This weekly digest targets news, events, announcements, articles and research in the vaccine and global health ethics and policy space and is aggregated from key governmental, NGO, international organization and industry sources, key peer-reviewed journals, and other media channels. This summary proceeds from the broad base of themes and issues monitored by the Center for Vaccine Ethics & Policy in its work: it is not intended to be exhaustive in its coverage.

Vaccines and Global Health: The Week in Review is published as a PDF and scheduled for release each Saturday [U.S.] at midnight [0000 GMT-5]. The PDF is posted and the elements of each edition are presented as a set of blog posts at https://centerforvaccineethicsandpolicy.net. This blog allows full text searching of over 21,000 entries.

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Request email delivery of the pdf: If you would like to receive the PDF of each edition via email [Constant Contact], please send your request to david.r.curry@centerforvaccineethicsandpolicy.org.

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Editor’s Note:
As is obvious to all, the sheer volume of strategic announcements, regulatory actions, country program decisions, commentary, and, indeed, misinformation around COVID response continues at extraordinary levels. Our weekly digest strives to present a coherent and comprehensive snapshot, but cannot be exhaustive. If you recognize a missed strategic development, a new source of rigorous analysis, or an insight/commentary that would benefit our common understanding, please advise me...we will review suggestions and consider inclusion in a subsequent edition:
david.r.curry@ge2p2global.org

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Malaria

21 April 2021 News release
World Malaria Day: WHO launches effort to stamp out malaria in 25 more countries by 2025

Ahead of World Malaria Day, marked annually on 25 April, WHO congratulates the growing number of countries that are approaching, and achieving, zero cases of malaria. A new initiative launched today aims to halt transmission of the disease in 25 more countries by 2025.

Of the 87 countries with malaria, 46 reported fewer than 10 000 cases of the disease in 2019 compared to 26 countries in 2000. By the end of 2020, 24 countries had reported interrupting malaria transmission for 3 years or more. Of these, 11 were certified malaria-free by WHO.

"Many of the countries we are recognizing today carried, at one time, a very high burden of malaria. Their successes were hard-won and came only after decades of concerted action” said Dr Tedros Adhanom Ghebreyesus, WHO Director-General. “Together, they have shown the world that malaria elimination is a viable goal for all countries.”...

New report: "Zeroing in on malaria elimination”
Through the E-2020 initiative, launched in 2017, WHO has supported 21 countries in their efforts to get to zero malaria cases within the 2020 timeline. A new WHO report summarizes progress and lessons learned in these countries over the last 3 years.

According to the report, 8 of the E-2020 member countries reported zero indigenous cases of human malaria by the end of 2020: Algeria, Belize, Cabo Verde, China, El Salvador, the Islamic Republic of Iran, Malaysia and Paraguay. In Malaysia, the P. knowlesi parasite, normally found in monkeys, infected approximately 2600 people in 2020.

A number of other countries made excellent progress: Timor-Leste reported only 1 indigenous case, while 3 other countries – Bhutan, Costa Rica and Nepal – reported fewer than 100 cases.

Building on the successes of the E-2020, WHO has identified a new group of 25 countries that have the potential to stamp out malaria within a 5-year timeline. Through the E-2025
initiative, launched today, these countries will receive specialized support and technical guidance as they work towards the target of zero malaria...

20 April 2021  Departmental news
RTS,S malaria vaccine reaches more than 650 000 children in Ghana, Kenya and Malawi through groundbreaking pilot programme
Malaria vaccine coverage through childhood immunization programme signals strong community demand for vaccine.
Two years on from the launch of a pilot programme, more than 1.7 million doses of the world’s first malaria vaccine have been administered in Ghana, Kenya and Malawi, benefitting more than 650 000 children with additional malaria protection.

The number of children reached in this relatively short period indicates strong community demand for the vaccine as well as the capacity of the countries’ child immunization programmes to deliver the vaccine on a novel schedule (4 doses up to about age 2 years).

At a time when global progress in malaria control has stalled, the protection provided by the RTS,S malaria vaccine, when added to currently recommended malaria control interventions, has the potential to save tens of thousands of lives per year.

“Ghana, Kenya and Malawi show that existing childhood vaccination platforms can effectively deliver the malaria vaccine to children, some of whom have not been able to access an insecticide treated bed net or other malaria prevention measures,” says Dr Kate O’Brien, WHO Director of the Department of Immunization, Vaccines and Biologicals. “This vaccine may be key to making malaria prevention more equitable, and to saving more lives.”

“Over the last 2 decades, we have achieved remarkable results with existing malaria control tools, averting more than 7 million deaths and 1.5 billion cases of the disease,” says Dr Pedro Alonso, Director of the WHO Global Malaria Programme. “However, progress towards key targets of our global malaria strategy remains off course. To get back on track, new tools are urgently needed – and malaria vaccines must be a critical component of the overall toolkit.”...

World Malaria Day : Unitaid commits to ensure increased and equitable access to life-saving tools against malaria
23 April 2021  Unitaid Press Release
Geneva – Ahead of World Malaria Day, marked annually on April 25, Unitaid reaffirms its strong commitment to combat malaria by increasing its efforts to prevent, control, and ultimately eliminate the disease.

The emergence of COVID-19 more than one year ago has thrown health systems into disarray and forced many countries to shift their focus and resources away from malaria. This threatens to reverse hard-won gains, particularly in the highest malaria burden countries where the rate of progress has slowed in recent years.
The World Health Organization (WHO) warns countries that disruptions to programmes that prevent and treat malaria could lead to a potential doubling of malaria deaths in sub-Saharan Africa in 2020 compared to 2018.

A new report by the Global Fund to Fight AIDS, Tuberculosis and Malaria highlights the urgent need to scale-up the adaptative measures adopted to counter the impact of COVID-19 to ensure the continuing delivery of lifesaving health services for malaria..

COVID 19 Vaccines – Equity/Access

France makes important vaccine dose donation to COVAX
:: Today, to mark the first year of the creation of the Access to COVID-19 Tools (ACT) Accelerator, President Emmanuel Macron announced that France has begun sharing vaccine doses with COVAX, starting with a first batch of 105,600 doses – with 500,000 by the middle of June. These doses are provided free of charge to the COVAX AMC.

:: This is the first donation of doses acquired by a high-income country to COVAX, and launches Team Europe’s dose sharing through COVAX, with France becoming the first EU Member State to activate this mechanism.

:: France will ramp its commitment up to at least 5% of its total doses by the end of 2021. A number of other countries have expressed willingness to share vaccine doses with COVAX. President Macron has called on all G7 and high-income countries to follow suit.

Geneva, 23 April 2021 – Today saw France become the first country to donate doses of COVID-19 vaccines from its domestic supply to COVAX, with an initial commitment of 500,000 doses. This new pledge by President Emmanuel Macron allows COVAX to start a new chapter – where, in addition to doses secured through deals with manufacturers, high-income economies can provide doses directly to the global vaccine equity mechanism.

This initial donation will be provided through COVAX, with a first batch of 105,500 doses for April. The initial shipment will be allocated through the COVAX Facility to Mauritania. This pilot shipment of AstraZeneca vaccine is part of a commitment of 500,000 doses from multiple manufacturers planned by mid-June, with a goal to provide at least 5% of all doses acquired by France to COVAX over the course of 2021. These doses have been purchased by France and are being provided free of charge to the COVAX Facility, to be distributed to lower-income economies in line with the equitable allocation mechanism that underpins COVAX. This donation – the first of its kind – will be an example to be followed by Team Europe more broadly.

This pledge follows on from a call by President Macron for high-income countries to provide a proportion of their doses to the 92 lower-income economies eligible for support under the Gavi COVAX Advance Market Commitment (Gavi COVAX AMC). The announcement came on the first anniversary of the launch of the Access to COVID-19 Tools (ACT) Accelerator, the global collaboration to accelerate the development, production, and equitable allocation and distribution of COVID-19 tests, treatments, and vaccines.
Commenting on this announcement, President Macron said: “Our goal, with these donations, is to allow all countries, especially in Africa, to vaccinate the populations who need it most urgently, beginning with healthcare professionals.”

The donation follows the publication by COVAX in December of its Principles for Dose-Sharing, which provide a framework for high-income economies to make additional volumes, secured via their own bilateral deals, available through the Facility primarily to Gavi COVAX AMC-eligible economies, on an equitable basis. This dose donation mechanism has been designed with “Team Europe”, in coordination with France, the European Commission, Norway and European partners. The Government of Canada provided support to operationalise the COVAX dose sharing mechanism, to ensure doses can be welcomed by other countries. UNICEF will provide contracting, insurance and delivery of donated doses to the receiving countries...

PRINCIPLES FOR SHARING COVID-19 VACCINE DOSES WITH COVAX
COVAX 18 December 2020

To maximize impact, the Facility promotes the following principles for shared doses:

1. Safe and effective: shared doses must be of assured quality with, at a minimum, WHO prequalification/emergency use listing or licensure/authorization from an SRA. Vaccine doses could be transferred to countries most rapidly if they are already in the COVAX Portfolio; other vaccines can be considered if they meet WHO’s Target Product Profile and the standards set by the Independent Product Group for vaccines in the COVAX portfolio.

2. Early availability: shared doses should be made available as soon as possible and ideally concurrently by the sharing country as it receives vaccines to increase equitable access and have maximum impact. Dose sharing should begin very early in 2021. Doses provided later in 2021 and beyond could still help increase coverage in countries and impact the pandemic.

3. Rapidly deployable: sharing of doses should be signaled as early as possible in the manufacturing process, with the dose-sharing country facilitating authorizations, so that doses are shipped directly from the manufacturer with universal labelling and packaging, allowing rapid deployment and maximizing shelf-life.

4. Unearmarked: to facilitate equitable access and in keeping with COVAX’s allocation mechanism, doses should not be earmarked for specific geographies or populations.
5. Substantive quantity: shared doses should be of sufficient and predictable volumes to have a substantive impact in achieving the goals of the Facility.

Shared COVID-19 doses would ideally be fully paid for by the dose-sharing country, including ancillary costs where possible. When shared vaccines are being provided to AMC-eligible economies, the Facility may also consider contributing to the costs of doses or options for doses at Facility prices (for example, for doses that are available early in 2021). These principles will be implemented in consultation with dose-sharing countries and vaccine manufacturers.

In keeping with the Facility’s goals, principles, and operations, the Facility will ensure that shared doses are distributed equitably, effectively, and transparently through the COVAX Allocation Mechanism. In parallel, COVAX is supporting AMC-eligible economies to optimize readiness for vaccination and ensure that ‘no dose sits idle’. For AMC-eligible economies, shared doses would be eligible for the Indemnity and Liability provisions for these economies.

COVID 19 Vaccines – ACT-A/Access/Logistics

UNICEF Executive Director Henrietta Fore's remarks at the one-year anniversary of the Access to COVID-19 Tools Accelerator

Statement
NEW YORK, 23 April 2021 - "UNICEF is proud to be part of the ACT-Accelerator and COVAX. "We’re applying our experience as the largest single vaccine buyer in the world. We’re working with manufacturers and partners to procure COVID-19 vaccine doses, as well as freight, logistics and storage. And we’re procuring diagnostics, therapeutics and PPE.

"In the race to defeat this virus, equity is not a ‘nice to have’ — it’s a necessity. Each time the virus is transmitted somewhere in the world, it can evolve and new variants could emerge This threatens recovery everywhere.

"So we need to get vaccines off the tarmac and into the arms of those who need them.

"That means helping governments prepare to receive the vaccines. It means having appropriate cold chain equipment in place. It means training health workers. It means building trust and tackling misinformation. And it means delivering other critical interventions – infection control, PPE, handwashing supplies, and more.

"All of this requires funding. And countries are having a hard time finding room in their domestic budgets for the rollout — which could lead to vaccine supplies being wasted or countries sacrificing other vital health programmes.

"They need our support now.

"Help us close the overall funding gap for ACT-A. UNICEF urgently requires flexible funds for the vaccine rollout and for tests, treatments and supplies. "Let’s make sure the light at the end of the tunnel shines for us all. Thank you."
**ACT-Accelerator 1-Year Anniversary: the biopharmaceutical industry is committed to continue to play a critical role**

*IFPMA Press Release*

Geneva, 23 April 2021 – Today we welcome the one-year Anniversary of ACT Accelerator (ACT-A) – an unprecedented global partnership established to defeat a global health crisis. The force of ACT-A has been its flexible, solution-oriented and collaborative approach, with all players – governments, business, civil society, and global health organizations – having a seat at the table. Beating COVID-19 will require constant global surveillance, continued innovation, and close cooperation.

Since the beginning of this pandemic, the biopharmaceutical industry committed to fair and equitable access to new COVID-19 tools. In joining the ACT-A last year, the biopharmaceutical industry signed up to bring to this partnership the industry’s unique knowledge and expertise in the discovery and development of novel therapeutics and vaccines and in building manufacturing capacity and distribution networks.

Within the year of ACT-A coming together considerable progress has been made, in particular with regards to vaccines. COVAX has secured nearly 2 billion vaccine doses; and 38 million have reached over 100 countries. This has only been possible, because within that time, several highly safe and effective COVID-19 vaccines have been approved, compressing a decade of normal development times in just ten months. In parallel to conducting the necessary steps to gain approval for the new vaccines, vaccine manufacturers prepared the manufacturing base from which today historic quantities of COVID-19 vaccines are being produced and deployed across the world. The speed of response is impressive.

This month, on the first anniversary of the ACT-Accelerator, the 1 billion COVID-19 vaccine production milestone has been reached, and current projections[1] to produce close to 10 billion doses by the end of 2021 is thought to be feasible. According to a recent World Bank report[2], this should be sufficient to achieve global equity in the distribution of vaccines and attain worldwide herd immunity by March 2022. However, vaccine makers warn that their manufacturing scale up projections to meet global demand are dependent on immediate action being taken to promote the free flow of goods and trade as well as better visibility of demands on supplies...

**COVID Vaccine – Response Financing**

**World Bank Financing for COVID-19 Vaccine Rollout Reaches $2 Billion**

*Financing for the poorest countries is on grant or highly concessional terms*

WASHINGTON, April 20, 2021— The World Bank announced today that it has reached $2 billion in approved financing for the purchase and distribution of COVID-19 vaccines for 17 developing countries.

This financing is part of the $12 billion envelope over 24 months for developing countries to acquire and deploy vaccines and strengthen their vaccination systems. For poorer
countries financing is on grant or highly concessional terms. The Bank expects to support 50 countries with $4 billion financing for COVID-19 vaccines by mid-year.


“Access to vaccines is key to altering the course of the pandemic and helping countries move toward a resilient recovery,” said World Bank Group President David Malpass. “Our programs are helping developing countries respond to the health emergency and have financing available for vaccines. As the world attempts to carry out the largest vaccination effort in history, we have stressed the need for countries with excess vaccine supplies to release them as soon as possible, and for financing commitments to COVAX to be encashed.”

The Bank’s vaccine finance package is designed to be flexible. It can be used by countries to procure doses through COVAX or other sources. It can also finance other key deployment and health system strengthening activities, such as medical supplies, personal protective equipment, vaccine cold-chains, training health workers, data- and information systems and communications and outreach campaigns to key stakeholders which are key to ensure vaccination acceptance. The Bank has aligned its eligibility criteria of COVID 19 vaccines with the revised eligibility criteria of COVAX and other Multilateral partners...

COVID Vaccines – Industry, IP/TRIPS, Manufacturing

COVID-19 vaccine industry cautions immediate action needed to remove manufacturing supply barriers to meet production
23 April 2021
:: On the 1st anniversary of ACT-Accelerator, COVID-19 vaccine makers representing biotechnology firms, developing and developed country manufacturers renew their commitment to produce sufficient vaccines to meet world needs.
:: Increased production output of COVID-19 vaccines is forecast and can be attributed to over 200 manufacturing deals coming online and greater efficiency of a complex process, however, the manufacturing scale up depends on overcoming major manufacturing supply challenges.
:: Vaccine industry warns that their manufacturing scale up projections are dependent on immediate action being taken to promote the free flow of goods and trade as well as better visibility of demands on supplies.
23 April 2021: Washington DC, Geneva, Hyderabad: The Biotechnology Innovation Organization (BIO), Developing Countries Vaccine Manufacturers’ Network (DCVMN) and the International Federation of Pharmaceutical Manufacturers and Associations (IFPMA) are all key players in the historic effort to scale up the manufacturing of COVID-19 vaccines. All three entities signed up as partners of ACT-Accelerator last year and committed to fair and equitable access to COVID-19 vaccines. This month, on the first anniversary of the ACT-Accelerator, the 1 billion COVID-19 vaccine production milestone has been reached, and current projections[1] to produce close to 10 billion doses by the end of 2021 is thought to be feasible. According to a recent World Bank report[2], this should be sufficient to achieve global equity in the distribution of vaccines and attain worldwide herd immunity by March 2022.
This forecast is based on over 275 manufacturing deals that have been agreed to date coming on-line. Of these deals, 214 include various forms of partnership or collaboration that rely on technology transfer. There are early signs that the sharing of know-how of the processes and the technologies used to make the vaccines, as well as training specialist personnel to ensure quality standards throughout the process, are now starting to have an impact on the projected output. As these facilities get up to speed, they are able to produce more vaccines, as well as achieve increasingly better yields.

But the vaccine industry groups warn that success in achieving the manufacturing targets which by the end of 2021 should meet the needs of 70% of the world’s population, hinge on resolving immediately trade barriers and removing export restrictions that hinder the movement of global supply of vaccine components and the vaccines themselves during the manufacturing process. The demand on vaccine raw materials, ingredients and manufacturing components will need to meet the demand associated with the increase in vaccine production. This is of particular concern since there is currently a global shortage of some of the over 100 components and ingredients needed for vaccine manufacturing. While a great deal of focus has been put on ensuring there are enough vials or syringes; today we are seeing shortages in the lipids that are used in mRNA vaccines; as well as tubing and the plastic bags that are used in the production process for many vaccines.

The three vaccine industry groups have been actively engaged in highlighting these currents together with COVAX, both at the Global COVID-19 Vaccine Manufacturing Supply Chain Summit in March 2021, as well as more recently at a WTO event “COVID-19 and Vaccine Equity: What can the WTO Contribute”. These discussions have started to point towards a number of potential short-term solutions; namely:

:: Further exploring voluntary manufacturing partnerships where feasible.
:: Removing current export restrictions and ensuring free flow of goods and workforce across the world.
:: Facilitating and speeding up of trade in the global supply chain of COVID-19 vaccines and their components. This would require the involvement of the World Trade Organization and the World Customs Organization.
:: Identifying and finding solutions to constraints of raw materials, critical components and technology for vaccine manufacturing. Industry believes that a voluntary scheme for increasing visibility on demand and supply of COVID-19 vaccine components could improve the efficiency of the market place. The vaccine industry groups would welcome the creation of a clearing house or hub managed by a trusted third party to head off problems before they occur by knowing where there could be spare resources or bottlenecks in supplies of critical items.

The recently announced COVAX manufacturing task force where industry intends to play a key role, needs to see these solutions through from concept to reality within the next month. In the following months, the taskforce would be the appropriate forum for vaccine makers to share their experience of technology transfer and contribute to exploring the skills set needed to build a platform for sustainable vaccine manufacturing.
COVID-19 Vaccine Roll-out
Apr 24, 2021 | COVAX (WHO,GAVI,CEPI), UNDESA, Press Reports | DATA
Global COVID-19 Figures: 141M total confirmed cases; 3.1M total confirmed deaths
Global vaccines administered: 970M
Number of Countries: 26
COVAX First Allocations (Number of Doses): 73M
COVAX Delivered (Number of Doses): 13M
Other Delivered (Number of Doses): 17M
Total Delivered (Number of Doses): 30M
Total Administered (Number of Doses): 8.8M

Coronavirus [COVID-19] - WHO
Public Health Emergency of International Concern (PHEIC)
https://www.who.int/emergencies/diseases/novel-coronavirus-2019

Weekly Epidemiological and Operational updates
Last update: 24 April 2021
Confirmed cases :: 145 216 414  [week ago: 134 139 501]
Confirmed deaths :: 3 079 390  [week ago: 2 992 193]
Countries, areas or territories with cases :: 223

Statement on the seventh meeting of the International Health Regulations (2005)
Emergency Committee regarding the coronavirus disease (COVID-19) pandemic
19 April 2021 Statement
The seventh meeting of the Emergency Committee convened by the WHO Director-General under the International Health Regulations (2005) (IHR) regarding the coronavirus disease (COVID-19) took place on Thursday, 15 April 2021 from 12:00 to 16:30 Geneva time (CEST)...

The Committee recognized WHO’s and States Parties’ progress in implementing the previous advice and Temporary Recommendations from the 6th meeting of the Emergency Committee. The Committee congratulated the mission team and the report from the WHO-convened Global Study of Origins of SARS-CoV-2 and encouraged implementation of the recommendations published in the Mission report.

The Committee remains concerned that the world will not exit the pandemic unless, and until, all countries have access to appropriate supplies of diagnostics, treatments and vaccines, irrespective of their ability to pay and the capacity and financial resources to rapidly and effectively vaccinate their populations. Inequities within and among all countries is slowing the return to normal social and economic life. The Committee provided the following advice to the Director-General accordingly.

The Director-General determined that the COVID-19 pandemic continues to constitute a PHEIC. He accepted the advice of the Committee to WHO and issued the Committee’s advice to States Parties as Temporary Recommendations under the IHR.
The Emergency Committee will be reconvened within three months or earlier, at the discretion of the Director-General. The Director-General thanked the Committee for its work.

**Advice to the WHO Secretariat** [Excerpts]

**COVID-19 Vaccination**
1. Promote global solidarity and equitable vaccine access by encouraging States Parties and manufacturers to support the COVAX Facility, including by sharing vaccine doses, and to conduct technology transfer for local production of COVID-19 vaccines and ancillary supplies, including in low- and middle-income countries with scalable capacities.
2. Accelerate evaluation of COVID-19 vaccine candidates, encourage regulatory agencies to use reliance mechanisms, and support States Parties in strengthening their regulatory agencies to facilitate supply of vaccines with assured quality, efficacy, and safety...

**...Health Measures in Relation to International Traffic**
14. Update the WHO December 2020 risk-based guidance for reducing SARS-CoV-2 transmission related to international travel (by air, land, and sea) based on current science and best practices that include clear recommendations for testing approaches and traveler quarantine duration, as appropriate. Incorporate an ethical framework into the updated guidance to guide national decision making. The guidance should take into consideration COVID-19 vaccination roll out, immunity conferred by past infection, risk settings, movements of migrants, temporary workers, and purpose of travel (non-essential versus essential).
15. Continue to coordinate with relevant stakeholders in the fields of international travel and transport, including ICAO, UNWTO, and IATA, for the regular review, updating, and dissemination of evidence-based guidance on travel-related risk reduction measures.
16. Continue to update the WHO interim position on the considerations regarding requirements of proof of vaccination and to produce interim guidance and tools related to standardization of paper and digital documentation of COVID-19 travel-related risk reduction measures (vaccination status, SARS-COV-2 testing and COVID-19 recovery status) in the context of international travel.
17. Continue to work with States Parties and partners to enable essential travel and repatriation and to facilitate the movement of goods to prevent delays in access to aid and essential supplies.
18. Continue to encourage vaccination of seafarers and air crews in line with the Joint statement on prioritization of COVID-19 vaccination for seafarers and aircrew.

::: Weekly operational update on COVID-19 - 19 April 2021

**Overview**
In this edition of the Weekly Operational Update on COVID-19, highlights of country-level actions and WHO support to Member States include:
:: Training critical care nurses for COVID-19 in the occupied Palestinian territory, including east Jerusalem
:: Health for all in India during the COVID-19 pandemic
:: Supporting monitoring health inequities and minimizing health service disruptions in Nigeria
:: COVAX Facility delivers COVID-19 vaccine doses to Brunei Darussalam
:: Workshop and technical dialogue on COVID-19 surveillance, testing and contact tracing in the Czech Republic
:: Addressing mental health needs amidst the COVID-19 pandemic in Nepal
Weekly epidemiological update on COVID-19 - 20 April 2021

Overview

Globally, new COVID-19 cases rose for the eighth consecutive week, with over 5.2 million new cases reported in the last week. The number of new deaths increased for the fifth consecutive week, increasing by 8% compared to last week, with over 83 000 new deaths reported. While all regions except the European Region reported an increase in incident cases in the last week, the largest increase continues to be reported by the South-East Asia Region, largely driven by India, followed by the Western Pacific Region.

In this edition, special focus updates are provided on:

:: WHO COVID-19 global rapid risk assessment
:: Pandemic influenza surveillance—drawing a parallel with the COVID-19 pandemic
:: SARS-CoV-2 variants

Table 2: SARS-CoV-2 variants of concern (VOC) and variants of interest (VOI), as of 20 April 2021*

<table>
<thead>
<tr>
<th>Nextstrain clade</th>
<th>Pango lineage</th>
<th>GISAID clade</th>
<th>Alternate names</th>
<th>First detected in</th>
<th>Earliest samples</th>
<th>Characteristic mutations</th>
</tr>
</thead>
<tbody>
<tr>
<td>20C</td>
<td>B.1.525</td>
<td>G/484K.V3</td>
<td>-</td>
<td>United Kingdom and Nigeria</td>
<td>Dec 2020</td>
<td>H69-V70 del, Y144 del, Q52R, E484K, Q677H, D614G, and F881L</td>
</tr>
<tr>
<td>Not yet assigned</td>
<td>B.1.128.3, alias P.3</td>
<td>Not yet assigned</td>
<td>PHL-B.1.1.28</td>
<td>Philippines and Japan</td>
<td>Feb 2021</td>
<td>141-143 del, E484K, N501Y, P681H</td>
</tr>
</tbody>
</table>

*While work is ongoing to establish standardized nomenclature for key variants, these are the names by which WHO will refer to them in this publication.
WHO – COVID Vaccines EUAL, Prequalification

Statement of the Strategic Advisory Group of Experts (SAGE) on Immunization: Continued review of emerging evidence on AstraZeneca COVID-19 Vaccines
22 April 2021  Statement

WHO is committed to updating its policy guidance whenever relevant new information has been obtained through the use of the vaccine in populations around the world and new results from clinical research.

Accordingly, new data continues to regularly emerge from ongoing clinical trials and monitoring on the AstraZeneca COVID-19 Vaccine and other vaccines. On the basis of this additional evidence, the Strategic Advisory Group of Experts (SAGE) on Immunization has updated its interim guidance on the use of the AstraZeneca vaccines against COVID-19 that are produced by different manufacturers (AstraZeneca-Vaxzevria, Serum Institute India SII Covishield, and SK Bioscience).

**WHO continues to support the conclusion that the benefits of these vaccines outweigh the risks.** Pursuant to the latest data, further clarification of precautions and types of risk (ie. Thrombosis with Thrombocytopenia Syndrome) has been added. More data have been obtained on the effectiveness of the vaccines in different population groups, such as older adults, making the evidence base more robust. Clarifications and specifications have been added as to the vaccination of specific population groups (pregnant and lactating women, person with previous SARS-CoV2 infection and others).

The changes to these Interim Recommendations apply to multiple sections of the document. The updated version is available [here](https://www.who.int/immunization/topics/covid-19).

The SAGE Working Group on COVID-19 Vaccines will continue to evaluate available data and modify the guidance as required.

Draft landscape and tracker of COVID-19 candidate vaccines
23 April 2021 | Publication

The COVID-19 candidate vaccine landscape and tracker database compiles detailed information on COVID-19 vaccine candidates in development.

The landscape is updated regularly - twice a week (Tuesday and Friday, 17:00 CET).


Status of COVID-19 Vaccines within WHO EUL/PQ evaluation process 14 April 2021
For 19 vaccine candidates, presents Manufacturer, Name of Vaccine, NRA of Record, Platform, EOI Accepted Status, Pre-submission Meeting Held Status, Dossier Accepted for Review, Status of Assessment; Anticipated/Completed Decision Date

[click on the link above for full scale view]
COVID Vaccine Developer/Manufacturer Announcements [organizations from WHO EUL/PQ listing above]

AstraZeneca
Press Releases - No new digest announcements identified

Bharat Biotech, India
Press Releases - No new digest announcements identified

Apr 21: Bharat Biotech and ICMR Announce Interim Results from Phase 3 trials of COVAXIN®; Demonstrates overall Interim Clinical Efficacy of 78% and 100% efficacy against Severe COVID-19 disease

Apr 20: Bharat Biotech Announces COVAXIN® Capacity Expansion to Support vaccination campaigns in India and Worldwide.
Capacity expansion has been implemented across multiple facilities in Hyderabad and Bangalore, to reach ~700 million doses/year, one of the largest production capacities for Inactivated viral vaccines worldwide,

- IMDG agonist molecule synthesis and manufacturing has been successfully implemented in India eliminating dependency on imports,
- Raw materials, packing materials and single use consumables for manufacturing have been secured to meet our capacity requirements

BioCubaFarma – Cuba

Últimas Noticias

**Comenzó segunda fase de ensayos clínicos del candidato vacunal Soberana Plus**

Con la vacunación de una veintena de personas comenzó este sábado en el capitalino Instituto de Hematología e Inmunología, la fase II A de los ensayos clínicos con el candidato vacunal cubano anti-COVID-19 Soberana Plus, desarrollado por el Instituto Finlay de Vacunas (IFV)...

CanSinoBIO

*News* - No new digest announcements identified

Clover Biopharmaceuticals - China

*News* - Website under maintenance

Curevac [Bayer Ag – Germany]

April 19, 2021

**CureVac Swiss AG Initiates Rolling Submission Process for mRNA-based COVID-19 Vaccine Candidate, CVnCoV, with Swissmedic**

Gamaleya National Center

*Latest News and Events* - No new digest announcements identified  [See Russia/RFID below]

IMBCAMS, China

*Home* - No new digest announcements identified

Janssen/JNJ

*Press Releases*

Apr 23, 2021  *United States*

**Johnson & Johnson Single-Shot COVID-19 Vaccinations to Resume in the U.S. for All Adults Aged 18 and Older Following CDC and FDA Decision**

... Johnson & Johnson has updated the EUA Fact Sheets for Healthcare Providers Administering Vaccine (Vaccination Providers), and Recipients and Caregivers for the Company’s COVID-19 vaccine, to include information about the diagnosis and treatment of thrombosis with thrombocytopenia. The revised EUA fact sheets is available at: www.janssencovid19vaccine.com...

Apr 23, 2021  *United States*

**Johnson & Johnson Statement on April 23 CDC Advisory Committee Meeting on Company COVID-19 Vaccine**

... Statement from Paul Stoffels, M.D., Vice Chairman of the Executive Committee and Chief Scientific Officer at Johnson & Johnson: “We are grateful to the Advisory Committee and its medical experts for the rigorous evaluation of our COVID-19 vaccine. The Committee’s recommendation is an essential
step toward continuing urgently needed vaccinations in a safe way for millions of people in the U.S. As the global pandemic continues to devastate communities around the world, we believe a single-shot, easily transportable COVID-19 vaccine with demonstrated protection against multiple variants can help protect the health and safety of people everywhere. We will continue to collaborate with the CDC, FDA and health authorities around the world, including the European Medicines Agency and the World Health Organization, to ensure this very rare event can be identified early and treated effectively. We remain committed to the health and safety of people worldwide.”

**Moderna**
*Press Releases*
April 20, 2021

**Moderna Announces New Supply Agreement with Israel for 2022**
:: First firm order reached with the Company for 2022 supply
:: Israel also retains an option to purchase doses of variant-specific vaccine booster candidate, pending regulatory approval

**Novavax**
*Press Releases - No new digest announcements identified*

**Pfizer**
*Recent Press Releases*

**Pfizer and BioNTech to Supply the European Union with 100 Million Additional Doses of COMIRNATY®**
04.19.2021

**Serum Institute of India**
*NEWS & ANNOUNCEMENTS*
Wednesday, April 21, 2021

**Media Statement**
Serum Institute of India (SII), welcomes the recent announcement made by Government of India’s Ministry of Health and Finance Ministry to accelerate India’s vaccination drive. The promising directives will help to scaleup vaccine production, and allow state governments, private hospitals, and vaccination centers to procure vaccines directly.

For the next two months, we will address the limited capacity by scaling up the vaccine production. Going ahead, 50% of our capacities will be served to the Government of India’s vaccination program, and the remaining 50% of the capacity will be for the State governments and private hospitals.

...Considering the global vaccine prices, we are ensuring that our vaccines are affordable in comparison to any other vaccines in the world.

... Furthermore, owing to the complexity, and urgency of the situation it is challenging to supply it independently to each corporate entity. We would urge all corporate and private individuals to access the vaccines through the state facilitated machinery and private health systems. Post 4-5 months, the vaccines will be made available in retail and free trade.

We at Serum, would like to assure you that we will continue to do our best to help everyone and would request you all to be patient with us.

ADAR C POONAWALLA, CEO, SERUM INSTITUTE OF INDIA

**Sinopharm/WIBPBIBP**
News  - No new digest announcements identified

Sinovac  
Press Releases  - No new digest announcements identified

Vector State Research Centre of Viralogy and Biotechnology
Home  - No new digest announcements identified

Zhifei Longcom, China
[Anhui Zhifei Longcom Biologic Pharmacy Co., Ltd.]
[No website identified]

UNICEF COVID-19 Vaccine Market Dashboard :: Agreements Table Accessed 24 Apr 2021
An overview of information collected from publicly announced bilateral and multilateral supply agreements [Agreements view from 2021-04-09 to date]

<table>
<thead>
<tr>
<th>Deal date</th>
<th>Recipient</th>
<th>Deal type</th>
<th>Vaccine name</th>
<th>Vaccine developer</th>
<th>Manufacturer</th>
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<tr>
<td>2021-04-18</td>
<td>Pakistan</td>
<td>Bilateral</td>
<td>CoronaVac</td>
<td>Sinovac</td>
<td>Sinovac</td>
</tr>
<tr>
<td>2021-04-19</td>
<td>Israel</td>
<td>Bilateral</td>
<td>mRNA-1273</td>
<td>Moderna</td>
<td>Moderna</td>
</tr>
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<td>2021-04-19</td>
<td>Guinea</td>
<td>Bilateral</td>
<td>CoronaVac</td>
<td>Sinovac</td>
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<tr>
<td>2021-04-20</td>
<td>Brazil</td>
<td>Bilateral</td>
<td>BNT-162</td>
<td>Pfizer/BioNTech</td>
<td>Pfizer/BioNTech</td>
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<td>2021-04-20</td>
<td>Israel</td>
<td>Bilateral</td>
<td>BNT-162</td>
<td>Pfizer/BioNTech</td>
<td>Pfizer/BioNTech</td>
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<tr>
<td>2021-04-22</td>
<td>Germany</td>
<td>Bilateral</td>
<td>Sputnik V</td>
<td>Gamaleya Research Institute</td>
<td>Gamaleya Research Institute</td>
</tr>
<tr>
<td>2021-04-22</td>
<td>Thailand</td>
<td>Bilateral</td>
<td>BNT-162</td>
<td>Pfizer/BioNTech</td>
<td>Pfizer/BioNTech</td>
</tr>
<tr>
<td>2021-04-23</td>
<td>Canada</td>
<td>Bilateral</td>
<td>BNT-162</td>
<td>Pfizer/BioNTech</td>
<td>Pfizer/BioNTech</td>
</tr>
<tr>
<td>2021-04-23</td>
<td>Canada</td>
<td>Bilateral</td>
<td>BNT-162</td>
<td>Pfizer/BioNTech</td>
<td>Pfizer/BioNTech</td>
</tr>
</tbody>
</table>
Our World in Data

Coronavirus (COVID-19) Vaccinations

Daily COVID-19 vaccine doses administered per 100 people, Apr 24, 2021

- United Arab Emirates: 1.02 (Apr 23, 2021)
- Uruguay: 1.0 (Apr 23, 2021)
- Bahrain: 0.96 (Apr 23, 2021)
- United States: 0.84 (Apr 23, 2021)
- Hungary: 0.81 (Apr 23, 2021)
- Qatar: 0.81 (Apr 23, 2021)
- United Kingdom: 0.72 (Apr 23, 2021)
- Chile: 0.72 (Apr 23, 2021)
- Germany: 0.58 (Apr 23, 2021)
- Netherlands: 0.57 (Apr 23, 2021)
- France: 0.52 (Apr 22, 2021)
- Brazil: 0.32
- China: 0.29 (Apr 23, 2021)
- Turkey: 0.19
- India: 0.19 (Apr 23, 2021)

Share of the population fully vaccinated against COVID-19, Apr 24, 2021

- Israel: 57.9% (Apr 23, 2021)
- Chile: 31.5% (Apr 22, 2021)
- Bahrain: 30% (Apr 23, 2021)
- United States: 27.3% (Apr 23, 2021)
- Serbia: 19.1%
- United Kingdom: 17.8% (Apr 23, 2021)
- Hungary: 16.1% (Apr 23, 2021)
- Morocco: 11.4% (Apr 23, 2021)
- Turkey: 9.4%
- France: 7.6% (Apr 22, 2021)
- Germany: 7% (Apr 23, 2021)
- Brazil: 5.1%
- India: 1.6% (Apr 23, 2021)

Source: Official data collated by Our World in Data – Last updated 24 April, 17:31 (London time)
FDA and CDC Lift Recommended Pause on Johnson & Johnson (Janssen) COVID-19 Vaccine Use Following Thorough Safety Review

April 23, 2021

Following a thorough safety review, including two meetings of the CDC’s Advisory Committee on Immunization Practices, the U.S. Food and Drug Administration and the U.S. Centers for Disease Control and Prevention have determined that the recommended pause regarding the use of the Johnson & Johnson (Janssen) COVID-19 Vaccine in the U.S. should be lifted and use of the vaccine should resume.

The pause was recommended after reports of six cases of a rare and severe type of blood clot in individuals following administration of the Janssen COVID-19 Vaccine. During the pause, medical and scientific teams at the FDA and CDC examined available data to assess the risk of thrombosis involving the cerebral venous sinuses, or CVST (large blood vessels in the brain), and other sites in the body (including but not limited to the large blood vessels of the abdomen and the veins of the legs) along with thrombocytopenia, or low blood platelet counts. The teams at FDA and CDC also conducted extensive outreach to providers and clinicians to ensure they were made aware of the potential for these adverse events and could properly manage and recognize these events due to the unique treatment required for these blood clots and low platelets, also known as thrombosis-thrombocytopenia syndrome (TTS).

The two agencies have determined the following:
:: Use of the Janssen COVID-19 Vaccine should be resumed in the United States.
:: The FDA and CDC have confidence that this vaccine is safe and effective in preventing COVID-19.
:: The FDA has determined that the available data show that the vaccine’s known and potential benefits outweigh its known and potential risks in individuals 18 years of age and older.
:: At this time, the available data suggest that the chance of TTS occurring is very low, but the FDA and CDC will remain vigilant in continuing to investigate this risk.
:: Health care providers administering the vaccine and vaccine recipients or caregivers should review the Janssen COVID-19 Vaccine Fact Sheet for Healthcare Providers Administering Vaccine (Vaccination Providers) and Fact Sheet for Recipients and Caregivers, which have been revised to include information about the risk of this syndrome, which has occurred in a very small number of people who have received the Janssen COVID-19 Vaccine.

CDC’s independent Advisory Committee on Immunization Practices met today to discuss the latest data on TTS, hearing from the vaccine manufacturer Janssen and the COVID-19 Vaccine Safety Technical (VaST) Subgroup, as well as a risk benefit analysis. ACIP is committed to be vigilant and responsive to additional information that could impact the risk benefit analysis of any of these vaccines. Vaccine safety monitoring will continue and any new information about TTS will be brought to ACIP as needed.
“Safety is our top priority. This pause was an example of our extensive safety monitoring working as they were designed to work—identifying even these small number of cases. We’ve lifted the pause based on the FDA and CDC’s review of all available data and in consultation with medical experts and based on recommendations from the CDC’s Advisory Committee on Immunization Practices. We have concluded that the known and potential benefits of the Janssen COVID-19 Vaccine outweigh its known and potential risks in individuals 18 years of age and older. We are confident that this vaccine continues to meet our standards for safety, effectiveness and quality. We recommend people with questions about which vaccine is right for them have those discussions with their health care provider,” said Janet Woodcock, M.D., Acting FDA Commissioner.

“Above all else, health and safety are at the forefront of our decisions,” said CDC Director Dr. Rochelle P. Walensky. “Our vaccine safety systems are working. We identified exceptionally rare events – out of millions of doses of the Janssen COVID-19 administered – and we paused to examine them more carefully. As we always do, we will continue to watch all signals closely as more Americans are vaccinated. I continue to be encouraged by the growing body of real-world evidence that the authorized COVID-19 vaccines are safe and effective, and they protect people from disease, hospitalization, and death. I urge anyone with questions about the COVID-19 vaccines to speak with their healthcare provider or local public health department.”...

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**White House [U.S.]**

*Briefing Room – Selected Major COVID Announcements*

**Remarks by President Biden on the COVID-19 Response and the State of Vaccinations**
April 21, 2021 • Speeches and Remarks

**FACT SHEET: President Biden to Call on All Employers to Provide Paid Time Off for Employees to Get Vaccinated After Meeting Goal of 200 Million Shots in the First 100 Days**
April 21, 2021 • Statements and Releases

**COVID Data Tracker [U.S.]** April 3, 2021

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**COVID-19 Vaccinations in the United States**

Overall US COVID-19 Vaccine | Deliveries and Administration; Maps, charts, and data provided by CDC, updates daily by 8 pm ET†
 Represents all vaccine partners including jurisdictional partner clinics, retail pharmacies, long-term care facilities, dialysis centers, Federal Emergency Management Agency and Health Resources and Services Administration partner sites, and federal entity facilities.

<table>
<thead>
<tr>
<th>Total Vaccine Doses</th>
<th>Delivered 290,685,655</th>
<th>Administered 225,640,460</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>People Vaccinated</th>
<th>At Least One Dose</th>
<th>Fully Vaccinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>138,644,724</td>
<td>93,078,040</td>
</tr>
<tr>
<td>% of Total Population</td>
<td>41.8%</td>
<td>28%</td>
</tr>
<tr>
<td>Population ≥ 18 Years of Age</td>
<td>136,993,180</td>
<td>92,656,311</td>
</tr>
<tr>
<td>% of Population ≥ 18 Years of Age</td>
<td>53.1%</td>
<td>35.9%</td>
</tr>
<tr>
<td>Population ≥ 65 Years of Age</td>
<td>44,477,440</td>
<td>36,695,327</td>
</tr>
<tr>
<td>% of Population ≥ 65 Years of Age</td>
<td>81.3%</td>
<td>67.1%</td>
</tr>
</tbody>
</table>

*About these data*
Europe: COVID-19 Vaccines – Announcements/Regulatory Actions/Deployment

European Medicines Agency
News & Press Releases

News: AstraZeneca’s COVID-19 vaccine: benefits and risks in context (new)
CHMP, Last updated: 23/04/2021

[Excerpt]
Vaxzevria (formerly COVID-19 Vaccine AstraZeneca) is authorised in the EU to prevent COVID-19, which can cause severe disease and death. The disease can also have long-term consequences in people of all ages, including in otherwise healthy people.

The benefits of Vaxzevria outweigh its risks in adults of all age groups; however, very rare cases of blood clots with low blood platelets have occurred following vaccination.

To support national authorities making decisions on how to best use the vaccine in their territories, EMA’s human medicines committee (CHMP) has further analysed available data to put the risk of these very rare blood clots in the context of the vaccine’s benefits for different age groups and different rates of infection.

The analysis will inform national decisions on the roll out of the vaccine, taking into account the pandemic situation as it evolves and other factors, such as vaccine availability. The analysis could change as new data become available.

The Committee also considered available data on the use of the second dose...

News: Increase in vaccine manufacturing capacity and supply for COVID-19 vaccines from BioNTech/Pfizer and Moderna (new)
CHMP, Last updated: 23/04/2021

EMA’s human medicines committee (CHMP) has adopted two important recommendations that will increase manufacturing capacity and supply of COVID-19 vaccines in the EU.

News: Meeting highlights from the Committee for Medicinal Products for Human Use (CHMP) 19-22 April 2021 (new)
CHMP, Last updated: 23/04/2021

News: COVID-19 Vaccine Janssen: EMA finds possible link to very rare cases of unusual blood clots with low blood platelets (new)
PRAC, Last updated: 20/04/2021

[Excerpt]
At its meeting of 20 April 2021, EMA’s safety committee (PRAC) concluded that a warning about unusual blood clots with low blood platelets should be added to the product information for COVID-19 Vaccine Janssen. PRAC also concluded that these events should be listed as very rare side effects of the vaccine.

In reaching its conclusion, the Committee took into consideration all currently available evidence including eight reports from the United States of serious cases of unusual blood clots associated with low levels of blood platelets, one of which had a fatal outcome. As of 13 April 2021, over 7 million people had received Janssen’s vaccine in the United States.

All cases occurred in people under 60 years of age within three weeks after vaccination, the majority in women. Based on the currently available evidence, specific risk factors have not been confirmed...
Statement by Commissioner Kyriakides on the review by the European Medicines Agency of the AstraZeneca COVID-19 vaccine

Following a formal request by the European Commission, the European Medicines Agency has reviewed additional vaccination and epidemiological data submitted by Member States in relation to the AstraZeneca vaccine.

EU launches €100 million humanitarian initiative to support COVID-19 vaccination campaigns in Africa

Today, Commissioner for Crisis Management, Janez Lenarčič, will visit the Africa Centres for Disease control and Prevention (Africa CDC) in Addis Ababa. This visit marks the start of the implementation of the EU's new €100 million humanitarian initiative in support of the COVID-19 vaccination campaigns in Africa. As announced by the President of the European Commission, Ursula von der Leyen, at the G7 meeting in February 2021, this €100 million initiative is part of the European Commission's efforts to ensure equitable and fair access to safe and effective vaccines to all. By joining forces with the Africa CDC and other international partners, the European Commission aims to support a fast and safe rollout of Covid-19 vaccines in Africa...

Africa: COVID-19 Vaccines – Announcements/Regulatory Actions/Deployment

UPDATE: Statement to Member States regarding thromboembolic events after vaccination with Janssen COVID-19 vaccine (Johnson & Johnson)

COVID-19 vaccines remain a key tool to prevent severe cases and deaths from COVID-19 infection. As such rapid access to safe and effective vaccines is paramount to the African Union vaccination strategy to achieve control of the pandemic.

The currently available evidence underscores the safety and efficacy of Janssen COVID-19 vaccine, notably in settings with high prevalence of the 501Y.V2 (or B.1.351) SARS CoV2 variant.

The position of Africa CDC is that the benefits of the Janssen COVID-19 vaccine outweigh the risks for people who receive it.

National health care authorities should reinforce vaccine safety monitoring. Health care providers and clinicians should be informed of the risk of thrombotic thrombocytopenia in order to recognize and properly manage this very rare adverse event. Africa CDC will continue to monitor reports of adverse events following immunization, for all COVID-19 vaccines, including the Janssen COVID-19 vaccine, and will provide further guidance to Member States.

Russia: COVID-19 Vaccines – Announcements/Regulatory Actions/Deployment
Russia: Sputnik V – "the first registered COVID-19 vaccine"
https://sputnikvaccine.com/newsroom/pressreleases/

Press Releases
RDIF and Minapharm agree to produce over 40 million doses of the Sputnik V vaccine in Egypt
Press release, 22.04.2021

Production of Sputnik V launched in Argentina
Press release, 20.04.2021

Sputnik V demonstrates 97.6% efficacy according to analysis of data from 3.8 million vaccinated persons in Russia making it the most efficient COVID-19 vaccine in the world
Press release, 19.04.2021

RDIF and Hualan Biological Bacterin agree to produce over 100 million doses of the Sputnik V vaccine in China
Press release, 19.04.2021

India: COVID-19 Vaccines – Announcements/Regulatory Actions/Deployment

Indian Council for Medical Research (ICMR)
https://www.icmr.gov.in/media.html
No new digest content identified.

Ministry of Health and Family Welfare
https://www.mohfw.gov.in/

COVID-19 INDIA as on : 24 April 2021, 08:00 IST (GMT+5:30)
(↑↓ Status change since yesterday)
Active (15.37%) 2552940 (124324↑)
Discharged (83.49%) 13867997 (219838↑)
Deaths (1.14%) 189544 (2624↑)

Total Vaccination : 13,83,79,832 (29,01,412 ↑)

17.02.2021 Guidelines for International Arrivals

17.02.2021 Algorithm for international arrivals
[For full size image click on link]
China: COVID-19 Vaccines – Announcements/Regulatory Actions/Deployment

[See China CDC section below]

Emergencies

POLIO
Public Health Emergency of International Concern (PHEIC)

Polio this week as of 21 April 2021
:: The GPEI has made available reports from the Technical Advisory Group (TAG) meetings for Pakistan and Afghanistan which were held virtually in February and March this year.

Summary of new WPV and cVDPV viruses this week (AFP cases and ES positives):
:: Afghanistan: three cVDPV2 positive environmental samples
:: Pakistan: three WPV1 and one cVDPV2 positive environmental sample
:: Benin: one cVDPV2 positive environmental sample
:: Iran: one cVDPV2 positive environmental sample
:: Sierra Leone: three cVDPV2 positive environmental samples
:: Tajikistan: two cVDPV2 positive environmental samples

WHO/OCHA Emergencies

Editor’s Note:
Continuing with this edition, we include information about the last apparent update evident on the WHO emergency country webpages, recognizing almost universal and significant interims since last update regardless of the level of the emergency listed.

WHO Grade 3 Emergencies [to 24 Apr 2021]
Democratic Republic of the Congo - No new digest announcements [Last apparent update: 12 Jan 2021]
Mozambique floods - No new digest announcements identified [Last apparent update: 3 November 2020]
Nigeria - No new digest announcements identified [Last apparent update: 29 Jun 2020]
Somalia - No new digest announcements identified [Last apparent update: 17 July 2020]
South Sudan - No new digest announcements identified [Last apparent update: 4 February 2020]
Syrian Arab Republic - No new digest announcements identified [Last apparent update: 24 October 2020]
Yemen - No new digest announcements identified [Last apparent update: 30 June 2020]

:::

WHO Grade 2 Emergencies [to 24 Apr 2021]

Malawi
:: Boosting equity to malaria prevention in Malawi through vaccination 22 April 2021

Afghanistan - No new digest announcements identified [Last apparent update: 5 July 2020]
Angola - No new digest announcements identified [Last apparent update: 16 March 2021]
Burkina Faso - No new digest announcements identified [Last apparent update: 01 avril 2021]
Burundi - No new digest announcements identified [Last apparent update: 04 July 2019]
Cameroon - No new digest announcements identified [Last apparent update: 22 August 2019]
Central African Republic - No new digest announcements identified [Last apparent update: 12 June 2018]
Ethiopia - No new digest announcements identified [Last apparent update: 22 August 2019]
Iran floods 2019 - No new digest announcements identified [Last apparent update: 2 March 2020]
Iraq - No new digest announcements identified [Last apparent update: 11 April 2021]
Libya - No new digest announcements identified [Last apparent update: 7 October 2019]
Measles in Europe - No new digest announcements identified [Last apparent update: 16-12-2020]
MERS-CoV - No new digest announcements identified [Last apparent update: 8 July 2019]
Mozambique - No new digest announcements identified [Last apparent update: 03 November 2020]
Myanmar - No new digest announcements identified [Last apparent update: 29 March 2021]
Niger - No new digest announcements identified [Last apparent update: 16 avril 2021]
occupied Palestinian territory - No new digest announcements identified [Last apparent update: 4 September 2019]
HIV in Pakistan - No new digest announcements identified [Last apparent update: 27 August 2019]
Sao Tome and Principe Necrotizing Cellulitis (2017) - No new digest announcements
Sudan - No new digest announcements identified [Last apparent update: 24 June 2020]
Ukraine - No new digest announcements identified [Last apparent update: 1 May 2019]
Zimbabwe - No new digest announcements identified [Last apparent update: 10 May 2019]

:::

WHO Grade 1 Emergencies [to 24 Apr 2021]

Kenya
:: Kenya Third Wave Response: A time to synergize and re-energize 23 April 2021

Chad - No new digest announcements identified [Last apparent update: 30 June 2018]
Djibouti - No new digest announcements identified [Last apparent update: 25 novembre 2020]
Mali - No new digest announcements identified [Last apparent update: 3 May 2017]
Namibia - viral hepatitis - No new digest announcements identified [Last apparent update: 20 July 2018]
Tanzania - No new digest announcements identified [Last apparent update: 21 October 2020]

:::
UN OCHA – Current Emergencies
COVID-19 - No new unique digest announcements identified

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WHO & Regional Offices [to 24 Apr 2021]
23 April 2021  Departmental news
Fair Pricing Forum ends with good intentions and new undertakings from WHO

23 April 2021  News release
ACT-Accelerator one year on

23 April 2021  News release
COVID-19 continues to disrupt essential health services in 90% of countries

22 April 2021  Statement
Statement of the Strategic Advisory Group of Experts (SAGE) on Immunization: Continued review of emerging evidence on AstraZeneca COVID-19 Vaccines
[See COVID above for detail]

21 April 2021  News release
World Malaria Day: WHO launches effort to stamp out malaria in 25 more countries by 2025

20 April 2021  Departmental news
RTS,S malaria vaccine reaches more than 650 000 children in Ghana, Kenya and Malawi through groundbreaking pilot programme

20 April 2021  Departmental news
Message from Director SRH/HRP

20 April 2021  Departmental news
WHO validates Gambia for having eliminated trachoma as a public health problem

19 April 2021  Departmental news
Applications for the 23rd WHO Expert Committee on Selection and Use of Essential Medicines available for public review and comment

19 April 2021  Statement
Statement on the seventh meeting of the International Health Regulations (2005) Emergency Committee regarding the coronavirus disease (COVID-19) pandemic
[See COVID above for detail]

::::::

Weekly Epidemiological Record, Vol. 96, No. 16, pp. 125–132  23 April 2021
:: WHO’s role in SARS-CoV-2 laboratory diagnostics: an end-to-end approach
WHO Regional Offices
Selected Press Releases, Announcements

WHO African Region AFRO
:: Cabo Verde attains zero local malaria transmission 22 April 2021
:: Boosting equity to malaria prevention in Malawi through vaccination 22 April 2021
:: Getting malaria prevention back on track 22 April 2021

WHO Region of the Americas PAHO
No new digest content identified

WHO South-East Asia Region SEARO
No new digest content identified

WHO European Region EURO
:: Technical experts advise on how to ensure the best possible schooling during COVID-19 23-04-2021
:: WHO, FAO, and OIE call for stronger coordination in mitigating health threats 23-04-2021
:: COVAX helps make equitable access to COVID-19 vaccines a reality in the WHO European Region 23-04-2021
:: New report from WHO on health spending calls on governments not to repeat past mistakes when rebuilding from COVID-19 22-04-2021
:: Using the arts to improve health: WHO pioneers large-scale, arts-based health interventions 21-04-2021

WHO Eastern Mediterranean Region EMRO
:: World Immunization Week 2021 22 April 2021
:: Syria receives its first delivery of COVID-19 vaccines through the COVAX Facility 22 April 2021

WHO Western Pacific Region
No new digest content identified

CDC/ACIP [U.S.] [to 24 Apr 2021]
http://www.cdc.gov/media/index.html
https://www.cdc.gov/vaccines/acip/index.html
Latest News Releases, Announcements
FDA and CDC Lift Recommended Pause on Johnson & Johnson (Janssen) COVID-19 Vaccine Use Following Thorough Safety Review
Friday, April 23, 2021
[See COVAX US above for full text]
MMWR News Synopsis  Friday, April 23, 2021
:: Airport Traveler Testing Program for SARS-CoV-2 — Alaska, June–November 2020
:: COVID-19 Outbreaks in Correctional Facilities with Work-Release Programs — Idaho, July–November 2020
:: Laboratory Modeling of SARS-CoV-2 Exposure Reduction Through Physically Distanced Seating in Aircraft Cabins Using Bacteriophage Aerosol — November 2020 (Early Release April 14, 2021)

Coronavirus Disease 2019 (COVID-19)- CDC
Selected Resources
COVID Data Tracker Recent Updates - 2021-04-22 - Updated Variant Proportions tab that shows variant proportions by region
4/23/21 COVID Data Tracker Recent Updates - 2021-04-22 - New Global Vaccinations tab displays vaccination counts and rates by country
4/23/21 ACIP Presentation Slides: April 23, 2021 Meeting

Africa CDC  [to 24 Apr 2021]
http://www.africacdc.org/
News
Statement
UPDATE: Statement to Member States regarding thromboembolic events after vaccination with Janssen COVID-19 vaccine (Johnson & Johnson)
24 April 2021

Statement
Statement on donation and distribution of Oxford-AstraZeneca COVID-19 vaccine through AVATT
21 April 2021

China CDC
http://www.chinacdc.cn/en/
No new digest content identified.

National Health Commission of the People's Republic of China  [to 24 Apr 2021]
http://en.nhc.gov.cn/
News
**April 24: Daily briefing on novel coronavirus cases in China**
On April 23, 31 provincial-level regions and the Xinjiang Production and Construction Corps on the Chinese mainland reported 9 new cases of confirmed infections.

**Chinese health official stresses preventing COVID-19 import**
2021-04-22

**Over 204 mln COVID-19 vaccine doses administered across China**
2021-04-23

**China to produce more than 3b COVID-19 vaccines this year: Official**
2021-04-21

**National Medical Products Administration – PRC** [to 24 Apr 2021]

*News*

**Xi says China committed to making vaccines a global public good**
2021-04-21

President Xi Jinping on April 20 said China will honor its commitment of making vaccines a global public good...China will continue anti-COVID cooperation with the World Health Organization and other countries and do more to help developing countries defeat the virus, Xi said.

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**Organization Announcements**

*Editor's Note:*
Careful readers will note that the number and range of organizations now monitored in our *Announcements* section below has grown as the impacts of the pandemic have spread across global economies, supply chains and programmatic activity of multilateral agencies and INGOs.

**Paul G. Allen Frontiers Group** [to 24 Apr 2021]
*News*
[Website not responding at inquiry]

**BARDA – U.S. Department of HHS** [to 24 Apr 2021]
https://www.phe.gov/about/barda/Pages/default.aspx
*News*
No new digest content identified.

**BMGF - Gates Foundation** [to 24 Apr 2021]
https://www.gatesfoundation.org/ideas/media-center
*Press Releases and Statements*
No new digest content identified.
The Bill & Melinda Gates Medical Research Institute is a non-profit biotech organization. Our mission is to develop products to fight malaria, tuberculosis, and diarrheal diseases—three major causes of mortality, poverty, and inequality in developing countries. The world has unprecedented scientific tools at its disposal; now is the time to use them to save the lives of the world’s poorest people.

CARB-X is funding Baebies Inc. to develop a rapid diagnostic for neonatal sepsis

CARB-X is funding Phico Therapeutics to develop an engineered bacteriophage drug to treat ventilator-associated pneumonia caused by drug-resistant Pseudomonas aeruginosa.

Center for Vaccine Ethics and Policy – GE2P2 Global Foundation

CEPI – Coalition for Epidemic Preparedness Innovations

DARPA – Defense Advanced Research Projects Agency
Chemical and biological (CB) threats have become increasingly ubiquitous and diverse, presenting significant risks to warfighters in theater and stability operators during pandemic outbreaks. State-of-the-art personal protective equipment (PPE) can be bulky, heavy, and cumbersome, often severely limiting user mobility and performance. The Personalized Protective Biosystem (PPB) program aims to develop technology that reduces the need for burdensome protective equipment while increasing individual protection against CB threats.

**Duke Global Health Innovation Center** [to 24 Apr 2021]
https://dukeghic.org/
**WEEKLY COVID VACCINE RESEARCH UPDATE**
Last dated update: FRIDAY, April 2, 2021

**EDCTP** [to 24 Apr 2021]
http://www.edctp.org/
The European & Developing Countries Clinical Trials Partnership (EDCTP) aims to accelerate the development of new or improved drugs, vaccines, microbicides and diagnostics against HIV/AIDS, tuberculosis and malaria as well as other poverty-related and neglected infectious diseases in sub-Saharan Africa, with a focus on phase II and III clinical trials
24 April 2021
**EDCTP-funded trial of R21/Matrix-M malaria vaccine shows efficacy of 77%**
Positive results from an EDCTP-funded clinical trial in Burkina Faso, published as a preprint with *The Lancet*, demonstrate that the malaria vaccine candidate R21/Matrix-M is safe, immunogenic and has an efficacy of 77%, exceeding the WHO goal of 75% efficacy for malaria vaccines.
[University of Oxford news item: *Malaria vaccine becomes first to achieve WHO-specified 75% efficacy goal*]

**Emory Vaccine Center** [to 24 Apr 2021]
http://www.vaccines.emory.edu/
**Vaccine Center News**
No new digest content identified.

**European Vaccine Initiative** [to 24 Apr 2021]
http://www.euvaccine.eu/
**Latest News**
**World Malaria Day 2021: Reaching the zero malaria target by 2030**

**FDA** [to 24 Apr 2021]
https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/default.htm
**Press Announcements | Selected Details**
**April 23, 2021 - FDA and CDC Lift Recommended Pause on Johnson & Johnson (Janssen) COVID-19 Vaccine Use Following Thorough Safety Review**
[See COVID U.S. above for detail]
**April 23, 2021 - Coronavirus (COVID-19) Update: April 23, 2021**

**April 21, 2021 - FDA Continues Important Steps to Ensure Quality, Safety and Effectiveness of Authorized COVID-19 Vaccines**

...As part of our regulatory processes for reviewing all manufacturing facilities, the FDA recently completed an inspection of Emergent BioSolutions, a proposed manufacturing facility for the Johnson & Johnson COVID-19 Vaccine. As Johnson & Johnson announced last month, the FDA has not authorized this facility to manufacture or distribute any of Johnson & Johnson's COVID-19 Vaccine or components and, to date, no COVID-19 vaccine manufactured at this plant has been distributed for use in the U.S.

The FDA's inspections are thorough, and these assessments review the quality of manufacturing procedures, including records, staff training, facility operations, drug production and testing and the systems in place to ensure product quality. During an inspection of Emergent BioSolutions that ended Tuesday, the FDA cited a number of observations concerning whether the facility’s processes met our requirements and standards. These observations are outlined in our inspection closeout report, also known as a “FDA Form 483.”...

**April 20, 2021 - Coronavirus (COVID-19) Update: April 20, 2021**

**Fondation Merieux** [to 24 Apr 2021]
http://www.fondation-merieux.org/
News, Events
No new digest content identified.

**Gavi** [to 24 Apr 2021]
https://www.gavi.org/
News Releases
23 April 2021
France makes important vaccine dose donation to COVAX
[See COVAX above for detail]

**GHIT Fund** [to 24 Apr 2021]
https://www.ghitfund.org/newsroom/press
GHIT was set up in 212 with the aim of developing new tools to tackle infectious diseases that
No new digest content identified.

**Global Fund** [to 24 Apr 2021]
News & Stories
Global Fund Applauds Netherlands’ Contribution to ACT-Accelerator
20 April 2021
The Global Fund warmly welcomed the announcement by the Netherlands of a contribution of €52 million to the Access to COVID-19 Tools (ACT) Accelerator – a groundbreaking global collaboration to accelerate development, production, and equitable access to COVID-19 tests, treatments, and vaccines.
Of the new funds, €12 million will be channeled through the Global Fund to strengthen its response to the COVID-19 pandemic while protecting gains made against HIV, tuberculosis, and malaria over the last two decades. The rest, €40 million, will be invested in the purchase of vaccines through COVAX – the vaccines pillar of the ACT-Accelerator. This latest commitment follows €85 million the Netherlands has contributed to the global response to COVID-19 since the pandemic began, bringing its total investment to date to €137 million...

Global Research Collaboration for Infectious Disease Preparedness [GloPID-R] [to 24 Apr 2021]
https://www.glopid-r.org/news/
News
No new digest content identified.

Hilleman Laboratories [to 24 Apr 2021]
http://www.hillemanlabs.org/
No new digest content identified.

Human Vaccines Project [to 24 Apr 2021]
http://www.humanvaccinesproject.org/media/press-releases/
No new digest content identified.
[Website not fully loading at inquiry]

IAVI [to 24 Apr 2021]
https://www.iavi.org/newsroom
PRESS RELEASES/FEATURES
No new digest content identified.

International Coalition of Medicines Regulatory Authorities [ICMRA]
Selected Statements, Press Releases, Research
No new digest content identified.

ICRC [to 24 Apr 2021]
Selected News Releases, Statements, Reports
No new digest content identified.

International Generic and Biosimilar Medicines Association [IGBA]
https://www.igbamedicines.org/
News
No new digest content identified.
**COVID-19: IFRC warns Europe’s poorest countries are being left behind, as deaths hit grim milestone**

As Europe reaches the grim milestone of 50 million infections and 1 million lives lost to COVID-19, IFRC calls for more equitable access to vaccination to counter disparities across countries and ensure no one is left behind.

21 April 2021

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**SARS-CoV-2: infection induces antibodies capable of killing infected cells regardless of disease severity**

Drawing on epidemiological field studies and the French COVID hospital cohort coordinated by Inserm, teams from the...

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**Webinar | COVID-19 and Public Governance: Effective Global Vaccination Strategies for Vaccine Access**
While vaccination campaigns are rolled out across the globe and access to safe and effective COVID-19 vaccines come into sight, more work, funding and collaboration are still needed to overcome the tremendous health and economic consequences of this pandemic. In this crisis, international cooperation needs to succeed—also to set itself up for further challenges to come. Register below!
April 29, 2021 | 9:30 Berlin | 16:30 Seoul

JEE Alliance  [to 24 Apr 2021]
https://www.jeealliance.org/
Selected News and Events
No new digest content identified.

Johns Hopkins Center for Health Security  [to 24 Apr 2021]
https://www.centerforhealthsecurity.org/news/center-news/
Center News
No new digest content identified.

MSF/Médecins Sans Frontières  [to 24 Apr 2021]
http://www.msf.org/
Latest [Selected Announcements
Malaria
Pumps, bicycles and satellites: fighting malaria in Burundi
Project Update 22 Apr 2021

Peru
COVID-19 leaves high numbers of deaths and overwhelmed hospitals in Peru
Press Release 20 Apr 2021

National Academy of Medicine - USA [to 24 Apr 2021]
https://nam.edu/programs/
Selected News/Programs
Upcoming Events:
Researching Novel Therapeutics in a Pandemic: Lessons from COVID-19  (April 22)
Implementation Science and Non-Vaccine Public Health Measures during COVID-19  (April 23)
Exploring Influenza Vaccine Critical Inputs, Technologies, and Logistcis Day 1  (April 23)
Exploring Influenza Vaccine Critical Inputs, Technologies, and Logistcis Day 2  (April 27)

National Vaccine Program Office - U.S. HHS  [to 24 Apr 2021]
https://www.hhs.gov/vaccines/about/index.html
Upcoming Meetings/Latest Updates
No new digest content identified.

NIH  [to 24 Apr 2021]
COVID-19 vaccine responses to be studied in people with immune deficits
April 23, 2021 — Enrollment begins at NIH Clinical Center.

Clinical trial of therapeutics for severely ill hospitalized COVID-19 patients begins
April 22, 2021 — Patients with acute respiratory failure may now enroll in NIH-sponsored trial.

Large NIH clinical trial will test polyclonal antibody therapeutic for COVID-19
April 21, 2021 — Study is part of an effort to speed development of the most promising treatments and vaccine candidates.

Large clinical trial to study repurposed drugs to treat COVID-19 symptoms
April 19, 2021 — Using an ACTIV master protocol, the trial will focus on potential interventions for mild-to-moderate illness.

UN OCHA Office for the Coordination of Humanitarian Affairs [to 24 Apr 2021]
https://www.unocha.org/
Press Releases
20 April 2021
United Nations launches $29 million appeal for St. Vincent and the Grenadines and other affected countries as volcano eruption continues

18 April 2021
United Nations Resident Coordinator and Humanitarian Coordinator for Syria, Imran Riza, condemns killing of two aid workers in Deir-Ez-Zor, Syria [EN/AR]

PATH [to 24 Apr 2021]
https://www.path.org/media-center/
Press Releases
No new digest content identified.

Sabin Vaccine Institute [to 24 Apr 2021]
http://www.sabin.org/updates/pressreleases
Statements and Press Releases
No new digest content identified.

UNAIDS [to 24 Apr 2021]
http://www.unaids.org/en
Selected Press Releases/Reports/Statements
21 April 2021
Civil society from Asia and the Pacific join the first regional consultation on the High-Level Meeting on AIDS
Regional network of people living with HIV launched in the Middle East and North Africa

Less than 60% of pregnant women living with HIV in western and central Africa have access to services to stop vertical transmission of HIV

UNDP United Nations Development Programme [to 24 Apr 2021]
http://www.undp.org/content/undp/en/home/presscenter.html
Latest from News Centre
No new digest content identified.

UNESCO [to 24 Apr 2021]
http://en.unesco.org/news
Selected Latest News
Making COVID-19 Vaccine a “global public good” for its timely allocation to Africa
19/04/2021
...In this context, the Framework for Fair, Equitable and Timely Allocation of COVID-19 Vaccines in Africa, issued in January 2021 by Africa Centres for Disease Control and Prevention (Africa CDC) and the South African Medical Research Council (SAMRC), as well as the UNESCO Ethics Commissions’ Call for Global Vaccines Equity and Solidarity, issued in February 2021 as a joint statement by UNESCO International Bioethics Committee (IBC) and the World Commission on the Ethics of Scientific Knowledge and Technology (COMEST), needed to be reaffirmed for ensuring that a COVID-19 Vaccine is considered a “global public good” that is accessible to everyone, irrespective of ethnicity, nationality, gender, sexual orientation, race and religion. This is the rationale behind the Series of Community Engagement and Experience Sharing Virtual Workshops on Ethical Considerations in Covid-19 immunization campaigns for its fair, equitable and timely allocation in Africa, with the first of the series held on 14 April 2021."

UNHCR Office of the United Nations High Commissioner for Refugees [to 24 Apr 2021]
Selected News Releases, Announcements
UNHCR’s Grandi calls on the international community to stand with DR Congo
23 Apr 2021
Mounting death toll in the Central Mediterranean calls for urgent action
JOINT UNHCR/IOM PRESS RELEASE
23 Apr 2021
Data visualization reveals impacts of climate change on displacement
22 Apr 2021
UNHCR’s Protection Chief visits Cyprus, addresses challenges in access to asylum
22 Apr 2021
More refugees arrive in Chad following recent clashes in CAR
20 Apr 2021

Relocations in Brazil offer dignity and hope to thousands of Venezuelans
Joint UNHCR/IOM Press Release
20 Apr 2021

UNICEF [to 24 Apr 2021]
https://www.unicef.org/media/press-releases
Selected Press Releases, Statements
Statement 04/23/2021
UNICEF Executive Director Henrietta Fore’s remarks at the one-year anniversary of the Access to COVID-19 Tools Accelerator
As prepared for delivery

Press release 04/23/2021
COVID-19 continues to disrupt essential health services in 90 per cent of countries
Some signs of recovery emerging but major efforts required to restore and strengthen health services

Press release 04/22/2021
UNICEF Goodwill Ambassador David Beckham leads global vaccination drive during World Immunization Week
Global partners pledge a $1 donation for every like, share or comment on social media posts mentioning ‘UNICEF’ using the hashtag #VaccinesWork until the end of April

Statement 04/22/2021
Syria receives its first delivery of COVID-19 vaccines through the COVAX Facility
Joint Statement by UNICEF Regional Director for the Middle East and North Africa, Ted Chaiban, WHO Regional Director for the Eastern Mediterranean, Dr. Ahmad Al-Mandhari, and Gavi, the Vaccine Alliance Director of Country Support, Pascal Bijleveld

Press release 04/19/2021
Nine times more migrant children in Mexico over the past three months - UNICEF

Unitaid [to 24 Apr 2021]
https://unitaid.org/
Featured News
23 April 2021
World Malaria Day : Unitaid commits to ensure increased and equitable access to life-saving tools against malaria
Geneva – Ahead of World Malaria Day, marked annually on April 25, Unitaid reaffirms its strong commitment to combat malaria by increasing its efforts to prevent, control, and ultimately eliminate the disease.

The emergence of COVID-19 more than one year ago has thrown health systems into disarray and forced many countries to shift their focus and resources away from malaria. This threatens to reverse
hard-won gains, particularly in the highest malaria burden countries where the rate of progress has slowed in recent years.

The World Health Organization (WHO) warns countries that disruptions to programmes that prevent and treat malaria could lead to a potential doubling of malaria deaths in sub-Saharan Africa in 2020 compared to 2018.

A new report by the Global Fund to Fight AIDS, Tuberculosis and Malaria highlights the urgent need to scale-up the adaptative measures adopted to counter the impact of COVID-19 to ensure the continuing delivery of lifesaving health services for malaria...

**Vaccination Acceptance Research Network (VARN)** [to 24 Apr 2021]
https://vaccineacceptance.org/news.html#header1-2r

*Announcements*
*No new digest content identified.*

**Vaccine Confidence Project** [to 24 Apr 2021]
http://www.vaccineconfidence.org/

*News, Research and Reports*

**Coronavirus global impact**

Launched April 2, 2020 and recurring every 3 days, Premise Data is utilizing its global network of Contributors to assess economic, social, and health sentiment surrounding the coronavirus (COVID-19).

*Data arrays do not seem to loading*

**Vaccine Education Center – Children’s Hospital of Philadelphia** [to 24 Apr 2021]
http://www.chop.edu/centers-programs/vaccine-education-center

*News*
*No new digest content identified.*

**Wellcome Trust** [to 24 Apr 2021]
https://wellcome.ac.uk/news

*News and reports*

**Explainer**

**What are human infection studies and why do we need them?**
19 April 2021

**The Wistar Institute** [to 24 Apr 2021]

*Press Releases*

Apr. 22, 2021

**Low-dose Administration of MERS DNA Vaccine Candidate Induces Potent Immunity and Protects From Virus Challenge in Preclinical Models**

Dose-sparing regimens and intradermal delivery have important implication for rapid clinical development of effective, well-tolerated and easy-to-distribute vaccines against MERS and other emerging coronaviruses.
The COVID-19 pandemic is a global public health issue requiring a global solution with regional, national and local applicability. The extreme COVID-19 fatigue and uncertainty experienced by populations worldwide urgently requires both short-term and long-term practical solutions.

In countries that have been more successful in containing COVID-19, health and social professionals have been in leading roles formulating evidence-informed recommendations on the basis of best practice, and supporting societal engagement.

Therefore, the Coalition of Global Health, Primary Care and Social Work Professionals has sent an open letter to the Presidents of the 2021 G7 and G20 Summits to call on the G7 and G20 Summits to engage with the representatives of the Coalition to work directly on the co-design and co-production of local, national, regional and international strategies to effectively combat the COVID-19 global pandemic.

Together we can overcome the COVID-19 pandemic.

Letter to G7
Letter to G20

Advancing Essential Public Health Functions to Prevent the Next Pandemic
Apr 19, 2021
Advancing Essential Public Health Functions to Prevent the Next Pandemic

The Essential Public Health Functions (EPHFs) are a set of fundamental actions taken to achieve the public health goal of improving, promoting, protecting, and restoring the...
World Customs Organization – WCO [to 24 Apr 2021]
http://www.wcoomd.org/
Latest News – Selected Items
20 April 2021
The SAFE Working Group endorses the SAFE 2021 Framework of Standards after a successful Review Cycle and paves the way to prioritize its activities in line with the WCO’s COVID-19 Action Plan

World Organisation for Animal Health (OIE) [to 24 Apr 2021]
Press Releases
No new digest content identified.

WTO - World Trade Organisation [to 24 Apr 2021]
http://www.wto.org/english/news_e/news_e.htm
WTO News and Events
Members note sharp downturn in LDCs’ trade, discuss role of trade in eradicating poverty
19 April 2021
An analysis of least-developed countries’ (LDCs) trade flows in 2020, presented to WTO members at a meeting of the Sub-Committee on LDCs on 19 April, revealed that the negative impact of the COVID-19 pandemic on trade was worse for LDCs than for the world as a whole. In addition, delegations discussed preparations for the Fifth United Nations Conference on LDCs as well as the latest research on LDCs carried out by the United Nations Conference on Trade and Development (UNCTAD)...

Introduced by UNCTAD, “The least-developed countries report 2020 — productive capacities for the new decade” notes that LDCs were innovative in setting up measures to combat the crisis, both productive and institutional. For example, Senegal came up with rapid COVID-19 testing facilities and Bangladesh revamped its manufacturing production capacity.

Yet, it is estimated that over 300 million people are still living in extreme poverty, according to UNCTAD. The organization’s new productive capacities index indicates that LDCs lag behind other developing countries in several productive capacity areas. The transition to a digital economy remains pending. This is due to costly adoption of new technological capabilities, to insufficient skills and inadequate infrastructure. Policies are needed to develop LDCs’ productive capacities through investment and industrial transition...

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ARM [Alliance for Regenerative Medicine] [to 24 Apr 2021]
Press Releases - Alliance for Regenerative Medicine (alliancerm.org)
Press Releases
No new digest content identified.

BIO [to 24 Apr 2021]
Press Releases
Proposed “TRIPS” Waiver Is the WRONG Way To Attack Global Access for Vaccines to Developing Countries
April 20, 2021
Dr. Michelle McMurry-Heath, president and CEO of the Biotechnology Innovation Organization (BIO), yesterday sent a letter to U.S. Trade Representative (USTR) Ambassador Katherine Tai sharing BIO perspectives regarding the proposed WTO “TRIPS waiver”...

DCVMN – Developing Country Vaccine Manufacturers Network [to 24 Apr 2021]
http://www.dcvmn.org/
News; Upcoming events
No new digest content identified.

ICBA – International Council of Biotechnology Associations [to 24 Apr 2021]
https://internationalbiotech.org/news/
News
No new digest content identified.

IFPMA [to 24 Apr 2021]
http://www.ifpma.org/resources/news-releases/
Selected Press Releases, Statements, Publications
ACT-Accelerator 1-Year Anniversary: the biopharmaceutical industry is committed to continue to play a critical role
23 April 2021
[See COVAX above for detail]

COVID-19 vaccine industry cautions immediate action needed to remove manufacturing supply barriers to meet production
23 April 2021
[See COVAX above for detail]

PhRMA [to 24 Apr 2021]
http://www.phrma.org/
Selected Press Releases, Statements
Data shows that Americans are relying on vaccines to get us through the pandemic
April 22, 2021
Data shows that Americans are relying on vaccines to get us through the pandemic.
Blog Post
**Americans’ Willingness to Receive COVID-19 Vaccine**

If one of the FDA-approved vaccines to prevent COVID-19 was available to you right now at no cost, would you agree to be vaccinated?

- %Yes  - % No

<table>
<thead>
<tr>
<th>Month</th>
<th>% Yes</th>
<th>% No</th>
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<tbody>
<tr>
<td>Jul-20</td>
<td>65</td>
<td>35</td>
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<tr>
<td>Aug-20</td>
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<tr>
<td>Feb-21</td>
<td>71</td>
<td>29</td>
</tr>
<tr>
<td>Mar-21</td>
<td>74</td>
<td>26</td>
</tr>
</tbody>
</table>

% Yes for Jan., Feb., Mar. includes those who have already received at least one vaccine dose.

Before Jan., question wording was: If an FDA-approved vaccine to prevent COVID-19 was available right now at no cost, would you agree to be vaccinated?

Jul. and Aug. readings are monthly averages.

GALLUP PANEL

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**Journal Watch**

*Vaccines and Global Health: The Week in Review* continues its weekly scanning of key peer-reviewed journals to identify and cite articles, commentary and editorials, books reviews and other content supporting our focus on vaccine ethics and policy. Journal Watch is not intended to be exhaustive, but indicative of themes and issues the Center is actively tracking. We selectively provide full text of some editorial and comment articles that are specifically relevant to our work. Successful access to some of the links provided may require subscription or other access arrangement unique to the publisher.

If you would like to suggest other journal titles to include in this service, please contact David Curry at: david.r.curry@centerforvaccineethicsandpolicy.org

**AJOB Empirical Bioethics**

Volume 12, 2020 Issue 2

https://www.tandfonline.com/toc/uabr21/current

Article

Assessment of the All of Us research program’s informed consent process
Informed consent is the gateway to research participation. We report on the results of the formative evaluation that follows the electronic informed consent process for the All of Us Research Program. Of the nearly 250,000 participants included in this analysis, more than 95% could correctly answer questions distinguishing the program from medical care, the voluntary nature of participation, and the right to withdraw; comparatively, participants were less sure of privacy risk of the program. We also report on a small mixed-methods study of the experience of persons of very low health literacy with All of Us informed consent materials. Of note, many of the words commonly employed in the consent process were unfamiliar to or differently defined by informants. In combination, these analyses may inform participant-centered development and highlight areas for refinement of informed consent materials for the All of Us Research Program and similar studies.

Compassionate Force
Using force in caregiving is most often justified based on risk-benefit or best interest analyses. Careful, inclusive deliberation about whether force should be used in the course of a patient’s care is a rise-to-the minimum precursor of responsible force implementation, as is minimizing a patient’s risk of harm. Even when clinically indicated and ethically justifiable, force protocols drawing on physical, pharmaceutical, and legal means of restraint or seclusion can undermine therapeutic capacity in patient-clinician relationships, erode trust, and exacerbate emotional and moral distress for both patients and clinicians. These high stakes cum patients’ extreme vulnerability prompt us to consider how clinicians’ and organizations’ clinical and ethical obligations extend beyond harm minimization to compassion maximization. Although the words "compassion" and "force" rarely appear together, this issue investigates what their union could mean for and make possible in the enterprise of health care.
American Journal of Tropical Medicine and Hygiene
https://www.ajtmh.org/view/journals/tpmd/104/4/tpmd.104.issue-4.xml

Perspective Piece
The COVID-19 Pandemic in Peru: What Went Wrong?
Alvaro Schwalb and Carlos Seas
DOI: https://doi.org/10.4269/ajtmh.20-1323

Contact Tracing and the COVID-19 Response in Africa: Best Practices, Key Challenges, and Lessons Learned from Nigeria, Rwanda, South Africa, and Uganda
Jean B. Nachega, Rhoda Atteh, Chikwe Ihekweazu, Nadia A. Sam-Agudu, Prisca Adejumo, Sabin Nsanzimana, Edson Rwegasore, Jeanine Condo, Masudah Paleker, Hassan Mahomed, Fatima Suleman, Alex Riolexus Ario, Elsie Kiguli-Malwadde, Francis G. Omaswa, Nelson K. Sewankambo, Cecile Viboud, Michael J. A. Reid, Alimuudin Zumla, and Peter H. Kilmarx
DOI: https://doi.org/10.4269/ajtmh.21-0033

Review Article
Open access
Hematological Abnormalities in COVID-19: A Narrative Review
Asma Rahman, Roshan Niloofa, Umesh Jayarajah, Sanjay De Mel, Visula Abeysuriya, and Suranjith L. Seneviratne
DOI: https://doi.org/10.4269/ajtmh.20-1536

Abstract
COVID-19 is caused by SARS-CoV-2. Although pulmonary manifestations have been identified as the major symptoms, several hematological abnormalities have also been identified. This review summarizes the reported hematological abnormalities (changes in platelet, white blood cell, and hemoglobin, and coagulation/fibrinolytic alterations), explores their patho-mechanisms, and discusses its management. Common hematological abnormalities in COVID-19 are lymphopenia, thrombocytopenia, and elevated D-dimer levels. These alterations are significantly more common/prominent in patients with severe COVID-19 disease, and thus may serve as a possible biomarker for those needing hospitalization and intensive care unit care. Close attention needs to be paid to coagulation abnormalities, and steps should be taken to prevent these occurring or to mitigate their harmful effects. The effect of COVID-19 in patients with hematological abnormalities and recognized hematological drug toxicities of therapies for COVID-19 are also outlined.

A Realist Synthesis of Community-Based Interventions in Vector-Borne Diseases
Dennis Pérez, Emilie Robert, Elsury Johanna Pérez, Veerle Vanlerberghe, Pierre Lefèvre, and Valéry Ridde
DOI: https://doi.org/10.4269/ajtmh.20-0944

Abstract
Randomized control trials have provided evidence that some community-based interventions (CBIs) work in vector-borne diseases (VBDs). Conversely, there is limited evidence on how well those CBIs succeed in producing specific outcomes in different contexts. To conduct a realist synthesis for knowledge translation on this topic, we examined the extent to which realist concepts (context, mechanisms, and outcomes) and their relationships are present in the existing literature on CBIs for
VBDs. Articles on CBIs were identified from prior scoping reviews of health interventions for VBDs. Content of the articles was extracted verbatim if it referred either to realist concepts or CBI features. The number of articles and the average number of words extracted per category per CBI were quantified. Content of the articles was scrutinized to inductively gather qualitative evidence on the interactions between realist concepts. We reviewed 41 articles on 17 CBIs from 12 countries. The average number of words used for mechanisms was much lower than those used for outcomes and context (309,474, and 836, respectively). The average number of words used for mechanisms increased when a CBI was described in three or more articles. There were more extensive accounts on CBI features than on mechanisms. It was difficult to gather evidence on the interactions among realist concepts from the content of the articles. Scarce reporting on mechanisms in published articles limits conducting a realist synthesis of CBIs in VBDs. More transdisciplinary research that goes beyond the biomedical paradigm is needed to boost the development of intervention mechanisms in this field.

Articles
Refugee Settlements and Cholera Risks in Uganda, 2016–2019
Godfrey Bwire, Christopher Garimo Orach, Freda Loy Aceng, Sam Emmanuel Arianitwe, David Matseketse, Edson Tumusherure, Issa Makumbi, Allan Muruta, Rebecca D. Merrill, Amanda Debes, Mohammad Ali, and David A. Sack
DOI: https://doi.org/10.4269/ajtmh.20-0741

Annals of Internal Medicine
April 2021 Volume 174, Issue 4
http://annals.org/aim/issue
Original Research
Population Mortality and Laws Encouraging Influenza Vaccination for Hospital Workers
Mariana Carrera, PhD, Emily C. Lawler, PhD, Corey White, PhD
Pages:444–452

Position Papers
A Comprehensive Policy Framework to Understand and Address Disparities and Discrimination in Health and Health Care: A Policy Paper From the American College of Physicians
FREE
Josh Serchen, BA, Robert Doherty, BA, Omar Atiq, MD, David Hilden, MD, MPH, ... et al.
Pages:529–532

Ideas and Opinions
A Public Health COVID-19 Vaccination Strategy to Maximize the Health Gains for Every Single Vaccine Dose
FREE
Ruanne V. Barnabas, MBChB, MSc, DPhil, Anna Wald, MD, MPH
Pages:552–553

Editorials
U.S. COVID-19 Vaccination Challenges Go Beyond Supply
FREE
Artificial Intelligence – An International Journal
Volume 293  April 2021
[Reviewed earlier]

BMC Cost Effectiveness and Resource Allocation
http://resource-allocation.biomedcentral.com/
(Accessed 24 Apr 2021)
[No new digest content identified]

BMJ Global Health
April 2021 - Volume 6 - 4
https://gh.bmj.com/content/6/4
[Reviewed earlier]

BMC Health Services Research
http://www.biomedcentral.com/bmchealthservres/content
(Accessed 24 Apr 2021)
[No new digest content identified]

BMC Infectious Diseases
http://www.biomedcentral.com/bmcinfectdis/content
(Accessed 24 Apr 2021)
[No new digest content identified]

BMC Medical Ethics
http://www.biomedcentral.com/bmcmedethics/content
(Accessed 24 Apr 2021)
[No new digest content identified]

BMC Medicine
http://www.biomedcentral.com/bmcmed/content
(Accessed 24 Apr 2021)
[No new digest content identified]

BMC Pregnancy and Childbirth
http://www.biomedcentral.com/bmcpregnancychildbirth/content
Advancing the ethical dialogue about monkey/human chimeric embryos

Henry T. Greely, Nita A. Farahany

In this issue of Cell, Tan et al. report the first injection of human stem cells into in vitro non-human primate blastocysts with significant survival of the human cells, raising new scientific possibilities but also important ethical issues.

Chimeric contribution of human extended pluripotent stem cells to monkey embryos ex vivo

Tao Tan, et a;
Human cells, in the form of extended pluripotent stem cells, have the ability to contribute to both embryonic and extra-embryonic lineages in ex-vivo-cultured monkey embryos.

**Featured Article**

**Toward a fine-scale population health monitoring system**
Gillian M. Belbin, et al

Taking a quantitative approach to genetic ancestry in health systems furthers understanding of disease burdens specific to fine-scale populations and the environmental and demographic ties that can impact disease.

**Child Care, Health and Development**
Volume 47, Issue 3  Pages: 297-410  May 2021
https://onlinelibrary.wiley.com/toc/13652214/current
[Reviewed earlier]

**Clinical Pharmacology & Therapeutics**
Volume 109, Issue 4  Pages: 783-1158  April 2021
https://ascpt.onlinelibrary.wiley.com/toc/15326535/current

**Therapeutic Innovations in Infectious Diseases**
[Reviewed earlier]

**Clinical Therapeutics**
Volume 43  Issue 3  p431-650, e57-e96
http://www.clinicaltherapeutics.com/current
[Reviewed earlier]

**Clinical Trials**
Volume 18 Issue 2, April 2021
https://journals.sagepub.com/toc/ctja/18/2
[Reviewed earlier]

**Conflict and Health**
http://www.conflictandhealth.com/
[Accessed 24 Apr 2021]
[No new digest content identified]

**Contemporary Clinical Trials**
Volume 102  March 2021
[Reviewed earlier]
The CRISPR Journal
Volume 4, Issue 2 / April 2021
https://www.liebertpub.com/toc/crispr/4/2
[New issue; No digest content identified]

Current Genetic Medicine Reports
Volume 9, issue 1, March 2021
https://link.springer.com/journal/40142/volumes-and-issues/9-1
[Reviewed earlier]

Current Opinion in Infectious Diseases
April 2021 - Volume 34 - Issue 2
https://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
[Reviewed earlier]

Current Protocols in Human Genetics
Volume 108, Issue 1 December 2020
https://currentprotocols.onlinelibrary.wiley.com/toc/19348258/current
[Reviewed earlier]

Developing World Bioethics
Volume 21, Issue 1 Pages: i, 1-54 March 2021
https://onlinelibrary.wiley.com/toc/14718847/current
[Reviewed earlier]

Development in Practice
Volume 31, Issue 3, 2021
http://www.tandfonline.com/toc/cdip20/current
[New issue; No digest content identified]

Disaster Medicine and Public Health Preparedness
Volume 15 - Issue 1 - February 2021
https://www.cambridge.org/core/journals/disaster-medicine-and-public-health-preparedness/latest-issue
Commentary
Saving Lives Now From Ebola in Africa
James G. Hodge, Jr, Hannah-Kaye Fleming
Abstract
In his letter, Peace is a better focus than Ebola in the Democratic Republic of the Congo (DRC), David M. Brett-Major provides a vital reminder of the tragic undercurrent of violence and political instability dominating African regions currently impacted by the second worst Ebola outbreak in modern history. He characterizes health-centric activities as a “common mistake” to remedy the “vicious cycle” of
endemic violence and disease outbreaks in DRC and surrounding areas. What is truly needed is a “concerted peace and development process, with health as a voice in a chorus – not alone.”

**Disasters**
Volume 45, Issue 2  Pages: 253-497  April 2021
https://onlinelibrary.wiley.com/toc/14677717/current
[Reviewed earlier]

**EMBO Reports**
Volume 22  Issue 4  7 April 2021
https://www.embopress.org/toc/14693178/current
[Reviewed earlier]

**Emerging Infectious Diseases**
Volume 27, Number 4—April 2021
http://wwwnc.cdc.gov/eid/
[Reviewed earlier]

**Epidemics**
Volume 34  March 2021
https://www.sciencedirect.com/journal/epidemics/vol/34/suppl/C
[Reviewed earlier]

**Epidemiology and Infection**
Volume 149 - 2021
https://www.cambridge.org/core/journals/epidemiology-and-infection/latest-issue
[Reviewed earlier]

**Ethics & Human Research**
Volume 43, Issue 2  Pages: 1-48  March–April 2021
https://onlinelibrary.wiley.com/toc/25782363/current
*Research ethics and pandemics • IRBs and AI research*
[Reviewed earlier]

**The European Journal of Public Health**
Volume 31, Issue 1, February 2021
https://academic.oup.com/eurpub/issue/31/1
[Reviewed earlier]

**Expert Review of Vaccines**
Antenatal care providers’ attitudes and beliefs towards maternal vaccination in Kenya
[version 2; peer review: 1 approved, 1 not approved]
Subhash Chander, Ines Gonzalez-Casanova, Sandra S. Chaves, Nancy A. Otieno, Marc-Alain Widdowson, Jennifer Verani, Paula Frew, Andrew Wilson, Saad B. Omer, Fauzia Malik
Peer Reviewers Clarissa Simas; Zhihua Liu
Funder: Bill and Melinda Gates Foundation
LATEST VERSION PUBLISHED 22 Apr 2021

Genome Medicine
https://genomemedicine.biomedcentral.com/articles
[Accessed 24 Apr 2021]

The impact of genomics on precision public health: beyond the pandemic
Authors: Muin J. Khoury and Kathryn E. Holt
Citation: Genome Medicine 2021 13:67
Content type: Editorial
Published on: 23 April 2021

Precision public health has been defined in many ways [1]. It can be viewed as an emerging multidisciplinary field that uses genomics, big data, and machine learning/artificial intelligence to predict health risks and outcomes and to improve health at the population level. Just like precision medicine seeks to provide the right intervention to the right patient at the right time, the aim of precision public health is to provide the right intervention to the right population at the right time, with the goal of improving health for all.

Global Health Action
Volume 14, Issue 1 (2021)
https://www.tandfonline.com/toc/zgha20/current?nav=tocList
[Reviewed earlier]
Global Public Health
Volume 16, Issue 4 (2021)
http://www.tandfonline.com/toc/rgph20/current
[Reviewed earlier]

Globalization and Health
http://www.globalizationandhealth.com/
[Accessed 24 Apr 2021]
[No new digest content identified]

Health Affairs
Vol. 40, No. 3 March 2021
https://www.healthaffairs.org/toc/hlthaff/current
March 2021 | Nursing Homes, COVID-19 & More
[Reviewed earlier]

Health and Human Rights
Volume 22, Issue 2, December 2020
Special Section: Big Data, Technology, Artificial Intelligence and the Right to Health
[Reviewed earlier]

Health Economics, Policy and Law
Volume 16 - Issue 2 - April 2021
https://www.cambridge.org/core/journals/health-economics-policy-and-law/latest-issue
[Reviewed earlier]

Health Policy and Planning
Volume 36, Issue 2, March 2021
https://academic.oup.com/heapol/issue/36/2
[Reviewed earlier]

Health Research Policy and Systems
http://www.health-policy-systems.com/content
[Accessed 24 Apr 2021]
[No new digest content identified]

Human Gene Therapy
Volume 32, Issue 7-8 / April 2021
https://www.liebertpub.com/toc/hum/32/7-8
[New issue; No digest content identified]
Disability inclusion in humanitarian action
by HPN October 2020

The theme of this edition of Humanitarian Exchange, co-edited with Sherin Alsheikh Ahmed from Islamic Relief Worldwide, is disability inclusion in humanitarian action. Persons with disabilities are not only disproportionately impacted by conflicts, disasters and other emergencies, but also face barriers to accessing humanitarian assistance. At the same time, global commitments and standards and the IASC Guidelines on the inclusion of persons with disabilities in humanitarian action all emphasise how persons with disabilities are also active agents of change. Disability and age-focused organisations have led on testing and demonstrating how inclusion can be done better. Yet despite this progress, challenges to effective inclusion remain.

As Kirstin Lange notes in the lead article, chief among these challenges is humanitarian agencies’ lack of engagement with organisations of persons with disabilities. Simione Bula, Elizabeth Morgan and Teresa Thomson look at disability inclusion in humanitarian response in the Pacific, and Kathy Al Jubeh and Alradi Abdalla argue for a ‘participation revolution’, building on learning from the gender movement. Tchaurea Fleury and Sulayman AbdulMumuni Ujah outline how the Bridge Article 11 training initiative is encouraging constructive exchange between humanitarian and disability actors. The lack of good, disaggregated data is highlighted by Sarah Collinson; Frances Hill, Jim Cranshaw and Carys Hughes emphasise the need for training resources in local languages and accessible formats; and Sophie Van Eetvelt and colleagues report on a review of the evidence on inclusion of people with disabilities and older people.

Rebecca Molyneux and co-authors analyse the findings of a review of a DFID programme in north-east Nigeria, while Carolin Funke highlights the importance of strategic partnerships between disability-focused organisations, drawing on her research in Cox’s Bazar. Sherin Alsheikh Ahmed describes Islamic Relief Worldwide’s approach to mainstreaming protection and inclusion, while Pauline Thivillier and Valentina Shafina outline IRC’s Client Responsive Programming. The edition ends with reflections by Mirela Turcanu and Yves Ngunzi Kahashi on CAFOD’s SADI approach.

Assessing COVID-19 vaccine literacy: a preliminary online survey
Luigi Roberto Biasio, Guglielmo Bonaccorsi, Chiara Lorini & Sergio Pecorelli
Pages: 1304-1312
Published online: 29 Oct 2020

The estimated impact of decreased childhood vaccination due to COVID-19 using a dynamic transmission model of mumps in Japan
Taito Kitano & Hirosato Aoki
Review
Real-world evidence of quadrivalent meningococcal conjugate vaccine safety in the United States: a systematic review
Tracy a Becerra-Culqui, Lina S. Sy, Zendi Solano & Hung Fu Tseng
Pages: 1432-1441
Published online: 29 Oct 2020

Article
Determinants of policy and uptake of national vaccine programs for pregnant women: results of mixed method study from Spain, Italy, and India
Lois Privor-Dumm
Pages: 1474-1482
Published online: 17 Dec 2020

Infectious Agents and Cancer
http://www.infectagentscancer.com/content
[Accessed 24 Apr 2021]
[No new digest content identified]

Infectious Diseases of Poverty
http://www.idpjournal.com/content
[Accessed 24 Apr 2021]
From 30 million to zero malaria cases in China: lessons learned for China–Africa collaboration in malaria elimination
Authors: Jun-Hu Chen, Jun Fen and Xiao-Nong Zhou
Content type: Editorial
20 April 2021

International Health
Volume 13, Issue 2, March 2021
https://academic.oup.com/inthealth/issue/13/2
[Reviewed earlier]

International Journal of Community Medicine and Public Health
Vol 8, No 4 (2021) April 2021
https://www.ijcmph.com/index.php/ijcmph/issue/view/75
[Reviewed earlier]
Original Investigation

**Immunogenicity of the Ad26.COV2.S Vaccine for COVID-19**
Kathryn E. Stephenson, MD, MPH; Mathieu Le Gars, PhD; Jerald Sadoff, MD; et al.
free access has active quiz
This randomized trial compares the immunogenicity of a SARS-CoV-2 Ad26.COV2.S vaccine at high vs low vs no dose (placebo) in humans, including the kinetics, magnitude, and phenotype of coronavirus spike-specific humoral and cellular immune responses.

Research Letter

**Acute Allergic Reactions to mRNA COVID-19 Vaccines**
Kimberly G. Blumenthal, MD, MSc; Lacey B. Robinson, MD, MPH; Carlos A. Camargo Jr, MD, DrPH; et al.
free access has active quiz
This study examines the incidence of acute allergic reactions to mRNA COVID-19 vaccine administrations in health care employees in Massachusetts.

Viewpoint

**CDC Interim Recommendations for Fully Vaccinated People: An Important First Step**
Athalia Christie, MIA; Sarah A. Mbaeyi, MD; Rochelle P. Walensky, MD
free access has active quiz
This Viewpoint summarizes CDC activity recommendations for individuals fully vaccinated against SARS-CoV-2 infection, including resumption of low-risk gatherings among vaccinated people and maintenance of public health measures in activities involving unvaccinated people.

**Incentivizing Vaccination Uptake - The “Green Pass” Proposal in Israel**
This Viewpoint explains the “green pass” program in Israel to encourage residents to seek COVID-19 vaccination, with incentives including access to social, cultural, and sports events and gyms, hotels, and restaurants as well as exemption from quarantine after travel or exposure to an individual with SARS-CoV-2 infection.

**JAMA Network**

**COVID-19 Update  April 24, 2021**

*These articles on COVID-19 were published across the JAMA Network in the last week.*

**JAMA Pediatrics**

April 2021, Vol 175, No. 4, Pages 339-440

https://jamanetwork.com/journals/jamapediatrics/currentissue

[Reviewed earlier]

**JBI Evidence Synthesis**

April 2021 - Volume 19 - Issue 4

https://journals.lww.com/jbisrir/Pages/currenttoc.aspx

[New issue; No digest content identified]

**Journal of Adolescent Health**

Volume 68  Issue 5  p833-1024

https://www.jahonline.org/current

*Commentary*

**COVID-19 Vaccination of Adolescents and Young Adults of Color: Viewing Acceptance and Uptake With a Health Equity Lens**

Tamera Coyne-Beasley, Samantha V. Hill, Gregory Zimet,...Maria Veronica Svetaz, Maria Trent, Leslie Walker-Harding

Published online: April 01, 2021

p844-846

*Original Articles*

**National Study of Youth Opinions on Vaccination for COVID-19 in the U.S.**

Eric J. Brandt, Julia Rosenberg, Marika E. Waselewski, Xochitl Amaro, Jacob Wasag, Tammy Chang

Published online: April 03, 2021

p869-872

**Journal of Artificial Intelligence Research**

Vol. 70 (2021)

https://www.jair.org/index.php/jair

[Reviewed earlier]
Journal of Community Health
Volume 46, issue 2, April 2021
[Reviewed earlier]

Journal of Development Economics
Volume 150  May 2021
[Reviewed earlier]

Journal of Empirical Research on Human Research Ethics
Volume 16 Issue 1-2, February-April 2021
http://journals.sagepub.com/toc/jre/current
[Reviewed earlier]

Journal of Epidemiology & Community Health
April 2021 - Volume 75 - 4
https://jech.bmj.com/content/75/4
[Reviewed earlier]

Journal of Evidence-Based Medicine
Volume 14, Issue 1  Pages: 1-81  February 2021
https://onlinelibrary.wiley.com/toc/17565391/current
[Reviewed earlier]

Journal of Global Ethics
Volume 16, Issue 2, 2020
http://www.tandfonline.com/toc/rjge20/current
[Reviewed earlier]

Journal of Health Care for the Poor and Underserved (JHCPU)
Volume 32, Number 1, February 2021
https://muse.jhu.edu/issue/43951
Table of Contents
[Reviewed earlier]

Journal of Immigrant and Minority Health
Volume 23, issue 2, April 2021
Journal of Immigrant & Refugee Studies
Volume 19, 2021_ Issue 2
https://www.tandfonline.com/toc/wimm20/current
[Reviewed earlier]

Journal of Infectious Diseases
Volume 223, Issue 5, 1 March 2021
https://academic.oup.com/jid/issue/223/5
[Reviewed earlier]

Journal of Medical Ethics
April 2021 - Volume 47 - 4
http://jme.bmj.com/content/current
[Reviewed earlier]

Journal of Patient-Centered Research and Reviews
Volume 8, Issue 2 (2021)
https://digitalrepository.aurorahealthcare.org/jpcrr/
[New issue; No digest content identified]

Journal of Pediatrics
Volume 232 p1-316
http://www.jpeds.com/current
Original Articles
Association of Bacteremia with Vaccination Status in Children Aged 2 to 36 Months
Jennifer Dunnick, Maia Taft, Robert T. Tisherman, Andrew J. Nowalk, Robert W. Hickey, Paria M. Wilson
Published online: January 13, 2021
p207-213.e2

Journal of Pharmaceutical Policy and Practice
https://joppp.biomedcentral.com/
[Accessed 24 Apr 2021]
[No new digest content identified]

Journal of Public Health Management & Practice
March/April 2021 - Volume 27 - Issue 2
https://journals.lww.com/jphmp/pages/currenttoc.aspx
[Reviewed earlier]
2021: the beginning of a new era of immunisations?

The Lancet

While the world is firmly focused on the efficacy, adverse events, licensing, and roll-out of COVID-19 vaccines, the disruption of and barriers to routine immunisations during the pandemic have garnered much less attention. World Immunization Week (April 24–30) presents an opportunity to reflect on the state of immunisation efforts for vaccine-preventable diseases, how the COVID-19 pandemic has affected progress, and what lessons can accelerate efforts to prevent diseases through immunisation.

The Immunization Agenda 2030 (IA2030) will be officially launched on April 26. This agenda provides a new global vision and strategy for vaccines for the next decade, following on from the Global Vaccine Action Plan (2011–20). Before the beginning of the pandemic, progress in vaccine coverage had already been stalling between 2010 and 2019. For example, according to WHO and UNICEF data, global rates of immunisation with the first dose of measles-containing vaccine remained at 84–85%.
The Global Vaccine Action Plan was important to bring partners together and broaden the vaccine coverage to include newer vaccines, such as those for rotavirus and hepatitis B. However, the conclusion of a WHO evaluation was that it did not make progress in addressing inequity and was only partly successful in influencing national actions as a top-down approach.

IA2030 sets out a very ambitious plan, taking lessons learnt into account and hoping that COVID-19 prevention provides a stark reminder of the importance and power of vaccines. The agenda, which was designed with the cooperation of countries, puts much more emphasis on an approach tailored to the national context and integrated into primary health-care services, particularly to prioritise populations that have not been reached. Immunisation at all ages should be part of such a national plan and will vary in national strategies according to demographics. The agenda aims to be adaptable to changing circumstances brought on by, for example, increased migration, civil unrest, climate change, or future pandemics, but the specifics on how such resilience can be achieved are not established. The four overarching principles the IA2030 puts forward are a people-centred, country-owned, partnership-based, and data-guided approach.

Nobody would disagree with the agenda’s aims. It is laudable that previous shortcomings have been considered and health systems strengthening, especially at the primary care level, is seen as crucial for sustainable progress. The key to success, however, will be how to implement the national plans and to ensure financing is sustained. The COVID-19 pandemic has made this task much more difficult by severely disrupting routine immunisation. Because of travel restrictions, deployment of scarce health workers to COVID-19 care, shortage of personal protective equipment, and disruption of supply chains, many countries will have to provide catch-up services and risk severe outbreaks of vaccine-preventable diseases when easing lockdown. Interruptions in survey data collection will mean data gaps will make it harder to identify those most in need. COVID-19 has further exacerbated inequities and poverty and has led to mass migration from urban to rural areas in many countries, making it difficult to keep track of people needing vaccinations.

But COVID-19 has also catalysed new approaches to vaccine development and mass vaccination efforts that could be taken forward in national routine immunisation plans and vaccine development more generally. For example, house-to-house COVID-19 vaccinations, as offered in some high-income countries to vaccinate individuals shielding or unable to travel, might reach those otherwise missed. Short-term vaccination centres could be used, and school-based or work-based vaccinations could be offered. Electronic immunisation registries should be rolled out widely to facilitate data collection and identification of gaps with attention to data protection and security. Accelerating vaccine development, testing in trials, and licensing with robust post-licensing surveillance should become the new norm. Techniques used for COVID-19 vaccines, such as the use of mRNA, might be applicable to other diseases. Early-phase research for mRNA and vector-based vaccines for HIV has started.

Much has been achieved through vaccination, with many lives saved and disabilities prevented. Science has brought us options for many diseases, with further possibilities on the horizon. A new era of immunisations is much needed and the IA2030 sets out a very good framework. But vaccine hesitancy remains an important issue to tackle. And without addressing the fundamental underlying barriers of inequity, poverty, political posturing, and commercial interest protection, the next decade will not achieve much more than the past.

Comment
Human rights and fair access to COVID-19 vaccines: the International AIDS Society–Lancet Commission on Health and Human Rights

Commissioners of and collaborators with the International AIDS Society–Lancet Commission on Health and Human Rights

... The Commission had its first meeting in early 2021 and expects to produce its first full report in 2022. The key questions that will inform our work are shown in the panel. We are charged with examining how to ensure that human rights are at the core of global health efforts, enabling them to fulfil the lofty goals outlined in the WHO Constitution, in international human rights treaties, and in many national constitutions and legal frameworks: that the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction and that the health of all peoples is fundamental to the attainment of peace and security and is dependent on the fullest cooperation of individuals and states.23

The Commission’s work will seek to strengthen and expand health and human rights efforts to include emerging areas that impact the right to health, including misinformation, disinformation, social media, and the politicisation of health information; the climate crisis and the right to a sustainable environment; and the social determinants of health arising from inequity, social injustice, and conflict and displacement.

Framing questions the Commission will interrogate
1. What is the future of the health and human rights framework?
2. How can the health and human rights framework be revitalised and reinvigorated to achieve healthy communities?
3. What domains of the health and human rights framework are most relevant for ensuring robust health systems and universal access to prevention and care?

Health Policy

The escalating tuberculosis crisis in central and South American prisons
Katharine S Walter, et al

Summary
In the past decade, tuberculosis incidence has declined in much of the world, but has risen in central and South America. It is not yet clear what is driving this reversal of progress in tuberculosis control. Since 2000, the incarcerated population in central and South America has grown by 206%, the greatest increase in the world. Over the same period, notified tuberculosis cases among the incarcerated population (hereinafter termed persons deprived of their liberty [PDL], following the Inter-American Commission on Human Rights) have risen by 269%. In both central and South America, the rise of disease among PDL more than offsets tuberculosis control gains in the general population. Tuberculosis is increasingly concentrated among PDL; currently, 11% of all notified tuberculosis cases in central and South America occur among PDL who comprise less than 1% of the population. The extraordinarily high risk of acquiring tuberculosis within prisons creates a health and human rights crisis for PDL that also undermines wider tuberculosis control efforts. Controlling tuberculosis in this region will require countries to take urgent measures to prioritise the health of PDL.

The Lancet Child & Adolescent Health
Apr 2021 Volume 5 Number 4 p233-308, e9-e11
https://www.thelancet.com/journals/lanchi/issue/current
[Reviewed earlier]
Lancet Digital Health
Apr 2021  Volume 3  Number 4  e204-e273
https://www.thelancet.com/journals/landig/issue/current
[Reviewed earlier]

Lancet Global Health
Apr 2021  Volume 9  Number 4  e372-e557
https://www.thelancet.com/journals/langlo/issue/current
[Reviewed earlier]

Lancet Infectious Diseases
Apr 2021  Volume 21  Number 4  p439-578, e67-e109
https://www.thelancet.com/journals/laninf/issue/current
[Reviewed earlier]

Lancet Public Health
Apr 2021  Volume 6  Number 4  e192-e259
https://www.thelancet.com/journals/lanpub/issue/current
[Reviewed earlier]

Lancet Respiratory Medicine
Apr 2021  Volume 9  Number 4  p319-434, e30-e46
https://www.thelancet.com/journals/lanres/issue/current
[Reviewed earlier]

Maternal and Child Health Journal
Volume 25, issue 4, April 2021
[Reviewed earlier]

Medical Decision Making (MDM)
Volume 41 Issue 3, April 2021
http://mdm.sagepub.com/content/current
[Reviewed earlier]

The Milbank Quarterly
A Multidisciplinary Journal of Population Health and Health Policy
Volume 99, Issue 1  Pages: 1-327  March 2021
https://onlinelibrary.wiley.com/toc/14680009/current
[Reviewed earlier]
**Nature**
Volume 592 Issue 7855, 22 April 2021
https://www.nature.com/nature/volumes/592/issues/7855

*Editorial* 21 April 2021

**Africa’s vaccines revolution must have research at its core**

It’s an injustice that Africa has to import 99% of its vaccines. COVID has sparked a push for change — and researchers have a crucial role.

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*Article* | 24 March 2021

**Quadrivalent influenza nanoparticle vaccines induce broad protection**

A nanoparticle influenza vaccine candidate is shown to induce broad cross-reactive antibody responses in animal models.
Seyhan Boyoglu-Barnum, Daniel Ellis & Masaru Kanekiyo

***Nature Biotechnology***
Volume 39 Issue 4, April 2021
https://www.nature.com/nbt/volumes/39/issues/4
[Reviewed earlier]

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*Nature Communications*
https://www.nature.com/subjects/health-sciences/ncomms
(Accessed 24 Apr 2021)
[No new digest content identified]

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*Nature Genetics*
Volume 53 Issue 4, April 2021
https://www.nature.com/ng/volumes/53/issues/4
[Reviewed earlier]

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*Nature Human Behaviour*
Volume 5 Issue 4, April 2021
https://www.nature.com/nathumbehav/volumes/5/issues/4

*Review Article* | 01 April 2021

**Intelligence, health and death**

Cognitive epidemiology studies prospective associations between cognitive abilities and health outcomes. Deary et al. review research in this field over the past decade, synthesizing evidence and outlining open questions.

Ian J. Deary, W. David Hill & Catharine R. Gale

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*Resource* | 08 March 2021

**A global panel database of pandemic policies (Oxford COVID-19 Government Response Tracker)**
The Oxford COVID-19 Government Response Tracker (OxCGRT) records data on 19 different government COVID-19 policy indicators for over 190 countries. Covering closure and containment, health and economics measures, it creates an evidence base for effective responses. Thomas Hale, Noam Angrist & Helen Tatlow

**Nature Medicine**
Volume 27 Issue 4, April 2021
https://www.nature.com/nm/volumes/27/issues/4
[Reviewed earlier]

**Nature Reviews Genetics**
Volume 22 Issue 4, April 2021
https://www.nature.com/nrg/volumes/22/issues/4
[Reviewed earlier]

**Nature Reviews Immunology**
Volume 21 Issue 4, April 2021
https://www.nature.com/nri/volumes/21/issues/4
[Reviewed earlier]

**Nature Reviews Drug Discovery**
Volume 20 Issue 4, April 2021
https://www.nature.com/nrd/volumes/20/issues/4
[Reviewed earlier]

**New England Journal of Medicine**
April 22, 2021 Vol. 384 No. 16
http://www.nejm.org/toc/nejm/medical-journal
**Perspective**
**An Uncertain Public — Encouraging Acceptance of Covid-19 Vaccines**
Gillian K. SteelFisher, Ph.D., Robert J. Blendon, Sc.D., and Hannah Caporello, B.A.
... To understand public attitudes toward taking a Covid-19 vaccine and the factors likely to affect willingness to do so going forward, we examined 39 nationally representative, randomized polls with publicly available tabulations that were conducted between August 2020 and February 2021 (see Supplementary Appendix, available at NEJM.org). Our framework provides a perspective different from that of much of the media reporting on individual polls and informs our recommendations for outreach efforts to encourage vaccine uptake — efforts in which we believe physicians can play an important role...

**Editorials**
**Audio Interview: Covid-19 Vaccines and Pregnancy — A Conversation with CDC Director Rochelle** WalenskyE.J. Rubin, L.R. Baden, R.P. Walensky, and S. Morrissey
**Summary points**

:: Efforts to control Plasmodium vivax malaria have been less successful than for Plasmodium falciparum, resulting in higher prevalence of P. vivax malaria in most coendemic regions. One of the key differences between the 2 species is the ability of P. vivax to form hypnozoites causing relapses which facilitate transmission. Preventing P. vivax relapses is key for the elimination of P. vivax malaria.

:: The widescale use of the radical cure to clear hypnozoites has been underutilized in most endemic countries. Two breakthroughs have increased the likelihood that the radical cure will be rolled out in P. vivax endemic regions: To clear hypnozoites, primaquine can be administered in short, high-dose regimens or a single dose of the recently licensed tafenoquine is administered. Novel technologies allow measurement of glucose-6-phosphate dehydrogenase (G6PD) activity at the point of care. Identifying patients with low G6PD activity, not eligible for these novel regimens, is a precondition for their safe administration.

:: Novel approaches to P. vivax elimination such as mass drug administrations of antimalarial drugs including 8-aminoquinolines require considerable resources and carry safety risks.

:: A safe and protective P. vivax vaccine would be an asset in the elimination of P. vivax malaria but is unlikely to be available in the near future.

:: Case management that includes a radical cure is currently the most promising approach to P. vivax elimination. New regimens for radical cure and the possibility to minimise the risk of haemolysis through novel G6PD tests bring up operational challenges, but if deployed wisely could have sufficient impact to eliminate if not eradicate *P. vivax* malaria.
Addressing power asymmetries in global health: Imperatives in the wake of the COVID-19 pandemic
Seye Abimbola, Sumegha Asthana, Cristian Montenegro Cortes, Renzo R. Guinto, Desmond Tanko Jumbam, Lance Louskieter, Kenneth Munge Kabuel, Shehnaz Munshi, Kui Muraya, Fredros Okumu, Senjuti Saha, Deepika Saluja, Madhukar Pai
Collection Review | published 22 Apr 2021 PLOS Medicine
https://doi.org/10.1371/journal.pmed.1003604

Summary points
:: The Coronavirus Disease 2019 (COVID-19) pandemic, the Black Lives Matter and Women in Global Health movements, and ongoing calls to decolonise global health have all created space for uncomfortable but important conversations that reveal serious asymmetries of power and privilege that permeate all aspects of global health.
:: In this article, we, a diverse, gender-balanced group of public (global) health researchers and practitioners (most currently living in the so-called global South), outline what we see as imperatives for change in a post-pandemic world.
:: At the individual level (including and especially ourselves), we emphasise the need to emancipate and decolonise our own minds (from the colonial conditionings of our education), straddle and use our privilege responsibly (to empower others and avoid elite capture), and build “Southern” networks (to affirm our ownership of global health).
:: At the organisational level, we call for global health organisations to practice real diversity and inclusion (in ways that go beyond the cosmetic), to localise their funding decisions (with people on the ground in the driving seat), and to progressively self-decentralise (and so, divest themselves of financial, epistemic, and political power).
:: And at both the individual and organisational level, we emphasise the need to hold ourselves, our governments, and global health organisations accountable to these goals, and especially for governance structures and processes that reflect a commitment to real change.
:: By putting a spotlight on coloniality and existing inequalities, the COVID-19 pandemic inspires calls for a more equitable world and for a decolonised and decentralised approach to global health research and practice, one that moves beyond tokenistic box ticking about diversity and inclusion into real and accountable commitments to transformative change.

PLoS Neglected Tropical Diseases
http://www.plosntds.org/
(Accessed 24 Apr 2021)
[No new digest content identified]

PLoS One
http://www.plosone.org/
(Accessed 24 Apr 2021)
Acceptance and attitudes toward COVID-19 vaccines: A cross-sectional study from Jordan
Tamam El-Elimat, Mahmoud M. AbuAlSamen, Basima A. Almomani, Nour A. Al-Sawalha, Feras Q. Alali
Research Article | published 23 Apr 2021 PLOS ONE
https://doi.org/10.1371/journal.pone.0250555

The belief that politics drive scientific research & its impact on COVID-19 risk assessment
Danielle M. McLaughlin, Jack Mewhirter, Rebecca Sanders
Dynamic prioritization of COVID-19 vaccines when social distancing is limited for essential workers
Jack H. Buckner, Gerardo Chowell, and Michael R. Springborn
PNAS April 20, 2021 118 (16) e2025786118; https://doi.org/10.1073/pnas.2025786118

Prehospital & Disaster Medicine
Volume 36 - Issue 2 - April 2021
https://www.cambridge.org/core/journals/prehospital-and-disaster-medicine/latest-issue
[Reviewed earlier]

Preventive Medicine
Volume 145  April 2021
[Reviewed earlier]

Proceedings of the Royal Society B
28 April 2021  Volume 288  Issue 1949
https://royalsocietypublishing.org/toc/rspb/current
[New issue; No digest content identified]

Public Health
Volume 192  Pages 1-74 (March 2021)
[Reviewed earlier]

Public Health Ethics
Volume 13, Issue 3, November 2020
Public Health Reports
Volume 136 Issue 2, March/April 2021
https://journals.sagepub.com/toc/phrg/136/2
[Reviewed earlier]

Qualitative Health Research
Volume 31 Issue 5, April 2021
http://qhr.sagepub.com/content/current
[Reviewed earlier]

Research Ethics
Volume 17 Issue 2, April 2021
http://journals.sagepub.com/toc/reab/current
[New issue; No digest content identified]

Reproductive Health
http://www.reproductive-health-journal.com/content
[Accessed 24 Apr 2021]
[No new digest content identified]

Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)
https://www.paho.org/journal/en
Selected Articles
23 Apr 2021
Traditional, complementary, and integrative medicine evidence map: a methodology to an overflowing field of data and noise
Brief communication | English |

22 Apr 2021
The demographic features and outcome indicators of the Barbados HIV Pre-exposure Prophylaxis Program, 2018-2019
Original research | English |

Risk Analysis
Volume 41, Issue 4  Pages: 559-699  April 2021
https://onlinelibrary.wiley.com/toc/15396924/current
Special Issue: Risk Assessment, Economic Evaluation, and Decisions Perspectives
Introduction to Special Issue on Risk Assessment, Economic Evaluation, and Decisions
James K. Hammitt, Lisa A. Robinson

Abstract
Integrating risk assessment, economic evaluation, and uncertainty to inform policy decisions is a core challenge to risk analysis. In September 2019, the Harvard Center for Risk Analysis, with support from the Society for Risk Analysis Economics and Benefits Analysis Specialty Group and others, convened a workshop to address this issue. The workshop built in part on the recommendations of the 2009 National Research Council report, Science and Decisions: Advancing Risk Assessment. It honored John S. Evans, whose thoughtful and innovative teaching and scholarship have significantly advanced thinking on these issues. This special issue features a profile of Dr. Evans and nine articles that build on work presented at the workshop.

Risk Management and Healthcare Policy
[Accessed 24 Apr 2021]

Original Research
Determinants of Incomplete Vaccination Among Children Aged 12 to 23 Months in Gindhir District, Southeastern Ethiopia: Unmatched Case–Control Study
Risk Management and Healthcare Policy 2021, 14:1669-1679
Published Date: 21 April 2021

Science
23 April 2021  Vol 372, Issue 6540
http://www.sciencemag.org/current.dtl

In-Depth
After vaccine failures, France laments biomedical decline
By Tania Rabesandratana
Science23 Apr 2021 : 331-332 Full Access
Researchers blame a squeeze in basic research funding and scarce venture capital for biotech startups.

Science Translational Medicine
21 April 2021  Vol 13, Issue 590
https://stm.sciencemag.org/
[New issue; No digest content identified]

Social Science & Medicine
Volume 274  April 2021
[Reviewed earlier]

Systematic Reviews
https://systematicreviewsjournal.biomedcentral.com/articles
Theoretical Medicine and Bioethics
Volume 41, issue 5-6, December 2020
[Reviewed earlier]

Travel Medicine and Infectious Diseases
Volume 40  March–April 2021
[Reviewed earlier]

Tropical Medicine & International Health
Volume 26, Issue 4  Pages: i-iv, 385-502  April 2021
https://onlinelibrary.wiley.com/toc/13653156/current
[Reviewed earlier]

Vaccine
Volume 39, Issue 16  Pages 2183-2318 (15 April 2021)
https://www.sciencedirect.com/journal/vaccine/vol/39/issue/16
Discussion  Full text access
COVID-19 vaccination and critical care capacity: Perilous months ahead
Leslie A. Reperant, Albert D.M.E. Osterhaus
Pages 2183-2186

Discussion  Full text access
Safety monitoring of COVID-19 vaccines – Lessons learned from the 1976 national influenza immunization program about detecting rare vaccine-related severe adverse events in emergency mass-vaccination programs
Alan Kendal
Pages 2187-2189

Review article  Full text access
mRNA vaccines manufacturing: Challenges and bottlenecks
Sara Sousa Rosa, Duarte M.F. Prazeres, Ana M. Azevedo, Marco P.C. Marques
Pages 2190-2200

Review article  Abstract only
Systematic literature review of cross-protective effect of HPV vaccines based on data from randomized clinical trials and real-world evidence
Darron R. Brown, Elmar A. Joura, Glorian P. Yen, Smita Kothari, ... Margaret Stanley
Pages 2224-2236
Research article  Abstract only
**Redesigning immunization supply chains: Results from three country analyses**
Wendy Prosser, Olamide Folorunso, Joseph McCord, Gregory Roche, ... Jean-Charles Dubourg
Pages 2246-2254

Research article  Full text access
**COVID-19 vaccine intentions in the United States, a social-ecological framework**
Carl Latkin, Lauren A. Dayton, Grace Yi, Arianna Konstantopoulos, ... Xiangrong Kong
Pages 2288-2294

Research article  Open access
**Projected COVID-19 epidemic in the United States in the context of the effectiveness of a potential vaccine and implications for social distancing and face mask use**
Mingwang Shen, Jian Zu, Christopher K. Fairley, José A. Pagán, ... Lei Zhang
Pages 2295-2302

Research article  Open access
**Pertussis infant morbidity and mortality trends after universal maternal immunisation in Mexico: An ecological database study with time-series analysis**
Adriana Guzman-Holst, Gerardo Luna-Casas, Maria Y. Cervantes-Apolinar, Gloria C. Huerta-Garcia, ... Gilberto Sánchez-González
Pages 2311-2318

Vaccines — Open Access Journal
http://www.mdpi.com/journal/vaccines
(Accessed 24 Apr 2021)

Open Access  Article
**Nursing Home and Vaccination Consent: The Italian Perspective**
by Nunzia Cannovo et al
Vaccines 2021, 9(5), 429; https://doi.org/10.3390/vaccines9050429 (registering DOI) - 24 Apr 2021

Abstract
Since the beginning of the Covid-19 pandemic, many countries have begun vaccination campaigns, with different methods and timelines, with the goal of vaccinating over 75% of the population and thus achieving herd immunity. Initially it was necessary to identify the categories of citizens [...]

Open Access  Article
**Acceptance of COVID-19 Vaccination among Front-Line Health Care Workers: A Nationwide Survey of Emergency Medical Services Personnel from Germany**
by André Nohl et al
Vaccines 2021, 9(5), 424; https://doi.org/10.3390/vaccines9050424 (registering DOI) - 23 Apr 2021

Abstract
Introduction: The aim of this study was to evaluate the COVID-19 vaccination acceptance of emergency medical services (EMS) personnel as front-line health care workers (HCW) in Germany. Several studies have shown low willingness for vaccination (e.g., seasonal influenza) among HCWs and EMS personnel. [...]
Open Access Article
Off-Label Use of COVID-19 Vaccines from Ethical Issues to Medico-Legal Aspects: An Italian Perspective
by Davide Ferorelli et al
Vaccines 2021, 9(5), 423; https://doi.org/10.3390/vaccines9050423 (registering DOI) - 23 Apr 2021
Abstract
During the COVID-19 outbreak, the lack of official recommendations on the treatment has led healthcare workers to use multiple drugs not specifically tested and approved for the new insidious disease. After the availability of the first COVID-19 vaccines (Comirnaty Pfizer-BioNTech and Moderna COVID19 [...] R

Open Access Article
COVID-19 Vaccination Intent and Willingness to Pay in Bangladesh: A Cross-Sectional Study
by Russell Kabir et al
Vaccines 2021, 9(5), 416; https://doi.org/10.3390/vaccines9050416 - 21 Apr 2021
Abstract
This article reports the intent to receive a SARS-COV-2 vaccine, its predictors and willingness to pay in Bangladesh. We carried out an online cross-sectional survey of 697 adults from the general population of Bangladesh in January 2021. A structured questionnaire was used to [...] R

Open Access Article
COVID-19 Vaccination Scenarios: A Cost-Effectiveness Analysis for Turkey
by Arnold Hagens et al
Vaccines 2021, 9(4), 399; https://doi.org/10.3390/vaccines9040399 - 18 Apr 2021
Abstract
As of March 2021, COVID-19 has claimed the lives of more than 2.7 million people worldwide. Vaccination has started in most countries around the world. In this study, we estimated the cost-effectiveness of strategies for COVID-19 vaccination for Turkey compared to a baseline [...] R

Value in Health
April 2021 Volume 24 Issue 4 p463-604
https://www.valueinhealthjournal.com/current
[Reviewed earlier]

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Media/Policy Watch
This watch section is intended to alert readers to substantive news, analysis and opinion from the general media and selected think tanks and similar organizations on vaccines, immunization, global public health and related themes. Media Watch is not intended to be exhaustive, but indicative of themes and issues CVEP is actively tracking. This section will grow from an initial base of newspapers, magazines and blog sources, and is segregated from Journal Watch above which scans the peer-reviewed journal ecology.
We acknowledge the Western/Northern bias in this initial selection of titles and invite suggestions for expanded coverage. We are conservative in our outlook in adding news sources which largely report on primary content we are already covering above. Many electronic media sources have tiered, fee-based subscription models for access. We will provide full-text where content is published without restriction, but most publications require registration and some subscription level.

The sheer volume of vaccine and pandemic-related coverage is extraordinary. We will strive to present the most substantive analysis and commentary we encounter.

**The Atlantic**
http://www.theatlantic.com/magazine/
*Accessed 24 Apr 2021*
[No new, unique, relevant content]

**BBC**
http://www.bbc.co.uk/
*Accessed 24 Apr 2021*
[No new, unique, relevant content]

**The Economist**
http://www.economist.com/
*Accessed 24 Apr 2021*
*Covid catastrophe*
India’s giant second wave is a disaster for it and the world
The government’s distraction and complacency have amplified the surge
*Leaders* Apr 24th 2021 edition

Doses of scepticism
Africa’s covid-19 vaccination drive is off to a slow start
Scant supply is the biggest problem, but not the only one
Apr 24th 2021 edition

Free exchange
How to think about vaccines and patents in a pandemic
Do public-health crises call for a departure from the rules?
Apr 24th 2021 edition

**Financial Times**
https://www.ft.com/
*Accessed 24 Apr 2021*
*Coronavirus latest: CDC head warns of ‘unsettling gaps’ in vaccine coverage across US*
*University of Michigan to mandate vaccines for students living on-campus*
April 23, 2021

Japanese politics & policy
Japan to impose new state of emergency as Covid-19 cases rise
April 23, 2021

Coronavirus latest: Canada bans flights from India and Pakistan over variants
Thailand reports record infections as it secures more vaccines
April 23, 2021

Forbes
http://www.forbes.com/
Accessed 24 Apr 2021
[No new, unique, relevant content]

Foreign Affairs
http://www.foreignaffairs.com/
Accessed 24 Apr 2021
[No new, unique, relevant content]

Foreign Policy
http://foreignpolicy.com/
Accessed 24 Apr 2021
[No new, unique, relevant content]

New Yorker
http://www.newyorker.com/
Accessed 24 Apr 2021
[No new, unique, relevant content]

New York Times
http://www.nytimes.com/
Accessed 24 Apr 2021
Climate
U.S. Is Under Pressure to Release Vaccine Supplies as India Faces Deadly Surge
  The Biden administration is blocking the export of supplies that Indian vaccine makers say they need to expand production.
By Somini Sengupta
PRINT EDITION April 25, 2021

Africa
Africa’s already slow vaccine drive is threatened as supplies from a stricken India are halted.
  India’s dire Covid crisis is having global ripple effects, especially in Africa, which has 17 percent of the world’s people but is far behind in vaccinations.
By Abdi Latif Dahir
**U.S. Vaccines Made at Troubled Baltimore Plant Were Shipped to Canada and Mexico**

The Biden administration said it did not know of manufacturing problems at the Emergent factory when it approved shipping millions of doses of AstraZeneca’s vaccine. The company says the doses were safe.

By Sheryl Gay Stolberg and Chris Hamby

PRINT EDITION Vaccines From Troubled Site Were Shipped Out of U.S. | April 24, 2021, Page A6

**Opinion**

**I Run the W.H.O., and I Know That Rich Countries Must Make a Choice**

If they keep their vaccine promises, the pandemic can end.

By Tedros Adhanom Ghebreyesus

April 22, 2021

Almost one billion doses of Covid-19 vaccines have been administered around the world, and yet the weekly number of cases hit a record high last week, and deaths are climbing, on pace to eclipse 2020’s grim tally. How can this be? Weren’t vaccines supposed to douse the flames of the pandemic?

Yes, and they are. But here’s the thing about an inferno: If you hose only one part of it, the rest will keep burning.

Many countries all over the world are facing a severe crisis, with high transmission and intensive care units overflow with patients and running short on essential supplies, like oxygen.

Why is this happening? For several reasons: The rise of more transmissible variants, the inconsistent application and premature easing of public health measures like mask mandates and physical distancing, populations that are understandably weary of adhering to those measures and the inequitable distribution of vaccines

Scientists developed several vaccines for Covid-19 in record time. Yet of the more than 890 million vaccine doses that have been administered globally, more than 81 percent have been given in high- and upper-middle-income countries. Low-income countries have received just 0.3 percent.

This problem is sadly predictable. When the H.I.V. epidemic erupted in the 1980s, lifesaving antiretrovirals were developed rapidly, and yet a decade passed before they became available in sub-Saharan Africa.

A year ago, the World Health Organization and many global health partners came together in an effort to avoid history repeating. The Access to Covid-19 Tools (ACT) Accelerator, including the vaccine sharing initiative Covax, was begun to ensure the most equitable possible distribution of vaccines, diagnostics and therapeutics for Covid-19.

The concept was crystal clear: At a time when no one knew which vaccines would prove effective in clinical trials, Covax was designed to share the huge inherent risks of vaccine development, and to offer a mechanism for pooled procurement and equitable rollout.

While scientists toiled in laboratories, the W.H.O. and partners set standards, facilitated trials, raised funds, tracked manufacturing progress and worked with countries to prepare for rollout.
Countries at all income levels, manufacturers and others in the private sector committed to participate. But many of the same wealthy countries that were publicly expressing support for Covax were in parallel preordering the same vaccines on which Covax was relying.

In January, I issued a global challenge to see vaccination underway in all countries within the first 100 days of the year. This was an eminently achievable goal.

By April 10 — the 100th day — we had come close to achieving it: All but 26 countries had started vaccination, and of those, 12 were about to start, leaving 14 countries that had either not requested vaccines through Covax or were not ready to start vaccinating.

But the amount of vaccines delivered has been totally insufficient. As of Thursday, Covax has distributed 43 million doses of vaccine to 119 countries — covering just 0.5 percent of their combined population of more than four billion.

Since the ACT Accelerator’s birth a year ago, many of the world’s biggest economies have given strong support to Covax politically and financially, but they have also undermined it in other ways.

First, vaccine nationalism has weakened Covax, with a handful of rich countries gobbling up the anticipated supply as manufacturers sell to the highest bidder, while the rest of the world scrambles for the scraps. Some countries have placed orders for enough doses to vaccinate their entire population several times over, promising to share only after they have used everything they need, perpetuating the pattern of patronage that keeps the world’s have-nots exactly where they are.

Second, vaccine diplomacy has undermined Covax as countries with vaccines make bilateral donations for reasons that have more to do with geopolitical goals than public health. This inevitably leaves countries with the least political clout as wallflowers at the vaccine ball.

Third, vaccine hesitancy has hampered the rollout of vaccines, through the same combination of myth and misinformation that has enabled measles to resurge around the world. Reports of very rare side effects linked to some vaccines have spurred countries with other options to cast some aside. This includes vaccines that many of the world’s low-income nations were relying on but now question. Let’s be clear: While safety is paramount and we pay careful attention to any signs of adverse events, the shots’ benefits vastly outweigh the risks for all four vaccines with W.H.O. emergency use listing.

And fourth, a new trend — let’s call it vaccine euphoria — is undermining hard-won gains as some countries relax public health measures too quickly and some people assume that vaccines have ended the pandemic, at least where they live.

It doesn’t have to be this way. Scarcity drives inequity and puts the global recovery at risk. The longer this coronavirus circulates anywhere, the longer global trade and travel will be disrupted, and the higher the chances that a variant could emerge that renders vaccines less effective. That’s just what viruses do.

We face the very real possibility of affluent countries administering variant-blocking boosters to already vaccinated people when many countries will still be scrounging for enough vaccines to cover their most-at-risk groups.
This is unacceptable. Analysts predict vaccines will generate huge revenues for manufacturers. Meanwhile, the ACT Accelerator is still $19 billion short of the funds it needs to expand access not just to vaccines but also to diagnostics and treatments like oxygen. But even if we had all the funds we need, money doesn’t help if there are no vaccines to buy.

The solution is threefold: We need the countries and companies that control the global supply to share financially, to share their doses with Covax immediately and to share their know-how to urgently and massively scale up the production and equitable distribution of vaccines.

One way to do this is through voluntary licensing with technology transfer, in which a company that owns the patents on a vaccine licenses another manufacturer to produce its shots, usually for a fee. Some companies have done this on a bilateral basis. But such agreements tend to be exclusive and nontransparent, compromising equitable access.

A more transparent method is for companies to share licenses through the Covid-19 Technology Access Pool, a globally coordinated mechanism proposed by Costa Rica and started by the W.H.O. last year. Another option, proposed by South Africa and India, is to waive intellectual property rights on Covid-19 products through a World Trade Organization agreement that would level the playing field and give countries more leverage in their discussions with companies. Governments could drive greater sharing of intellectual property by offering incentives to companies to do it.

If this is not a time to take those actions, it’s hard to fathom when that would be.

In combination with proven public health measures, we have all the tools to tame this pandemic everywhere in a matter of months. It comes down to a simple choice: to share or not to share.

Whether or not we do is not a test of science, financial muscle or industrial prowess; it’s a test of character.

**Washington Post**

https://www.washingtonpost.com/

*Accessed 24 Apr 2021*

*World*

**A gift to Damascus: 150,000 COVID-19 Chinese vaccines**

DAMASCUS, Syria — The Syrian government received the first batch of Chinese COVID-19 vaccines on Saturday, a gift of 150,000 jabs to Damascus, Syrian and Chinese officials said.

The Chinese vaccines arrived in Damascus airport where they were received by Syria’s Health Minister Hassan Ghabbash and China’s ambassador to Damascus.

The Chinese batch comes a few days after more than 200,000 jabs were delivered to Syria through the United Nations-led platform which provides vaccines to the needy...

*Apr 24, 2021*

* * * * *
The International Community Has One Job: Getting COVID-19 Under Control

Enough. We cannot continue business as usual. Until this crisis is over—and over everywhere—exiting the COVID-19 mass casualty event must be the singular focus of the international community.

Amanda Glassman and Rachel Silverman

A Framework to Assess the Impact of COVID-19 Vaccination Certificates

Since the start of 2021, the pandemic has taken a more hopeful turn with the rollout of COVID-19 vaccines. As such, an increasing number of public and private sectors in many settings are considering the introduction of COVID-19 vaccination certificates or similar instruments as a safe passage into the new normal.

Yot Teerawattananon et al.

The Importance of Intellectual Property in Healthcare Innovation during COVID-19

April 22, 2021

Podcast Episode

Bruce Gellin: Keeping a Focus on Routine Immunizations While Responding to Covid-19

April 21, 2021 | By Katherine E. Bliss

Essential Workers Employed Outside Health Care are Less Enthusiastic about Getting a COVID-19 Vaccine than Other Adults

April 23, 2021  News Release
There has been little research on how essential workers not employed in the health care sector have been impacted by the pandemic and their views on and experiences with COVID-19 vaccines. The latest KFF COVID-19 Vaccine Monitor report finds that this group of workers – roughly 3 in 10 of…

April 22, 2021  News Release
COVID-19 Deaths and Cases in Long-Term Care Facilities Have Fallen to All-Time Lows in the Four Months Since Vaccinations Began

COVID-19 deaths and cases among residents and staff of long-term care facilities have fallen dramatically since vaccinations began in December, with deaths declining by nearly 89 percent and cases declining by nearly 92 percent as of April 2021, according to a new KFF analysis. COVID-19 deaths in long-term care settings...

World Economic Forum  [to 24 Apr 2021]
https://agenda.weforum.org/news/
Media
[No new digest content identified]