Objectives

- Describe BPHC public health surveillance goals, data sources and analytic capacity
- Review the goals and content of the Health of Boston Report
- Discuss future surveillance priorities
Primary Functions of Research and Evaluation Office

- Public Health Surveillance
- Data Dissemination Services
- Evaluation Services
- Research

- Aligns with 4 essential public health services:
  - Monitor health status to identify community health problems
  - Inform, educate, and empower individuals and communities by providing data about health
  - Evaluate effectiveness, accessibility, and quality of personal and population-based health services
  - Research for new insights and innovative solutions to health problems
BPHC Public Health Surveillance Goals

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

- Dissemination, dissemination, dissemination, and liberation
  - Put data into the hands of those who can and want to use it
  - Trigger other requests for data
BPHC Surveillance Goals, contd.

- Promote variety of data use cases
  - Facilitate and inform public health planning (programs, policies, systems, built environment etc.)
  - Detect and monitor changes in health events and practices
  - Evaluate policies and programs
  - Support grant applications
  - Generate hypotheses and stimulate applied research

- Advocate for access to public health surveillance data
  - 2014 An Act Relative to Public Health Data Sharing
Public Health Surveillance Data

- Boston Behavioral Risk Factor Surveillance System
- Youth Risk Behavior Survey
- U.S. Census
- Vital Records
- Hospital Case Mix
- Other: Infectious Disease, STI, Cancer Incidence, PRAMS, HIV/AIDS Surveillance, Lead Screening, Substance Abuse Treatment, map layers from various agencies/sources
Data Sources

- Receive data from state and local partners

- Challenges include timeliness and quality

- 2014 law was supposed to relieve administrative burden of data sharing with DPH and CHIA
  - CHIA MOU put in place March 2015
Specialized Analytic Tools

- **Boston Population Estimates Project (B-PEP)**
  - Generates intercensal (2001-2009) and postcensal (2011-2016) population estimates
  - Totals by any combination of Race/Ethnicity, Sex, Age, and Neighborhood

- **Boston Health Rate Generator**
  - Age-Adjusted and Age-Specific Rates
  - Statistical Significance Testing of Differences Between two groups or over time (trend analysis)
  - Allows for individual year or combined years analyses
Health of Boston (HOB) Report

- Core part of BPHC surveillance activities, but not the only part of it

- 2009: significant expansion and integration of multiple data sources

- Each year, BPHC has added data sources and stratifications, and made changes based on feedback

- Only includes population data, not program data
HOB Goals

- Assess the health of Boston residents, and
- Share information with those who can use it (e.g., community-based organizations, hospitals, CHCs, academic partners, etc.)
Positive Feedback on HOB

- Identified as a valuable resource by partners across many sectors (see Local Public Health System Assessment)
- Provides comprehensive, stratified surveillance data from multiple sources
- Focus on social determinants and health equity helps shape and support the work of BPHC and its external partners
- Helps partners to understand what data are available and generates data requests
- Technically sound
Opportunities for Improvement

- Data time lag; some data 2-3 years old
- Not interactive; static
- Web presence is extremely limited
- Desire for additional stratifications or geographic cuts; deeper dives
- Dense report: too much information, a lot of data packed into a single report
2017 Report

Will be released in April 2017

- New layout, leveraging in-house BPHC graphic designer
- Policy perspectives on key health issues from thought leaders/experts in the field
- Program perspectives from BPHC programmatic leaders
- Community Perspectives from Boston residents with personal experiences with particular health issues.
- Additional domains: Community Assets, Environmental Health, Injury
- Continued focus on health equity and SDOH
- Additional geographic analysis and more maps
- Use of infographics to make data more visually appealing
Key domains

- Health Equity
- Demographics
- Social Determinants of Health
- Community Assets
- Environmental Health
- Access to Care
- Maternal and Child Health
- Health-related behaviors
- Chronic Disease
- Cancer
- Infectious Disease
- Sexual Health
- Injury and Exposure to Violence
- Mental Health
- Substance Use Disorders
- Death
Looking forward...

- Embrace technology to improve access to timely and relevant local data
- Build informatics infrastructure and capacity across the BPHC
- Web-based portal for internal and external data access
  - All available data including state data sets, syndromic surveillance, EMS, program data
  - Need to ensure appropriate analytics
    - Methodological rigor is critical
  - Provide multiple stratifications, geographically granular
  - Features may include data visualization: e.g., mapping tool
Q&A