

Groundbreaking study quantifies health costs of climate-change related disasters in the US

November 9 2011

Health costs exceeding \$14 billion dollars, 21,000 emergency room visits, nearly 1,700 deaths, and 9,000 hospitalizations are among the staggering impacts of six climate change-related events in the United States during the last decade, according to a first-of-its-kind study published in November 2011 edition of the journal *Health Affairs*.

"When [extreme weather](#) hits, we hear about the property damage and insurance costs. The healthcare costs never end up on the tab, but that doesn't mean they're not there," said lead author Kim Knowlton, DrPH, assistant clinical professor of [Environmental Health Sciences](#) at Columbia University's Mailman School of Public Health and Senior Scientist for the [Natural Resources Defense](#) Council (NRDC). "Right now, there's a gaping hole in our understanding of the health-related costs of [climate change](#). This report begins the work to fill that void. Only by having a clear sense of health impacts and their costs, can we work to reduce them."

The analysis spotlights cases in six specific categories in the U.S. occurring during 2002 through 2009, including: Florida hurricanes, North Dakota floods, California [heat waves](#) and wild fires, nationwide ozone air pollution, and [West Nile virus](#) outbreaks in Louisiana (which were tied to warmer weather and changes in precipitation patterns). The study is the first to develop a uniform method of quantifying the associated health costs for extreme weather and disease events that are

expected to be exacerbated by climate change.

Researchers found that the six categories of events resulted in an estimated 1,689 [premature deaths](#), 8,992 hospitalizations, 21,113 emergency room visits, and 734,398 outpatient visits, totaling over 760,000 encounters with the health care system. Extreme climate-change related events are projected to increase in severity and frequency as climate change continues to go unchecked.

Only 13 U.S. states currently include public health measures in their climate change adaptation plans. With a better understanding of the economic impacts and health risks, as offered by the study, government agencies and key players can create effective partnerships for climate-health preparedness that aggressively limit and reduce public health damage.

"Investments in climate change mitigation at the local, state and national levels, married with analyses of the climate change health costs to inform this strategic planning, will save billions of dollars in health costs and save lives," notes Dr. Knowlton.

This week Congresswoman Lois Capps (D - CA) proposed the Climate Change Health Protection and Promotion Act. The bill would direct the Secretary of Health and Human Services to develop a national strategic action plan to assist health professionals in preparing for and responding to the public health effects of climate change.

Provided by Columbia University

Citation: Groundbreaking study quantifies health costs of climate-change related disasters in the US (2011, November 9) retrieved 2 May 2024 from <https://medicalxpress.com/news/2011-11-groundbreaking-quantifies-health-climate-change->

[disasters.html](#)

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.