Update 48 (1st of December 2020)

Information about Infection disease
COVID-19 (novel coronavirus)

Force Health Protection Branch FHPB (former DHSC) NATO MILMED COE in Munich
1st of December 2020
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In December 2019, a novel coronavirus emerged in Wuhan City, China. Since then the virus spread to 65 countries including Europe and America. Since then the virus showed evidence for human-to-human transmission as well as evidence of asymptomatic transmission. At 30th January 2020 WHO declared a Public Health Emergency of International Concern. The disease was formally named COVID-19 on 11th of February. The virus itself has been named SARS-CoV-2. On 11th of March 2020 WHO characterized the disease as a pandemic.

HIGHLIGHTS/NEWS

- The US pharmaceutical company *Moderna* as well as *Biontech/Pfize*r submitted the application for conditional approval for both vaccination candidates to the European Medicines Agency on Monday.
- **EMA**: wants to decide on a recommendation for approval for the corona vaccine *BionTech/Pfizer* in December. A result of the examination should be available no later than December 29th. A decision on the application of *Moderna* is expected by January 12th. If the EMA decides positively, the EU Commission can approve the use of the vaccines for all member countries.
- **BionTech**: could deliver its corona vaccine "within a few hours" after approval by the authorities. The vaccine is delivered in boxes and can be cooled in these with dry ice for up to 30 days in the respective vaccination center or for up to five days in a standard refrigerator. Freezers only become important when it comes to extended storage.
- **WHO**: Due to the corona pandemic, there could be tens of thousands additional deaths from malaria this year. Depending on how severely the malaria health services have been interrupted because of the pandemic, there could be between 20,000 and 100,000 more malaria deaths than expected, most of them children. Experts criticized malaria for not getting nearly as much attention and funding as the coronavirus. It is a treatable and preventable disease that causes almost 400,000 deaths every year.
- **OCHA**: The UN released the *Global Humanitarian Overview 2021* it sets out 34 response plans covering 56 vulnerable countries. It can be accessed via its new online platform.
- The relocation of the Olympic Games will result in additional costs of around 1.61 billion euros. In addition to the measures to protect against infection, there are additional expenses for employees, equipment and storage space as well as higher rental costs for arenas and real estate in the Olympic Village. The organizing committee estimates the cost of measures to protect against the coronavirus alone at more than 800 million euros.

Find articles and other materials at the MilMed CoE homepage: click here

Please use our online observation form to report your lessons learned observations as soon as possible.
Click here to submit your lessons learned observations online

GLOBALLY ↘ **63 292 299** confirmed cases **40 609 300** recovered **1 469 400** deaths
EU/EEA and the UK ↘ **17 961 182** confirmed cases **7 394 900** recovered **409 701** deaths
USA → **(new cases/day 156 255)** **13 483 818** confirmed cases **5 095 884** recovered **266 841** deaths
India ↘ **(new cases/day 38 772)** **9 462 809** confirmed cases **8 889 585** recovered **137 621** deaths
Brazil ↗ **(new cases/day 24 468)** **6 335 878** confirmed cases **5 597 802** recovered **173 120** deaths
Russia → **(new cases/day 26 046)** **2 302 062** confirmed cases **1 787 962** recovered **40 050** deaths
France → **(new cases/day 4 005)** **2 222 488** confirmed cases **162 281** recovered **52 731** deaths

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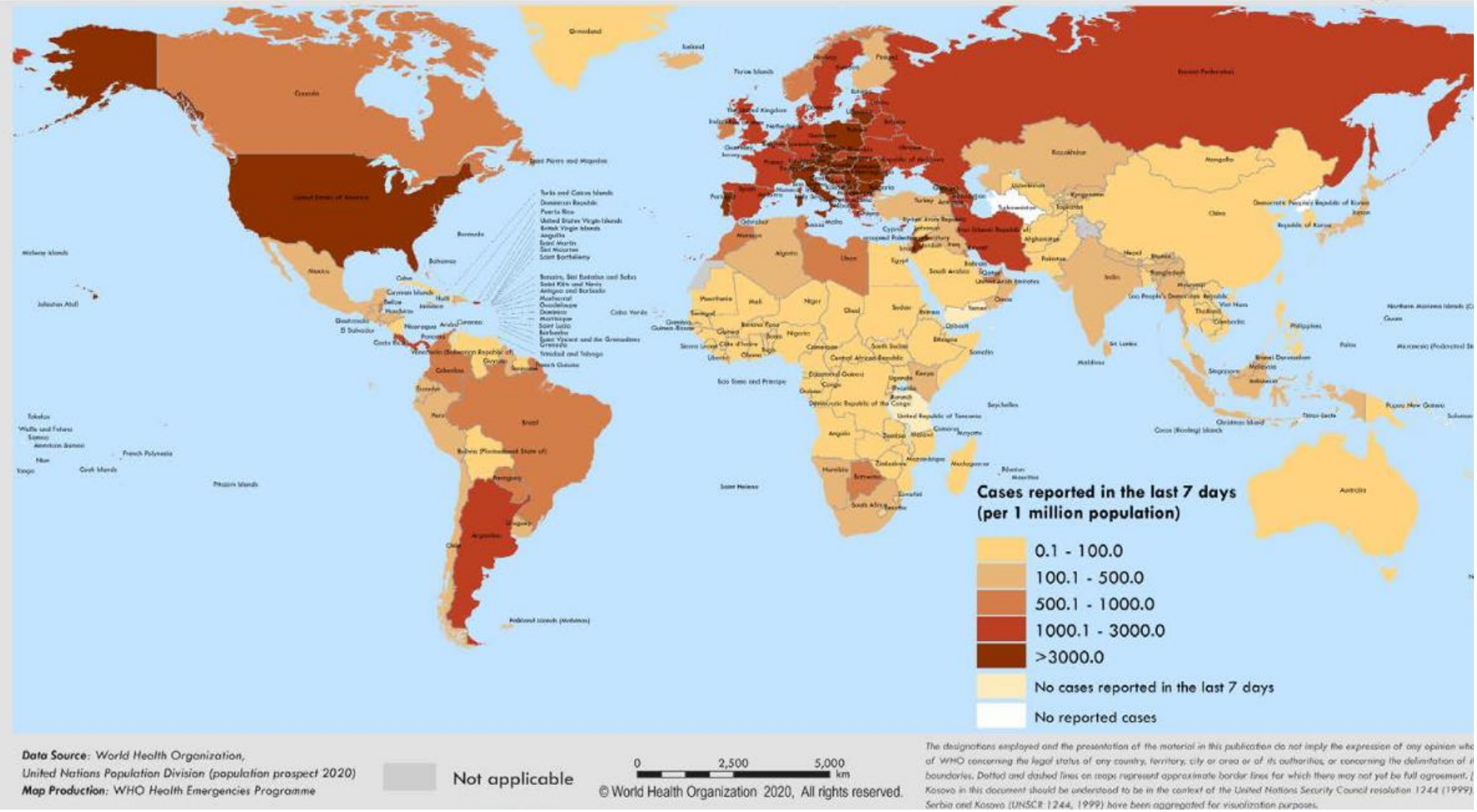
Map of countries with reported COVID-19 cases (last 7 days)



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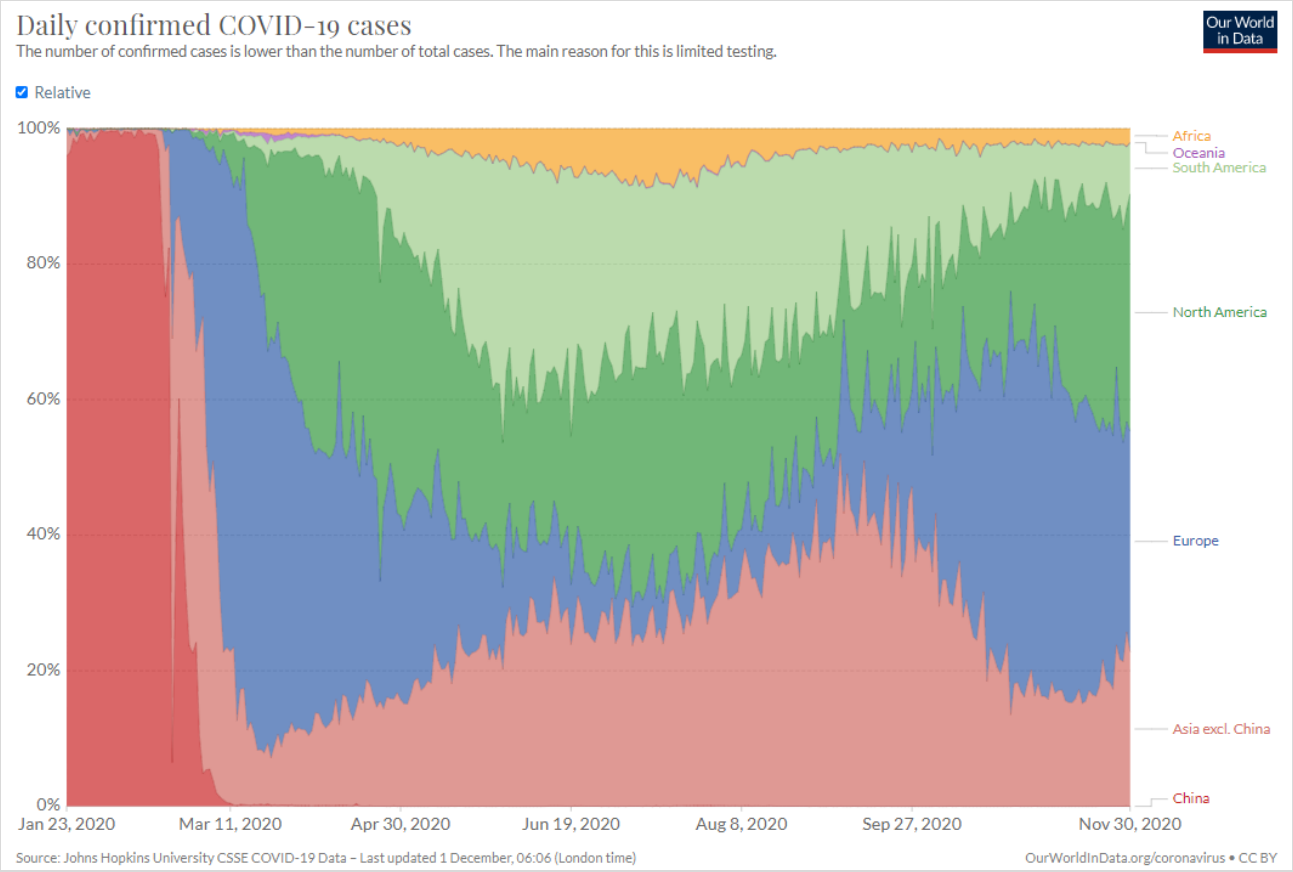
Worldwide Situation

Global Situation



WHO weekly operational update on COVID-19 as of 30th November 2020:

See information about partnership, logistics, health learning, medicines and health products, funding/donors and regional highlights in the document as well as links to Technical guidance and latest publications. To assess household transmission, a case-ascertained study was conducted by the CDC in Nashville, Tennessee, and Marshfield, Wisconsin, commencing in April – September 2020.

Record humanitarian response plan by UN and partners

The shock of COVID-19 has pushed the number of people who need humanitarian assistance worldwide to a record high – up by 40 per cent compared to the same time last year.

If all those who will need humanitarian aid next year lived in one country, it would be the world's fifth largest nation, with a population of 235 million.

The lives of people in every nation and corner of the world have been upended by the impact of the pandemic. Those already living on a knife's edge are being hit disproportionately hard by rising food prices, falling incomes, interrupted vaccination programmes and school closures. Extreme poverty has risen for the first time in 22 years. Multiple famines loom on the horizon.

International donors gave a record $17 billion in 2020 for collective humanitarian response. Data show that 70 per cent of the people targeted for aid were reached, an increase compared to 2019. But as needs are rising, funding remains less than half of what the UN and partner organizations asked for. Next year, the estimated cost of response is $35 billion.

The Global Humanitarian Overview (GHO) 2021 sets out 34 response plans covering 56 vulnerable countries. It is being presented today in Geneva at an event. Subsequent presentations will take place on the same day in Berlin, Brussels, London and Washington, D.C.

The full *Global Humanitarian Overview 2021* can be accessed via its new online platform.

Country reports:

KHM: All government schools in Cambodia will close by the start of the new school year in January. Public schools will be closed until January 11; Private schools would have to close for two weeks and could then offer online classes. Wedding parties and gatherings of more than 20 people will be banned from Monday on. Authorities moved quickly to quell a coronavirus outbreak after announcing rare cases of community transmission. Fifteen people have so far tested positive since Sunday. Cambodia has had just 323 cases so far and no deaths reported.

VNM: After almost three months (89 days) without any new infections, a man became infected with the corona virus. The 32-year-old was infected by a flight attendant who had returned from Japan on a plane.

HKG: civil servants will again work from home, as the city has seen a surge of coronavirus infections with 76 new cases recorded on Monday. Private companies are urged to encourage their staff to do the same. Meanwhile, restrictions on social gatherings will be tightened from four to two people.

TWN: reports 24 cases, the most in a number of months. All involved people from Indonesia, the U.K., U.S. and Philippines. Indonesian workers will be barred from entering Taiwan from Dec. 4 to Dec. 17.

IND: Coronavirus cases rose by 38,772, marking the 23rd straight day that daily infections have stayed below 50,000. Daily cases have been dipping since hitting a peak in September.

USA: New York is reopening its public elementary schools despite a surge in corona numbers. The decision was taken on the basis of studies on safety in schools. The schools open on December 7th. The city administration is moving away from its self-set threshold of three percent positive corona tests, from which the schools should be closed. The rate is currently 3.1 percent. Middle and high school students will continue to be educated online. The primary school students also have to be tested weekly for a coronavirus infection.

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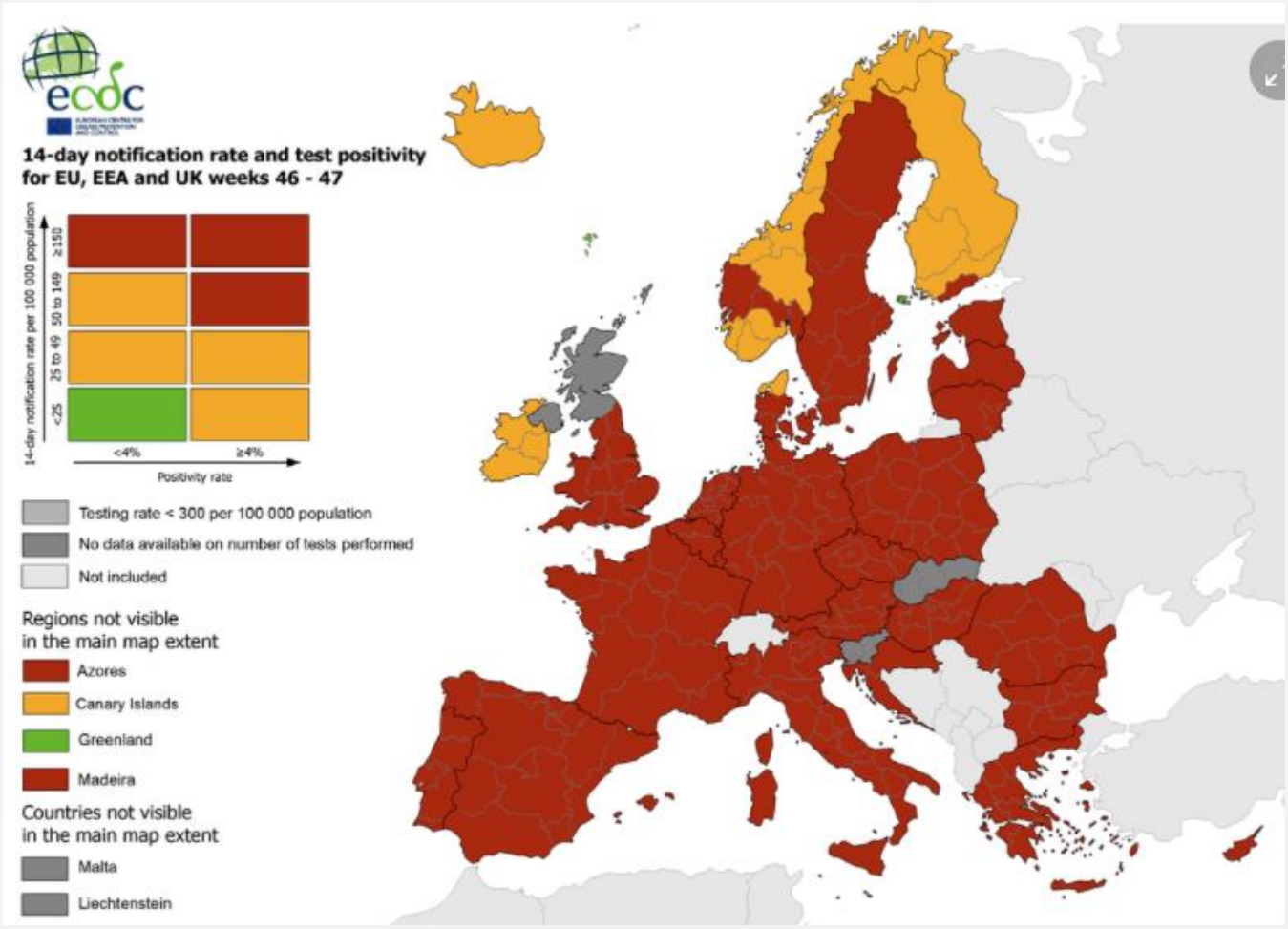
All public and private social gatherings of individuals from different households will be banned in **Los Angeles** County for at least three weeks starting Monday.

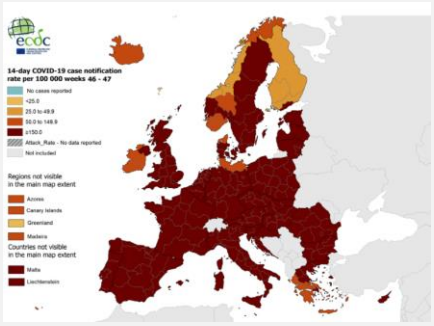
California is considering new exit restrictions in what is currently the hardest hit areas. If the number of cases continues to rise steeply, the bed utilization in intensive care units will increase to 112 percent by mid-December at the latest. The number of hospital admissions has risen rapidly in the past 14 days: Almost 7,800 people infected with corona are currently being treated as inpatients. The number of intensive care cases also increased significantly.

CAN: Canada's government says it will extend its restrictions for all travelers entering the country, except from the United States, until Jan. 21. Restrictions for U.S. citizens and foreign nationals arriving from south of the border will continue until Dec. 21 and may be extended at that time.

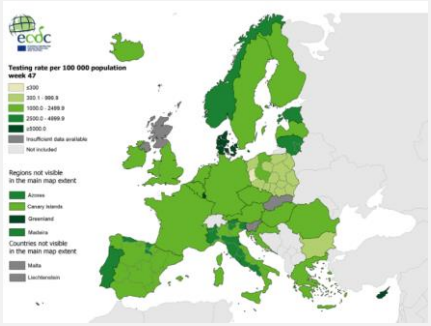
Situation in Europe

[Maps in support of the Council Recommendation on a coordinated approach to the restriction of free movement in response to the COVID-19 pandemic in the EU](), as of 26 November 2020





14-day case notification rate per 100 000 inhabitants



Testing rates per 100 000 inhabitants

Positivity rates

ECDC COVID-19 surveillance report Week 47, as of 26 November 2020

Weekly surveillance summary

This summary presents highlights from two separate weekly ECDC surveillance outputs, using data up to the end of the current reporting week (week 47, ending Sunday 22 November 2020).

- The COVID-19 country overview provides a concise overview of the evolving epidemiological situation with the COVID-19 pandemic, both by country and for the European Union/European Economic Area (EU/EEA) and the United Kingdom (UK) as a whole, using daily and weekly data from a range of sources.
- The COVID-19 surveillance report presents the epidemiological characteristics of COVID-19 cases reported to The European Surveillance System (TESSy) to date and assesses the quality of the data.

Additional weekly surveillance bulletins relevant to the COVID-19 pandemic in Europe include EuroMOMO (estimates of all-cause mortality) and Flu News Europe (including primary care sentinel and hospital-based surveillance for respiratory disease), which are published every Thursday and Friday, respectively.

The data behind most of the figures in this report are available to download in multiple formats from ECDC's website.

Trends in reported cases and testing

- By the end of week 47 (22 November 2020), the 14-day case notification rate for the EU/EEA and the UK, based on data collected by ECDC from official national sources from 31 countries, was 549 (country range: 58–1 186) per 100 000 population. The rate has been decreasing for one day.
- Among 30 countries with high case notification rates (at least 60 per 100 000), sustained increases (for at least seven days) were observed in five countries (Estonia, Latvia, Lithuania, Portugal and Sweden). One country (Finland) had increases of less than seven days' duration. Stable or decreasing trends in case rates of 1–22 days' duration were observed in 24 countries (Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, Liechtenstein, Luxembourg, Malta, the Netherlands, Norway, Poland, Romania, Slovakia, Slovenia, Spain and the UK).
- Based on data reported to TESSy from 23 countries, among people over 65 years of age, high levels (at least 60 per 100 000) or sustained increases in the 14-day COVID-19 case notification rates compared to last week have been observed in 22 countries (Austria, Belgium, Croatia, Cyprus, Czechia, Denmark, Estonia, Germany, Greece, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Spain and Sweden).
- Notification rates are highly dependent on several factors, one of which is the testing rate. Weekly testing rates for week 47, available for 27 countries, varied from 829 to 11 350 tests per 100 000 population. Luxembourg had the highest testing rate for week 47, followed by Cyprus, Denmark, the UK and Estonia.
- Among 23 countries in which weekly test positivity was high (at least 3%), two countries (Estonia and Portugal) had positivity that had increased compared to the previous week. Test positivity remained stable or had decreased in 21 countries (Austria, Belgium, Bulgaria, Croatia, Czechia, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Romania, Spain, Sweden and the UK).

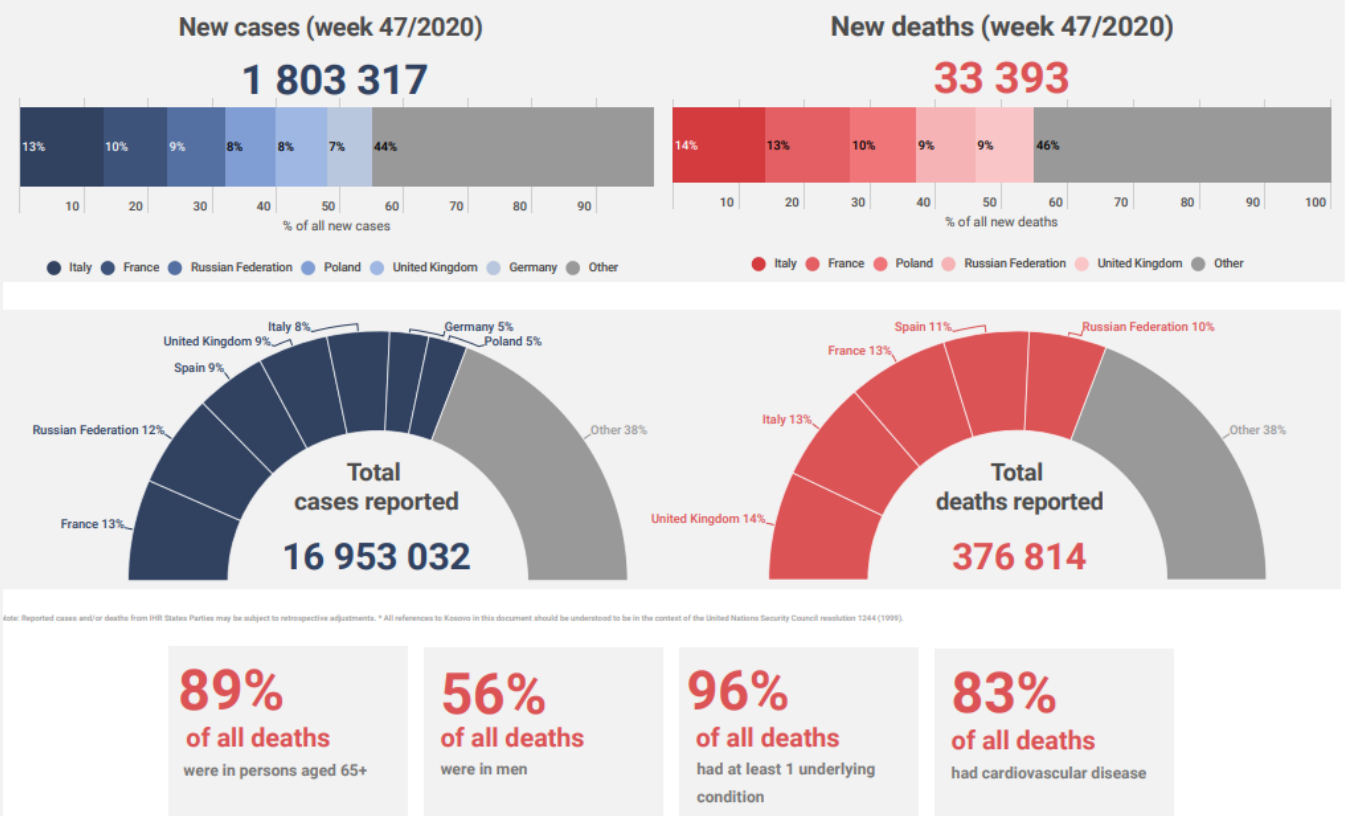
Hospitalisation and ICU

- Pooled data from 18 countries for week 47 show that there were 2 patients per 100 000 population in ICU due to COVID-19, which is 91% of the peak ICU occupancy observed during the pandemic. Pooled weekly ICU admissions based on data from 13 countries were 2.6 new admissions per 100 000, which is 72% of the peak rate to date.
- Hospital and/or ICU occupancy and/or new admissions due to COVID-19 were high (at least 25% of the peak level during the pandemic) or had increased compared to the previous week in 29 countries (Austria, Belgium, Bulgaria, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the UK). No other increases have been observed, although data availability varies.

Mortality

- The 14-day COVID-19 death rate for the EU/EEA and the UK, based on data collected by ECDC from official national sources from 31 countries, was 95.3 (country range: 2.4–226.7) per million population. The rate has been increasing for 72 days.
- Among 28 countries with high 14-day COVID-19 death rates (at least 10 per million), sustained increases (for at least seven days) were observed in 15 countries (Austria, Bulgaria, Croatia, Cyprus, Estonia, France, Germany, Greece, Italy, Lithuania, Luxembourg, Poland, Portugal, Romania and the UK). Three countries (Ireland, Latvia and Liechtenstein) had increases of less than seven days' duration. Stable or decreasing trends in death rates of 1–6 days' duration were observed in 10 countries (Belgium, Czechia, Hungary, Iceland, Malta, the Netherlands, Slovakia, Slovenia, Spain and Sweden).

COVID-19 situation update for the WHO European Region (16 - 22 November 2020 Epi week 47)



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Country Reports:

ITA: Italy is fighting the economic consequences of the corona pandemic with another billion package. As the government in Rome announced, this fourth aid package, worth eight billion euros, enables companies hit particularly hard by the pandemic to postpone tax payments. One-off aid payments of one thousand euros to employees in tourism, the cultural sector, sports and leisure and entertainment facilities are also planned. Since the pandemic began in March, the Italian government has now launched four aid packages to alleviate the economic consequences.

DEU: Chancellor Angela Merkel has criticized the plans of various countries particularly affected by the corona pandemic to allow hotel stays for family visits in large cities over Christmas. After the corona restrictions are to be relaxed over Christmas, some federal states want to open hotels for family members.

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The intensive care physicians warn of the growing risk of excessive demands on German clinics in the Corona crisis. On average, there are now only three intensive care beds available per hospital across Germany. "We are in an absolutely exceptional situation that we have never experienced before in the history of intensive care medicine," say intensive care physicians.

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Bavaria's second largest city, **Nuremberg**, imposes an exit restriction. In the 518,000-inhabitant city, leaving the apartment is only allowed for a compelling reason such as going to work. This will initially apply until December 20th. The reason is the increase in the incidence value to more than 300 new infections per 100,000 inhabitants in the past seven days.

BEL: After a decrease in daily coronavirus infections and hospital admissions, non-essential businesses are allowed to reopen in Belgium. According to the new regulations, people have to go shopping alone and are allowed to stay in a store for a maximum of half an hour. Exceptions apply for accompanying minors or for people who need support. With these restrictions, the Belgian government wants to prevent mass gatherings in the most popular shopping centers and streets. Restaurants and bars are still closed in Belgium.

AUT: Austria relies on voluntary mass tests of the population to contain the corona pandemic. The Annaberg-Lungötz community in the Salzburger Land is the first. The 2200 citizens are invited to be tested. Tracking down those infected with corona, even symptom-free, is an important component in breaking chains of infection. In the federal states of Tyrol, Vorarlberg and Vienna, the multi-day mass tests begin on Friday. In Vienna, the capacity is designed for up to 150,000 people per day. Corona infection is detected using an antigen test, which should be checked with a PCR test if the result is positive.

RUS: According to the authorities, 569 people who tested positive for the corona virus died within 24 hours in Russia. That is a maximum. The number of deaths rises to a total of 40,464. The number of positive tests increased by 26,402 to more than 2.32 million.

TUR: Turkey is reacting to the dramatically increasing corona numbers with strict exit restrictions. A night curfew applies from today. A complete lockdown including exit restrictions on the day should therefore apply on the weekend. Turkey had already imposed a partial lockdown in November.

ESP: The regional government in Madrid has opened a new epidemic emergency hospital with more than 1000 beds. The "Hospital Enfermera Isabel Zendal" is supposed to relieve the hospitals in the Spanish capital region, which are overburdened in the fight against the coronavirus. In addition to caring for people with COVID-19, the new hospital is to become a reference center for research and treatment of infectious diseases in Spain. The 700 doctors and nurses earmarked for the new hospital will not be hired but will be withdrawn and transferred from other hospitals in the city.

IRL: The second strict corona lockdown has come to an end. After six weeks, shops such as hairdressers and fitness studios are allowed to reopen. Museums, galleries, libraries, cinemas and places of worship can also be visited again. Restaurants and pubs that also serve food open again from Friday. Bars that only offer drinks, however, remain closed. Citizens should continue not to leave the district in which they live. At least in busy streets, mouth and nose masks should also be worn

	outdoors. Visits to people from other households are still prohibited. Meetings of up to three households should only be possible around Christmas and New Year's Eve.

Subject in Focus

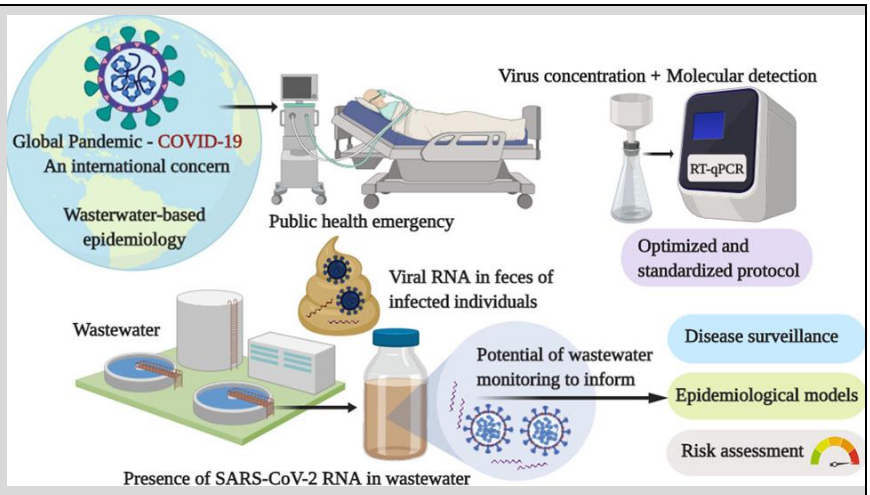
Wastewater monitoring of SARS-CoV-2

Wastewater monitoring of SARS-CoV-2: first results

Background:
An epidemic is detected in such a way that sick people seek medical help and then a significant accumulation of a certain disease pattern is determined. However, there are also situations in which this approach does not work, especially when infected people show no signs of illness or even no signs at all (are presymptomatic or asymptomatic). This can then lead to health authorities not being aware of a rapidly spreading infection process for weeks. However, wastewater-based epidemiology (WBE), for example, is suitable for identifying epidemics without the sick having to see a doctor. Wastewater is monitored for the presence of viruses, bacteria or other pathogens and, ideally, infections in the population are detected before the first diseases occur. The basic idea behind this procedure is that infectious agents are excreted by infected people via body fluids, both before and during illness. After entering the sewage system, these substances are concentrated in sewage treatment plants and can then be detected.

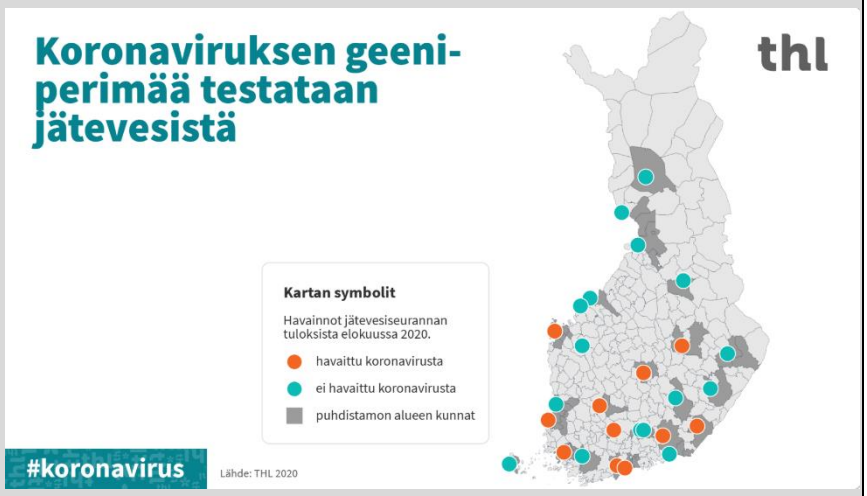
History:
As early as the 1960s, scientists in the USA were able to show that components of the vaccine against the poliovirus could be detected in wastewater. In the so-called Helsinki poliovirus experiment it was then shown that the polio vaccine could be detected in a sewage treatment plant 20 km from the point of entry even after four days and an estimated 800 million liters of wastewater flow. The calculations in FIN at that time showed that with the help of wastewater monitoring, 1 infected person per 10,000 inhabitants could be determined. Another application of wastewater monitoring for polioviruses in ISR in the 1970s showed that detection in wastewater was possible up to 9 days before the first clinical case. In addition to its use as an early warning system for infections with the poliovirus, the WBE has since been used successfully to detect norovirus or hepatitis virus A infections in the population.

Use with SARS-CoV-2:



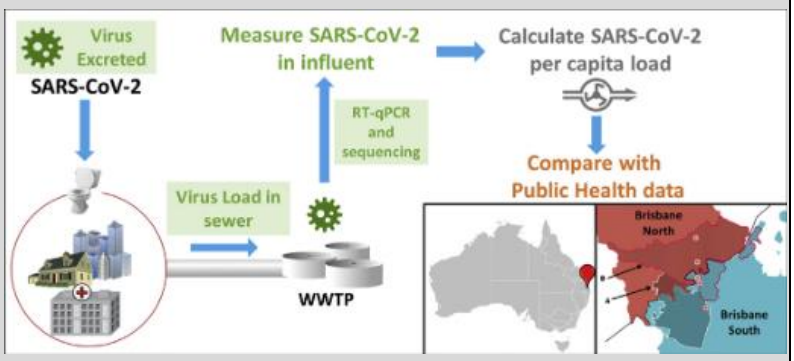
Earlier wastewater monitoring during the first SARS pandemic in 2003 had shown that fragments of SARS-CoV-1 could be detected in wastewater. Since SARS-CoV-2 was found in stool samples at an early stage, it made sense to carry out wastewater monitoring during the current pandemic. The presence of SARS-CoV-2 virus material in wastewater was proven in February 2020 when NLD experts found the virus in 6 municipal sewage treatment plants. Further evidence of non-infectious fragments of the virus in untreated (and in some cases also treated) wastewater was then reported from ITA, FIN, ESP, FRA, USA, AUS and JAP. In April 2020, DEU researchers then detected the virus in the wastewater from 9 sewage treatment plants in North Rhine-Westphalia, with the wastewater concentration of virus RNA correlating positively with clinical reports of confirmed COVID-19 cases in the respective region. As a result, a test phase with 20 sewage treatment plants was started in DEU in May 2020, which was then expanded to 100 sewage treatment plants with a catchment area of around 30 million people in the second half of the year. The results of this comprehensive study are expected to be available by mid-December. However, in order to be able to make reliable statements for the whole of DEU with regard to the number of infected people, about 80% of the DEU waste water flow would have to be monitored.
This would include around 900 wastewater treatment plants, whose wastewater would then have to be examined at regular intervals using a standardized and certified procedure.

Experience from FINLAND:



The health authorities in FIN have been taking wastewater samples at 28 sewage treatment plants on a weekly or monthly basis since April 2020. Since then, it has been possible to detect the occurrence of infections, especially in the metropolitan areas of HELSINKI, TURKU, TAMPERE, VAASA and RAUMA. In November, however, virus RNA was already detected in almost all of the selected regions

Experience form Australia:



Australia also detected SARS-CoV-2 in wastewater in Australia using an RT-qPCR assay in a first study. Currently RT-qPCR assays developed for clinical specimen testing are being used for SARS-CoV-2 RNA detection in wastewater samples. Since different assays may produce conflicting results when the con-centration is low in wastewater, these assays need to be evaluated head to head in intra- and inter-laboratory studies. The virus concentration method is another

	essential factor that re-quires attention for improving the sensitivity of detection of SARS-CoV-2 in wastewater. **Conclusion:** From a technical point of view, wastewater monitoring of SARS-CoV-2 can be carried out relatively easily. So-called RT-qPCR methods are used nowadays, which, in addition to detecting the virus in real time, also allow the viral load in the wastewater to be quantified. This enables the number of unreported infections in a region to be determined more precisely. However, the amount of virus released by infected people varies greatly from person to person, which makes it difficult to calculate the number of infected people in a region precisely. Another factor that has an impact on the viral load in municipal wastewater can be industrial wastewater. In addition, the weather can have a significant influence on the process, as, for example, heavy rain leads to a dilution of wastewater, which in turn leads to a lowering of the viral load in the samples - the opposite is the case in longer dry periods. In regions that are heavily frequented by tourism, the data on the entry of wastewater into the system due to tourists can also be distorted. Another disadvantage of wastewater monitoring is that such procedures can only be used in countries that have (almost) complete disposal of wastewater. In most of the poorer countries of the world this is not the case, in which case the evidence of surface waters contaminated with sewage would have to be provided. Probably the most important factor, however, is that wastewater monitoring should, if possible, provide data in real time (daily, but at least weekly) in order to provide politicians with a solid basis for potentially far-reaching measures. For technical and logistical reasons, automated processes for wastewater monitoring are currently not yet available. Sources: https://doi.org/10.1016/j.scitotenv.2020.141750 https://apps.who.int/iris/handle/10665/333670 https://doi.org/10.1016/j.scitotenv.2020.143350 https://doi.org/10.1016/j.watres.2020.116560 https://doi.org/10.1016/j.envpol.2020.115806 https://doi.org/10.1016/j.scitotenv.2020.139631 https://doi.org/10.1016/j.scitotenv.2020.140719 https://doi.org/10.1016/j.envint.2020.105689 https://doi.org/10.1016/j.jece.2020.104429 https://doi.org/10.1038/s41893-020-00605-2 https://doi.org/10.1016/j.watres.2020.116560 https://doi.org/10.1016/j.coesh.2020.06.001 https://doi.org/10.1016/j.scitotenv.2020.139076 https://doi.org/10.1038/s41587-020-0690-1 https://doi.org/10.1016/j.scitotenv.2020.142358 https://reader.elsevier.com/reader/sd/pii/S0048969720322816?token=D1052683F5F721BC47FB653943B920837368600FDFADDFC5048EDDCA53FF33CED0F1C32B60F08B14DA69BD3B813B12D5 https://thl.fi/fi/tutkimus-ja-kehittaminen/tutkimukset-ja-hankkeet/sars-cov-2-jatevedenpuhdistamoilla/koronaviruksen-jatevesiseuranta

COVID-19 Crisis Update in Côte d'Ivoire

In cooperation with Bundeswehr HQ of Military Medicine

Côte d'Ivoire

Area:	322,463 km^2
Population:	23,740,424
Capital:	Yamoussoukro (political)
	Abidjan (economic)
Age structure:	
0-14 years:	39,59%
15-24 years:	19,91%
25-54 years:	34,25%
55-64 years:	3,47%
65 years and over:	2,78%

CONFLICT:

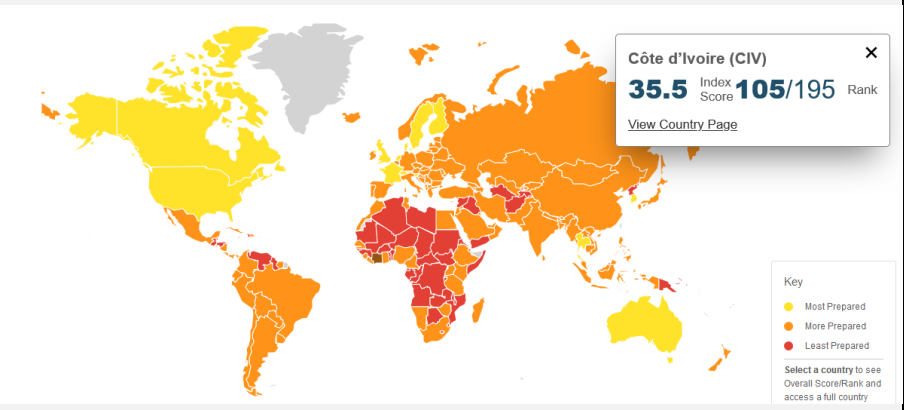
The republic and former French colony of Côte d'Ivoire, in which around 60 different tribes and today 25 million inhabitants live, received full independence from France in 1960. After elections, Félix Houphouët-Boigny becomes President of the Republic and is thus also Commander-in-Chief of the Armed Forces according to the constitution. He maintains close economic, cultural and military ties to France and also establishes trade relations with other European industrialized countries. The simple health system is also based on the French model. Because of this, but also because of the internal political stability (Félix Houphouët-Boigny leads the country with a hard hand, but does not resolve differences between the ethnic groups like his counterparts in neighboring countries with violence, but with diplomacy), the Republic of Côte d'Ivoire can have experienced exceptional economic growth for Africa within a few years.

This stable and conflict-free period ends in 1990. Due to the large number of ethnic groups and an economic downturn, internal conflicts are developing in Côte d'Ivoire, which ended in a civil war in 2002 that divided the country into two parts, the Islam-dominated north and the Christian south. The civil war was also a conflict over land and access to resources. In 2004 the United Nations established the UNOCI peacekeeping mission, which was successfully completed in 2017 after the establishment of a buffer zone, subsequent new elections (2010) and the establishment of a new government (2011). The United Nations regards it as a success story for the multi-ethnic state. After the settlement of the civil war, Côte d'Ivoire has made impressive progress from last place on the Fragile States Index 28 ranks and also made economic progress. However, there is also criticism that war crimes and human rights violations are not investigated and that there is no reconciliation or reappraisal of the conflicting parties. The ethnic conflicts that persist even after the peace mission has ended are still unresolved. Most of the ethnic groups are descendants of former kingdoms from neighboring West African countries. The ethnic groups and ethnic groups differ primarily in their origins and their current population concentration. They also often have their own languages. Increasing Islamization is currently playing a dominant role.

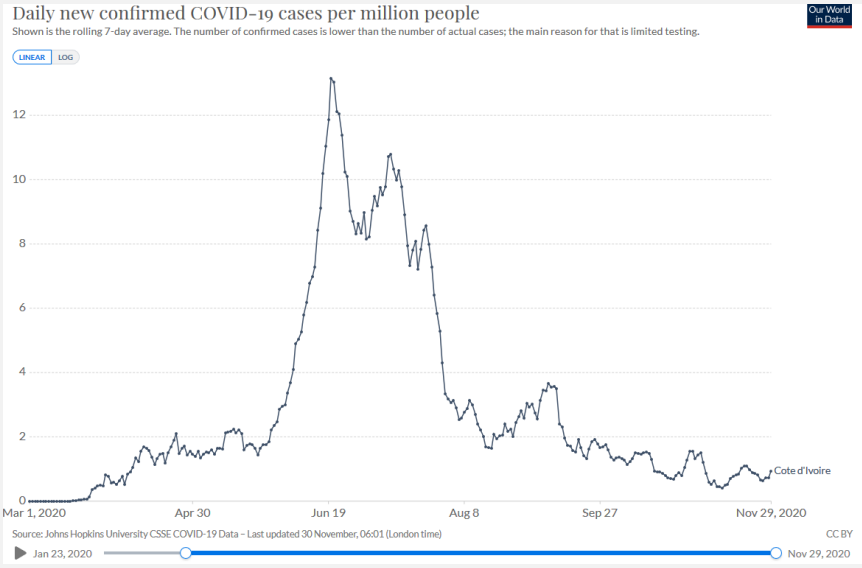
In addition to various African ethnic groups, foreign workers, traders and investors have settled in the course of colonization and thereafter in number and origin. Even if they represent only a small part of the total population, European and Asian immigrants change the socio-cultural social structures above all. in the cities. The Côte d´Ivoire is the most important immigration country for labor migrants in West Africa. Most of the Africans in the Ivory Coast who still work in agriculture today come from Burkina Faso, Mali and Ghana in particular, which does not always go without conflicts. In addition to immigration to agricultural areas, there has been a strong rural exodus in the Ivory Coast towards Abidjan and other

urban centers for decades. There is constant growth (+ 2.4% p.a.) and a strong rejuvenation of the population (average age 20; approx. 60% under 24). A little under half of the population lives below the poverty line. The Côte d´Ivoire is still one of the most urbanized countries in West Africa. However, opposite trends have also been observed in recent years. The coexistence of the population in Côte d´Ivoire has never been free of conflict. Ethnic, cultural, but mainly religious differences in the population have also led to socio-political consequences such as a regional policy that divides society, which in turn has led to numerous marginalizations and thus serious conflicts. The phenomenon of emigration or the return of former immigrant Africans from neighboring Ivorian states back to their home country is not uncommon.

HEALTH:



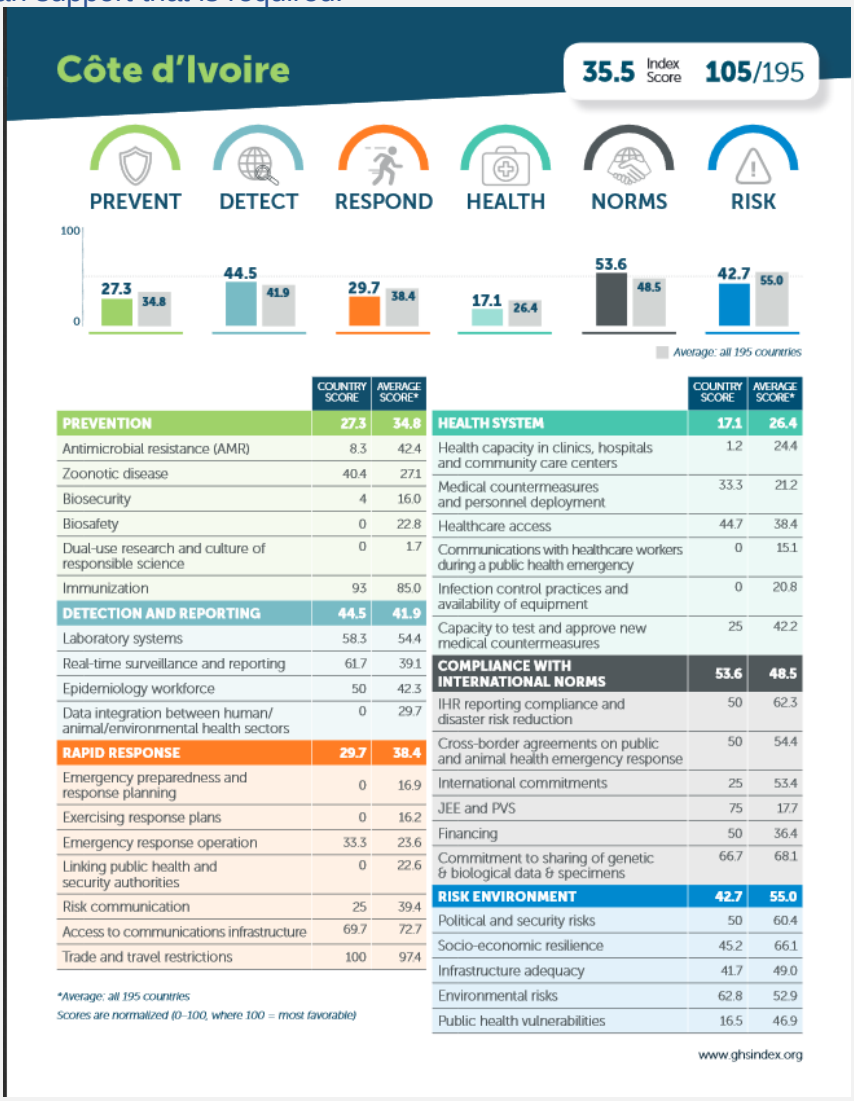
The health system of the Côte d´Ivoire is mainly shaped by the French system, but it still bears traditional traits through natural healers and Islamic medical techniques, which are also integrated into the health system by the state. Many health facilities were destroyed and looted during the years of civil war. The public health system as a whole also suffers from infrastructural problems, inadequate facilities and a difficult staffing situation, as the government only allocates an insufficient budget to the sector. In 2017, health insurance was introduced with the aim of improving access to the health system, in which the treatment normally has to be paid for by the patient. Côte d´Ivoire is struggling with the diseases common in the region such as HIV and tuberculosis, which, however, have the highest numbers in the region in Côte d´Ivoire. According to this, malaria is one of the most important causes of death in the country, especially children under five years of age are affected.



The weak health system is currently facing 21,168 (17,948, Aug 31) COVID-19 confirmed cases, of which 131 (115, Aug 31) have died so far. That is only "only" about 3000 positive cases more than three months ago. There is a very low mortality rate of 0.6%. Côte d'Ivoire compares the cases with 793 hospital beds for COVID-19 patients. The beds are hardly used, since most of the courses are not difficult and the average age is 31 years. The focus of the outbreak is the Abidjan economic center, which is home to five million people. After a severe shutdown in early May, around five million students across the country have been going back to school since May, and trips to rural areas are taking place again. After that, the number of COVID 19 infections rose rapidly (see graphic below left) and only reached a stable level again at the beginning of August or the number of active cases fell (continuously. However, based on the circumstances described, a very high number of unreported cases can be assumed. The high numbers in Abidjan at the beginning of the year could possibly have been reported by the concentrated test possibilities there. The test capacities in the rural infrastructurally disadvantaged regions are low or nonexistent. Overall in a global comparison, however, the Ivory Coast is under the number of tests carried out per 1 million inhabitants The opening in May and increasing mobility in the multi-ethnic country has exacerbated the situation. At the same time, a possible economic downturn caused by COVID-19 is promoting the still existing ethnic groups Conflicts, this is especially true those because peace was created, but reconciliation and coming to terms with the civil war have hardly taken place or not at all. With a population that lives almost 50 percent below the poverty line and is growing steadily, the struggle for resources and survival will probably play a central role. A

breeding ground for social, religious and ethnic conflicts, which in turn will affect the slowly improving health system.
The presidential elections in October, in which the head of state Alassane Ouattara was elected for a third, previously impossible and controversial term, promoted the critical factors described above. There have been violent protests against the 78-year-old's renewed candidacy for weeks. According to human rights activists, more than 20 people have now been killed. They died either through political violence or inter-ethnic violence.

CONCLUSION:
It is to be feared that the controversial election of Head of State Quattara, which was not recognized by the opposition, will further promote poverty and conflict in the country and thus further worsen the humanitarian situation in Côte d'Ivoire. In conclusion, it is to be hoped that the country will not fall back into civil war and that the overall situation will then worsen and make it much more difficult for the external humanitarian support that is required.



	COUNTRY SCORE	AVERAGE SCORE*
PREVENTION	**27.3**	**34.8**
Antimicrobial resistance (AMR)	8.3	42.4
Zoonotic disease	40.4	27.1
Biosecurity	4	16.0
Biosafety	0	22.8
Dual-use research and culture of responsible science	0	1.7
Immunization	93	85.0
DETECTION AND REPORTING	**44.5**	**41.9**
Laboratory systems	58.3	54.4
Real-time surveillance and reporting	61.7	39.1
Epidemiology workforce	50	42.3
Data integration between human/ animal/environmental health sectors	0	29.7
RAPID RESPONSE	**29.7**	**38.4**
Emergency preparedness and response planning	0	16.9
Exercising response plans	0	16.2
Emergency response operation	33.3	23.6
Linking public health and security authorities	0	22.6
Risk communication	25	39.4
Access to communications infrastructure	69.7	72.7
Trade and travel restrictions	100	97.4

*Average: all 195 countries
Scores are normalized (0-100, where 100 = most favorable)

	COUNTRY SCORE	AVERAGE SCORE*
HEALTH SYSTEM	**17.1**	**26.4**
Health capacity in clinics, hospitals and community care centers	1.2	24.4
Medical countermeasures and personnel deployment	33.3	21.2
Healthcare access	44.7	38.4
Communications with healthcare workers during a public health emergency	0	15.1
Infection control practices and availability of equipment	0	20.8
Capacity to test and approve new medical countermeasures	25	42.2
COMPLIANCE WITH INTERNATIONAL NORMS	**53.6**	**48.5**
IHR reporting compliance and disaster risk reduction	50	62.3
Cross-border agreements on public and animal health emergency response	50	54.4
International commitments	25	53.4
JEE and PVS	75	17.7
Financing	50	36.4
Commitment to sharing of genetic & biological data & specimens	66.7	68.1
RISK ENVIRONMENT	**42.7**	**55.0**
Political and security risks	50	60.4
Socio-economic resilience	45.2	66.1
Infrastructure adequacy	41.7	49.0
Environmental risks	62.8	52.9
Public health vulnerabilities	16.5	46.9

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Source:
https://www.giz.de/de/downloads/GBN_Sector%20Brief_Cote_dIvoire_Gesundheit_D_WEB.pdf
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MilMed CoE VTC COVID-19 response

Topic	The NATO Centre of Excellence for Military Medicine is putting its expertise and manpower to aid in any way possible during the pandemic. The VTC is for interested participants (experts) to exchange experiences, management regulations and restrictions due to COVID-19. We would like to propose just one of the most important topics in the next iteration. We will have some experts giving a short briefing and then afterward we will have time for questions and experiences as well as a fruitful discussion. **Topics former VTCs:** • Regulations on the public, military and missions abroad. Medical Treatment Facilities: how equipped they are, is there pooling / isolation of COVID-19 patients in separate facilities. • Testing strategies • Aeromedical evacuation • De-escalation strategy and measures • Collateral damage of COVID-19 emphasing Mental Health Aspects and other non COVID related diseases • Immunity map, national strategies to measure and evaluate the immunity level" • Mental Health • Treatment of mild symptomatic cases of COVID-19 • Transition home office back to the office • COVID-19 Second Wave prediction and preparedness based on facts/experiences, modelling and simulation • Perspectives of the current COVID-19 vaccine development • National overview on current COVID-19 situation • Long term effects of COVID-19 and the impact on force capability • Overview on current COVID-19 situation in Missions • Civil – military cooperation in view of COVID-19 • Immunity development versus reinfections of COVID-19
Immunity development versus reinfections of COVID-19	Briefer from **NATO MILMED COE, POL, USA and GBR** reported. **NATO MILMED COE** Briefer talked about immunity development in lights of notified COVID-19 reinfections --- The Briefer from **POL** talked about new given directions by the polish Government related to the antigen tests for COVID-19 --- **GBR** Briefer give a short overview of Immunity to COVID-19 in UK --- Summary: • Reinfections have been observed but are also known from other endemic human coronavirus infections. We can expect more cases of reinfections in future. In addition, there appear to be more reinfections, but due to their asymptomatic course, they may not be detected. It is still unclear whether the next infection will be more or less severe. • Studies shown a certain correlation between severity of symptoms and the magnitude of AB response. • We can recognize that T-cells response plays the significant role in fight with SARS-CoV-2 infection. • SARS-CoV-2 seems to induce an immune memory response from previous endemic coronavirus infections. **Next VTC will be postponed to Wednesday 2nd of December with the same topic "The current status of SARS-CoV-2 vaccine development".**

Recommendations

Recommendation for international business travellers As of 19th October 2020	Many countries have halted some or all international travel since the onset of the COVID-19 pandemic but now have re-open travel some already closed public-travel again. This document outlines key considerations for national health authorities when considering or implementing the gradual return to international travel operations. The decision-making process should be multisectoral and ensure coordination of the measures implemented by national and international transport authorities and other relevant sectors and be aligned with the overall national strategies for adjusting public health and social measures. WHO Public health considerations while resuming international travel. **Travel has been shown to facilitate the spread of COVID-19 from affected to unaffected areas. Travel and trade restrictions during a public health event of international concern (PHEIC) are regulated under the International Health Regulations (IHR), part III.** The majority of measures taken by WHO Member States relate to the denial of entry of passengers from countries experiencing outbreaks, followed by flight suspensions, visa restrictions, border closures, and quarantine measures. Currently there are exceptions foreseen for travellers with an essential function or need. **In the case of non-deferrable trips, please note the following** • Many airlines have suspended inbound and outbound flights to affected countries. Contact the relevant airline for up-to-date information on flight schedules. • Check your national foreign office advices for regulations of the countries you´re traveling or regulations concerning your country. • Information's about the latest travel regulations and De-escalation strategy measures you can find at IATA and International SOS. For Europe you will find more information here. **Most countries implemented strikt rules of contact reduction:** • Everyone is urged to reduce contacts with other people outside the members of their own household to an absolutely necessary minimum. • In public, a minimum distance of 1.5 m must be maintained wherever possible. • Staying in the public space is only permitted alone, with another person not living in the household or in the company of members of the own household (for most countries, please check bevor traveling). • Follow the instructions of the local authorities. **Risk of infection when travelling by plane:** The risk of being infected on an airplane cannot be excluded, but is currently considered to be low for an individual traveller. The risk of being infected in an airport is similar to that of any other place where many people gather. If it is established that a COVID-19 case has been on an airplane, other passengers who were at risk (as defined by how near they were seated to the infected passenger) will be contacted by public health authorities. Should you have questions about a flight you have taken, please contact your local health authority for advice. **General recommendations for personal hygiene**, cough etiquette and keeping a distance of at least one metre from persons showing symptoms remain particularly important for all travellers. These include: • Perform hand hygiene frequently. Hand hygiene includes either cleaning hands with soap and water or with an alcohol-based hand rub. Alcohol-based hand rubs are preferred if hands are not visibly soiled; wash hands with soap and water when they are visibly soiled; • Cover your nose and mouth with a flexed elbow or paper tissue when coughing or sneezing and disposing immediately of the tissue and performing hand hygiene; • Refrain from touching mouth and nose; See also: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public • If masks are to be worn, it is critical to follow best practices on how to wear, remove and dispose of them and on hand hygiene after removal.

- WHO information for people who are in or have recently visited (past 14 days) areas where COVID-19 is spreading, you will find here.

Travellers who develop any symptoms during or after travel should self-isolate; those developing acute respiratory symptoms within 14 days upon return should be advised to seek immediate medical advice, ideally by phone first to their national healthcare provider.
Source: WHO and ECDC

European Commission:

On 13 May, the European Commission presented guidelines and recommendations to help Member States gradually lift travel restrictions, with all the necessary safety and precautionary means in place.

On 13 October, EU Member States adopted a Council Recommendation on a coordinated approach to the restriction of free movement in response to the COVID-19 pandemic.

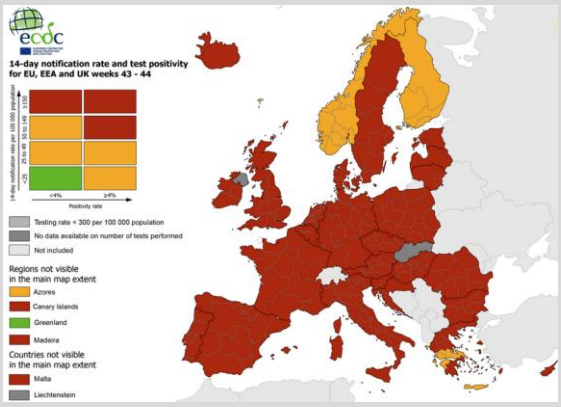
1. Common criteria

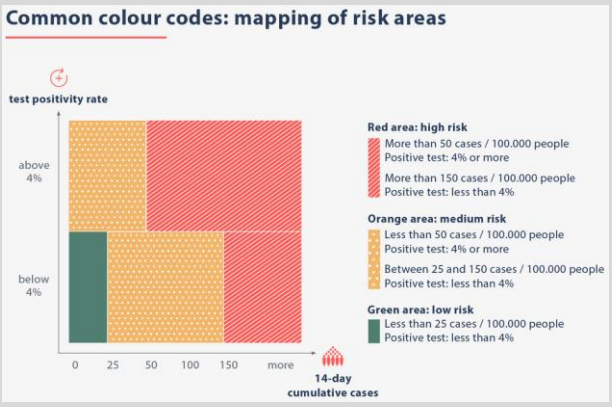
- **the notification rate** (the total number of newly notified COVID-19 cases per 100 000 population in *the last 14* days at regional level)
- **the test positivity rate** (the percentage of positive tests among all tests for COVID-19 infection carried out during the last week)
- **the testing rate** (the number of tests for COVID-19 infection per 100 000 population carried out during the *last week*)

2. A common map
The ECDC will publish a map of EU Member States, broken down by regions, which will show the risk levels across the regions in Europe using a traffic light system. See also "Situation in Europe".

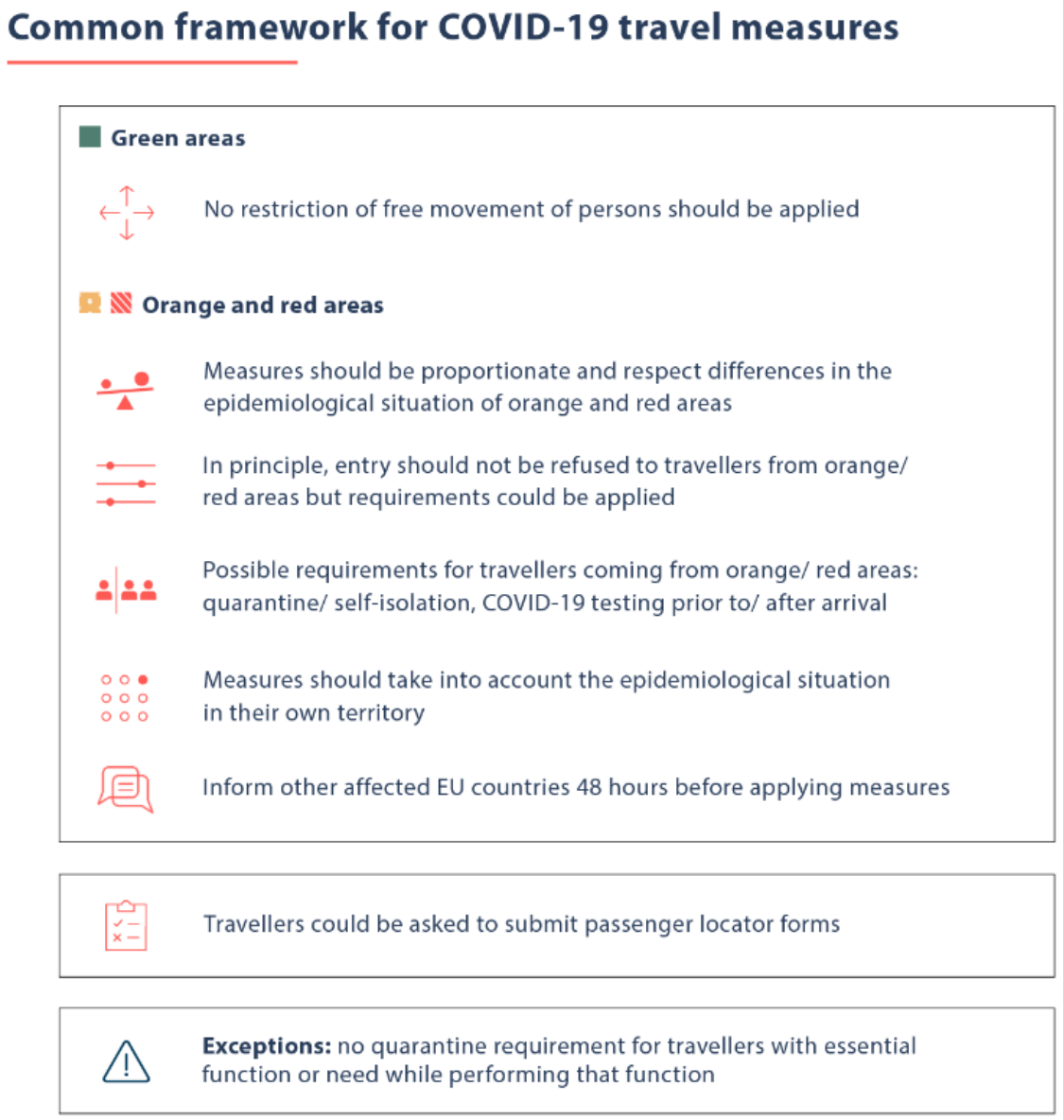
Areas are marked in the following colours:

- **green** if the 14-day notification rate is lower than 25 cases per 100 000 and the test positivity rate below 4%;
- **orange** if the 14-day notification rate is lower than 50 cases per 100 000 but the test positivity rate is 4% or higher or, if the 14-day notification rate is between 25 and 150 cases per 100 000 and the test positivity rate is below 4%;
- **red** if the 14-day notification rate is 50 cases per 100 000 or higher and the test positivity rate is 4% or higher or if the 14-day notification rate is higher than 150 cases per 100 000;
- **grey** if there is insufficient information or if the testing rate is lower than 300 cases per 100 000.





3. A common approach for travellers



4. Clear and timely information to the public about any restriction

As a general rule, information on new measures will be published 24 hours before they come into effect.

All information should also be made available on Re-open EU, which should contain a cross-reference to the map published regularly by the European Centre for Disease Prevention and Control.

More information about traveling in the EU by the European Commission you will find here:
https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/travel-and-transportation-during-coronavirus-pandemic_en
https://www.consilium.europa.eu/en/policies/coronavirus/covid-19-travel-and-transport/

Risk Assessment	
Global	• Because of global spread and the human-to-human transmission the **moderate to high** risk of further transmission persists. • Travellers are at risk of getting infected worldwide. It is highly recommended to avoid all unnecessary travel for the next weeks. • Individual risk is dependent on exposure. • National regulation regarding travel restrictions, flight operation and screening for single countries you will find here. • Official IATA changed their travel documents with new travel restrictions. You will find the documents here. • Public health and healthcare systems are in high vulnerability as they already become overloaded in some areas with elevated rates of hospitalizations and deaths. Other critical infrastructure, such as law enforcement, emergency medical services, and transportation industry may also be affected. Health care providers and hospitals may be overwhelmed. • Asymptomatic persons as well as infected but not sickened persons could be a source of spreading the virus. Therefore, no certain disease-free area could be named globally.
Europe As of 23rd of October 2020	ECDC assessment for EU/EEA, UK as of 23 October 2020: Under the current classification system, based on epidemiological indicators, the epidemiological situation in countries is classified as *stable*, *of concern* or of *serious concern*. The majority of countries in the European region are currently classified as experiencing an epidemiological situation of **serious concern** due to the increasing case notification rates and/or test positivity≥3% as well as the high notification rates in the older age groups and/or high mortality rates. Countries have implemented various non-pharmaceutical interventions, but these have not been sufficiently effective in controlling transmission due to several factors: • adherence to the measures was sub-optimal; • the measures were not implemented quickly enough; • or the measures were insufficient to reduce exposure. As a result, the epidemiological situation is now rapidly deteriorating in most countries. **There are currently only six countries in the region that are classified as experiencing a *stable epidemiological situation*.** • In countries where the epidemiological situation is stable: • the **probability of infection** for the population is **generally low** but **the impact of infection** still **varies** depending on the individuals affected; • the risk for the **general population** in these countries is **low;** • for **vulnerable individuals**, including the elderly and people with underlying medical conditions, the risk is **moderate**. Nevertheless, in these six countries, there is still ongoing transmission and the situation must be closely monitored. **Based on the latest available data to ECDC, there are currently no countries categorised as having an epidemiological situation '*of concern*'.** **In countries where the epidemiological situation is of serious concern:** • there is a **high risk** to the **general population**, • and for **vulnerable individuals** the COVID-19 epidemiological situation represents a **very high risk**. In these countries the continuously increasing trend in notification rates calls for strong public health action in order to prevent the imminent risk that health care systems will be overwhelmed, rendering them unable to provide safe, adequate care.

References:

- European Centre for Disease Prevention and Control www.ecdc.europe.eu
- World Health Organization WHO; www.who.int
- Centres for Disease Control and Prevention CDC; www.cdc.gov
- European Commission; https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/travel-and-transportation-during-coronavirus-pandemic_en
- Our World in Data; https://ourworldindata.org/coronavirus
- Morgenpost; https://interaktiv.morgenpost.de/corona-virus-karte-infektionen-deutschland-weltweit/

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