








## Climate Change and Health

According to NASA, Climate change is defined as the long-term change in the average weather patterns that have come to define local, regional, and global climates. These changes are caused by humans, especially fossil fuel burning. Due to this, we are seeing increased temperatures, rising sea levels, ice loss, variations in growing seasons and severe changes in extreme weather such as hurricanes, heatwaves, wildfires, droughts, and floods. Climate change is a threat multiplier, and the health effects are intensifying resulting in increased morbidity and mortality.

The effects of climate change include air pollution, water pollution, extreme heat, increasing allergens, decreased food supply, decreased water supply and changes in infectious disease transmission. The health impacts are vast and all encompassing, see below:

### Examples of Climate Impacts on Human Health

	Climate Driver	Exposure	Health Outcome	Impact
 Extreme Heat	More frequent, severe, prolonged heat events	Elevated temperatures	Heat-related death and illness	Rising temperatures will lead to an increase in heat-related deaths and illnesses.
 Outdoor Air Quality	Increasing temperatures and changing precipitation patterns	Worsened air quality (ozone, particulate matter, and higher pollen counts)	Premature death, acute and chronic cardiovascular and respiratory illnesses	Rising temperatures and wildfires and decreasing precipitation will lead to increases in ozone and particulate matter, elevating the risks of cardiovascular and respiratory illnesses and death.
 Flooding	Rising sea level and more frequent or intense extreme precipitation, hurricanes, and storm surge events	Contaminated water, debris, and disruptions to essential infrastructure	Drowning, injuries, mental health consequences, gastrointestinal and other illness	Increased coastal and inland flooding exposes populations to a range of negative health impacts before, during, and after events.
 Vector-Borne Infection (Lyme Disease)	Changes in temperature extremes and seasonal weather patterns	Earlier and geographically expanded tick activity	Lyme disease	Ticks will show earlier seasonal activity and a generally northward range expansion, increasing risk of human exposure to Lyme disease-causing bacteria.
 Water-Related Infection ( <i>Vibrio vulnificus</i> )	Rising sea surface temperature, changes in precipitation and runoff affecting coastal salinity	Recreational water or shellfish contaminated with <i>Vibrio vulnificus</i>	<i>Vibrio vulnificus</i> induced diarrhea & intestinal illness, wound and blood-stream infections, death	Increases in water temperatures will alter timing and location of <i>Vibrio vulnificus</i> growth, increasing exposure and risk of water-borne illness.
 Food-Related Infection ( <i>Salmonella</i> )	Increases in temperature, humidity, and season length	Increased growth of pathogens, seasonal shifts in incidence of <i>Salmonella</i> exposure	<i>Salmonella</i> infection, gastrointestinal outbreaks	Rising temperatures increase <i>Salmonella</i> prevalence in food; longer seasons and warming winters increase risk of exposure and infection.
 Mental Health and Well-Being	Climate change impacts, especially extreme weather	Level of exposure to traumatic events, like disasters	Distress, grief, behavioral health disorders, social impacts, resilience	Changes in exposure to climate- or weather-related disasters cause or exacerbate stress and mental health consequences, with greater risk for certain populations.



## Provider Notice

October 29, 2024

(NIEHS supports research that can be used to make decisions that can help reduce the threats of climate change. In the 2016 report by the U.S. Global Change Research Program, [The Impacts of Climate Change on Human Health: A Scientific Assessment](#))

CountyCare Health Plan is beginning to explore our role in improving the quality of life for our members related to climate change. Begin to think “What’s my role?”

Thank you for working with us to ensure that CountyCare members receive quality care at the right time and in the right setting. If you have any questions or would like additional information, please contact CountyCare Provider Services at [countycareproviderservices@cookcountyhhs.org](mailto:countycareproviderservices@cookcountyhhs.org) or your assigned Provider Relations Representative.