

Diabetes Task Force

Environmental Impacts on Diabetes Management and Access to Care

DIABETES CONTINUUM OF CARE | JUNE 2023



OVERVIEW

The climate crisis has disproportionately impacted the health of low-income and minoritized communities. These communities tend to most acutely feel the effects of environmental stressors caused by climate change. The issue of environmental injustice - the inequitable and disproportionate exposure of poor, minoritized, and disenfranchised populations to environmental hazards - contributes to and exacerbates the health disparities such as the prevalence of diabetes and other chronic conditions.¹

Climate change exacerbates existing vulnerabilities faced by health center patients who already face multiple barriers to diabetes management and care.

Climate change, including heat, drought, and more frequent and severe weather events (i.e., wildfires and hurricanes), impacts diabetes care and management among underserved populations. There are direct and indirect connections between the environment and diabetes: food insecurity, water access, displacement, and migration. Structural factors contribute to the challenges of diabetes management, especially for underserved populations, such as

agricultural workers and Asian-American & Native Hawaiian/Pacific Islanders (AA & NH/PI). Underserved, low-income, minoritized populations tend to live in substandard housing with lack of access to clean water and green spaces/parks. They are also more likely to live in low-lying, hard-to-reach, or unincorporated areas that are more directly impacted by flooding, wildfires, and hurricanes. The competing priorities and stressors caused by these weather events, from loss of electricity and water, to interrupted transportation, to displacement, makes it harder to manage their diabetes and other chronic conditions.

Diabetes management is often impacted by social drivers of health such as the built environment, structural and political policies, in addition to patients' cultural and personal preferences.

At the forefront of the impacts of climate change, agricultural workers and AA & NH/PI populations, in particular, face numerous barriers to diabetes care and management. For example, many people living in the Pacific Islands are extremely vulnerable to rising sea levels, as well as storms and droughts that are increasing in frequency and severity. NH/PI individuals, especially those who migrate to and from the Pacific Islands to the U.S., may not be able to grow or access the foods that are indigenous to their cultures, forcing adaptation to an unfamiliar diet. Structural factors such as limited access to internet, fresh water, and medical care combined with the stressors associated with the environmental impacts of climate change exacerbate diabetes and other chronic conditions.

Agricultural workers' low wages and hazardous working conditions contribute to their high prevalence of diabetes. As outdoor workers, they are at greater risk for

heat stress, especially due to the increasing number of high heat days. It is estimated that by 2050, the number of unsafe working days experienced by the average farmworker will increase from 21 to 39.² Due to their lack of control over their working conditions, farmworkers may not be able to take cooling breaks or access water in the fields. In fact, some farmworkers may prefer energy drinks since they are more easily accessible and can help increase their productivity. Further, drought and flooding may damage crops, resulting in lost wages and, in some cases, may force farmworkers to migrate to new areas, making it more difficult to access food, medication, and health care.

Lack of patient agency and autonomy due to social and structural drivers of health as well as competing priorities associated with navigating environmental disasters complicate diabetes management and access to care.

Health centers, as providers in underserved communities, are also impacted by natural disasters. They may suffer infrastructure damage, lose access to electricity, and experience supply chain disruptions. In addition, they may have a shortage of clinical or support staff, who themselves may be personally impacted by the disaster and therefore unable to work. Despite these impacts, health centers are often at the center of the community response. In addition to providing health care, they also may help connect community members to other needed resources, such as food and shelter.

Health centers can play an important role in serving their patients and the community during and after climate-related disaster events.

As the climate crisis worsens, health centers and their patients will need support to promote health and resiliency. AmeriCares, AAPCHO, and Farmworker Justice, among others, have resources for clinicians, administrators, and patients on the impacts of climate change and strategies to support chronic disease management. For example, NACHC's Community Health Access to Resilient Green Energy (CHARGE) partnership supports health centers' access to more reliable and affordable power sources. Given the intersection of climate and diabetes in underserved communities, resources and recommendations provided to patients must be tailored to the needs of the community served and include strategies that are geographically and culturally appropriate.

KEY TAKEAWAYS FOR HEALTH CENTERS

- **Behavior change recommendations related to diabetes management should be person-centered and recognize the intersecting barriers and competing priorities faced by patients as well as responsive to cultural practices and preferences.**
- **Agricultural workers and AA & NH/PI individuals experience the impacts of climate change differently and strategies to serve these communities should be geographically, culturally, and linguistically appropriate.**
- **Health centers have access to community partnerships beyond the health center walls that can support their preparedness for and response to climate-related events.**

RESOURCES

- **Extreme Weather Resources** (Americares)
- **Natural Disaster Preparedness and Response Resources** (Americares)
- **Farmworkers and Heat-Related Illness** (Farmworker Justice)
- **Environmental Justice Symposium Report** (Farmworker Justice)
- **Issue Brief: Climate Change and Its Impact on Farmworkers** (Farmworker Justice)
- **Heat-Related Injuries** (National Healthcare for the Homeless Council)
- **Managing Diabetes in the Heat** (Centers for Disease Control and Prevention)
- **Diabetes, Oral Health, and Nutrition – What is the Connection?** (Association of Diabetes Care & Education)
- **Pacific Islander Diabetes Prevention Program** (Pacific Islander Center of Primary Care Excellence)
- **Cultural Belonging: Ecological Stewardship** (Pacific Islander Community Association of Washington)
- **Impacts of Climate Change** (Marshallese Educational Initiative)

REFERENCES

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NATIONAL TRAINING & TECHNICAL ASSISTANCE PARTNERS



Association of Asian Pacific
Community Health Organizations
aapcho.org



Farmworker Justice
farmworkerjustice.org

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Diabetes Task Force

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