



#ClimateChangesHealth

# Northeast CLIMATE AND HEALTH

## BACKGROUND

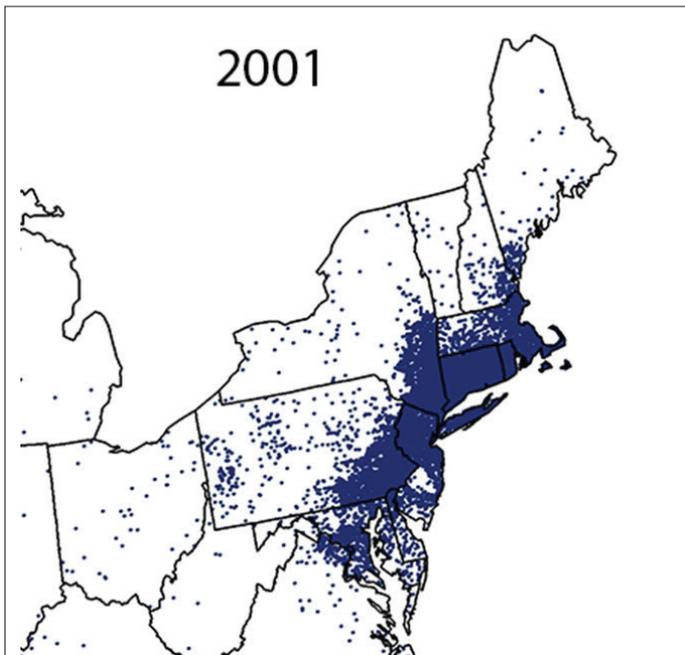
Burning fossil fuels, such as coal and gas, releases carbon dioxide. CO<sub>2</sub> builds up in the atmosphere and causes Earth's temperatures to rise. This extra, trapped heat disrupts many of the interconnected systems in our environment, posing risks to human health. Some impacts of climate change are already being felt throughout the United States. We need to safeguard our communities by protecting people's health from the effects of climate change.

## ISSUE SUMMARIES

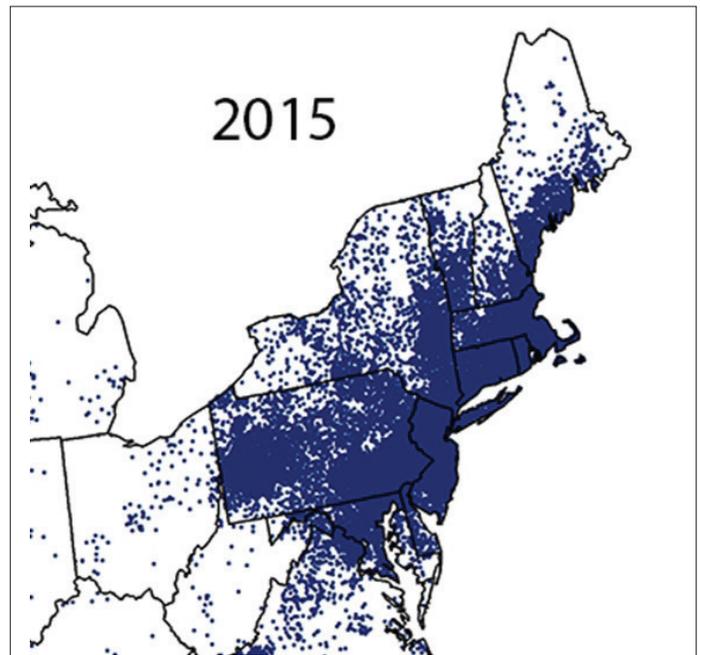
### VECTOR-BORNE DISEASE

Climate change increases the risk of diseases spread by vectors such as fleas, ticks and mosquitoes. Warmer than average temperatures make previously unaffected regions new habitats for these disease-carrying organisms. In particular, mosquitos carrying West Nile Virus and ticks carrying Lyme disease have expanded their geographic ranges, resulting in disease transmission in previously unaffected areas.

**LYME DISEASE CASES  
IN THE NORTHEAST, 2001**



**LYME DISEASE CASES  
IN THE NORTHEAST, 2015**



Source: The Centers for Disease Control and Prevention

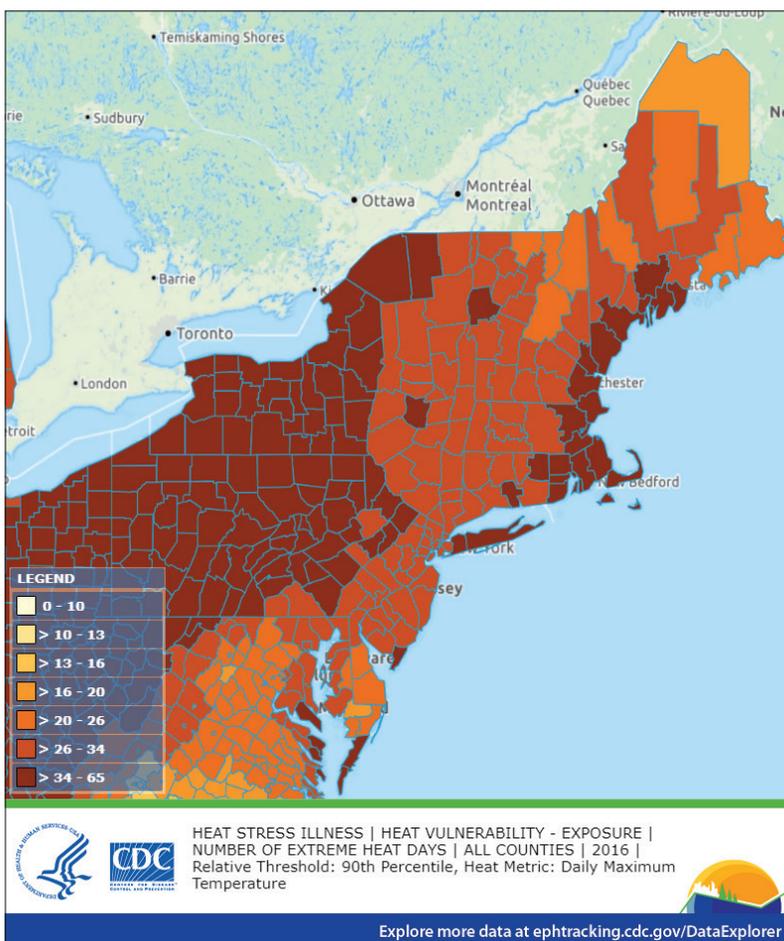
## FLOODING AND WATER QUALITY

Heavy rain, worsened by climate change, contributes to severe flooding and sewer overflows. Floodwaters can be contaminated by agricultural waste, chemicals and raw sewage that can carry harmful bacteria, viruses and parasites. Flooding and poor water quality can lead to injury and illness.

## EXTREME HEAT

Extreme heat leads to increased hospitalizations and, sometimes, fatal health events. Children, the elderly, people with chronic diseases, low-income populations and outdoor workers are at the highest risk for heat-related illnesses. Extreme heat is also linked to increased aggression, raising the incidence of assaults, murders and suicides.

### NUMBER OF EXTREME HEAT DAYS, 2016



Source: The Centers for Disease Control and Prevention

## FAST FACTS



**In 2013, there were 133 deaths due to extreme heat** in New York City.



**By 2090, there will be 490 additional cases of West Nile Virus** per year in the Northeast.



**Increased risk of campylobacteriosis and salmonella has been documented in Maryland** due to increased heavy precipitation.



**Since the early 1990s, reported cases of Lyme disease in the U.S. have tripled**, to about 30,000 cases each year.



After Hurricane Sandy impacted the entire eastern seaboard, **11 billion gallons of untreated and partially treated sewage flowed into rivers, bays, canals and city streets.**