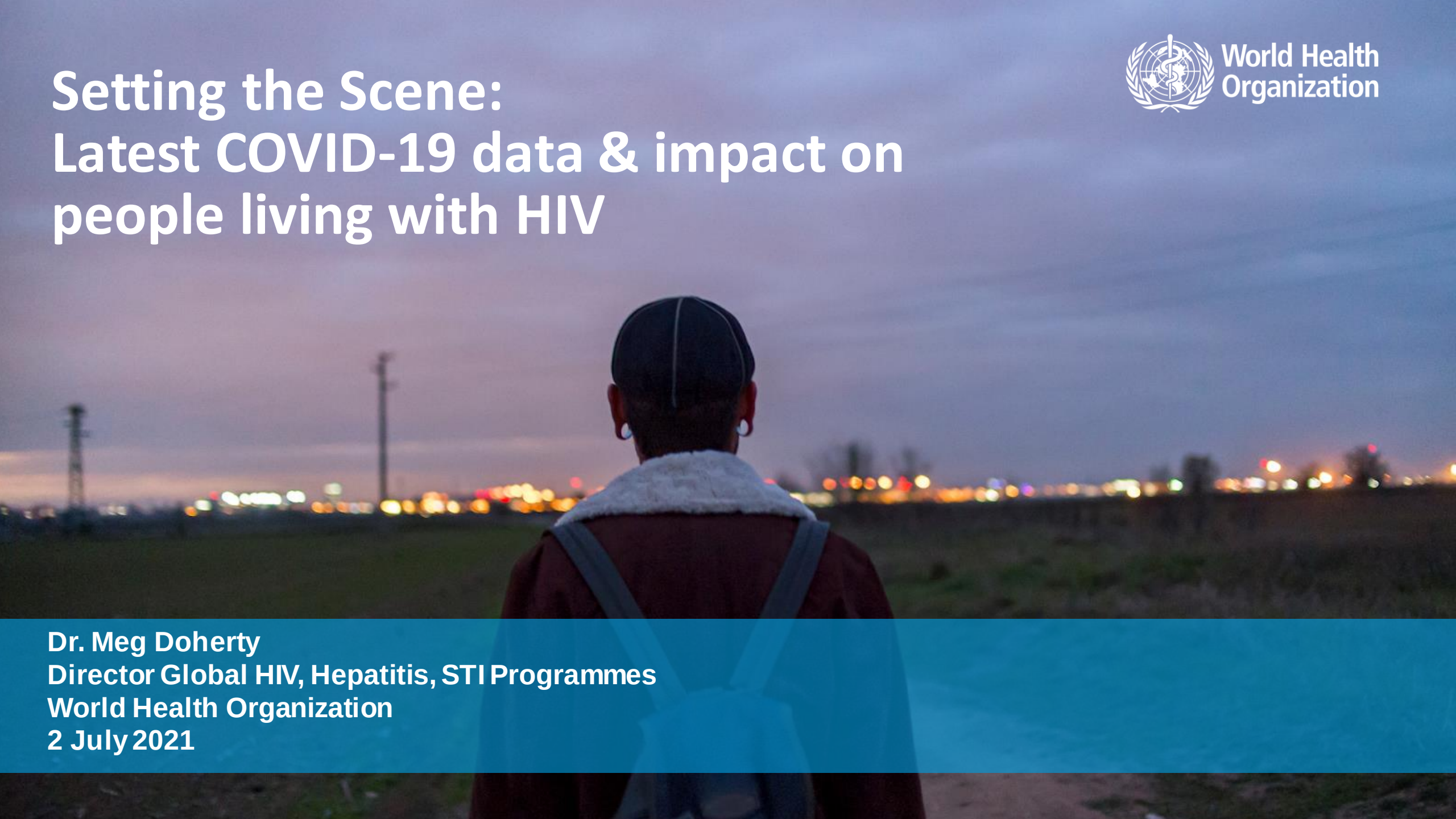
Setting the Scene: Latest COVID-19 data & impact on people living with HIV



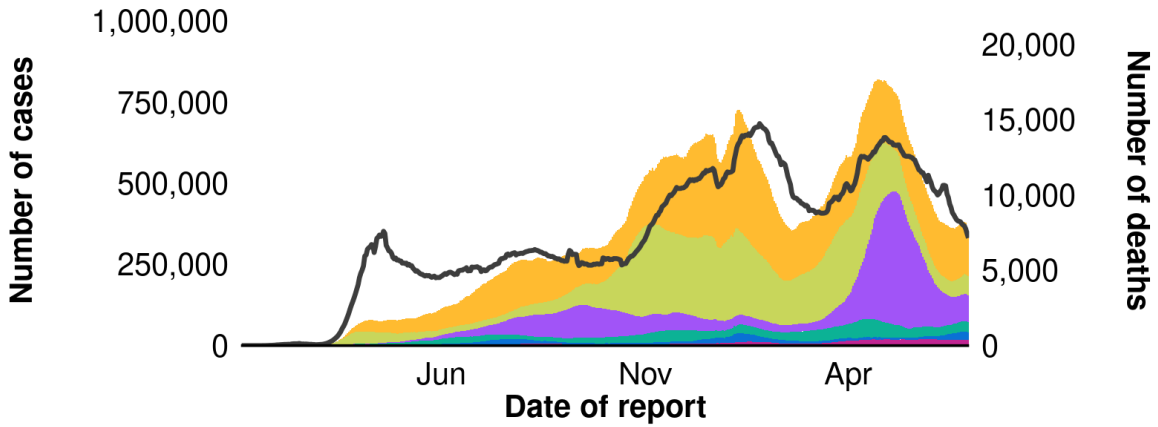
Dr. Meg Doherty
Director Global HIV, Hepatitis, STI Programmes
World Health Organization
2 July 2021

Global Situation

(as of 30 June 10H CEST)

World Health Organization

- **Previous 24 hours:**
  - 337,163 new confirmed cases
  - 6,617 new deaths
- **Cumulative:**
  - **181,521,067** confirmed cases
  - **3,937,437** deaths



data smoothed with 7-day moving average

Countries with the highest number of new cases in previous 24 hours

Country	New Cases	Total Cases	New Deaths	Total Deaths
India	45,951	30,362,848	817	398,454
Colombia	28,478	4,187,194	648	105,326
Brazil	27,804	18,448,402	618	514,092
Indonesia	21,807	2,178,272	467	58,491
Russian Federation	21,042	5,514,599	669	135,214
United Kingdom	20,223	4,775,305	23	128,126
United States of America	18,442	33,317,803	302	599,089
Argentina	18,389	4,423,636	574	93,142
South Africa	13,347	1,954,466	226	60,264
Iran (Islamic Republic of)	12,717	3,192,809	142	84,127

Globally, cases of the Alpha variant have been reported in 172 countries, territories or areas (hereafter countries; two new countries in the past week), of Beta in 120 countries (one new country), Gamma in 72 countries (one new country) and Delta in 96 countries (11 new countries).

Global Situation
(as of 30 June 10H CEST)

World Health Organization

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 21 – 27 June 2021**

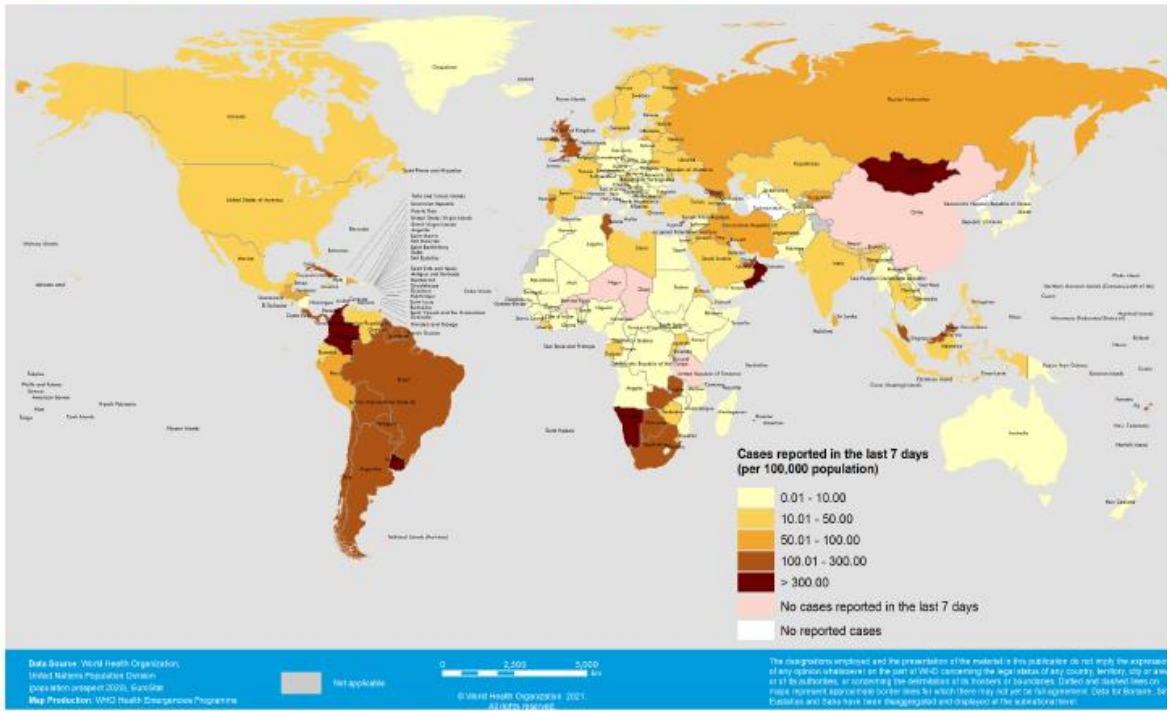
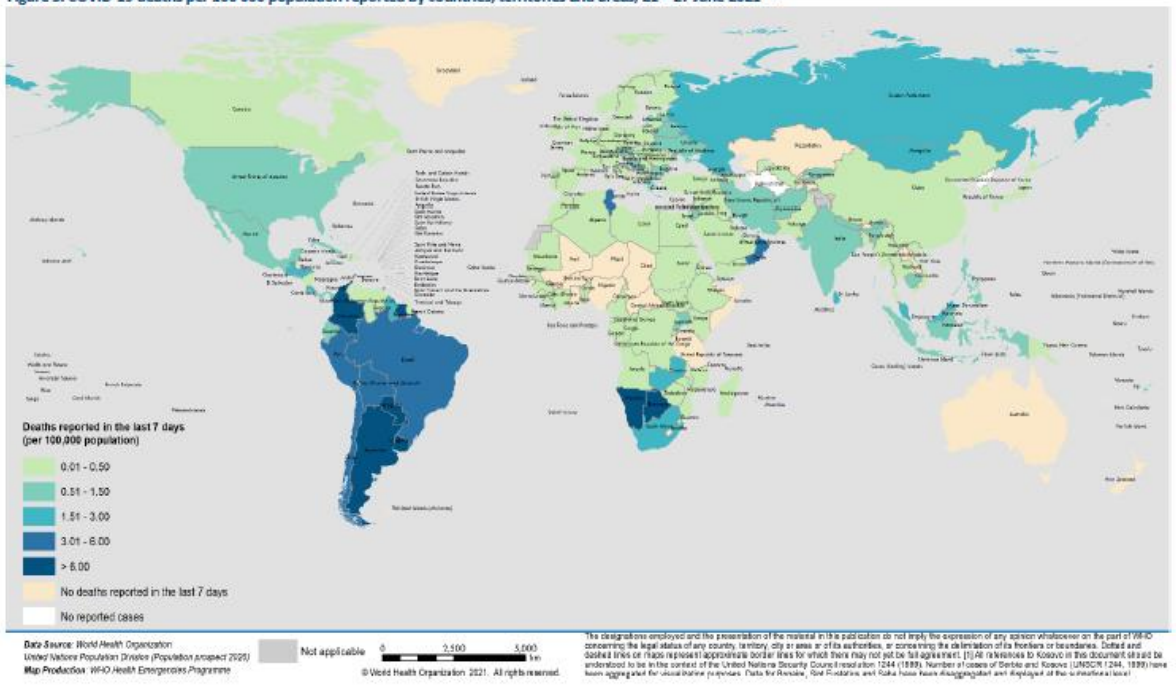


Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 21 – 27 June 2021**

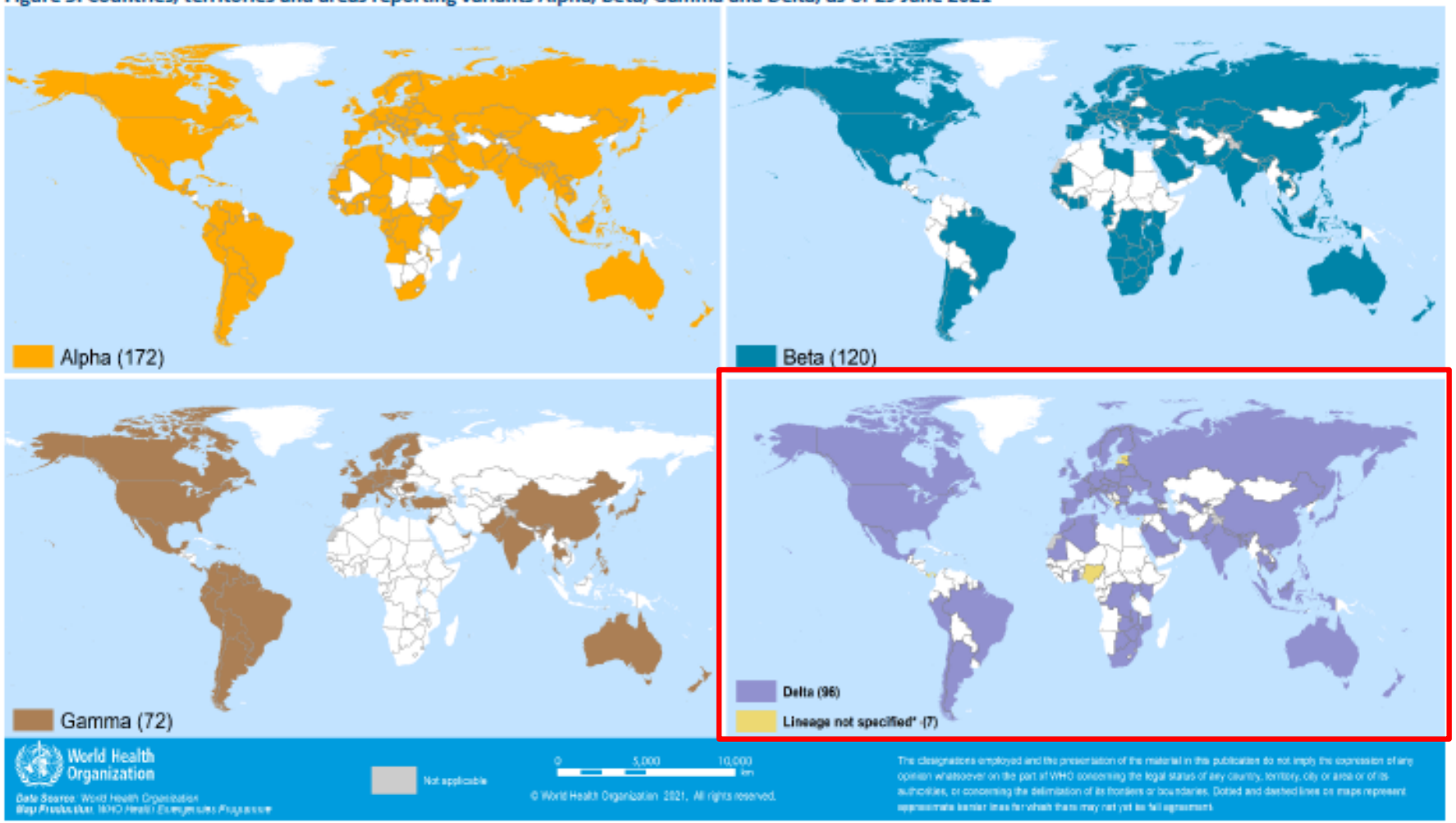


**See *Annex 2: Data, table and figure notes*

Spread of SARS CoV-2 Variants

World Health Organization

Figure 3. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 29 June 2021**



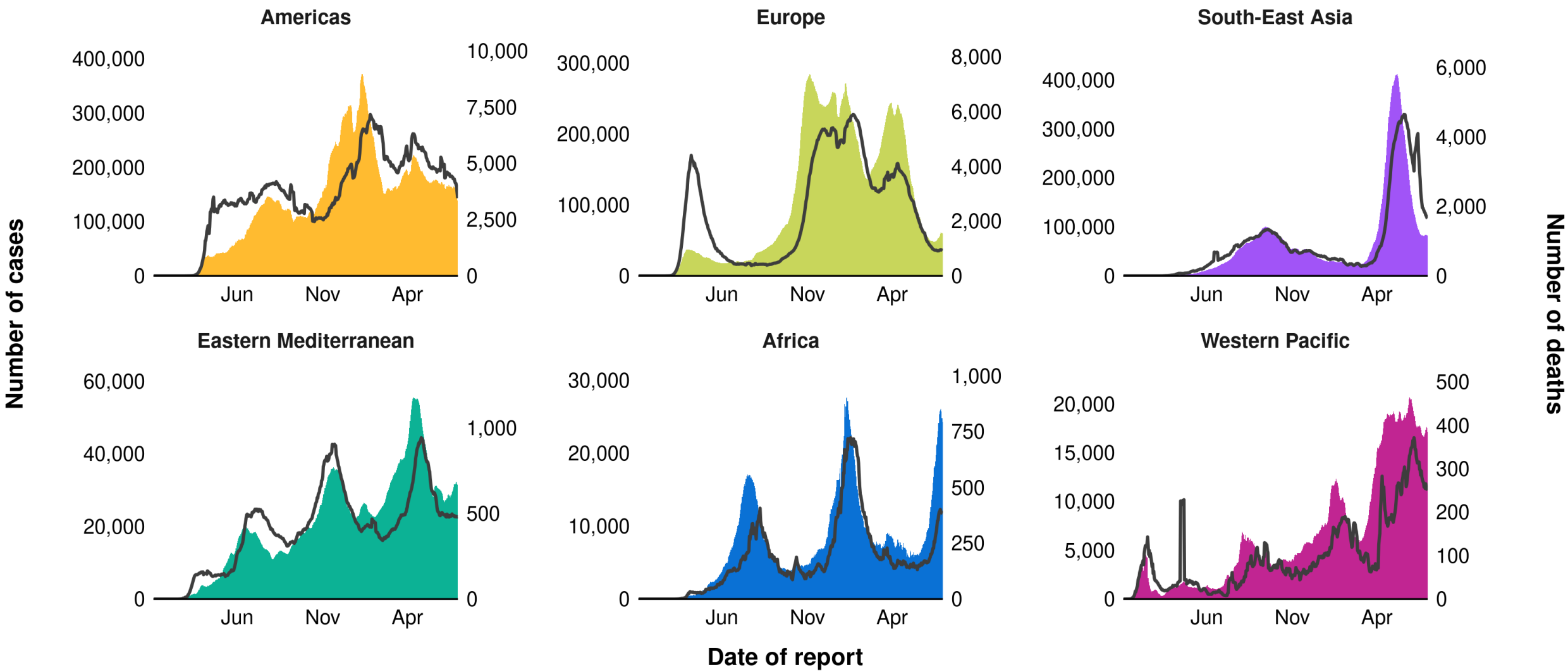
*Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

**Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details.

Epidemic curve by region

(as of 30 June 10H CEST)

World Health Organization

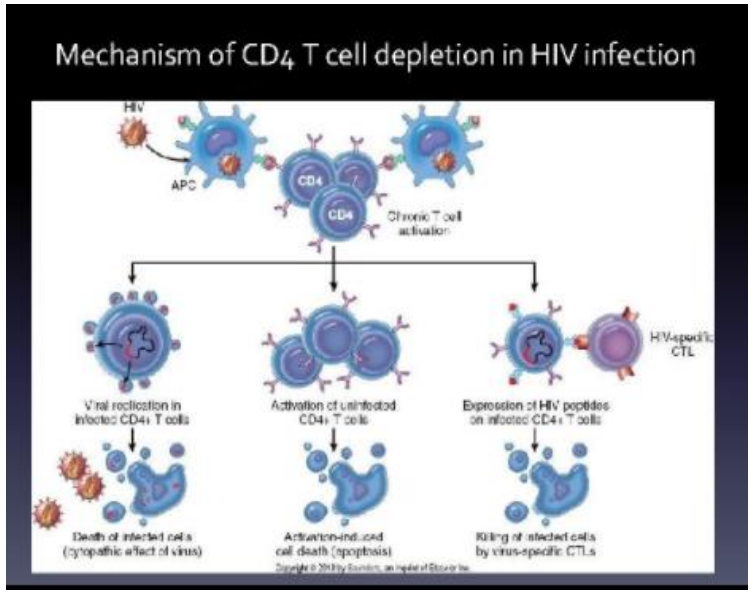


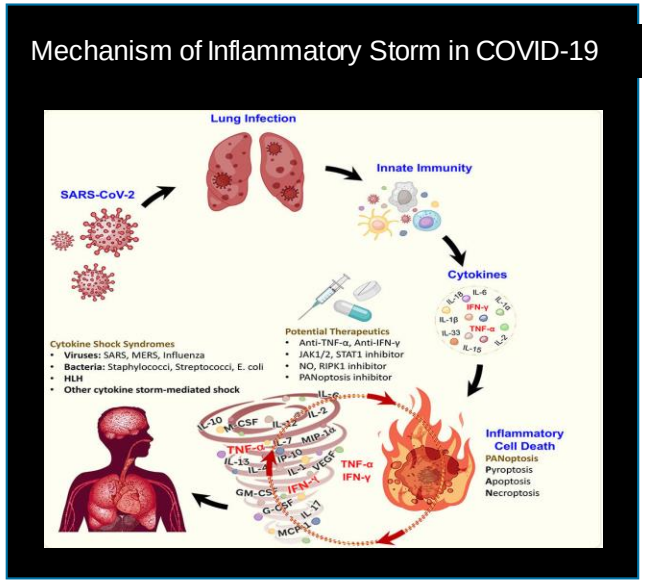
Cases depicted by bars; deaths depicted by line. Data smoothed with 7-day moving average. Note different scales for y-axes.

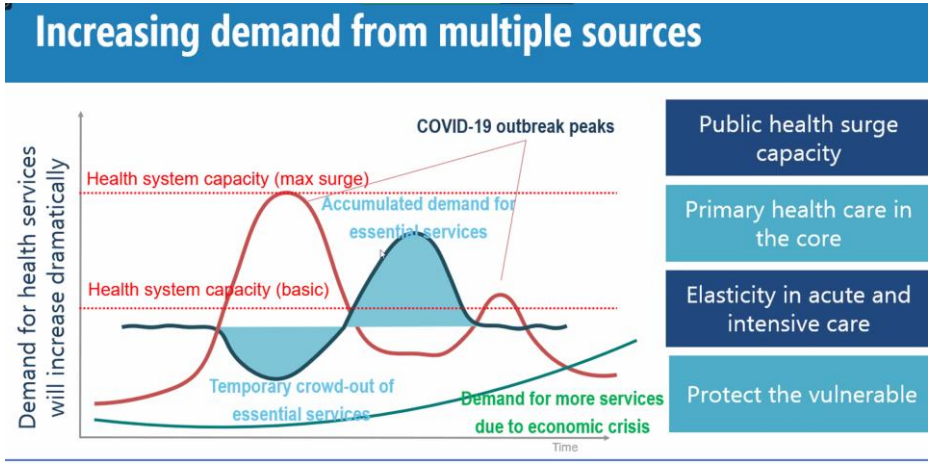
COVID-19 and HIV: What it the relationship?

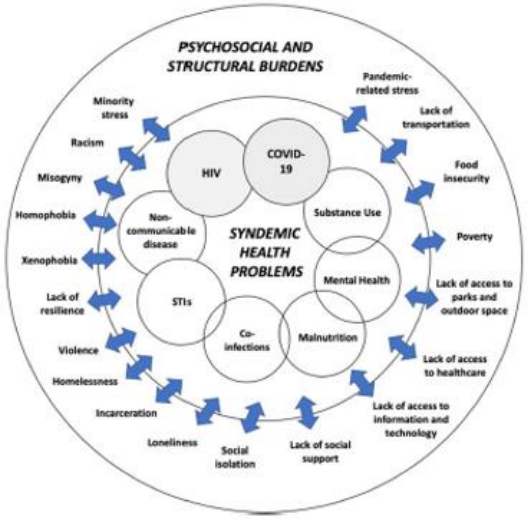
World Health Organization

- Are PLHIV on ART protected against COVID-19 ART?
- Are PLHIV more susceptible to SARS-CoV-2?
- Is COVID-19 more severe in PLHIV?
- Is the risk of death higher in PLHIV ?
- What is the impact of COVID-19 pandemic in HIV care services?
- Are COVID-19 vaccines safer and effective in PLHIV?









Efficacy and safety of ARVs for the treatment and COVID-19

Case reports and small cohort studies (mainly LPV/r)

JIAS JOURNAL OF THE INTERNATIONAL AIDS SOCIETY Open Access

REVIEW | Open Access

Systematic review of the efficacy and safety of antiretroviral drugs against SARS, MERS, or COVID-19: initial assessment

Nathan Ford, Marco Vitoria, Ajay Rangaraj, Susan L Norris, Alexandra Calmy, Meg Doherty

First published:26 March 2020 | https://doi.org/10.1002/jia2.25489

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi:10.1002/jia2.25489

22 observational studies (227 patients)

- Timing, treatment duration / dose varied, co-interventions
- The low certainty of the evidence

2 clinical trials

- **Severe COVID-19** : mortality numerically lower in the LPV/r group (14/99) compared to the control group (25/100) - not statistically significant**.**
- **Mild to moderate COVID-19:** no difference in positive to negative conversion rates for SARSCov2 and clinical outcomes

COVID-NMA COVID-19 OPEN LIVING EVIDENCE SYNTHESIS TO INFORM DECISION

The COVID-NMA initiative

A living mapping and living systematic review of Covid-19 trials

Pharmacological treatments

All-cause mortality D28

Study	Follow up days	Intervention 1	Intervention 2	r1/N1	r2/N2	Risk of Bias A	B	C	D	E	Overall	Risk Ratio [95% CI]
Mild/moderate												
Yueping L, 2020	21	Lopinavir-Ritonavir 400/100 mg/day	Standard care	0/34	0/17							
Mild to critical												
Ader F, 2021	28	Lopinavir-Ritonavir 800/200 mg/day	Standard care	14/150	12/152							1.65% 1.18 [0.57, 2.47]
Mild to critical												
Pan H, 2020	28	Lopinavir-Ritonavir 800/200 mg	Standard care	148/1411	146/1380							19.15% 0.99 [0.80, 1.23]
Mild to critical												
Horby P, 2020	28	Lopinavir-Ritonavir 800/200 mg	Standard care	374/1616	767/3424							75.99% 1.03 [0.93, 1.15]
Severe												
Cao B, 2020	28	Lopinavir-Ritonavir 400/100 mg/day	Standard care	19/99	25/100							3.21% 0.77 [0.45, 1.30]
			Total:	**555/3310**	**950/5073**							

Heterogeneity: $Q = 1.50$, $p = 0.83$; $I^2 = 0.0\%$; $\tau^2 = 0.00$

1.02 [0.93, 1.12]

Risk of bias ratings:
- Low Risk of Bias
- Some Concerns
- High Risk of Bias

Risk of Bias Domains:
A: Bias due to randomization
B: Bias due to deviation from intended intervention
C: Bias due to missing data
D: Bias due to outcome measurement
E: Bias due to selection of reported result

Intervention 1 better | Intervention 2 better

0.05 1 5

Risk Ratio

Data source: the COVID-NMA initiative (https://covid-nma.com/)

Based on available evidence, the use of LPV/r or other antiretrovirals do not improve clinical outcomes in individuals with COVID-19.

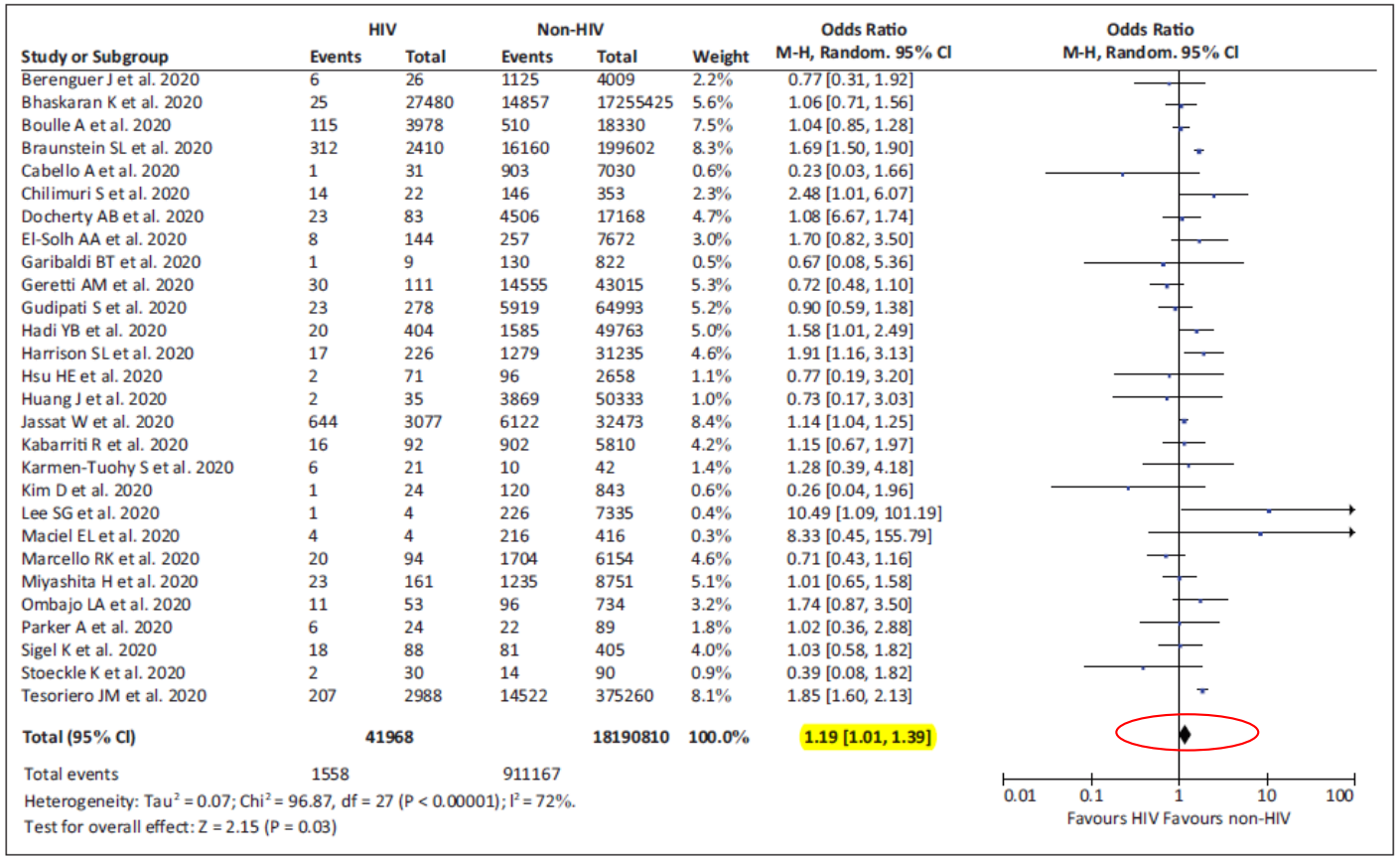
Does HIV affect COVID-19 mortality?

Recent systematic review & metanalysis (Hariyanto et al, S A J HIV Med, 2021)

- 28 studies (218,255 patient)
- Pooled analysis suggests HIV is associated with **greater mortality from COVID-19,** (OR= 1,19 95% CI 1.01-1.39, p=0.03) **and not affected by age, gender, race or ART use.**
- Subgroup analysis show statistically significance **only in studies from Africa and USA**, but not in Europe and Asia

- Weaknesses:
  - Primarily observational data and use of pre-print studies
  - Limited number of studies included CD4, VL and ART information
- Larger observational or RCTs are needed

Association of HIV with mortality from COVID-19 outcome



Study or Subgroup	HIV Events	HIV Total	Non-HIV Events	Non-HIV Total	Weight	Odds Ratio M-H, Random. 95% CI
Berenguer J et al. 2020	6	26	1125	4009	2.2%	0.77 [0.31, 1.92]
Bhaskaran K et al. 2020	25	27480	14857	17255425	5.6%	1.06 [0.71, 1.56]
Boulle A et al. 2020	115	3978	510	18330	7.5%	1.04 [0.85, 1.28]
Braunstein SL et al. 2020	312	2410	16160	199602	8.3%	1.69 [1.50, 1.90]
Cabello A et al. 2020	1	31	903	7030	0.6%	0.23 [0.03, 1.66]
Chilimuri S et al. 2020	14	22	146	353	2.3%	2.48 [1.01, 6.07]
Docherty AB et al. 2020	23	83	4506	17168	4.7%	1.08 [6.67, 1.74]
El-Solh AA et al. 2020	8	144	257	7672	3.0%	1.70 [0.82, 3.50]
Garibaldi BT et al. 2020	1	9	130	822	0.5%	0.67 [0.08, 5.36]
Geretti AM et al. 2020	30	111	14555	43015	5.3%	0.72 [0.48, 1.10]
Gudipati S et al. 2020	23	278	5919	64993	5.2%	0.90 [0.59, 1.38]
Hadi YB et al. 2020	20	404	1585	49763	5.0%	1.58 [1.01, 2.49]
Harrison SL et al. 2020	17	226	1279	31235	4.6%	1.91 [1.16, 3.13]
Hsu HE et al. 2020	2	71	96	2658	1.1%	0.77 [0.19, 3.20]
Huang J et al. 2020	2	35	3869	50333	1.0%	0.73 [0.17, 3.03]
Jassat W et al. 2020	644	3077	6122	32473	8.4%	1.14 [1.04, 1.25]
Kabarriti R et al. 2020	16	92	902	5810	4.2%	1.15 [0.67, 1.97]
Karmen-Tuohy S et al. 2020	6	21	10	42	1.4%	1.28 [0.39, 4.18]
Kim D et al. 2020	1	24	120	843	0.6%	0.26 [0.04, 1.96]
Lee SG et al. 2020	1	4	226	7335	0.4%	10.49 [1.09, 101.19]
Maciel EL et al. 2020	4	4	216	416	0.3%	8.33 [0.45, 155.79]
Marcello RK et al. 2020	20	94	1704	6154	4.6%	0.71 [0.43, 1.16]
Miyashita H et al. 2020	23	161	1235	8751	5.1%	1.01 [0.65, 1.58]
Ombajo LA et al. 2020	11	53	96	734	3.2%	1.74 [0.87, 3.50]
Parker A et al. 2020	6	24	22	89	1.8%	1.02 [0.36, 2.88]
Sigel K et al. 2020	18	88	81	405	4.0%	1.03 [0.58, 1.82]
Stoeckle K et al. 2020	2	30	14	90	0.9%	0.39 [0.08, 1.82]
Tesoriero JM et al. 2020	207	2988	14522	375260	8.1%	1.85 [1.60, 2.13]
Total (95% CI)		**41968**		**18190810**	**100.0%**	**1.19 [1.01, 1.39]**
Total events	1558		911167			

Heterogeneity: $Tau^2 = 0.07$; $Chi^2 = 96.87$, df = 27 ($P < 0.00001$); $I^2 = 72\%$.
Test for overall effect: Z = 2.15 (P = 0.03)

Odds Ratio M-H, Random. 95% CI
0.01 0.1 1 10 100
Favours HIV Favours non-HIV

HIV, human immunodeficiency virus; M-H, Mantel-Haenszel; CI, confidence interval.

Hariyanto TI. Human immunodeficiency virus and mortality from coronavirus disease 2019: A systematic review and meta-analysis.S Afr J HIV Med. 2021;22(1), a1220. https://doi.org/10.4102/ sajhivmed.v22i1.1220

WHO Global Clinical Platform for COVID-19

In May 2020 WHO/WHE launched the Global Clinical Platform and invited Member States, heath care facilities and research networks to collect patient-level **anonymized clinical data of people hospitalized with confirmed or suspected COVID19** using standardized data collection tools

Goal is to inform global and national policies and responses to COVID-19 through a «living» assessment of:

1. **Regional variations** and **temporal trends** in clinical presentations, clinical care and uptake of WHO recommended interventions for COVID-19
2. **Risk factors** associated with **mortality and disease severity** globally and by region
3. Clinical features, and prognostic factors in **subpopulations**, including **people living with HIV (PLHIV)**
4. **Post COVID-19 condition**

World Health Organization

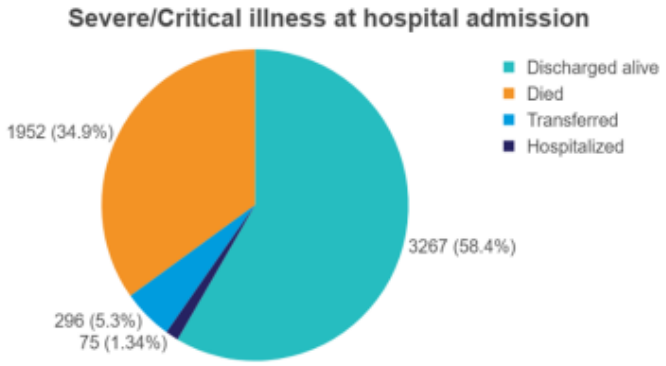
https://www.who.int/teams/health-care-readiness-clinical-unit/covid-19

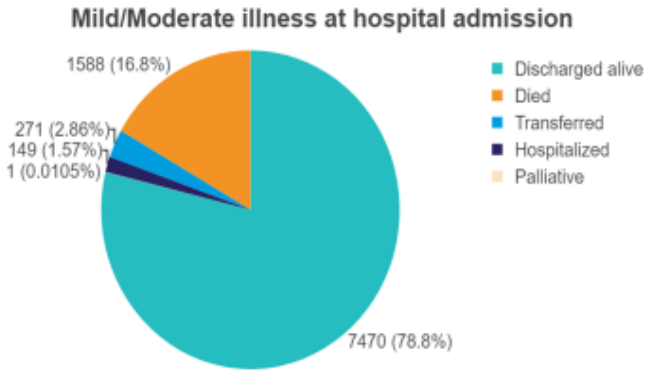
HEALTH EMERGENCIES programme

HIV & COVID-19

Outcomes among PLHIV hospitalised with COVID-19, by severity of illness at hospital admission

23.1% of PLHIV with a known outcome died during the hospital stay

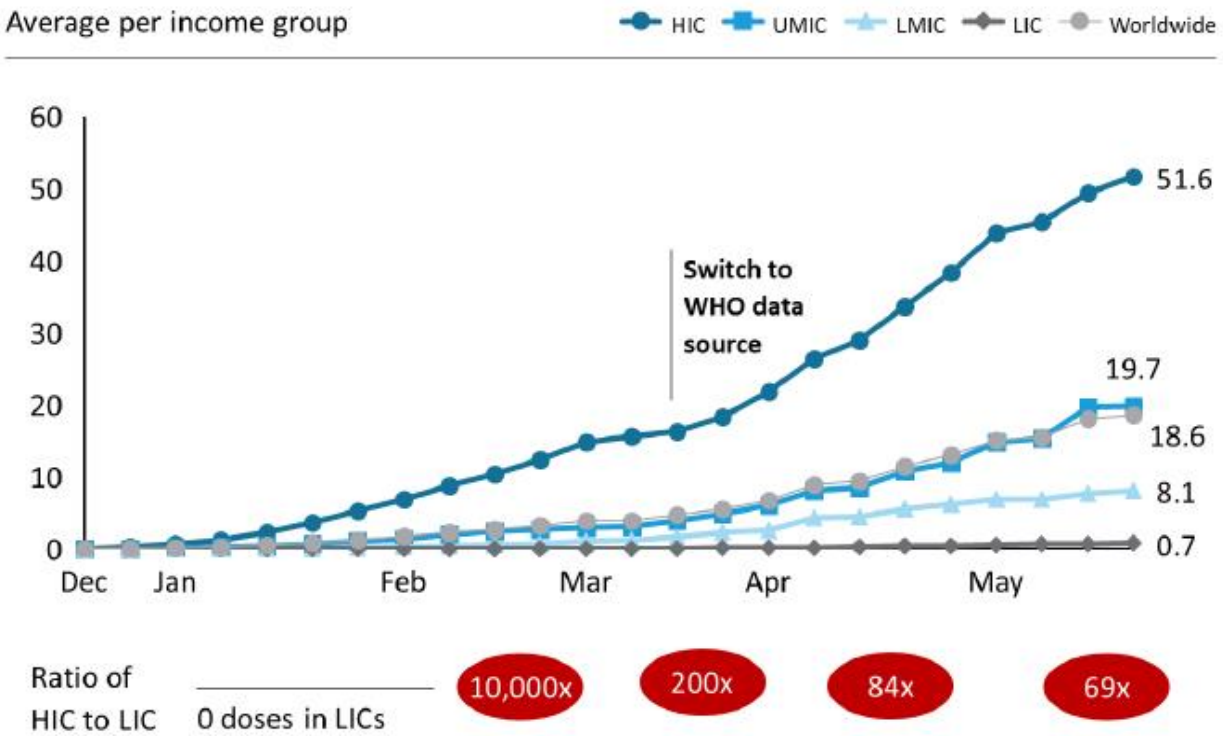




World Health Organization

Vaccination distribution

Cumulative COVID-19 doses administered per 100 population



Total COVID-19 doses administered per 100 population

World Health Organization

End-to-end: Vaccination

The world went from virus identification to in-country authorized vaccine use in less than 12 months

WHO and partners identifying 'red flag' implementation issues and **coordinating problem solving** with country programmes

85,000+ learners by 3 OpenWHO courses

Portfolio of **training, guidance and tools**

COVID Vx population prioritization and product specific **policy recommendations** developed

284 products in development

Vaccines in development using WHO specified TPP, standardized methods and definitions; Solidarity Trial designed

>2 billion doses secured for 2021

Coordinated **global safety system** for EUL vaccines and support countries systems

COVAX facility established and implemented membership, deals, financing, and terms

LOCAL

GLOBAL

Fair and equitable allocation framework and mechanism established and deployed to deliver COVAX vaccines

Global Vaccine Strategy through COVAX established, aiming to end acute phase of pandemic

Vaccine programmes are **delivering 15+ COVID vaccines**, prioritizing those at highest risk and health workers

210 countries have started campaigns for 1.6 billion doses in 5 months

71.7 million doses to 123 countries by COVAX

7 vaccines with WHO EUL

Comprehensive **readiness** assessment (VIRAT) and **National Deployment and Vaccine Plans** (NDVP) supported through Regional WHO coordination

EUL criteria established by WHO along with harmonized **regulatory processes** to assure speed and efficiency of authorizations through reliance

World Health Organization

Safety of COVID-19 vaccines in PLHIV

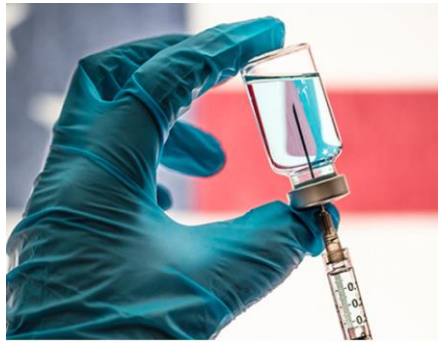
Do COVID-19 vaccines provide protection for PLHIV?

- **No evidence to support a less robust immune response to COVID-19 vaccines among PLHIV and low CD4 cell counts**
- Approved vaccines do not use attenuated viruses (similar safety to the non-immunodeficient population is plausible)
- No interaction of current vaccines with ART (ARVs show no clinical activity against SARSCov-2)

Inactivated virus | Viral subunit | Viral vector | RNA vaccines

Table. Advantages and disadvantages of immunogens used in vaccines

IMMUNOGEN	WHAT IT IS	ADVANTAGE	DISADVANTAGE	EXAMPLE OF VACCINES
Inactivated virus	Inactivated dead virus	Induces strong antibody response	Requires large quantities of virus, low or no cellular response	Influenza, rabies hepatitis A
Viral subunit	A protein derived from a pathogen	May have fewer side effects than whole virus (redness, swelling at injection site)	May be poorly immunogenic; complex process	Influenza
Viral vector	Viral pathogen expressed on a safe virus that doesn't cause disease	Rapid development, strong cellular response, relatively easy to produce	Prior exposure to vector virus (eg. adenovirus) may reduce immunogenicity, some vectors require boosting with a different vector	Ebola
Nucleic acid	mRNA coding for a viral	Strong cellular immunity; rapid	Relatively low antibody response	COVID-19



COVID-19 vaccines using adenovirus vector (AD5) & theoretical risk of HIV infection

- HIV vaccine studies - STEP & PHAMBILI (2007): increased HIV infection in male subgroups in both studies - reason uncertain (interference with vaccine-specific response or susceptibility of CD4 cells to HIV?)
- More recent study did not show this association
- Benefits of all licensed vaccines outweigh potential risks in a pandemic context
- More specific studies with vaccines using AD5 vectors are needed

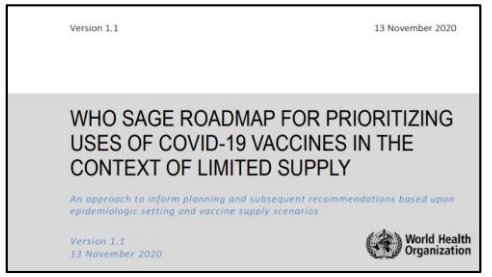
Efficacy of COVID-19 vaccines in PLHIV

Should PLHIV get COVID-19 vaccines early in the roll out?

- WHO recommends that countries refer to the WHO SAGE Roadmap For Prioritizing Uses Of COVID-19 Vaccines In The Context Of Limited Supply

- **PLHIV should not be excluded from COVID-19 vaccine access plans regardless of immune status**

- **Consider inclusion of PLHIV as priority group for COVID-19 vaccination according to epidemiological context.**


Version 1.1 13 November 2020

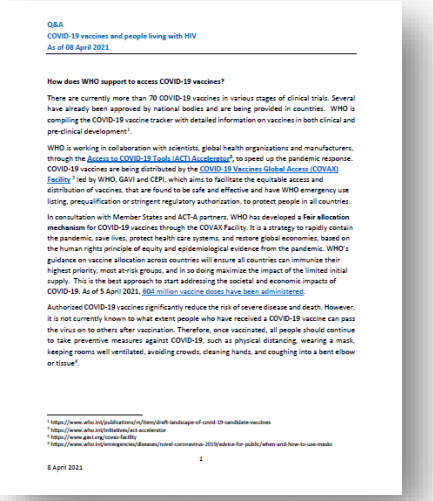
WHO SAGE ROADMAP FOR PRIORITIZING USES OF COVID-19 VACCINES IN THE CONTEXT OF LIMITED SUPPLY

An approach to inform planning and subsequent recommendations based upon epidemiologic setting and vaccine supply scenarios

Version 1.1
13 November 2020

World Health Organization

https://www.who.int/publications/m/item/who-sage-roadmap-for-prioritizing-uses-of-covid-19-vaccines-in-the-context-of-limited-supply


Q&A
COVID-19 vaccines and people living with HIV
As of 08 April 2021

How does WHO support to access COVID-19 vaccines?

There are currently more than 70 COVID-19 vaccines in various stages of clinical trials. Several have already been approved by national bodies and are being provided in countries. WHO is compiling the COVID-19 vaccine tracker with detailed information on vaccines in both clinical and pre-clinical development[1].

WHO is working in collaboration with scientists, global health organizations and manufacturers, through the Access to COVID-19 Tools (ACT) Accelerator[2], to speed up the pandemic response. COVID-19 vaccines are being distributed by the COVID-19 Vaccines Global Access (COVAX) Facility[3] led by WHO, GAVI and CEPI, which aims to facilitate the equitable access and distribution of vaccines, that are found to be safe and effective and have WHO emergency use listing, prequalification or stringent regulatory authorization, to protect people in all countries.

In consultation with Member States and ACT-A partners, WHO has developed a **fair allocation mechanism** for COVID-19 vaccines through the COVAX Facility. It is a strategy to rapidly contain the pandemic, save lives, protect health care systems, and restore global economies, based on the human rights principle of equity and epidemiological evidence from the pandemic. WHO's guidance on vaccine allocation across countries will ensure all countries can immunize their highest priority, most at-risk groups, and in so doing maximize the impact of the limited initial supply. This is the best approach to start addressing the societal and economic impacts of COVID-19. As of 5 April 2021, 604 million vaccine doses have been administered.

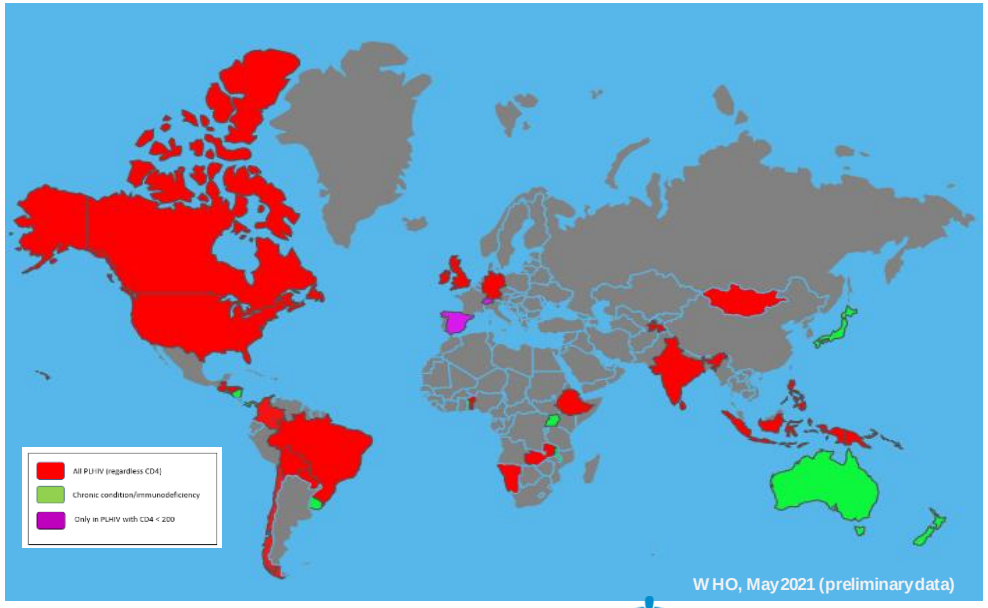
Authorized COVID-19 vaccines significantly reduce the risk of severe disease and death. However, it is not currently known to what extent people who have received a COVID-19 vaccine can pass the virus on to others after vaccination. Therefore, once vaccinated, all people should continue to take preventive measures against COVID-19, such as physical distancing, wearing a mask, keeping rooms well ventilated, avoiding crowds, cleaning hands, and coughing into a bent elbow or tissue[4].

[1] https://www.who.int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines
[2] https://www.who.int/initiatives/act-accelerator
[3] https://www.gavi.org/covax-facility
[4] https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/when-and-how-to-use-masks

1

8 April 2021

40 countries have included PLHIV as a priority group in their national COVID-19 vaccine plans



World Health Organization

HIV vs COVID-19: comparative vaccine pipelines in 2020

Compilation from several sources, Apr 2021

World Health Organization

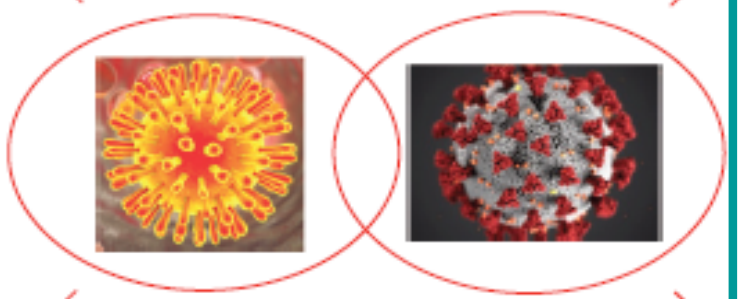
Question	HIV vaccine candidates	COVID-19 vaccines candidates
Timeline	35+ years	15 months
Total number of candidates developed	18 in clinical evaluation 28 in pre-clinical **46 total** 4 tested in efficacy trials none approved 100+ other discontinued pre-efficacy	91 in clinical evaluation 184 in preclinical **275 total (6 based on HIV vaccines)** 13 products approved by at least one SRA
Total investment in USD/ vaccine development effort	$14.5 billion from 2000-2018 (no specific data pre-2000) In 2018: $842 million: basic research (17.5%) preclinical (42.9 %), clinical (36%), cohort (2.8 %), advocacy (2.8%)	~ $10 billion in 2020 R&D manufacturing: Investment in R&D of $2.4 B; tech transfer/scale-up $1.7 B, at-risk manufacturing of $5.3 B; ~$4.3 B at-risk manufacturing (to be recovered as inventory value for successful candidates).
Total investment in 2020 for vaccine effect	**$850-900 million**	**$100-105 billion**
Active Industry Investments in Late-Stage Trials and Development	2	10

Interaction of the HIV and SARS-CoV-2 pandemics and unanswered questions

World Health Organization

Clinical:
- Worse outcome possible for people living with HIV
- Not noticed in small series but suggested in large cohort studies
- Consider different diagnoses (eg, *Pneumocystis jirovecii*)
- Consider coinfections

Epidemiological:
- Higher effect in susceptible populations
- Disruption to HIV prevention and treatment services due to the COVID-19 pandemic



Impact:
- Increase HIV viraemia and excess mortality in people living with HIV due to COVID-19-induced interruption in health-care services
- Interference in prevention campaigns (ie, pre-exposure prophylaxis), with increased HIV transmissions

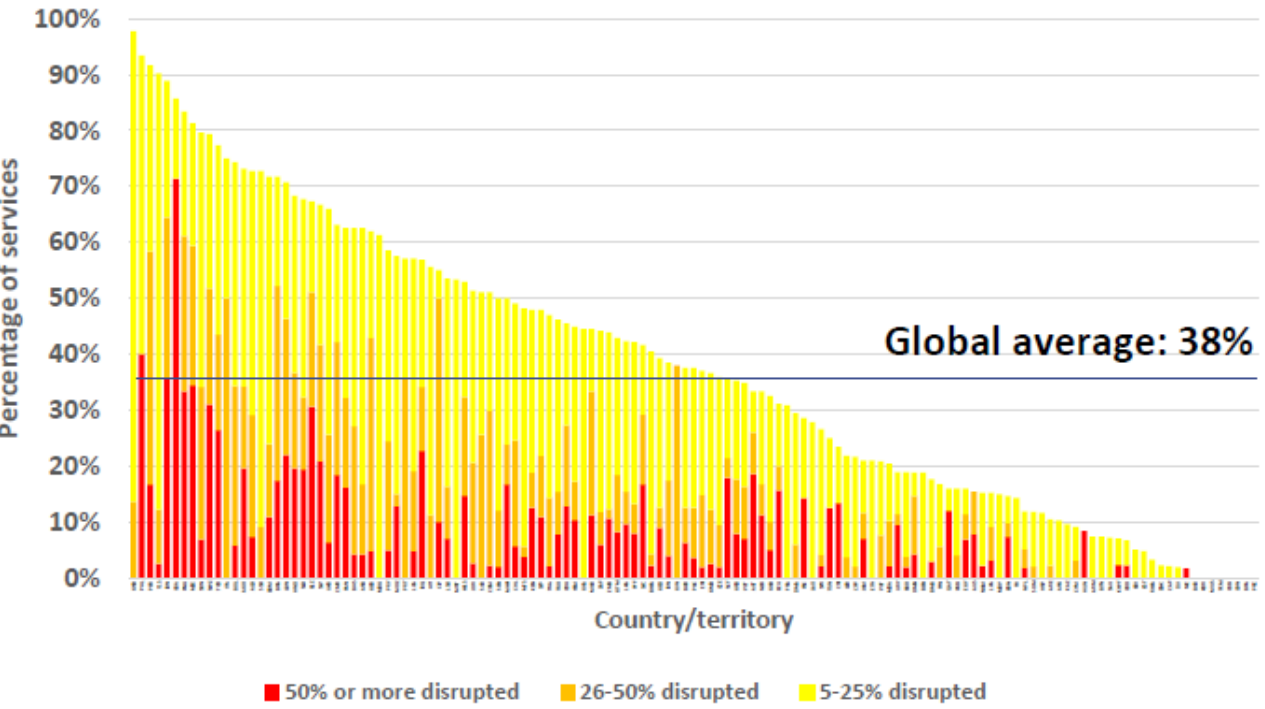
COVID-19 treatment:
- No evidence that antiretroviral drugs are active against SARS-CoV-2
- Treat COVID-19 infection similar to HIV-negative individuals
- Check drug–drug interactions
- Seek advice of an HIV specialist

SARS-CoV-2 prevention:
- Immune responses to SARS-CoV-2 vaccines unknown
- Immunosuppressed people living with HIV being a priority group for vaccination

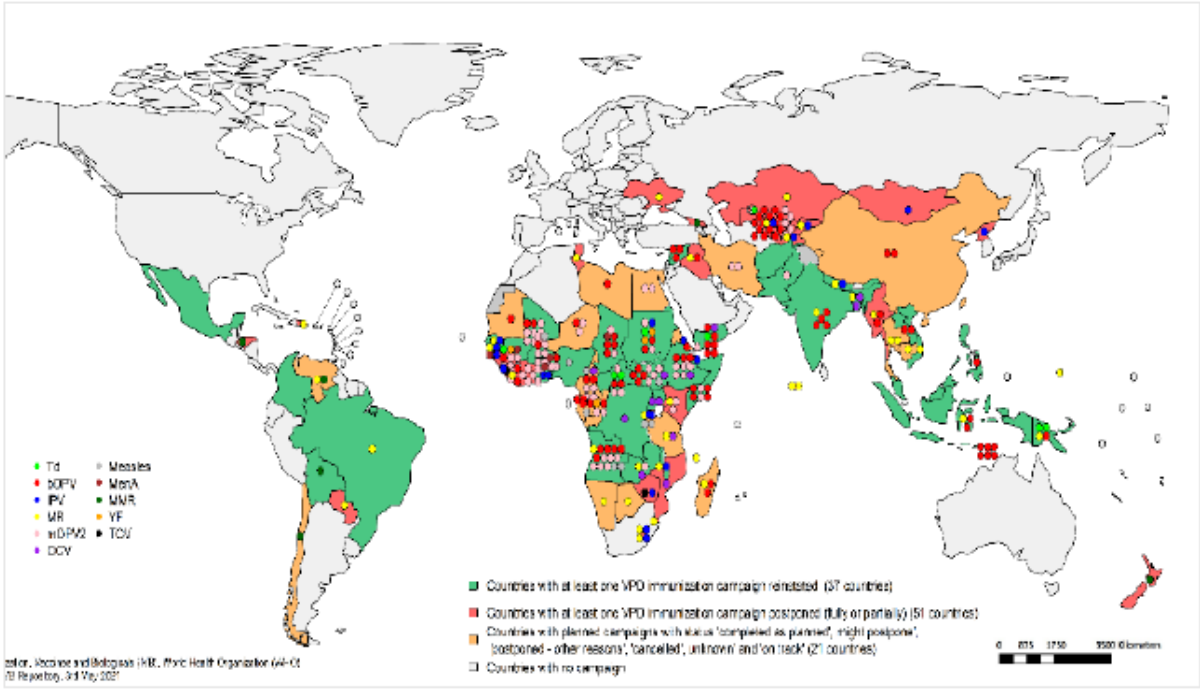
Comorbidities in people living with HIV:
- Worse clinical outcome for COVID-19 infection related to comorbidities, which are more prevalent in people living with HIV compared to general population

COVID-19 continues to disrupt essential health services

Percentage of responding countries (n= 135) experienced a disruption to health services due to COVID-19



Vaccine preventable disease campaigns postponed due to COVID-19

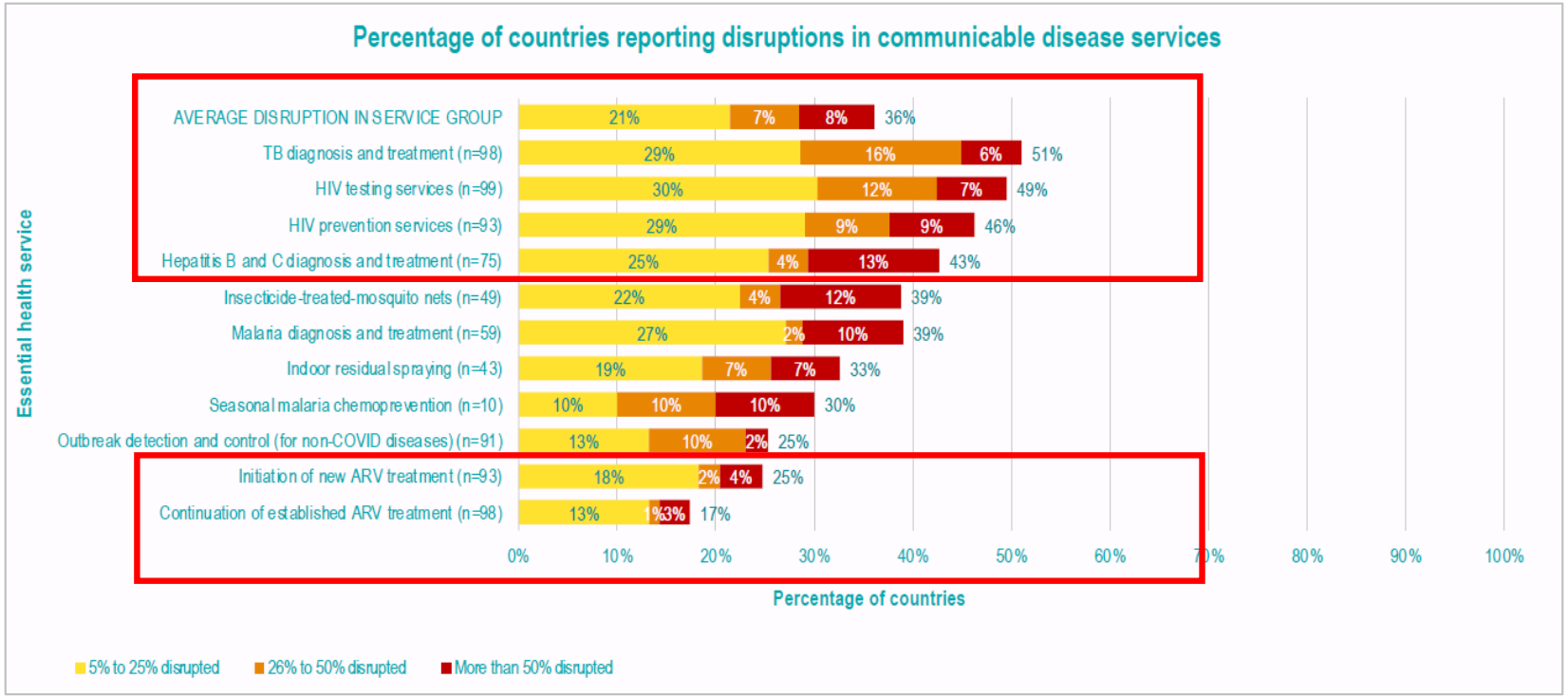


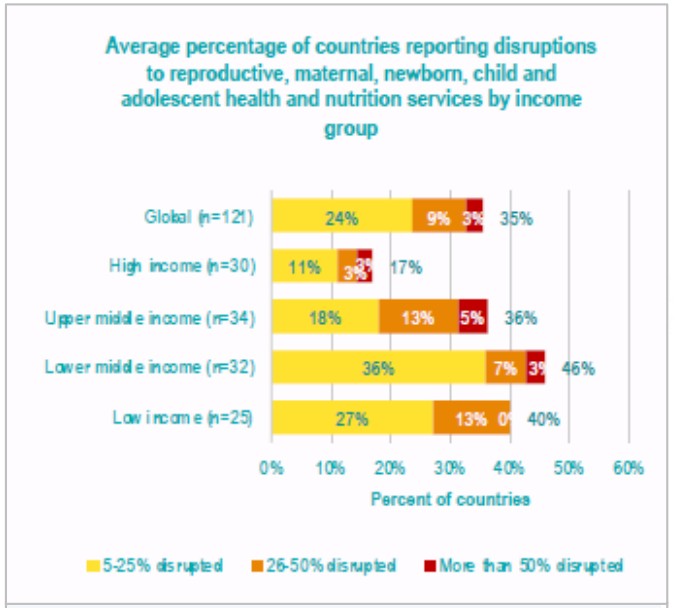
World Health Organization

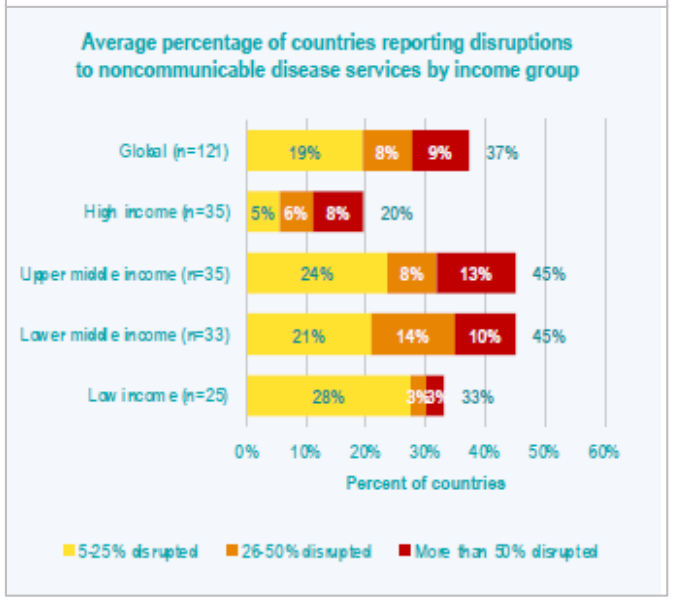
Pulse survey on continuity of essential health services during the COVID-19 pandemic

Global results – as of 16 April 2021

World Health Organization



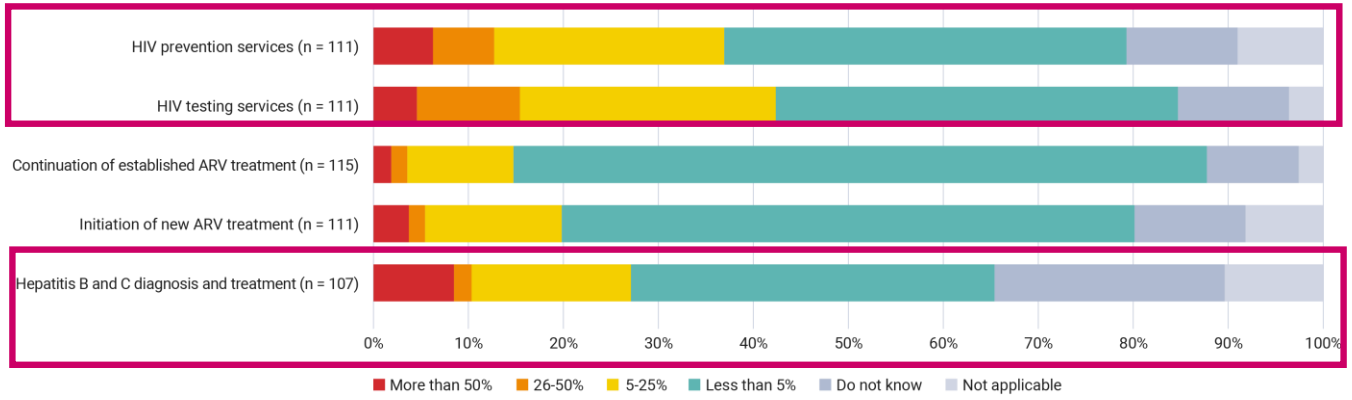




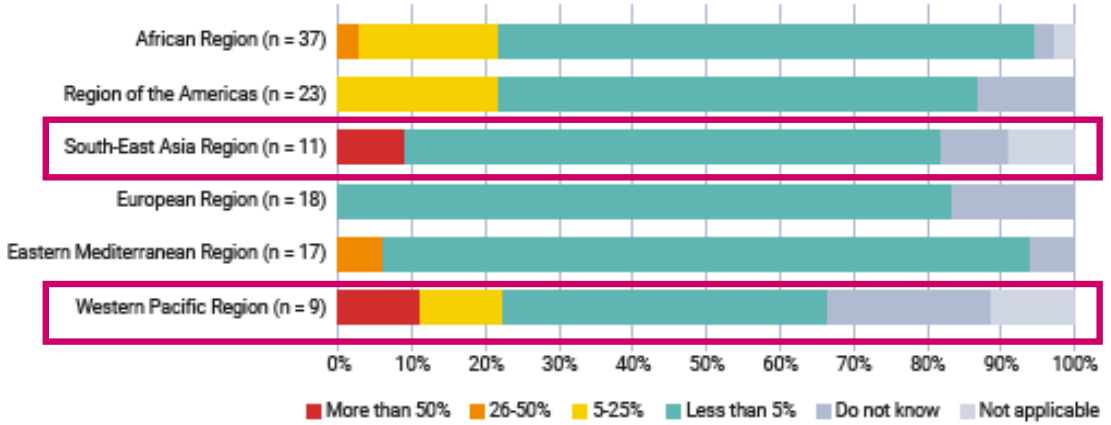
COVID-19 Disruptions of HIVs Diagnosis & Treatment Services

World Health Organization

Disruption in other services for HIV and viral hepatitis, March 2021



Disruption in of ART services caused by COVID-19, by WHO region, March 2021

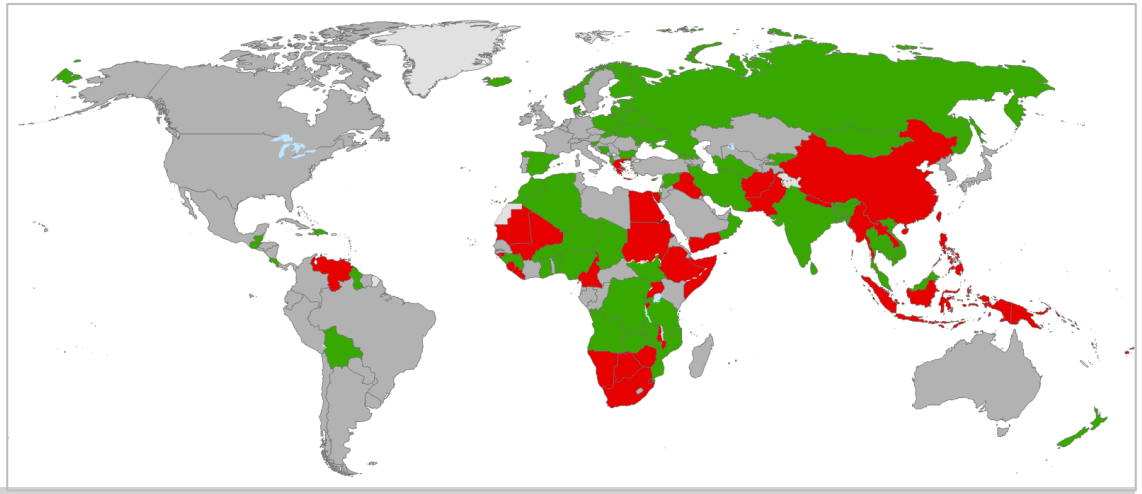


Report has best practices from each region of policy implementation and community delivery

Countries reporting on ARV disruptions due to COVID-19, 2020-21

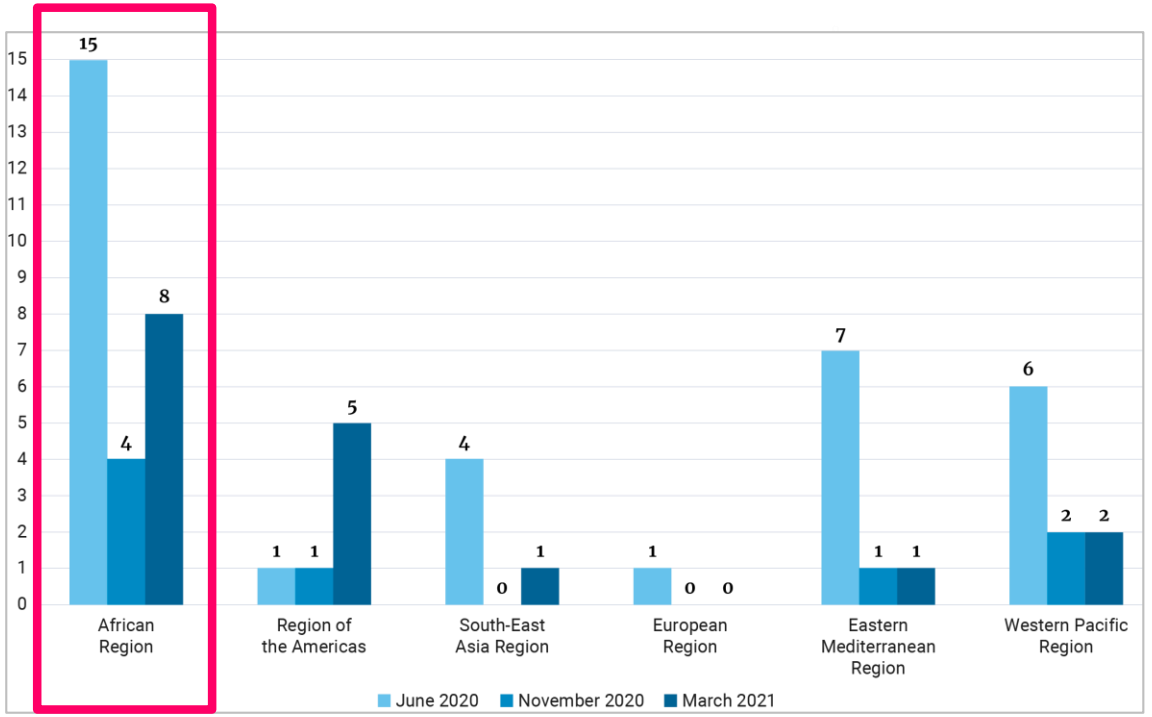
World Health Organization

Preliminary results compiled from a survey conducted by WHO between April and Sept 2020 (n=127)



Results compiled from a survey conducted by WHO in November 2020 (n=152): 9 countries reported ARV disruptions

Number of countries reporting disruption in antiretroviral therapy services in June 2020, November 2020 and March 2021



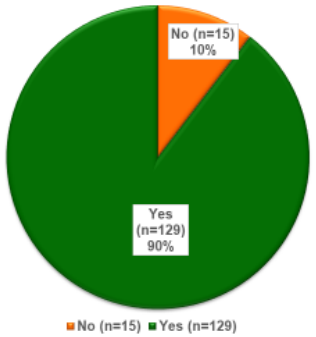
Source: Global HIV, Hepatitis and STIs Programmes (HSS), WHO, 2020

Countries reporting on ARV disruptions due to COVID-19, 2020 -21

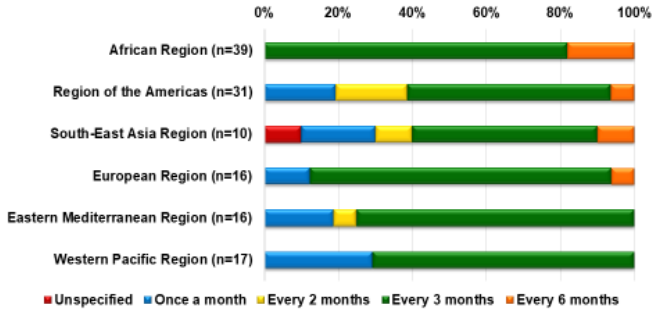
National policies on frequency of ART pick-up for people who are stable on ART, 2020

World Health Organization

ARV multi-month dispensing policy adoption (n=144)



Frequency of antiretroviral dispensing in national policies by WHO Region (n=129)

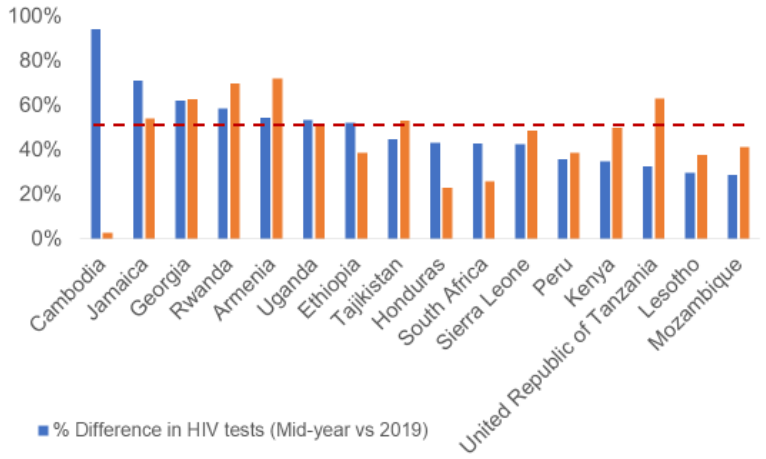


Source: Global Aids Monitoring, UNAIDS/WHO/UNICEF and WHO HIV/HEP/STI COVID-19 Questionnaire, 2020

World Health Organization

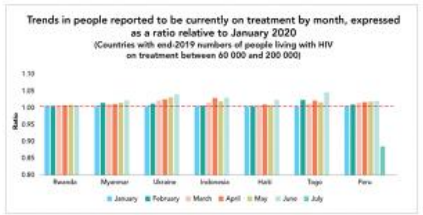
Difference in total HIV tests and HIV positive tests

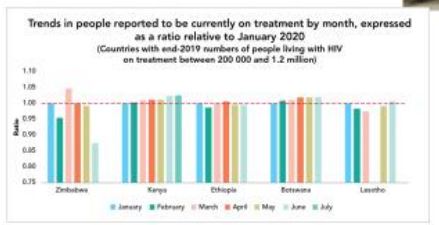
Comparing percent difference between Jan-Sep 2020 GAM and annual 2019 GAM

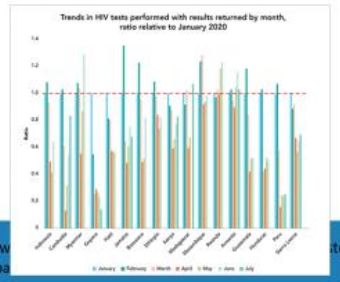


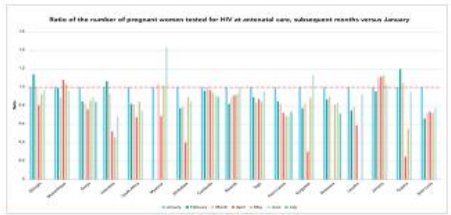
- Most countries do not appear on track to achieve both HIV testing and total positive diagnoses achieved in 2019
- Jamaica, Georgia, Rwanda, Armenia, and Uganda appear mostly on track to achieve HIV testing and positive test volumes in 2019.
- Cambodia – despite substantial testing very few positive tests reported compared to 2019
- Importantly some reductions in HIV testing compared to 2019 are due to broader efforts to invest in more targeted testing in 2020 prior to COVID-19 related disruptions

COVID-19: HIV testing declines; EMTCT is mixed, and treatment stable





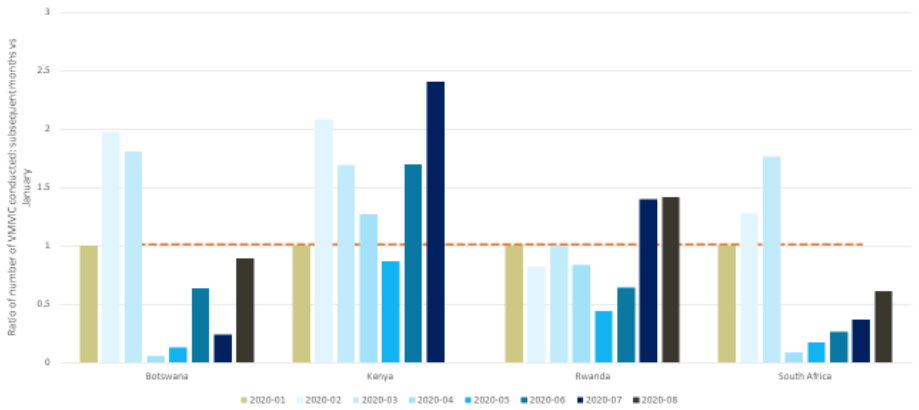




https://w tories/2020/october/20201027_covi d19-impa

World Health Organization

In Botswana, Kenya, Rwanda, and South Africa VMMC services were suspended or slowed down in April 2020, however services are resuming



Source: UNAIDS HIV services tracking tool, 2020
Notes: Data are reported monthly by national country teams, with support from UNAIDS, UNICEF, and WHO. Historical monthly data may be updated or revised at the time of each submission; thus results may change.

Are new care delivery models effective?

World Health Organization

Opportunities to build back better health systems to address inequalities

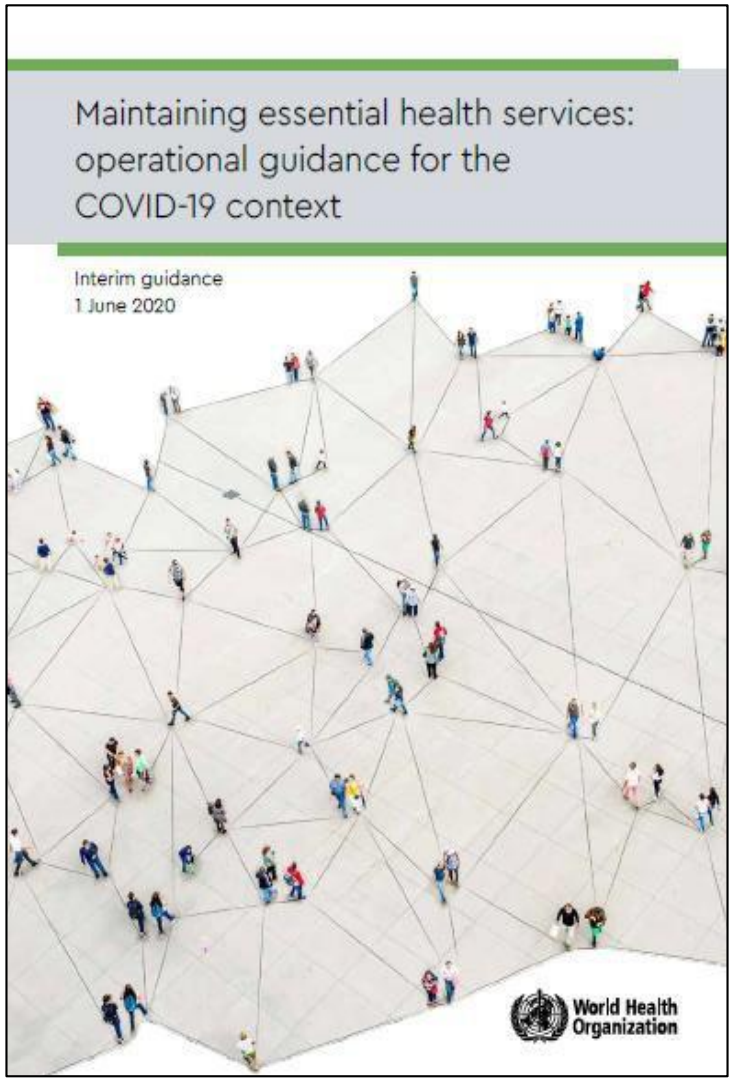
Published qualitative studies show the feasibility of introducing innovative approaches for testing, PrEP and ART, OST and other treatment distribution as possible and important solutions in LMIC settings during COVID-19

Testing & Delivery Models	• Available evidence shows **overall high positive acceptance of HIV self-testing among PLWH during lockdown** • One qualitative paper in Kenya reported reduction of outreach and testing services among sex workers (Q2#15)

Treatment Delivery Models	• **PrEP/ART teleconsultation**
	  • In Brazil, PrEP teleconsultation was experienced by 23% of users, with 89% feeling satisfied and **70% reporting high openness and acceptability to PrEP teleconsultation.** (Q2 #1)
	  • In Italy, 24% of patients in a large HIV clinic used teleconsulting, with no patients visiting the unit presented with acute COVID. (Q2 #5)
	  • In Australia, HIV care continued with 95% and 98% being able to access their HIV provider and antiretroviral therapy (ART), respectively. **Telehealth was used by 92% and was largely well received.** (Q2 #14)
	• **Multi-month dispensing:** In Egypt, multi-month dispensing of ART was implemented among a small group of participants (n=40) who **self-reported increased adherence**. (Q2#2)
	• **Telemedicine Pre-Planning:** In a randomized trial of visits delivered by telemedicine in the US, HIV patients were randomized to have a pre-visit planning call to address barriers to telemedicine visit versus a standard reminder call. **No difference between pre-visit and control in scheduled visit attendance** (83% v. 78%, OR 1.38, 95% CI 0.67–2.81). (Q2#3)

Prevention Delivery Models	• **Prevention**: One study (UK) used automated SMS messages sent to construction workers with unknown HIV status resulted in 22% subsequently taking a HIV test during 10-week study period. (Q2#4) • In Kenya, a virtual outreach program using social media platforms (WhatsApp, Facebook, Grinder) was

Maintaining Essential Health Services

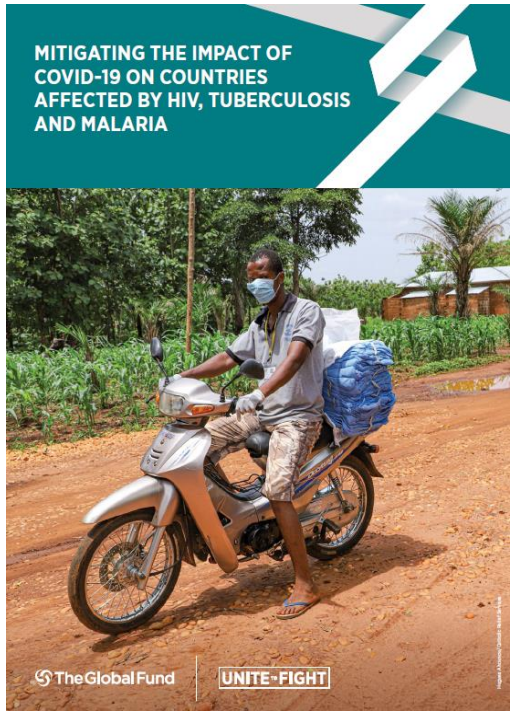


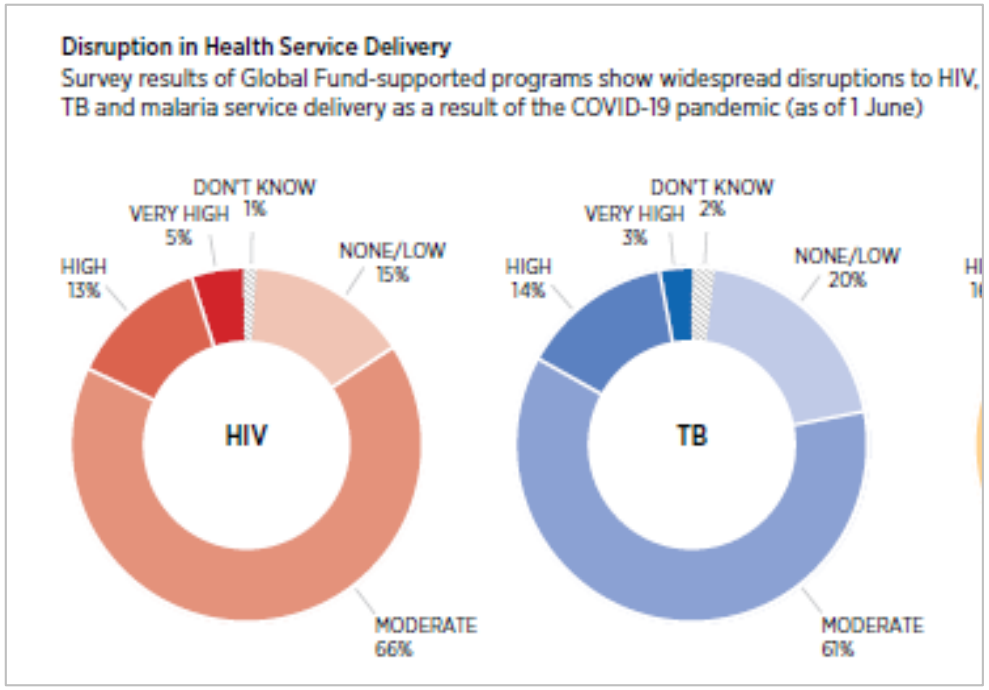
New version of operational guidance -underdevelopment

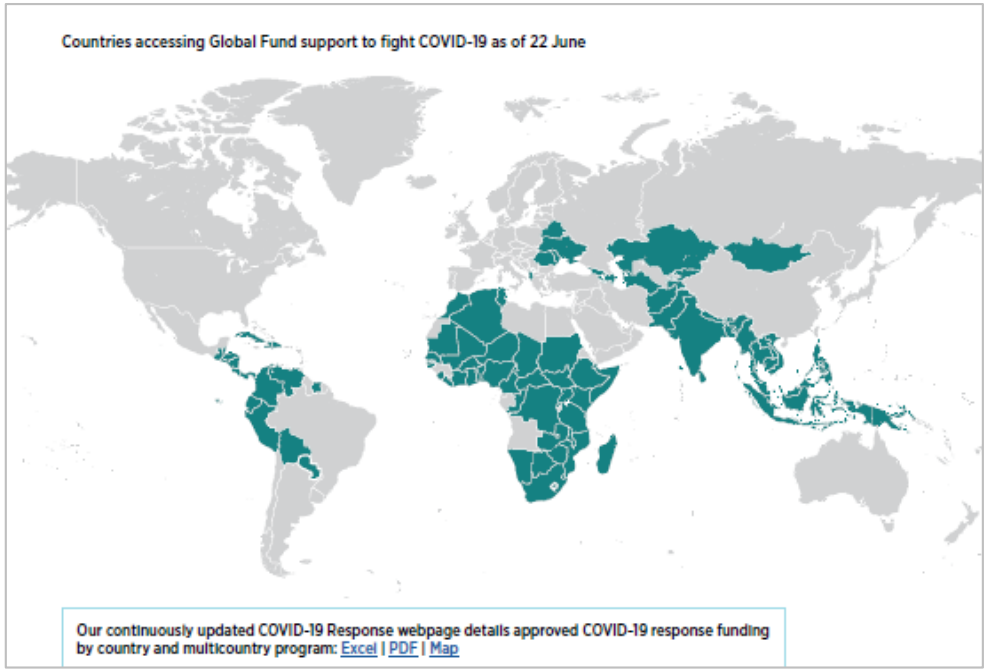
1) expands on the operational choices facing countries,
2) accommodates critical changes in disease-specific and life-course program guidance according to:

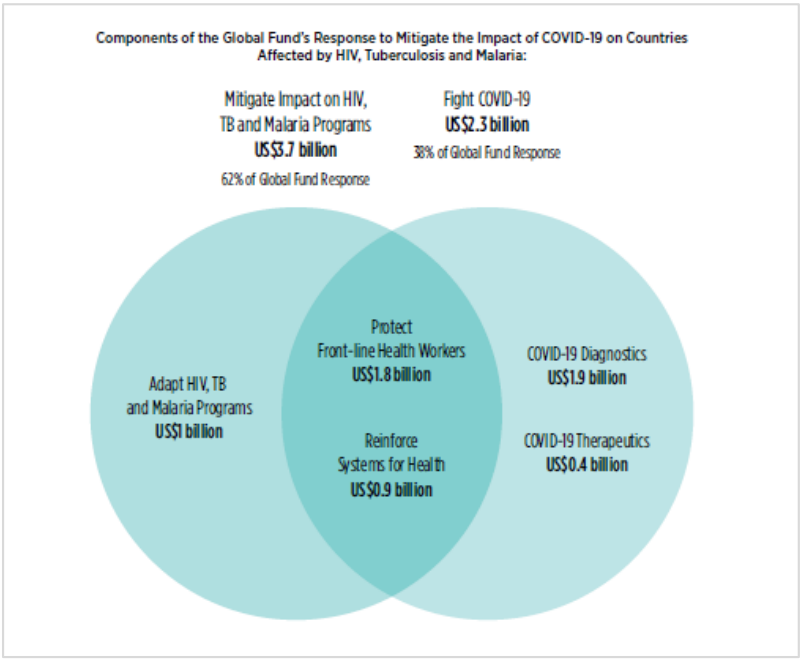
- Horizon of COVID-19 vaccination distribution
- Impact of prolonged disruption of services
- Accumulating direct and indirect impact of the pandemic on HCW & communities
- Sustained changes in care seeking behavior
- Sustained changes in service delivery context
- Need to orient response capacity-building activities towards forward-thinking health system strengtheninh
- Changes in risk and patterns of transmission with new variants

C19 RM 2.0









The Global Fund's Response to Mitigate the Impact of COVID-19 on Countries Affected by HIV, Tuberculosis and Malaria[7]:
All figures in US$

	Resource Need for Global Fund Implementing Countries	Global Fund Share
Adapt HIV, TB and Malaria Programs	$2.7bn	$1bn
Protect Front-line Health Workers	$10.8bn	$1.8bn
Reinforce Systems for Health	$2.3bn	$0.9bn
Fight COVID-19	$12.7bn	$2.3bn
Diagnostics	$4.9bn	$1.9bn
Therapeutics	$7.8bn	$0.4bn
SUBTOTAL	$28.5bn	$6bn
Global Fund resources already made available through grant flexibilities and the COVID-19 Response Mechanism		$1bn
TOTAL ADDITIONAL RESOURCES REQUIRED		**$5bn**

7 The breakdown of funding across the categories is indicative and does not necessarily reflect how the US$6 billion will be distributed.

C19 RM 2.0 Update

2021 Fast-track Requests:

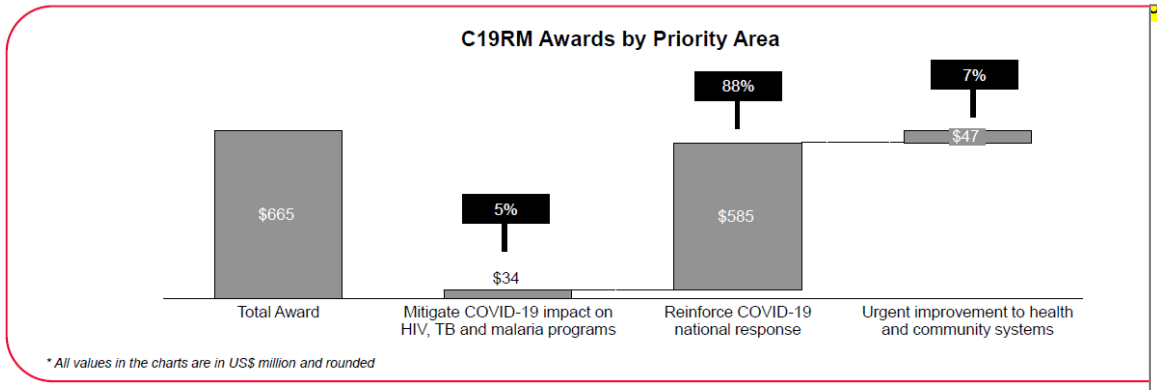
- **US$493 million is awarded** to 29 countries and 1 multicountry/ via Fast-track (represents 6.8% of applicants' HTM allocation). This represents 55% of the total Fast-track mechanism.
- In total **39 fast-track requests were received, including 8 to be resubmitted due to incomplete documentation.**
- Assuming all under review are approved **34% of the US$900 million ceiling remains available** for award.

OVERVIEW

(as of June 21)

C19RM Award by Priority Area

Award by priority area: Investments are mainly **directed towards reinforcing COVID-19 national response**. This is expected as the awards are for Fast-track. With only five Full Funding Requests **awarded or recommended for Board approval,** we are already seeing a **more balanced picture across the priority areas**.



THE GLOBAL FUND

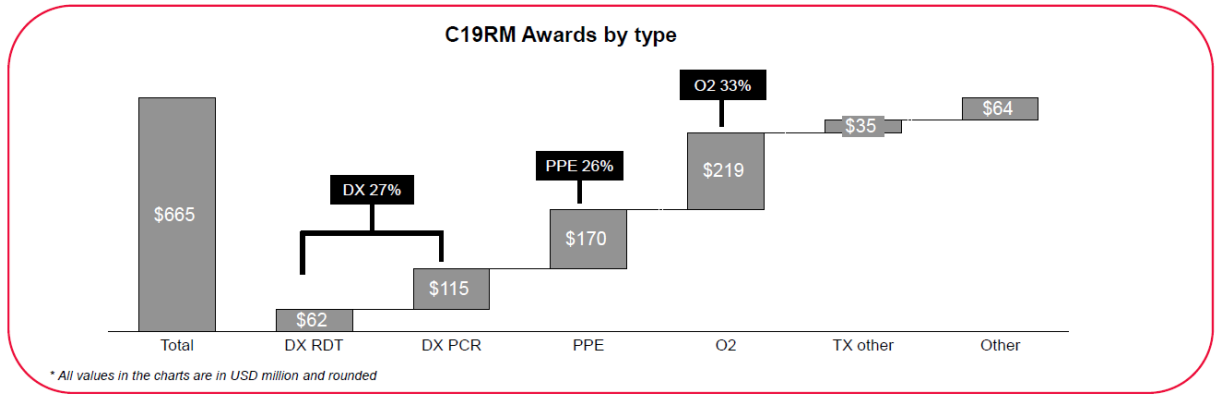
OVERVIEW

(as of June 21)

C19RM Award by Health Products

Health product **investments are more balanced across key Health Products**

Over **50% of awards to date** are expected to come **via Wambo**.



THE GLOBAL FUND

9

Summary

Question	Key Messages
Use of ARVs for treatment of COVID-19	• No evidence that LPV/r or other ARVs improve COVID-19 clinical outcomes
Clinical/epidemiological links between HIV and COVID-19 (impact on incidence, severity and mortality of COVID-19)	• Evidence is mixed, particularly PLHIV susceptibility to COVID-19. • Recent data suggest the evidence may be strongest to support a relationship between HIV and COVID-19-related severity and in hospital mortality. • Similar to those without HIV, co-morbidities among PLWH are correlated with greater severity and mortality.
COVID-19 impact on HIV morbidity and mortality (health service disruptions)	• Maintaining access to testing, ART and adherence support is of the utmost importance to minimize excess HIV-related mortality due to COVID-19 restrictions. • Community interventions and remote-based treatment and delivery models (m-health) are a feasible and acceptable way to deliver HIV. • MMD, has provided an important role in mitigating the impact
Safety and efficacy of COVID-19 vaccines in PLHIV	• Current approved vaccines are considered safe and effective in PLHIV, regardless of clinical /immunological status. • PLHIV should not be excluded from COVID-19 vaccine access plans regardless of their immune status, and **countries ought to consider including PLHIV as a priority group for COVID-19 vaccination according to their epidemiological context**.

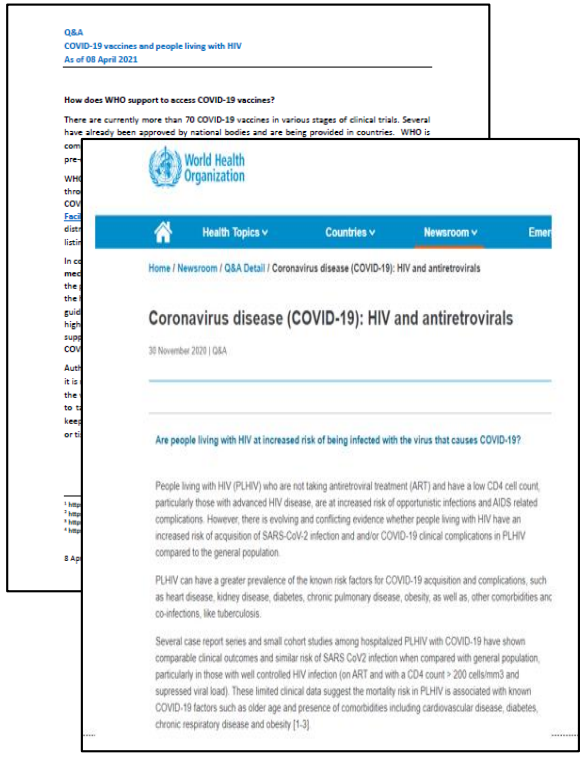
COVID-19 info at WHO website

World Health Organization

Q&A: COVID-19 vaccines and ARVs in PLHIV

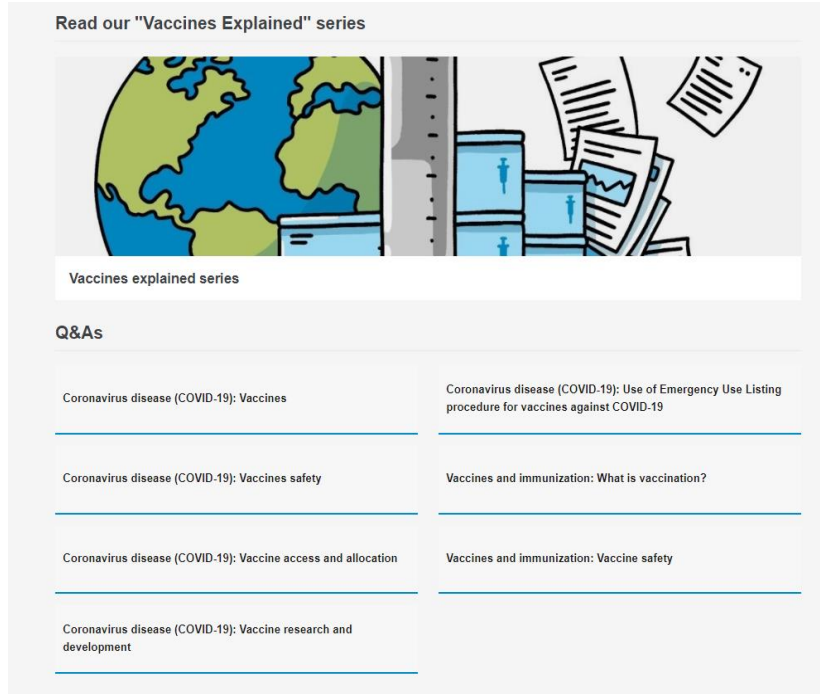
https://www.who.int/news-room/q-a-detail/coronavirus-disease-(covid-19)-covid-19-vaccines-and-people-living-with-hiv

https://www.who.int/news-room/q-a-detail/coronavirus-disease-covid-19-hiv-and-antiretrovirals


Q&A
COVID-19 vaccines and people living with HIV
As of 08 April 2021

How does WHO support to access COVID-19 vaccines?

There are currently more than 70 COVID-19 vaccines in various stages of clinical trials. Several have already been approved by national bodies and are being provided in countries. WHO is



https://www.who.int/emergencies/diseases/novel-coronavirus-2019

Thank you

Acknowledge support from:

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- Daniel Low-Beer
- Lara Vojnov
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- Andy Seale

World Health Organization