THE COLLABORATIVE ON HEALTH AND THE ENVIRONMENT - WASHINGTON

RESEARCH AND INFORMATION WORKING GROUP

CLIMATE CHANGE & HEALTH

FACT SHEETS ON HEALTH AND ENVIRONMENT IN WASHINGTON

INTRODUCTION

Climate change can have profound effects on health. Potential diseases and disabilities include increasing rates of asthma, heart attacks, stroke, skin cancer and cataracts, as well as increased mortality from extreme temperatures and weather events, and higher rates of some vector-borne diseases, such as malaria and dengue fever.

The Intergovernmental Panel on Climate Change (IPCC) has completed several global studies on the health effects of climate change, most recently in 2001.[1] Nationally, the US Global Change Research Program published a "National Assessment of the Potential Consequences of Climate Variability and Change for the US," including a section on human health.[2]

In 1998, the US signed the Kyoto Protocol on climate change, but it has not been ratified.

CLIMATE CHANGE AND HEALTH IN WASHINGTON STATE

- One study found that if the temperature in Seattle rose by 3 degrees Fahrenheit, the number of weather-related deaths would increase significantly.[3] People with heart problems and those who live in places with high summer temperatures, such as the Columbia Basin, are at a higher risk for illnesses in times of extreme heat.[4,5]

- Climate change in Washington state could worsen air pollution, according to the U.S. Environmental Protection Agency. Poorer air quality could increase respiratory illnesses such as asthma (which affects about 40,000 adults and 120,000 children in Washington), reduce lung function and cause inflammation of the lungs.[6]

- Many communicable diseases will be worsened by climate change, including food-borne diseases such as *Salmonella* (in beef, poultry and eggs) and *Vibrio parahaemolyticus* (in seafood), as well as diseases carried by ticks, mosquitoes and rodents.[7,8]

- Higher temperatures and longer summers will allow ticks and other parasites to multiply more. If people spend more time outdoors, their exposure is likely to increase. Taken together, these factors are likely to lead to higher rates of disease.[9]

- The average annual temperature in the Puget Sound region rose 2.3 degrees Fahrenheit during the 20th century.[10] If Pacific Northwest temperatures continue to increase, the allergy season will become longer and more intense.[11]

- By 2100, the temperature is expected to increase by about 5 degrees in winter and summer, and 4 degrees in spring and fall. This will cause more flooding, which can result in the contamination of drinking water by toxic chemicals and disease-causing micro organisms.[12]

- Precipitation in Washington has increased by 20% over the last century, especially in the western part of the state.[13]

COMPARING WASHINGTON STATE NATIONALLY

- The rate of temperature increase in Puget Sound is higher than the global rate.[14]

- There is very little information on climate change and health at a state level, so it is difficult to compare Washington with other states or nationally.

- The National Assessment of the Potential Consequences of Climate Variability and Change for the United States predicts that temperature increases will be much greater in the southeastern and central US than in the Pacific Northwest.[15]

- Washington- and Oregon-based scientists drafted a "Scientific Consensus Statement on the Likely Impacts of Climate Change on the Pacific Northwest" in October 2004. The statement includes considerations of the impacts on human health, including a longer and more intense allergy season, exacerbated water-quality issues and extreme weather events.[16]

SOURCES

1 http://www.grida.no/climate/ipcc_tar/wg2/347.htm
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