

Climate Impacts on Human Health

Heat-related illness

- » Increasing temperatures and heat wave days result in elevated body temperatures. This can lead to heat stroke, heat syncope, heat exhaustion, heat cramps and heat rash.
- » Vulnerable groups:
 - Pregnant women
 - Older adults
 - Children
 - Low-income persons
 - Socially isolated individuals
 - Outdoor workers
 - Urban residents
 - Communities of color

Mental health

- » Displacement, illness and injury because of environmental changes can lead to anxiety, depression, suicidal ideation and disruption of social networks. Exposure to pollution has been linked to developmental delays in children.
- » Vulnerable groups:
 - Coastal communities
 - American Indians
 - Farm workers
 - Urban residents

Allergies

- » Increasing pollen counts and pollen potency result from rising temperatures and carbon dioxide levels. Increasing mold growth following storms and flooding also causes higher rates of allergic rhinitis and asthma attacks.
- » Vulnerable groups:
 - People with preexisting conditions
 - Children

Respiratory disease and illness

- » Air pollution and smoke from wildfires can exacerbate preexisting conditions and cause new respiratory diseases and illness.
- » Vulnerable groups:
 - People with preexisting conditions
 - Children
 - Older adults

Vector-borne disease

- » Stagnant water bodies caused by heat or drought provide a habitat for pests, such as mosquitoes and ticks. Higher temperatures also change the life cycle of certain pests that transmit diseases, such as West Nile virus and Lyme disease.
- » Vulnerable groups:
 - Outdoor workers
 - People in routine contact with animals
 - People living in areas with ticks

Gastrointestinal disease

- » Winter storms, flooding and harmful algal blooms can contaminate drinking water with viruses, parasites and bacteria that cause GI illness.
- » Vulnerable groups:
 - People who eat shellfish
 - Coastal communities
 - American Indians
 - Infants
 - Private well users

Injury

- » Winter storms, flooding and landslides can cause injuries from falling trees, electrical hazards, unsafe structures and flying debris.
- » Vulnerable groups:
 - Emergency responders
 - Coastal communities
 - Residents in forested communities

Violence

- » Heat waves can increase heart rate, blood circulation and sweating. They can also influence metabolic changes associated with the sympathetic nervous system linked to the fight or flight response. This can cause an increase in violent behavior.
- » Vulnerable groups:
 - Children
 - Young adults

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PUBLIC HEALTH DIVISION
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For sources, go to:
www.healthoregon.org/climate

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