

CHAPTER 04

HEALTH



A technician in Gracias a Dios, Honduras, examines blood samples to check for malaria as part of the Clinton Health Access Initiative.

In 2023, the world largely moved on from Covid-19, even if the virus still affected many. For the Foundation's health team, this transition played out in our daily work as we shifted our focus more to the health threats of climate change. We wound down our Covid-19 projects while seeking to apply many of the tools and lessons learned to a new body of work.

By the Numbers

In 2023, the Foundation and its grantees and partners helped achieved:



518K



community health workers across 13 countries supported by stronger national community health policies, investment cases and digital tools

>61M



people reached by more precise infectious disease surveillance tools

\$100M



leveraged for community health systems on top of RF's \$15M funding from bilateral and multilateral donors

>380K



people immunized against Covid-19

95



health institutions—serving 27 million people—with stronger **data-informed** immunization practices





EPIDEMIC INTELLIGENCE

Building on the learnings from **The Pandemic Prevention Initiative** identified in last year’s report, a deep collaboration was established with the **WHO’s Hub for Pandemic and Epidemic Intelligence** to launch the International Pathogen Surveillance Network (IPSN) to scale up pathogen genomic surveillance as a critical tool for early detection and response to pandemic threats. The IPSN now includes 108 partner organizations across 45 countries.

Our partners also strengthened disease surveillance through **wastewater surveillance**—a tool to detect and monitor a broad spectrum of established, nascent, and overlooked pathogens especially in low resource settings. The Alliance for Pathogen Surveillance Innovations—India, a group of leading scientific institutions, are collaborating in India to institutionalize multi-pathogen wastewater surveillance. Today, the surveillance is active in four major cities, reaching over 25.5 million people.

Our work in epidemics also included the Global Vaccination Initiative. In 2023:

The Vaccination Action Network (VAN) and its management was formally transitioned to Africa CDC’s Knowledge Management Hubs under the Knowledge Hubs Initiative

Implementing partners across Kenya, Malawi, Tanzania, Uganda, Zambia have been able to successfully immunize 385,000 people against Covid-19

The reach of the health workforce led by midwives and traditional therapists was extended to marginalized indigenous communities in Guatemala and Honduras

CLIMATE X HEALTH FINANCING PRINCIPLES

On December 3, countries convened for the first-ever “Health Day” at the 2023 United Nations Climate Change Conference (COP28)—a milestone for the climate and health community. The deliberations issued the COP28 UAE Declaration on Climate and Health signed by 150 countries, including the United States and China, which acknowledged for the first time the growing health impacts of climate change and the protective health benefits of stronger climate action. Acting as a threat multiplier, climate change has increased the risk of deaths, noncommunicable diseases, the emergence and spread of infectious diseases, health emergencies, and mental health worldwide, yet little political attention had been given to the health considerations of climate action to date.

As a member of the Health Day Steering Committee, the Foundation worked with the COP28 Presidency to advance substantive climate-health political commitments at COP. Working with a coalition of global partners, including World Health Organization, the Global Fund, and the Green Climate Fund, The Rockefeller Foundation also developed the COP28 Guiding Principles for Financing Climate and Health Solutions and secured endorsements from over 40 climate and health funders, multilateral development banks, philanthropies, governments, private sector, and civil society. Released at the World Climate Action Summit, the high-level segment for Heads of State at COP28, the Guiding Principles anchored over \$1 billion USD in climate-health commitments. The historic outcome is a testament to the power of convening and coalition building to bring together typically siloed sectors of climate, health, and development to solve seemingly intractable problems like climate change.



MBDS conducting an exercise in Laos in 2019 for a joint investigation of a disease outbreak.



PRECISION PUBLIC HEALTH

The **Precision Public Health Initiative**, launched in 2019 alongside **UNICEF**, the **Global Fund**, **Gavi**, and the **World Bank's Global Financing Facility**, helped community health workers across 13 countries in East Africa, Southern Africa, and India use data to deliver the right care at the right time. This five-year body of work, which continued amid the global pandemic, resulted in national community health policies and national data visualization tools supporting more than 518,000 community health workers.

The work led to the creation of the Community Health Roadmap, now housed within UNICEF, to continue mobilizing resources for community health systems. The global partnership created dedicated financing mechanisms, including the Africa Frontline First Catalytic Fund at the Global Fund, and a new \$100m fund for the Community Health Delivery Partnership being established at USAID and UNICEF.

Our partners also helped develop high-impact data visualization tools across three states in India—Rajasthan, Tamil Nadu, and Chhattisgarh—including a real-time tracking system (THAIMAI) for high-risk pregnancies and sick newborns that uses chatbot technology to track and record services delivered to antenatal women and children up to one year of age.

Policy implementers and data scientists in India meet to collaborate on new dengue digital platform. Photo courtesy of ARTPARK.

DISEASE SURVEILLANCE

Because climate data can help improve health care, we supported the creation of a disease surveillance dashboard in India that can provide a risk prediction for dengue infection outbreaks four weeks in advance with 70% accuracy. Dengue is a climate-affected disease and is likely to become more common as temperatures rise. In Karnataka, the AI & Robotics Technology Park (ARTPARK) at IISc is helping integrate climate data along with other data variables into the Government of Karnataka's disease monitoring dashboard, which serves 31 districts—over 61 million people. City specific climate and disease management interventions are also introduced at Bengaluru's Smart City integrated command and control center. This has enabled the city to mobilize resources at least one week in advance of a potential outbreak. The work in Karnataka is already generating interest in other states and is expected to expand partnerships between local collaborators and our Asia Regional Office.

STORIES FROM THE FIELD

Work from our Asia Regional Office

The Mekong Basin Disease Surveillance Network is a visionary trust-based collaboration between six diverse Mekong Basin countries—Cambodia, China, Laos, Myanmar, Thailand, and Vietnam. They regularly exchange information, participate in cross-border meetings, and receive training to enhance surveillance and detection capabilities. The pioneering model holds global potential for cross-border disease surveillance, especially as climate change alters disease patterns and creeping urbanization escalates pathogen transmissions from animals to humans.



WHAT WE HAVE HEARD

Our collaborative efforts above helped set the stage for the Foundation's next chapter in public health, which will focus on addressing the health impacts of climate change in some of the world's most climate-vulnerable communities. Determined to get this right, the Foundation's health team spent much of the past year listening to a wide spectrum of partners and peers. Here's what they told us:

Act now.

Those most affected by climate change—and often least responsible for greenhouse gas emissions—are experiencing the negative health effects of higher temperatures right now. We must act with urgency.

Adopt a resilience mindset.

People living at the forefront of climate change will experience myriad health threats when temperatures rise and natural disasters occur. We don't need to focus on a single disease, instead we need to understand the potential threats before they become reality and mobilize resources to respond.

Work across governments.

Health authorities at all levels of government—both multilaterally and within individual countries—need better information about how climate change will affect people's health so institutions can prepare and respond, and they need to partner with other agencies to adequately respond.

In Gracias a Dios, Honduras, a nurse takes a blood sample to test for malaria as part of an effort from the Clinton Health Access Initiative.





LESSONS LEARNED FROM OUR HEALTH WORK

2023 was a year of reflection and change. It is clear the world needs a transformation of health systems to better prevent, predict, detect, and respond to disease outbreaks caused or worsened by climate change. Taking time to understand the right role for RF to play in the climate and health intersection is challenging given the urgency our partners feel. But we know it would be irresponsible and unwise to run ahead without understanding what role we're best placed to play.

As we seek to achieve our goals in 2024 and beyond, we'll benefit from insights and lessons learned over the course of our engagement and work in 2023, including:

Local context matters.

In 2023, we tested several pilots to understand the role of technology in responding to climate-aggravated infections, such as the work with ARTPARK. One of the lessons we learned after the disappointment of our Pandemic Prevention Institute work is that we cannot underestimate the power of local context. The Foundation needs to practice deep listening to understand climate and health needs and priorities as they evolve. How we create matters as much as what we create.

Sustainability requires planning from day one.

Some of the work the Foundation is concluding will continue because we stepped into it understanding we would be time-bound partners. As the strategy gains momentum, we must do so in coalition with leaders in the field who are well-placed to make sure the work that matters for people's health continues beyond RF and philanthropy's initial intervention.

Go where there is government excitement.

For successful government engagement, it is critical to engage early and continuously, as well as understand the decision-making process and priorities. ARTPARK engaged closely with local government stakeholders to understand local needs, limitations and aspirations. This insight and close collaboration led to the development of a tool for dengue surveillance that went on to become a model for other states in India.



In the Colombian Amazon, the Amazon Conservation Team is pioneering a new Intercultural Health Care model, combining Indigenous and Western medicine.



SPOTLIGHT

INNOVATION STORIES



Atlas AI

With support from the Foundation, **Atlas AI combines deep data sets and satellite imagery with the powers of AI to better plan and implement large social investments.** Founded in partnership with the Foundation in 2018, Atlas AI is developing a Climate Vulnerability Index to closely track climate hazards and their impact on public health in Sub-Saharan Africa. Other work focuses on providing policymakers with data-rich insights to accelerate economic development and promote climate-resilient infrastructure investment across the region. In Kenya, ENGIE Energy Access is using AtlasAI's platform to predict the location of optimal customers for sustainable home solar energy-powered appliances, resulting in a 48% increase in regional sales.

The Foundation has long sought to work at the frontier of technology to find new breakthroughs that support our work or deserve support on their own.



Public utility workers replacing lead pipes.

BlueConduit

BlueConduit—which we support through the Windward Fund—is a pioneering water analytics company committed to revolutionizing water infrastructure decision making and management.

With support from the Foundation, BlueConduit has applied its machine learning models across over 100 communities and water systems in 15 states, enabling streamlined lead detection in over 80% of proposed replacements.

>80% of attempted replacements to **locate lead streamlined**