

# The Public Health Department of the Future

**Adapted to the Changing Conditions**

November 2018

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President & CEO  
Trust for America's Health



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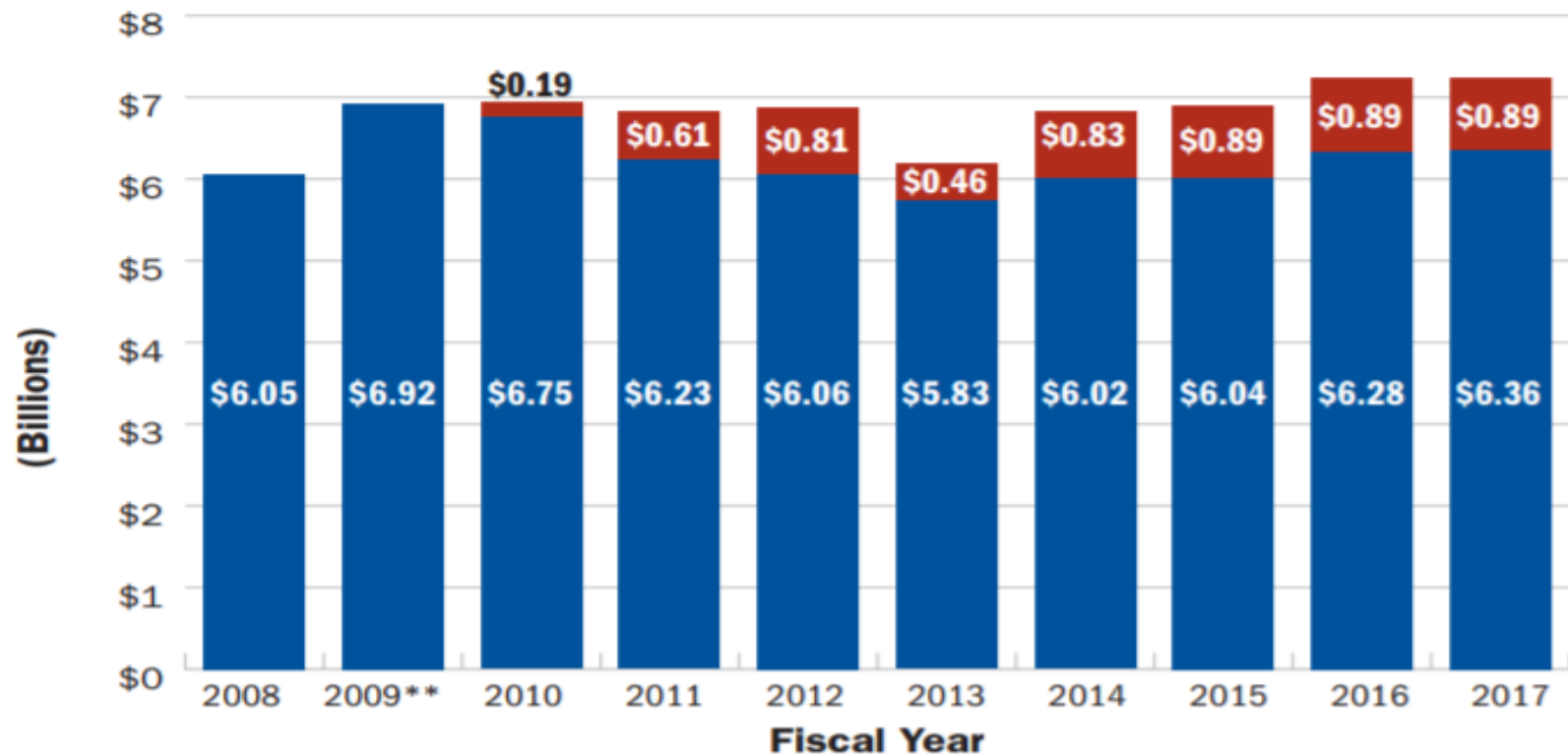
# **What's the Context And Its Meaning For Public Health?**





# Federal Funding Flat and At Risk

**CDC Program Levels — Fiscal Year 2008 to Fiscal Year 2017\***



■ CDC Funding from the Prevention and Public Health Fund   ■ CDC Program Level (Without the PPHF)

\*This chart does not account for inflation, numbers are rounded

\*\*FY 2009 includes the 2009 Recovery Act

# State and Local Public Health Budgets

(source: ASTHO & NACCHO latest reports)

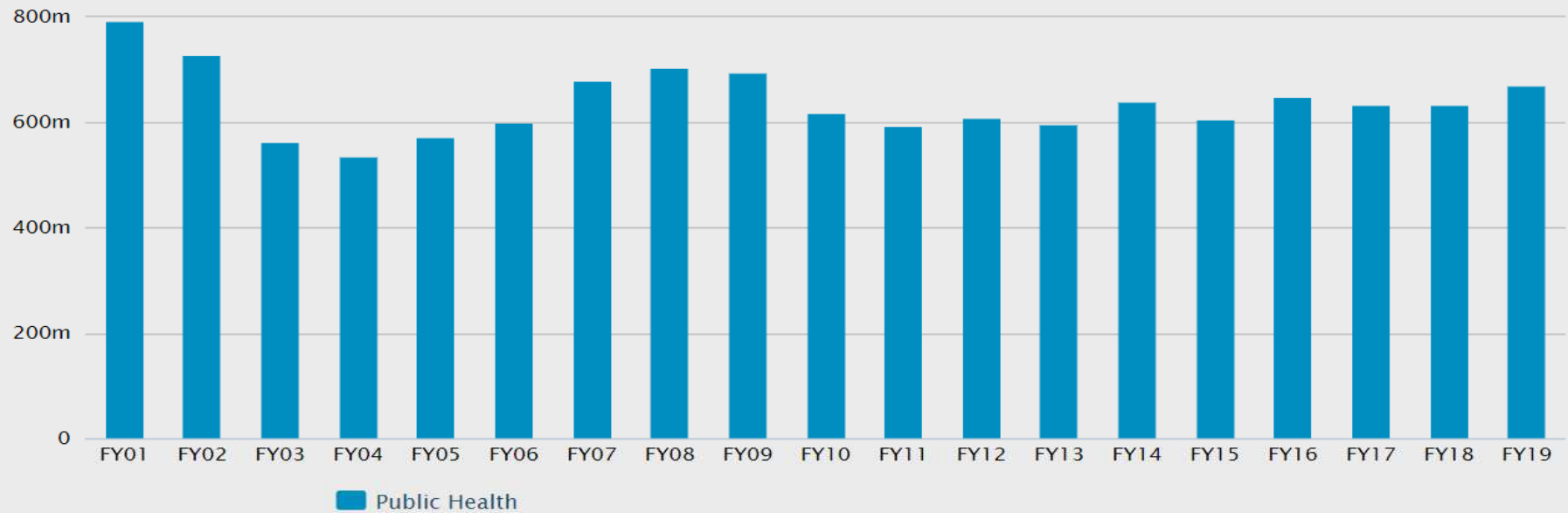
## □ **Funding:**

- State budgets: down 8% 2014-2015 - cuts from federal contracts & direct state funds
- Local depts: 23% had cut in last fiscal year; estimated 30% will in coming year

## □ **Workforce:**

- State: down 3% employees from 2012-2016
- Local/state: 60,000 jobs lost in last 8 years

# MA Public Health Funding Down 5% in Last 10 Years



Highcharts.com

[download as spreadsheet](#)

	Adjusted for inflation (cpi)	NOT adjusted
FY19	\$669,726,002	\$669,726,002
FY18	\$632,929,523	\$617,773,687
FY17	\$633,775,338	\$604,997,036
FY16	\$647,192,992	\$606,552,491
FY15	\$604,692,731	\$562,939,659

## See Changes in Funding

Between  and

**UPDATE**

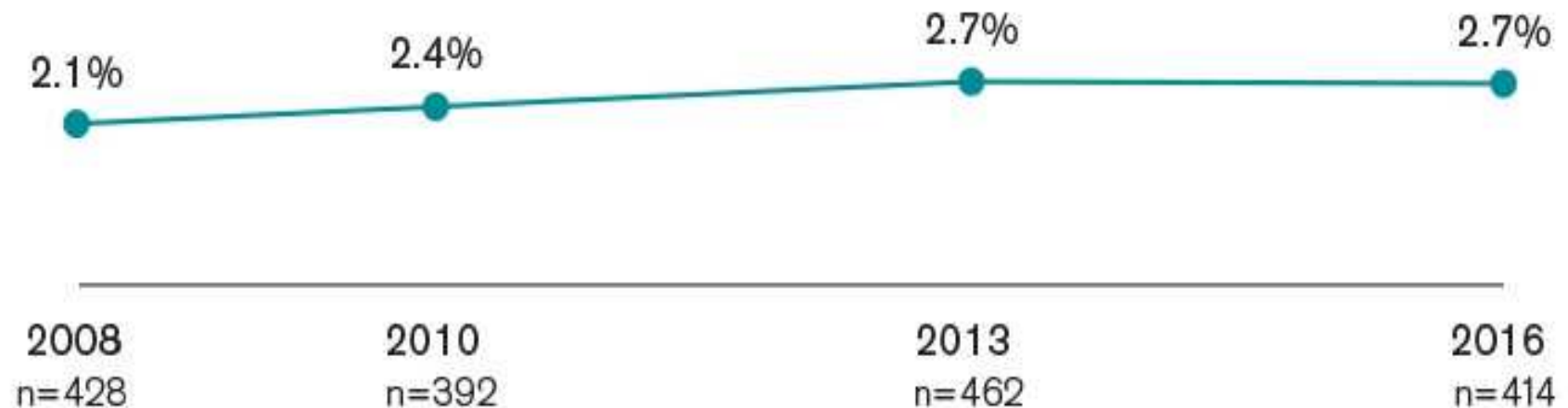
### Funding for Public Health

↓ 4.8%

## The Workforce Is Aging

- **Age:** The average PH worker is 47 years old—7 years older than US workforce
- **Retirement:** workers eligible to retire in 2020 will go from 17% to 25%

Percentage of total workforce retired over time



Based on numbers of employees who retired in the previous year



# The Workforce Is Changing

## Estimated size of select occupations over time

Number of Full-Time Equivalents (FTEs)

Registered nurses



Year	n
2008	n=1,992
2010	n=1,855
2013	n=1,704
2016	n=1,611

Environmental health workers



Year	n
2008	n=1,925
2010	n=1,802
2013	n=1,573
2016	n=1,645

Behavioral health staff



Year	n
2008	n=1,831
2010	n=1,766
2013	n=1,388
2016	n=1,804

Health educators



Year	n
2008	n=1,899
2010	n=1,754
2013	n=1,441
2016	n=1,652

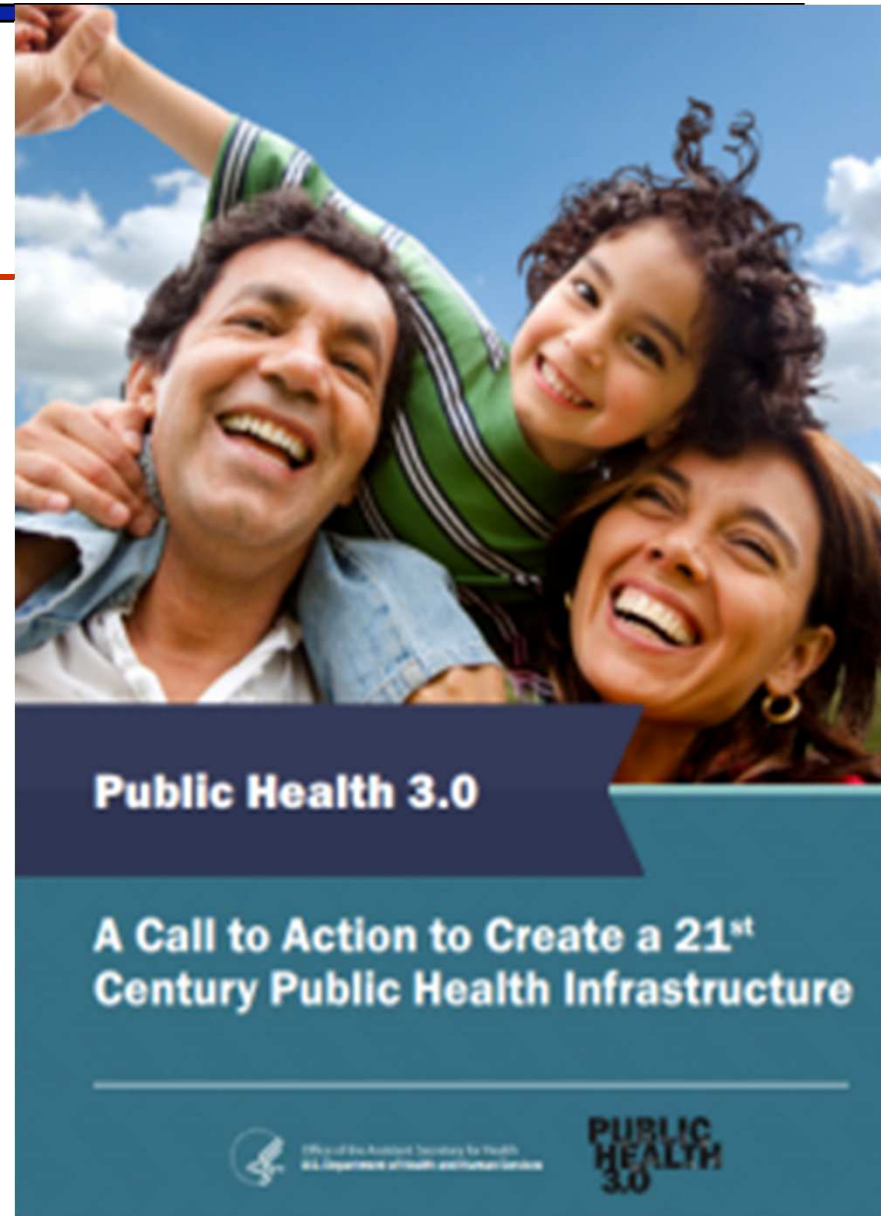
# **Core Mission of Health Departments Remains the Same**

Reduction of leading causes of  
preventable deaths, illnesses, injuries  
Special emphasis on underserved  
populations & equity



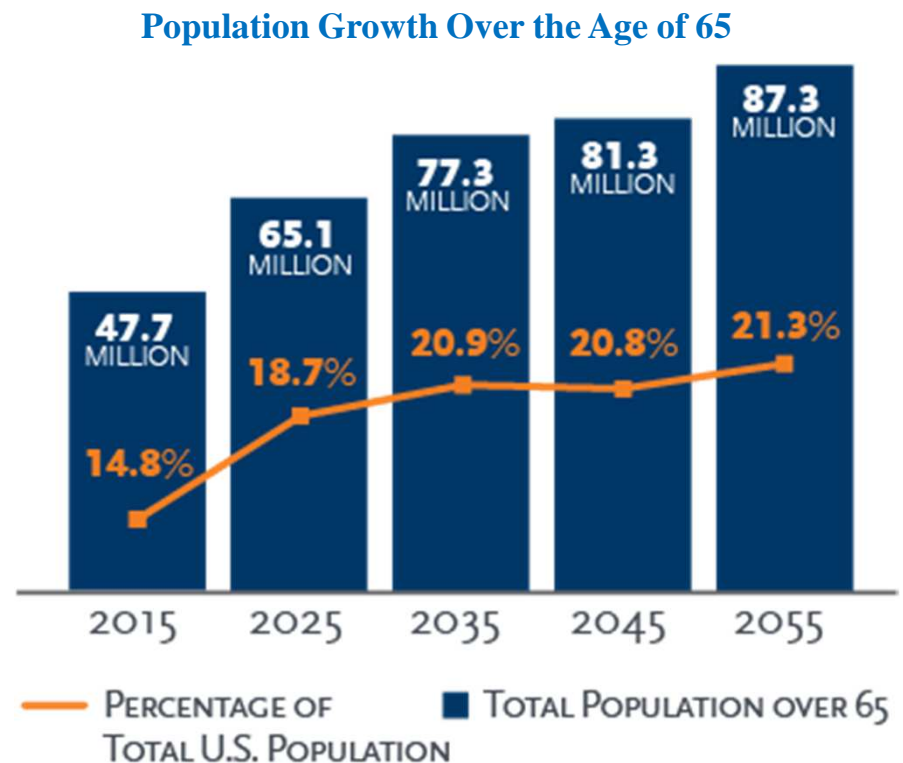
# Public Health 3.0

- ❑ Chief Health Strategist
- ❑ Timely, granular data
- ❑ Health care links
- ❑ Policy-oriented
- ❑ Upstream



# Chief Health Strategist of the Future

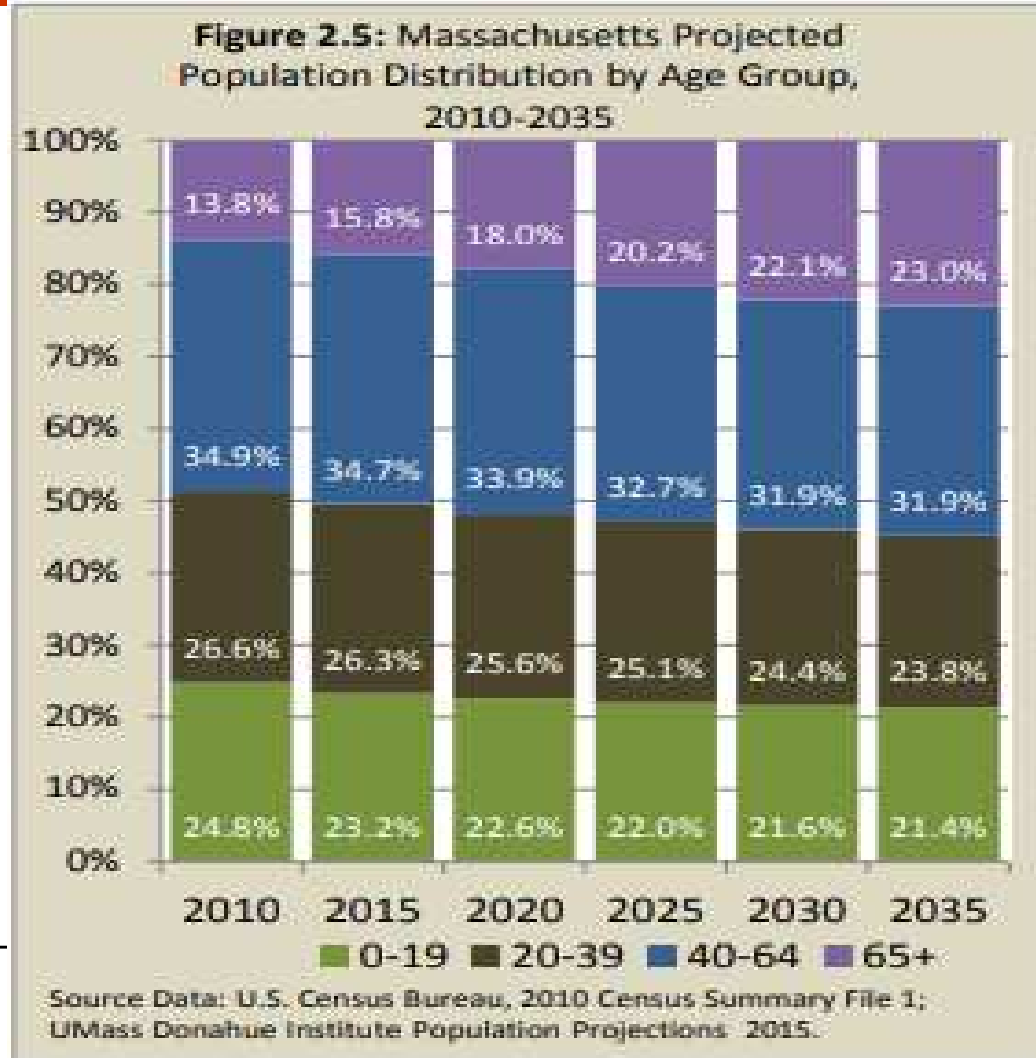
**Practice #1:** Adopt and adapt strategies to combat the evolving leading causes of illness, injury, and premature death



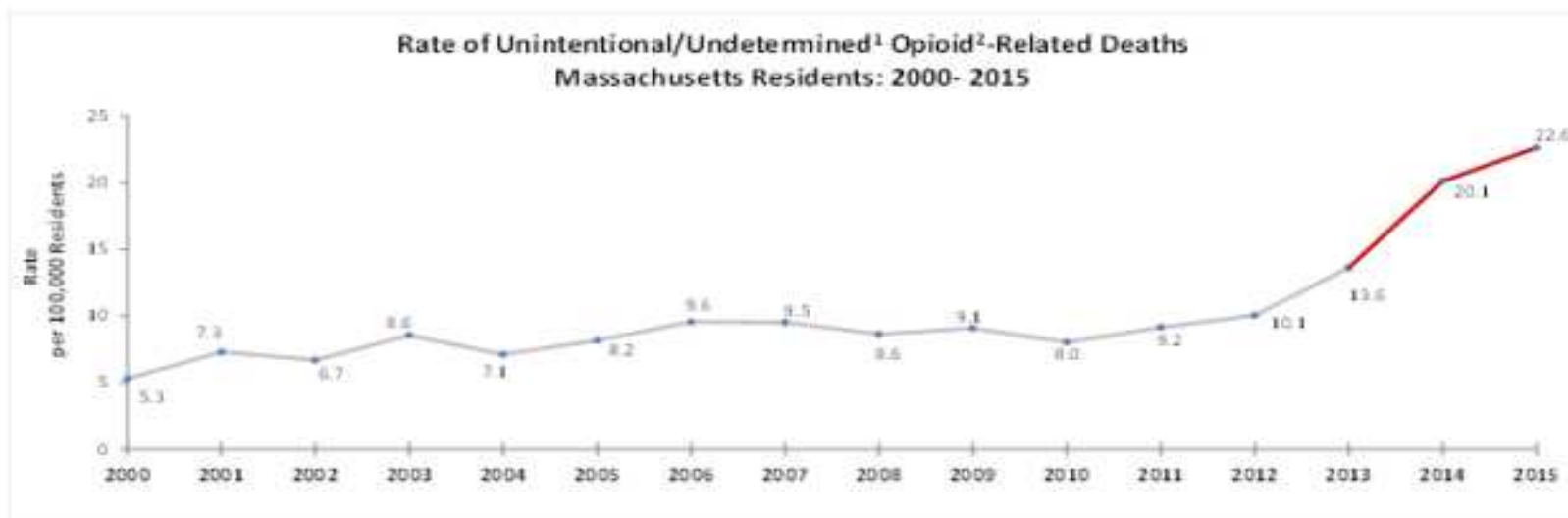
US Census Bureau, December 2012

# Changing Demographics and Health Needs

- Aging of the population (e.g. social isolation & independent living)
- Chronic disease prevalence grows



# Opioid-Related Deaths Increase



# Chief Health Strategist of the Future

**Practice #2:**  
Develop strategies for promoting health & well-being that work most effectively for communities of today & tomorrow



*A Tool for Informed Decision-Making*



The *Community Guide* provides a set of evidence-based recommendations for public health action to improve community health.

The *Community Guide* summarizes what is known about the effectiveness and feasibility of community-based health interventions by conducting systematic reviews of the intervention literature.

# Communicating Success

## EXAMPLES OF RETURN ON INVESTMENTS FOR PREVENTION EFFORTS

Five Strongest  
School-based  
Substance Misuse  
Prevention  
Programs

**3.80:1  
to 34:1**

Community-based  
Nutrition, Activity  
and Tobacco  
Prevention  
Programs

**5.60:1**

Lead Abatement  
Programs

**17:1 to  
221:1**

Supportive  
Housing Programs  
for High-Need  
Patients

**2:1  
to 6:1**

Community Health  
Worker Navigator,  
Referral and Case  
Management  
Programs

**2:1  
to 4:1**

Early Childhood  
Education  
Programs

**4:1 to  
12:1<sup>55</sup>**

Child Asthma  
Prevention  
Programs

**1.46:1  
to 7:1**

WIC Program  
Savings in  
Healthcare Costs  
for Infants

**2:1  
to 3:1**

Nurse Home  
Visiting for  
High Risk Infant

**5.70:1**



# Chief Health Strategist of the Future

**Practice #3:** Identify, analyze, and distribute information from new, big, and real-time data sources

**Data Across  
Sectors** for Health



DASH is a national Robert Wood Johnson Foundation program

# Examples of Creative Data Usage (County Health Rankings/City Health Dashboard)

## Differences in Health Factors within States by Place and Racial/Ethnic Groups

### How Do Counties Rank for Health Factors?

Health factors in the County Health Rankings represent the focus areas that drive how long and how well we live, including health behaviors (tobacco use, diet & exercise, alcohol & drug use, sexual activity), clinical care (access to care, quality of care), social and economic factors (education, employment, income, family & social support, community safety), and the physical environment (air & water quality, housing & transit).



Rank 1-4 Rank 5-7 Rank 8-10 Rank 11-14

# Chief Health Strategist of the Future

**Practice #4:** Build a more integrated, effective health system through collaboration between clinical care and public health



# Widespread Coverage and Value-Based Contracting Expands Prevention Services

**Massachusetts**

**has**

**accepted federal  
Medicaid expansion**

**1,589,897**

Number of people covered by  
Medicaid/CHIP as of July 2018

**302,538**

Increase in the number of people covered by  
Medicaid/CHIP fall 2013 to July 2018

**24%**

Reduction in the uninsured rate from 2013 to 2017

# Chief Health Strategist of the Future

**Practice #5:** Collaborate with a broad array of allies to build healthier and more vital communities

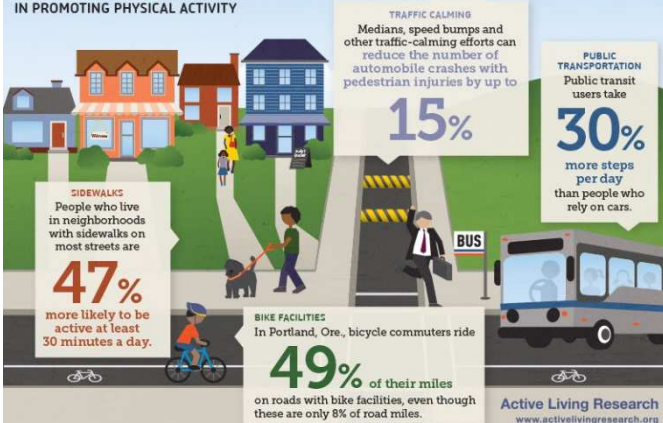


# Social Determinants Of Health: More Widely Recognized

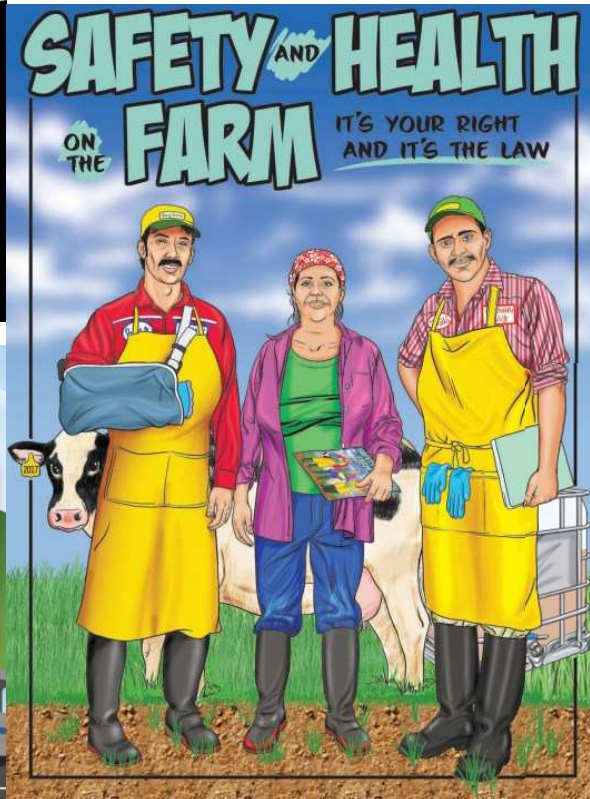
## Social Determinants of Health and Equity

### The Impacts of Racism on Health

## THE ROLE OF Transportation IN PROMOTING PHYSICAL ACTIVITY



Sources: SIDEWALKS: Smith J, Bouillon A, et al. "Neighborhood Environments and Physical Activity among Adults in 11 Countries." American Journal of Preventive Medicine, 36(6): 484-490, June 2009. BIKE LANE: Osi J et al. Bicycling for Transportation and Health: The Role of Infrastructure. Journal of Public Health Policy (2009) 30, 595-610. doi:10.1093/jph/30.6.595. TRAFFIC CALMING: Barr J, Collier T, Frost C, et al. "Area-Wide Traffic Calming for Preventing Traffic-Related Injuries." Cochrane Database of Systematic Reviews (1), January 2003. Lyle K. "Area-Wide Urban Traffic Calming Schemes: A Meta-Analysis of Safety Effects." Accident Analysis and Prevention, 33(3): 267-286, May 2001. PUBLIC TRANSPORTATION: Caspersen S. "Public Transit, Obesity, and Medical Costs: Assessing the Magnitude." Preventive Medicine, 44(1): 16-21, January 2008.



## HOUSING & HEALTH

### IMPROVED WATER & SANITATION

reduces diarrhoea related deaths in young children.

### BETTER FLOORING

reduces parasitic infestations, diarrhoea, anaemia and improves cognitive development.

### BETTER VENTILATION

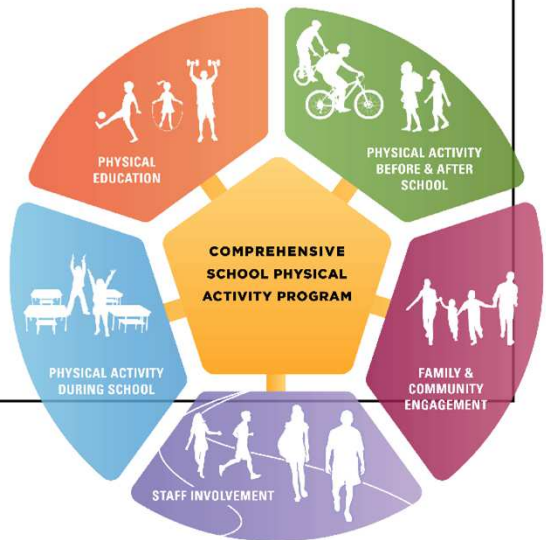
means fewer eye and lung irritations and smoke related diseases.

### HEALTH

improves with reduced rates of malaria, respiratory infections and gastrointestinal illnesses.

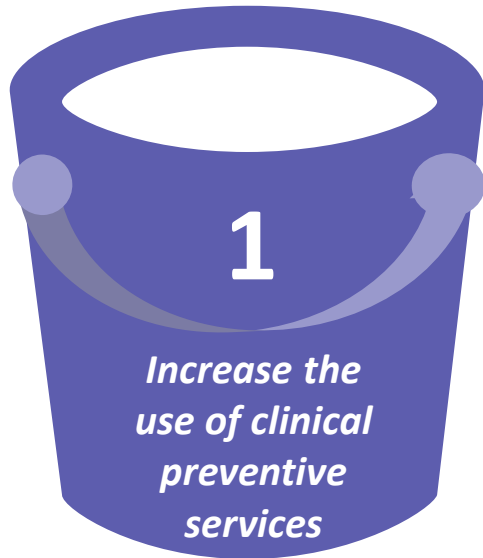
### BETTER ROOFING

reduces dampness which means less respiratory illness.



# The 3 Buckets of Prevention

## Traditional Clinical Prevention



*Health Care*

## Innovative Clinical Prevention



## Community-Wide Prevention



*Public Health*

# Bucket 1: Traditional Clinical Approaches

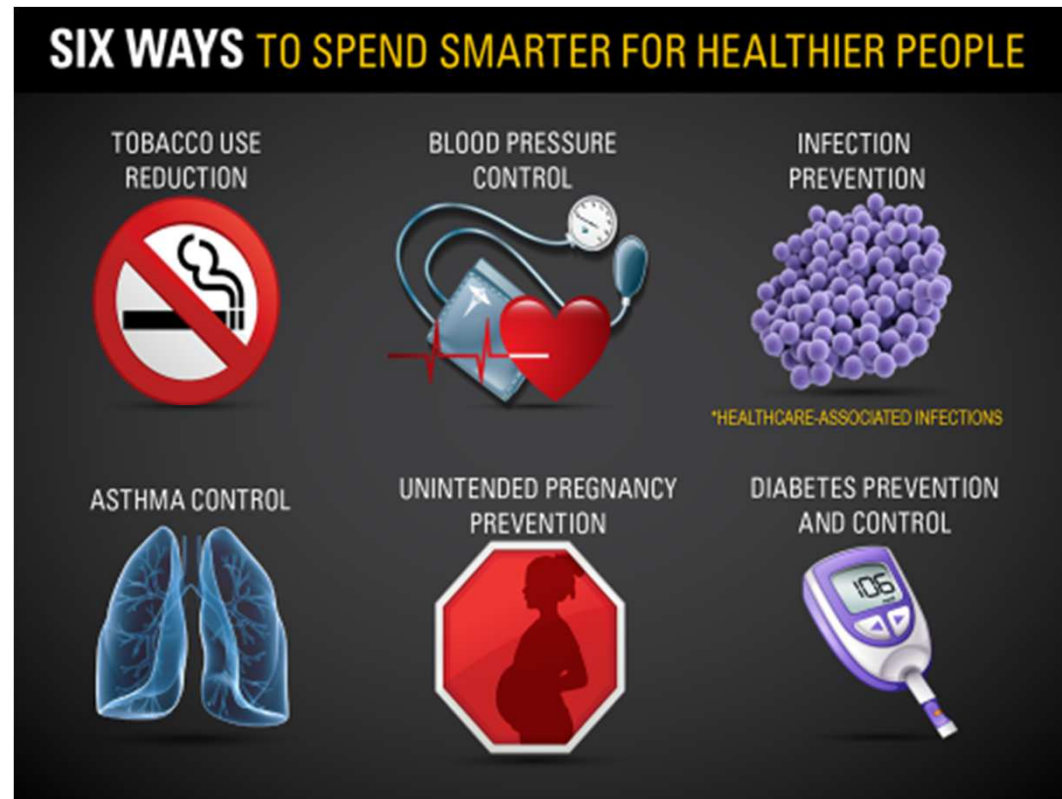
*Focus on Preventive Care*





# Development of 6|18 Initiative

- ❑ Focus on 6 high-cost, high-prevalence conditions
- ❑ Review of CIO evidence-based clinical interventions
- ❑ 18 interventions identified



# **Provide All Tobacco Cessation Meds Without Cost**



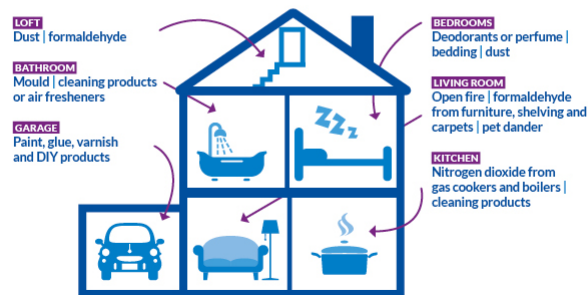
# Bucket 2: Innovative Patient-Centered Care

*Focus on Preventive Care*



# To Address Asthma: Healthy Home Risk Reduction

## Common asthma triggers in the home



## Home visit by CHWs to

- Provide additional education/ encouragement
  - Assess risk factors in the home
  - Assist in removing risk factors

# Bucket 3: Community-Wide Health

*Focus on Preventive Care*



# Health In & Beyond the MD Office

- School-Based Programs to Increase Physical Activity
- School-Based Violence Prevention
- Safe Routes to School
- Motorcycle Injury Prevention
- Tobacco Control Interventions
- Access to Clean Syringes
- Pricing Strategies for Alcohol Products
- Multi-Component Worksite Obesity Prevention

Counseling and Education

Clinical Interventions

Long Lasting Protective Interventions



## Changing the Context

Making the healthy choice the easy choice

- Early Childhood Education
- Clean Diesel Bus Fleets
- Public Transportation System
- Home Improvement Loans and Grants
- Earned Income Tax Credits
- Water Fluoridation



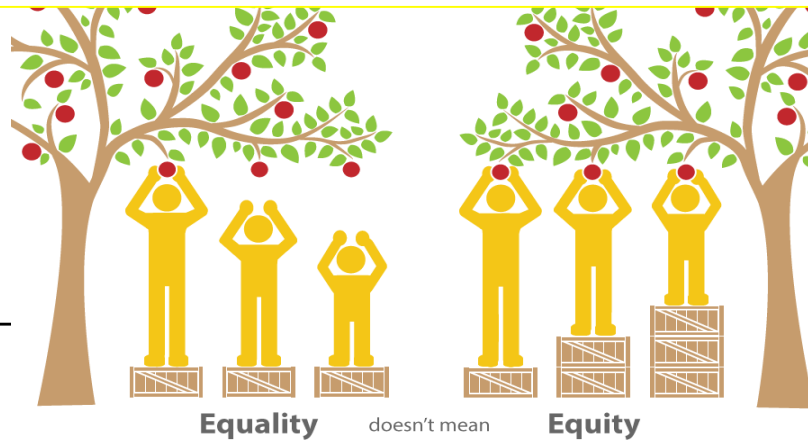
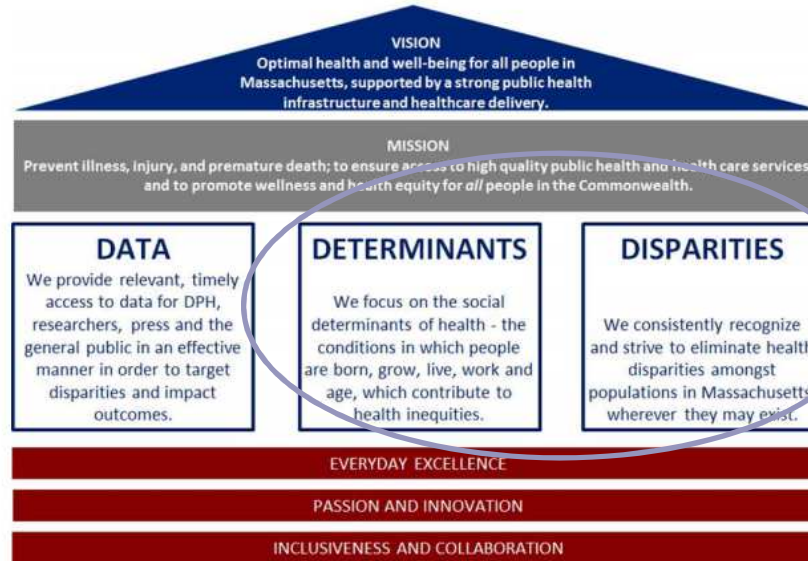
## Social Determinants of Health

# HI-5



HEALTH **IMPACT** IN 5 YEARS

# Optimal Health for all With Equity Focus



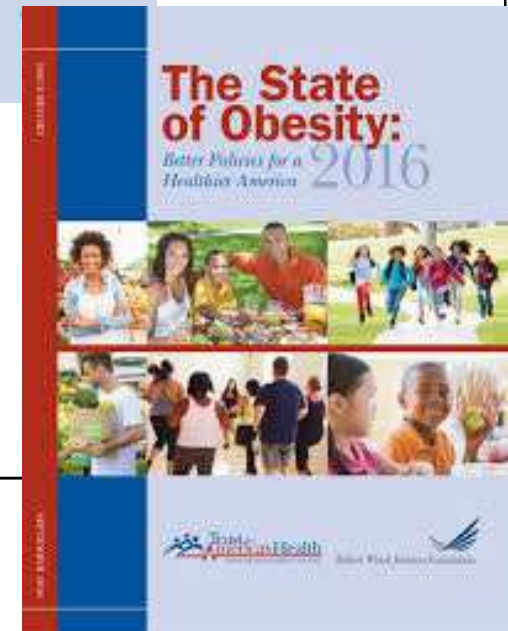
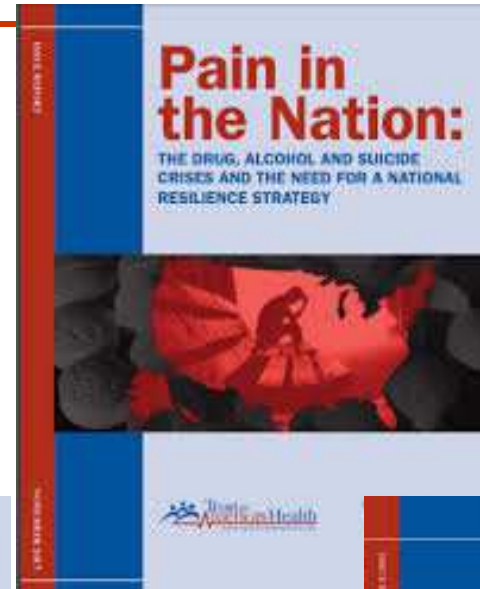
# What's The National Response ?







# Educational Reports for Policy Makers



# Congressional Visits and Briefings

- ❑ The Public Health Response to the Recent Hurricanes  
October, 2017
- ❑ Obesity – November, 2017
- ❑ Lead Poisoning – October, 2017
- ❑ Emergency Preparedness –  
March & June, 2017



# Executive Branch Visits and Briefings



# Critical CDC Public Health Investments are at Risk:

## The Impact in Massachusetts

Total Amount to Massachusetts:

\$17,106,585

329 jobs

Are estimated as supported by these funds annually\*

\$4,624,238

to support  
**vaccines for  
needy children  
and adults**

\$4,372,600 to

the Department of  
Public Health for  
**core state-  
identified needs**

\$961,559 in

infectious disease  
prevention  
**including health  
care-associated  
infections**

\$5,118,704 in

chronic disease  
prevention  
**including diabetes,  
heart disease and  
stroke, and  
tobacco cessation**

\*Evidence-based health economic formula utilizing state-specific personnel costs and impact variables

\*\*Dollar amounts come from publicly available governmental data on the Prevention Fund and the grants it supports

### Adults Who Had a Cholesterol Screening

### % of Adults Who Currently Smoke

Rate	State	US Representative (District)	Rank	Rate	State	US Representative (District)
<b>81.5</b>	<b>USA</b>			<b>17.5</b>	<b>USA</b>	
84.7	Maryland	Jamie Raskin (MD-8)	1	7.9	Utah	Jason Chaffetz (UT-3)
84.4	New Jersey	Leonard Lance (NJ-7)	2	8.3	California	Ro Khanna (CA-17)
84.2	Florida	Vern Buchanan (FL-16)	3.5	8.8	California	Jackie Speier (CA-14)
84.2	Florida	Daniel Webster (FL-11)	3.5	8.8	California	Zoe Lofgren (CA-19)
84.1	New York	Thomas R. Suozzi (NY-3)	5	9.2	Utah	Mia B. Love (UT-4)
84.1	New Jersey	Josh Gottheimer (NJ-5)	6	9.4	California	Anna G. Eshoo (CA-18)
83.4	New Jersey	Rodney P. Frelinghuysen (NJ-11)	7	9.5	Utah	Chris Stewart (UT-2)
83.4	New Jersey	Christopher H. Smith (NJ-4)	8	9.9	Utah	Rob Bishop (UT-1)
83.1	Massachusetts	William R. Keating (MA-9)	9	10.0	Washington	Adam Smith (WA-9)
83.1	New Jersey	Thomas MacArthur (NJ-3)	11	10.1	California	Eric Swalwell (CA-15)
83.1	Florida	Bill Posey (FL-8)	11	10.1	California	Julia Brownley (CA-26)
83.0	Maryland	Andy Harris (MD-1)	11	10.1	Maryland	Jamie Raskin (MD-8)
83.0	Florida	Lois Frankel (FL-21)	13	10.2	California	Nancy Pelosi (CA-12)
82.8	New York	Kathleen M. Rice (NY-4)	14	10.4	California	Barbara Lee (CA-13)
82.8	Connecticut	James A. Himes (CT-4)	16	10.5	California	Judy Chu (CA-27)
82.8	Massachusetts	Seth Moulton (MA-6)	16	10.5	California	Edward R. Royce (CA-39)
82.7	Florida	Brian J. Mast (FL-18)	16	10.5	California	J. Luis Correa (CA-46)
82.7	Florida	Charlie Crist (FL-13)	18	10.6	California	Mimi Walters (CA-45)

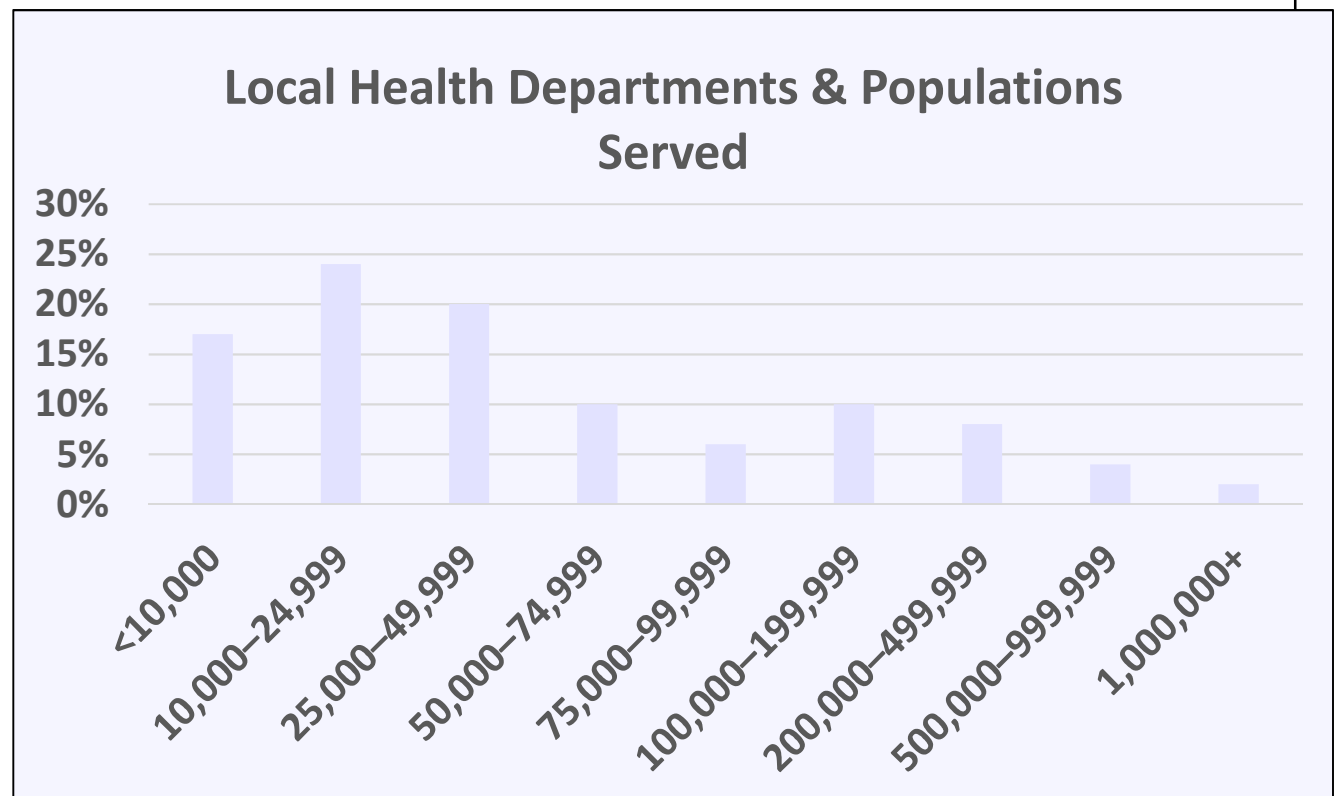
# Easier Said Than Done

## Challenges in Meeting the Needs

40% of HD  
average 4 FTEs

20% average  
15 FTEs

Source: NACCHO. 2013 National  
Profile of Local Health Departments;  
[http://nacchoprofilestudy.org/wp-content/uploads/2014/02/2013\\_National\\_Profile021014.pdf](http://nacchoprofilestudy.org/wp-content/uploads/2014/02/2013_National_Profile021014.pdf)



# You Need Our Support (and Vice Versa)

