

The Intersection of Environmental Justice and the Choose Safe Places For Early Care and Education Pilot Program in Southeastern Massachusetts

Jessica Burkhamer, Catherine Ngo, Brenda Netreba, Sharon Lee, Alicia Fraser Massachusetts Department of Public Health, Bureau of Environmental Health, Environmental Epidemiology Program

BACKGROUND

Child care programs play an important role in keeping children safe. Many young children spend more time at these programs than anywhere else outside of their homes. Environmental Justice (EJ) neighborhoods host a disproportionate concentration of contaminated sites. Considering that children are particularly sensitive to harmful chemicals and that EJ neighborhoods are unduly burdened by environmental pollution, care must be taken to safely site child care programs in these communities.

METHODS

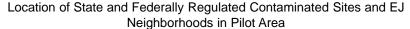
The Massachusetts Department of Public Health (DPH) partnered with the MA Department of Early Education and Care's (EEC) Southeast Region to pilot the Choose Safe Places for Early Care and Education program to screen new child care program locations for environmental hazards. Using maps and data from MassGIS and the MA Environmental Public Health Tracking Program (MAEPHT), we illustrate the opportunities for the Choose Safe Places program to protect children from environmental hazards, particularly in EJ areas.

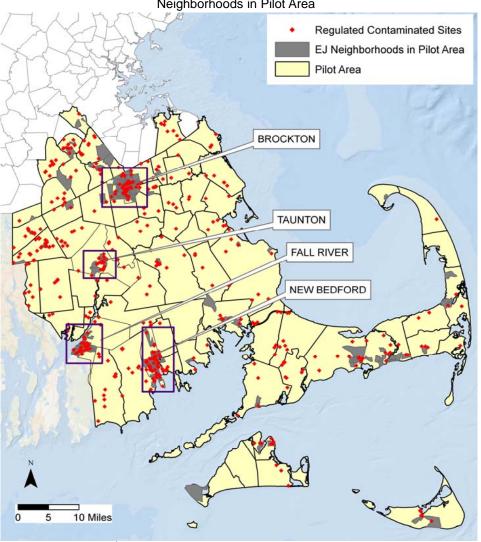
The MA Executive Office of Energy and Environmental Affairs (EEA) Environmental Justice Policy defines EJ neighborhoods as US Census Bureau census block groups that meet at least one criteria for income, percent minority, or English isolation.¹

Data Notes: Population numbers were based on the US Census Bureau's 2010 Decennial Census. The number of licensed group and school-aged child care programs was based on EEC's Licensed Child Care Search website, which may not contain programs currently undergoing license renewal. State-regulated waste sites are limited to those that have completed Tier Classification under the Massachusetts Contingency Plan.

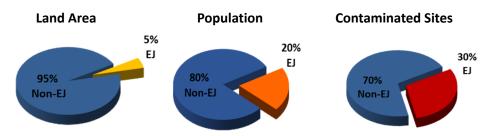
Acknowledgments: This work was partially funded by the US Agency for Toxic Substances and Disease Registry and the US Centers for Disease Control and Prevention

RESULTS AND DISCUSSION





Contact Information: <u>Jessica.Burkhamer@mass.gov</u> https://www.mass.gov/choose-safe-places-for-early-care-and-education



Burden of Contaminated Sites within EJ Neighborhoods in the Pilot Area

- EJ neighborhoods make up just 5% of the land area in the pilot region^{2,3}, but are home to
 - 20% of the population,²
 - 25% of children under age 5 years,² and
 - 30% of regulated contaminated sites.⁴
- 76% of the EJ population in the pilot area lives in just 4 communities (Brockton, New Bedford, Fall River, and Taunton).³
- 76% of contaminated sites in EJ neighborhoods in the pilot area are densely concentrated in these 4 communities.^{3,4,5}

Opportunities for the Choose Safe Places Program

- 900 licensed group and school-aged child care programs in the pilot area are located in communities with EJ populations (prior to the COVID-19 pandemic).⁶
- The higher burden of contaminated sites within EJ neighborhoods creates a challenge for safe siting of child care programs.

CONCLUSIONS

The Choose Safe Places program can provide a key service to prevent or minimize environmental exposures to children at child care programs due to poor siting.

References: 1. EEA. 2017. Environmental Justice Policy.

2. MassGIS. 2020b. Datalayers from the 2010 U.S. Census, Summary File 1.

MassGIS, 2020a, 2010 Environmental Justice Populations

4. MassGIS. 2020c. MassDEP Tier Classified Oil and/or Hazardous Material Sites (MGL c. 21E).

5. MA EPHT. 2020. Community Profiles.

6. EEC. 2020. Licensed Child Care Search