/Housing Choice Voucher Program
- Chicago Department of Water Management
- Chicago Public Schools
- Ideas 42/Mayor's Office/Community-based agencies
- Hardware store project

Water Testing

- Testing is the only way to determine if there is lead in drinking water
- If a test shows lead in excess of EPA's action level of 15 ppb action should be taken to minimize exposure:
 - Action depends on presence or absence of lead in the service pipe at the street

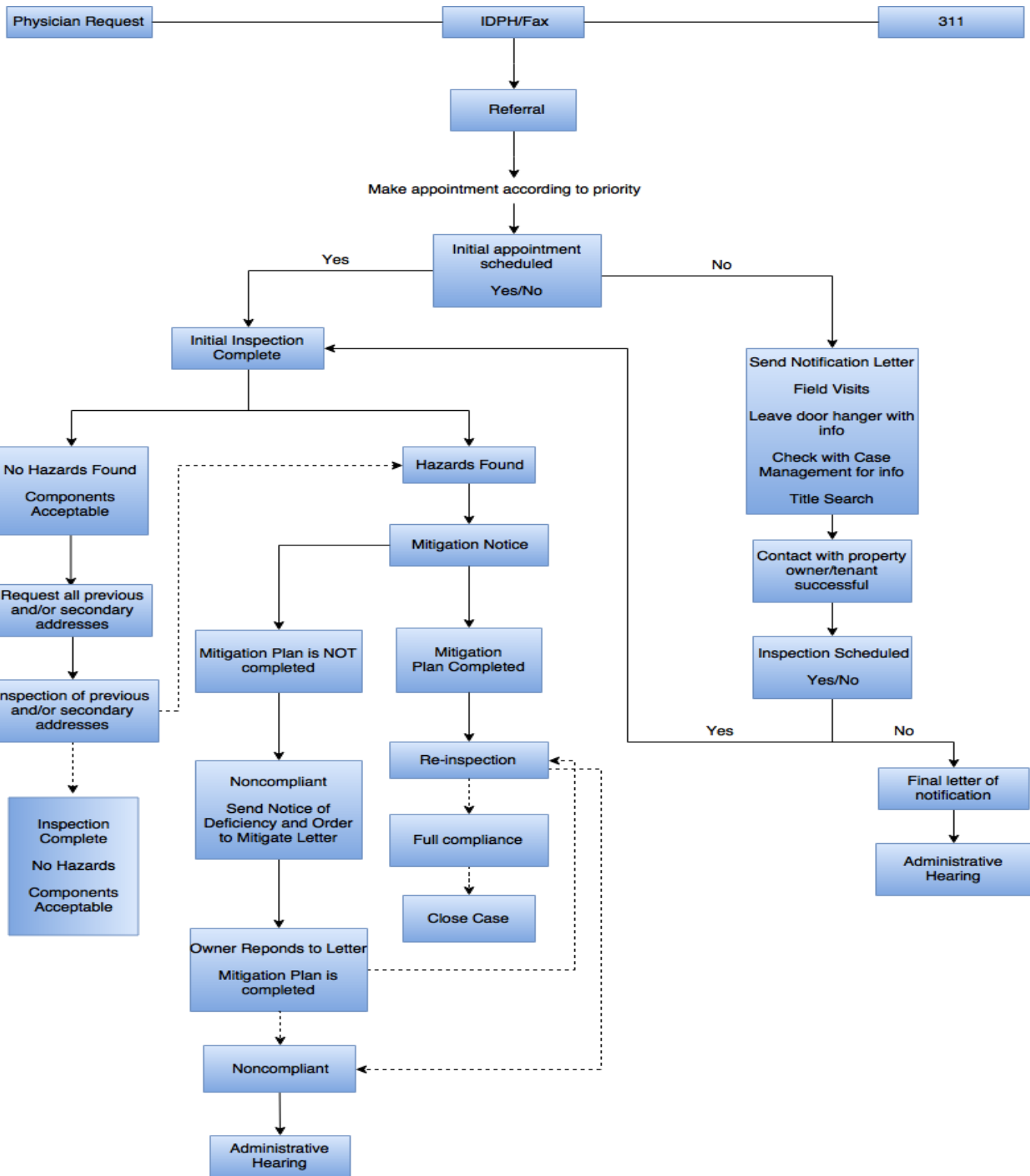
Water Testing

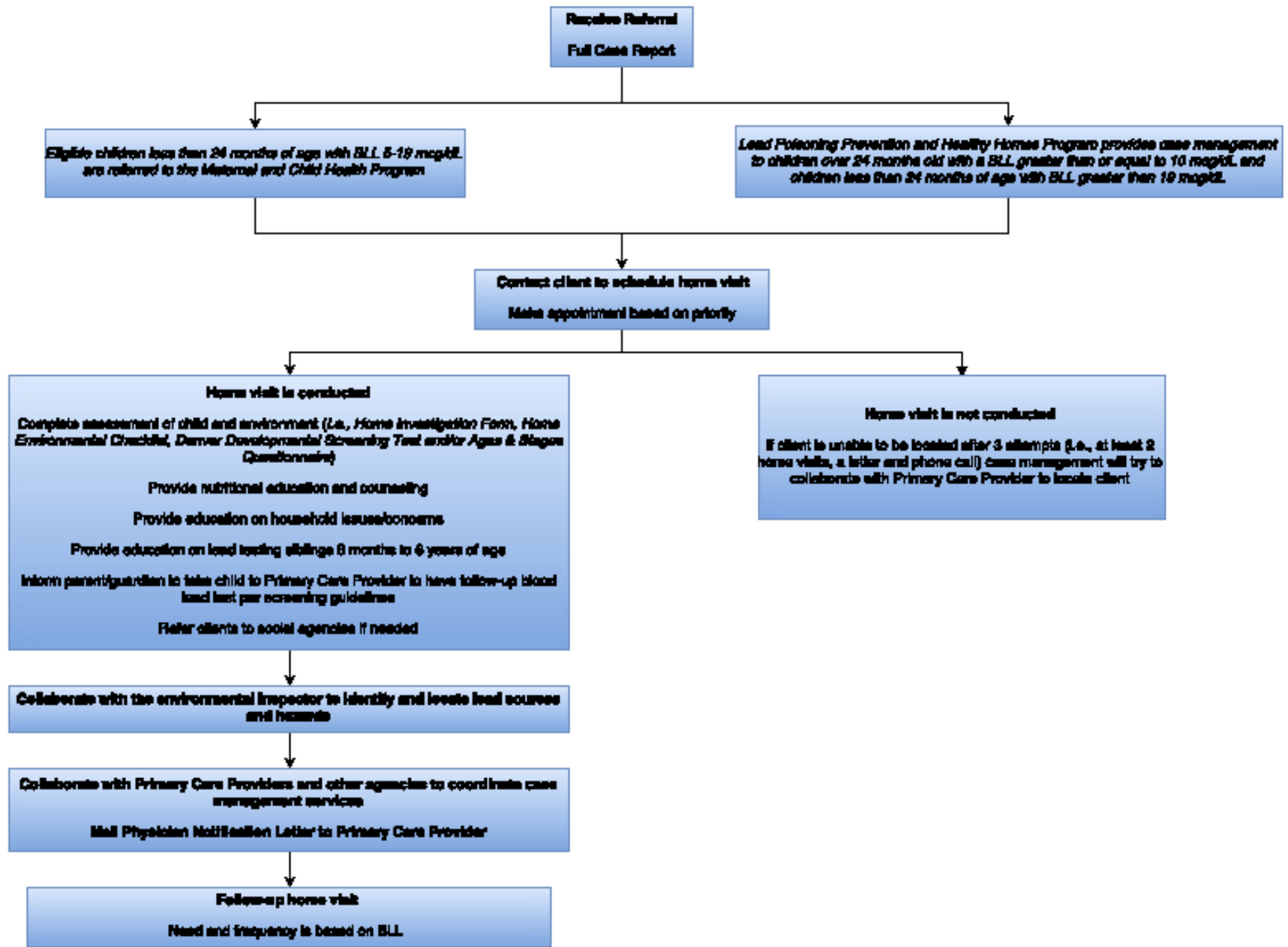
- Lead service pipe present:
 - If using tap water for drinking or cooking , especially if water has been stagnant for more than 6 hours:
 - Run high-volume taps (e.g., shower) on cold for 5 or more minutes
 - Run kitchen tap on cold for 1-2 additional minutes
 - Fill containers from this tap
- Lead service pipe not present:
 - If using tap water for drinking or cooking , especially if water has been stagnant for more than 6 hours:
 - Run tap on cold for 1-2 minutes
 - Fill containers from this tap

Lead Service Lines

- Lead service lines were banned in new construction in 1988
- In order to confirm whether a home has a lead service line a licensed and bonded plumber must investigate

Current Response in Chicago







@ChiPublicHealth



/ChicagoPublicHealth



HealthyChicago@CityofChicago.org



www.CityofChicago.org/Health