

COVID-19 Global Situation:

Progress and remaining challenges in ending the acute phase of the COVID-19 pandemic

Member State briefing on the COVID-19 pandemic 21 July 2022

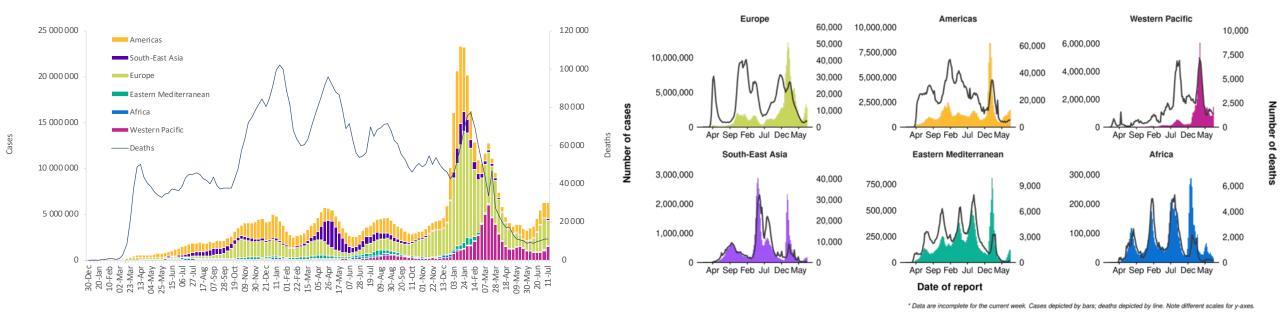
Current global situation

Reported week commencing

CASES REPORTED TO WHO AS OF 17 July 2022

- Last week new cases: >6.2 million
- Last week new deaths: 11 000

- Cumulative cases: >560 million
- Cumulative deaths: >6.3 million



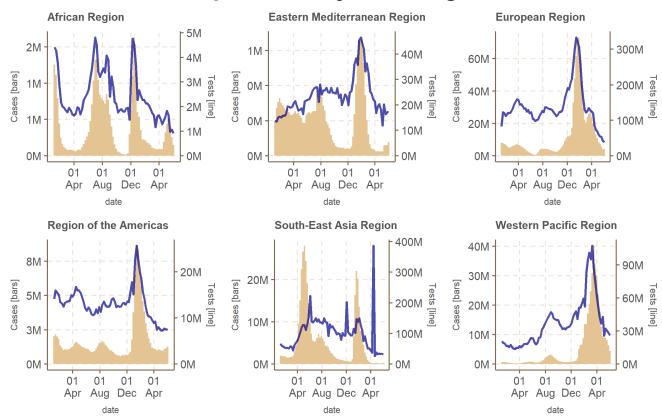
Change in weekly new cases and deaths by WHO region

EW 28 (17 Jul to 11 Jul) compared to EW 27 (10 Jul to 04 Jul)

WHO Region	new cases in last /	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Maathe in lact /	Cumulative deaths (%)
Europe	2 785 259 (44%)	-16%	235 432 245 (42%)		-14%	2 036 904 (32%)
Americas	1 756 694 (28%)	9%	167 081 979 (30%)		7%	2 775 646 (44%)
Western Pacific	1 444 382 (23%)	1 37%	66 933 896 (12%)		-3%	241 684 (4%)
South-East Asia	173 854 (3%)	5%	58 967 419 (11%)		70%	791 164 (12%)
Eastern Mediterranean	120 859 (2%)	-1%	22 288 922 (4%)		15%	344 024 (5%)
Africa	15 409 (0%)	-27%	9 175 098 (2%)		-39%	173 861 (3%)
Global	6 296 457 (100%)	·	559 880 323 (100%)		-1%	6 363 296 (100%)

COVID-19 testing and sequencing trends*

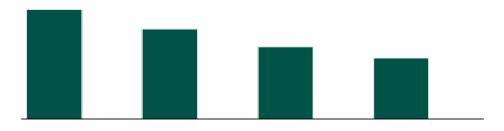
Cases and tests per week by WHO region



* January 2021 – June 2022, only includes countries where testing data are available for full time series

Proportion of Member States (MS) that publicly shared SARS-CoV-2 genomic sequence data in the past 90 days

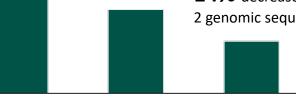
As of 1 April 2022



As of 13 June 2022

85% decrease in LICs that shared SARS-CoV-2 sequence data (13 to 2 MS)

14% decrease in HICs shared that SARS-CoV-2 genomic sequencing data (51 to 44 MS)



High income countries (HIC, n = 57)

Upper middle income countries (UMIC, n = 53)

Lower middle Income countries (LMIC, n = 54) Low income countries (LIC. n = 27)

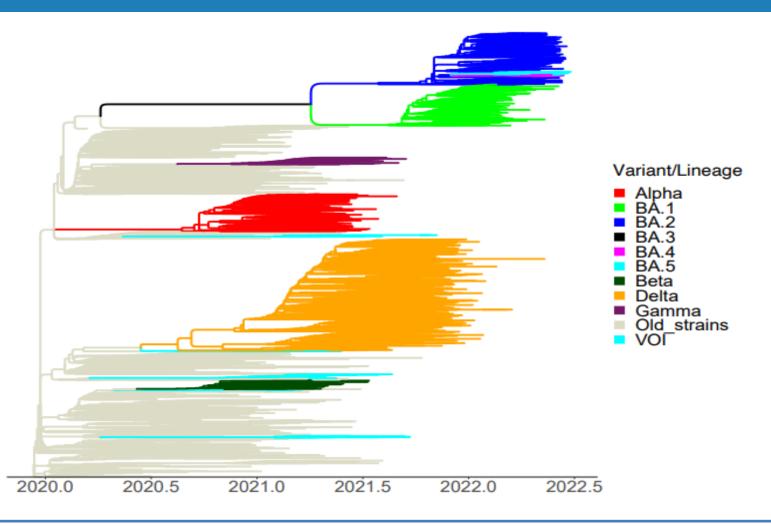
Source: GISAID EpiCoV Database

Note: Analysis contains 191 WHO Member States with World Bank Income Classification





Virus evolution: emergence of VOCs

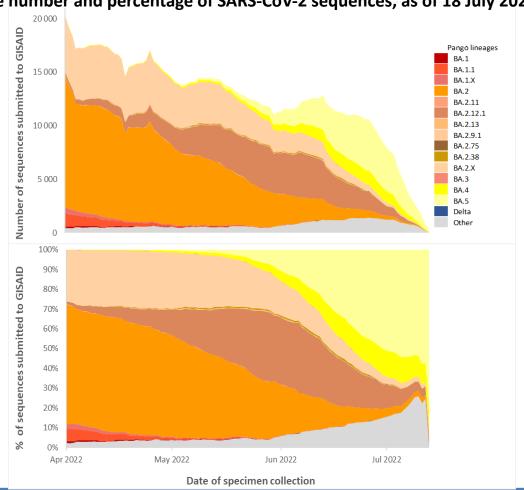


- Evolution of SARS-CoV-2 has consisted in parallel evolution towards more transmissible variants such as Alpha, Beta, Gamma and (slightly after) Delta.
- Higher transmissibility of these variants mostly driven by virus adaptation to the human host
- Higher transmissibility of Omicron largely driven by immune escape; Omicron replicates better in the upper respiratory tract as compared to Delta or the index virus



SARS-CoV-2 Global variant circulation and trends

The number and percentage of SARS-CoV-2 sequences, as of 18 July 2022

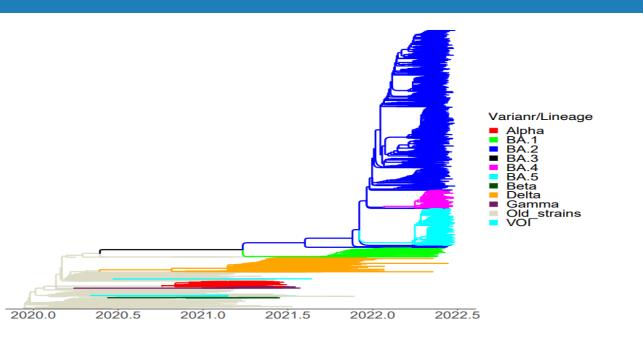


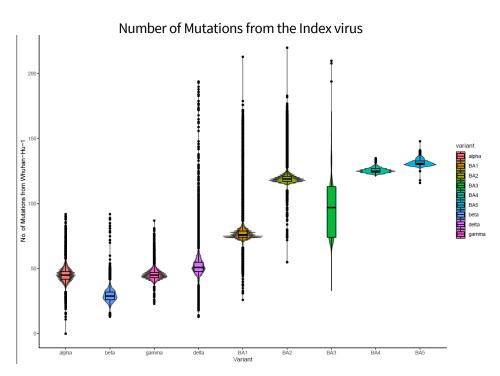
- A total of **12** million SARS-CoV-2 sequences have been submitted to GISAID as of 18 July 2022. **4.8** million of these are Omicron sequences
- Omicron remains the dominant VOC globally, accounting for 95% of sequences submitted from 13 June to 13 July 2022. The remaining 5% are recombinants, Delta VOC and sequences waiting to be assigned.
- Several Omicron lineages have emerged, with over 75 being assigned a PANGO lineage.





SARS-COV-2 Omicron VOC evolution





- Omicron emergence has consisted in multiple waves of infections driven by subvariants with some additional immune escape; immunity against severe disease is maintained
- All these subvariants (BA.1, BA.2, BA.4, BA.5) have retained the main characteristics of Omicron so far, i.e., ability to escape immunity and preference to replicate in the upper respiratory tract



Phenotypic characteristics of BA.4/BA.5

Public health domain of	Omicron lineages					
impact	BA.1	BA.2	BA.4	BA.5		
Transmissibility	Lower growth advantage compared to BA.2*, BA.4 and BA.5 ¹	Lower growth advantage compared to BA.4 and BA.5 *	Growth advantage compared to BA.2 ¹	Growth advantage compared to BA.4 $^{\scriptsize 1}$		
Disease severity	No difference in disease severity compared to BA.2, BA.4 and BA.5 ²	No difference in disease severity compared to BA.1, BA.4 and BA.5 ²	Currently available evidence does not suggest a difference in disease severity compared to BA.1 and BA.2 ²			
Risk of reinfection	Reduced risk of reinfection with BA.1 after infection with BA.2	Reduced risk of reinfection following infection with BA.1 ³	Protection against infection following previous BA.2 infection ⁴	Protection against infection following previous BA.2 infection ⁴		
Impact on antibody responses	Lower neutralising antibody titers compared to the index virus ⁵	Lower neutralising antibody titers compared to the index virus ⁵	Lower neutralising antibody titres (7.6-fold) compared to BA.1 ^{6,7}	Lower neutralising antibody titres (7.5-fold) compared to BA.1 6,7		
Impacts on diagnostics	S gene target failure	The majority will be S gene target positive	S gene target failure	S gene target failure		
Impact on treatment	Impact on treatment Reduced efficacy of cilgavimab and casirivimab-imdevimab		Reduced neutralising activity of sotrovimab, bamlanivimab, casirivimab, etesevimab, imdevimab and tixagevimab. Increased resistance to cilgavimab	Reduced neutralising activity of sotrovimab, bamlanivimab, casirivimab, etesevimab, imdevimab and tixagevimab. Increased resistance to cilgavimab		
			compared to BA.2 8	compared to BA.2 8		

^{*}Detailed methods: Campbell, Finlay, et al. "Increased transmissibility and global spread of SARS-CoV-2 variants of concern as of June 2021." Eurosurveillance 26.24 (2021)

4https://www.medrxiv.org/content/10.1101/2022.07.11.22277448v1 5 doi:10.1101/2022.02.06.22270533

6 doi:10.1101/2022.05.16.22275151 7doi:10.1101/2022.04.30.489997

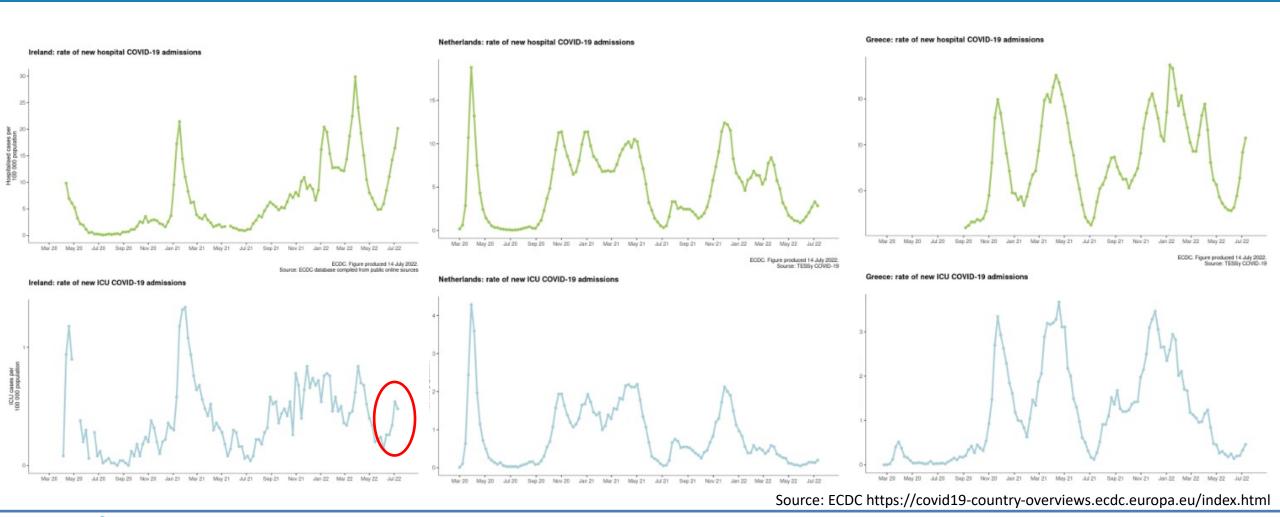
8 https://www.biorxiv.org/content/10.1101/2022.05.03.490409v1.full

²https://www.medrxiv.org/content/10.1101/2022.07.07.22277315v1

³https://www.medrxiv.org/content/10.1101/2022.06.23.22276824v1

¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1086494/Technical-Briefing-43-28.06.22.pdf

Omicron BA.4 and BA.5 driving hospitalization in other countries in EURO, particularly in older populations



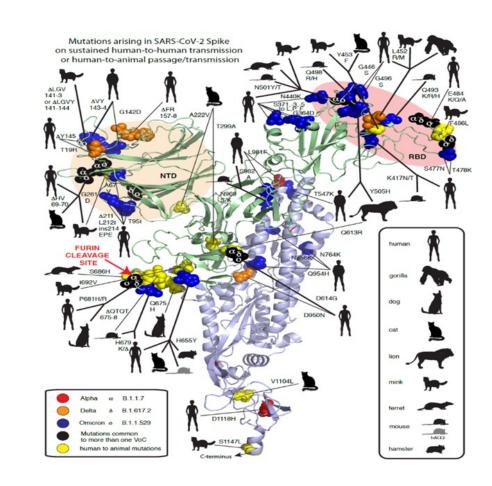




SARS-CoV-2 will continue to evolve

Potential driver of emergence of genetically divergent SARS-CoV-2

- Uncontrolled transmission and prolonged human-human transmission in areas with limited surveillance and sequencing
- Novel hosts driving viral adaptation via immune pressure and by hosting different coronaviruses
- Persistent SARS-CoV-2 infection in an immunocompromised







Summary of global epidemiology

- The decline in sequence data continues to be a challenge.
- A wave of infections driven by BA.4 and BA.5 has been occurring, bringing an increase in cases, and hospitalizations,
 particularly in elderly populations in a number of countries, including the United Kingdom, France, and the United States
- An increase in ICU admissions has been observed in some countries, but available evidence does not suggest a change in severity in BA.4 or BA.5 compared to BA.2
- Although the increase in cases has not been accompanied by a proportionate increase in deaths, global COVID-19
 mortality remains very high, at over 11,000 deaths per week





Update on 2022 Strategic Preparedness, Readiness and Response Plan Strategic objectives to end the global COVID-19 public health emergency in 2022









2022 SPRRP planning scenarios*

Base case I The virus continues to evolve. However, severity is significantly reduced over time due to sustained and sufficient immunity against severe disease and death, with a further decoupling between incidence of cases and severe disease leading to progressively less severe outbreaks. Periodic spikes in transmission may occur as a result of an increasing proportion of susceptible individuals over time if waning immunity is significant, which may require periodic boosting at least for high-priority populations; a seasonal pattern of peaks in transmission in temperate zones may emerge.

*All scenarios will need to plan for managing Post COVID-19 condition **Worst case** I A more virulent and highly transmissible variant emerges against which vaccines are less effective, and/or immunity against severe disease and death wanes rapidly, especially in the most vulnerable groups. This would require significant alterations to current vaccines and full redeployment and/or broader boosting of all high-priority groups.

Best case I Future variants that emerge are significantly less severe, protection against severe disease is maintained without the need for periodic boosting or significant alterations to current vaccines.



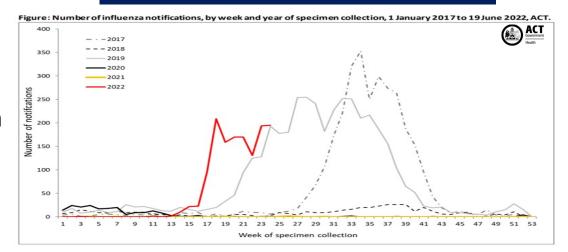


2022 global influenza trends

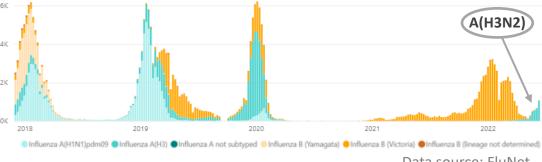
Unusual seasonality of influenza

- Early start of season in some southern hemisphere countries
- Restart of A(H3N2) virus circulating in China after extremely low/none circulation during the COVID-19 pandemic
- B/Yamagata lineage viruses low/none circulation globally in the past 3 years, yet to monitor its PH significance re. vaccine composition
- Novel subtype and spread of avian influenza infection in humans
 - China reported <u>first</u> 2 human infections by A(H3N8) subtype.
 - UK and USA reported for the <u>first-time</u> human infections of A(H5N1) (one case in each country).
 - Sporadic human infection with zoonotic influenza viruses continues to be reported.

Influenza detections, Australia, 2017-present



Influenza detections, China, 2018-present



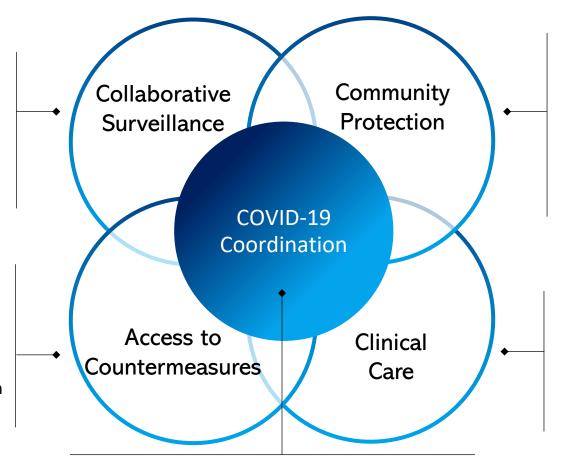
Data source: FluNet





Progress in implementing SPRRP 2022, remaining challenges and uknowns

- 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



- 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

- 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





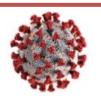
Preparing for future SARS-CoV-2 variants and respiratory pathogen pandemics



SPRP 2022 approach

Response & transition

- 1. Optimize COVID-19 strategies
- 2. Evolve systems from emergency response posture to prepare for future SARS-CoV-2 variants & other respiratory diseases including disease X



COVID-19 IHR EC April 2022

Statement & recommendation

EC noted continued importance of WHO's guidance to support State Parties' recovery planning & future respiratory pathogen pandemic preparedness

<u>EC recommended</u> State Parties strengthen COVID-19 pandemic response plans... inform current & future response and preparedness efforts





Future-proofing: integrated respiratory pandemic planning

WHO actions

- 1. WHO Policy Brief: guides countries in respiratory preparedness
- 2. Simulation exercise: enables countries to review COVID-19 & pandemic influenza plans, assess gaps and kick-start integrated respiratory pathogen pandemic planning approach
- 3. Country engagement: started through PIP Framework recipient countries, regional initiatives & partner agencies, global SPRP indicator to monitor progress (# countries with updated plans)
- 4. Global Partner Forum (45 agencies): strengthen coherence
- 5. Global guidance & community of practice: under development





Immediate needs by Member States

- **Reassess** current national epidemiologic situation, capacities, policies and financing for an agile response planning for future waves of SARS-CoV-2 infection
- Maintain surveillance to meet the immediate needs of SARS-CoV-2 virus evolution, including sequencing and sharing information, while strengthening longer term surveillance capacities for respiratory diseases
- **Scale up** lines of COVID-19 defense:
 - Tailored use of public health and social measures: calibrate based on risk to prevent infections and reduce pressure on virus
 - Evaluate surge and adjustment capacities to manage COVID-19 disease, early use of diagnostics to ensure early access to antivirals, potential disruptions to key sectors
 - Prepare for potential increased needs to treat severe disease: e.g., O₂, ventilation, therapeutics, trained work force
 - Vaccinate those most at risk for severe disease and at highest risks of exposure in all countries; reach targets
- Strengthen and reinforce work force across health sector and beyond, including adequate supplies and use of PPE; Reinforce infection prevention and control actions in health facilities
- **Communicate** regularly and openly with populations, empower, engage, enable with supportive policies
- Share success stories and ways in addressing challenges



