

Hurricane Ida Climate and Health Rapid Response Summary and Lessons Learned

Top Line

There is strong evidence to suggest that extreme weather events like hurricanes are being impacted by climate change. A warmer atmosphere holds more moisture and likely contributes to hurricanes being stronger and delivering heavier rain events. However, the health effects of extreme weather events depend greatly on the hazard and social vulnerability profile of a community. More can be done to prepare these communities and tackle the social determinants which so often drive mortality in the context of such disasters. Changes to support a more resilient future must take place at the community, state, regional, and federal levels. Efforts are already underway at the federal level to enact change.

Hurricane Ida: the role of climate change in extreme weather events

- The degree to which we can attribute extreme weather events to the effects of climate change depends on the event
- Rule of thumb: the more simple the relationship between the event and temperature, the easier we can attribute it to climate change (e.g. heat waves and wildfires closely track with temperature changes and therefore can more easily be attributed to climate change)
- Hurricanes represent a more complex system. However, we know that with a warmer climate, more water vapor can be stored in the atmosphere and that this likely contributes to heavier rain events. Models of Ida did predict heavy rain, but they could not predict the extreme rate of rainfall like that which fell on New York City and which broke records for rainfall in the New York Metro area.

In perspective: the response to Hurricane Ida

- It is hard to not compare Hurricane Ida to prior hurricanes like Hurricane Katrina. Katrina killed approximately 1,800 people whereas Ida killed approximately 50 people in the Northeast. One of the primary differences that account for this mortality difference is that whereas drowning contributed to much of the mortality for Hurricane Ida, Hurricane Katrina resulted in both short term morbidity and mortality from levees breaking as well as long term complications resulting from the prolonged disconnect for people from essential medical care.
- Vulnerability and resilience are determined by population factors, individual factors, and environmental factors. Different regions of the country have different hazard risk and social vulnerability profiles, each of which may also help to explain the differences in Katrina and Ida.
- Building back better from extreme weather events must go beyond just reestablishing vulnerability that was present before. To build forward, we must build back with climate science and climate forecasts in mind.

A policy response to the climate crisis

• The Medical Society Consortium has a mission of informing the public and policymakers re: health harms of climate change and benefits of climate solutions.

- The federal policy landscape for response to the climate crisis is changing. Biden has launched an "all of government" response which includes the establishment of a new Office of Climate Change and Health Equity in the Department of Health and Human Services.
- The Medical Society Consortium has a set of Coalition Policy Agendas that are currently being reviewed by congress for both mitigation and adaptation to the climate crisis. Please visit https://medsocietiesforclimatehealth.org/ for more details.