



Are We Medically Prepared for Climate Change?

Juliette Van Vleck & Ruby Rodriguez

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Needs Assessment

Message from the Accreditation Council for Continuing Medical Education (ACCME): do not foster “checkbox” behavior by making education on this topic mandatory.

We, the authors, identified the best path forward as connecting with important stakeholders in the CME industry and creating a needs assessment that focuses on a specific target group and knowledge gap that needs to be addressed.

Outline

- 1. Current shortcomings in both clinical and educational practices**
- 2. Examples to highlight the need for expanded CME**
- 3. Desired outcomes & implementation**

Current Unmet Clinical Needs

Graduating and current medical practitioners face a knowledge gap in understanding, managing, and adapting to the consequences of climate change that influences both the **health of their patients** and the **health care they deliver**. In order to care for patients in the changing climate, future medical professionals will require education on the health effects of climate.

Increase clinician awareness and understanding of the climate change risk factors that affect their patients to avoid delay in diagnosis and provide the appropriate care, especially concerning:

- **Vulnerable populations:** people with underlying conditions, pregnant women, elders, children, minority groups, and patients affected by >2 risk factors.
- **State-specific issues:** activate State Departments of Public Health as a partner to contribute regional expertise.

Current Shortcomings in Education

Current mentions of climate change/climate change curricula for CME credits is being developed, but remains **inconsistent**, and **not personalized** to the risk factors of each state. Some states and cities — like Oregon and San Francisco— are pioneering this education, but there is still much room for improvement and expansion.

Most Climate and Health literature is commentary, not actionable. The available CME is designed to help clinicians treat these emerging issues which are occurring as a result of climate change, but more work needs to be done to evaluate the effects on patient health, and keep up with emerging medical issues (as climate change is not a stationary target, and effects to humans will **continually evolve**).

Examples highlight need for expanded curriculum

Valley Fever

- Disease caused by a fungus that grows in the soil and dirt only found in California.
- Approximately 5-10% of people who get Valley Fever will develop serious or long-term problems in their lung.
 - Less than 1% of people will have the infection spread to central nervous system.
- New cases being reported in Washington, Oregon, and Utah due to worsening wildfires.
- Awareness is critical because clinicians outside southwestern US do not know symptoms and/or do not know to test for it.

Extended Range of Mosquitos

- Climate change influences the range of mosquitoes and creates more favorable conditions for the spread of dengue, chikungunya, and Zika in parts of the US.
- Mosquitoes moving to the US are affected by temperatures and are able to survive easily and transmit disease at a faster rate in warmer climates.
- During a winter, populations of *Ae. aegypti* adults were recently located near Washington DC, which previously had an average winter temperature lower than the limit for the development of this species.

Other important examples include excessive heat for cardiac patients, worsening air quality for asthmatic patients, and recognizing the signs of mold exposure from repeated flooding—among many others.

Desired Outcomes & Implementation



To ACCME: In our research, we found there is a curriculum available through the CDC and some specific states. We urge you to consider it as a priority area, and make these resources available to accredited providers on the resource page on ACCME website.



To State Departments of Public Health: Review our needs assessment and find funding to support development of the curriculum with state-based CE providers; Conduct a “call-to-action” of state clinical providers, including medical societies and accredited providers.



To CDC Climate and Health Program: We urge you to expand and more widely implement the Climate-Ready States and Cities Initiative—and work with stakeholders in the medical industry to build this into state-specific CE curriculums.



To the Federation of State Medical License Boards: In your role to support state medical boards in licensing, disciplining, and regulating healthcare professionals, we urge you to promote best practices, and provide policies, advocacy, and other resources (CE) on the intersection of climate and health.

Thank you