Academic Health Department:

Partnership to Improve Delivery of Local Public Health Services

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Our Challenge…..

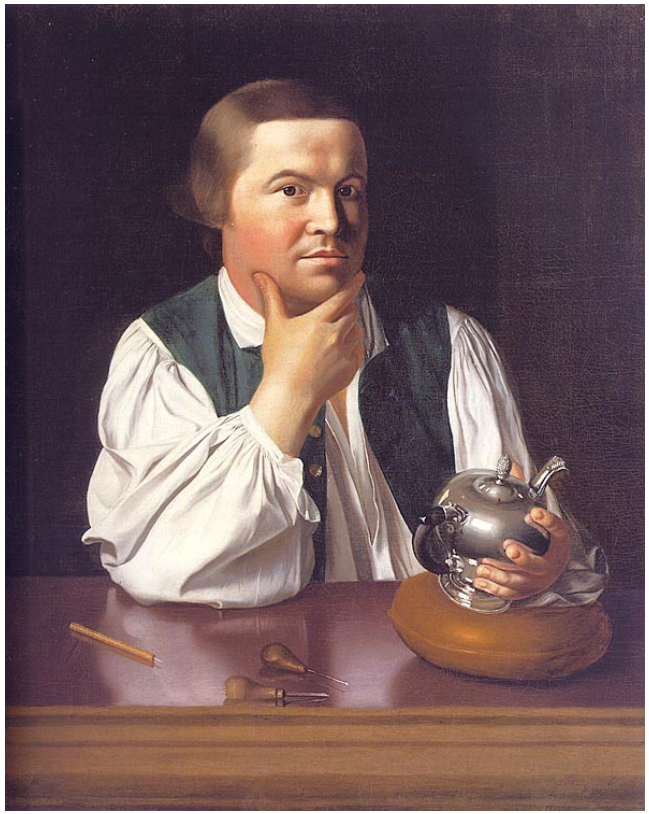
Develop a partnership between an academic institution and practice agency to enhance the ability of both to fulfill their missions.

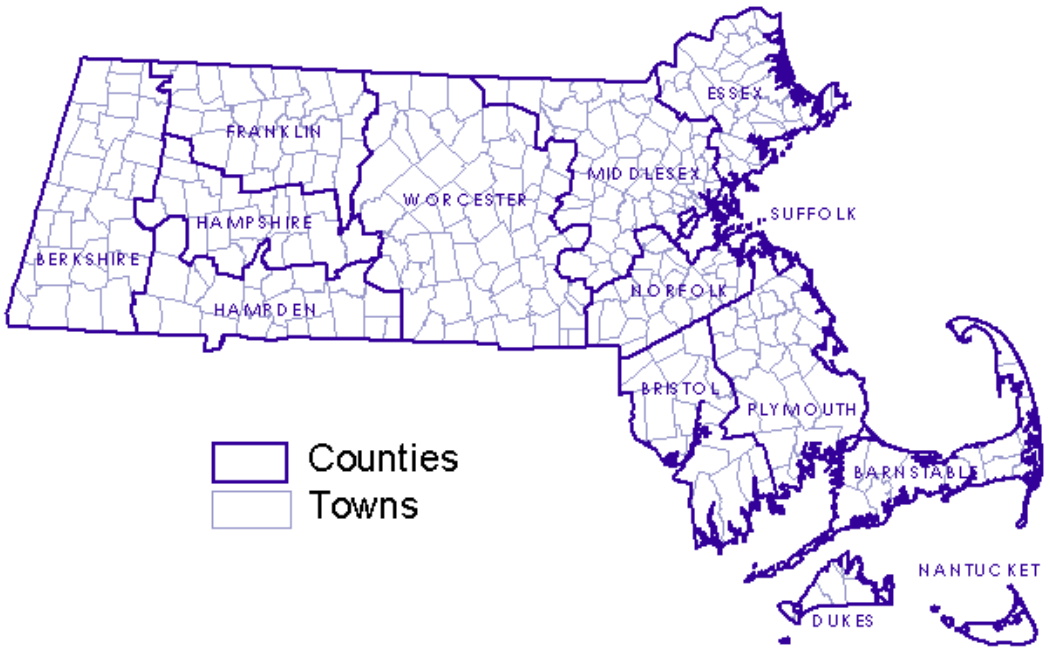
Academic Health Department

- ASPH-funded
- Builds on prior relationship between BUSPH and Cambridge Health Department/Region 4b
- Addresses public health needs of Massachusetts communities

Harold Cox:
a man of many hats….

Local Public Health in Massachusetts

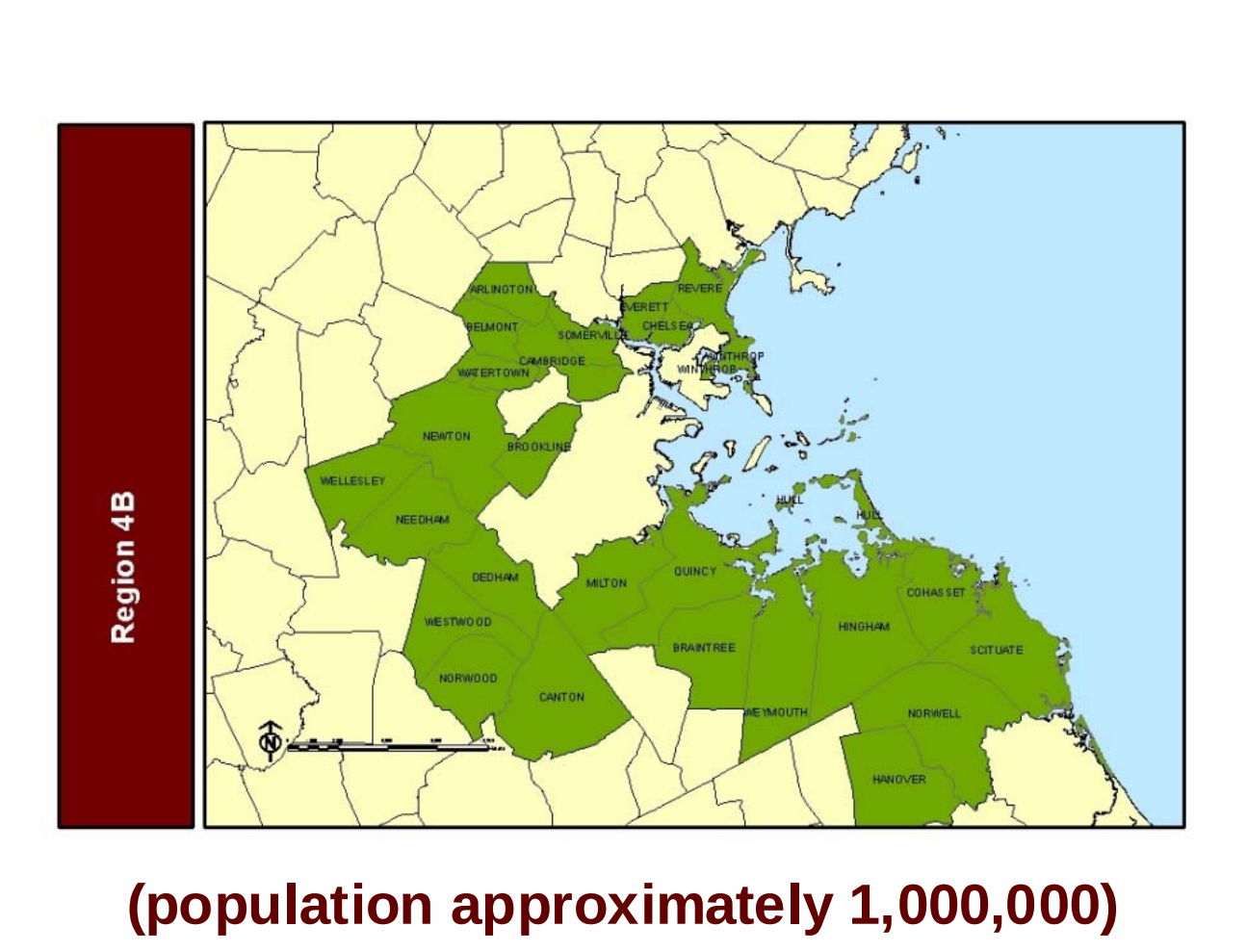




351 cities and towns

351 local health agencies

Emergency Preparedness Region 4b
27 communities surrounding Boston



(population approximately 1,000,000)

Partnership Goals:

- **Goal 1:**
  - **Establish formal affiliation** between Boston University School of Public Health and Cambridge DPH (on behalf of 27 local communities in region)
- **Goal 2:**
  - Combine resources to **build public health capacity to deliver epidemiology services** throughout the region;
- **Goal 3:**
  - **Evaluate AHD Partnership** for quality assurance and possible expansion

Partnership Activities

Goal 1: Formal academic/practice relationship:

- Signed agreement letter / formal subcontract
- Establish Advisory Council
- Share expertise among faculty and practitioners
  - Courses (face-to-face and on-line) for practitioners & students
  - Database for consulting/speakers' bureau
  - Increased practicum/job shadowing/mentoring opportunities for students in LHDs

Partnership Activities

Goal 2: Regional Epidemiology Center

Use partnership to:

- **Address lack of epi expertise across region**
- **Continue efforts to build Regional Epidemiology Center**

Partnership Activities

Goal 2: Regional Epidemiology Center (continued)

- Hired three BUSPH students to work with Regional Epidemologist
- On-line survey and focus groups of local public health nurses to identify community needs
- Collected all available epi data for communities in Region; generated summary reports
- Plans for providing technical assistance during outbreaks

Massachusetts Emergency Preparedness Region 4b

Health Data Watch 2007

Sub-region 1

The Health Data Watch provides a snapshot of the health of Region 4b, focusing on basic demographic characteristics and leading health indicators. Sub-region 1 includes the communities of Cambridge, Chelsea, Everett, Revere, Somerville, and Winthrop.

Demographic Highlights

- Sub-region 1 (11,787 persons/sq mi) is more densely populated than Region 4b (3,825) and Massachusetts (812).
- In sub-region 1, thirty-four percent of persons age 5 and over, speak a language other than English at home, compared to 19% in the state and 22% in Region 4b.
- The median household income is significantly lower in sub-region 1 ($43,488) compared to Massachusetts ($60,602) and Region 4b ($64,344).

Key Health Indicators

- Cancer is the leading cause of death in sub-region 1.
- The rate of alcohol/substance related hospitalizations and opioid-related hospitalizations is higher in sub-region 1 as compared to the State and Region 4b.
- The rate of Chlamydia incidence is higher as compared to the State and Region 4b.
- The incidence of syphilis is almost 2.5 times higher in sub-region 1 than in Massachusetts.
- The rate of asthma-related hospitalizations is significantly less in both sub-region 1 and Region 4b as compared to the State.
- In 2006, Middlesex and Suffolk counties in Region 4b had 90% of days with an Air Quality Index rating of "Good." [12]

Leading Health Indicators

	Massachusetts	Region 4b	Sub-region 1
Leading Causes of Death [1]			
Heart Disease	170.8	145.8*	161.7
Cancer	184.2	171.4*	194.4
Stroke	37.7	33.5	36.9
Top 3 Causes of Cancer Mortality [1]			
Lung	52.4	46.5*	61.5
Breast (Female)	23.0	22.4	25.2
Prostate	21.8	20.6	27.3
Colorectal	17.4	16.1	17.7
Top 3 Causes of Cancer Incidence [11]			
Prostate	162.2	155.0	149.6
Breast (Female)	130.2	136.5	116.3
Lung	70.6	66.5	78.6
Mental Health			
Suicide Deaths [4]	7.0	6.0	6.1
Mental Disorder Deaths [4]	27.5	27.0	33.1
Mental Disorder Hospitalizations [1]	826.2	753.7*	1,073.0*
Perinatal and Child Health [4]			
Births [4]	76,824	11,519	3,993
Low Birth Weight (<2500g or 5lbs 8oz, % by birth weight)	8%	7%	8%
Very Low Birth Weight (<1500g or 3lbs 5oz, % by birth weight)	1%	1%	1%
Preterm Births (<37 wk)	9%	8%	8%
Infant Mortality [1]	5.1	4.5	5.3
Teen Pregnancy (% by age)	6%	3%*	6%
Maternal Smoking During Pregnancy	7%	5%*	5%*
Injuries			
Falls (hospitalizations) [1]	2,749.4	2,408.8	2,370.1
Motor Vehicle Related Hospitalizations [1]	1,323.4	961.2	1,258.9
Weapons Related (ED visits for unarmed or sharp instrument assault) [13]	2,245	173	119
Asthma			
Asthma-Related Hospitalizations [1]	1,016.1	753.4*	693.8*
Substance Abuse			
DPH Funded Treatment Program Admissions [9,1]	103,070	9,548	4,160
Alcohol/Substance Related Hospitalizations [1]	341.2	337.3	479.5*
Opioid-Related Fatal Overdoses [3]	8.2	8.8	11.8
Opioid-Related Hospitalizations [1]	267.2	243.8*	378.1*
Overweight/Obesity			
Obesity Hospitalizations [1]	42.7	34.2*	37.5

Note: The default measure is age-adjusted rate (cases per 100,000 population)
[1] Rate (per 1,000 live births)
[4] Count
* Statistically different from the State

Partnership Activities

Goal 3: Evaluate partnership

- assess success of various components
- monitor progress toward objectives
- involve graduate evaluation students in development of surveys and reports (as practicum and directed study)

What makes partnership work?

- Prior professional relationships among AHD participants
- Mutual ownership of and commitment to the program
- Identification of mutual benefit from collaboration
- Specific do-able project(s)
- Student involvement to enhance skills and increase efficiency in the workplace

What are barriers to collaboration?

- Clear definition & prioritization of project goals
- Differing missions & timetables of academia and practice
- Equitable compensation
- Communicating role of AHD to consumers
- Name “Academic Health Department”

Who benefits from academic/practice collaboration?

- **Agency**:
  - Additional resources to achieve mission
  - Professional develop opportunities for staff (Adjunct faculty appointments)
- **Faculty**:
  - Collaborative opportunities with practitioners in research and teaching activities
- **Students**:
  - Experience in real world
  - Exposure to practitioners in and out of classroom
  - Entrée into field for post-grad opportunities
- **Public**:
  - Access to health information about their community
  - Improved public health infrastructure

Do we want to continue?

YES!

Future efforts may include:

- **Identify new funding!**
- **Training program for a new statewide disease tracking system (MAVEN)**
- **Periodic updated health assessment data reports, environmental health data reports, outbreak investigation teams**