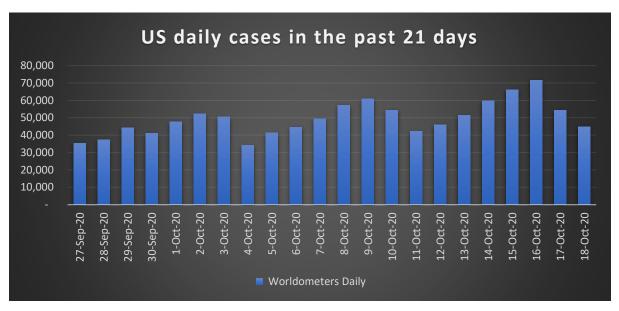
PCS Information Bulletin #39: COVID-19 Review

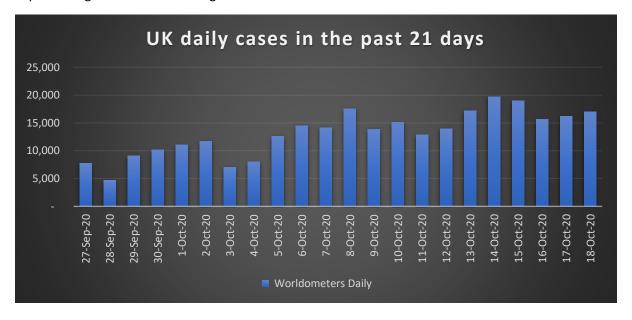
Wednesday, October 21, 2020

As always, please remember that **this report is for informational purposes only** and does not constitute the designation of a PCS event. We have decided to provide this report simply to help the market understand the COVID-19 situation and to provide access to some of the resources our team uses daily for intelligence on this event.

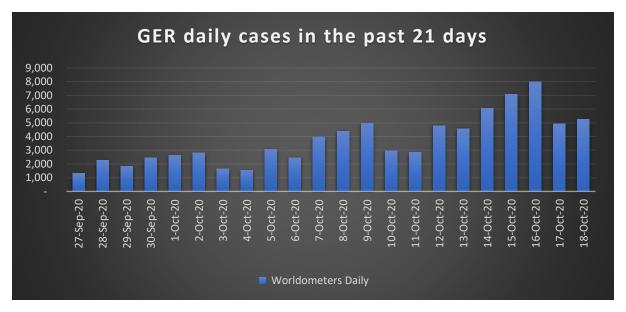
Global resurgence of COVID-19



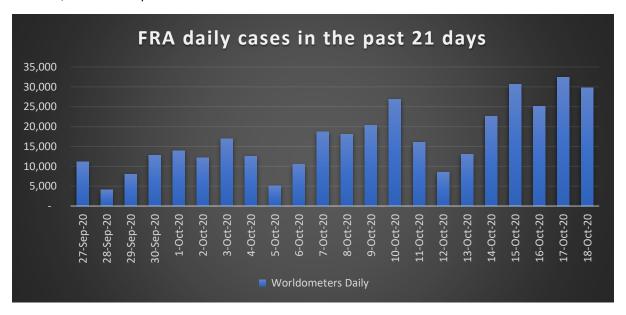
More than 68,000 new cases of Covid-19 were recorded in the United States on Friday, the highest number in a single day since July 31, 2020. The trend shows further confirmation that the country is experiencing a coronavirus resurgence.



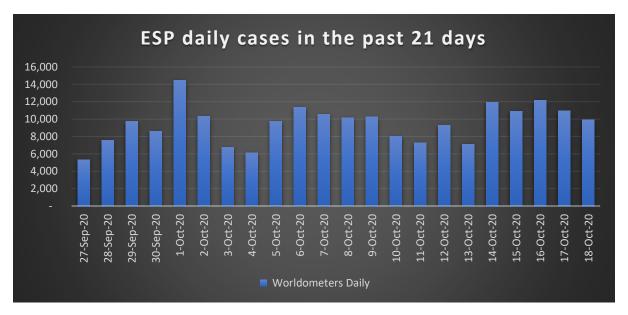
There have been at least 741,200 confirmed cases of coronavirus in the United Kingdom, with the most recent numbers tallying over 16,000 cases and rising. Britain has the highest number of Covid-19 deaths in Europe and on October 3, 2020, officials added 15,841 cases overall after resolving a technical issue that affected cases from Sept. 25 to Oct. 2.



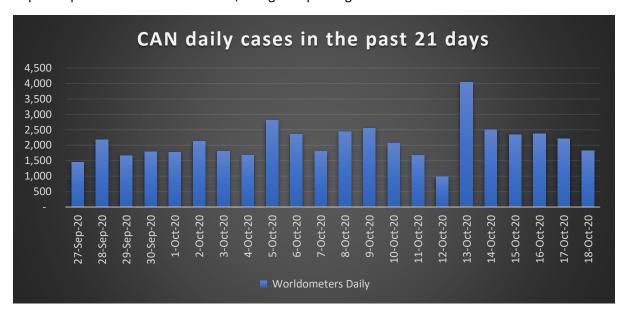
Germany saw a record daily increase in new coronavirus cases on Friday, reporting almost 8,000 new infections and a total of at least 366,200 confirmed cases since the pandemic started. Germany has received worldwide recognition for its response to the outbreak: a combination of an early, strict lockdown and widespread testing, which allowed schools and much of the economy to reopen over the summer, but cases tripled in the first two weeks of October with the arrival of colder weather.



French people spent their first evening under curfew on Saturday October 17, 2020 as the health ministry reported more than 32,000 new confirmed cases of Covid-19, the highest single-day tally since the start of the pandemic. France is in an official state of emergency with curfews meant to curb the spread of the virus applying to Paris, Ile-de-France, Lille, Grenoble, Lyon, Aix-Marseille, Montpellier, Rouen, Saint-Etienne and Toulouse.



Spain's cumulative tally of coronavirus infections rose by over 13,300 to over 920,000 cases in a slight acceleration from the previous few days, as Catalonia prepared to shut down bars and restaurants in a bid to slow the spread of the virus. Spain's government invoked a state of emergency on Friday to impose a partial lockdown on Madrid, being Europe's highest infection rate area.



The total number of COVID-19 cases in Canada has passed 200,000. The development comes just over four months after Canada reached the 100,000-case threshold. The bulk of the country's caseload has been concentrated in Ontario and Quebec, though numbers have been surging in much of the country in recent weeks as Canada deals with a second wave of the COVID-19 pandemic.

Increases in European COVID-19 transmission

Europe is once again dealing with a serious and alarming outbreak of COVID-19. Using the WHO's 53 European member countries to define the continent, daily deaths could be four to five times higher in January than they were in April.

- According to the Washington Post (https://www.washingtonpost.com/world/europe/covid-europe-records/2020/10/15/0126c256-0ee7-11eb-b404-8d1e675ec701_story.html), COVID-19 is now Europe's fifth leading cause of death, with more than 1,000 fatalities per day coming from the virus.
- More than a million new cases were reported on the continent over the past 10 days.
- Countries showing record or near-record levels of new cases include: France, United Kingdom, Netherlands, and others.
- Italy reported almost 9,000 new cases last Thursday.
- France saw 30,000 new cases last Thursday the same day the United States saw 60,000. Keep in mind that France has a population of only ~67,000.

The continent's various national leaders seem reluctant to reengage the "lockdown" strategies previously used, a sentiment that has some amount of traction in the United States, as well. A combination of economic strain and overall COVID-19 fatigue seem to be involved in the decision-making process.

What the decisions of European and U.S. leaders could suggest to the re/insurance industry

The response to the resurgence – particularly the unwillingness to return to the lockdown strategy – is perhaps the most interesting and actionable development for the global re/insurance community. As businesses slowly reopened in May and June, with the main threat of the pandemic shifting from those areas initially affected, underwriters began to discuss risk-transfer structures that might be useful to re/insurers in protecting their risk and capital from pandemic in the future.

A common theme that PCS found in conversations with clients was the notion that lockdowns would come faster in the event of a COVID-19 resurgence (or future pandemic). Almost all of them mentioned something about "learning from our mistakes." Of course, that's a loaded term, and the world leaders currently wrestling with decisions on how to keep their citizens safe would likely claim that they have – and that current responses are being shaped by what they've learned over the past nine or so months. And that's a fair claim. The notion that what we did last time should happen faster this time isn't necessarily correct. (PCS makes this observation without any judgment as to whether lockdowns were appropriate then or are appropriate now.)

What's important is that there's an assumption on future behavior in play (namely that we'd default to lockdowns faster than we did before) that would be integrated into a pandemic-related underwriting process or even backed into a risk-transfer agreement. During those discussions, PCS made very clear that the rush to lockdowns would not be a foregone conclusion, and that (a) there's no guarantee that leaders or their voters would "learn from their mistakes" and (b) pandemic-response strategy may evolve alongside the pandemic itself, meaning that prior measures may not be most effective in the future.

Now, let's take that back to the risk-transfer discussion. There was a bit of chatter about using some form of lockdown or "civil closure" as a trigger in pandemic risk transfer. Of course, that' difficult enough, because there's no common language for defining a lockdown across the global market – let alone even across a single state in the United States. But, assuming that could be worked out, you'd then have to address the basis risk associated with pandemic spread and subsequent economic malaise without a claim on the instrument.

Parametrics for pandemic are less likely to be useful to cover specific losses to your book than they are as a blunt-force hedge to inject capital during periods of uncertainty. Whether you have asset-side losses or an influx of claims, the instrument would pay out based on the underlying conditions that could affect either form of financial loss. From there, the company would have an infusion of capital to use as it sees fit.

What happens, in that scenario, if there's no civil closure order of a sort to trigger the cover?

Well, the instrument presumably wouldn't pay. That's easy enough to understand. But the conditions around that are more interesting. The company would face either an asset-side loss or a large number of claims due to some sort of economic condition. People get the virus and don't shop. They don't go to work. They don't do any of the normal, day-to-day things that have led consumer spending to account for 70 percent of economic activity in the United States (and presumably reasonably similar levels in other parts of the developed world). So, you'd have economic factors ultimately driving the impact on a risk-bearer's book that the parametric hedge should address. But, because there's no lockdown, financial relief wouldn't come.

The dynamics of the above would likely be different from what we saw in March, April, and May. While lockdowns led to a rather swift and severe curtailing of economic activity, a COVID-19 resurgence absent a lockdown (or commensurate) order would probably take longer to manifest economically. So, there'd be a longer period of slower decline, but it would ultimately reach the same end as the lockdown scenario. However, the lockdown requirement in a trigger would be what introduces basis risk.

Understanding the latest increase in U.S. COVID-19 cases

The latest report of 60,000 new COVID-19 cases last Thursday wasn't wholly alarming in itself (https://www.washingtonpost.com/health/2020/10/15/coronavirus-cases-surging/). After all, with 50 states and 350 million people, the United States could absorb that amount of new infections. And the fact that the cases are spread across 44 states might seem encouraging, as well, as it would imply that there isn't a single hot spot (or even a handful of them). However, there are plenty of reasons to keep an eye on this trend.

The fact that the large number of newly reported cases is spread across the United States suggests that there's a platform emerging for significant infection increases nationwide. Essentially, there are more places where a large concentration of cases could emerge, thus resulting in the potential for many significant increases simultaneously. And simultaneity is itself a profound risk. Multiple pockets of high COVID-19 infections would strain resources, as well as planning and coordinating activities.

- California has more infections than any other state, although that's cumulative back to the
 beginning of the pandemic. However, we've consistently seen roughly 2,500 or more cases
 reported daily in the state since its summer surge receded. Sustained reporting levels are
 noteworthy, although they should be considered alongside California's population, which is the
 largest in the United States.
- Illinois and Wisconsin both reported more than 4,000 new cases last Thursday, which brings the states into new territory, or at least to levels not seen since last spring.
- New York, which bore the brunt of the initial outbreak in the United States, has continued to
 test aggressively. On October 15, 2020, the state reported 1,707 new cases
 (https://covid19tracker.health.ny.gov/views/NYS-COVID19-Tracker/NYSDOHCOVID-19TrackerDailyTracker?%3Aembed=yes&%3Atoolbar=no&%3Atabs=n), and the state is watching specific
 zip codes very carefully.

Political risk manifesting in California wildfires?

Last week, a request for federal assistance to help pay for the recovery from several of the California wildfires was at first refused and then accepted. According to the *Washington Post* (https://www.washingtonpost.com/nation/2020/10/16/trump-rejects-california-disaster-wildfires/), a phone from the state's governor to the president of the United States was involved in the change. State and federal exchanges over federal aid isn't new, and it's not unique to the current administration. However, it does raise further questions about the impact political risk could have on natural catastrophe events, both for the people affected and the insurers who provide support.

PCS has been focused on the issue of political risk impacting natural catastrophe risks since the earliest days of the COVID-19 outbreak, when we began to explore the impact of virus transmission risk on catastrophe response and insurance industry claim-handling capabilities. The delivery of aid is of course a crucial aspect of political risk within the context of a natural catastrophe event, but there are many ground-level issues that could have long-term implications in affected areas. And with COVID-19 cases again increasing rapidly across the United States – with flu season and winter coming – we could see issues related to virus transmission during post-event response, along with the impact of political decisions on event remediation.

If you haven't read our latest white paper on how political risk has become a more pronounced input into natural catastrophe risk, please let Tom (tjohansmeyer@verisk.com) or Ted (tgregory@verisk.com) know you'd like a copy, and we'll send one out to you.

California Insurance Commissioner hearings on wildfires and the industry response

In the midst of the year with the most wildfire events designated in PCS history, wildfire activity is still active and ongoing across California with established events, some of which have been active for months and new fires occurring each week. More than 7,400 firefighters remain on the frontlines of 22 wildfires across the state, 12 of which remain major incidents. Firefighters responded to 47 new initial attack wildfires Sunday. Since the beginning of the year, some 8,600 wildfires have burned more than 4.1 million acres in California, and to date, the total number of fatalities statewide is 31 and more than 9,200 structures have been destroyed, according to CalFire.

Wildfire-resistant materials and designs, coupled with vigilant maintenance, work together to drive down risk. Buildings are systems with multiple vulnerabilities, so no single action alone will significantly reduce wildfire risk. One part of a home or business may be wildfire-resistant while another remains highly vulnerable leaving the structure, neighborhood and community at risk. Gov. Gavin Newsom's proposed state budget for this year originally contained \$100 million to help communities retrofit homes for wildfire safety. But the funding was dropped after the COVID-19 pandemic and economic shutdown left the state with a \$50 billion deficit.

Insurance Commissioner Ricardo Lara convened a "virtual investigatory hearing" on Monday October 19th to initiate a series of regulatory actions that will protect residents from the increasing risk of wildfires. Commissioner Lara plans to use his authority in four areas: pushing for incentives for mitigation; establishing statewide standards for hardened homes; creating fire risk scores that are transparent; requiring insurers to seek adequate and justifiable rates to protect the solvency of the market. The hearing included testimony from homeowners who lost their coverage, the insurance industry, consumer advocates and firefighting officials. Other topics included resilience, and home hardening.

The American Property Casualty Insurance Association (APCIA) in support of the insurance industry has commented on the hearing. The APCIA, along with the Personal Insurance Federation of California, issued a joint statement in response touching on points relative to the position of the insurance industry. "As the impacts of climate change are felt with larger and more intense fires and threats to our communities, lives and property we must work together as neighbors, communities, regulators and insurers to ensure access to comprehensive homeowners insurance for all Californians." The statement notes that insurers are seeing mounting economic losses in California that are not sustainable in the long term. The statement further goes on to state, "There is no easy way to address the many complex issues impacting the availability and affordability of homeowners coverage in fire-prone areas," and "However, working collaboratively to ensure rates reflect the new and increased risk of wildfire, using modern catastrophe models to better assess risk, and promoting effective strategies to mitigate wildfires puts us on the right path."

Six of this year's wildfires also rank in the top 20 most destructive wildfires in California history, while the North Complex and LNU Lightning Complex fell in the ranks of the deadliest wildfires. Officials are warning residents to remain cautious, citing historic trends that the state experiences the most devastating fires throughout the months of September and October.