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# TARGETS UPDATE

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# **HIV and COVID-19: Drawing Lessons from Dual Pandemics**

28 July 2022

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**Director - Global HIV, Hepatitis and STIs Programmes**

**World Health Organization**

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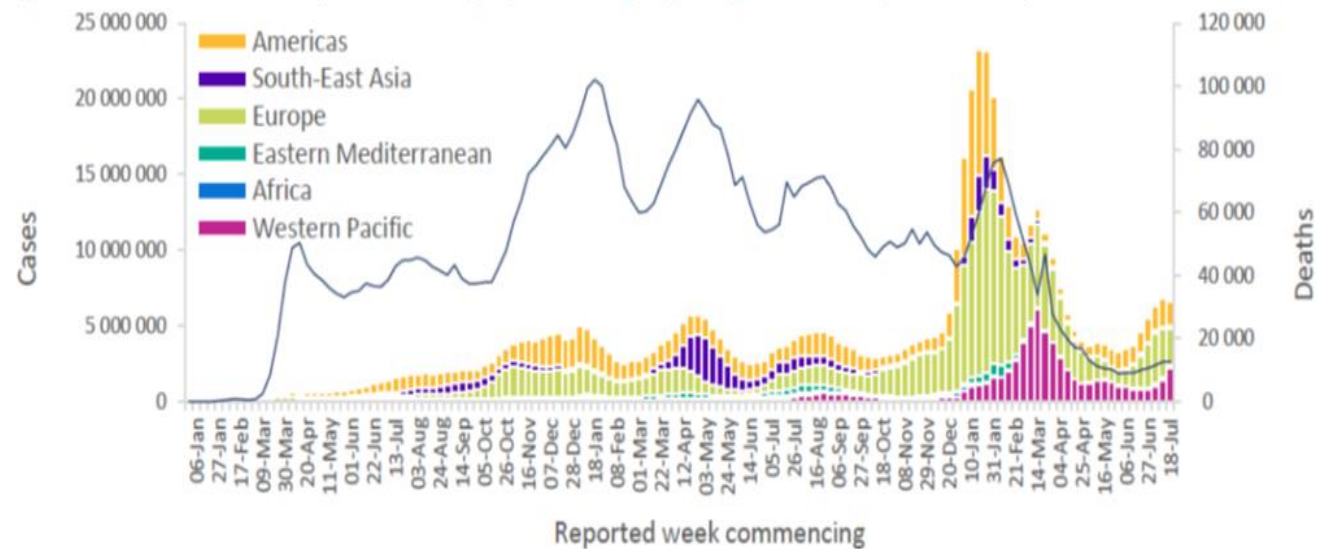
**TARGETS UPDATE**

# COVID-19 Situation: COVID-19 is not over

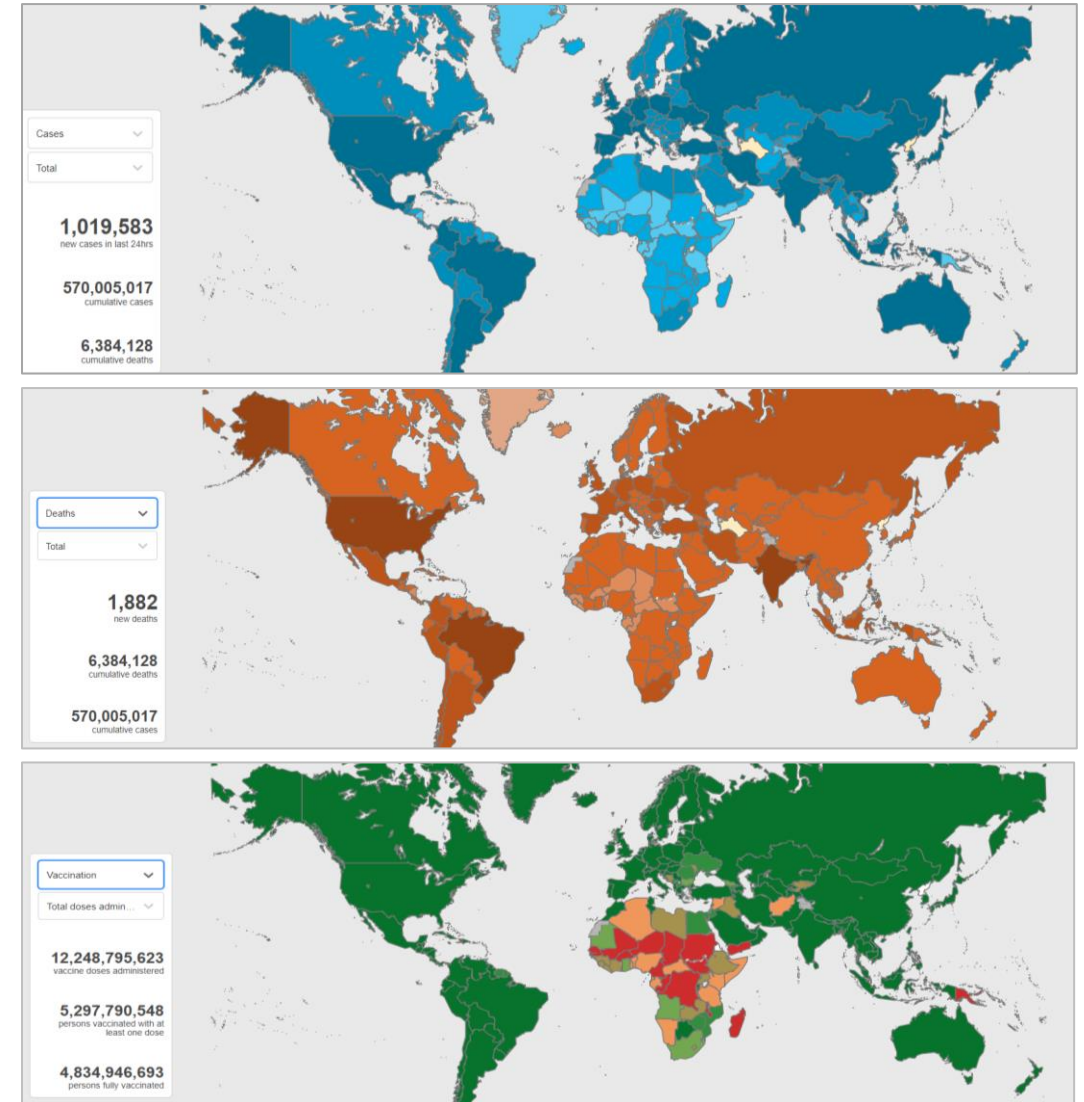


Globally, as of 4:28pm CEST, 27 July 2022, there have been 570,005,017 confirmed cases of COVID-19, including 6,384,128 deaths, reported to WHO. As of 26 July 2022, a total of 12,248,795,623 vaccine doses have been administered.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 24 July 2022\*\*



\*\*See [Annex 1: Data, table, and figure notes](#)



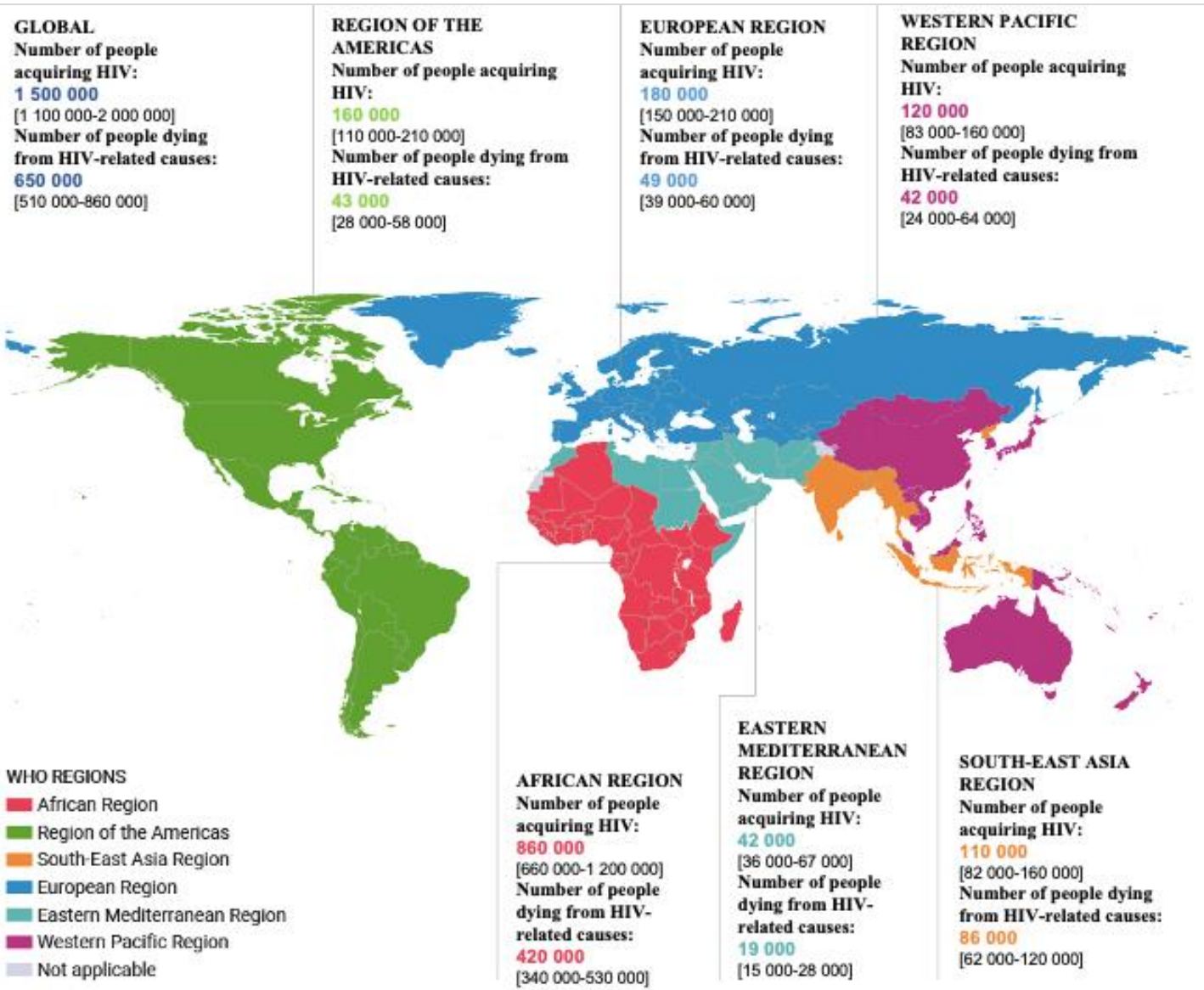


# Global and regional HIV epidemic, 2021

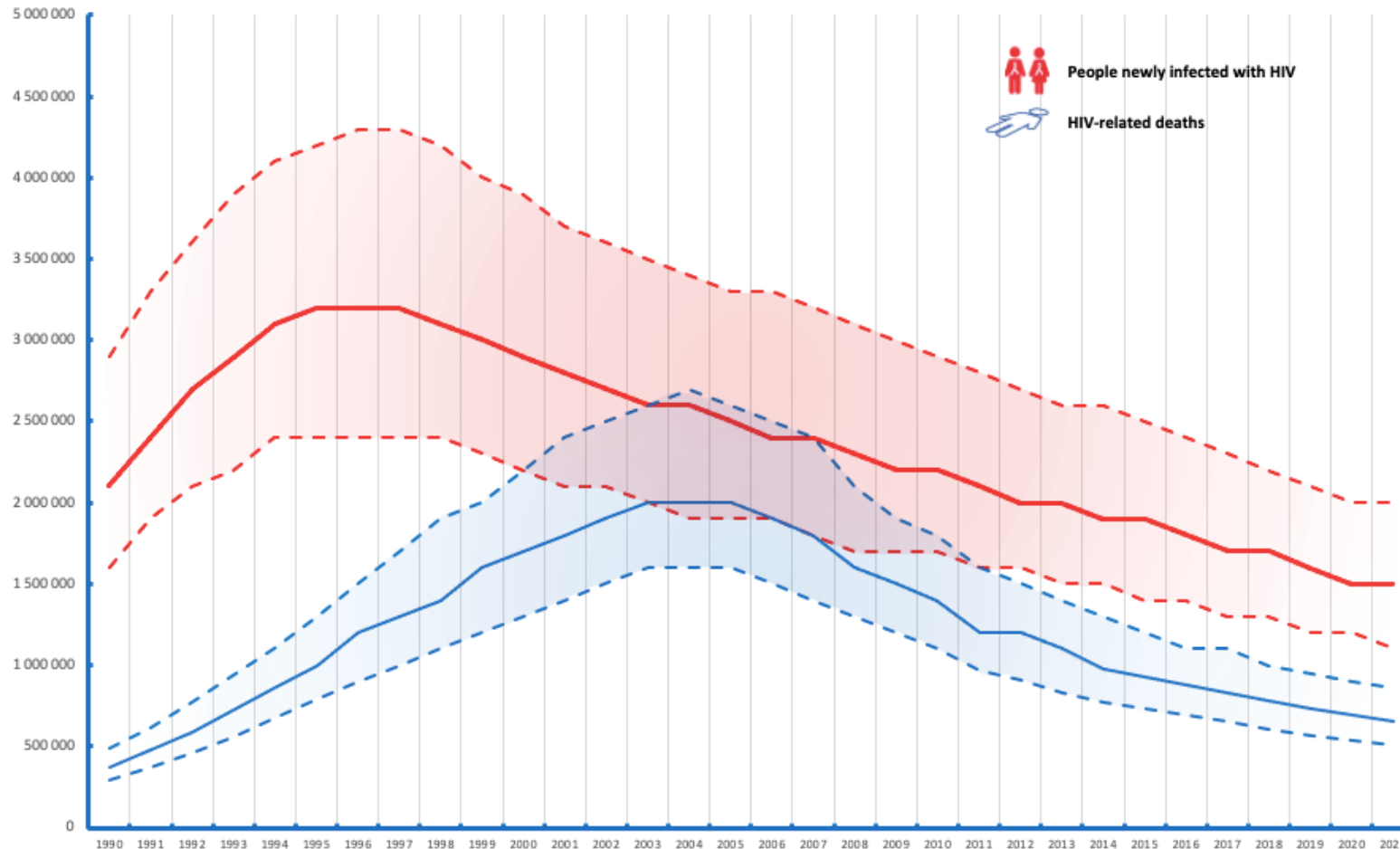


## New infection every two minutes in AGYW 2021

- Eastern Europe and central Asia, Latin America, and the Middle East and North Africa have all seen increases in annual HIV infections over several years
- New HIV infections are rising where they had been falling
- New infections dropped only 3.6% between 2020 and 2021, the smallest annual decline since 2016



# Decline in number of people acquiring HIV and HIV-related deaths globally over time

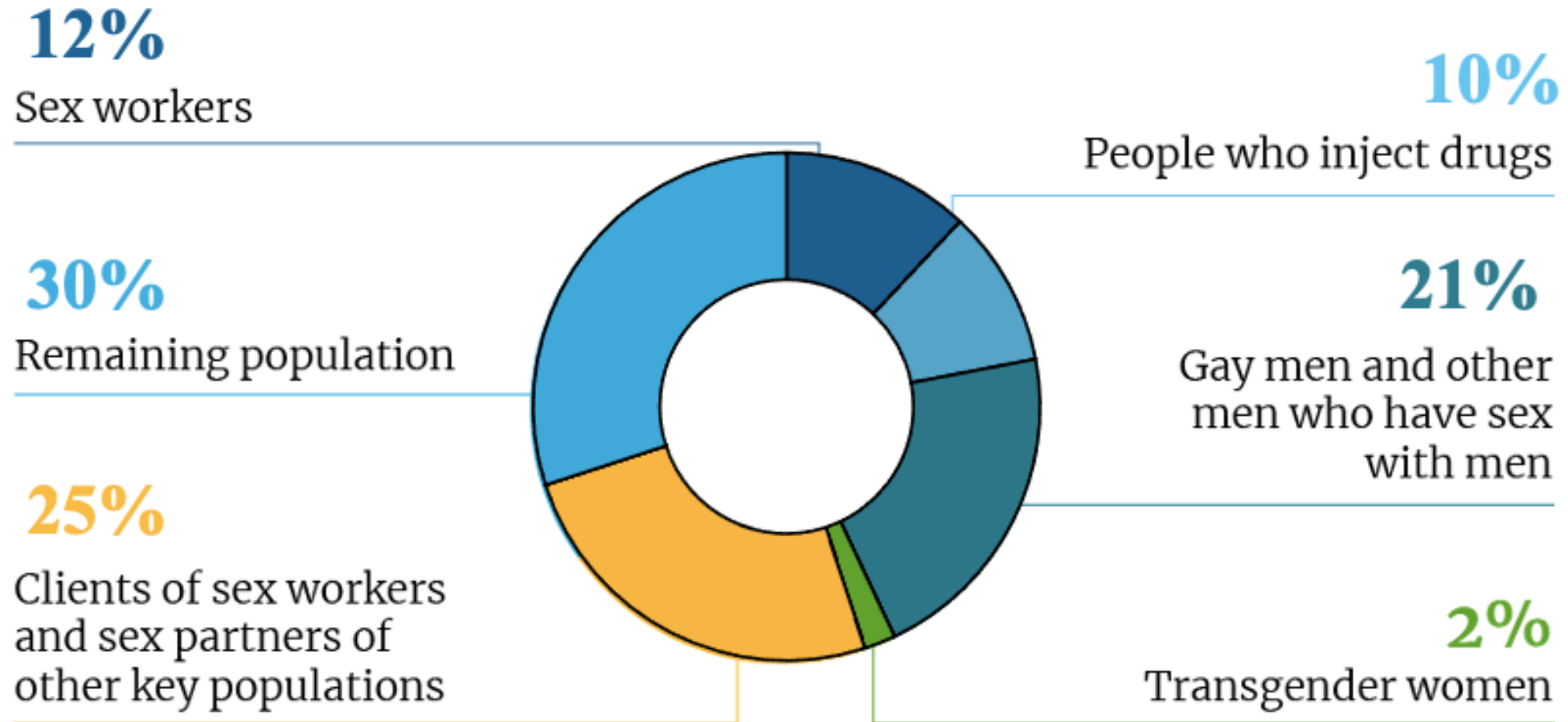


- **Decline in number of new HIV infections has stagnated.**
- Will miss the 2025 target unless treatment coverage is accelerated and effective prevention efforts re-invigorated and barriers to inclusion are removed.

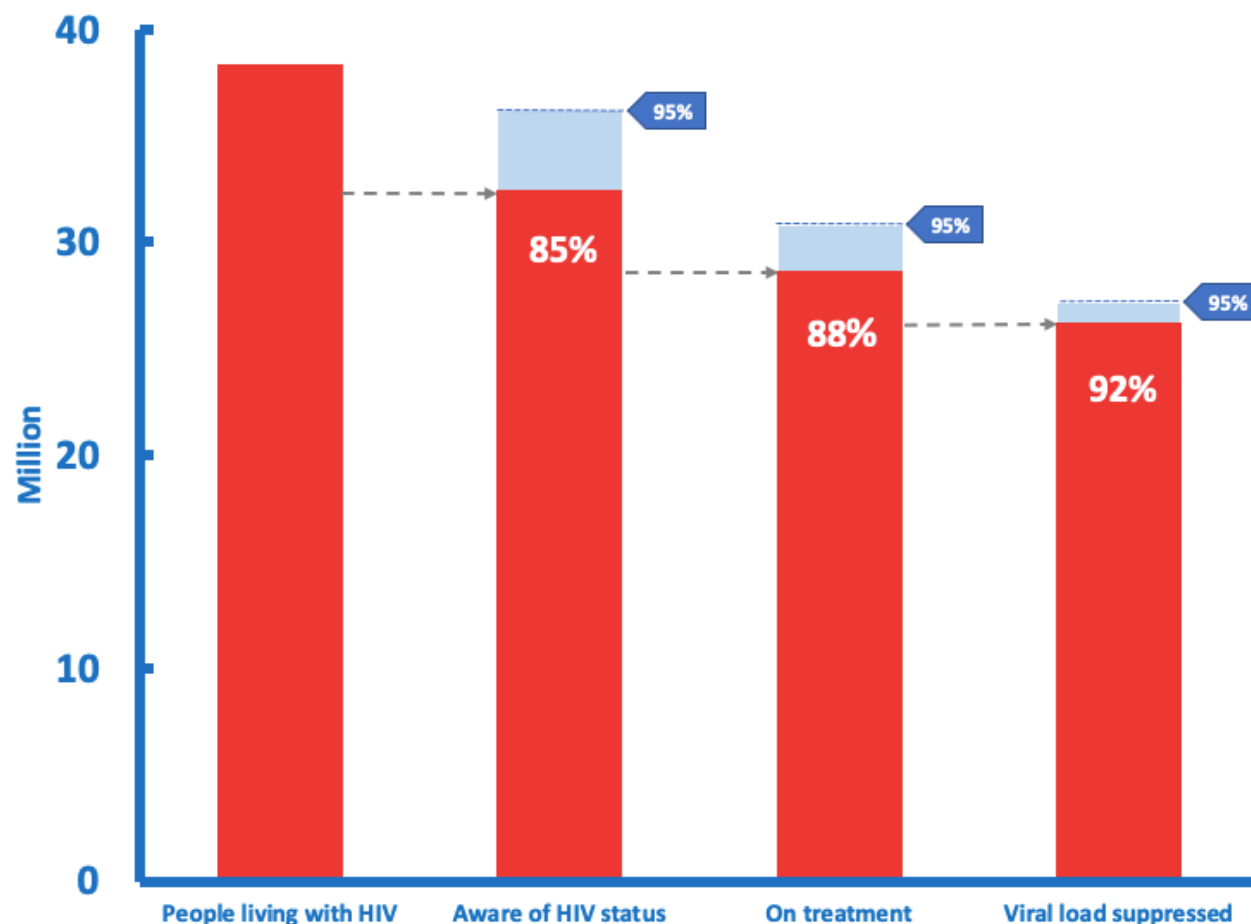
**2021 new HIV infections**  
**1 500 000 [1 100 000–2 000 000]**

**2021 AIDS-related deaths**  
**650 000 [510 000–860 000]**

# Distribution of acquisition of new HIV infections by population, global, 2021



# HIV service cascade, global, 2021

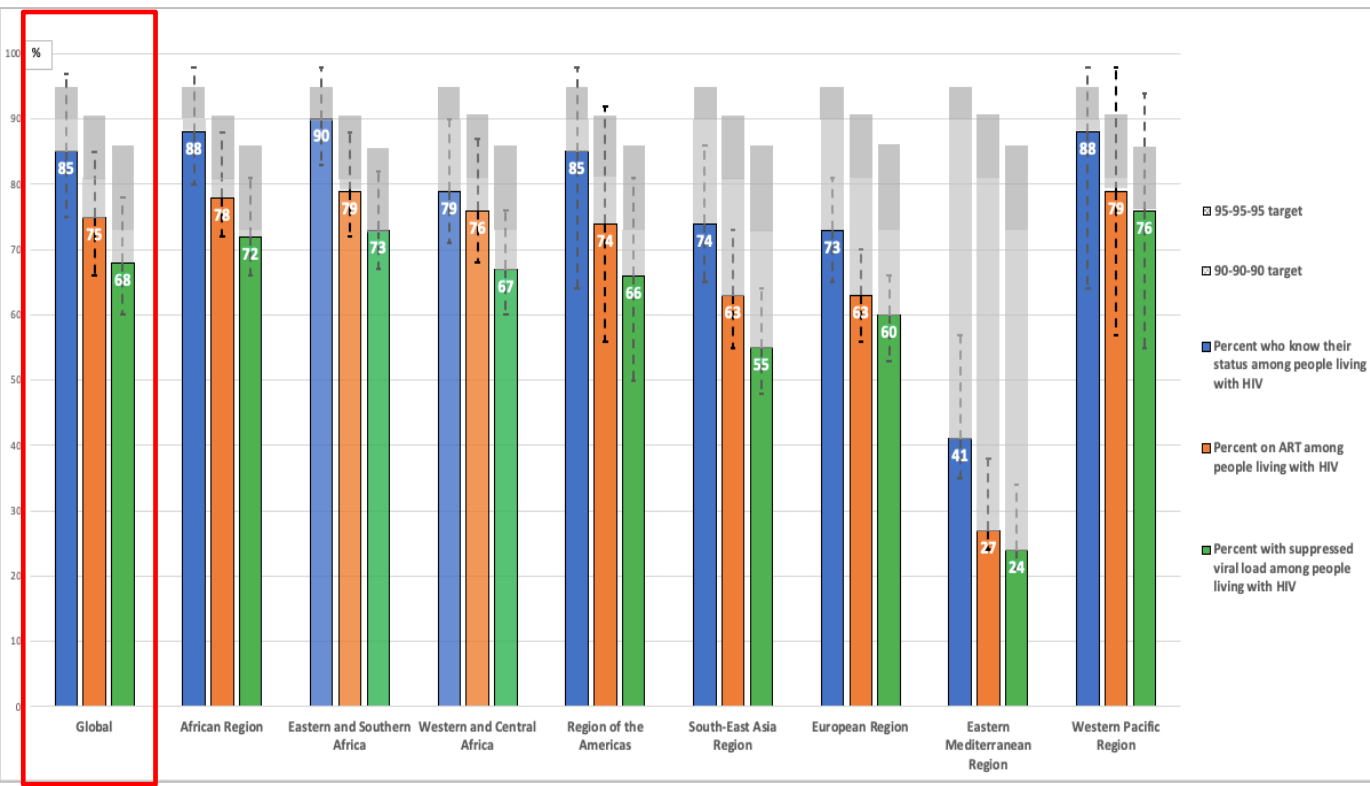


## 95-95-95 targets by 2030

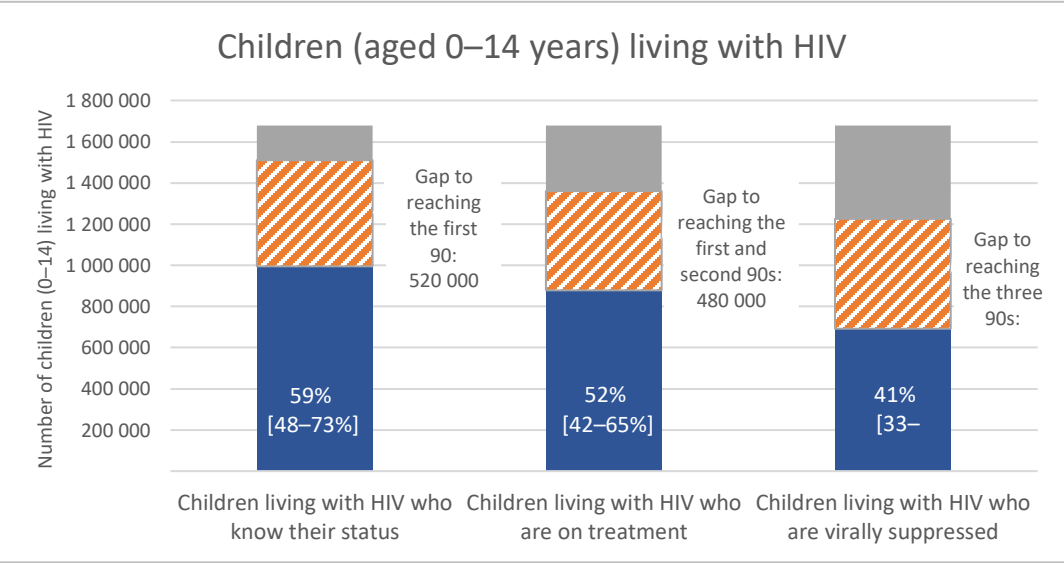
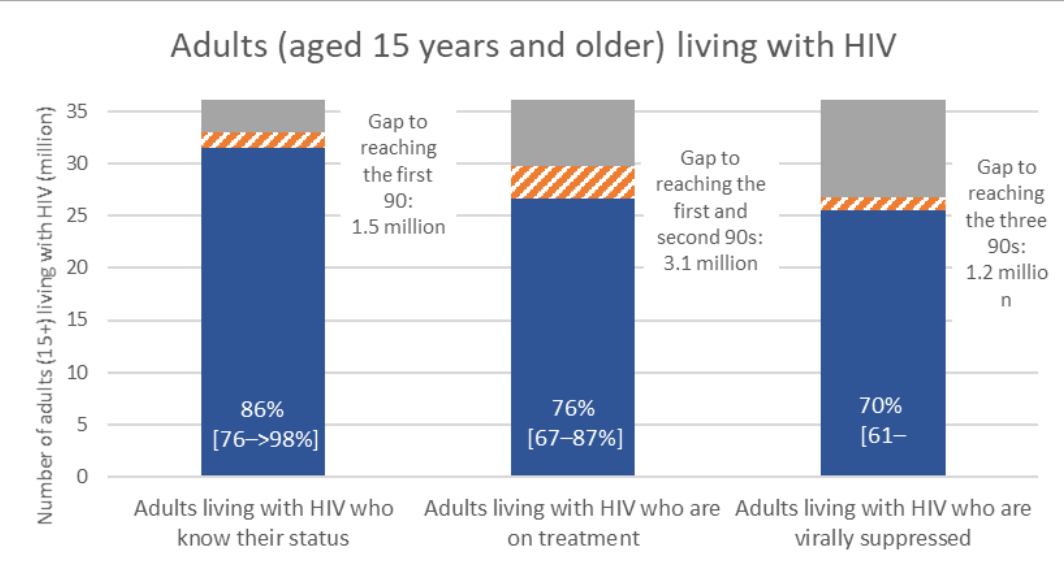
- 95 percent of people living with HIV know their status
- 95 percent of people living with HIV who know their status are receiving treatment
- 95 percent of people on treatment have suppressed viral loads
- Number of people on HIV treatment grew more slowly in 2021 than it has in over a decade

The denominator is the value from the previous bar in the last three bars. For example, 88% of people who were aware of their status were receiving ART.

# Progress towards 90–90–90 and 95–95–95 targets of the HIV service cascade, by WHO region, 2021



Source: UNAIDS/WHO estimates

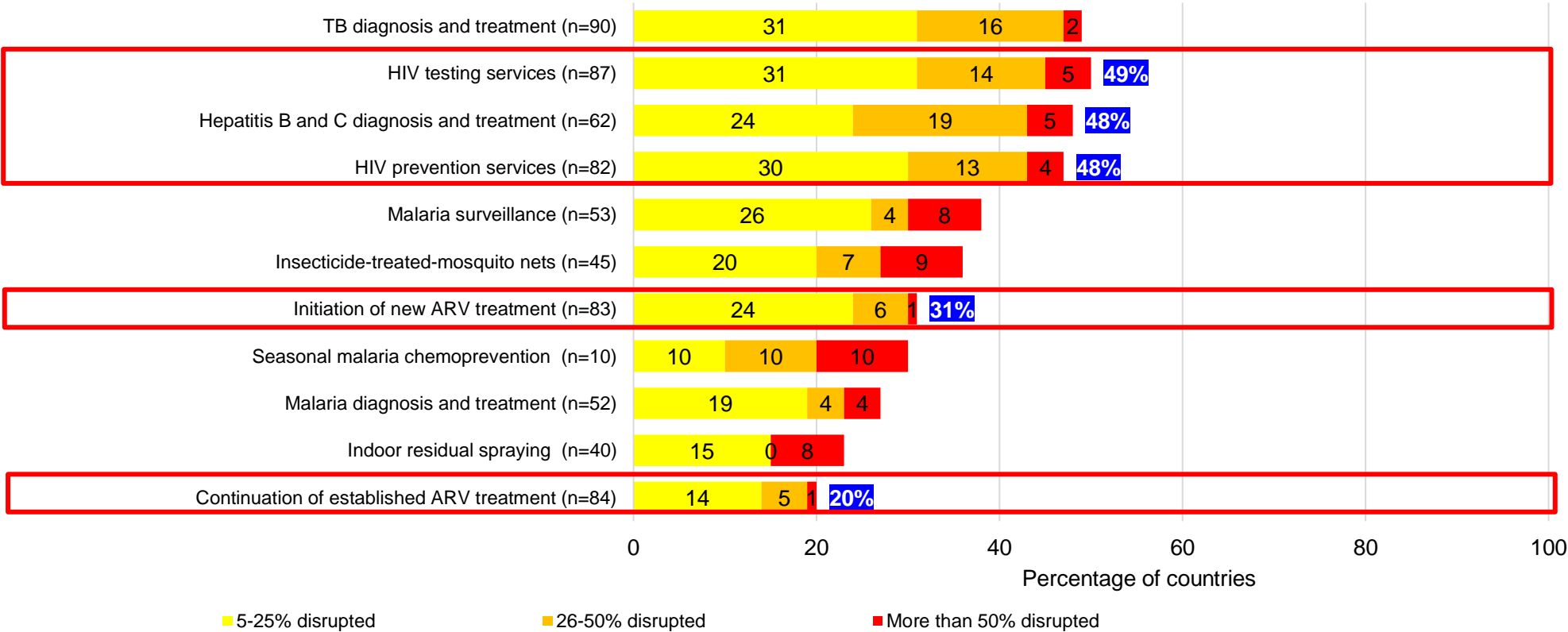




# Percentage of countries reporting disruptions in communicable disease (TB, HIV, hepatitis and malaria) services during the COVID-19 pandemic in Q4 2021



About half of countries report disruptions HIV testing and prevention services, and hepatitis B & C diagnosis and treatment

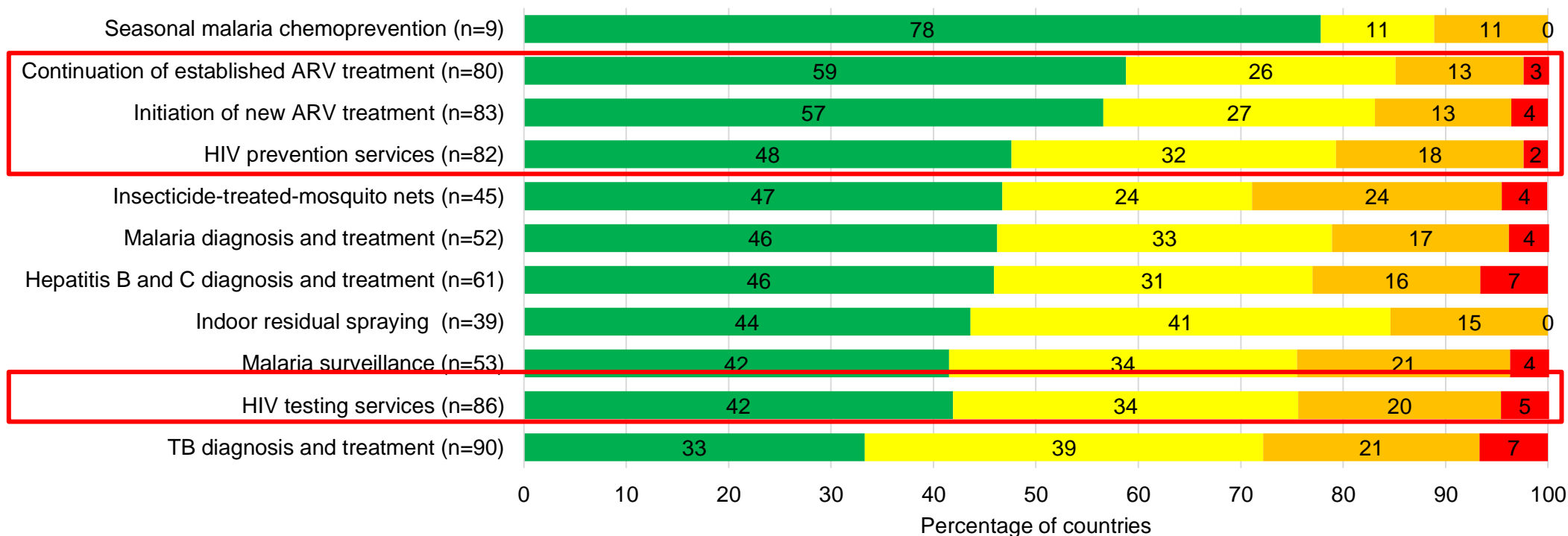


Source: Round 3 Global pulse survey on continuity of essential health services, Nov-Dec 2021 (reflecting situation during previous 6 months)

# Perceptions of levels of disruption and recovery in communicable disease services during the COVID-19 pandemic in Q4 2021 as compared to Q1 2021

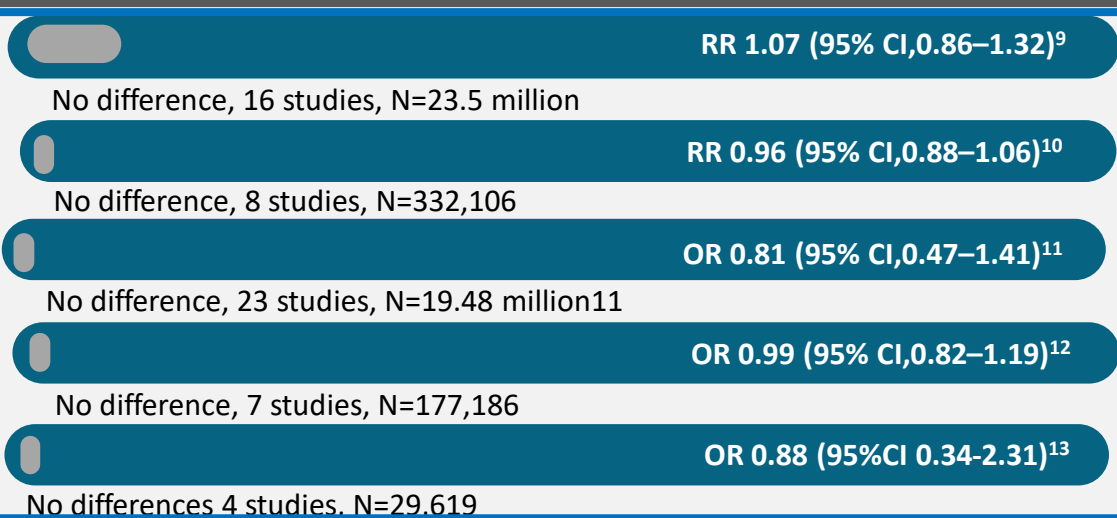
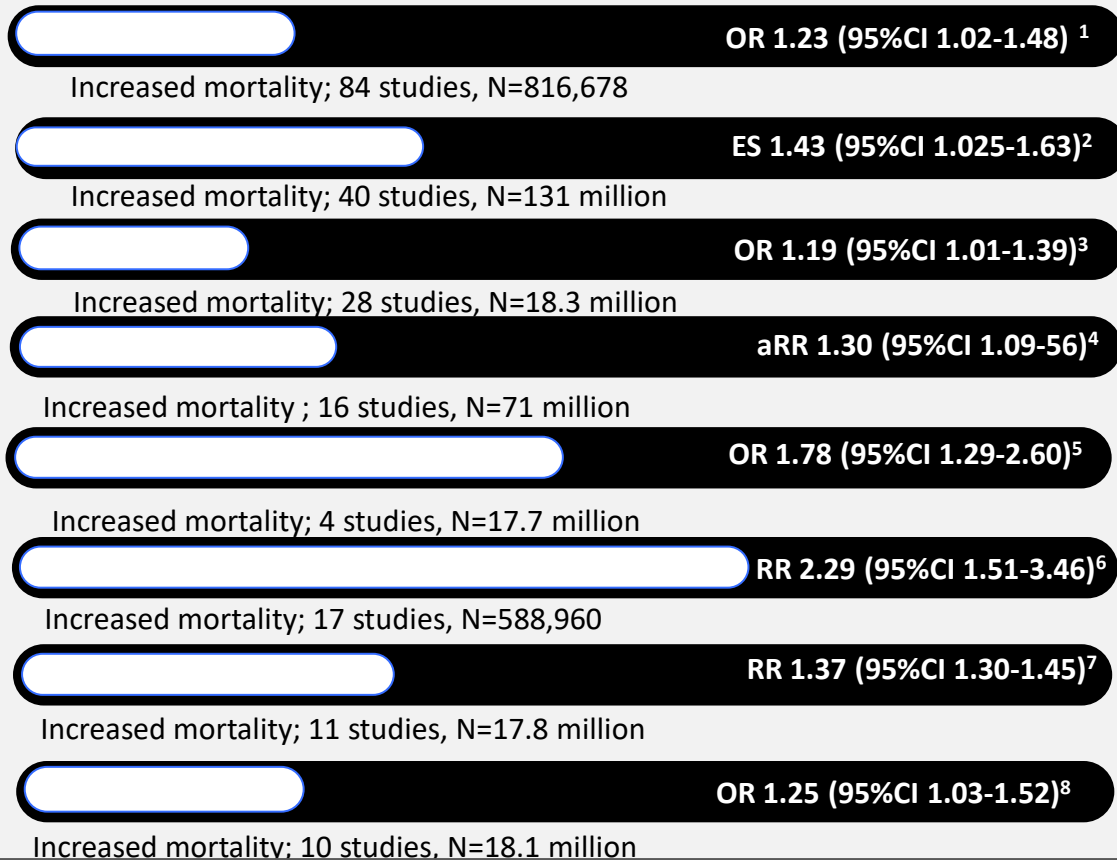


About half of countries report disruptions HIV testing and prevention services, and hepatitis B & C diagnosis and treatment



■ Back to pre-pandemic levels ■ Still disrupted, better than Jan-March 2021 ■ Still disrupted, no change from Jan-March 2021 ■ Still disrupted, worse than Jan-March 2021

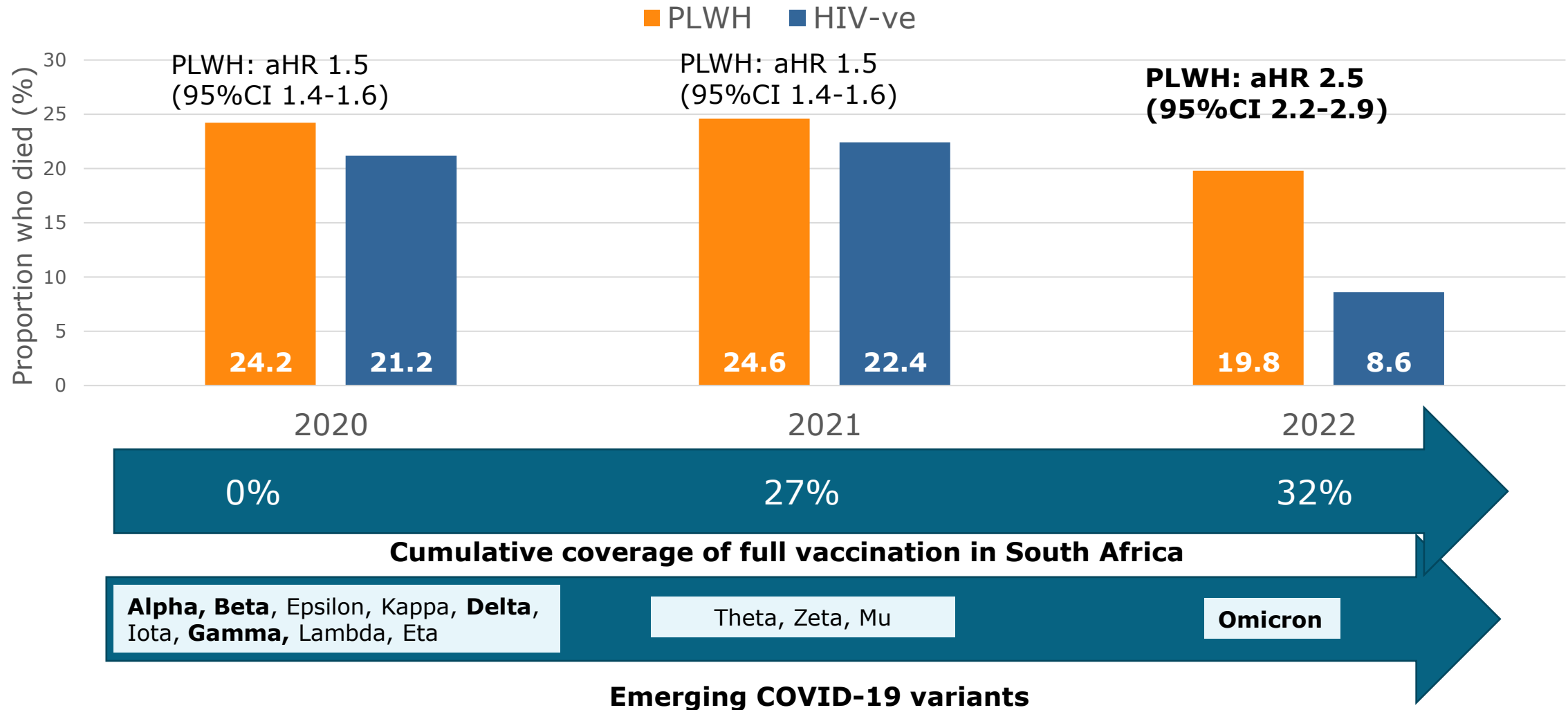
# HIV and COVID-19 mortality: a review of systematic reviews and meta-analysis



- 8/13 reviews reported an **increased risk** of COVID-19 mortality in PLWHIV (ranging from 19% to 129%)
- 5/13 reported **similar mortality risk**
- No review showed a reduced risk among PLWHIV

References: Wang Y et al<sup>1</sup>; Han X et al<sup>2</sup>; Hariyanto T<sup>3</sup>; Wang Y et al<sup>4</sup>; Ssentongo P et al<sup>5</sup>; Oyelade T et al<sup>6</sup>; Moradi Y et al<sup>7</sup>; Dong Y et al<sup>8</sup>; Dzinamarira T et al<sup>9</sup>; Liang M et al<sup>10</sup>; Danwang C et al<sup>11</sup>; Sarkar S et al<sup>12</sup>; Ssentongo P et al<sup>13</sup>;

# COVID-19 mortality over time by HIV status

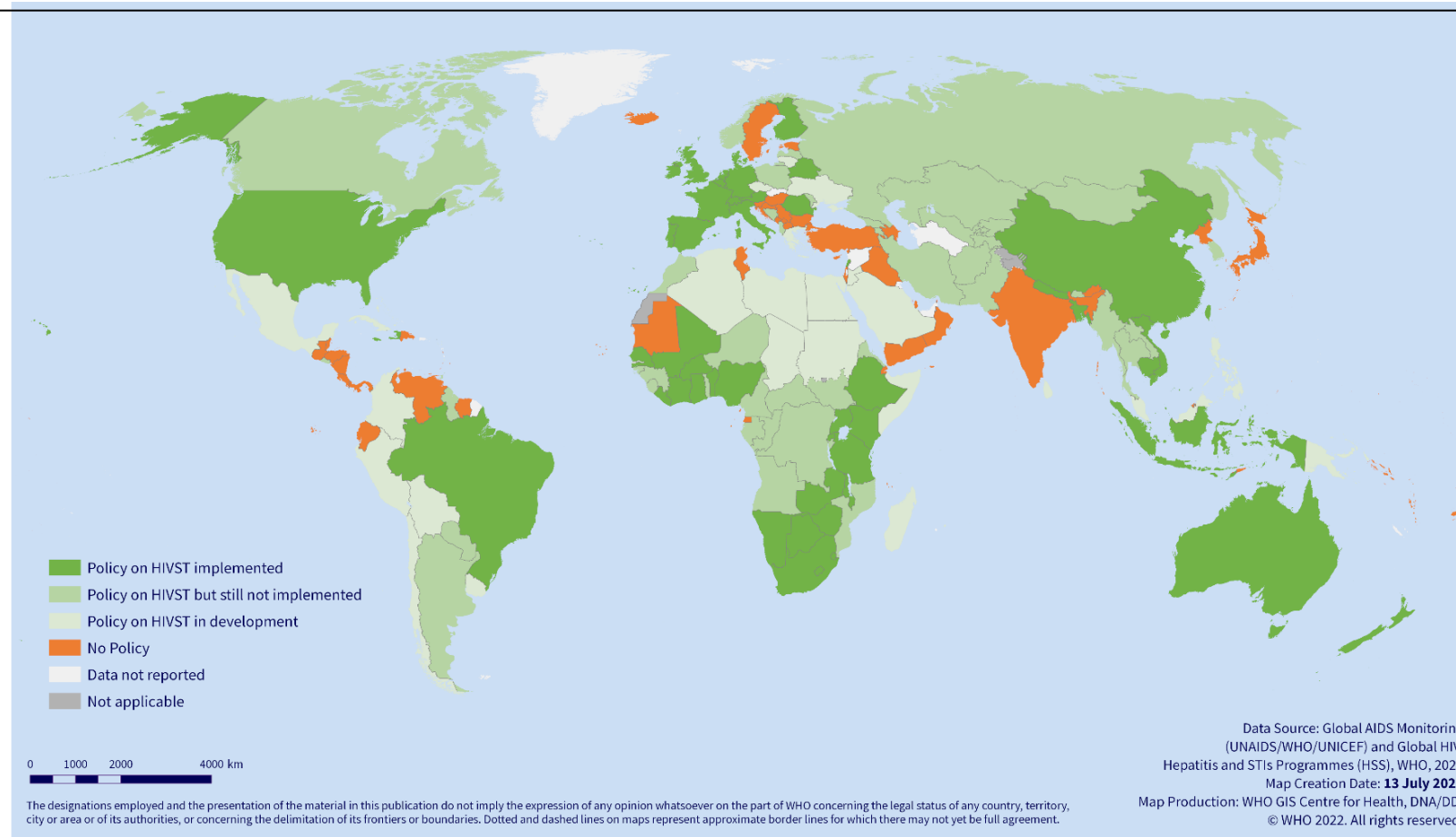




# National policy on HIV self-testing and implementation status, July 2022



By July 2022, 98 countries adopted HIV self-testing policies in their national guidelines, with 52 countries routinely implemented the policy.



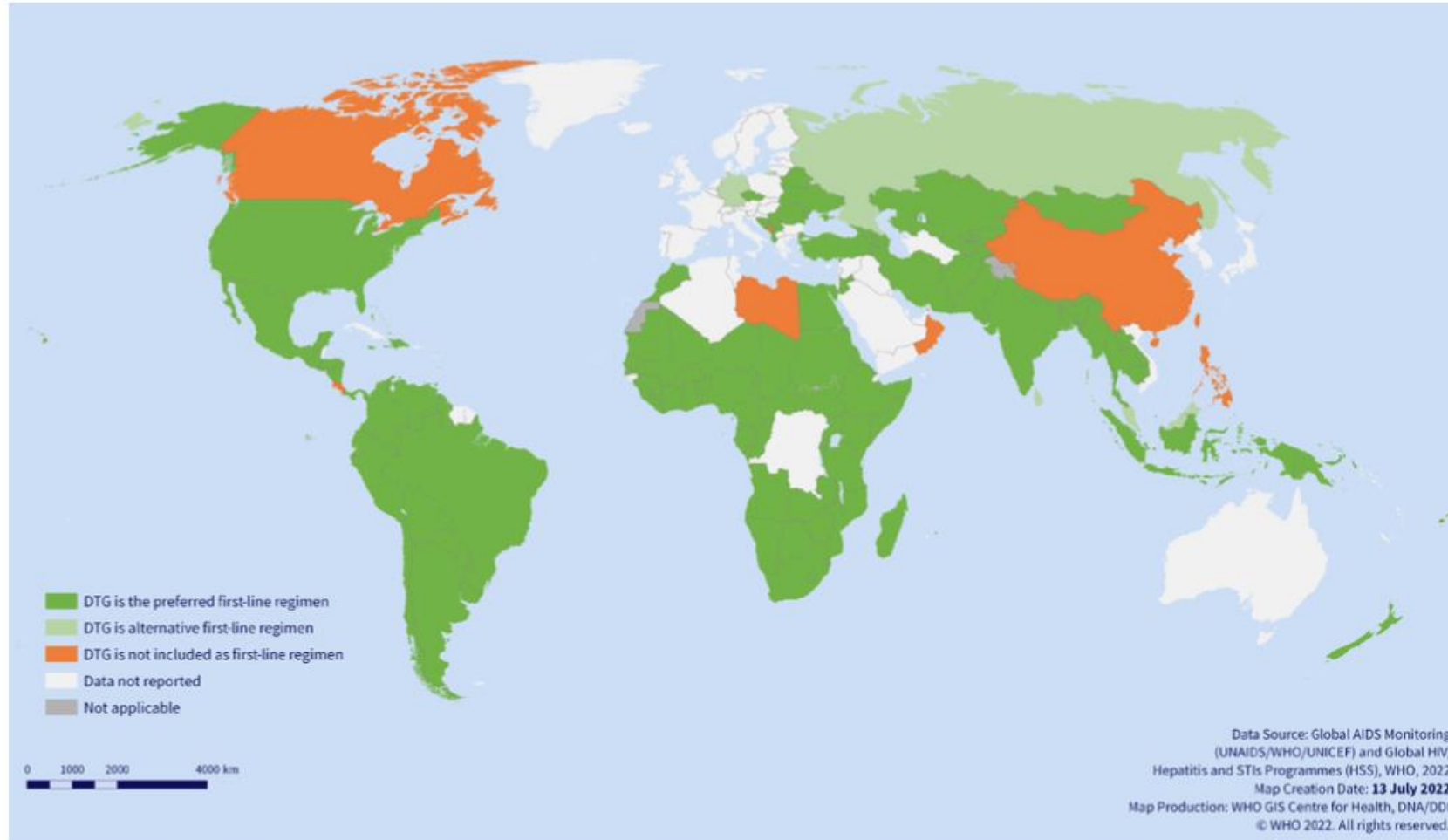
Source: Global AIDS Monitoring (UNAIDS/WHO/UNICEF) and Global HIV, Hepatitis and STIs Programmes (HSS), WHO, 2022

Disclaimer: The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

# Adoption of TDF+3TC (or FTC) + DTG as the preferred first-line antiretroviral combination for treatment initiation in national guidelines for adults and adolescents, July 2022



By July 2022, 108 countries (88%) adopting DTG as part of the preferred first-line antiretroviral therapy for adults and adolescents, an 80% increase from 60 countries in 2020 when data for this indicator was first collected.



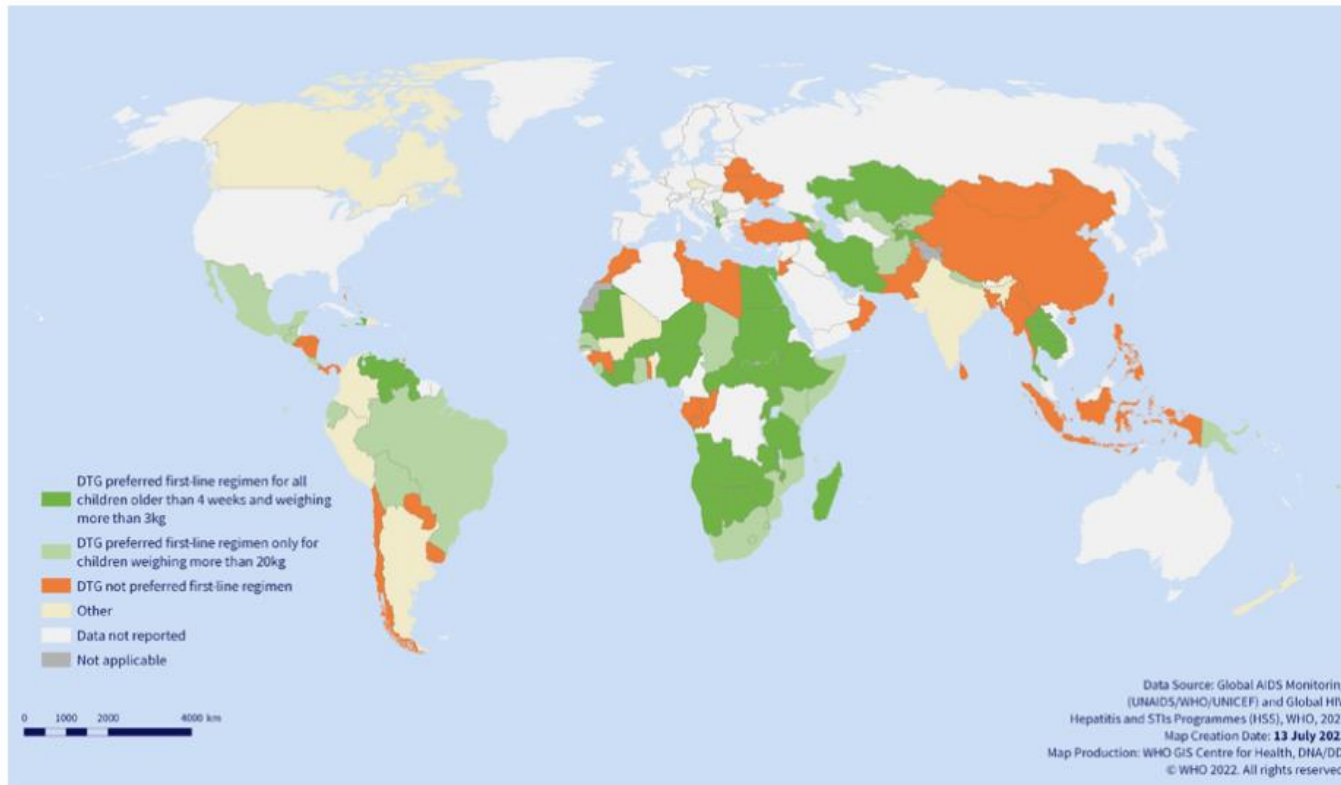
Source: Global AIDS Monitoring (UNAIDS/WHO/UNICEF) and Global HIV, Hepatitis and STIs Programmes (HSS), WHO, 2022

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# Adoption of DTG regimens as the preferred treatment option in national guidelines for all infants and children living with HIV, July 2022



By July 2022, DTG has been adopted as the preferred treatment initiation option for infants and children in 55% (60/110) of reporting countries, this represents a 71% increase from 2020, when adoption of DTG as the preferred treatment initiation option was reported by 35 countries.



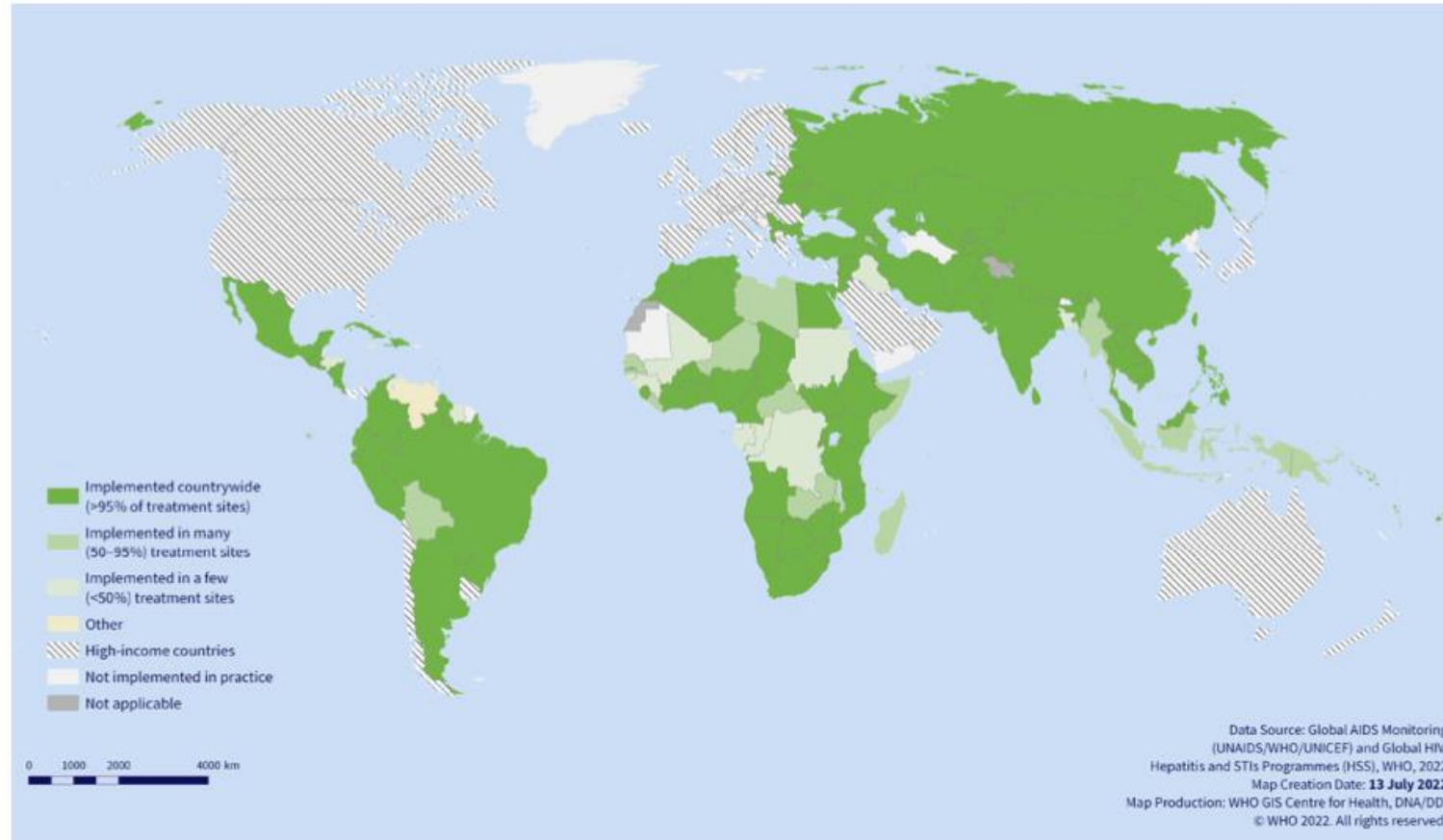
Source: Global AIDS Monitoring (UNAIDS/WHO/UNICEF) and Global HIV, Hepatitis and STIs Programmes (HHS), WHO, 2022

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# National policy on routine viral load testing for monitoring ART and implementation status among adults and adolescents living with HIV in low- and middle-income countries, July 2022



By July 2022, routine viral load monitoring for adults and adolescents has been implemented countrywide in 74% (91/123) of reporting low- and middle-income countries; of the remainder almost half (47%, 15/32) reported implementation in many (50–95%) treatment sites



Source: Global AIDS Monitoring (UNAIDS/WHO/UNICEF) and Global HIV, Hepatitis and STIs Programmes (HHS), WHO, 2022

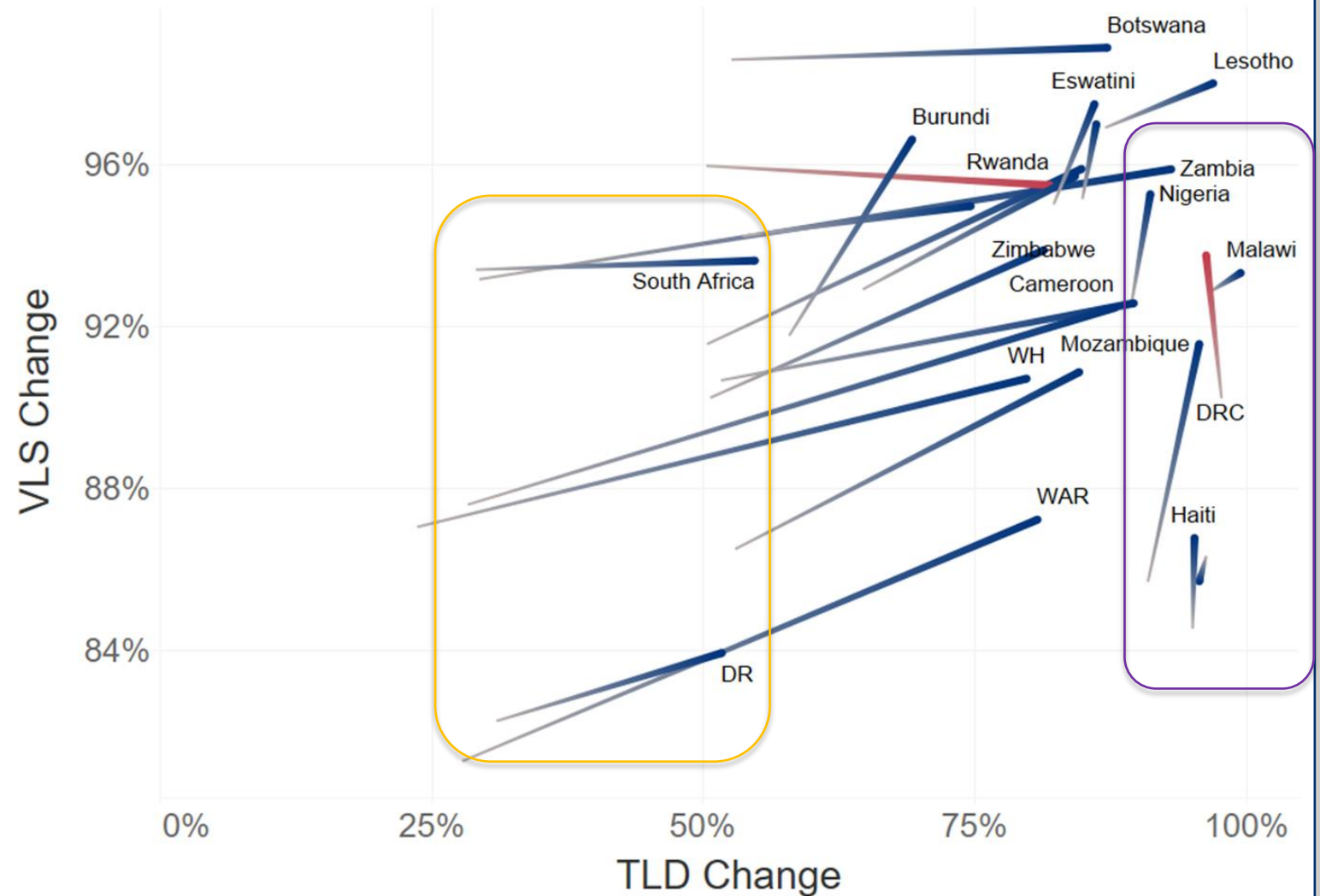
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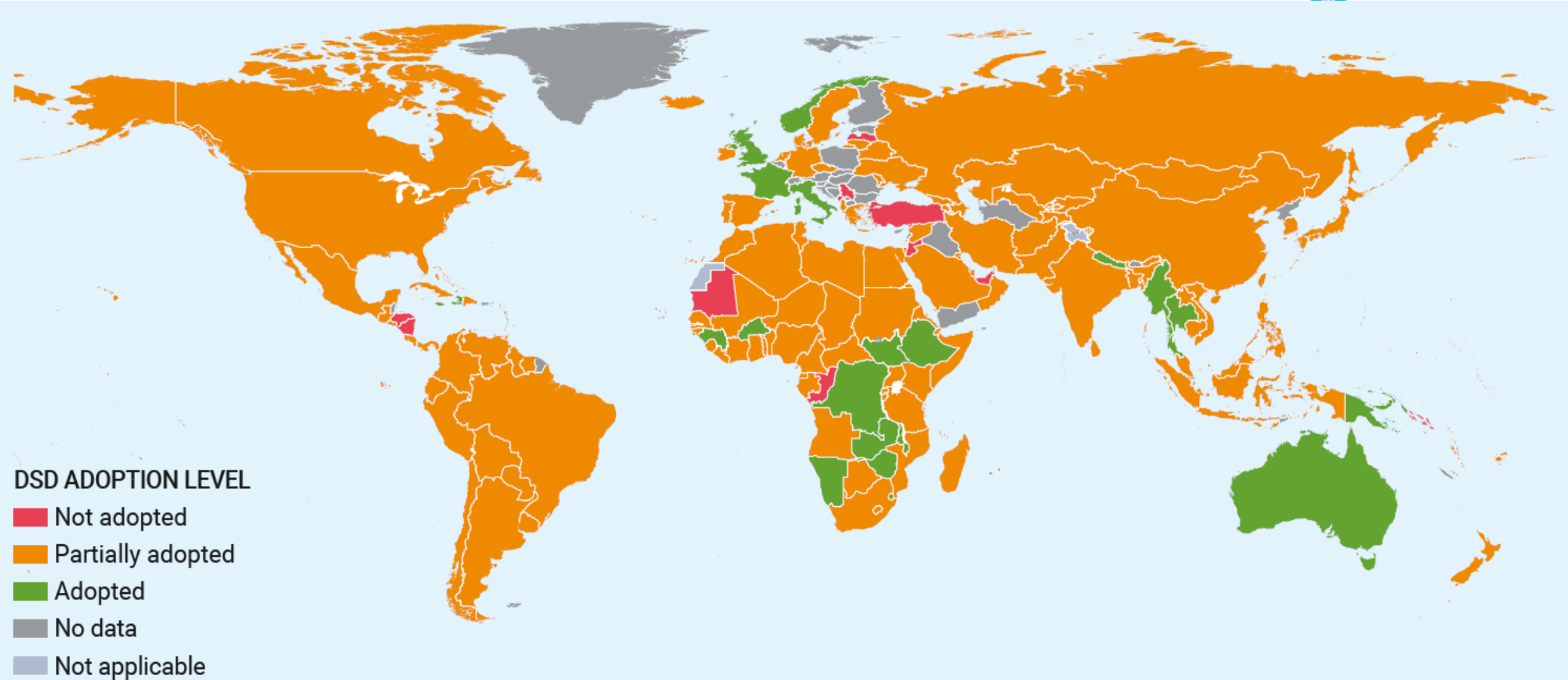
## Overall impact of a guideline change: significant improvements to the VLS

- Transition to TLD was followed by near universal improvements in viral load suppression
- Due to better tolerance/adhesion? Getting rid of NNRTI resistance issues? Combination?
- Early adopters (such as Nigeria, Haiti, and DRC) are still seeing population-level improvements in BSSs
- Slightly flatter curves for the countries furthest behind in adopting TLDs

**TLD and VLS Shifts**  
Change in TLD and VLS, FY20-21



# Globally, majority of countries have partially adopted at least 1 DSD model in their national policies, by end 2021

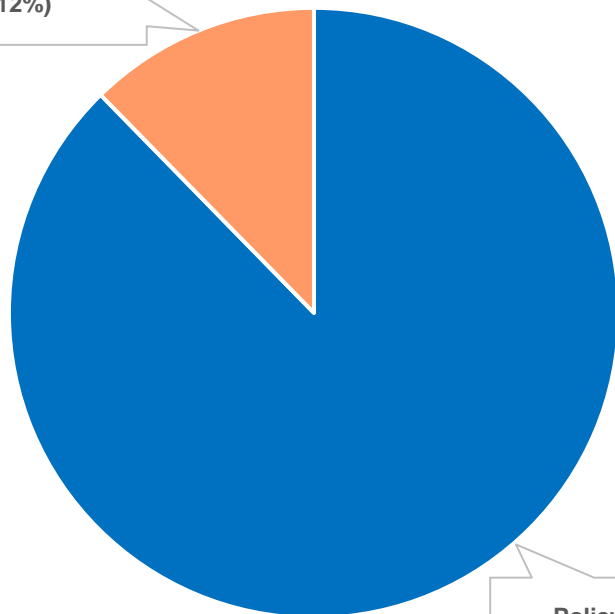


Source: HIV Policy Lab, 2021.

# National policies on frequency of ART pick-up for people who are stable on ART, 2021

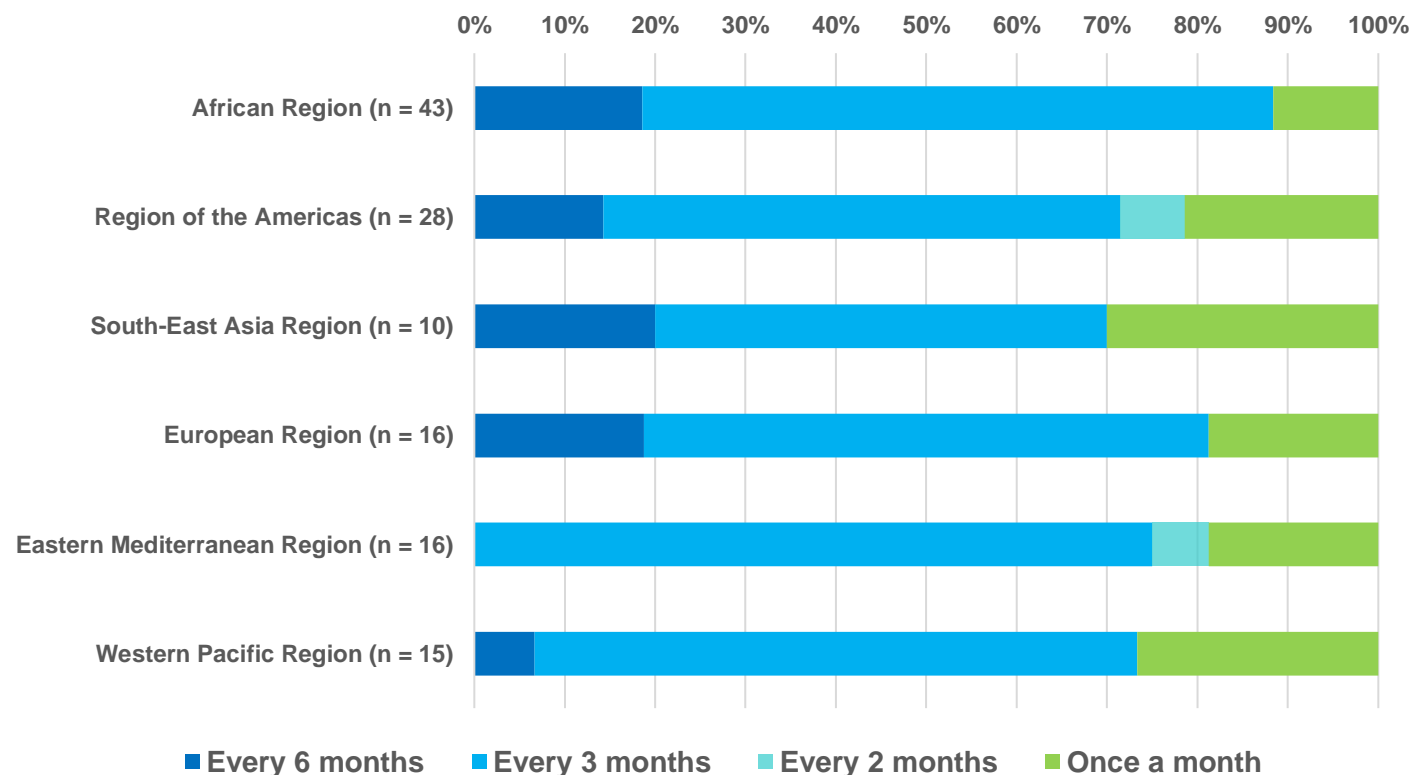
National policies on frequency of ART pick-up for people who are stable on ART, 2021 (n = 146 reporting countries)

No policy, 18 (12%)



Policy, 128 (88%)

Frequency of ART pick-up for people who are stable on ART, by WHO region, 2021 (n = 128 reporting countries)



# Maintenance Essential Health Services

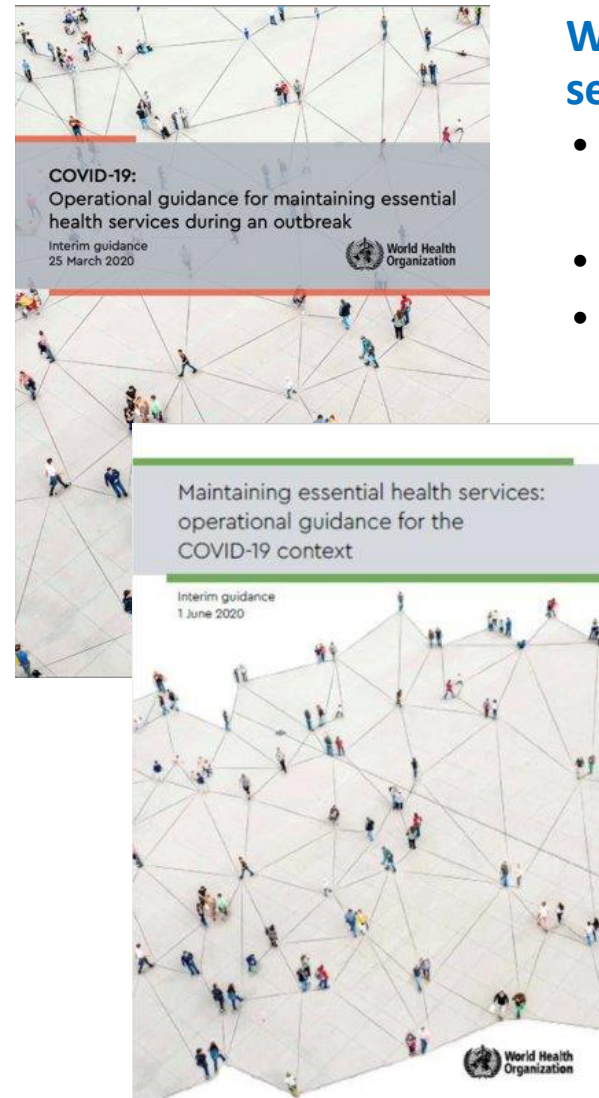


## WHO Operational guidance for maintaining HIV services in the COVID-19 context

- Emphasize same-day start for ART including starting outside of a facility (e.g. during outreach or when attending mobile services).
- Extend to 6-monthly dispensing
- Promote and scale-up of models of ART dispensing outside the facility (community)

## Countries make pivotal changes to maintain HIV services during the COVID-19 pandemic and these will likely build long-term benefits

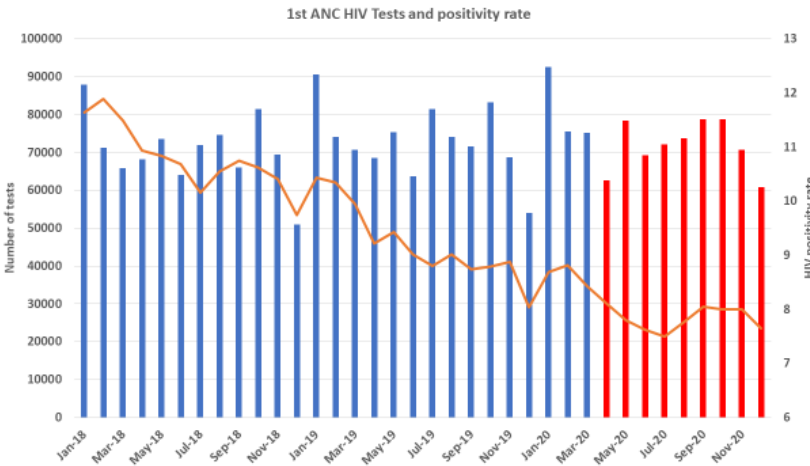
- **Resilient responses includes:**
  - DSD models and multi-month provision of meds, community pickup, use of ehealth and mhealth technology, & strong community engagement
  - Expanding eligibility and transitioning from 3 to 6 months supply when possible
  - Embracing out of facility (community) models,
  - Less frequent visits to a health facility with less frequent medication pick-ups,
  - Integrating/aligning ART refills with other health services (preventive and chronic medications such as TB, TPT, AHD, NCDs, FP)
  - Virtual Case Management
  - Improved focus on people-centered care



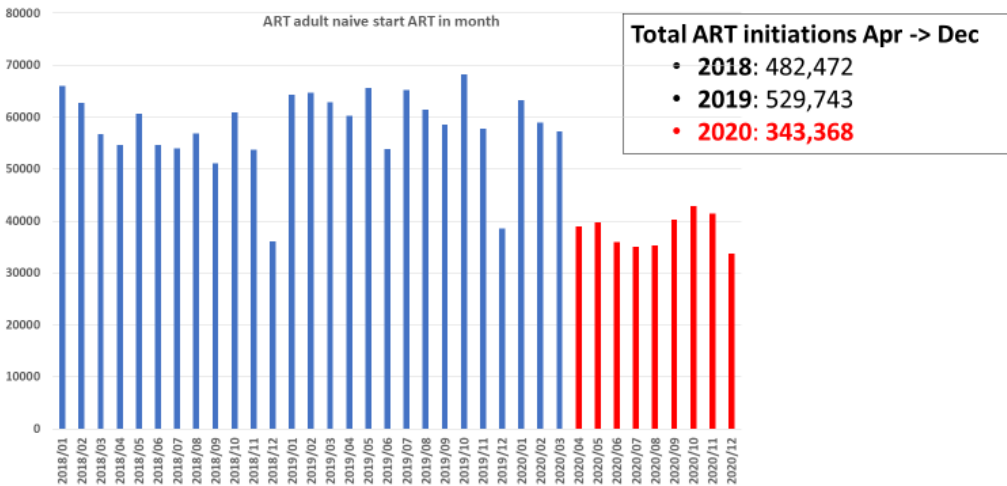


# Reduction in testing and ART initiation during C19

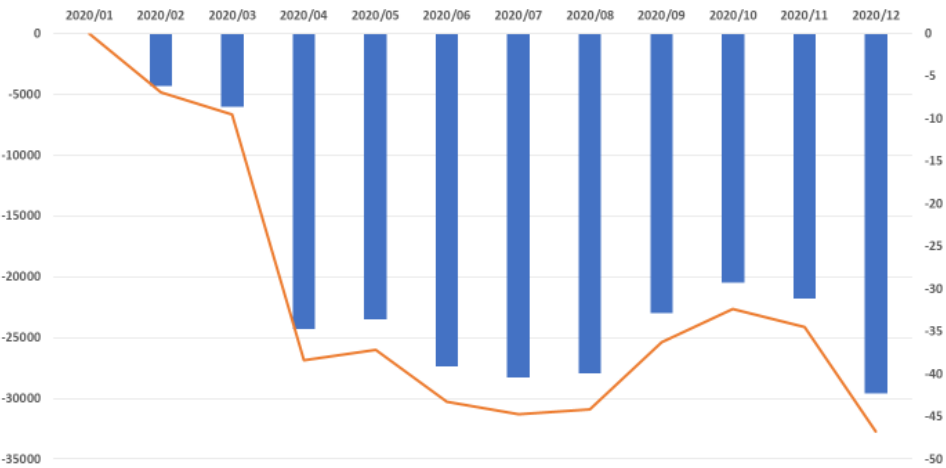
## ANC – HIV Testing at First ANC Visit



## Adult: ART initiation (naïve)

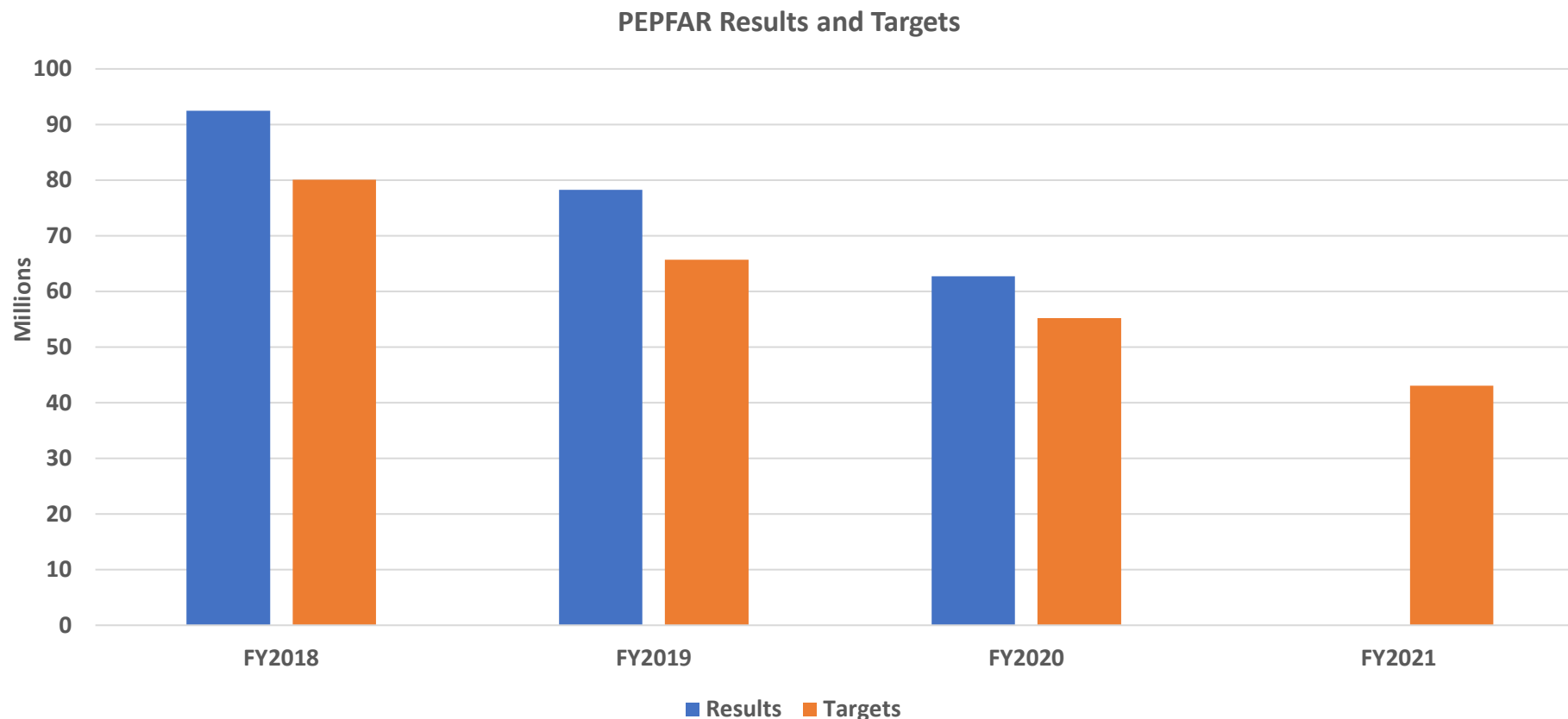


## Adult Naïve ART initiation – vs January 20



# Change in PEPFAR HIV testing strategy

Transitioning from **a wide-scale HIV testing services to more targeted testing** – 35% reduction in PEPFAR testing volume targets between 2018 & 2020



Source: PEPFAR Panorama Spotlight, 2021



# Continuation of testing services during the COVID-19 pandemic

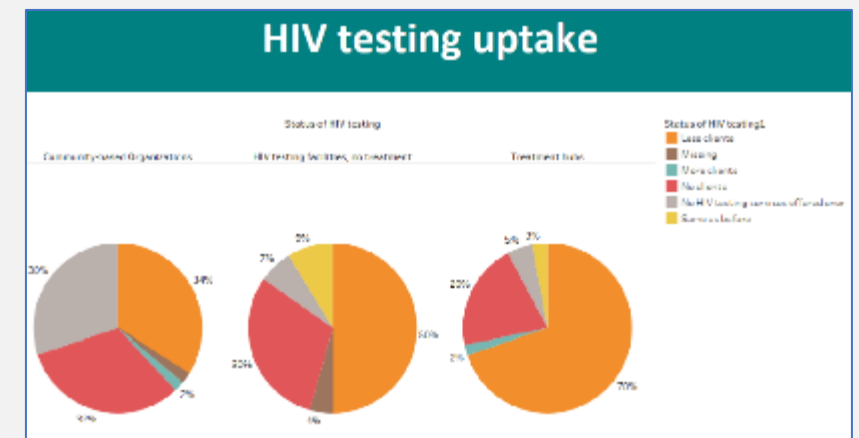


**Biggest contributor to reductions and in HTS likely pre-dates COVID-19, largely due to scale-up of suboptimal targeted testing in high HIV burden countries**

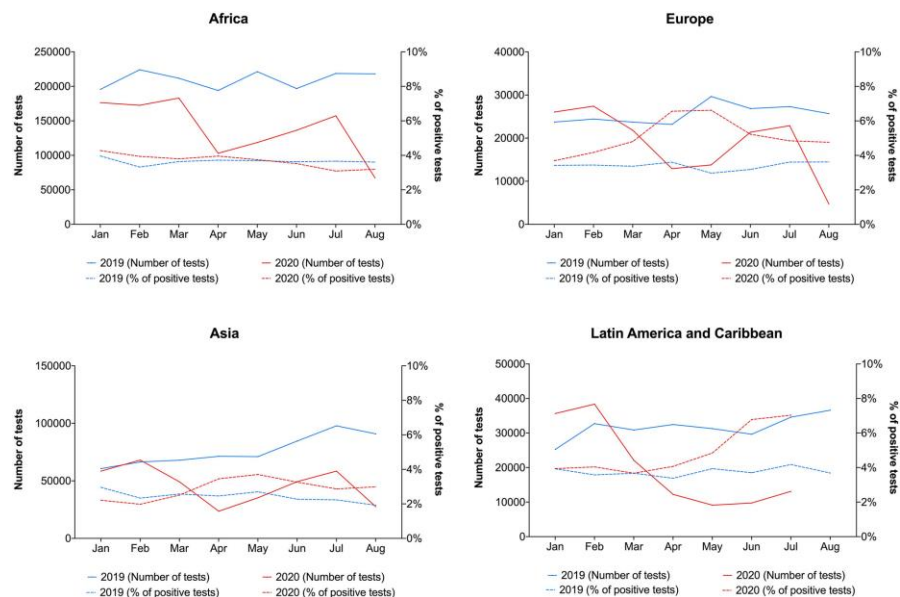
- **Focus on maintaining access to treatment and care**
  - MMD, pharmacy/community pick up, home delivery, keeping PHC open, virtual and digital platforms for remote support and appropriate PPE for health workers
- **But need to also try and maintain testing services**
  - avoid losing substantial HIV, STI and Hepatitis gains
  - support people with who are undiagnosed or unlinked to treatment
  - Maintain prevention services for those at high ongoing risk

**Planning needed to avoid stockouts**

**\*Some reports highlighted COVID-19 affecting HIV testing services – w/ HIV testing volumes and total positive diagnoses**



# COVID-19 disruptions in all regions, especially key populations



Retrospective analysis comparing 2019 and 2020 data, from 44 countries, showed:

- **35.4% reduction in testing** (45% in LAC, 39% in Asia, 35% in Africa and 26% in Europe.)
- **9.5% increase in HIV positivity** (44% in Europe, 19% in LAC, 14% in Asia and 2% in Africa)
- **Key and vulnerable populations received substantially fewer tests than before, especially SW, TG, MSM and migrants.**
- Trends illustrate targeted testing strategies used increasingly during COVID-19
- Catch-up strategies may be needed for some settings and populations missed, especially key and vulnerable populations.

Population	% Reduction in tests HIV tests	% Increase in HIV positive tests
MSM	41.82 (41.58-42.06)	2.92 (1.74-4.58)
TG	52.85 (51.60-54.10)	33.37 (30.09-36.78)
<b>SW</b>	<b>58.75 (58.38-59.12)</b>	24.14 (19.54-29.22)
PWID	10.74 (10.43-11.05)	49.04 (45.07-53.03)
<b>Migrants</b>	41.3 (41.04-41.58)	<b>63.07 (55.48-70.21)</b>
People in prison	0 (slight increase reported)	0 (slight decrease reported)



# WHO HTS and ART initiation adaptations for COVID-19

## Key considerations

1. Prepare a **strategy for HTS adaptation** gradual and proportional COVID-19 community circulation and health system disruptions
2. Protect and support **frontline HIV providers**: IPC training, access to PPE, and COVID-19 care and vaccine
3. **Prioritization of HTS**:
  - Individuals suspected of **advanced HIV disease**
  - Individuals suspected or **diagnosed with TB, STI, malnutrition**
  - **ANC**, including retesting, as well as **early infant diagnosis (EID)**
4. **ART initiation** should be offered on the **same day** as HIV testing to people who are ready to start and different DSD models available to ensure access
5. **\*\*Scale-up HIV self-testing (HIVST) especially outside of facilities**, including PEP/PrEP
6. **HTS with higher HIV positivity**, e.g., index testing, should be prioritized
7. Maintain services for **key population** using **virtual interventions** (outreach and follow-up; information on COVID-19; tracing; virtual consultations and referrals)
8. **Greater integration** and explore potential **synergy between COVID-19 & HTS**: simultaneous testing (e.g. integrate HTS/HIVST with mask distribution, vaccinations in high HIV burden settings)
9. Mitigate impact of COVID-19 on demand side factors: **Promote** use of services; **protect** patients; ensure **access** to essential services
10. Data **monitoring** and operational **research**: report and scale-up initiatives



# HIVST in the COVID-19 context

## Key considerations for HIVST

- **HIVST can be used** to maintain services while adhering to physical distancing guidance.
- Important to strategically implement HIVST **prioritizing areas & populations** with greatest needs and gaps in testing coverage.
- **HIVST approaches include:**
  - distribution for personal use and/or sexual and/or drug injecting partners of PLHIV and social contacts of key populations
  - in high HIV burden settings, pregnant women may also provide HIVST kits to their male partners.
- **Priority settings to consider:**
  - pick up at facilities or community sites
  - virtual platforms (e.g., websites and social media) and distribution through mail
  - pharmacies, retail vendors, vending machines
  - linked to PrEP and PEP programmes



### Countries with HIVST programmes

Replace facility with HIVST (to decongest health facilities)

Expand and adapt HIVST

Use HIVST for partner services, workplace and social network testing

HIVST for maintaining PrEP/PEP services

### Countries yet to offer HIVST

Lobby for rapid HIVST approval, registration and use

Select HIVST products Start procurement

Start pilot or full implementation in priority populations and geographies

# \$1 HIV self-test kit increasing access



- **98 countries with HIVST policies & >10 million HIVST kits procured in LMIC annually**
  - Yet only 52 countries implementing HIVST with an estimated unmet need of 180 million tests per year
- **WHO has now prequalified 6 HIV self-tests, with this new \$1 option in 140 countries more countries will be able to implement**
  - **MedAccess estimates over next 5 years 8.1 million people will use the test, closing gaps in HIV testing, treatment and prevention**
- **Cost barriers have been an issue hindering wide-scale implementation in many settings**
  - Expanding existing uses for case finding, as well as new opportunities for prevention programmes, broader health system efficiencies and integration efforts (such as in family planning and SRH services)

Source: [WHO 2022](#), [Devex 2022](#)



# Scale-up and innovative DSD models made real

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

## Busting myths and delivering services



"People living with HIV peers and community-based supporters are assigned to deliver ARV drugs to the specified location where the people living with HIV have agreed to get it. This may be at the district hospital, or other desirable places where clients feel comfortable, including at their homes."

Community Health and Inclusion Association, Laos

"We have done a 30 minutes radio talk show covering most frequent asked questions around COVID-19 and being young, HIV positive and COVID-19."

Africaid Zvandiri, Zimbabwe

Findings from a survey of networks of people living with HIV



## • 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)

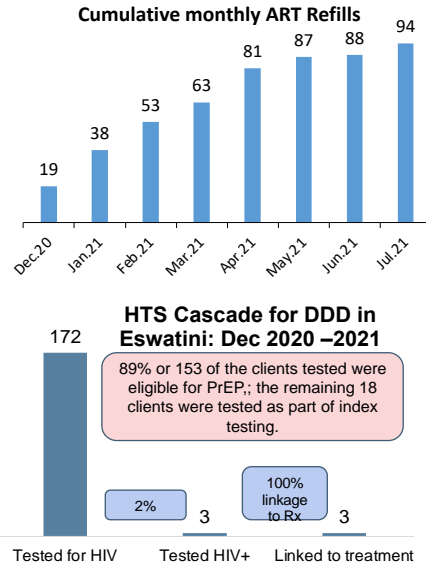
# Country examples and innovations from EPIC Program

## Eswatini: Community distribution model

### MoBaCo Model



- Eswatini government-initiated model in response to COVID-19
- Community sites: drug shops, closed schools, churches, etc.
- Distributes ARVs, TB, and NCD medications (antidiabetic, antihypertensives) FP products, PrEP, and condoms
- Targets populations extend beyond ART clients.



## Lesotho: Automated dispensing model: BonoloMeds

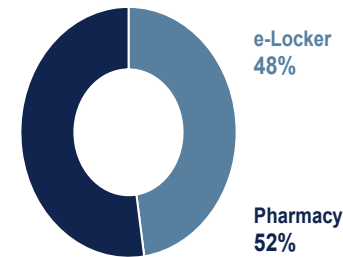


**215** Clients have enrolled in the e-locker model



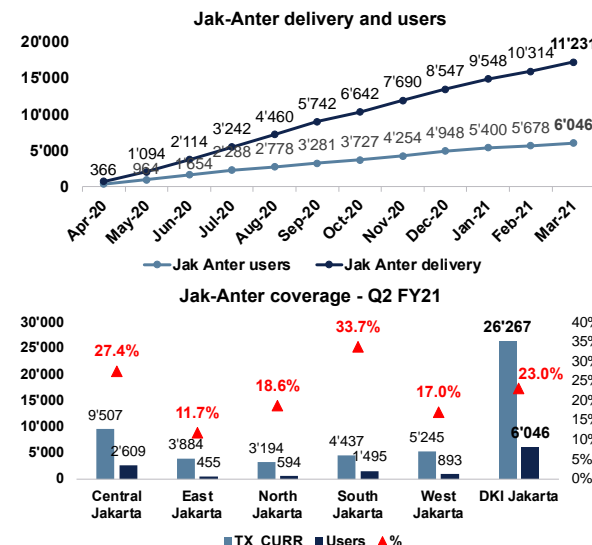
**46** Clients have so far successfully picked up their ARV refills from the e-lockers. Others are scheduled for later pick-up dates.

Proportion of clients who chose the e-locker and pharmacy model



Parcels of ARVs are made available in secure automated lockers from which clients can take out their parcel of ARV refills

## Indonesia: Ride-based app and courier service home delivery



"When we provide two-months of ARVs – or send medications through Jak-Anter – our workload decreases and we can focus on other key tasks, including COVID-19 contact tracing."  
- Health care provider in South Jakarta

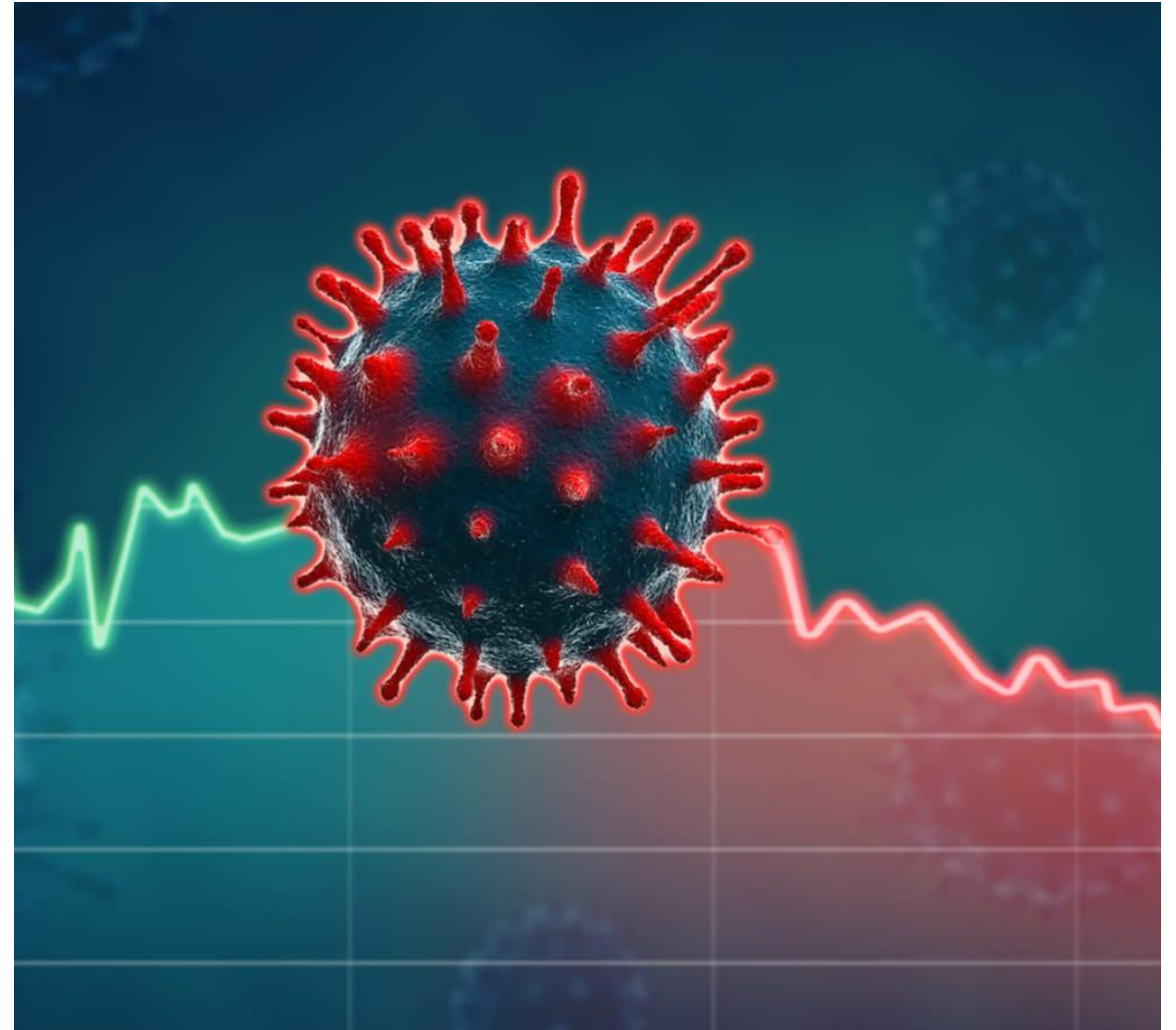
Having my medications delivered to my home has helped me stay on HIV treatment and lowered my risk of COVID-19. The medicine is wrapped to protect my identity and the use of Go-Jek [a ride-based app] means that my neighbors do not know the contents of the delivery."  
- PLHIV client

- Health facility staff contacted the client to confirm address and desire for ARV home delivery.
- Medication is packed in containers concealing the contents and sent to the client through the *Jak-Anter* delivery system via a ride-based app or transport courier service such as Tiki, JNE, Grab, or Gojek.
- Facilities first pay the transportation fees and then are reimbursed by USAID/LINKAGES.



# Virtual Interventions - Rapid COVID 19 response

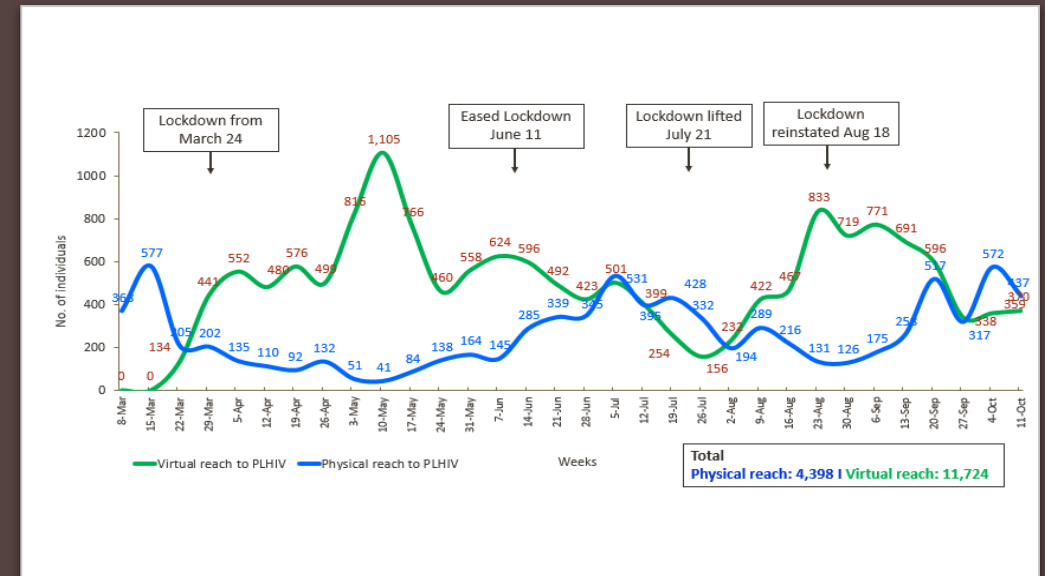
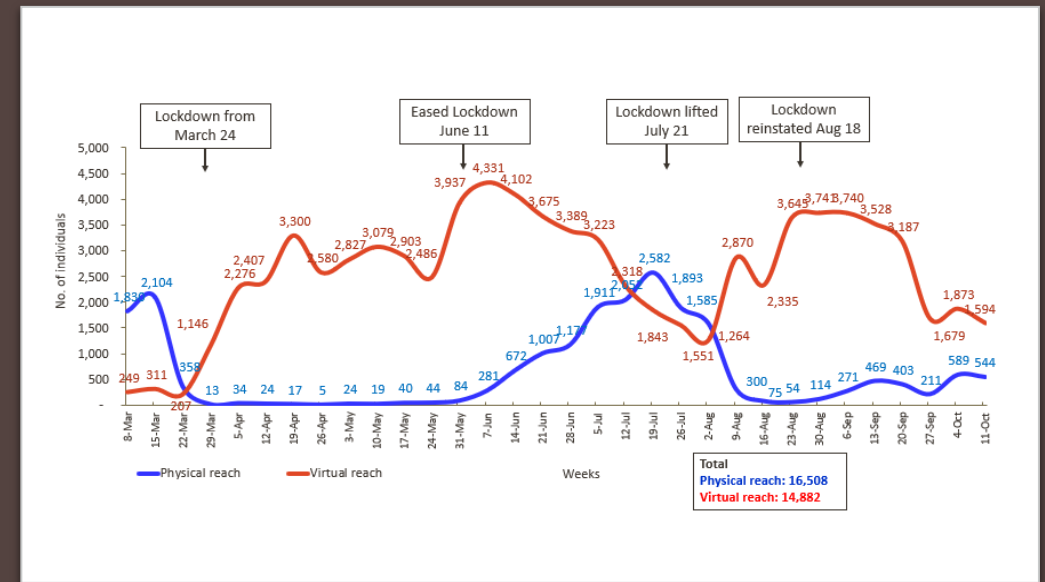
- Mitigate the impact of COVID 19 on programmes
- **Self – care** option of accessing services
- **Decongest the facilities** to avoid infection related risks
- **Home delivery of HIV ST kits, ART, PrEP** for self and partners
- Can be adapted for all populations and services
- **Real time tracking and data management**



# Virtual Case Management as a response to COVID 19

- Physical vs virtual outreach during COVID 19 lockdowns in Nepal
- Use of social media platforms and dating apps to reach new populations online
- Use of digital social content on prevention and treatment;
- **Peer champions, case management teams, and community-based supporters delivered ART directly to clients' homes**
- **Case management support for 75% PLHIV shifted online**

Source: FHI360 Nepal



# New section on monitoring DSD in 2022 WHO SI guidelines



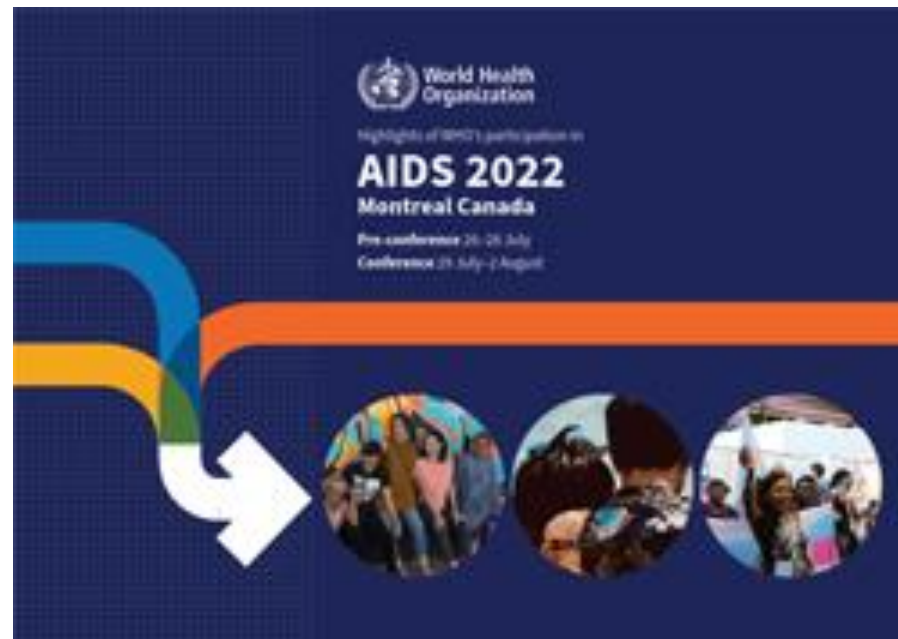
## WHO 2022 Five key recommendations for the patient monitoring system

1. Analyse and use routine testing data to optimise HIV testing services
2. Use person-centred patient data to assess ART interruption, improve re-engagement and retention in care
3. Integrate the monitoring of DSD within the HIV patient monitoring system
4. Enhance data quality and use
5. Use drug stock data

## Differentiated service delivery

- ✓ **5 new indicators for monitoring DSD implementation and outcomes**
  - ✓ DSD 1. Multi month ARV dispensation
- ✓ Example tools and country case study
- ✓ Minimum data elements for monitoring DSD
- ✓ Update of patient monitoring tools for tracing DSD interventions and monitoring retention and health outcomes
- ✓ Update of patient monitoring tools, ART cohort and cross-sectional reports to enable monitoring of DSD

# WHO at AIDS 2022





# Thank you

For more information, please contact:

Global HIV, Hepatitis and Sexually  
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