

Global Health Security

CAPACITY STATEMENT

October 2024

RISE
Reaching Impact, Saturation,
and Epidemic Control

Reaching Impact, Saturation and Epidemic Control (RISE) assists countries to respond to the HIV, global health security, and mpox health emergencies, providing technical assistance, service delivery, research, and cross-cutting health systems support to address critical pandemic response priorities. While initially funded to address the HIV epidemic, RISE jumped into the worldwide response to the COVID-19 pandemic in 2020. The same technical capacities brought to bear on HIV and COVID-19 are the exact capacities that will move forward the Global Health Security Agenda. Led by Jhpiego, the RISE consortium has offices across Sub-Saharan Africa, Asia, Latin America, and the Caribbean. Consortium members include:


- ICAP at Columbia University (ICAP)
- Management Sciences for Health (MSH)
- ANOVA Health Institute
- BAO Systems
- Mann Global Health (MGH)
- Johns Hopkins University (JHU) Center for Public Health and Human Rights, Center for Global Emergency Care and Center for Health Security



The RISE consortium is ready to enhance the development of national-level strategies by providing training across all cadres of the workforce, conducting needs assessments to define implementation priorities and policy, carrying out research to inform scale-up, supporting procurement and infrastructure, and direct implementation as needed.

GLOBAL HEALTH SECURITY

RISE is currently implementing Global Health Security focused activities in **Ethiopia, India, Sierra Leone, and South Africa**. RISE has worked across countries to build capacity for detection, monitoring, and response to zoonotic diseases through the promotion of a coordinated one-health approach across human and animal health sectors; strengthening antimicrobial stewardship among both human and animal health professionals to combat antimicrobial resistance (AMR); increasing the capacity for early detection and surveillance of emerging high-consequence pathogens (HCP) across both human and animal health sectors by strengthening laboratory capacity, next genome sequencing, implementation of real-time early warning signal models and



data sharing. The RISE strategy focuses on emerging zoonoses and leverages our deep technical expertise and relationships to facilitate intersectoral coordination for effective preparedness and response.

PREVENTION


The RISE consortium brings the capacity and knowledge of all its partners to prevent and reduce the likelihood of natural, intentional, or accidental outbreaks.

Preventing the emergence and spread of antimicrobial resistance (AMR)

- **Jhpiego** has worked closely with the Centers for Disease Control and Prevention (CDC) on a multi-site evaluation of antimicrobial use and AMR in six health facilities in **Brazil, Chile, and Argentina** before and during the COVID-19 (C19) pandemic including setting up, monitoring of prescribing practices and utilizing essential drug lists.
- **ICAP** is working across ministries in **Eswatini** to strengthen the One Health approach to surveillance on AMR, antimicrobial use and antimicrobial consumption by strengthening the national AMR Containment Committee, supporting development of an implementation plan for the National AMR Strategy, developing AMR surveillance dashboards, providing guidance and TA to national One Health Committees to harmonize AMR data collection, analysis, and quality across sectors, including through connected tools that track and map the emergence of resistance across human and animal health, facilitating enrollment in the WHO Global AMR Surveillance and Use Surveillance System (GLASS), strengthening the antimicrobial stewardship (AMS) program and establishing a sheep blood donation center. In **Kenya**, ICAP is collaborating with MOH to strengthen AMR and AMS at two large hospitals in Nairobi to strengthen laboratory capacity for AMR testing, strengthen IPC and Occupational Health and Safety implementation, support production of annual antibiograms, connect the laboratory information system to the national surveillance system and enhance healthcare-associated infection (HAI) surveillance. Additionally, in partnership with CDC, ICAP developed a toolkit to support healthcare workers in middle-income countries to develop and implement quality improvement (QI) projects that improve IPC and mitigate the spread of carbapenem-resistant Enterobacteriaceae (CRE) and other HAIs. ICAP piloted the toolkit in **Thailand**, including implementation of QI projects in 12 health facilities. In **Ukraine**, ICAP is collaborating with the Ukraine Center for Public Health to strengthen national capacity to address AMR, including strengthening coordination and collaboration between multi-disciplinary teams and regional centers for disease control and hospitals to improve the laboratory-clinical interface, improve management of infections in wounded, detect and respond to resistant organisms, prevent spread of AMR through IPC and strengthen surveillance. ICAP also improved AMR diagnostic capacity through procurement, installation and training on laboratory equipment and established colonization screening for carbapenem-resistant organisms.
- **MSH**, through the global USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program (2018–2025) has provided Global Health Security Agenda (GHSA) support to 13 African and Asian countries to strengthen multisectoral (One Health) coordination on AMR, infection prevention and control (IPC) and antimicrobial stewardship (AMS).¹ MTaPS mobilized widespread public education (such as training of journalists in all the seven provinces of Nepal and education of school students in all the governorates of Jordan) on AMR, IPC and One Health, and supported convening of the annual World AMR Awareness Week (WAAW) in multiple partner countries, bringing together the human, animal, and, in some cases, the environmental sectors. Support for multisectoral coordination notably increased engagement of the animal sector in AMR response in the partner countries.^{1,2} MTaPS worked with national counterparts in **Tanzania** to develop multisectoral AMS policy/guidelines and the AMR communication strategy – both documents featured strong animal sector components. In **Uganda**, MTaPS helped develop and finalize the

¹ <https://joppp.biomedcentral.com/articles/10.1186/s40545-021-00309-8>

² <https://onehealthoutlook.biomedcentral.com/articles/10.1186/s42522-023-00081-6>



first veterinary essential medicines list and five guidelines for the use of antimicrobials in food-producing animals.^{3,4} Additionally, MTaPS worked with 10 GHSA partner countries to conduct multisectoral assessment of AMS policies and regulation, which included both human and animal sectors. Through Fleming Fund grant, MSH also supports AMR and antimicrobial use surveillance and laboratory strengthening to generate and analyze quality data in Nigeria. MSH has conducted antimicrobial use and healthcare-acquired infection prevalence surveys in **Tanzania** and **Uganda**; and supported **Ethiopia's** first national AMR governance collaborative. In **Nigeria**, MSH supports AMR and antimicrobial use surveillance and laboratory strengthening to generate and analyze quality data, and in **Cameroon**, under the newly launched USAID's Next Gen Exchange Program (2024-2029), MSH will support the establishment of public-private coalition and strategies to slow the emergence and spread of AMR through multisectoral coordination, surveillance of AMR and antimicrobial use, and IPC.

Zoonotic diseases

- **RISE** consortium partners have extensive experience in responding to the global health crises, including the COVID 19 pandemic and regional Ebola outbreaks. Currently, RISE is building the capacity of India's state ministries of health (MOHs) to manage mpox outbreaks. Strategies include screening and treating mpox and working with India's Regional Disease Diagnosis Labs in six regions to strengthen mpox disease diagnosis and surveillance within the animal population.
- In partnership with the **JHU Center for Global Health and Global Infectious Diseases**, RISE has hosted several webinars on HCPs/outbreaks (such as Marburg in Tanzania) to provide knowledge updates to partners, practitioners, and policymakers.
- Through MTaPS, MSH adapted WHO's human health IPC assessment tools and helped **Cote d'Ivoire**, **Democratic Republic of Congo (DRC)** and **Mali** conduct assessments in the animal sector. For example, **Mali** conducted its first national-level IPC assessment in the **animal sector**, which led to the development of IPC guidelines and an action plan. In **Uganda**, MTaPS supported situational analysis of IPC in the animal/agriculture sector followed by the development of a national IPC plan in that sector; the program also helped develop IPC guidelines for the **animal-production sector**.⁵
- **MSH** also developed and disseminated national guidelines on IPC for viral hemorrhagic fever in Nigeria and Senegal; and convened the human and animal health sectors, local governance structures, and community stakeholders to establish integrated electronic disease surveillance systems in **Afghanistan**, **Benin**, **Madagascar**, and **Pakistan**.
- To enhance cross-border communication, information sharing, and coordination for Ebola preparedness, **ICAP** trained health workers and screeners at local points of entry and supported cross-border planning and information sharing between **Uganda** and **South Sudan**.
- Through MTaPS, MSH supported the national stakeholders to develop national antimicrobial use guidelines for the animal sector and a training package based on those guidelines; MSH subsequently supported conducting TOT to 15 **veterinarians** and 42 **livestock technicians** using the training package.

Biosafety and Biosecurity

- In **India**, the **JHU biocontainment unit (BCU)** team is providing technical assistance to the RISE project and supporting sub-national entities to build BCUs, which will convert existing intensive care units to manage and research pathogens safely. Activities include developing training materials and framework, conducting training, and developing infrastructure and operational guidelines.
- **RISE India** is strengthening biomedical waste management using its established hub and spoke model.
- **ICAP** is strengthening national biorepository systems in **Eswatini** and **Kenya** to ensure safe transport of pathogen isolates from health facilities to national reference laboratories.

³ https://pdf.usaid.gov/pdf_docs/PA00ZZQR.pdf

⁴ <https://www.sciencedirect.com/science/article/pii/S259005362400003X>

⁵ <https://www.sciencedirect.com/science/article/pii/S259005362400003X>



Planning for the Availability and Delivery of Vaccines, Point-of-Care Diagnostics, and Treatments for Future Infectious Disease Threats


- With a presence on WHO SAGE's C19 Vaccine working group and the Sabin-Aspen Vaccine Science and Policy Group, **RISE** collaborates with national governments and local partners to deliver large-scale vaccination services, focusing on equity by helping countries reach the most vulnerable. RISE has reinforced vaccination efforts in **Ecuador, Ghana, India, Lesotho, Namibia, Nigeria, and Rwanda**, delivering over **21 million C19 vaccine doses** as of May 2024.
- Under the **Save Lives Now initiative**, **RISE** is expanding access to medical oxygen, including the installation of pressure swing adsorption (PSA) plants in **Afghanistan, Ghana, Kenya, and Mozambique**, as well as efforts to increase access to liquid oxygen in **Ecuador, Ethiopia, and Ghana**. **RISE** informed site selection, provided infrastructure, trained biomedical engineers, designed consumption and forecasting dashboards, and facilitated private-public partnerships to strengthen supply chains.
- With **Global Fund Technical Assistance** support, **RISE** supports the sustainable use of medical oxygen investments in **Bangladesh, Ethiopia, Ghana, and Mozambique**, including clinical and engineering training, and the development of standard operating procedures, and site preparation and use of 14 PSA plants.
- Also under **Saving Lives Now**, **RISE** has supported the introduction of rapid antigen testing and oral antivirals under the Test to Treat (T2T) initiative in **Bangladesh, Ghana, Lesotho, Mozambique, and Rwanda**. RISE provided Paxlovid to over 1000 people who were diagnosed with COVID-19. RISE developed tools to inform scale-up, integrated activities into national guidelines, facilitated regulatory approval, trained health care workers in the safe use of antivirals including developing technical guidance such as a [Fact Sheet for Clinicians on the C19 Response: Test-to-Treat](#).
- **MSH** has supported 17 countries to introduce COVID-19 vaccines, building on new vaccine introduction experience supporting the pentavalent vaccine in Haiti (2012-13), the pneumococcal conjugate vaccine (2011-18) and DPT-HepB-Hib1-3 vaccine (2012-18) in DRC, and the measles rubella vaccine in Malawi (2017-2022).

DETECTION

Early threat detection seeks to save lives by ending outbreaks before they become pandemics. Through ongoing work, RISE continues to build strategies and infrastructure to conduct necessary surveillance at the country-level.

National Laboratory System Strengthening

- To strengthen laboratory capacity and improve surveillance efforts in **India**, **RISE** provided direct support to strengthen RT-PCR capacity (n=420) and next generation sequencing (n=11) this included guidelines and training in sample processing, biomedical waste management, safety procedures, and lab information management.
- In **Ecuador**, in collaboration with the Universidad San Francisco de Quito, **RISE** strengthened one of three genome sequencing laboratories in the country to increase sample throughput ten-fold, by providing equipment, training laboratory personnel and operationalizing whole genome sequencing guidelines.
- **MSH** has expertise in equipping laboratories to meet Biosafety Level 3 standards, supporting them to receive and maintain international accreditations, and strengthening systems to transport, package, and ship specimens as required by the International Air Transport Association Dangerous Goods Regulations. In **Nigeria**, MSH strengthened laboratory system governance by establishing Laboratory Technical Working Groups in six states and providing them with technical assistance and supported the Medical Laboratory Science Division (MLSD) of the Federal Ministry of Health (FMOH) to develop the first National Essential Diagnostic List (NEDL), launched in May 2022: the first country in the AFRO region to do so.
- **ICAP** supports over **1,300 standalone laboratories and 2,400 point-of-care testing laboratories** in 15



countries. ICAP provides technical assistance to MOHs and national laboratories to update and revise national policies, optimize lab sample diagnostic networks, develop external quality assurance guidelines, and support stepwise laboratory quality improvement towards accreditation.

Surveillance

- **RISE** consortium partners have supported over 20 countries to strengthen sentinel and event-based surveillance systems on severe acute respiratory syndrome (SARS) and other public health threats. RISE is supporting ministries of health to implement and strengthen surveillance activities related to C19. For example, the project provides technical assistance for the creation of customized DHIS 2 modules to track C19 tests and results and client admission to C19 treatment facilities as well as high quality data visualizations for decision-making and reporting. In **Ecuador**, RISE supported the sequencing of over 1,500 samples to determine the predominant C19 variants in the country. In **Nigeria**, RISE improved C19 data collection with prompt entry of client data for cases of interest into the Surveillance Outbreak Response Management and Analysis System, ensuring that test results are received by the surveillance team and that the full cascade of monitoring and contact tracing ensues.
- With CDC funding, **Jhpiego** supported C19 surveillance in more than 20 countries, including event, community, and indicator-based efforts; setting up data warehouses, and improving integration and interoperability among systems. In the Democratic Republic of Congo, Jhpiego has catalogued cases of all Ebola outbreaks in coordination with the government and participated in deliberations on response efforts.
- In Cameroon, **ICAP** conducted a serosurvey of C19 among 10,000 individuals in the 10 regional capitals; in South Sudan, ICAP conducted serologic testing on remnant samples to understand the prevalence of C19; and in the Republic of Georgia, ICAP piloted wastewater surveillance for C19 re-emergence in three cities.
- **MSH** developed a guide on [Key Considerations and Strategies for Strengthening COVID-19 Diagnostic Supply Chains in Low- and Middle-Income Country Settings](#) which outlines supply chain challenges; compares types of COVID-19 tests and tradeoffs among them.

Human Resources/One Health Workforce Development and Management

- **RISE** supports health workforce planning and coordination investments to ensure sustainable pandemic preparedness within the health service delivery sections across 14 countries. RISE activities have evolved from capacity building to strengthening C19 clinical case management to supporting the implementation of the WHO basic emergency care curriculum, and community-based preparedness. RISE has trained over 74,000 health care workers and delivered support for non-hospitalized rehabilitation and outpatient “test to treat” services in collaboration with local partners.
- **RISE** has supported the training of HCW in the identification and management of emerging zoonotic threats such as Mpox, creating online training modules for just in time support.
- In **Lesotho**, **RISE** provided direct critical care service support for C19 case management at two treatment centers and training on clinical care guidelines at more than 17 hospitals. The project has developed C19 risk communication materials, including posters and job aides on IPC, COVID diagnosis, hypoxia management, and the use of oxygen delivery devices that targeted healthcare workers.
- ICAP strengthened the capacity of the **Africa One Health University Network** and **Southeast Asia One Health University Network** to increase the capacity of HCW to prevent, detect, and respond to disease outbreaks. Additionally, in **Sierra Leone**, ICAP trained fellows from the Field Epidemiology Training Program (FETP) in surveillance, outbreak investigations, public health communications, quality improvement and mentorship. In **South Sudan**, ICAP supported multidisciplinary rapid response teams in all 10 states and in 24 counties at high risk for EVD, including building their capacity in surveillance, IPC, risk communication and clinical oversight.
- **MSH** has developed and implemented the [Sustaining Essential Health Care during COVID-19: A Toolkit for Local Leaders to Adapt Health Services in Low Resource Settings](#) in **Madagascar and Benin** to plan and implement service adaptations to maintain population access to essential care.



RESPONSE


Rapid, effective, and flexible response to pandemic infection is the heart of all that the RISE consortium does.

Health Emergency Management

- **RISE** has provided significant technical assistance to support oxygen delivery preparedness, forecasting for acute demand and managing supply chains.
- In **Nigeria**, **RISE** supported the establishment of emergency operations centers in eight states, which included procurement and installation of state-of-the-art equipment and software for communication and data visualization as well as training of strategic information officers, call center agents, and contact tracers.
- **JHU** led a multinational tabletop exercise for the **Jhpiego** CDC GHSA award on viral hemorrhagic fever outbreak in **Liberia**, **Sierra Leone**, and **Mali** to examine vulnerabilities in national and regional health security architectures and planning, opportunities for regional coordination, and to define regional preparedness priorities.
- In partnership with **JHU**, **Jhpiego** conducted seven country Emergency Response and Capacity Assessments in south and central America to support the Pan American Health Organization (PAHO) to define GHS priorities in the region.
- The **JHU CEPAR** has expertise in conducting extensive disaster preparedness activities, including tabletop exercises. Additionally, CEPAR designs and operationalizes facility-based regional Incident Management Command Systems (**Philippines**, **Saudi Arabia**).
- **MSH's** *Leading and Managing for Results in Pandemics* program is being used in **Kenya**, **Malawi**, **Nigeria**, **Peru**, **Rwanda**, and **Uganda** to enhance the leadership and management capacities of public health emergency preparedness, response, and recovery teams. MSH developed and implemented tools and approaches that strengthened and accelerated IPC response in 14 countries during COVID-19 outbreak. In **Rwanda**, MSH helped establish a new provincial Emergency Operations Centre in May 2022. In partnership with the Center for Global Emergency Care at Johns Hopkins University and the WHO, RISE has built emergency management capacity by providing training in Basic Emergency Care, as well as supporting the training for a cadre of Master trainers in **Mozambique**, **Lesotho**, **Ghana**, **Rwanda**, and **Kenya**, to ensure locally led training cascades.
- **ICAP** has supported health emergency management capacity strengthening in **Sierra Leone**, **South Sudan**, **Ethiopia**, and **Uganda**. During the Ebola outbreak in West Africa, ICAP supported the government of **Sierra Leone** to evaluate the community care center (CCC) model and develop recommendations for future outbreaks and response strategies. In **South Sudan**, ICAP provided technical assistance to the MOH-led national incident management team to issue daily updates and alerts on Ebola Virus Disease (EVD) and other public health hazards. ICAP also trained more than 150 individuals across the country in the WHO incident management system. Additionally, ICAP supported cross-border communication, information sharing and EVD preparedness and response between **South Sudan** and **Uganda**. In **Ethiopia**, ICAP supported the creation of regional emergency operation centers in Addis Ababa, Oromia, and Amhara, as well as the national EOC at the Ethiopian Public Health Institute. These EOCs operated as command posts during the COVID-19 response.

Risk Communication and Community Engagement (RCCE)

- During the C19 pandemic, **RISE** applied its experience in HIV risk communication and engagement to develop and implement mass awareness campaigns, health promotion, social mobilization, stakeholder, and community engagement; and infodemic management in **Ecuador**, **Ghana**, **Lesotho**, **Nigeria**, and **Rwanda**.
- RISE conducted social media sentiment analysis in **Namibia** and **India** to support C19 messaging, which in turn supported the MOHs to develop an effective response that connected clients with C19 care and resources.
- **MSH** supported risk communication and community engagement (RCCE) activities through the USAID organized Network of Services for Everyone's Health Activity in Malawi, reaching more than 9 million



people in 2020 and 2021 with messages on C19 prevention measures and vaccination. Community sensitization efforts engaged more than 1,200 community and faith leaders. The *Chipatala Cha Pa Foni* health hotline service processed more than 3,700 calls in Nov 2020 (54% COVID).

- **ICAP** supported RCCE in **South Sudan**, collaborating with local stakeholders to develop and produce radio jingles specific to COVID-19 and Ebola Virus Disease preparedness.

Infection Prevention and Control (IPC)

- **RISE** supports infection prevention and control (IPC) efforts by training safety officers, addressing supply chain issues, conducting needs assessments, training policymakers, drafting SOPs, and rapid response training. The project has built the capacity of HCWs at the facility level in **Afghanistan, Bangladesh, Ecuador, Ethiopia, Ghana, India, Kenya, Lesotho, Mozambique, Nigeria, and Rwanda** on the appropriate use of oxygen equipment to support clients with advanced C19, and to prevent other infections. Under its PEPFAR-funded HIV work, RISE has also supported IPC efforts in over 14 countries in Sub Saharan Africa.
- **RISE** developed a digital IPC supervision checklist, in use since 2020; the platform operates online/offline in 174 health facilities in **Mozambique**. The IPC platform responds to the MOH's needs for real-time management of health facility interventions including performance, PPE stock, and comparing C19 treatment centers, the number of facility staff, and providers infected with C19.
- The **MSH**-led USAID MTaPS Program strengthened national and facility IPC program core components and healthcare waste management reaching more than 4,100 healthcare facilities across 12 countries; trained 45,000 healthcare workers; developed 29 COVID-19 IPC eLearning programs, now managed by MOHs, universities, and other stakeholders. In **Haiti**, MSH supported the establishment of IPC committees in 27 hospitals. In **Malawi**, MSH updated national IPC guidelines and delivered IPC training to more than 2,000 health workers across more than 300 service-delivery sites. In **Tanzania, Mozambique, and Cameroon**, MSH provided technical to national counterparts to develop protocols surveillance of healthcare associated infections. In **Cameroon**, MSH will also continue to support the improvement of IPC practices under ESCAPE.
- In **Sierra Leone**, ICAP has strengthened IPC at national and health facility levels since 2015. During the Ebola outbreak, ICAP partnered with the Ministry of Health and Sanitation to conduct a rapid evaluation of IPC strategies and a subsequent evaluation of the national IPC program and practices at health facilities nationwide. ICAP also led a quality improvement collaborative at eight health facilities, to train facility-level staff to identify IPC quality challenges, conduct root cause analysis, identify and priorities context-tailored solutions, and conduct rapid iterative tests of change. Within four months, the eight facilities improved compliance with IPC standards from 67% to 96%. Additionally, ICAP collaborated with the MOH to design, develop and implement the country's first advanced IPC certificate course, featuring innovative simulation-based learning and a skills laboratory to train healthcare workers. ICAP also provided technical assistance to the National IPC Unit to develop a national IPC M&E framework and tools, build local capacity to manage and analyze IPC-related data and to draft IPC-related reports.
- In **Uganda**, MTaPS supported situational analysis of IPC strategies and a subsequent evaluation in the animal/agriculture sector followed by the development of the national IPC plan in that sector; the program and practices at health facilities nationwide.

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