Disease outbreaks and other health emergencies can cause social, political, and economic disruptions within countries and across the globe. IntraHealth International offers technical assistance that helps countries build resilient, prepared health systems; prevent, detect, and respond to pandemic influenza and other threats (PIOET); and develop strong local technical and management capacity to sustain systems for the long haul. We act across local, national, and global levels to prepare communities and advance global health security, with recent experience addressing outbreaks of Ebola and Zika. We are meeting regularly with our local program leaders to adapt our existing work and can mobilize quickly to help countries develop and implement emergency responses to the current COVID-19 pandemic.

STRENGTHENING HEALTH SYSTEMS

Global Advocacy: As the leader of the secretariat of the Frontline Health Workers Coalition (FHWC), we advocate for more strategic investments to ensure the health workforce includes staff with the key capacities laid out by the International Health Regulations (IHR). Our staff lead FHWC’s 40 public and private organizational members—which include USG implementers, private-sector partners like Johnson & Johnson and Medtronic Foundation, and advocacy organizations—to advocate for greater focus and investments in meeting the needs of frontline health workers. This includes evidenced-based policy analysis to demonstrate the cost vs. benefits of investments as well as ensuring frontline health workers’ voices are heard by policymakers. Our advocacy has helped lead to: a major focus on the frontline health workforce in the 2019 White House Global Health Security Strategy, a strengthened Workforce Action Package in the multilateral Global Health Security Agenda, bipartisan resolutions on the frontline health workforce, and increases in congressional appropriations for global health security.

Emergency Communication: IntraHealth and UNICEF developed a two-way emergency communication tool which allows health officials to target and send SMS messages to health workers throughout a country, region, or district. Ministries of health (MOHs) can use the Mobile Health Worker Ebola Response and Outreach tool—known as mHero—to broadcast messages, report emerging cases, share clinical information, improve health worker
knowledge, and coordinate with far-flung health facilities at a pace equal to or faster than that of the epidemic. mHero has been used in Liberia, Guinea, Mali, and Sierra Leone. In each country, IntraHealth turned the system entirely over to the MOH for ownership and sustainability of use.

During the Ebola outbreak in Liberia, mHero was used more than 400 times to reach over 7,000 health workers. mHero’s ability to provide information and collect data rapidly from health workers in remote locations—all using preexisting infrastructure—led the MOH to expand its use as an integrated disease surveillance system after the emergency abated. It now also allows health workers to initiate messages. The ministry has reached over 17,000 health workers with alerts about health events—everything from Lassa fever to neonatal tetanus. Liberia is currently using mHero for early identification of suspected COVID-19 cases.

In 2019 in Rwanda, as Ebola spread in the Democratic Republic of Congo, we helped the MOH upgrade its Ebola call center—a hotline facility for information exchange and case reporting. With our support, the call center can answer health workers’ questions, receive and track case reports, trace call locations for real-time data about the emergency, and send alerts regarding outbreaks.

**National Emergency Preparedness and Surveillance:** We work with MOHs to improve emergency planning, surveillance, and evidence-based decision making. In Mali, we helped harmonize standard operating procedures (SOPs) for infection prevention and control (IPC) between the Emergency Operations Center and National Health Directorate and helped officials draft the National Health Safety Plan based on the IHR. We also helped Mali operationalize its Department of Emergency Operations Public Health Unit and develop SOPs for its activation, notification, and investigation of public health events as well as communication in the event of an outbreak of an illness with epidemic potential. We helped Mali’s OneHealth Technical Working Group (TWG) develop and disseminate SOPs for epidemiological surveillance and helped establish the country’s biannual epidemiological surveillance data reviews. The reviews, now led by regional health teams independent of IntraHealth’s assistance, have increased the completeness of surveillance data for influenza, polio, measles, hemorrhagic fevers, yellow fever, and meningitis to more than 95% in four districts.

**Facility Emergency Preparedness:** In Mali we work with seven national and regional hospitals to identify gaps in their responses to and preparedness for PIOET and other health emergencies and develop plans to close those gaps. Using IntraHealth’s Optimizing Performance and Quality (OPQ) methodology, facility teams continually assess their hospitals’ infection prevention and control (IPC) measures, preparedness for PIOET, and referrals processes. Based on these assessments, each hospital designs an appropriate annual quality improvement plan, which we help them implement. Our assistance has included training on IPC and decontamination procedures, surveillance standards and procedures, and the IHR. We have also procured IPC materials and developed and disseminated job aids to help health workers identify PIOET. Within each hospital, we established and guided weekly epidemiological data reviews, a system which has since been institutionalized and sustained by each hospital.
In Rwanda, we worked with the MOH to establish six Ebola Virus Disease (EVD) isolation units, where clients suspected of having the disease could be isolated, investigated, and treated if needed. This included renovating and equipping existing facilities and training staff in EVD response and IPC.

**Community Emergency Preparedness:** In Senegal, we helped make communities aware of EVD and PIOET risks and prepare to respond effectively to potential EVD cases. We trained 195 hygiene officers to prevent and respond to EVD; more than 700 community members to recognize and report signs and symptoms of PIOET, including EVD; 187 information systems specialists to use GIS to track and report cases of PIOET; and more than 200 community workers on biomedical waste management. With the hygiene officers, we conducted more than 20,000 risk communication education sessions through home visits, talks with Imams, and public outreach. We also trained mortuary staff and Imams on how to prevent infection while preparing bodies for burial.

**Supply Chain Strengthening:** We are a provider of global expertise in workforce development for health supply chains in more than 34 countries. During emergencies, disruptions to health supply chains can impede prevention and response. On the USAID-funded Global Health Supply Chain Program-Procurement Supply Management Project (GHSC-PSM), IntraHealth has provided technical assistance, tools, and training to strengthen the supply chain workforce in more than 20 countries in sub-Saharan Africa and Asia and leads GHSC-PSM’s global technical approach to supply chain workforce development. In Uganda, IntraHealth has worked closely with district health management teams and supply chain departments through the USAID RHITES-E project in 23 districts to monitor and maintain stocks of health supplies. This includes implementing a digital stock monitoring tool to help mitigate low stock levels and stock-outs.

**PROTECTING & PREPARING THE HEALTH WORKFORCE**
Frontline health workers are every country’s first line in detecting, reporting, and responding to emerging threats. They have the power to stop epidemics in their tracks. That’s why we train and equip facilities and health workers on disease surveillance and response, infection prevention, occupational safety and health, and much more.

**Education before Emergencies:** After occupational safety and health assessments found that Cameroon had no national or sub-national policies regarding protection of health workers from transmissible illnesses, we worked with Cameroon’s nascent OneHealth Team to identify policy needs and goals and with training institutions to incorporate biosafety procedures into health workers’ preservice educational curricula.

In South Sudan, we supported field epidemiology training for central and state ministries of health and county health departments, focusing on routine immunization, surveillance of priority diseases and health events, and response to vaccine-preventable disease outbreaks. We trained 48 staff, including Expanded Program on Immunization Officers and Infectious Disease Surveillance and Response Officers.

In Rwanda, we prepared 450 health workers to effectively respond should they encounter a suspected EVD case. We also trained Rapid Response Teams (RRTs), mobilized to respond to reports of potential EVD and PIOET. Through mentoring health providers and emergency drills, the RRTs learned IPC skills and knowledge, including use of personal protective equipment, signs and symptoms of PIOET, case response and reporting, and isolation and referral procedures.

**Training during Emergency Response:** During an epidemic, health workers often need training in new knowledge and skills to save lives and protect themselves and are also needed urgently within facilities to deliver services. To simultaneously keep health workers in their facilities and update their knowledge and skills, we can rapidly develop context-specific courses that can be taken with a standard mobile phone. We used this method to provide health workers in 2014’s Ebola-affected areas with up-to-date training about the disease, its transmission, protection from viral hemorrhagic fevers, and universal precautions, all using standard SMS. Additionally, together with mPowering Frontline Health Workers and other partners, we hosted a series of training of trainers webinars including “mTraining Health Workers for Ebola—Protection, Detection, and Response.” The series was aimed at those educating others and covered topics such as selecting audiences and messages; techniques and technologies; SMS
and Interactive Voice Response; and measuring the impact of mTraining. Almost 600 participants from 75 countries joined the webinars. Moreover, the site on which these resources were available acted as an online community forum for information gathering and engagement, allowing programs to share resources and helping donors quickly identify ways to support response efforts. Finally, IntraHealth created a four-week virtual course, supported by a USAID Grand Challenge award, to train potential mHero users on how to use the technology during an emergency, from conceptualization of a messaging campaign through the technical steps involved in sending out and managing messages. Training participants came from 26 different countries.

**Ensuring Occupational Health and Safety:** Health workers’ safety is fundamental to ensuring their ability to care for clients, especially in an emergency. We assisted Uganda’s MOH to train health workers in occupational health and safety (OHS). Together, we developed *Guidelines for Occupational Safety and Health Including HIV in the Health Services Sector*. This guide, used throughout Uganda to train district and health facility teams, lays out the actions required to ensure health workers’ safety. Topics include hazard identification, risk management, and prevention and management of exposures due to HIV, TB, hepatitis, and viral hemorrhagic fevers, as well as wider IPC and workplace safety. This includes psychosocial safety issues such as health workers’ mental health, stress reduction, gender equality and reduction of harassment, and the roles gender, age, and socio-economic standing play in risk. The guide and training have informed development of risk-reduction action plans, OHS committees, and coordinated preparedness, surveillance, contact tracing, and response to PIOET.