Implementing national studies on the real-world effectiveness of COVID-19 vaccines in Armenia

Evaluating vaccine performance in the real-world is critical to understand the risks and benefits of COVID-19 vaccination. Many factors impact real-world vaccine effectiveness (VE) and knowing the real-world differences is key to help answer a variety of questions regarding the duration of protection, effectiveness of different vaccines, number of doses administered and more.

VE study guidelines were developed by WHO/Europe focused on the first priority groups for vaccination: Severe Acute Respiratory Infection (SARI) hospitalisations associated with laboratory-confirmed SARS-CoV-2 and a healthcare workers cohort study that are a part of the WHO UNITY Studies (a global sero-epidemiological standardization initiative).

These studies will help us to have a better understanding of the performance of COVID-19 vaccines for a range of disease outcomes (symptomatic infection – severe disease) for a variety of vaccines in settings.

Although a number of post-introduction VE studies have been published for high-income countries, very few have been undertaken in low- and middle-income countries and areas where factors such as vaccine rollout, previous outbreaks and types of vaccines used may differ.

continued on next page
From the field

**Continued:** Implementing national studies on the real-world effectiveness of COVID-19 vaccines in Armenia

WHO/Europe has started to implement such VE studies including the healthcare worker cohort study rolling out in Albania, Georgia and Azerbaijan and SARI studies starting in Kyrgyzstan and Kosovo. The work has involved collaboration with field epidemiology programmes, Epiconcept, public health authorities and international partners.

A technical mission in Armenia, from 7 – 21 December 2021 in collaboration with the Armenian Ministry of Health, provided timely evidence about the impact of COVID-19 vaccination activities. Working closely with the Armenian National Center for Disease Control (NCDC) and National Digital Health System (ArMed), medical record data on COVID-19 health outcomes were compared with patients’ vaccination status to estimate the reduced risk of infection, severe disease and death among individuals, and other key health measurements like duration of protection.

As vaccination efforts continue and higher coverage is achieved, the goal is to implement a standard scientific process in Armenia to periodically evaluate the effectiveness to show any continued benefits. These unique estimates will allow for data to be collected based on the specific types of vaccine in use, in the context of the population at risk, and those with past exposure history to various strains of the virus. Furthermore, on a local and regional level, the implementation of vaccine effectiveness studies and their results can help fine-tune policy and be used to address vaccine hesitancy.

1All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

**WHO in the Western Pacific delivers critical equipment and supplies to Vanuatu and Fiji**

On 5 December, the Operations Support and Logistics (OSL) team of the WHO Regional Office for the Western Pacific arranged a charter flight loaded with critical medical supplies and personal protective equipment (PPE).

The 15 tons of cargo was dispatched on a charter flight coordinated by the World Food Programme from the Regional Emergency Stockpile in Manila for the ongoing COVID-19 response in Vanuatu and Fiji.

The US$ 350 000 worth of medical equipment and supplies included more than 700 000 items such as gloves, gowns, face shields, masks, pulse oximeters and oxygen concentrators. These supplies provide protection to health-care workers on the front line and ensure their capacity to conduct critical case management work.

Through precise planning, careful coordination and existing relationships, the OSL team ensures life-saving medical supplies and equipment are made available to help countries in preparing and responding to the COVID-19 pandemic. Over the past 24 months, the Regional Stockpile in Manila has successfully dispatched more than US$ 20 million worth of critical supplies including PPE, biomedical equipment and laboratory supplies to 38 destinations throughout the Western Pacific Region in very short timeframes.
WHO boosts Sierra Leone’s COVID-19 response and disease surveillance with laboratory commodities

WHO handed over a consignment of various laboratory commodities for COVID-19 and routine laboratory testing worth over US $ 600,000 to the Ministry of Health and Sanitation on 10 December 2021. The donation is part of WHO’s continued assistance to Sierra Leone to scale-up COVID-19 testing and confirmation of cases in communities and public health facilities at national and sub-national levels; heightened surveillance for Ebola; and, to ensure availability of critical laboratory testing services for appropriate patient management.

The consignment included specimen collection kits, antigen rapid diagnostic kits and PCR test kits that screen for variants of concern for COVID-19, donated by WHO. The consignment also included kits, waste management supplies for Ebola virus disease specimens, procured with funding from the United States Agency for International Development (USAID). The donation also included an assortment of laboratory supplies to support routine laboratory testing and blood donation services, as part of efforts to improve availability of these critical services, procured with funding from the Islamic Development Bank (IsDB).

Receiving the commodities, the Minister of Health and Sanitation, Dr Austin Demby commended WHO for the continued support in the provision of technical as well as logistical assistance to the COVID-19 response and other concurrent public health interventions in Sierra Leone.

With this donation, the country is now able to scale up testing for COVID-19 at 20 high-burden health facilities using the kits to concurrently test and screen for some variants of concern for COVID-19 like Delta, Omicron and, ensure health-worker, public and environmental safety as the country continues with heightened surveillance for Ebola. Additionally, the country is able to continue and to decentralize provision of critical routine and clinical testing services as part of efforts to improve access to quality services.

“Continuous intensified and uninterrupted laboratory testing is a fundamental component of a functional disease surveillance system. Hence, for the health authorities to plan and effectively implement COVID-19 response interventions, we have made the donations to boost testing that would help reveal the trend of the pandemic and the burden of transmission so that the right actions and interventions can be taken”, says Dr Steven V. Shongwe, WHO Representative in Sierra Leone.

For further information, click here.
Public health response and coordination highlights

- In the UN Crisis Management Team meeting on 16 December 2021, WHO reported that the number of the global weekly COVID-19 cases and deaths decreased slightly last week, with over 4 million new cases and just under 47,000 new deaths, a 5% and 10% decrease respectively. WHO noted that as of 15 December, the Omicron variant of concern (VOC) has been reported in 85 countries. Based on current limited evidence Omicron appears to have a growth advantage over Delta.

- On Omicron priorities, WHO briefed the need for coordinated characterization, risk assessment and research and innovation leading to evidence based decision making and policy formation. WHO further stressed the need to intensify efforts to drive down/keep down transmission by strengthening public health and social measures.

- FAO, WHO and OIE updated the CMT on the “One Health” Agenda.
  - **FAO** briefed on the Tripartite Plus Global Plan of Action for One Health (2022-2026) that aims to stimulate a more comprehensive One Health approach to global health threats at the human-animal-environment interface, focusing on working in cross-sectoral ways within national programmes.
  - **OIE** highlighted the issue of building One Health workforce, noting the need to expand and transform the recruitment, development, education, training, distribution, retention and financing of the health and care workforce.
  - **WHO** briefed the creation of a new One Health Strategy Unit to improve coordination across the work of the organisation on One Health related disease or public health issues.

- **The World Bank** informed that it has just finished a stock-taking exercise on One Health and that a technical brief was presented to the World Bank Board on 1 December. WHO briefed on the expanded supply of vaccines in Q4 of 2021, however, noted issues concerning the absorption capacity of countries with humanitarian needs.

- **IOM** briefed results from a survey of 180 country offices on migrant inclusion in national deployment and vaccination plans, finding that 83 per cent and migrants in regular situations had access to COVID-19 vaccines.

- **The UN Department of Global Communications (DGC)** advised that it is preparing its plans for 2022, highlighting that *Responding to COVID-19 and Recovering Better* will be the top UN communications priorities for next year, with a focus on vaccine equity.
Pandemic learning response
Learn in 60 global languages on OpenWHO.org

WHO is pleased to close 2021 with the launch of our 60th language on the OpenWHO.org learning platform, as part of our efforts to make public health knowledge accessible to all. The newest language is Tajik, which is available for a course on using antigen rapid diagnostic tests to test suspect COVID-19 cases.

OpenWHO now offers free online courses in the official languages of 43 out of 46 of the least-developed countries, as well as the 15 most-spoken languages worldwide, in recognition that it is easier to learn in one’s native tongue. The Introduction to COVID-19 course has been the most translated course and the French language is the most translated language.

In total, 11 million words have been translated by WHO offices and volunteers across more than 70 countries so that communities can access life-saving information in their mother tongues to protect themselves and their loved ones. A new Serving Countries portal provides 12 countries with easy access to courses in their official languages to support their response to health emergencies. OpenWHO will expand these localization efforts going forward, with additional languages, translations and country-originated courses in the pipeline to meet growing demand.

“For almost 2 years, we have worked together with amazing crowd power from all corners of the world and in particular from WHO country and regional offices to help ensure equitable access to pandemic and emergency-related WHO technical guidance in a large variety of languages. Evidence shows that accessing learning in preferred languages enhances uptake and comprehension and further can help save lives,”

Heini Utunen, acting Head of the Learning and Capacity Development Unit for the WHO Health Emergencies Programme.

Overall, OpenWHO hosts courses on 120 health topics, including 40 COVID-19 courses, with more than 6 million course enrolments and more than 3 million certificates issued.
Partnerships

The Global Health Cluster - GHC

Vaccine equity: bringing COVID-19 vaccination to the most vulnerable

The Global Health Cluster has recently published a new infographic: “Reaching 70% vaccine coverage for COVID-19 - What will it take to reach people facing humanitarian crises?” Ensuring populations across the world are vaccinated for COVID-19 is critical to ending the pandemic by increasing immunity, decreasing deaths, and reducing the risk of new variants emerging.

The global strategy to reach 70% vaccination coverage by June 2022 requires a coordinated and concerted effort to ensure no one is left behind including the most marginalized and those facing humanitarian crises. Currently however, these populations face the most inequity. This infographic includes key asks to ensure the set goal is achieved.

A new photo story, “Bringing COVID-19 vaccination close to the most vulnerable” has been published. Reaching people in humanitarian settings may remain a challenge even when they are included in the COVID-19 national deployment and vaccination plans. Around the world, health clusters, led by WHO, are mobilizing partners to target vulnerable populations (such as internally displaced people, returnees, migrants regardless of legal status, refugees, people living in nongovernment controlled, insecure or hard to reach areas) and bring the vaccination close to the most vulnerable.

This newly published photo story features Health Cluster partners' innovative strategies to ensure vaccines are supplied and administered to all populations of concern in multiple settings.
WHO Key Actions during November/December 2021:

- Launched a new Open WHO course, “Infodemic management 101”
- Celebrated the 1-year anniversary (27 issues) of the WHO infodemic management News Flash
- 770 infodemic managers trained from 132 countries in 3 trainings since November 2021.
- Published report from 3rd WHO infodemic management conference on the whole-of-society challenges and approaches to respond to infodemics across six tracks.

WHO continues to support the scale-up of infodemic management capacities in countries. In May 2021, Member States adopted the Resolution WHA74.7, Strengthening WHO preparedness for and response to health emergencies, and at the WHA Second Special Session in December 2021, Member States launched a process to develop historic global accord on pandemic prevention, preparedness and response, by SSA2/3 where Member States recognize the need for national and global coordinated actions to address the misinformation, disinformation and stigmatization that undermine public health.

During November and December 2021, WHO held its third WHO infodemic manager training with 249 trainees from 82 countries (61% female, 42% from mid-to-senior level jobs, 77% having experience in emergency response).

The training included a 3.5-week-long simulation exercise on COVID-19 response infodemic challenges such as:
- controversy following adverse events following immunization
- countering misinformation influencing health behaviors, vaccination, young people and mass gatherings
- review of EPI and COVID-19 communications plans, and
- integrated analysis of the infodemic related to COVID-19 vaccines.

WHO also co-hosted the 5th WHO infodemic management conference with 71 participants from a variety of sectors to discuss the metrics and measurement of the burden of infodemic with US CDC.

The conference implements one of the workstreams of the WHO public health research agenda for managing infodemics. Next steps to advance the foundations for burden of infodemic metrics were agreed upon, including developing standardized definitions for key concepts, measures and components of the infodemic and more.
COVID-19 Preparedness

The essential task of strengthening genomic surveillance: WHO in collaboration with GISAID organizes training workshops for laboratory experts

With the COVID-19 pandemic progressing, genomic surveillance, is essential to inform us of circulating viruses and response measures required. The sequencing of representative samples continuously collected in a standardized approach from patients meeting influenza-like illness, acute respiratory infection, and severe acute respiratory infection case definitions, allows us to monitor the evolving trends and relative proportions of existing and emerging genetic variants circulating in the community.

Since 1952, GISRS has monitored influenza viruses and added SARS-CoV-2 in March 2020. GISAID has been an important partner of GISRS and the GISRS-GISAID collaboration on influenza has expanded to other respiratory viruses including SARS-CoV-2 and Respiratory Syncytial Virus (RSV). A joint bioinformatics training programme was developed to support Member States to expedite the effective genomic surveillance of SARS-CoV-2 using influenza surveillance systems.

WHO Global Influenza Programme and GISAID jointly organized a series of workshops with experts from National Influenza Centres (NICs) and National COVID-19 laboratories. The course is divided into three modules, from basic to advanced levels with the following objectives:

- Scaling up GISRS SARS-CoV-2 genomic surveillance, data sharing and interpretation of SARS-CoV-2 bioinformatics; and
- Equipping NICs with the skills to access, use and contribute to GISAID databases, platforms and tools, from SARS-CoV-2 to influenza and RSV.

Module 1 (Introductory) was recently completed on 9 December 2021 by more than 110 experts from over 40 countries globally. It comprised online lectures with real-time demonstrations followed by offline exercises. The training was held over a period of several months with five small groups according to time zones and languages spoken. The module covered the basics of virus sequencing; considerations for the genomic sequencing component of GISRS surveillance of SARS-CoV-2; and the submission, curation, annotation and basic interpretation of data using GISAID tools.

Module 2 (Intermediate) and Module 3 (Advanced) will launch in the coming months.

As we have learnt from the COVID-19 pandemic, an effective genomic surveillance system using GISRS to monitor SARS-CoV-2, as well as for influenza, is a critical component of pandemic and post-pandemic response. WHO will continue to strengthen the global network of laboratories of GISRS.
COVID-19 Preparedness

Universal Health and Preparedness Review (UHPR) Pilot: Bangui, Central African Republic

No country was fully prepared to deal with a pandemic of such scale, speed, severity and impact as COVID-19. With the purpose to “build mutual trust and accountability for health, by bringing nations together as neighbours and to support a whole-of-government approach to pandemic preparedness”, WHO’s Director General Dr Tedros Adhanom Ghebreyesus announced the Universal Health and Preparedness Review (UHPR) mechanism in November 2020.

The UHPR is a Member State-driven intergovernmental consultative mechanism that aims to:

- identify gaps in country preparedness through an inclusive, all of government and whole-of-society based approach
- develop cooperative platform building mutual trust, accountability to better respond to future pandemics
- promote peer-to-peer support and learning among member states, and promote sustainable financing to implementation of recommendations

The first UHPR pilot, facilitated by a three level WHO mission, was conducted from 4-14 December 2021 in the Central African Republic. The mission involved high-level engagement with several senior representatives across government sectors, members of Parliament, heads of UN agencies, and representatives of civil society, private sector and community leaders. A simulation exercise and site visits were conducted as part of the review of national capacities. The pilot aimed to garner and document best practices and identify key gaps in national preparedness.

“We hope that by taking this first step, the Central African Republic can make a meaningful contribution to global preparedness and demonstrate our commitment to multilateral solutions for health security.”

Dr Pierre Somsé, Minister of Health and Population

The UHPR pilot report from the Central African Republic will be available in January 2022.

To date, 16 countries have volunteered to pilot the UHPR mechanism. Lessons from UHPR pilots are being documented and applied to further strengthen the review process and associated tools. An update of the progress to develop and pilot UHPR will be presented to WHO Member States at the 75th World Health Assembly (WHA) in line with Resolution 74.7 of the 74th WHA.

“One of the most important lessons from the ongoing COVID-19 pandemic, it is that health is everyone’s business. We, therefore, need high-level political commitments, cross-sectoral mobilization, and whole-of-society approaches with full participation of the community. UHPR has the potential to be a game changer and we applaud the Central African Republic for testing the concept in a particularly challenging context.”

Dr Ngoy Nsenga, WHO Representative
Operations Support and Logistics

The COVID-19 pandemic has prompted an unprecedented global demand for Personal Protective Equipment (PPE), diagnostics and clinical care products.

To ensure market access for low- and middle-income countries, WHO and partners have created a COVID-19 Supply Chain System, which has delivered supplies globally.

The table below reflects WHO and PAHO-procured items that have been shipped as of 19 December 2021.

<table>
<thead>
<tr>
<th>Region</th>
<th>Laboratory supplies*</th>
<th>Personal protective equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample collection kits</td>
<td>Antigen RDTs</td>
</tr>
<tr>
<td>Africa (AFR)</td>
<td>5 281 025</td>
<td>1 554 300</td>
</tr>
<tr>
<td>Americas (AMR)</td>
<td>1 446 132</td>
<td>18 692 200</td>
</tr>
<tr>
<td>Eastern Mediterranean (EMR)</td>
<td>2 625 143</td>
<td>2 345 875</td>
</tr>
<tr>
<td>Europe (EUR)</td>
<td>913 300</td>
<td>1 195 125</td>
</tr>
<tr>
<td>South East Asia (SEAR)</td>
<td>4 145 800</td>
<td>4 645 000</td>
</tr>
<tr>
<td>Western Pacific (WPR)</td>
<td>659 450</td>
<td>180 650</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15 070 850</strong></td>
<td><strong>28 613 150</strong></td>
</tr>
</tbody>
</table>

Note: PAHO procured items are only reflected in laboratory supplies not personal protective equipment. Data within the table above undergoes periodic data verification processes. Therefore, some subsequent small shifts in total numbers of procured items per category are anticipated.

*Laboratory supplies data are as of 29 November 2021

For further information on the COVID-19 supply chain system, see [here](#).
Appeals

WHO’s Strategic Preparedness and Response Plan (SPRP) 2021 is critical to end the acute phase of the pandemic, and as such the SPRP is an integrated plan bringing together efforts and capacities for preparedness, response and health systems strengthening for the roll out of COVID-19 tools (ACT-A). Of the US$ 1.96 billion appealed for, US$ 1.2 billion is directly attributable towards ACT-A, US$ 643 million of the total appeal is intended to support the COVID-19 response specifically in countries included in the Global Humanitarian Overview.

As of 14 December 2021, WHO has received US$ 1.2 billion out of the 1.9 billion total requirement. A funding shortfall of 34% remains during the third quarter of the year, leaving WHO in danger of being unable to sustain core COVID-19 functions at national and global levels for urgent priorities such as vaccination, surveillance and acute response, particularly in countries experiencing surges in cases.

Of note, only 6% of funding received for SPRP 2021 to date is ‘flexible’, compared with 30% flexible funds received for the 2020 SPRP. The continuous lack of operating funds is already having an impact on operations and WHO’s ability to rapidly react and respond to acute events and provide swift and needed support to countries.

A mid-year report on SPRP 2021 is now available, in addition to an updated appeal with concrete asks and priorities. WHO appreciates and thanks donors for the support already provided or pledged and encourages donors to give fully flexible funding for SPRP 2021, allowing WHO to direct resources to where they are most needed.

The status of funding raised for WHO against the SPRP can be found here.
WHO has recently published the WHO ACT-Accelerator Appeal: Supporting the spinal cord of the global COVID-19 response (December 2021), including WHO’s unique role and funding requirements to deliver on its role and work under the Access to COVID-19 Tools (ACT)-Accelerator, October 2021 to September 2022.

The ACT-Accelerator – and WHO’s funding requirement within it – is a subset to WHO’s global Strategic Preparedness and Response Plan (SPRP) which outlines WHO’s overall objectives and funding needs for the COVID-19 response.

The ACT-Accelerator needs US$ 23.4 billion until September 2022. Of this, WHO’s funding needs are US$ 1.57 billion, less than 7% of the total ask. This is an urgent call for the international community to fund the low cost, high impact work of the WHO to deliver on its new role within the new ACT-Accelerator.
COVID-19 Global Preparedness and Response Summary indicators


<table>
<thead>
<tr>
<th>Indicator (data as of)</th>
<th>2020 Baseline</th>
<th>Previous Status</th>
<th>Status Update</th>
<th>2021 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pillar 3:</strong> Proportion of countries(^a) testing for COVID-19 and timely reporting through established sentinel or non-sentinel ILI, SARI, ARI surveillance systems such as GISRS or other WHO platforms (N=69(^b), as of epidemiological week 48 2021)(^c)</td>
<td>22% (n=15)(^d)</td>
<td>58% (n=67)</td>
<td>49% (n=57)</td>
<td>50%</td>
</tr>
</tbody>
</table>

This week (epidemiological week 48), of the 116 countries in the temperate zone of the northern hemisphere and the tropics expected to report, 57 (49%) have timely reported COVID-19 data. An additional 6 countries in the temperate zones of the southern hemisphere have timely reported COVID-19 data for this week.

| **Pillar 9:** Countries\(^a\) where at least one vaccine preventable disease (VPD)-immunization campaign was previously postponed by COVID-19 that has since been reinstated using risk mitigation strategies (N=67, as of 1 December)\(^c\) | 55% (n=35) (January 2021) | 60% | 61% (n=41) | N/A |

| **Pillar 10:** Proportion of Member States that have started administration of COVID-19 vaccines (N=194, as of 20 December)\(^c\) | 0\(^f\) | 99% (n=192) | 99% (n=192) | 100% |

| **Pillar 10:** Number of COVID-19 doses administered globally (N=N/A, as of 20 December)\(^c\) | 0\(^f\) | 8 200 642 671 | **8 387 658 165** | N/A |

| **Pillar 10:** Proportion of global population with at least one vaccine dose administered in Member States (N= 7.78 billion, as of 20 December)\(^c\) | 0\(^f\) | 55.9% (n=4.3 billion) | **56.3% (n=4.37 billion)** | N/A |

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\(^a\) The term “countries” should be understood as referring to “countries and territories”

\(^b\) 69 countries and territories (the denominator) is the number of countries expected to conduct routine ILI, SARI and/or ARI surveillance at the time of year

\(^c\) Weekly reported indicator

\(^d\) Baseline for epidemiological week for southern hemisphere season

\(^e\) Quarterly reported indicator

\(^f\) Indicator reporting start data: start of COVID-19 vaccination used to calculate baseline

N/A not applicable; TBD to be determined; ILI influenza like illness; SARI severe acute respiratory infection; ARI acute respiratory illness; GISRS: Global Influenza Surveillance and Response System
WHO Funding Mechanisms

COVID-19 Solidarity Response Fund

As of 10 November 2021, The Solidarity Response Fund has raised or committed more than US$ 256 million from more than 676 626 donors.

The Fund is powered by the WHO Foundation, in collaboration with the UN Foundation and a global network of fiduciary partners. Donations to the COVID-19 Solidarity Response Fund (SRF) support WHO’s work, including activities with partners to suppress transmission, reduce exposure, counter misinformation, protect the vulnerable, reduce mortality and morbidity and accelerate equitable access to new COVID-19 tools.

The world has never faced a crisis like COVID-19. The pandemic is impacting communities everywhere. It’s never been more urgent to support the global response, led by WHO.

The following amounts have already been disbursed to WHO and partners:

- **$169 million**
  - to the World Health Organization to procure and distribute essential commodities and coordinate response.

- **$10 million**
  - to CEPI to catalyze and coordinate global vaccine R&D.

- **$10 million**
  - to UNHCR to protect at-risk Internally Displaced People and refugees.

- **$10 million**
  - to UNICEF to support vulnerable communities in low-resource settings.

- **$20 million**
  - to WFP to support the shipment of vital commodities where they are most needed.

- **$5 million**
  - to UNRWA to support refugee populations in Gaza, Jordan, Lebanon, Syria and the West Bank.

- **$2.6 million**
  - to the World Organization of the Scout Movement to alleviate the pandemic’s negative impact on youth development.
Key links and useful resources

**GOARN**
For updated GOARN network activities, click [here](#).

**Emergency Medical Teams (EMT)**
For updated EMT network activities, click [here](#).

**WHO case definition**
For the WHO case definitions for public health surveillance of COVID-19 in humans caused by SARS-COV-2 infection, published December 2020, click [here](#).

**WHO clinical case definition**
For the WHO clinical case definitions of the post COVID-19 condition, click [here](#).

**EPI-WIN**
For EPI-WIN: WHO Information Network for Epidemics, click [here](#).

**WHO Publications and Technical Guidance**
For updated WHO Publications and Technical Guidance on COVID-19, click [here](#).

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For more information on COVID-19 regional response:

- African Regional Office
- Regional Office of the Americas
- Eastern Mediterranean Regional Office
- European Regional Office
- Southeast Asia Regional Office
- Western Pacific Regional Office

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For the 14 December 2021 **Weekly Epidemiological Update**, click [here](#). Highlights this week include:

Updates on the geographic distribution of SARS-CoV-2 variants of concern (VOCs), and summarise phenotypic characteristics (transmissibility, disease severity, risk of reinfection, and impacts on diagnostics and vaccine performance) of VOCs based on available studies.

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**News**

- To read more about WHO listing 9th COVID-19 vaccine for emergency use listing (NVX-CoV2373) with aim to increase access to vaccination in lower-income countries, click [here](#).
- To watch WHO’s Science in 5 on COVID-19: Omicron update on YouTube, click [here](#).
- To read more about Dr Ayoade Alakija appointed as WHO Special Envoy for the ACT-Accelerator, click [here](#).
- Click to read [Enhancing Readiness for Omicron (B.1.1.529): Technical Brief and Priority Actions for Member States](#), updated 17 December.