

# 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).

