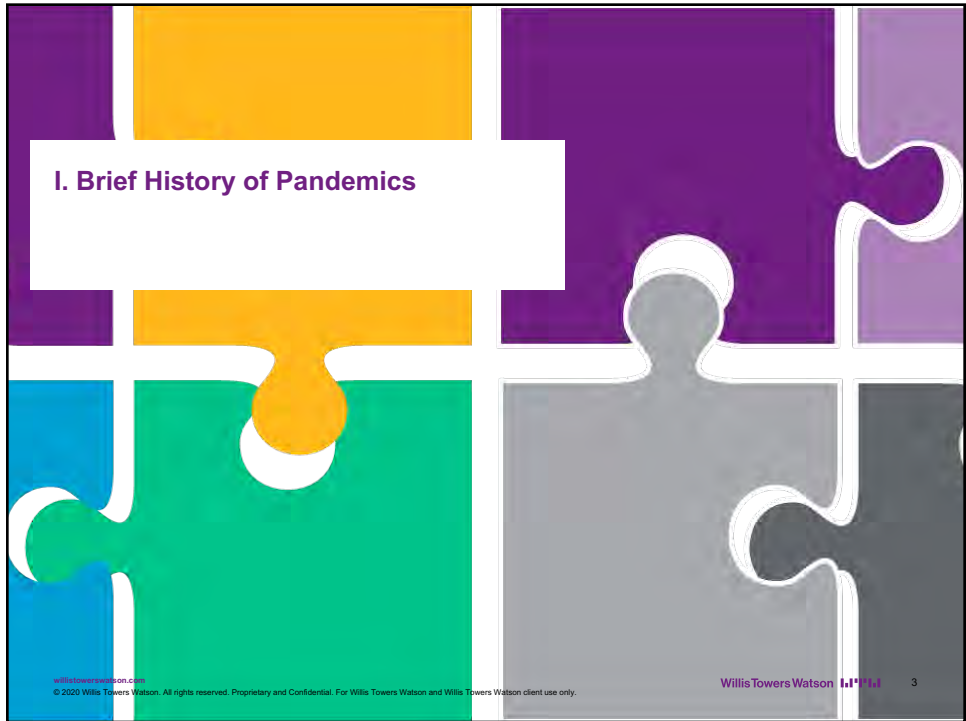


Pandemic Risk Webinar

- 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 – 1/3 of the world's population, causing a flu pandemic.

2600 per 100,000

GREATEST INFLUENZA DEATH TOTAL

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

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.

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II. COVID-19 Status

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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, disease – 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.

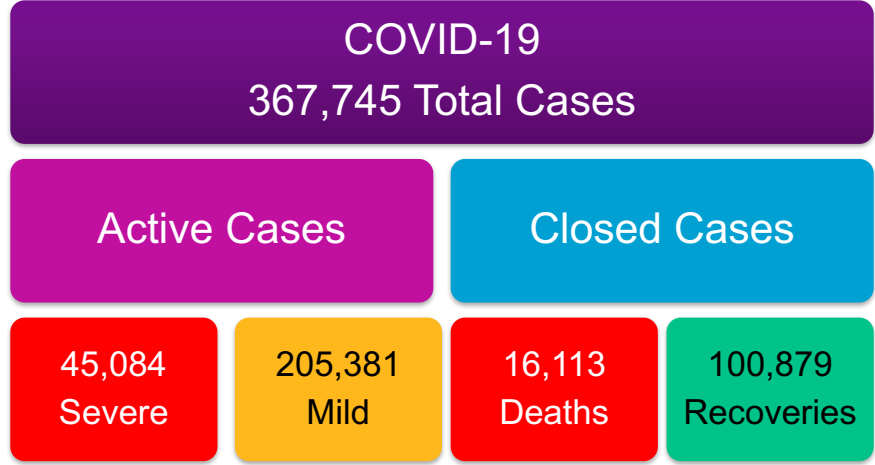
Symptoms of COVID-19

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

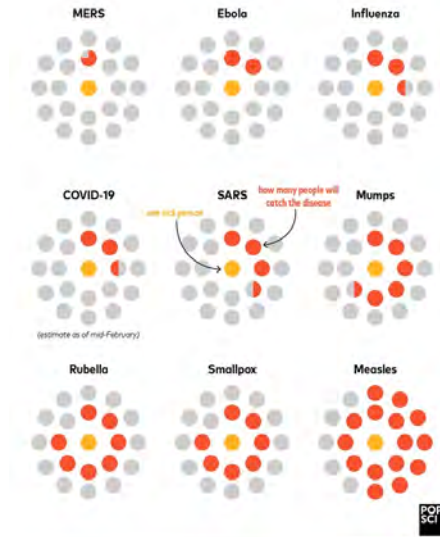
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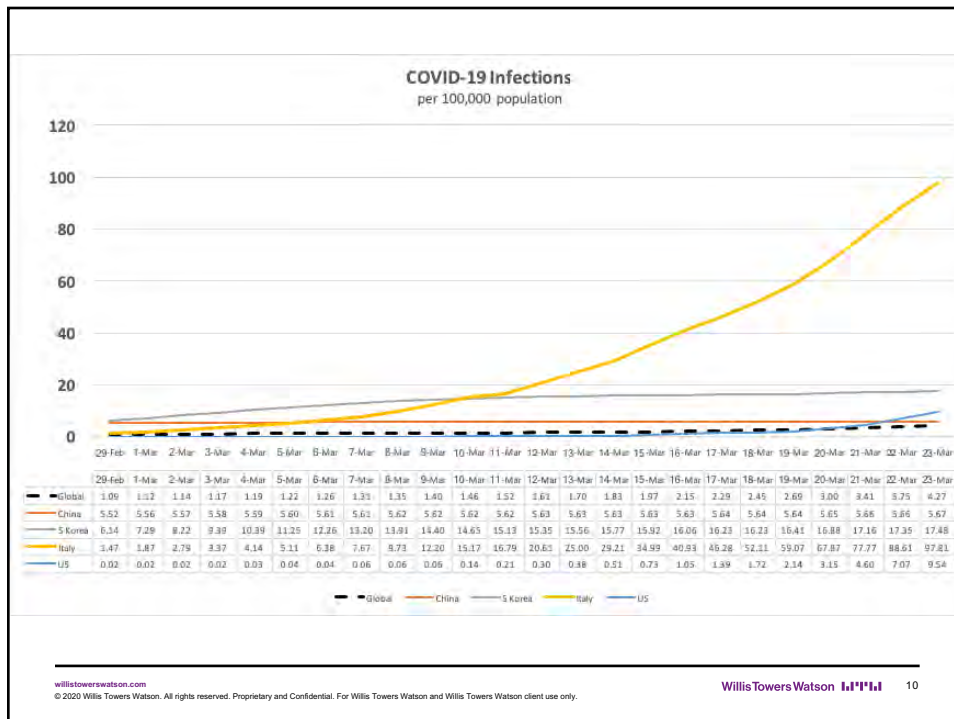
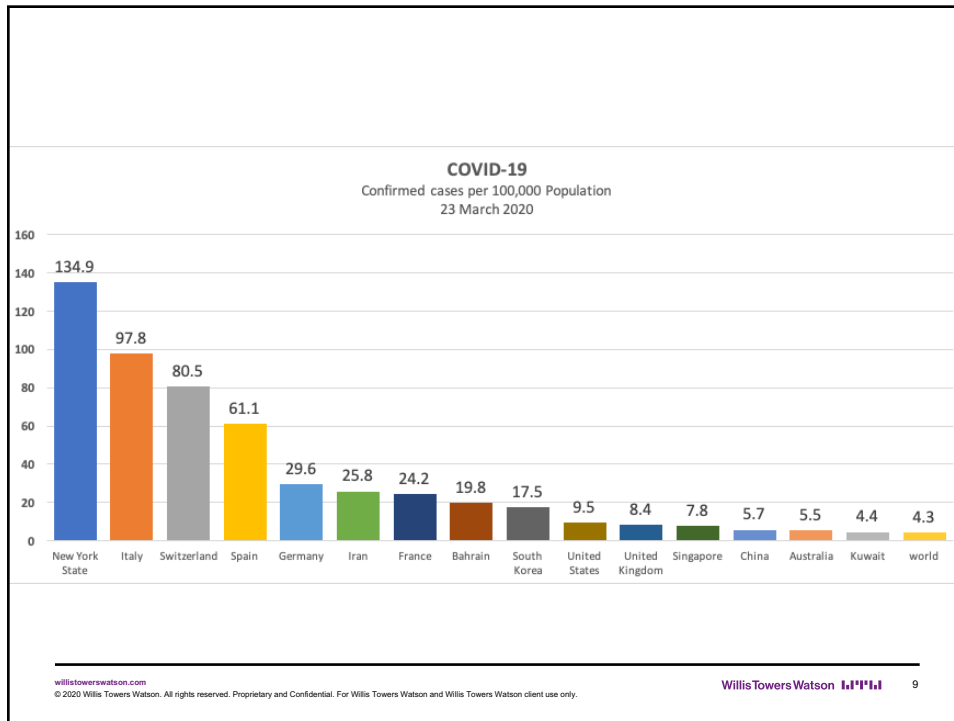
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Breakdown
As of March 23



R0 – Disease Spread







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

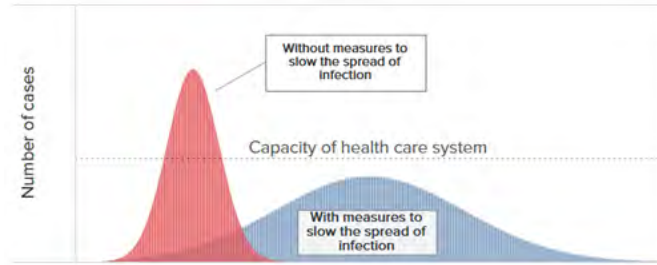
- Surgical revenue** – currently, little to none
- Medical Malpractice** – quality of care, potential rationing, delivery / availability of routine critical care
- Mix of business** impacting reimbursement – need for ICU care more heavily weighted to Medicare / Medicaid populations (reimbursement level mismatch)
- Uncompensated care**

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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?

III. Business Operational Impact



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.

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WORLDWIDE REACH. HUMAN TOUCH.

Operational Issues



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

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Areas of Economy impacted

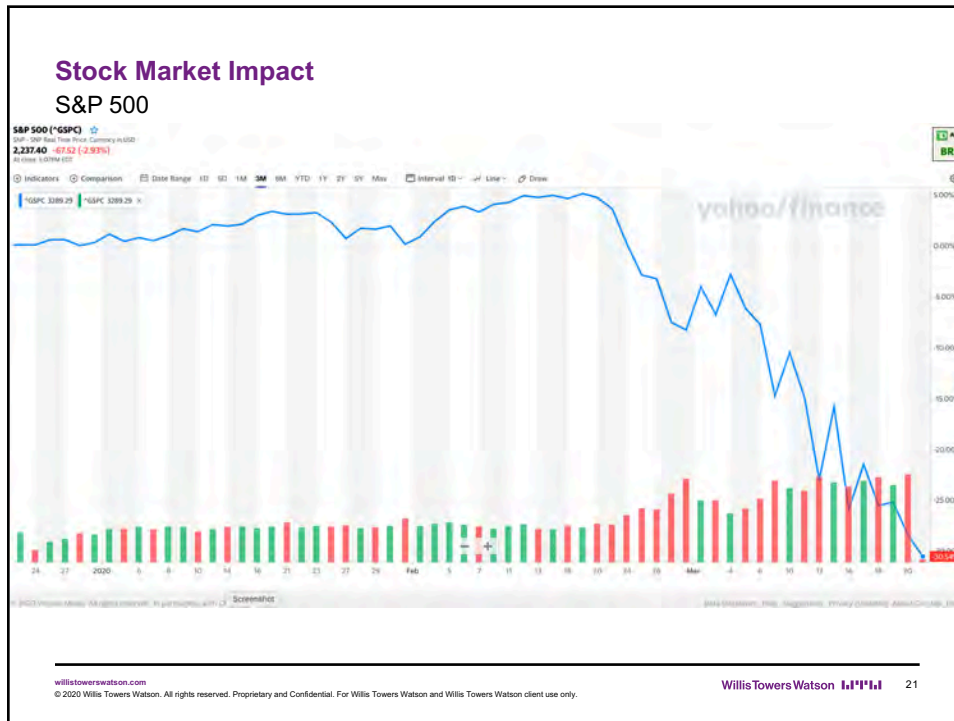
Healthcare

Financial Markets **Government Response**

Demand for Goods & Services **Supply of Goods & Services** **Unemployment**

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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

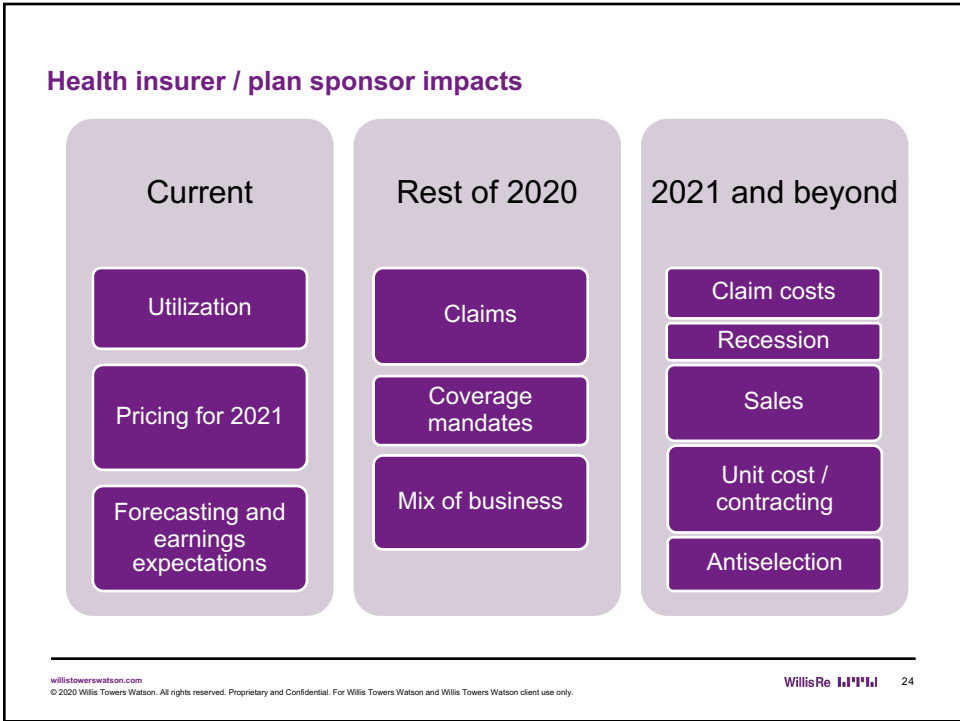
1957 – Flu Pandemic
 GDP growth was down approximately 2.5%

1968 – Flu Pandemic
 GDP growth was on trend

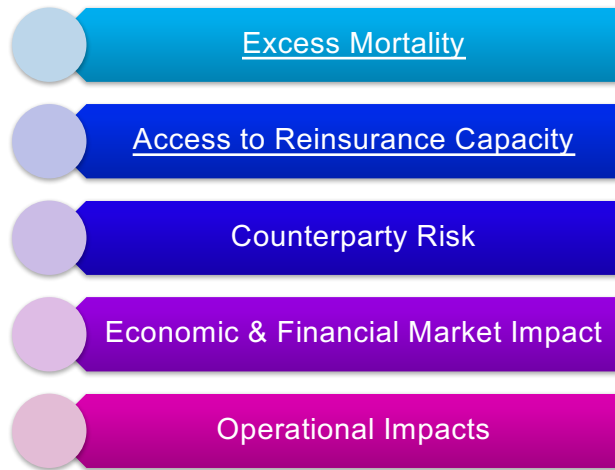
2020 – COVID-19
 How many months of disruption of activities
 Uneven impact on various sectors

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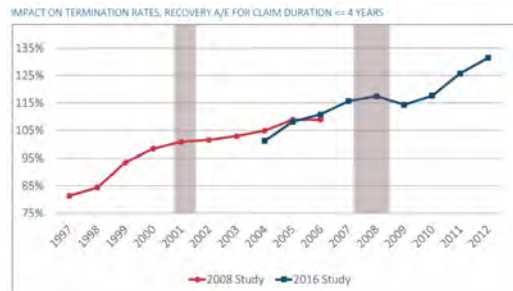
Risk to Life Insurers



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	Possibly Covered	Probably not covered
Work Injury Medical Costs Travel	Event Cancellation Liability to third parties, D&O Trade Credit	Business Interruption

Reinsurer Impact

Class of Business	Reinsurance Considerations
Contingency Event cancellation Conferences	<ul style="list-style-type: none"> With global participation in events, most stringent authority ruling likely applies Loss of revenue and sponsorship agreements insurable Often have infectious diseases exclusions, then covered as an extension
Personal Accident & Travel Delay / cancellation	<ul style="list-style-type: none"> Trigger requires government advice ('Notifiable disease') or a WHO pandemic declaration Hours clause and policy excess limitations Policy non-renewal and loss of premium
Life and A&H Extreme mortality Medical expenses	<ul style="list-style-type: none"> Proportional treaties offer un-restricted cover for pandemic Low mortality on those of working age Medical Expenses less of an issue for now as care is via public institutions
Trade Credit & Surety	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Epidemic such as COVID 2019 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&G and E&O claims may be possible if negligence and company under-performance can be demonstrated





Closing Thoughts

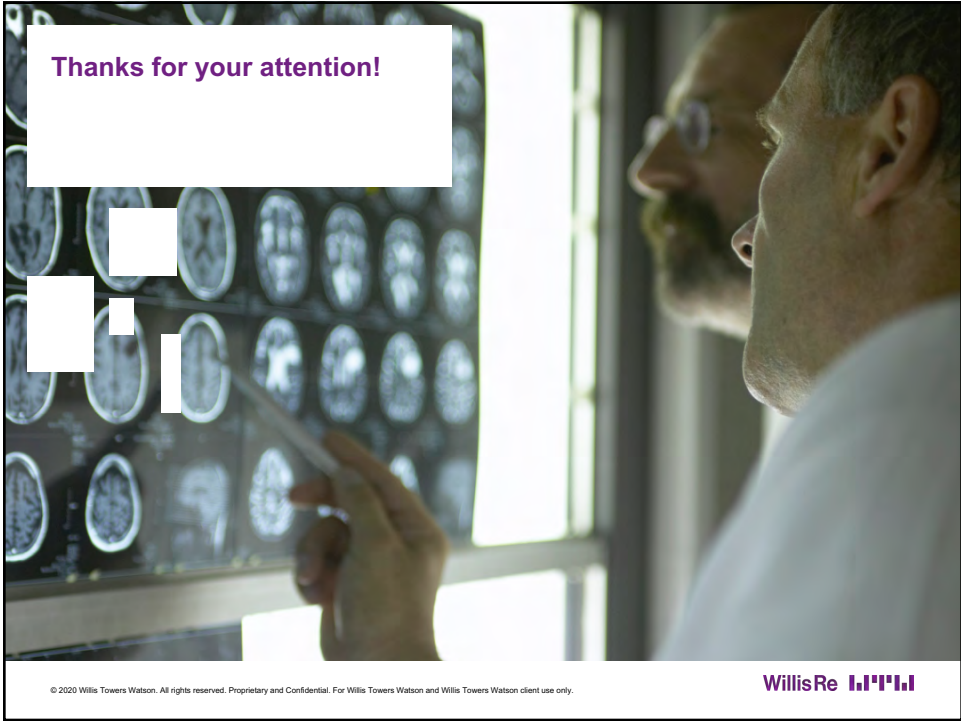
First Task – Survive the Pandemic

- 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



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