



# Short Update 55a COVID-19 Coronavirus Disease 05<sup>th</sup> of February 2021



## GLOBAL

104 867 097  
Confirmed cases  
69 291 350 recovered  
2 282 926 deaths

## USA

(new cases/day 120 537)  
26 571 626  
confirmed cases  
10 878 394 recovered  
453 719 deaths

## India

(new cases/day 12 899)  
10 802 591  
confirmed cases  
10 496 308 recovered  
154 823 deaths

## Brazil

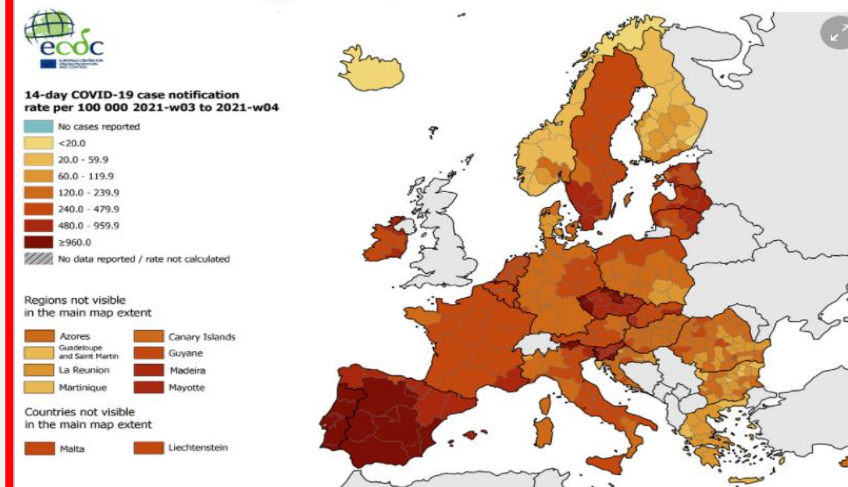
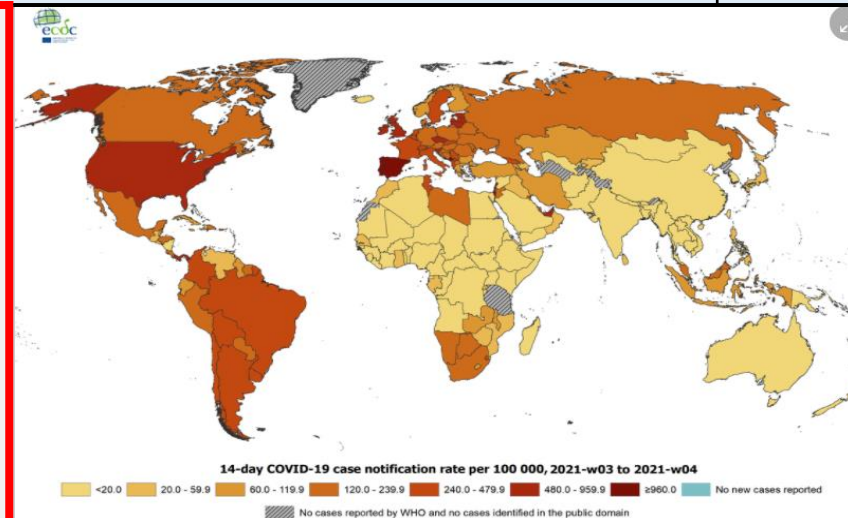
(new cases/day 112 875)  
9 396 293  
confirmed cases  
8 366 197 recovered  
228 795 deaths

### News:

- **Oxford/CDC:** More people are now vaccinated against Corona than have previously been infected with the virus. A total of 104.9 million vaccine doses were administered. However, many of those vaccinated have only received one of two required doses.
- **EMA:** The so-called rolling review process was initiated on the basis of the first results of laboratory tests and clinical studies by the US manufacturer Novavax. According to the procedure, data and results of studies are already assessed even before a formal application for approval has been submitted. This significantly shortens the approval process.
- **ECDC:** Does not see any additional benefit in the use of N95 masks in everyday life. The potential cost and harm does not warrant a recommendation to wear N95 masks in place of other masks in public. The emergence of new variants of the coronavirus does not make any other mask types necessary than those currently used in the context of non-pharmaceutical measures. The authority is currently in the process of updating the document on assessments of mask use in the social environment to reduce corona transmission.
- **COVAX** publishes [first interim distribution forecast](#). According to the forecasting and assuming funding availability, they expect as many as ~1.8 billion doses to be available to the 92 economies of the Gavi COVAX Advance Market Commitment (AMC) in 2021, corresponding to ~27% coverage of AMC populations.
- **EU:** The Commission President has admitted failures in the procurement of corona vaccines at European level. The EU underestimated the complications that can arise in the manufacture of such vaccines. The EU ordered too hesitantly.
- **WTO:** The patents of pharmaceutical companies on corona vaccines and other agents will not be weakened for the time being. India and South Africa had campaigned at the WTO to temporarily remove patent protection to boost production, but rich countries are resisting it.
- **WHO's** health emergencies online learning platform: [OpenWHO.org](https://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:** UK Biobank SARS-CoV-2 Serology Study
- **Q&A: I'm vaccinated – what next?**
- **Comparison of vaccines**
- **Timeline COVID-19 infection**
- **In the press**



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## EUROPE

33 461 815  
confirmed cases  
17 961 050  
recovered  
752 241 deaths

## GBR

(new cases/day 20 634)  
3 892 459  
confirmed cases  
xx recovered  
110 250 deaths

## Russia

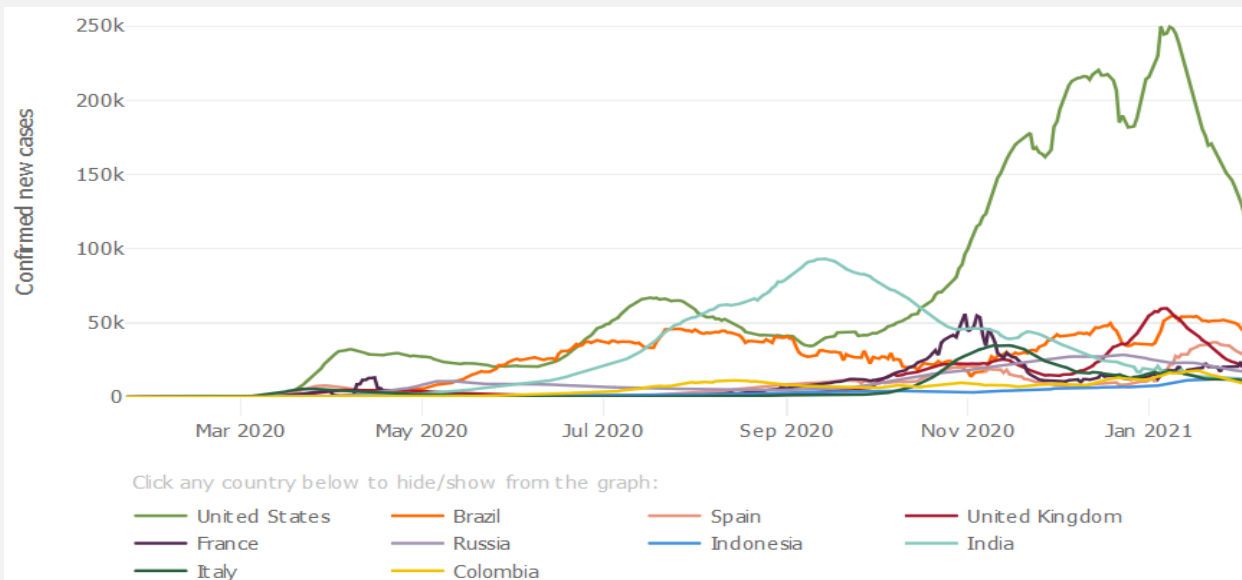
(new cases/day 16 463)  
3 874 830  
confirmed cases  
3 352 720 recovered  
74 005 deaths

## France

(new cases/day xx)  
3 251 160  
confirmed cases  
228 472 recovered  
77 595 deaths

# Global Situation

**Outbreak evolution for the current 10 most affected countries;  
Johns Hopkins as of 4 February**



## Country reports:

**GBR:** It is estimated that more than 15 percent of the population have already gone through a corona infection. This is based on figures from the [ONS statistics agency](#). The estimate is based on data from antibody tests from December 22nd and January 18th. The data vary greatly by region, with London leading the way with 21 percent.

A [study by the UK Biobank](#) shows that almost 90 percent of those infected have antibodies against the coronavirus in their body six months after being infected. In 88 percent of the study participants examined, antibodies could have been detected after the full six months of the investigation, after three months this was even the case in 99 percent of the patients. The findings suggest that people could be protected from re-infection for at least six months.

**SVK:** Schools and kindergartens may gradually open again from Monday under strict conditions. The relaxation initially only applies to the first four school levels and the final classes of some school types. The condition for the youngest students is a negative corona test from their parents that is no more than seven days old, and for the older students a separate test certificate.

**BGR:** Middle schools and high schools have been reopened for face-to-face teaching. First, the 7th, 8th and 12th grade students should come back to the school building after a good two months of distance learning. After 14 days, these grades return to distance learning, while the other grades switch to teaching in the classrooms.

**FRA:** Thousands of people demonstrated against social cuts and the closure of cultural institutions in the corona pandemic. The largest rallies took place on Thursday in Paris, Marseille, Lyon and Nantes. The police spoke of several thousand participants, according to the trade unions, however, 20,000 people took to the streets in Paris alone. 165 campaigns were announced nationwide.

**DNK/SWE:** Plans to develop a digital ID card with corona vaccination data, which will initially make life easier for business travelers in particular. With the so-called Corona passport, citizens on business and other trips abroad should be able to document that they have been vaccinated against COVID-19. The implementation of the Corona Pass including the app will, however, take three to four months.

**SWE:** In future, foreigners will have to present a negative corona test that is no older than 48 hours when entering the country. The regulation applies from Saturday and provisionally until March 31. The aim is to curb the spread of new virus variants. Exceptions are family matters, foreigners residing in Sweden, children, and young people.

**USA:** Leading corona experts have warned people not to meet people from other households to watch the Super Bowl. Similar occasions such as Christmas or holidays have led to an increase in infections.

**CAN:** To avoid any more Corona infections CAN bans cruise ships from its waters until February 28. The ban applies in general to cruise ships with more than 100 people. In Arctic coastal waters, it already works on ships with more than 12 people on board.

**BRA:** Variant P.1, discovered in Amazonas, was identified in another region. On Tuesday, three cases were confirmed in São Paulo. In the state of Rio Grande do Sul, a study detected two cases of co-infection by two different strains of the coronavirus. Additionally five states reported hospital bed occupancy above 80%.

**PS-GZA:** After a decline in the number of infections, the ruling Hamas is loosening the corona restrictions for the Palestinian territory. A Home Office spokesman said the weekday evening lockdowns and weekend bans would be lifted. Markets, however, should remain closed on Fridays.

**CHN:** China has deployed anal swabs for COVID-19 testing in some cities, citing better accuracy than throat swabs in some key groups. Using anal swabs could avoid missing infections, as SARS-CoV-2 remains detectable for a longer time in the anus or excrement as Chinese specialist said.

**IND:** The latest serological survey conducted in Delhi with over 28,000 samples tested, indicates that the national capital could be nearing herd immunity against COVID-19. In one district, 60% of the residents were found to have SARS-CoV-2 antibodies. Many other districts showed a seroprevalence rate of more than 50%.

**UKR:** According to the evaluation of the antibody tests carried out in January, antibodies could already be detected in 44 to 60 percent of people in the country. In October the value was 33 percent and in July only nine percent. From May 2020 to the end of January 2021, more than 140,000 antibody tests were done. It is not yet clear how long antibodies are retained in an infected person.

# Global Situation

## Vaccination news:

**EU:** Due to the shortage of corona vaccines, a new task force is to provide targeted support to manufacturers in jointly expanding production. It will support the six companies with which the EU has supply contracts. The aim is that all suppliers can deliver on the promised number of doses.

**Covax:** Plans to deliver a good 337 million doses of corona vaccines by the end of June. These are 336 million doses from AstraZeneca and 1.2 million doses from BioNTech. This means that an average of 3.3 percent of the respective population can be vaccinated in the 145 countries that have requested delivery. According to the plans, delivery should begin before the end of February.

**PKR: North Korea** receives almost two million corona vaccination doses at its own request, although it claims to be corona-free.

**CureVac / GlaxoSmithKline:** The two companies want to jointly develop a next-generation COVID-19 vaccine. These should be directed against the new emerging virus variants. The vaccine could be available in the coming year if it is successfully developed and approved by the authorities. It builds on CureVac's existing COVID-19 vaccine, which is currently in the critical phase of development and is based on mRNA.

**AstraZeneca/Oxford:** The next generation of COVID-19 vaccines should be produced by autumn, which should also protect against the variants. Furthermore, data on the effectiveness of the COVID-19 vaccine in older adults are about to be available.

**ITA:** announced an investment of 81 million Euros in Reithera, an Italian biotech company working on a COVID-19 vaccine using gorilla adenovirus as a vector. The decision was made in order to give the country some autonomy in vaccine production but many experts have criticised the investment. Reithera has only completed a phase 1 trial so far.

**CHE:** The government has signed a contract with Curevac for the delivery of five million vaccine doses. Once the vaccine has been approved, Curevac is expected to start delivering in the second quarter of 2021. A preliminary contract for six million vaccine doses was also signed with Novavax and the delivery of a further six million doses agreed with Moderna. AstraZeneca's vaccine will not be approved for the time being. The currently available data do not yet allow the authority to make a positive benefit-risk decision. For a final assessment, the applicant must submit and evaluate additional efficacy data from a phase III study in North and South America.

**USA:** The White House COVID-19 Response Team announced on Wednesday, that 1.6 million COVID-19 doses had been administered each day over the past week and that 3.4 million Americans have been fully vaccinated with two doses. Although Pfizer and Moderna are due to deliver an additional 200 million doses near the end of March, more than 500 million doses will be needed to vaccinate every American older than 16 years.

**MEX:** The Mexican health authority approved the Russian corona Sputnik V vaccine for emergency use.

**ISR:** Since Thursday, citizens under 35 who were previously exempt can make vaccination appointments. However, health insurers are still required to focus their efforts on people over 50 and those who are not mobile. Most recently, the willingness to vaccinate decreased significantly. While the daily vaccination numbers in the past month were often over 200,000, in the last few days it was only over 100,000. Since the vaccination campaign began in December, more than 3.2 million people in the country have received the first vaccination against the coronavirus. That's a third of the population. Around 1.8 million Israelis have already been vaccinated twice. At the same time, the number of infections remains very high.

## Global epidemiological situation overview; WHO as of 31 Jan

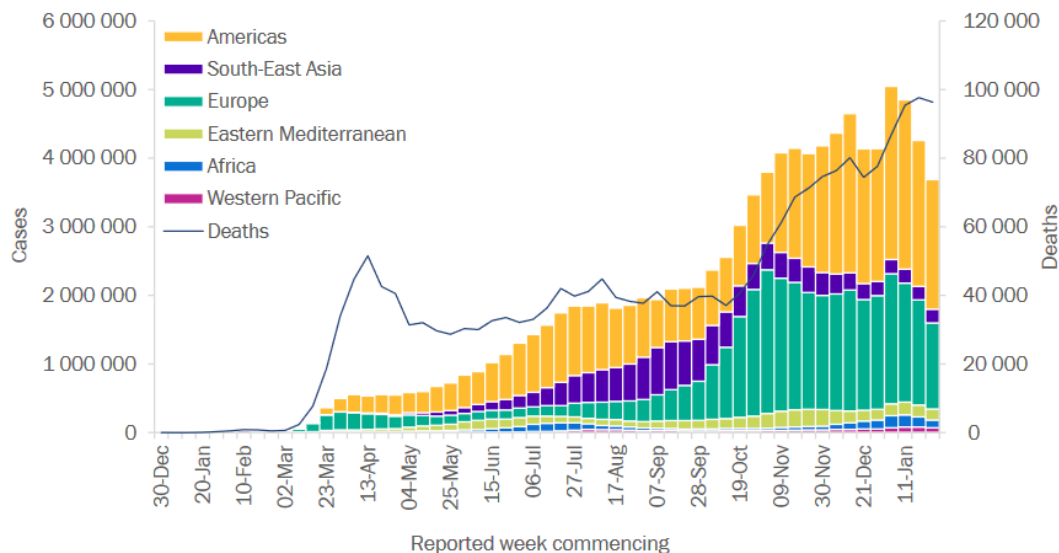
Globally, 3.7 million new cases were reported last week, a 13% decline as compared to the previous week, and the third consecutive week showing a decline in cases. There were 96000 new deaths, and a 1% decline as compared to the previous week, (Figure 1). This brings the total number of cases to over 102 million and the total number of deaths to 2.2 million from 222 countries and territories. Last week, all WHO regions, except **South-East Asia** reported a decline in new cases (Table 1). Although new deaths declined globally by 1%, they rose in the **Western Pacific (21%)**, **Eastern Mediterranean (9%)**, and the **Americas (4%)**.

Saturday 30 January 2021 marked one year since WHO declared COVID-19 a Public Health Emergency of International Concern. At that time, there were 9826 cases in 20 countries, and 213 deaths in one country (all of which were in China).

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

- **United States of America;** reporting 1 072 287 cases, a 15% decrease,
- **Brazil;** reporting 364 593 cases, a 1% increase,
- **Great Britain;** reporting 178 629 cases, a 31% decrease,
- **France;** reporting 141 092 cases, a 2% increase and
- **the Russian Federation;** reporting 131 039 cases, a 13% decrease.

Figure 1: COVID-19 cases reported weekly by WHO Region, and global deaths, as of 31 January 2021\*\*



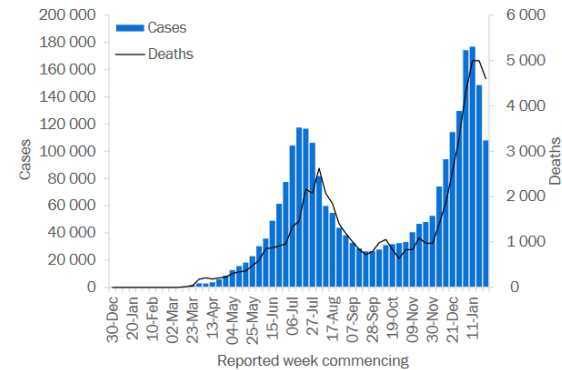
# Situation by WHO Region, as of 31<sup>th</sup> January

## Situation by WHO Region

### African Region

In the past week, the African Region reported over 108 000 cases and just over 4600 deaths, a 27% decrease in cases and an 8% decrease in deaths respectively compared to the previous week. Cases have decreased for two consecutive weeks. The highest numbers of new cases were reported in South Africa (44 397 new cases; 74.9 new cases per 100 000 population; a 44% decrease), Nigeria (9955 new cases; 4.8 new cases per 100 000; a 15% decrease) and Zambia (8760 new cases; 47.7 new cases per 100 000; a 3% increase).

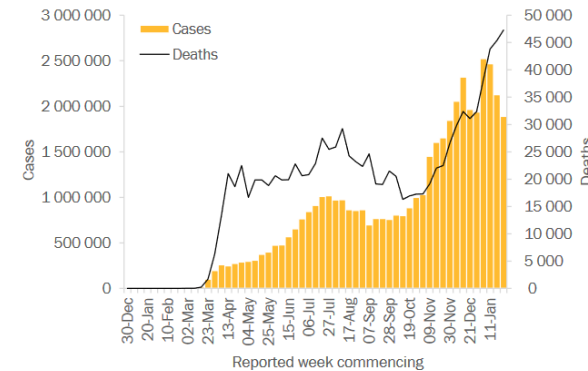
The countries reporting the highest number of new deaths in the past week were South Africa (3377 new deaths; 5.7 new deaths per 100 000; a 9% decrease), Zimbabwe (219 new deaths; 1.5 new deaths per 100 000; a 25% decrease) and Malawi (217 new deaths; 1.1 new deaths per 100 000; a 28% increase).



### Region of the Americas

Over 1.8 million new cases and over 47 000 new deaths were reported in the Region of the Americas this week, a decrease of 11% and an increase of 4% respectively compared to the previous week. The highest numbers of new cases were reported from the United States of America (1 072 287 new cases; 324.0 new cases per 100 000 population; a 15% decrease), Brazil (364 593 new cases; 171.5 new cases per 100 000; a 1% increase) and Mexico (109 603 new cases; 85.0 new cases per 100 000; an 11% decrease).

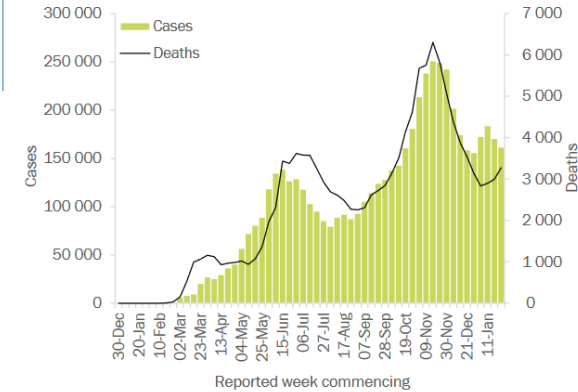
The highest numbers of deaths were reported from the same countries, the United States of America (22 506 new deaths; 6.8 new deaths per 100 000; a 4% increase), Mexico (8965 new deaths; 7.0 new deaths per 100 000; a 4% increase) and Brazil (7423 new deaths; 3.5 new deaths per 100 000; a 6% increase).



### Eastern Mediterranean Region

In the past week, the Eastern Mediterranean Region reported over 161 000 new cases, a decrease of 5% compared to last week. The region reported 3200 new deaths, a 9% increase. The three countries reporting the highest numbers of new cases continue to be the Islamic Republic of Iran (44 699 new cases, 53.2 new cases per 100 000 population, a 5% increase), Lebanon (22 326 new cases, 327.1 new cases per 100 000, a 19% decrease) and United Arab Emirates (26 285 new cases, 265.8 new cases per 100 000, 7% increase).

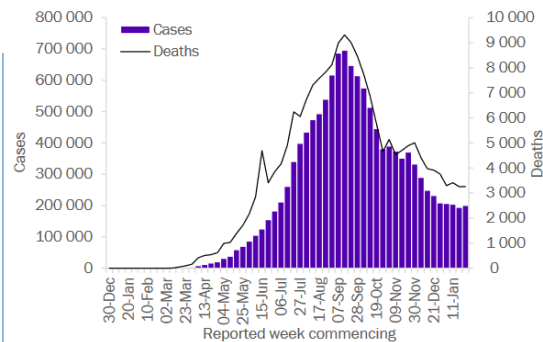
The highest numbers of new deaths were reported in Lebanon (751 new deaths, 11.0 new death per 100 000, an 81% increase), Iran (595 new deaths, 0.7 new death per 100 000 population, a 3% increase), and Tunisia (526 new deaths, 4.5 new death per 100 000, a 2% decrease).



### South-East Asia Region

Following slow declines in the number of new cases in the South-East Asia Region in recent weeks, there was a plateau in newly reported cases (200 000 new cases, 3% increase from last week), and deaths (3000 new deaths, 0% change) this week. The three countries reporting the highest numbers of new cases and new deaths were India (91 650 new cases; 6.6 new cases per 100 000, a 5% decrease), Indonesia (88 839 new cases; 32.5 new cases per 100 000; a 10% increase) and Sri Lanka (5706 new cases; 26.6 new cases per 100 000; an 8% increase).

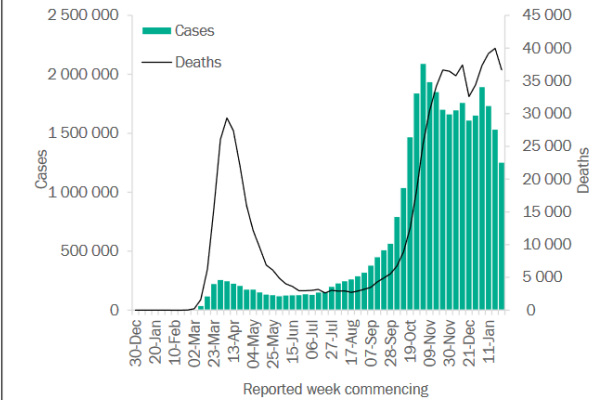
The three countries reporting the highest numbers of new deaths this week were Indonesia (2064 new deaths; 0.8 new deaths per 100 000, a 9% increase), India (935 new deaths; <0.1 new deaths per 100 000, a 12% decrease) and Bangladesh (108 new deaths; <0.1 new deaths per 100 000; a 10% decrease).



### European Region

The European Region reported over 1.2 million new cases and over 36 000 new deaths, a decrease of 18% and 8% respectively when compared to the previous week. The three countries reporting the highest numbers of new cases were the United Kingdom (178 629 new cases, 263.1 new cases per 100 000, a 31% decrease), France (141 092 new cases; 216.2 new cases per 100 000, a 2% increase) and the Russian Federation (131 039 new cases, 89.8 new cases per 100 000, a 13% decrease).

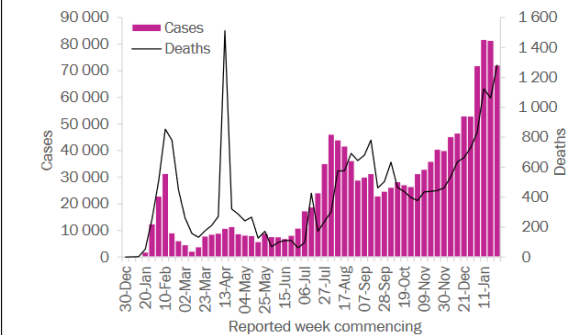
The highest numbers of deaths were reported from the United Kingdom (8242 new deaths; 12.1 new deaths per 100 000, a 6% decrease), Germany (5075 new deaths; 6.1 new deaths per 100 000, a 7% decrease) and the Russian Federation (3720 new deaths; 2.5 new deaths per 100 000, a 5% decrease).



### Western Pacific Region

The Western Pacific Region reported 72 000 new cases the past week, an 11% decrease compared the previous week, while a marked (21%) increase was seen in the number of new deaths, with over 1200 deaths reported this week. The three countries reporting the highest numbers of new cases in the region this week were Malaysia (29 206 new cases; 90.2 new cases per 100 000, a 15% decrease), Japan (26 081 new cases; 20.6 new cases per 100 000, a 32% decrease), and the Philippines (11 837 new cases; 10.8 new cases per 100 000, a 9% decrease).

The three countries reporting the highest numbers of new deaths this week were Japan (635 new deaths; 0.5 new deaths per 100 000, an 8% increase), the Philippines (479 new deaths; 0.4 new deaths per 100 000, an 11% increase) and Malaysia (79 new deaths; 0.2 new deaths per 100 000, a 56% increase).



Source:

<https://www.who.int/publications/m/item/weekly-epidemiological-update---2-february-2021>

# Update on SARS-CoV-2 variants of concern

Source: <https://www.who.int/publications/m/item/weekly-epidemiological-update---27-january-2021>  
[https://www.who.int/docs/default-source/coronaviruse/risk-comms-updates/update47-sars-cov-2-variants.pdf?sfvrsn=f2180835\\_4](https://www.who.int/docs/default-source/coronaviruse/risk-comms-updates/update47-sars-cov-2-variants.pdf?sfvrsn=f2180835_4)

WHO 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 February 2021:

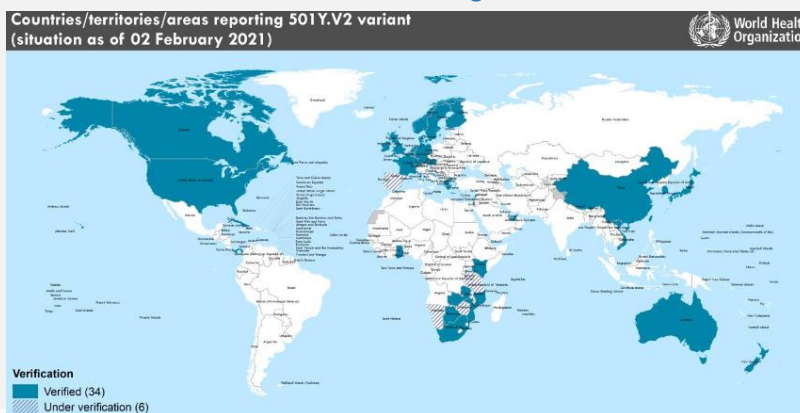
## 1. Variant VOC 202012/01, lineage B.1.1.7

Since our last update on 27 January, variant VOC 202012/01 has been detected in ten additional countries. As of 2 February, a total of 80 countries across all six WHO regions have reported either imported cases or community transmission of this variant.



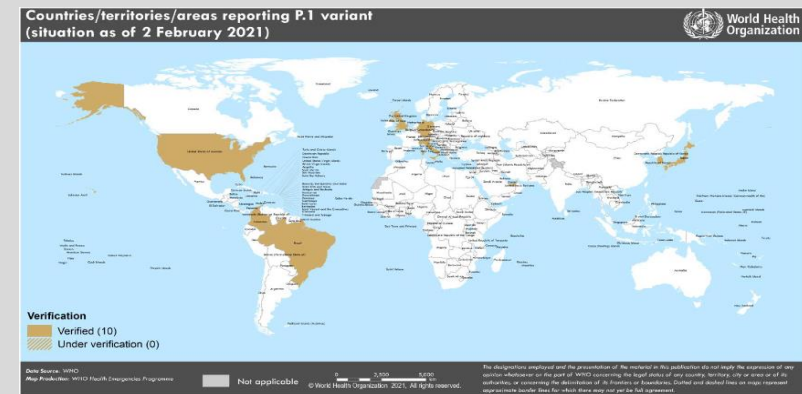
## 2. Variant 501Y.V2, lineage B.1.351:

Since the last update on 27 January, 501Y.V2 has been reported from ten additional countries—now totaling 41 countries across four of the six WHO regions.



## 3. Variant P.1, lineage B.1.1.28:

Since our last update, variant P.1 has been reported in two additional countries. To date, this variant is reported in ten countries across four of the six WHO regions.



In a multidisciplinary Global Transmission Discussion Seminar participants from Brazil, Denmark, South Africa and the United Kingdom presented ongoing work aiming to understand transmission aspects of the variants of concern emerging in their countries. Initial analyses suggest that some variants may be more transmissible, possibly due to mutations that improve the virus's ability to bind to human cells, but available studies have found that the modes of transmission have not changed.

SARS-CoV-2 incidence and hospitalizations in a number of countries where VOC202012/01 and 501Y.V2 are circulating has started to decline in recent weeks, demonstrating the effectiveness of public health and social measures for controlling transmission of these variants.

### Implications of variants detected in the UK & South Africa

Function of SARS-CoV-2	Variant detected in United Kingdom	Variant detected in South Africa
Transmissibility	increased transmissibility <sup>1</sup>	increased transmissibility <sup>2</sup>
Disease severity	preliminary data suggests no changes in disease severity <sup>1</sup> , however more studies are needed <sup>3</sup>	preliminary data suggests no changes in disease severity, however more studies are needed <sup>3</sup>
Vaccines	preliminary data <sup>4</sup> suggests the variant is unlikely to have an impact on the efficacy of approved vaccines	preliminary data <sup>5</sup> suggests vaccines continue to work, however more studies are needed
Diagnostics	may affect the performance of some diagnostic PCR assays <sup>6</sup>	More studies are needed
Therapeutics	more studies are needed	more studies are needed

# Subject in Focus

## UK Biobank SARS-CoV-2 Serology Study

Source: <https://www.ukbiobank.ac.uk/learn-more-about-uk-biobank/news/uk-biobank-study-shows-that-covid-19-antibodies-remain-for-at-least-6-months>

UK Biobank collected blood samples from approximately 20,200 individuals on a monthly basis for six months to determine the extent of past infection with SARS-CoV-2 in different population subgroups across the UK. Between 27<sup>th</sup> May and 4<sup>th</sup> December 2020, 18,893 individuals (93.5%) provided at least one sample that was successfully assayed. The **study found** that 8.8% of the UK population had been infected by December 2020, rising as high as 12.4% in London and as low as 5.5% in Scotland.

### Key findings

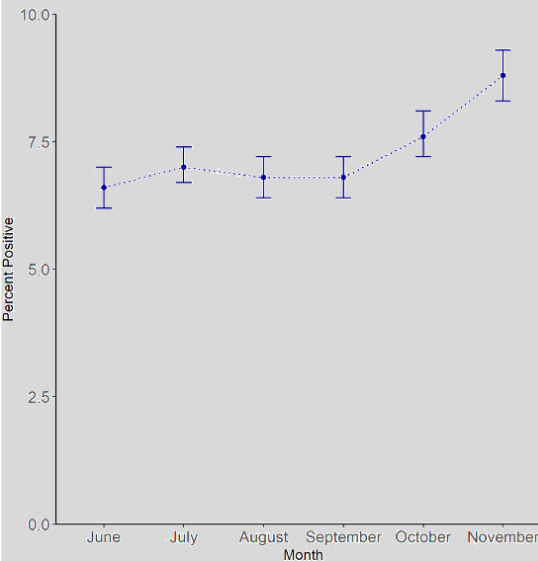
One of the most significant findings of the study is that 99% of participants who had tested positive for previous infection retained antibodies to SARS-CoV-2 for 3 months after being infected, and 88% did so for the full 6 months of the study. This discovery provides an early indication that the antibodies produced following natural infection, and potentially following vaccination, may protect most people against subsequent infection for at least 6 months.

### Additional results

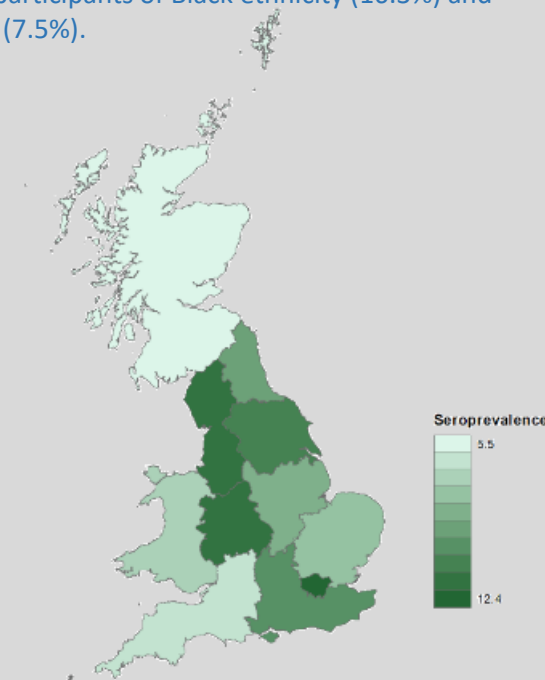
The study also found that:

- The most common symptom associated with having antibodies to SARS-CoV-2 was a loss of sense of taste and smell, which was reported by 43% of sero-positive participants.
- About one-quarter (24%) of sero-positive participants were completely asymptomatic and 40% did not have one of the three 'classic' COVID-19 symptoms (fever, persistent dry cough or loss of sense of taste or smell).

- The proportion of the population with antibodies to SARS-CoV-2[1] ('seroprevalence', which indicates past infection) rose from 6.6% at the start of the study period (May/June 2020) to 8.8% by the end of it (November/December 2020).
- Across the various population groups included in the study, it was found that:
  - > SARS-CoV-2 seroprevalence was most common in London (12.4%) and least common in Scotland (5.5%).
  - > There was no difference in seroprevalence by gender, but the proportion of participants with detectable antibodies was higher in younger people (13.5% among those under 30) and lowest in the elderly (6.7% among those over 70).
  - > The seroprevalence of SARS-CoV-2 was highest among participants of Black ethnicity (16.3%) and lowest among those of White (8.5%) and Chinese ethnicities (7.5%).

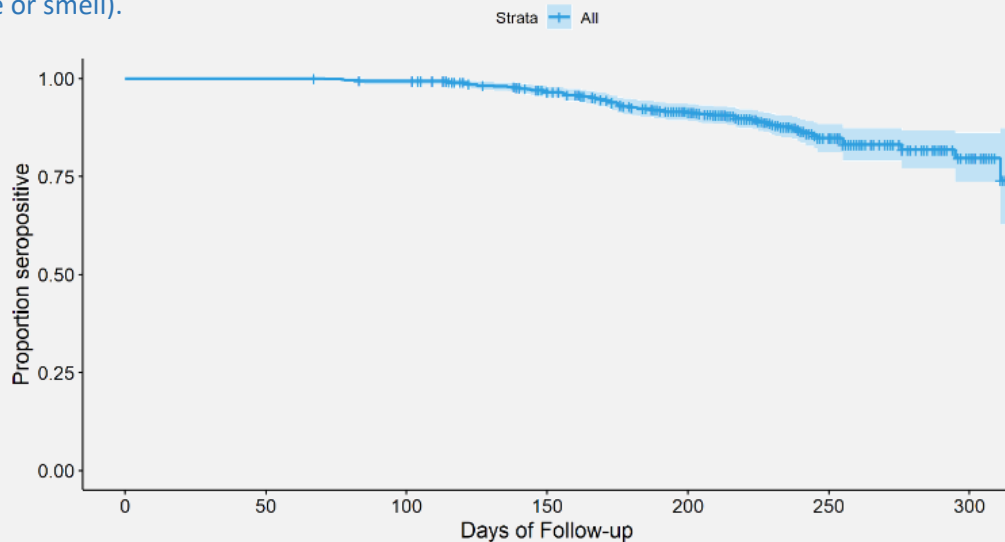


Seroprevalence of SARS-CoV-2 across the study months



Percentage of seropositive for SARS-CoV-2 infection by region

The data will be added to the UK Biobank database and research resource, enabling scientists globally to conduct further research into how SARS-CoV-2 infection affects health over the longer-term.



Proportion of seropositive participants remaining seropositive over time

[https://www.who.int/docs/default-source/coronavirus/risk-comms-updates/update45-vaccines-developement.pdf?sfvrsn=13098bfc\\_5](https://www.who.int/docs/default-source/coronavirus/risk-comms-updates/update45-vaccines-developement.pdf?sfvrsn=13098bfc_5)  
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/media-resources/science-in-5/episode-23---i-am-vaccinated-what-next>

# I am vaccinated, what next?

## Q & A



**CHOOSE TO GET VACCINATED**  
 PROTECT yourself, your family, your community, and help end the pandemic.

1. The vaccine will offer additional protection from COVID-19.
2. When entire communities get vaccinated, wear masks, social distance, avoid large gatherings, and wash their hands we'll have the best chance of ending the pandemic.
3. Initial vaccine quantities will be limited. Talk with your healthcare provider or local Medical Treatment Facility for more details about when vaccine will become available.

The vaccines available for COVID-19 have been proven safe and effective, are authorized by the U.S. Food and Drug Administration, and are being manufactured and distributed safely and securely.

For more information: 

**I GOT MY COVID-19 VACCINE!**

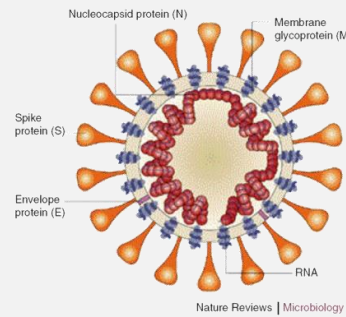
**COVID 19** For current COVID-19 information: <https://www.cdc.gov/coronavirus/2019-ncov/index.html>  
 The Military Health System Normal Access Line is available 24/7: Call 1-800-872-7242 (TDD) or 1-800-872-7243 (Voice)  
 Emergency Kit Checklist for Families: <https://www.hhs.gov/emergency-preparedness-response-recovery/kit-checklist>

**Public Health** Army Public Health The Army COVID-19 Information Hub: <https://www.army.mil/covid19>  
 Defense COVID-19: <https://www.defense.gov/coronavirus/>  
 DoD COVID-19: <https://www.dod.mil/coronavirus/>

1A-816-1206 12/10/2020 For more information, contact your installation's Department of Public Health. Approved for public release; distribution unlimited. version 1.0

### How COVID-19 vaccines work

Vaccines greatly reduce the risk of infection by training the immune system to recognize and fight pathogens such as viruses or bacteria. Most research on COVID-19 vaccines involves generating responses to all or part of the spike protein that is unique to the virus that causes COVID-19. When a person receives the vaccine, it will trigger an immune response. If the person is infected by the virus later on, the immune system recognizes the virus and, because it is already prepared to attack the virus, protects the person from COVID-19



### Why do we need vaccines for COVID-19?

Vaccines can prevent infectious diseases. Vaccines do prevent measles, polio, hepatitis B, influenza and many others. When most people in a community are protected by vaccination, the ability of the pathogen to spread is limited. This is called 'herd' or 'indirect' or 'population' immunity. When many people have immunity, this also indirectly protects people who cannot be vaccinated, such as those who have compromised immune systems.

### How safe are the COVID-19 vaccines?

The safety requirements for COVID-19 vaccines are the same as for any other vaccine and will not be lowered in the context of the pandemic. Safety trials begin in the lab, with tests and research on cells and animals first, before moving on to human studies. The principle is to start small and only move to the next stage of testing if there are no safety concerns. Clinical trials are evaluating COVID-19 vaccines in tens of thousands of study participants to generate the scientific data and other information needed to determine safety and effectiveness. These clinical trials are being conducted by manufacturers according to rigorous standards.

The COVID-19 vaccines are tested in a broad population of people – not only young, physically fit volunteers, but also older people and people with underlying health conditions. After deployment, the vaccines will continue to be carefully monitored for safety and effectiveness.

### Why are there so many COVID-19 vaccines in development?

There are many different COVID-19 vaccines in development using different technologies because it is not yet known which ones will be effective and safe. Based on experience, roughly 7% of vaccines in preclinical studies succeed. Candidates that reach clinical trials have about a 20% chance of succeeding. Different vaccine types may be needed for different population groups. For

example, some vaccines may work in older persons and some may not, as the immune system weakens with older age. Several vaccines are needed to allow countries with as much vaccine as possible to increase the supply. Not everyone will be able to be vaccinated right away because of limited supply. It is important that the initial supplies of vaccine are given to people in a fair, ethical, and transparent way.

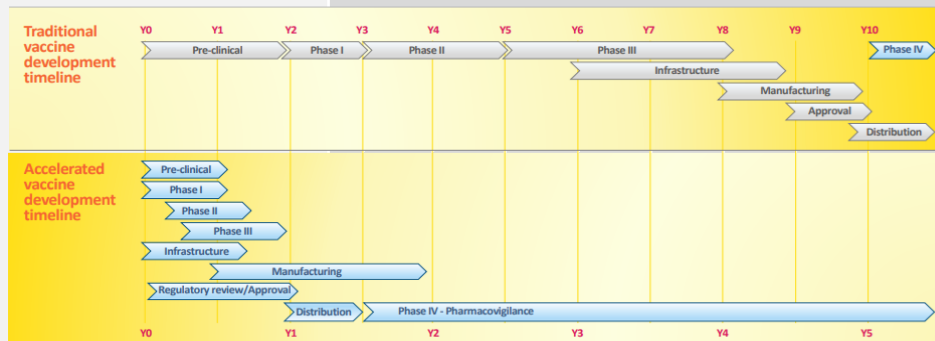
### Can we all go back to our normal life once vaccinated?

The Pfizer-BioNTech and Moderna vaccine trials show that COVID-19 vaccines are effective in preventing severe disease. However, neither the Pfizer-BioNTech nor the Moderna vaccine trials tested whether the vaccines prevent people from being infected with the virus, that means that it's not clear whether vaccinated people could still transmit COVID-19 to others. We don't know yet the duration of immunity conferred by the vaccines. In addition, it will take time to vaccinate everyone. Until that happens and until it's clear how well the vaccines prevent transmission, other public health and social measures such as physical distancing and wearing of masks will be needed.

### After one have been vaccinated when does the immunity kick in and how long does it last?

The vaccines we have are two dose vaccines (21 to 28 days, depending on the product). After the first dose we see a good immunity response it kicks in round about two week after the first dose. The second dose boost the immune response. The immunity is even stronger after the second dose. We don't know yet who long the immunity is present. We have to wait and follow people who are vaccinated to get some adequate answer.

## COVID-19 vaccine accelerated development



### After the vaccination can one still catch COVID-19 and can one also infect others?

The clinical trial shows that the vaccine protect people against these disease. What we don't know form the clinical trial jet is whether or not the vaccine protects transmitting somebody else.

### Can I get COVID-19 from the vaccine?

It's not possible to get COVID-19 from vaccines. Vaccines against COVID-19 use inactivated virus, parts of the virus, or a gene from the virus. None of these can cause COVID-19

# Comparison of vaccines

Three vaccines against COVID-19 have now been approved. The preparations from BioNTech/Pfizer, Moderna and AstraZeneca sometimes differ significantly.

## Covid-19- Vaccine

**BIONTECH**  
**Pfizer**



<b>Name:</b>	BNT162b2
<b>Type:</b>	mRNA-vaccine
<b>Durability:</b>	6 month (-70°C) 5 days (+2 °C to +8°C)
<b>Dose:</b>	2 dose 3 weeks apart
<b>Effectiveness:</b>	95%
<b>Costs:</b>	12 € (per dose)

## Covid-19- Vaccine

**moderna**



<b>Name:</b>	mRNA-1273
<b>Type:</b>	mRNA-vaccine
<b>Durability:</b>	6 month (-20°C) 30 days (+2 °C to +8°C)
<b>Dose:</b>	2 dose 4 weeks apart
<b>Effectiveness:</b>	94%
<b>Costs:</b>	15 € (per dose)

## Covid-19- Vaccine

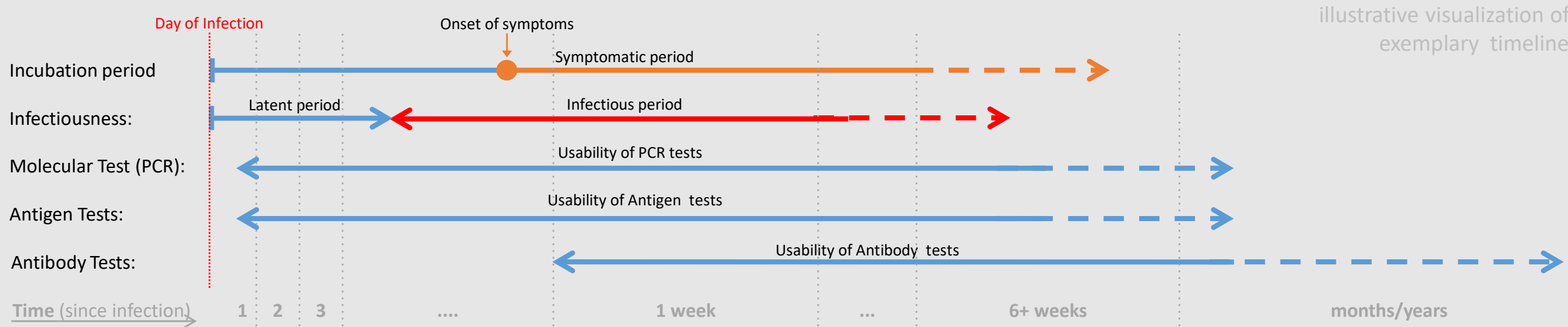
**AstraZeneca**



<b>Name:</b>	AZD1222
<b>Type:</b>	Viral Vector Vaccine
<b>Durability:</b>	6 month (+2 °C to +8°C)
<b>Dose:</b>	2 dose 4 weeks apart
<b>Effectiveness:</b>	62% to 90% (depends on the study)
<b>Costs:</b>	1,78 € (per dose)



# Timeline COVID-19 infection



	Molecular Tests	Antigen Tests	Antibody Tests
Also known as:	RT-PCR	Rapid diagnostic test	Serological test, serology, blood test, serology test
Applicable period:	From infection until at least 6 weeks after being symptom free	From infection until at least 6 weeks after being symptom free	As soon as 1 or 2 weeks after infection
How the sample is taken:	Nasal or throat swab (most tests) Saliva (a few tests)	Nasal or throat swab	Finger stick or blood draw
How long it takes to get results:	Several hours	Fast < 1h	Several hours or days
Is another test needed:	Not needed but can be repeated after negative test to reduce false negative result.	Positive results are usually accurate but negative results may need to be confirmed with a molecular test.	Sometimes a second antibody test is needed for accurate results.
What it shows:	Active coronavirus infection (i.e. <b>presence of SARS-CoV-2</b> )	Active coronavirus infection (i.e. <b>presence of protein fragments of SARS-CoV-2</b> )	If you've been <b>infected by coronavirus in the past</b>
What it can't do:	Show if you ever had COVID-19 or were infected with the coronavirus in the past. Show if you are currently infectious.	Definitively rule out active coronavirus infection. Antigen tests are more likely to miss an active coronavirus infection compared to molecular tests. Your health care provider may order a molecular test if your antigen test shows a negative result but you have symptoms of COVID-19.	Diagnose active coronavirus infection at the time of the test or show that you do not have COVID-19

Sources:  
<https://www.fda.gov/consumers/consumer-updates/coronavirus-testing-basics>  
<https://www.sciencemediacenter.de/alle-angebote/fact-sheet/details/news/verlauf-von-covid-19-und-kritische-abschnitte-der-infektion/>  
<https://www.apotheken-umschau.de/Coronavirus/Corona-Nachweis-Die-Testverfahren-im-Ueberblick-558071.html#Die-Testverfahren-im-Ueberblick:>

## 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!

04<sup>th</sup> February 2021

**Aljazeera**

### **UK to test whether AstraZeneca, Pfizer vaccines interchangeable**

<https://www.aljazeera.com/news/2021/2/4/astrazeneca-pfizer-begin-clinical-trial-on>

03<sup>rd</sup> February 2021

**DW**

### **Combined COVID mutations discovered in the UK**

<https://www.dw.com/en/combined-covid-mutations-discovered-in-the-uk/a-56445194>

04<sup>th</sup> February 2021

**DW**

### **India, South Africa lose bid to ban COVID vaccine patents**

<https://www.dw.com/en/india-south-africa-lose-bid-to-ban-covid-vaccine-patents/a-56460175>

04<sup>th</sup> February 2021

**BBC**

### **Study reveals extent of Covid vaccine side-effects**

<https://www.bbc.com/news/health-55932832>

02<sup>nd</sup> February 2021

**Aljazeera**

### **Palestinians begin COVID vaccinations in occupied West Bank**

<https://www.aljazeera.com/news/2021/2/2/palestinians-begin-covid-vaccinations-in-occupied-west-bank>

04<sup>th</sup> February 2021

**The Guardian**

### **Exclusive: indigenous Americans dying from Covid at twice the rate of white Americans**

<https://www.theguardian.com/us-news/2021/feb/04/native-americans-coronavirus-covid-death-rate>

03<sup>rd</sup> February 2021

**South China Morning Post**

### **Coronavirus vaccine: Russia moves a step ahead of China with clinical trial data release**

<https://www.scmp.com/news/china/diplomacy/article/3120425/coronavirus-vaccine-russia-moves-step-ahead-china-clinical>

04<sup>th</sup> February 2021

**The Guardian**

### **African nations fear more Covid deaths before vaccination begins**

<https://www.theguardian.com/global-development/2021/feb/04/african-nations-fear-more-covid-deaths-before-vaccination-begins>

04<sup>th</sup> February 2021

**The Guardian**

### **Home workers putting in more hours since Covid, research shows**

<https://www.theguardian.com/business/2021/feb/04/home-workers-putting-in-more-hours-since-covid-research>

# The new normal!

## THE NEW NORMAL



**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,  
**Do it!**



#StaySafe

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



Be aware of different levels of risk in different settings.

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



**Crowded places**

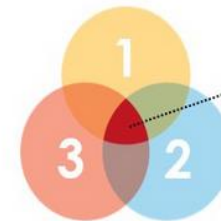
with many people nearby

**Close-contact settings**

Especially where people have close-range conversations

**Confined and enclosed spaces**

with poor ventilation



The risk is higher in places where these factors overlap.

**Even as restrictions are lifted, consider where you are going and #StaySafe by avoiding the Three C's.**

## WHAT SHOULD YOU DO?



Avoid crowded places and limit time in enclosed spaces



Maintain at least 1m distance from others



When possible, open windows and doors for ventilation



Keep hands clean and cover coughs and sneezes



Wear a mask if requested or if physical distancing is not possible

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



# 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 - [new studies](#) show that these two measures make a significant contribution to reducing the probability of transmission.

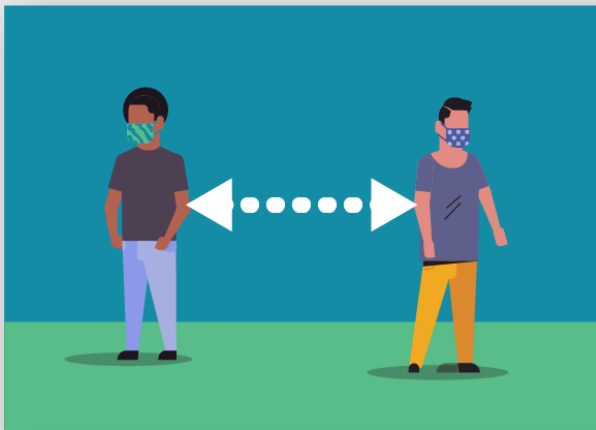
In the case of protective masks with an advertised protective effect in connection with SARS-CoV-2, depending on the intended purpose, a distinction is made between two types:

**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 without an exhalation valve and masks with an exhalation 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

	Mouth and nose protection	FFP2/FFP3 mask without valve	FFP2/FFP3 mask with valve
Protects wearer of mask	limited	✓	✓
Protects periphery	✓	✓	✗



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:

