

NOAA Climate Services User Engagement



HEALTH



OVERVIEW

Climate change, weather events, and atmospheric conditions can adversely impact human health in a variety of ways. Relevant climate information is essential for understanding how climate trends and weather patterns affect personal health and for developing appropriate planning, adaptation, and mitigation strategies.

KEY STAKEHOLDERS

NOAA engages various groups, both as an actionable information provider and as an applied research partner, to examine the effects of weather and climate on human health:

- Federal government agencies (e.g., Centers for Disease Control and Prevention, the National Institutes of Health, and the U.S. Environmental Protection Agency).
- Physicians
- Pharmaceutical companies
- Epidemiologists
- Hospital administrators
- Public health officials
- Academia and other researchers

SECTOR NEEDS

NOAA is partnering with the health sector to translate climate data into accessible, useful, and accurate products.

For example:

- Using precipitation data to investigate the relationship between increased flooding and waterborne disease outbreaks.
- Using relative humidity and wind speed data to study the relationship between fine particulate air pollution and daily mortality counts.
- Using temperature data to investigate correlations between temperature and total coliform bacterial contamination from public water drinking systems.

NOAA DATA AND PRODUCTS

There are many different types of useful climate information available.

Examples include:

- The *U.S. Heat Stress Index*, which is an assessment of “how hot it feels”, based on measured temperature and relative humidity.
- The *National Integrated Drought Information System*, which is a collaborative system that provides information about current drought conditions, impacts, and forecasts, planning, education, and research.
- The *West Nile Virus Mosquito Crossover Dates Indicator*, which provides estimates of the dates when the northern house mosquito—the primary suspect for transmission of the disease to humans—becomes the dominant species in a particular area (currently only available for Illinois).

