

International Public Health Agencies..

A Discussion with Duke Univ Medical Science
Students

“Protecting the Health of People Across all Nations”

By Merle Green, Executive Director, Assn of NC Boards of Health

October 20, 2025

Global health is important because:

- 1.it addresses the quality of healthcare worldwide and aims to eliminate health disparities, particularly for vulnerable populations.
2. It focuses on achieving better health outcomes through research, education, and collaborative interventions.
- 3.it plays a crucial role in international affairs, as it fosters cooperation among nations to tackle health challenges that transcend borders, such as pandemics and chronic diseases.
- 4.Ultimately, prioritizing global health leads to improved health security and equity for all.

Through research and action projects, science and medicine have established a solid knowledge base, relevant theories, models, methodologies, valuable data, and lots of experiences that is being directly used in addressing global health.

UNICEF's work

UNICEF works in over 190 countries and territories to save children's lives, to defend their rights, and to help them fulfil their potential, from early childhood through adolescence. And we never give up.

Overview

UNICEF , originally the United Nations International Children's Emergency Fund, officially United Nations Children's Fund since 1953, is an agency of the United Nations responsible for providing humanitarian and developmental aid to children worldwide.

UNICEF's activities include:

1. providing immunizations and disease prevention,
2. administering treatment for children and mothers with HIV,
3. enhancing childhood and maternal nutrition,
4. improving sanitation,
5. promoting education, and
6. providing emergency relief in response to disasters



Paul Edward Farmer (October 26, 1959 – February 21, 2022) was an American [medical anthropologist](#) and physician. Farmer held an MD and PhD from [Harvard University](#), where he was a [University Professor](#) and the chair of the Department of Global Health and Social Medicine at [Harvard Medical School](#). He co-founded Partners In Health based on the belief that everyone deserves quality health care. Paul cared for the sick, trained generations of clinicians, and transformed health care policies—saving millions of lives and inspiring a movement toward global health equity. We carry forward his legacy and vision.

Global Health Council is the leading member organization devoted to advancing global health priorities by uniting advocates, implementers, policy makers, and other stakeholders.

US CDC (Centers for Disease Control) is the nation's leading science-based, data-driven, service organization that protects the public's health. CDC works 24/7 to protect America from health, safety and security threats, both foreign and in the U.S.

THE WORLD HEALTH ORGANIZATION

We put science to work to build a healthier, safer world

The World Health Organization leads and champions global efforts to achieve better health for all. By connecting countries, people and partners, we strive to give everyone, everywhere an equal chance at a safe and healthy life.

From emerging epidemics such as COVID-19 and Zika to the persistent threat of communicable diseases including HIV, malaria, Ebola, Marburg and tuberculosis and chronic diseases such as diabetes, heart disease and cancer, we bring together 194 countries and work on the frontlines in 150+ locations to confront the biggest health challenges of our time and measurably advance the well-being of the world's people.

UNC Gillings School of Global Public Health

The global health work at Gillings impacts policy and programs locally and internationally. This is accomplished by an extensive network of faculty, students and alumni who conduct global health research and practice.

Our community is collaborative and supportive of those who want to partner to address complex global public health issues.

We focus on populations and health issues (and solutions) that cross international borders. Our work affects global health policy and practice through researching, advocating, educating, policy-influencing and providing advice and technical support at all levels from local communities to global bodies such as WHO and World Bank. The Gillings School contributes to better health around the world.

UNC Gillings School of Global Public Health

Local and Global Health

We work in all 100 North Carolina counties and over 35 countries. Our courses and degrees integrate local and global health content. Through partnerships, our students and faculty work with, and learn from, communities to transform health, globally and locally.

The top 10 public health challenges for 2025-2026 emphasize (1) the need for a unified global approach to address infectious diseases, (2) health disparities, (3) climate change, (4) mental health, (5) substance use, (6) reproductive health, (7) food safety, (8) emerging technologies, (9) healthcare costs, and (10) global collaboration.

(compiled by PubMed from the National Institutes of Health)

10 Emerging Public Health Threats for North Carolinians to Watch in 2025-26

1. Antibiotic Resistance

Antibiotic resistance remains one of the most pressing public health threats, exacerbated by the overuse of antibiotics in both healthcare and agricultural practices. By the end of 2025, the World Health Organization (WHO) projects a significant increase in resistant infections, potentially leading to higher morbidity and mortality rates. The rise of multi-drug resistant organisms poses a serious challenge to effective treatment options for common infections, leading to longer hospital stays and increased healthcare costs.

2. Climate Change and Health

Climate change continues to present substantial threats to public health, influencing air quality, food security, and the transmission of infectious diseases. By 2025-26, the anticipated impacts of climate change will necessitate a reevaluation of [public](#) health strategies to address these concerns.

Extreme weather events—such as heatwaves, hurricanes, and floods—are expected to increase in frequency, creating immediate health risks including injuries, heat-related illnesses, and mental health crises arising from disasters.

3. Mental Health Crisis

The mental health crisis, exacerbated by the COVID-19 pandemic, is expected to worsen by 2026. Increased anxiety, depression, and substance abuse are emerging as significant public health issues across multiple demographics.

The ongoing impacts of isolation, financial stress, and uncertainty about the future contribute to a decline in mental health worldwide. This crisis calls for urgent attention and effective interventions to support affected individuals.

4. Vaccine Hesitancy

Vaccine hesitancy poses another significant threat to international public health, particularly as misinformation about vaccines proliferates online. Rising doubts about vaccine safety and effectiveness can lead to reduced immunization rates, resulting in potential outbreaks of vaccine-preventable diseases. This challenge requires urgent intervention to counteract misinformation and restore public trust in vaccines.

Health communications that convey accurate, science-based information can empower communities to make informed decisions about vaccinations. In the wake of the global pandemic, the importance of robust vaccination campaigns has never been clearer.

5. Non-Communicable Diseases (NCDs) (chronic)

Non-communicable diseases (NCDs) such as cardiovascular diseases, diabetes, and cancer are projected to continue imposing heavy burdens on [healthcare systems globally](#) in 2025-26. Sedentary lifestyles, dietary changes, and tobacco use contribute significantly to the rise of NCDs.

As urbanization and globalization affect lifestyles, addressing these factors becomes imperative in improving population health.

Preventive measures focusing on healthy behaviors can mitigate NCD risks.

6. Food Security and Nutrition

Food security and nutrition will become increasingly urgent public health challenges during 2025- 2026.

Climate change, economic instability, and [supply chain](#) disruptions can lead to food shortages and malnutrition, particularly in vulnerable populations. A robust public health response is necessary to address these issues and ensure equitable access to nutritious foods.

Malnutrition—locally and globally—has far-reaching implications for public health

7. Health Equity and Social Determinants of Health

As health disparities continue to widen, the focus on health equity becomes paramount by 2025-'26.

Vulnerable populations often experience higher rates of disease, disability, and mortality due to social determinants of health, such as economic stability, education access, and healthcare availability. Addressing these disparities is crucial for achieving equitable health outcomes for all.

8. Pandemics and Emerging Infectious Diseases

The threat of pandemics and emerging infectious diseases remains a significant public health concern during 2025-'26.

The COVID-19 pandemic revealed how quickly infectious diseases can spread globally and disrupt everyday life. As new pathogens emerge, including zoonotic diseases originating from animal populations, preparedness and response capability must remain a prioritized area.

9. Substance Use Disorders

Substance use disorders, including alcohol and opioid addiction, are poised to escalate as critical public health issues in 2025-'26.

Accessibility to substances, social isolation, and mental health comorbidities have intensified these challenges in recent years.

Addressing substance use disorders requires both preventive and treatment strategies to mitigate their widespread effects.

10. Health Technology and Data Privacy

The integration of technology in healthcare is rapidly transforming how health services are delivered. In 2025-'26, the reliance on digital health solutions—such as telemedicine and health apps—will continue to grow.

However, with this advancement comes the challenge of ensuring data privacy and security for patients, underscoring the importance of safeguarding sensitive health information. Internationally, advanced telehealth can be a major advantage.

Humanitarian disasters are breeding both short-term and long-term health problems around the world.

The WHO says the world's top health crises are born from humanitarian disasters including wars, political instability and displacement, climate change, and disease outbreaks.

These conflicts can disrupt medical services such as vaccination campaigns, limit people's access to clean water and sanitary conditions, increase malnutrition and the spread of infections, harm people's mental health, and see healthcare facilities attacked, not to mention the death toll from the disasters themselves.

AND FINALLY...

During 2025- 2027, as Duke Univ students, lets help to create significant advancements in personalized healthcare, preventive medicine, and the integration of technology in health and wellness practices locally and globally.

OK? 😊

What technologies—AI, diagnostics, mobile health—can be scaled to **enhance disease prevention, surveillance, and response?**

How can global health systems **rapidly detect, contain, and prevent emerging infectious diseases** before they spread internationally?