



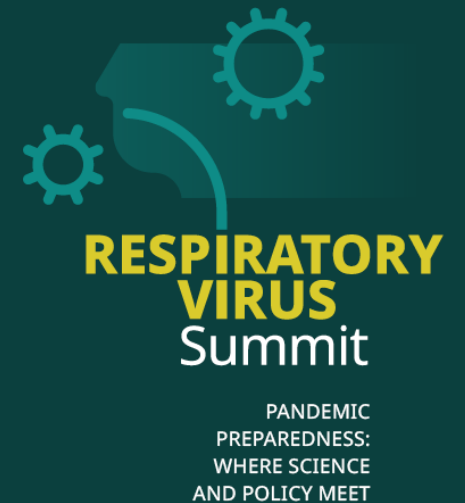
RESPIRATORY VIRUS Summit

organised by **ESWI**

PANDEMIC
PREPAREDNESS:
WHERE SCIENCE
AND POLICY MEET

The role of WHO in Pandemic Preparedness Planning

Dr. Maria Van Kerkhove, *WHO, Switzerland*





World Health
Organization

What does pandemic preparedness really mean?

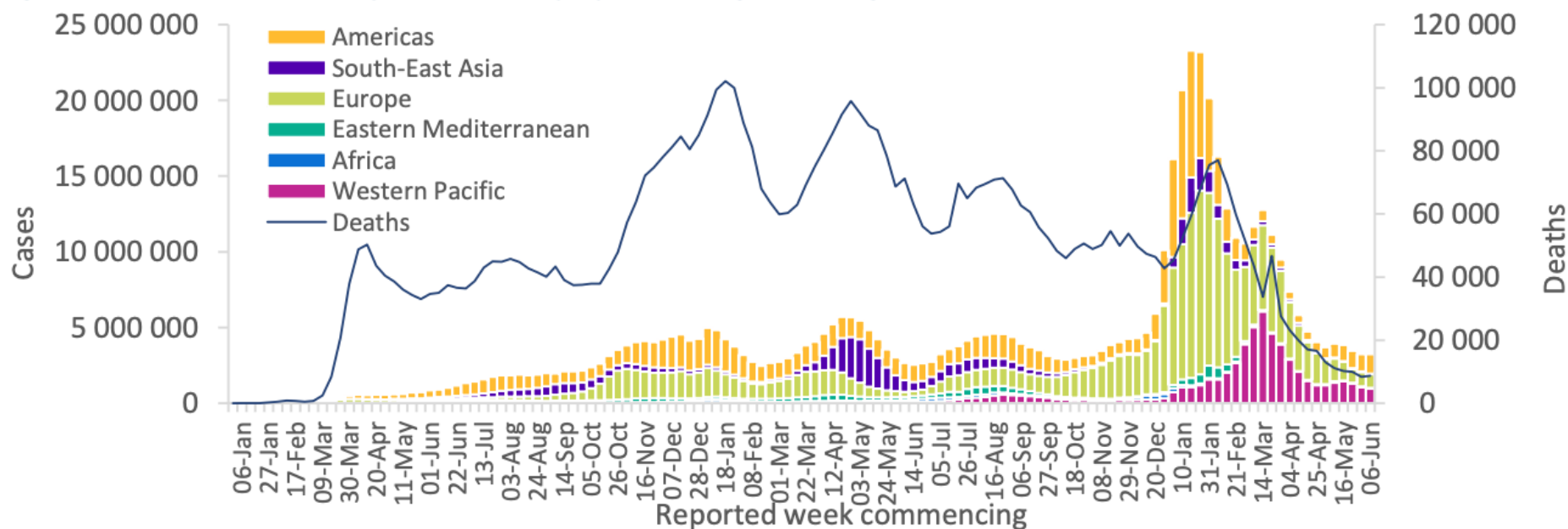
The role of WHO in Pandemic Preparedness Planning

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Epidemic and Pandemic Prevention and Preparedness
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ESWI, 21 June 2022

Global COVID-19 epidemiological situation (as of 12 June 2022)

- New cases: >3.2 million
- New deaths: 8,737
- Cumulative cases: >533 million
- Cumulative deaths: >6.3 million

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 12 June 2022**



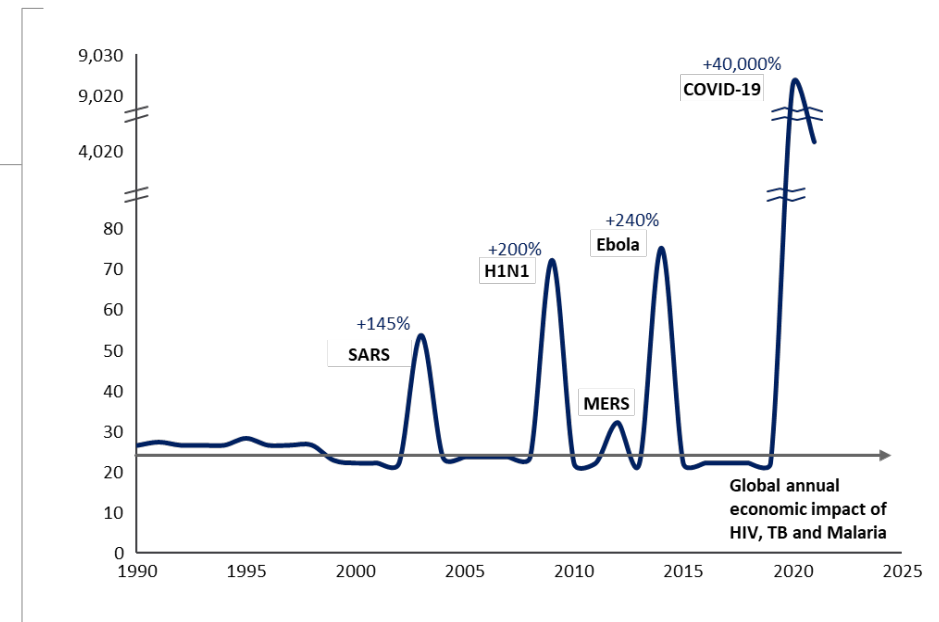
COVID-19 is having a devastating effect on societies...



... with economic impact far outweighing any previous outbreaks

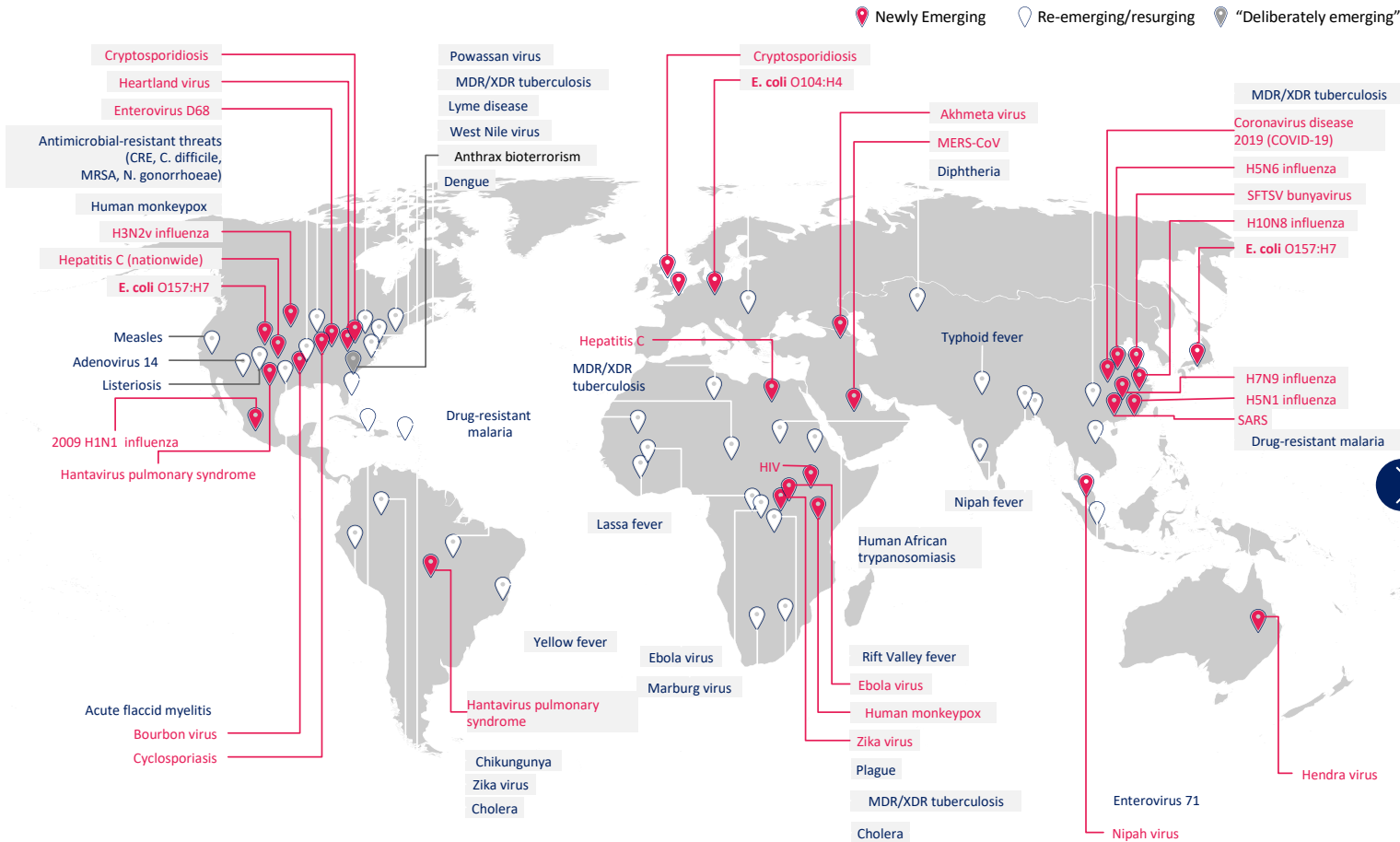
COVID has significant affected societies...

Global Health		90%	healthcare systems disrupted ¹
Economic		\$16T¹	Estimated revenue losses in international sectors
Education		1.6B	students out of school ²
Climate		-30%	investment in clean energy transition ³
Poverty		+135M	people pushed into poverty by 2030 ⁴



1. Midpoint of estimates by David M. Cutler, PhD, Department of Economics, Harvard University; IMF; McKinsey; and Congressional Research Service, 2 World bank; 3 Market intelligence ; 4 Effect of covid-19 only, UN

... and it will not be the last health emergency



- The risk is increasing due to environmental degradation, rapid urbanization, and international travel & trade
- Increasing humanitarian crisis needs: 160 million people targeted by health cluster across 56 countries

Countries face different situations, challenges and scenarios for ending the emergency phase and for achieving sustained COVID-19 control



Current and Previous Strategy

Current Epidemiology

Population demographics and risk factors for severity

Population immunity from vaccination and/or infection

Access to life saving tools

Capacities to implement in communities and across all pillars

Operational readiness and agility to adjust actions and surge as needed

Public trust, societal engagement and unrest

Factors that continue to drive SARS-CoV-2 circulation and impact



Drivers of disease impact and transmission

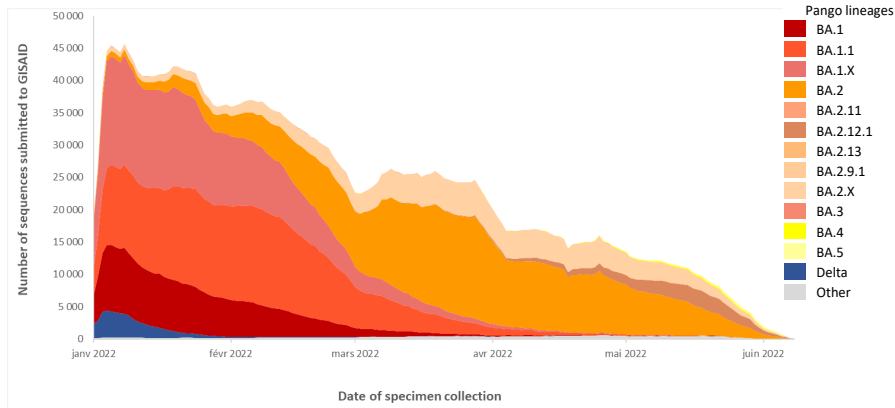
Drivers of high transmission

- **Viral evolution resulting in more transmissible variants**
- Lack of immunity due to lack of access to vaccination, hesitancy, or incomplete vaccination, and/or waning protection against COVID-19 following infection or vaccination
- Inconsistent and/or inadequate use of proven Public Health and Social Measures
- Insufficient capacity to use and or adjust interventions on the basis of available public health intelligence and accrued knowledge
- Misinformation, disinformation and politicization undermining the effectiveness of proven public health and social measures, therapeutics, and vaccines

Drivers of high impact

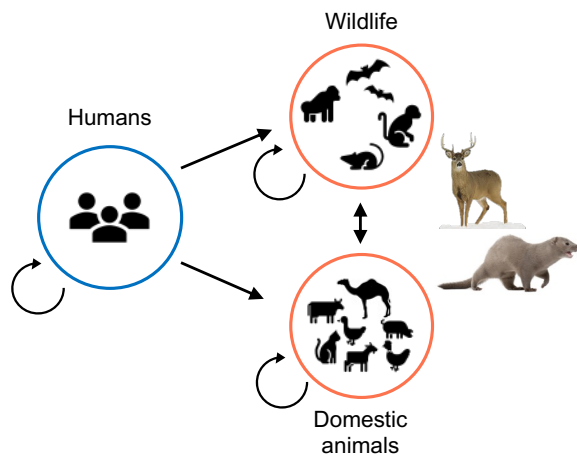
- Low vaccination coverage, with complete schedule, in priority use populations globally
- Waning protection against severe disease or death following vaccination and/or infection
- Lack of access to life-saving tools such as oxygen and other therapeutics
- Lack of access to diagnosis, late diagnosis and delayed entry into clinical care pathway
- Viral evolution reducing the efficacy of life saving tools
- Poorly defined and/or resourced care pathways for post-COVID-19 Condition (Long COVID)
- Insufficient capacity to adjust recommended layered interventions on the basis of available public health data and analysis

SARS-CoV-2 continues to evolve



Number of Omicron sequences by sister-lineage,*

*sister-lineages include pooled descendent lineages BA.1.X, BA.2.X and BA.3, BA.4 and BA.5



- Omicron dominant variant of concern (VOC) observed in the context of declining numbers of sequence submitted globally
- Alpha, Beta, Gamma, Delta have declined significantly over time but may still be circulating below detection levels
- Omicron subvariants have the potential to cause waves of infection in countries depending on the background immunity, assesment of their severity as compared to BA.1/BA.2 is ongoing
- BA.4, BA.5 and BA.2.12.1 have increased in prevalence in the last few weeks, however, they remain at a low prevalence globally
- Recombinants, reverse zoonoses are occurring, although the extent is unclear
- **Urgent need to maintain and even enhance surveillance globally**

Strategic objectives to end the global COVID-19 public health emergency in 2022



2022 Planning scenarios

Base case

- Virus evolves with severity significantly reduced over time
- Spikes in transmission as a result of waning immunity
- Boosting for high-priority populations
- Seasonal peaks in transmission

Best case

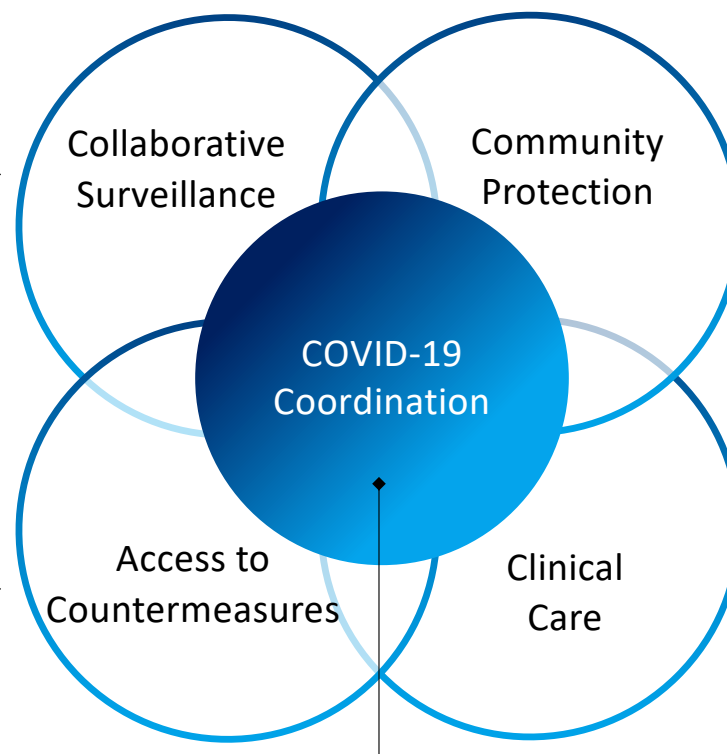
- Future variants significantly less severe
- Protection against severe disease is maintained
- Less need for periodic boosting

Worst case

- A more virulent and highly transmissible variant emerges
- Vaccines are less effective
- Alterations to vaccines req. & boosting of high-priority groups

Five core components of COVID-19 preparedness, readiness and response: Integration and strengthening actions to address future scenarios

- Integrate COVID surveillance with systems for surveillance of influenza and other respiratory pathogen
- Expand genomic sequencing capacity to increase global coverage
- Maintain & strengthen transmission trend surveillance of cases, deaths, hospital admissions
- Monitor variants and adjust countermeasures as needed
- Scale manufacturing platforms & expanded agreements for technology transfer
- Coordinate procurement & strengthen supply chains to ensure equitable access



- Fully vaccinating most vulnerable and using an optimal schedule of vaccines including boosters.
- Expand social listening systems to facilitate to improve immunization strategies
- Apply context specific public and social measures to reduce risk of spread of the virus
- Strengthen early recognition, triage, safe patient flow and diagnostics to provide timely treatment & resuscitation
- Address gaps infection prevention & control
- Restore essential health services that have disrupted due to COVID

- Integration of COVID-19 into broader health systems and health security strategies & plans
- Coordinated planning, costing & financing across
- Strengthened monitoring and tracking against delivery targets

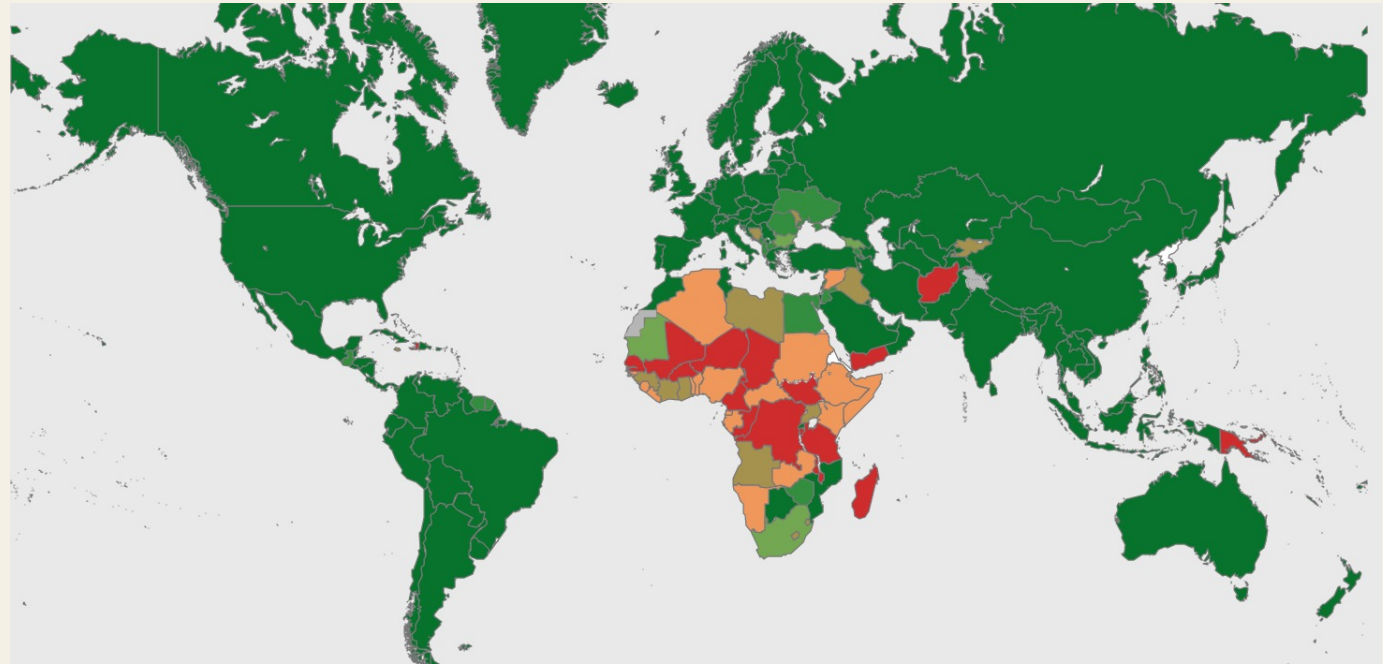
More than 12 billion doses administered globally, but inequities persist

12.3 billion vaccine doses administered globally as of 14 June 2022

4 billion vaccine doses administered across AMC participants

Strong global vaccine inequity persists – 18 AMC participants have vaccinated less than 10% of the population (compared to 34 in January 2022)

Persons fully vaccinated per 100 population



Note: The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory 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.
There are in total 92 Covax Advanced Market Commitment (AMC) in low and lower middle income countries with special condition to access Covax vaccine doses.

Source: WHO COVID-19 Dashboard (map), UNICEF Procurement Portal (COVAX shipments), Bloomberg (total # of doses administered).

Vaccine delivery challenges and next steps over the coming months



- **The window of opportunity to increase vaccination coverage is time bound as countries address competing health priorities and Omicron has changed risk perceptions**
 - Support acceleration campaigns in 34 countries in next 3-4 months and use this as an opportunity to strengthen health systems.
- **Most of the countries with low coverage rates are dealing with humanitarian emergencies**
 - Focus on integration of COVID-19 vaccination with humanitarian activities
- **Coverage of healthcare workers, the elderly and people with comorbidities is still low**
 - Support countries develop tailored approaches to reach high-priority groups

Support required

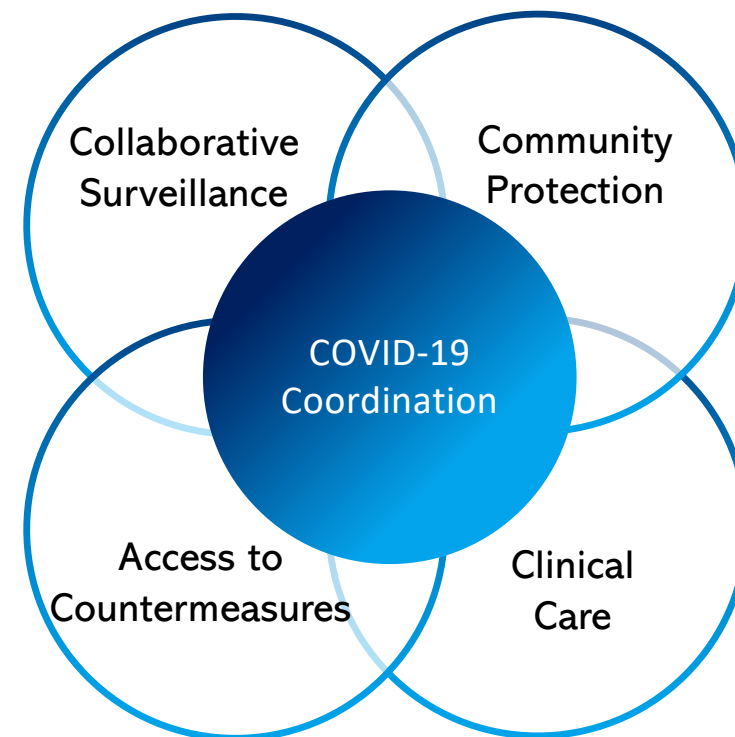
- Maintain political attention on COVID-19 vaccination
- Continue to provide flexible delivery funding
- Support the integration of COVID-19 vaccination with humanitarian activities and encourage humanitarian partners to take this up
- Invest in primary health care systems and in local production as key components of pandemic preparedness

Pandemic Preparedness.... Is now.

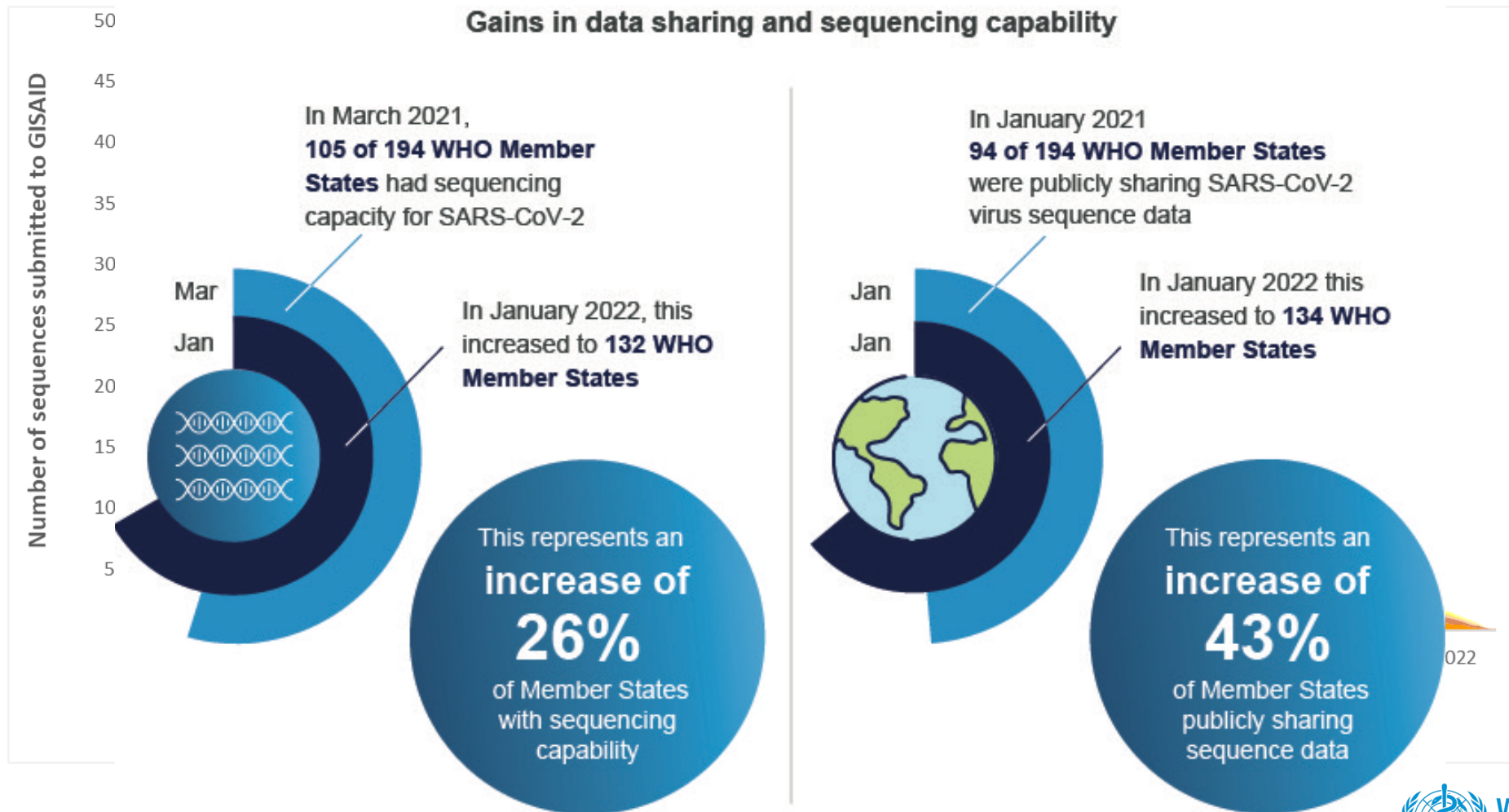


The global emergency is not over. We are not yet living with COVID-19 responsibly

- Millions (re)infected each week
- 8000+ dying each week
- Billions not fully vaccinated
- Post COVID-19 Condition burden and planning
- Systems, financing, workforce being dismantled
- Public trust low, disinformation rampant, societal unrest increasing



Leveraging data sharing and sequencing capabilities



What is the global genomic surveillance strategy for pathogens with pandemic and epidemic potential?



A 10-year unifying framework to strengthen country, regional and global genomic surveillance.



IT AIMS TO:



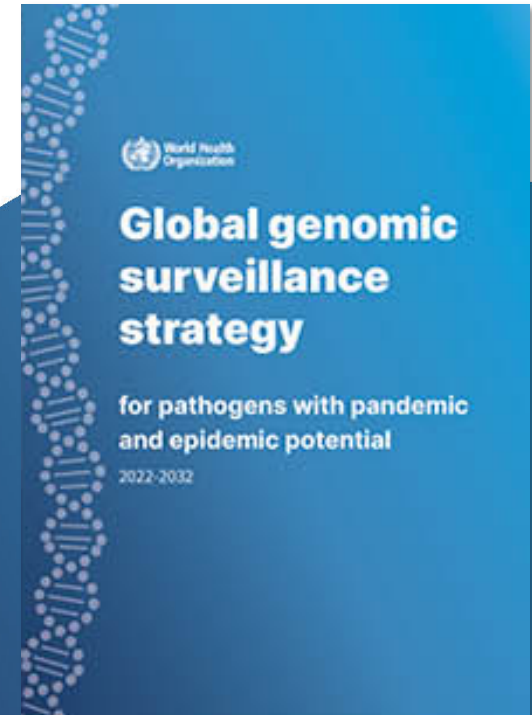
Link and embed pathogen monitoring within broader surveillance systems



Identify opportunities to strengthen and establish capacities and systems



Bring partners and stakeholders together to work on a common vision

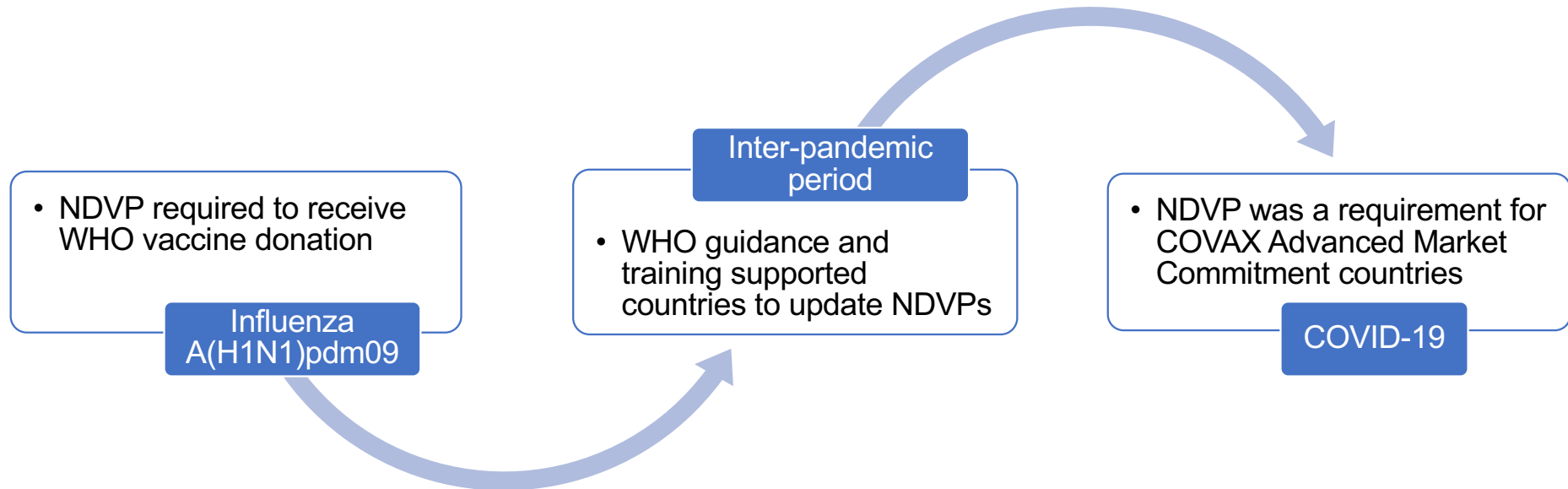


The Strategy aims to mobilize genomic surveillance efforts against any pandemic or epidemic threat by strengthening and linking laboratories around the world.

National deployment and vaccination plans (NDVP)



NDVP are an important planning tool for countries introducing vaccine during pandemics

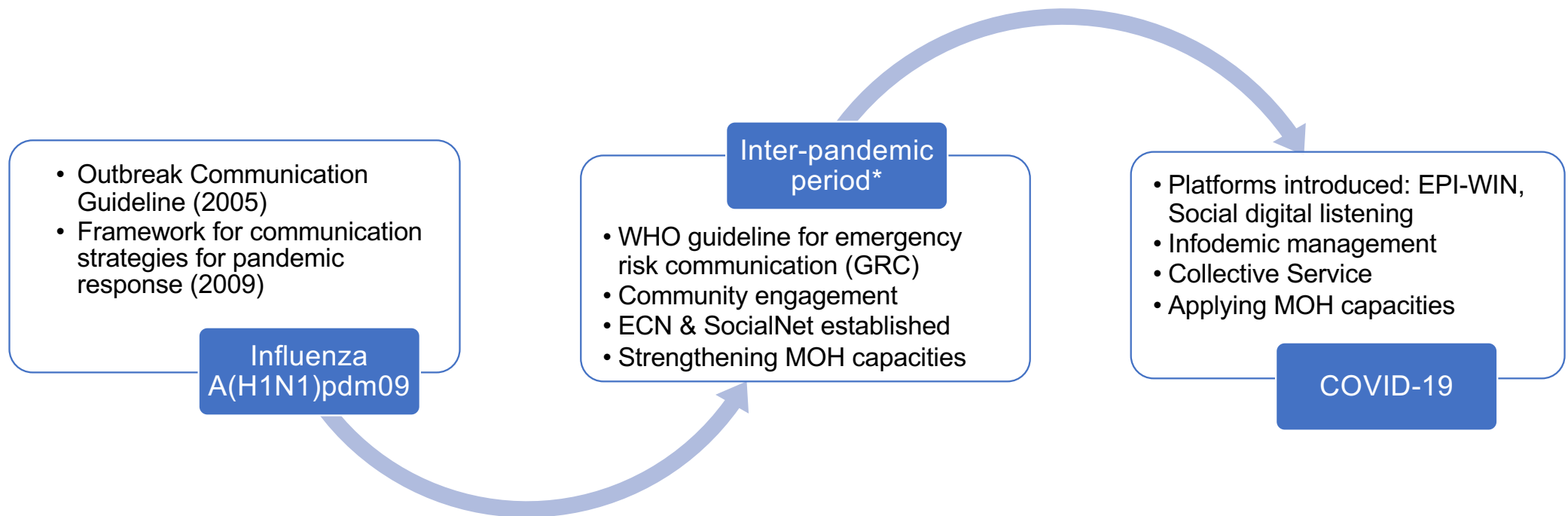


Lessons learned from 2009 Influenza and COVID-19 pandemics:

- Having to develop a NDVP at the time of an emergency has slowed down vaccine roll out
- Countries with an existing influenza NDVP were able to adapt for COVID-19 vaccine

Moving forward, updating NDVPs as part of pandemic preparedness planning can help countries prepare for known and unknown pathogens

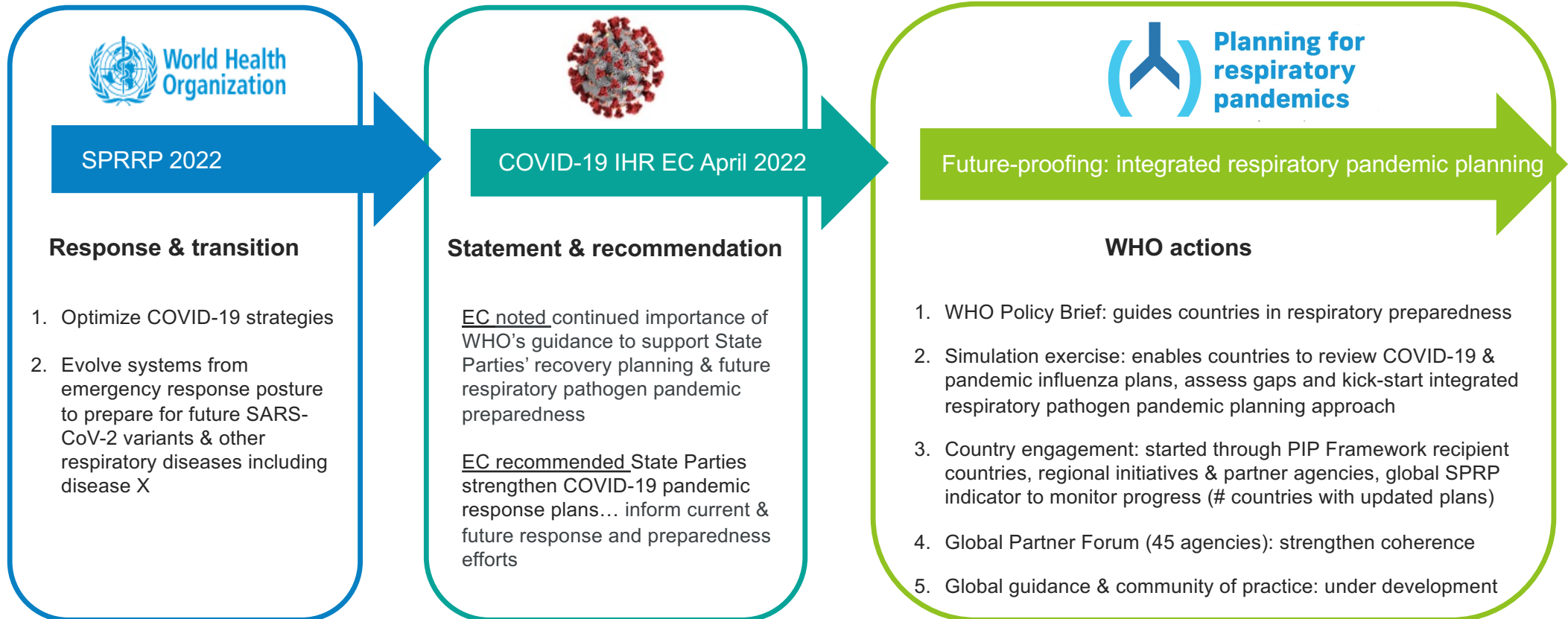
Risk communication and community engagement (RCCE)



Moving forward, building on and strengthening RCCE platforms as part of pandemic prevention, preparedness and readiness planning can help countries prepare for known and unknown pathogens

**Strengthening, learning through outbreaks of MERS, EVD, Zika, plague, Yellow Fever...*

Preparing for future SARS-CoV-2 variants and respiratory pathogen epidemics/pandemics



COVID-19 and the future of pandemic preparedness and response: A new health threat architecture: if not now when?



- Maintain, strengthen, integrate surveillance systems, sequencing, supported work force, disease management; rebuild trust; be agile

- Fully vaccinate most vulnerable in every country

- Working toward the longer-term goal to develop a Sustainable System for Integrated Epidemic Respiratory Disease Preparedness, Response and Control

- Outbreaks of pathogens of pandemic potential are set to continue to increase in frequency for the foreseeable future. COVID-19 was disease X, and the next disease X is out there.

- Without swift and coordinated action to strengthen the global architecture for pandemic preparedness and response, backed by the necessary financing, the costs of the next pandemic are likely to exceed those of COVID-19.

