Testing is not only vital to defeating COVID-19, it is the bedrock of sustainable, resilient health systems.

- **Stop the Spread**: Testing enables test-trace-isolate strategies to contain COVID-19, and protect those yet to be (or unable to be) vaccinated.
- **Treat and Save Lives**: Testing informs treatment decisions, making sure the right disease is being treated.
- **Protect Communities**: Testing enables ongoing public health surveillance to inform decision-making, including public health interventions.
- **Control Variants**: Testing detects and tracks the emergence and circulation of new variants.
- **Measure Vaccine Efficacy**: Testing measures the efficacy of vaccines, in clinical trials and real-world settings.
COVID-19 has shown that testing is the weakest link in health systems.

Huge inequities in access to testing jeopardize our ability to get ahead of the virus, and new variants are emerging. For every COVID-19 test conducted in low-income countries, over 50 are being conducted in high-income countries. Sequencing capacity is minimal or non-existent in most low- and middle-income countries. This inequity leaves many countries to operate blindly, without the possibility to effectively track the virus. As a result, emerging strains - that may be increasingly virulent and deadly - are able to circulate widely before they are spotted, and hotspots cannot be contained before they spread.

Country uptake and deployment of testing has been hampered by a lack of funding. Funding is urgently needed to support countries in implementing test-trace-isolate strategies, and in planning, purchasing, and procuring adequate supplies of testing equipment. Funding will also support the integration of diagnostic strategies within existing health systems, as well as provide essential training for laboratory technicians, health workers, and community health workers on the front lines.

New diagnostic technologies are needed for resource-poor settings. Resource-poor settings lack access to the laboratories needed to process complex molecular tests. The Diagnostics Pillar is supporting countries in accessing reliable, affordable tools that can be used anywhere – such as high-quality antigen rapid diagnostic tests (Ag RDTs) and self-tests.

The Diagnostics Pillar of the ACT-Accelerator is improving equitable access to affordable tests.

Co-led by FIND and the Global Fund, the Diagnostics Pillar of the Access to COVID-19 Tools (ACT) Accelerator has harnessed the strengths of over 30 global health partners and developed a comprehensive, end-to-end workplan that spans research and development, market shaping, country uptake and implementation. Many significant gains have already been achieved.

Access to affordable, high-quality Ag RDTs has been guaranteed for low- and middle-income countries. In September 2020, the ACT-Accelerator announced a plan to make Ag RDTs available to low- and middle-income countries, including direct agreements with manufacturers, specific WHO policy guidance, and catalytic funding to procure and deploy the tests. The speed at which reliable Ag RDTs were developed and made available is one of the remarkable achievements of the partnership – for comparison, getting reliable Ag RDTs that could be conducted outside of laboratory facilities developed and ready for procurement took 5 years to achieve for HIV.

Technology transfer and support to scale up manufacturing capacity is driving down Ag RDT prices to less than US$2.50. By working with industry and manufacturing partners on initiatives including scale up of local manufacturing, the Diagnostics Pillar has enabled to cut the price of Ag RDTs in half since October 2020, and further decreases are expected.

“We need test kits readily available, and not only available at the center but also available in all parts of the country.”

Dr. Jane Ruth Aceng,
Minister of Health for Uganda
The Diagnostics Pillar is working to strengthen the uptake of testing in countries. Alongside securing lower prices, the Diagnostics Pillar supports countries in the uptake of testing strategies and addressing implementation barriers. This includes training laboratory technicians, health workers and community health workers, and building local diagnostic capacity.

The ACT-Accelerator is calling for 900 million tests to be procured for low- and middle-income countries by the end of 2021. By the end of July 2021, over 94 million tests (37.8 molecular (PCR) tests and 56.8 million Ag RDTs) had been procured for low- and middle-income countries. Over 23,000 healthcare workers in almost 200 countries had access to training to effectively implement the tests.

Investments in diagnostic testing strengthen health systems beyond the COVID-19 pandemic.

COVID-19 has significantly impacted health services for other diseases – like HIV, tuberculosis, and malaria – across low- and middle-income countries. Spot-checks at 502 health facilities across Africa and Asia showed that between April and September 2020, HIV testing fell 41% in comparison with the same time period in 2019, TB referrals decreased 59%, and malaria diagnoses fell by 31%. A lack of diagnostic testing means people are running a higher risk of not accessing the treatment they need and, consequently, of dying.

The pandemic has highlighted the importance of investing in testing and in strengthening health systems.

Diagnostic capacity already in place for other diseases has been crucial to respond to COVID-19 – for instance, testing equipment for TB has been used to co-test for both COVID-19 and TB at the same time.

Drawing upon the experience of communities and civil society is critical for the successful rollout of testing. Community health workers are at the heart of the response and ensure delivery of testing services even in the remotest areas.

Comprehensive diagnostic testing is key for fighting antimicrobial resistance, enabling better management of patients who are infected and testing the efficacy of new antimicrobials.

Diagnostic testing is – and will continue to be – the first line of defense of any pandemic response and a critical element of resilient and sustainable health systems. We must capitalize on the advances spurred by COVID-19 to reinforce the fight against other diseases such as HIV, tuberculosis, malaria and hepatitis, and help the world prepare for future pandemics.
The ACT-Accelerator Diagnostics Pillar is facing a funding gap of US$8.7 billion to support low- and middle-income countries respond to the COVID-19 pandemic. This investment will have far-reaching implications for health systems worldwide and play a major role in achieving the 2030 Sustainable Development Goals.

KEY AREAS TO BUILD ON FROM COVID-19 THAT CAN BOOST ACCESS TO TESTING FOR ALL DISEASES

- Political focus and collaboration
- Sequencing capacity for disease surveillance and rapid response
- Diagnostic prioritization within health systems
- Technologies to improve diagnostics use, including mobile and digital tools
- Health worker training and diagnostic literacy
- Innovation and manufacturing capacity

ACT-Accelerator Diagnostics Pillar working group leads

- Bill & Melinda Gates Foundation
- Boston University
- FIND Diagnosis for all
- The Global Fund
- GFAN Global Fund Advocates Network
- Praesens
- The Rockefeller Foundation
- Amsterdam UMC University Medical Centers
- Unitaid
- UNICEF
- World Economic Forum
- World Health Organization