



# Climate change adaptation by city and state health departments

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## INTRODUCTION

The public health impacts of climate change are widely covered in scientific literature.

The U.S. Environmental Protection Agency identifies 3 climate-induced threats to human health:

- Increased frequency and intensity of **extreme weather events**;
- Increased prevalence of **climate-sensitive, vector-borne diseases** (i.e. West Nile Virus);
- Decline in **air quality**, and increase in prevalence of smog events (EPA, 2009).

Additionally, researchers confirm a correlation between a correlation between socioeconomic position (SEP) and exposure to environmental pollutants (O'Neill et al., 2003).

As such, less affluent are predicted to be the most vulnerable to the aforementioned public health impacts. In producing climate change adaptation policies and programs, the New York City and State health departments must be cognizant of such at-risk groups.

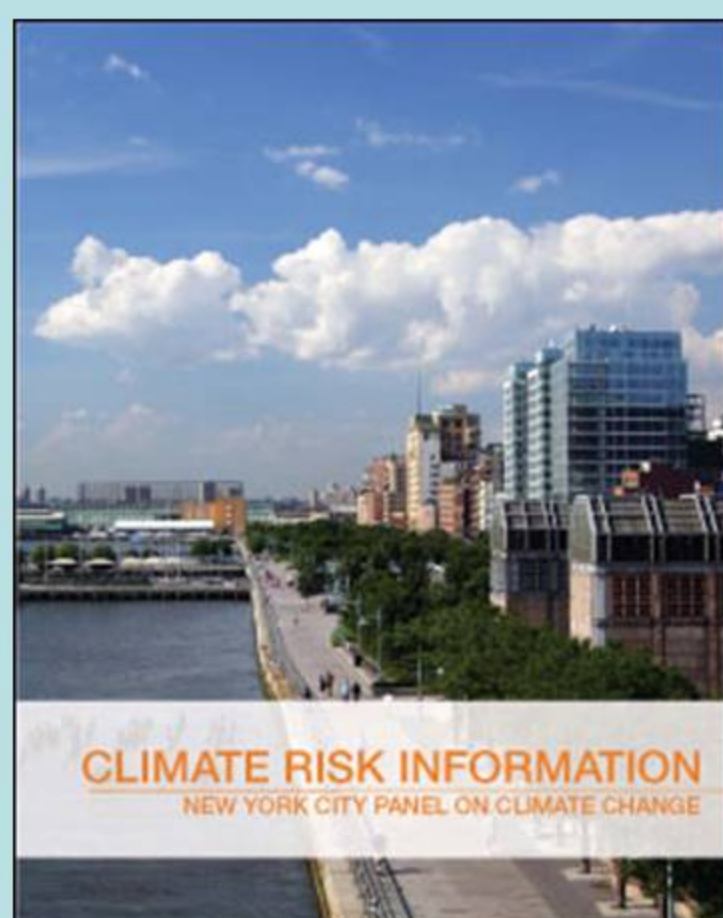
Upon performing a comprehensive survey of the programs and policies adopted by other U.S. city health departments, those of Seattle and Chicago were deemed to have the most potential with regards to vulnerable populations.

Through the use of in-depth case studies, this project aims to produce a set of policy recommendations to be presented to city and state health departments to better ensure climate change adaptation policy is inclusive of such vulnerable populations.

## CASE STUDIES

### 1: New York City

Climate change adaptation policies in New York City seem to focus solely on the physical impacts, namely, flooding from rises in sea level.



In the *Climate Risk Information* report released by the New York City Panel on Climate Change (2009), the risks associated with climate change are reported to be sea level rise and flooding, extreme weather, and changes in precipitation; notably missing from this list are the indirect social impacts, including those associated with public health.

Additionally, under the PlaNYC initiative to “work with vulnerable neighborhoods to develop site-specific protection strategies”, workshops have been conducted in a number of neighborhoods judged to be the most vulnerable to climate change. These neighborhoods, however, are judged to be “vulnerable” solely due to rises in sea level, and not due to public health.

## CASE STUDIES (CONT'D)

### 2: Chicago, IL

While the Chicago Climate Action Plan, the city's equivalent to PlaNYC, focuses solely on climate change mitigation, as opposed to adaptation, the city's has an **Extreme Weather Operations Plan** that has been commended by the American Medical Association has hailed as a model for other cities. The plan goes into effect when the national weather service officially declares a heat watch, upon which a wide number of city departments and offices—including but not limited to the Department of Aging, the Housing Authority, the Transit Authority, and the Department of Human Services—are charged with various tasks to ensure that casualties among the city's most at-risk and hard-to-reach are minimized.

### 3: Seattle & King County, WA

The greater Seattle area is commendable all-around in terms of its public health response programs; most notable is the King County Public Health's Vulnerable Populations Action Team (VPAT). Though originally formed with a focus on influenza pandemic planning, the program now spans a wide variety of emergencies, coordinating countywide preparedness efforts through collaboration with a wide variety of community partners. With a vision to “ensure that no one group is more impacted than another in an emergency”, the program aims to “assure access to public health preparedness, response and recovery information and services for the most at-risk and hardest-to-reach residents in King County... through mutually respectful relationships with vulnerable communities and the organizations that serve them”.

## CONCLUSION

Though the initiative to work with vulnerable populations under PlaNYC is commendable, the city must work to also consider the public health effects of climate change. At present, the public health response programs in New York City are criticized as being “fragmented and reactionary” (McCormick, 2007). The city must work to produce an emergency response plan much like Chicago's in order to create an effective public health response to the effects of climate change, while working to create and maintain communication channels as in Seattle's Vulnerable Populations Action Team.

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