

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

Virginia Department of Health Portsmouth Health District in Hampton Roads Region • Portsmouth, Virginia

Background

Virginia has a population of about 8.5 million, with the primary population centers also being the areas of population growth. These include the Washington D.C. Metro area (Fairfax County, Loudon County, Prince William County, Cities of Alexandria and Arlington), the Richmond City Metro Area (Chesterfield County, Henrico County, and City of Richmond), and the Hampton Roads Metro Area (Cities of Virginia Beach, Norfolk, Hampton, Chesapeake, Newport News, Portsmouth, Suffolk, and Williamsburg.)

Hampton Roads is a region of approximately 2 million located in Southeast Virginia. It includes beach destinations such as Virginia Beach, large military installations such as the largest Naval Base in the world in Norfolk, and commuter-suburban communities such as Chesapeake and Suffolk. Geographically, it is located at the intersection of several rivers and at the opening of the Chesapeake Bay.

Due to the geography, the Hampton Roads area has been deemed the 2nd most vulnerable location in the nation, after New Orleans, in terms of effects of sea level rise due to climate change. In addition,

the region is immediately North of the Outer Banks of North Carolina, and is at risk of the environmental impacts of hurricanes and other storms, such as extreme flooding. Successfully preparing for evacuation of the whole region that is linked together by bridges and tunnels has been problematic.

Climate change has also had an impact on the region's economy. As the region depends heavily on aquaculture and agriculture, changes in water temperature have increased the number of Vibrio outbreaks among shellfish harvested in the Chesapeake Bay resulting in the closure of whole harvesting areas for a seasons at a time. Additionally, mosquito-borne and tick-borne vectors have also migrated into the region due to environmental changes. The region has seen high number of EEE, WNV, and Chikungunya Virus disease over the past several years.

Mitigation of these environmental challenges has been limited primarily to addressing sea level rise and flooding in the region and the economic impact that will have on business development and the military bases.

GOAL

Increase awareness of the health and public health impacts of climate change, sea level rise, and flooding in the region; involvement of public health in discussions regarding mitigation and adaptation (discussions predominantly involve federal government partners in the military, large business owners, city elected leadership, and academic partners currently).

Objectives

- Partner with Old Dominion University's Mitigation and Adaptation Research Institute (MARI) in introducing public health impacts into the discussions regarding climate change in the region
- Provide internal training on climate change and the Health Department's role in local climate change initiatives
- Increase the knowledge base of local health departments and all community partners regarding the public health and long term consequences of climate change
- Expand surveillance activities related to mosquito-borne and tick-borne diseases
- Convene a steering committee to identify capacity and funding needs

RESOURCES:

[*The Policy Climate for Climate Change in Virginia: Overview of Adaptation Policy, Planning, and Implementation Landscape \(2013\)*](#)
[*Mitigation and Adaptation Research Institute – Old Dominion University*](#)



FOR MORE INFORMATION, PLEASE CONTACT:

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The mission of the National Association of County and City Health Officials (NACCHO) is to be a leader, partner, catalyst, and voice with local health departments.

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