HEALTH OF BOSTON
2016-2017

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Director, Research and Evaluation Office, BPHC
Assess the health of Boston residents using population health surveillance data

- Estimate the scope and magnitude of health events and determinants
- Estimate the geographic, demographic, and temporal distribution of health events and determinants
- Focus on health inequities, social determinants of health (SDoH) and outcomes/status over the life course
- More “what” than “why”

Share information with those who can use it
The percentage of uninsured in 2015 was

- **3.8%** for Boston
- **9.4%** for the U.S. overall
<table>
<thead>
<tr>
<th>Health-Related Behaviors</th>
<th>Asian</th>
<th>Black</th>
<th>Latino</th>
<th>White</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public HS Students Who Consumed Fruit &lt; Once per Day, 2015</td>
<td>↔</td>
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<td>Public HS Students Who Consumed Veggies &lt; Once per Day, 2015</td>
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<tr>
<td>Public HS Students Who Engaged in Regular PA, 2015</td>
<td>↓</td>
<td>↔</td>
<td>↔</td>
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<td>ref</td>
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<tr>
<td>Adults Who Met CDC Guidelines for PA, 2015</td>
<td>↔</td>
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<td>ref</td>
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<td>ref</td>
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<tr>
<td>Daily Consumption of 1 or 1+ SSB Among Public HS Students, 2015</td>
<td>↓</td>
<td>↔</td>
<td>↔</td>
<td>ref</td>
<td>↓</td>
<td>ref</td>
</tr>
<tr>
<td>Daily Consumption of 1 or 1+ SSB Among Adults, 2015</td>
<td>↔</td>
<td>↑</td>
<td>↑</td>
<td>ref</td>
<td>↓</td>
<td>ref</td>
</tr>
<tr>
<td>Public HS Students Who Smoked Cigarettes, 2011, 2013, and 2015 Combined</td>
<td>↓</td>
<td>↓</td>
<td>↓</td>
<td>ref</td>
<td>↓</td>
<td>ref</td>
</tr>
</tbody>
</table>

‡ Data not presented due to insufficient sample size
↑ statistically significantly higher than reference group
↓ statistically significantly lower than reference group
↔ not statistically significantly different than reference group
Figure 6.13 Infant Mortality by Race/Ethnicity and Year

* Statistically significant change over time
Figure 6.17 Elevated Blood Lead Levels\textsuperscript{1} by Year

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure6.17}
\caption{Elevated Blood Lead Levels by Year}
\end{figure}

\textsuperscript{1} Based on the 2012 CDC recommendation of $\geq 5$ ug/dl. For more information see Blood-Lead Level in the Technical Notes.

\textbf{DATA SOURCE:} Childhood Lead Poisoning Prevention Program, Massachusetts Department of Public Health
Figure 6.4 Births Among Females Ages 15-17 by Race/Ethnicity and Year

* Statistically significant change over time

DATA SOURCE: Boston resident live births, Massachusetts Department of Public Health (data as of August 2016). Data may be updated as more information becomes available.
Figure 7.28 Public High School Students Who Smoked Cigarettes by Year

Figure 7.35 Binge Drinking Among Public High School Students by Year

* Statistically significant change over time

Figure 11.3 Chlamydia by Year

* Statistically significant change over time
DATA SOURCE: Infectious Disease Bureau, Boston Public Health Commission
Figure 8.16 Asthma Hospitalizations† by Race/Ethnicity and Year

* Statistically significant change over time
† Age-adjusted rates per 10,000 residents

DATA SOURCE: Acute hospital case-mix databases, Massachusetts Center for Health Information and Analysis
Figure 9.4 Cancer Mortality† by Race/Ethnicity and Year

* Statistically significant change over time
† Age-adjusted rates per 100,000 residents

DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health (data as of December 2016). Data may be updated as more information becomes available.
New and continued challenges
Figure 6.7 Low Birthweight Births by Race/Ethnicity and Year

Low Birthweight Births

Healthy People 2020 Target: 7.8%  US 2015: 8.1%  MA 2015: 7.5%  Boston 2015: 8.6%

DATA SOURCE: Boston resident live births, Massachusetts Department of Public Health (data as of August 2016). Data may be updated as more information becomes available.
Hypertension Among Adults
Healthy People 2020: 26.9%

US median 2015: 30.9%

MA 2015: 29.6% (28.4-30.9)

Boston 2015: 24.9% (23.0-26.9)
  Black Residents 36%
  Latino Residents 27%
  White Residents 20%

Figure 8.43 Hypertension Among Adults by Year

**Obesity Among Adults**

*Healthy People 2020 Target: 30.5%*

*US median 2015: 29.8%*

*MA 2015: 24.3% (23.0-25.5)*

*Boston 2015: 21.9% (19.9-24.0)*

- Black residents: 32%
- Latino residents: 30%
- White residents: 17%

**Figure 8.50 Obesity Among Adults by Year**

**Diabetes Among Adults**

**U.S.** 9.3%

**Boston:** 8%
- Black residents 15%
- Latino residents 11%
- White residents 5%

*Statistically significant change over time*

Figure 8.26 Diabetes Among Adults by Neighborhood, 2010, 2013, and 2015 Combined

NOTE: “BB” includes the Back Bay, Beacon Hill, Downtown, the North End, and the West End.
“SE” includes the South End and Chinatown.


Figure 8.53 Obesity Among Adults by Neighborhood, 2013 and 2015 Combined

NOTE: “BB” includes the Back Bay, Beacon Hill, Downtown, the North End, and the West End.
“SE” includes the South End and Chinatown.


Figure 8.46 Hypertension Among Adults by Neighborhood, 2013 and 2015 Combined

NOTE: “BB” includes the Back Bay, Beacon Hill, Downtown, the North End, and the West End.
“SE” includes the South End and Chinatown.

Figure 14.14 Substance Abuse Mortality† by Type (Overall, Alcohol, Drug) and Year

Deaths per 100,000 residents ages 12 and older

* Statistically significant change over time
† Age-adjusted rates per 100,000 residents ages 12 and older

DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health (data as of December 2016). Data will be updated as more information becomes available.
Figure 14.15 Substance Abuse Mortality† Excluding Fentanyl\(^1\) by Type (Overall, Alcohol, Drug) and Year

† Age-adjusted rates per 100,000 residents ages 12 and older.

\(^1\) Fentanyl identified by ICD-10 code T40.4. See Fentanyl Identification in Death Data in the Technical Notes for complete methodological description.

DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health (data as of December 2016). Data will be updated as more information becomes available.
Figure 14.12 Substance Abuse Mortality† by Race/Ethnicity and Year

- Deaths per 100,000 residents ages 12 and older

* Statistically significant change over time
† Age-adjusted rates per 100,000 residents ages 12 and older

DATA SOURCE: Boston resident deaths, Massachusetts Department of Public Health (data as of December 2016). Data will be updated as more information becomes available.
<table>
<thead>
<tr>
<th></th>
<th>Boston Housing Authority resident</th>
<th>Renter, with assistance</th>
<th>Renter, no assistance</th>
<th>Home owner</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asthma</strong></td>
<td>18.7%* (14.1-24.3)</td>
<td>18.9%* (14.7-24.0)</td>
<td>9.6% (8.1-11.4)</td>
<td>9.0% (7.3-11.0)</td>
</tr>
<tr>
<td><strong>Diabetes</strong></td>
<td>5.5%* (3.6-8.4)</td>
<td>5.0%* (3.4-7.3)</td>
<td>3.6% (2.6-4.9)</td>
<td>2.8% (2.0-3.9)</td>
</tr>
<tr>
<td><strong>Hypertension</strong></td>
<td>26.5%* (20.6-33.5)</td>
<td>25.0%* (19.7-31.1)</td>
<td>16.5% (14.3-19.0)</td>
<td>16.1% (13.9-18.6)</td>
</tr>
<tr>
<td><strong>Obesity</strong></td>
<td>27.3%* (21.6-33.7)</td>
<td>28.4%* (23.7-33.6)</td>
<td>18.9% (16.7-21.2)</td>
<td>19.0% (16.7-21.5)</td>
</tr>
<tr>
<td><strong>Persistent anxiety</strong></td>
<td>24.4%* (19.2-30.5)</td>
<td>31.6%* (26.2-37.5)</td>
<td>22.3%* (19.9-25.0)</td>
<td>15.5% (13.3-17.9)</td>
</tr>
<tr>
<td><strong>Persistent sadness</strong></td>
<td>18.6%* (14.1-24.2)</td>
<td>22.7%* (17.9-28.4)</td>
<td>12.5%* (10.6-14.7)</td>
<td>5.4% (4.5-6.5)</td>
</tr>
</tbody>
</table>

* Statistically significant difference when compared to reference group (home owner)
1 Adjusted for age, race/ethnicity, and sex
Community Assets

- Actively engaged community and partners
- Community-based organizations
- CHCs and Hospitals
- Academic institutions
- State and city agencies
- Physical and built environmental assets
- Economic assets
- Leadership
<table>
<thead>
<tr>
<th>Top 5 reasons for 311 citizen requests</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanitation</td>
<td>106,506</td>
<td>16%</td>
</tr>
<tr>
<td>Bulk-item pick-up</td>
<td>63,250</td>
<td></td>
</tr>
<tr>
<td>Missed trashed/recycling pick up</td>
<td>39,572</td>
<td></td>
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<tr>
<td>Street Cleaning</td>
<td>94,847</td>
<td>14%</td>
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<tr>
<td>Snow-plow request</td>
<td>50,077</td>
<td></td>
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<tr>
<td>Highway Maintenance</td>
<td>60,200</td>
<td>9%</td>
</tr>
<tr>
<td>Sidewalk/Pothole Repair</td>
<td>37,244</td>
<td></td>
</tr>
<tr>
<td>Enforcement &amp; Abandoned Vehicles</td>
<td>59,696</td>
<td>9%</td>
</tr>
<tr>
<td>Abandoned Vehicles</td>
<td>48,482</td>
<td></td>
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<tr>
<td>Housing</td>
<td>42,494</td>
<td>6%</td>
</tr>
<tr>
<td>Unsatisfactory heat/living condition</td>
<td>26,281</td>
<td></td>
</tr>
<tr>
<td>Mice/pest infestation (residential)</td>
<td>5,895</td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td>276</td>
<td></td>
</tr>
<tr>
<td>Total requests/contacts</td>
<td>674,190</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Voter Turn Out Rates for General Election
Nov 8, 2016, by Precincts

Legend
- 72.2% to 84.1%
- 66.7% to 72.1%
- 61.1% to 66.6%
- 1.3% to 61.1%

NOTES: Rates are based on the number of registered voters.
DATA SOURCE: Official Ballots Cast Percentage, State and City Election Results, City of Boston
Food Resources by Neighborhood:
Meal Programs, Food Pantry, Community Gardens,
Farmer's Markets, Grocery Stores

Legend:
- ▲ Meal program (13)
- ● Both food pantry and meal program (20)
- ○ Food pantry (66)
- ● Farmer's market (21)
- ● Community gardens (145)
- ● Grocery stores (46)

NOTE: “BB” includes the Back Bay, Beacon Hill, Downtown, the North End, and the West End.
“SE” includes the South End and Chinatown. Parentheses in the legend contain the number of locations.
DATA SOURCE: Mayor's Office of Food Initiatives, and Info Business Database via Boston Planning and Development Agency Research Division Analysis
Acknowledgements

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  - Monica Valdes Lupi
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  - Deb Allen
  - Gerry Thomas
  - Maia Brodyfield

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  - Neel Batra
  - Denise Dodds
  - Dan Dooley
  - Shannon O’Malley
  - Cristi O’Conor
  - Amar Mehta
  - Johnna Murphy
  - Phyllis Sims
  - Roy Wada
  - Megan Young
Questions?