Climate Change and Maternal, Fetal, and Infant Health

Climate change is causing a global public health crisis that affects the health of people who are pregnant or of childbearing age and has significant implications for future generations. People who are pregnant are more vulnerable to the effects of climate change than the general population; women who live in low-income or urban communities are most at risk. Certified nurse-midwives (CNMs) and certified midwives (CMs) care for those who are exposed to rising temperatures and extreme weather events that put them and their offspring at risk for adverse health effects.

American College of Nurse-Midwives (ACNM) affirms the following:

- Overwhelming evidence indicates that natural climate variations are being altered by human activity; that these changes are increasing in scope and severity; and that climate change poses significant consequences for the planet, including the health of humans.
- Climate change is a global threat that poses significant risks to women and pregnancy-capable people across the lifespan and to the developing fetus and newborn.
- Support and guidance are needed for local, national, and international policy that promotes accelerated reduction of greenhouse gas emissions, supports resilience planning for communities, and accelerates global commitment to responding to the climate crisis.
- Health care providers, including CNMs/CMs, can reduce their environmental footprints through the integration of climate-smart health practices, which includes reducing waste, incorporating renewable energy sources, and promoting resilience strategies when possible.
- Addressing climate change is a part of our commitment to reproductive justice, as the right to birth and raise children in a safe and healthy environment is a core component of this work.
- CNMs/CMs should educate themselves and their patients on how to prepare for and protect against health threats related to climate change. For example, how to act on alerts about poor air quality days to prevent respiratory issues and how to avoid exposure during extreme heat and to vector-borne diseases.
- CNMs/CMs should be involved in developing national and state climate action plans that incorporate health and safety. Underserved communities are disproportionately affected by climate change disruptions; therefore, special consideration in planning is warranted and must be central to and engaged in decision-making.
Background

Largely due to human activities, unprecedented levels of atmospheric greenhouse gases are contributing to a rise in global temperature and changing climate patterns. The Intergovernmental Panel on Climate Change identifies the last four decades as being successively warmer than any decade that preceded it since 1850. The resulting changes to climate patterns have significant public health implications, including exacerbation and increased rates of current and new cases of asthma, premature death related to air pollution and heat-related illness, and increased transmission risk of vector-borne disease.

People who are pregnant are particularly vulnerable to the direct and indirect effects of climate change and are more sensitive to heat stress and dehydration. Researchers have linked extreme heat to preterm birth, low birth weight, stillbirth, preeclampsia, and eclampsia. The deterioration in air quality caused by burning fossil fuels poses significant risks. Pregnant people exposed to nitrogen dioxide and benzene have an increased risk of preterm birth, and low birth weight. Exposure to ground-level ozone and particulate matter was associated with low birth weight and preterm birth as well as with increased vulnerability to respiratory and cardiovascular diseases in adults. Negative effects are worsened in low- and middle-income countries by lack of access to health care and public health services, decreased access to education, poverty, poor sanitation, food and water insecurity, armed conflict, and mass population migration.

Increased temperatures and precipitation changes have contributed to an increase in the transmission of vector-borne diseases such as the Zika virus, which can cause serious harm to the developing fetus, as well as expanding ranges of these diseases, such as dengue and Lyme. Extreme weather events such as flooding and droughts that threaten water and food security affect the health of pregnancy-capable people before and during pregnancy and after birth. Using a range of scales and across all major regions of the world, investigators recently linked climatic events to human conflict, including violence and domestic abuse, child abuse, and lack of reproductive control.

Incontrovertible evidence demonstrates that climate change presents a threat to the health of individuals and the environment and that pregnant people, their fetuses, and newborns are particularly vulnerable to the effects of climate change. As health professionals who care for these at-risk populations, CNMs/CMs should advocate for evidence-based public health initiatives that address climate change, strive to mitigate emissions locally and within their organizations, and communicate accurate information about the health costs of fossil fuel policies to their clients and policymakers.

References


>Note: Midwifery and midwives as used throughout this document refer to the education and practice of certified nurse-midwives (CNMs) and certified midwives (CMs) who have been certified by the American Midwifery Certification Board (AMCB).

*Source: Division of Standards and Practice Clinical Standards and Practice Documents Section
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