Force Health Protection Branch **NATO MilMed COE** Munich

GLOBAL

48 676 299

Confirmed cases

32 222 350

recovered

1 233 620 deaths

USA

(new cases/day 120 513)

9 531 278

confirmed cases

3 745 856 recovered

233 959 deaths

India

8 411 724

confirmed cases

7 765 966 recovered

124 985 deaths



Short Update 44a COVID-19 **Coronavirus Disease**

NATO

info.dhsc@coemed.org

Branch Chief Phone: +49 89 1249 4003 **Branch Admin**

Phone: +49 89 1249 4001

News:

• WHO/UN: The WHO is concerned about the explosion in the number of cases in Europe, the continent is now the global hotspot. The United Nations now planning a special summit to strengthen international cooperation during the crisis, and around 150 countries voted to hold a partially virtual meeting of the heads of government at the beginning of December 2020.

• EU: Various countries such as DNK, GBR and NOR have tightened entry regulations in view of the trend in the number of cases. Experts had estimated that around 60% of all infections go undetected when crossing borders.

• WHO: To a significant number of people, COVID-19 poses a range of serious long-term effects, and post COVID-19 symptoms and complications have been reported in both non-hospitalised and hospitalised patients. WHO Director said "What's really concerning is the vast spectrum of symptoms that fluctuate over time, often overlap and can affect any system in the body. From fatigue, a cough and shortness of breath, to inflammation and injury of major organs - including the lungs and heart, and even neurological and psychological effects. Although we're still learning about the virus, what's clear is that this is not just a virus that kills people. While people do recover, it can be slow –sometimes weeks or months – and it is not always a linear route to recovery."

(new cases/day 50 210) WHO: Several vaccines are now in final phase three trials. If proved safe and effective they will be rolled out through the ACT Accelerator's vaccine arm – the COVAX Facility, which is now supported by 186 countries. The COVAX Facility is speeding up the search for an effective vaccine for all countries. At the same time, it is supporting the building of manufacturing capabilities, and procuring doses ahead of time so that 2 billion doses can be fairly distributed by the end of 2021.

- 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.

Brazil

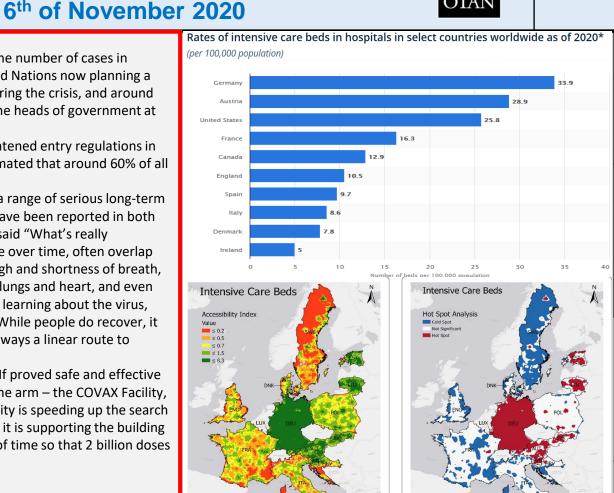
(new cases/day 23 976)

5 590 025

confirmed cases 5 078 162 recovered 161 106 deaths

Topics:

- **Global situation**
- Subject in Focus: An age and gender analysis of COVID-19
- In the press



EUROPE

11 676 308 confirmed cases

4 172 100 recovered

294 337 deaths

Russia

(new cases/day 19 116)

1 699 695

confirmed cases

1 271 349 recovered 29 285 deaths

FRANCE

(new cases/day 58 046)

1 601 367

confirmed cases 124 278 recovered

39 037 deaths

(new cases/day 21 908)

1 306 316

confirmed cases 150 376 recovered 38 486 deaths

Global Situation

DEU: According to the RKI, new

corona infections in Germany

have reached a new high with

laboratories are reaching their

increasing number of corona

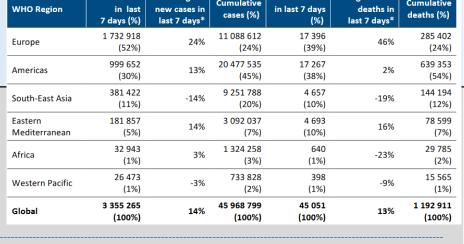
tests. More and more often they

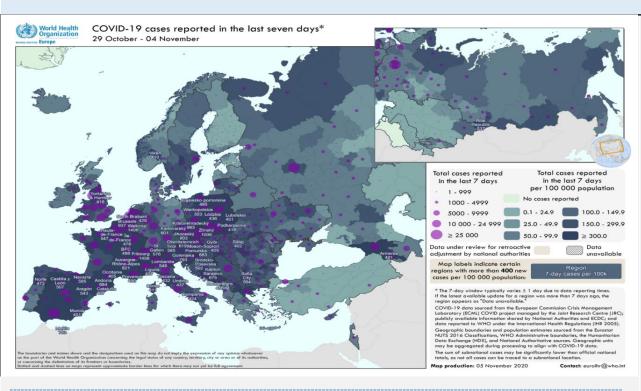
cannot keep up with evaluating

21,506 new cases. The

tests.

capacity limits due to the





CZE: With 13,231 new infections within 24 hours, the country continues to have one of the highest infection rates in the EU. Due to the overload of the health system, the CZE government has asked DEU for support. The Bundeswehr is now supporting its allies, 2 intensive care physicians from the medical service are being sent to Prague; In addition, 10 patients with intensive care are to be transferred to DEU with MEDIVAC and treated in the German Bundeswehr hospitals.

POL: The situation in Poland continues to deteriorate. According to the Ministry of Health, 445 people died with or from the corona virus - more than ever before within one day. The authorities also reported 27,086 detected new infections, just below the high of 27,143 cases reached on Thursday.

SVN: Serious riots broke out during a demonstration against the anti-corona measures in Slovenia. In the capital Ljubljana, a crowd of hundreds of demonstrators threw bottles, stones, firecrackers and smoke bombs at the police on Thursday. This took action against the demonstrators with tear gas, pepper spray and water cannons.

HUN: with 4709 cases, there have been more new infections within a day than ever before. The number of deaths related to the virus increased by 103. It is the first time that more than 100 people have died from or with the virus in one day.

GBR: Great Britain has also imposed a 14-day quarantine requirement for travelers from Denmark. The measure to contain the corona virus will apply from Friday morning. Like Germany and Sweden before, Denmark will be removed from the list of safe countries. It was only on Thursday that the government in London ordered quarantine for travelers from Germany and Sweden, which should apply from Saturday morning.

GRC: from this weekend in the fight against the corona pandemic, rigorous exit restrictions will also apply during the day. Citizens are only allowed to leave their houses and apartments if they have applied for this via their mobile phone and received approval by SMS. The measure is valid for three weeks. A night curfew had previously been imposed across the country. The number of infections in Greece had recently increased significantly. On Wednesday, 2,646 new infections with the coronavirus and 18 new deaths were recorded, which was a sharp increase compared to the previous week. Since the pandemic began, almost 47,000 cases of infection and around 670 deaths have been registered in the country.

DKN: A hard lockdown is imposed in 7 communities in the north of the country after a new subspecies of SARS-CoV-2 was detected in humans. Researchers assume that the subtype had previously spread and mutated in the mink farms located there before it passed back to humans. A total of around 10 million mink are kept for fur production in DNK, it can be assumed that all animals have to be culled. Likewise, the mutation in the virus could undermine vaccine development efforts.

ITA: reported the highest numbe of new corona infections since the beginning of the pandemic. Accordingly, 34,500 people in Italy were infected with the corona virus within the past 24 hours. The number of new Covid-19 deaths also increased to 445 reported in 24h. The government in Rome has meanwhile declared four of the 20 regions in Italy to be red zones. A partial lockdown will apply in these zones from Friday. Lombardy, where the coronavirus was particularly rampant at the beginning of the pandemic, is also considered a red zone.

AUT: only 27 percent of new infections with the coronavirus can be traced back to one source. This is due to the large number of cases. Experts assume that in the next few days a little more than 6000 people will be proven to be infected with the virus.

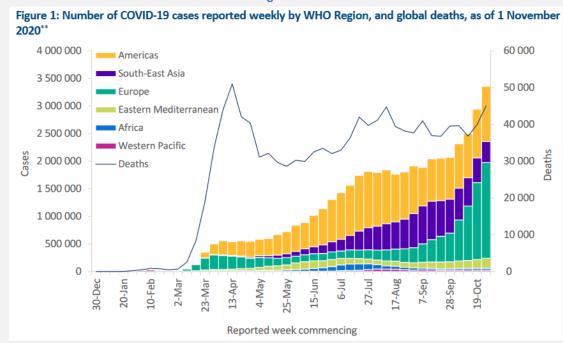
USA: While the presidential election is currently the hot topic in the US, the corona virus is spreading further. In the US, a record number of new infections was recorded for the second day in a row. The Johns Hopkins University announced on 123,085 new cases were recorded within 24 hours. Francis Collins, director of the National Institutes of Health, urged Americans to wear masks in the winter, arguing it could save up to 130,000 lives. He published the new study "Modelling COVID-19 scenarios for the United States" in the journal nature medicine.

Global Situation

Source: https://www.who.int/publications/m/item/weekly-epidemiological-update---27-october-2020

Global epidemiological situation

In the past week, over 3.3 million new cases have been reported globally. As of 1 November, nearly 46 million cases and 1.2 million deaths have been reported globally. The further acceleration in the incidence of new cases was most notable in **European Region**, which reported half of global new cases (over 1.7 million cases - a 22% increase from the previous week. Moreover, the region also reported a substantial rise in the number of new deaths (a 46% increase compared with the previous week), with **Europe and the Americas** now each reporting over 17 000 new deaths in the last 7 days. The **Americas and the Eastern-Mediterranean Regions** have also seen relatively smaller rises in the number of reported cases. **The South-East Asia Region** has continued to report a decline in new cases and deaths, while case incidence continues to fluctuate around similar rates compared to recent weeks in the **African and Western Pacific Regions**.



Despite regional variations, the countries reporting the highest number of cases in the past week remain the same as in the previous four weeks: The **United States of America**, **India and France**. Since the start of the pandemic, nine countries have reported more than **1 million confirmed cases**: the **United States**, **India**, **Brazil**, **Russian Federation**, **France**, **Spain**, **Argentina**, **Colombia**, and the **United Kingdom**.

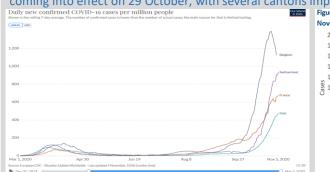
Five have reported over 40 000 cumulative deaths: the United States, Brazil, India, Mexico, and the United Kingdom

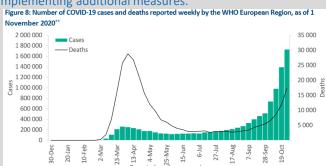
The **European Region** has seen a 22% increase in new cases and a 43% increase in new deaths in the past 7 days compared with the previous week. **France, Italy, and the United Kingdom** reported the highest numbers of new cases, although **Andorra, Czechia, and Belgium** reported the highest per population incidence.

France accounted for the third-highest number of new cases globally, with over 275 000 cases reported in the past week (4200 cases per million population): a 27% increase from the previous week. The number of new cases has increased since August, in line with much of Europe; however, in October there has been a considerable escalation. As of 29 October, there were 24 000 hospitalizations, with 3500 in intensive care, with the Ile-de-France and Auvergne-Rhône-Alpes regions having the highest numbers of hospitalizations. The COVID-19 occupancy rate of intensive care beds is rising rapidly. The increases in indicators are most marked among people aged 65 and over. The President of the Republic announced the reinstatement of stricter public health and social measures from 30 October to 1 December.

Belgium and Italy have both seen rapid rises in cases, and reported the 2nd and 9th highest number of new cases in Europe, respectively. New cases in Belgium fell by 21% from last week to 82 500 new cases, while those in Italy rose by 72% from last week to 175 000 new cases. Despite the fall seen in Belgium, it still has one of the world's highest incidences of new cases per million population, with 7 000 new cases per million. Italy's incidence is lower at 2800 cases per million. Belgium has instituted a second phase of national containment measures. Italy and several other European countries have been experienced an increasing number of protests over government restrictions.

In **Switzerland**, the number of new cases has grown considerably in October, rising from fewer than 2500 new weekly cases reported from mid-April through to the end of September, and fewer than a hundred cases reported in some weeks, to 50 000 new cases in the past week. **Switzerland** has the fifth- highest incidence of new cases per million population in the Region (5800 cases per million population). The weekly number of hospitalizations has also risen considerably. While weekly testing rates have increased, test positivity rates have also increased from 15% to 22.5% (as of 25 October). Since the beginning of September, the median age of cases has been steadily increasing from 33 to 42 years, as of 25 October. **Switzerland** has progressively implemented strict public health and social measures in recent weeks, with a new range of national restrictions coming into effect on 29 October, with several cantons implementing additional measures.





Subject in Focus An age and gender analysis of COVID-19

Based on WHO's surveillance system, using both case report form data and weekly aggregated data shared by Member States, an analysis has been conducted, covering 124 countries from five out of six WHO Regions which have provided sufficient data. The data covers the period 31 December 2019 to 18 October 2020, and includes data on 18 156 074 patients. Looking at age distribution over time since the start of the pandemic, an increase in the proportion of confirmed cases in younger population groups has been observed over time. Most notably, the proportion of cases among adolescents and young adults aged 15-24 years increased from 4% at the beginning of the epidemic (week 9-10) to 14% during week 42, and those aged 25-64 increased from 50% to 65% over the same period. Slight increases were also observed in the proportion of cases among children aged 0-4 years (from 0.5% to 2%), and 5-14 years (from 1% to 5%). Concurrently, a decrease and then stabilization of the proportion of cases aged 65 years and older, from 40% in the early stages of the epidemic, down to 15% in recent weeks was observed.

Changes in age distribution trends are likely linked to several factors, including **increased surveillance** and **access to testing**. Early in the pandemic, surveillance and limited testing capacity was often focused on patients with severe disease, who were more likely to be elderly hospitalized patients. Surveillance and testing capacities were expanded and became more accessible to cases with mild or no symptoms.

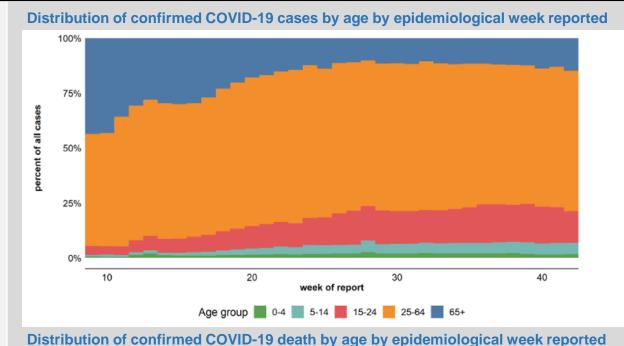
The decrease in proportion of elder cases could also be linked to the **implementation of infection prevention and control measures** in long term care facilities, and an increase in transmission among younger age groups. The evolution of reported deaths by age shows a **slow increase** in the proportion of reported deaths aged 25-64 years, ranging from roughly 10% in the early stages, peaking at 30% in the summer, and now around 25%. Reported deaths in those aged 65 years and older **decreased** from close to 90% in the early stages to 75% in the most recent weeks.

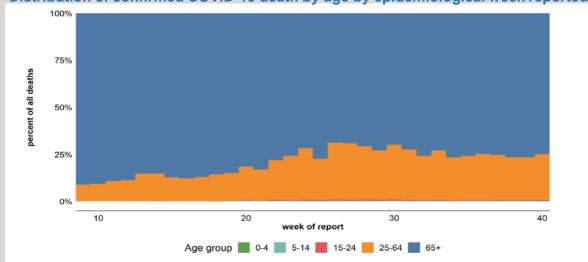
These data support previous observations that older people, who often have co-morbidities, remain the most vulnerable to COVID-19 morbidity and mortality. The proportion of reported deaths in the youngest age groups, 0-4 and 5-14 years, remain under 0.2%. Critically, while most people with COVID-19 recover after 2 to 6 weeks, there is increasing documentation of the long term effects of COVID-19, including among younger and non-vulnerable groups.

Gender distribution:

Our overall data show that men and women each comprise 50% of cases; however, this proportion varies greatly between countries. A higher proportion of cases tends to be observed among men in countries where men are frequently exposed outside the household as a result of economic factors, or have differential access to testing and healthcare. In countries where women are involved in healthcare and social careers, the proportion of confirmed COVID-19 cases is higher. These gender differentials can also vary among age groups. There is a notable difference in the death rate between sexes, with males accounting for 59% of deaths recorded. Differences in risks of exposure, behaviour and risk perception, such as smoking and healthcare-seeking behaviours, as well as differences in some co-morbid conditions, may impact the outcomes of COVID-19 and contribute to male—female differences in disease severity.

Source: Weekly epidemiological update – 3rd Nov 2020 by WHO





Reopening schools causes coronavirus R transmission rate to surge

Reopening schools following coronavirus lockdowns is linked to a surge in transmissions within a month, according to the first study to look at the impact of lifting restrictions on the R rate.

Children's return to classrooms was followed by an average 24-per-cent rise in the R transmission number. The only other measure linked to a higher increase in the rate is lifting a ban on groups gathering, which led to a 25-per-cent rise in R.

To create their models, the authors linked data on country-level R estimates from the London School of Hygiene & Tropical Medicine with information about non-pharmaceutical interventions from the Oxford COVID-19 government response tracker. 790 phases from 131 countries were included in the analysis. The median duration of phases was 11 days, with the shortest median duration observed in phases in which closure of schools were introduced. Requirements to stay at home and restrictions on internal movements were the most common NPIs introduced and were most often introduced and lifted simultaneously. With regard to the temporal sequence of introducing and lifting NPIs, closure of schools and public events.

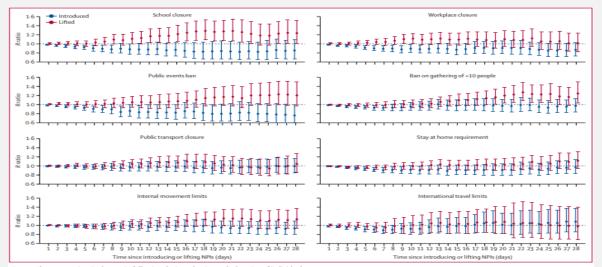


Figure 3: Change over time in the R ratio following the introduction and relaxation of individual NPIs
For each NPI, the reference period is the day before introduction or relaxation of that NPI. An R ratio of more than 1 indicates increased transmission, and an R ratio of less than 1 indicates decreased transmission. The error bars present the 95% CIs of the R ratios derived from the model. NPI=non-pharmaceutical intervention. R=time-varying reproduction number.

R represents the average number of people each person with COVID-19 goes on to infect. When the figure is above one, an outbreak can grow exponentially.

Reopening schools was associated with a 24-per-cent increase in R after 28 days, although the researchers cautioned, they were unable to account for different precautions some countries implemented for reopening schools, such as limiting class sizes, social distancing, cleaning, personal hygiene, face masks, and temperature checks.

The study, published in <u>The Lancet Infectious</u> <u>Diseases journal</u>, also created models of the impact combinations of measures had on the R rate when introduced.

They found a comprehensive package of restrictions including public events bans, school closures, a ban on gatherings of 10 or more people, widespread home-working, and stay-athome orders was linked to the biggest fall in R rate. Transmissions fell by 52 per cent within four weeks when those measures were all introduced. The least comprehensive package of measures - a ban on public events and gatherings of more than 10 people – would reduce R by 29 per cent by day 28, the study concluded.

Looking at the measures individually, a ban on public events was associated with the greatest reduction in R, amounting to a 24 per cent reduction after 28 days.

	Day 7	Day 14	Day 28
School closure			
Introduction	0-89 (0-82-0-97)	0-86 (0-72-1-02)	0.85 (0.66-1.10)
Relaxation	1-05 (0-96-1-14)	1-18 (1-02-1-36)	1.24 (1.00-1.52)
Workplace closure			
Introduction	0.89 (0.83-0.96)	0-89 (0-78-1-02)	0.87 (0.73-1.03)
Relaxation	1-04 (0-97-1-13)	1.10 (0.97-1.24)	1.01 (0.83-1.25)
Public events ban			
Introduction	0.90 (0.82-0.99)	0.83 (0.68-1.00)	0.76 (0.58-1.00)
Relaxation	1-02 (0-93-1-11)	1-07 (0-92-1-24)	1-21 (0-97-1-50)
Ban on gatherings of more th	an ten people		
Introduction	0.93 (0.87-0.99)	0.98 (0.87-1.10)	0.97 (0.83-1.14)
Relaxation	0.99 (0.93-1.06)	1.07 (0.96-1.20)	1-25 (1-03-1-51)
Public transport closure			
Introduction	0.97 (0.91-1.04)	0.98 (0.87-1.11)	0.99 (0.84-1.18)
Relaxation	1-00 (0-93-1-07)	1.08 (0.96-1.22)	1-04 (0-85-1-27)
Requirements to stay at home			
Introduction	0.90 (0.85-0.97)	0.89 (0.79-1.00)	0.97 (0.83-1.14)
Relaxation	0.97 (0.91-1.03)	1.02 (0.92-1.13)	1-11 (0-94-1-32)
Internal movement limits			
Introduction	0.97 (0.90-1.03)	0-97 (0-87-1-10)	0.93 (0.79-1.10)
Relaxation	0.98 (0.92-1.04)	1.06 (0.95-1.18)	1-13 (0-94-1-37)
International travel limits			
Introduction	0.89 (0.81-0.98)	0.97 (0.81-1.16)	1.08 (0.85-1.38)
Relaxation	0.95 (0.84-1.07)	1.02 (0.81-1.28)	0.98 (0.68-1.40)
Data are R ratio (95% CI). For each NPI, the reference period is the day before introduction or relaxation of that NPI. An R ratio of more than 1 indicates increased transmission, and an R ratio of less than 1 indicates decreased			

transmission. NPI-non-pharmaceutical intervention. R-time-varying reproduction number

Table 1: Change in the R ratio over time on day 7, day 14, and day 28 after the introduction and relaxatio

The researchers also analysed Google mobility data, modelling visits to workplaces and time spent in residential areas.

Results indicated that people took some time to adapt their behaviour to comply with workplace closures and stay-at-home requirements, which was similar to the delay between the measures and the effects seen on R of between one and three weeks.

Researchers suggested the delay was possibly due to the population taking time to modify their behaviour to adhere to measures.

They said some of the greatest effects on R were seen for measures that were more easily enforceable by law, like schools reopening and public events bans.

This may have been because their effects were more immediate and compliance was easier to ensure, the researchers added.

Source:

https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30785-4/fulltext

https://www.independent.co.uk/news/science/coronavirus-r-rate-school-closures-lockdown-lancet-study-b1251617.html

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!

01st November 2020

The Guardian

Tiny variants in genes may dictate severity of coronavirus

https://www.theguardian.com/science/2020/nov/01/covids-effect-on-health-blamed-on-tiny-genetic-variations

05th November 2020

Aljazeera

India-made COVID-19 vaccine likely by February: Gov't scientist

https://www.aljazeera.com/news/2020/11/5/india-made-covid-19-vaccine-likely-by-february-govt-scientist

30th October 2020

The Guardian

Coronavirus strain from Spain accounts for most UK cases – study

https://www.theguardian.com/world/2020/oct/30/coronavirus-strain-from-spain-accounts-for-most-uk-cases-study

05th November 2020

NBC News

Covid-19 may make people's tinnitus worse

https://www.nbcnews.com/health/health-news/covid-19-may-make-people-s-tinnitus-worse-n1246649

01st November 2020

Aljazeera

Australia records zero new COVID-19 cases

https://www.aljazeera.com/news/2020/11/1/national-donut-australia-records-zero-new-community-covid-case

05th November 2020

The Guardian

Covid immune response faster and stronger postinfection, scientists say

https://www.theguardian.com/world/2020/nov/05/covid-immune-response-much-faster-and-stronger-post-infection-coronavirus-scientists-say

04th November 2020

The Guardian

Tiny air pollution rise linked to 11% more Covid-19 deaths – study

https://www.theguardian.com/environment/2020/nov/04/tiny-air-pollution-rise-linked-to-11-more-covid-19-deaths-study

05th November 2020

South China Morning Post

In Singapore, 'revenge dining' trend sparked by Covid-19 cabin fever props up restaurants

https://www.scmp.com/week-asia/economics/article/3108430/singapore-revenge-dining-trend-sparked-covid-19-cabin-fever

The new normal!

#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!



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

But this doesn't mean we should go back to the 'old normal'.

If we don't stay vigilant and protect ourselves and others, coronavirus cases may go up again.

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

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

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

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



Avoid the Three C's

World Health Organization

Be aware of different levels of risk in different settings.

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





with many people nearby



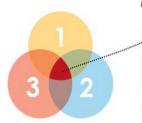
Close-contact settings

Especially where people have closerange conversations



Confined and enclosed spaces

nere with poor close- 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



laintain at least 1 m distance



When possible, open windows and doors for ventilation



Keep hands clean and cover coughs and sneezes



an and requested or if physical sneezes distancing is not possible

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

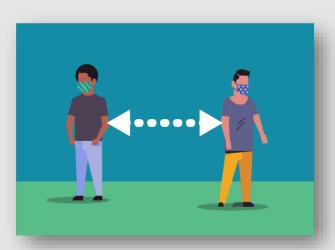
#StaySafe



The perfect wave – why masks are still important



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



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

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



DON'T wear your facemask under your nose or mouth.

DON'T allow a strap to

hang down. DON'T cross









https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/diy-cloth-face-coverings.htm https://www.bfarm.de/SharedDocs/Risikoinformationen/Medizinprodukte/DE/schutzmasken.html