THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES A SCIENTIFIC ASSESSMENT



POPULATIONS OF **CONCERN**

Climate change is already causing, and is expected to continue to cause, a range of health impacts that vary across different population groups in the United States. The vulnerability of any given group is a function of its sensitivity to climate change related health risks, its exposure to those risks, and its capacity for responding to or coping with climate variability and change. Vulnerable groups of people, described here as populations of concern, include those with low income, some communities of color, immigrant groups

(including those with limited English proficiency), Indigenous peoples, children and pregnant women, older adults, vulnerable occupational groups, persons with disabilities, and persons with preexisting or chronic medical conditions. Characterizations of vulnerability should consider how populations of concern experience disproportionate, multiple, and complex risks to their health and well-being in response to climate change.

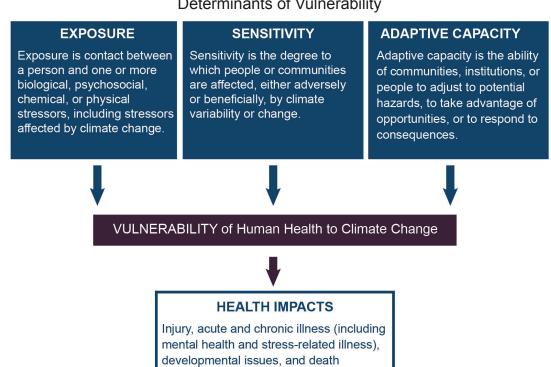
Vulnerability Varies Over Time and Is Place-Specific

Key Finding 1: Across the United States, people and communities differ in their exposure, their inherent sensitivity, and their adaptive capacity to respond to and cope with climate change related health threats [Very High Confidence]. Vulnerability to climate change varies across time and location, across communities, and among individuals within communities [Very High Confidence].

Health Impacts Vary with Age and Life Stage

Key Finding 2: People experience different inherent sensitivities to the impacts of climate change at different ages and life stages [High Confidence]. For example, the very young and the very old are particularly sensitive to climate-related health impacts.

Determinants of Vulnerability



Defining the determinants of vulnerability to health impacts associated with climate change, including exposure, sensitivity, and adaptive capacity (see Ch. 9: Populations of Concern). (Figure source: adapted from Turner et al. 2003)8



Persons with disabilities often rely on medical equipment (such as portable oxygen) that requires an uninterrupted source of electricity.

Social Determinants of Health Interact with Climate Factors to Affect Health Risk

Key Finding 3: Climate change threatens the health of people and communities by affecting exposure, sensitivity, and adaptive capacity [High Confidence]. Social determinants of health, such as those related to socioeconomic factors and health disparities, may amplify, moderate, or otherwise influence climate-related health effects, particularly when these factors occur simultaneously or close in time or space [High Confidence].

Mapping Tools and Vulnerability Indices Identify Climate Health Risks

Key Finding 4: The use of geographic data and tools allows for more sophisticated mapping of risk factors and social vulnerabilities to identify and protect specific locations and groups of people [High Confidence].



Climate-related exposures may lead to adverse pregnancy and newborn health outcomes.



Because of existing vulnerabilities, Indigenous people, especially those who are dependent on the environment for sustenance or who live in geographically isolated or impoverished communities, are likely to experience greater exposure and lower resilience to climate-related health effects.

