



Rhode Island

New Study Prompts Updates to Heat Advisory Policy

Lessons Learned and Recommendations:

- Weather-related hospital emergency department visits begin well before the heat advisory threshold is met
- Extreme heat was the leading cause of weather-related deaths in the U.S. from 2000 through 2009
- Climate change is expected to lead to longer and more frequent extreme heat events, and increases in average temperatures are projected to make these events last longer
- National Weather Service recommends the use of early, enhanced safety messaging to the public

What they did, and why:

Led by a researcher from Brown University, researchers from three New England states documented the relationship between heat and health in the region, prompting the National Weather Service Northeast Region to update its heat advisory policy. Heat advisories will now be issued when the heat index is forecast to reach 95 degrees for any amount of time on two or more consecutive days or 100 degrees for any amount of time on a single day. Heat advisories were previously only issued for a heat index of 100 degrees for two or more consecutive hours.

According to the study, hospital emergency department visits increased by 7.5% and deaths from all causes increased by 5.1% in Rhode Island, Maine, and New Hampshire on days when the heat index reached 95 degrees, as compared to days with a maximum heat index of 75 degrees. The study also found that people with pre-existing health conditions in the three states fared much worse on days when the heat index reaches 95 degrees.

What is the Heat Index?

The heat index is what the temperature feels like to the human body, and is determined by the combination of air temperature and relative humidity. Heat index values are for shady locations, so being exposed to direct sunlight can increase the heat index value by up to 15 degrees.

Benefits:

This study and the changes to the heat advisory policy will protect the most vulnerable Rhode Islanders and reduce heat-related morbidity and mortality. In response to the recommendation and data, Rhode Island DOH has worked to develop new partnerships, communication tools, and outreach strategies.

During an average Rhode Island summer, the heat index reaches 90 degrees on 10 days. Climate Solutions New England predicts that between 2020 and 2099 Rhode Island will experience 13-44 more days above 90 degrees than the current 10-day-a-year average. The new heat advisory policy will help people be more prepared for incidences of extreme heat.

For more information:

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*“As we prepare for
and respond to
climate change
statewide, it is
essential that we
continue to support
this kind of research
that allows us to
identify burdens and
trends to take specific
steps to ensure that
everyone in Rhode
Island has an equal
opportunity to be
healthy and safe.”*

Nicole Alexander-
Scott, Director of
Health