Climate Change and Health Working Group

Recommendations to the NACNR

Dr. Betty Bekemeier and Dr. John Grason



Climate Change-Related Health Impacts

CHANGES IN CLIMATE



Increased global temperature



Extreme weather and disasters



Precipitation extremes



Sea level rise



Changes in land use and growing seasons

EFFECTS OF CLIMATE CHANGE



Extreme heat



Air and water pollution



Reduced food and water quality



Changes in infectious diseases and vector transmissions



Increasing allergens

HEALTH IMPACTS



Heat related illness



Cardiovascular disease, stroke, and other chronic conditions



Injuries and death



Mental and neurological disorders



Zoonotic, vector- and water- borne diseases

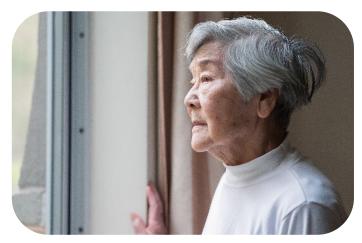


Respiratory diseases and asthma

Source: NIH Climate Change and Health Initiative



Climate Change-Related Social Determinants of Health



Dangers to Vulnerable Populations

Pregnant women, children, older adults, indigenous people, and people with certain occupations, existing medical conditions, and disabilities are especially vulnerable to climate change.

Source: EPA



Impacts on Neighborhoods

Individuals who live in areas that were previously subjected to redlining practices experience worse local environmental quality and health outcomes.

Source: NIH



Threats to Food Production

The poorest Americans will have to purchase nutrient-poor, calorie-rich foods or endure hunger, causing an increase in obesity and micronutrient malnutrition.

Source: CDC







Background and Charge

- Established under NACNR in September 2023
- Charged with recommending, to the NACNR, future directions for NINR-supported science in climate change and health
- Asked to identify pressing research questions that can be addressed using nursing science's multi-level approach to improving health





Process

- Met four times between September and November 2023
- Discussed areas of critical need, gaps in current research, and future directions
- Formed the basis for nine recommendations for NINRsupported science in climate change and health research.



Overall Conclusions

- Nurses and nurse scientists have firsthand knowledge of climate-related health outcomes on the communities and people they serve.
- Climate change-related health impacts on communities pose a challenge and are an ideal topic of interest for nursing research, with nurses poised at the intersection of science and society
- The consensus: NINR and nursing science are well-positioned to play key roles in this area.
- NINR should be bold and creative in its thinking as it considers future initiatives in climate change and health research.





Members

Name	Affiliation
Betty Bekemeier, PhD, MPH, RN, FAAN (co-chair)	University of Washington
John Grason, PhD (co-chair)	NINR
Alexandra Adams, MD, PhD	Montana State University
Adelita Cantu, PhD, RN, FAAN	University of Texas
Lauren Clay, PhD, MPH	University of Maryland, Baltimore County
Kelli DePriest, PhD, RN	RTI International
Katie Huffling, DNP, RN, CNM, FAAN	Alliance of Nurses for Healthy Environments
LaRon Nelson, PhD, RN, FNP, FNAP, FNYAM, FAAN	Yale University
Julie Postma, PhD, RN	Washington State University
Teddie Potter, PhD, RN, FAAN, FNAP	University of Minnesota
Daniel Jackson Smith, PhD, AGPCNP-BC, CNE	Villanova University
Catherine Timura, PhD (executive secretary)	NINR







NINR should support climate change and health research that incorporates a cross-cutting focus on health equity, health disparities, and social determinants of health.

Recommendation 2

NINR should support climate change and health research that has a strong focus on multilevel, interdisciplinary, and transdisciplinary research across a broad range of settings, communities, and populations.



NINR should support science that investigates the potential impacts of climate change on nutrition and food security and develop strategies for mitigating these impacts.





NINR should support the exploration of strategies for reducing the impact of climate-related disruptions and disasters on health care systems and services (e.g., the impact of increasing severe heat and storms).

Recommendation 5

NINR should leverage its expertise in developing and testing strategies to build and reinforce adaptation and resiliency in the face of climate change-related health impacts.





NINR should leverage its focus on community and population health to work with communities in developing strategies for mitigating the impact of climate change on health.



NINR should support the development of a cohort of trainees and new investigators with the knowledge and skills necessary to conduct rigorous and high impact research on understanding and mitigating the health effects of climate change.

Recommendation 8

NINR should support research to inform policy decisions about climate change and health at the federal, state, and local government levels.



NINR should support research improving the way that climate change and its impacts on health are communicated to the public.







