

Update on SARS-COV-2 and Omicron VOC

9 December 2021

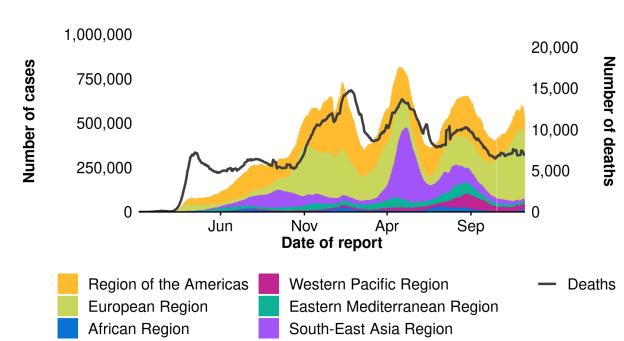
ACT Accelerator Facilitation Council

Global Situation

(as of 8 December 10H CET)

Cumulative:

- 266,504,411 confirmed cases.
- 5,268,849 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
United States of America	1	190,353	48,982,584	1,343	783,433
Germany	~~	69,601	6,291,621	527	104,047
France	~~	58,852	7,749,620	171	117,404
United Kingdom	V	45,102	10,560,345	180	145,826
Russian Federation	~~	30,752	9,895,597	1,179	284,823
Poland	\sim	28,549	3,732,589	591	86,796
Turkey	V~	22,687	8,943,837	198	78,215
Czechia	~	19,546	2,282,212	132	34,034
Netherlands	~~	18,017	2,790,830	68	19,770
Italy	~~~	15,742	5,134,318	99	134,386

WHO African Region

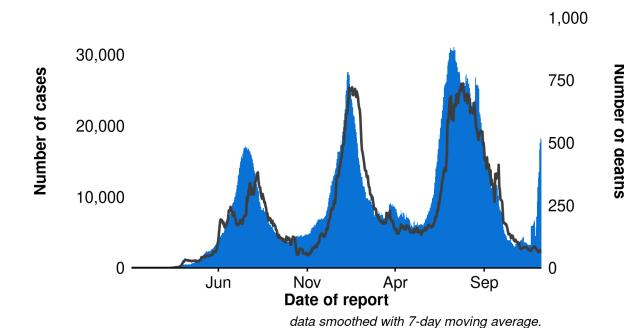
(as of 8 December 10H CET)

Previous 24 hours:

- 29,210 new confirmed cases from 29 countries.
- 143 new deaths from 16 countries.
- 4.2% of new global cases and 1.9% of new global deaths

Cumulative:

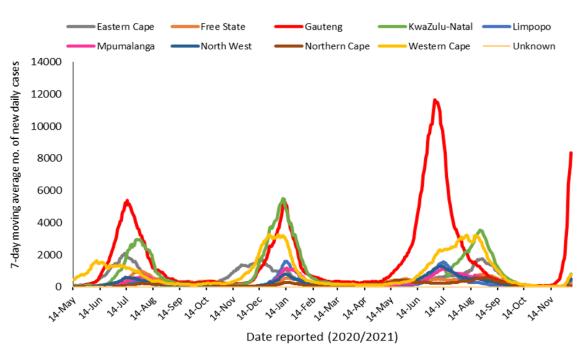
- 6,408,551 confirmed cases.
- 153,503 deaths.



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

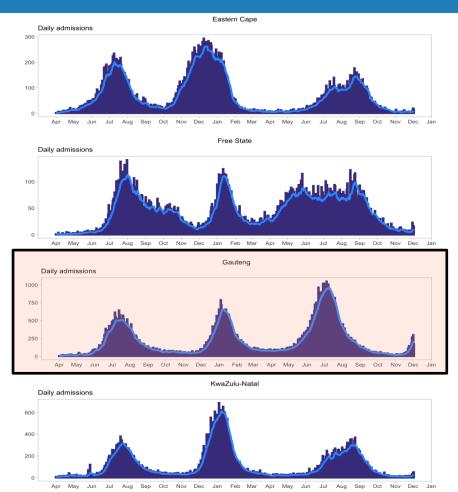
Country		New Cases	Total Cases	New Deaths	Total Deaths
South Africa	~~	13,147	3,051,222	27	90,002
Zimbabwe	M	6,586	145,632	8	4,718
Mauritius	\	6,194	62,500	58	652
Eswatini	λ	507	48,358	0	1,248
Madagascar	_	470	44,800	5	972
Namibia		430	129,938	1	3,574
Cameroon		401	107,549	19	1,823
Burkina Faso	Manual	334	16,334	4	290
Algeria		197	211,859	3	6,114
Mali	M	141	18,113	1	619

Trends of SARS-COV-2 cases and hospitalizations South Africa



7-day moving average number of new cases by province and date of reporting, 12 April 2020 to 06 Dec 2021, South Africa Courtesy of NICD South Africa

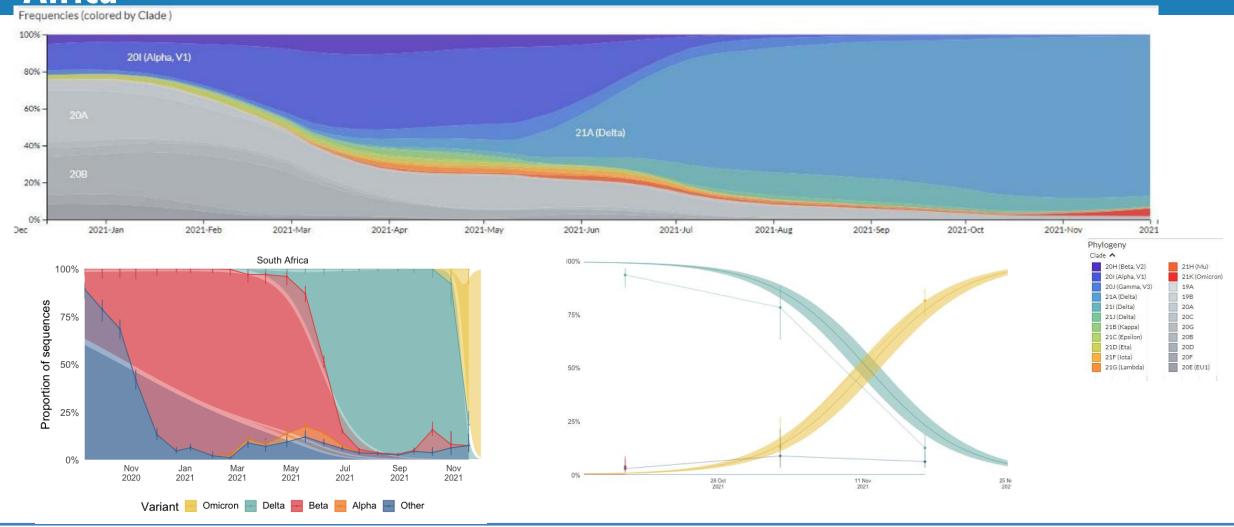
Increase in hospitalisations most prominent in Gauteng – centre of Omicron outbreak







Proportion of SARS-CoV-2 VOCs variants over time: Globally and South Africa







Under an IMST, WHO is assessing the threat of VOCs (including omicron)

3 key properties of a variant are likely to influence the overall threat from it.

TAG for Virus Evolution

is assessing its effect on transmission, disease severity, vaccines, therapeutics and diagnostics, and the effectiveness of PHSMs

WG for Clinical Management Networks

is assessing impacts of VOCs on current vaccines and WHO Global Clinical Platform for COVID

The Joint Advisory Group on Therapeutics Prioritization

is analyzing the possible effects on treatment of hospitalized patients.

WG on outpatient platform trials

is reviewing trial designs and challenges

Its transmissibility

(relative to circulating variants)

Its virulence

(ability to cause severe disease)

Its ability to evade immune responses

(prior infection and vaccines & therapeutics)

The R&D Blueprint for Epidemics

is convening researchers to identify knowledge gaps, and studies needed to answer the most pressing questions.

Omicron variant assays & animal models study tracker

The WG on vaccines TPPs

is reviewing current desirable and minimum criteria for vaccines.

WHO BioHub system

a reliable, safe, and transparent mechanism to voluntarily share novel biological materials

Regulatory convergence via ICMRA

For evaluation of variant specific vaccines

TAG for COVID-19 Vaccine Composition

is assessing impacts of VOCs on current vaccines and determining whether changes to the composition of vaccines are needed.

SAGE for vaccines

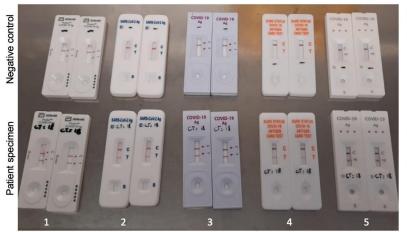
is reviewing data to develop evidence based recommendations on the vaccination policies and target populations.

Thousands of researchers around the world are contributing their data and expertise to the deliberations



Omicron implications for diagnostics and therapeutics

SARS-CoV-2 Ag-RDT testing with left-over patient specimen, Omicron VOC, 01.12.2021



Meriem Bekliz, PhD, Isabella Eckerle, MD, on behalf of the Geneva Centre for Emerging Viral Diseases, University Hospitals of Geneva &

University of Geneva, Aq-RDTs received from Foundation for Innovative New Diagnostics (FIND), Geneva

Test results on TagPath Thermofisher Assav: N gene Ct=19 ORF1 Ct =18 4 S gene Ct = not detected

Confirmation of Omicronindicative mutations by partia Sanger sequencing of the

Application of 5 µl of original VTM + buffer of the kit

Testing performed in duplicates

Ag-RDT tests used:

- 1) Panbio COVID-19 Ag Rapid test device (Abbott)
- 2) Flowflex (ACON biotech)
- 3) Standard Q CoVID19 Ag (SD Biosensor/Roche)
- 4) Sure Status Covid-19 Antigen Card Test (Premier Medical Corporation)
- 5) OnSite COVID-19 Ag RDT (CTK Biotech)







- PCR assays (with multiple gene targets) continue to detect SARS-CoV-2 infection, including Omicron
- Antigen-detection tests (Ag-RDTs) are expected to continue to detect SARS-CoV-2 infection, including Omicron



WHO R&D Blueprint

DRAFT Statement on the possible effects of the new SARS CoV-2 Omicro variant on treatment of hospitalized COVID-19 patients

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Therapeutic

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1 December 2021

Antivirals

Geneva, Switzerland

- Focus initial research efforts on:
 - antigen binding and virus neutralization by antiviral monoclonal antibodies
 - characterization of the COVID-19 phenotype caused by infection with **Omicron variant**

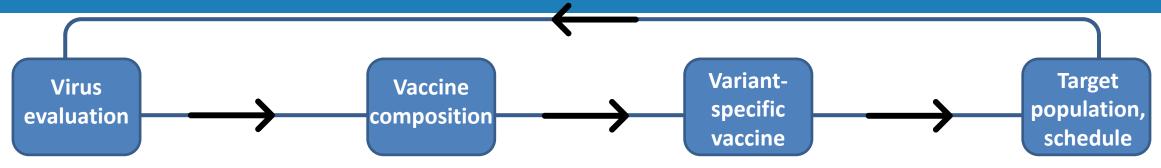
	In vitro			In vivo	
	Antiviral assessment	Live virus neutralization	Binding IgG	mAb efficacy	Therapeutic efficacy
Neutralizing monoclonal Antibody		x	x	x	





Experiment Type

From VOC designation to policy recommendations for variant specific vaccines



Monitoring & surveillance



- Which variants warrant further investigation
- Defines VOIs or VOCs
- Assess impact on interventions & tools





Determine whether changes to vaccine composition are needed



Evaluates variantspecific vaccine

EUL/PQ

Determine whether evidence on modified vaccine permits regulatory approval



Provides policy recommendations

SAGE

 Define goals of vaccination, target populations and vaccine schedules



Define priority research agenda

R&D Blueprint Expert Groups

- o Live critical appraisal of emerging data
- Design of methods for evaluation of variant specific vaccines (pre-clinical & clinical





Priorities

- Coordinated characterization, risk assessment and required research and innovation leading to evidence-based decision-making and policy formation
- Intensify efforts to drive down/keep down transmission strengthen PHSM
- Accelerating higher, verified COVID-19 vaccines coverage, among the most vulnerable populations and HCWs, supported by strong risk communication and community engagement
- Supporting all countries to enhance clinical pathways, surveillance and laboratory systems including genomic sequencing, with a particular focus on LMICs

Reduce Exposure

Suppress transmission Protect the vulnerable

Reduce morbidity and mortality

Strengthen communities



B.1.1.529 Variant of Concern: Omicron

Clinical Data Platform - for severity monitoring CRF UPDATED

The WHO Global Clinical Platform for COVID-19

COVID ClinPlatform@who.int

