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PANDEMIC FLU AND THE P&C INSURANCE INDUSTRY

INTRODUCTION

What is the real risk of a global viral influenza outbreak to the Canadian general insurance industry? Is the impact overstated and fuelled by sensationalist media coverage? Or are insurers, the business sector, governments and the public alike woefully unprepared for the scope of disruption, strain and potential chaos?

Somewhere in between alarmism and apathy is the realistic response that global pandemic flu outbreaks have occurred in the past, and, according to health care experts, will certainly occur in the future. When, where and how extensive the pandemic will be is difficult to predict, but historically major outbreaks have taken place every 35-40 years. The three largest pandemics of the 20th century killed over 43 million people worldwide. The deadliest of these, the Spanish flu outbreak in 1918, resulted in an estimated 40 million global deaths. Since then, serious influenza viruses have occurred with the 1957 Asian flu and the 1968 Hong Kong flu pandemics, together causing approximately three million deaths.

So they have happened, and many scientists and medical professionals say the world is overdue for a major influenza pandemic. "It is only a matter of time before an avian flu virus – most likely H5N1 – acquires the ability to be transmitted from human to human, sparking the outbreak of human pandemic influenza," says Lee Gon-Wook, director-general of the World Health Organization. "We don't know when this will happen. But we do know that it will happen."

"Many consider this 'flu hype,'" says Kirsty Duncan, a Canadian scientist who has done extensive research in the field of pandemic flu for the past 15 years. "As a scientist, I walk a fine line between providing information and scaremongering. For the first time since I've started this work, I am concerned."

With the experience of Sudden Acute Respiratory Syndrome (SARS) fresh in the minds of many Canadians and with the emergence of the avian flu virus throughout Asia, Europe and North America, there are specific concerns that the interconnected nature of global trade and travel could create a vast and deadly international pandemic.

How ready is the insurance sector for a global influenza outbreak? What are the specific risks that could impact the industry? This paper will answer these questions and provide information on strategies for business continuity planning to cope with the spread of pandemic flu.

PANDEMIC FLU

Pandemic flu is an epidemic that occurs over a wide geographical, usually global, area and affects an exceptionally high proportion of the population. Flu pandemics typically come in multiple outbreak waves, often two or three periods that last six to eight weeks, but often at intervals of six to nine months apart. An influenza pandemic could last for a year or more, infecting up to one-third of the population in

Canada. This makes for a long “event” or crisis for the typical insurance operation or business, with no clear demarcation of beginning or end – much unlike a physical natural disaster.

“The pandemic situation is completely opposite to the flood or fire or earthquake, where companies try to get employees together and work to make the recovery happen,” says Peter Neumann, senior vice president & national risk control director, Aon Canada. “One of the key components of the pandemic is social distancing and keeping people apart. How do we get people to work from their homes?”

A pandemic influenza outbreak is associated with the influenza A virus – the most harmful to humans. An outbreak typically emerges from a strain of influenza to which humans have had no exposure and for which there is no natural immunity. Bird populations are a frequent source of influenza A viruses, although other animals can act as viral hosts. Seasonal flu, in contrast, is typically influenza B virus (sometimes A) and is a viral infection of the lungs that appears in Canada each year between November and March. While about 8,000 Canadians die each year from seasonal flu, Health Canada estimates conservatively that a pandemic flu could claim as many as 58,000 lives. The WHO estimates that more than 7 million deaths worldwide could result from even a mild pandemic.

One such recent example of a mild pandemic was the outbreak of SARS in 2003. By the time SARS ended, about 800 people in 26 countries had died from the disease, just under 10 per cent of those infected. The vast majority of SARS cases were reported in Asia, although 38 people died in Canada and Toronto’s economy and tourism industry were severely affected. Not an influenza virus per se, but rather a corona virus, SARS was known as a droplet infection, meaning that it spreads when a large droplet containing the virus is coughed or sneezed by an infected person and then inhaled or ingested by another, according to the Marsh Risk Alert report *Avian Flu: Preparing for a Pandemic*.

“The SARS experience is on many peoples’ minds as they consider a potential avian flu pandemic,” the Marsh report notes. “Although SARS provides a recent case study to which risk managers can look for ideas in planning for avian flu, they should keep in mind that SARS was mild compared to the potential impact of an influenza pandemic.”

Most of the recent attention around potential pandemic influenza has focused on avian flu, specifically the H5N1 virus strain. First traced to an outbreak of influenza among poultry in Hong Kong in 1997, the H5N1 virus has resulted in the destruction of more than 150 million domestic fowl in Asia. While an aggressive response in Hong Kong temporarily stemmed the spread of the disease, the H5N1 virus was linked to an outbreak at a commercial farm in South Korea in 2003, and other parts of Asia, where it is now endemic. It has also spread to Eastern Europe, and has been discovered, in milder low-pathogenic variety of strain, in parts of Canada. So far, according to the WHO, the total number of cases of H5N1 virus infection is 256, with 151 deaths, in ten countries.

Genetic testing has shown that avian flu viruses played a role in the last three influenza pandemics of the 20th century. It is when the virus mutates and causes person-to-person transmission that a pandemic can occur. “The strain of avian flu referred to as H5N1 is considered a significant threat because there is little or no immunity to it in the general population, and because it has the potential (but currently not the capability) to spread from human to human,” according to an *Influenza Pandemic White Paper* from Munich Re Group.

An exclusive focus on avian flu and the H5N1 virus, however, may blind companies and governments to the potential risks of other sources of disease, according to another white paper from Aon entitled *Exploding the Myths*. “It is not just the H5N1 virus that could be a problem,” the white paper notes. “The impact of a growing number of diseases from regions, such as Africa, can be just as grave on a business as a pandemic virus spreading from the Asian region. Many businesses are now focusing their efforts on maintaining a level of protection against diseases from wherever they originate.”

The risk of a pandemic flu outbreak emerging from many potential viral sources is a distinct threat for businesses, governments and populations of countries around the world. How prepared are they to deal with the risk?

LEVEL OF PREPAREDNESS

It is difficult to gauge if businesses, specifically the Canadian P&C insurance industry, are equally as concerned about pandemic flu as health care experts and scientists. A survey of P&C companies in summer, 2006 by the Office of Superintendent of Financial Institutions (OSFI) shows an uneven level of preparedness and business continuity planning.

"The general indications are that companies are at varying degrees of preparedness," says Penny Lee, managing director, financial institutions group, OSFI. "Many are incorporating the threat of a potential pandemic in their business continuity plans and many are considering the potential that a pandemic can occur in waves. However, some either have not or are only now looking at reviewing pandemic plans of their external service providers."

In what is believed to be the largest and most comprehensive survey of pandemic flu preparedness, Mercer Consulting polled more than 450 companies spanning 38 countries and 26 industries in March, 2006. It found that while 70 per cent of businesses surveyed believed a pandemic would damage profitability, only 47 per cent had a business continuity plan in place and just 17 per cent had budgeted for pandemic preparedness. The survey also noted that companies in Asia are the best prepared, with 25 per cent establishing a pandemic preparedness budget, compared to 12 per cent in Europe and 7 per cent in North America.

"A pandemic will severely impact consumer confidence, and industries that depend heavily on foot traffic or people congregating in closed spaces could take a hit in a pandemic," says Rosaline Chow Koo, head of Mercer's Health & Benefit business for Asia Pacific. "Nevertheless, there is a gap between concern and specific planning actions to date."

Another survey by the Conference Board of Canada in February, 2006 revealed that executives of nearly 80 per cent of businesses were concerned about the impact a pandemic would have on their operations. But only four per cent of responding companies reported having a pandemic business continuity plan completed.

While 71 per cent of businesses said they were working on a pandemic plan, fully a quarter of the businesses that responded to the survey said they haven't got one and aren't working on one.

The research report by Marsh brokers on pandemic flu summarized the situation as follows: "It's likely that many companies are not making any special preparations in advance of what they see as the slim likelihood of an avian flu pandemic; instead operating with the belief that should one occur, either it will not affect them, or they will respond as the need arises," according to the Marsh report. "An outbreak of avian flu will severely test even the best-laid business continuity plans, and businesses are well-advised to review and revise their plans in the light of this threat."

Given this uneven level of preparedness, what are the likely direct effects of such a pandemic on the P&C insurance industry?

OPERATIONAL RISK

Many sources of information, including OSFI's survey, divide the impact of a pandemic flu into two broad categories of operational risk and insurance coverage risk. In other words, a pandemic would impact both the day-to-day operations of insurance organizations and, potentially, the claims paid out in both commercial and personal policies.

"The most common risk identified by P&C institutions was operational, relating to the loss of manpower, employee-absenteeism effect and the ability to renew or write business, handle increases in claims, and not necessarily insured losses," says Penny Lee.

Several studies cite the crucial areas of operational risk that a business operation will face in a pandemic flu outbreak. In particular, employee absenteeism rates of 25-30 per cent (or more) are projected by health care experts. Widespread infection rates could mean the

virus spreads to every part of the country, and many regions of the world, making off-site operations or the moving of office locations difficult.

"There will be widespread economic and infrastructure disruptions, including transportation shutdowns, electricity, communications and telecommunications slowdowns and disruptions to other basic services," says Elizabeth Murphy, associate partner and transition advisor at KPMG. "All of this will lead to a loss of productivity and a reduced workforce."

For insurance operations, Murphy notes that companies may face changed behaviour from customers, such as increased demand for Internet processes, a disruption to functions, such as processing premium transactions, and greater demand for assessing and processing claims in certain lines of business.

Healthcare and government departments will be extremely burdened in the event of a pandemic, leading to a decrease in the provision of services. In addition, a company's supply chain of service providers will also be affected, leading to potential disruptions in delivery of products and services.

"The hardest hit companies in any industry are likely to be those with worldwide operations, global supply chains and/or international customers," according to the Marsh influenza report.

It lists several areas of operational concern facing the business sector:

- Can the company operate with 25 per cent or greater absenteeism for prolonged periods? What are management policies for supporting quarantined staff?
- Can the company have employees work remotely? What infrastructure is needed?
- How does the company know that supply resources are not contaminated?
- How will clients be assured that products are not contaminated?
- Will there be a disruption to the company's supply chains?
- What are the procedures to protect or decontaminate facilities and heating, ventilation, air conditioning systems, electronic equipment and other materials?
- What assurance procedures exist to inform employees they are safe at work?
- What policies exist to promote hygiene and ensure non-transmission at work?
- At what point does the company prohibit staff from traveling to certain regions?
- What escalation procedures exist to get additional resources?
- Is there a trained crisis-management team that includes on-call staff?

The question of supply chains is a particular area that requires greater focus. While some firms have completed internal business continuity plans, "too many companies lack a basic knowledge of their suppliers," according to the Aon white paper. "There is no point in identifying alternative suppliers of a particular item if they are based in the same region as the original supplier. This is an error common to many plans and is even more worrying because many of the vital products or pieces of machinery in question come from areas of Asia likely to be first affected during a pandemic."

The concept of "social distancing" is another operational issue that companies will have to forecast and develop strategies around. People, including employees and customers, will be reluctant to use public transportation, go to crowded areas such as malls, concerts or trade shows and attend meetings. "Few businesses seem to realize that disruptions in local travel patterns could well be economically devastating," Aon notes. "Many people will practice social distancing."

The economic devastation of a pandemic flu has been projected by some key agencies around the world. The World Bank estimates that a pandemic flu would cause \$800 billion in worldwide economic damages (the SARS outbreak alone resulted in total lost business revenue of \$60 billion, according to the Asian Development Bank).

The retail, food, consumer goods and travel industries will be particularly affected, according to Marsh. "Pandemic influenza would have a macro impact on regional and global economies that could result in a significant shift in the way that companies conduct their businesses and their ability to continue operations."

Insurance companies could also face financial risks, according to the OSFI survey. "Financial risk related to market liquidity and credit risk were identified by P&C institutions, and here the respondents were mostly interested in their accessibility to cash, the impact of the global financial markets on their investments in terms of market value and risk related to reinsurers," says Penny Lee.

The spin-off effects of volatility in financial markets during a flu pandemic are especially relevant to P&C insurers, which have significant investment portfolios. "A pandemic flu will lead to a decline in market confidence, heightened market volatility and increased risk aversion in financial markets," says KPMG's Murphy. "This, in turn, could lead to a fall in asset prices, a flight to quality investments and an increase in demand for liquidity in investments."

INSURANCE COVERAGE RISK

Whether traditional insurance policies will respond to a pandemic flu outbreak is an issue clouded with uncertainty. "Insurance risk is the most unclear for the P&C sector," notes OSFI's Lee. "Some respondents suggested that there could be a potential increase in insured losses, dependent on the specific circumstances of the loss. Potential losses include those from business interruption and travel insurance, liability with personal and bodily injury, as well as property losses similar to mould."

Many insurance organizations hold the position that standard policy wordings, such as general liability, commercial property and business interruption, will not respond to economic losses stemming from pandemic flu. "An influenza pandemic will not likely impact the property and casualty insurance and reinsurance industry in a direct or major way," according to the Munich Re white paper. "Most P&C lines of business provide no coverage for influenza pandemic events."

Similarly, in its white paper Aon observes that "insurance cover for events such as pandemics that are inevitable, spread globally and will result in major losses is difficult to obtain. Where insurers do offer cover, terms and conditions are usually very stringent." It is very rare for insurers to offer specific time-element coverages for "infectious disease outbreaks."

For example, commercial general liability provides coverage against a broad range of liabilities alleged to result from the acts or negligence of the insured, including personal and bodily injury. However Munich Re considers this a low to moderate risk (depending on class of business). "Although improbable, the insurer could be held legally liable for the existence of, transmission of, or failure to protect the public from a naturally-occurring disease." Insurers would closely scrutinize the alleged causal connection between a claimed infection and the actions of the insured.

For commercial property and business interruption coverage, policies cover only physical injury or destruction of tangible property. Insurers often take the position that certain types of claimed damage are not covered or that the mere presence of the virus in or on the property does not constitute physical injury.

In the past, this has not stopped clients from making claims during outbreak of infectious disease. "Whenever businesses suffer a loss, owners naturally look to their insurance policies for help," the Marsh risk report notes. "As was the case with the SARS virus, many claims stemming from a flu pandemic are likely to lead to disputes."

Some examples where pandemic flu could trigger coverage include professional liability or directors' and officers' liability – if lawsuits allege that companies' failed to plan for or address pandemic issues. In addition, specific industries such as poultry farmers, medical facilities, entertainment complexes or arenas (special events) may face a higher risk profile. In terms of surety, it is possible that severe pandemic scenarios where construction work is slowed or halted could trigger performance bonds.

For business interruption, Munich Re states that "one specific area to analyze would be potential coverage in the event of a civil authority restricting travel or forcing the closure of certain businesses or services." Marsh notes that some large hotel/hospitality and entertainment companies have obtained programs that contain an endorsement that covers the time-element loss resulting from closure of the premises by a public authority after one or more guests exhibit symptoms of a contagious disease. But, again, this is outside the scope of most standard coverage.

In most scenarios, companies affected by the pandemic flu will be hard pressed to find coverage that will respond to losses. "Businesses must recognize that the commonly held belief that . . . insurers will come to the rescue is a myth like many others in this subject," according to Aon.

BUSINESS CONTINUITY PLANNING

In addition to measuring the impact of a pandemic flu, many commentators emphasize the need for a business continuity plan that takes into account the unique characteristics of this type of "disaster" – lengthy period of infection (likely in waves), employee absenteeism, macroeconomic downturn, service supply chain interruption and travel restrictions. In particular, the time to start planning for a pandemic should be well before any outbreak occurs, experts contend.

"Once a pandemic virus emerges, it will be too late to begin planning," according to *Influenza Pandemic: Continuity Planning Guide for Canadian Business* by the Canadian Manufacturers & Exporters Association. "The virus is highly contagious and spreads quickly. There will be only a 20-to-30 day window between emergence and pandemic, while it will take four-to-five days for a patient to become symptomatic."

Many businesses in Canada recognize the need for effective business continuity planning. A survey of businesses across the country by KPMG in 2006 found that 83 per cent of respondents had a plan in place. While awareness of business continuity is growing, Graeme Booth, one of the authors of the KPMG study and a partner in the firm's risk and resiliency practice, says much more can be done in the areas of business impact analysis (BIA) and ongoing testing of plans.

"A lot of the activity to build a business continuity plan is driven by a specific event or activity," Booth says. "An organization has to take a much more holistic view of risk and do comprehensive BIA of various scenarios. That certainly includes catastrophes like pandemic flu."

"I have seen a lot of organizations take for granted that we will have a certain level of service available and people available, but what happens when you take those two out of the equation, as is the case with pandemic flu. A lot of the plans haven't gone into that level of detail," notes Lisa Benini, senior advisor, business continuity program, B.C. government.

While business continuity plans may be in place, what about specific pandemic response plans? Canadian research scientist Kirsty Duncan notes that "the U.S. government asked every U.S. business to have a pandemic plan in December, 2005. As of March, 2006, about 15 per cent of businesses had a plan. Here in Canada, it's about 4 per cent, and of that, only 4 per cent have liaised with government."

The linkage with government is an important issue for businesses to consider, experts say. Canada does have a national influenza plan that was formalized in 2004, while provinces also have plans, such as the Ontario Health Pandemic Influenza Plan, created in June, 2005. Many cities, such as Toronto, have worked to align their local plans with those of federal and provincial governments, particularly given

some of the concerns around uncoordinated responses to the SARS outbreak. Businesses should at least be familiar with the content of these government influenza response plans.

“Good coordination with outside agencies is vital for a plan to be effective,” Aon notes in its white paper. “It is staggering how many businesses undertaking important economic functions are not aware of who deals with pandemic issues at their local authority. The best plans are those that bring together all parts of the value chain.”

Those companies looking to start a pandemic flu business continuity plan (BCP) should consider four key steps, according to Ralph Dunham, business continuity management practice leader for Marsh Canada. These questions include:

- Is there an existing business continuity plan with recovery procedures for critical locations and business functions?
- Has your organization completed a recent in-depth BCP review?
- Do existing recovery processes consider significant staff reductions and loss of support resources over an extended period of time?
- Have your recovery plans been adequately tested?

The latter point concerning testing is often the weak link in many companies' pandemic planning, according to the Aon white paper. “Today, it is lack of appreciation of weak points in so many plans that is so disconcerting. Some organizations seem to have not only avoided any test run of their plan, but have also dispensed with a thorough analysis of the interdependency of every part, operation, site and person in the process.”

CONCLUSION

The big question on the minds of businesses, insurance companies, governments and regular citizens alike when it comes to pandemic flu is: how will we cope with the effects of a highly contagious disease? Some think there would be enough early warning signs in Canada, perhaps even six months, of an outbreak that would likely originate in Asia. Others believe that the time is now to begin aggressively testing business continuity plans across both private and public sector organizations. SARS proved how quickly a disease can spread from country to country through air travel.¹

“Although pandemic planning is developing and more countries are improving their defences, there are still many gaps and differences in approach,” the Aon white paper concludes. “The same can be said of the plans of businesses. It is therefore vital for corporate government and management accounting purposes for organizations to continue to look at the effects of a pandemic on suppliers and customers as well as others in their value chain.”

“The issue of pandemic flu has now become one that every corporate leader or board of directors must consider and take into account,” according to Marsh's report. “Beyond fears over the possible loss of life, avian flu has raised concerns about governments' and businesses' readiness to deal with a crisis of enormous scale. However, there is still time to prepare for the contingency. Now is the time to check your company's preparedness for handling a pandemic crisis.”

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¹ Here is the chronology for the SARS epidemic: First appearance detected in Hong Kong in February 2003. Canadian Kwan Sui-Chu travelled to Hong Kong in February 2003 and returned to Toronto in late February, complaining of fever and coughing. She died March 5, becoming Canada's first SARS fatality. Her son Tse Chi Kwai suffered the same symptoms and died March 13. The World Health Organization issued its first global alert about SARS March 12, 2003. The WHO put Toronto on a travel warning advisory on April 23, 2003 and again on May 27, 2003 after the second outbreak. On June 26, 2003, the WHO declared the worldwide SARS epidemic to be coming to an end and removed all travel warnings. The WHO reported 8,450 probable SARS cases and 810 deaths in 29 countries. There were 44 deaths in Canada, all in the Greater Toronto Area, with 400 confirmed cases of infection.

SOURCE DOCUMENTS AND LINKS

A State of Unpreparedness: Canadian Organizations' Readiness for a Pandemic

[<http://www.conferenceboard.ca/documents.asp?rnext=1706>]

Published: June 2006

Source: Conference Board of Canada

Document Type: Briefing, 16 pages

Author(s): Christopher Hallamore

Mercer Global Avian Flu Survey:

Striking Gap between Employer Concern & Pandemic Preparedness

[<http://www.mercerhr.com/summary.jhtml?idContent=1215240>]

Published: March 30, 2006, Singapore

Source: Mercer Human Resource Consulting

Document type: Global report

Avian Influenza Pandemic Resource Centre [http://www.aon.com/about/news/newsroom/issues/avian_flu.jsp]

Pandemic Influenza: Exploding the Myths

Published: December 2006

Document Type: Briefing, 16 pages

Avian Flu Pandemic: Managing the Risks of an Invisible Threat

Published: October 2005

Document Type: White paper

MMC (Marsh & McLennan Companies) Knowledge Centre on Pandemics

[<http://www.mmc.com/knowledgecenter/pandemics.php>]

Includes a variety of reports including the Marsh Avian Flu: Preparing for a Pandemic

[<http://www.mmc.com/knowledgecenter/viewpoint/af2006.pdf>]

Published: January 2006

Document Type: Briefing, 9 pages in PDF

Also additional information is available at: <http://solutions.marsh.com/pandemic/>

Influenza Pandemic White Paper

Focus: US Property & Casualty Insurance and Reinsurance

[<http://www.munichreamerica.com/main2.asp>]

Published: 2007

Source: Munich Reinsurance America

Document Type: White Paper, 12 pages

Influenza Pandemic: Continuity Planning Guide for Canadian Business

[www.cme-mec.ca/pdf/CME_Pandemic_Guide.pdf]

Published: March 2006

Source: Canadian Manufacturers & Exporters Association

Document Type: Best Practices Guide, 90 pages

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