thinkpiece

Promoting debate and fresh thinking in the Insurance and Finance Industry

Pandemics – be prepared

Trevor Maynard

Summary

- The risk of pandemics is ever present. The last global pandemic was the Spanish Flu outbreak in 1918, and historically such pandemics typically occur around every 30-50 years. Indeed the Commissioner of the City of London Police said, last year, that a pandemic at some point is "inevitable". Many argue that we are better off today for facing the next outbreak as a result of a number of factors including better drugs. However there is concern that the next pandemic could be worse than those in the past.
- Contingency and business continuity planning is vital. When planning contingencies it would be wise to consider alternative scenarios to the 1918 Spanish Flu outbreak; to ensure response plans do not "over-optimise" to one scenario.
- A major pandemic is expected to have significant economic consequences. The outbreak of SARS in 2002 caused economic losses of up to USD150bn. Research suggests that states in the US will lose up to 8% of their GDP in a major pandemic.
- Insurers must consider the impact of pandemic on various policy classes and when doing so they ask themselves "was the policy designed to respond in this situation"? We can expect life and health insurance policies to be materially impacted and this will affect the finances of reinsurers that offer to protect mortality losses. Insurers need also to take in to account the impact upon their own staff.

Number 15 (March 2009)

*The Chartered Insurance Institute is the world's largest professional body for insurance and financial services and is the leader in awarding qualifications to industry practitioners. Our **think**pieces are a key part of our ongoing commitment to promoting innovative thinking and debate within the insurance and financial sectors.*

LLOYD'S

CII Group PFS CII

CII Introduction: At the beginning of the new millennium the issue of pandemics was a hot topic. With outbreaks in the Far East of SARS and then avian flu the media was awash with debate on what would happen if something similar hit the UK and questions around how well prepared we are. As we come to the end of the decade this popular interest has died down considerably suggesting that the risk has gone away. In this Thinkpiece Trevor Maynard, manager of emerging risks at Lloyd's, shows that this is far from the case and that, based on past experience, at some point a pandemic is inevitable. He points out the potential consequences and that businesses, insurers in particular, need to be prepared for all eventualities.

Avian flu was the subject of much media attention only a few years ago yet you might be forgiven for assuming the risk has passed if the front page news was your guide. In fact the risk is arguably as high now as it was when avian flu was making the headlines. There are limited human cases and, currently, over 50% of those who catch this strain of the flu die from it. This compares to a similar "case fatality rate" of less than 3% for past flu pandemics. It is to be hoped, as is typical, that the virus would weaken if regular human to human transmission becomes more common; but this is not certain and underlines why society and businesses should take this risk seriously and be prepared.

"'Commissioner Mike Bowron of the City of London Police state[d] that "a pandemic is inevitable, start planning now""

This short think piece considers the implications of a pandemic on the insurance industry and is based on a report published by the Emerging Risks Team at Lloyd's[1]. The key message for our industry, along with all others, is that we should be aware of pandemic risk and need to consider how we will respond to the inevitable impacts of: staffing absence, bereavement and market disruption. However, for insurers there is a sting in the tail as we must also consider whether policies might be triggered in a pandemic including those that were not designed with a pandemic in mind.

Current state of play

Fears of an avian flu pandemic a few years ago led the World Health Organisation (WHO) to move to "phase 3" of their influenza preparedness plan. Their plan has six levels or "phases", the first two cover the "interpandemic period" when no new human virus strains have been detected but animal strains may be starting to cause concern. The next three phases relate to the "pandemic alert" phase. They are triggered when humans are known to have contracted the disease. Phase 3 (the current phase) is in force when human to human contact has occurred but is rare, at the other extreme phase 5 is triggered when large clusters of cases are observed but are still local in their extent. Phase 6 is a full pandemic with cases around the world.

Pandemics – what has gone before

A pandemic is an epidemic with a global spread of infection. Since the 1600's there has been a succession of pandemics typically occurring around 30-50 years apart; this led Commissioner Mike Bowron of the City of London Police, at a Lloyd's/XL seminar in 2008, to state that "a pandemic is inevitable, start planning now". Pandemics vary in their impact from hundreds of thousands to tens of millions dead. The most deadly influenza pandemic to date occurred in 1918 and was spread around the world by demobilised troops. Some estimates suggest that this pandemic led to 100 million deaths, more than the First World War itself. The "Spanish Flu", as it became known, infected around 30% of the population and of those infected around 2.5% died as a result. This particular pandemic affected the healthiest members of society, those of working age, placing another bitter blow to an already stretched post-war workforce.

There are also reasons for concern that the next pandemic could be worse than the past

Better prepared today?

Many argue that modern society would be better off today than in the past when faced with the next pandemic. There are good reasons to think this because we have better drugs, such as antivirals, antibiotics and ever quicker processes to create a vaccine. Also, the WHO will coordinate the political response, making use of internationally binding regulations, and were recently very successful in containing the near-pandemic Severe Accute Respiratory Syndrome (SARS) which caused concern from November 2002 to July 2003. The spread of SARS was very rapid, with 27 countries reporting cases only six weeks after the initial outbreak. Although weaknesses in public health systems were highlighted in some countries, the WHO successfully corralled various governments into coordinated action. Another strength of our current society lies with modern communication methods such as emails and internet based tools and many stakeholders made use of these during SARS. Computer models can now help understand the likely spread of the virus and play a role in planning its containment. So there are many reasons to hope that we will be better prepared and better able to fight the next pandemic when it comes.

[1] The full report Lloyd's Emerging Risks Team report *Pandemic: Potential Insurance Impacts*, available at http://www.lloyds.com/NR/rdonlyres/AFDA2B40-DAD7-4E15-8DAD-7838ED165A1E/0/ER_Pandemic_InsuranceImpacts_V2.pdf

However, there are also reasons for concern that the next pandemic could be worse than in the past. For example, global businesses are increasingly part of a global network of supply chains. When these are functioning well they lead to an efficient use of resources. However, "just in time" models of supply can break down if key links in the chain are broken. Many hospitals only store a limited number of drugs, which could suffer a shortage of supply in a pandemic; perhaps because the pandemic has hit another country in the supply chain harder. Unlike 1918 there is now a vibrant global travel system which SARS showed can quickly spread a pandemic round the world. The global population was estimated at 6.7bn in 2008 compared to under 2bn in 1918 and a far higher proportion live in towns and cities than in the past; again leading to a rapid spread.

Almost all industries are expected to be negatively impacted: globally, estimates range from 1% to 10 of GDP

It is quite correct to consider whether an *influenza* pandemic will impact business, but a key concern raised in Lloyd's report is that other forms of pandemic are possible but don't seem to be considered in scenarios. HIV/AIDS has killed 25m people since 1981, Small Pox, before its eradication had a case mortality rate of 30% and Bubonic Plague killed 30%-60% of the population of Europe in the 1300s. Tuberculosis has affected one third of the global population at some time, according to the WHO, and there are now strains that are effectively untreatable by antibiotics. Hendra virus is currently causing concern in Australia and Ebola virus is thought to be a potential bioterrorism weapon. Despite this variety of potential pandemics many "worst case" scenarios simply consider a re-run of the 1918 event. It would be unwise to consider a scenario much weaker than that event (since we already know it is possible); but it is also important not to "over-optimise" to it. For example, the infection routes for avian flu tend to be mainly via airborne particles caused by sneezing. Other types of pathogen have other routes of infection, for example being transmitted on surfaces. For example, a pre-packaged food company would do well to consider some of these other forms of transmission when considering the impact of a pandemic on their business model, and on their duty of care to their staff and customers.

Government action

There is no doubt that governments are taking the threat of a pandemic seriously. The International Health Regulations, are legally binding and form international law. They were enacted in 2005 and came into force in 2007. They give a new framework under which countries must detect, assess, notify and respond to public health threats. The White House has published a national strategy which suggests a division of responsibilities between Federal Government, State regulators and the private sector. In the UK the government have a contingency plan designed to save lives, minimise disruption to society and where possible to maintain business continuity. A UK National Pandemic Influenza committee will advise health departments and a News Co-ordination Centre will ensure public information is timely and consistent. In addition the UK department Defra has many pages on its website offering help and advice. The breadth of detail that is available would make it very difficult for a company executive to argue that their inaction was due to inadequate information and this may have implications for insurance policies offering liability cover.

Economic Consequences

A major pandemic is expected to have significant economic consequences. SARS caused 8000 infections with a case fatality rate of nearly 10%. This is a tiny fraction of the impact of a pandemic, yet research suggests that SARS caused economic losses of up to USD150bn affecting face-to-face and travel industries in particular. The organisation Trust for America's Health estimates that there was a 60% reduction in air travel to Hong Kong over the period of outbreak. Their research suggests that states in the US will lose up to 8% of their GDP in a major pandemic depending on the mix of business in the region. Almost all industries are expected to be negatively impacted; globally, estimates range from 1% to 10% of GDP. Insurers with significant exposure to equity markets and longer dated corporate bonds may be particularly exposed to falling asset values at a time where the liability side of their balance sheet is also affected.

Impact on insurers

When considering the impact of a pandemic on various policy classes insurers must ask themselves "was the policy designed to respond in this situation"? We can expect life and health insurance policies to be materially impacted and this will affect the finances of reinsurers that offer to protect mortality losses. It is possible that liability policies will be triggered by a severe pandemic though issues of liability are settled in the courts. Lloyd's pandemic report considers several hypothetical scenarios, for example whether the organisers of a concert that fail to cancel an event, when their peer companies are acting more cautiously, could be a target for legal action if they are later shown to have helped spread the disease. Whilst full causation may be difficult to establish in many cases statistical arguments may be possible and lead to a sharing of blame as we have seen in asbestos cases.

Business should be prepared for subsequent waves and plan for the recovery phase

Research from Marsh suggests that over three quarters of companies have inadequate pandemic plans, with one third having no strategy at all. Those companies that can be shown to lag well behind their peers are most at risk of legal action for failing in their duty of care to their: employees or customers, or for being negligent when safeguarding their shareholders assets. Event cancellation insurance has standard exclusions but we understand that these are proving difficult to apply in a soft market; another danger, pandemics can strike at any time in the market cycle. Travel insurance policies may be triggered as may hospitality business interruption, and medical malpractice policies. If triggered, we will see aggregations of loss potentially across each country in a portfolio and possibly several times in a year of cover as the pandemic waves race round the planet.

Secondary impacts may also occur both immediately and over time. The emergency services expect to offer an adequate service during a pandemic and it became clear during the Lloyd's/XL conference that they are going to considerable lengths to achieve this. However for scenario planning it is important to consider the impact of them not meeting this aim. In this event we may see greater severity from road accidents and fires (as they take longer to deal with them) or a higher incidence of theft. It is likely that a pandemic will affect the developing world more than the developed. They do not have access to as wide a range of medicines and in some cases the populations are less healthy to begin with. A pandemic would highlight the difference in welfare between the two worlds potentially fuelling extremism and hence affecting the level political and terrorism risk around the world for some time after the pandemic is over. Policies written to respond to these risks (which in some cases are multi year) may see a change in the risk landscape that was not envisaged at the time of writing the policy.

Business continuity

The Lloyd's Emerging Risks Team's report focuses on the insurance implications of a pandemic. This is not to forget the impact it would have on insurers own staff, their greatest resource. Lloyd's along with many other companies in the industry regularly takes part in business continuity planning and also took part in the FSA pandemic exercise in 2006. In terms of business continuity planning the Lloyd's/XL seminar concluded that, although the emergency services are taking pandemic preparedness very seriously, continuity plans should consider the impact of a reduced level of service. Businesses should educate their staff in advance on the hygiene and quarantine procedures they may need to take. They should identify who their key personnel are and explore cross training to help cope with absent staff. Many businesses are expecting to make use of "home working" and those that are should fully understand how telecommuting can serve the business and where the weak points are; for example they should evaluate requirements for bandwidth at their gateway and consider buying extra now. Businesses should be prepared for subsequent waves and plan for the recovery phase and should include these issues when they exercise contingency plans against the timeline of a pandemic. They would be wise to check their suppliers are also well prepared. It is important to decide on corporate priorities and the key services that must be maintained. Finally after the pandemic is over they should expect a more fluid job market as employees react to how they were treated by employers during the pandemic.

Conclusions

There is reason to hope that a coordinated global response will contain the worst impacts of a pandemic; but our society is vastly different to when the last pandemic hit and we can expect some surprises. Many forms of pandemic are possible and so it is critical that businesses around the world consider a *variety* of scenarios so they can react during and after the event as quickly as possible. Many forms of insurance policy might be triggered in a pandemic; some are obvious, others will depend on legal rulings and insurers may benefit from tightening contract wording now rather than waiting for an unexpected judgement. Secondary impacts and ripple effects are likely and it is important to think of these when considering scenarios; in particular the asset side of our balance sheets may also be adversely affected. Our view is: don't panic, but do be prepared.

***If you have any questions or comments about this publication, or would like to be added to a mailing list to receive future Thinkpieces, please contact the CII Policy & Public Affairs team on:* ☎ 020 7417 4783 💻 thinkpiece@cii.co.uk**

Trevor Maynard is Manager of Emerging Risks at Lloyd's of London. Lloyd's Emerging Risks Team published a report in October 2008 on the insurance impacts of pandemics, for more details and our other reports see www.Lloyds.com/emergingrisks. Lloyd's also runs a 360 risk project which can be found on www.lloyds.com/360 this project sponsored the pandemic event and has also considered risks such as climate change, terrorism trends, compensation culture and the insurance cycle.