Force Health Protection Branch
NATO MilMed COE
Munich

Short Update 66a
COVID-19
Coronavirus Disease
23rd of April 2021

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GLOBAL
↗
144 782 884
Confirmed cases
129 600 000 recovered
3 072 501 deaths

USA
(new cases/7days 127,6)
↘
31 790 832
confirmed cases
30 200 000 recovered
567 907 deaths

India
(new cases/7days 136,4)
↗
16 263 695
confirmed cases
12 630 000 recovered
185 920 deaths

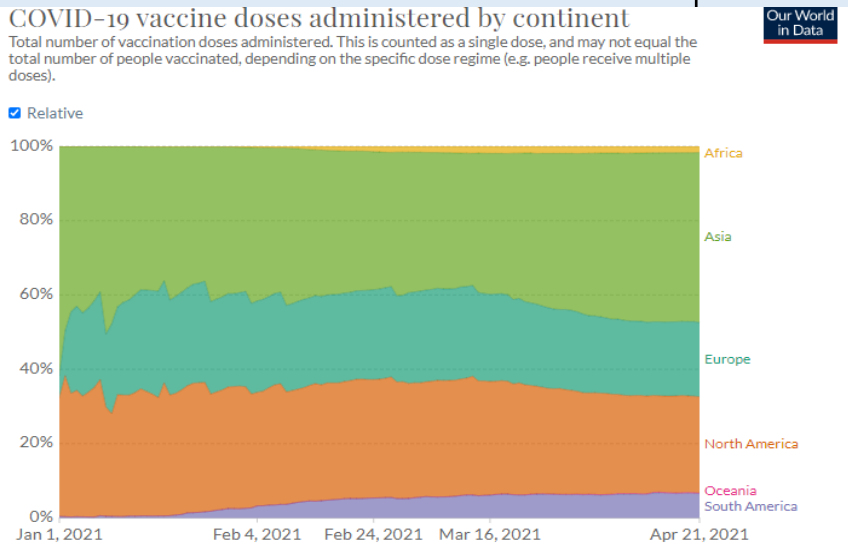
Brazil
(new cases/7days 212,5)
↘
14 167 973
confirmed cases
12 700 000 recovered
383 502 deaths

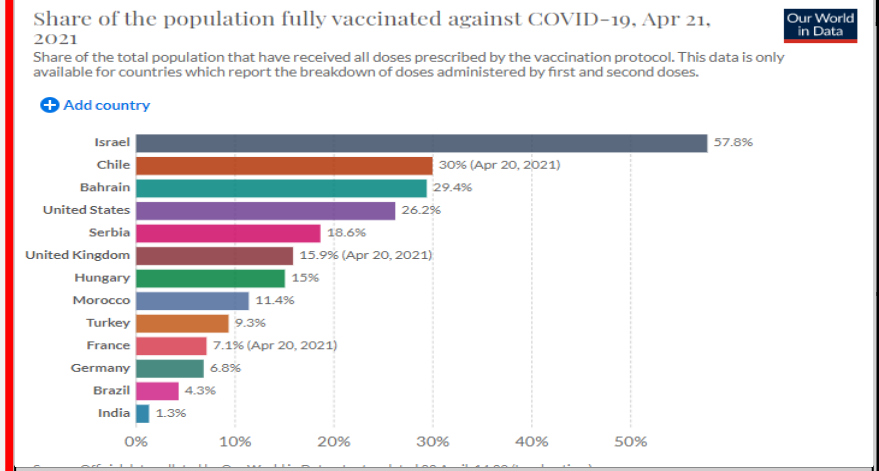
News:

- **WHO**: On the basis of this additional evidence, the Strategic Advisory Group of Experts (SAGE) on Immunization has updated its interim guidance on the use of the AstraZeneca vaccines against COVID-19
- WHO continues to support the conclusion that the benefits of the vaccine outweighs the risk. More data have been obtained on the effectiveness of the vaccines in different population groups, such as older adults, making the evidence base more robust.
- **EMA:** The safety committee (PRAC) finds possible link to very rare cases of unusual blood clots with low blood platelets and recommends that a warning should be added to the product information. But the reported combination of blood clots and low blood platelets is very rare, and the overall benefits of COVID-19 **Vaccine Janssen** in preventing COVID-19 outweigh the risks of side effects.
- **EU**: Portugal is the first of the 27 EU countries to finalise its national plan for the use of European Corona aid and submitted it to the European Commission.
- **Russia** expects approval of the single-dose version of the Sputnik V vaccine in May. By the end of the year, the production of "Sputnik Light" could be ramped up to 30 million doses per month.
- **BEL:** The new 'Indian' variant of the coronavirus has been discovered in Belgium. Variant B.1.617 was found in a group of 20 Indian students who came to Belgium by bus after landing in Paris in mid-April.
- **WHO**: The WHO calls on several African countries (including Malawi) to not destroy COVID-19 vaccines that have exceeded their expiration date. Further investigations should take place as to whether the vaccines could still be used.
- **ECDC:** Introduced the new European COVID-19 Forecast Hub, an initiative of the ECDC, with the support of the Centre for Mathematical Modelling of Infectious Diseases (CMMID) at the London School of Hygiene & Tropical Medicine. The hub will collate weekly short-term forecasts from modelling teams around the world, predicting the number of COVID-19 cases and deaths four weeks ahead in 32 countries.
- **ECDC:** Published an interim guidance on the benefits of full vaccination against COVID-19 for transmission and implications for non-pharmaceutical interventions.
- **ECDC:** organised the first training modules in the framework of the EU Initiative on Health Security. The first two training modules will focus on epidemic intelligence and rapid risk assessment, with the overall aim of empowering professionals in partner countries' to better face the threats to public health posed by infectious diseases.

Topics:

- Global situation
- SARS-CoV-2 variants of concern
- **Subject in Focus:** COVID-19 Vaccination Side Effects
- The benefits of full vaccination against COVID-19 for transmission and implications for non-pharmaceutical interventions
- Ramadan and COVID-19
- In the press





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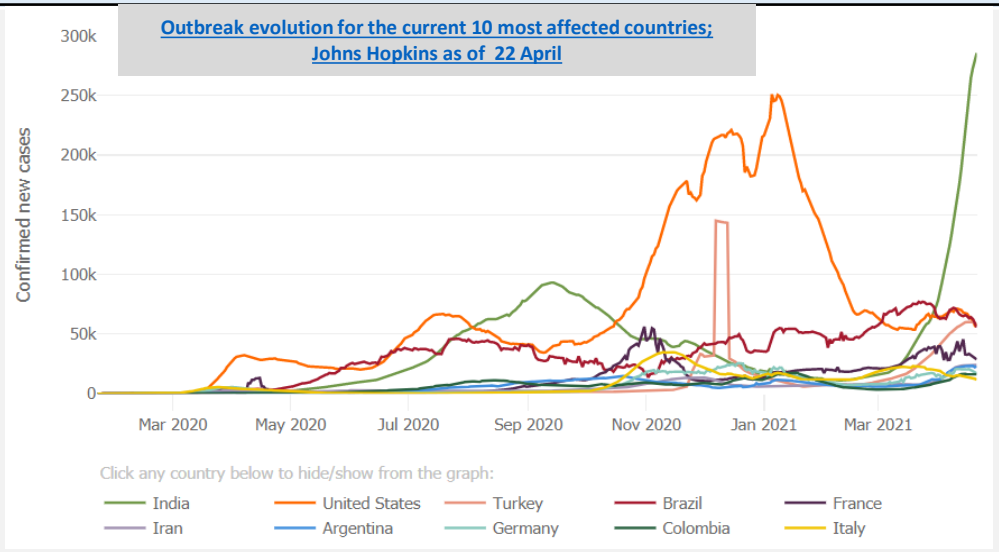
EUROPE
↘
48 162 612
confirmed cases
43 510 000 recovered
1 029 046 deaths

France
(new cases/7days 329,1)
↘
5 408 606
confirmed cases
4 775 000 recovered
102 164 deaths

Russia
(new cases/7days 41,0)
↗
4 682 573
confirmed cases
4 443 000 recovered
105 328 deaths

GBR
(new cases/7days 26,3)
↗
4 398 435
confirmed cases
4 230 000 recovered
127 345 deaths

Global Situation



Country reports:

DEN: The second phase of an opening plan comes into effect. In view of the stable corona infection numbers, shopping centers are allowed to receive customers again. Restaurants and cafes are also reopening. However, if you want to eat indoors, you have to reserve a table and show a negative corona test or a vaccination certificate. Museums, libraries and art halls are also reopening, but only for those who can also show a negative Corona test, vaccination or survived infection with the help of a Corona passport. In football, up to 500 seated spectators per stadium section are permitted under certain conditions. There is also further relaxation in schools and for organized training and in sports halls and other covered facilities for children, young people and senior citizens.

ESP: Due to the good infection situation on Mallorca, the corona restrictions will be relaxed further on Saturday. Almost all of the relaxations apply with slightly different requirements for all islands until May 9th.

DEU: The proportion of variant B.1.1.7 first identified in GBR has risen to almost 95 percent in samples studied.
The number of seriously ill with COVID-19 in German intensive care units has risen again above the 5000 mark. 5049 such cases are now being treated in clinics nationwide, 62 more than the day before. The last time this was so high was in mid-January.

ITA: The government has presented a roadmap for a gradual easing of Corona restrictions from 26 April to the summer. With the new decree, Rome is reintroducing white and yellow zones for regions with low or moderate corona values after weeks of pause. In the Yellow Zones, restaurants and bars will be able to serve guests at tables at lunchtime and in the evenings from 26 April. The interiors remain closed. Theatres, cinemas and concert halls are allowed to open with a limited number of visitors. In addition, a Corona Pass will soon be introduced for travel within the country. With this so-called Green Pass, which, for example, vaccinated people can get, travel to regions with a high risk of corona is permitted.

POL: After a slight decrease in the number of cases, the corona restrictions are to be cautiously relaxed in several regions. Since the number of new infections is still high, the restrictions can only be reduced in the less severely affected regions. In eleven regions, however, hairdressing salons and cosmetic studios will be allowed to reopen from April 26th. In addition, students in grades one to three return to alternating lessons. The following applies nationwide: only grocery stores, drug stores and pharmacies are open in shopping centers. Hotels and pensions are still not allowed to accept guests.

GRE: From 3 May, bars and restaurants will be able to reopen their outdoor areas. Mandatory Corona tests for employees and compliance with hygiene rules are required. Restrictions on travel between regions will not be relaxed before the upcoming Orthodox Easter.

TUR: The planned weekend lockdown was extended to include a public holiday on Friday. This was due to the massive increase in the number of new corona infections. The lockdown now lasts from Thursday evening to Monday morning.

USA: The highest level travel warnings have been expanded significantly. Now 100 additional states are represented in the fourth, red level. The list of the US State Department now includes Germany, France, Great Britain, Canada and Mexico, among others.

JAP: The organizers of the Tokyo Olympics have for the first time reported a corona infection in connection with the Olympic torch relay. A police officer tested positive for the virus a day after serving whilst running through Kagawa Prefecture. It was the first confirmed infection related to the run since it began on March 25. All hygiene measures were followed.

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The Olympic city of Tokyo is to be put into a state of emergency three months before the summer games due to the sharp rise in infections. The state of emergency for Tokyo, Osaka, Kyoto and Hyogo Prefecture is expected to apply from Sunday to May 11th.

IND: For the second day in a row, authorities in India reported a global high of new corona cases, killing another 2,263 people who tested positive.

NPL: First corona cases reported on Mount Everest. A Norwegian mountaineer claims to have tested positive for the virus. A Sherpa was also infected.

ARG/COL: The South American soccer championship Copa America is to be hosted despite Corona. However, contrary to the intention of the South American football association Conmebol to fill the stadiums to 30 percent with spectators, the event will not be held in front of fans. It is to take place this summer - parallel to the European Championships - from June 11th to July 10th in Argentina and Colombia.

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With 537 deaths within 24 hours, **Argentina** recorded the most COVID-19 victims since the pandemic began. After one of the longest lockdowns in the world last year, the Argentine government recently imposed strict exit restrictions on large parts of the South American country.

CAN: To contain the corona pandemic, flights from India and Pakistan have been banned from landing for 30 days. Cargo flights are excluded.

Global Situation

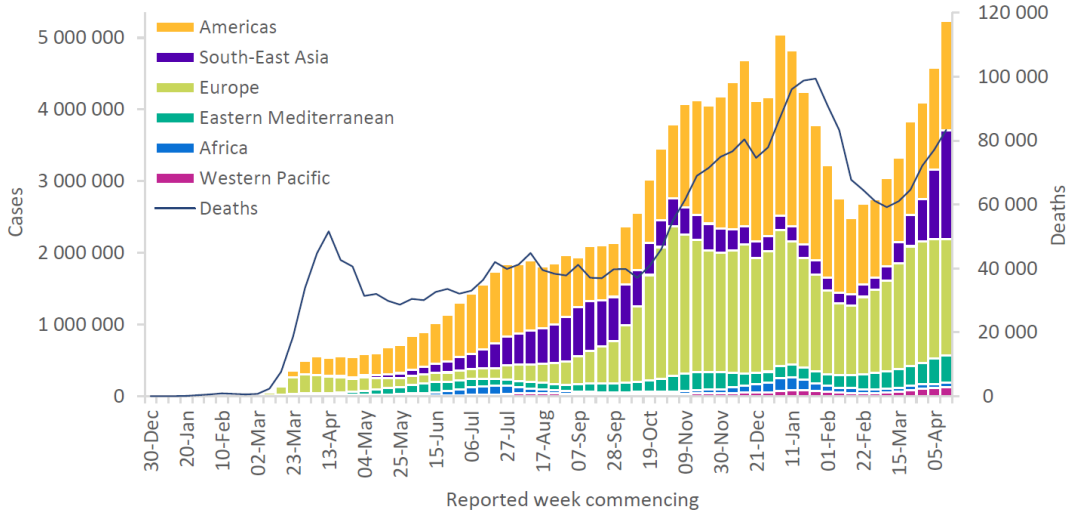
Global epidemiological situation overview; WHO as of 13 April 2021

Globally, new COVID-19 cases increased for the eighth consecutive week, with more than 5.2 million new cases reported in the last week – surpassing the previous peak in early January 2021 (Figure 1). The number of new deaths increased for the fifth consecutive week, an 8% increase as compared to the previous with over 83 000 new deaths reported. Last week the reported cumulative COVID-19 death toll surpassed 3 million lives; the pace of deaths is accelerating, it took nine months to reach 1 million deaths, another four to surpass 2 million, and just three to reach 3 million deaths.

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

- **India;** reporting 1 429 304 cases, a 64% increase,
- **United States of America;** reporting 477 778 cases, a 2% increase,
- **Brazil;** reporting 459 281 cases, a 1% decrease
- **Turkey;** reporting 414 312 cases, a 17% increase and
- **France;** reporting 233 275 cases, 12% decrease.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 18 April 2021**



Source: https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---20-april-2021

Vaccination news:

CDC: So far, a total of 282.2 million vaccine doses have been delivered. 218.9 million doses from Pfizer / BioNTech, Moderna and Johnson & Johnson. 89.2 million Americans are fully vaccinated. About 328 million people live in the United States. US President Joe Biden has thus achieved his central 100-day goal of 200 million corona vaccinations administered in the country.

Valneva: Due to sluggish negotiations with the EU Commission, the Franco-Austrian pharmaceutical company Valneva will offer its vaccine to individual European countries instead of the entire EU. In mid-January, the EU Commission announced preliminary talks with Valneva about the possible purchase of up to 60 million vaccine doses. So far, however, no contract has been concluded. The UK, on the other hand, has already ordered 100 million cans for the period 2021 to 2022. According to the company, Valneva's vaccine successfully completed the first of usually three clinical phases at the beginning of April. In the EU, a possible approval was not expected before the second half of the year.

NOR: As long as the use of the AstraZeneka vaccination in the country is stopped, the AstraZeneca vaccine doses in stock will be passed on to the Scandinavian partner countries Sweden and Iceland. 200,000 of the 216,000 vials in stock are to go to Sweden, the remaining 16,000 to Iceland. If the drug is re-used in the country, Norway will receive the vaccine doses back from the two partner countries.

POL: US pharmaceutical company Pfizer has confirmed media reports that Corona vaccine doses seized in Mexico and Poland were counterfeit. About 80 people were allegedly vaccinated against the coronavirus using the substance confiscated from a clinic in Mexico. The doses of the alleged BioNTech/Pfizer vaccine seized in Poland contained a harmless cosmetic substance, presumably anti-wrinkle cream, according to the report.

FRA: 500,000 doses of AstraZeneca vaccine are to be donated to COVAX by mid-June. Covax plans to deliver 237 million AstraZeneca cans to 142 countries by the end of May.

SYR: The first delivery of 54,000 AstraZeneca doses have arrived in the rebel province of Idlib in northwest Syria. Health care workers and humanitarian organizations will be vaccinated first. A team responsible for this should start vaccinations at the beginning of May. The next delivery that arrives will then be used to vaccinate older and chronically ill people.

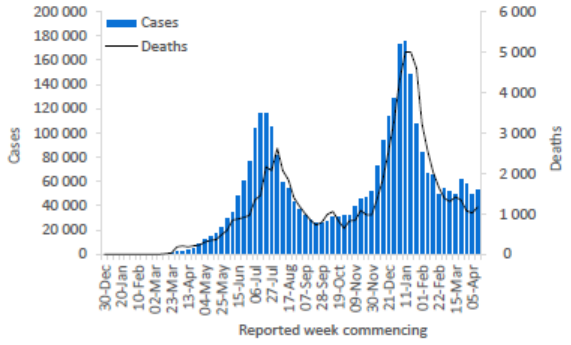
Situation by WHO Region, as of 18th April

WHO regional overviews

African Region

The Africa Region reported over 54 000 new cases and over 1100 new deaths, a 7% and a 14% increase respectively compared to the previous week. The number of weekly cases continues to fluctuate over the last eight weeks, with no clear trend, while weekly deaths increased last week reflecting a large increase in deaths reported by South Africa. The highest numbers of new cases were reported from Ethiopia (12 981 new cases; 11.3 new cases per 100 000 population; a 7% decrease), South Africa (8153 new cases; 13.7 new cases per 100 000; a 35% increase), and Kenya (6103 new cases; 11.3 new cases per 100 000; a 14% decrease).

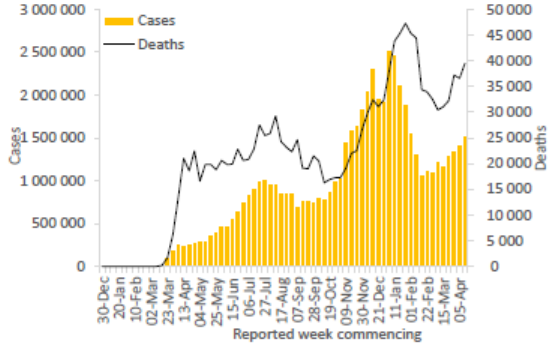
The highest numbers of new deaths were reported from South Africa (455 new deaths; 0.8 new deaths per 100 000 population; a 51% increase), Ethiopia (182 new deaths; 0.2 new deaths per 100 000; a 13% decrease), and Kenya (133 new deaths; 0.2 new deaths per 100 000; a 7% increase).



Region of the Americas

The Region of the Americas reported over 1.5 million new cases and over 39 000 new deaths, a 7% and an 8% increase respectively compared to the previous week. The region has reported an overall increasing trend in new cases for the last eight weeks and new deaths for the last five weeks. The highest numbers of new cases were reported from the United States of America (477 778 new cases; 144.3 new cases per 100 000; a 2% increase), Brazil (459 281 new cases; 216.1 new cases per 100 000; a 1% decrease), and Argentina (160 747 new cases; 355.7 new cases per 100 000; a 29% increase).

The highest numbers of new deaths were reported from Brazil (20 031 new deaths; 9.4 new deaths per 100 000; a 2% decrease), the United States of America (5146 new deaths; 1.6 new deaths per 100 000; a 1% decrease), and Mexico (4673 new deaths; 3.6 new deaths per 100 000; a 48% increase).



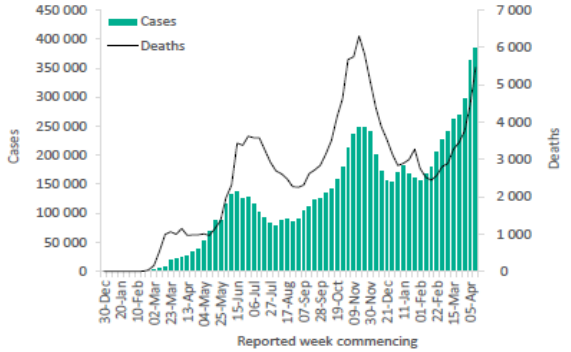
Source:

https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---20-april-2021

Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 386 000 new cases and over 5400 new deaths, a 6% and a 23% increase respectively compared to the previous week. The upward trend in cases and deaths reported since February 2021 continues, with a sharper increase in new deaths the last two weeks. The highest numbers of new cases were reported from the Islamic Republic of Iran (166 367 new cases; 198.1 new cases per 100 000; a 29% increase), Iraq (52 832 new cases; 131.3 new cases per 100 000; a 6% increase), and Pakistan (34 190 new cases; 15.5 new cases per 100 000; a 3% increase).

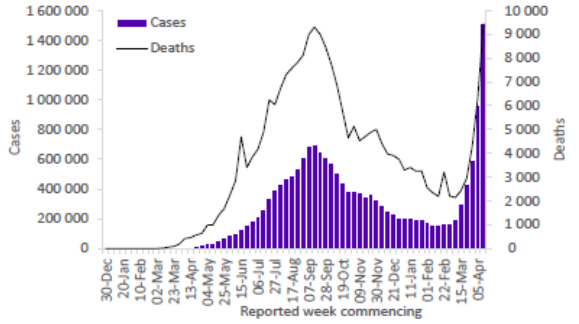
The highest numbers of new deaths were reported from the Islamic Republic of Iran (2095 new deaths; 2.5 new deaths per 100 000; a 70% increase), Pakistan (765 new deaths; 0.3 new deaths per 100 000; a 21% increase), and Tunisia (482 new deaths; 4.1 new deaths per 100 000; a 59% increase).



South-East Asia Region

The South-East Asia Region reported over 1.5 million new cases and over 9400 new deaths, a 57% and a 49% increase respectively compared to the previous week. The increasing trend in new cases and deaths, which appears to be accelerating, continued last week, with weekly cases rising sharply for the sixth consecutive week while weekly deaths rose for the fifth consecutive week. The trend in the region continues to be driven largely by the trajectory of the outbreak in India which reported the highest numbers of new cases (1 429 304 new cases; 103.6 new cases per 100 000; a 64% increase), followed by Indonesia (36 895 new cases; 13.5 new cases per 100 000; a 4% increase), and Bangladesh (36 315 new cases; 22.1 new cases per 100 000; a 25% decrease).

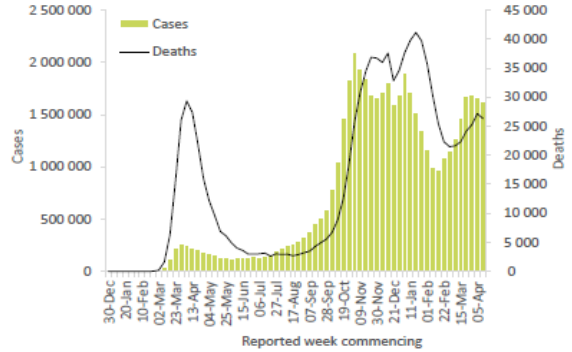
The highest numbers of new deaths were reported from India (7875 new deaths; 0.6 new deaths per 100 000; a 69% increase), Indonesia (885 new deaths; 0.3 new deaths per 100 000; a 26% decrease), and Bangladesh (622 new deaths; 0.4 new deaths per 100 000; a 39% increase).



European Region

The European Region reported over 1.6 million new cases and over 26 000 new deaths. The region reported a slight decrease in new cases (3%) for the second week in a row, a sign that transmission in the region may be slowing as the number of new deaths also decreased (3%) for the first time following a five-week increasing trend. The highest numbers of new cases were reported from Turkey (414 312 new cases; 491.2 new cases per 100 000; a 17% increase), France (233 275 new cases; 358.7 new cases per 100 000; a 12% decrease), and Germany (143 994 new cases; 173.1 new cases per 100 000; a 28% increase).

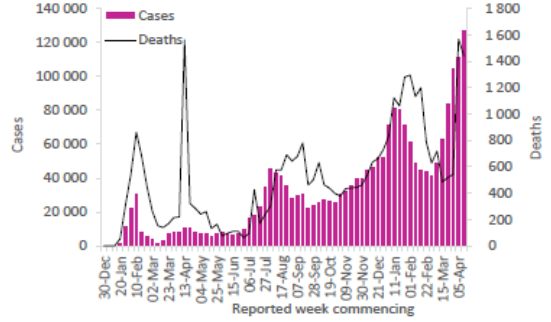
The highest numbers of new deaths were reported from Poland (3611 new deaths; 9.5 new deaths per 100 000; a 4% increase), Ukraine (2772 new deaths; 6.3 new deaths per 100 000; a 3% increase), and Italy (2753 new deaths; 4.6 new deaths per 100 000; a 14% decrease).



Western Pacific Region

The Western Pacific Region reported over 128 000 new cases and over 1400 new deaths, a 15% increase and an 8% decrease respectively compared to the previous week. Cases increased for the sixth consecutive week, while deaths decreased after rising for three weeks, continuing to largely reflect the trajectory of deaths reported by the Philippines, the most affected country in the region. The highest numbers of new cases were reported from the Philippines (72 848 new cases; 66.5 new cases per 100 000; a 5% increase), Japan (26 426 new cases; 20.9 new cases per 100 000; a 29% increase), and Malaysia (13 742 new cases; 42.5 new cases per 100 000; a 45% increase).

The highest numbers of new deaths were reported from the Philippines (1066 new deaths; 1.0 new deaths per 100 000; a 19% decrease), Japan (240 new deaths; 0.2 new deaths per 100 000; a 49% increase), and Malaysia (49 new deaths; 0.2 new deaths per 100 000; a 40% increase).



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.

As surveillance activities to detect SARS-CoV-2 variant cases are strengthened at local and national levels, including systematic genomic sequencing, the number of countries reporting VOCs has continued to increase. This information should be interpreted with due consideration of surveillance limitations, including but not limited to differences between countries in sequencing capacity and prioritization of samples for sequencing.

SARS-CoV-2 variants of concern (VOC) and variants of interest (VOI), as of 20 April 2021

	Nextstrain clade	Pango lineage	GISAID clade	Alternate names	First detected in	Earliest samples	Characteristic mutations
VOC	20I/501Y.V1	B.1.1.7	GR	VOC 202012/01[†]	United Kingdom	Sep 2020	H69/V70 del, Y144 del, N501Y, A570D, P681H, S106/G107/F108 del
VOC	20H/501Y.V2[†]	B.1.351	GH	VOC 202012/02	South Africa	Aug 2020	L242/A243/L244 del, K417N, E484K, N501Y, S106/G107/F108 del
VOC	20J/501Y.V3	B.1.1.28.1, alias P.1[†]	GR	VOC 202101/02	Brazil and Japan	Dec 2020	K417T, E484K, N501Y, S106/G107/F108 del
VOI	20C	B.1.525	G/484K.V3	-	United Kingdom and Nigeria	Dec 2020	H69-V70 del, Y144 del, Q52R, E484K, Q677H, D614G, and F888L
VOI	20C/S.452R	B.1.427/ B.1.429	GH/452R.V1	CAL.20C/L452R	United States of America	Jun 2020	L452R, W152C, S13I, D614G
VOI	20B/S.484K	B.1.1.28.2, alias P.2	GR	-	Brazil	Apr 2020	L18F, T20N, P26S, F157L, E484K, D614G, S929I, V1176F
VOI	Not yet assigned	B.1.1.28.3, alias P.3	Not yet assigned	PHL-B.1.1.28	Philippines and Japan	Feb 2021	141-143 del, E484K, N501Y, P681H
VOI	20C	B.1.526 with E484K or S477N	GH	-	United States of America	Nov 2020	L5F, T95I, D253G, D614G, A701V, E484K or S477N
VOI	20C	B.1.616	GH	-	France	Jan 2021	G142 del, D66H, Y144V, D215G, V483A, D614G, H655Y, G669S, Q949R, N1187D

Variant **B.1.617**

Was first discovered in October in the West Indies. Above all, it carries two mutations in the virus' spike protein, which the pathogen uses to dock on human cells. These could potentially lead to higher portability. Experts already assume that the so-called double mutant is responsible for the rapidly increasing number of corona cases in India. The "double mutant" has already been discovered in other countries, including the USA, Australia, Israel, Belgium and Singapore. Many countries have therefore issued entry bans for travelers from India or issued travel warnings.

Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01

Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01

Countries, territories and areas reporting SARS-CoV-2 P.1 variant

WHO recommendation

The chances of SARS-CoV-2 mutating increases with its frequency of human and animal infections. Hence, reducing transmission of SARS-CoV-2 through established disease control methods as well as avoiding introductions into animal populations are crucial aspects of the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critical to curb the spread of SARS-CoV-2 and its variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the implementation of PHSM and infection prevention and control (IPC) measures in health facilities has been effective in reducing COVID-19 case incidence, which has led to a reduction in hospitalizations and deaths among COVID-19 patients. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities. Authorities are also encouraged to strengthen surveillance and sequencing capacities and apply a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants based on the local context, and the detection of unusual events.

Source: https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---20-april-2021

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Subject in Focus:
COVID-19 Vaccination Side Effects

There has a been a lot of discussion about side effects associated with COVID-19 vaccinations. This has led to reports of widespread vaccine hesitancy particularly for certain vaccines such as the AstraZeneca. This update provides an overview of what is known about SEs associated with the different types of vaccine.

Information Sources

The European Medicines Agency provides information about risk associated with different types of COVID vaccination on its webpage (see here for update on AZ).
The US CDC has a webpage that reports on adverse events associated with COVID-19 vaccination. There is a national Vaccine Adverse Event Reporting System (VAERS) which, at the time of publication, had not detected any patterns in cause of death that would indicate a safety problem with the COVID-19 vaccines approved for use in the US.
The UK Medicines Healthcare Regulatory Agency (MHRA) publishes information for healthcare professionals on the different types of COVID-19 vaccination (see here for information on AstraZeneca)

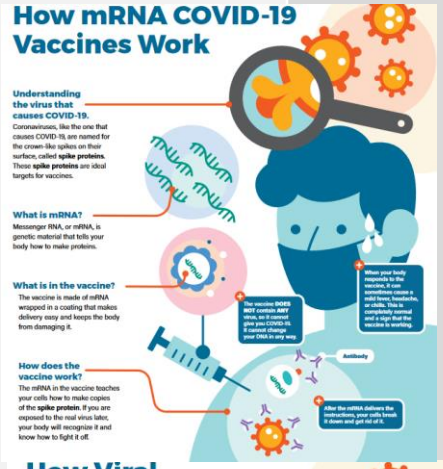
mRNA Vaccines

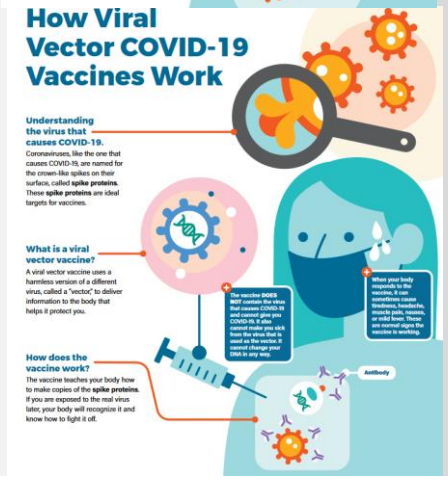
Concerns have been raised about the risk of anaphylaxis, particularly after Pfizer/BioNTech vaccine. The following is a short summary of some of the studies that have explored this:
A report from the US CDC published in JAMA reviewed suspected anaphylaxis post-vaccination. Evidence from 9.9 million doses of Pfizer-BioNTech and 7.6 million doses of Moderna found 66 case reports of anaphylaxis (47 following Pfizer, 19 following Moderna).
A large cross sectional survey published in JAMA from Mass General Brigham employees recorded 2% with 'acute allergic reactions' (1365/52,805) and 16 (0.025%) with anaphylaxis – 9 cases from Moderna and 7 cases from Pfizer-BioNTech vaccine.
Most information about the use of both Moderna and Pfizer-BioNTech vaccines for public and healthcare professionals now includes information about allergic reactions and avoidance of the vaccine if there are concerns that the patient is likely to have an allergic reaction following administration of the vaccine.

Viral Vector Vaccines

AstraZeneca

There has been a lot of interest in blood clotting disorders associated with the AZ vaccine. The EMA reported that, as of 04 Apr 21, 169 cases of cerebral venous sinus thrombosis (CVST) and 53 cases of splanchnic vein thrombosis (SVT) had been reported to the EU drug safety database Eudravigilance (out of approximately 34 million people vaccinated in the EEA and UK using AZ). An in-depth review of 62 cases of CVST and 24 cases of SVT found that 18 had died.
There has been a variable response to this information with different countries restricting the use of AZ vaccine to different age groups. Most national decisions have focused on the balance between the risk of severe COVID-19 prevented by the vaccine and the risk of adverse events from the vaccine. This risk balance has differed between countries leading to different restrictions.





Johnson and Johnson

The US has paused the J&J vaccine following reports of clotting disorders in women leading to death in a small number of patients. This is currently under investigation. The EU has recognised the issue and, similar to guidance about AZ, has provided information for the public and healthcare professionals on the risk. Canada continues to use the vaccine and it is not licensed for use in the UK.

Sputnik V

A report in the Lancet for over 20,000 recipients of the Sputnik V vaccine suggested that no serious adverse events were seen in a Phase III trial. There is limited real-world data available on Sputnik V.

Other Vaccines including inactivated whole virus (Sinopharm, Sinovac) and protein subunit (Novavax) vaccines

There is limited information about side effects of other vaccines available. A report from Phase 1 and 2 trials of Sinopharm and Sinovac reported that both vaccines were 'safe and well tolerated'. Reports of adverse events from Sinovac have not been substantiated.
According to press releases, Novavax completed a phase 3 trial in the UK however there is limited information about adverse events apart from Phase 1-2 trial results which did not report any adverse events. Further trials are being undertaken in the US, Mexico and South Africa.

Summary

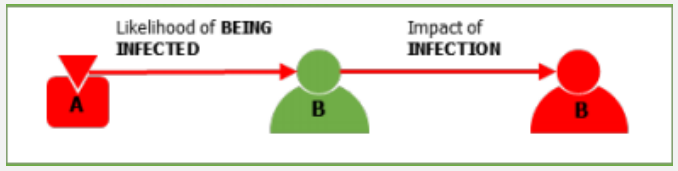
It is clear that adverse events associated with COVID-19 vaccines have been identified although, currently, these appear rare. With ongoing roll out of new vaccines and better understanding of existing vaccines the risk profile of each vaccine and information available to healthcare providers and patients will improve. Currently the use of national and pan-national sources of information is advised to better inform the Chain of Command about risks and benefits of COVID-19 vaccination in a military population.

The benefits of full vaccination against COVID-19 for transmission and implications for non- pharmaceutical interventions

COVID-19 vaccines licensed in the EU/EEA have been shown during clinical trials to be highly effective in providing protection against symptomatic and severe COVID-19. Evidence from real-life usage of COVID-19 vaccines has confirmed these clinical trial findings and also showed high vaccine effectiveness against PCR-confirmed SARS-CoV-2 infection.

Limited evidence indicates that fully vaccinated individuals, if infected, may be less likely to transmit SARS-CoV-2 to their unvaccinated contacts. Uncertainty remains regarding the duration of protection in such cases, as well as possible protection against emerging SARS-CoV-2 variants.

Red: infected,
green: vaccinated



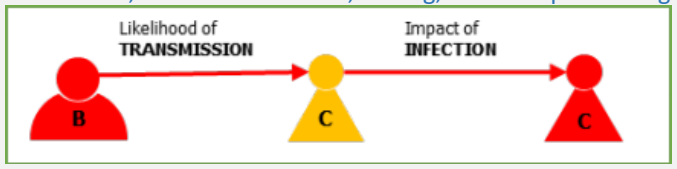
Viral circulation in the EU/EEA currently remains high, and the cumulative vaccination uptake in the EU/EEA is still low in the adult population aged 18 years and older, although higher in specific groups of the population targeted in the initial phases of the COVID-19 vaccine rollout, such as people aged 80 years and older and healthcare workers.

In the current context, and given the available evidence:

- The **risk of developing severe COVID-19 disease for a fully vaccinated individual** is **very low** in younger adults and middle-aged adults with no risk factors for severe COVID-19, and **low** in older adults or people with underlying risk factors.
- The **risk of developing severe COVID-19 disease for an unvaccinated individual who has been in contact with a fully vaccinated person exposed to SARS-CoV-2 infection** is **very low to low** in younger adults and middle-aged adults with no risk factors for severe COVID-19, and **moderate** in older adults or persons with underlying risk factors (limited evidence available so far).

The overall reduction in risks of severe COVID-19 disease is dependent on vaccine uptake and vaccination coverage in the general population and is modulated by several other factors, such as age and underlying conditions, vaccine characteristics, variants of concern, setting, and the epidemiological situation.

Red: infected,
yellow: unvaccinated



To date, given the current risks as assessed, there are specific situations in which non-pharmaceutical interventions (NPIs) can be lifted:

- When fully vaccinated individuals meet other fully vaccinated individuals (very low/low risk), physical distancing and the wearing of face masks can be relaxed;
- When contact tracing, vaccinated contacts who have been exposed to a confirmed case should continue to be managed according to existing ECDC guidance. However, health authorities may consider undertaking a risk assessment on a case-by-case basis and subsequently classify some fully vaccinated contacts as low-risk contacts. Factors that need to be taken into consideration in such assessments include, for example, the local epidemiological situation in terms of circulating variants, the type of vaccine received, and the age of the contact. The risk of onward transmission to vulnerable persons by the contact should also be considered.
- Requirements for testing and quarantine of travellers (if implemented) and regular testing at workplaces can be waived or modified for fully vaccinated individuals as long as there is no or very low level circulation of immune escape variants (in the community in the country of origin, in the case of travellers).
- In the current epidemiological context in the EU/EEA, in public spaces and in large gatherings, including during travel, NPIs should be maintained irrespective of the vaccination status of the individuals.
- Countries considering relaxing measures for fully vaccinated people should take into account the potential for uneven inequitable vaccine access across the population. Examples from countries where vaccination coverage is higher and severe COVID-related outcomes and SARSCoV-2 incidence have subsequently declined, such as the United Kingdom (UK) and Israel, provide an indication of how population-level transmission can be reduced with the careful application and slow release of public health prevention measures while vaccination rollout is scaled up as quickly as possible throughout the EU/EEA.

Table 6. Scenarios where physical distancing and face mask wearing may be relaxed based on the risk assessment for fully vaccinated individuals to develop or transmit severe disease

Scenario	Risk	Relaxing requirements for physical distancing and face mask wearing	Factors that would modify the risk and require maintained NPIs
Fully vaccinated individuals meeting other fully vaccinated individuals	**Fully vaccinated younger adults and middle-aged adults:** Very low	✓	Presence of COVID-19 compatible symptoms in any individual High circulation of immune escape variants
	Fully vaccinated older adults/ individuals with underlying conditions: Low	✓	Presence of COVID-19 compatible symptoms in any individual High circulation of immune escape variants
A fully vaccinated individual meeting one or more unvaccinated individuals from the same household or social bubble	**Fully vaccinated younger adults and middle-aged adults:** Low	✓	Presence of COVID-19 compatible symptoms in any individual High circulation of immune escape variants
	Fully vaccinated older adults/ individuals with underlying conditions: Low to moderate	✗	
One or more unvaccinated individuals from the same household or social bubble meeting a fully vaccinated individual	**Unvaccinated younger adults and middle-aged adults:** Low	✓	Presence of COVID-19 compatible symptoms in any individual High circulation of immune escape variants
	Unvaccinated older adults/ individuals with underlying conditions: Low to moderate	✗	

Source: https://www.ecdc.europa.eu/sites/default/files/documents/Interim-guidance-benefits-of-full-vaccination-against-COVID-19-for-transmission-and-implications-for-non-pharmaceutical-interventions.pdf

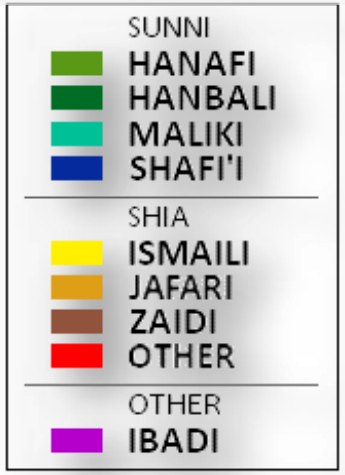
Ramadan and COVID-19

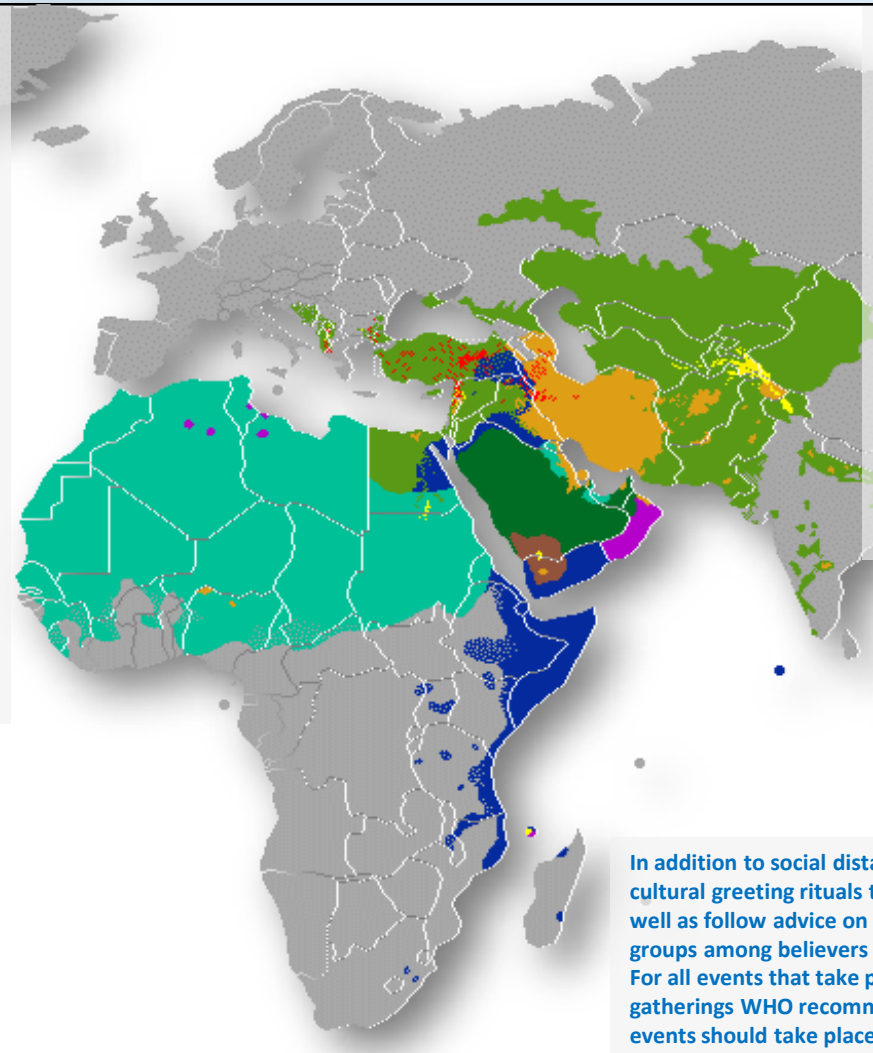
Ramadan:

The Ramadan, the month of fasting for the Muslims and the subsequent Fast-Breaking ("Iftar") are two important events in the Islamic calendar. As one of the five pillars of Islam fasting during Ramadan is conducted by 1.8 billion people (approx. ¼ of global population). This year Ramadan falls between mid-April and mid-May 2021 as the COVID-19 pandemic continues into its second year. During Ramadan/fasting numerous social and physical contacts take place for religious reasons (e.g. increased and intensive visits to the mosques, pilgrimages and celebrations with the family). The usual way of conducting these activities are often not compliant with the rules of social distancing and other prevention measures. Therefore, WHO has published recommendations for celebrating a safe Ramadan. These measures will have direct implications for the social and religious gatherings central to Ramadan.

Given the surge in COVID-19 cases associated with Ramadan-related activities observed in 2020, and the additional uncertainties brought by SARS-CoV-2 variants and other factors contributing to increased transmission, it is imperative to observe the holiday with caution and care. In particular, the continued implementation of, and adherence to, individual-level precautionary measures, and the strict monitoring and enforcement of PHSMs adopted by the relevant authorities are important to avoid increased transmission.

The most effective measures are the postponement or cancellation of social and religious gatherings. Cancelling or significantly modifying religious and social gatherings should be seriously considered. WHO recommends that any decision to restrict, modify, postpone, cancel or proceed with holding a mass gathering should be based on a rigorous risk assessment exercise based on three steps: risk evaluation, risk mitigation and risk communication.





If the decision is taken to cancel social and religious gatherings, virtual alternatives using platforms such as television, radio, and digital and social media can be considered instead. If Ramadan gatherings are allowed to proceed, precautionary measures should be strictly implemented to mitigate the risk of SARS-CoV-2 transmission.

A strong risk communication strategy is essential to explain to the population the reasons for decisions taken. Clear instructions should be given and the importance of following national policies reinforced. The risk communication strategy should include proactive messaging on healthy behaviours during the pandemic, and use different media platforms. It should also include elements of community engagement to ensure participatory approaches, build trust and social cohesion, and better understand community perspectives, so that interventions may be adapted on the basis of those insight.

Eligible individuals should be encouraged to get vaccinated during Ramadan to protect themselves and their communities, and religious leaders should promote vaccine uptake and advocate for the continuation of vaccination campaigns without interruption

In addition to social distancing it is important to regularly wash your hands, refrain from cultural greeting rituals that include physical contact and prohibit gatherings of large groups as well as follow advice on use of masks. At the same time WHO points out that there are risk groups among believers that should act especially carefully to protect themselves.

For all events that take place despite the general recommendation to cancel or postpone large gatherings WHO recommends limiting the number of these events and their duration. Such events should take place outdoors and all kinds of hygiene-measures should be implemented. If an outdoor event is not possible, ensure that the indoor venue has enough space to accommodate participants with appropriate physical distancing, as well as adequate ventilation and air flow.

The epidemiologic situation is likely to look very different among the respective Islamic countries and measures needs to be adapted to the current situation.

https://www.who.int/publications/i/item/WHO-2019-nCoV-Ramadan-2021.1

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!

22nd April 2021
Aljazeera
Tokyo Olympic torch staffer becomes event's first COVID case
https://www.aljazeera.com/news/2021/4/22/tokyo-olympic-torch-staffer-becomes-events-1st-covid-19-case

20th April 2021
DW
COVID vaccines tested on real-world variants in Israel
https://www.dw.com/en/covid-vaccines-tested-on-real-world-variants-in-israel/a-57268516

17th April 2021
DW
Who's paying for Europe's COVID-related debts?
https://www.dw.com/en/whos-paying-for-europes-covid-related-debts/a-57233153

22nd April 2021
BBC
Coronavirus: Pfizer confirms fake versions of vaccine in Poland and Mexico
https://www.bbc.com/news/world-56844149

20th April 2021
Aljazeera
Non-stop cremations cast doubt on India's counting of COVID dead
https://www.aljazeera.com/news/2021/4/20/non-stop-cremations-cast-doubt-on-indias-counting-of-covid-dead

20th April 2021
The Guardian
France is first EU member state to start testing digital Covid travel certificate
https://www.theguardian.com/world/2021/apr/20/france-is-first-eu-member-state-to-start-testing-digital-covid-travel-certificate

22nd April 2021
South China Morning Post
Coronavirus: China and US reach 200 million vaccine shots but Beijing up against tight supply
https://www.scmp.com/news/china/science/article/3130655/coronavirus-china-and-us-both-mark-200-million-vaccine-shots

22nd April 2021
The Guardian
Scientific paper claiming smokers less likely to acquire Covid retracted over tobacco industry links
https://www.theguardian.com/science/2021/apr/22/scientific-paper-claiming-smokers-less-likely-to-acquire-covid-retracted-over-tobacco-industry-links

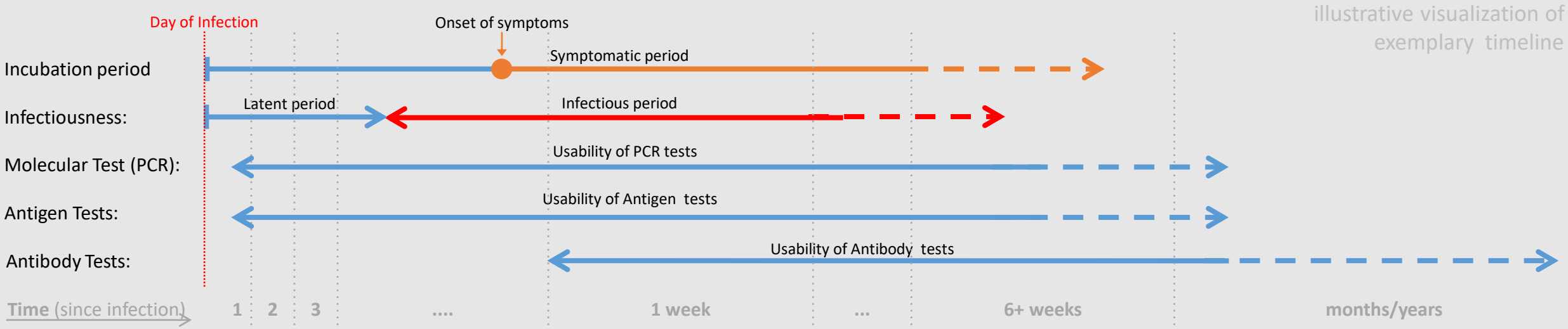
22nd April 2021
The Guardian
'It breaks our heart not to sing': how choirs are keeping the music alive during Covid
https://www.theguardian.com/music/2021/apr/22/choirs-coronavirus-covid-19-us-virtual-singing

Three ways to detect a corona infection

Source: https://www.zusammengegencorona.de/

	+ Self test	++ Rapid antigen test	+++ Laboratory test
	The antigen self-test also enables laypersons to test themselves by following the instructions for use. The result is valid for 24 hours.	A sample is taken by trained staff and evaluated on site. The result is valid for 24 hours.	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.
			
WHEN?	**Situation:** no suspicion, no symptoms. **Implementation:** planned visits to family celebrations, friends, school or day-care ⇨ **Preventive testing, third-party protection**	**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**	**Situation:** symptomatic persons, suspected cases, and/or after a positive quick test or self-test result. ⇨ **Diagnostic**
			
HOW?	freely available in pharmacies or in retail stores. Suitable for self-testing at home.	Implementation in medical practices or test centers by trained staff	Implementation in medical practices or test centres by trained staff.
	15-30 min	15-30 min	1 day
RESULT?	The test person determines the result autonomously by using the test strip	Trained staff determine the result using test strips and provide written evidence	Laboratory analyses sample. Test person receives written or digital evidence.
WHAT NOW?	POSITIVE: laboratory test and isolation NEGATIVE: Avoid the three C's	POSITIVE: laboratory test and isolation NEGATIVE: Avoid the three C's	POSITIVE: Isolation NEGATIVE: Avoid the three C's

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: