In 2003 a previously unknown virus emerged in Asia and began to cause deadly breathing problems amongst those infected. They called it "Severe Acute Respiratory Syndrome" or SARS. At the same time, another new virus, an Influenza virus called H5N1 came on the scene. The virus became known as the "Bird Flu" because it infected those who came in contact with infected birds. And while SARS was completely unexpected, we were waiting for Bird Flu. Influenza viruses have been causing wide scale illness and death for over 300 years of recorded history, and it has been a long time since the world has seen a bad case, so governments and businesses alike took stock.

On Nov. 1, 2005 President Bush declared the objectives of his new National Strategy for Pandemic Preparedness and Response: "Our strategy is designed to meet three critical goals: First, we must detect outbreaks that occur anywhere in the world; second, we must protect the American people by stockpiling vaccines and antiviral drugs, and improve our ability to rapidly produce new vaccines against a pandemic strain; and, third, we must be ready to respond at the federal, state and local levels in the event that a pandemic reaches our shores," said President Bush.

The threat was real and present, and the implications enormous. A human flu pandemic occurs when flu spreads around the world and affects a large proportion of the population. No region of the world is immune, regardless of where the virus originates. Some pandemics are more severe than others, though the worst pandemic in recent history was the Spanish Flu of 1918 that is suspected of killing over 50 million people worldwide. The concern was a similarly severe pandemic today could not only affect the same numbers of people or more but could massively disrupt our way of life.

Governments, including the United States Centers for Disease Control and the World Health Organization, accelerated their preparation and research on how best to limit a pandemic's impact. The financial services industry - business critical to the functioning of our society – not only were one of the first to understand the implications of a pandemic, but were actively engaged by government authorities to ensure they could endure the impact of a severe influenza pandemic. To that end, companies developed influenza pandemic plans.

The first incident to test these newly developed pandemic plans came in the spring of 2009 – the H1N1 Swine Flu pandemic, so named because it evolved from pigs originating from Mexico.

This flu pandemic fortunately was not severe, though it tested the efficiency of vaccine production and the robustness of government and corporate plans alike. Since then the world has seen new viruses evolve namely influenza A/H7N9, H6N1, and a SARS-like virus called MERs-CoV. The "old" H5N1 bird flu remains, though even after a decade, it has not developed the ability to easily infect person-to-person, and thus is not a pandemic flu virus today.

And herein lies the challenge with the Influenza virus – it is very unpredictable. We cannot tell which virus strain will cause the next pandemic, how rapidly the disease will spread, or how severe it will be. Nor can we predict which population groups will be at the highest risk of disease and death.

What we do know is that a pandemic's impact is partly determined by the age group it affects. The impact is greater if the virus largely affects healthy young adults. The disease spreads in waves. People who are not affected in the first wave may be struck by the second. Subsequent waves may be more severe. Or not. Two out of the last three pandemics have originated in Asia, where dense populations live in close proximity to ducks and pigs. Surveillance of animal health may provide early warning signs of impending human diseases. Quarantines and other public health interventions have done little to keep past pandemics from spreading.

Nevertheless, it is important to try and delay the virus's spread in order to give medical institutions more time to prepare. Vaccines may have limited impact on a pandemic. A great amount of lead time is required to manufacture commercial quantities, and the limited amounts that can be produced are not enough to protect entire populations.

What might happen if one of the flu virus threats out there develops the ability to spread easily from person to person? Like with the Spanish flu, thousands may die while millions more may require medical attention. This will likely overwhelm healthcare systems and essential services may break down as key personnel are infected. Businesses and schools may close and International travel may be limited as governments restrict entry.

So the purpose of a pandemic plan is to mitigate the impact of this threat. While there are plans to try and extinguish a new virus before it breaks out, the expectation is that a flu pandemic cannot be prevented and they will be a continual threat to mankind. While there is no cure for the flu once you get it – there are drugs that may be able to reduce the severity and duration of the illness. The key though is a vaccine which will protect people from the virus. A vaccine can only be created once we know the exact nature of the virus, and it presently takes months to produce. Thus the planning strategy is to recognize the virus quickly, create a vaccine as soon as possible, and while the vaccine is being produced, slow the spread of the disease and limit

the number of people infected so that the local community can best support those affected and maintain society functions.

Companies have an important role in a Flu Pandemic. Companies are best able to support their employees and thus can minimize that burden on the local health authorities. In this way community pandemic response can be maximized. Typical corporate pandemic plans focus on ensuring employee health while maintaining business continuity. To do so, companies need to be able to monitor an evolving pandemic, as it is a dynamic situation. They need to keep up-todate with recommendations from health experts, which are likely to change in different phases of the pandemic. They must ensure clear communication between their staff, and coordinate with health practitioners, government and non-government organizations who are involved with policy and disease control so that misinformation can be addressed and stress best managed. Company plans include strategies to reduce the chances that employees become infected with a focus on mission-critical staff to maintain operations. Companies can identify those employees and dependents that fall into "high risk" groups and ensure their health care is optimized. While much effort is made in pandemic planning around health protection and support, other business continuity issues such as working from home, connectivity and redundancy also must be addressed. While a pandemic wave may be severe, it will resolve, and planning also includes how quickly and effectively business operations can return to normal so as to limit hardship on the community. For financial services, this is critical so that businesses can rapidly begin to support the needs of their community.

So in summary, preparing, maintaining and testing your pandemic plan is an important endeavour. Pandemic will be an ever-present threat, and one which will always be unpredictable. We will continue to learn more and create more effective solutions to manage through a pandemic, and thus a pandemic plan must be regularly updated and continually maintained. We hope this exercise helps your organization address your needs and ensure you are ready to meet and manage through the next great wave.