

# Massachusetts Health Policy Forum: Student Forum

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Associate Commissioner
Massachusetts Department of Public Health
Friday, April 6, 2018



## The Administration

#### **Baker Administration**

Governor's Office
Charlie Baker
Karen Polito



**DPH Commissioner**Monica Bharel



Governor Charlie Baker



Secretary Marylou Sudders



Lt. Governor Karyn Polito



Commissioner Monica Bharel



## **About DPH**



#### 1799

History of department dates to Paul Revere



#### 8 Bureaus, 6 Offices

DPH covers a range of issues from birth until death



### 15 sites, 3000 employees

DPH is located across the Commonwealth, and partners with local boards of health



#### \$1 billion

Annual budget, comprised of federal, state, and grant funding

#### Massachusetts Department of Public Health Regional Offices & Hospitals Northeast Regional Health Office Tewksbury Hospital Board of Registry in Medicine Division of Professional Licensure BEH - Radiation Control Program Central Regional Health Office Bureau of Healthcare Safety and Quality Western Regional Health Office **DPH Central Office** WIC - Warehouse Jamaica Plain Campus Registry of Vital Records WIC - Training Center Lemuel Shattuck Hospital Western Massachusetts Hospital Pappas Rehabilitation Hospital for Children MetroBoston Regional Health Office **MA Counties DPH Regional Offices** Barnstable Franklin Norfolk Berkshire **Plymouth DPH Hospitals** Hampden **Bristol** Hampshire Suffolk Middlesex Dukes Worcester Nantucket Essex Miles



Prevention and Wellness – Health Access – Nutrition – Perinatal and Early Childhood – Adult Treatment – Data Analytics and Support – Housing and Homelessness - Violence and Injury Prevention - Office of Statistics and Evaluation – Childhood Lead Poisoning Prevention – Community Sanitation – Drug Control - Occupational Health Surveillance - PWTF - SANE Program -Interagency Initiatives – Planning and Development – Prevention – Problem Gaming – Quality Assurance and Licensing – Youth and Young Adults – Early Intervention – Children and Youth with Special Needs – Epidemiology Program – Immunization Program – Global Populations and Infectious Disease Prevention - STI Prevention - HIV/AIDS - Integrated Surveillance and Informatics Services – Clinical Microbiology Lab – Chemical Threat, Environment and Chemistry Lab – Childhood Lead Screening – Environmental Microbiology and Molecular Foodborne Lab – STD/HIV Laboratories – Biological Threat Response Lab – Central Services and Informatics – Quality Assurance – Safety and Training – Health Care Certification and Licensure – Health Professional Licensure – Office of Emergency Medical Services – DoN – Medical Use of Marijuana – Shattuck Hospital – Mass Hospital School – Tewksbury Hospital – Western MA Hospital – State Office of Pharmacy Services - Office of Local and Regional Health - Office of Health Equity - Accreditation and Performance Management – ODMOA – OPEM – HR and Diversity – Office of General Counsel - Office of CFO - Commissioner's Office



Massachusetts DPH will be a national leader in innovative, outcomes-focused public health based on a data-driven approach, with a focus on quality public health and health care services and an emphasis on the social determinants and eradication of health inequities.



#### **VISION**

Optimal health and well-being for all people in Massachusetts, supported by a strong public health infrastructure and healthcare delivery.

#### **MISSION**

The mission of the Massachusetts Department of Public Health (DPH) is to prevent illness, injury, and premature death; to ensure access to high quality public health and health care services; and to promote wellness and health equity for *all* people in the Commonwealth.

### DATA

We provide relevant, timely access to data for DPH, researchers, press and the general public in an effective manner in order to target disparities and impact outcomes.

### **DETERMINANTS**

We focus on the social determinants of health - the conditions in which people are born, grow, live, work and age, which contribute to health inequities.

### **DISPARITIES**

We consistently recognize and strive to eliminate health disparities amongst populations in Massachusetts, wherever they may exist.

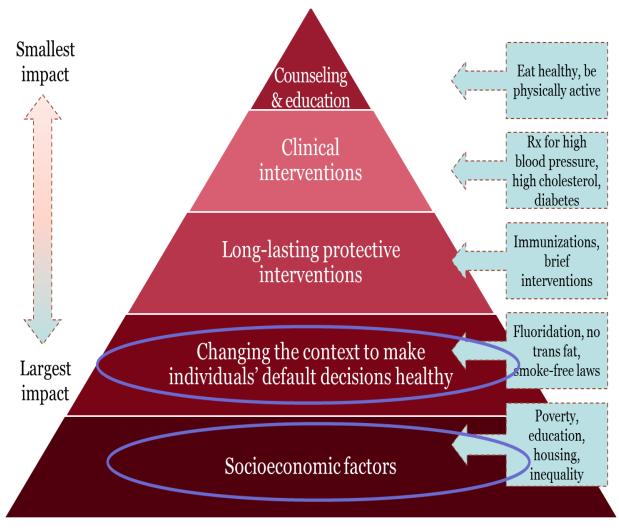
#### **EVERYDAY EXCELLENCE**

PASSION AND INNOVATION

INCLUSIVENESS AND COLLABORATION



## **CDC** Health Impact Pyramid





## A FOCUS ON HEALTH EQUITY



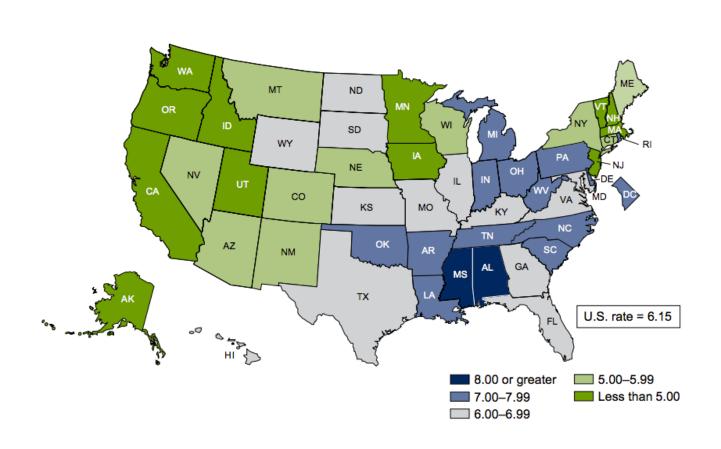
## **Healthiest State in the Nation:**

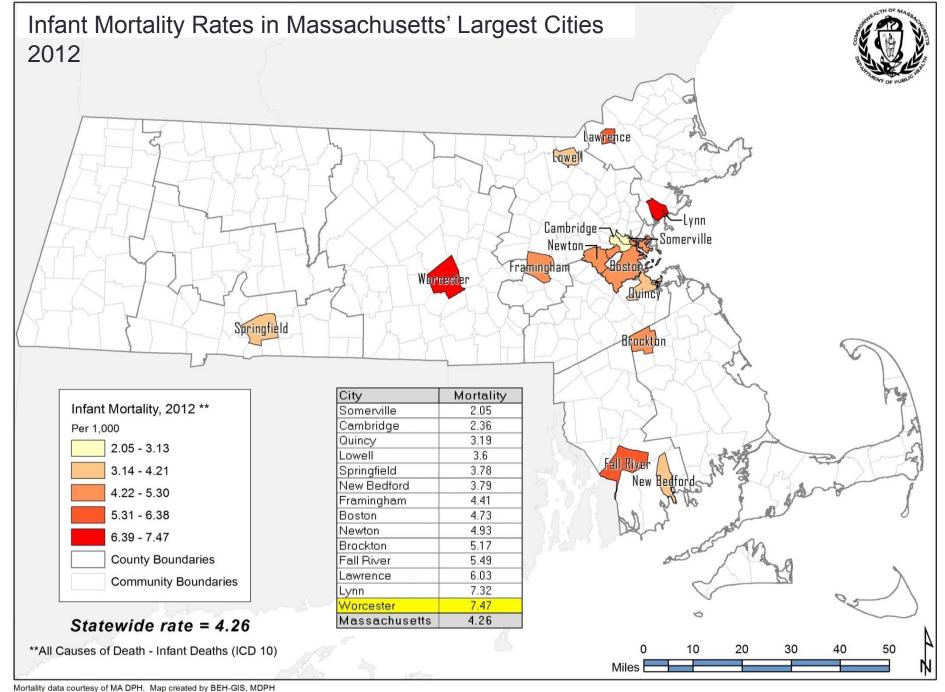


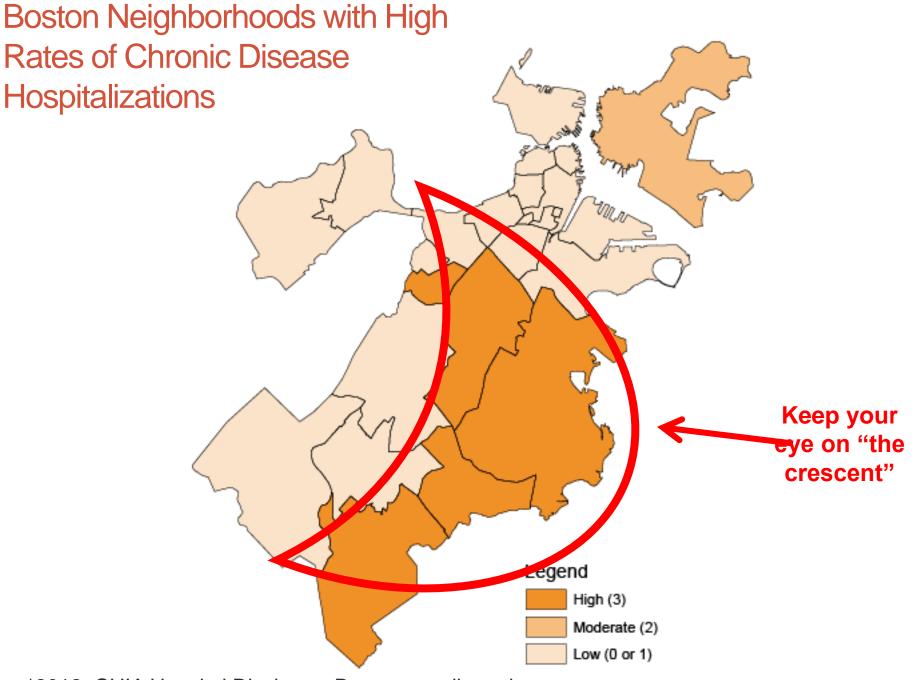
Massachusetts was ranked the #1 healthiest state in the US in the 2017 *America's Health Rankings* Annual Report.



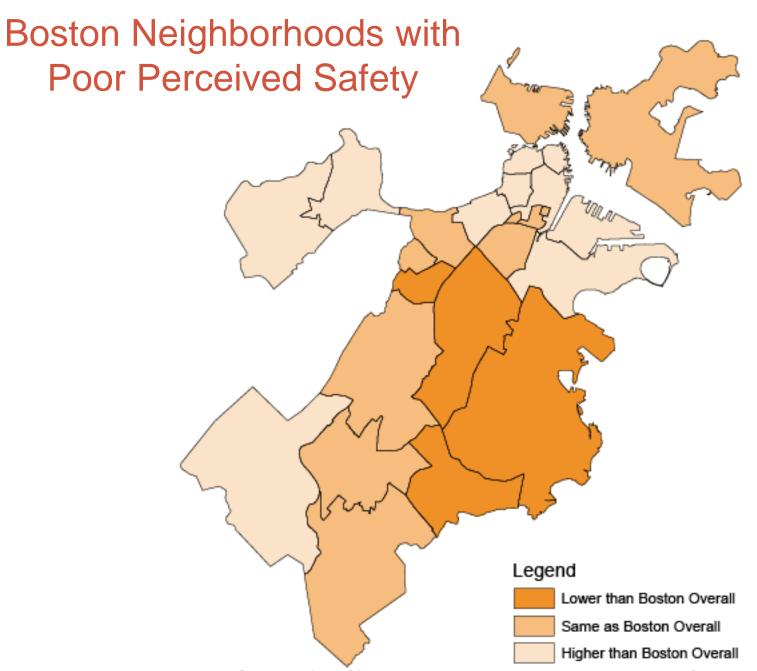
## U.S. Infant Mortality Rate 2011



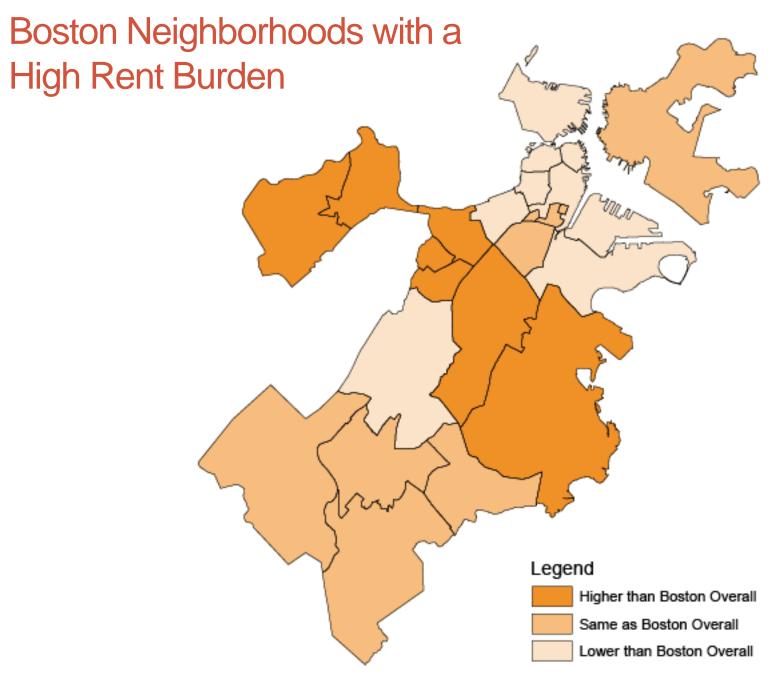




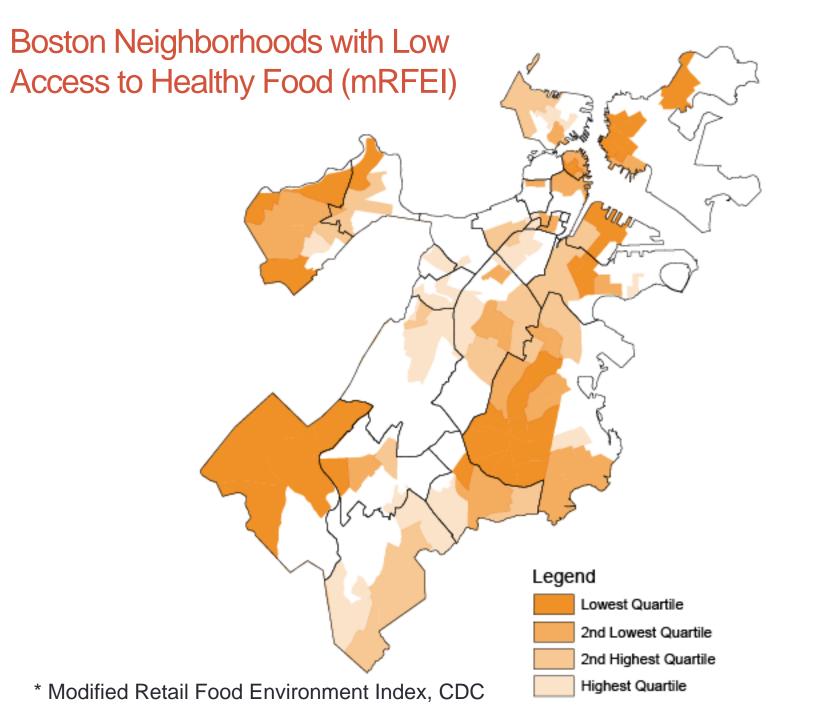
\*2012 CHIA Hospital Discharge Data, age adjusted



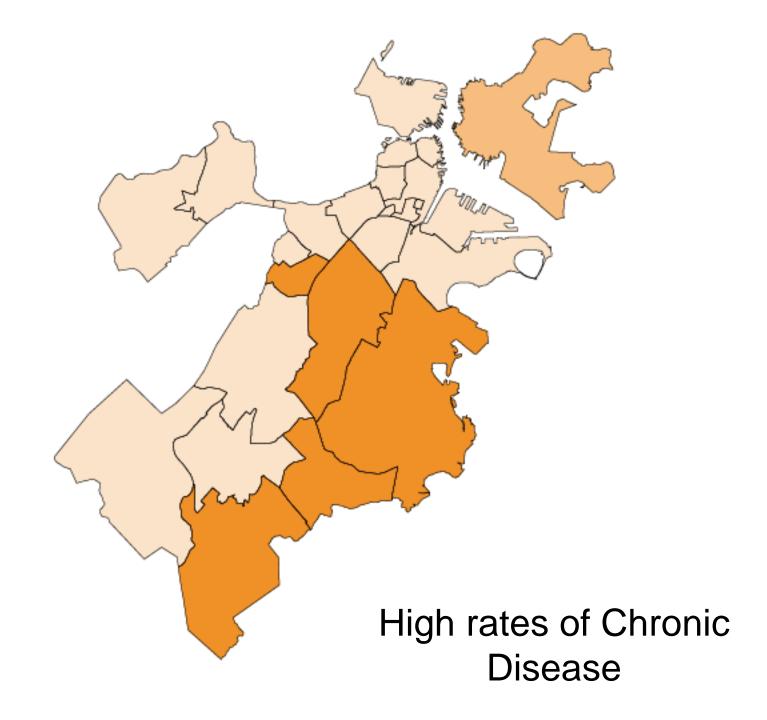
<sup>\*</sup>Boston Neighborhood Survey (BNS), 2008; Harvard Youth Prevention Center through Cooperative agreement with the CDC

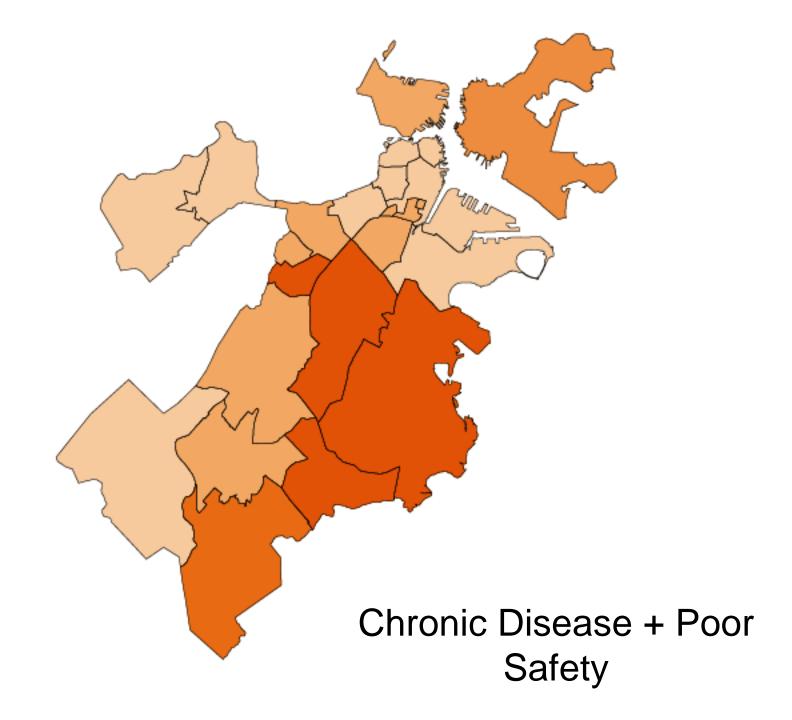


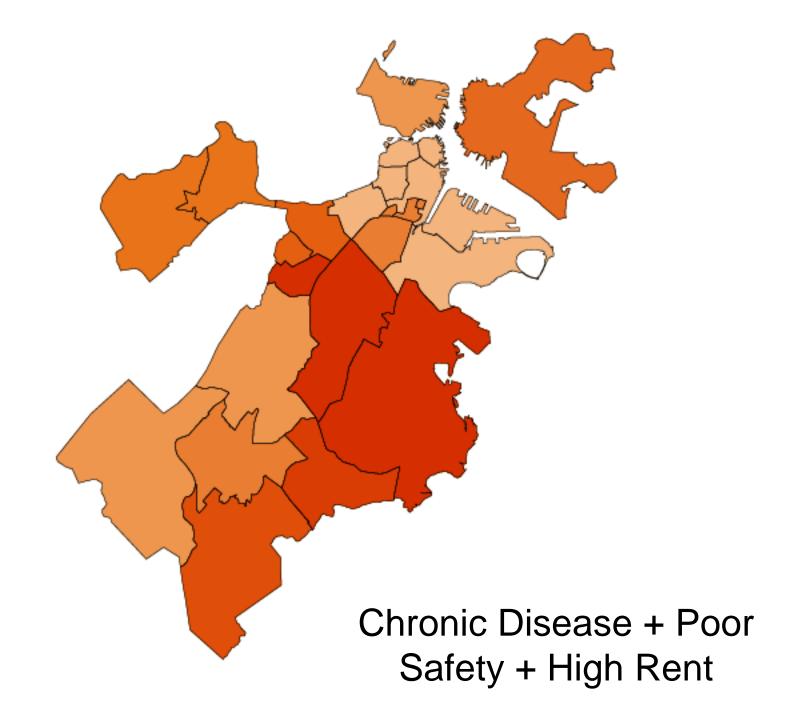
<sup>\*</sup> American Community Survey, 2008-2012, US Census Bureau

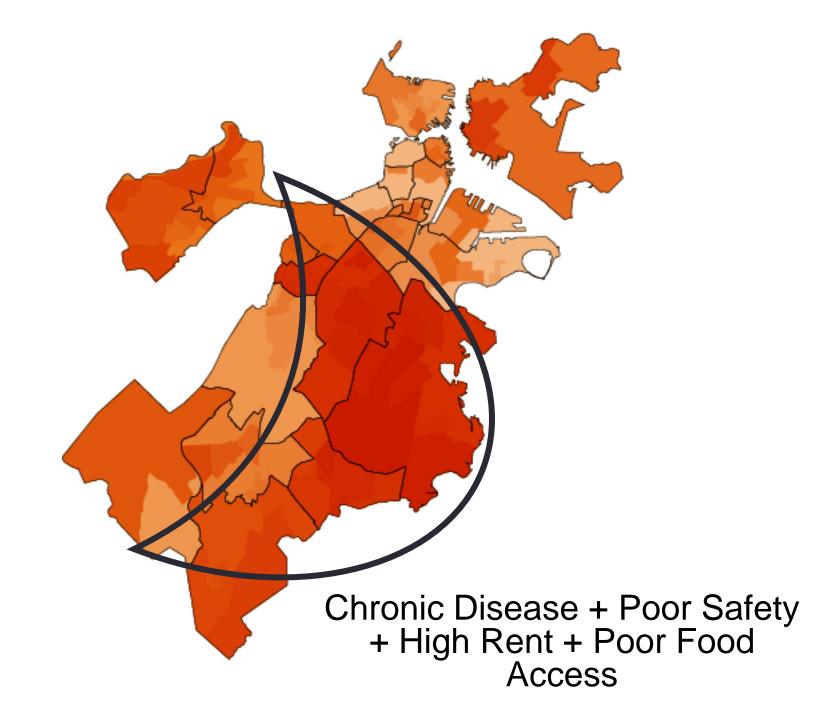


# But put them all together and...





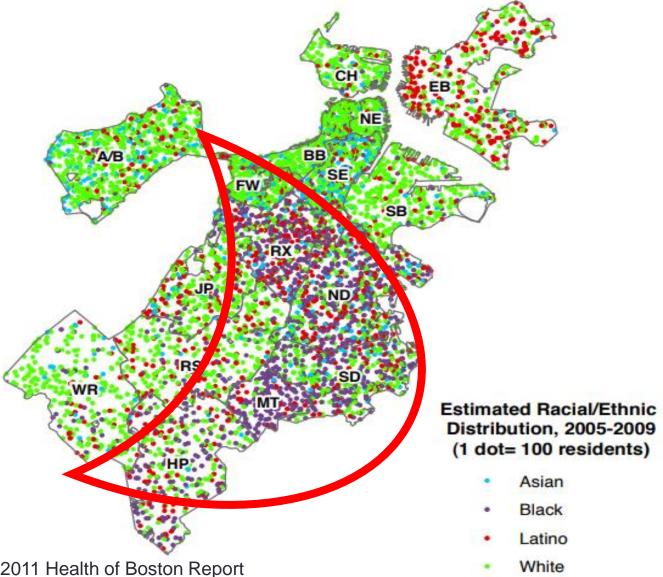




# What else is going on in "the crescent"...

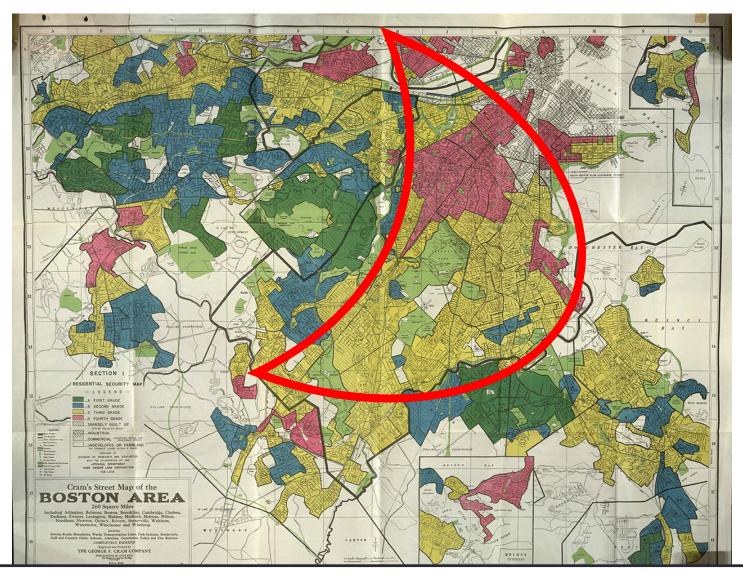


## Place Matters



Map Source: 2011 Health of Boston Report Data Source: Census 2000, US Census Bureau

# Redlining of Boston Neighborhoods





## Racial Inequities in Health

## Black vs. White Death Rate Disparities

	White, NH	Black, NH
All Causes	686.3	784.1
Heart Disease	157.9	177.3
Cancer	176.9	191.4
Stroke	31.7	44.5
Diabetes Mellitus	13.0	27.8

Higher death rates among blacks vs. whites

Categories of White, Black, and Asian/Pacific Islander do not include persons of Hispanic origin ICD-10 codes for selected causes of death (b)

Death rates for counts less than 30 are unstable and should be interpreted with caution NH=Non-Hispanic, PI=Pacific Islander

The Counts and Rates are 3 year aggregates

- See Notes on Population Data
- 2008-2010 Mortality (Vital Records) ICD-10 based

# Health Priorities Social Determinants of Health



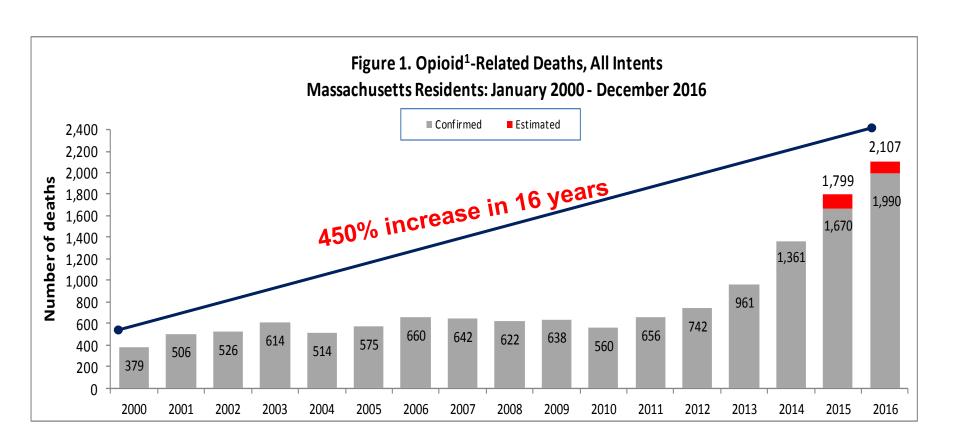


# Case Study: Opioid Data

Analyzing data, determinants and disparities to produce good policy



## **Opioid Related Deaths**





## Opioid Overdose Death Rates by County

2011 - 2013

Opioid Overdose Death Rate By County, per 100,000 people

17.2 - 20.4

State Rate: 19.1 (Jan. 2011- Dec. 2013)

Opioid Overdose Death Rates, All Intents, by County, Massachusetts: January 2011 - December 2013

Franklin

Middlesex

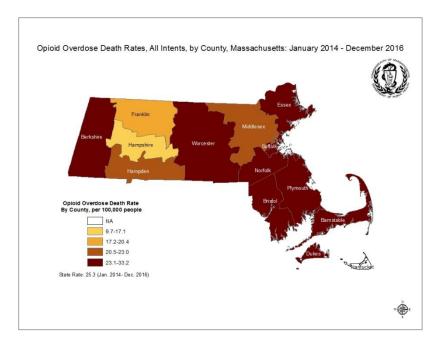
Worcester

Surfolk

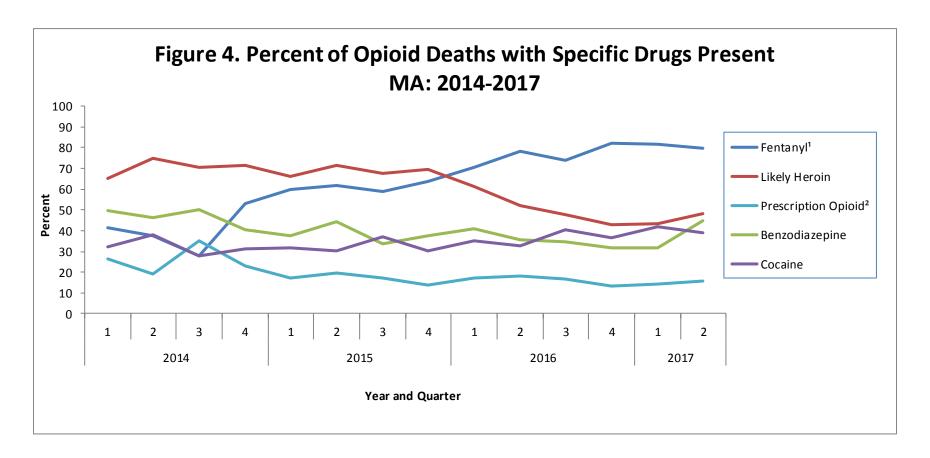
Ply mouth

Barnstable

vs. **2014 - 2016** 



The rate of fentanyl present in the toxicology of opioid-related overdose deaths continues to rise, reaching **81 percent** this year, while the rate of prescription opioids and heroin present in opioid-related overdose deaths continues to decline









An Assessment of Fatal and Nonfatal Opioid Overdoses in Massachusetts (2011 – 2015)



Chapter S of the Acts of 2015 Chapter SS) was passed by the Mascachuserts significant and signed into law by Governor Chapter 0. But air in August 2015. This law permitted the Inlagar and analysis of different government data as to better understand the opioid spilentine, good pools of worksyment, and high make programment, decisions. Chapter 15 of made data an in depth report reasoning the feature shring the poid crisis in Mascachusetts. The was we enacthorized in Chapter 131 of the Act 2015, enabling this unspre-celented analysis to continue supporting the Commonwealth's data driven response to the opioid crisis in Mascachusetts. The was we enacthorized the Onlyte 1130 of the Act 2015, enabling this opioid profits possible only the opioid crisis in Mascachusetts. The was we enacthorized the Southern State 110 of the Acts 2015, enabling the State 110 of the Southern State 110 of the Acts 2015, enabling the the Acts 2015,

In the treelve months since the first Chapter 55 report was released in September 2016, nearly 2,000.

Massachusetts residents have died of opioid-related overdoore. The total number of death has increased fine-field in the last JV owen, but the rate of increase of opioid-related overdoore deaths was particularly sharp between 2013 and 2014. The maps below thow a graphic depiction of the increasing and spreading opioid orisis in Massachusetts between 2011 and 2015 the districting are on the maps below.

Increasing and Spreading Opioid-Related Overdose Death Rates in Massachusetts from 2011 to 2

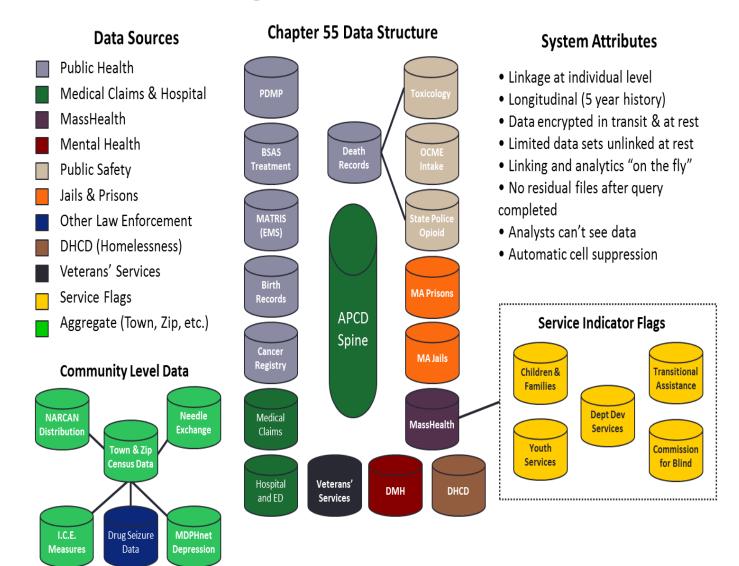


What is especially notable in the opidemic's region and middous geographic spread throughout the Commonwealth. Amost overy community is effected, Opidel velocities overdoore deaths and northal opiodirelated overdoors are highest among younger males, but all apopulation subgroups have seen increases in correctly ware. Individual related from increasation are also as high and deathsy one reserving the community, but as too are individuals experiencing homelessness, veterans, mothers with opided use disorder, and individuals with arricon mental illness. August 2017





## **Data Mapping**





## Chapter 55: Partners Coming Together

#### **Academic**

- Brandeis University
- Boston University
- Brown University
- Harvard Medical School
- Harvard School of Public Health
- Massachusetts College of Pharmacy and Health Sciences
- Massachusetts Institute of Technology
- Northeastern University
- Tufts University
- University of Massachusetts Amherst
- University of Massachusetts Boston
- University of Massachusetts Medical School

#### **Hospitals & Private Industry**

- Baystate Health
- Beth Israel Deaconess Medical Center
- Boston Medical Center
- •Brigham & Women's Hospital
- Children's Hospital
- •GE
- •IBM
- Liberty Mutual
- Massachusetts General Hospital
- Massachusetts League of Community Health Centers
- McKinsey & Company
- •The MITRE Corporation
- Partners Healthcare
- PwC
- Rand Corporation

#### **State and Federal Government Agencies**

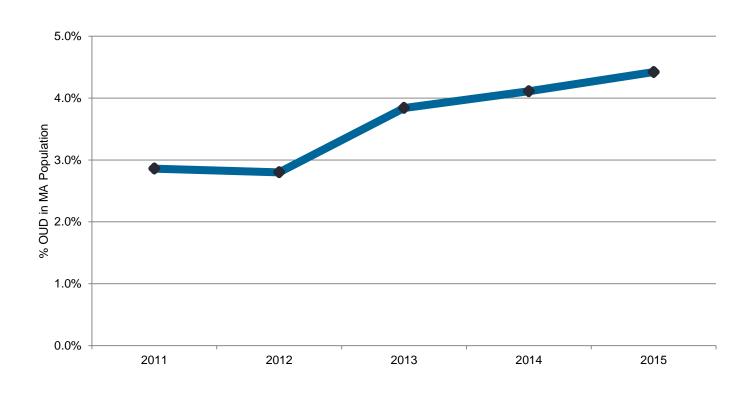
- Boston Public Health Commission
- Center for Health Information and Analysis
- Department of Housing and Community Development
- Department of Mental Health
- Department of Correction
- Department of Public Health
- Executive Office of Health and Human Services
- Executive Office of Public Safety and Security

- Federal Bureau of Investigation
- High Intensity Drug Trafficking Area (NE)
- Health Policy Commission
- Massachusetts Sheriffs' Association
- MassIT
- Office of the Chief Medical Examiner
- State Auditor's Office



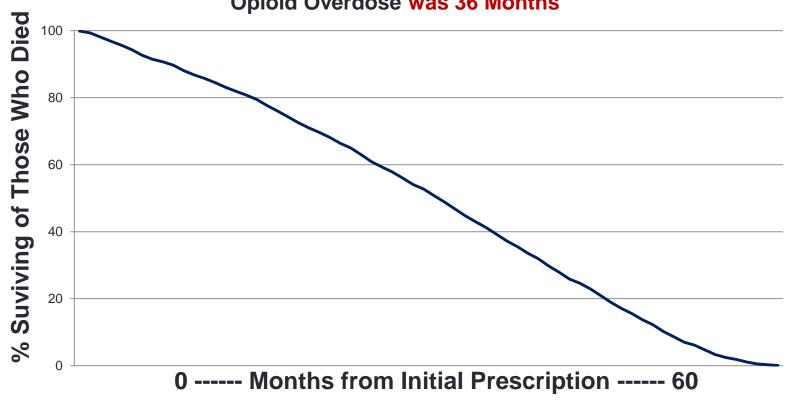
## Opioid Use Disorder (OUD)

## Estimated OUD Population Rises Signficantly Between 2011-2015



## Time From Initial Rx to Overdose Death

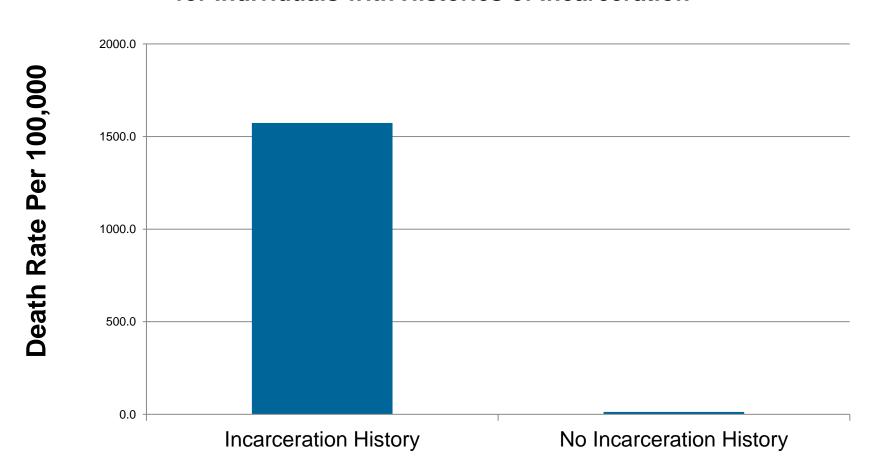
Average Survival Time For Those Who Died of Opioid Overdose was 36 Months





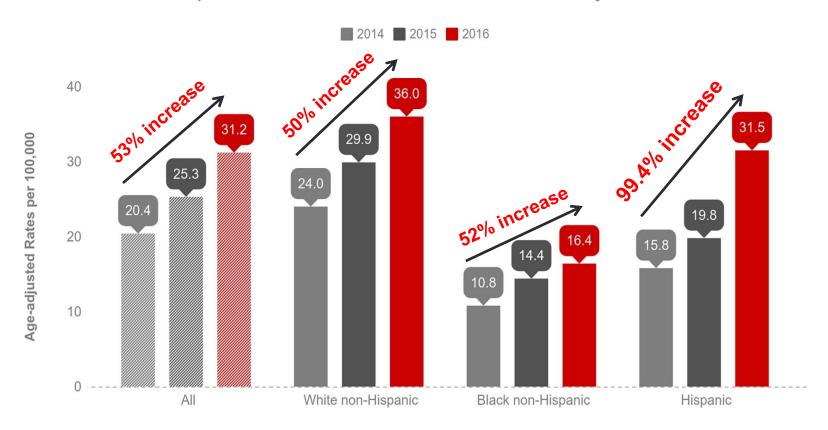
## Persons with Histories of Incarceration

## Opioid Death Rate 120 Times Higher for Individuals with Histories of Incarceration



## The age-adjusted opioid-related overdose death rate for Hispanics doubled in three years (2014-2016)

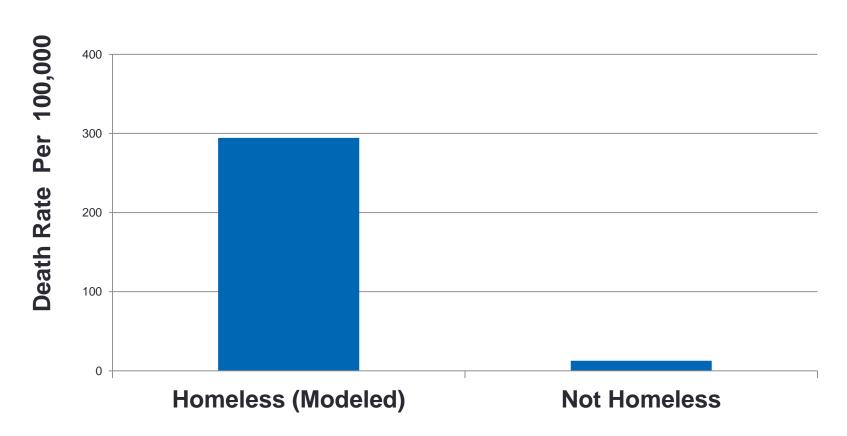
Confirmed Opioid-Related Death Rates, All Intents, by Race and Year





### Persons Experiencing Homelessness

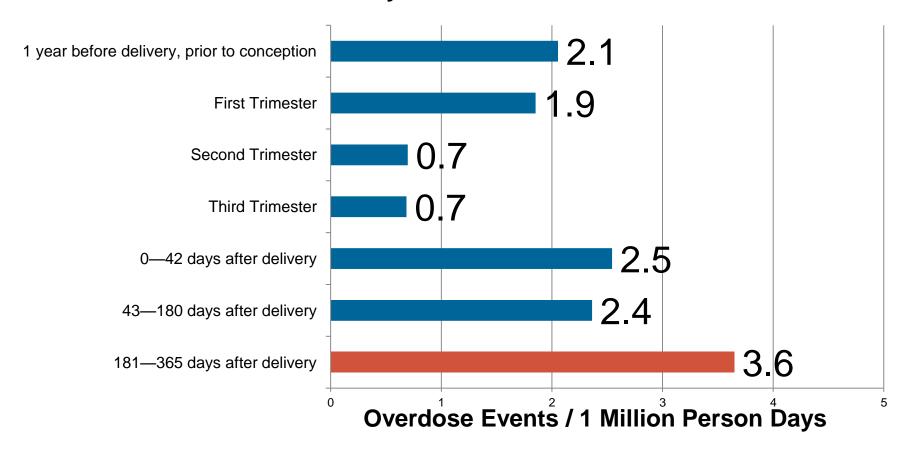
Opioid Death Rate 30 Times Higher for the Homeless Individuals



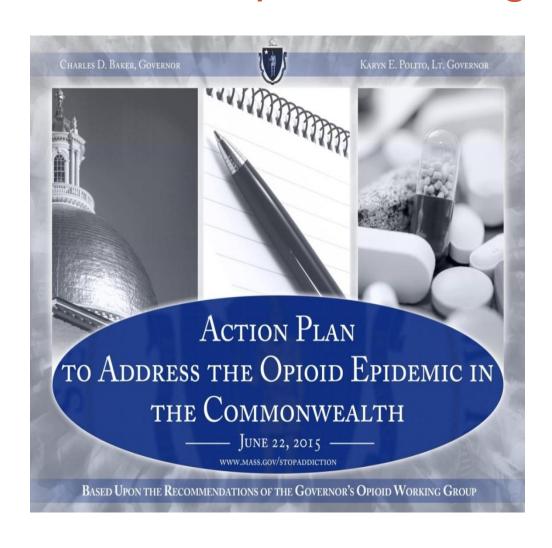


## Pregnant and Postpartum Risk

### Rate of Opioid Overdose Events Increase Sharply After Delivery for OUD Mothers



### Governor Baker's Opioid Working Group







WHAT IS STIGMA?

TAKE THE PLEDGE

**TAKE THE QUIZ** 

**SHOW YOUR SUPPORT** 

FOR HELP: 1-800-327-5050 (tty: 1-800-439-2370)

www.mass.gov/StateWithoutStigma



### Parent Campaign Launched

- Rx opioid misuse
- Parents of middle and high school age kids
- Tips for how to start conversation













## Safe Prescribing

- Rx 7-day limit
- Check Prescription Monitoring Tool
- Prescriber Education





SCHOOL THOSE AGES TO THE SCHOOL T

- Medical Schools
- Dental Schools
- Advance Practice Nursing
- Physician Assistants
- Community Health Centers
- Social Work Programs





### Access to Naloxone (Narcan®)



- First Responders
- Bystanders
- Pharmacies
- Community Bulk
   Purchasing Program

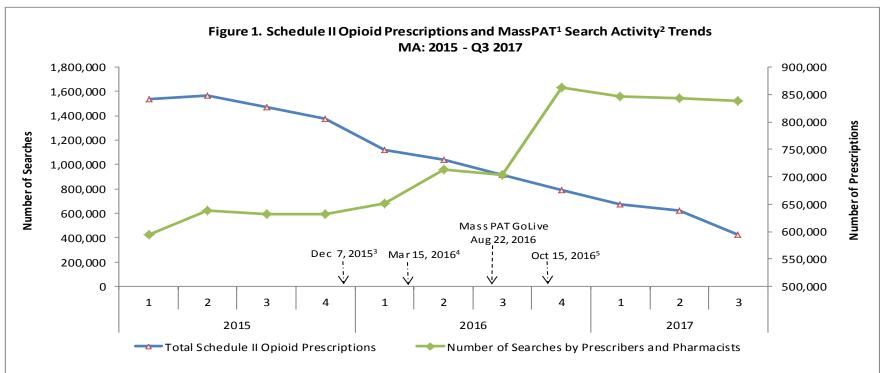


### Treatment and Recovery

- 600 more Tx beds since 2015
- Expanded Office
   Based Treatment
- Treatment for High-Risk Populations
- 2000 + sober home beds certified



### Prescription Monitoring Program – Data Trends



<sup>&</sup>lt;sup>1</sup> MassPAT is the Massachusetts Prescription Awareness Tool (Online PMP)

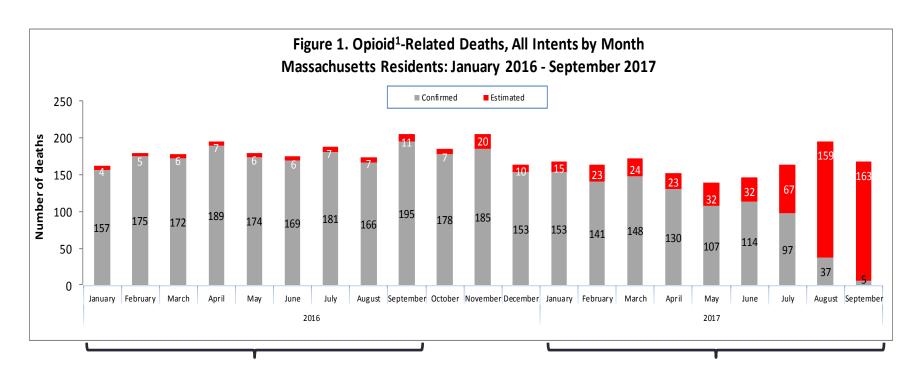
<sup>&</sup>lt;sup>2</sup> Search activity includes prescribers, delegates, and pharmacists registered in MassPAT and in the previous MA Online PMP system

<sup>&</sup>lt;sup>3</sup> Pharma des required to report daily

<sup>&</sup>lt;sup>4</sup> STEP bill signed into law (7-day supply requirements go into effect)

<sup>&</sup>lt;sup>5</sup> MA prescribers required to look up patient when prescribing a Schedule II or III opioid medication

# Opioid-related overdose deaths declined by an estimated 10% in the first nine months of 2017 compared to the first nine months of 2016



Estimated 1637 deaths

Estimated 1470 deaths



### **QUESTIONS AND DISCUSSION**



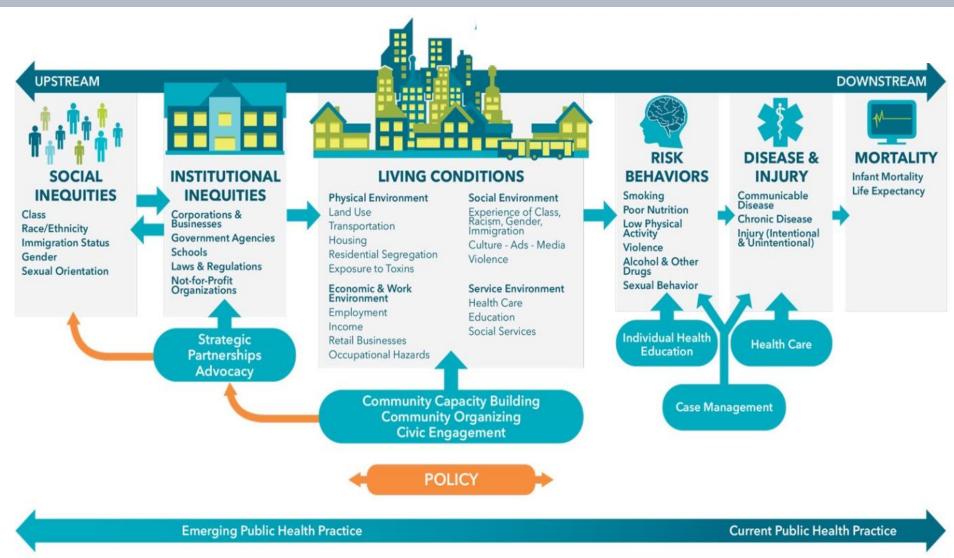
## SOCIAL DETERMINANTS OF HEALTH PANEL

Glory Song, MPH, Epidemiologist, Office of Statistics and Evaluation

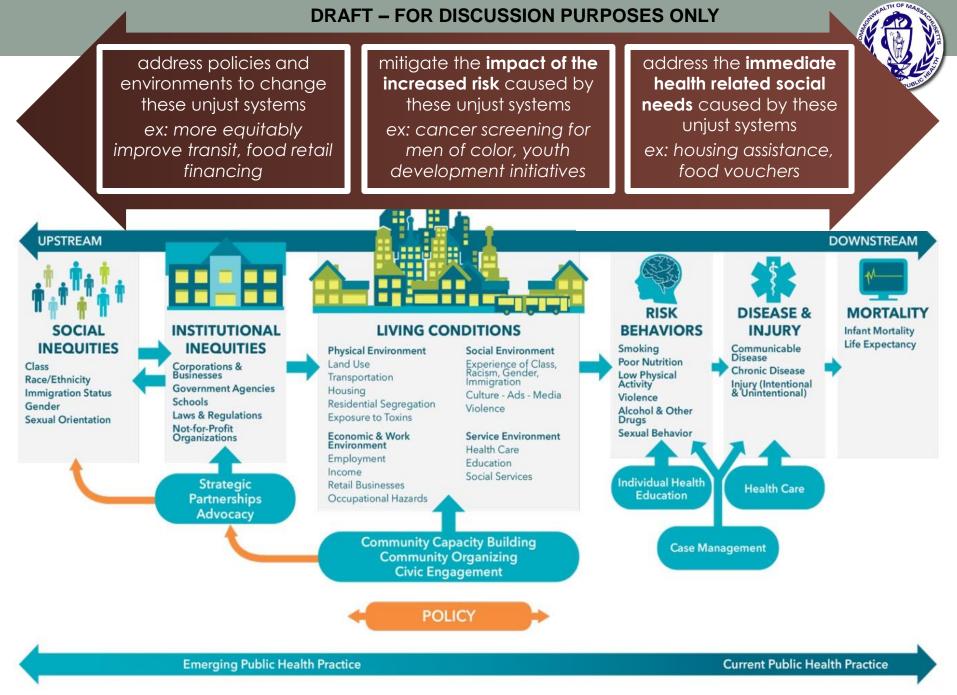
Ben Wood, MPH, Director, Office of Community Health Planning and Engagement

Jean Zotter, JD, Manager, Prevention and Wellness Trust Fund

# Capacity Building Using a SDoH Framework



Source: Bay Area Regional Health Inequities Initiative



Source: Bay Area Regional Health Inequities Initiative



# Clinical-Community Partnerships for Prevention

- \$42.75 million for 4 years (2013-17)
  - Funded as part of Prevention and Wellness Trust Fund
- Goals: reduce rates of prevalent and preventable health conditions and control costs
  - Pediatric Asthma
  - Tobacco Use
  - Hypertension
  - Older Adult Falls





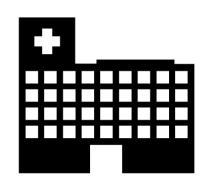






#### **Retooling DoN for Today's Health Care Market**

**Determination of Need: Community Health Initiative** 







Need to Expand / Improve Health Care Facilities

5% Community Health Initiative Funding



Determination of Need Project



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Project's

Maximum Capital

Expenditure



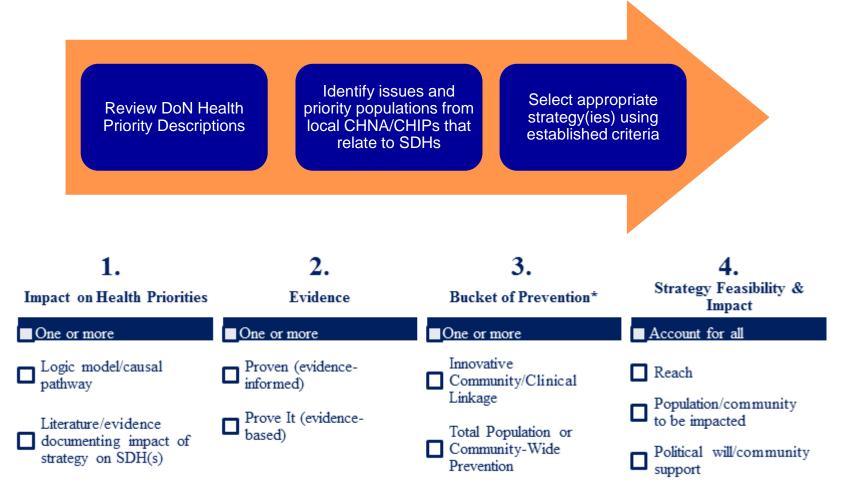
### DPH's SDoH/Health Priorities



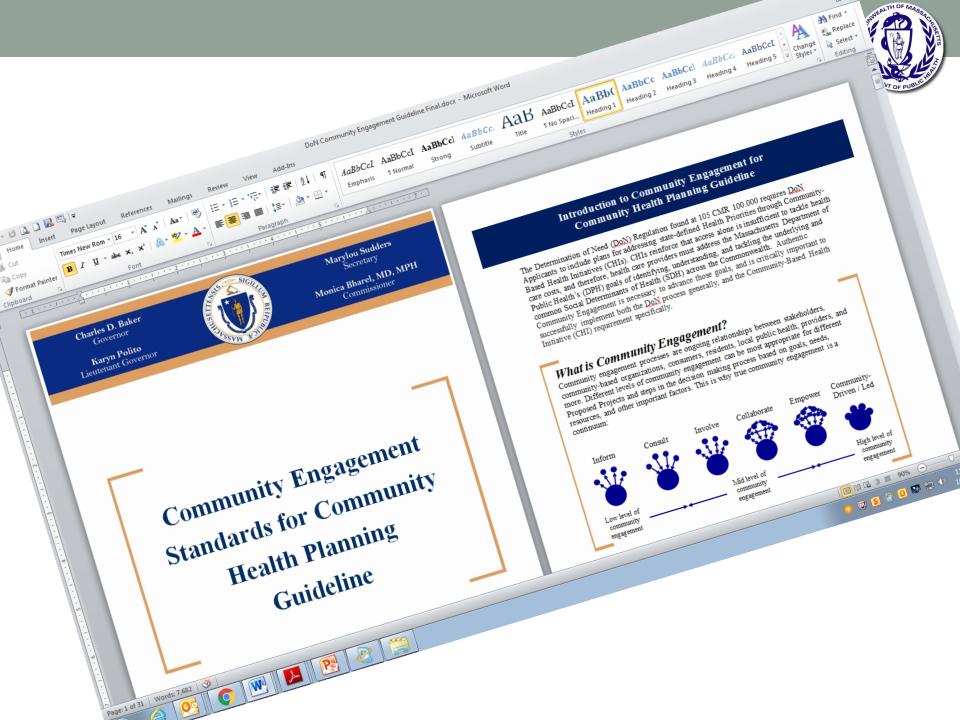
Source: Massachusetts State Health Assessment, 2017



### DoN Health Priorities: Selecting Strategies that Impact the Social Determinants of Health



<sup>\*</sup> Auerbach, John. "The 3 buckets of prevention." *Journal of Public Health Management and Practice* 22.3 (2016): 215-218.



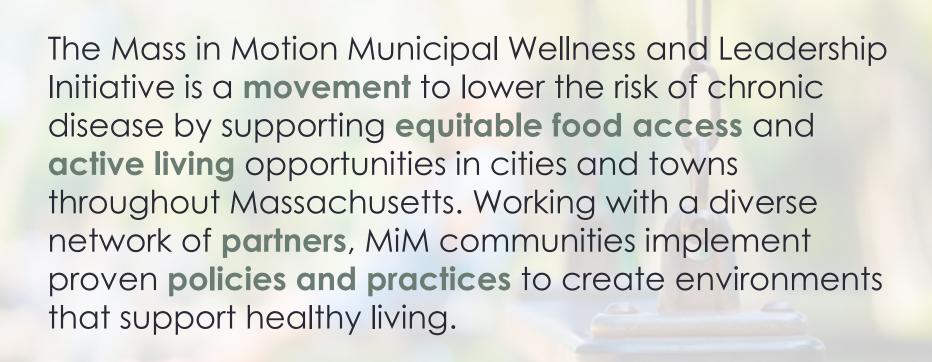
#### **Retooling DoN for Today's Health Care Market**



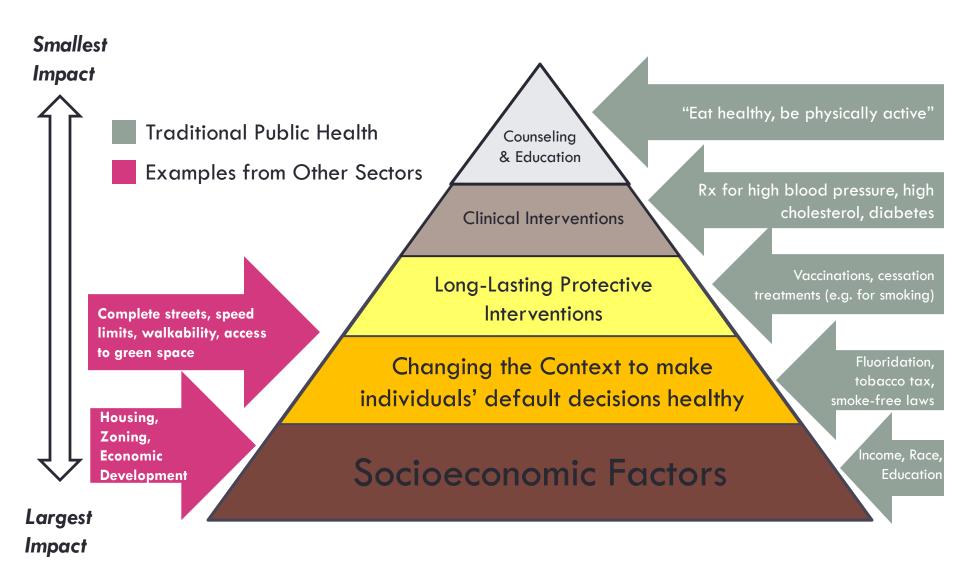
### **Community Engagement: Spectrum of Public Participation**

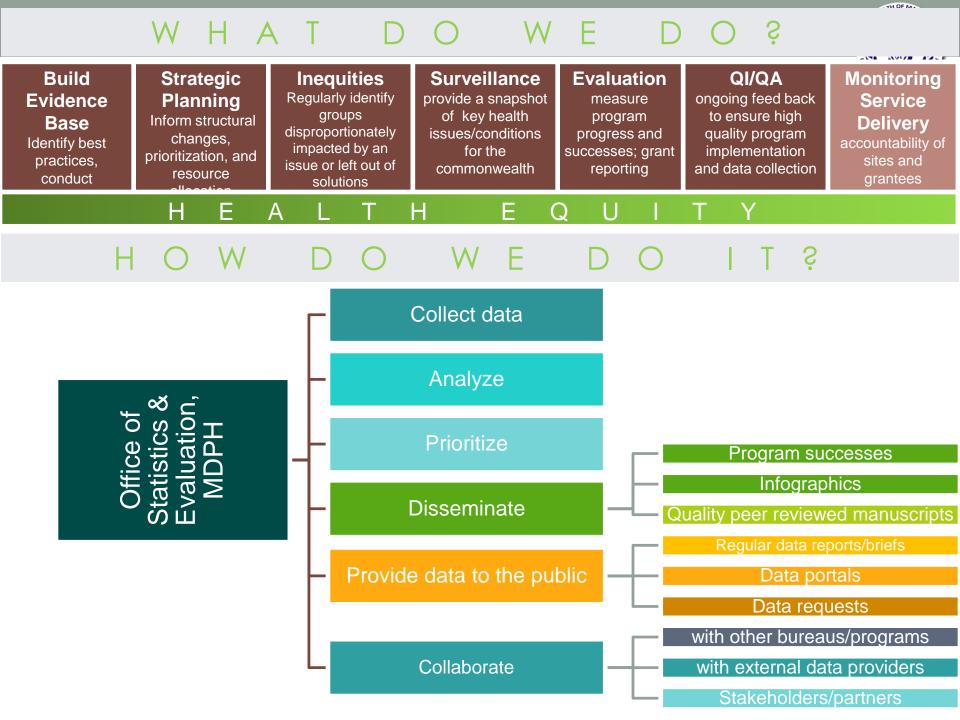
Throughout a community health planning process levels of engagement will likely vary. Based on the International Associations Public Participation's spectrum of engagement (with DPH adaptation), DoN Applicants use this tool to assess their approach to community engagement.

	Inform	Consult	Involve	Collaborate	Delegate	Community Driven / -led
Community Participation Goal	To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	To obtain community feedback on analysis, alternatives, and/or solutions	To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	To partner with the community in each aspect of the decision including the development of alternatives and identification of the preferred solution	To place the decision-making in the hands of the community	To support the actions of community initiated, driven and/or led processes
Promise to the community	We will keep you informed	We will keep you informed, listen to and acknowledge concerns, aspirations, and provide feedback on how community input influenced decisions	We will work with you to ensure that your concerns & aspirations are directly reflected in the alternatives developed and provide feedback on how that input influenced decisions	We will look to you for advice & innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible	We will implement what you decide, or follow your lead generally on the way forward	We will provide support to see your ideas succeed
Examples	•Fact sheets •Web sites •Open Houses	Public comments Focus groups Surveys Community meetings  *Spectrum adapted from	•Workshops     •Deliberative polling     •Advisory groups  http://c.ymcdn.com/sites/www.iap2.or	Advisory groups     Consensus building     Participatory decision making      making	•Advisory groups •Volunteers/ stipended •Ballots •Delegated decision	•Community-based processes •Stipended roles for community •Advisory groups



### focus on the environments and causes







### **QUESTIONS AND DISCUSSION**