Nursing Schools Leading the Way In Healing Our Planet: Climate Change Action Plans

Robyn Gilden, PhD, RN
Karin Russ, MS, RN
MNA 113th Annual Convention
October 13-14, 2016
Learning Objectives

1. Describe the various ways in which climate change impacts human health
2. Relate the roles a Climate Change Work Group can perform at a School of Nursing
3. Discuss possible activities of a Climate Change Work Group
Pathways of Climate Change and Impacts on Health

1. Extreme heat
2. Outdoor air quality
3. Flooding
4. Vector-borne infection
5. Water-related infection
6. Food-related infection
7. Mental health and well-being

(Crimmins et al, 2016; EPA, 2016)
<table>
<thead>
<tr>
<th>Climate Driver</th>
<th>Exposure</th>
<th>Health Outcome</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extreme Heat</td>
<td>More frequent, severe, prolonged heat events</td>
<td>Elevated temperatures</td>
<td>Heat-related death and illness</td>
</tr>
<tr>
<td>Outdoor Air Quality</td>
<td>Increasing temperatures and changing precipitation patterns</td>
<td>Worsened air quality (ozone, particulate matter, and higher pollen counts)</td>
<td>Premature death, acute and chronic cardiovascular and respiratory illnesses</td>
</tr>
<tr>
<td>Flooding</td>
<td>Rising sea level and more frequent or intense extreme precipitation, hurricanes, and storm surge events</td>
<td>Contaminated water, debris, and disruptions to essential infrastructure</td>
<td>Drowning, injuries, mental health consequences, gastrointestinal and other illness</td>
</tr>
<tr>
<td>Vector-Borne Infection (Lyme Disease)</td>
<td>Changes in temperature extremes and seasonal weather patterns</td>
<td>Earlier and geographically expanded tick activity</td>
<td>Lyme disease</td>
</tr>
<tr>
<td>Water-Related Infection (Vibrio vulnificus)</td>
<td>Rising sea surface temperature, changes in precipitation and runoff affecting coastal salinity</td>
<td>Recreational water or shellfish contaminated with Vibrio vulnificus</td>
<td>Vibrio vulnificus induced diarrhea &amp; intestinal illness, wound and bloodstream infections, death</td>
</tr>
<tr>
<td>Food-Related Infection (Salmonella)</td>
<td>Increases in temperature, humidity, and season length</td>
<td>Increased growth of pathogens, seasonal shifts in incidence of Salmonella exposure</td>
<td>Salmonella infection, gastrointestinal outbreaks</td>
</tr>
<tr>
<td>Mental Health and Well-Being</td>
<td>Climate change impacts, especially extreme weather</td>
<td>Level of exposure to traumatic events, like disasters</td>
<td>Distress, grief, behavioral health disorders, social impacts, resilience</td>
</tr>
</tbody>
</table>

(Crimmins et. al, 2016)
The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment

Climate change is a significant threat to the health of the American people. This scientific assessment examines how climate change is already affecting human health and the changes that may occur in the future.
Fifth Assessment Report (AR5)

44th Session of the IPCC, Bangkok, Thailand

The 44th Session of the IPCC will take place in Bangkok, Thailand from the 17th to 20th October at the UNCC.

- Information Note
- Documents

Quick Links

- Strategic Planning Schedule AR6
- Fifth Assessment Report
- Outreach Calendar

Upcoming Meetings

3 Oct - 30 Oct: Call for Scoping Nominations for AR6
17 Oct - 20 Oct: 44th Session of the IPCC
(Bangkok, Thailand)
21 Oct - 21 Oct: Executive Committee Meeting
(Bangkok, Thailand)
2008 House of Delegates Resolution
Global Climate Change

- Nurses have the responsibility to be aware of broader health concerns such as environmental pollution

- ANA and its constituent member associations have an obligation to take action to influence public policy on global climate health threats and to develop and support programs that would allow and encourage nurses to have an impact in the global health environment

- The challenges we face as a result of global climate change are unprecedented in human history and it is critical that nurses speak out in a united voice and advocate for change on both individual and policy levels

- ANA encourages constituent member associations to support local public policies that endorse sustainable energy sources and reduce greenhouse gas emissions

- RESOLVED, that the American Nurses Association supports initiatives to decrease the contribution to global warming by the healthcare industry
APHA

• APHA is a founding partner of Climate for Health, a network of health leaders committed to protecting the health and well-being of Americans and leading by example on a path to a positive future for climate solutions.

• By joining Climate for Health, we commit to putting climate solutions in place within our own organizations and working together to prepare, empower and inspire our members, staff and the nation on climate change policies and solutions.
2015 White House pledge
Health Educators Climate Commitment

• 48 Public Health, Medical, and Nursing Schools from 15 Countries commit to *train students to address the Health Impacts of Climate Change*
  – *118 schools around the world*
Deans’ Global Health Educators Climate Commitment and Pledge

Schools signing onto the Global Health Educators Climate Commitment:

- Emory University, Nell Hodgson Woodruff School of Nursing
- Johns Hopkins University, School of Nursing
- University of California-San Francisco, School of Nursing
- University of Kwazulu-Natal, School of Nursing and Public Health, South Africa
- University of Maryland, School of Nursing
- University of Michigan, School of Nursing
- University of Nebraska Medical Center, College of Nursing
- University of Pennsylvania, School of Nursing
- University of Washington, School of Nursing
- Walden University, School of Nursing
- Washington State University, College of Nursing
- Yale University, School of Nursing
Other SON Climate Change Initiatives

- UMSON
- UMSG
- Salisbury
- Georgetown
- University of Washington
- Johns Hopkins
UMSON Climate Change Work Group Charge

• To recommend changes to the school’s various curriculum so that graduates are able to:
  1. Understand their **personal** responsibility to reduce the carbon footprint in their own sphere of influence,
  2. Understand their **professional** responsibility to reduce the carbon footprint that results from health care waste and to support individuals, families, and communities with the health consequences of climate change, and
  3. Understand the **systematic** issues that impact climate change.

• Make recommendations to the School for initiatives to reduce the carbon footprint of the building.
Personal Actions to Help Climate Change

- EPA-

What You Can Do

Driving a car, using electricity to light and heat your home, and throwing away garbage all lead to greenhouse gas emissions. You can reduce emissions through simple actions like changing a light bulb, powering down electronics, using less water, and recycling. This site provides more than 25 easy steps you can take at Home, School, the Office, and On the Road to protect the climate, reduce air pollution, and save money. Take action today! Small steps add up, if we all do our part.
Professional/Systematic

• Professional Statements on climate change
  – ANA HOD Energy Choices
  – ANA Environmental Health Principles
  – AACN Environmentally Sustainable SON
  – APHA PHN EH Principles
  – APHA Climate Change
Professional/Systematic

- HCWH
- Practice GreenHealth
- ANHE
Health care professionals can play a vital role in preparing their medical staff, facilities and communities to be resilient and cope with the health and environmental effects of climate change. Please join us for a look at the casual relationship between health care and climate change.

• **Objectives**
  - Demonstrate the causal relationship between health care and climate change
  - Illustrate the benefits of mitigation and adaption strategies to reduce the impact of climate change on the health care sector
  - Make specific recommendations on how to improve health and wellbeing and reduce greenhouse gas emissions
  - Educate health care staff on how to best communicate the relationship between climate and health impacts to patients & families
• **Nurses Climate Change Toolkit- resources**
  
  – [Climate Change and Health: Is There a Role for the Health Care Sector](#) (2012) A tool for continuing discussions and information sharing about climate change. Authored by Laura Anderko, Ph.D., RN, Stephanie Chalupka, Ed.D., RN, PHCNS-BC, FAAOHN, and Brenda M. Afzal, MS, RN.
  
  – [The Costs of Inaction: The Health Impacts of Climate Change](#), Webinar (The Climate Reality Project, 2013)
  
  – [IPCC Special Report: Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX).](#) (2012)
  
  – Presentation: [Communicating the Human Implications of Climate Change: A Climate Change Communication Primer for Health Professionals](#)
Climate Change and Health

Over the last 100 years the average temperature on the Earth has risen approximately 1°F Fahrenheit (F), increasing at a rate twice as fast as has been noted for any period in the last 1,000 years. The Arctic ice cap is shrinking, glaciers are melting, and the Arctic permafrost is thawing. There is mounting evidence that these global climate changes are already affecting human health.

This Climate Change and Health Community provides an overview of climate change, explores health implications and provides an opportunity for nurses to individually and collectively advocate policies and practices that are meant to mitigate or adapt to climate change.

Follow the links below to learn more about climate change and how nurses can become advocates around this issue.

Resources
- Climate Change Basics
- Climate Change and Health
- Nurses Taking Action
Possible Activities for the Climate Change Work Group

1. Elective on Climate Change
2. Incorporate into core courses
3. Climate Change Certificate
4. Brand for Climate Change Responsibility
5. LEED Silver Renovations/New Construction
6. Water-saving features
7. Electricity-saving features
Discussion

Ideas for UMSON and your home institution.
References & Resources


5. Health Care Without Harm (n.d.) Nurses Climate Change Toolkit. Available at: https://noharm-uscanada.org/content/us-canada/nurses-climate-change-toolkit

6. The Intergovernmental Panel on Climate Change (2016). Available at: http://www.ipcc.ch/

References & Resources


