

The National Environmental Health Association (NEHA) aims to raise awareness of the impacts of climate change. These changes, including the effects of extreme weather events on infrastructure and human health, have increased the need for preparedness and response across every sector of public health, especially environmental health (EH). EH professionals play an integral role in mitigation, preparedness, response, and recovery. Clearly, NEHA's mission, to advance the environmental health professional for the purpose of providing a healthful environment for all.

Climate change is the greatest threat to global health. It affects human health through air quality, extreme heat, drought, wildfires, extreme storms, floods, vector borne illnesses, and changing local weather patterns.

Though global, the effects of climate change are inherently local. All people are susceptible to physical and mental health impacts; however, certain groups carry a heavier burden. These populations include children, people of color, older adults, people with disabilities, and people in impoverished communities.

**National Oceanic and Atmospheric Administration*

CLIMATE CHANGE AND FLOODING

Climate change is modifying precipitation patterns and intensity of rainfall throughout the U.S. Flash flooding can occur when rivers experience a quick increase in precipitation during a short period of time. Frequent intense storms quickly saturate the soil, and in those urban areas with dense infrastructure and little open soil, these storms overwhelm storm sewer systems, causing even more severe flooding. Periods of drought can also exacerbate this problem as the sudden and intense downpours cannot be absorbed quickly. Flooding can affect many aspects of human health. For example:

- Sea level rise contributes to higher water levels, strong currents, and floating debris during flooding events. The increase in flooding puts people at risk of injuries, drowning, or death

- Warmer surface temperatures create a habitat that generates extreme storms. These characteristics increase the exposure to vector-borne diseases and the potential for dangerous extreme weather events
- During a flood, water can be contaminated through waterborne pathogens, chemicals from industrial areas and agriculture runoff, stormwater overflow, or human and livestock waste. Exposure to these contaminants can pose serious health threats
- Community destruction from flooding increases mental health effects from trauma and property loss, destroys roads, and limits access to supporting health services
- Flooding can also cause food supply destruction

Health effects related to floods can contribute to school and work absences as well as decreased workplace productivity.

ENVIRONMENTAL HEALTH WORKFORCE ROLE

ASSESSMENT

EH professionals identify, assess, and help recommend solutions for flood vulnerabilities.

- Assess local weather and precipitation. Examples include:
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RECOMMENDATIONS

- EH professionals should undergo the Environmental Health Training in Emergency Response (EHTER) training. The Awareness Level training focuses on EH responders' role to prepare for, respond to, and recover from air pollution emergencies, and the Operations Level involves hands-on operation practice and response to simulated events.
- NEHA recommends that communities utilize a systematic approach to flood preparedness such as CDC's Building Resilience Against Climate Effects (BRACE) Framework.
- NEHA supports the Pandemic and All-Hazards Preparedness Reauthorization Act (PAHPRA) and calls on its members to examine their roles in the implementation of this important bill.