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### **News**

## Countries around the world prepare for COVID-19 vaccine introduction

Diana Chang Blanc, World Health Organization; and Kelli Cappelier, John Snow, Inc. (JSI)

In February, countries around the world made a herculean effort to develop their National Deployment and Vaccination Plans (NDVPs) in preparation for the introduction of the COVID-19 vaccine in response to controlling the global pandemic. In total, 102 NDVPs were shared formally with WHO through the Partners Platform (<a href="https://covid19partnersplatform.who.int/en/">https://covid19partnersplatform.who.int/en/</a>), which includes 86 countries of the 92 Advanced Market Commitment (AMC) countries.

To achieve this milestone, WHO and UNICEF regional offices, with guidance from the COVAX Country Readiness and Delivery (CRD) work stream, established Regional Review Committees (RRCs) to support countries in the review of their NDVPs. The RRCs, composed of a diverse group of experts from WHO, UNICEF, and partners, assessed the country plans and provided feedback to strengthen them for COVID-19 vaccine introduction. Country plans were assessed using a standard review form and were approved based on three minimum criteria: (1) definition of the target population and delivery strategy; (2) assessment of cold chain expansion needs; and (3) alignment with WHO vaccine safety standards. Once a country's plan was approved, the country was recommended for vaccine allocation through the COVAX Facility.

7-8 To-date, three vaccine products have received policy recommendations from the WHO Strategic Advisory Group of Experts (SAGE) and WHO Emergency Use Licensure (EUL): Pfizer-BioNTech, Moderna, and AstraZeneca.

An indicative allocation for doses from the COVAX Facility for Q1 and Q2 in 2021 was communicated to countries in the beginning of February 2021. The first COVAX Facility vaccine allocation took place on 17 February 2021 for the AstraZeneca vaccine products and was validated by the Independent Allocation of Vaccines Group (IAVG) in the week of 22 February 2021. A limited number of countries will also be receiving the Pfizer-BioNTech vaccine through the COVAX Facility in Q1. Ghana was the first country to receive vaccines doses supported by the COVAX Facility and launched its introduction with the Serum Institute of India-Astra Zeneca vaccine on 1 March 2021. As of 07 March, 12.6 million COVAX supported doses have been delivered since that first shipment and introductions will continue to accelerate through the following weeks.



## How much does it cost to deliver COVID vaccine in low- and middle-income countries? \$1.66 per dose

Christina Banks and Laura Boonstoppel, ThinkWell

Through the <u>COVAX Advance Market Commitment (AMC)</u>, 92 low- and middle-income countries will be able to access subsidized COVID-19 vaccines, covering around 20% of the countries' total population.

A multi-organizational costing working group has estimated the incremental financial cost of delivering COVID-19 vaccines in these 92 AMC countries to be US\$1.66 per dose supplied and US\$3.70 per person vaccinated with two doses (after accounting for vaccine wastage), or a total of US\$2.018 billion.

Country-level delivery costs amount to US\$1.41 per dose, including components such as per diem for health workers, training, planning, and social mobilization etc. but excluding health worker salaries and ultra-cold chain costs. Technical assistance at global, regional, and country level is estimated at US\$0.16 per dose delivered. The total also includes US\$78 million for five innovations that are being accelerated to advance COVID-19 vaccine delivery: smart vaccination certificates, traceability solutions, real-time monitoring, digital micro-planning, and digital tools for safety monitoring. Additionally, the cost of pharmacovigilance and post-introduction evaluations at global and regional level are estimated at US\$20 million (see table below).

#### Total costs by cost category

Category	Total (US\$ million)	Percentage of total
Fixed site and outreach delivery	1,146	57%
Up-front in country	576	28%
Technical assistance	198	10%
Innovations	78	4%
Post-introduction evaluations	13	1%
Global pharmacovigilance activities	7	0.4%

To further explore the costs of delivering COVID-19 vaccines in 92 AMC countries, the full report from UNICEF is available <a href="here">here</a>.

The <u>COVID-19 vaccine introduction and deployment costing tool</u> (CVIC tool) developed by WHO can be used to support country level costing.

### #TeamVaccines is all of us

Morgane De Pol, International Federation of Pharmaceutical Manufacturers & associations (IFPMA)

The International Federation of Pharmaceutical Manufacturers & associations (IFPMA) has just launched the #TeamVaccines campaign, a global digital campaign designed to build confidence in COVID-19 vaccines.

The campaign tells the human stories of real people involved in the making of COVID-19 vaccines; people from around the world who work within the biopharmaceutical industry and who have been affected by the global pandemic in many of the same ways everyone has – balan-



The people making COVID-19 vaccines need them as much as we all do

#TeamVaccines Facebook banner

cing work and home schooling, supporting family members and friends, dealing with illness and loss – all the while working to help advance science and urgently bring new COVID-19 vaccines to the world.

The biopharmaceutical industry, academia, governments and regulators have come together to rise to the challenge of our age. We have accelerated research and development and delivered vaccines in record time, and are making vaccines in huge numbers that have not been seen before. But we are doing it in the way we always do – to the highest of scientific and regulatory standards. The #TeamVaccines campaign shows how the biopharmaceutical industry embraces rigorous independent scientific evaluation and robust independent approval processes. Not just scientifically, but also in the way the COVID-19 vaccines are being produced, distributed and monitored.

#TeamVaccines is all of us united by a shared goal: end the suffering, protect the ones we love, and help the world get back to normal.



### Pakistan introduces new typhoid vaccine in largest province

Mohammed Osama Mere, WHO Regional Office for the Eastern Mediterranean

Pakistan's largest province Punjab (110 million population), and the capital Islamabad, completed the first phase of the typhoid conjugate vaccine (TCV) campaign on 15 February 2021. More than 13 million children between nine months to 15 years of age were vaccinated over the course of two weeks. The campaign was organized in 12 districts of Punjab province and marks the formal introduction of TCV in the routine immunization schedule of the Expanded Programme on Immunization (EPI) in Punjab province and Islamabad, the capital. Around 206 cases of mild Adverse Event following Immunization (AEFI) were reported during the campaign at a rate of one AEFI case per 10,000 vaccinated children.



Launch of the TCV campaign

WHO estimates that Pakistan has one of the highest incidence rates of typhoid at 450 cases per 100,000 of population. Moreover, Pakistan experienced outbreaks of Extensive Drug Resistance cases starting from 2017 in Hyderabad and Karachi in Sindh province which was followed by a mass campaign of TCV in November 2019 when more than 10 million children were vaccinated and which resulted in a reduction in the extensively drug-resistant (XDR) cases by two thirds in 2020 compared with 2017. Pakistan is considered the first country in the world to implement a mass campaign and introduce the TCV nationally into its routine immunization programme.

As Punjab comprises 53 per cent of the country's population, the success of the efforts to contain

XDR outbreaks depends on the consistent quality of campaigns and immunization service delivery in the province. WHO, with Gavi funding, has supported all the operations of the campaign including the microplanning, training, implementation, development of web-based data and a mobile app for real time reporting, and analysis and conducting the post campaign coverage survey by a third party.



## Past Meetings/Workshops

## Educational Programme on Maternal Immunization and Vaccinology Principles as a Tool to Develop Vaccinology Knowledge for Gynaecologists

Julio Gonell and Jorge Vargas, Sociedad Dominicana de Obstetricia y Ginecología; and María Castrejón, Elidia Domínguez and Laura Naranjo, GSK Vaccines- Central America and Caribbean

Location: Dominican Republic

Date: 20, 27 August and 3 September 2020

Three weekly 90-minute virtual live sessions through Webex, including an extended Q&A session.

Participants: Sociedad Dominicana de Obstetricia y Ginecología: Gynaecologists: 359

Gynaecologist Fellows: 141.

Purpose: To promote in gynaecologists and gynaecology fellows, the importance of vaccines, especially in

women, during pregnancy and in health care professionals, as a strategy for reducing vaccine-

preventable diseases and morbidity and mortality in infants.

Details: The need for knowledge on the importance of vaccination in women and during pregnancy for the

protection of infants was identified in gynaecologists & gynaecology fellows was identified. Based on this, GlaxoSmithKline (GSK) developed scientific content for the webinars to focus primarily on maternal immunization against pertussis and built a "formal" virtual course capable of being

delivered through the Webex platform. The course contained the following modules:

I. Vaccination in women.

2. Vaccination in Health Care Professionals.

- 3. Pertussis: disease and epidemiology.
- 4. Importance of maternal immunization and antibody transfer.
- 5. Effectiveness of maternal immunization against pertussis disease.
- 6. Safety of vaccination in pregnant women.
- 7. Recommendations from international and supranational organizations for pertussis maternal immunization.
- 8. Tips for management of the cold chain.

The Sociedad Dominicana de Obstetricia y Ginecología gave its academic endorsement for the webinars and participated actively and jointly coordinated the sessions with GSK.

This is the first initiative to organize available scientific content into a "formal course" with the aim to improve vaccinology education for gynecologists, both specialists and fellows, in the Dominican Republic. These health care professionals then become ambassadors for women and maternal immunization.

The course enhances awareness of the benefit of these vaccines which results in an increase in vaccination coverage, and contributes to reducing the burden of pertussis.



### Learning for COVID-19 vaccine introduction: Accelerator Conference concludes the 2020 Teach to Reach programme

lan Steed, The Geneva Learning Foundation (TGLF)

Location: Virtual workshop Date: January 2021

3,838 immunization professionals from 94 countries (50% national and sub-national MoH) joined Participants:

the 2020 Teach to Reach programme, comprising:

Programme co-design supported by 50 participants from previous Scholar courses.

- Pre-course symposium accessed by over 3000 participants, drawing on successes, challenges and lessons-learned shared through the application process.
- Level I certification earned by 992 learners through the development of locally-sustainable, context-specific, peer-reviewed action plans informed by global learning science expertise. By January 2021, 236 alumni had completed implementation of their plans, and 404 alumni had started (but not yet completed) implementation of their plans.
- Level 2 certification earned by 334 level I alumni at a three-day workshop through problemsolving participant-generated challenges together with subject matter experts from global part-

BMGF launched Teach to Reach in 2015 to explore the "art of the possible" in improving immun-Purpose: ization training. During 2020, The Geneva Learning Foundation engaged national and sub-national

immunization staff to deepen this agenda, culminating in a conference focused on learning for

COVID-19 vaccine introduction, designed and led by national immunization staff.

During the workshop, participants created the Global Council for Learning Leadership in Immunization, a global action network with the purpose of contributing to the Immunization Agenda 2030 through transforming immunization training.

The Global Council's first action was to convene the Teach to Reach Accelerator Conference in January 2021. 282 Council members from 35 countries met weekly to design and prepare the fully online conference, which saw:

- 2,856 participants from 112 countries join for an average of 335 minutes over three
- a maximum of 780 attendees attending simultaneously
- five plenaries and 35 breakout sessions (22 English, 13 French)
- 13,900 networking meetings between attendees
- 58 global and regional partners, and 14 Scholar country teams contribute content.

For further Conference outputs, please send an email.

#### Details:



### Resources

### CoMO launches the Toolkit of resources for World Meningitis Day 2021 (24 April 2021)

Nadia Vaenerberg, Confederation of Meningitis Organisations (CoMO)

The <u>Confederation of Meningitis Organisations (CoMO)</u> has launched a publicly available <u>Toolkit of resources</u> to help people raise awareness of meningitis on this World Meningitis Day (24<sup>th</sup> April 2021). With the ratification of the Global Roadmap to Defeat Meningitis by 2030 during <u>the World Health Assembly in November 2020</u>, meningitis is now higher on the agenda than ever before which is vital because progress to eradicate this disease has lagged behind other infectious diseases. It is believed that everyone should work to prevent the preventable and so calling on everyone to "Take Action #DefeatMeningitis" it is hoped the Roadmap's vision can become a reality.

The Toolkit contains infographics in 10 languages, testimonial tiles for social media use and many facts about this disease, which (combined with neonatal sepsis) is the second largest infectious killer of children under five.

Over the next couple of months a policy push and more resources will be launched. To contact the Confederation of Meningitis Organisations, please contact us at: <a href="mailto:info@comomeningitis.org">info@comomeningitis.org</a>.

### Coming Soon! New Immunization portal with data visualization tools

Kristi James, WHO Headquarters

On 15 March 2021, the annual immunization data collection begins using the new electronic Joint Reporting Form (eJRF). In order to see and use the data, the WHO Immunization Information System (WIISE) team has been working on a new portal that will include the annual JRF reported data which is linked directly to WIISEMart.

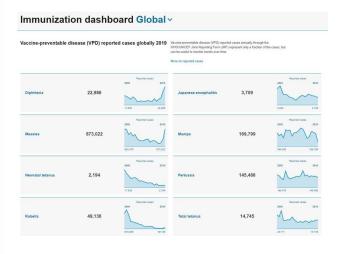
With the new portal, it will be possible to:

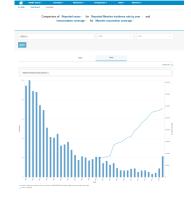
- 1. Start with a high-level overview of the data before going into the details
- 2. Filter data by region, country, or other country groupings
- 3. Navigate the information you need using an interactive dashboard
- Make comparisons between data sets such as reported coverage and vaccination coverage
- 5. View trends and conduct time series analysis
- 6. Map the data over time

Export the data you need and create other data visualizations.

The data that will be available includes the vaccine scheduler, immunization coverage data, vaccine-preventable disease reported cases data, vaccine introduction and immunization indicators.

All this will be available plus the colors used on the site are accessible for people with color-blindness. The screenshots in this article give a sneak peek into what is to come. The launch date is the second quarter of 2021.









### Featured resources: COVID-19 vaccines

### **COVID-19** vaccine introduction toolbox

Etienne Franca and Shoshanna Goldin, WHO Headquarters

The Country Readiness and Delivery (CRD) workstream part of COVAX, the vaccines pillar of the Access to COVID-19 Tools Accelerator launched the COVID-19 vaccine introduction toolbox, which provides guidance, tools and training to equip countries to prepare for and implement COVID-19 vaccination. This toolbox—intended to support Ministries of Health, health workers, partner organizations, and other stakeholders—is organized in line with the Guidance on Developing a National Deployment and Vaccination Plan for COVID-19 vaccines and will be updated as new resources become available. For questions, comments or feedback about the resources please send an e-mail.

## Operational guidance series produced by WHO/Europe to help countries prepare for and implement COVID-19 vaccination

George Eki, WHO Europe

This series of operational guidance modules was developed by a working group convened by the WHO Regional Office for Europe and consisting of experts from WHO, partner agen-cies, academia, Member States and other stakeholders.

#### Management structure, advocacy and resources for COVID-19 vaccine deployment and vaccination

This documents outlines key actions to ensure a "fit-for-purpose governance structure" that ensures intersectoral collaboration and partnership with relevant governmental and non-governmental entities to provide high-level policy direction. This governance structure will play a critical role in obtaining the required political support and mobilizing adequate resources.

#### COVID-19 vaccination data and information management, including monitoring of vaccine effectiveness

A robust un-derstanding of the size of different target populations supports evidence-informed deci-sion-making to define priority groups, planning for vaccine delivery and supply management at all levels, and enables vaccination coverage monitoring among targeted groups. This guidance document along with accompanying tools aims to sup-port countries in estimating the size of their target populations for effective COVID19 vaccine deployment.

### Legal and regulatory framework facilitating vaccine deployment

This document reviews regulatory practices and options, and supplements the regulatory guidance provided in the UNI-CEF interim guidance on developing national deployment plans for COVID-19 vaccines.

### **Acceptance and uptake of COVID-19 vaccines**

This document from WHO EURO highlights key activities to ensure high uptake of COVID-19 vaccination before or during the initial de-ployment phase which should be built upon and maintained for further rollout of the vaccine during the subsequent phases.

#### Evidence-based decision-making process for developing national COVID-19 vaccination strategies

This document outlines key considerations for National Immunization Technical Advisory Groups (NITAGs) in line with the SAGE value framework on approaches in developing preliminary recom-mendations on vaccination objectives and prioritization of target populations.

To provide guidance and tools to National Immunization Technical Advisory Groups (NITAGs) in developing recommendations on vaccination objectives and prioritization of population groups for COVID-19 vaccination. The National Immunization Technical Advisory Groups (NITAGs) or equivalent advisory bodies play a key role in enabling ministries of health to develop evidence-informed strategies for COVID-19 vaccination.

In order to support the national planning process, the WHO Strategic Advisory Group of Experts on Immunization (SAGE) provided guidance on prioritizing target populations for different stages of vaccine availability and local epidemiological settings. The European Technical Advisory Group of Experts on Immunization (ETAGE) has considered the available regional data on COVID-19 epidemiology and local demography and, based on robust modelling has adapted the SAGE recommendations to the context of the WHO European Region. This document outlines key considerations for NITAGs in line with SAGE value framework on approaches in developing preliminary recommendations on vaccination objectives and prioritization of target populations.



### New platform: COVID-19 vaccines and vaccination explained

George Eki, WHO Europe

In collaboration with WHO/Europe, the WHO Collaborating Centre for Vaccine Safety, Hospital Clínico Universitario de Santiago, has developed an <u>online platform</u> to answer key questions from health care professionals and the general public on COVID-19 vaccines. This new online platform offers an evolving library of videos, podcasts and texts in English, Russian and Spanish.

The materials are part of joint efforts by WHO and the WHO Collaborating Centre to ensure that health workers are well prepared to make decisions for themselves and to advise and inform the public about COVID-19 vaccines and vaccination.



The materials are developed by the WHO Collaborating Centre for Vaccine Safety and available in English, Spanish and soon also Russian.

The platform boost of video materials that answers key questions on COVID-19 vaccines and its related issues such as;

- COVID-19 vaccines and vaccination
- What are clinical trials and are they enough to prove that a vaccine is safe?
- What adverse reaction is associated with Pfizer/BioNTech vaccine?
- How does the AstraZeneca vaccine work?
- Does the vaccine work and how long does the protection last?
- How could vaccines be developed at record speed at still maintaining its quality and safety?

visit the GIN archive on the WHO website:



### Links

### **Organizations and Initiatives**

American Red Cross

Centers for Disease Control and Prevention

Global Vaccines and Immunization

Johns Hopkins

accine Access Center

ulue of Immunization Compendium of Evidence (VoICE)

VIEW-hub

**IMMUNIZATION**basics

Immunization Center Maternal and Child Health Integrated Program (MCHIP)

Publications and Resources

Universal Immunization through Improving Family Health Ser-

vices (UI-FHS) Project in Ethiopia

**PAHO** 

ProVac Initiative

**PATH** 

Better Immunization Data (BID) Initiative

Center for Vaccine Innovation and Access

Defeat Diarrheal Disease Initiative

Malaria Vaccine Initiative

RHO Cervical Cancer

Sabin Vaccine Institute

Boost – A Global Community of Immunization Professionals

**UNICEF** 

Supplies and Logistics

**USAID** 

**USAID** Immunization

USAID Maternal and Child Survival Program

WHO

Department of Immunization, Vaccines & Biologicals ICO Information Centre on HPV and Cancer

National programmes and systems

Immunization planning and financing

Immunization monitoring and surveillance
National Immunization Technical Advisory Groups Resource Center

SIGN Alliance

Other

Coalition Against Typhoid

Confederation of Meningitis Organizations
Dengue Vaccine Initiative

European Vaccine Initiative

Gardasil Access Program
Gavi the Vaccine Alliance

Global Polio Eradication Initiative

Immunization Academy

International Association of Public Health Logisticians

Immunization Economics resource International Vaccine Institute

Measles & Rubella Initiative

Multinational Influenza Seasonal Mortality Study Network for Education and Support in Immunisation (NESI)

Stop Pneumonia

TechNet-21

Vaccine Safety Net

Vaccines Today

### WHO Regional Websites

Routine Immunization and New Vaccines (AFRO)

Immunization (PAHO)

Vaccine-preventable diseases and immunization (EMRO)

Vaccines and immunization (EURO)

Immunization (SEARO)

Immunization (WPRO)

### **UNICEF Regional Websites**

<u> Immunization (Central and Eastern Europe)</u>

Immunization (Eastern and Southern Africa)

Immunization (South Asia)

Immunization (West and Central Africa)

Child survival (Middle East and Northern Africa)

Health and nutrition (East Asia and Pacific)

Health and nutrition (Americas)

#### **Newsletters**

Immunization Monthly update in the African Region (AFRO)

WHO/Europe Vaccine-preventable diseases and immunization (VPI) news (EURO)

Immunization Newsletter (PAHO)

The Civil Society Dose (GAVI CSO Constituency)

TechNet Digest

Vaccine Delivery Research Digest (Uni of Washington)

Gavi Programme Bulletin (Gavi)

**Immunization Economics Community of Practice**