



Beth Israel Deaconess  
Medical Center



HARVARD MEDICAL SCHOOL  
TEACHING HOSPITAL

**Massachusetts Family Impact Seminar  
Social Determinants Impact on Health Disparities**

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# Health Disparities

- Contributing factors:
  - Race/Ethnicity
  - Religion
  - Immigration status
  - Language proficiency
  - Socio-economic status
  - Disability
  - Gender/Gender Identity
  - Sexual orientation



GENETICS

20%

HEALTH CARE

20%

SOCIAL, ENVIRONMENTAL, BEHAVIORAL FACTORS

60%



# Social Determinants

Conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life.

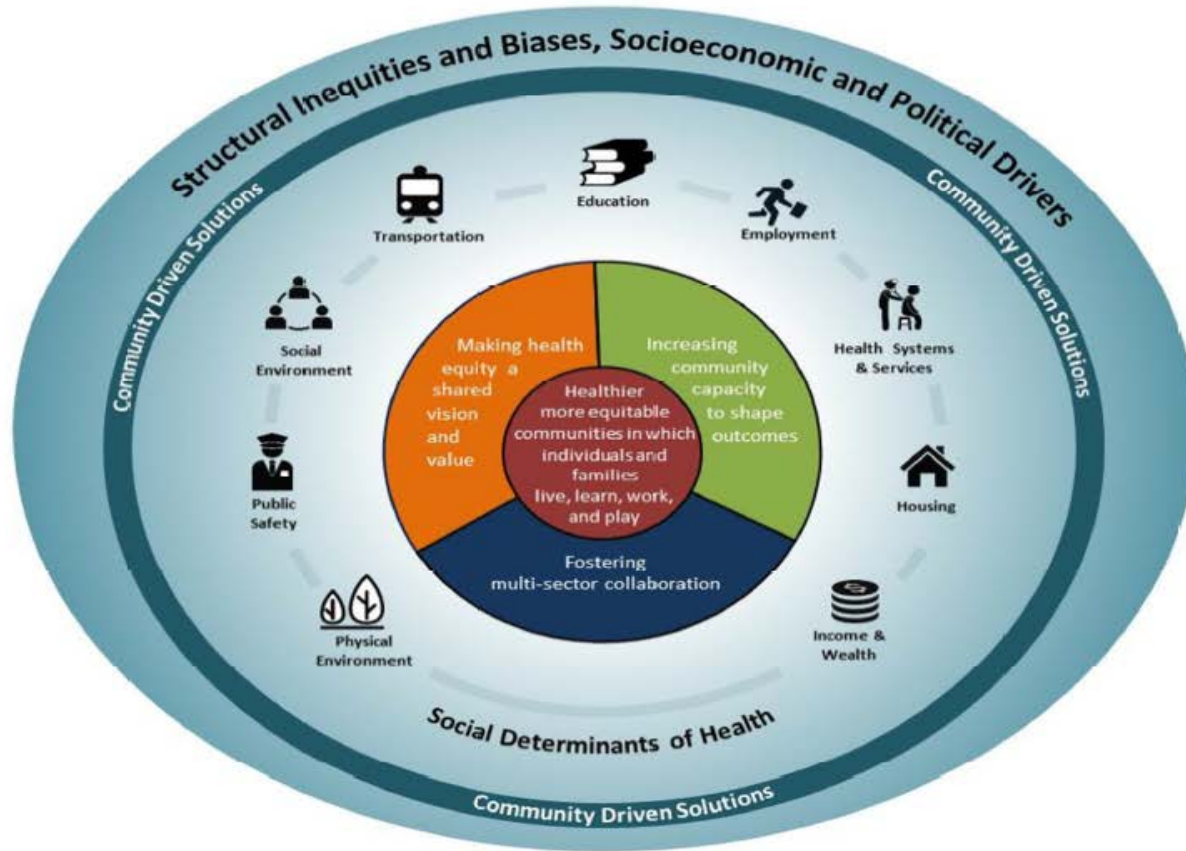


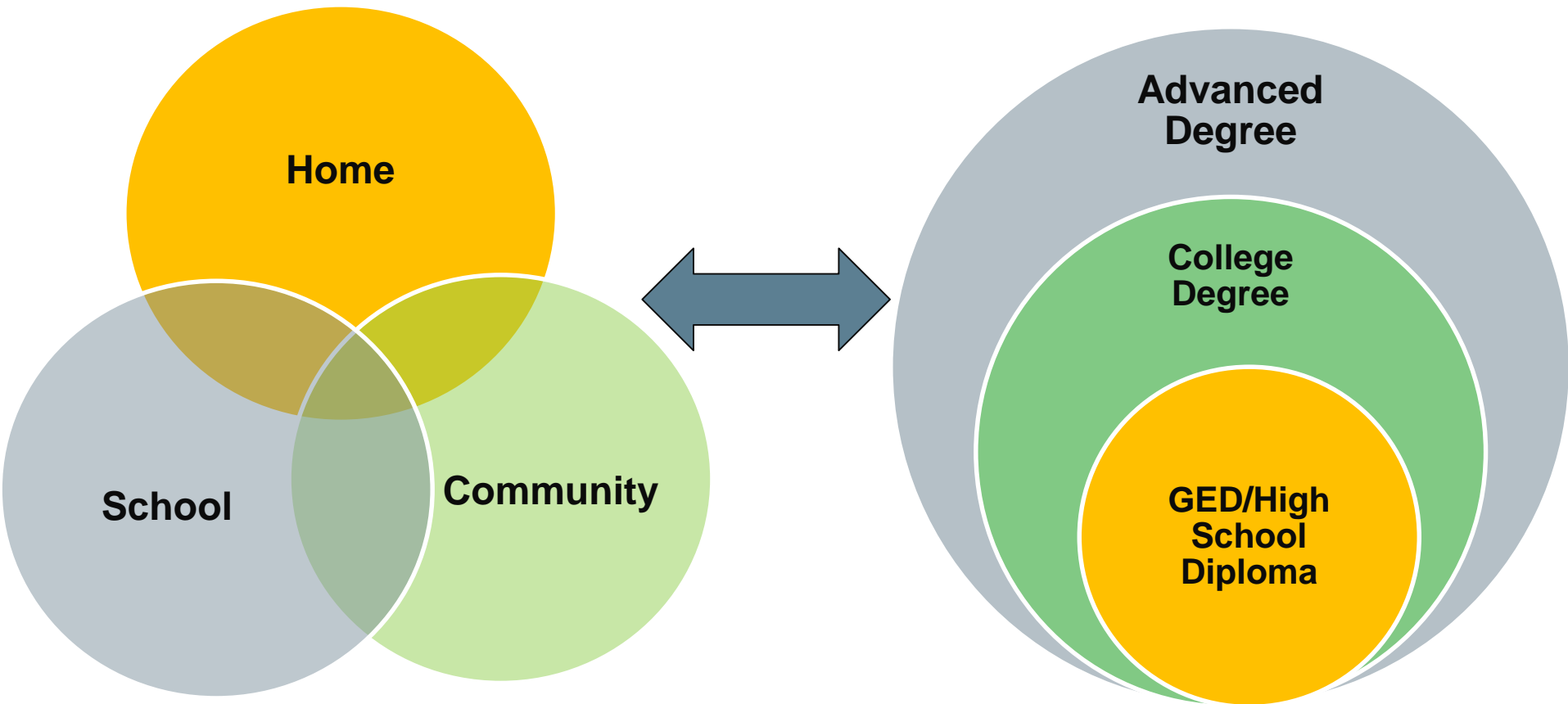
FIGURE 1-3 Report conceptual model for community solutions to promote health equity.

 **Inter-Related and Inter-Dependent**

# Education & Health Disparities

Process

Outcome

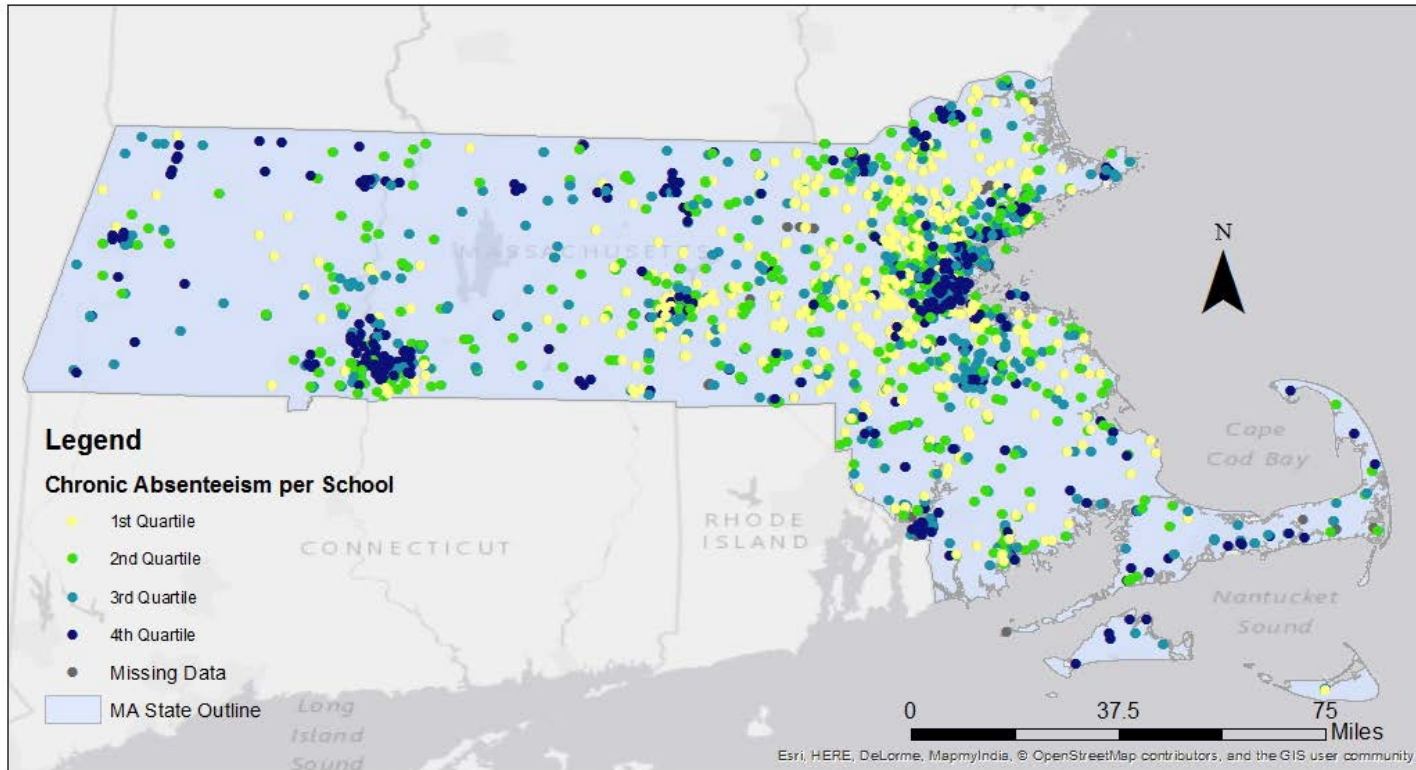


# Education & Health Disparities

## Multiple Factors affect Educational Attainment:

- Family SES, family size, parent educational attainment, etc.
- Built environment – Ambient air pollution and surrounding greenness

### MA Quartiles of Chronic Absenteeism



## Education & Health Disparities

### Lower Educational Attainment Correlated to:

Poorer child well-being (based on mother's education level) ✓

Shorter life expectancy ✓

Higher rate of obesity ✓

Difficulty managing chronic diseases ✓

Less likely to wear a seatbelt ✓

Diet that is not healthy/nutritious ✓

Lower health literacy ✓



Lower socio-economic status



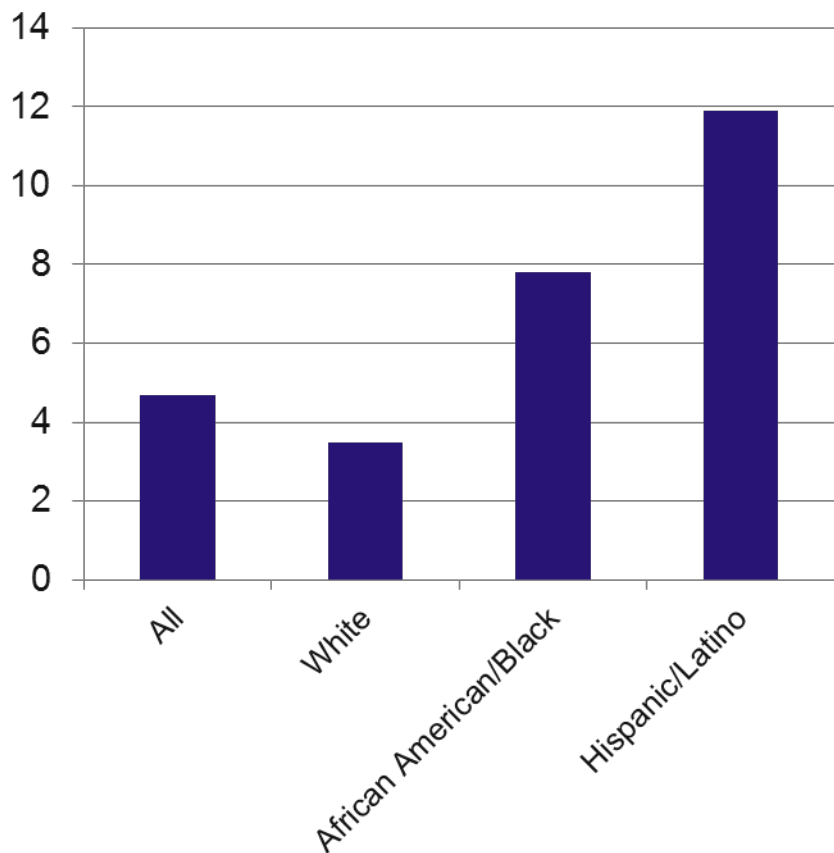
Lower rating of health – fair/poor



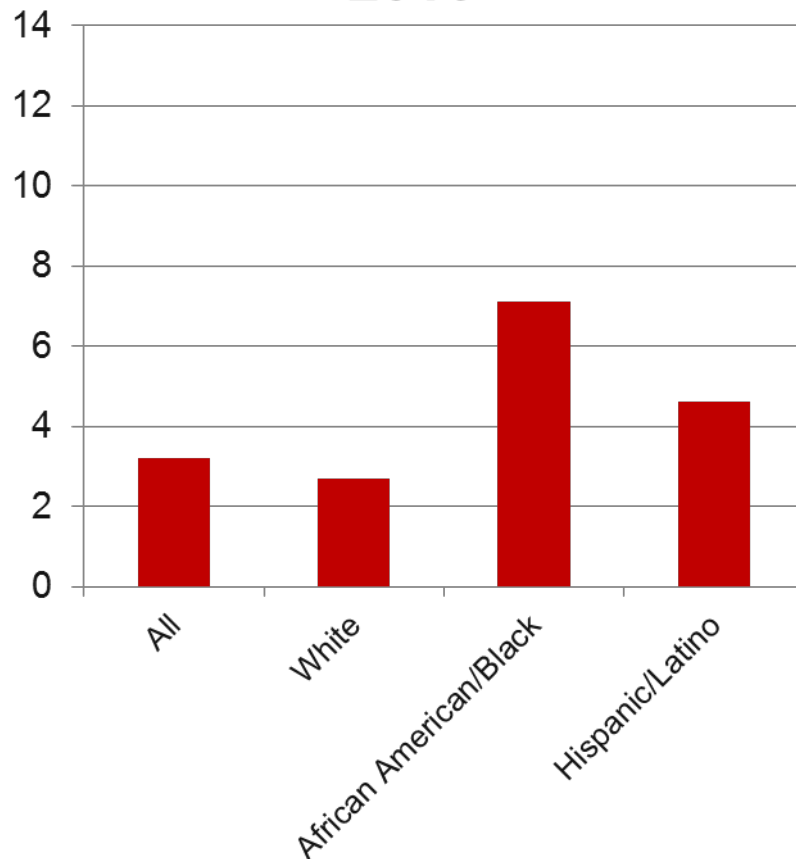
# Economic Stability & Health Disparities

## Massachusetts Unemployment by Race 4<sup>th</sup> Quarter

**2015**



**2016**



# Economic Stability & Health Disparities

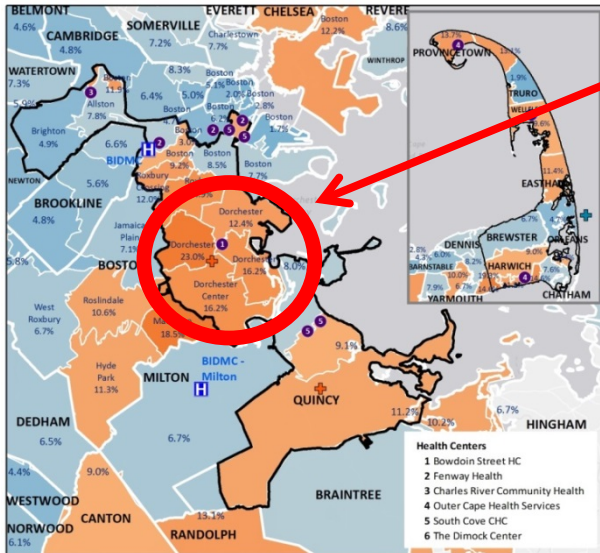
- Dictates access to:
  - Housing
    - Safe and Stable
      - Reduces psychosocial / stress burden
      - Increases community cohesion
    - High quality
      - Reduces exposure to toxins, noise
      - Integrated
    - Affordable = 30%
  - Food Access
    - Nutritious = fresh fruits and vegetables, lean proteins
  - Healthcare Access



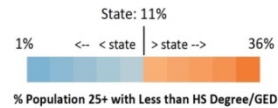


# Economic Stability

## % Unemployed



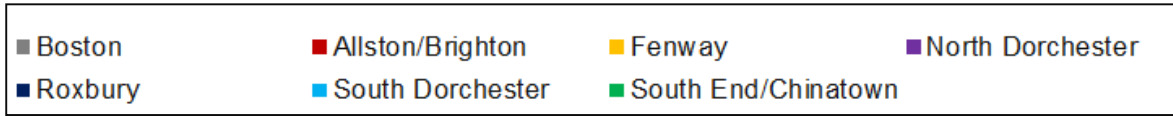
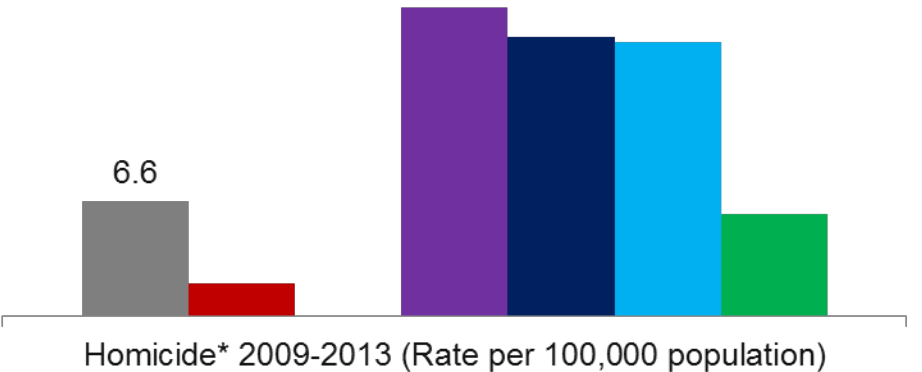
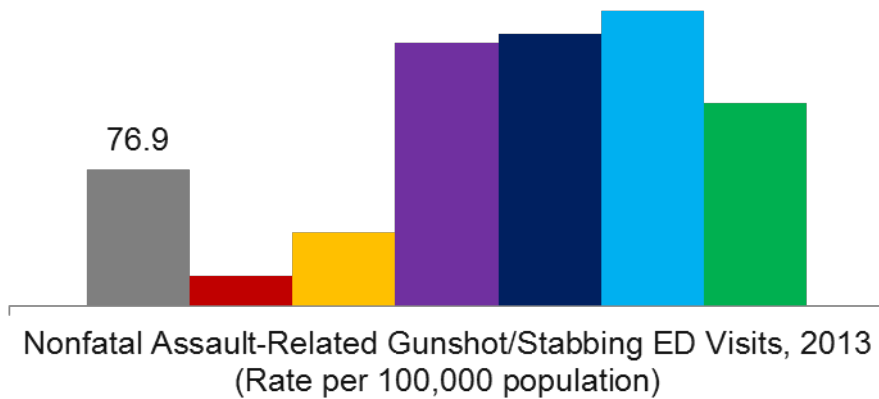
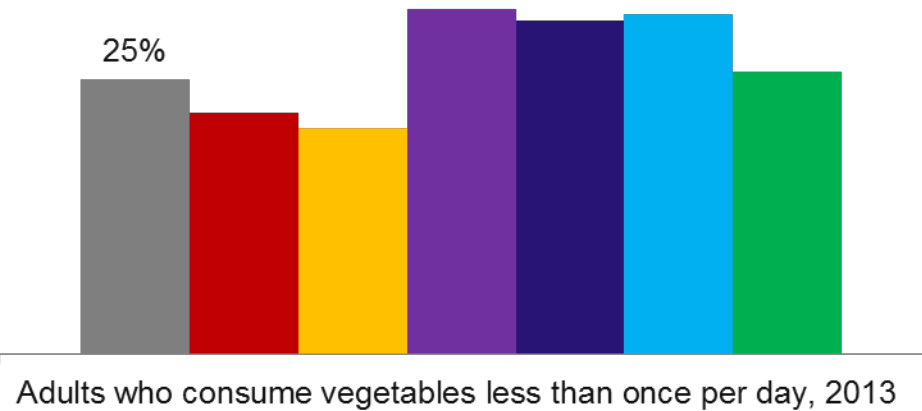
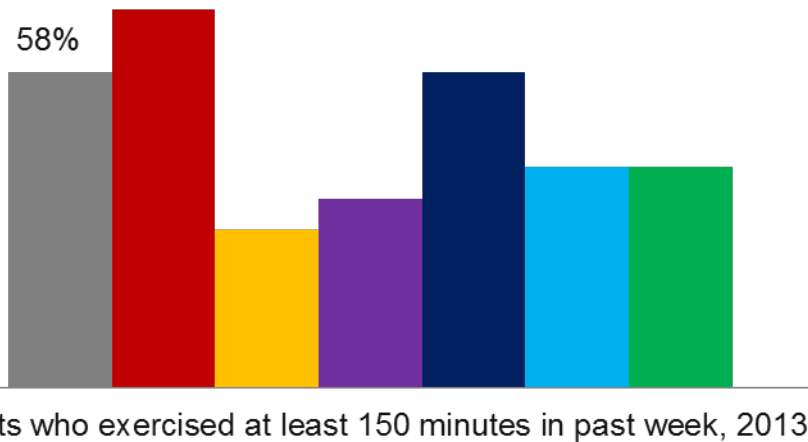
## % Population 25+ with Less than HS Degree/GED



## % Non-White Population



# Social Determinants of Health & Health Risk Factors



# Health Disparities

Area	Percent of Adults with HTN 2013	Heart Disease Hospitalizations 2013*	Percent of Adults with Asthma 2013	Asthma ED Visits 2013*	Percent of Adults with Diabetes 2013	Diabetes Hospitalizations, 2013 (age-adjusted rate per 1,000)	Deaths from Colorectal Cancer 2013	Deaths from Prostate Cancer 2013
<b>Boston</b>	<b>24.0 (22.3-25.6)</b>	<b>9.1</b>	<b>11.1 (9.7-12.5)</b>	<b>9.0</b>	<b>8.6 (7.7-9.6)</b>	<b>1.9</b>	<b>16.4</b>	<b>25.7</b>
<b>North Dorchester</b>	<b>28.5 (23.1-33.9)</b>	<b>11</b>	<b>17.7 (12.4-23.0)</b>	<b>14.3</b>	<b>12.4 (8.9-15.8)</b>	<b>3.0</b>	<b>12.6</b>	<b>29.8</b>
<b>Roxbury</b>	<b>28.3 (22.1-34.5)</b>	<b>13.2</b>	<b>13.8 (7.9-19.7)</b>	<b>17.5</b>	<b>15.1 (10.3-19.9)</b>	<b>3.5</b>	<b>25.5</b>	<b>49.5</b>
<b>South Dorchester</b>	<b>30.3 (25.2-35.3)</b>	<b>9.5</b>	<b>12.5 (8.3-16.7)</b>	<b>14.5</b>	<b>10.0 (7.0-12.9)</b>	<b>2.8</b>	<b>19.9</b>	<b>32.8</b>



# Health Disparities

Area	Mental Health Hospitalizations 2013 (age adjusted rate per 1,000)	Alcohol-Related hospital patient encounters* (residents 12+) (age adjusted rate per 1,000)	Drug-related hospital patient encounters* (residents 12+) (age adjusted rate per 1,000)	Persistent Sadness Among Adults (15+ days during past 30 days), 2013	Suicide, 2009-2013 (Avg annual age adjusted rate per 100,000)
Boston	8.0	17.7	6.8	12.2 (10.7-13.7)	6.7
North Dorchester	7.1	13.4	6.5	16.5 (11.6-21.4)	8.7
Roxbury	9.0	22.6	12.2	12.6 (7.7-17.5)	6.2
South Dorchester	10.5	16.1	8.3	14.5 (9.8-19.1)	7.7

# Health and Health Care

- Strong health center network breaking down barriers
  - Insurance status
  - Socio-economic status
  - Literacy
  - Language
  - Culture
  - Sexual orientation and gender identity
  
- Access issues continue
  - Recruitment/retention of bicultural/bilingual clinicians
  - Parity for mental health services (and stigma)
  - Limited oral health capacity (especially low-income adults)
  - Low health literacy

## MLCHC Organizational Member Locations



# MA Programs & Policies

## Programs

Healthcare Reform

Mass in Motion

Prevention Wellness Trust Fund

Health Safety Net (HSN)

MassHealth Accountable Care Organization

One Stop Career Centers

Workforce Competitiveness Trust Fund

Loan Repayment Program for Health Professionals

MBTA Reduced Fares for seniors, students, visually impaired and physically challenged riders

Massachusetts Comprehensive Permit Act: Chapter 40B

## Policies

An Act establishing the Massachusetts food policy council

An Act Relative to Transgender Anti-Discrimination

An Act Relative to Substance Use, Treatment, Education and Prevention

An Act to Establish Equal Pay

An Act Restoring the Minimum Wage and Providing Unemployment Insurance Reforms

## Policy Recommendations

- Advocate for the continuation of critical federal-level policies and funding that improve the social determinants of health, especially for poor and minority populations
- Create a Massachusetts “Moving to Opportunity” demonstration project
- Strengthen education infrastructure and resources in low-income neighborhoods including job training and job readiness programming
- Sustain the Prevention and Wellness Trust Fund
- Adopt a Health in All Policies approach, whereby health and health equity are considered in and across all sectors – housing, transportation, fiscal, environment, etc. with regard to all policies, programs and processes





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Source: Bureau of Labor Statistics Local Area Unemployment Statistics (LAUS) data and Current Population Survey (CPS) data, 2015 & 2016  
Analysis: Economic Policy Institute

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