

Pandemic Prevention, Preparedness and Response

Governments and health systems must urgently strengthen their approach to pandemic prevention, preparedness and response if we are to avoid the catastrophic impacts of another crisis like the COVID-19 pandemic.

In just over three years, the COVID-19 pandemic contributed to nearly 25 million deaths worldwide and reversed progress towards global health goals, including the fight against infectious diseases like HIV, TB and malaria and advancements in maternal and child health. Over 93 million were pushed into poverty. In addition to the devastating death toll, the pandemic exposed the dramatic inequality in access to health tools and services between high- and low-income countries and between rich and poor people.

This was not the first global health emergency, nor will it be the last. Climate change is intensifying, making people more vulnerable to illnesses exacerbated by increased pollution, extreme heat,

drought and famine, and increasing the spread of infectious diseases like malaria. Deforestation and urbanization are increasing the risk of spillover of disease from wildlife to humans; we have already seen this in recent years with new influenza strains and re-emerging viruses. Antimicrobial resistance is on the rise, with deadly diseases such as tuberculosis becoming increasingly resistant to the lifesaving drugs used to treat them.

How we contribute to pandemic prevention, preparedness and response

At Unitaid, we save lives by making new health products available, adapted and affordable for people in low- and middle-income countries. We identify innovative treatments and tools, help tackle the barriers that are holding them back, and get them to the people who need them most – fast. Our expertise and agile approach are particularly important during pandemics, when new tools are urgently needed. When the COVID-19 pandemic hit, we quickly applied our expertise to address critical challenges that prevented low- and middle-income countries from accessing new and lifesaving medicines, medical oxygen and diagnostic tests. We continue to invest in strengthening health systems, coordination mechanisms and community-led health initiatives, so we are all better equipped to respond to whatever comes next.

Photo: Improving access to medical oxygen was critical during the COVID-19 response, but also strengthens health systems to provide ongoing quality care and prepare for future pandemics. At Botsabelo Hospital in Lesotho, Dr. Ninza Sheyo provides Khamokha Khamokha with oxygen to help treat multidrug-resistant tuberculosis.
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Building alliances and working with partners:

Global emergencies require a coordinated, global response. During the COVID-19 pandemic, we played a leading role in the Access to COVID-19 Tools Accelerator (ACT-Accelerator), a groundbreaking collaboration to ensure equitable access to COVID-19 vaccines, tests and treatments. We co-led the ACT-Accelerator's Therapeutics Pillar, together with the Global Fund to Fight AIDS, Tuberculosis and Malaria and Wellcome. In the Diagnostics Pillar, we co-led the market shaping efforts to increase access, affordability and availability of COVID-19 tests. We also launched the Oxygen Emergency Taskforce to address the critical shortage and lack of affordability of oxygen in the fight against the pandemic.

To continue the critical work on medical oxygen, the Oxygen Emergency Taskforce evolved into the Global Oxygen Alliance (GO₂AL) – a broader and more inclusive partnership that includes more than 20 health partners and representatives from civil society and affected communities. Co-chaired by Unitaid and the Global Fund, GO₂AL aims to convert the investments made during the pandemic into lives saved, including financing to expand production, lowering the price of oxygen and providing technical support to governments. GO₂AL will collaborate across members and other partnerships to strongly position and advocate for sustainable oxygen systems as a building block for health system strengthening, universal health coverage and pandemic prevention, preparedness and response.

Increasing access, affordability and uptake of key medical supplies: Together with partners, we negotiated immediate price reductions of 30-50% for both polymerase chain reaction (PCR) and antigen rapid diagnostic tests; our support in introducing additional manufacturers for a more competitive market led to further significant reductions in prices. In partnership with FIND and

the Global Fund, we accelerated test development and distribution, including rapid self-tests, and stronger laboratory and surveillance systems, including genomic surveillance. On therapeutics, we boosted access and accelerated generic production of oral antivirals enabled by the voluntary licensing agreements with the Medicines Patent Pool (MPP), a unique platform established by Unitaid to increase access to affordable drugs.

We supported health facilities in 22 countries to decentralize and integrate COVID-19 testing and treatment into routine services, so people could receive primary care and be tested for the new virus at the same time. Our support to early-adoption test-and-treat strategy, together with FIND, focused on people who tested positive and who could benefit from access novel antiviral treatment as outpatients to prevent severe COVID-19.

In response to critical oxygen shortages, we negotiated unprecedented agreements with two major gas companies and secured price reductions of approximately 22% for liquid oxygen and 43% for cylinders and cylinder filling, paving the way for long-term agreements for access to liquid oxygen. Through the Oxygen Emergency Taskforce, we raised more than US\$1 billion to boost access to medical oxygen, expand production, negotiate for better pricing, and provide technical advice to governments.

Strengthening regional manufacturing: When COVID-19 hit, global lockdowns, increased demand and disruptions to supply chains meant countries without local manufacturing lost access not only to COVID-19 tools, but routine medical supplies as well. To ensure countries are better prepared to prevent and respond to new global health emergencies and people have continued access to the health commodities they need, we are working to strengthen regional and domestic manufacturing of medical health products.

To strengthen diagnostics manufacturing, we worked with FIND to address the country shortage of reagents, a critical component of COVID-19 tests; we spearheaded the transfer of rapid diagnostic testing technology across three continents, ensuring supply security and contributing to a lower global price for tests. The MPP also collaborated with the World Health Organization to create a vaccine technology transfer hub in South Africa that is now working to enhance future capacity for the manufacturing of biologics in the region.

Our impact

While the global response to COVID-19 led to unprecedented collaboration and innovation, there remain clear challenges in strengthening health systems, new product development and manufacturing to increase the speed, affordability and accessibility of new tools so that everyone, everywhere can benefit. We played a critical role by making rapid and targeted investments to improve access to health tools and by co-leading global coordination of the ACT-Accelerator's Therapeutics Pillar, the Oxygen Emergency Taskforce, and market shaping of the Diagnostics Pillar. Our investments are built on the impact of our broader portfolio, which improves preparedness in low- and middle-income countries by increasing access to pandemic-relevant health tools.

To strengthen pandemic response and capacity to respond to potential surges, we have:

- **Increased the supply and lowered prices of tests and antivirals for COVID-19:** Enhanced the quality of clinical care packages for COVID-19 by increasing the supply of affordable rapid diagnostic tests, in coordination with therapeutics; preparing the market to respond to the need for oral antivirals, with expanded capacity for production under voluntary licenses with the MPP and negotiated agreements for a US\$25 ceiling price from generic manufacturers of the oral antiviral nirmatrelvir/ritonavir.

- **Strengthened regional manufacturing:** We arranged technology transfer agreements to enable expanded production of quality-assured antigen rapid tests in Africa, Asia and Latin America and the Caribbean.
- **Supported a pipeline of health tools and their adoption in low- and middle-income countries:** We supported a clinical trials platform and pioneering integrated packages of care, including community support and demand generation at country level.
- **Delivered emergency oxygen supplies to respond to COVID-19:** We provided more than 26,000 cylinders, 52,000 concentrators and 14,000 pulse oximeters, and installed, procured or repaired 53 pressure swing adsorption plants (PSA).
- **Increased long-term stability of oxygen supply and equipment:** We secured unprecedented agreements with two major industrial liquid gas companies, leading to price reductions of 22% for liquid oxygen and 43% for cylinders and cylinder filling and paving the way to long-term sustainability of supply. We negotiated, or are negotiating, over 40 agreements linked to liquid oxygen supply and PSA repairs.

The pandemic highlighted critical vulnerabilities in oxygen access – both for COVID-19 patients and for other conditions requiring oxygen therapy. Our efforts to increase and stabilize access to medical oxygen during the pandemic will have important and sustained impact as a result. Moving forward, we will continue to prioritize investments that optimize access to health products, build sustainable markets, and identify strategies to improve quality of clinical care packages and decentralize test-and-treat. This work strengthens health systems that can be leveraged for pandemic preparedness and response but also optimize health in between crises.

Case Study:**Testing for today's diseases, and tomorrow's pandemics**

Testing is the cornerstone of pandemic response. It is needed to track the scale and extent of an outbreak, and to treat or isolate infected people to control the spread. Without tests, countries are flying blind. A key lesson from the COVID-19 pandemic was that for all countries to have timely access to tests best suited to their needs, we must support regional manufacturing.

During the COVID-19 pandemic, we increased the capacity of companies across Latin America and the Caribbean, Africa and Asia to produce COVID-19 antigen rapid diagnostic tests to meet local demand. In Senegal, for example, we partnered with FIND to support diaTROPIX, a non-profit manufacturer that is part of Institut Pasteur. Bionote and Mologic, two diagnostics developers, provided technology transfer – the instructions, raw materials, equipment and quality control needed to create the tests – to diaTROPIX, enabling the production of high-quality tests in Senegal.

As the world transitions from the COVID-19 pandemic, we are supporting diaTROPIX to produce a portfolio of tests needed in the region, including HIV tests. This strengthens regional manufacturing capacity both for products needed today and keeps the facility functioning and ready to expand to make tests for other diseases when another local outbreak or global pandemic occurs.

Looking ahead

The COVID-19 pandemic showed that prompt access to lifesaving tools is paramount. Our unique approach to address access all along the value chain is critical to getting tests, treatments and tools to people who need them most in a health emergency.

But access requires that the product be developed in the first place. The lack of early research into therapeutics is an urgent gap. Moving forward, the global health community must increase investments in research and development for new therapeutics so there will be a healthy pipeline of candidates that can be rapidly produced when a new pandemic hits – and then we can work with partners to reduce prices and increase access to those new treatments.

As we transition from the COVID-19 emergency response, our ongoing work on therapeutics, diagnostics, market shaping, oxygen and regional manufacturing will continue to support countries to address today's health challenges while also building the capacity to respond to future pandemics.

About Unitaid:

We save lives by making new health products available and affordable for people in low- and middle-income countries. We work with partners to identify innovative treatments, tests and tools, help tackle the market barriers that are holding them back, and get them to the people who need them most – fast. Since we were created in 2006, we have unlocked access to more than 100 groundbreaking health products to help address the world's biggest health challenges, including HIV, TB, and malaria; women's and children's health; and pandemic prevention, preparedness and response. Every year, more than 170 million people benefit from the products we've helped roll out.