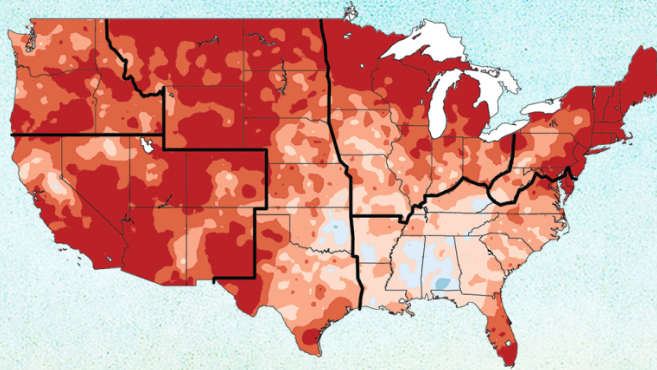


Third National Climate Assessment

Climate Change Impacts in the United States



Marie O'Neill
June 24, 2014



GlobalChange.gov
U.S. Global Change Research Program



Human Health

<http://nca2014.globalchange.gov/report/sectors/human-health>

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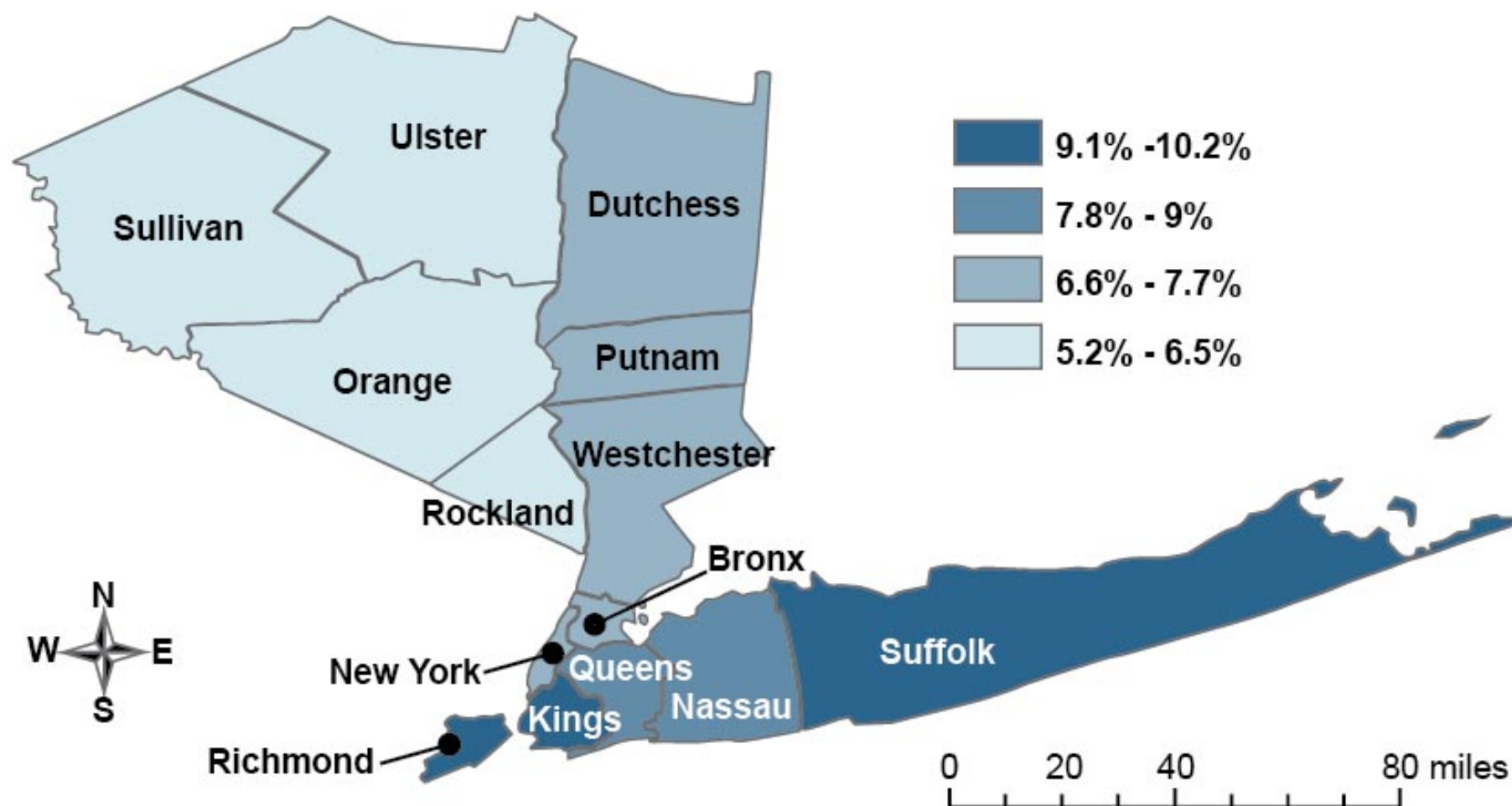


Wide-ranging Health Impacts

Climate change threatens human health and well-being in many ways, including impacts from increased extreme weather events, wildfire, decreased air quality, threats to mental health, and illnesses transmitted by food, water, and disease-carriers such as mosquitoes and ticks. Some of these health impacts are already underway in the United States.

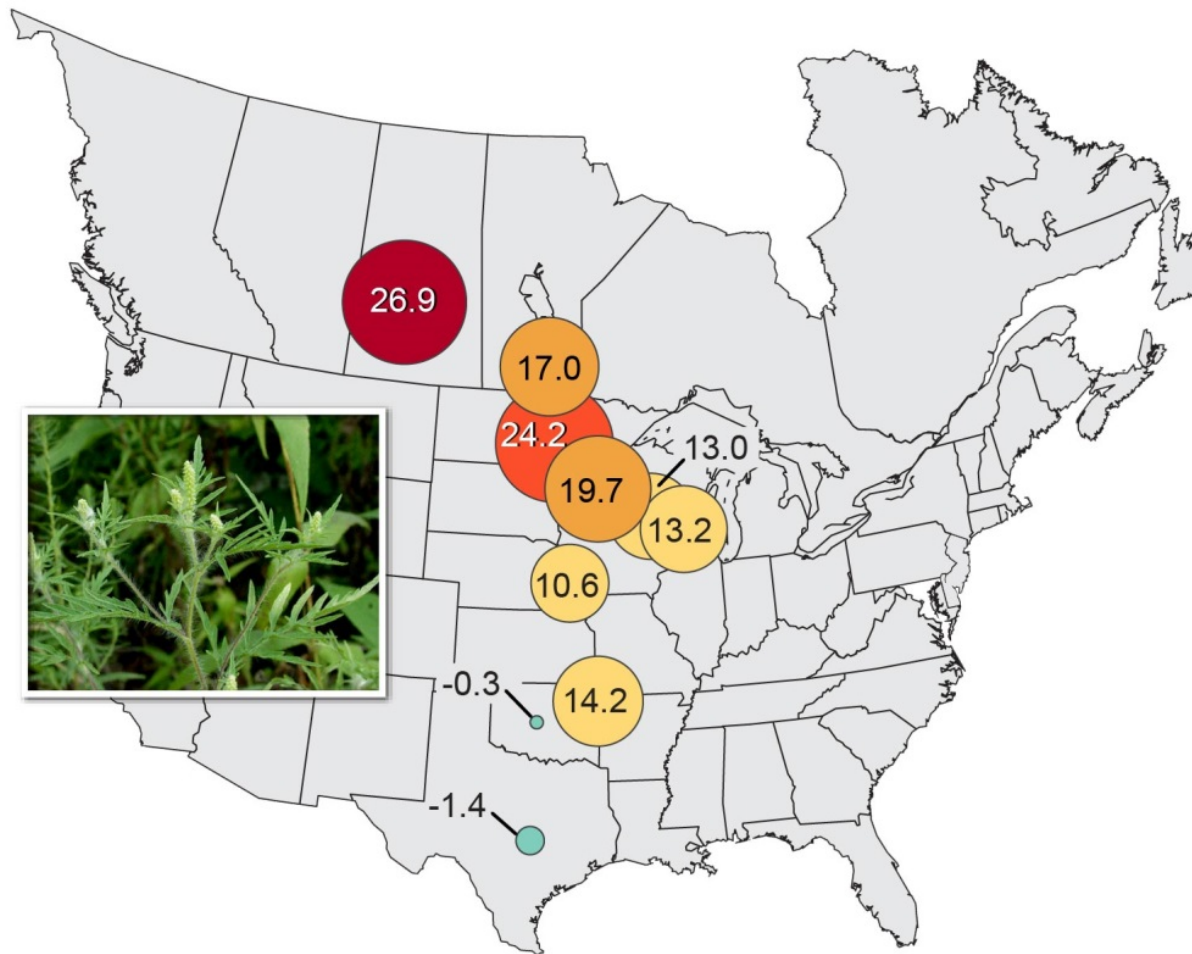


Climate Change Projected to Worsen Asthma





Ragweed Pollen Season Lengthens



Change in Ragweed Season Length (Days)



<0.0



0.0-4.9



5.0-9.9



10.0-14.9



15.0-19.9



20.0-24.9



>25.0



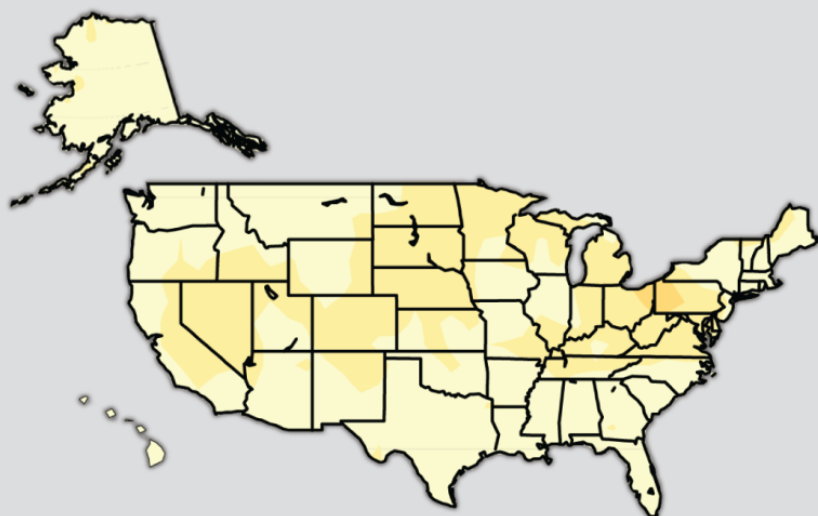
Wildfire Smoke has Widespread Health Effects



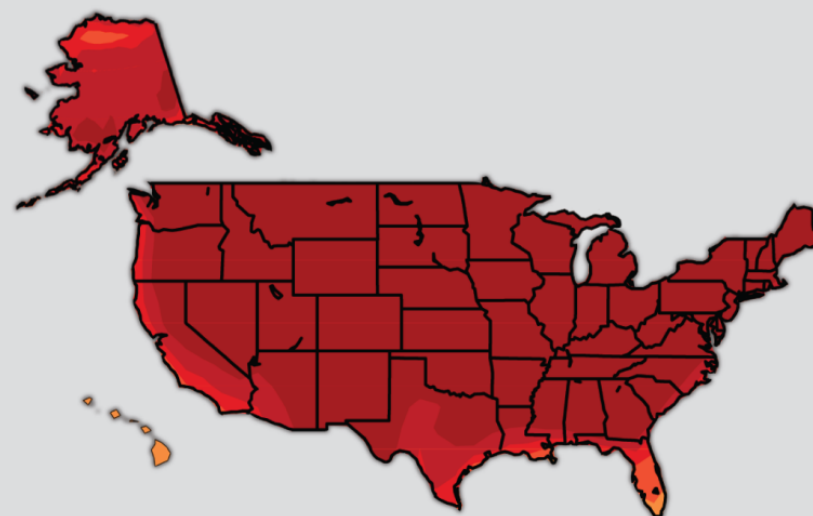


Projected Temperature Change of Hottest Days

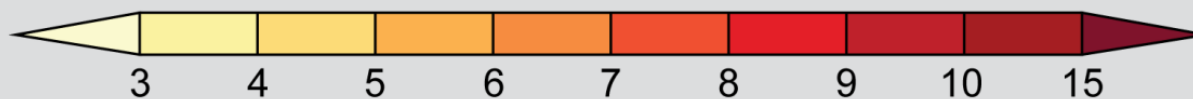
Rapid Emissions Reductions (RCP 2.6)



Continued Emissions Increases (RCP 8.5)

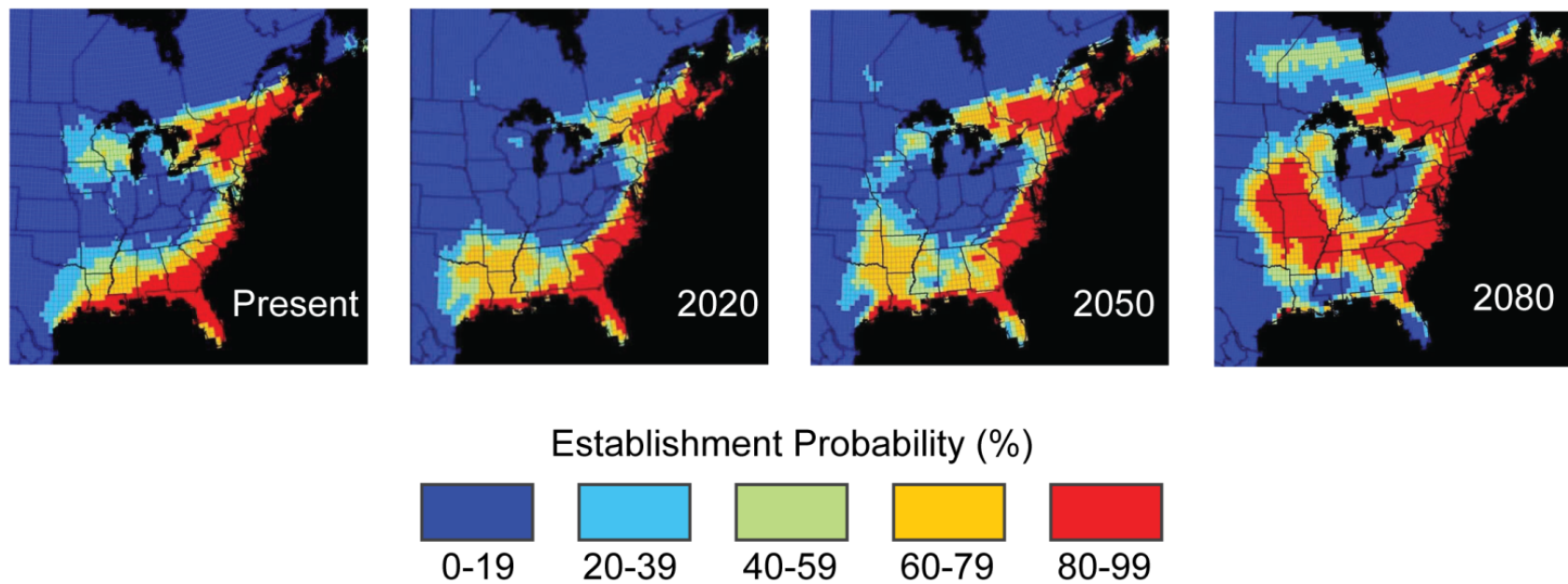


Temperature Change (°F)





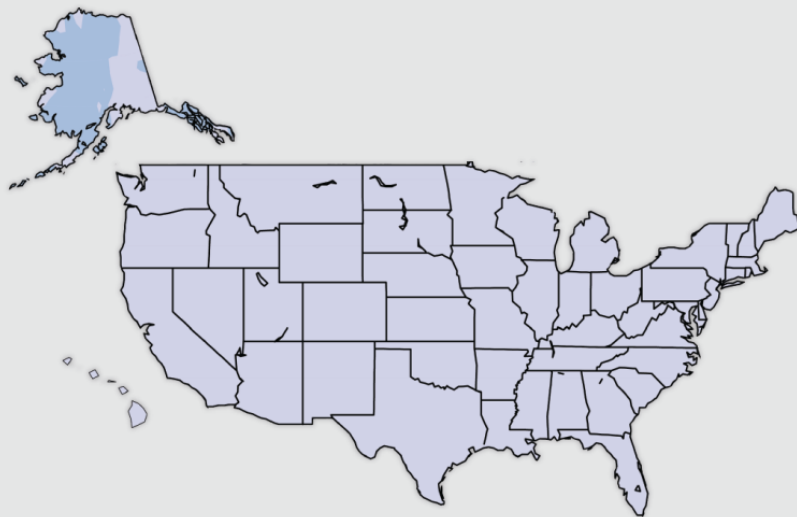
Projected Changes in Tick Habitat



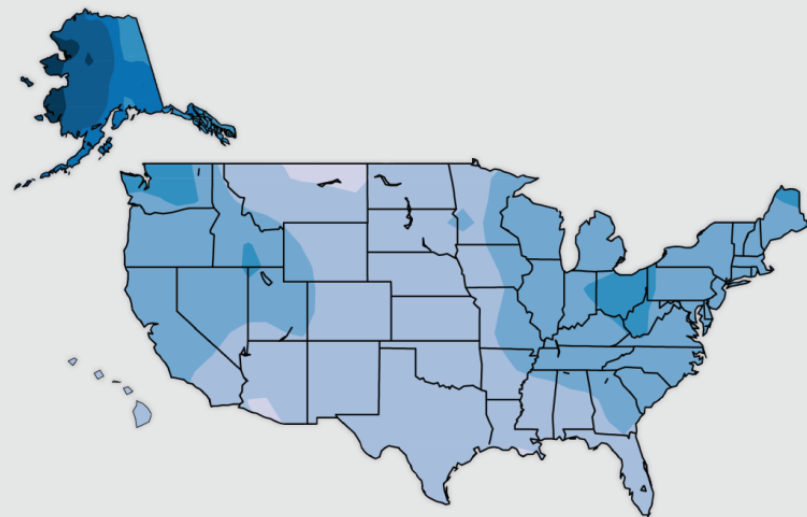


Projected Change in Heavy Precipitation Events

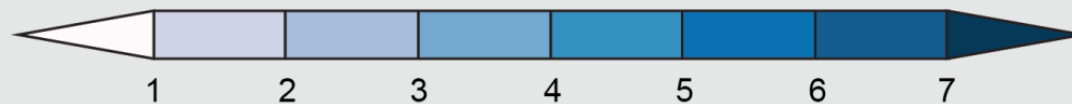
Rapid Emissions Reductions (RCP 2.6)



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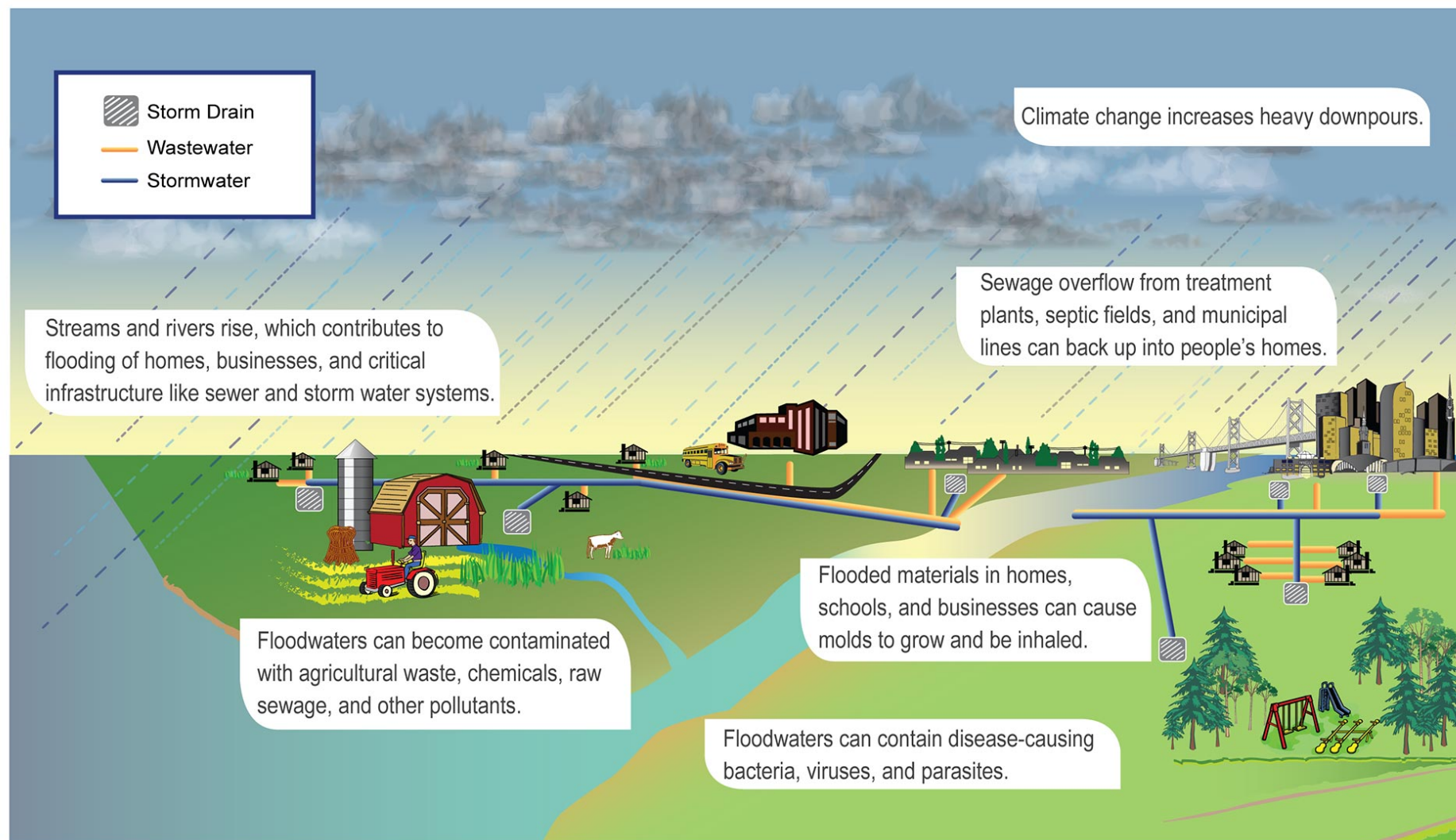


Future Change Multiplier





Heavy Downpours are Increasing Exposure to Disease





Harmful Bloom of Algae



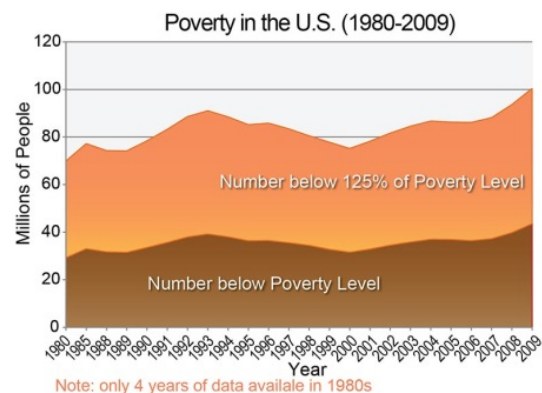
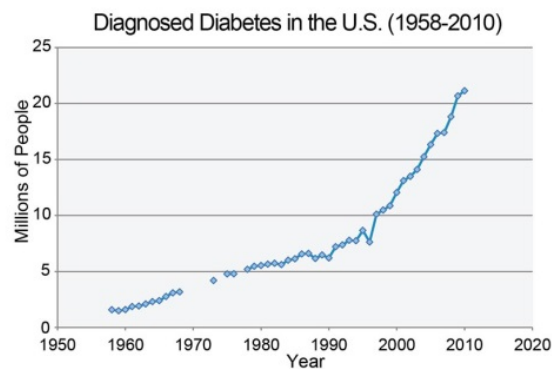
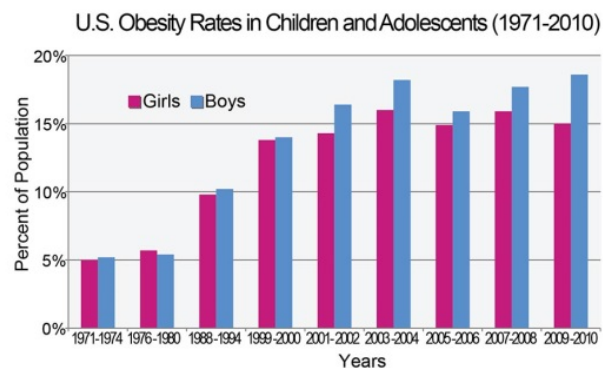
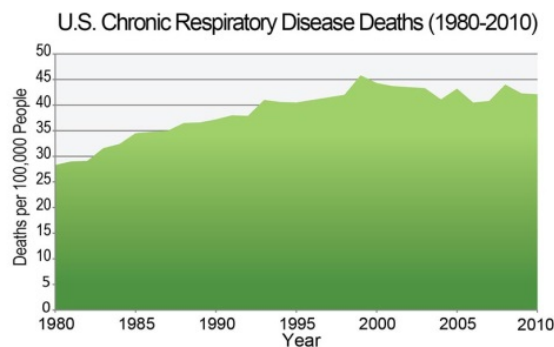
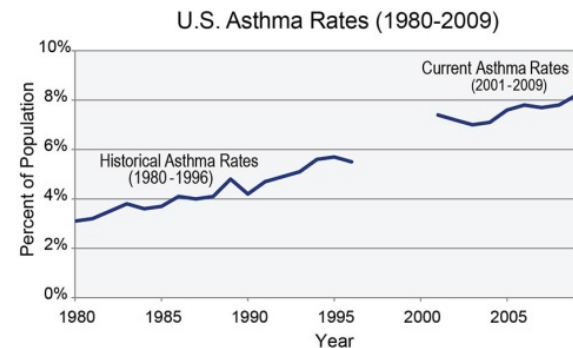
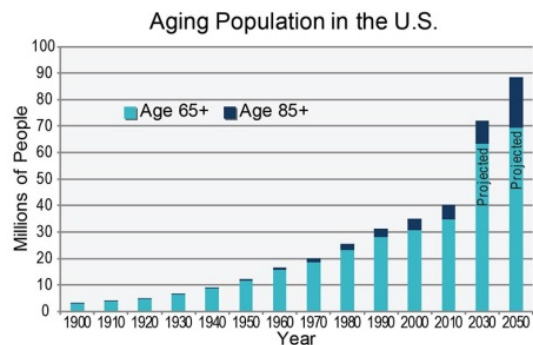


Most Vulnerable at Most Risk

Climate change will, absent other changes, amplify some of the existing health threats the nation now faces. Certain people and communities are especially vulnerable, including children, the elderly, the sick, the poor, and some communities of color.

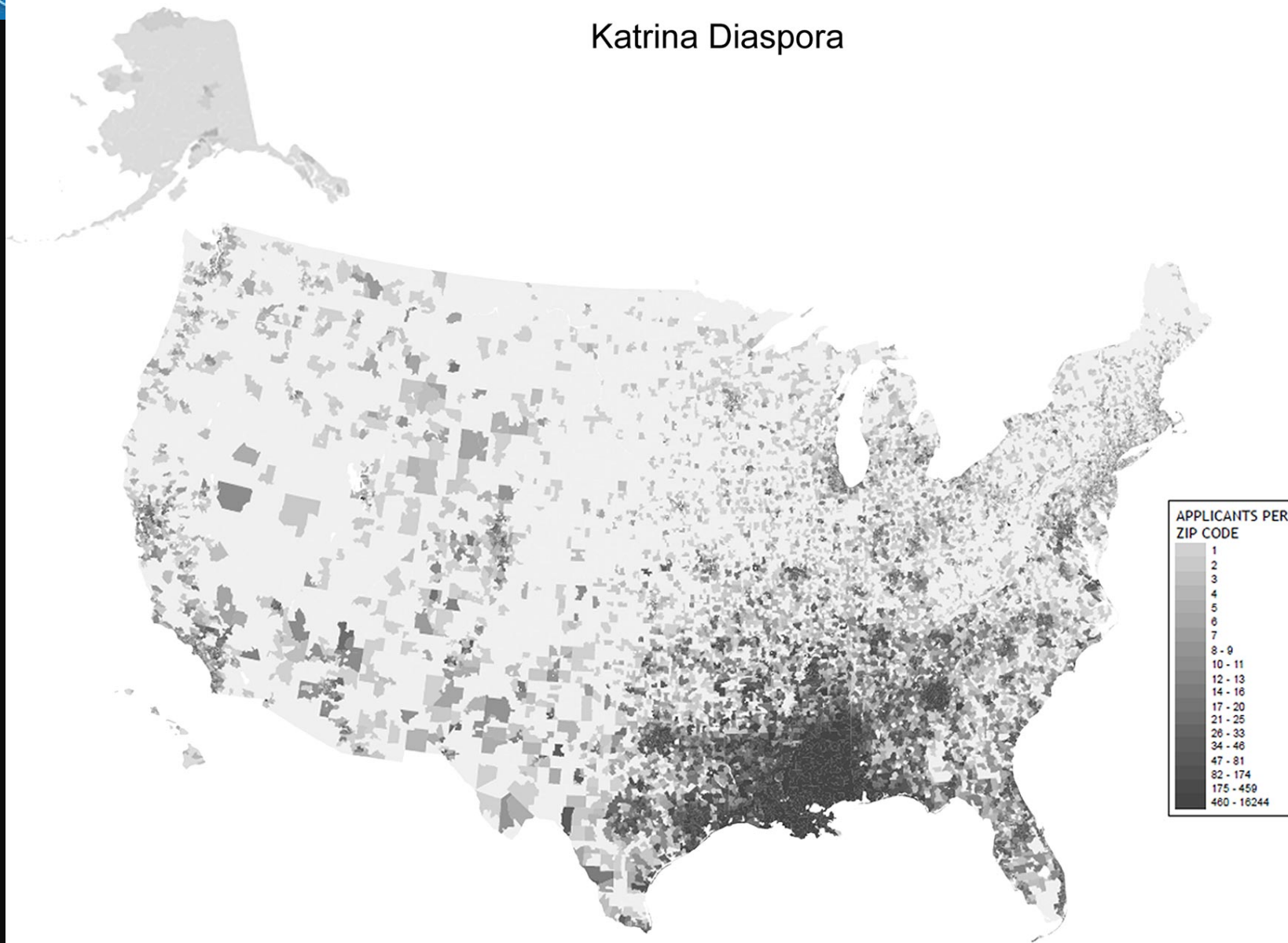


Elements of Vulnerability to Climate Change





Katrina Diaspora





Prevention Provides Protection

Public health actions, especially preparedness and prevention, can do much to protect people from some of the impacts of climate change.

Early action provides the largest health benefits.

As threats increase, our ability to adapt to future changes may be limited.



Responses Have Multiple Benefits

Responding to climate change provides opportunities to improve human health and well-being across many sectors, including energy, agriculture, and transportation. Many of these strategies offer a variety of benefits, protecting people while combating climate change and providing other societal benefits.

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