



Short Update 61a COVID-19 Coronavirus Disease 19th of March 2021



GLOBAL

↗
121 815 492
Confirmed cases
69 013 550 recovered
2 691 567 deaths

USA

↗
(new cases/day 59 843)
29 551 144
confirmed cases
10 753 819 recovered
537 445 deaths

Brazil

(new cases/day 90 303)
↗
11 780 820
confirmed cases
10 383 496 recovered
287 499 deaths

India

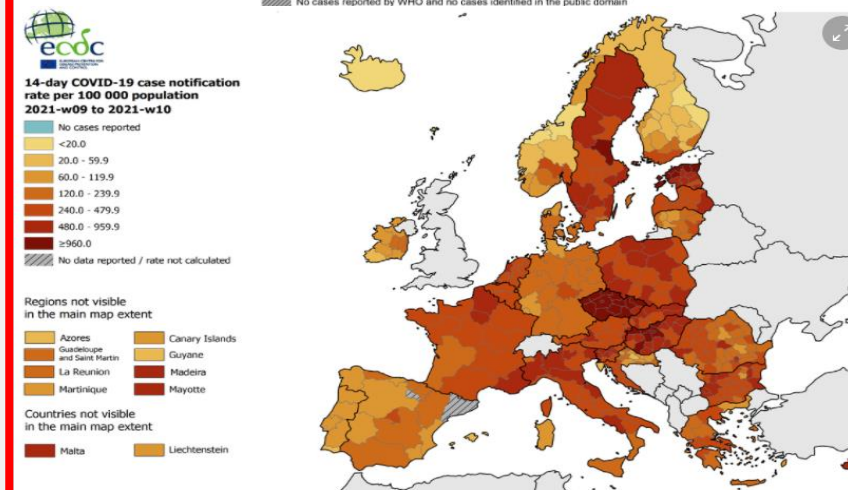
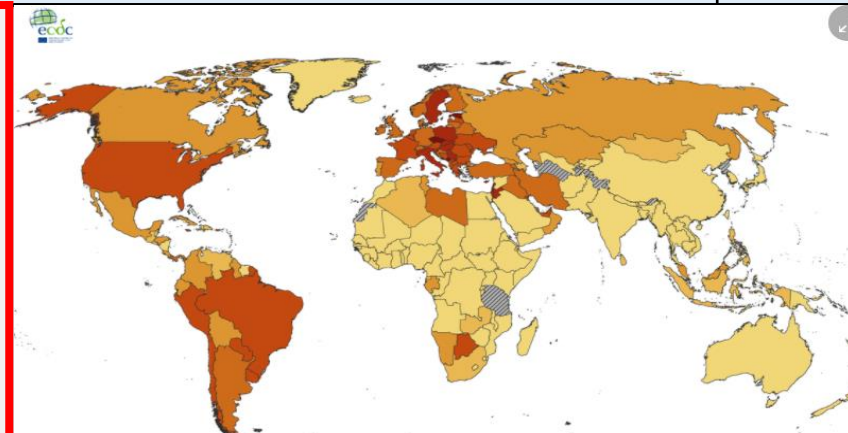
(new cases/day 35 871)
↗
11 514 331
confirmed cases
11 083 679 recovered
159 370 deaths

News:

- **WHO:** Currently, the WHO believes that the benefits of the AstraZeneca vaccine [outweigh the risks and recommends that vaccinations](#) continue. The WHO also stresses that vaccination against COVID-19 does not reduce disease or death from other causes.
- **EMA:** The European Medicines Agency decided that the AstraZeneca vaccine remains a recommended vaccine against COVID-19. The benefits still outweigh the risks despite possible link to rare blood clots with low blood platelets, EMA said in a press release on Thursday afternoon. There was no evidence of a problem related to specific batches of the vaccine or to particular manufacturing sites. However, an extra warning about possible rare blood clots in cerebral veins is included in the side effects. <https://www.ema.europa.eu/en/news/covid-19-vaccine-astrazeneca-benefits-still-outweigh-risks-despite-possible-link-rare-blood-clots>
- **EU:** There are still high hurdles in the EU to the approval of the Russian vaccine Sputnik V. So far, no application for approval has been submitted for Sputnik, the company must first provide data. There must also be factories authorised by the authority for each vaccine approved by the EMA.
- **EU/GBR:** British Health Minister Matt Hancock has urged the European Union to stick to the treaties in a dispute over vaccine doses. Otherwise, there will be consequences. The EU is threatening Britain with a vaccine export ban because the UK, for its part, does not supply doses to the EU.
- **ECDC:** Published a "[Consideration on the use of self-tests for COVID-19](#)". Only rapid antigen detection tests (RADTs) for self-testing for direct detection of SARS-CoV-2 virus particles in infectious individuals are considered within this document.
- **WHO:** One of the ways WHO is supporting countries strengthen their engagement and empowerment strategies is through the publication of the [10 Steps to Community Readiness—What countries should do to prepare communities for a COVID-19 vaccine, treatment, or new test](#).
- 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: SARS-CoV-2 P1-variant apparently as dangerous as B.1.1.7
- Interim Public Health Recommendations for Fully Vaccinated People
- **FAQ:** Vaccination and positive test results?
- Three ways to detect a corona infection
- Timeline COVID-19 infection
- In the press



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EUROPE

↗
40 079 870
confirmed cases
21 759 350
recovered
900 912 deaths

Russia

(new cases/day 9 167)
→
4 378 656
confirmed cases

3 991 385 recovered
92 266 deaths

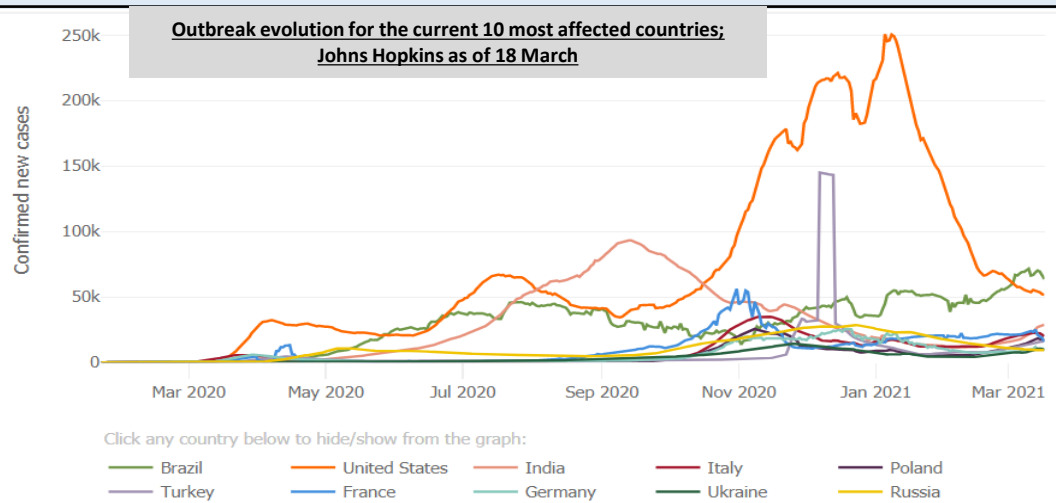
GBR

(new cases/day 6 753)
↘
4 280 886
confirmed cases
xx recovered
125 926 deaths

France

(new cases/day 27 166)
↗
4 181 607
confirmed cases
278 263 recovered
91 679 deaths

Global Situation



Country reports:

DEU: An increase of the B.1.1.7 variant within Germany is reported. Currently approx. 72% of all samples tested were described as B.1.1.7 positive. Compared to last week this is an increase of about 17 percentage points (last week 55% of all assessed samples had the variant). It is unclear if this value holds true for all samples or just for the subset investigated more closely. Another dataset (based on complete genome sequencing) showed a 48% share of B.1.1.7.

BEL: For the first time since November 2020 the country reported more than 3,000 new cases within 24h. The 14-days incidence is at 330 cases per 100,000 inhabitants. The number of patients being hospitalized increased over the recent weeks. Despite tough mitigation measures like border closures for non-essential travel and social distancing rules, shops remained open since December. The government is considering to postpone discussed relaxations of the mitigation measures.

GRC: Minister of Health Vassilis Kikilias asked all physicians to volunteer for helping in the health system. More than 200 specialists are desperately needed within 48 hours. If only an insufficient number of medical experts agree to help, a special rule within the Corona-emergency act will be activated to force medical experts into joining the fight against corona. This special paragraph has been introduced to the legal framework last year.

FRA: Due to a sharp increase in the number of Corona infections, France is imposing a new lockdown on the Greater Paris area and other parts of the country. From Midnight on Friday, all non-essential shops will have to close there for a month and stricter exit restrictions will apply. These include the capital region of Ile de France and the Hauts-de-France region bordering Belgium.

POL: After more than 25,000 new cases within a single day, the government decided to implement a country-wide lockdown starting on Saturday. Malls, hotels, theatres, and cinemas have to remain closed.

SVK: The government prolonged the State of Emergency that is in place since 1st of October by another 40 days (until 28th April 2021). The state of Emergency allows authorities to deploy and force health personnel to work, as well as to impose curfews. In addition to the restrictions already in place, a new rule was introduced, prohibiting tourist travel abroad, following criticism that movement within the country is heavily restricted but tourist travel abroad remained possible.

UKR: The capital Kyiv (3m inhabitants) is entering into three weeks of lockdown due to the increasing number of cases. According to the major Vitali Klitschko, 70% of the capital's hospital beds reserved for COVID-19 patients are already occupied. Theatres, cinemas, museums and malls will be closed. Pharmacies and stores selling essential goods will remain open. Barbers and fitness studios can be visited if an appointment is made beforehand. Kindergartens and Public transport remain open. Students are asked to learn from at home.

BGR: The country is tightens its COVID-19 regulations and closes all schools, restaurants and malls for 10 days. The country reported 4201 new cases and 136 new deaths within 24 hours. Currently 609 patients are treated at an ICU, in total more than 7800 patients are treated in hospitals because of COVID-19

USA: US CDC informed the public on Wednesday that more than 40m US citizens already received their second shot of a COVID-19 vaccine. More than 147m doses were distributed in the US. The USA have approx. 328m inhabitants.

NZL: The country announced that it plans to establish a tourism bubble with Australia likely to start in April. Within this bubble no quarantine would be necessary for travellers entering the country. Discussions with other proximate nations (i.e. Cook Islands, and Niue) are on-going. Since March 2020 entering New Zealand was virtually impossible for people that are not residents or nationals of the country.

ARE: On Wednesday the United Arab Emirates reported that half of the population received at least one shot of a COVID-19 vaccine. Among the elderly and high-risk groups approx. 70% have received a vaccine. Non-national workers can also get vaccinated. Only children, pregnant, and breastfeeding women are not eligible for inoculation.

BRA: On Wednesday, the country reported more than 90,000 new infections and 2648 new deaths. In total the country with 211m inhabitants reported 11,7m cases and 284.775 fatalities since the beginning of the pandemic.

ARG: Thousands of people have taken to the streets for food aid. They gathered in front of the government headquarters in Buenos Aires and held up placards reading "Finish with hunger."

JPN: Japan is going to end the state of emergency that is in place for Tokyo and the neighbouring provinces since January, at the end of the week on 21st March. Secretary of Commerce Yasuhisa Nishimura asked everyone to maintain precautionary measures and help fighting the spread of the disease, even after the state of emergency.

IND: A new report from the Pew Research Center warns that more than 32m Indians slipped into poverty as a cause of COVID-19. Those people are no longer part of the middle class (defined as people earning USD 10-20 per day). The report expects that India will face a far more severe increase in poverty and decrease of the middle class, compared to China during the COVID-19 induced downturn.

Global Situation

Vaccination news:

EU: The EU commission organizes a meeting with all European producers of COVID-19 vaccines to discuss how the European vaccination campaign can be speeded up and how the supply with vaccines and ingredients necessary for the production process can be improved.

AstraZeneca/GBR: Britain's medicines agency MHRA says evidence does not suggest the AstraZeneca vaccine causes blood clots. Currently, the available evidence does not suggest that blood clots in veins are caused by AstraZeneca's COVID vaccine. However, examinations of a very rare and special type of blood clots in cerebral veins are ongoing.

Sputnik V: According to press articles the EU considers a collaboration with Russia to produce and distribute the Russian Sputnik V vaccine in Europe. Some European countries (e.g. Hungary) already bought the Russian vaccine, others already showed their interest.

Europe: **Germany, Italy and Spain** restarted the vaccination with AstraZeneca vaccine after the statement of the EMA. France plans to vaccinate only people over 65 and Scandinavia sticking to the suspension.

VAT: The Vatican has taken a positive view of its Corona vaccination campaign. Within the papal small state, no new COVID cases had occurred. The Vatican State had begun administering the BioNTech-Pfizer-Vakzins to employees and their family members in mid-January. The vaccination programme is now on the verge of vaccinating the homeless, that is taken care for by the papal charity office.

AUT: A letter from Austria's chancellor Sebastian Kurz regarding the distribution of vaccines ordered by the EU raised discussions among the member states. Initially this mechanism aimed at distributing all vaccines ordered by the EU on a pro rata basis based on the member states' population. After some members declined the option to participate in this mechanism the mechanism is only used within those countries that opted in.

USA: The United States announced that they will share their spare doses only with their neighbouring countries Mexico and Canada. MEX and CAN will receive approx. 2.5m and 1.5m doses respectively.

IND: Adar Poonawalla, the CEO of world's largest vaccine producer Serum Institute of India warned that "resource nationalism" can severely hinder achieving the UN/Covax goal of delivering 2bn doses of anti-corona vaccines to poor countries. He blamed the USA of using a law initially designed for war-times to ban the export of much needed ingredients. US official refused this accusation.

CHN: China announced to relax some of its travel restrictions for people proofing to have received a Chinese COVID-19 vaccine. Consequentially it will be easier to enter the country if the traveller's country of residence has approved at least one Chinese vaccine. People that were inoculated with another vaccine can apply but have to present stronger arguments or specific documents.

IRN: A third COVID-19 vaccine developed by Iranian researches has reached the clinical trial phase, according to Iranian officials. The vaccine candidate called Fakhra will enter into Phase III studies with 20,000 volunteers being inoculated in Tehran and other cities. The Fakhra vaccine is based on inactivated viruses but international researchers raised concern because of the lack of data published until now and the little information provided regarding the research and production process.

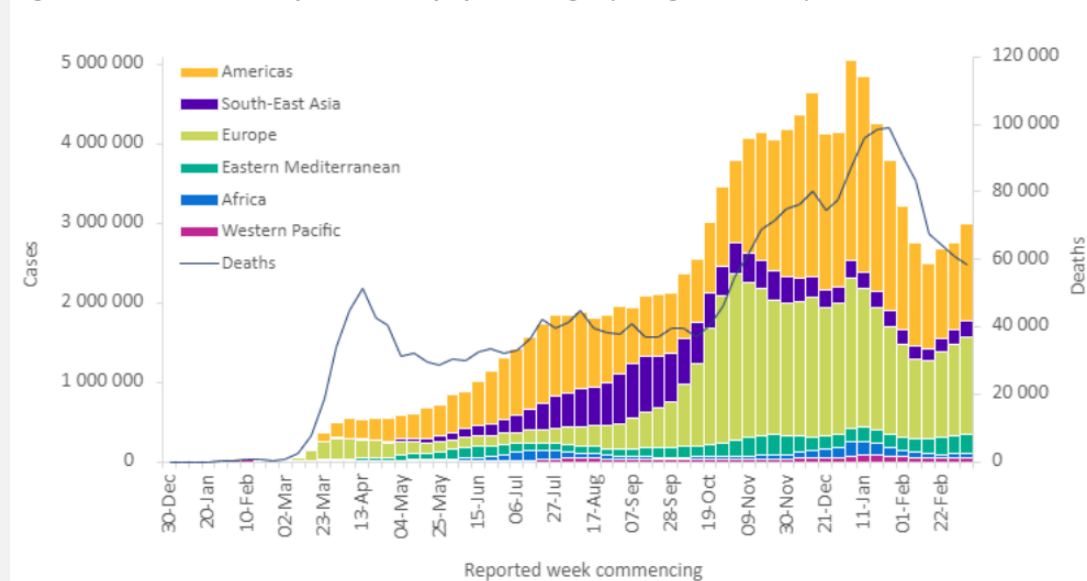
Global epidemiological situation overview; WHO as of 14 March 2021

New cases continue to rise globally, increasing by 10% in the past week to over 3 million new reported cases (Table 1). The number of new cases peaked in early January 2021 when there were just under 5 million cases reported in one week. New cases then declined to just under 2.5 million cases by the week commencing 15 February. However, for the past three weeks new cases have increased. This week, the Americas and Europe continue to account for over 80% of new cases and new deaths, with rises in new cases seen in all regions apart from Africa, where incidence rates decreased by 4%. New deaths on the other hand continue to decline and are now under 60 000, since peaking in the week commencing 18 January (when there were over 95 000 new deaths in the week). The last time when there were fewer than 60 000 new weekly deaths was four months ago, in the week commencing 9 November. This week, although new deaths declined globally, they rose in two WHO regions; the Eastern Mediterranean (by 3%) and the Western Pacific (by 14%).

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

- **Brazil;** reporting 494 153 cases, a 20% increase,
- **United States of America;** reporting 461 190 cases, a 8% increase,
- **Italy;** reporting 155 076 cases, a 12% increase,
- **France;** reporting 150 434 cases, a 5% increase, and
- **India;** reporting 148 249 cases, a 30% increase

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 14 March 2021**



Source: <https://www.who.int/publications/m/item/weekly-epidemiological-update---16-march-2021>

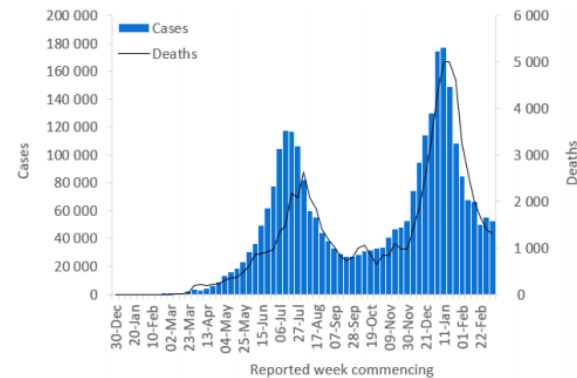
Situation by WHO Region, as of 14th March

WHO regional overviews

African Region

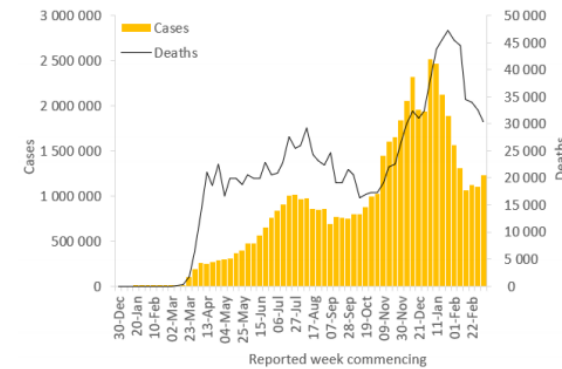
The African Region reported under 53 000 new cases and just over 1300 new deaths, a 4% and a 6% decrease respectively compared to the previous week. The decreasing trend in deaths has been observed since early February 2021. The highest numbers of new cases were reported from Ethiopia (9025 new cases; 7.9 new cases per 100 000 population; a 29% increase), South Africa (8208 new cases; 13.8 new cases per 100 000; a 3% increase), and Kenya (4443 new cases; 8.3 new cases per 100 000; a 64% increase).

The highest numbers of new deaths were reported from South Africa (614 new deaths; 1.0 new deaths per 100 000; a 13% decrease), Ethiopia (120 new deaths; 0.1 new deaths per 100 000; an 82% increase), and Botswana (65 new deaths; 2.8 new deaths per 100 000; a 33% increase).



Region of the Americas

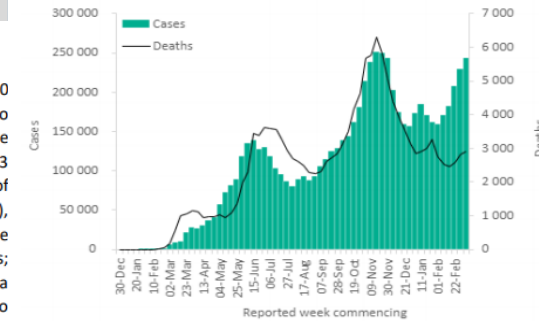
The Region of the Americas reported over 1.2 million new cases and over 30 000 new deaths, a 13% increase and a 6% decrease respectively compared to the previous week. Deaths continued to decrease for the second consecutive week. The highest numbers of new cases were reported from Brazil (494 153 new cases; 232.5 new cases per 100 000; a 20% increase), the United States of America (461 190 new cases; 139.3 new cases per 100 000; an 8% increase), and Argentina (45 311 new cases; 100.3 new cases per 100 000; a 7% increase). The highest numbers of new deaths were reported from Brazil (12 335 new deaths; 5.8 new deaths per 100 000; a 24% increase), the United States of America (9381 new deaths; 2.8 new deaths per 100 000; a 24% decrease), and Mexico (4273 new deaths; 3.3 new deaths per 100 000; a 16% decrease). These three countries accounted for 85% of deaths reported in the Americas this week.



Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 243 000 new cases and under 2900 new deaths, a 7% and a 3% increase respectively compared to the previous week. New weekly cases have increased for the past five weeks and deaths have increased for the past three weeks. The highest numbers of new cases were reported from the Islamic Republic of Iran (57 678 new cases; 68.7 new cases per 100 000; a 1% decrease), Jordan (47 585 new cases; 466.4 new cases per 100 000; a 36% increase), and Iraq (31 129 new cases; 77.4 new cases per 100 000; a 1% increase).

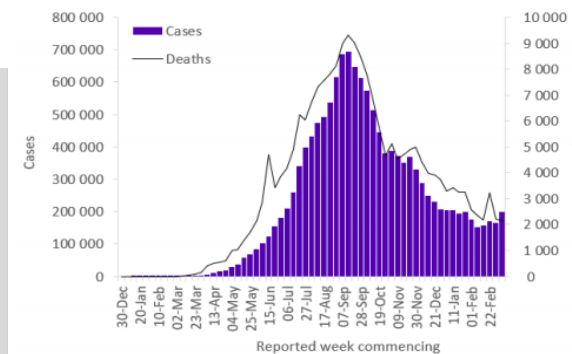
The highest numbers of new deaths were reported from the Islamic Republic of Iran (548 new deaths; 0.7 new deaths per 100 000; an 11% decrease), Jordan (385 new deaths; 3.8 new deaths per 100 000; a 71% increase), and Lebanon (321 new deaths; 4.7 new deaths per 100 000; an 11% decrease).



South-East Asia Region

The South-East Asia Region reported just under 200 000 new cases and just over 2100 new deaths, a 19% increase and a 3% decrease respectively compared to the previous week. The highest numbers of new cases were reported from India (148 249 new cases; 10.7 new cases per 100 000; a 30% increase), Indonesia (40 905 new cases; 15.0 new cases per 100 000; a 9% decrease), and Bangladesh (6512 new cases; 4.0 new cases per 100 000; a 67% increase).

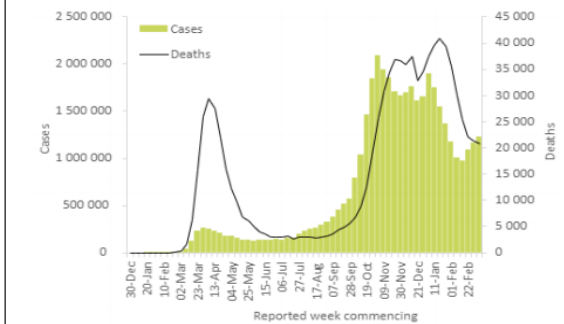
The highest numbers of new deaths were reported from Indonesia (1175 new deaths; 0.4 new deaths per 100 000; similar to the previous week), India (851 new deaths; 0.1 new deaths per 100 000; a 21% increase), and Bangladesh (76 new deaths; <0.1 new deaths per 100 000; a 49% increase).



European Region

The European Region reported over 1.2 million new cases, and just over 20 000 new deaths, a 6% increase, and a 2% decrease respectively compared to the previous week. Cases in the Region have been steadily increasing over the past three weeks while trends in new deaths have been consistently declining for the past eight weeks. The highest numbers of new cases were reported from Italy (155 076 new cases; 256.5 new cases per 100 000; a 12% increase), France (150 434 new cases; 230.5 new cases per 100 000; a 5% increase) and Poland (111 718 new cases; 295.2 new cases per 100 000; a 27% increase).

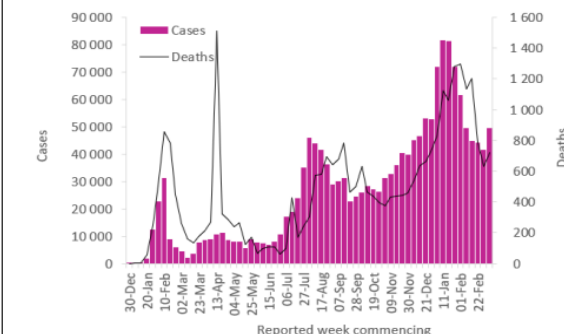
The highest numbers of new deaths were reported from the Russian Federation (2990 new deaths; 2.0 new deaths per 100 000; similar to the previous week), Italy (2303 new deaths; 3.8 new deaths per 100 000; an 11% increase), and Poland (1893 new deaths; 5.0 new deaths per 100 000; a 25% increase).



Western Pacific Region

The Western Pacific Region reported under 50 000 new cases and over 700 new deaths, a 19% and a 14% increase respectively compared to the previous week. This is the first time in seven weeks that an increase in new cases has been reported with new deaths also showing an uptick. The highest numbers of new cases were reported from the Philippines (25 473 new cases; 23.2 new cases per 100 000; a 51% increase), Malaysia (10 632 new cases; 32.8 new cases per 100 000; a 21% decrease), and Japan (7917 new cases; 6.3 new cases per 100 000; a 10% increase).

The highest numbers of new deaths were reported from Japan (333 new deaths; 0.3 new deaths per 100 000; a 9% decrease), the Philippines (301 new deaths; 0.3 new deaths per 100 000; a 71% increase), and Malaysia (40 new deaths; 0.1 new deaths per 100 000; an 11% decrease).



Source:

<https://www.who.int/publications/m/item/weekly-epidemiological-update---16-march-2021>

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 16 March 2021:

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



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



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



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
Earliest sample date	20 September 2020	Early August 2020	December 2020
Key spike mutations	H69/V70 deletion; Y144 deletion; N501Y; A570D; P681H	L242/A243/L244 deletion; K417N; E484K; N501Y	K417T, E484K; N501Y
Key mutation in common	S106/G107/F108 deletion in Non-Structural Protein 6 (NSP6)		
Countries reporting cases (newly reported in last week)**	118 (7)	64 (6)	38 (6)

Emerging variants of interest (VOIs)

A SARS-CoV-2 variant, labelled CAL.20C/L452R (based upon the NextStrain subclade and key mutation), spanning PANGO lineages B.1.427 and B.1.429, has been designated as a VOI by WHO based on recent assessments and emerging evidence. This variant is characterized by a combination of three mutations in the receptor binding domain (RBD), namely S13I, W152C, L452R, of which the focus is on the L452R mutation. It was first detected during a local increase in COVID-19 cases in California, United States of America in June 2020. Surveillance has shown that it has since contributed to a substantive proportion of local COVID-19 cases in California, and has been detected in all US states and at least 26 other countries to date.

Outside of the US, reported detections of this VOI are currently limited to a relatively low number of sequences, suggesting it has not yet resulted in widespread disease in other countries. The assessment as a VOI follows preliminary, emerging evidence that this variant may be associated with phenotypic impacts which may pose an increased public health risk and COVID-19 control measures compared to other variants. This includes a possible increase in transmissibility, 1 mixed findings on potentially higher infectivity (based on PCR cycle thresholds as a proxy), and a slight reduction in neutralization for sera from recovered patients clinically diagnosed with COVID-19 and in vaccine recipients. The L452R mutation has been associated with a reduction in neutralization of monoclonal antibodies but further investigations are ongoing. The impact of this variant on disease severity is under investigation. These are preliminary findings, include non-peer review studies, and require further investigations. WHO is working with US Centers for Disease Control and Prevention (CDC) and the WHO Virus Evolution Working Group to further assess this VOI.

Source: <https://www.who.int/publications/m/item/weekly-epidemiological-update---16-march-2021>
https://www.who.int/docs/default-source/coronaviruse/risk-comms-updates/update47-sars-cov-2-variants.pdf?sfvrsn=f2180835_4
<https://www.ecdc.europa.eu/sites/default/files/documents/RRA-covid-19-14th-update-15-feb-2021.pdf>
<https://www.who.int/publications/m/item/covid-19-weekly-epidemiological-update>



Subject in Focus:

SARS-CoV-2 P1-variant apparently as dangerous as B1.1.7

SARS-CoV-2 P1-variant apparently as dangerous as B1.1.7

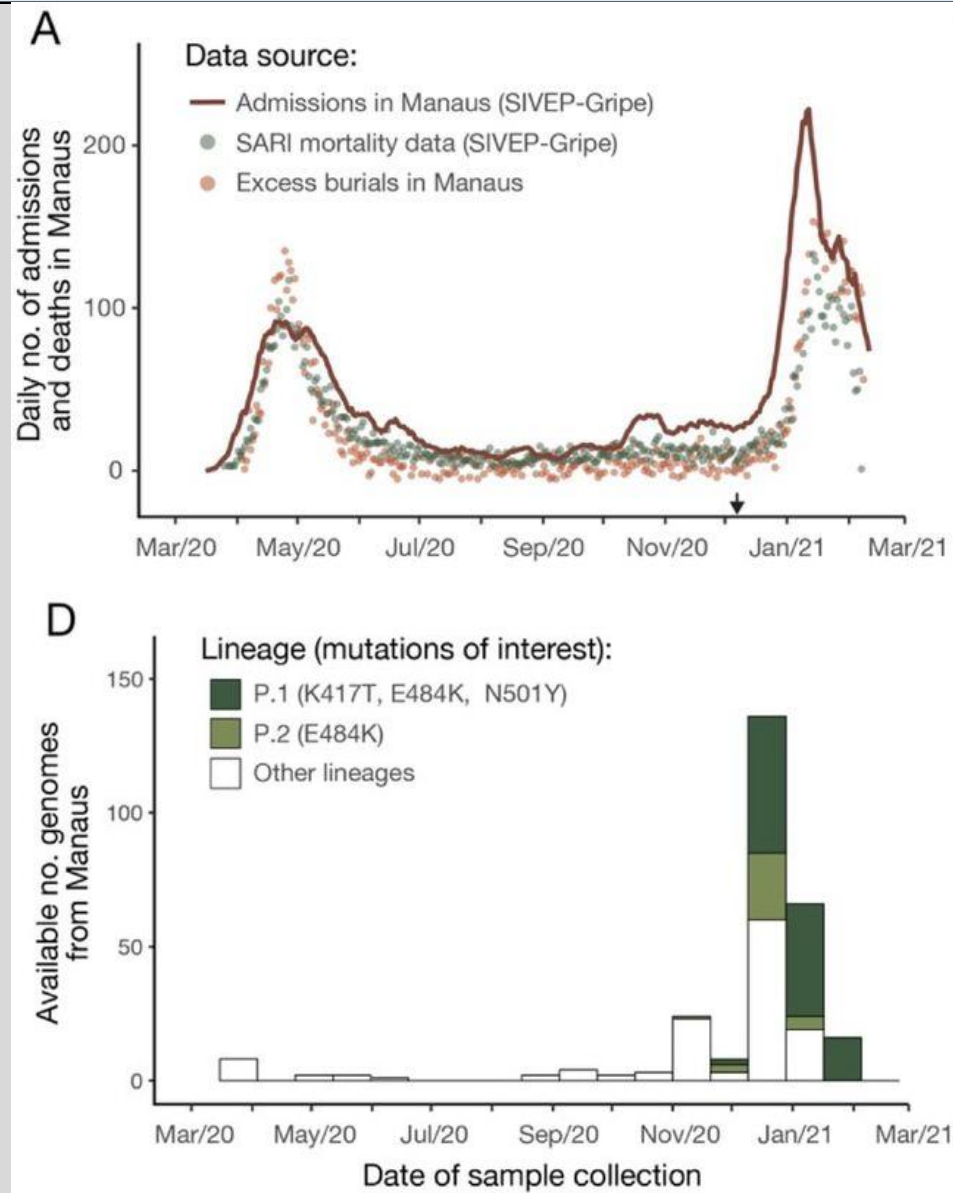
While the SARS-CoV-2 variant B.1.1.7 initially found in England spreads within Europe and is about to become dominant in Germany, an international research team from Brazil, England, Belgium, Denmark, and the United States investigated the characteristics of the so called P1-variant in Brazil. This variant gained global attention as it was first identified during the second wave of the outbreak in Manaus (BRA) in early 2021. The extraordinary aspect is that Manaus was heavily affected during the first wave and epidemiologic assessments lead to the conclusion that approx. two thirds of all inhabitants were infected during this wave in April or May 2020. Based on this observation the extent and severity of the second wave in Manaus was very surprising.

In the study that is described here and that has yet to be peer-reviewed by independent experts, it was investigated if there are signs for an increased contagiousness, virulence or anti-body resistance within the new P1 variant. After its first occurrence in the beginning of November, the new variant spread rapidly in Manaus and is responsible for 90% of all new infections. In total there are 17 mutations in the genome, compared to the initial variants found in Brazil. In their study, the researchers described an increase in contagiousness by factor 1.4 to 2.2. If this holds true, the P1-variant would surpass the B1.1.7 variant in this respect. It is still unclear if P1 leads to an increased virus load in the nose/throat area or if it lasts there longer. It is suspected that P1 comes with an increased lethality, but there is no unequivocal proof yet.

Nevertheless, one thing became obvious: At least 25 to 61% of the patients formerly infected with SARS-CoV-2 that have recovered (and were therefore considered to be immune) got infected again. This could be a hint that the immune response after an infection might not be sufficient to fight off the new variant safely and permanently. This fear has been substantiated by comparing cell cultures. Brazil widely uses the Chinese Corevac vaccine which shows only few specific antibodies 5 months after inoculation. The neutralizing effect of other vaccines (like BionTech/Pfizer) has been shown to be halved. Even if the P1-variant has initially been found in Brazil only, it has recently been identified in 19 other countries as well.

Take home messages:

- The P1-variant initially found in the Amazon region in Brazil has the potential to spread at least as easily and extensively like the B1.1.7-variant.
- This variant is far more contagious compared to the wild type and at least as dangerous as B1.1.7.
- A potential explanation for the devastating effects of the new variant is the notably reduced neutralizing effect found in cell culture experiments.
- It is not yet clear if vaccines remain effective against the P1-variant but there are reasons to expect a reduction of the protective effect.
- Even though there is increasing satisfaction and excitement because of the improving supply with vaccines globally, studies like show that there is a possibility that the COVID-19 pandemic is far from over.



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.



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.

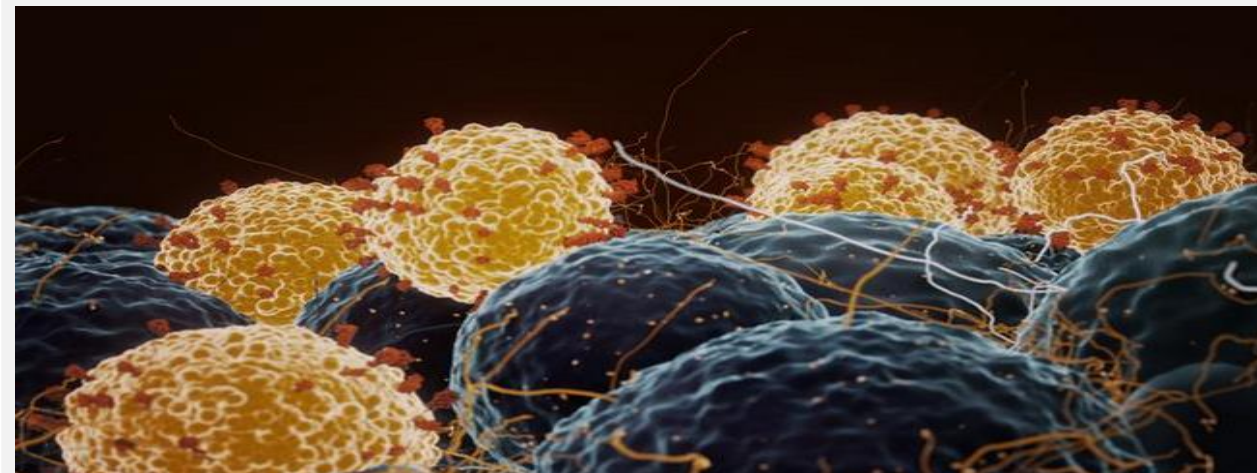
A full vaccination has already taken place, do I still have to be in quarantine if I am a contact person or if I am entering from a risk area:

-> **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>



Three ways to detect a corona infection

Source: <https://www.zusammengegegencorona.de/>

WHEN?

HOW?

RESULT?

WHAT NOW?

+ Self test

The antigen self-test also enables laypersons to test themselves by following the instructions for use. The result is valid for 24 hours.



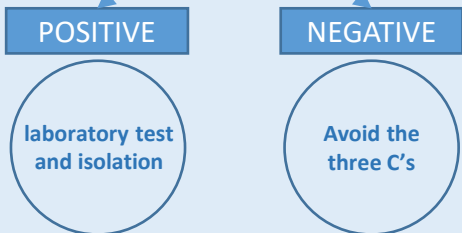
Situation: no suspicion, no symptoms.
Implementation: planned visits to family celebrations, friends, school or day-care
 ⇒ Preventive testing, third-party protection



freely available in pharmacies or in retail stores. Suitable for self-testing at home.

15-30 min

The test person determines the result autonomously by using the test strip



++ Rapid antigen test

A sample is taken by trained staff and evaluated on site. The result is valid for 24 hours.



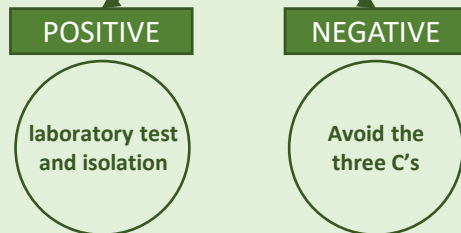
Situation: no suspicion, no symptoms or after contact with COVID-19 infected people
Implementation: planned visits to family celebrations, friends, school or day-care
 ⇒ Preventive testing, third-party protection



Implementation in medical practices or test centers by trained staff

15-30 min

Trained staff determine the result using test strips and provide written evidence



+++ Laboratory test

Specialist staff takes a sample from the nose or throat. The evaluation takes place in the laboratory. Due to the scientific investigation, the test takes longer, but it is also very reliable. It is considered the gold standard.



Situation: symptomatic persons, suspected cases, and/or after a positive quick test or self-test result.
 ⇒ Diagnostic



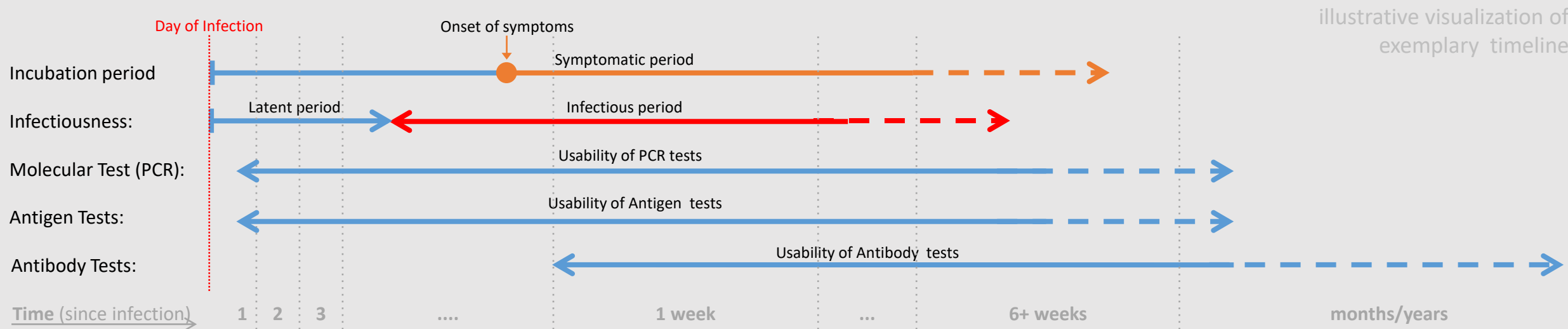
Implementation in medical practices or test centres by trained staff.

1 day

Laboratory analyses sample. Test person receives written or digital evidence.



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. presence of SARS-CoV-2)	Active coronavirus infection (i.e. presence of protein fragments of SARS-CoV-2)	If you've been infected by coronavirus in the past
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!

18th March 2021

Aljazeera

Global middle class shrinks for first time since 1990s

<https://www.aljazeera.com/economy/2021/3/18/bbglobal-middle-class-shrinks-for-first-time-since-1990s>

18th March 2021

DW

AstraZeneca: EU regulator rules vaccine is 'safe' for use

<https://www.dw.com/en/astrazeneca-eu-regulator-rules-vaccine-is-safe-for-use/a-56910224>

16th March 2021

BBC

Covid-19 disruptions killed 228,000 children in South Asia, says UN report

<https://www.bbc.com/news/world-asia-56425115>

18th March 2021

BBC

Covid-19: Cambridge scientists study DNA for long Covid clues

<https://www.bbc.com/news/uk-england-cambridgeshire-56445891>

18th March 2021

Aljazeera

Existing COVID vaccines may protect against Brazil strain: Study

<https://www.aljazeera.com/news/2021/3/18/existing-covid-vaccines-may-protect-against-brazil-strain-study>

18th March 2021

The Guardian

How a surge of Covid cases in India hit the UK's vaccine supply

<https://www.theguardian.com/world/2021/mar/18/uk-covid-vaccine-supply-hit-as-rise-in-indian-cases-diverts-doses-closer-to-home>

16th March 2021

South China Morning Post

Leprosy drug clofazimine effective in suppressing Covid-19, researchers [...] find

<https://www.scmp.com/news/hong-kong/health-environment/article/3125701/leprosy-drug-clofazimine-effective-suppressing>

19th March 2021

The Guardian

Fight against tuberculosis set back 12 years by Covid pandemic, report finds

<https://www.theguardian.com/global-development/2021/mar/19/fight-against-tuberculosis-set-back-12-years-by-covid-pandemic-report-finds>

18th March 2021

The Guardian

Covid: viral shedding is greatest in afternoon, study suggests

<https://www.theguardian.com/world/2021/mar/18/covid-viral-shedding-is-greatest-in-afternoon-study-suggests>