DEPARTMENT OF ECOLOGY
State of Washington

Human Health

Preparing Washington for a Changing Climate

Washington's climate is changing in ways that could pose threats to human health.

Heat-Related Illnesses

- Climate change will likely result in more frequent, longer, and more severe heat waves in the summer. Prolonged exposure to heat can lead to heat exhaustion, heat stroke, or even death.

Reduced Air Quality

- Warmer summer temperatures are expected to increase exposure to ground-level ozone, or smog, and make it difficult to meet the air quality standards necessary to protect public health. Larger and more frequent wildfires could also increase particle pollution and degrade air quality.
- Climate change could also affect allergies and respiratory health by increasing pollen production and lengthening the pollen season.

Diseases

- Some diseases transmitted by food, water, and insects are likely to increase due to higher temperatures, heavier rainfall and more flooding. Warmer temperatures can expand the range of pests and insects northward and spread new diseases. Higher temperatures can also increase food-borne illnesses by allowing bacteria to grow more rapidly.
- With global trade and travel, Washington could face increased risk from diseases originating outside the U.S.

Illness, Injury, and Mental Health Problems

- Climate change is expected to result in more extreme events such as floods, droughts, and storms. Extreme events threaten human health and safety and can lead to more injuries, illnesses, mental health problems, and even deaths.

Drinking water and water quality

- Decreased snowpack, early snowmelt, and lower summer streamflow could strain our water supplies and increase competition for water for all uses.
- Water quality could decline because of lower summer flows and increased winter rainfall and flooding.

Protecting Our Health in a Changing Climate

Keeping the people of Washington healthy is of prime importance. Washington State's Climate Change Response Strategy lays out a roadmap for state and local policymakers and planners to prepare for potential public health risks, and includes strategies to:

- Identify and protect people and communities most vulnerable to climate-related health problems.
- Improve systems to monitor and detect climate-related health risks, such as infectious diseases and air and water pollution.
- Boost preparedness and response for climate-related emergencies such as more heat waves, floods, droughts, and wildfires.
- Increase awareness about potential health risks and responses among the public, doctors, health agencies, social service agencies, and others.
- Consider potential options to prevent, detect, and swiftly respond to health risks with long-range programs and policies at the state level.

Taking action now can reduce our vulnerability and help keep our citizens healthy under future climate conditions.

Who is at risk?

Many of the expected health effects of climate change will fall mostly on young children, the elderly, and people with existing respiratory, cardiovascular, or other chronic health conditions. People who work or exercise outdoors are also more exposed to the effects of heat. Poor and disadvantaged people are particularly at risk from the impacts of climate change. Low income individuals, and minority populations already face challenges due to poor health and socioeconomic barriers, unstable employment, and lower quality housing. They face more barriers to health care and have less capacity to respond and adapt to more extreme heat events, drought, flooding, sea level rise, and other climate change impacts.

More information

Ecology's Climate Change website:

www.ecy.wa.gov/climatechange/ipa_responsestrategy.htm

Contacts

Hedia Adelsman | (360) 407-6222
hade461@ecy.wa.gov

Joanna Ekrem | (360) 407-7144
jekr461@ecy.wa.gov

August 2012
Publication No. 12-01-009

Photo credits:
See page 200 of the Response Strategy report.

DEPARTMENT OF ECOLOGY
State of Washington