Local Health Departments are preparing for the Health Effects of Climate Change

Boston Public Health Commission, Massachusetts

Background
The Boston Public Health Commission (BPHC) is the Department of Health for the City of Boston. The BPHC’s mission is to protect, preserve, and promote the health and well-being of all Boston residents, particularly the most vulnerable.

Boston is the capital city of Massachusetts, the largest city in New England, and makes up the majority of Suffolk County, MA. It is a relatively dense city (estimated 667,137 residents in a 48 square mile area), comprised of 16 culturally diverse neighborhoods containing many sub-populations. As one of America’s gateway cities, Boston has a large population of recent immigrants with 26 percent of residents born outside the United States.

Historically, mixed zoning has meant that many areas of the city outside of the downtown core include businesses of all sizes interspersed with residences, particularly in the lower income communities of color that have been identified as environmental justice communities. Boston is home to several major institutes of higher education (Boston University, Northeastern University, Berklee College of Music, Tufts University School of Medicine, etc.) and prominent medical institutions (Dana Farber Cancer Institute, Massachusetts General Hospital, and Beth Israel Deaconess, to name just a few) as well as cultural and historic sites such as the Old North Church, Paul Revere’s House, and Fenway Park.

Climate Change:
As a coastal city, sea level rise and flooding associated with storm surge is a top climate change impact of concern for Boston. We’ve already experienced early impacts of this in localized flooding and major storm events. One larger roadway near the coast is notorious for flooding during larger storms. Additional climate change concerns that we’re beginning to see emerge include:

- Increasing summer temperatures and an increased numbers of heat wave days – From a public health perspective, we’re concerned both with providing adequate emergency cooling resources for the elderly, the homeless, and other vulnerable populations during heat waves, as well as the additional impacts of longer hotter summers, such as increasingly frequent cyanobacteria blooms in our urban waters;
- Increased severity of both summer and winter storms – Storms appear to be increasing in severity. The older trend of multiple winter snowstorms that deposit a few inches seems to have been replaced in recent years with a single major blizzard that drops over a foot of snow or an ice storm that can cause major infrastructure damage. Both of these present public health challenges, including providing emergency services and protecting medically vulnerable individuals; and
Expanding vector-borne illness – West Nile Virus and other vector-borne illnesses have been a continually emerging and evolving public health concern in the Boston area with annual monitoring and mosquito control efforts which have expanded as the mosquito season has expanded.

Goal

Because of the widespread impact that climate change can have and the diverse nature of the agencies and populations that can be affected, BPHC has two broad goals related to climate change. The first is to integrate considerations of public health, environmental justice, and particularly vulnerable populations into all aspects of City policy related to climate change mitigation and adaptation. The second is to develop and maintain a robust infrastructure for public health response to natural disasters.

Objectives

- BPHC is committed to leading by example organizationally both for other city agencies and the public through our own efforts to mitigate our impact on climate change
- BPHC has set a Health in All Policies objective to integrate consideration of public health into the broader scope of all City policies beyond our own internal processes
- BPHC strives to maintain a world class emergency response and preparedness public health infrastructure able to respond to climate-related and other public health emergencies, including the Stephen M. Lawlor Medical Intelligence Center

Achievements and Successes

- In 2001 BPHC was the first city agency to purchase hybrid vehicles, which led the way for Boston’s current vehicle fleet made up almost entirely of hybrid vehicles
- BPHC was a leading force in the city’s Clean Air Cabs program launched in 2006 to replace a significant portion of the city’s licensed taxi cabs with hybrid vehicles
- In pursuit of the Health In All Policies objective, BPHC has worked diligently to integrate public health into larger City discussions around climate change
- BPHC played a significant role in developing the City’s first greenhouse gas emissions inventory and climate action plan
- BPHC Chronic Disease Division has helped implement physical activity and injury prevention into citywide policies, including Boston’s Complete Streets program (http://bostoncompletestreets.org/about/)
- The BPHC’s Office of Public Health Preparedness manages the Get Ready, Be Safe, Stay Healthy community preparedness program and, along with the BPHC’s Environmental & Occupational Health Division, participates regularly in citywide multi-agency climate change adaptation planning efforts.

FOR MORE INFORMATION, PLEASE CONTACT:

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