

Worldwide COVID-19 Situation Report



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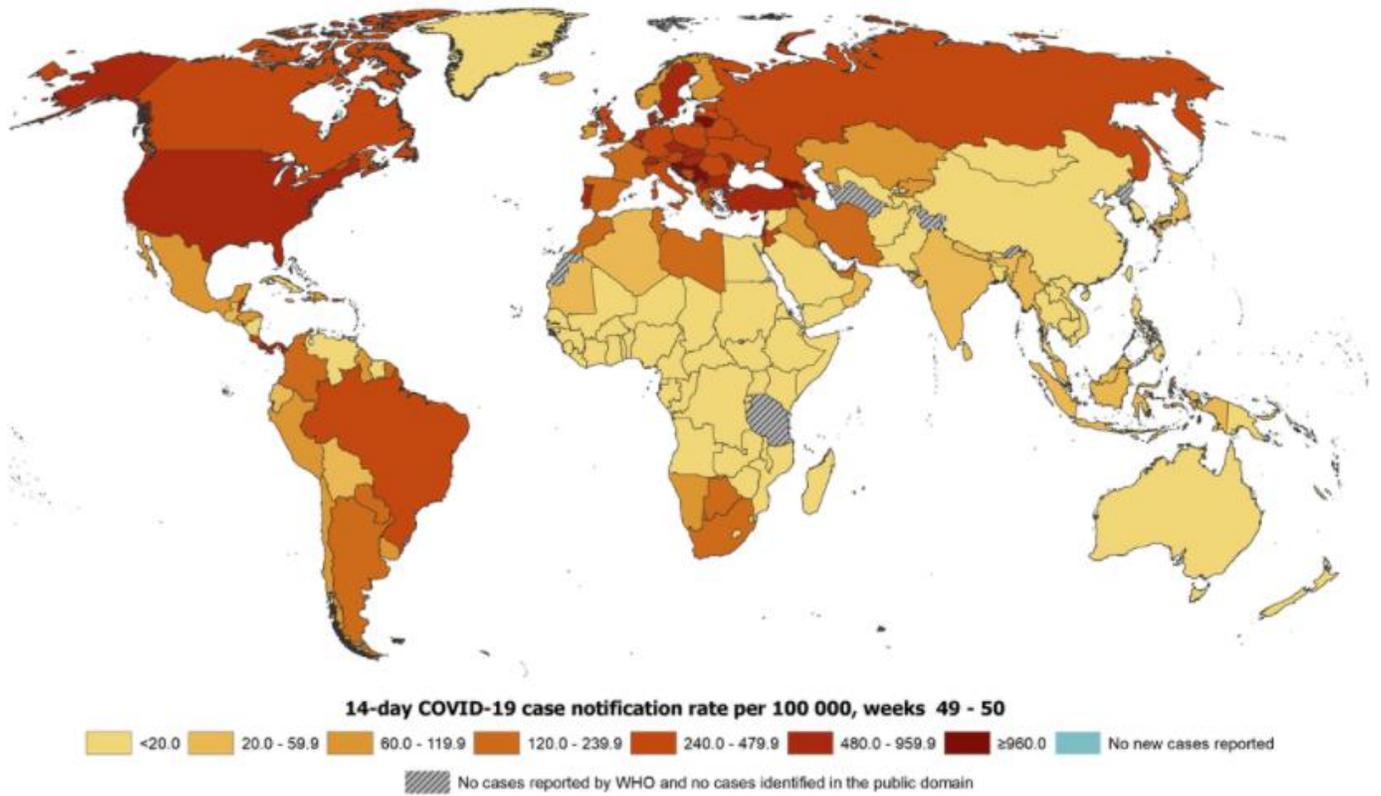
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OVERVIEW

There have been more than 77.7 million cases of novel coronavirus (COVID-19) worldwide and more than 1.7 million deaths. According to the World Health Organization (WHO), the rate of new infections and new deaths increased over the past week, with new cases rising by six percent and deaths by four percent. The majority of new cases over the last week were in North and South America, while most new deaths occurred in Europe. The numbers of new cases and new deaths being reported declined in the WHO-designated Eastern Mediterranean and South-East Asia regions, the former of which is comprised mainly of countries in the Middle East and North Africa, and the latter of which is made up of South and Southeast Asian countries. The highest numbers of new infections over the past week were reported in the United States, Brazil, the United Kingdom, Russia, Germany, Turkey, India, Italy, France, and Colombia.

Note: the European Centre for Disease Prevention and Control (ECDC), from which much of the Worldwide COVID-19 Situation Report's table data is drawn, recently changed its schedule for reporting data from daily to weekly. For this reason, the most recent date in the table for this Situation Report is from December 17. Updated data from the ECDC will be released on December 23 and December 30, and is expected to be updated every Thursday starting in January.

Fourteen-Day Cumulative Number of Reported COVID-19 Cases per 100,000 People



Source: European Centre for Disease Prevention and Control (ECDC)

Confirmed Cases Worldwide as of Tuesday Morning, December 17

Country/Region	December 17	December 8
United States	16,256,754	14,954,332
India	9,884,100	9,703,770
Brazil	6,901,952	6,623,911
Russia	2,653,928	2,488,912
France	2,376,852	2,295,908
United Kingdom	1,849,403	1,737,960
Italy	1,843,712	1,742,557
Spain	1,751,884	1,702,328
Argentina	1,498,160	1,466,309
Colombia	1,425,774	1,377,100
Germany	1,337,078	1,197,709
Mexico	1,250,044	1,182,249
Poland	1,135,676	1,067,870
Iran	1,108,269	1,051,374
Turkey	995,471	545,711
Peru	984,973	975,116
Ukraine	900,666	821,947
South Africa	860,964	817,878
Indonesia	617,820	581,550
Netherlands	612,746	563,608
Belgium	611,284	592,479
Czechia	581,079	551,070
Iraq	574,634	566,015
Chile	571,919	562,142
Romania	556,335	517,236
Bangladesh	490,533	479,743
Canada	460,743	423,054
Philippines	449,400	441,399
Pakistan	440,787	423,179
Morocco	399,609	381,188
Switzerland	372,329	352,875
Saudi Arabia	359,888	358,922
Israel	357,859	347,331
Portugal	348,744	325,071
Sweden	341,029	278,912
Austria	320,036	303,157

Country/Region	December 17	December 8
Hungary	283,870	256,367
Serbia	266,432	226,209
Jordan	259,614	244,069
Nepal	248,423	241,995
Ecuador	202,110	198,244
Panama	193,007	179,230
Georgia	191,063	169,649
Kazakhstan	186,277	180,777
United Arab Emirates	184,949	177,577
Japan	179,653	163,929
Bulgaria	179,449	164,185
Croatia	175,886	152,239
Azerbaijan	175,874	149,765
Belarus	160,295	148,953
Dominican Republic	154,692	149,138
Costa Rica	153,169	146,421
Armenia	148,682	142,928
Bolivia	147,150	145,657
Lebanon	146,520	138,096
Kuwait	146,218	144,599
Qatar	141,121	140,086
Slovakia	132,984	117,283
Guatemala	129,282	125,674
Moldova	126,518	117,495
Oman	126,240	125,115
Palestine	124,657	113,755
Greece	124,534	116,721
Egypt	121,575	118,847
Ethiopia	116,769	113,735
Honduras	114,359	111,023
Tunisia	111,361	104,329
Denmark	109,758	92,649
Myanmar	108,342	100,431
Venezuela	107,177	104,442
Puerto Rico	107,158	99,486
Bosnia and Herzegovina	101,117	94,944

Source: European Centre for Disease Prevention and Control (ECDC), and various media outlets

Confirmed Cases Worldwide as of Tuesday Morning, December 17

Country/Region	December 17	December 8	Country/Region	December 17	December 8
Slovenia	96,314	86,288	Mozambique	16,954	16,326
Lithuania	95,021	77,426	Namibia	16,536	15,219
Paraguay	93,582	88,723	Angola	16,188	15,648
Algeria	92,102	88,825	French Polynesia	15,747	15,107
Kenya	91,892	88,579	Cyprus	15,101	12,867
Libya	90,779	87,097	Democratic Republic of the Congo	14,512	13,749
Bahrain	89,143	88,111	Guinea	13,457	13,264
Mainland China	86,789	86,646	Maldives	13,368	13,213
Malaysia	83,475	74,294	Botswana	12,873	11,531
Kyrgyzstan	77,674	75,690	Tajikistan	12,704	12,469
Ireland	76,185	74,468	Jamaica	11,710	11,184
Uzbekistan	75,094	74,206	Cape Verde	11,357	11,063
North Macedonia	73,638	68,332	Malta	11,254	10,659
Nigeria	73,175	69,645	Zimbabwe	11,246	10,839
Singapore	58,320	58,273	Mauritania	10,971	9,516
Ghana	53,014	52,274	Uruguay	9,708	7,505
Afghanistan	49,273	47,716	Haiti	9,565	9,389
Albania	48,530	43,683	Cuba	9,423	8,906
Kosovo	46,580	43,324	Gabon	9,351	9,278
South Korea	43,484	38,755	Belize	9,295	7,953
El Salvador	41,880	40,345	Syria	9,166	8,490
Montenegro	41,426	38,562	Hong Kong	7,969	7,076
Luxembourg	41,272	38,215	Bahamas	7,674	7,579
Norway	41,003	38,322	Andorra	7,338	7,084
Sri Lanka	32,790	28,580	Guam	7,106	7,019
Finland	30,810	27,881	Trinidad and Tobago	6,879	6,775
Australia	28,031	27,972	Eswatini	6,768	6,529
Uganda	27,532	23,200	Rwanda	6,659	6,191
Latvia	25,675	21,520	Congo	6,200	5,774
Cameroon	25,359	24,752	Malawi	6,066	6,051
Cote d'Ivoire	21,680	21,507	Guyana	5,920	5,697
Sudan	21,386	19,747	Nicaragua	5,887	5,838
Zambia	18,274	17,931	Mali	5,814	5,290
Estonia	18,055	15,226	Djibouti	5,728	5,708
Madagascar	17,638	17,513	Iceland	5,557	5,496
Senegal	17,075	16,553	Suriname	5,353	5,325

Source: European Centre for Disease Prevention and Control (ECDC), and various media outlets

Confirmed Cases Worldwide as of Tuesday Morning, December 17

Country/Region	December 17	December 8
Equatorial Guinea	5,195	5,166
Aruba	5,049	4,966
Central African Republic	4,936	4,922
Somalia	4,579	4,579
Thailand	4,237	4,107
Burkina Faso	4,030	3,315
Gambia	3,782	3,770
Curaçao	3,624	3,136
Togo	3,251	3,111
South Sudan	3,223	3,181
Benin	3,090	3,073
Guinea Bissau	2,447	2,442
Sierra Leone	2,445	2,428
Lesotho	2,285	2,150
Niger	2,258	1,894
Yemen	2,083	2,383
San Marino	1,947	1,800
United States Virgin Islands	1,828	1,649
Jersey	1,779	1,388
Liberia	1,771	1,676
Chad	1,770	1,728
New Zealand	1,740	1,729
Liechtenstein	1,514	1,431
Vietnam	1,397	1,367
Sint Maarten	1,249	1,141
Gibraltar	1,075	1,055
Sao Tome and Principe	1,009	1,002
Mongolia	912	888
Turks and Caicos islands	769	756
Western Sahara	766	766
Taiwan	740	718
Burundi	729	698
Papua New Guinea	725	671
Eritrea	711	649
Diamond Princess Cruise Ship	696	696
Monaco	668	641

Country/Region	December 17	December 8
Comoros	628	616
Faroe Islands	528	510
Mauritius	523	505
United Republic of Tanzania	509	509
Bhutan	438	432
Bermuda	431	306
Isle of Man	373	370
Cambodia	359	350
Cayman Islands	298	290
Barbados	296	287
Guernsey	289	288
Saint Lucia	275	270
Seychelles	202	184
Bonaire, Saint Eustatius and Saba	173	169
Brunei Darussalam	152	151
Antigua and Barbuda	148	146
Northern Mariana Islands	113	111
Saint Vincent and the Grenadines	98	87
Dominica	88	85
British Virgin Islands	80	73
Grenada	69	41
Macau	46	46
Fiji	46	44
Laos	41	41
New Caledonia	36	35
Timor Leste	31	31
Saint Kitts and Nevis	28	25
Holy See	26	26
Greenland	19	18
Falkland Islands (Malvinas)	19	17
Solomon Islands	17	17
Montserrat	13	13
Anguilla	10	9
Marshall Islands	4	4
Wallis and Futuna	3	3
Vanuatu	1	1

SPREAD OF COVID-19: ASIA/PACIFIC

COVID-19 cases in the Asia-Pacific region have climbed to at least 12,640,501, while deaths have reached at least 195,945. Outbreaks are continuing in much of East Asia, with the situations in Hong Kong, Japan, and South Korea proceeding unabated, while new cases have been reported in parts of mainland China and Mongolia. In several countries in Southeast Asia, virus cases remain on a general upward climb, and Thailand has reported a recent spike due to a cluster at a seafood market near Bangkok. India's overall number of new cases continues to fall. In Australia, a significant cluster near Sydney is expanding, with resultant restrictions placed on Sydney and on travel out of the area to other states and territories. While there continues to be progress toward the more widespread rollout of COVID-19 vaccines, there remains a risk of virus clusters emerging in areas where the outbreak was previously under control, as illustrated by the cases of Australia and Thailand, and bringing associated lockdowns and other disruptions.

East Asia

China

- Chinese authorities continue to report mostly imported COVID-19 cases; however, several local infections have been confirmed in recent days, most notably an outbreak in the city of Dalian in Liaoning Province. More than 12 virus cases have occurred in Dalian since December 15, including eight on Monday, of which six were asymptomatic, which the Chinese government does not include in the country's official tally. Officials have again blamed the origin of the cluster on imported frozen products.
 - No widespread lockdown restrictions have been reported in Dalian, but officials are advising residents of Jinpu New Area to remain at home if not out for essential reasons.
 - Other recent cases of local transmission have been reported in Beijing, along with continuing cases in Heilongjiang and Sichuan Provinces.
- Officials in Sichuan Province plan to make COVID-19 vaccines available to the general public beginning in early February after first responders and other at-risk groups are inoculated.

Hong Kong

- Hong Kong's number of new locally transmitted COVID-19 cases has fluctuated between 53 and 78 for the past several days.
- Current social distancing restrictions are being extended until at least January 6, and officials have warned that they may be increased if the outbreak worsens. In-person schooling has been suspended until at least January 10.
- As of Tuesday, flights from the United Kingdom have been suspended due to the new virus strain circulating in the UK.

Japan

- Japan averaged more than 2,700 new COVID-19 cases per day over the past week as the country's outbreak continues to expand. Cumulative infections in the country are now above 200,000, and the death toll has climbed above 3,000.
 - Most recent deaths have been reported in Aichi, Chiba, Hokkaido, Hyogo, Kanagawa, Osaka, Saitama, and Tokyo.
- The medical system remains strained, and the Tokyo government plans to offer additional compensation to hospitals treating COVID-19 patients, along with testing centers and pharmacies that operate for extended hours during the holiday season.

Mongolia

- Lockdown measures are being reimposed in Ulaanbaatar from 6:00 AM local time on Wednesday, December 23, until at least 6:00 AM on January 6 due to additional virus cases detected in the capital. The lockdown is expected to include such measures as the closure of nonessential businesses and stay-at-home orders for those not out for essential reasons.

South Korea

- An average of more than 1,000 new COVID-19 cases were reported daily in South Korea over the last week. The country set new records for daily deaths and daily new infections on multiple days the past week.
- With the hospital system remaining under strain, media sources report that several COVID-19 deaths this month have occurred before patients were able to be admitted to crowded hospitals. Such cases have been reported in Seoul, Gyeonggi Province, and other locations. Hundreds of COVID-19 patients in Seoul have had to wait for two days or more to be accepted at a hospital.
- Private gatherings of more than four people are being banned until at least January 3.

Taiwan

- Taiwan this week announced its first locally transmitted case of COVID-19 since April. The patient had contact with an international pilot who was infected.
 - Taiwan's Centers for Disease Control (CDC) is advising people who were at locations visited by the pilot to monitor their health conditions and seek medical attention if experiencing COVID-19 symptoms. A list of affected locations is available here: <https://www.cdc.gov.tw/En/Category/ListContent/tov1jahKUv8RGSbvmzLwFg?uaid=k72hT71KxrunjgeDZEnDKA>.

Southeast Asia

Indonesia

- Indonesia's COVID-19 outbreak continues to grow, with the country averaging more than 6,900 new daily cases for the past week. More than 20,000 people have now died from the virus in Indonesia.

- Anti-virus restrictions in Jakarta have been extended again and will now remain in place until at least January 3.

Malaysia

- Malaysia averaged around 1,538 new COVID-19 infections daily over the past week, with many new cases continuing to be reported in Kuala Lumpur and Selangor. Overall case numbers are continuing to trend upward.
- Conditional movement control orders (CMCO) remain in place for Kuala Lumpur, Sabah, and parts of Johor, Negeri Sembilan, Perak, Pulau Pinang, and Selangor through at least December 31. In these areas, bars and clubs remain closed, and some other restrictions are in place.
- International students will be allowed to travel to Malaysia starting January 1.
- The government has made deals for COVID-19 vaccines with AstraZeneca and Pfizer/BioNTech, and is working on deals with CanSino Biologics and Sinovac from China, and the Gamaleya Institute in Russia. Some vaccines are also expected to be acquired from the WHO's COVAX program. Malaysian authorities expect to have enough vaccines to inoculate over 80 percent of the population, with vaccinations planned to start in February. First responders and those in at-risk groups will be prioritized for vaccination.

Myanmar

- An average of around 1,067 new COVID-19 cases were reported daily in Myanmar over the past week, with confirmed cases continuing to decline steadily for the past month.
- Private hospitals are expanding COVID-19 testing and treatment in order to assist government hospitals that continue to be strained by the pandemic.
- Lockdown restrictions have been lifted in Mandalay, but the government continues to advise people to avoid crowded locations.
- Parks, lakes, and other such public locations in Yangon have been closed ahead of the holiday period in an effort to prevent any spike in infections due to larger gatherings.

Thailand

- Thailand's COVID-19 cases have spiked over the past few days due to the discovery of a cluster centered on the Mahachai seafood market in Samut Sakhon, southwest of Bangkok. As of Tuesday, more than 1,000 infections connected to the cluster have been confirmed. The majority of cases have been detected in migrant workers from Myanmar employed at the market, and lockdown restrictions have been imposed on the market and its environs.
 - Testing is being carried out for around 10,000 workers and others connected to the cluster.
- Officials have indicated that further anti-virus restrictions may be implemented by later this week, but no details have yet been released on what such directives might entail.

South Asia

India

- India confirmed an average of around 24,135 new COVID-19 cases every day for the last week. Fewer than 20,000 new infections were reported on Monday, the first time the daily number has been that low since the beginning of July.
- India will ban flights to and from the UK starting on Wednesday due to the new virus strain circulating in the UK. The suspension will last through at least the end of the year.
 - Authorities plan to trace anyone who arrived in India from the UK since November 25 for possible testing if they are displaying COVID-19 symptoms.
- Media sources report that the Indian government is expected to approve AstraZeneca's vaccine by next week, with inoculations likely to begin in January.

Oceania

Australia

- Australia's COVID-19 cluster that was detected last week in the Northern Beaches suburb of Sydney has continued to expand, with as many as 90 infections now linked to the outbreak. Residents in the Northern Beaches are under a stay-at-home order.
- Further restrictions have been implemented in the Greater Sydney area in response to the Northern Beaches cluster, including a limit of ten people at home gatherings and limits on the number of people at religious services and other events.
 - The Northern Territory, Queensland, Victoria, and Western Australia have banned entry for those who have been in Greater Sydney and are not traveling for essential purposes, while most other states and territories continue to require quarantines for those who have been in the area.

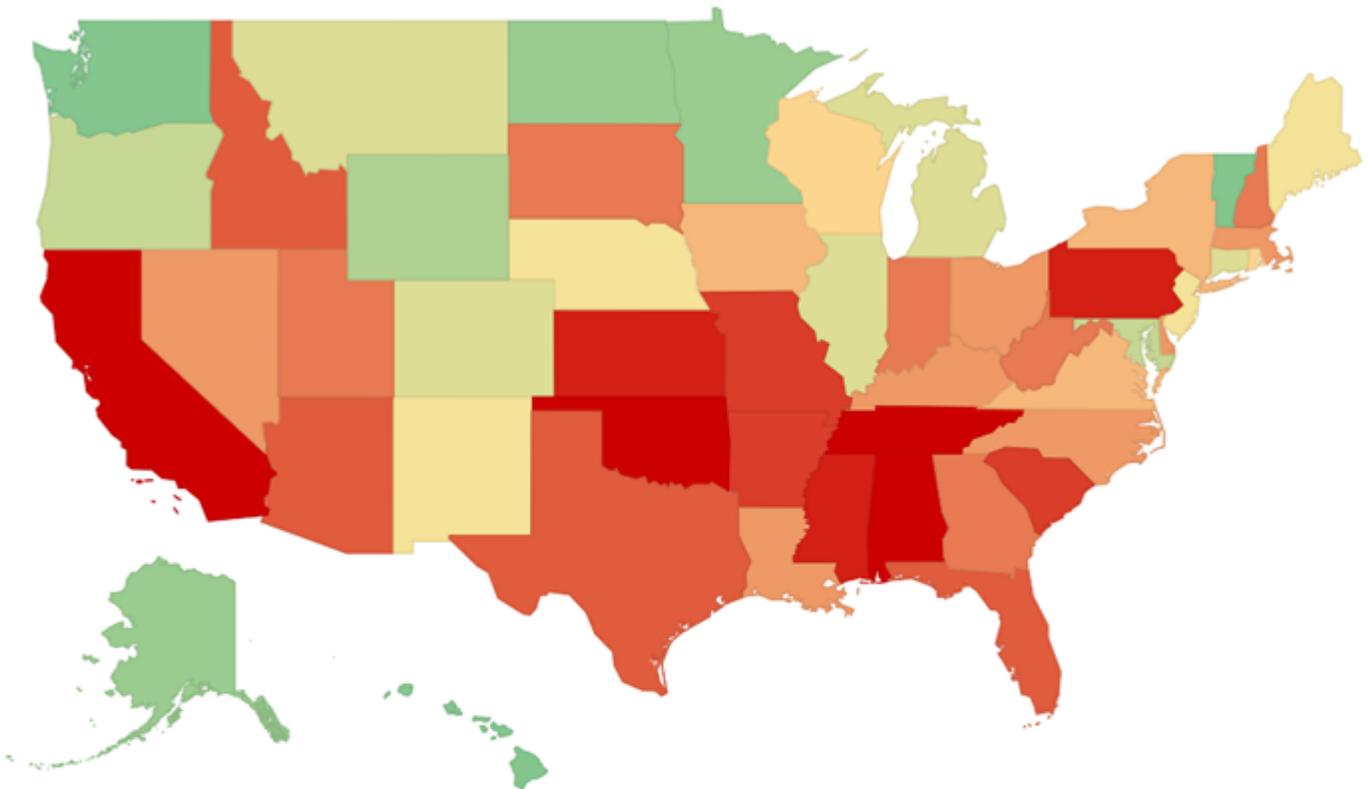
SPREAD OF COVID-19: NORTH AMERICA

United States

The COVID-19 situation in the U.S. remains poor as the country continues to report a record number of cases, hospitalizations, and deaths. The seven-day daily case average has risen to over 215,000 and on Friday, December 18, the U.S. reported over 250,000 cases in a single day for the first time ever. The increases come even as a number of states in the Midwest and Northeast have begun to report decreases in cases, but record numbers have been buoyed by a worsening situation in California, the new epicenter of the U.S. outbreak. While testing has also continued to increase, with the seven-day testing average over 1.8 million, the national test positivity rate has also risen and is now over 11 percent, suggesting that the U.S. is still missing positive

cases and allowing undetected spread of the virus. After reporting a slight decrease in hospitalizations over the weekend, hospitalizations again increased on Monday and over 115,000 people were hospitalized due to COVID-19. The ongoing record increase in hospitalizations has also led to a record number of deaths with the seven-day daily death average now over 2,600. Last week, the U.S. reported over 3,400 deaths in a single day twice and reported over 10,000 deaths in a three-day stretch. Public health officials have warned that travel related to the Christmas holiday could lead to a further surge in cases and have cautioned people to limit travel and gatherings, similar to warnings for the Thanksgiving holiday last month. There are currently 7,359,900 active cases, while an estimated 10,807,200 people have recovered. As of Tuesday, at least 18,057,100 COVID-19 cases and at least 319,827 deaths have been reported throughout the United States.

RIMC COVID-19 Risk Score December 22



Data sources: Johns Hopkins University and Medicine, The COVID Tracking Project

The risk score is displayed as colors, ranging from red (poor/deteriorating situation), to yellow (neutral/relatively stable situation), to green (good/improving situation). The colors generally represent if the situation is deteriorating or improving, the change in the risk of exposure, and the strain on state resources over the past two weeks. The score is comprised of multiple factors, which are weighted according to their relative importance in the status and trend of the outbreak. This includes the number of new cases per one million people in a state (high weight), the number of new hospitalizations per capita (high weight), the percent change in new cases from week to week (moderate weight), the level to which a change in new cases can be correlated with a change in testing (moderate weight), the percent of tests returning positive (high weight), and the percent change in hospitalizations (high weight). The result is an approximation of these trends and factors.

Canada

Canada is also reporting record numbers of new cases and hospitalizations; however, the overwhelming majority of new cases are currently being reported in Ontario and Quebec, much like at the beginning of the Canadian COVID-19 outbreak. The seven-day daily case average has increased to over 6,600 and last week Canada reported its first day of over 7,000 cases. The national per capita rate of new cases has increased to 176.2 per million people; however, Ontario and Quebec are the only provinces currently reporting increases in per capita average. Even as the western provinces of Alberta, Manitoba, and Saskatchewan are reporting decreases, all three provinces are reporting higher per capita rates of new cases compared to the national average and Alberta continues to report the highest of any province at 341.5. Record hospitalizations are also continuing in Canada and as of Monday, over 3,600 people were hospitalized due to COVID-19. Increases in daily deaths are also persisting and the seven-day average has risen to 111. The increases in Ontario and Quebec have led to new restrictions in both provinces with Ontario announcing a new provincewide lockdown beginning on December 26, while Quebec's new restrictions have stopped short of instituting a full lockdown. There are currently 77,361 active cases, while an estimated 423,621 people have recovered. As of Tuesday, at least 515,314 COVID-19 cases and at least 14,332 deaths have been reported in Canada.

Recent Developments

- The U.S. and Canada announced the ongoing border closure to nonessential travel between the two countries would be extended again through at least January 21.
- In response to reports of a new, more infectious strain of COVID-19 in the UK, Canada banned all passenger flights from the UK between December 21 and December 24. Exception to the temporary ban includes cargo flights, technical stops where passengers do not disembark, and emergency or previously authorized situations.
- In response to multiple instances of people receiving the Pfizer/BioNTech COVID-19 vaccine suffering serious allergic reactions, the U.S. Centers for Disease Control and Prevention (CDC) issued a warning recommending that any person who has a known severe allergic reaction to any ingredients in the vaccine to not receive it. People with histories of severe allergic reactions to other medications or things not related to the vaccine may still get vaccinated. Vaccine providers have been advised that everyone receiving the vaccine should be monitored for at least 15 minutes and those with a history of allergic reactions for at least 30. Full CDC advice on allergic reactions and the Pfizer/BioNTech vaccine can be viewed at the following link: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/allergic-reaction.html>.
- The Canadian government announced that the Canada Emergency Wage Subsidy program has been extended through at least March 13, 2021. The program initially began in March 2020 and allows companies affected by COVID-19 a wage subsidy rate of up to 75 percent. Full details on the announcement can be viewed at the following link: <https://www.canada.ca/en/department-finance/news/2020/12/government-announces-wage-subsidy-rate-increase-to-75-per-cent.html>.

- Last week, the U.S. Labor Department announced the number of Americans applying for new unemployment benefits rose to 885,000, the highest weekly number since September. In total, at least 20.6 million Americans are currently receiving some type of unemployment benefits.
- Last week, the U.S. Food and Drug Administration (FDA) authorized the first over-the-counter rapid COVID-19 antigen at-home test. The test was designed by Ellume, an Australian manufacturer, and the company anticipates three million tests will be produced over the next month. The tests will cost US \$30 and be available for purchase at local pharmacies and online. Full details on the FDA authorization can be viewed at the following link: <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-authorizes-antigen-test-first-over-counter-fully-home-diagnostic>.
- On Monday, December 21, armed protesters demonstrated outside the Oregon State Capitol in opposition of ongoing restrictions within the state. Several dozen people participated in the action, which included the group attempting to enter the Capitol after it had been closed for a special legislative session to pass COVID-19 relief bills. The group allegedly used chemical agents and bear spray against law enforcement and at least two people were arrested. While anti-restriction protests have occurred intermittently in both the U.S. and Canada, this marked the most significant action since the spring.

SPREAD OF COVID-19: EUROPE

As of Tuesday, December 22, the cumulative COVID-19 caseload in Europe, the Caucasus, and Central Asia has risen to at least 21,605,000, including more than 497,000 deaths. The biweekly incidence and pace of new infections have continued to rise amid the approaching Christmas period. Several of the most impacted countries in the region, including Denmark and the Netherlands, appear to be moving toward a possible third wave, with cases steadily increasing in recent weeks. Conversely, other countries, most notably Italy and Spain, appear to be bringing their current waves under control, with new cases stabilizing. The increasing rate of new infections and deaths has prompted a growing number of countries to impose anti-infection measures, including France, which introduced a nationwide nightly curfew, and Germany and the United Kingdom, where authorities have closed nonessential businesses and implemented new lockdown measures in an attempt to curtail travel and gatherings. Nevertheless, it is expected that larger gatherings during the Christmas period will heighten the risk of transmission and likely contribute to a sharp spike in new infections in the coming weeks. Moreover, as the pandemic continues to evolve and cases continue to increase, there is a heightened potential for other countries to follow suit and reinstate or harden their COVID-19 restrictions.

The recent emergence of a mutated SARS-CoV-2 variant, known as VUI2020/01, in the United Kingdom has prompted numerous countries both inside and outside of Europe to temporarily ban travel to and from the country. European nations such as Belgium, France, Germany, Italy, the Netherlands, Spain, and Switzerland, have imposed a precautionary ban on travel into their respective territories from the UK for the foreseeable future. It is worth noting that VUI-202012/01 has purportedly also been detected in Belgium, Denmark, and the Netherlands; however, there were no indications of associated bans on travel from mainland Europe into other

countries in the region. Authorities in the UK suggest that this novel strain may have contributed to a recent uptick in case incidence, although it is reportedly not associated with higher morbidity. While initial analyses of the mutant strain indicate that it may be up to 70 percent more transmissible than other COVID-19 variants in circulation, officials have assured that they do not foresee the diagnosis of the mutant strain to have any impact on the progress of the vaccination program currently underway in the UK. The appearance of this new mutant strain coincides with the EU's preparation to authorize a vaccination for use in the bloc's 27 member states. On December 21, the European Commission ratified the BioNTech/Pfizer COVID-19 vaccine following a positive recommendation from the European Medicines Agency (EMA). In response to concerns surrounding the efficacy of the approved inoculation in relation to the newly discovered strain, Emer Cooke, the executive director of the EMA, has stated that "there is no evidence" that the vaccine against COVID-19 is ineffective against the novel strain. While the exact day when vaccine shipments will leave factories is unclear, forecasts suggest that the first immunizations are on course to be administered in the region on December 27, with priority generally awarded to healthcare workers, the elderly, and other high-risk groups. The President of the European Commission, Ursula von der Leyen, has indicated that future authorizations would follow. The EMA is set to review Moderna Inc.'s COVID-19 vaccine candidate on January 6, while also continually reviewing inoculations from Oxford/AstraZeneca and Johnson & Johnson.

- Tier 4 restrictions and travel bans imposed on the UK by other countries are likely to incur supply chain disruptions to businesses from a variety of sectors, such as manufacturing, due to delays in imports and exports or cancellations of deliveries. Most notably, it raises potential concerns about food shortages at a time of year when the UK produces very little of its own food and relies heavily on produce delivered from the continent by road.
- On December 22, approximately 3,000 trucks remained stranded in England following the closure of the border with France, and the backlog will reportedly take days to clear. Over the Christmas period, an estimated 10,000 trucks travel between the port of Dover and the port of Calais per day.
- Germany's airline Lufthansa is readying to cut a further 30,000 jobs this month, with an additional 10,000 anticipated to go in 2021. The airline is currently targeting employee roles abroad; however, next year, Germany-based positions are expected to go due to negative impacts on the aerospace industry amidst COVID-19 restrictions.
- In Britain, the Office for National Statistics revealed that retail sales fell by 3.8 percent in November on the previous month following the imposition of lockdowns and restrictions that shut stores, ending a six-month trend of rising sales. A 19 percent fall in clothing sales followed the closure of most department stores and non-essential shops. Supermarkets and food stores, however, increased sales by 3.1 percent, and the lockdown bolstered online shopping to a record total of 31.4 percent of all spending.

UPDATES AROUND THE REGION:

The daily number of cases in the **United Kingdom** has surged in recent weeks amid the onset of a possible third wave following the identification of a new mutant strain of COVID-19, known as VUI2020/01. Despite this, the number of daily deaths has fluctuated during this time. The largest daily case jump was recorded on December

20, and the greatest number of mortalities occurred on December 16, totaling 35,928 and 612, respectively. Hospitalization rates are high in eastern England, with some cities exceeding hospitalization levels from the first wave of the pandemic. The nation's death toll currently stands at 67,616, second only to Italy in the bloc. In response to the spike in infections and the new COVID-19 variant, Prime Minister Boris Johnson announced tougher restrictions for parts of South East England, including London, which moved into a new Tier 4 on December 20, wherein residents are to stay at home with the exception of essential activities until further notice. Media reports have emerged indicating that additional police units are being deployed to major transport hubs across the affected areas to enforce compliance with restrictive measures. Furthermore, in an effort to address rising daily case incidence in their respective nations, the governments of Northern Ireland, Scotland, and Wales have announced lockdowns. In Northern Ireland, a lockdown is expected to begin on December 26 and will likely entail closing all non-essential retail establishments and limiting the hospitality sector to takeaway services. From December 26, mainland Scotland will be locked down for at least three weeks, resulting in non-essential shops, cafés, pubs, restaurants, and hairdressers to close. Only essential travel will be permitted. In Wales, non-essential shops, close contact services, gyms, and leisure centers are closed as of December 20. As of this writing, there has been no indication as to how long these measures are expected to remain in effect.

The British Ministry of Health has highlighted that the new novel variant may be associated with faster proliferation, with estimates indicating that it may be up to 70 percent more transmissible than other variants in circulation. Nevertheless, it is unknown at this time to what extent the increase in infections in all age groups is due to the new strain. Although the new variant is primarily concentrated in Tier 4 areas in England, it is also present in lower tiered areas around the country. Public Health England has emphasized that every region has recorded cases and the county risks seeing a continuous upsurge if infections are allowed to spread further. Tier 4 rules will be reviewed on December 30, as part of the wider review of all tier restrictions, with updated guidance expected. The possibility that further restrictive measures on movement and/or gatherings may be imposed across England in the coming days and weeks in an effort to curb viral spread cannot be discounted. While there is no indication that the new variant is more lethal than current or previous COVID-19 iterations, several European nations, including Belgium, France, Germany, Italy, the Netherlands, Spain, and Switzerland, have temporarily banned travel to and from the UK. It cannot be ruled out that other countries take similar action in the coming weeks. Investigations into potential consequences of this outbreak are ongoing, despite preliminary analyses indicating that the emergence of the strain is unlikely to impinge vaccination efforts in the UK and potentially elsewhere.

Media reports have emerged indicating that associated restrictions and travel bans are resulting in disruptions to cargo transport, and British ports, which have already been under pressure due to COVID-19 restrictions and a recent surge in worldwide container traffic, are under increasing strain. Disruptions to cargo transport may result in shortages of produce and associated rising prices within the UK in the coming weeks. Moreover, Royal Mail has reportedly suspended deliveries of packages and letters from the UK to mainland Europe, and postal services from other countries in the region, such as Germany, to the UK have likewise been suspended until further notice. It is recommended to be observant to the potential for disruptions to supply chains throughout the UK and potential future shortages of produce in the country.

During the past two weeks, daily new infections have been surging rapidly in the **Netherlands**, with daily cases numbering over 6,000 since December 8, continuing the trend of rising infections after the December 5 gift-giving celebrations marking the birthday of Saint Nicholas. On December 20, the country recorded 13,032 infections, the largest single daily figure documented since the onset of the pandemic. Conversely, daily new deaths have reached a plateau in the past two weeks, with the highest number of deaths being recorded on December 15 and 18, with 86 and 84, respectively, before dropping off in recent days. The upturns have ushered in a five-week lockdown across the nation, which is in effect as of December 15, and expected to last for a period of five weeks. Public places such as gyms, museums, cinemas, and hairdressers are closed until January 19, while supermarkets, banks, and pharmacies remain open. Schools are closed until January 18. Residents are advised to stay at home whenever possible and households are not authorized to have more than two visitors, with the exception of December 24 to 26, when they can welcome up to three. Possible changes to restrictive measures for the Christmas season and the start of the new school year in January will be reviewed by government officials and, if ratified, will be announced in the coming days. Health Minister Hugo de Jonge has announced that vaccinations are expected to begin being administered on January 8 with the first injections allocated for healthcare workers.

Daily new cases in **Italy** have been on a downward trend since mid-November. On December 22, 10,870 new infections were recorded, marking a 62 percent decrease from the 28,334 infections documented on November 22. Nonetheless, the nation is currently experiencing the highest number of daily deaths since the end of March, with an average of 615 deaths per day between December 8 and 22. While daily new deaths have dropped slightly in the past few days, such downturns have been seen previously and were followed by surges; as such, there were 887 deaths recorded on December 10 and a further 846 documented on December 15. The nation has now suffered 69,214 COVID-19-related fatalities, surpassing the UK as the most impacted European country. Despite recent promising trends, the possibility that daily case incidence and daily new deaths may rise significantly in the foreseeable future cannot be ruled out. Indeed, the health ministry recently announced that an estimated one in 30 Italians have been infected since the virus first appeared in the country in February. Many Italian regions are under partial lockdown, under a three-tier system, and a ban on travel between different regions from December 21 to January 6 has been announced. In addition, people will not be allowed to leave their hometowns on December 25 and 26 and January 1, aside for certain exemptions. Churches will remain open; however, a daily curfew from 10:00 PM to 5:00 AM may stymie Midnight Mass participation. Restrictions are variable on a regional basis, and it is advised to continue monitoring developments associated with local measures.

Infection rates and mortalities in **France** have declined sharply since the peak of the second wave last month and have remained constant during the past two weeks. There were some 5,797 cases and 351 deaths recorded on December 22, representing decreases of 58 percent and 29 percent, respectively, between December 8 and 22. Prime Minister Jean Castex lifted the lockdown on December 15, as daily infection rates and hospital intensive care unit occupancy remained below the prescribed thresholds. In a further attempt to prevent a new uptick in COVID-19 infections, a nationwide nightly curfew is in effect between 8:00 PM and 6:00 AM local time, with the exception of December 24, and will remain in place until at least January 20. Travel between regions in France is permitted and establishments such as schools and shops are open. Restaurants, cafés, cinemas, museums, and ski resort lifts remain closed, along with universities, which will be closed until at least February.

On December 20, the government barred the entry of trucks from the UK for 48 hours in response to the outbreak of the mutant strain. On December 22, an agreement was reached between the respective countries' governments, whereby passengers from the UK have been permitted to enter France from December 23 with a negative COVID-19 test result. Health officials continue to warn of the risk of a third wave of infection if people fail to heed the advice of health authorities in the coming weeks.

The epidemiological situation in **Germany** has deteriorated consistently since December 8. The average number of new daily COVID-19 infections has undergone an increase in recent weeks. On December 18, health officials documented 31,553 new cases and 838 new deaths, the highest single-day respective totals to date, and both metrics appear to be on an upward trajectory. In response to this uptick, President Frank-Walter Steinmeier has tightened measures in an attempt to curb daily infection numbers amidst the festive period. A new nationwide lockdown was implemented on December 16 and is slated to last until January 10, whereby all non-essential shops will be closed, and gatherings will be limited to a maximum of five people from two households. Nevertheless, the possibility that additional restrictive measures will be imposed in the next week, both locally and nationally, cannot be ruled out. Health Minister Jens Spahn has indicated that COVID-19 vaccinations are expected to begin being administered on December 27, with the first doses reportedly designated for occupants of care homes.

In **Spain**, data from the health ministry also showed 7,530 new COVID-19 cases were recorded on December 22, bringing the total number of infections since the onset of the pandemic to 1,830,110. Nonetheless, there has been a stable drop in daily case incidence in recent days, following a surge between December 15 and 18, which resulted in a high of 10,419 infections being documented on December 18, the highest daily total in over a month. The period since December 8, meanwhile, has been characterized by sporadic spikes in daily deaths. The mean number of daily mortalities recorded during the past fortnight is 192, the highest average in a month. It is worth noting that, while daily new deaths have shown a promising trend in the past few weeks, an uptick in daily deaths is possible in the foreseeable future alongside a potential surge in daily new infections during the Christmas period. In response, the government has approved a set of directives for the period between December 23 and January 6 to stem possible resurgent infections. During this window, travel between regions will be allowed, provided people are visiting friends and family. Social gatherings on December 24, 25, and 31, and January 1 will be limited to ten people. Curfews remain in effect across the country, with variability by region in the times between which movement is prohibited; curfews begin between the hours of 10:00 PM and 12:00 AM local time depending on location and end at 6:00 AM. Regional governments, however, can modify curfew times and can also close regional borders for travel if deemed necessary. The current nationwide curfew will be extended to 1:30 AM on December 24 and 31.

Health authorities in **Portugal** documented 98 COVID-19-related deaths on December 13, the highest daily total since the inception of the virus. After a relatively mild first wave, daily cases rose sharply in the second, but have plateaued in recent weeks. Daily deaths on the other hand, have numbered above 55 since December 8, representing the greatest average death toll across a given two-week period to date. President Marcelo Rebelo de Sousa extended the state of health emergency until December 23, with media reports suggesting that it is expected to be further extended until January 7. Under the state of emergency, working from home is mandatory for people in the top three of the four tiers, affecting more than 80 percent of the population. These

areas also have a curfew in place between 11:00 PM and 5:00 AM local time. Despite such restrictions, rules have been relaxed. Namely, travel between regions will be allowed from December 23 to 26, and on December 24 and 25, the curfew will be from 2:00 AM to 5:00 AM. Government officials have indicated that a vaccination plan is projected to have almost one million people vaccinated against COVID-19 between January and April.

In **Denmark**, daily new cases have been on an upward trajectory since December 8. There were some 4,508 cases recorded on December 18, a new record, while 21 deaths were documented on December 21, the highest number since early April. Daily new deaths have experienced an uptick over the past few weeks after having held steady since the first wave of the pandemic. To address these trends, additional restrictions have been imposed nationwide to mitigate the spread of COVID-19 from December 16, whereby catering establishments are only authorized to offer takeaway services and facilities such as gyms, museums, cinemas, and sports centers are closed. Furthermore, all retail businesses, with the exception of supermarkets, pharmacies, and other stores which sell daily essentials, will be closed from December 25 through January 3. Travel between different regions of the country is authorized, and health authorities have no plans at this time to impose travel restrictions.

Daily case incidence in the **Czech Republic** has been rising since December 8 and there were 3,387 cases documented on December 22. Daily new deaths have been increasing, although they appear to have possibly reached a plateau in the past few days. There were 86 deaths recorded on December 22, compared with the 128 deaths on December 15, which marked the highest single-day death toll since November 28. In an effort to curb the spread of COVID-19 in the country, new restrictive measures are in effect as of December 18, whereby restaurants, hotels, and indoor sports venues are closed, public gatherings will be limited to six people, both inside and outside, and there is a nationwide nightly curfew between the hours of 11:00 PM and 5:00 AM local time. Retail establishments remain open. The possibility of further restrictions being imposed in the future in the event of a spike in new cases and deaths in the coming weeks cannot be discounted.

SPREAD OF COVID-19: LATIN AMERICA AND THE CARIBBEAN

As of Tuesday, December 22, the cumulative COVID-19 caseload in Latin America and the Caribbean has risen to at least 14,837,727. This amounts to an increase of 8.6 percent since the last worldwide Situation Report was issued on December 8, which is very close to the 8.4 percent increase observed during the previous two-week period. Over the last week, both Brazil and Colombia have broken their previous records for the most new cases of COVID-19 recorded in a single day. Brazil continues to report the highest cumulative caseload in the region (7,263,619), followed by Argentina (1,547,138), Colombia (1,518,067), Mexico (1,325,915), Peru (997,517), and Chile (589,604). The region-wide death toll has climbed to 489,178.

Many countries across Latin America and the Caribbean have ratcheted up mobility restrictions ahead of the upcoming holidays. Nevertheless, public non-compliance with anti-infection measures remains a widespread

challenge, and it is expected that Christmas and New Year's Eve gatherings will likely contribute to a sharp spike in new infections in the coming weeks.

In recent days, several countries throughout the region (including Argentina, Chile, and Colombia) have suspended commercial flights to and from the United Kingdom, after a new and potentially more contagious mutant variant of COVID-19 was discovered in the country. Some Latin American governments have taken even more stringent measures. Peru, for instance, has banned all flights to and from Europe for at least two weeks. Concerns about the growing number of infections in Brazil have similarly led to Uruguay and Suriname once again closing their land, air, and maritime borders to all non-essential traffic. Given the current trajectory of the situation, it appears likely that additional governments throughout Latin America and the Caribbean will reinstate more stringent border controls and movement restrictions in the coming days and weeks.

Latest Developments in Worst-Affected Countries

Brazil

- The average number of new daily COVID-19 infections across Brazil has risen sharply over the last week, surpassing the previous record that had been set in July.
- Public health authorities have expressed concern that the public will increasingly flout health protocols with the onset of summer. Beaches in Rio de Janeiro and other parts of the country have grown increasingly crowded in recent weeks.
- Starting on December 30, all new arrivals from foreign countries will be required to provide proof of a negative RT-PCR (real-time reverse transcription polymerase chain reaction) COVID-19 test to their airline prior to departure. The test must be administered no more than 72 hours beforehand.
- Brazil's Federal Supreme Court has issued an injunction allowing state governments to purchase COVID-19 vaccines that have been approved by international health agencies, even if they have yet to be authorized by the Brazilian National Health Surveillance Agency (ANVISA).

Argentina

- The average daily incidence of new COVID-19 cases in Argentina has risen over the last week and a half.
- On Tuesday, December 22, the Argentine Ministry of Health indicated that it was assessing the prospect of closing the country's borders once again, as was done at the onset of the pandemic. Epidemiologists have indicated that they are currently more concerned about the rising number of infections in neighboring Brazil than the emergence of the new COVID-19 variant in the UK.

- The administration of President Alberto Fernández has reportedly come close to striking a deal with U.S. drugmaker Pfizer that would guarantee Argentina 1,500,000 doses of the company’s COVID-19 vaccine between January and March.

Colombia

- The average number of new daily cases of COVID-19 across Colombia has sharply increased over the last week, surpassing the previous record that was set in August. The country’s cumulative caseload has surpassed the milestone of 1.5 million.
- Public health officials have attributed the “second wave” of infections to the uptick in holiday gatherings. Multiple cities have reintroduced more stringent anti-infection measures.
 - Starting on Monday, December 21, Bogotá reinstated a series of mobility restrictions known as “*pico y cédula*.”
 - While the policy is in effect, each family must designate a single individual to leave the home for shopping, banking, etc. Individuals with IDs ending in even numbers are permitted to leave the home for such errands on odd-numbered dates, and vice versa.
 - Exceptions are granted for healthcare needs, trips to the pharmacy, and legal/financial services requiring the presence of multiple people.
 - The policy is slated to remain in effect through January 15.
 - In Medellín, the *pico y cédula* policy will be in effect from December 22 through December 31. Additionally, a continuous curfew will run from 8:00 PM local time on December 24 to 6:00 AM on December 26, and from 8:00 PM on December 31 through 6:00 AM on January 2.
 - In Cartagena, *pico y cédula* will be observed in 11 districts from December 22 until January 16.

Mexico

- The average daily incidence of new COVID-19 infections in Mexico has fluctuated over the last week, remaining slightly below the record high that was set in early December.
- On Saturday, December 19, Mexico City and the surrounding state of Estado de México reverted to the “red” level of the country’s color-coded “traffic light” reopening program. Both are tentatively slated to remain in this phase at least through January 10.
 - The “red light” is the most restrictive level of lockdown. It necessitates the closure of all non-essential businesses and activities. Essential sectors that will remain exempt include industry/manufacturing, healthcare, energy, financial services, grocery stores, take-out food, public transit, funeral services, construction, and various repair shops.

- The Mexico City Metro has temporarily shut down service to multiple stations in an effort to curb non-essential movement.
- Hospitals across Mexico City are reportedly 82 percent full, and those throughout Estado de México have reportedly exceeded 75 percent of their maximum capacity.
- Nevertheless, numerous activist groups have organized marches throughout downtown Mexico City to protest against the anti-infection measures. More demonstrations of this nature will likely take place while the “red light” restrictions remain in effect.
- Dr. Mike Ryan, the executive director of the WHO’s Health Emergencies Program, has stated that Mexico never truly emerged from the “first wave” of COVID-19 infections to grip the country.

Peru

- The average number of new daily COVID-19 cases in Peru is at roughly the same level as it was two weeks ago, following moderate fluctuation.
- As of this writing, Lima has not yet finalized any deals with drugmakers to purchase COVID-19 vaccines. This can be largely attributed to the political turbulence that the country has recently experienced, having three different presidents in less than a week in early November.
- Still, the Peruvian Ministry of Health reports that the country will receive its first COVID-19 vaccines through the World Health Organization’s COVAX (COVID-19 Vaccines Global Access) program in the first quarter of 2021.
- Due to concern about the emergence of a new and potentially more infectious variant of COVID-19 in the UK, President Francisco Sagasti announced a two-week ban on all flights to and from Europe on Monday, December 21.

Chile

- The average number of new daily COVID-19 cases throughout Chile has steadily risen since early December, reaching a level not seen since early August.
- Troops from the Chilean Army have been tasked with manning checkpoints and conducting audits throughout the Santiago Metropolitan Region, to ensure compliance with the latest COVID-19 restrictions. Last week, the capital reverted to a more stringent set of anti-infection measures under the country’s “Paso a Paso” (Step by Step) reopening plan.
- The Chilean Army has evacuated 36 infected personnel from the Bernardo O'Higgins Riquelme Base in Antarctica. The outbreak marks the first time that COVID-19 has appeared on the continent.

Other Updates around the Region

- The average number of new daily COVID-19 infections in **Belize** hit a record high on December 9, but has since fallen sharply. An indefinite nationwide nightly curfew from 8:00 PM to 5:00 AM entered into effect on December 20.
- **Ecuador** declared a 30-day state of emergency on December 20. All travelers arriving from or transiting through the European Union, the UK, Australia, or South Africa must present a negative PCR test that was taken within the last ten days. A 15-day nightly curfew from 10:00 PM to 4:00 AM was also enacted, along with restrictions on alcohol and new maximum occupancy limits for stores, hotels, and restaurants. All social gatherings have been capped at ten people, and new driving restrictions have been imposed.
- **Honduran** authorities have announced that all mobility restrictions will be lifted between the hours of 5:00 AM and 10:00 PM on December 24, 25, 31, and January 1. Bars and nightclubs will be required to remain closed.
- **Puerto Rico** received 47,500 doses of Moderna’s COVID-19 vaccine on Monday, December 21. Another shipment with 21,400 doses of the Pfizer/BioNTech vaccine is scheduled to arrive on Wednesday. Authorities have indicated that the doses should be sufficient to inoculate all of the territory’s front-line medical personnel, police officers, firefighters, and utility workers.
- In an attempt to stem new imported cases of COVID-19, **Suriname** closed all of its land, air, and maritime borders on December 22. Exceptions will be granted for select categories of essential travel.
- Starting on Monday, December 21, **Uruguay** closed all of its land, air, and maritime borders to non-essential travel. More than 500 troops from the nation’s army and navy have been deployed to 25 checkpoints along the border with Brazil and Argentina. All borders will remain open to the flow of cargo and humanitarian aid.

SPREAD OF COVID-19: MIDDLE EAST AND NORTH AFRICA

As of December 22, the cumulative COVID-19 caseload for the Middle East and North Africa (MENA) region has risen to 7,191,166, including 139,268 virus-related deaths. This amounts to an increase of about 28 percent since the last Worldwide Situation Report was issued on December 8, compared to approximately 20 percent from November 25-December 7. The large jump is likely at least partially due to a recent change in reporting methods in Turkey which led to the country recording approximately a 140 percent increase over the past two weeks, skewing overall data upward, as most countries individually recorded decreasing infection rates, with only a handful experiencing slight rises. Turkey has taken over as the worst-affected country in the region in terms of total caseload, followed by Iran, Iraq, Pakistan, and Morocco.

Despite most countries appearing to have gained control of their outbreaks, health experts warn of a general resurgence during the upcoming Christian holidays and the New Year, as civilians gather for celebrations and ceremonies both outdoors and indoors. Concerns of a resurgence also arose as mutated strains of the virus were detected in the United Kingdom (UK) and South Africa over the past few days, causing many countries to either completely shut down their borders or suspend travel to and from effected nations. Although not much is currently known about the variant strains of COVID-19, officials speculate that existing vaccines will still be effective against it. Indeed, over the past two weeks, MENA countries have increasingly authorized the use of various vaccines, including the Pfizer, Moderna, and Sinopharm vaccines. Although nationwide vaccination campaigns breathe new hope into promises for economic recovery and return to normalcy in the long term, inoculation programs may not be significantly effective in the immediate future. Concerns remain regarding how effective vaccines will be, and accessibility to vaccines in poorer countries and refugee camps. Moreover, the introduction of the vaccine, coupled with general sense that the pandemic has died down, may lead to people becoming increasingly negligent regarding anti-virus measures. As such, most nations are likely to continue familiar anti-COVID-19 measures for the foreseeable future, and renewed internal lockdowns are possible in some areas where the outbreak is worsening.

The rate of infection across the region has accelerated over the past two weeks, compared to a relatively stable period between August and November. However, most nations witnessed decreasing rates of infection or negligible increases, suggesting the jump may be attributed to the significant resurgence seen in Turkey over the past two weeks.

- The rate at which COVID-19 is spreading throughout the MENA region has increased since the last worldwide Situation Report was issued on December 8 to 27.91 percent, compared to 19.39 percent from November 25-December 7.
- Case incidence has increased over the past two weeks in Israel (9.38%), possibly due in part to recent Hanukkah celebrations, which saw large crowds gathering, reportedly ignoring social distancing directives.
- As the rate of infection continues to rise in Egypt (6.25%), on December 20, an official stated that the true number of infections is at least ten times the official number. The country also recorded its highest number of daily cases since July on December 21, at 718 cases over the previous 24 hours.
- Saudi Arabia recorded only eight virus-related deaths over the past 24 hours, marking the lowest death toll since last spring, as the rate of infection (0.62%) continues to decline.
- Other countries in the Gulf, including Qatar (1.5%), Oman (2.25%), Kuwait (2.28%), and Bahrain (2.65%), continue to boast the slowest rates of infection, suggesting the Gulf region has largely gained control of the virus outbreak.

Concerns of a resurgence of the virus intensified over the past week, following the detection of variant strains of COVID-19 in the UK and South Africa. In response, a handful of countries have implemented travel restrictions, either completely closing borders or suspending flight from effected countries. Cargo transport via airplanes, ships and trucks are largely excluded from the border lockdowns.

- In Saudi Arabia, the government announced on December 21 that all international flights have been suspended for one week, except for foreign travelers currently in the Kingdom returning to their

country of origin. Additionally, entry to the Kingdom through land and seaports is suspended for one week. Saudi Arabia has also put the year-round umrah pilgrimage on hold.

- Beginning December 23 Pakistan will temporarily suspend all travel to and from the UK. All travelers who have been in the UK over the previous ten days will not be allowed entry.
- In Kuwait, the government announced the suspension of all passenger flights and the closure of all land and sea borders from 11:00 PM local time on December 21 through at least 11:59 PM on January 1. Furthermore, the Ministry of Health announced that all citizens and residents who arrived in Kuwait from the EU or the UK between December 11 and 21 must get a COVID-19 test on the fifth and tenth days after their arrival.
- The Turkish government announced on December 21 that, effective immediately, all flights to and from the United Kingdom, Denmark, the Netherlands, and South Africa have been temporarily suspended, though an end date has not been specified.
- On December 20, Iran suspended flights to and from the UK for two weeks.
- On December 21, Tunisian authorities suspended all travel between the UK, US, South Africa, and Australia, indefinitely.
- On December 20, Israel's coronavirus cabinet barred entry to foreign nationals, and mandated a ten to 14-day quarantine in government-run centers, depending on whether or not they agree to be screened for the virus. Previously, returnees could choose to isolate at home. Lawmakers also imposed a ban on foreigners arriving from the UK, South Africa, and Denmark.
- In Oman, land, air, and sea borders will also be shut for one week, beginning Tuesday, December 22, though cargo is reportedly not affected. Despite the border closures, there are reportedly no current plans to reintroduce internal lockdowns.
- On December 21, Algeria temporarily suspended the evacuation of Algerian nationals from the UK.
- On December 22, Iraq announced the closure its land borders and suspension of all passenger flights to and from the UK, South Africa, Australia, Denmark, the Netherlands, Belgium, Iran, and Japan, for two weeks, beginning December 24. Cargo operations are exempt from the closures.

MENA nations have increasingly authorized the use of various vaccines, as country-wide inoculation campaigns are initiated. Concerns remain regarding the effectiveness of the vaccines, and accessibility to vaccines in poorer countries and refugee camps.

- On December 21, Iraq's health ministry announced that a deal with Pfizer has been reached to receive 1.5 million doses of their vaccine in early 2021. As the vaccine requires two injections, the order is expected to cover just 750,000 of Iraq's 40 million people.
- Qatar approved the Pfizer vaccine for use on December 20.
- Oman is set to receive its first Pfizer vaccine shipment on Wednesday, December 23, with the initial phase of inoculation covering 20 percent of the population. The Gulf country is expected to begin vaccinations on December 27.
- Algerian President Abdelmadjid Tebboune announced on December 20 that COVID-19 vaccination will begin in the country in January, though the provider of the vaccine has not been specified.

- On Monday, December 14, the UAE began COVID-19 vaccinations in Abu Dhabi using the Sinopharm vaccine. Bahrain has also authorized use of the Sinopharm vaccine, as well as the Pfizer vaccine.
- Egypt's Dar al Iftaa, the government's principle Islamic legal institution, announced permission for Muslims to use COVID-19 vaccines, even if they contain pig derivatives, as the consumption of pork is forbidden in Islam, on December 21.

Despite widespread vaccination campaigns beginning across the region, enhanced internal lockdown measures continue to be reported in countries where the virus spread is worsening. Familiar anti-COVID-19 measures, including social distancing and mandatory face mask use are likely to continue in the coming months. A few countries are also relaxing anti-COVID-19 measures for the upcoming holidays.

- Israel's health minister stated on December 22 that a third lockdown is the country's only option to stop the spread of the virus, which has accelerated over the past two weeks, though, as of this writing, no such decision has been made.
- Tunisian authorities decided to extend the nationwide curfew from 8:00 PM to 5:00 AM local time until "mid-January" on December 21. Additionally, a ban remains in effect on all private and public gatherings, and travel is banned between regions.
- On December 21, Egypt's Education Ministry announced that school attendance is no longer mandatory, through January 10.
- In Pakistan, "smart lockdowns" were put in place in four more areas of Karachi, including Model Colony, Korangi, and Shah Faisal Town, for two weeks, starting December 20, as localized lockdowns continue to be implemented in COVID-19 hotspots.
- On December 17, Palestinian authorities announced a two-week lockdown in the West Bank, including extending a current 7:00 PM to 6:00 AM local time curfew on weekdays, and a full lockdown on weekends. The lockdown also includes the closure of all educational institutions, restaurants, and gyms. Entering and leaving Israel for work will also be banned.
- Beginning December 23, a nationwide curfew from 9:00 PM to 6:00 AM local time will be in effect in Morocco for three weeks. Other measures include the daily closure of restaurants by 8:00 PM, and a ban on all public and private gatherings.
- Turkish authorities announced on December 18 that in-person education will not resume until at least February 15, pushing back a previous target date of January 4.
- Lebanon has eased some restrictions in anticipation of upcoming Christian holidays and New Year's celebrations. From December 23 to January 3, the tourism sector's working hours will be extended to 3:00 AM local time, and outdoor and indoor gatherings will be permitted at 50 percent and 25 percent capacity, respectively, with total attendance not to exceed 100 people.

SPREAD OF COVID-19: SUB-SAHARAN AFRICA

Since the last Worldwide COVID-19 Situation Report was issued on December 8, the number of COVID-19 cases in sub-Saharan Africa has reached over 1.6 million. The number of deaths has also increased to more than 37,000. The total caseload and pace of new infections have continued to gradually rise in recent months, suggesting that the region is slowly entering a second wave of infections, following its first peak in July and a plateau around September and October. The worst-affected country in the region, South Africa, has confirmed its second wave, and has blamed it on the emergence of a new variant of the virus that could be more virulent. This has prompted a growing number of countries to restrict travel to and from South Africa, and others could follow suit over the coming days and weeks. As the pandemic has continued to escalate across the region, several countries have also reintroduced curfews, lockdowns, and other anti-infection measures, potentially heightening the risk of disruptions to business operations, travel, and supply chains. With the holiday season approaching and many countries reporting growing fatigue with social distancing and other guidelines, the risk of transmission is likely to rise over the coming weeks, and a surge in new infections is likely. The beginning of West and Central Africa's winter season, which brings cooler and drier conditions, as well as dust, could also further affect transmission, and contribute to a rise in cases. This in turn could prompt other countries to adopt stricter anti-infection measures, possibly with little advance notice.

Over the past two weeks, the biweekly incidence and pace of infections have continued to gradually rise, suggesting that sub-Saharan has entered its second wave of COVID-19 infections.

- As of the morning of Tuesday, December 22, at least 1,680,949 confirmed COVID-19 cases have been recorded across sub-Saharan Africa.
- More than 175,000 new cases have been recorded in the region since the last Situation Report was issued on December 8. This is over 80% higher than the total number of cases recorded during the previous two-week period spanning November 24 to December 8. It also marks a continual increase in the biweekly incidence (new cases reported over a two-week period) since late September.
- The total number of cases has risen by 11.65% over the past two weeks, marking a significant increase in the pace of new infections compared to the previous two-week period, when the total caseload grew by 6.91%. It also marks a continual surge in the pace of new infections since October.
- The total number of deaths attributed to COVID-19 has risen substantially, by 10.31%, to 37,195.
- According to the World Health Organization (WHO), the Africa region has continued to record some of the largest weekly increases in caseload over the past few weeks; however, it accounts for just over 2% of all cases and deaths globally.

While a growing number of countries appear to have entered a second wave of infections, the pace of new infections continues to vary considerably across the region.

- The largest increases in cases over the past two weeks have occurred in Burkina Faso (59.91%), Uganda (35.28%), Niger (31.97%), Namibia (26.81%), and Eritrea (24.35%).

- The pace of new infections has increased in several of the worst-affected countries in the region, including South Africa (13.80%) and Nigeria (13.31%), both of which have confirmed that they have entered a second wave.
- Conversely, Ethiopia and Kenya, the second and third worst-affected countries in the region respectively, have recorded decreases in the pace of new infections, indicating that the current waves could be winding down.
- At least ten countries have recorded increases in their caseloads of less than 2%.
- The rate of transmission has increased in 32 countries and territories in the region and decreased in 18.

A new variant of the SARS-CoV-2 virus that causes COVID-19 has been discovered in South Africa and is believed to be driving its second wave. In response, a growing number of countries have banned travel to and from South Africa.

- The 501.V2 variant has been identified in nearly 200 samples collected across 50 different hospitals in South Africa since late September. It is similar to the variant found in the UK and is believed to result in a higher viral load, which could cause it to spread more quickly and efficiently between humans. The new variant is also believed to affect younger people more severely.
- Two of the three new mutations in the South African variant reportedly reduce sensitivity to some antibodies, which could potentially affect the efficacy of the vaccines currently under development. However, Health Minister Zweli Mkhize has stated that the current vaccines should still be effective against this variant.
- In response to the discovery, at least 15 countries have restricted travel to and/or from South Africa. France, Germany, the Netherlands, Saudi Arabia, Switzerland, and Turkey have banned all passenger flights to and from the country. Several others, including El Salvador, Israel, Mauritius, Panama, Sudan, and Tunisia, have closed their borders to travelers from South Africa.
- Although the 501.V2 variant has only been identified in South Africa at this time, the high levels of population movement between South Africa and neighboring and nearby countries could heighten the risk of spread across Southern Africa and could lead to broader travel restrictions to and from countries in the region.
- The new variant detected in the UK, B.1.1.7, has also been identified in Nigeria as early as August. However, health officials have stated that it accounts for only approximately 1% of all cases in the country.

As the overall pace of new infections has increased, a growing number of countries have re-introduced and/or tightened curfews, restrictions on movement, and other anti-infection measures.

- Eritrea has re-introduced a lockdown beginning on December 22, including a restriction on nonessential movement and a ban on movement between villages and cities. Additionally, the use of private or other individual transport has been prohibited and all nonessential businesses have been ordered to close. Only sectors including manufacturing, agriculture, food processing, and construction will be allowed to operate. Most gatherings have been banned, except for funerals and other vital gathering, and will be limited to no more than ten people.

- Eswatini has introduced a ban on nonessential travel between 11:00 PM and 4:00 AM local time until January 6.
- Mali has declared a state of emergency for ten days from December 19. During this time, bars, restaurants, nightclubs, and other places of leisure will be closed. Schools will also remain closed and gatherings will be limited to 50 people.
- Nigeria's federal government has ordered the immediate closure of all bars, nightclubs, pubs, event centers, and recreation centers for a period of five weeks from December 21. Most restaurants have been also been ordered to close, except those servicing restaurants or providing takeaway or delivery. Gatherings have been limited to no more than 50 people and schools have been closed until January 18. However, it is largely up to states to enforce these measures.
- Rwanda has introduced new requirements for visitors, ordering them to provide proof of a negative COVID-19 test upon arrival in order to make hotel reservations.
- Sudan has closed its borders to travelers from the United Kingdom, the Netherlands, and South Africa due to concerns regarding new virus variants. This measure will remain in effect until at least January 5.
- Togo has introduced a nightly curfew in Lomé from December 20 to January 3. The curfew will run from 10:00 PM to 5:00 AM local time, except on December 24, 25, and 31, when it will begin at 11:00 PM. The curfew will also be extended to the rest of the country on December 24, 25, and 31, as well as on January 1.

ASSESSMENT

With vaccine distribution programs beginning to go into effect in some countries, there are concerns over how long it may take to inoculate large numbers of people in some parts of the world. According to some reports, many residents in middle- and lower-income countries will likely not have access to vaccines until some point in 2022. Some governments have estimated that their vaccination programs will begin later in 2021 but may run for up to five years before majorities are vaccinated. Under such extended timelines, COVID-19 will likely continue to have some level of impact on business operations and travel in countries with lower vaccination rates for a longer period of time. This could include localized shutdowns during regional virus outbreaks and limitations on travel for people who lack some proof of vaccination.

More than two million people worldwide are believed to have received one of several COVID-19 vaccines so far. China leads the group, with up to one million Chinese nationals already having received experimental vaccines from Chinese pharmaceutical companies. More than 600,000 people in the US have been vaccinated since Pfizer/BioNTech's vaccine was approved, some 500,000 have been inoculated in the UK, and around 440,000 in Russia. Most of these vaccines require two doses administered at separate times, and the majority of recipients in the US and UK have likely not yet had both doses.

As vaccines become more available to the wider public, companies continue to work to counter logistical issues associated with their distribution. One of the more prominent remains the low temperatures at which they must be stored, which range from -94 degrees Fahrenheit (-70 degrees Celsius) for the Pfizer/BioNTech

vaccine, to more usual refrigerated temperatures for some of the others. In response to the necessity of shipping large numbers of vaccine doses in the near future, some air carriers, including Hong Kong-based Cathay Pacific, are expanding cold storage capacity at airport cargo terminals, in some cases adding space for millions of additional doses. Transporters are also adding further innovations for freight tracking, including providing the ability to observe the temperature, humidity, and location of vaccine shipments in real-time. Some reports estimate that more than half of all vaccines distributed annually end up being spoiled due to high temperatures or other logistics-involved issues, and such possibilities continue to represent a challenge to the worldwide distribution of COVID-19 vaccines.

As new virus strains spread in the UK and South Africa, several countries have suspended flights or otherwise curtailed travel from one or both of them, or from other affected countries. Additional countries are likely to enact similar restrictions. The situation illustrates the potential for unexpected developments to cause new disruptions in relation to the COVID-19 pandemic even as vaccine distribution proceeds. Individuals and businesses are advised to continue to anticipate operational difficulties related to the outbreak until vaccinations are much more widespread.