



Mission Information

Field	Global Health
Member State:	United States of America
Regional Group:	Brazil; GRULAC
Principal Delegate:	Ronaldo Costa Filho; Permanent Representative of the Federative Republic of Brazil to the United Nations
Date of Submission:	03/05/2026

II. Statement of Purpose

This submission outlines the United States' assessment of the intersection between climate change, mosquito-borne disease expansion, and health equity. It evaluates domestic preparedness, identifies structural vulnerabilities affecting marginalized communities, and proposes equity-centered public health and climate adaptation strategies to uphold the right to health.

III. Research Question / Inquiry

The Member State of the United States of America seeks to investigate:

To what extent has the United States strengthened preparedness and equitable response to climate-driven mosquito-borne diseases, and what policy gaps remain in protecting vulnerable populations?

IV. Executive Abstract

Climate change is measurably expanding mosquito habitat suitability and lengthening transmission seasons within the United States, raising new public health concerns. According to the Fifth National Climate Assessment, average annual temperatures across the contiguous United States have increased by approximately 2.5°F since 1970, contributing to longer warm seasons and more permissive environments for vectors such as *Aedes aegypti*. In 2023, the Centers for Disease Control and Prevention confirmed eight locally acquired *Plasmodium vivax* malaria cases in Florida and Texas, the first documented local transmission in the United States since 2003, signaling the reemergence of climate-sensitive vector-borne diseases.

Data collection for this report draws from CDC surveillance systems, national climate assessments, Government Accountability Office (GAO) evaluations, and national surveys of vector control organizations. These sources indicate that while the United States maintains strong scientific and epidemiological infrastructure, implementation capacity remains uneven across jurisdictions. A 2017 nationwide survey of mosquito control programs found that 84% lacked at least one core capability, such as routine arboviral surveillance, insecticide resistance testing, or sustained funding for year-round operations.

Structural vulnerability significantly shapes exposure risk. Low-income communities, racial and ethnic minorities, and individuals experiencing homelessness are more likely to reside in flood-prone neighborhoods with aging drainage systems and inadequate waste management infrastructure, increasing standing water and mosquito breeding sites. Additionally, uninsured and undocumented populations face barriers to timely medical care, increasing the risk of delayed detection and localized spread.

Primary successes include robust federal surveillance through the CDC, increased public awareness of vector-borne disease risks, and ongoing interagency coordination on climate preparedness. However, key challenges remain, including fragmented local funding structures, infrastructure disparities, and insufficient integration of climate projections into long-term vector control planning. The findings suggest that while national-level scientific capacity is strong, equitable implementation and local preparedness require further strengthening to ensure the right to health is protected in a warming climate.

V. Proposed Recommendations

1. **Recommendation 1:** Increase sustained federal funding for a coordinated National Vector-Borne Disease Prevention and Control System to reduce disparities created by fragmented, locally funded mosquito control programs.
 2. **Recommendation 2:** Prioritize infrastructure investment in underserved communities, including modernized drainage systems, water management, and waste disposal improvements to reduce standing water mosquito breeding sites.
 3. **Recommendation 3:** Integrate climate projection data into national and state-level public health planning to proactively expand surveillance, early warning systems, and community outreach in emerging high-risk regions.
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