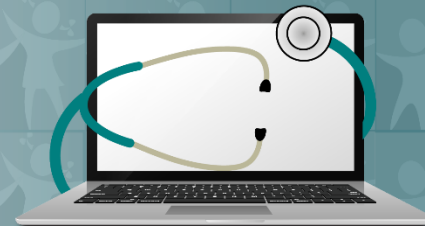




PEHSU NATIONAL CLASSROOM

Pediatric Environmental
Health Specialty Units



www.pehsu.net/nationalclassroom.html



Webinars

Series of scientific webinars that provide a forum for discourse on scientific issues.

Live and On-Demand

Case Conferences
Journal Clubs
Grand Rounds

CE Available



Online Courses

Evidence-based online courses on a variety of children's environmental health topics.

Interactive and Self-Paced

CE Available



Resource Catalog

Fact sheets, journal publications, reports, and other resources for parents, community members, patients and healthcare professionals

Topics included:
Air Quality, Pesticides,
Natural Disasters, BPA,
Mold, Lead, Mercury



Climate Change and Reproductive Health: What Providers Should Know and Do

Laura Anderko, PhD, RN, Georgetown University
Katie Huffling, MS, RN, CNM, Alliance of Nurses for Healthy Environments

Acknowledgements



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Slide 25 (left, map): <https://health2016.globalchange.gov/air-quality-impacts#narrative-237>; (right, photo): <https://www.pexels.com/photo/sky-sunset-clouds-bright-36464/> (graphics in public domain)

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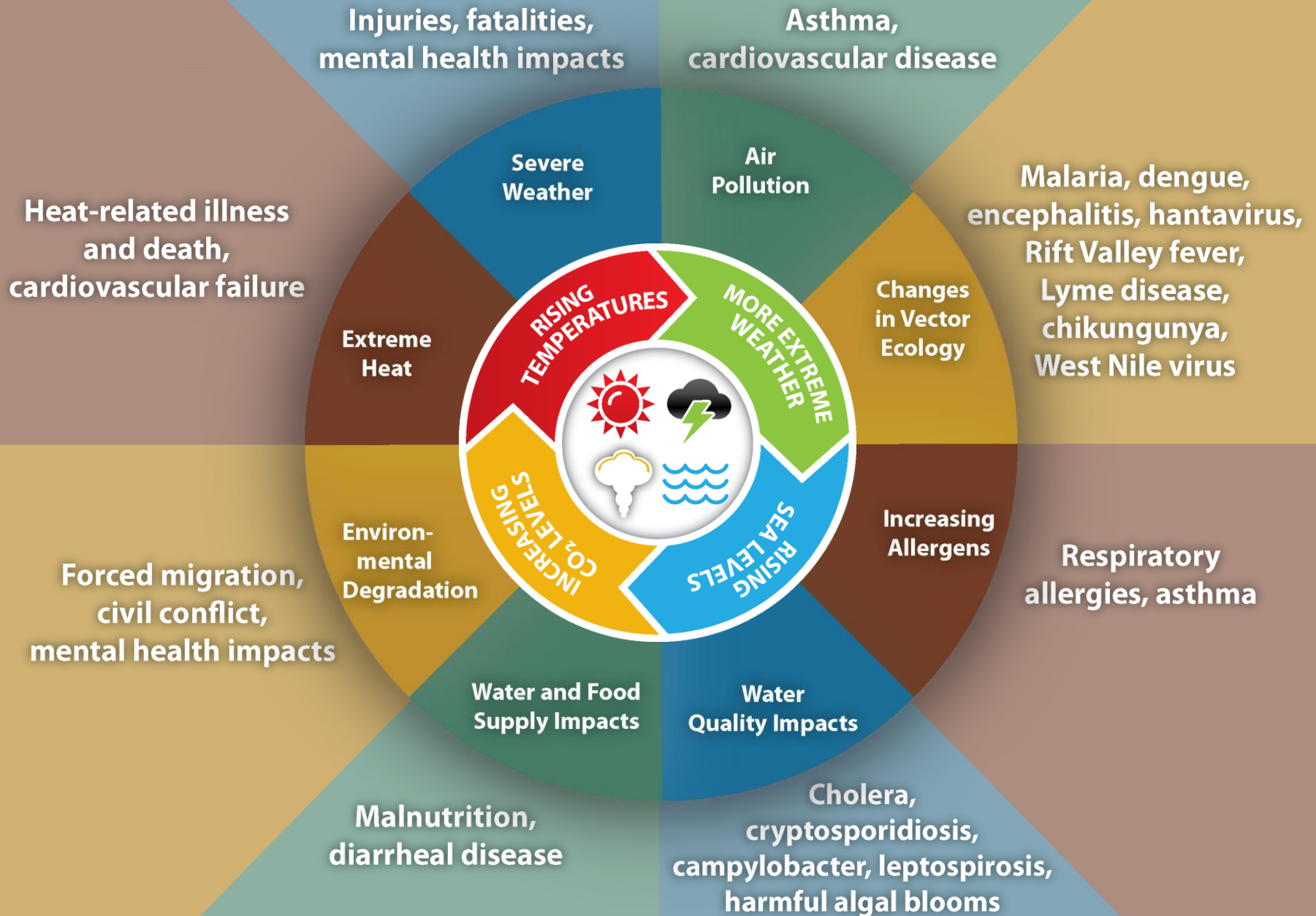
Learning Objectives

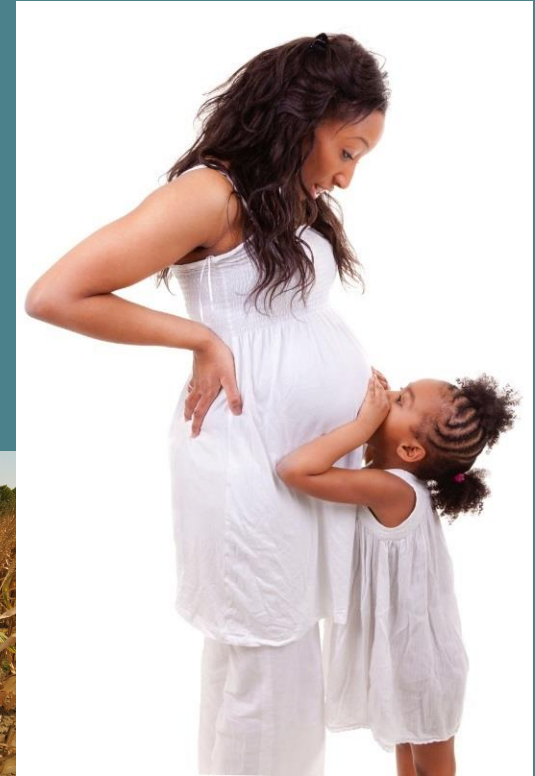
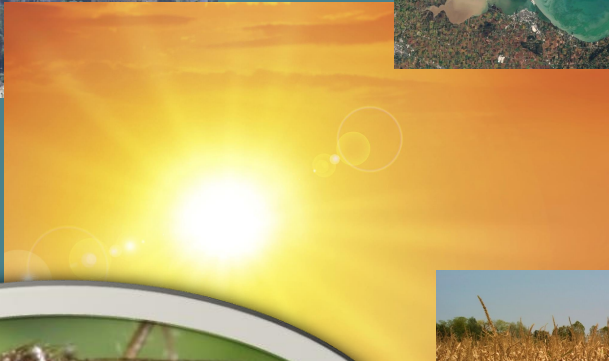
- Describe ways that climate impacts health
- Identify the most common impacts of climate changes on maternal health and birth outcomes
- List strategies and resources that health professionals can use to assist child-bearing women to reduce health risks from climate changes



An Overview: Climate Change and Health

Impact of Climate Change on Human Health





Direct Impacts on Maternal Health

Air Pollution: Respiratory Diseases



Heat: Dehydration, Renal Effects



Expanding Geographical Ranges: Vector-Borne Diseases



Heat, Disasters: Food and Water-Borne Diseases



Changes in Seasons, Droughts, & Flooding: Nutritional Impacts





Indirect Impacts on Maternal Health

Extreme Weather Events: Forced Migration, Infectious Diseases, Lack of Access to Care



Mental Health



Violence



Exacerbation in Poverty





Impact on Birth Outcomes

Birth Weight



Pre-term, Sudden Infant Death



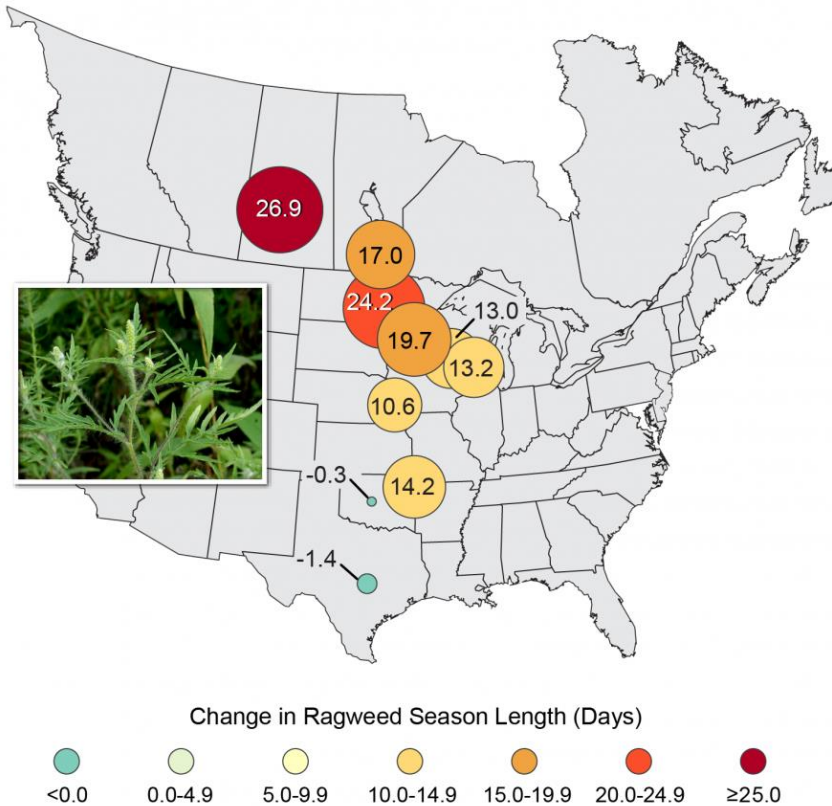
Congenital Cataracts





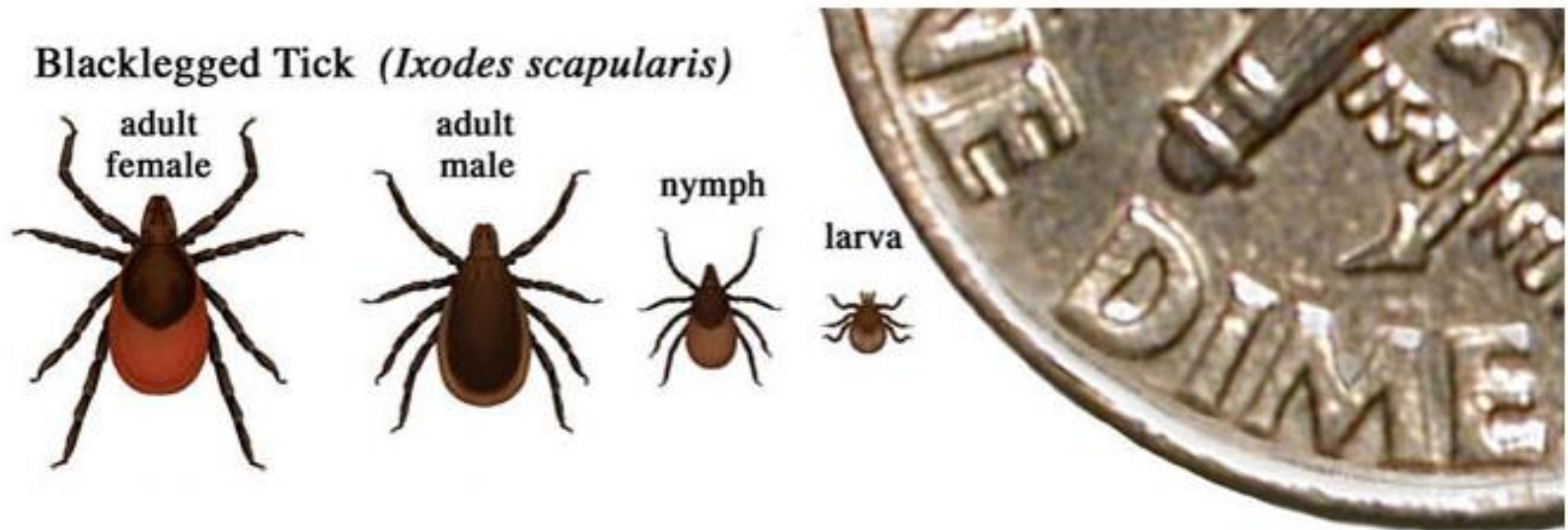
Practice Implications

Air pollution: Heat and Wildfires



<https://health2016.globalchange.gov/air-quality-impacts#narrative-237>

Vector-borne diseases



In general, adult ticks are approximately the size of a sesame seed and nymphal ticks are approximately the size of a poppy seed.

Food and water



Extreme weather events





Resources

Resources



Climate Change and the Health of Pregnant Women

Understanding the threats that climate change poses to human health can help us work together to lower risks and be prepared.

Climate change threatens human health, including mental health, and access to clean air, safe drinking water, nutritious food, and shelter. Everyone is affected

Climate change will also cause extreme heat events to become more frequent and severe, which can lead to dehydration and renal (kidney) failure



Resources

The Climate Is Changing Take Simple Steps to Protect Children's Health

keep cool in the heat

- ▶ Urge children and pregnant women to drink water more often than usual to prevent dehydration.
- ▶ Dress children in loose, lightweight, light-colored clothing.
- ▶ Spend time in air conditioned places.
- ▶ Know the warning signs of heat exhaustion and heat stroke; see www.cdc.gov/extremeheat/warning.html.

guard against Lyme disease

- ▶ Apply insect repellent, according to directions, rated for ticks.
- ▶ Dress children in protective clothing, if possible.
- ▶ Check children for ticks after they have been in or near woods and fields.
- ▶ Have children bathe when they come indoors after being in or near woods and fields.
- ▶ If you find a tick on your child, remove it as soon as possible and clean the bite area. If your child develops a rash, fever, or other flu-like symptoms within several weeks of a tick bite, check with your child's health care provider.
- ▶ For more information, see www.cdc.gov/ticks.

know your air quality

- ▶ Listen for air quality alerts during weather broadcasts or check air quality forecasts at www.airnow.gov.
- ▶ Check the pollen count in your area. If your child has allergies, limit outdoor activities on days when the pollen count is high.
- ▶ During bad air quality days, keep windows and doors closed so indoor air and outdoor air do not mix. If you can, run an air conditioner.
- ▶ When air quality is unhealthy, plan outdoor activities in the morning.
- ▶ If your child has asthma, limit outdoor activity on poor air quality days. Talk to your child's health care provider to come up with a plan for managing asthma symptoms or treating allergies.
- ▶ If you spot mold, clean and dry the surface according to guidelines at www.epa.gov/mold/cleanupguidelines.html.

stay alert for storms and flooding

- ▶ Make a basic emergency supply kit. See <http://emergency.cdc.gov/preparedness/kit/disasters>.
- ▶ Plan an evacuation route and family meeting place.
- ▶ Do not let children play in or near flooded areas.
- ▶ If your children were exposed to flood waters, monitor them for diarrhea.
- ▶ After a severe storm, check your child's mental health, school performance, and sleeping and eating patterns. Get help if needed.

prevent mosquito bites

- ▶ Use insect repellent, according to directions, rated for mosquitoes.
- ▶ Dress children in protective clothing—long-sleeved shirts, pants, and socks—when weather permits.
- ▶ Use screens in windows at home.
- ▶ Eliminate places for mosquitoes to live and breed, such as standing water.
- ▶ For more information, see www.cdc.gov/

Resources

HOW CLIMATE CHANGE AFFECTS CHILDRENS HEALTH

Climate Change Impacts	Health Effects on Children
Increases in ground-level ozone (smog) and other air pollution	Asthma exacerbations; interferes with normal lung development; increases allergic rhinitis, bronchitis
Increases in airborne allergens such as pollen	Asthma exacerbations; increases allergic rhinitis, bronchitis
Heat waves	Heat stress, heat stroke, reduced school performance
Extreme weather events (rain, hurricane, tornado, flooding)	Injuries, drowning
Droughts, floods, increased mean temperature	Vector-, food- and water-borne diseases
Sea level rise	Injuries, drowning, water and soil salinization, ecosystem and economic disruption
Drought, ecosystem migration	Food and water shortages, malnutrition
Climate change generally	Mental health impacts

Adapted from CDC Policy on Climate Change and Public Health, http://www.cdc.gov/climatechange/pubs/Climate_Change_Policy.pdf.

LEARN MORE

REMEMBER: Lawmakers work for you – that's their job. They want to hear from constituents, via email, phone, or even in person. Nurses and doctors are among the most trusted professions. Policymakers listen to what you have to say.

Resources for healthcare professionals on climate change and clinical care

ANHE's Advancing Clean Air, Climate, & Health: Opportunities for Nurses: <http://bit.ly/anhe-climate>

Health Care Without Harm: Healthy Hospitals, Healthy Planet, Healthy People: <http://bit.ly/healthwithoutharm>

Physicians for Social Responsibility's Climate Change and Health Resources: <http://bit.ly/psr-climate-resources>

National Association of City and County Health Officers Climate Change Resources: <http://bit.ly/naccho-climate>

Georgetown Climate Center State and Local Adaptation Plans: <http://bit.ly/georgetown-climate>

WHAT HEALTH PROFESSIONALS CAN DO ABOUT CLIMATE CHANGE

A resource for pediatricians, pediatric nurse practitioners, and other health professionals



Moms Clean Air Force



Alliance of Nurses for Healthy Environments



Public Health Perspectives



Resources

Georgetown Climate Center: <http://www.georgetownclimate.org>

ACOG Position Statement Climate Change and Women's Health:
<http://www.acog.org/Resources-And-Publications/Position-Statements/Climate-Change-and-Womens-Health>

Health Care Without Harm: <https://noharm.org>

ecoAmerica: <http://ecoamerica.org>

Clean Power Plan: <https://www.epa.gov/cleanpowerplan>

Wildfire Guide: A Guide for Public Health Professionals:
https://www3.epa.gov/airnow/wildfire_may2016.pdf

Resources

- CDC's BRACE framework and guidance documents
<http://www.cdc.gov/climateandhealth/default.htm>
- Third National Climate Assessment <http://nca2014.globalchange.gov/report/sectors/human-health>
- USGCRP Climate Health Assessment <https://health2016.globalchange.gov/>
- EPA Climate Change Health Impacts <https://www3.epa.gov/climatechange/impacts/health.html>

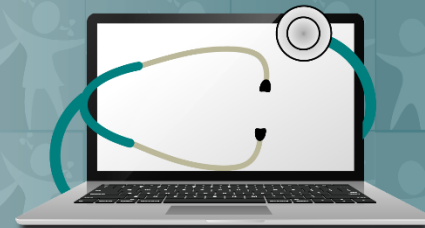
Thank you! Questions?





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