

Dentons Flashpoint

Daily Global Situation Report

November 23, 2020

Global Situation Update: November 23, 2020

KEY TAKEAWAYS

Oxford University and AstraZeneca developers plan to request regulatory approval immediately for COVID-19 vaccine.

The G20 extended the Debt Service Suspension Initiative for poorest countries until June 2021.

China threatens retaliation after visit of a US Navy admiral to Taiwan, opposing military relations between Taipei and Washington.

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

Global

Overnight, , confirmed coronavirus cases rose to 59,060,169 in 216 countries and territories, with 1,394,833 deaths.

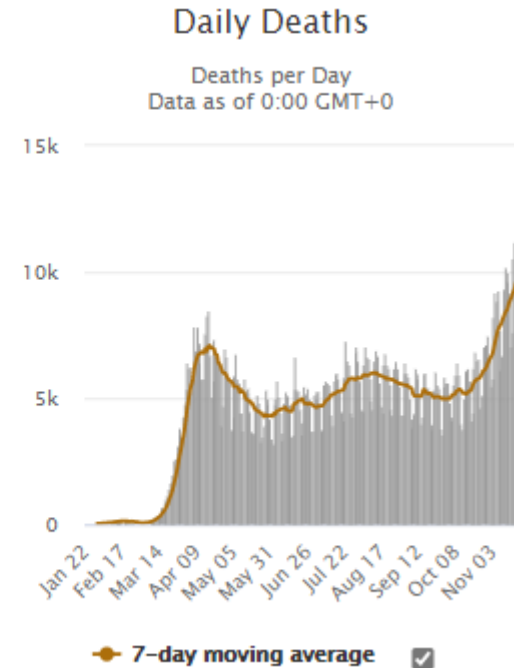
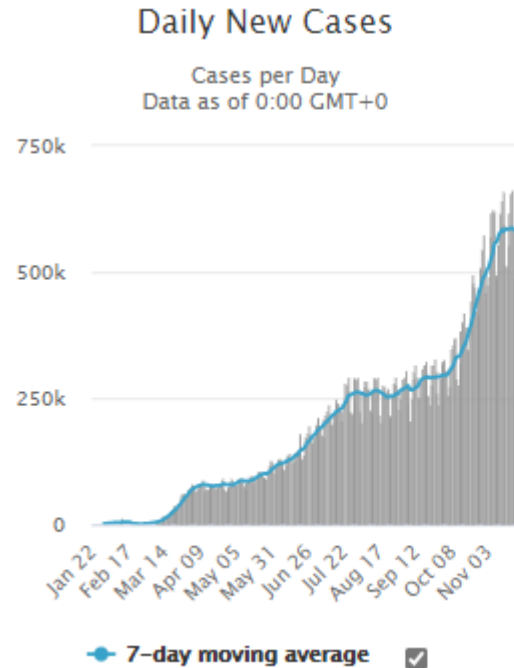
- G20 leaders pledged to “*spare no effort*” to ensure cheap, global access to **Covid-19 vaccines**, even as they failed to make specific commitments on the distribution of early doses.
- The G20 extended the Debt Service Suspension Initiative, a temporary freeze in official **bilateral debt payments** by the poorest countries, until June 2021.
- The US FDA issued emergency use authorization for Regeneron Pharmaceuticals Inc’s COVID-19 antibody therapy, an **experimental treatment** given to President Trump.
- The **coronavirus vaccine** developed by Oxford University and AstraZeneca has exceeded regulatory requirements for effectiveness in phase 3 trials and developers plan to request regulatory approval immediately.
- Researchers have found a close relative of the virus that causes **Covid-19 in bats** stored in a Cambodian freezer for 10 years. The virus, along with a second discovered in Japan, are the first known relatives of COVID-19 to be found outside China.
- Australian researchers have discovered that people who have been infected with Covid-19 have sustained **protection against reinfection** for at least eight months.

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

Global

Over the past week, daily new cases of coronavirus continued to trend up, topping 58 million. One week ago, the count was 37 million. The spread of infections in Western Europe shows signs of peaking.

The upward trend for global deaths accelerated. Total coronavirus deaths are in excess of 1.38 million.



Source: WorldoMeter

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

Markets

Beijing has warned it will show “zero tolerance” for financial misconduct after several high-profile bond defaults by state-owned companies roiled the Chinese debt market.

- **European markets** rose, bolstered by news that the vaccine being developed by AstraZeneca and Oxford university had exceeded the level of efficacy sought by regulators.
- **Asian stocks** closed up, even before the vaccine news.
- **Brent crude** futures rose nearly 2 percent as traders eyed a recovery in crude demand due to the successful vaccine trials.

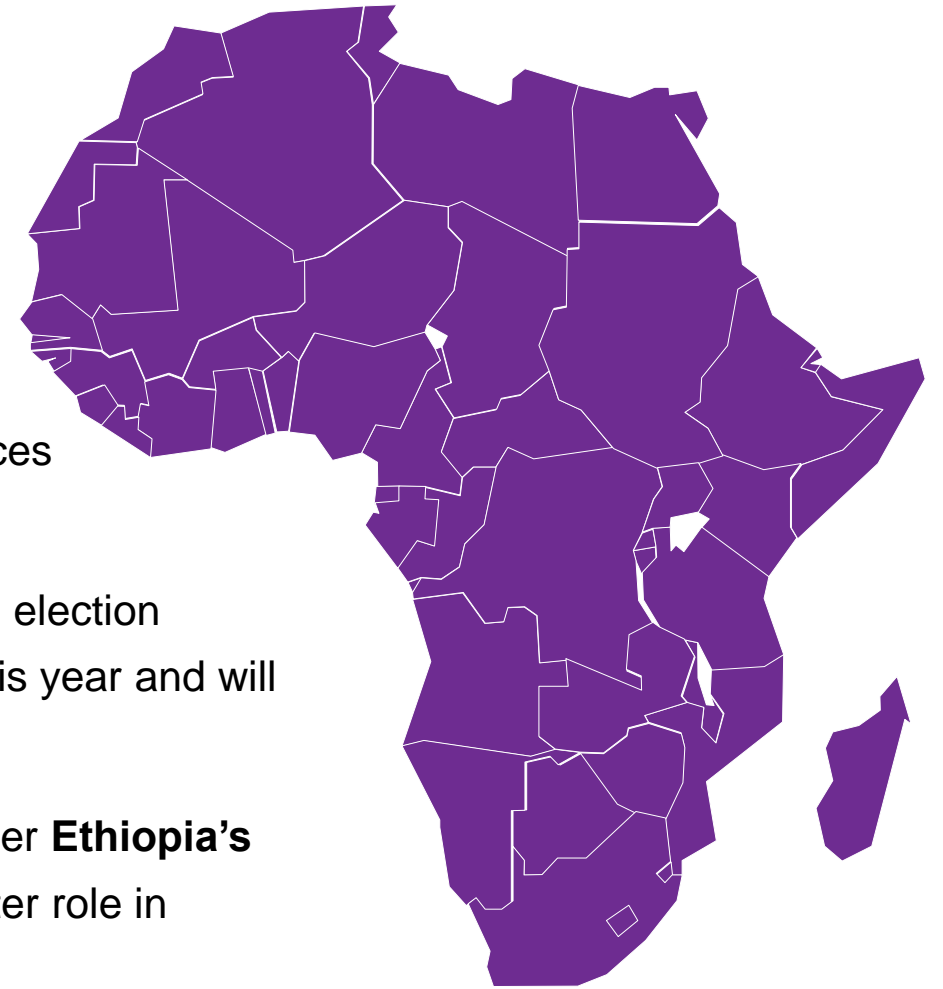
Business

Moderna will charge governments between \$25 and \$37 per dose of its COVID-19 vaccine candidate, depending on the amount ordered.

- **Guitar Center Inc**, the largest US retailer of music instruments and equipment, filed for Chapter 11 bankruptcy.
- **Western Union** has acquired a 15 percent stake in the digital payment unit of Saudi Arabia's **STC Group** for \$200 million.
- **Blackstone Group Inc** is seeking to raise about \$5 billion for its second private equity fund focused on Asia.
- **Cineworld**, the world's second-largest cinema chain, has secured \$450 million in emergency funding, giving it \$4.9 billion in total debt financing to see it through the remainder of the Covid-19 crisis.
- **Aviation** executives stepped up calls for coronavirus tests for airline passengers to replace quarantine as they warn that the vaccine breakthrough may distract from the immediate priority to open up air travel.

Africa

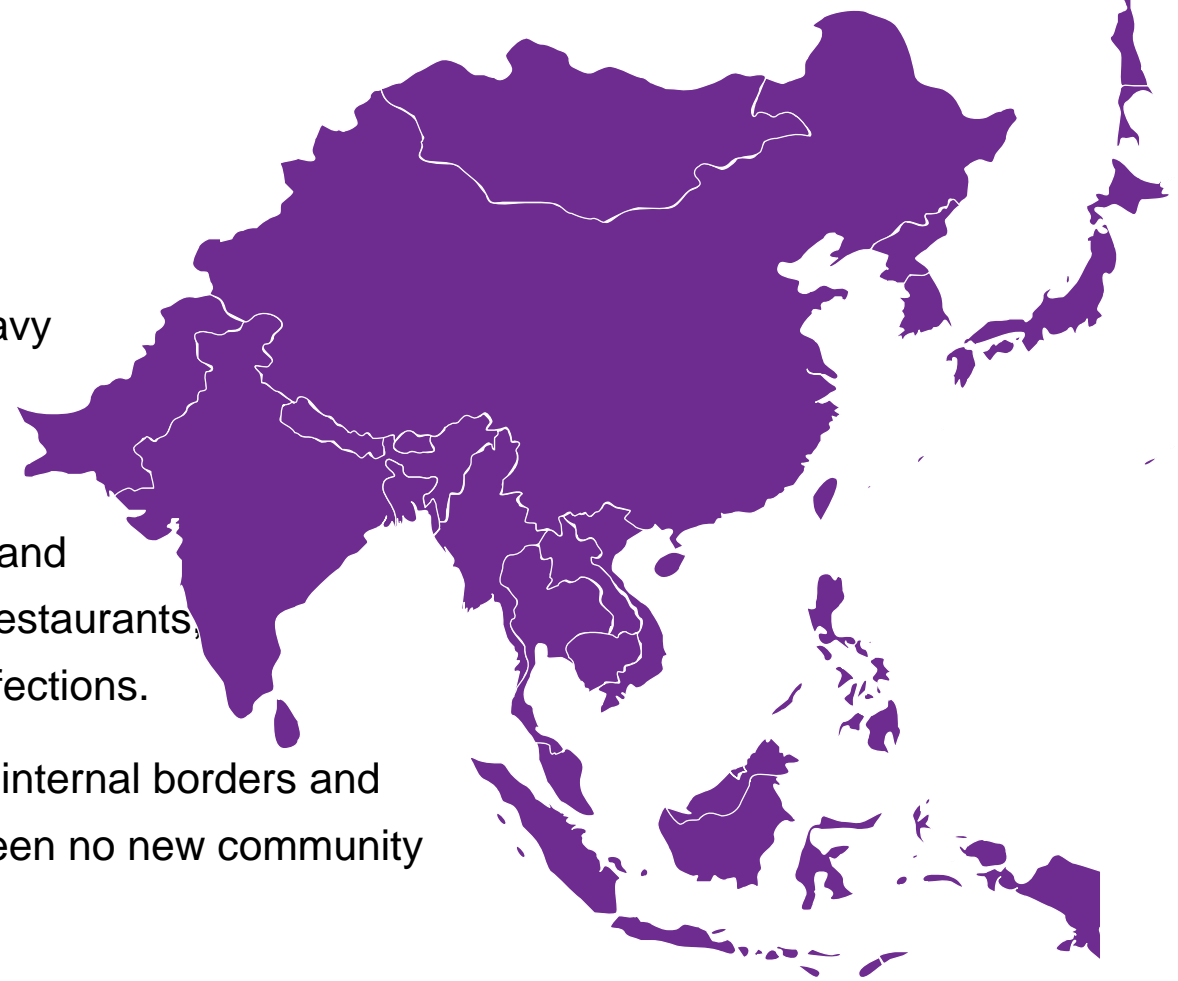
- **Ethiopia's** army urged civilians in the rebel-held capital of Tigray to vacate the city as the military surrounded the city with tanks for a planned offensive. Prime Minister Ahmed gave Tigrayan regional forces 72 hours to surrender.
- Voters went to the polls in **Burkina Faso** on Sunday in a presidential election dominated by jihadist violence that has cost more than 2,000 lives this year and will prevent voting in hundreds of villages.
- **Sudan** boycotted talks on Saturday between Nile Valley countries over **Ethiopia's** Grand Renaissance dam, calling on the African Union to play a greater role in pushing forward the negotiations that have stalled for years.
- **Nigeria**, Africa's biggest economy, has sunk into a second recession in less than five years, battered by the oil price crash brought on by the coronavirus pandemic.



Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

Asia

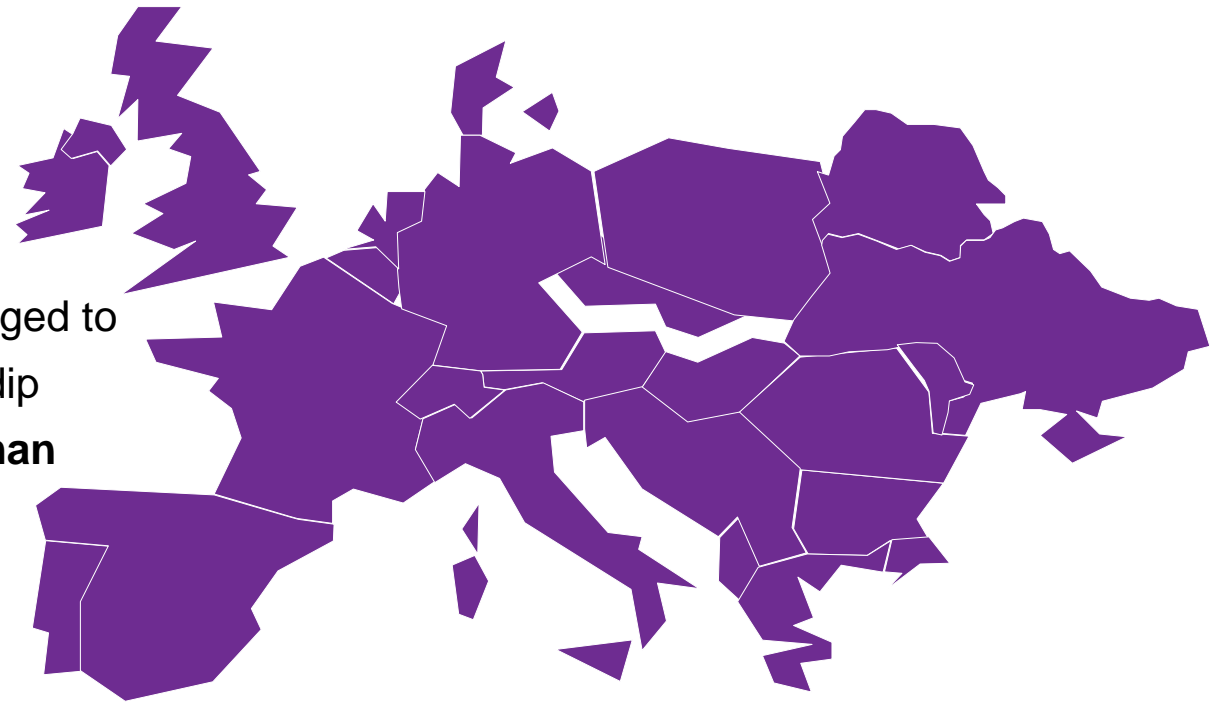
- **China** threatened to respond to the reported visit of a **US** Navy admiral to **Taiwan** and firmly opposed any military relations between Taipei and Washington.
- **South Korea's** capital city and nearby areas will close bars and nightclubs, limit religious gatherings, and restrict service at restaurants, in a bid to contain a burgeoning third wave of coronavirus infections.
- **Australia** moved a step closer to normal life, opening some internal borders and easing restrictions, as the vast majority of the country has seen no new community infections or deaths for weeks.
- **Japan's** new minister for administrative reform proposed doing away with the centuries-old tradition of stamping documents with a hanko (a seal) would open the way to digitizing Japan's government.
- **Hong Kong and Singapore** postponed the opening of a "travel bubble" after Hong Kong reported a new outbreak of virus cases.



Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

Europe

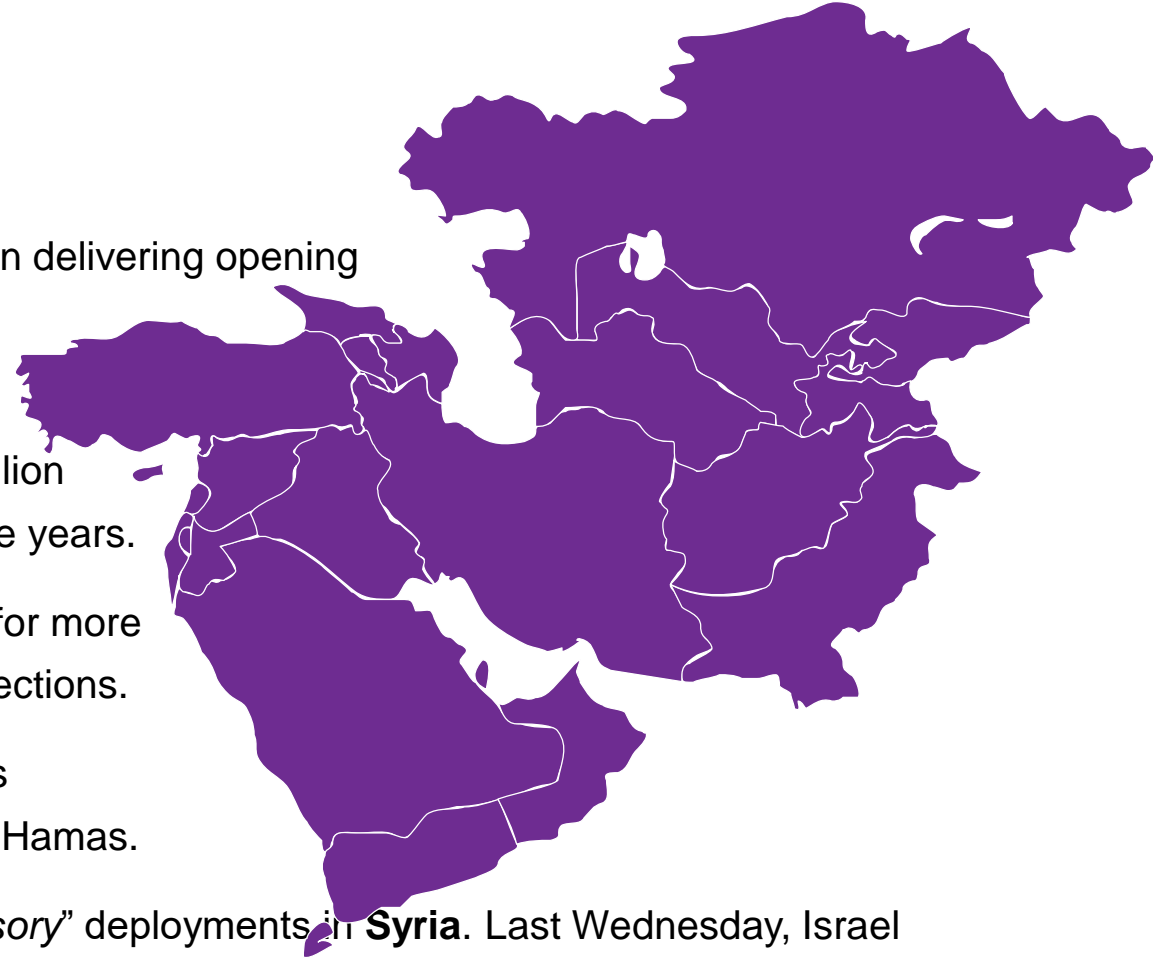
- Activity in the **eurozone's** dominant services sector plunged to the lowest level in six months, raising fears of a double-dip economic downturn in the final quarter of the year. **German** business activity has continued to grow despite rising coronavirus infections and tighter restrictions causing Europe's largest economy to lose some momentum in November.
- **France** will start easing coronavirus lockdown rules in coming weeks, carrying out the process in three stages so as to avoid a new flareup in the pandemic. **Turkey** recorded 6,017 coronavirus cases on Sunday — an all-time daily high — as the country endured its first weekend lockdown. Over the weekend, **Russia** surpassed 2 million infections, **Germany** 900,000 and **Poland** 800,000. **Romania** reported its 10,000th death, with over 400,000 infections.
- The **UK** secured a trade deal with **Canada** that will roll over the terms of an existing agreement between the **EU** and Canada when the Brexit transition period ends on January 1.



Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

Middle East

- **Saudi Arabia** convened the virtual G20 meeting, with King Salman delivering opening remarks.
- **Abu Dhabi** unveiled the discovery of 22 billion barrels of unconventional oil reserves as the Gulf producer pledged \$122 billion in capital expenditure for its national oil company over the next five years.
- **Pakistan** has ordered schools, colleges and universities to close for more than six weeks from Thursday to head off a rise in coronavirus infections.
- Over the weekend, the **Israeli** military responded to rocket attacks from **Gaza** by airstrikes against several military sites belonging to Hamas.
- **Iran** threatened to strike back against Israel for targeting its “*advisory*” deployments in **Syria**. Last Wednesday, Israel attacked eight targets, including an Iranian headquarters at Damascus international airport and a “*secret military site*” that served as a “*hosting facility for senior Iranian delegations when they come to Syria to operate.*”
- **Russia** stopped a UN Security Council committee from blacklisting **Libyan** Al-Kaniyat militia and its leader for human rights abuses; Al-Kaniyat fought alongside Khalifa Haftar’s eastern-based Libyan National Army (LNA).



Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

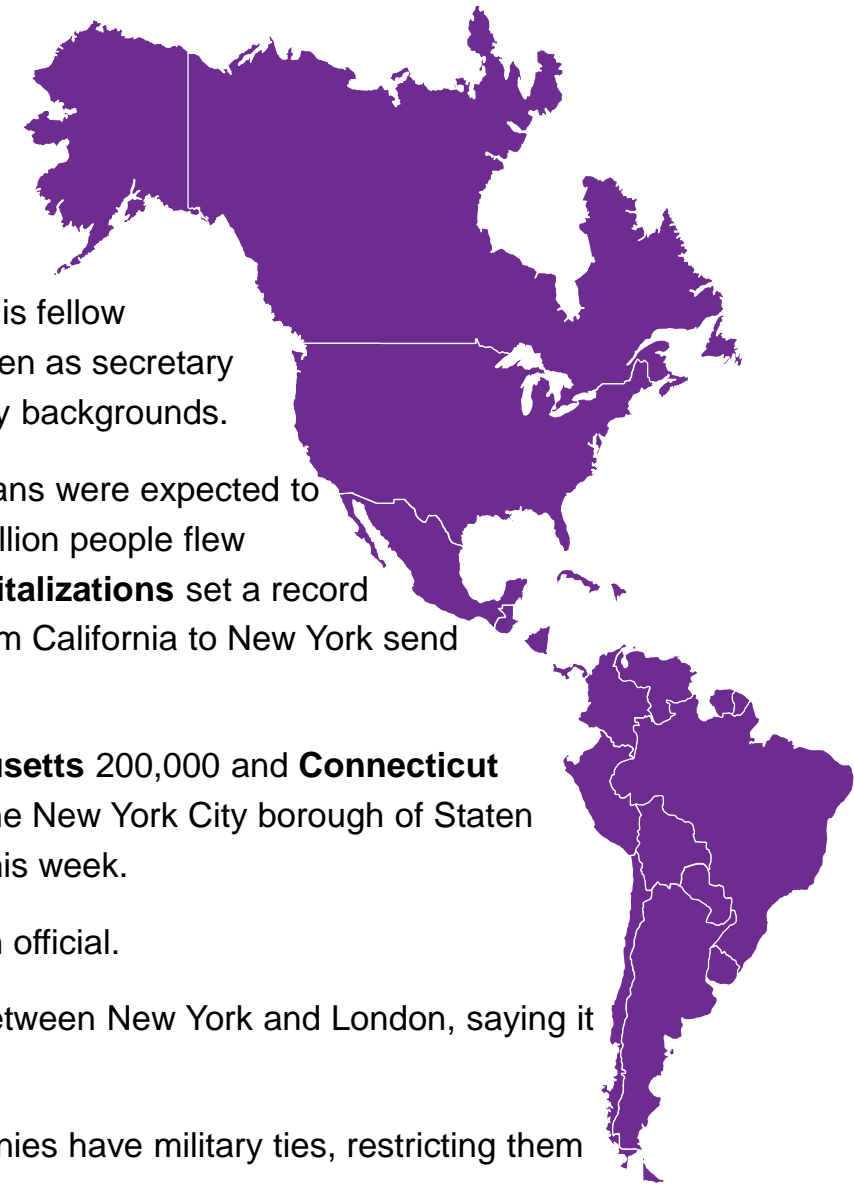
Americas

- **Guatemala's** government requested assistance from the Organization of American States (OAS) to help launch a dialogue with "*diverse political forces*" after a massive protest over 2021 budget cuts turned violent. Brazil surpassed 6 million coronavirus infections.
- In **Cuba**, more than a hundred pro-government civilians on Sunday mobbed a handful of protesters who showed up at Havana's Central Park to support a group of dissidents on a hunger strike.
- Ontario, **Canada's** most populous province, ordered a lockdown on metropolitan Toronto from Monday after a record high number of new coronavirus cases were reported at the weekend.



Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

Americas: US

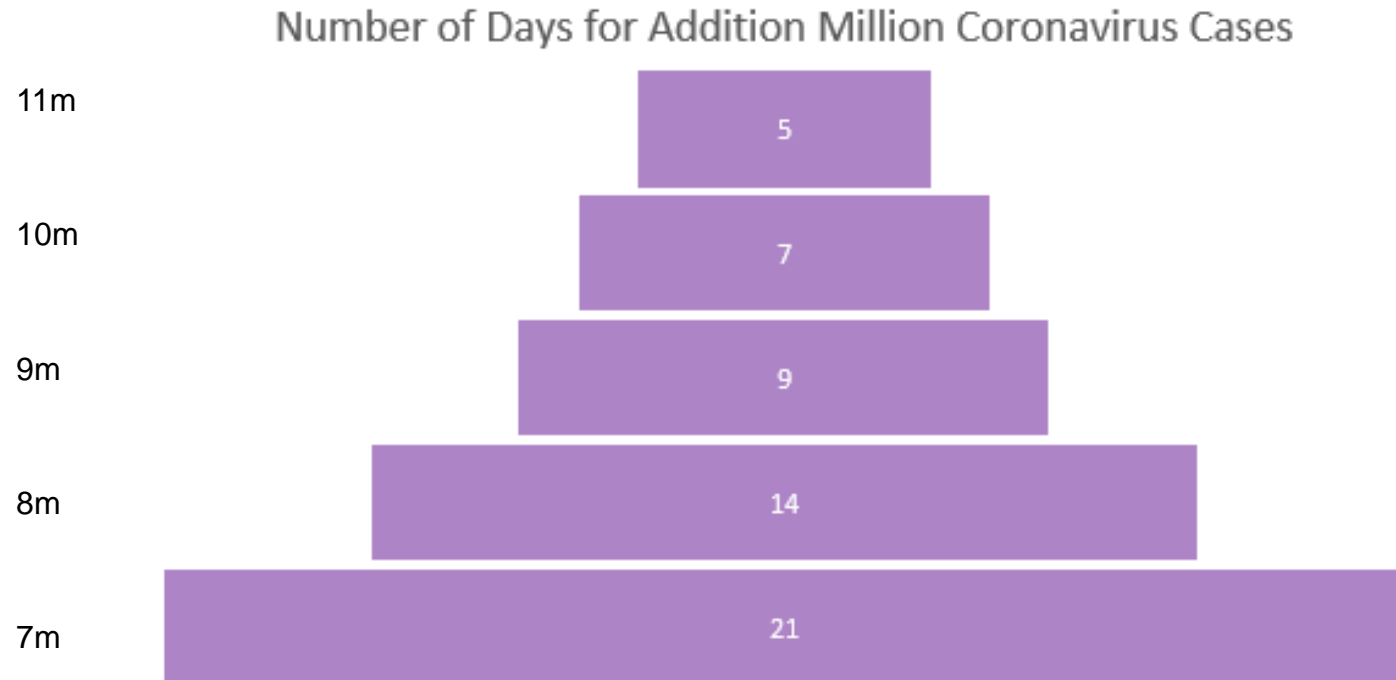


- After another **court defeat** in Pennsylvania, President Trump faces increased pressure from his fellow Republicans to concede to Democrat Joe Biden. President-elect Biden will name Antony Blinken as secretary of state and Linda Thomas-Greenfield as ambassador to the U.N., bringing deep foreign-policy backgrounds.
- The nation recorded its **12th million COVID-19 case** on Saturday, even as millions of Americans were expected to **travel** for the upcoming Thanksgiving holiday, ignoring public health warnings. More than 1 million people flew through US airports on Friday, the second highest since the beginning of the pandemic. **Hospitalizations** set a record for the 13th day in a row. **Panic buying and hoarding** has returned as shutdowns in states from California to New York send pandemic-weary shoppers on a new scramble for essentials.
- Over the weekend, **New Jersey and Pennsylvania** surpassed 300,000 infections, **Massachusetts** 200,000 and **Connecticut** 100,000. **New York** Gov. Andrew Cuomo warned that cases are rising so quickly in parts of the New York City borough of Staten Island that nonessential businesses may be closed and mass gatherings banned there later this week.
- **COVID-19 vaccines** could reach the first Americans by mid-December, according a top health official.
- Delta Air Lines has cast doubt on hopes of opening an **air “corridor”** on the lucrative route between New York and London, saying it would be easier to relaunch transatlantic flights to “*just about any*” other European capital.
- The Trump administration is planning to declare that 89 **Chinese** aerospace and other companies have military ties, restricting them from buying a range of U.S. goods and technology.

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

Americas: United States

The pace of new US infections has quickened, with nearly one million more cases recorded in just the last 5 days before the latest record.



Source: Johns Hopkins University

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

Science Under the Scope: Vaccine Approval and Distribution

Contributed by the Scowcroft Institute of International Affairs

While the news regarding the development of two COVID-19 vaccines by Pfizer and BioNtech is promising, there remain several significant hurdles to vaccine distribution in the US and abroad.

The first two weeks of November have seen promising news regarding the development of two COVID-19 vaccines. Pfizer and BioNtech reported on November 18th that they have concluded their Phase 3 trials and that the vaccine is 95 percent effective.(1) In addition, Pfizer says that the vaccine maintains its effectiveness across age, gender, race, ethnicity, and age demographics. The findings from the Pfizer study are encouraging, not only because of the vaccine's high efficacy, but also because there were no serious side effects reported in the more than 43,000 individuals enrolled.(2)

In the same week Moderna also released a preliminary report on their COVID-19 vaccine. Their report shows that the Moderna

vaccine is 94.5 percent effective so far in the large-scale Phase 3 trial they are conducting.(3) Like the Pfizer vaccine, the Moderna vaccine appears to be equally safe and efficacious for all ages, genders, races, and ethnicities. Not only do the vaccines provide hope as the world enter the 11th month of living with COVID-19, but they also have demonstrated an entirely new way of creating vaccines, which utilizes mRNA.(4)

Based on the announcement from the two companies, the United States government has updated their timeline for vaccine availability, stating that the first 20 million doses could be available as early as December 2020.(5) Members of Operation Warp Speed leadership have said that they can have the vaccine ready for distribution within 24 hours of receiving Emergency Use Authorization (EUA).

While this information is encouraging, there remain several significant hurdles to vaccine distribution, particularly for the Pfizer vaccine. Pfizer's vaccine has to be administered in two doses, given 21 days apart. As of now, the vaccine, which needs to be stored at more than minus 100 degrees Fahrenheit will be delivered in boxes

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

Science Under the Scope: Vaccine Approval and Distribution

backed with dry ice, which should keep the doses viable for up to 10 days.(6) Further complicating administration of the Pfizer vaccine is that once the packages are opened, they can only keep the vaccine viable for 5 days and they cannot be opened more than twice per day.(7) Using 1,000 doses of vaccine in less than a week may not be a challenge for hospitals in large cities, but it is a significant barrier for rural communities, smaller doctor's offices, and Native communities utilizing reservation-based clinics. Multiple states have expressed concern. Washington State, for example, does not have warehouses that can store the Pfizer vaccine at cold enough temperatures and Arizona has stated they don't have a way to get the vaccine to their rural areas or tribal lands.(8) Members of the CDC Vaccine Task Force have acknowledged that it is unlikely that rural communities will have access to the vaccine, at least during the earliest months of distribution.

An inability to get the vaccine to rural parts of the United States is discouraging because those areas are seeing the highest rates of infection as of November 2020. Additionally, rural communities tend to have older populations with more underlying comorbidities, meaning that many rural residents are at greater risk of severe

COVID-19 compared to their urban counterparts. Even the proposed solution of setting up large, centralized distribution centers (9) may not solve the problem for rural communities, especially for individuals living in poverty who may have no form of transportation.

The Pfizer distribution challenge is not just an issue in the United States. The obstacles facing rural areas will likely become even more complicated when attempting to distribute the vaccine to Sub-Saharan Africa, most of Asia, and other regions of the world where maintaining ultra-cold chain requirements will not be possible.(10) Russia has suggested that it will overcome the cold chain issues by using lyophilization, which is a process of freeze drying dehydrated versions of the vaccine (11) to extend its life-span and reduce the need for an ultra-cold chain. While lyophilization may offer a solution, the process is far from perfect and requires far more scientific investigation to improve it to a point where it could be done reliably.

Because of these obstacles it might not be possible for every area of the world, or even every area of the United States to get access to the Pfizer vaccine. Fortunately, the Moderna vaccine is not far behind in its development and does not have the same ultra-cold chain requirements as the Pfizer vaccine. Until a greater number of

Science Under the Scope: Vaccine Approval and Distribution

vaccines are approved; however, the challenges of vaccine distribution may mean that there will be an effective COVID-19 vaccine that is only available to a select population.

1. Pfizer. (2020, November 18). Pfizer and Biontech Conclude Phase 3 Study of COVID-19 Vaccine Candidate, Meeting All Primary Efficacy Endpoints. *Pfizer Press Release*. Retrieved from https://www.pfizer.com/news/press-release/press-release-detail/pfizer-and-biontech-conclude-phase-3-study-covid-19-vaccine?utm_source=Global+Health+NOW+Main+List&utm_campaign=11c7ab1fae-EMAIL_CAMPAIGN_2020_11_17_05_11&utm_medium=email&utm_term=0_8d0d062dbd-11c7ab1fae-2863497
2. Pfizer. (2020, November 18). Pfizer and Biontech Conclude Phase 3 Study of COVID-19 Vaccine Candidate, Meeting All Primary Efficacy Endpoints. *Pfizer Press Release*. Retrieved from https://www.pfizer.com/news/press-release/press-release-detail/pfizer-and-biontech-conclude-phase-3-study-covid-19-vaccine?utm_source=Global+Health+NOW+Main+List&utm_campaign=11c7ab1fae-EMAIL_CAMPAIGN_2020_11_17_05_11&utm_medium=email&utm_term=0_8d0d062dbd-11c7ab1fae-2863497
3. Grady, D. (2020, November 18). Early Data Show Moderna's Coronavirus Vaccine is 94.5% Effective. *The New York Times*. Retrieved from https://www.nytimes.com/2020/11/16/health/Covid-moderna-vaccine.html?campaign_id=60&emc=edit_na_20201116&instance_id=0&nl=breaking-news&ref=cta®i_id=69994515&segment_id=44589&user_id=64109258e059d2687be14dff6c504db
4. Grady, D. (2020, November 18). Early Data Show Moderna's Coronavirus Vaccine is 94.5% Effective. *The New York Times*. Retrieved from https://www.nytimes.com/2020/11/16/health/Covid-moderna-vaccine.html?campaign_id=60&emc=edit_na_20201116&instance_id=0&nl=breaking-

[news&ref=cta®i_id=69994515&segment_id=44589&user_id=64109258e059d2687be14dff6c504db](https://www.nytimes.com/2020/11/16/health/Covid-moderna-vaccine.html?campaign_id=60&emc=edit_na_20201116&instance_id=0&nl=breaking-news&ref=cta®i_id=69994515&segment_id=44589&user_id=64109258e059d2687be14dff6c504db)



5. Schnirring, L. (2020, November 13). Feds update vaccine arrival amid record US COVID-19 rise. *CIDRAP News*. Retrieved from <https://www.cidrap.umn.edu/news-perspective/2020/11/feds-update-vaccine-arrival-amid-record-us-covid-19-rise>
6. Arnsdof, I., Gabrielson, R., Chen, C. (2020, November 10). Most States Aren't Ready to Distribute the Leading COVID-19 Vaccine. *ProPublica*. Retrieved from: <https://www.propublica.org/article/most-states-arent-ready-to-distribute-the-leading-covid-19-vaccine>
7. Arnsdof, I., Gabrielson, R., Chen, C. (2020, November 10). Most States Aren't Ready to Distribute the Leading COVID-19 Vaccine. *ProPublica*. Retrieved from: <https://www.propublica.org/article/most-states-arent-ready-to-distribute-the-leading-covid-19-vaccine>
8. Arnsdof, I., Gabrielson, R., Chen, C. (2020, November 10). Most States Aren't Ready to Distribute the Leading COVID-19 Vaccine. *ProPublica*. Retrieved from: <https://www.propublica.org/article/most-states-arent-ready-to-distribute-the-leading-covid-19-vaccine>
9. Ducharme, J. (2020, November 13). Why You May Not Be Able to Get Pfizer's Frontrunner COVID-19 Vaccine. *Time*. Retrieved from <https://time.com/5911543/pfizer-vaccine-cold-storage/>
10. Ducharme, J. (2020, November 13). Why You May Not Be Able to Get Pfizer's Frontrunner COVID-19 Vaccine. *Time*. Retrieved from <https://time.com/5911543/pfizer-vaccine-cold-storage/>
11. FDA. (2014). Lyophilization of Parenteral (7/93). Retrieved from <https://www.fda.gov/inspections-compliance-enforcement-and-criminal-investigations/inspection-guides/lyophilization-parenteral-793>

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

The Phase III Vaccine Tracker

The vaccines under development by Pfizer/BioNTech, Moderna and AstraZeneca/University of Oxford have dominated recent cycles of news on COVID-19 vaccines. However, there are a dozen other vaccine candidates currently in final-stage Phase III trials, including a handful of Chinese and Russian vaccines that have already been approved for limited early use. The global race is on to lock in supplies, but many drug procurement contracts are not transparent.

The Phase III Vaccine Tracker

Vaccine Candidate	Sponsor	Sponsor	Trial Phase	Institution/ Country	Further Details
<i>mRNA-1273</i>	Moderna	 	Phase 3	National Institutes of Health (USA)	<p>Moderna is developing an mRNA-based vaccine candidate in partnership with the US National Institutes of Health. Phase 3 trials began in July, enrolling 30,000 people across 89 US sites. Moderna announced on November 16 that preliminary analysis of trial results showed the candidate to be 94.5% effective; of the 95 participants who got COVID-19, 90 were in the placebo group and only 5 had the vaccine. Of the 11 trial volunteers who developed severe infections, none had received the vaccine. The trial is still ongoing, but Moderna plans to submit for Emergency Use Authorization within weeks. The US government agreed to pay \$1.5 billion in exchange for 100 million doses if the vaccine proves safe and effective; Canada also agreed to acquire 20 million doses. The European Commission is also seeking a deal with Moderna.</p>


Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

The Phase III Vaccine Tracker

Vaccine Candidate	Sponsor	Sponsor	Trial Phase	Institution/ Country	Further Details
BNT162b2 (two versions were trialed)	Pfizer, BioNTech	  	Phase 2/3	Pfizer is a New York -based company while BioNTech is German . The two have also partnered with China's Fosun Pharma.	Germany's BioNTech in collaboration with New York's Pfizer and China's Fosun Pharma are developing an mRNA candidate administered in two doses., Phase 2/3 trials were launched in July with 30,000 volunteers in the US and other countries; later expanded to 43,000. On November 9, the developers announced preliminary data indicating the vaccine is over 90% effective, followed up 10 days later by a more finalized analysis of 164 cases showing the vaccine to be 95% effective. Pfizer and BioNTech submitted their Emergency Use Authorization request to the FDA on November 20 and expect to manufacture 50 million doses in 2020 and over 1.3 billion doses by the end of 2021 if the vaccine is approved. The US government has agreed to pay \$1.9bn for 100 million doses to be delivered by December with the option to acquire 500 million more later, Japan has agreed to acquire 120 million doses, and the EU has made a deal for 200 million doses.



Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

The Phase III Vaccine Tracker

Vaccine Candidate	Sponsor	Sponsor	Trial Phase	Institution/Company	Further Details
<i>CoronaVac</i>	Sinovac		Phase 3; approved for limited use	Sinovac Research and Development Co., Ltd. (China)	China's Sinovac Biotech launched Phase 3 trials for its candidate in Brazil in July and later added trials in Indonesia and Turkey. Brazilian authorities have called CoronaVac the safest of the five vaccines being tested in the country, and over 100,000 doses have already arrived in Sao Paulo, though distribution dates remain uncertain. Indonesia has also reached an agreement for at least 40 million doses by March 2021. Media reported that the Chinese government granted emergency approval for limited use in July, and local authorities in Jiaxing confirmed in October that the vaccine was being administered to people in high-risk jobs.

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

The Phase III Vaccine Tracker

Vaccine Candidate	Sponsor	Sponsor	Trial Phase	Institution/ Country	Further Details
<i>Ad5-nCoV</i>	CanSino Biologics		Phase 3; approved for limited use	Tongji Hospital (China)	CanSino Biologics and China's Academy of Military Medical Sciences are developing a candidate which was approved for limited use by the Chinese military on June 25, for one year. Phase 3 trials began in August in multiple countries including Saudi Arabia, Pakistan, and Russia.
<i>No name announced</i>	Wuhan Institute of Biological Products; China National Pharmaceutical Group (Sinopharm)	 武汉生物制品研究所有限责任公司 Wuhan Institute of Biological Products Co., Ltd.	Phase 3; approved for limited use	Henan Provincial Center for Disease Control and Prevention (China)	The Wuhan Institute of Biological Products and Sinopharm launched Phase 3 trials in the UAE in July and in Peru and Morocco in August. The vaccine was approved for limited use by China and later by the UAE.



Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

The Phase III Vaccine Tracker

Vaccine Candidate	Sponsor	Sponsor	Trial Phase	Institution/ Country	Further Details
No name announced	Beijing Institute of Biological Products; China National Pharmaceutical Group (Sinopharm)		Phase 3; approved for limited use	China	Sinopharm and the Beijing Institute of Biological Products are testing a vaccine candidate that was approved for limited use by China and later by the UAE. Phase 3 trials are underway in the UAE and Argentina. The chairman of Sinopharm has said that by November, nearly 1 million people in China have received its vaccines, and that the company has been scaling up manufacturing of both its vaccines with to produce a billion doses a year.


Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

The Phase III Vaccine Tracker

Vaccine Candidate	Sponsor	Sponsor	Trial Phase	Institution/ Country	Further Details
AZD1222	AstraZeneca; Univ. of Oxford; IQVIA; Serum Institute of India	 	Phase 3	Univ. of Oxford, the Jenner Institute (UK)	AstraZeneca and the University of Oxford is in Phase 2/3 trials in the UK and India, and Phase 3 trials in Brazil, South Africa, and the US. AstraZeneca halted trials on September 6 to investigate the illness of one volunteer; British and Brazilian trials resumed one week later but other trials remain on hold. The vaccine has produced a strong immune response in people over 70; with 90 percent efficacy for all. Developers plan to immediate request regulatory approvals. Manufacturing capacity stands at 2 billion doses if approved. The US in May awarded \$1.2 billion in support for the candidate, and the EU in August agreed to acquire 400 million doses if the vaccine proves safe and effective.



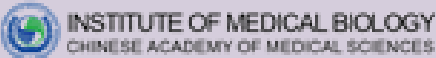

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

The Phase III Vaccine Tracker

Vaccine Candidate	Sponsor	Sponsor	Trial Phase	Institution/ Country	Further Details
<i>GAM-Covid-Vac</i> <i>renamed</i> <i>“Sputnik V”</i>	Gamaleya Research	 ФНИЦ эпидемиологии и микробиологии имени Н.Ф. Гамалеи	Phase 3; approved for early use	The Gamaleya Institute is part of Russia’s Ministry of Health.	Russia’s Gamaleya Research Institute started clinical trials in June for their vaccine, now called “Sputnik V,” which was approved for early use in Russia on August 11 before entering Phase 3 trials. After vaccine experts raised alarms about this expedited approval, Russia amended the announcement to say the approval was a “conditional registration certificate” that will depend on positive Phase 3 trial results. Russia has made deals with countries including Brazil, Mexico, and India to supply Sputnik V, and launched new Phase 2/3 trials in India on October 17. On November 11, Russian health authorities announced that preliminary evidence shows the vaccine to be 92% effective; outside scientists are still pressing for more data.





Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

The Phase III Vaccine Tracker

Vaccine Candidate	Sponsor	Sponsor	Trial Phase	Institution/ Country	Further Details
Ad26.COV2.S	Johnson & Johnson; Beth Israel Deaconess Medical Center	 	Phase 3	Beth Israel Deaconess Medical Center is in Boston , and Johnson & Johnson is a US company.	J&J in partnership with Beth Israel Deaconess Medical Center started Phase 3 trials in September, with 60,000 participants. On October 12, trials were paused to investigate an adverse reaction in a volunteer and resumed 11 days later. On November 16, the developers announced they are launching a second Phase 3 trial to test the effects of two vaccine doses (prior trials tested one dose.) The US government has agreed to pay \$1 billion for 100 million doses if the candidate is approved, the EU reached a similar deal for 200 million doses in October. J&J is aiming for production of at least one billion doses in 2021.
No name announced	Anhui Zhifei Longcom; Chinese Academy of Medical Sciences	 	Phase 3	China	Phase 2 trials began in July, and Phase 3 trials were announced on November 20. The developers plan to recruit 29,000 volunteers in Ecuador, Indonesia, Pakistan and Uzbekistan.

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

The Phase III Vaccine Tracker

Vaccine Candidate	Sponsor	Sponsor	Trial Phase	Institution/ Country	Further Details
Covaxin	Indian Council of Medical Research; National Institute of Virology; Bharat Biotech	 	Phase 3	India	Phase 3 trials were announced on October 23; reports initially circulated that the vaccine would be ready in August, but Bharat's CEO has said it will be ready no earlier than 2021.
CoVLP	Medicago; GSK	 	Combined Phases 2/3	Medicago is based in Canada and GSK in the UK	Partly funded by cigarette maker Philip Morris, this vaccine candidate is plant-based, using a species of tobacco. Phase 2/3 trials began November 23. In October, the company announced a deal to supply the Canadian government with 76 million doses.

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

The Phase III Vaccine Tracker

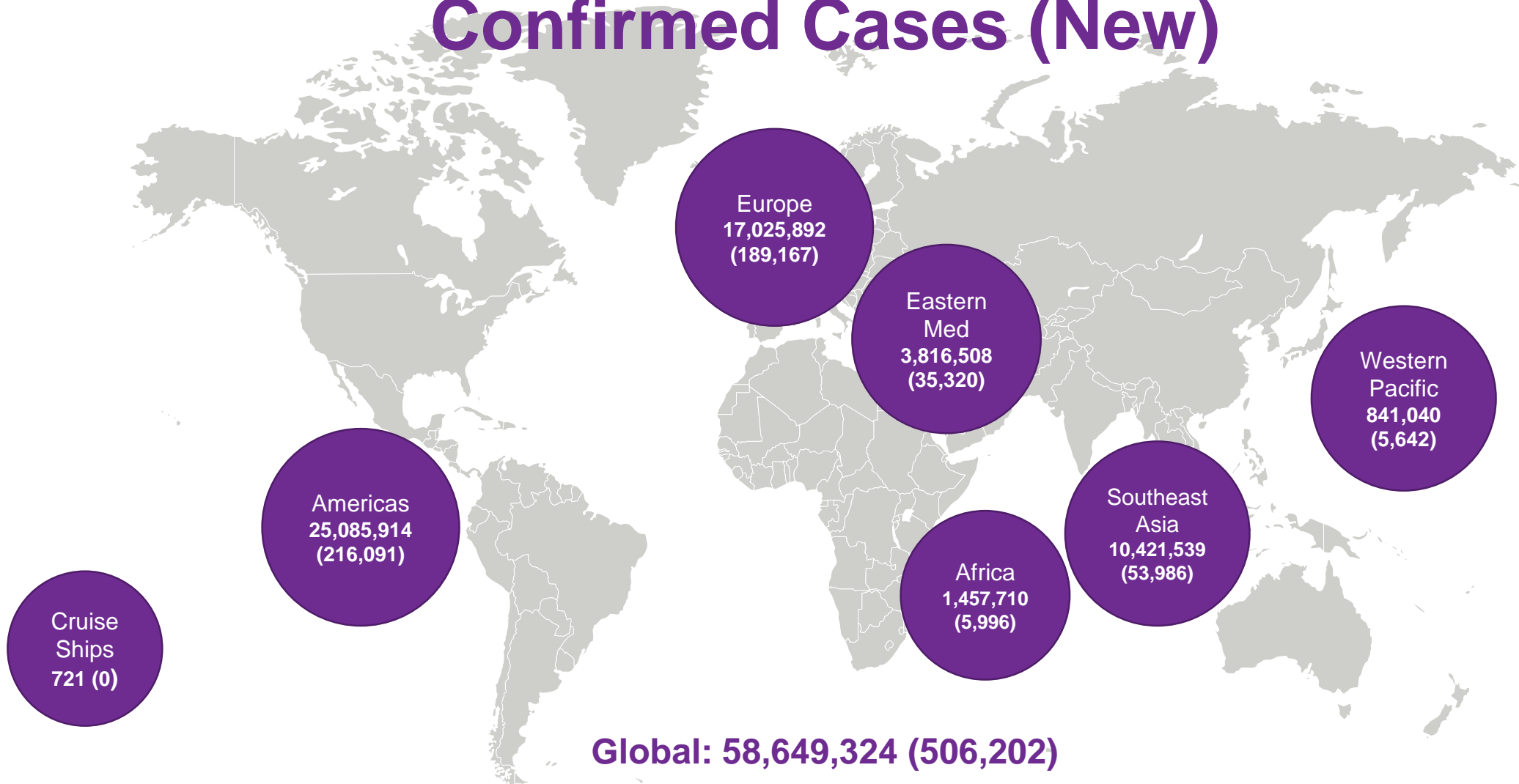
Vaccine Candidate	Sponsor	Sponsor	Trial Phase	Institution/Country	Further Details
NVX-CoV2373	Novavax		Phase 3	Novavax is a US company, and is working with India's Serum Institute for manufacturing	Novavax launched a Phase 3 trial in the UK with 15,000 volunteers in September and is expected to launch a larger Phase 3 trial in the US by the end of November. Novavax reached an agreement with the Serum Institute of India to manufacture vaccines, which they say will enable production of up to 2 billion doses a year. If trials succeed, Novavax will deliver 100 million doses to the US in early 2021, and another 40 million doses to Australia.

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

Coronavirus Condition Updates

As of 2100 hours US EDT on November 22

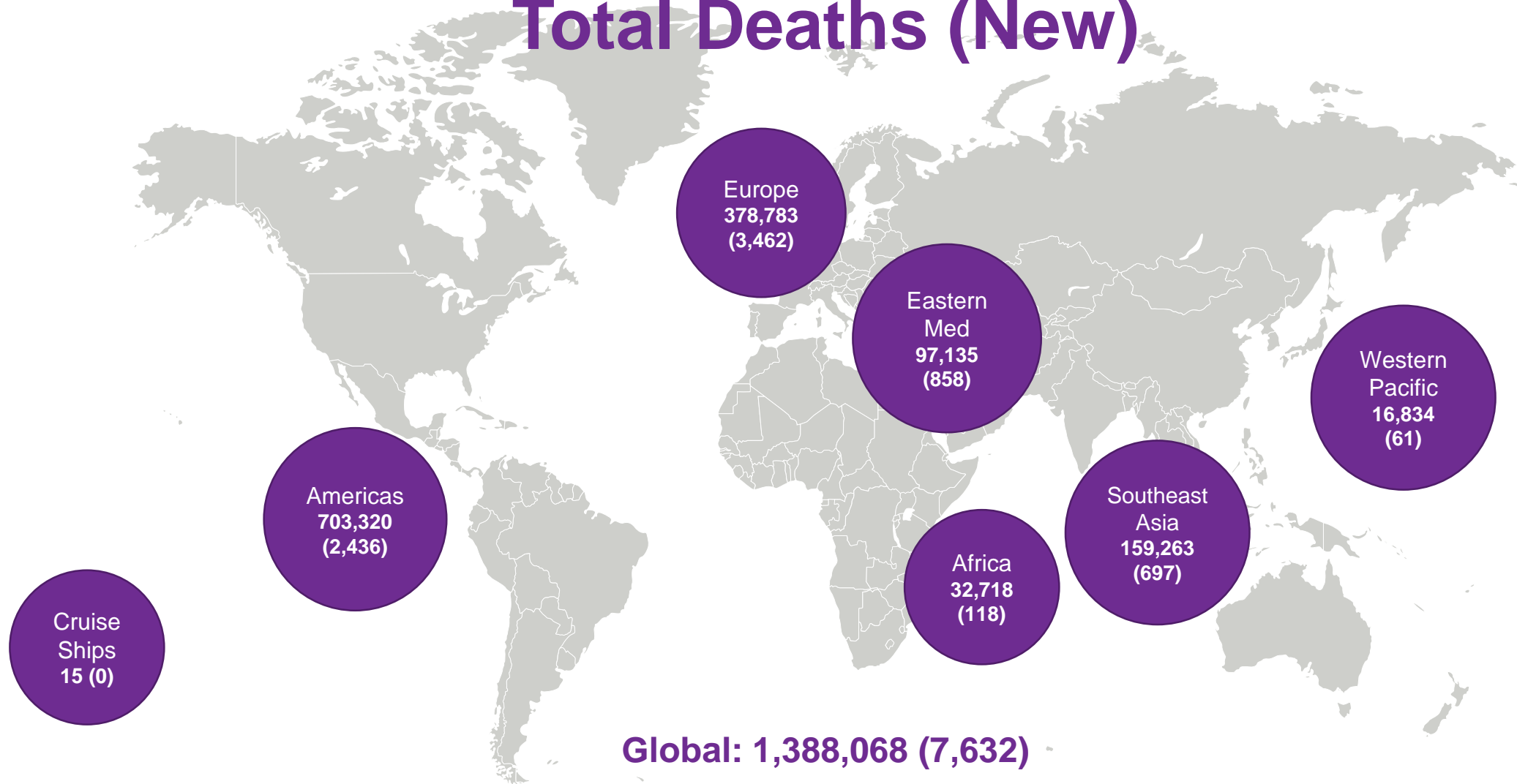
Confirmed Cases (New)



Reflects data as of 2100 hours the evening before the date of the situation report.
Data Source: Johns Hopkins University

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

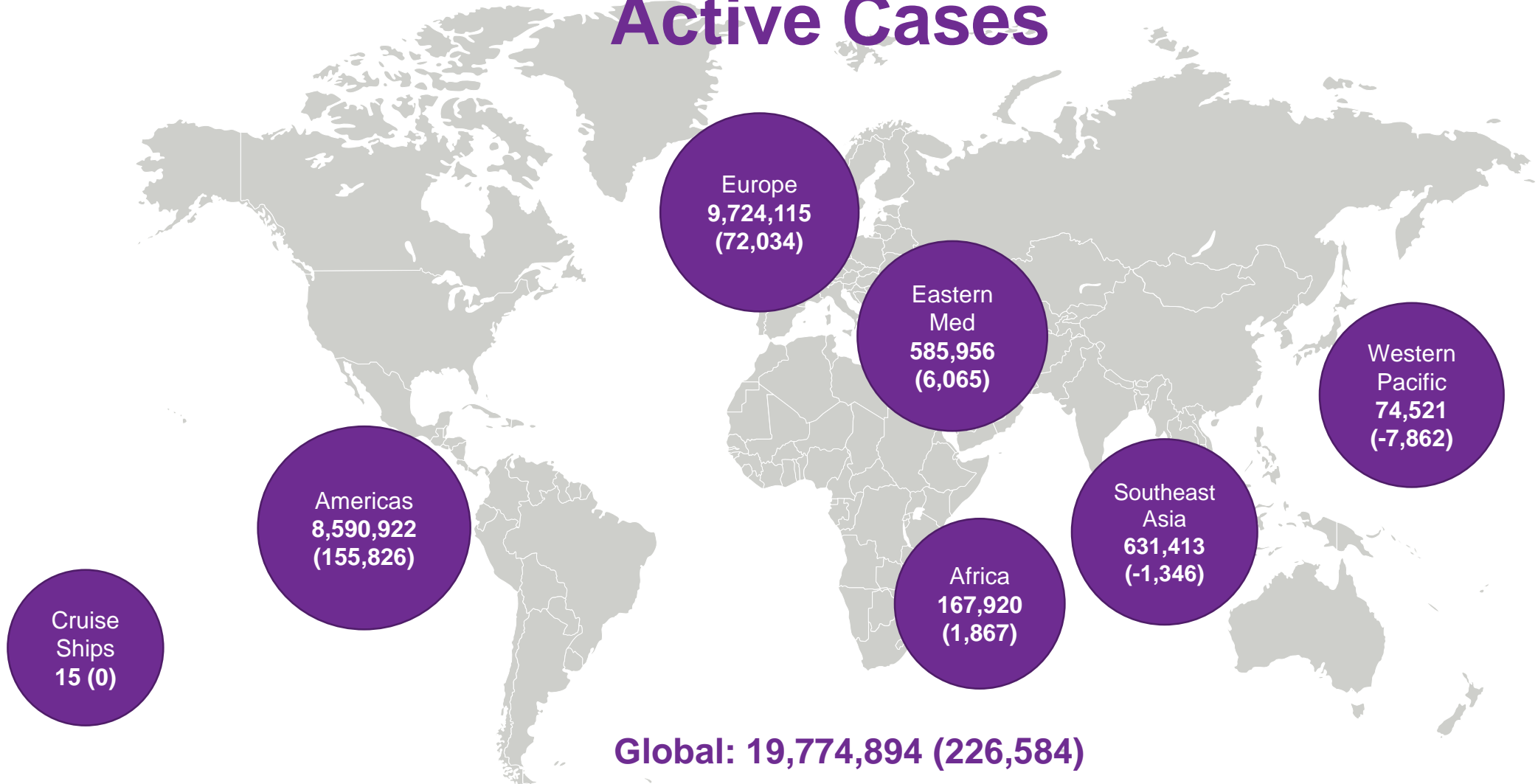
Total Deaths (New)



Reflects data as of 2100 hours the evening before the date of the situation report.
Data Source: Johns Hopkins University

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

Active Cases



Reflects data as of 2100 hours the evening before the date of the situation report.
Data Source: Johns Hopkins University

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

Country Risk Assessment

VERY HIGH RISK (>5,000 cases)

Country	Active Cases	Confirmed (New)	Deaths (New)	Cases / 1M Pop.	Deaths / 1M Pop	% Daily Change7-Day Av
US	7454188	12191330 (157400)	255637 (916)	37945	792	9.88%
France	1962709	2140829 (13157)	48398 (214)	32760	746	7.43%
UK	1457285	1514465 (18667)	55101 (399)	22227	809	9.43%
Spain	1363735	1556730 (0)	42619 (0)	33985	911	6.30%
Italy	805947	1408868 (28337)	49823 (562)	23315	825	16.35%
Belgium	543161	558779 (1875)	15618 (96)	47969	1337	4.09%
Netherlands	475757	484648 (5388)	8891 (21)	28260	518	7.59%
Russia	453252	2071858 (24295)	35838 (396)	14314	248	7.81%
Brazil	444245	6071401 (18615)	169183 (194)	28483	794	3.43%
India	443486	9139865 (44059)	133738 (511)	6598	97	3.22%
Poland	423742	861331 (17856)	13618 (330)	22768	360	17.22%
Ukraine	331331	642215 (12365)	11292 (143)	14320	251	14.12%
Germany	306581	932367 (4377)	14159 (98)	11111	171	13.88%
Iran	206114	854361 (13053)	44802 (475)	10121	531	10.80%

VERY HIGH RISK (>5,000 cases)

Country	Active Cases	Confirmed (New)	Deaths (New)	Cases/ 1M Pop.	Deaths/ 1M Pop	% Daily Change7-Day Av
Sweden	201889	208295 (0)	6406 (0)	20574	633	14.85%
Mexico	161095	1041875 (15906)	101676 (853)	7977	783	3.39%
Argentina	137872	1370366 (4184)	37002 (100)	30211	816	4.37%
Hungary	127903	174618 (4320)	3800 (111)	18094	394	19.27%
Serbia	119921	1211120 (4995)	1199 (31)	13885	137	30.18%
Romania	113450	418645 (5837)	10047 (131)	21820	524	13.94%
Switzerland	105845	290601 (0)	4056 (25)	33481	467	11.52%
Czechia	86966	492263 (1513)	7196 (101)	45933	671	6.53%
Portugal	83942	260758 (4788)	3897 (73)	25603	383	16.67%
Bulgaria	82416	121820 (1123)	2880 (60)	17585	416	19.35%
Bangladesh	78525	447341 (2060)	6388 (38)	2706	39	3.35%
Austria	75540	247188 (5226)	2388 (60)	27384	265	17.49%
Jordan	67175	183429 (5268)	2236 (64)	17908	218	21.67%
Greece	66915	91619 (1498)	1630 (103)	8807	157	19.01%

Data Source: Johns Hopkins University

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

Country Risk Assessment

VERY HIGH RISK (>5,000 cases)

Country	Active Cases	Confirmed (New)	Deaths (New)	Cases / 1M Pop.	Deaths / 1M Pop	% Daily Change 7-Day Av
Indonesia	63596	497668 (4360)	15884 (110)	1812	58	6.14%
Colombia	62198	1248417 (7924)	35287 (183)	24433	691	3.98%
Turkey	59827	446822 (6017)	12358 (139)	5276	146	7.28%
Iraq	57911	535321 (1766)	11958 (33)	13194	295	3.02%
Honduras	55370	104435 (0)	2857 (0)	10479	287	1.28%
Canada	53169	333808 (4724)	11502 (47)	8727	302	10.30%
Slovakia	49687	96241 (984)	671 (27)	17624	123	9.84%
Morocco	49168	324941 (3979)	5316 (60)	8763	143	9.78%
Costa Rica	48438	129418 (0)	1608 (0)	25314	315	4.79%
Lebanon	47909	116476 (1193)	900 (6)	17096	132	9.48%
Ireland	45074	70461 (318)	2023 (1)	14207	408	3.63%
Ethiopia	38447	105785 (433)	1647 (11)	911	14	2.90%
Pakistan	38348	376929 (2756)	7696 (34)	1681	34	4.75%
South Africa	36677	767679 (2270)	20903 (58)	12880	351	2.17%

VERY HIGH RISK (>5,000 cases)

Country	Active Cases	Confirmed (New)	Deaths (New)	Cases/ 1M Pop	Deaths/ 1M Pop	% Daily Change 7-Day Av
Lithuania	35716	47047 (2307)	386 (12)	17375	143	26.12%
Bosnia	33314	80006 (697)	2276 (30)	24447	695	10.06%
Peru	33093	948081 (0)	35549 (0)	28646	1074	1.39%
Armenia	30182	126224 (1385)	1952 (21)	42565	658	7.04%
Azerbaijan	28122	93094 (3196)	1131 (24)	9149	111	18.70%
Libya	27820	77823 (1015)	1089 (21)	11266	158	5.42%
Kenya	24485	77372 (968)	1380 (14)	1427	25	9.21%
Philippines	24209	418818 (1966)	8123 (43)	3802	74	2.62%
Algeria	23796	74862 (1088)	2272 (17)	1695	51	9.59%
Tunisia	23641	88711 (1240)	2821 (69)	7475	238	9.36%
Dominican Republic	23548	138410 (640)	2310 (2)	12709	212	3.39%
N Macedonia	20866	54743 (1112)	1511 (24)	26277	725	14.05%
Japan	20818	133034 (2163)	1943 (11)	1031	16	10.84%
Paraguay	20328	76476 (619)	1657 (5)	10671	231	6.41%

Data Source: Johns Hopkins University

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

Country Risk Assessment

VERY HIGH RISK (>5,000 cases)

Country	Active Cases	Confirmed (New)	Deaths (New)	Cases / 1M Pop.	Deaths / 1M Pop	% Daily Change 7-Day Av
Slovenia	20119	65308 (1024)	1052 (26)	31412	506	15.72%
Croatia	19985	103718 (3308)	1353 (49)	25327	330	18.81%
Nepal	19963	220308 (1669)	1321 (16)	7508	45	4.78%
Belarus	19055	123999 (1564)	1096 (7)	13124	116	7.91%
Myanmar	18749	79246 (1398)	1739 (17)	1453	32	12.94%
Georgia	18117	104732 (4048)	976 (49)	26274	245	23.92%
Moldova	16236	97941 (1252)	2149 (19)	24302	533	8.84%
Albania	16220	32761 (565)	699 (14)	11389	243	15.05%
Panama	15864	154783 (1206)	2957 (11)	35653	681	5.25%
Bolivia	15733	143978 (56)	8907 (3)	12264	759	0.51%
Norway	14461	32765 (413)	306 (0)	6025	56	13.22%
Denmark	14427	70485 (850)	784 (3)	12152	135	11.85%
Malaysia	12843	54775 (1096)	335 (3)	1684	10	13.43%
Kosovo	12338	34295 (707)	914 (10)			15.10%

VERY HIGH RISK (>5,000 cases)

Country	Active Cases	Confirmed (New)	Deaths (New)	Cases/ 1M Pop	Deaths/ 1M Pop	% Daily Change 7-Day Av
West Bank & Gaza	11987	71644 (1390)	636 (16)	13918	124	12.02%
Kazakhstan	11431	126182 (716)	1945 (0)	6651	103	4.07%
Latvia	11332	13120 (376)	153 (0)	6987	81	19.61%
Montenegro	11132	31062 (409)	439 (5)	49454	699	12.51%
UAE	9567	158990 (1205)	552 (4)	15999	56	5.44%
Luxembourg	9488	29762 (0)	260 (0)	49106	422	12.87%
Chile	9450	540640 (1497)	15069 (39)	28186	786	1.73%
Uganda	9185	17968 (301)	172 (4)	388	4	10.84%
Ecuador	8433	185643 (767)	13201 (62)	10460	744	2.88%
Israel	8232	328918 (521)	2799 (42)	35761	304	1.57%
French Polynesia	8073	12978 (0)	63 (0)	46095	224	9.80%
Kyrgyzstan	7539	69581 (432)	1231 (4)	10597	187	3.73%
Oman	7432	122081 (721)	1380 (15)	23673	268	1.39%
Puerto Rico	7300	47459 (1025)	1017 (5)	25435	300	10.49%

Data Source: Johns Hopkins University

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

Country Risk Assessment

VERY HIGH RISK (>5,000 cases)

Country	Active Cases	Confirmed (New)	Deaths (New)	Cases / 1M Pop.	Deaths / 1M Pop	% Daily Change 7-Day Av
Guatemala	7140	118629 (212)	4076 (2)	6574	226	3.16%
Afghanistan	7085	44706 (203)	1687 (12)	1138	43	3.28%
Kuwait	7012	140056 (322)	866 (3)	32607	202	2.30%
Angola	6810	14493 (80)	337 (1)	436	10	7.19%
Cyprus	6544	8643 (187)	44 (1)	7138	36	16.95%
Saudi Arabia	6107	355258 (224)	5780 (19)	10143	165	0.56%
Sri Lanka	6015	20171 (400)	87 (4)	940	4	14.30%
Finland**	5964	21639 (423)	375 (0)	3903	68	10.74%
Guadeloupe	5839	8225 (0)	144 (0)	20555	360	1.54%
Sudan**	5118	16052 (213)	1197 (4)	363	27	8.88%

Data Source: Johns Hopkins University

** Indicates moved up a risk category

HIGH RISK 1,000-5,000 cases)

Country	Active Cases	Confirmed (New)	Deaths (New)	Cases/ 1M Pop	Deaths/ 1M Pop	% Daily Change 7-Day Av
Venezuela	4609	99835 (400)	871 (2)	3515	31	2.49%
Egypt	4598	113027 (351)	6548 (13)	1096	64	2.00%
Martinique	4597	4732 (0)	37 (0)	12614	99	0.00%
Jamaica	4541	10284 (44)	238 (1)	3467	80	3.89%
South Korea	3956	31004 (271)	509 (4)	599	10	7.21%
Estonia	3937	9724 (349)	88 (1)	7328	66	21.46%
Syria	3752	7225 (71)	376 (4)	409	21	7.49%
Nigeria	3140	66383 (155)	1167 (1)	319	6	1.86%
CAR	2924	4911 (0)	63 (0)	1010	13	0.22%
Qatar	2711	137229 (167)	236 (1)	48874	84	1.05%
Botswana	2267	9594 (0)	31 (0)	4048	13	14.27%
Belize	2225	5183 (73)	116 (4)	12761	280	6.21%
El Salvador	2190	37562 (312)	1075 (5)	5780	165	3.21%
Uzbekistan	2187	71617 (186)	603 (0)	2128	18	1.92%

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

Country Risk Assessment

HIGH RISK (1,000-5,000 cases)

Country	Active Cases	Confirmed (New)	Deaths (New)	Cases / 1M Pop.	Deaths / 1M Pop	% Daily Change7-Day Av
Malta	2159	8924 (102)	111 (0)	20190	251	9.97%
Mayotte	2024	5036 (0)	48 (0)	18288	174	2.28%
Guam	1919	6452 (0)	103 (0)			8.18%
Mozambique	1762	15037 (56)	124 (1)	476	4	3.92%
South Sudan	1697	3047 (0)	60 (0)	271	5	1.44%
Congo (Brazzaville)	1652	5632 (0)	93 (0)	1011	17	2.08%
Bahamas	1598	7413 (18)	163 (0)	18780	413	3.06%
Bahrain	1538	85705 (114)	338 (0)	49707	196	1.17%
Australia	1400	27834 (13)	907 (0)	1086	35	0.31%
Nicaragua	1341	5725 (0)	159 (0)	860	24	1.12%
Ghana	1146	50874 (157)	323 (0)	1624	10	1.48%
Haiti	1128	9214 (0)	232 (0)	804	20	0.50%
Mali**	1086	4255 (49)	145 (2)	208	7	8.34%

Data Source: Johns Hopkins University

** Indicates moved up a risk category

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

US Risk Assessment

VERY HIGH RISK (>5,000 cases)

State	Active Cases	Confirmed (New)	Deaths (New)	Cases / 1M Pop.	Deaths / 1M Pop	% Daily Change 7-Day Av
California	1095798	1114524 (9089)	18726 (54)	28246	474	7.40%
Florida	920423	938414 (6587)	17991 (61)	43692	838	5.67%
Illinois	644248	656298 (10012)	12050 (99)	51792	951	12.60%
New York	478588	596214 (5391)	34319 (23)	32592	1760	6.04%
Georgia	439934	449132 (2328)	9198 (19)	42301	866	5.38%
Missouri	273534	277112 (4291)	3578 (4)	45825	617	11.75%
New Jersey	247943	306007 (3968)	16761 (15)	35104	1902	8.74%
Arizona	244821	299665 (4331)	6464 (7)	41170	888	8.09%
Texas	218803	1153612 (24810)	21013 (110)	40651	730	8.14%
Virginia	190725	217796 (2117)	3938 (0)	25516	461	7.27%
Colorado	184780	198600 (3921)	2806 (19)	34487	487	17.72%
Maryland	169199	182139 (2168)	4434 (19)	30127	733	8.90%
Michigan	167879	329021 (0)	8875 (0)	32945	889	16.15%
Washington	138641	141260 (0)	2619 (0)	19498	346	7.94%

VERY HIGH RISK (>5,000 cases)

State	Active Cases	Confirmed (New)	Deaths (New)	Cases/ 1M Pop.	Deaths/ 1M Pop	% Daily Change 7-Day Av
Alabama	138347	232506 (1798)	3457 (0)	47419	705	6.32%
Kansas	132615	137085 (19)	1326 (1)	46902	484	14.24%
Nevada	131871	133888 (2155)	2017 (6)	43468	655	10.24%
Kentucky	130157	158100 (2192)	1787 (4)	35388	400	12.98%
Indiana	125060	295357 (6174)	5305 (59)	43872	788	14.82%
Ohio	118147	351419 (8133)	5996 (12)	30064	513	15.17%
Pennsylvania	109902	313358 (6370)	9816 (41)	24511	775	14.25%
Nebraska	97084	114061 (1032)	909 (4)	58431	468	13.94%
Wisconsin	96514	376238 (4019)	3150 (7)	60915	516	12.31%
South Carolina	94329	206295 (1277)	4283 (9)	40067	832	5.23%
Iowa	93154	211664 (2461)	2202 (11)	66730	695	11.98%
Connecticut	86841	101469 (0)	4828 (0)	28460	1354	12.64%
Utah	60479	177176 (3197)	793 (6)	55265	247	13.19%
Oregon	58480	65170 (1502)	820 (1)	15451	194	12.72%

Data Source: Johns Hopkins University

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

US Risk Assessment

VERY HIGH RISK (>5,000 cases)

State	Active Cases	Confirmed (New)	Deaths (New)	Cases / 1M Pop.	Deaths / 1M Pop	% Daily Change 7-Day Av
North Carolina	55609	336775 (4514)	5034 (29)	32110	480	7.29%
Idaho	53300	91653 (819)	849 (2)	51287	475	10.26%
New Mexico	51656	81896 (2456)	1383 (33)	39057	660	21.61%
Massachusetts	50656	206850 (2695)	10512 (24)	30011	1525	8.98%
Minnesota	47140	270157 (7205)	3297 (40)	47903	585	17.24%
Rhode Island	43393	48001 (0)	1294 (0)	45311	1221	13.48%
Tennessee	41979	340476 (4589)	4266 (55)	49856	625	8.68%
Oklahoma	32384	174330 (3406)	1634 (10)	44056	413	11.59%
Louisiana	27972	220192 (3483)	6260 (27)	47365	1347	7.12%
Mississippi	22821	143180 (779)	3676 (19)	48109	1235	6.20%
Alaska	20505	27773 (549)	103 (1)	36344	139	14.25%
Arkansas	17663	145173 (1352)	2357 (20)	48106	781	8.36%
South Dakota	16897	73065 (851)	819 (42)	82591	926	10.52%
Montana	16026	55680 (1138)	603 (3)	52097	564	15.31%

Data Source: Johns Hopkins University

Note: This report is based on sources and information deemed to be true and reliable, but Dentons makes no representations to same.

VERY HIGH RISK (>5,000 cases)

State	Active Cases	Confirmed (New)	Deaths (New)	Cases/ 1M Pop.	Deaths/ 1M Pop	% Daily Change 7-Day Av
Delaware	15170	31808 (487)	748 (2)	32665	768	9.45%
West Virginia	13340	40478 (880)	662 (4)	22586	369	16.85%
Wyoming	11186	28169 (759)	176 (0)	48671	304	20.15%
North Dakota	10238	72683 (1143)	846 (6)	95377	1102	12.22%

HIGH RISK (1,000-5,000 cases)

State	Active Cases	Confirmed (New)	Deaths (New)	Cases/ 1M Pop.	Deaths/ 1M Pop	% Daily Change 7-Day Av
Hawaii	5292	17483 (122)	233 (2)	12162	165	4.14%
District of Columbia	4599	20151 (190)	670 (0)	28553	949	5.83%
New Hampshire	4238	17637 (322)	512 (4)	12942	377	16.75%
Maine	2392	10359 (236)	176 (2)	7706	131	13.66%
Vermont	1287	3629 (83)	63 (0)	5816	101	20.39%

** Indicates moved up a risk category

Contacts

This summary is based on reports sourced from among the 75 countries in which Dentons currently serves clients as well as from firms in other locations, some of which will formally join Dentons later in 2020. We are pleased to share this complimentary summary and contemporaneous assessment, with the caveat that developments are changing rapidly. This is not legal advice, and you should not act or refrain from acting based solely on its contents. We urge you to consult with counsel regarding your particular circumstances.

To read additional analysis, visit the [Dentons Flashpoint portal](#) for insights into geopolitics and governance; industry and markets; cyber and security; science, health and culture; and economic and regulatory issues.

Karl Hopkins

Partner and Global Chief Security Officer
Dentons
Washington, DC

D +1 202 408 9225
karl.hopkins@dentons.com

Melissa Mahle

Senior Analyst
Dentons
Washington, DC

D +1 202 408 6383
melissa.mahle@dentons.com