PCS Information Bulletin #25: COVID-19 Review

Wednesday, July 15, 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.

Political Risk and Pandemic Reporting

Political risk and pandemic data reporting seem to be tightly intertwined. In a previous edition, the PCS team noted the changes in how Brazil decided to report on COVID-19 impact. And we detailed some of the data discrepancies among authoritative informal reporting agencies, which counted political risk among the underlying factors involved. Now, a possibility in how U.S. data is reported could provide further challenges.

A report by the *Washington Post* (https://www.washingtonpost.com/health/2020/07/13/trump-administration-recommend-national-guard-an-option-help-hospitals-report-covid-19-data/) indicates that the U.S. Department of Health and Human Services has eliminated the CDC as a recipient of COVID-19 data from hospitals. Instead, local healthcare providers would report either to the state or to a federal contractor – and that would be the intermediate step before federal reporting. Whether this ultimately prevents the CDC from receiving such data remains unclear. Additionally, any implications for reporting U.S. data to the WHO – and whether the WHO would otherwise get such data – remains unclear.

The potential implications for the global re/insurance community could be significant. As an industry, of course, we seek to harvest as much data as possible in the face of a potential loss, and the CDC has become a key source of data related to the pandemic (unsurprisingly). The disruption of data flow (or degradation of data quality) could impact models and analysis across our industry. Further, it could compromise any risk-transfer transactions that use CDC data as a trigger.

If there are impacts on data speed or quality in the transmission of data up to the WHO as a result of the potential disintermediation of the CDC, then it's worth noting the potential implications for future WHO-triggered pandemic transactions, as well. Questions about the flow of data from one of the largest populations in the world could drive the need for increased trigger sophistication, with structuring efforts needing to account not just for the potentially impeded flow of U.S. data but also for the emergence of a similar disruption in other major countries. Essentially, there's the risk that the WHO could be undermined as an informal reporting agent, because the threat of disruption could strike any major national public health agency.

A second-order impact on the use of the WHO data as a trigger could be the risk of trigger failure. A future transaction using WHO data could be affected by a country's decision to change its underlying reporting practices, which would result in less data – or poorer quality data – reaching the WHO. That situation could be used to form an argument for trigger failure by a party to a risk-transfer transaction, ultimately leading to increased post-loss frictional costs and delays in settlement.

Although details are still thin, it does seem that the reporting of data to state and local public health authorities in the United States may not be impacted. If that's the case, then it reinforces PCS's thinking of the past few months that the optimal approach to the use of informal reporting agent data in the transfer of risk (and even in most analytical endeavors) would be to collect it from the organizations closest to the risk, and then aggregate them.

COVID impact at a county level

There are more than 3,000 counties within the United States, and the ten counties with the most confirmed cases of COVID-19 totals more than 677,500 confirmed cases which is more than 20% of all cases in the United States. The ten most infectious counties are located in the states of Arizona, California, Florida, Illinois, New York, and Texas. Expand to include the top 25 counties and there are more than 1,000,000 confirmed cases of COVID-19, consisting of over 30% of all cases in the United States. The below charts consist of data according to the Coronavirus COVID-19 Global Cases by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU).

Top 25 Confirmed Cases by County (JHU data through July 12)			
	County	State	Confirmed Cases
1	Los Angeles	California	133,549
2	Cook	Illinois	95,557
3	Maricopa	Arizona	80,146
4	Queens	New York	65,745
5	Miami-Dade	Florida	64,444
6	Kings	New York	60,045
7	Bronx	New York	48,375
8	Harris	Texas	45,368
9	Nassau	New York	42,307
10	Suffolk	New York	42,028
11	Westchester	New York	35,297
12	Dallas	Texas	33,800
13	Broward	Florida	30,025
14	New York	New York	27,458
15	Philadelphia	Pennsylvania	27,367
16	Riverside	California	24,765
17	Orange	California	24,715
18	Middlesex	Massachusetts	24,483
19	Wayne	Michigan	23,996
20	Clark	Nevada	23,048
21	Palm Beach	Florida	21,018
22	Suffolk	Massachusetts	20,301
23	Bergen	New Jersey	19,871
24	Prince George's	Maryland	19,713
25	Bexar	Texas	19,648

Arizona

Arizona top five counties	Number of county cases	Percentage of state cases
Maricopa County	80,146	65.4253%
Pima County	11,800	9.6327%
Yuma County	8,300	6.7755%
Pinal County	5,600	4.5714%
Navajo County	4,300	3.5102%
	110,146	89.9151%

The state of Arizona is seventh on the list of most confirmed cases of COVID-19 per state with an estimated 122,500 confirmed cases. The top five counties total over 110,100 confirmed cases which is nearly 90% of all confirmed cases in the state. Maricopa County alone has over 65% of the cases in the state with about 80,100 confirmed. Maricopa County ranks third on the list for the most confirmed cases of COVID-19 out of all the counties in the United States. Maricopa County includes the cities of Chandler, Glendale, Mesa, Scottsdale, and the most populous city in the state, Phoenix. In Arizona, the five counties with the most confirmed cases consist of almost 90% of the total cases in the state.

California

California top five counties	Number of county cases	Percentage of state cases
Los Angeles County	133,549	41.1553%
Riverside County	24,765	7.6317%
Orange County	24,715	7.6163%
San Diego County	19,400	5.9784%
San Bernardino County	19,000	5.8552%
	221,429	68.2370%

With regards to the number of confirmed cases of COVID-19, Los Angeles County is the most infectious county of all counties in the United States with over 133,500 confirmed cases. Los Angeles County has almost 38,000 more confirmed cases than the next county with the most confirmed cases in the United States. California is the second largest state regarding confirmed cases with about 324,500 cases. Los Angeles County makes up over 41% of all cases in the state. There are about 108,000 less confirmed cases for the second county with the most confirmed cases in the state of California. On the list below Los Angeles County are Riverside County and Orange County, each exceeding 7% of the state's total cases with more than 24,700 cases per county.

Florida

Florida top five counties	Number of county cases	Percentage of state cases
Miami-Dade County	64,444	23.8858%
Broward County	30,025	11.1286%
Palm Beach County	21,018	7.7902%
Hillsborough County	19,100	7.0793%
Orange County	18,000	6.6716%
	152,587	56.5556%

Florida has over 269,800 confirmed cases of COVID-19 and ranks third on the list of most confirmed cases per state. Miami-Dade County represents about 24% of the state's cases with more than 64,400 confirmed cases. Miami-Dade County is sixth for the most confirmed cases of COVID-19 of all counties in the United States and has more than double the number of confirmed cases than the next infectious county in Florida, Broward County. In the country, Broward County is 13th on the list for most confirmed cases with more than 30,000 cases, which makes up more than 11% of Florida's total cases. Additionally, Palm Beach County with over 21,000 confirmed cases represents 7% of all cases in Florida.

Illinois

Illinois top five counties	Number of county cases	Percentage of state cases
Cook County	95,557	61.6497%
Lake County	10,400	6.7097%
DuPage County	9,700	6.2581%
Kane County	8,100	5.2258%
Will County	7,300	4.7097%
	131,057	84.5529%

Illinois has 155,000 confirmed cases of COVID-19 and is sixth on the list for the most confirmed cases per state. Of all counties in the United States, Cook County is the 2nd most infectious county with over 95,500 confirmed cases. In regard to the total cases in Illinois, Cook County consists of more than 61% of the confirmed cases. Cook County is nine times greater than the next largest county in the state, Lake County, which has 10,400 confirmed cases. The top five counties in the state consist of over 84% of the total confirmed cases in Illinois.

Nevada

Nevada top five counties	Number of county cases	Percentage of state cases
Clark County	23,048	83.2058%
Washoe County	3,600	12.9964%
Elko County	244	0.8809%
Carson City	213	0.7690%
Nye County	186	0.6715%
	27,291	98.5235%

Although Nevada is toward the middle of the list of states with the most confirmed cases, Clark County sits as the 20th for the most confirmed cases of COVID-19 of all counties in the United States. Clark County contains 83% of all confirmed cases in the state with over 23,000 cases. Clark County is more than 6 times greater than the next largest county in the state, Washoe County, which has 3,600 confirmed cases. Nevada which consists of sixteen counties and one independent city has 98.5% of the total confirmed cases in the five most infected counties within the state.

New York

New York top five counties	Number of county cases	Percentage of state cases
Queens County	65,745	16.4981%
Kings County	60,045	15.0678%
Bronx County	48,375	12.1393%
Nassau County	42,307	10.6166%
Suffolk County	42,028	10.5465%
	258,500	64.8683%

The state of New York is at the top of the list for the most confirmed COVID-19 cases for a state. New York City which consists of New York County (Manhattan), Kings County (Brooklyn), Bronx County (The Bronx), Richmond County (Staten Island), and Queens County (Queens) has almost 215,800 confirmed cases of COVID-19 and makes up over 54% of all confirmed cases in the state. Queens County has the most confirmed cases of all counties in New York state with over 65,700 cases. Long Island's two counties are Nassau County and Suffolk County, and each exceeds 10% of the state's total cases with more than 42,000 cases per county.

Pennsylvania

Pennsylvania top five counties	Number of county cases	Percentage of state cases
Philadelphia County	27,367	27.4218%
Montgomery County	8,900	8.9178%
Delaware County	7,500	7.5150%
Bucks County	6,100	6.1122%
Allegheny	5,000	5.0100%
	54,867	54.9770%

Pennsylvania is 10th largest state for confirmed cases of COVID-19 with 99,800 cases. Philadelphia County which is the county with the most confirmed COVID-19 cases in the state contains over 27% with more than 27,000 cases. Philadelphia County has almost 18,500 more confirmed cases than the second most county, which is Montgomery County with 8,900 confirmed cases. Nearly 55% of all confirmed cases in Pennsylvania are in the top five counties in the state.

Texas

Texas top five counties	Number of county cases	Percentage of state cases
Harris County	45,368	17.2633%
Dallas County	33,800	12.8615%
Bexar County	19,648	7.4764%
Tarrant County	17,800	6.7732%
Travis County	14,600	5.5556%
	131,216	49.9300%

Texas is the fourth largest state regarding confirmed cases of COVID-19 with about 262,800 cases. Harris County with more than 45,300 confirmed cases consists of 17% of all cases in Texas, has the most confirmed cases in Texas, and is ranked 8th among all counties in the United States. Second largest county in Texas is Dallas County with 33,800 confirmed cases and 13% of cases in the state.

COVID-19 and Marine: Potential Claim Drivers

It's no secret that lockdowns and other restrictions on movement around the world have had an impact on global supply chains. And that, intuitively, has led to a decline in shipping activity around the world, with the result being a general likelihood of reduced losses. It's similar to the dynamic in auto/motor that the market has seen during periods of constrained movement in the United States, United Kingdom, and other markets. With that in mind, though, the marine re/insurance community would be prudent to avoid complacency. Even with a reduction in sailings, risk remains. A recent report by Allianz (https://www.allianz.com/en/press/news/studies/200715_Allianz-AGCS-safety-and-shipping-review-2020.html) highlights some of these issues, a number of which have been on the PCS team's mind since the early days of the COVID-19 pandemic.

We've spent a fair amount of time in our COVID-19 information-only bulletins discussing crew change, why it isn't happening as often as usual, and what that could mean for marine insureds. Human error is always a concern, and when people aren't getting the rest and recreation to which they'd normally be accustomed, one can expect the risk of error to increase. The available seafaring community has been limited in several ways by COVID-19:

- Illness of prospective crew members themselves or their family members
- Inability of crew members to cross borders in order to become available
- Limited locations where vessels can change crew members
- Wariness about the risk of transmission

Operating concerns from social distancing to increased planning and larger workloads for smaller crews have resulted in the disruption of maintenance activity essential to the functioning of vessels. According to Allianz, this is "already one of the major causes of insurance claims" in the marine sector. The heightened risk of machinery damage could lead to aggregate concerns for the marine insurance community.

Port inspections and statutory surveys could be reduced or delayed, notes Allianz (this is an issue PCS has only touched on briefly so far in our COVID-19 information-only reporting). We've generally considered this issue from the point of view of virus transmission. However, it also leads to the risk of unsafe practices or defective equipment not being identified and remedied – and that would trace a straight line to potential claims activity. Cargo damage and delay could come from problems or backlogs at ports, as well, with any unsafe practices or defective equipment only exacerbating the situation further.

Additional concerns identified by Allianz include increased impact from slower emergency response; the increased risk of vessels in lay-up relative to extreme weather, piracy, and political risk; and the wide range of implications associated with a general downturn in global economic conditions.
The PCS team has done a back-of-the-napkin analysis of the potential impacts of COVID-19 on the global marine re/insurance market. This extremely informal exercise, based on potential insured losses of US$50-70 billion across all P&C lines of business (https://www.artemis.bm/news/global-covid-19-claims-under-70bn-lloyds-estimate-too-high-analysts/), translates to roughly 5-10 percent of the overall loss going to the marine market. This was based on limited data points early in the pandemic and is, again, back of the napkin.

Artemis ILS Asia 2020 Keynote: PCS

If you didn't get the opportunity to see PCS's contribution to Artemis's virtual conference for the ILS Asia market, we encourage you to do so at the following link:

https://event.on24.com/eventRegistration/EventLobbyServlet?target=reg30.jsp&referrer=&eventid=2460632&sessionid=1&key=D2CB23107DF0EA6884A30BBB0D526FF9&regTag=&sourcepage=register .

The session had sufficient question and answer activity to drive an extra 30 minutes of discussion beyond scheduled time, and it was well worth it. The session covered a wide range of topics related to COVID-19, including strike/riot/civil commotion, large property risk losses, cyber, and the implications of the pandemic for natural catastrophe events. Please feel free to share the link to this session liberally.