Force Health Protection Branch NATO MilMed COE Munich



Short Update 60a **COVID-19 Coronavirus Disease** 12th of March 2021



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News: **GLOBAL** 118 597 530 **Confirmed cases** 67 156 850 recovered

- 2 630 031 deaths
- USA (new cases/day 61 406) 29 171 777 confirmed cases 10 753 819 recovered 528 491 deaths

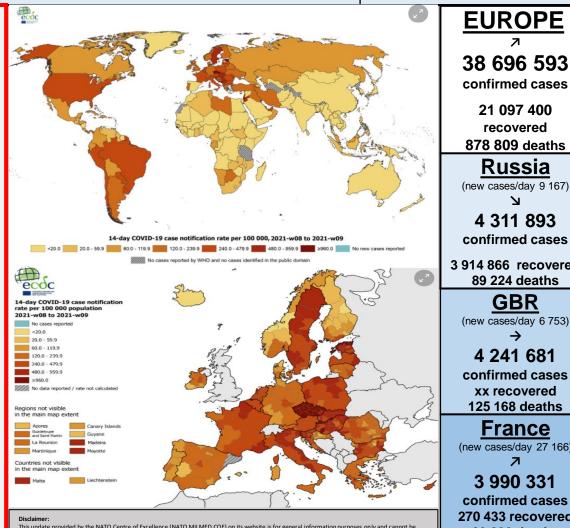
India (new cases/day 22 854)

11 308 846 confirmed cases 10 953 303 recovered 158 306 deaths



11 277 717 confirmed cases 9 983 656 recovered 272 889 deaths

- **WHO:** Today marks the first anniversary of the classification of the novel coronavirus as a pandemic. Since the first infections were registered in China in December 2019, more than 117 million infections have been detected worldwide. More than 2.6 million people died.
- EMA/EU: Approved Johnson&Johnson's COVID-19 vaccine on Thursday. The Committee for Medicinal Products for Human Use (CHMP) of the EMA recommended conditional approval of the vaccine. The final decision by the European Commission has been passed as well.
- DNK/AstraZeneca: DNK stops vaccination with AstraZeneca for initially 14 days. The reason was evidence that blood clots had occurred after vaccinations. However, it has not yet been established whether there is a link with the vaccine. The EMA have launched an investigation into the vaccine in the light of the case. Norway, Iceland and Thailand announced the same step.
- University of Exeter: The corona mutant B.1.1.7, first discovered in the UK, is 64 percent more deadly than previous variants of the virus, according to a new study. In 4.1 out of a thousand cases, infection with B.1.1.7 leads to death. In previous coronavirus variants, the death rate is 2.5 out of a thousand cases.
- IUCN: In many parts of the world, the Corona pandemic has led to cuts in conservation. According to the World Conservation Union (IUCN), more than half of all protected areas in Africa have had to reduce or stop patrols and operations against poachers. A quarter of all protected areas in Asia also reported restrictions on conservation activities. In total, one in five gamekeepers in more than 60 countries has lost their jobs. One in four received less pay or their wages late.
- GlaxoSmithKline: GlaxoSmithKline plans to apply for emergency use authorisation in the US and elsewhere for its experimental COVID-19 antibody treatment after an interim analysis of clinical trial results showed an 85 per cent reduction in hospitalisation or death among patients.
- **OXFAM:** Again warns of shortages of Corona vaccines in low-income countries. Worldwide, the majority of the poorest countries have not yet administered a single vaccination. By the end of 2021, at best, only about 20 percent of residents in southern hemisphere countries could hope to be vaccinated against the coronavirus.
- CDC: Issues First Set of Guidelines on How Fully Vaccinated People Can Visit Safely with Others. WHO's health emergencies online learning platform: OpenWHO.org.
- Find Articles and other materials about COVID-19 on our website here.
- Please use our online observation form to report your lessons learned observations as soon as possible
- here. Topics:
 - Global situation
 - SARS-CoV-2 variants of concern
 - Subject in Focus: Variant B.1.1.7 of COVID-19 associated with a significantly higher mortality rate
- Interim Public Health Recommendations for Fully Vaccinated People
- The One Health Approach
- FAQ: Vaccination and positive test results?
- In the press



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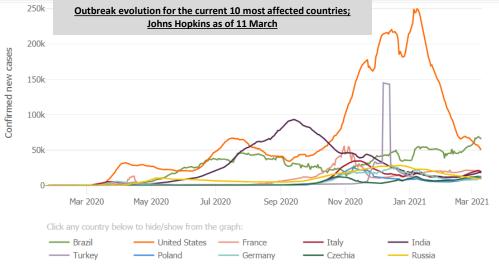
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21 097 400 recovered 878 809 deaths Russia (new cases/day 9 167) N 4 311 893 confirmed cases 3 914 866 recovered 89 224 deaths **GBR** (new cases/day 6 753) \rightarrow 4 241 681 confirmed cases xx recovered 125 168 deaths France (new cases/day 27 166)

3 990 331 confirmed cases 270 433 recovered 89 830 deaths

7

Global Situation



Country reports:

DEU: The number of new infections and the incidence are rising again. The federal and state health ministers are aiming for the start of corona vaccinations in doctors' practices by mid-April at the latest. The aim is to start as early as possible, but no later than the week of April 19.

IND: The number of new Corona cases is increasing again in India. In the past 24 hours, health authorities have recorded 23,285 new infections - the highest level since December 24. Health experts attribute the increase in case numbers to lower compliance with protections and meet more people.

FRA: This weekend, for the third year in a row, an all-day curfew will apply on the French Riviera. Corona patients will also be transferred from hospitals in the Paris metropolitan area to other regions because or the first time since the end of 2020, more than 4,000 corona patients are in the intensive care unit in France.

The travel restrictions will be relaxed. Passengers to and from Australia, South Korea, Israel, Japan, New Zealand, the UK and Singapore would no longer have to prove a compelling reason for their journey. Other rules remain in force. This includes the presentation of a negative coronavirus test, which must not be older than 72 hours.

AUT: In Austria, a region can only be left with a negative corona test due to the high number of corona infections. The Gastein Valley in the state of Salzburg is affected. From Monday, a negative test will be required to leave the popular valley, the country said.

PRT: Despite a drastic improvement in the situation, the former pandemic hotspot Portugal has extended the Corona state of emergency for a further two weeks until 31 March. The government plans to start easing next week. Nurseries, preschools and primary schools are due to open on Monday, as well as hairdressers and bookstores.

MLT: After a record of more than 500 Corona new infections in 24 hours, schools and all stores and services that are not considered systemically important were closed yesterday. Travel to Malta's sister island of Gozo is restricted. Organised sport will be banned in the future. Weddings should no longer be celebrated. The restrictions are reported to apply until at least 11 April.

POL: On Thursday, about 21,000 new coronavirus infections were reported within 24 hours. According to the Ministry of Health, such a high figure was last recorded in November. The authority also attributes the increase in the number of cases to the rapid spread of the British virus mutation in Poland.

The restrictions in two regions particularly affected by the pandemic will be reintroduced. In the affected areas, cinemas, swimming pools, shopping centres and hotels would have to close again. Children in the first three classes would also have to be partially re-educated online.

UKR: On Thursday, 4250 new COVID-19 patients were admitted to Ukrainian hospitals within 24 hours - more than at any time since the outbreak of the pandemic. Compared to the previous day, the number represents a 22 percent increase in new patients.

LTU: Corona restrictions are being eased as new infections decline. From 15 March, all shops with direct access from the street will be able to open again. Museums and galleries are also allowed to welcome visitors again. The shops have to ensure that there is an area of 20 square meters for each customer, in museums and galleries it is 30 square meters. However, the visit to the exhibition rooms is limited to groups of two people. Exceptions apply to families. Tickets may only be sold online.

BGR: Corona measures have been tightened due to the rapidly increasing number of cases. Middle schools, high schools and colleges are now required to move to distance learning in 16 out of 28 regions - including the capital Sofia. In some places only grocery stores and pharmacies will be allowed to remain open in shopping malls. Conferences and meetings were banned.

BIH: The country is currently in the third wave of the pandemic. On Tuesday 1,110 new cases have been reported; the highest so far of 2021. Current numbers indicate 423 active cases per 100,000 residents in BIH and increasing daily. Sarajevo Canton will be put on lockdown this weekend from Friday 2000 to 0700 Monday. Everything will be closed except pharmacies and grocery stores. All hospitality business including shopping centers will be closed. Additional restrictions and lockdowns are expected for other areas in the country.

USA: The vial of the first Corona vaccination in the USA comes to the museum. New York-based hospital operator Northwell Health donated the empty vial of the Biontech-Pfizer-Vakzins to the National Museum of American History in Washington. Also donated were the vaccination card, staff card and coat of New York nurse Sandra Lindsay, who was officially vaccinated on December 14 as the first U.S. citizen. The museum began collecting items related to the Corona pandemic in April 2020. It is not yet clear when they will be exhibited - the museum is currently closed due to Corona.

BRA: On Thursday, more than 2,000 Corona deaths in one day were recorded for the first time since the pandemic began.

PHL: A night-time curfew is being put in place again in Manila. It will come into force for two weeks from Monday and will apply between 10 pm and 5 am.

Global Situation

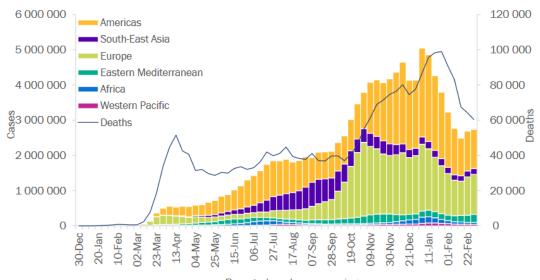
Global epidemiological situation overview; WHO as of 9 March

Over 2.7million new cases were reported last week, a 2% increase compared to the previous week (Figure 1). The global case increase was driven by increases in the Eastern Mediterranean (10%), African Region(10%), and Europe (4%), while small declines were seen in the Americas (-2%), South-East Asia (-2%) and Western Pacific regions (-6%). Globally, around half of countries are seeing declines while the other half are experiencing increasing numbers of new cases. Global new deaths continued the downward trend observed since early February 2021, declining a further 6% compared to last week. Death rates declined in all regions except in the Eastern Mediterannean, where new deaths reported rose by 9%. The Americas and Europe account for around 80% of new cases and new deaths reported globally.

In the past week, the five countries reporting the highest number of new cases were:

- United States of America; reporting 427 233 cases, a 10% decrease,
- Brazil; reporting 413 597 cases, a 11% increase,
- France; reporting 143 622 cases, a 4% decrease,
- Italy; reporting 138 937 cases, a 24% increase and
- India; reporting 114 068 cases, a 9% increase

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 7 March 2021**



Reported week commencing

Vaccination news:

EU: A large proportion of Corona vaccines produced in the EU are exported to third countries. Under the control mechanism for vaccine exports introduced in January, exports of more than 34 million doses have been reported to the European Commission. The UK is reportedly the largest buyer of Corona vaccines produced in the EU.

EU: The health ministers of the Baltic states of Estonia, Latvia and Lithuania have called on the EU to establish a transparent mechanism for the redistribution of coronavirus vaccines among EU Member States. The aim is to respond more quickly to corona emergencies in individual countries and to adapt the vaccine supply accordingly. It would also make more efficient use of vaccines produced and delivered at EU level and redistribute unused vaccines before their expiry date.

BioNTech/EU: The company plans to deliver an additional four million doses of Corona vaccine to the EU over the next two weeks. The additional package was negotiated so that EU states could target vaccinations in Corona hotspots and slow down the spread of the dreaded virus variants.

AUT/BioNTech: A pilot project will be carried out in Austria to investigate the effect of the BioNTech vaccine against the South African variant of the coronavirus. The citizens of the Tyrolean district of Schwaz, where the more contagious variant is common, can get vaccinated from Thursday. Around 50,000 people have registered for the study.

GBR: In London, the first Britons have been vaccinated at the world-famous Westminster Abbey Cathedral. In future, up to 2000 vaccinations per week will be carried out there.

SRB: will begin production of Russia's COVID-19 vaccine Sputnik V on May 20, according to government figures. In a first production cycle, four million doses of vaccine could be produced.

JAP: China's National Olympic Committee wants to provide vaccine doses for participants in this summer's Olympic and Paralympic Games in Tokyo and 2022 in Beijing. These doses are provided in two ways. Either through cooperation with international partners or directly in the many countries where agreements on Chinese vaccines exist. The IOC is responsible for the costs of the vaccines. For each of these doses, the IOC will also pay for two additional doses that can be made available to the population in the countries.

CHL: has overtaken Israel as the world champion of vaccination. Over the past seven days, an average of 1.08 doses per day per 100 inhabitants have been vaccinated against corona, compared with 1.03 in Israel. In total, about 4.2 million people have already received at least one dose. On Monday, the country set a daily record of 319,014 vaccinations. Chile is experienced in the organization of vaccination campaigns and has ordered vaccines from various manufacturers very early on. Most of the vaccine comes from the Chinese manufacturer Sinovac. Despite the successful vaccination record, however, the number of corona infections in Chile continues to rise. At the beginning of the week, the government increased the initial restrictions in various places.

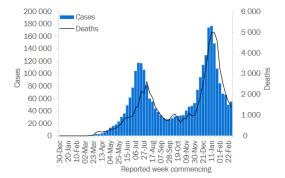
PAK: has started to vaccinate people aged at least 60 years. The country is currently administering Sinopharm's Corona vaccine from China. Beijing had donated doses of the drug in February. According to official figures, the country is to receive an additional 17 million doses of AstraZeneca from the Covax programme between March and June. The number of corona infections and deaths in Pakistan has steadily increased since regular schooling resumed there on 1 March.

Situation by WHO Region, as of 9th March

African Region

The Africa region reported over 55 000 new cases and over 1300 new deaths, a 10% increase and 16% decrease respectively compared to the previous week. Since new weekly case counts peaked in early January 2021, this is the first weekly increase following 6 weeks of decreasing case numbers. The highest numbers of new cases were reported from South Africa (7981 new cases; 13.5 new cases per 100 000 population; a 19% decrease), Ethiopia (6976 new cases; 6.1 new cases per 100 000; a 13% increase), and Zambia (4840 new cases; 26.3 new cases per 100 000; a 48% increase).

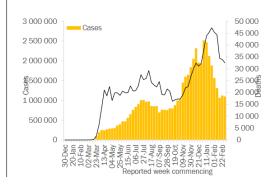
The highest numbers of new deaths were reported from South Africa (706 new deaths; 1.2 new deaths per 100 000 population; a 30% decrease), Ethiopia (66 new deaths; 0.1 new deaths per 100 000; a 21% decrease), and Nigeria (59 new deaths; <0.1 new deaths per 100 000; a 20% decrease).



Region of the Americas

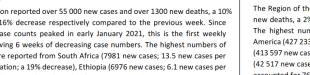
The Region of the Americas reported over 1.1 million new cases and over 32 000 new deaths, a 2% and 4% decrease respectively compared to the previous week. The highest numbers of new cases were reported from the United States of America (427 233 new cases; 129.1 new cases per 100 000; a 10% decrease), Brazil (413 597 new cases; 194.6 new cases per 100 000; an 11% increase), and Argentina (42 517 new cases; 94.1 new cases; a 14% decrease). The United States and Brazil accounted for 76% of new weekly cases reported in the Americas.

The highest numbers of new deaths were reported from the United States of America (12 315 new deaths: 3.7 new deaths per 100 000; a 17% decrease). Brazil (9935 new deaths; 4.7 new deaths per 100 000; a 23% increase), and Mexico (5104 new deaths: 4.0 new deaths per 100 000; a 7% decrease).





Source:

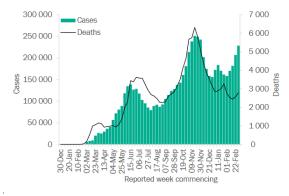


https://www.who.int/publications/m/item/weekly-epidemiological-update---10-march-2021

Eastern Mediterranean Region

The Eastern Mediterranean region reported just under 229 000 new cases and just under 2800 new deaths, a 10% and 9% increase respectively compared to the previous week. New cases have increased week on week for the past four weeks, while deaths have increased for the past two weeks. The highest numbers of new cases were reported from Islamic Republic of Iran (58 523 new cases; 69.7 new cases per 100 000; a 3% increase), Jordan (34 919 new cases; 342.2 new cases per 100 000; a 31% increase), and Iraq (30 948 new cases; 76.9 new cases per 100 000; a 13% increase).

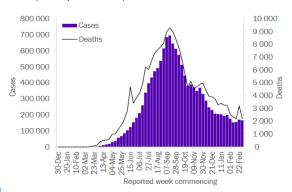
The highest numbers of new deaths were reported from Islamic Republic of Iran (614 new deaths; 0.7 new deaths per 100 000 population; an 8% increase), Lebanon (361 new deaths; 5.3 new deaths per 100 000; a 2% increase), and Pakistan (329 new deaths; 0.1 new deaths per 100 000; a 20% increase)



South-East Asia Region

The South-East Asia region reported over 167 000 new cases and 2200 new deaths, a 2% and 32% decrease respectively compared to the previous week. Progressive declines in case incidence observed mid-September 2020 have slowed in recent weeks, and increases have been observed in several countries in the region. The highest numbers of new cases were reported from India (114 068 new cases; 8.3 new cases per 100 000; a 9% increase), Indonesia (44 762 new cases; 16.4 new cases per 100 000; a 23% decrease), and Bangladesh (3893 new cases; 2.4 new cases per 100 000; a 39% increase).

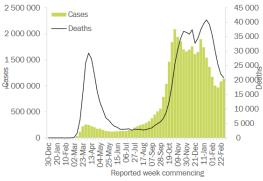
The highest numbers of new deaths were reported from Indonesia (1173 new deaths; 0.4 new deaths per 100 000; a 30% decrease), India (705 new deaths; <0.1 new deaths per 100 000; a 6% decrease), and Nepal (237 new deaths; 0.8 new deaths per 100 000; a 67% decrease). The spike in deaths observed last week were driven by retroadjustments in Nepal



European Region

The European region reported over 1.1 million new cases and under 21 000 new deaths, a 4% increase and 6% decrease respectively compared to the previous week. Since early January 2021, new weekly cases have decreased overall; however, increases have been reported in the past two weeks. New weekly deaths have continued to decline since the mid-January 2021. The highest numbers of new cases were reported from France (143 622 new cases; 220.0 new cases per 100 000; a 4% decrease), Italy (138 937 new cases; 229.8 new cases per 100 000; a 24% increase), and Poland (87 928 new cases; 232.3 new cases per 100 000; a 29% increase).

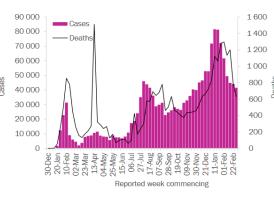
The highest numbers of new deaths were reported from the Russian Federation (2978 new deaths; 2.0 new deaths per 100 000; a 5% increase), France (2100 new deaths; 3.2 new deaths per 100 000; a 3% decrease), and Italy (2071 new deaths; 3.4 new deaths per 100 000; a 3% increase).



Western Pacific Region

The Western Pacific region reported over 41 000 new cases and over 600 new deaths, a 6% and 20% decrease respectively compared to the previous week. New weekly cases have continued to decrease since mid-January 2021, and deaths have decreased overall in recent weeks. The highest numbers of new cases were reported from Philippines (16 891 new cases; 15.4 new cases per 100 000; a 13% increase), Malaysia (13 462 new cases; 41.6 new cases per 100 000; a 25% decrease), and Japan (7216 new cases; 5.7 new cases per 100 000; similar to the previous week).

The highest numbers of new deaths were reported from Japan (367 new deaths; 0.3 new deaths per 100 000; a 17% decrease), Philippines (176 new deaths; 0.2 new deaths per 100 000; a 20% decrease), and Malaysia (45 new deaths; 0.1 new deaths per 100 000; a 36% decrease).



Update on SARS-CoV-2 Variants Of Concern (VOC)

WHO/ECDC is working with partners to evaluate available evidence around transmissibility, severity, antibody neutralization capabilities and potential impacts on vaccines of specific mutations, variants of interest and variants of concern. Here we provide an update on ongoing studies, as well as the geographical distribution of three variants of concern as reported by countries, territories and areas (hereafter countries) as of 02 March 2021:

1. Variant VOC 202012/01 , lineage B.1.1.7:

Since our last update on 2 March, VOC 202012/01 has been detected in five additional countries. As of 9 March, a total of 111 countries across all six WHO regions have reported cases of this variant.



2. Variant 501Y.V2, lineage B.1.351:

Since the last update on 2 March, 501Y.V2 has been reported from three additional countries–totaling 58 countries across all six WHO regions. In several areas within the African Region, variant 501Y.V2 has been reported to comprise a high proportion of sequenced samples.

Reductions in neutralizing antibody activity against 501Y.V2 following either natural infection or vaccination have been documented, and discussed in past editions of the Weekly Epidemiological Update. Findings from a recent study that analyzed convalescent plasma from 20 patients and sera from 22 participants of vaccine trials (Moderna SARS-CoV-2 mRNA-1273 vaccine (12 participants); Pfizer BNT162b2 COVID-19 vaccine (10 participants)) indicated that relative to the original SARS-CoV-2, there was a substantial decrease in the neutralizing activity of convalescent plasma



(9.4-fold) and sera from vaccinated participants (10.3 to 12.4-fold) against the 501Y.V2 variant.

3. Variant P.1, lineage B.1.1.28: Since our last update, variant P.1 has been reported in three additional countries. As of 9 March, this variant is reported in 32 countries across all six WHO regions.



4. Condensed overview of emerging information on key variants of concern as of 02 March 2021

Nextstrain clade	20I/501Y.V1	20H/501Y.V2*	20J/501Y.V3
PANGO lineage	B.1.1.7	B.1.351	B.1.1.28.1, alias P.1*
GISAID clade	GR	GH	GR
Alternate names	VOC 202012/01*	VOC 202012/02	-
First detected by	United Kingdom	South Africa	Brazil / Japan
First appearance	20 September 2020	Early August 2020	December 2020
Key spike mutations	H69/V70 deletion; Y144 deletion; N501Y; A570D; and P681H	L242/A243/L244 deletion; K417N E484K, N501Y	K417N, E484K; N501Y
Key mutation in common	S106/G10	7/F108 deletion in Non-Structural Protein 6 (NS	SP6)
Transmissibility*	Increased ¹ (36%-75%) ² , increased secondary attack rate ³ (10% to 13%)	Increased [1.50 (95% CI: 1.20-2.13) times more transmissible than previously circulating variants] ^{4,5}	Increased, more transmissible tha previous circulating variants ⁶
Severity*	Possible increased risk of hospitalization ⁷ , severity and mortality ³	No impact reported to date ^{4,5} , no significant change in-hospital mortality ⁸	Under investigation, limited impact ⁶
Neutralization capacity*	Slight reduction but overall neutralizing titers still remained above the levels expected to confer protection ⁹	Decreased, suggesting potential increased risk of reinfection ^{4, 10, 11}	Decreased, reinfections reported ¹²⁻¹⁴
Potential impacts on vaccines*	No significant impact on Moderna, Pfizer- BioNTech, and Oxford- AstraZeneca vaccines ¹⁵⁻¹⁸	Moderna and Pfizer-BioNTech: Reduction in the neutralizing activity, but impact on protection against disease not known. ¹⁵⁻¹⁸ Novava: and Janssen: Lower vaccine efficacy in South Africa compared to settings without the variant (press release data only). Moderate-severe disease were assessed. Serologic neutralization results pending. ^{13, 20} AstraZeneca: Limited vaccine efficacy against mild-moderate COVID-19 disease, with wide confidence intervals, impact on severe disease undetermined. Serologic neutralization substantially reduced compared with original strains, based on small number of samples analyzed ^{21, 22}	Under investigation
Potential impacts on diagnostics*	S gene target failure (SGTF). ²¹ No impact on Ag RDTs observed ²³	None reported to date	None reported to date
Countries reporting cases (newly reported in last week)**	111 (5)	58 (3)	32 (3)

Source: https://www.who.int/publications/m/item/weeklyepidemiological-update---10-march-2021 https://www.who.int/docs/defaultsource/coronaviruse/risk-comms-updates/update47sars-cov-2-variants.pdf?sfvrsn=f2180835_4 https://www.edc.europa.eu/sites/default/files/docum ents/RRA-covid-19-14th-update-15-feb-2021.pdf https://www.who.int/publications/m/item/covid-19weekly-epidemiological-update

Subject in Focus:

Variant B.1.1.7 of COVID-19 associated with a significantly higher mortality rate

The highly infectious variant of COVID-19 discovered in Kent, which swept across the UK last year before spreading worldwide, is between 30 and 100 per cent more deadly than previous strains, new analysis has shown.

A pivotal study, by epidemiologists from the Universities of Exeter and Bristol, has shown that the SARS-CoV-2 variant, B.1.1.7, is associated with a significantly higher mortality rate amongst adults diagnosed in the community compared to previously circulating strains. The study compared death rates among people infected with the new variant and those infected with other strains. It showed that the new variant led to 227 deaths in a sample of 54906 patients – compared to 141 amongst the same number of closely matched patients who had the previous strains.

With the new variant already detected in more than 50 countries worldwide, the analysis provides crucial information to governments and health officials to help prevent its spread.

The study is published in the British Medical Journal on Wednesday, 10 March 2021.

Introduction

A new lineage of the SARS-CoV-2 virus (named B.1.1.7) was identified from genomic sequencing of samples from patients with COVID-19 in the south east of England in early October 2020. In December 2020, Public Health England identified this virus as a variant of concern (VOC-202012/1). During December this new variant spread from the south east to London and the rest of the UK. Since then, the prevalence of VOC-202012/1 has been observed to be increasing in both Europe and the US.

Results

Of the 54 906 participants with the VOC (S gene negative), an average of 227 deaths occurred compared with 141 of 54 906 with the original Virus (S gene positive) over the study period.

Discussion

Infections with the new variant VOC-202012/1 (as measured by S gene negativity) were associated with an increased risk of death (P<0.001) in people testing positive for COVID-19 in the community. The increased hazard ratio between 1.32 and 2.04, higher than for other variants, translates to a 32% to 104% increased risk of death, with the most probable hazard ratio estimate of 1.64, or a 64% increased risk of death. The absolute risk of death in this group of community identified participants, however, remains relatively low, increasing from 2.5 to 4.1 deaths per 1000 cases.

Conclusion

The variant of concern, in addition to being more transmissible, seems to be more lethal. The scientists expect this to be associated with changes in its phenotypic properties because of multiple genetic mutations, and see no reason why this finding would be specific to the UK. This development, borne out in epidemiological analyses, implies that the rate of patients with serious infection requiring hospital attention will increase.

The resulting number of deaths will scale linearly with the proportion of people infected with the new variant. Other analyses have indicated that the new variant is also associated with increased transmissibility, which would lead to a potentially exponential increase in the resulting number of deaths.12 Clinicians at the front line should be aware that a higher mortality rate is likely even if quality of practice remains unchanged. This has broader implications for any vaccination allocation policy designed to reduce mortality in the late middle age groups, typical of the community identified patients in this dataset.

The question remains whether excess mortality due to VOC-202012/1 will be observed in other population groups, particularly elderly people, care home residents, and those with other comorbidities who generally present directly to hospital as an emergency. Hospital based studies require a mechanism to distinguish emerging variants from previously circulating variants, currently only done through genotyping. Owing to the effort involved, the proportion of genotyped samples representing patients admitted to hospital remains low, and it is recommend that PCR tests that specifically target VOC-202012/1 mutations should be more widely used.

Model, predictor, value	Hazard ratio (95% CI)	P value		
S gene+age				
S gene status:				
Positive (ref)	-			
Negative	1.64 (1.32 to 2.04)	<0.001		
Age (per decade)	3.55 (3.28 to 3.84)	<0.001		
S gene+N gene cycle threshold+age				
S gene status:				
Positive (ref)	-	_		
Negative	1.37 (1.09 to 1.72)	0.004		
Age (per decade)	3.51 (3.24 to 3.80)	<0.001		
N gene cycle threshold (per 10 units)	0.50 (0.39 to 0.65)	<0.001		

Table 2 Risk of death in S gene negative compared with S gene positive (reference category) participants

What is already known on this topic

- The SARS-CoV-2 variant of concern 202012/1, first detected in the south east of England in autumn 2020, is more transmissible than previously circulating variants
- The emergence of this variant coincided with high hospital occupancy, which is known to increase mortality
- Before this study, unbiased estimates of the mortality of the variant of concern were not available

What this study adds

- Individuals infected with the variant of concern, identified at UK community test centres, were between 32% and 104% (central estimate 64%) more likely to die than equivalent individuals infected with previously circulating variants
- The absolute risk of death in this largely unvaccinated population remains low, but clinicians and public health officials should be aware that a higher mortality rate is likely even if practice remains unchanged

Source: https://www.bmj.com/content/372/bmj.n579

Interim Public Health Recommendations for Fully Vaccinated People

The new CDC guidance—which is based on the latest science — includes recommendations for how and when a fully vaccinated individual can visit with other people who are fully vaccinated and with other people who are not vaccinated. This guidance represents a first step toward returning to everyday activities in the communities. CDC will update these recommendations as more people are vaccinated, rates of COVID-19 in the community change, and additional scientific evidence becomes available.

A person is considered fully vaccinated two weeks after receiving the last required dose of vaccine. Although vaccinations are accelerating it is estimates that just 2.5% of the worlds population has been fully vaccinated with a COVID-19 vaccine.

While the new guidance is a positive step, the vast majority of people need to be fully vaccinated before COVID-19 precautions can be lifted broadly. Until then, it is important that everyone continues to adhere to public health mitigation measures to protect the large number of people who remain unvaccinated.

Recommendations

The following recommendations apply to non-healthcare settings.

Fully vaccinated people can:

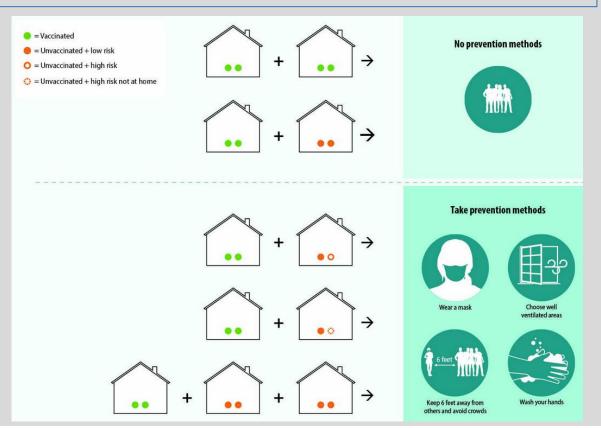
- Visit with other fully vaccinated people indoors without wearing masks or physical distancing
- Visit with unvaccinated people from a single household who are at low risk for severe COVID-19 disease indoors without wearing masks or physical distancing
- Refrain from quarantine and testing following a known exposure if asymptomatic (US regulation; national regulations must be checked)

For now, fully vaccinated people should continue to:

- Take precautions in public like wearing a well-fitted mask and physical distancing
- Wear masks, practice physical distancing, and adhere to other prevention measures when visiting with unvaccinated people who are at increased risk for severe COVID-19 disease or who have an unvaccinated household member who is at increased risk for severe COVID-19 disease
- Wear masks, maintain physical distance, and practice other prevention measures when visiting with unvaccinated people from multiple households
- Avoid medium- and large-sized in-person gatherings
- Get tested if experiencing COVID-19 symptoms
- Follow guidance issued by individual employers
- Follow CDC and health department travel requirements and recommendations

Source: https://www.cdc.gov/media/releases/2021/p0308-vaccinated-guidelines.html; https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated-guidance.html https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated.html CDC recommends that fully vaccinated people continue to take COVID-19 precautions when in public, when visiting with unvaccinated people from multiple other households, and when around unvaccinated people who are at high risk of getting severely ill from COVID-19:

- Wear a well-fitted mask.
- Stay at least 6 feet from people you do not live with.
- Avoid medium- and large-sized in-person gatherings.
- Get tested if experiencing COVID-19 symptoms.
- Follow guidance issued by individual employers.
- Follow CDC and health department travel requirements and recommendations.



The One Health Approach

Animals provide many benefits to people. Many people interact with animals in their daily lives, both at home and away from home. Animals provide food, fiber, livelihoods, travel, sport, companionship, and education for people across the globe. However, animals can sometimes carry harmful germs that can spread to people and cause illness – these are known as zoonotic diseases or zoonoses. Zoonotic diseases are very common, around the world. Scientists estimate that more than 6 out of every 10 known infectious diseases in people can be spread from animals, and 3 out of every 4 new or emerging infectious diseases in people come from animals.

December, 2019, marked the third re-emergence in the 21st century of the zoonotic coronavirus (CoV), named severe acute respiratory syndrome corona virus 2 (SARS-CoV-2), crossing species to infect humans.

The emergence and re-emergence of zoonotic diseases is not new, and over the past three decades the onset of outbreaks of infectious diseases emerging from animal reservoirs to infect humans has increased. For example, Ebola virus, highly pathogenic avian influenza (HPAI) viruses, and the coronaviruses severe acute respiratory syndrome (SARS) coronavirus and Middle East respiratory syndrome (MERS) coronavirus.

Studies show that at least 75% of emerging infectious diseases are zoonotic and originate from wildlife. Prevention activities are difficult to implement because events causing the emerge or re-emerge of zoonoses are complex and affected by multiple factors, such as genetic evolution, demographic changes, environmental conditions, or climate changes affecting the ecosystem.

Because of the close connection between people and animals, it's important to be aware of the common ways people can get infected with germs that can cause zoonotic diseases. These can include:

- **Direct contact**: Coming into contact with the saliva, blood, urine, mucous, feces, or other body fluids of an infected animal. Examples include petting or touching animals, and bites or scratches.
- Indirect contact: Coming into contact with areas where animals live and roam, or objects or surfaces that have been contaminated with germs. Examples include aquarium tank water, pet habitats, chicken coops, barns, plants, and soil, as well as pet food and water dishes.
- Vector-borne: Being bitten by a tick, or an insect like a mosquito or a flea.
- **Foodborne**: Each year, 1 in 6 Americans get sick from eating contaminated food. Eating or drinking something unsafe, such as unpasteurized (raw) milk, undercooked meat or eggs, or raw fruits and vegetables that are contaminated with feces from an infected animal. Contaminated food can cause illness in people and animals, including pets.
- Waterborne: Drinking or coming in contact with water that has been contaminated with feces from an infected animal.

The unforeseeable onset and rapid dissemination of zoonotic outbreaks means public health systems need to be able to quickly identify early signs of such threats and react promptly. The fact that the beginning of the nCoV-2019 outbreak was observed by at least one physician, as reported by The Guardian on February 2, but not perceived as an urgent threat at the level of decision makers, demonstrates the essential need to identify what could be done better—before new diseases emerge—therefore preventing future outbreaks or, at least, reducing their impact.

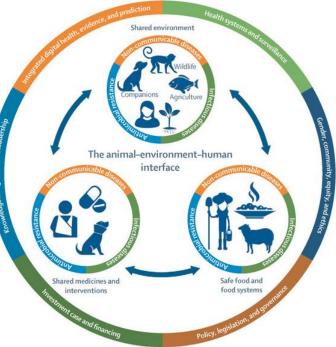
To reach this aim, the following steps are crucial: first, the understanding of the causes of disease emergence, the ecology of the agents involved, and their animal hosts; second, the creation of a network able to merge the contributions of different expertise, and work together holistically. At present, the main players of the network are in place (eg, medical doctors, veterinarians, public health experts, and food quality inspectors), but they act separately.

The One Health approach is an example of how separate efforts can be aligned to work together effectively. The concept of One Health recognises the interdependence of human health, animal health, and environmental health, and aims to achieve better public health outcomes through the understanding and prevention of risks that originate at the interface between humans, animals, and their environments. Such approach implies a multidisciplinary effort in the implementation of programmes, policies, and research, where multiple sectors communicate and work together, with the common goal of helping disease prediction, prevention, and preparedness.

Another key area where the One Health approach is needed is monitoring and surveillance. Some professions have greater exposure to zoonotic risks than others. Nearly half of the first patients affected by COVID-19 were working at the wet market where the virus originated. Those occupational categories deserve attention as groups at particular risk of zoonotic exposure.

The recent outbreak of the coronavirus infection is a particularly severe example of how close interactions between the health of humans, animals, and the environment can lead to a deadly epidemic. Now it is time to embrace One Health as a framework for public health action against zoonoses, as suggested by the tripartite (WHO, FAO, OIE) zoonotic guide. Governments must prioritise strategies to introduce the One Health approach in education and training programmes and in their public health systems, both at the national and international level. The timely recognition of the interconnection between humans, animals, and environment, intrinsic in the One Health approach, is a key prerequisite for understanding and managing the future of global health threats.

https://www.cdc.gov/onehealth/basics/zoonotic-diseases.html https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(20)300 http://www.fao.org/3/ca2942en/ca2942en.pdf https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)310



FAQs

Can the vaccination with COVID-19 vaccines lead to positive test results after rapid antigen tests or PCR tests?

It can be assumed that the COVID-19 vaccination does not lead to a positive test result after rapid antigen or PCR tests.

Antigen test:

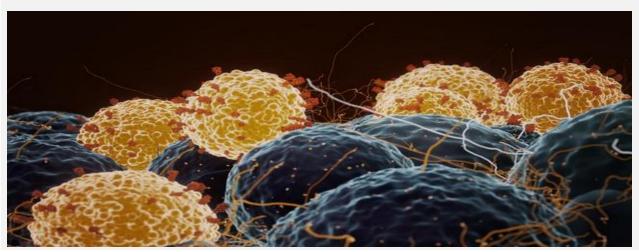
The vaccination is extremely unlikely to affect antigen tests.

- The vaccinations currently approved in the EU (Moderna, BioNTech, AstraZeneca) induce an immune response against the spike protein (S-protein). Almost all rapid antigen tests used in Europe are based on the detection of another protein, the nucleocapsid protein (N-protein). (*The summary of product characteristics provided with the test usually indicates whether the respective test is an S-protein or an N-protein based test.*)
- Besides, the test is performed as a nasopharyngeal or throat swab. Even if the antigen test is designed to detect the S-protein, it appears highly unlikely that a sufficient amount of S-protein, induced by the vaccination, will be available in the mucosa cells of the nasopharynx to be recognised by the antigen test the sensitivity of which is only limited.

PCR test:

An influence is excluded.

The quantitative real-time PCR methods for the detection of SARS-CoV-2 mRNA are usually based on the detection of two different virus genes (dual target principle: e. g. envelope [E] plus N2; N1 plus N2; orf1a/b plus E). Interference with a previously performed vaccination with SARS-CoV-2-mRNA, which codes for the S protein can be ruled out if this type of PCR test is used.



If an antigen test result is positive after a COVID-19 vaccination, this is in all probability due to the following causes:

- The vaccinated person was probably infected before the vaccination. The mean incubation period for COVID-19 is five to six days.
- The vaccinated person may have become infected shortly after the vaccination. Complete 95 percent protection can be expected from the vaccination only as from seven to 14 days after the second vaccination.
- Since it is not yet fully clarified whether the vaccination not only protects a person from the COVID-19 disease but also from the infection with the SARS-CoV-2 virus, it cannot be ruled out in principle that a person will become infected even if vaccinated; the disease then usually progresses with milder symptoms or even asymptomatic.
- The antigen test may be false positive, as is the case with all diagnostic devices, which, in rare cases react with some samples, even if the marker in this case the antigen of the SARS-CoV-2 virus is not present at all. In some tests, this can certainly occur in the order of magnitude of one to two percent of the tests. For this reason, a PCR test should be performed following a positive rapid antigen test in order to confirm or rule out an infection.

A full vaccination has already taken place, do I still have to be in quarantine if I am a contact person or if I am entering from a risk area:

- -> In most countries quarantine obligations also apply to vaccinated people! Please reassure yourself about the current requirements before you traveling to a country.
- At the moment it is still unclear whether and to what extent the vaccination could provide protection against transmission
- Therefore: "As long as the infection process is still as dynamic as it is at the moment and no further results are available, all measures should be followed to suppress the pandemic and protect all people as best as possible from infection. Therefore, as a precautionary measure until further study data are available Vaccinated persons also observe the infection protection measures when they come into contact with sick people or when returning from a risk area"

Source: https://www.pei.de/EN/service/faq/faq-coronavirus-content.html

https://www.rki.de/SharedDocs/FAQ/COVID-Impfen/gesamt.html;jsessionid=E363B36B89E8728615A8909FBF7ADF92.internet092

In the press

This section aims at summarizing trending headlines with regards to COVID-19. The collection does not aim at being comprehensive and we would like to point out that headlines and linked articles are no scientific material and for information purposes only. The headlines and linked articles do not reflect NATO's or NATO MilMed COE FHPB's view. Feedback is welcome!

11 th March 2021 Aljazeera China risks COVID 'immunity gap' amid slow vaccine uptake https://www.aljazeera.com/news/2021/3/11/china-risks-covid-immunity-gap-amid-slow-vaccine-uptake	10 th March 2021 The Guardian Deadly pig disease could have led to Covid spillover to humans, analysis suggests <u>https://www.theguardian.com/environment/2021/mar/10/deadly-pig-disease-</u> <u>could-have-led-to-covid-spillover-to-humans-analysis-suggests</u>	
DW Coronavirus: How can travel be more sustainable post-pandemic? https://www.dw.com/en/coronavirus-how-can-travel-be-more-sustainable-post-pandemic/a-56784730	11 th March 2021 South China Morning Post Coronavirus: the pandemic is now one year old, so when will it be over? https://www.scmp.com/news/china/science/article/3124885/coronavirus- pandemic-now-one-year-old-so-when-will-it-be-over	
11 th March 2021 DW		
Africa's battle with COVID-19 continues, one year on https://www.dw.com/en/africas-battle-with-covid-19-continues-one-year-on/a-56838418	11 th March 2021 The Guardian	
11 th March 2021 BBC 'Mini lab' hope for quick Covid test results https://www.bbc.com/news/uk-england-tyne-56366417	Stalled ships, stressed crews: Covid buying boom overwhelms LA ports https://www.theguardian.com/us-news/2021/mar/11/la-ports-stalled-ships- stressed-crews-covid-buying-boom 11 th March 2021 The Guardian Israeli real-world data on Pfizer vaccine shows high Covid protection	
11 th March 2021 Aljazeera		
COVID-19 has already wiped out 6 million jobs, EU study finds https://www.aljazeera.com/news/2021/3/11/covid-19-has-already-wiped-out-6-million-jobs-eu-study-finds	Covid protection <u>https://www.theguardian.com/world/2021/mar/11/israeli-real-world-data-on-</u> <u>pfizer-vaccine-shows-high-covid-protection</u>	

The new normal!

In some places, as cases of COVID-19 go down, some control measures are being lifted.

But this doesn't mean we should go back to the 'old normal'. If we don't stay vigilant and protect ourselves and others, coronavirus cases may go up again.

If we stop following the key protective measures, coronavirus can come rushing back.

Now, more than ever, it's important that we all follow our national health authority's advice and be part of helping to prevent coronavirus transmission.

Wherever you are, you still need to protect yourself against COVID-19.

Even as restrictions are lifted, consider where you are going and stay safe.





Avoid the Three C's World Health Be aware of different levels of risk in different settings.

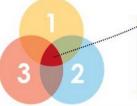
There are certain places where COVID-19 spreads more easily:





Crowded places with many people

settings Especially where people have closerange conversations enclosed spaces with poor ventilation



Maintain a

least 1m

distance

from others

nearby

The risk is higher in places where these factors overlap. Even as restrictions are lifted, consider where you are going and #StaySafe by

WHAT SHOULD YOU DO?

avoiding the Three C's.



Avoid crowded

places and limit

time in

enclosed

spaces



When possibl

open windows

and doors for

ventilation



Keep hands Vear a mask clean and requested cover coughs or if physical and sneezes distancing is not possible

If you are unwell, stay home unless to seek urgent medical care.



Be a role model. Show others the importance of cleaning hands, covering coughs and sneezes with a bent elbow, maintaining a distance of at least 1 metre from others and cleaning frequently touched

objects and surfaces regularly.

Don't just say it,



#StaySafe



Mouth and nose

protection

limited

Protects wearer

of mask

Protects

periphery

The perfect wave – why masks are still important



NEW STUDY ON MOUTH NOSE PROTECTION AND SOCIAL DISTANCING

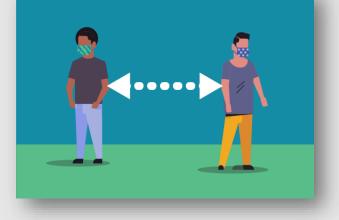
Unfortunately, in the epicenter of the new hot spots areas often enough people are seen who do not adhere to the still valid protective regulations such as social distancing and the correct wearing of a nose and mouth protection. It could be as simple as that - <u>new studies</u> show that these two measures make a significant contribution to reducing the probability of transmission.

In the case of protective masks with an advertised protective effect in connection with SARS-CoV-2, depending on the intended purpose, a distinction is made between two types:

Medical face masks (MNS; surgical (surgical) masks); are primarily used for third-party protection and protect the person against the exposure of potentially infectious droplets of the person wearing the face mask. Corresponding MNS protect the wearer of the mask if the fit is tight, but this is not the primary purpose of MNS. This is e.g. used to prevent droplets from the patient's breathing air from getting into open wounds of a patient. Since, depending on the fit of the medical face mask, the wearer not only breathes in through the filter fleece, but the breathing air is drawn in as a leakage current past the edges of the MNS, medical face masks generally offer the wearer little protection against aerosols containing excitation. However, you can protect the mouth and nose area of the wearer from the direct impact of exhaled droplets from the other person as well as from pathogen transmission through direct contact with the hands.

Particle-filtering half masks (FFP masks); are objects of personal protective equipment (PPE) in the context of occupational safety and are intended to protect the wearer of the mask from particles, droplets and aerosols. The design of the particle-filtering half masks is different. There are masks <u>without</u> <u>an exhalation valve</u> and masks <u>with an exhalation</u> valve. Masks without a valve filter both the inhaled air and the exhaled air and therefore offer both internal and external protection, although they are primarily designed for internal protection only. Masks with valves only filter the inhaled air and therefore offer no external protection!!!

As a large number of unrecognized people move around in public spaces without symptoms, mouth and nose protection protects other people, thereby reducing the spread of the infection and thus indirectly reducing the risk of becoming infected



FFP2/FFP3

mask without valve

FFP2/FFP3

mask with valve

X

https://www.sueddeutsche.de/gesundheit/atemschutzmaske-coronavirus-maske-schutz-1.4867144 https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/diy-cloth-face-coverings.html https://www.bfarm.de/SharedDocs/Risikoinformationen/Medizinprodukte/DE/schutzmasken.html Due to the occasion, it should be pointed out again and again, also by executives, that the correct way of wearing the mask is essential to achieve maximum protection. The mask wrong, e.g. for example, wearing it under the nose means accepting a possible infection of others.

FFP2 / 3 masks are still considered deficient equipment and should be kept available for healthcare workers and emergency services

When wearing a facemask, don't do the following:



DON'T wear your facemask

on your head

acemask without cleaning

our hands before and after



DON'T allow a strap to hang down. DON'T cross the straps.



around your neck



around your arr