



EXTREME WEATHER EVENTS AND CLIMATE CHANGE

Summary produced by the Blackfoot Environmental Office
in cooperation with the Center for Large Landscape Conservation

For more information visit blackfeetclimatechange.com

Climate change is increasing the frequency of flooding, wildfires, drought, heat waves, cold waves, and heavy snows. Extreme weather events like these can result in injury, illness, and death. Health risks can occur during an event, and also in the processes of disaster preparation and clean-up.



Extreme events often disrupt power, water supply, transportation, and communication systems, making it difficult to maintain medical access and emergency response services. Extreme events like heavy snow can trigger cascading failure (when one failure triggers another failure which triggers another failure, and so on). For example, heavy snow might cause power outages, making it difficult for people to stay warm, and it might also slow or block vehicle travel, making it hard to reach people who lost heat, which could then trigger medical emergencies.

Extreme events like flooding can contaminate food and water supplies with chemicals (e.g. PCBs, fire retardants, pesticides, herbicides), heavy metals (e.g. mercury and cadmium), and pharmaceuticals (e.g. synthetic hormones, antibiotics).

Impacts to mental health from extreme events can include stress, grief, and a sense of loss, as well as clinical disorders like depression, anxiety, and post-traumatic stress disorder.

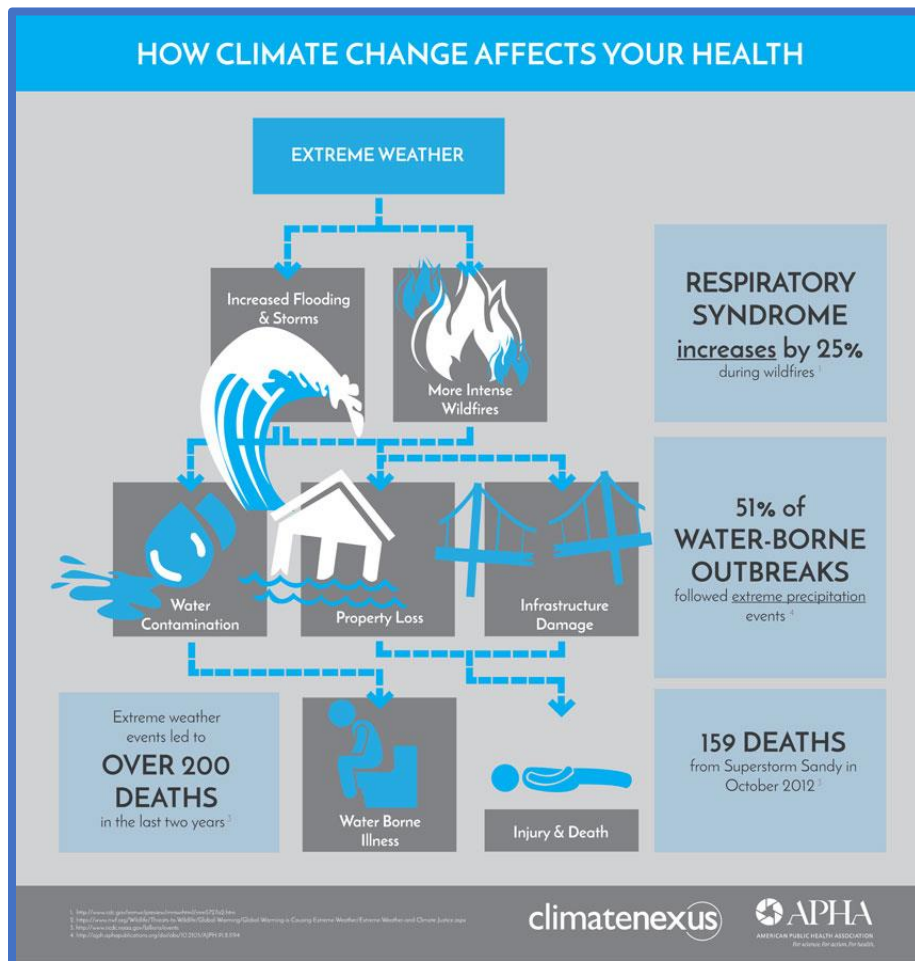
WHO IS MOST AT RISK?

Since there are a wide variety of extreme events that can occur, vulnerable populations will vary. However, people living in poverty are at higher risk, as are people suffering from illness, who may require medication that becomes inaccessible in an emergency. People who are socially isolated are also at risk, especially if they are dependent on others for assistance with relocating or responding to an emergency situation.

HOW CAN WE ADAPT?

- Plan ahead for emergencies by thinking about emergency preparedness in every part of the community.
- Encourage people to know their neighbors and build relationships of trust. Knowing and trusting your neighbor can help in an emergency, because you will have someone to reach out to for help, if emergency responders are slowed or if essential food, water, or basic medical supplies are temporarily unavailable.
- Create early warning systems to prepare the community for extreme events.
- Create emergency evacuation plans for a variety of extreme weather scenarios.
- Engage in climate-minded planning and business and residential zoning. For example, identify areas prone to flooding and discourage building in those areas.

- Encourage people to build homes and businesses in areas that are outside of the urban-wildland interface and less prone to wildfires.
- Where appropriate, protect and strengthen existing buildings to withstand extreme events like flooding, wildfires, and heavy snow.
- Create back-ups for power systems.
- Work with nature to create natural barriers and buffer zones. Restoring and protecting wetlands, for example, can increase resilience to both droughts and high precipitation events. Protecting beaver is one way we are increasing resilience to droughts and floods in the Blackfeet Nation. This is because beaver engineer riparian areas, increasing natural water storage.



Extreme weather impacts health through multiple pathways, as illustrated in the diagram above by the American Public Health Association.

For more information, visit the Blackfeet Country and Climate Change website:
blackfeetclimatechange.com

Content on this page is summarized from the U.S. Global Change Research Program’s report, “The Impacts of Climate Change on Human Health in the United States”, the National Institute of Environmental Health Sciences’ “A Human Health Perspective on Climate Change”, and the Centers for Disease Control and Prevention’s “When Every Drop Counts” to briefly describe some of the possible health outcomes that are most relevant to Blackfeet Country. This page does not include all possible health impacts and outcomes, nor does it include all possible risks and responses. It is important to keep in mind that our decisions and actions can influence the degree to which our community will experience these impacts to our health. Being proactive and making decisions now to safeguard health will help us be more resilient (December, 2017).