

COVID-19 Models for Third- and Fourth-Party General Liability and Directors & Officers

Julie Menken, ACAS

1. INTRODUCTION

The highly contagious coronavirus, SARS-COV-2, and resulting respiratory illness COVID-19 has resulted in more than 152.5 million confirmed cases and nearly 3.2 million deaths across 237 countries as of May 3, 2021. While the ultimate severity of the pandemic remains uncertain, the current litigation environment in the United States indicates the possibility of mass litigation resulting from introduction of the virus via travel, failure to contain the virus and prevent spread of disease. Pandemic severity here is defined as the total damage from the virus which includes the number of U.S. deaths, the number of severe cases resulting in hospitalization, and ultimate healthcare costs of those severe cases. Such an event challenges (re)insurers to quantify and manage their exposure to 3rd and fourth-party pandemic losses. Exposure-based pandemic scenarios assist in this endeavor by stipulating mass litigation events that could arise from the pandemic and estimate the potential economic damages by company and industry. The following essay is meant to serve as commentary on how pandemic liability models are built and the factors considered regarding line of business specific COVID-19 liability models.

1.1 Scenarios Context

The basis of SARS-COV-2 scenarios requires building an epidemiological and exposure model which estimates the number of fatalities and hospitalizations under varying assumptions of the ultimate severity of the pandemic. A key estimate, the total number of COVID-19 fatalities, will depend on the success of public health measures in controlling the spread of the virus, the emergence of treatments for COVID-19, and how quickly a vaccine can be developed and deployed. As of the writing of this essay, the FDA has approved emergency use of three vaccines, however, the effectiveness of the vaccine to lower pandemic severity depends on public trust and willingness to get vaccinated, a significant public health hurdle to overcome. Pandemic liability models should consider a variety of data sources to build the basis for its scenarios including CDC, IHME, and WHO data sources, among other sources of information to project number of deaths and COVID-19-specific healthcare costs by age and industry. Projected U.S. fatalities under each pandemic severity level of the liability model should be allocated among residents of long-term care facilities, workers in essential industries, workers in non-essential industries, and non-workers. Industry and

company specific damages vary by estimated employee count and risk level.

1.2 Objective

Models for COVID-19 liability will differ based on third-party versus fourth-party coverages due to differences in how these mass litigation events have typically played out in the U.S. court system. In this essay, we discuss both and the precedent set by asbestos mass litigation and how this may factor into future pandemic liability lawsuits.

2. THIRD-PARTY TAKE-HOME LIABILITY SCENARIOS

A key segment of third-party pandemic liability models considers mass litigation scenarios regarding liability for “take-home coronavirus” exposures whereby workers contract the virus in workplace and then infect their family members and/or co-habitants. Household members sickened with COVID-19 then sue the employers of infected workers for damages.

While the first official case of COVID-19 in the U.S. was detected in Washington state on January 19, 2020, epidemiologists believe the virus was circulating in major cities weeks before. As the number of cases and deaths accelerated in late February and early March, city and state officials enacted “stay-at-home” orders which closed many businesses, banned public and private gatherings, and directed residents to remain home for all but essential travel. However, there was significant variation in how and when businesses responded to the pandemic. Some businesses put social distancing practices in place or closed entirely prior to the enactment of stay-at-home orders. Others continued to operate as normal until directed to close by public health authorities. Essential businesses ranging from grocery stores to construction sites to hospitals continued to operate through the stay-at-home orders.

Businesses that continue operations during the pandemic have potential to contribute to the spread of SARS-COV-2. Workers may contract the virus from their co-workers or customers. Workers who contract the virus in the course of employment may be able to claim Workers’ Compensation benefits depending on the jurisdiction. Some workers could also file personal injury lawsuits against their employers if they believe their employers were negligent in exposing them to the virus.

The focus of 3rd party pandemic scenarios are on the emergence of lawsuits filed by individuals who alleged they contracted COVID-19 from a co-habitant who was infected with SARS-COV-2 at work. These take-home coronavirus plaintiffs argue that the employer was negligent in exposing the worker, and subsequently themselves, to the virus and sue for damages associated with COVID-19, including medical costs, lost wages, and pain and suffering. Under this scenario, take-home

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coronavirus lawsuits emerge in a wide range of industries including nursing homes, meatpacking, construction, public transportation, food service, and essential retail operations such as grocers and building supply stores. Individual lawsuits are consolidated in federal and state multidistrict litigations. Industry-by-industry, juries in bellwether cases hold defendants liable for take-home coronavirus plaintiffs' injuries and award damages. While a global settlement is not possible due to the diversity of defendants, a general case management strategy emerges that is employed widely to achieve efficient settlements for thousands of pending cases.

From this base scenario description, models may target three levels of pandemic severity and three levels of propensity to recover damages, considering the uncertainty vaccine rollouts and mask adherence to public health recommendations as well as the state-by-state legal considerations of duty. All scenarios include an estimate for the percent of COVID-19 hospitalizations and deaths which are attributable to take-home exposures. It is not known how likely it is that these injured individuals will file lawsuits and recover damages. Plaintiffs face difficulties in establishing that their infections resulted from a given employer's negligence and furthermore that the employer acted negligently and should be held liable. Workers' Compensation, health insurance, and possibly a government-administered essential worker victims' compensation fund offers alternative mechanisms for compensation that may dampen litigation claim rates. The uncertainty surrounding alternative compensation mechanisms is also reflected in the levels of propensity to recover.

Estimates identify over 200 industries with exposure to take-home coronavirus lawsuits. Scenario losses distribute losses among these industries in proportion to a qualitative measure of ease of virus spread and quantitative estimates of industry employment. Damages are distributed to companies within those industries in proportion to estimated employment. Curated and established portfolio modeling software would apply an insurance model to the pandemic liability scenarios and allow clients to run their general liability and umbrella portfolios against the scenarios to receive an estimate of their COVID take-home liability exposure.

In the current U.S. litigation environment, there is a non-insignificant probability that the United States court system will experience mass litigation from coronavirus injuries. Precedent for take-home exposure litigation was established with asbestos litigation whereby injured family members successfully sued the employer of the family member who brought home asbestos fibers on their clothes. Cases of asbestos-related disease from such second-hand exposure are well documented and some have resulted in successful litigation against the initial employer. Such take-home exposure can be used as precedent in 3rd-party take-home COVID-19 mass litigation lawsuits. The first take-home COVID-19 lawsuit was filed in May 2020 in Illinois. As of May 3, 2021, fifteen take-home coronavirus infection complaints have been filed, most alleging damages based on a negligence theory but some on a public nuisance theory, which has also been seen in asbestos cases. Given

observations of these early cases building on each other as test cases, the expectation is that we will see more of these take-home liability lawsuits in the years to come.

3. FOURTH-PARTY LIABILITY SCENARIOS

The second segment of pandemic scenarios envisions state governments filing suit against airline carriers and cruise lines alleging their negligent actions resulted in introduction and spread of SARS-COV-2 in the United States. The resulting lawsuits in this scenario class seek to recover costs of treating COVID-19 patients under state Medicaid programs. The fourth-party scenarios will have the same underlying epidemiological and exposure model as the third-party scenarios. The difference here is in the defendants and the mechanisms of mass litigation.

The United States enacted travel restrictions to and from China on January 31 and to and from Europe on March 12, but hundreds of thousands of travelers entered the U.S. before international air travel was effectively suspended worldwide, allowing the virus to be widely introduced to major population centers in the US. State and local governments, compelled to mobilize a response to the pandemic in the absence of federal government action, have at the same witnessed steep declines in their tax revenues and their budgets have been hit hard by the coronavirus. The Tax Policy Center estimates state government revenue will decrease by \$200 billion across fiscal years 2020 and 2021 relative to pre-pandemic forecasts. The decline in state government revenue has resulted in massive budget shortfalls that, in the absence of aid from the federal government, can only be addressed by reducing expenditures and raising additional revenue. At the same time, state governments are being forced to spend additional resources to expand emergency and hospital services to care for the hundreds of thousands of individuals who have been sickened by the virus.

With fourth-party pandemic liability, the model may contemplate a scenario by which state attorneys general file suit in state and federal courts seeking to recover the cost of treating COVID-19 patients by state Medicaid programs. The lawsuits name 60 air carriers and cruise lines who may have brought infected travelers into the United States between the time when the coronavirus was first known to be a major public health threat and when the United States effectively suspended international travel. These companies are alleged to have downplayed the seriousness of the health threat, continuing to operate “business as usual,” and not taking precautions commensurate with the risk such as discouraging non-essential travel, aggressively screening passengers for signs of illness prior to boarding, mandating all passengers wear masks, limiting occupancy, and disinfecting all surfaces between flights.

Individual state lawsuits are consolidated in federal multidistrict litigation. Juries in bellwether trials are persuaded that defendants’ disregard of the public health threat posed by coronavirus

accelerated the introduction and spread of the virus in the United States resulting in greater public health expenditures than would have materialized had these companies acted with an appropriate level of care in the early days of the pandemic. Juries hold defendants liable for the costs they imposed on public health insurance programs awarding several state plaintiffs hundreds of millions of dollars in compensatory and punitive damages. A global structured settlement modelled after the Tobacco Master Settlement Agreement is eventually reached between all plaintiffs and defendants with settlements allocated across defendants according to estimates of the number of passengers disembarking with coronavirus.

Fourth-party litigation operates by different standards of liability than do third-party suits. As such, the lawsuits do not consider individual cases against essential businesses, but rather, lawsuits against major players who can be deemed responsible for introducing the virus to the U.S. by failing to heed warnings in early days. In this way, the defendants in these scenarios will be lower in number with a greater percentage of loss allocation to each. Allocation to the estimated defendants in fourth-party scenarios will be based on extent of travel and date of first actions take to stop the spread of the virus via travel restrictions. Fourth party pandemic liability models may use international passenger statistics for cruise ships and airlines as a basis for potential loss allocation to insureds. Fourth-party scenarios also should contemplate the capacity to bear loss and market cap of the potential defendants. In particular, 4th party liability scenarios may also consider the issue of international conventions which limit liability for airline carriers.³

4. D&O AND OTHER CONSIDERATIONS

A third segment of pandemic liability scenarios should also consider is event-driven D&O, which have been increasing in recent years. Event-driven securities litigation involves operational risks which are not appropriately disclosed to investors and then a later event reveals the issue and causes the stock value to tumble. Mass tort litigation can serve as the vehicle for revealing the undisclosed operational risk, and therefore the same scenarios described for general liability can simultaneously trigger D&O events. As a result, there is significant risk of cross-line clash that casualty insurers face, and it is necessary to prepare companies by understanding their exposure not only to COVID-19 general liability but also the potential for them to see litigation across lines of business.

When mass torts cause a clash of underlying general liability and D&O losses, D&O is the “caboose” of the liability train. Using recent examples outside of COVID-19 of mass torts against opioids manufacturers and distributors, 3M and other PFAS manufacturers and users, Monsanto and J&J, event-based securities litigation can be modeled for potential COVID GL-D&O clash risk. Models for such risk will quantify the risk by estimating the size of the resulting event, the potential

range of shareholder damages, and the range of shareholder recoveries. To estimate shareholder damages models would estimate share price movements and reflect known historical patterns of shareholder recoveries. While the details of a COVID19 D&O model may differ from the underlying GL model, the underlying pandemic severity assumptions are consistent and clash between lines of business contemplated. Considering the litigation uncertainty and pandemic severity uncertainty, COVID19 liability models help provide estimates for the extent of insurer exposure both within and across lines of business.

5. REFERENCES

- [1] World Health Organization COVID-19 site: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
- [2] IHME projects over 5 million COVID-19 deaths globally and nearly 599 thousand U.S. COVID-19 deaths August 1, 2021, as of this writing. These numbers consider a rapid vaccine rollout. <https://covid19.healthdata.org/global?view=total-deaths&tab=trend>
- [3] Potential COVID-19 Liability Facing Air Carriers <https://www.jdsupra.com/legalnews/potential-covid-19-liability-facing-air-34753/>

Abbreviations and notations

CDC, Centers for Disease Control
D&O, directors and officers
GL, general liability

IHME, Institute for Health Metrics and Evaluation
PFAS, per- and polyfluoroalkyl substances
WHO, World Health Organization

Biography of the Author

Julie Menken, ACAS is a Senior Client Engagement Manager and Actuary at Praedicat, a liability emerging risk analytics and casualty catastrophe modeling company for casualty insurers and global industrial companies. Praedicat's emerging risk framework, liability scenarios and stochastic loss model makes emerging risk actionable across its lifecycle, helping companies to better identify liabilities early, track the risks and take action as they mature, and defend claims if litigation emerges. Praedicat is creating the technology for a growing and sustainable casualty market.

Praedicat was established in 2021, is based in Los Angeles, California and has offices in New York and London. Praedicat successfully participated in Lloyd's Lab Cohort 3 and 5, partnered with SOMPO to win an SMA Underwriting Innovation award in 2019, and has made the InsurTech Impact 25 of 2020 list by Oxbow Partners as one of the top-25 most promising insurance technology solution providers. Praedicat's ultimate aim is to deliver the science around health and environmental risks to businesses, driving smarter decisions that make the world cleaner, safe and healthier.