Pandemic Risk Webinar

I. Brief History of pandemics
II. Update on status of COVID-19 outbreak
III. Health provider impact
IV. Business operational impacts
V. Economic/Investment impact
VI. Insurer impact
VII. Closing Thoughts
I. Brief History of Pandemics

Historical Pandemics
The Last 100 years

1918 Flu Pandemic
In 1918, a new influenza virus emerged, infecting 300 million people, or 1/3 of the world’s population, causing a flu pandemic.

Greatest Influenza Death Total
The 1918 flu pandemic produced the greatest influenza death toll in recorded history, killing an estimated 675,000 Americans and at least 50 million people worldwide.

2600 per 100,000

1957 Asian Flu
2 million excess deaths on world population of 2.9 billion (69 per 100,000)

1968 Hong Kong Flu
1 million excess deaths on world population of 3.6 billion (28 per 100,000)

1981 – Present AIDS
35 million excess deaths.

2003 SARS
Spread of disease was stopped in a few months. Only 8000 infections and 800 deaths reported.
II. COVID-19 Status

COVID-19 Situation
Late March 2020

What are coronaviruses?

- Coronaviruses are a large family of viruses, some can infect people.
- Some cause mild illness, such as strains responsible for some common colds.
- Others can potentially lead to severe or even fatal diseases - such as Middle East respiratory syndrome coronavirus (MERS-CoV), which continues to circulate in some parts of the world.
- Severe Acute Respiratory Syndrome (SARS) is also a coronavirus. It caused severe and fatal disease in 2002-03, however, is no longer in circulation.

Symptoms of COVID-19

Most cases are mild. Symptoms start like many other illnesses and include:

- Fever
- Sore throat
- Cough
- Shortness of breath
- Muscle aches
- Diarrhea
Breakdown
As of March 23

COVID-19
367,745 Total Cases

Active Cases
- 45,084 Severe
- 205,381 Mild

Closed Cases
- 16,113 Deaths
- 100,879 Recoveries

R0 – Disease Spread
III. Health Provider Impact

Provider impacts

Operational
- Readiness – training, supplies, equipment, beds, staff
- Durational fatigue – employees at risk due to exposure and inundation
- Outcomes – quality and care
- Rationing – ICU beds for infected
- Collateral damage – deaths due to ICU overflow
- Routine care – availability / reduced utilization

Financial
- Surgical revenue – currently, little to none
- Medical Malpractice – quality of care, potential rationing, delivery / availability of routine critical care
- Mix of business impacting reimbursement – need for ICU care more heavily weighted to Medicare / Medicaid populations (reimbursement level mismatch)
- Uncompensated care
Flattening the COVID-19 Curve
The key to not overwhelming healthcare system capacity

Gradual rate of infection over longer period of time:
- Healthcare system as “subway car” analogy
  - Staggering “work hours” increases the likelihood you will get a “seat on the train”.
  - Work within capacity, buys time for effective treatments / vaccine, reduce collateral damage
- Fewer infections, fewer deaths?
- Can healthcare system meet needs with current capacity?
January Advice

**BASELINE ADVICE FOR EMPLOYERS:**

**Risk Managers, HR, Line Managers, Security Managers**
- Prepare for dynamic times: Airlines decrease frequency, borders close for certain populations, supplies become limited.
- Before, during and after approach to potential exposures for travelers
  - Before: Screen, train, collect contact details, track
  - During: Active monitor, provide updates, separate sick people
  - After: Questionnaires, determine a system for social distancing, monitor your employees, post-briefing
- Healthy work environments:
  - Take a proactive and reactive approach to mental health.
  - Encourage the flu shot.
  - Encourage employees to stay home if they are sick.
  - Role model behaviors yourself.

**Operational Issues**

- Benefits
- Building Management
- Resources
- IT
- Crisis Management
- Communications
- Travel
- Absenteeism
Operational Issues

Remote Workforce

Planning and Preparing for a Recovery phase

Everyone is keen to get back—possibly due to wanting a first mover advantage

BUT:

- Consider employee wellbeing – don’t expose employees to UNNECESSARY RISKS
- Plan for SAFETY
- Consider customer wellbeing – don’t be exposed to third party claims, D&O claims
- Brand IMPACT
IV. Economic Impact

Areas of Economy impacted

Healthcare

Financial Markets

Government Response

Demand for Goods & Services

Supply of Goods & Services

Unemployment
**GDP Impact**

1918 – Flu Pandemic  
GDP growth was down >5%  
But Pandemic coincided with end of WWI  
End of Korean War (1954) resulted in a 5% drop in GDP growth

1957 – Flu Pandemic  
GDP growth was down approximately 2.5%

1968 – Flu Pandemic  
GDP growth was on trend

2020 – COVID-19  
How many months of disruption of activities  
Uneven impact on various sectors
## VII. Insurer Impact

### Health insurer / plan sponsor impacts

<table>
<thead>
<tr>
<th>Current</th>
<th>Rest of 2020</th>
<th>2021 and beyond</th>
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<tbody>
<tr>
<td>Utilization</td>
<td>Claims</td>
<td>Claim costs</td>
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<td>Pricing for 2021</td>
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<td>Mix of business</td>
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<tr>
<td>expectations</td>
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<td>Unit cost / contracting</td>
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<td>Antiselection</td>
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Risk to Life Insurers

- Excess Mortality
- Access to Reinsurance Capacity
- Counterparty Risk
- Economic & Financial Market Impact
- Operational Impacts

Risk to Disability Insurers

Some risks for Disability Insurers to consider:

- Incidence and Recovery Rates

- Interest Rates
### Traditional Property and Casualty Cover

Depends on insurance contract/policy language

- **Generally Covered**
  - Work Injury
  - Medical Costs
  - Travel

- **Possibly Covered**
  - Event Cancellation Liability to third parties,
    - D&O
    - Trade Credit

- **Probably not covered**
  - Business Interruption

### Reinsurer Impact

<table>
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<tr>
<th>Class of Business</th>
<th>Reinsurance Considerations</th>
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| **Contingency** Event cancellation Conferences | • With global participation in events, most stringent authority ruling likely applies  
• Loss of revenue and sponsorship agreements insurable  
• Often have infectious disease exclusions, then covered as an extension |
| **Personal Accident & Travel** Delay / cancellation | • Trigger requires government advice (Notifiable Disease) or a WHO pandemic declaration  
• Hours clause and policy excess limits  
• Policy non-renewal and loss of premium |
| **Life and A&H** Extreme mortality  
Medical expenses | • Proportional treaties offer unrestricted cover for pandemic  
• Low mortality on those of working age  
• Medical expenses less of an issue as care is via public institutions |
| **Trade Credit & Surety** | • Trigger for Credit is essentially bankruptcy or insolvency  
• Expect some deterioration in loss ratios given supply chain disruption  
• Surety covers longer term performance risk so lower impact |
| **Property** Non-damage BI extensions | • General restrictions on original policies typically require property damage  
• Hours clause and other limitations in defining an event |
| **Liability** Workers Comp / EL  
D&O and E&O | • Epidemic such as COVID 19 is considered an occupational disease  
• Risk excess treat each individual as own event so limited exposure  
• Other non-proportional or proportional treaties likely to have restrictions  
• D&O and E&O claims may be possible if negligence and company under-performance can be demonstrated |
XI. Closing Thoughts

Closing Thoughts

First Task – Survive the Pandemic
- Operational challenges
- Investment challenges
- Insurance challenges
- Strategic challenges

Second Task – Decide what to do after the Pandemic
- Seeking to recapture what you were doing in 2019 is not the only choice
- There may well be new choices in a world that has been transformed by the months long fight against the virus
  - Operational / Investment / Insurance / Strategy

Third Task – Go for it
Thanks for your attention!

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