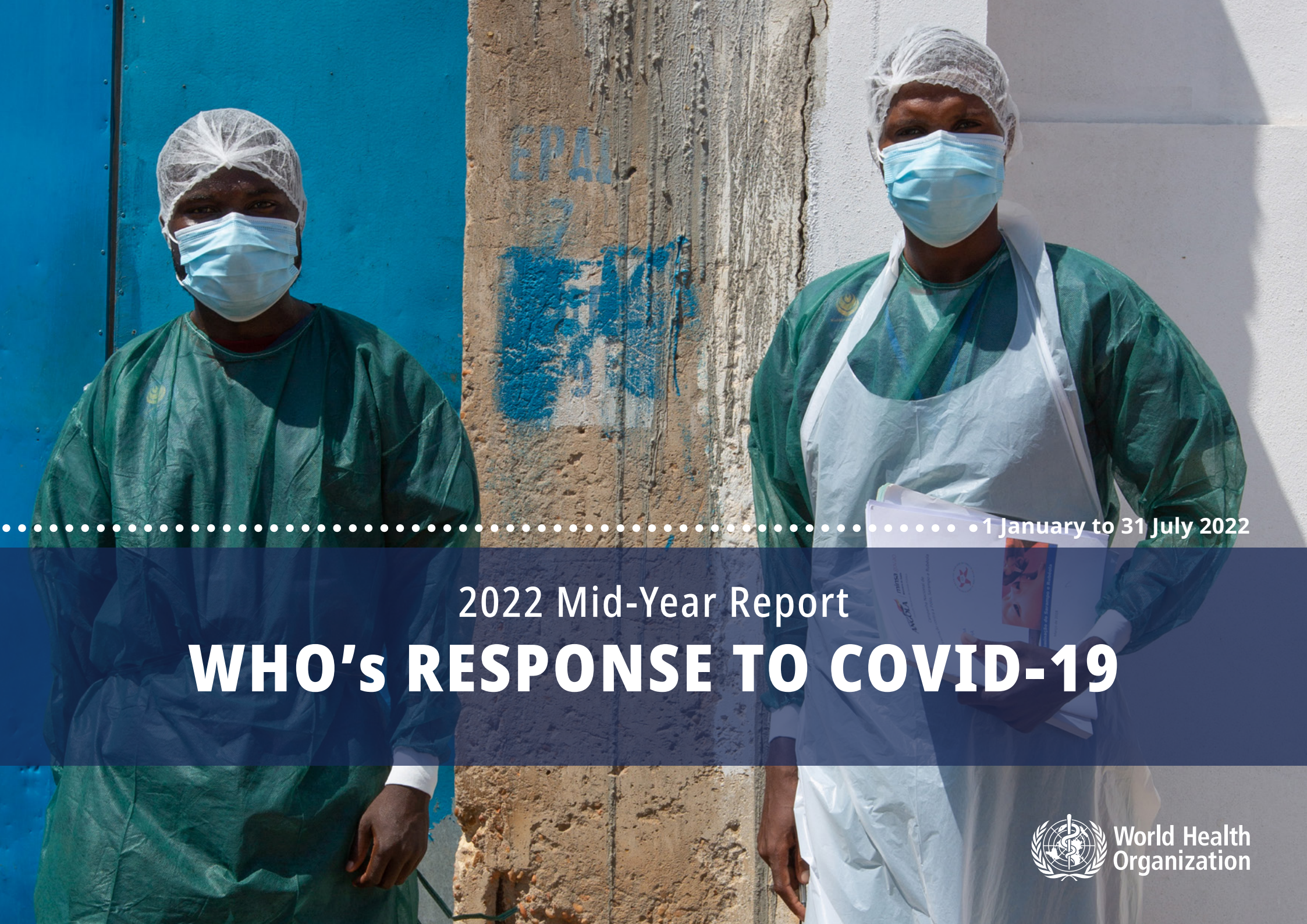


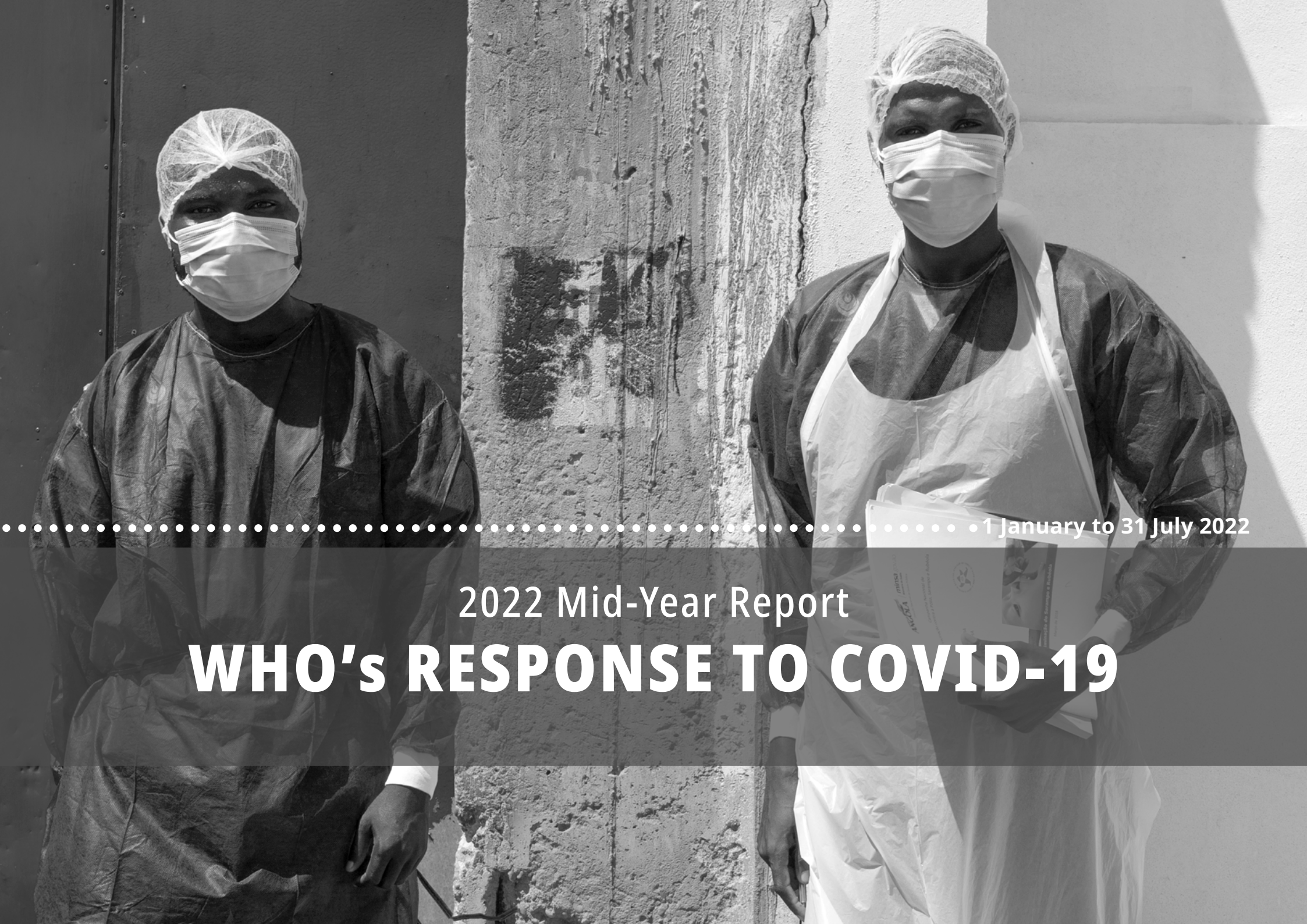


..... 1 January to 31 July 2022

2022 Mid-Year Report **WHO's RESPONSE TO COVID-19**



World Health
Organization



• 1 January to 31 July 2022

2022 Mid-Year Report

WHO's RESPONSE TO COVID-19

2022 Mid-Year Report WHO's RESPONSE TO COVID-19

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Situation overview

By the end of July 2022, over 574 million confirmed cases of COVID-19 and 6.3 million deaths had been reported to WHO. Given the latest developments and upon the advice of the [Emergency Committee on COVID-19](#), the virus remains a Public Health Emergency of International Concern (PHEIC) with Temporary Recommendations being issued by the Committee every three months.

Meeting the strategic objectives to end the global COVID-19 health emergency

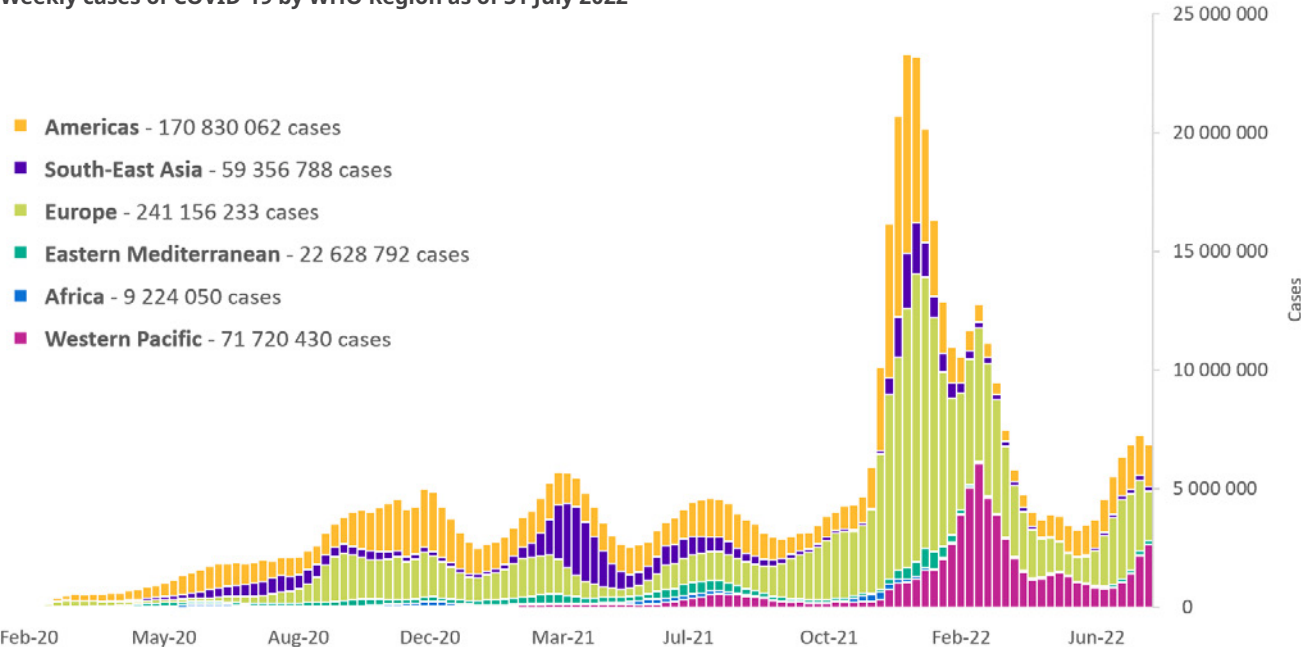
As per the 2022 Strategic Preparedness, Readiness and Response Plan (SPRP), WHO has set two strategic objectives to achieve the collective goal of ending the global public health emergency of COVID-19. The first objective is to **reduce and control the incidence of SARS-CoV-2 infections**. This is essential for protecting individuals, particularly those at risk of severe disease or occupational exposures to the virus, reducing the probability that future variants will arise, and easing the burden on health systems. The second objective is to **prevent, diagnose and treat COVID-19** to reduce mortality, morbidity, and long-term consequences.

These strategic objectives build on the six strategic objectives of the 2021 SPRP. As such, progress and achievements against both strategic plans are summarized in this Mid-Year Report, given the 2021 SPRP covered the period up to March 2022.

To achieve these strategic objectives, working with countries, WHO and partners have continued to advance core components of COVID-19 pandemic preparedness, readiness, and response. With the aim of ending the acute phase of the pandemic by the end of the year, WHO, in collaboration with partners, have supported countries to further strengthen their surveillance systems; ensure more equitable access to tests, treatments, and essential supplies worldwide; make health systems more resilient; and reduce exposure to the disease by empowering and enabling communities.

The first core component – to detect transmission through robust disease surveillance systems, collaborative intelligence, and early warning – has been compounded by a decrease in testing and a scale back in public health and social measures, making it increasingly difficult to assess the impact of variants on transmission, disease characteristics, and the effectiveness of countermeasures. To counter this trend and to strengthen robust surveillance, including genomic surveillance, WHO has supported countries in advancing their detection capacity and transmission control through guidance and training, as well as quality assessments, such as an assessment of laboratory capacities in 130 countries.

Weekly cases of COVID-19 by WHO Region as of 31 July 2022





The second core component – to protect the vulnerable by supporting equitable access to tests, treatments, vaccines, and essential supplies – has been promoted through country support, provision of essential supplies, and research and development, particularly in the area of antivirals. Working with the Global Fund and UNICEF, WHO has developed an allocation mechanism to support countries as antivirals become available.

While the conditions are now in place for all countries to achieve high levels of vaccination coverage, i.e. vaccine supply and technical support, progress remains uneven worldwide. Due to the intense transmission of the virus and low vaccination levels in many parts of the world, the risk of a new Variant of Concern (VOC) emerging continues to be high. This poses the threat of further waves of serious disease, mortality, and socioeconomic impacts. WHO had called on all countries to vaccinate at least 70% of their population by mid-2022. By the end of July 2022, more than 12.3 billion vaccines had been administered around the world. 75% of the world's health workers and over-60s are now vaccinated. However, only 59 countries managed to vaccinate 70% of their population, while the average rate in low- and middle-income countries is 15%.

To increase vaccination levels in low- and low-middle income countries, WHO and partners have worked with these countries to promote vaccine uptake by bringing them to where people are through mobile units, door-to-door campaigns, and by mobilising community leaders. In addition, COVAX delivered over 1.59 billion doses of WHO-approved COVID-19 vaccines to 146 countries. COVAX, which is co-led by WHO, the Coalition for Epidemic Preparedness Innovations (CEPI), and Gavi, alongside key delivery partner UNICEF, is the vaccines pillar of ACT-A. As a transversal pillar of ACT-A, the Health Systems and Response Connector (HSRC), co-led by WHO, UNICEF,

Global Fund, and World Bank with support from the Global Financing Facility (GFF) and close coordination with Gavi, worked with countries to ensure that they have the necessary technical, operational and financial resources to translate COVID-19 tools into national response interventions.

As for the third core component, WHO continued to strengthen health systems to prepare them for, manage, and adapt to shocks. WHO worked with countries in achieving their own priorities related to creating and improving national public health plans, enhancing primary and emergency care, and protecting and training health workers. A particular focus has been on building and strengthening global and national health emergency preparedness, response, and resilience, for example through the facilitation and deployment of international health workers and the improvement of national surge capacities. These measures not only benefit the COVID-19 response but also enable longer-term health system transformation, particularly in fragile and vulnerable areas.

As WHO continues to observe a major disconnect in COVID-19 risk perceptions between the scientific communities, political leaders, and the general public, it was critical to **advance the fourth core component, which relates to empowering and enabling communities.** By engaging them as partners in the response to the pandemic and providing clear, concise, and understandable information, WHO responded to the infodemic and built the resilience of communities in fragile, conflict-affected, or vulnerable contexts.



Community outreach health worker of Prei Trong Health Centre does community outreach within the district. © WHO / Tytaart



Strong outbreak surveillance systems

Detecting transmission through effective surveillance, collaborative intelligence, and early warning

To achieve the first strategic objective to reduce and control the incidence of SARS-CoV-2 infection, WHO and partners continued to monitor the evolution of the pandemic throughout the first half of 2022. The period was marked by the global dominance of the Omicron variant of concern (VOC) and its descendent lineages. Several of these emerging descendent lineages have already proven to be considerably more transmissible than the previously circulating COVID-19 variants, with further evidence of successful immune evasion, particularly against infection and symptomatic disease. However, as population-level immunity has increased due to infection and vaccination, many countries have scaled back both their public health and social measures and their surveillance and testing strategies. This has made it increasingly difficult to understand the true epidemiology of COVID-19 in these settings. Compounding this challenge has been the increased uptake of self-testing with antigen-based rapid diagnostic tests (Ag-RDTs – or simply, rapid tests), which, while an important tool for test-and-treat strategies, generally does not integrate with national surveillance.

As changes in surveillance and testing strategy have made it increasingly difficult to use case counts as a reliable marker of COVID-19 circulation, and to account for the decoupling between case incidence and severe disease, WHO has shifted the emphasis towards monitoring COVID-19-associated hospitalization and severe disease, including through the addition of intensive care unit (ICU) admissions to its global weekly aggregate surveillance. As of June 2022, 25% of the Member States reported hospitalization rates in country to WHO at least on a monthly basis, a decrease of 7% from the beginning of the year.

In light of increased pandemic fatigue and a lower benefit-to-harm ratio in conducting universal contact tracing and quarantine against Omicron VOC compared with previous variants, WHO has also adjusted its [recommendations on contact tracing and quarantine](#) to emphasize focusing on populations at high risk for exposure and severe disease (such as individuals living in long-term care facilities).

Following outbreaks at mink fur farms in 12 countries in Europe and North America in 2020, WHO, in collaboration with the Food and Agriculture Organization (FAO) and the World Organisation for Animal Health (WOAH), conducted a joint global [rapid risk assessment](#) and supported the development of biosafety guidance. The tripartite organizations issued a [joint call](#) urging countries to enhance targeted animal surveillance and take measures to reduce the risk of SARS-CoV-2 transmission between humans and wildlife to minimize the potential for the emergence of variants.

Under the [WHO BioHub System](#), which promotes the sharing of biological materials with epidemic or pandemic potential, pilot testing and system design activities were conducted to further test practices, documentation and tools. A technical consultation was held on 22 March with over 330 participants to discuss key topics, including considerations on access and benefit sharing.

Global Influenza Surveillance and Response System (GISRS)

The Global Influenza Surveillance and Response System (GISRS) has been at the forefront of the national and global response during the COVID-19 pandemic. In view of the co-circulations of influenza and SARS-CoV-2 viruses, as well as other respiratory viruses, the GISRS sentinel surveillance systems are the global platform to efficiently monitor relative co-circulations, community transmission and evolution of these viruses. [Revised interim guidance on integrated surveillance](#) was published in January 2022.

Since SARS-CoV-2 emerged and caused the COVID-19 pandemic, **115** countries have integrated COVID-19 surveillance into influenza sentinel systems, as of 28 June and **84** of these countries have fully functioning integrated surveillance. As of 31 May, **132** GISRS laboratories have contributed SARS-CoV-2 sequences to GISAID¹ and **74** GISRS laboratories support SARS-CoV-2 sequencing efforts for other GISRS and non-GISRS laboratories. So far **486** specialists from **105** countries have been trained through a series of GISRS bioinformatics training courses organized jointly with GISAID. The external quality assessment for laboratory detection of SARS-CoV-2 and influenza is underway with **215** national laboratories from **172** countries, areas and territories.

¹ The GISAID Initiative promotes the rapid sharing of data from all influenza viruses and the coronavirus to help researchers understand how viruses evolve and spread during epidemics and pandemics.



Key procurement figures since the beginning of the pandemic (cumulative as of 14 July 2022)



24 million
PCR tests



40 million
antigen RDTs



19 million
sample collection kits



287 million
medical masks



175 million
gloves



14 million
face shields

Maintaining robust surveillance and control of transmission

Laboratory capacities remain a critical pillar in both the detection of disease outbreaks and the response to them regardless of scale or origin. The pandemic has highlighted and reminded us of the need to quickly scale-up testing capacities and provide quality diagnostic test results not only at the national level but also at subnational levels. To assess the quality of coronavirus detection by reverse transcription polymerase chain reaction (RT-PCR) in laboratory systems across the globe, WHO issued a successful first round of COVID-19 External Quality Assessment in 2020/21 serving over 3000 laboratories. A second round of the programme is now underway including an assessment of the detection of variants. Nearly 4000 laboratories from 130 countries have already been enrolled for round two and are expected to test and report their results in August 2022.

Regional initiatives have also been instrumental in this regard, such as in **South-East Asia**, where the WHO Regional Office has taken numerous steps to strengthen detection capacities in the region, including through a three-day consultation in April to enhance genomic surveillance and sequencing capacity for the coronavirus. As a result, the number of laboratories testing for SARS-CoV-2 in South-East Asia has grown from five at the start of the pandemic to over 4800 at the end of March 2022. Similarly, **African** laboratories were able to generate genetic profiles of more than 93 000 samples of the coronavirus by the end of March 2022, compared with only 5000 sequences across the continent in early 2021. This includes, for example, support for **Lesotho** and the **Republic of the Congo**. In **Europe**, the WHO Regional Office supported the implementation of broader laboratory quality management systems through international and national mentoring.

Strengthening genomic surveillance for pathogens

The dynamics of the pandemic over two and a half years emphasized the need for strengthening genomic surveillance capacities which is essential to gain a deeper understanding of pathogens, their evolution and circulation. Recognizing this landscape and the need to ensure coherence and interoperability in the broader preparedness and response systems, WHO launched the [Global Genomic Surveillance Strategy for Pathogens with Pandemic and Epidemic Potential 2022–2023](#). The strategy sets out a unifying high-level framework for countries and partners to strengthen local-to-global genomic capacities in end-to-end surveillance systems.

In line with the report and [recommendations](#) of the International Health Regulations (IHR) COVID-19 Emergency Committee, WHO has published a [policy brief](#) outlining the core elements for Member States to develop an integrated approach to respiratory pathogen pandemic preparedness planning and enhance national and subnational functional capacities for preparedness. Additionally, WHO has provided tools, training, and supported consultative workshops globally and at country level, e.g. in the **Islamic Republic of Iran**, **Indonesia** and **Jordan**, to advise on the process.



WHO conducted a field visit to the COVID-19 testing and vaccination centre in Bahrain.
© WHO / Inas Hamam



Proportion of Member States that publicly share SARS-CoV-2 genetic sequence data and have the capability or access to timely sequence SARS-CoV-2



As of March 2022, **131 Member States** have sequencing capability

68% of Member States have sequencing capability



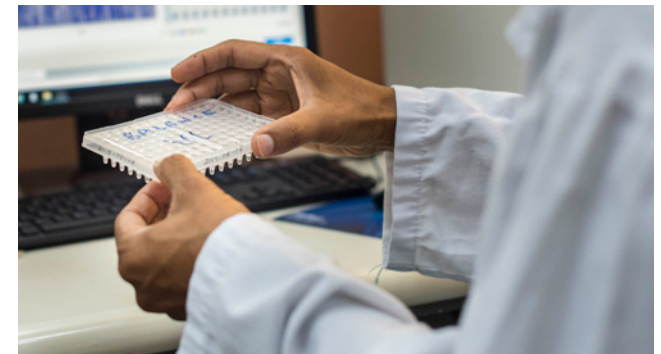
As of 31 December 2021, **173 of 194 Member States** had publicly shared SARS-CoV-2 virus sequence data at least once

This number increased to **180 Member States** as of 30 June 2022

4% increase in Member States publicly sharing SARS-CoV-2 sequence data

WHO Scientific Advisory Group for the Origins of Novel Pathogens (SAGO)

In the context of the continued threat of the emergence or re-emergence of pathogens with epidemic and pandemic potential, the WHO Scientific Advisory Group for the Origins of Novel Pathogens (SAGO) was established by the WHO Director-General as an independent and diverse international body of experts with a firm focus on science and public health. One of its primary tasks is to develop a global framework to define and guide studies into the origins of emerging and re-emerging pathogens of epidemic and pandemic potential. In June 2022, SAGO released its first preliminary report of recommendations to WHO with a brief overview of what is currently known on SARS-CoV-2 origins from published information, and a high-level outline of critical technical elements that should be included in the global framework.



Dr Phooblall works with RNA samples extracted from throat swabs at the Candos Virology Lab. © WHO / Blink Media – Gilliane Soupe



Impact story

Congo applies COVID-19 genomic sequencing skills to other diseases

Two years after the start of the pandemic, the Republic of Congo has begun to apply the genomic sequencing capacities developed in the fight against COVID-19 to other pathogens, including those responsible for malaria, tuberculosis or diarrhoeal diseases in young children.

Supported by WHO, partners and donors, the Congolese Foundation for Medical Research (FCRM), which is the only organization in the country with sequencing capabilities, quadrupled its daily sequencing capacity between 2020 and 2022, from 24 to 96 genomic sequences per day. The country now produces its own genomic sequences of the virus that causes COVID-19, circumventing the long, expensive process of sending the samples abroad.

FCRM is also implementing a WHO project to strengthen national capacities around clinical trials, with the aim of preparing the ground to introduce new treatments against COVID-19. In a similar vein, WHO supported Congo's National Public Health Laboratory with training and equipment.

"Strengthening genomic sequencing capacities contributes to the empowerment of the country, in terms of disease surveillance and patient care – and therefore to the fight against epidemics," said Dr Lucien Manga, WHO Representative in Congo.

Based on the capacity-building activities, FCRM has now established a sequencing protocol to describe the genes in bacteria's resistance to antibiotics, which will make it possible to better treat patients. A similar approach will be applied to a battery of parasites responsible for widespread diseases in Congo.

Congo applies COVID-19 genomic sequencing skills to other diseases. © WHO / Eromosele



Scientific meeting on developing a national genomic sequencing strategy for Türkiye. © WHO Country Office Türkiye

Impact story

Leading the development of a national genomic surveillance strategy in Türkiye

In a similar effort to build capacities and strengthen genomic surveillance for SARS-CoV-2 and other pathogens, WHO and the Turkish Ministry of Health are working closely together to leverage the investments made in sequencing equipment and computing infrastructure under the COVID-19 response for other high-risk pathogens, including antimicrobial resistance.

Türkiye is currently preparing a comprehensive and sustainable five-year national genomic surveillance strategy that will integrate all areas of infectious disease genomic surveillance to enhance preparedness and reinforce health security. To support Türkiye in this endeavour, WHO convened a scientific meeting in Izmir from 24 to 26 June, to promote the exchange of knowledge and experience on national genomic surveillance strategies within the European region. The meeting brought together ten countries from the region and participants from the Turkish Ministry of Health (MOH). Following this meeting, a task force comprised of WHO and MOH will further develop the strategy.



Equitable access to tests, treatments, and essential supplies

Protecting the vulnerable through prioritized research, equitable access and appropriate use of medical countermeasures, and essential supplies

The key to effectively treating and managing the disease and saving lives is to ensure that patients with suspected COVID-19 are tested and diagnosed early. For effective treatment of patients, it is critical that essential supplies and treatments are available in countries and used appropriately among patients who are most at risk. While much progress has been made, there remains a need for more equitable access to medical countermeasures and essential supplies. WHO has provided updated guidance throughout the pandemic on optimal use of tests, including self-tests, as well as updating clinical management guidance with the latest therapeutics to prevent severe disease and death. Under the ACT-A diagnostics and therapeutics pillar, WHO has led regulatory, policy, product procurement and allocation efforts and, together with other ACT-A partners, ensured procurement and deployment of COVID-19 therapeutics, including oxygen and related products to enable equitable global access to and delivery of safe, effective, quality-assured and affordable vaccines, therapeutics, diagnostics, and other essential medical goods to manage COVID-19 effectively.

Tests

Diagnostic testing for SARS-CoV-2 is a critical component of the overall strategy to prevent and control COVID-19. During the reporting period, testing has declined dramatically in many countries, obscuring the true picture of an evolving virus and the real burden of COVID-19 disease. To address this trend, WHO has called on Member States to increase testing and supported countries in scaling up testing.

WHO has updated its recommendation for Antigen-detecting rapid diagnostic tests (Ag-RDTs). The [updated interim guidance](#), published in March 2022, includes a new recommendation that self-tests can be offered as

part of COVID-19 testing services. Based on the global guidelines, training packages have been revised and regional adjustments have been made. To allow timely and accurate COVID-19 screening and detection of SARS-CoV-2 infection, rapid antigen tests were distributed to several countries, including 630 000 tests to **Iraq**. A Community-Based Response Testing Initiative in **18 African** countries has improved active casefinding through testing, genomic sequencing, home-based isolation and care, and assessment of hotspot communities. Rapid diagnostic testing was delivered to at least 10 million people, resulting in increased testing by 40%.

Treatment

Effective treatments, such as medical oxygen, are essential to prevent serious illness and death. With the availability of oral antivirals, new options for decentralized, outpatient treatments have become possible that, when administered early, can reduce the risk of hospitalization in individuals at high risk for severe disease (e.g. immunocompromised individuals, the elderly, and those with chronic diseases) and shorten the time to resolve symptoms. However, access to effective new antivirals is hampered by limited supply, especially in low- and middle-income countries, while at the same time there is still a shortage of medical oxygen and personal protective equipment.

Involving hundreds of hospitals in dozens of countries, the [WHO Solidarity PLUS trial](#) aims to provide robust results on whether a drug can save lives in those hospitalized with severe or critical COVID-19. This includes recent [research](#), published in The Lancet in May 2022, on the drug Remdesivir and three other drugs (lopinavir, hydroxychloroquine, and interferon) for hospitalised patients with COVID-19.

To address global inequities in access to oxygen, the Oxygen Scale Up Initiative has invested millions to procure and deploy oxygen at scale in over 26 low- and middle-income countries (through plants, bulk tanks and distribution systems). WHO also launched the [global O2CoV2 study](#) to assess the availability and use of oxygen for COVID-19 in 25 countries. As of 4 July, some 44 300 patients had been screened and nearly 1500 patients enrolled in the study. At country level, WHO has helped install solar-powered medical oxygen systems that are saving lives in three **Somali** cities and is working with partners toward expanding the lifesaving innovation to more areas. In **Paraguay**, the Pan American Health Organization (PAHO) delivered an oxygen plant to the Ministry of Public Health and Social Welfare, which will benefit approximately 236 000 people.

In parallel, the pandemic has highlighted the need for accessible, and regularly updated living guidance to place emerging findings into context and provide clear recommendations for clinical practice. In this regard, WHO published the 11th update of the [WHO Therapeutics and COVID-19 living guideline](#) which contains the Organization's most up-to-date recommendations for the use of therapeutics in the treatment of COVID-19. WHO also issued a fourth update to its [living guidelines on COVID-19 clinical management](#), and the toolkit for [Clinical care of severe acute respiratory infections \(SARI\)](#) was updated to help clinicians with the treatment of patients with COVID-19 and other respiratory pathogens. Through WHO's [COVID-19 clinical care pathway](#) website that visualizes and simplifies treatment options, health care workers are provided with an overview of current clinical and therapeutic recommendations to be considered when treating patients with COVID-19. Countries such as Iraq and Yemen also received direct clinical management support through training and the deployment of technical experts.



Over the past year, WHO has hosted a [webinar series](#) focused on recognition, research, and rehabilitation to advance the understanding of post COVID-19 condition. More information and research from global patient cohorts is needed to understand the natural history, pathophysiology, related sociopsychological causes and the different models of care to help to improve the long-term outcomes of COVID-19 in people with post COVID-19 condition.

Essential supplies

By reducing the shortage of medical equipment, WHO is helping national health systems respond adequately to the pandemic and meet future, long-term needs. The medical equipment that has been delivered will fill some of the identified gaps, not only for the treatment of COVID-19 patients but also for others who need intensive care and comprehensive monitoring, especially for respiratory diseases. To enable countries to estimate the need for personal protective equipment to protect health workers and patients based on epidemiological estimates, WHO, in collaboration with the Clinton Health Access Initiative, has further refined the [COVID-19 Essential Supplies Forecasting Tool](#).



Visit of Shariati Hospital in Tehran to assess Iran's health system's response to COVID-19 and identify areas of collaboration in diseases surveillance and outbreak management.
© WHO / Leila Javadi Shalkuhi

Snapshot of procurement



At least **1.7 million** COVID-19 rapid tests prepositioned at the **WHO African Region** warehouse.



50 oxygen cylinders and flow meters shipped to **Tanzania** to respond to urgent needs.



Delivery of **15** tonnes of medical equipment and supplies to **Samoa** including **640 000** PPE (surgical masks, gloves, gowns, etc.), **3000** pulse oximeters, and **50** oxygen concentrators.



Delivery of patient monitors, oxygen masks and bilevel positive airway pressure (BiPAP) machines – which allow health care workers to get oxygen into the lungs of a patient – to assist **North Macedonia's** COVID-19 response.



Donation of medical equipment, including **300** electronic temperature loggers, and **150** user-programmable data loggers, by the Pan American Health Organization (PAHO) to **Suriname** to strengthen the cold chain capacity of the national immunization programme.



Provision of technical support by the **WHO Regional Office for South-East Asia** to fragile, conflict-affected and vulnerable countries to enhance stockpiling to scale-up readiness for response.



Impact story

WHO increases medical oxygen generation capacity in northwest Syrian Arab Republic

Medical oxygen is crucial for patients with a range of conditions, including those with COVID-19, and other acute medical needs. In conflict settings, this critical component of healthcare is often quickly depleted due to increased demands and disruption to the supply networks.

To meet this heightened demand, WHO has increased its capacity to supply medical oxygen to the Syrian Arab Republic. Under the framework of the United Nations Security Council Resolution 2393 and its extensions, WHO and its health partners are providing cross-border health services to populations in northern Syrian Arab Republic from Gaziantep, Republic of Türkiye.

During the pandemic, when COVID-19 cases rapidly increased or safe oxygen supplies were temporarily disrupted, health partners had to look for solutions to access oxygen as one of the most critical interventions for patients with severe disease. The delivery of a high-capacity mobile oxygen generator on 24 March has helped to close this supply gap. The generator will serve a network of 17 hospitals in northern and western Aleppo with a catchment population of 1.7 million. Until then, WHO and local health partners relied on an existing fixed oxygen generator and the provision of liquid oxygen cylinders, but this was neither sufficient nor sustainable.

Watan, one of WHO's implementing partners in northwest Syrian Arab Republic, will pilot the use of the mobile generator to increase both the overall medical oxygen generation capacity and to enhance the agility of the oxygen supply system to fill acute supply gaps at different times, in different locations. The mobile oxygen generator includes a compressor that can either be used to fill up to 150 cylinders per day or be directly linked to a piped oxygen network at a health facility. Depending on the needs, the generator can be moved to meet immediate needs at specific health facilities.



Researcher at Department of Immunology and Molecular Medicine, University of Sri Jayewardenepura. © WHO Sri Lanka Country Office

Impact story

WHO provides technical support for research in Sri Lanka

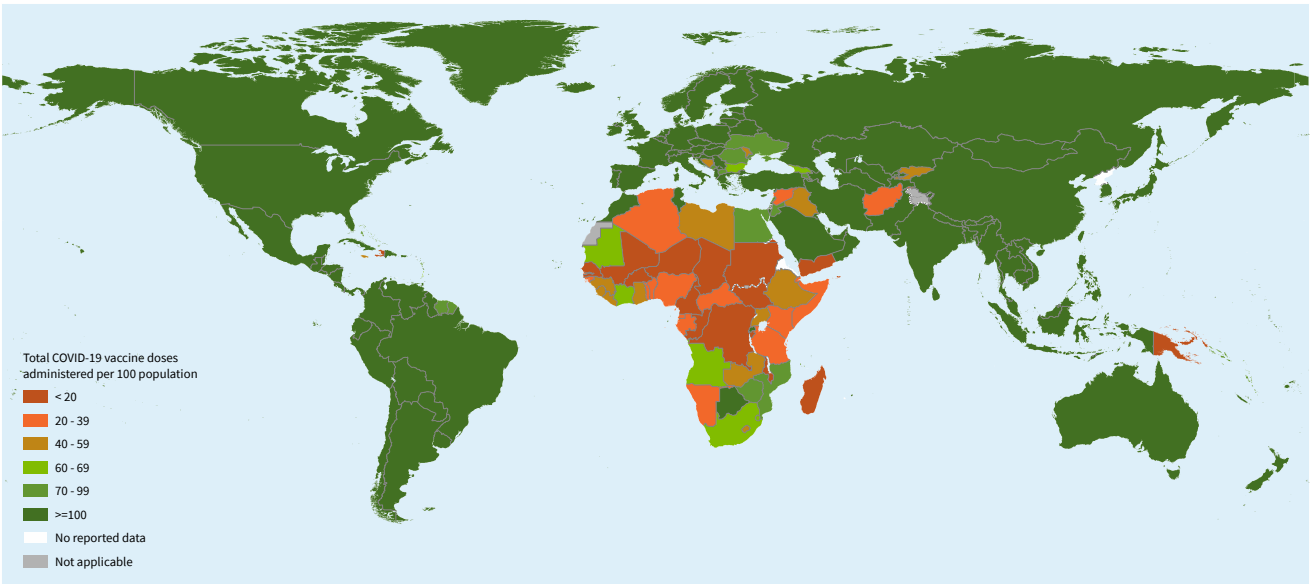
Sri Lanka experienced two massive COVID-19 outbreaks due to the Alpha and Delta variants of the coronavirus, resulting in a large number of infections in the population. However, the majority of infections were reported in adults, while actual infection rates in children in the country were not clearly known. Therefore, conducting a seroprevalence study remained an option for Sri Lanka to determine the prevalence of SARS-CoV-2 specific antibodies due to infection or vaccines in the country.

Seroprevalence studies help understand the true extent of an outbreak and provide valuable insights to project the trend of future outbreaks and their transmission dynamics. With this in mind, the University of Sri Jayewardenepura and the Ministry of Health, with support from WHO, have planned a [study on seroprevalence of SARS-CoV-2 infections and dengue infections in Sri Lankan children](#). The proposed study will help Sri Lanka determine the proportion of children who have been infected with COVID-19 and/or with dengue. In addition, the study will provide information to help understand the geographic distribution of both diseases in the Sri Lankan population. The findings of this investigation will be used to inform the public health response.



Spotlight on vaccines

Total reported COVID-19 vaccinations (as of 31 July 2022)



The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
Map Production: WHO Health Emergencies Programme
Map Date: 30 August 2022



In 2021, lack of vaccine supply was a major obstacle for many low- and middle-income countries, but the balance of supply and demand changed in January 2022, exactly when COVAX shipped its billionth dose of vaccine. Since the beginning of the year, the supply of COVID-19 vaccines has been plentiful, giving every country the chance to access the vaccines they need. However, the Omicron variant, which first emerged in late 2021, has impacted risk perceptions globally, resulting in decreased demand for vaccines and a need for concerted efforts to ensure increased vaccine uptake, particularly in middle- and low-income countries. Even as the virus has continued to mutate, WHO-authorised vaccines have remained highly effective at reducing serious illness and deaths.

The Lancet estimates that 20 million lives have been saved due to COVID-19 vaccine administration which has cut death by 63%.² A highly vaccinated population diminishes the risk of transmission, lowers the risk of severe illness and hospitalization, and reduces the chances of new variants emerging. By the end of July, more than 12 billion vaccine doses were administered globally, of which 4.4 billion were administered in the 92 Advanced Market Commitment (AMC92) participants. 1.59 billion doses of WHO-approved vaccines have been shipped through COVAX by the end of July. However, only 59 out of 194 WHO Member States have reached a vaccination rate of 70% or more. Globally, 62% of the population has completed primary vaccination but the rate drops to just 17% among low-income countries.

² Watson OJ, Barnsley G, Toor J, Hogan AB, Winskill P, Ghani AC. Global impact of the first year of COVID-19 vaccination: a mathematical modelling study. Lancet Infect Dis 2022; published online June 23. [https://doi.org/10.1016/S1473-3099\(22\)00320-6](https://doi.org/10.1016/S1473-3099(22)00320-6).



To further increase global vaccine coverage and translate more vaccines into vaccinations, the [COVID-19 Vaccine Delivery Partnership \(CoVDP\)](#) was launched by Gavi, UNICEF and WHO in January 2022 as an inter-agency initiative to support the 92 AMC countries in accelerating vaccine delivery, building on existing resources. Under the leadership of national governments through a 'One Country Team' approach, the CoVDP provides concerted support to the 34 countries that were at or below 10% coverage in January 2022 to promote progress towards national and global targets. To accelerate vaccine deployment strategies, WHO and the World Bank (WB), along with other members of CoVDP, have issued a [joint report](#) that addresses barriers to vaccine uptake and highlights lessons learned.

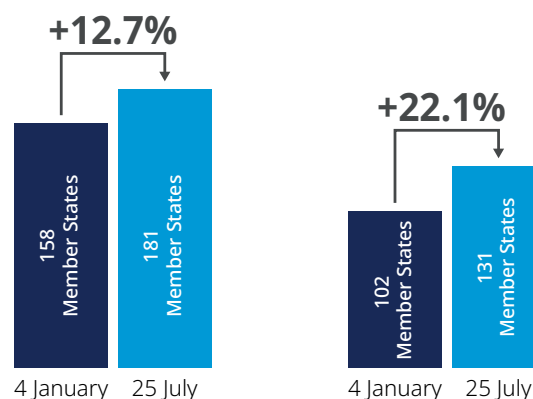
Since the beginning of the year, with support from many partners on the ground, several AMC countries have made significant progress in increasing full vaccination coverage rates. The proportion of the population fully vaccinated across the AMC92 has increased from 28% in January to 49% by the end of July. Among the 34 countries supported by CoVDP, completed primary series have increased from just 3% to 15% over the same period. By the end of July, 23 countries had gone beyond 10% coverage rates, with some reaching rates of 20% and more, including the **Central African Republic, Sierra Leone, the Solomon Islands and Uganda**. Among those that remain below 10%, three-quarters face ongoing humanitarian emergencies which hamper efforts to accelerate vaccinations.³

³ As of the end of July, of the 70 AMC participants reporting on healthcare worker vaccination coverage, an estimated 77% of targeted health workers have completed their primary series vaccination. Among the 69 AMC participants reporting on vaccination coverage among older populations, an estimated 67% of those have completed their primary series of vaccination.

Through the COVAX mechanism, **Honduras** received nearly 2.5 million doses of Pfizer vaccine in the first half of 2022, as part of COVAX's first 2022 allocation to the countries. In the **Philippines**, WHO helped transport people to a special vaccination centre to support those who are vulnerable to COVID-19 but have not received life-saving vaccines due to stigma, lack of money, difficulty accessing vaccine registration, or other barriers. In **Ukraine**, approximately 10 000 routine vaccine and COVID-19 vaccine doses were administered through outreach sessions in internally displaced people (IDP) locations to prevent outbreaks in shelters and collective centres.

Evolution of COVID-19 vaccination coverage

countries > 10% coverage # countries > 40% coverage



Source: WHO COVID-19 Dashboard, at 4 January 2022 and 25 July 2022

Maintaining momentum for better vaccine coverage

WHO presented its updated vaccine strategy in July in response to the spread of Omicron subvariants, advances in vaccine evidence, and lessons from the global vaccination programme. The updated strategy, titled "[Global COVID-19 Vaccination in a Changing World](#)," provides direction for countries, policy-makers, manufacturers, and international organizations in their ongoing efforts through 2022.

In line with the [WHO Roadmap](#), the strategy aims at supporting countries to meet their national targets with a focus on high-priority groups (i.e. reaching 100% of health care workers and 100% of the most vulnerable groups, including older people and those with underlying conditions). Secondly, the strategy recommends reducing COVID-19 transmission and ensuring greater vaccine equity through increased investment in innovation, and by equally distributing manufacturing across regions.



First consignment of COVID-19 vaccines. © WHO India



COVID-19 pandemic fuelled largest continued backslide in vaccinations

While progress on COVID-19 vaccinations needs to be scaled-up, WHO and UNICEF reported the [largest sustained decline in childhood vaccinations](#) in approximately 30 years, exacerbated by the COVID-19 pandemic. The percentage of children who received three doses of the vaccine against diphtheria, tetanus and pertussis (DTP3) – a marker for immunization coverage within and across countries – fell 5 percentage points between 2019 and 2021 to 81%. As a result, 25 million children missed out on one or more doses of DTP through routine immunization services in 2021 alone. The sharp two-year decline follows almost a decade of stalled progress, underscoring the need to not only address pandemic-related disruptions but also systemic immunization challenges.

With many competing health priorities that countries are dealing with, it is important to bundle or sequence COVID-19 vaccination with other immunization campaigns, e.g. with polio or measles, where appropriate, and use it as an opportunity to strengthen health systems. This is in addition to making COVID-19 vaccination available as part of routine services. WHO and UNICEF have been working with Gavi, the Vaccine Alliance and other partners to deliver the global [Immunization Agenda 2030](#) (IA2030), a strategy for all countries and relevant partners to achieve set goals on preventing diseases through immunization and delivering vaccines to everyone, everywhere, at every age.

“Planning and tackling COVID-19 should also go hand-in-hand with vaccinating for killer diseases like measles, pneumonia and diarrhoea,” said Dr Tedros Adhanom Ghebreyesus, WHO Director-General. “It’s not a question of either/or, it’s possible to do both.”



Sinergium Biotech laboratory in Argentina. © PAHO / WHO – Ary Rogerio Silva

Impact story

Technology transfer between regions – Latin American manufacturers complete first training in mRNA technology

The [mRNA technology transfer hub](#) in South Africa has established the first batches of mRNA vaccine candidate and has initiated production in line with good manufacturing practices (GMP). Clinical trials will start in early 2023. A total of 15 technology recipients (termed ‘spokes’) have been nominated from all six WHO regions, including **Brazil, Nigeria, Tunisia, India, Viet Nam, and Ukraine**, where training of manufacturers and regulatory strengthening has begun to ensure that countries are able to approve locally produced vaccines after technology transfer. To address the shortage of skilled workforce in low-and middle-income countries, a biomanufacturing workforce training hub has been established in the Republic of Korea, which is expected to train up to 2000 trainees per year once fully operational.

A group of vaccine manufacturers from Argentina and Brazil have become the first to receive technology transfer training in mRNA vaccines in South Africa. This training is part of a PAHO/WHO platform to advance the availability

of key medical health technologies in the Americas, especially as the Latin America and the Caribbean region imports ten times more pharmaceuticals than it exports, making it vulnerable to fluctuations in global supply, particularly during emergencies.

This training is a key component of the [Regional Platform to Advance the Manufacturing of COVID-19 Vaccines](#) and other health technologies in the Americas, a collaboration between PAHO/WHO, its Member States and regional partners, which aims to improve local production capacities to address the inequities in access to essential medicines and other health technologies faced in the region.

The training enables countries to develop and produce their own mRNA vaccines and deliver them to where they are needed most. The technology transfer allows companies to manufacture vaccines not only for COVID-19 but also for influenza and other respiratory viruses.



Resilient health systems

Reducing illness and death through lifesaving, safe and scalable health interventions, and resilient health system

The COVID-19 pandemic has highlighted vulnerabilities in the health systems of countries across the world. At the same time, it has provided fresh impetus to strengthen health systems, revitalize the essential public health functions (EPHFs) and enhance emergency preparedness and response (EPR) capacities. WHO has worked with various governments and partners to foster an integrated approach to health systems strengthening that aims to build resilience by advancing universal health coverage, health security and healthier populations. This includes, for example, the review of national public health institutional capacities within the **African Region**.

To better understand the extent of essential health service disruptions caused by the pandemic, WHO has conducted three rounds of the [Global pulse survey on continuity of essential health services during the COVID-19 pandemic](#). The [third pulse survey](#), which was published in February 2022, presents global findings from 129 countries, territories and areas that participated in the survey from November to December 2021. The findings offer critical insights into the impact of the pandemic on essential health services, the challenges health systems are facing to ensure access to essential COVID-19 tools, and how countries are responding to mitigate disruptions, recover services and strengthen health service resilience over the long-term. The fourth iteration is planned for the fourth quarter of 2022.

The pandemic also revealed many gaps in clinical care pathways, particularly in ensuring timely care and definitive diagnosis for acute respiratory presentations. In 2022, WHO has supported the development of roadmaps for national emergency and critical care strategic planning and implementation in countries such as **Afghanistan, Iraq, Namibia, Paraguay, and Yemen**. In addition, clinical care training and capacity-building activities have been scaled up in recent months, including by supporting courses in over 20 countries across all regions.

Furthermore, WHO has developed and rolled out tools to help countries identify and mitigate gaps in clinical care pathways to strengthen the health system response to COVID-19 and beyond. In collaboration with ACT-A partners, WHO developed the Core Clinical Care Readiness (C3R) Tool which supports countries to identify gaps in health services delivery by recognising context-relevant barriers and prioritizing actions to address them by generating an action plan. The next release of the tool in September 2022 will be configured to include other essential health services in addition to COVID-19.

WHO also continued to leverage global platforms to support the development of competencies and capacities in public health, such as through the [COVID-19 Health Services Learning Hub](#) where COVID-19 experiences have been shared from [Ethiopia](#), [Liberia](#) and [South Sudan](#).

In addition, WHO has involved global research communities on [key studies](#) to better understand modes of transmission and prevention of COVID-19. This includes engagement with researchers on [research and development needs](#) to end the acute phase of this pandemic and tackle future ones.

Infection prevention and control

COVID-19 has confirmed the central role that effective infection prevention and control (IPC) plays in the prevention and containment of outbreaks in health care facilities and in the community. By providing policies and guidelines, WHO has supported countries to maintain and strengthen IPC programmes and measures, such as a [policy brief](#), consolidated [guidelines](#) on IPC and water, sanitation and hygiene measures during the COVID-19 pandemic, and the first WHO [global report on IPC](#) which provides data on the spread of COVID-19 in health care facilities. By building IPC country capacities through the

WHO [IPC Global Community of Practice](#) and supporting several fragile, conflict-affected, and vulnerable countries, WHO ensured stronger infection prevention and control and quality of care, including in Northern **Ethiopia**, **Yemen**, and the **Ukraine** crisis by supporting the European Centre for Disease Prevention and Control's efforts to build [guidance and checklists](#) enabling safe infrastructure and administrative controls during the reception and care of refugee populations.

Taking balanced and risk-based public health and social measures

The WHO initiative '[Measuring the effectiveness and impact of public health and social measures](#)' aims to strengthen the global evidence base on public health and social measures (PHSM). In February 2022, the initiative was presented at the [COVID-19 Research and Innovation Forum](#) to call for more research on non-pharmaceutical countermeasures as part of pandemic preparedness and response efforts. Further, PHSM will be featured in the 2nd edition of the WHO Benchmarks for International Health Regulations Capacities tool, which is a first milestone towards the systematic integration of PHSM in the health emergency cycle. To assist Member States in decision-making related to PHSM implementation, the **WHO Regional Office for Europe** developed an innovative online [PHSM calibration tool](#). By using a combination of country-reported and user-input data, the tool automatically generates a situational assessment and corresponding PHSM guidance for users, summarized in a downloadable report.



Reflective learning during the COVID-19 pandemic

To help countries review and course-correct their COVID-19 response during the ongoing pandemic, WHO has supported countries in conducting COVID-19 intra-action reviews (IARs). An IAR is a country-led and facilitated process that allows stakeholders of the ongoing COVID-19 response to review the functional capacities of public health and emergency response systems at the national or subnational levels to identify best practices, gaps and lessons learned. As of 30 June 2022, a total of **126** COVID-19 IARs have been conducted by 76 countries, with **49** IARs conducted in 2020, **69** IARs in 2021, and **8** IARs in 2022. Among the **76** countries that have conducted IARs, **32** have conducted multiple IARs.

A global analysis of **83** COVID-19 IAR reports from **57** countries received by WHO as of 2 March 2022 identified many cross-cutting themes in countries' efforts to overcome this pandemic. These included repurposing existing policies, plans and resources, developing IT innovations to enhance the efficiency of pandemic management, and engaging in a whole-of-society approach to galvanize expertise and resources during countries' pandemic response.

Strengthening the COVID-19 response in emergency and humanitarian settings

To better understand challenges faced in humanitarian, fragile and conflict-affected settings related to COVID-19 response and identify technical support needed, the Global Health Cluster (GHC) conducted a survey in all 30 countries with humanitarian crises where the health cluster is activated. The [report](#), released in April 2022, shows that despite the fact that more than two years have passed since the onset of the pandemic, learning gaps still exist in these fragile settings and further capacity-building is needed. Based on the findings, WHO and GHC provided technical support and training, e.g. on how to deal with ethical dilemmas and how to utilise the [GHC tool](#) developed to help partners make difficult decisions based on competing needs and scarce resources during the COVID-19 pandemic.

COVID-19 also emphasised the need for better planning and preparedness for emergency management and the necessity for a surge in external healthcare professionals for direct clinical care and capacity-building support. The Emergency Medical Teams (EMT) initiative has strengthened national surge capacities, resulting in the mobilisation of thousands of national teams and the deployment of over **200** international healthcare professionals.

In Africa, about **360** national and international personnel have been deployed with the support of WHO and the EMT network. As a result, 34% (16 out of 47) of WHO African countries received support in the management of severe and critical cases of COVID-19 through targeted interventions. In May, WHO organised an EMT simulation (SIMEX) in Senegal based on a 72-hour emergency readiness deployment scenario for five countries. Since the beginning of the pandemic, PAHO has deployed a total of **300** EMTs in the Americas. In the **Western Pacific Region**, where 11 of 36 globally classified EMTs are located, a specialized New Zealand medical response team was sent to Niue to support the local COVID-19 response, while the Australian EMT was deployed to Kiribati, Solomon Islands and Vanuatu.

In addition to the EMTs, partners of the Global Outbreak Alert and Response Network (GOARN) continued to provide support to WHO and Member States for COVID-19 response activities. **23** deployments from GOARN partner institutions were initiated between January and June 2022 to support activities in the field, complemented by support from the GOARN Operational Support Team which maintained the [COVID-19 Knowledge Hub](#) on its website.

Furthermore, WHO provided courses in Emergency Unit Management and Mass Casualty Management to ensure that facilities can meet the need for COVID-19 surge and maintain essential health services during crisis. This was complemented by a learning programme that was successfully implemented in countries in the **African, European and Eastern Mediterranean Regions** in 2022. **145** WHO and Ministry of Health staff were trained through WHO's Leadership in Emergencies training programme that helps participants develop key leadership skills to fulfil emergency management roles.



Protecting and training the health workforce

COVID-19, as well as ongoing and emerging threats such as increasing climate-related events, have repeatedly demonstrated the importance of in-country public health expertise. To align the actions of WHO and its partners, WHO developed the roadmap on [National workforce capacity to implement the essential public health functions including a focus on emergency preparedness and response](#) to promote an integrated approach that helps to address the challenges posed by COVID-19 and better prepare the world for future pandemics and other public health threats. Part of these efforts is the training of 500 000 public health workers by PAHO in the **Americas** over the next five years. Given the current regional deficit of around 600 000 healthcare workers, particularly in rural and underserved areas, training and equipping health personnel is key. In other regions and countries, such as **Papua New Guinea**, WHO and its partners have also played a critical role in strengthening the national health workforce. In **Romania**, WHO donated more than 1800 bicycles and helmets to community health workers providing health services and care against COVID-19 in vulnerable communities.

International travel and mass gatherings

With borders re-opening and countries lifting many of the previous travel restrictions, requests to WHO increased to support countries through assessments of points of entry and capacity-building activities to ensure that airports, ports and ground-crossings have the adequate public health capacities to cope with the increased traffic. In May 2022, WHO supported the **United Republic of Tanzania** to conduct the first simulation exercise in East Africa since the onset of the pandemic, with the objective of improving readiness for health emergencies at points of entry. In addition, WHO conducted a regional training in **Oman** on overall preparedness and response at points of entry targeting fragile and conflict-affected countries. A bi-regional training-the-trainers workshop for the European and Eastern Mediterranean Regions on ship inspection was held in **Morocco** in July 2022.

To increase the cohesiveness of global responses to COVID-19 in the international travel and transport sectors, WHO regularly engaged with other UN agencies, international organizations, national authorities and non-state actors to promote its technical and policy advice. Some of the inter-agency initiatives that have brought together these actors in the first half of 2022 are the [Joint Action Group to review the impact of the COVID-19 pandemic on the world's transport workers and the global supply chain \(JAG-TSC\)](#) or the ad-hoc [UN inter-agency Task Force on the impact of COVID-19 on seafarers](#).

As of July, nearly 90% of countries worldwide reported having a mass gathering event being affected by COVID-19 as a result of using a risk-based approach. Through the publication of guidance and tools such as the [WHO mass gathering COVID-19 risk assessment tool – Generic Events](#), revised for the third time in June 2022, as well as through direct support, WHO helped countries and event organizers to plan and conduct mass gatherings safely. WHO also established event-based surveillance (EBS) to detect domestic and international signals related to COVID-19 and other public health threats which may cause potential importation and exportation of cases.



COVID-19 distancing signs on a bus in Baku. © WHO / Blink Media – Ehtiram Jabi



The ACT-A Health Systems and Response Connector: enhancing the equitable access and implementation of COVID-19 tools

The Act-A Health Systems and Response Connector (HSRC) is a multi-organization partnership co-led by WHO, UNICEF, Global Fund, and World Bank with support from the Global Financing Facility (GFF) and Gavi to ensure that all countries have the necessary technical, operational and financial resources to translate COVID-19 tools into national response interventions.

The HSRC articulates its work around three thematic areas:

- 1 Coordinating country planning, financing and tracking against targets
- 2 Coordinating technical, operational and financial support to countries to ensure the translation of tools (diagnostics, therapeutics, and vaccines) into effective health interventions
- 3 Removing bottlenecks in health systems and maintaining essential health services, while protecting health workers

Multiple achievements have been made under each of these three areas so far, in close collaboration with partners:

- **The HSRC has increased alignment and collaboration across partners through coherent action relating to the uptake of COVID-19 tools.** Currently, there are five up-and-running workstreams made of technical experts from all partners, where technical work and country engagement are ongoing.
- **Dynamic, multi-level and integrated data systems were compiled by the HSRC to provide transparency on data pertaining to the impact of COVID-19.** For example, the [Global COVID-19 Access Tracker \(GCAT\)](#) was developed to track the delivery of vaccines, tests and treatments globally. In addition, therapeutics request forms were added to the [Partners Platform](#) to facilitate the coordination of drug allocation for eligible countries, including tocilizumab, which 55 countries opted for in the first quarter of 2022.
- **40 country needs assessments for COVID-19 tools were carried out**, including in the Democratic Republic of the Congo and Ethiopia, using existing data sources. These needs assessments were then reviewed during HSRC's joint country engagement missions in collaboration with the [COVID-19 Vaccine Delivery Partnership](#). As a result, roadmaps for action and detailed costed action plans were developed for each country for the implementation of COVID-19 tools.



Medical nurse Madalina Dutu, University Hospital in Bucharest. © WHO / Mihai von Eremia



A polio worker speaks to a family in Borno State, Nigeria. © WHO / Andrew Esiebo

Impact story

COVID-19 vaccination efforts prove value of polio network for resilient health systems

As the first COVID-19 vaccines arrived in **Somalia**, polio programme staff were in position. Drawing on years of experience working to tackle polio and other health threats, staff had taken on key roles in logistics, cold-chain management and monitoring to ensure the success of the vaccine rollout. The introduction of COVID-19 vaccines in 2021 overwhelmed many country health systems and required all available resources to deliver vaccines to the most vulnerable. In this challenging environment, hundreds of polio eradication staff led efforts in areas ranging from coordination and community mobilization to training and surveillance. This work proves that sustaining these capacities is the way forward to build stronger, more equitable and resilient health systems.

A new WHO report titled, '[Role of the polio network in COVID-19 vaccine delivery and essential immunization: lessons learned for successful transition](#)', underscores the value of the polio network as an agile and experienced public health workforce capable of supporting national health programmes in delivering COVID-19 vaccines and strengthening essential immunization. A [2020 report](#) already documented the outstanding contributions of the polio network during the emergency stage of the COVID-19 pandemic, when over 5900 staff in the 20 priority countries for polio transition stepped up. The new report makes the case to transition the valuable skills and expertise of polio staff to strengthen immunization programmes, building on the COVID-19 experience.

In **Sudan**, 13 polio staff coordinated with partner agencies, trained vaccinators and provided comprehensive technical support for the vaccine rollout. In **Nepal**, 15 polio and immunization officers monitored the quality of COVID-19 vaccine sessions, whilst in **India**, polio and immunization Open Data Kit software was used to record data from more than 450 000 COVID-19 vaccination sessions. In **Nigeria**, at least 121 polio staff worked to sensitize communities to COVID-19.

The pandemic response shows that with an integrated approach it is possible to achieve more with limited resources. For instance, in the **Eastern Mediterranean Region**, the pandemic experience has led to the introduction of [Integrated Public Health Teams](#), which bring together public health staff to provide broader services to communities. Another lesson is the value of transferable skills that can contribute to vaccination across the life course. Harnessing the skills of polio personnel, and integrating them into other programmes, is key to achieving the goals of the [Immunization Agenda 2030](#).

"Regional and district polio officers acted as supervisors of the vaccine rollout. Some of the polio health workers worked as COVID-19 vaccinators, whereas others were social mobilizers."

Mohamud Shire
WHO polio eradication officer working in the central zone of Somalia



Empowered, engaged, and enabled communities

Reducing exposure through effective public health and social measures and countering misinformation through resilient communities

The pandemic has shown the importance of engaging communities from the outset and ensuring that they have access to, understand, and can process information in a way that enables them to make independent and informed decisions. Therefore, empowering and enabling communities to know and manage their risk is crucial to limiting exposure to the disease, especially for the most vulnerable, and ending the pandemic, particularly during a time when there is growing pandemic fatigue.

Risk communication and community engagement

Effective risk communication and community engagement (RCCE) seeks to involve communities in the response to health emergencies and outbreaks, inform and support them in understanding risks to enable informed decision-making and drive the adoption of protective behaviours. WHO has taken several actions over the past six months, in collaboration with Member States and partners, to ensure that communities are informed and engaged in pandemic response.

In 2022, WHO has launched over 72 products that include videos and infographics, Frequently Asked Questions (FAQ) and graphics on several topics related to COVID-19 and the needed public health and social measures, which have been translated into several languages. In addition, an important number of guidance and material has been published by the [regional RCCE network](#). WHO also collaborated with the [RCCE Collective Service](#) partner agencies⁴ to deliver guidance, tools, structures and mechanisms required for a coordinated, community-led and data-driven RCCE approach to the pandemic.

One critical activity undertaken by the **WHO Regional Office for South-East Asia** included building resilient communities through appropriate response to fake news and misinformation using community radios in the region, gaining significant reach in six countries, with an estimated audience of more than 1 million people. In the **Western Pacific Region**, the WHO Regional Office built the RCCE capacity of health workers in conjunction with strengthening partnerships with communities and academic networks.

Civil society engagement

To ensure that public health and social measures are adapted to local contexts and adopted by communities, credible, timely and accurate risk and science communication, infodemic management and community engagement are indispensable. Public health and social measures are crucial to protect people, especially those living in vulnerable conditions, and to counter a further increase of health and social inequities. As women and girls, as caregivers and patients, are particularly affected by the health, as well as socioeconomic consequences of the pandemic, **WHO Regional Office for Europe** has been working with civil society actors and governments to mitigate these negative impacts. In **Ukraine**, for example, WHO has strengthened its capacity with a full-time consultant on gender, equity and rights, providing ongoing training for primary health care providers on addressing intimate partner violence, which saw a sharp increase during the pandemic. A social inclusion analysis looking at the socioeconomic impact of the pandemic from a gender and equity perspective has been done in **North Macedonian** and is being finalised in **Kyrgyzstan** to inform recovery plans.

Mental health and psychosocial support

Among its many impacts, the COVID-19 pandemic exacerbated mental health conditions and strained mental health services worldwide. For example, estimates put the rise in both anxiety and depressive disorders at more than 25% during the first year of the pandemic. At the same time, mental health services have been severely disrupted and the treatment gap for mental health conditions has widened. During the COVID-19 pandemic, WHO in collaboration with partners deployed mental health and psychosocial support (MHPSS) coordinators and human resources. This strengthened national mental health systems and MHPSS responses, particularly in fragile and conflict-affected areas and for vulnerable groups. As a result of these efforts, the number of MHPSS coordination groups in countries doubled to **53** in May 2022. In addition, WHO provided technical expertise for the development of multiple COVID-19-specific guidance documents through the [Inter-Agency Standing Committee Reference Group on Mental Health and Psychosocial Support in Emergency Settings](#), which is co-chaired by WHO and the International Federation of Red Cross and Red Crescent Societies (IFRC).



Two women in front of the National COVID Memorial Wall in London. © WHO NOOR

⁴ The RCCE Collective Service is a partnership between the International Federation of Red Cross and Red Crescent Societies (IFRC), United Nations Children's Fund (UNICEF), the World Health Organization (WHO) and the Global Outbreak Alert and Response Network (GOARN), and as well as key stakeholders from the public health and humanitarian sectors.



Expanding South Sudan's COVID-19 vaccination to remote regions.
© WHO/Motherland productions

Preventing and Responding to Sexual Exploitation, Abuse and Harassment (PRSEAH)

Considering the higher risks of Sexual Exploitation, Abuse and Harassment (SEAH) in emergency operations, WHO has prioritized community-facing operations and programmes in high-risk settings and embedded PRSEAH into these programmes.

WHO has included PRSEAH experts in all Incident Management Support Teams (IMST) at all levels of the Organization, including in COVID-19 response operations. The integration of PRSEAH into COVID-19 response operations was initiated in January 2022 with a briefing of all Regional IMSTs. Further, a briefing on the prevention and response to sexual exploitation, abuse and harassment, core actions and performance standards at country level was conducted for staff responsible for COVID-19 vaccine rollout at the global and African levels.

Ongoing advocacy efforts with national governments to adopt and implement a PRSEAH policy are beginning to yield results and promote change. In **India**, for example, PRSEAH was integrated into the Environmental and Social Management framework for India's COVID-19 emergency response and health systems preparedness project.

Responding to the infodemic

The COVID-19 pandemic has been accompanied by an infodemic: excess information, including false or misleading information in digital and physical environments. This has emphasized the importance of translating science in a timely and accessible manner to different audiences. One of the key factors that contributed to WHO's efforts to make scientific information accessible to communities were the [WHO's Information Network for Epidemics \(EPI-WIN\)](#) updates and the EPI-WIN technical and science communication webinars. Since 2020, **77** EPI-WIN updates have been developed, including five updates in the first half of 2022. Similarly, **10** EPI-WIN webinars were held between January and March 2022 (over 130 since 2020) on innovative science communication and key technical issues.

During the first half of 2022, infodemic management capacity building was further scaled-up in countries to address misinformation and stigmatization that undermine public health. **Nigeria**, for example, held its first national infodemic management workshop and a training of trainers to cascade infodemic management throughout the country. The **WHO Regional Office for Europe** published a [policy brief](#) addressing the application of digital solutions to health risks raised by the COVID-19 infodemic. WHO has also innovated ground-breaking WHO infodemic manager training formats for **767** infodemic managers from **133** countries during more than two years of COVID-19 response.

In addition, WHO collected [case studies](#) through an open call to present innovative approaches to science communication during COVID-19. The launch featured the 20 top-rated good practice examples with initiatives ranging from serious games and chatbots to animation videos.



© WHO / Afghanistan

Impact story

Investment in the health and well-being of women and girls in Afghanistan

In many fragile and conflict-affected countries, COVID-19 is a crisis on top of a crisis. Afghanistan is one of the countries where the critical humanitarian situation leads to overlapping health threats that result in insufficient surveillance, testing, treatment, and vaccination of COVID-19. Between 7 and 10 million people (20–30% of Afghans) continue to live in areas where health care is unavailable or limited due to a lack of trained health workers and the inaccessibility of services.

Limited access to adequate health care, especially in rural areas, affects women and girls in particular. As their health often depends on the availability of female doctors, nurses, and midwives, the shortage of trained female health workers poses a serious threat.

WHO has worked with partners such as UNFPA, UN Women and UNICEF to improve this situation by investing in the health and well-being of women and girls in Afghanistan. WHO ensures the participation of women in capacity development initiatives on COVID-19 and advocates for access to health services for women and girls. As part of WHO's regional approach to provide demand-driven training through on-site missions and online, health workers from different sectors were trained in the treatment of COVID-19 patients in intensive care units. Special emphasis was placed on female staff in Afghanistan. Moreover, WHO has ensured continuous payment of health workers' salaries. In 2022, the salaries of 8277 essential medical and paramedical personnel, including 2178 (26.3%) women, continued to be paid thanks to the efforts of WHO and partners. In addition, WHO supported nine COVID-19 hospitals and 26 COVID-19 laboratories, provided supplies and covered the salaries of workers in these laboratories, as well as those of 111 rapid response teams collecting samples across the country.

One of the beneficiaries of this support is Razia Ghafaari, the only female doctor at the largest COVID-19 referral hospital in Kabul. "As health workers, we continue to look after patients even though we operate in extremely difficult circumstances. My role is to save lives and I will continue to serve my people", says Dr Razia Ghafaari. "When women and girls get COVID-19, it becomes my priority to ensure they get the same quality of care even though I am the only woman doctor attending to their needs."



OpenWHO and learning

WHO has continued to grow its offering of free online courses on [OpenWHO.org](https://openwho.org) to empower frontline health workers, responders, decision-makers and the public with real-time knowledge on COVID-19.

As of the end of July 2022:

- OpenWHO hosted [165 courses](#) on key public health topics, including **46** for the COVID-19 response.
- **11.1 million** words were translated so that vulnerable communities can access life-saving information on COVID-19 in their native languages, making it easier to understand.
- OpenWHO courses were available in **64** languages, including the **15** most commonly spoken languages worldwide and the official languages of **44** out of 46 of the least-developed countries.
- WHO was a few thousand registrations from the milestone of **7 million** course enrolments, bringing knowledge about the pandemic and beyond to learners around the world.
- The most popular course continued to be the [introduction to COVID-19](#), which had **1.1 million** enrolments and was available in **45** languages.

Other critical COVID-19 courses included [vaccination training for health workers](#) (**147 000** enrolments), [clinical management](#) (**37 000**), [rehabilitation](#) (**39 000**), [infection prevention and control](#) (**938 000**), [personal protective equipment](#) (**436 000**) and [country preparedness and response](#) (**565 000**). To bring COVID-19 learning to additional audiences, OpenWHO has partnered with the PAHO Virtual Campus for Public Health to translate and co-host OpenWHO courses in Spanish and Portuguese. The PAHO platform counted more than 1.1 million enrolments in OpenWHO COVID-19 courses as of the end of July, for a total of 6.5 million total COVID-19 course enrolments across the two platforms.

In June, almost **196 000** users accessed the [COVID-19 database](#) from **223** countries.



Orientation on COVID-19 prevention and home care management in mining community in Virac village, Itogon municipality, Benguet province in the northern Philippines. © WHO / Rolex dela Pena

Impact story

Civil Society Organization Initiative in the Western Pacific Region

WHO Regional Office for the Western Pacific launched an accelerator project from 2020 to 2022 to demonstrate how small investments in Civil Society Organizations (CSOs) can have a meaningful impact on the ground during COVID-19, especially for vulnerable populations. 11 CSO partners in the Philippines, Malaysia, and Papua New Guinea worked with a wide range of vulnerable populations, including people living in rural and remote areas, women from low-income backgrounds, indigenous communities, refugees and migrants.

The CSOs developed and disseminated targeted COVID-19 vaccine information, and communication materials and held community forums and dialogues to address questions and concerns about COVID-19. They also conducted capacity-building activities for community health workers to strengthen skills and improve knowledge of current national COVID-19 guidelines.

WHO provided technical assistance on community engagement and risk communication for all CSO partners throughout the initiative and met regularly with them to discuss how to navigate challenges. One of the goals of the CSO initiative, besides strengthening relationships with vulnerable groups, was to build the capacity of CSOs, particularly smaller ones, within and outside the health sector to support preparedness and response efforts during health emergencies. WHO also fostered linkages between CSOs, local health authorities, and other UN partners to strengthen civil society and local governance mechanisms that support a whole-of-society response during COVID-19 and beyond.



Looking ahead: 2022 and beyond

The first half of 2022 has shown that the pandemic is far from over. Given the enormous increase in COVID-19 cases at the beginning of the year and the renewed rise in numbers worldwide, it has become clear that the tools and mechanisms developed since the beginning of the pandemic need to be sustained and health systems must be further strengthened at both the global and local levels.

The goal, as a collective global community, is to end the global public health emergency of COVID-19 in 2022. To do this, essential steps need to be taken in line with the two strategic SPRP objectives to reduce mortality, morbidity, and long-term consequences, and to protect especially vulnerable individuals at risk of severe disease and those with occupational exposures to the virus while at the same time reduce and control the incidence of SARS-CoV-2 infection by preventing, diagnosing, and treating COVID-19. Further, it is imperative to reduce the pressure on health systems and on the virus itself, as this is leading to future variants, which may be more transmissible and deadly than the last. Looking beyond 2022, COVID-19 will remain in circulation, but future waves of infection do not need to lead to further waves of death.

We must not only draw lessons from the response to this pandemic, but also assess how lessons learned can inform the global architecture for health emergency preparedness, response, and resilience to enable rapid and coordinated action in the future, supported by the necessary resources. By building on and leveraging existing systems and emergency mechanisms, ways of working and partnership networks, progress can be accelerated in developing and strengthening national, regional, and global capacities. This requires even stronger collaboration and coordination at all levels between governments, scientists, manufacturers, international organizations, civil society and communities.

In this regard, WHO plays a leading role in bringing together different actors and initiatives at all levels by providing an end-to-end platform that draws on WHO's global, regional and local presence in different settings, as well as years of accumulated knowledge and extensive in-country experience.

Responding to COVID-19 is establishing stronger systems to prepare for future pandemics. Only by addressing this together can we ensure that the lessons of COVID-19 lead to greater health equity. To do so, we must tackle the root causes of unequal access to health care that existed prior to COVID-19 but were exacerbated by the pandemic. By identifying, analysing, and overcoming persistent barriers to adequate and affordable health services, such as lack of social protection, poor health coverage in underdeveloped areas, social exclusion, and gender inequality, important steps can be taken toward health equity.



Hodo, a nurse who works at the COVID isolation centre at Abaarso Tech University Daryeel Hospital in Hargeisa. © WHO / Blink Media – Mustafa Saeed

Towards more holistic surveillance

The need for robust surveillance, including access to testing and geographically representative genomic surveillance, continues to be central to adequately track existing and identify, characterize and assess SARS-CoV-2 emerging variants. Due to the pandemic, many countries around the world have significantly increased investment in surveillance, laboratory, diagnostic, and sequencing systems at national and subnational levels that go beyond the classical capabilities that have allowed us to detect these emerging and re-emerging pathogens with epidemic and pandemic potential in recent years.

This presents an opportunity for public health systems that have been enhanced over the last two and a half years, to be further strengthened to support the current threat of COVID-19 and future known and emerging threats faced by all Member States. The mechanisms that are in place, for example, for integrated surveillance, diagnostic capacity, health workforce, contact tracing, community engagement, investments in local research capacity, and sequencing, can be utilised for other circulating health threats.

Looking ahead, emphasis should be placed on promoting new and innovative methods for sustainable surveillance of COVID-19, such as environmental surveillance of wastewater, strengthening surveillance at the animal-human interface, and integrating COVID-19 into broader respiratory disease preparedness, readiness, prevention and response management. Consultations initiated by WHO with Member States have begun to continue to pave the way for more holistic surveillance of multiple respiratory pathogens in the long term.



Achieving global vaccination targets: Reaching those most at risk in all countries

The international community must deliver on its commitment to achieving COVID-19 vaccination targets in line with the [WHO SAGE Roadmap for prioritizing uses of COVID-19 vaccines](#) by maximizing coverage among persons at the highest risk of severe disease outcomes and persons at the highest risk of exposure, such as health workers. With sufficient support from the international community and increased national efforts to ensure rollouts to communities and combat mis/disinformation, high vaccination rates and boosting recommended groups can be achieved.

In this regard, the ongoing collaboration between WHO and its partners is proving to be particularly valuable. One example of success or best practice is the Access to COVID-19 Tools (ACT) Accelerator initiative. As the current ACT-A strategic plan timeframe comes to an end in October, the ACT-A hub is facilitating the development of a six-month plan aiming to [transition ACT-A's work](#) to long-term COVID-19 disease control.

Research and development for COVID-19 lifesaving tools must continue. It is crucial that there is enough investment for second-generation vaccines as well as tests and treatments. Building on existing vaccines that limit severity and prevent death, developing second-generation vaccines that stop – or at least lower infection – would be a major step forward. This is particularly important because, with each new wave of the virus, more people are left with Post-COVID-19 condition. This not only impacts individuals and their families, but it also places an extra burden on health systems, the wider economy and society at large.

Linking with communities

Community resilience is critical to moving toward the goal of ending the acute phase of the pandemic. Empowering and enabling communities will strengthen their resilience to better protect themselves from relevant risks and vulnerabilities. Going forward, their capacities need to be enhanced to prepare for and respond to this pandemic and other health emergencies. Bringing together and strengthening existing ties between local networks and communities of practice at the global level, is critical to reaching vulnerable and marginalized populations.

Moving from pandemic response to sustained management of COVID-19

COVID-19 highlighted the need for a multi-sectoral response to all crises, as the pandemic continues to exacerbate other health emergencies. The response of WHO and Member States to the pandemic has drawn on many capacities and platforms set up in response to previous health emergencies. It is vital that the lessons learnt from the pandemic inform and guide the evolution of the world's capacity to prepare for, prevent, detect, and respond to major health crises.

This includes, for example, using a One Health approach, which aims to comprehensively design and implement research, programmes, policies and legislation in which multiple sectors (such as public health, veterinary, agriculture, climate and planetary health) communicate and work together to achieve better public health outcomes. This can help meet the challenges brought about by COVID-19 and better prepare the world for future pandemics and other public health threats that could have a significant impact on economies and social development (e.g. climate-related events, zoonotic spill over).

With the creation of a financial intermediary fund (FIF) on strengthening pandemic prevention, preparedness, and response (PPR), critical gaps in low- and middle-income countries in pandemic PPR can be addressed to enhance country capacity in areas such as disease surveillance, laboratory systems, health workforce, emergency management, and community engagement. It can also help to strengthen regional and global capacity, for example, by supporting data sharing, coordinated development, procurement, deployment of countermeasures and essential medical supplies.

The pandemic has demonstrated the centrality of health to social, economic and political stability. Investments made today in more equitable access to testing and treatment, improved data systems, trained health workers, and enhanced planning mechanisms will contribute to stronger health systems and increase preparedness for future pandemics. This remains a generational opportunity to improve how countries prepare for and respond to new pathogens. Pandemic preparedness is now, not when the current threat is over.



Health worker carrying vaccines in flood affected areas in Rangpur division.
© WHO Bangladesh



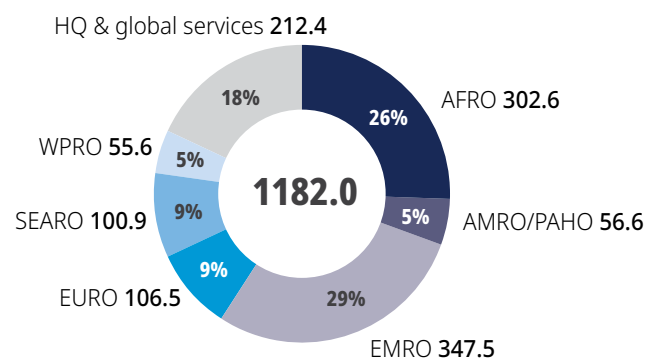
Annex

Financial contributions

WHO would like to thank its donors for their generous support provided for COVID-19 activities. The contributions to WHO have been critical to advancing the strategic objectives to end the global COVID-19 health emergency; implementing comprehensive COVID-19 pandemic preparedness, readiness, and response; and ensuring necessary support to countries, particularly fragile, conflict-affected, and vulnerable countries. As of 31 July 2022, contributions for COVID-19 came from over 35 entities including governments, international organizations and financial institutions, as well as from the private sector.

Allocations for COVID-19 (January–July 2022)

Figure 1. Funds allocated by Major Office (US\$ million)*



* Does not include funding not yet allocated to a Major Office.

Figure 2. Funds allocated by organizational level

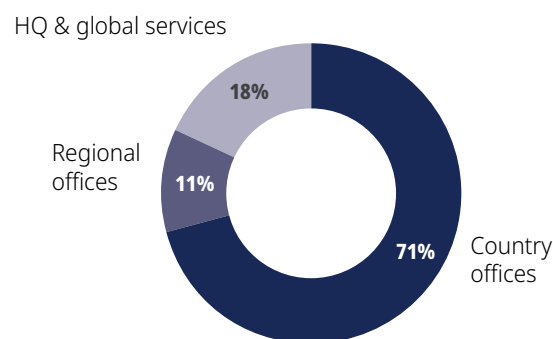


Table 1. Contributions for COVID-19 (January–July 2022)

Contributor	US\$ million
Asian Development Bank	2.72
Australia	5.30
Bill & Melinda Gates Foundation	0.25
Canada	0.35
Caribbean Development Bank	0.25
China	14.00
European Commission	8.52
Ford Foundation	2.00
Foundation for Innovative New Diagnostics (FIND)	1.45
France	55.80
Gavi, The Vaccine Alliance	28.89
Germany	352.80
Global Health Development	0.08
Guinea-Bissau_African Development Bank	8.28
Iceland	0.10
International Development Association (IDA)	0.78
International Organization for Migration (IOM)	0.13
Iran_World Bank	85.32
Ireland	1.01
Italy	3.16
Japan	4.52
Netherlands	0.80
Niger_Islamic Development Bank	0.21
Portugal	0.23
Republic of Korea	0.30
Spain	0.70
Switzerland	0.21
Unitaid	10.00
United Kingdom	0.07
United Nations Children's Fund (UNICEF)	17.72
United Nations Development Programme (UNDP) Multi-Partner Trust Fund (MPTF)	0.73
United States	403.85
Vital Strategies	0.20
Wellcome Trust	3.81
World Food Programme	0.30
Grand Total	1014.86



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