

# Recent Immigrants Working in Renovation and Construction Business and their families are at Increased Risk of Lead Poisoning

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# Surveillance in Boston Neighborhoods

- Boston has some the oldest housing stock in the nation with 67% built before 1978 when lead was banned in paint.
- Boston stores, retrieves and maintains its lead poisoning case management data to conduct surveillance of children with Elevated Blood Lead Levels.
- Surveillance of high risk neighborhoods and responses to neighborhood complaints of renovation and remodeling contractors by Boston Public Health Commission Health Inspectors found property owners and contractors engaged in unauthorized work.
- BPHC Health Inspectors identified property owners and contractors performing illegal or unauthorized deleading of residential housing or commercial buildings.
- Enforcement of Massachusetts Lead Laws 105 CMR 460, Sanitary Code Section 197B-199D.
- Massachusetts General Laws Chapter 111, Section 122-127 on Public Health Nuisance



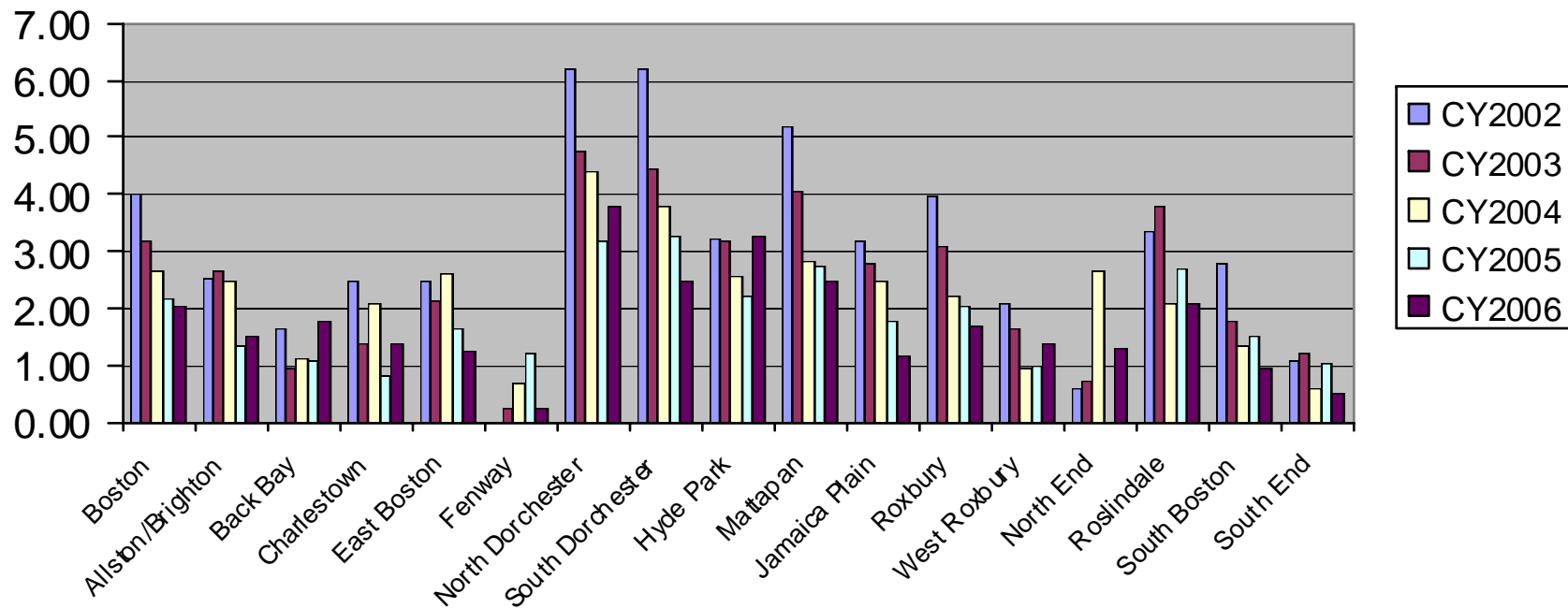
# Surveillance

- Cease or Stop Work Orders were issued to noncompliant property owners or contractors to stop short term exposure. Workers were educated on site about leaded dust, respiratory protection and disposal dermal protection.
- Property Owners and contractors Ordered to performed remedial clean-up of the site and/or face fines for illegal work..
- 100 Cease Work Orders issued per year in Boston Neighborhoods, primarily to painting, renovation and demolition/construction contractors.
- Identified that recent Brazilian Immigrants were performing renovation, painting, demolition and construction work..
- Language was a barrier towards the effective communication of the dangers of Leaded dust from scraping of lead paint from residential houses, in demolition and construction work. Unknowingly putting themselves and their families at risk.
- Trust was another unspoken component in the surveillance and outreach, as recent immigrants were cautious of city officials.



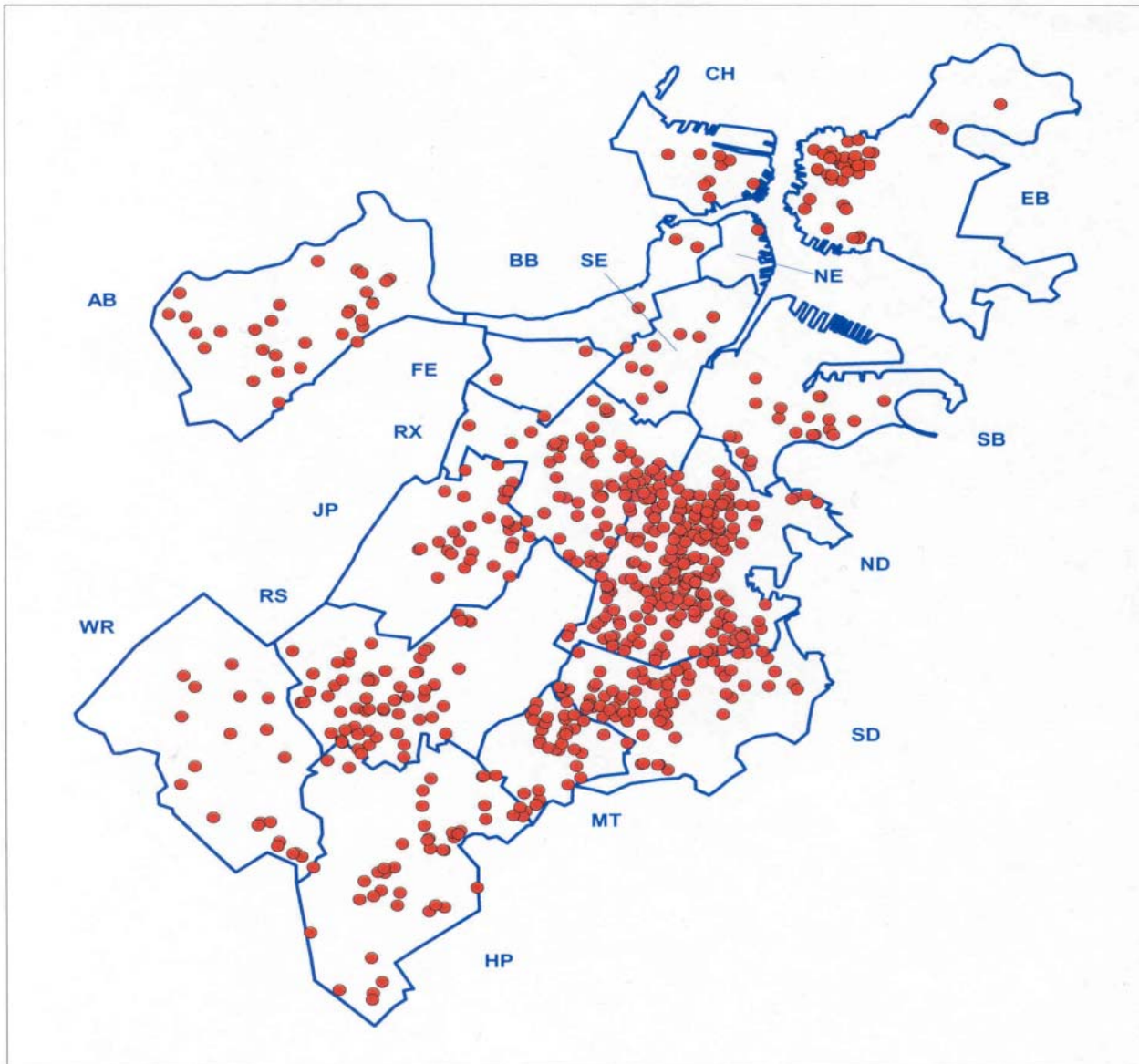
# Prevalence Rates of EBLs in Boston Neighborhoods

Prevalence Rates of Children <6 Years of Age with EBLs  $\geq 10$  ug/dl in Boston by Neighborhoods for CY2002-CY2006



BOSTON

## Boston Children With Elevated Lead 2003



Environmental Health Office, 12/06/2004

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# Surveillance Outreach

- BPHC's Environmental Health Office racially and ethnically diverse staff (Health Inspectors and Community Health Workers speak languages of the neighborhoods.
- (Spanish, Haitian Creole( French Creole), Portuguese, Portuguese Creole, and Vietnamese) and additional language assistance from the City of Boston for Chinese, and Russian.
- Many Brazilian immigrants live in the Allston-Brighton neighborhood of Boston. A total of 5,999 Latinos live in the two neighborhoods with a combined population 65,276 people (USCensus2000).
- Approximately 54 percent of the children less than five years of age are screened annually as compared to 83% for Boston overall.



# Collaborative Partnerships

- Partnerships were built with established community health centers networked with the Lead Poisoning Prevention Program for screening and lead poisoning awareness and prevention.
- Targeted Joseph M. Smith Community Health Center in Allston-Brighton Neighborhood whose clientele includes Brazilian immigrants.
- Established collaborative outreach efforts with Joseph M. Smith Brazilian Community Outreach Worker in December 2005.
- Developed a contract with Joseph M. Smith Community Outreach Worker to support outreach efforts to Brazilian Day Laborers in 2006.



# Community Outreach

- Mayor's Health Van used to target areas where day laborer congregated for work  
Diagnostic testing and lead screening once a month
- Targeted Brazilian Cafes, Bodegas, organizations and other businesses, newspapers, and internet newsletters in the area.
- Screening Workshops performed by BPHC Lead Poisoning Prevention staff.  
workshops translated with a BPHC Portuguese speaking community health outreach worker.
- Targeted Brazilian immigrants for screening and education after Church Services with the Brazilian Immigrant Center.
- Targeted Brazilians at Celebratory Festivals in the Allston-Brighton.





# Collaborative Partnerships

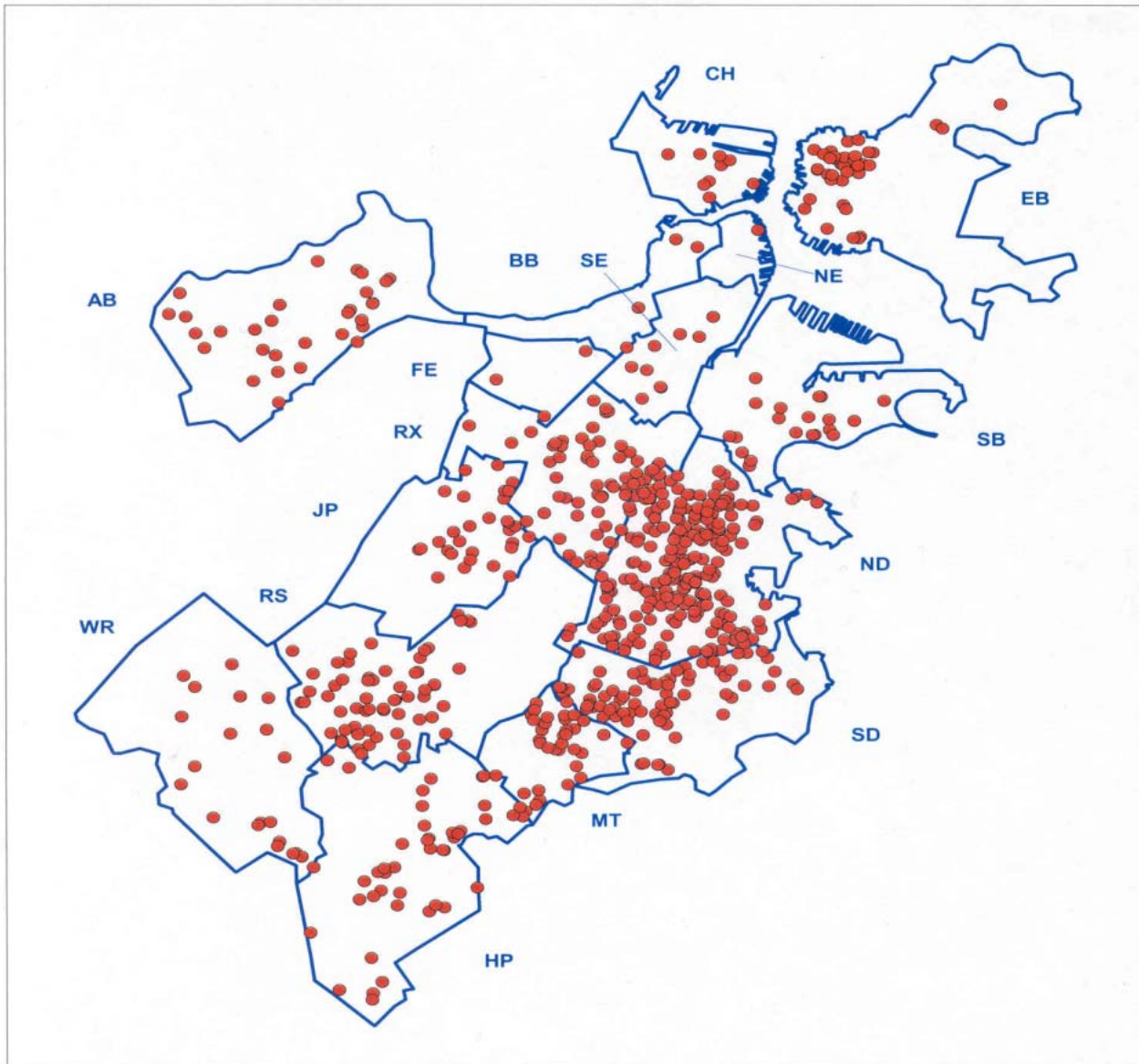
- Developed a collaborative partnership with the Brazilian Immigrant Center (BIC) to provide community outreach, screening health fairs, and training workshops to Day Laborers and families with children. BIC is a key stakeholder with Brazilian immigrant community.
- Mini-Grants under \$10,000 were used to help support and sustain community health outreach workers and their efforts to the Brazilian population.
- The Division of Occupational Health and Safety, State Laboratory Institute, and Cambridge Health Alliance were part of the training workshops and referral system for day laborers

# Outcomes

- Blood Lead Screening indicated that Brazilian Immigrant Day Laborers had significant Lead burdens in their bodies and blood stream.
- 89% of Brazilians were without primary health care insurance or providers.
- Distribution N= 51
- Mean Age =36.5 years
- Gender Male 94.7% Female 5.3%
- Mean BPb level Adults = 14.7  $\mu\text{g}/\text{dL}$
- Mean BPb levels Children=2  $\mu\text{g}/\text{dL}$
- 11% levels above 40  $\mu\text{g}/\text{dL}$  with ZPPs >100
- 14% levels between 25-44  $\mu\text{g}/\text{dL}$



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# LESSONS LEARNED

- Brazilian Immigrant Day Workers/Laborers are made aware of the dangers of Lead Poisoning and how to protect themselves and prevent exposure to leaded dust during high risk occupational work. Day Laborers once educated are more vocal about their occupational health and safety.
- Adult Lead Screening Surveillance of Day Laborers is vital to understanding the occupational health dangers of lead poisoning among recent immigrants.
- Use of a Mayor's Mobile Health Van to perform Day Laborers health screenings and diagnostic testing onsite.
- Collaborative partnerships can assist agencies in targeting immigrant outreach efforts and resources to specific populations.
- Brazilian Immigrant Workers referred to Joseph M. Smith Health Center or Mass Health for Health Insurance and Medical Follow-up/Screening.



# LESSONS LEARNED

- Brazilian Immigrant Center continues provide Workshops and developed a video “The Invisible Enemy” about Lead Poisoning as an integral part of their advocacy work and outreach on their website.
- Contractors are held accountable and follow OSHA 29 CFR 1910.1025 requirements for Lead and ensure the health and safety protection of their workers. Employers cannot retaliate against day laborers by firing them.
- Painting contractors are not normally regulated for work on residential properties in the City of Boston. BPHC will provide lead safety awareness training, dust mitigation and containment practices and remedial clean-up procedures for paint contractors. Painting contractors will be required to file permits to perform work.
- This model will be used for targeted outreach to the Latino, Haitian, and Dominican immigrant populations working in renovation, construction and demolition industries.

