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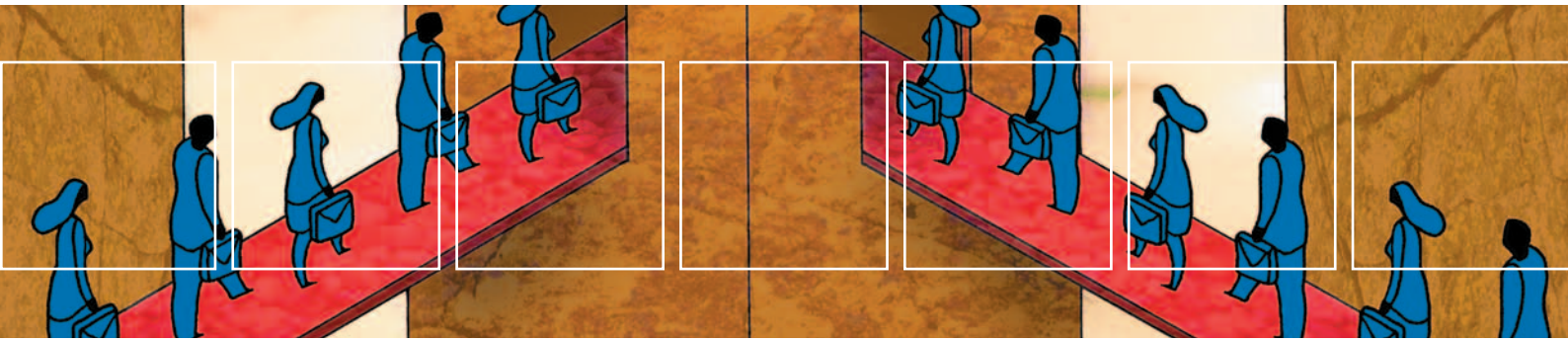

The Emerging Global Pandemic:

Human Resource Implications

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Principal

Mercer's white paper was developed to address the concerns raised by our clients regarding human resource implications of the Avian Flu pandemic. Primarily our clients focussed on the following questions:

1) What is Avian Flu and its likelihood to become a global pandemic?

2) How does it impact my organization and workforce?

3) What steps do we need to take to protect the organization and the well-being of our employees?

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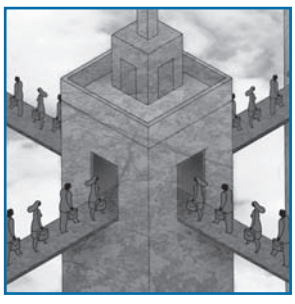


Introduction

In response to client concerns, Mercer Human Resource Consulting has prepared this white paper to address ways organizations may be affected by a potential avian flu pandemic and most importantly, how they can prepare for the human resource implications.

Specifically, this document seeks to objectively examine:

- The background to the current avian influenza endemic;
- The potential for this virus to mutate into a human influenza pandemic;
- The impact that a pandemic may inflict upon organizations and the people who work for them; and most importantly,
- The essential planning steps that prudent business leaders need to take for protecting their organizations and their human resources.

The avian flu outbreak currently sweeping the globe has gripped the public consciousness with concerns that the virus will mutate into a human influenza pandemic with potentially devastating consequences for global commerce and the community at large.

"In the event of a major global pandemic, preparedness and proactive planning will be critical to minimize disruption to business continuity and protect the health and well being of employees."

Over the past 12-18 months, the disease has evolved from one that was essentially confined to Southeast Asia to one that now threatens wild birds and domestic poultry populations across Asia, Europe, and Africa.

While relatively limited in numbers, human deaths have been recorded throughout Asia, and most recently, in Turkey and Iraq. With 92 deaths from a reported 170[1] cases, the mortality rate is in excess of 50%, compared to a SARS mortality rate of less than 10%.

We are currently at Phase 3 in the World Health Organization's six-phase pandemic alert protocol (see table, page 7), with a 10% probability of a pandemic occurring in the next two years. Even at this phase, which is likely to extend for several years, companies face the minimum case for business contingency planning as they receive a steady increase in questions on pandemic preparedness from their stakeholders.

But with each additional case of human infection the world moves a step closer to Phase 4, characterized by evidence of limited human-to-human transmission. Once the line is crossed to Phase 4, there is a higher risk of rapid progress through to a full global pandemic at Phase 6.

In the event of a major global pandemic, preparedness and proactive planning will be critical to minimize disruption to the business continuity and protect the health and well being of employees.

Glossary:

Antiviral	destroying or inhibiting the growth and reproduction of viruses
Avian	relating to or characteristic of birds
Endemic	disease prevalent in a particular region
Epidemic	outbreak of contagious disease that spreads rapidly and wildly
Influenza	acute, contagious viral infection characterized by inflammation of the respiratory tract and by fever, chills and muscular pain
Mammalian	various warm blooded vertebrate animals including humans
Pandemic	epidemic over a wide geographical area and affecting a large proportion of the population
Pathogenic	capable of causing disease
SARS	Severe Acute Respiratory Syndrome (SARS), was a viral respiratory illness first reported in Asia in February 2003 which spread to more than two dozen countries in North America, South America, Europe and Asia before being contained in the same year
Virulence	capable of causing disease by breaking down protective mechanisms of the host
WHO	World Health Organization (WHO), the United Nations specialized agency for health established in 1948

[1] World Health Organization, Cumulative Number of Confirmed Human Cases of Avian Influenza A/(H5N1) Reported to the World Health Organization, 20 February 2006.

What is Avian Influenza?

Avian influenza, or "bird flu" as it is commonly known, is a contagious disease caused by viruses that normally infect only birds, and sometimes, pigs. They have also, on rare occasions, crossed the species barrier to infect humans.

While we tend to think of influenza as a human disease, these viruses actually evolved in birds, within which 16 distinct subtypes of influenza viruses have been found. In aquatic birds such as ducks, geese, and wading birds, which appear to naturally harbor these viruses, they generally exist as a harmless gut infection spread in water habitats.

The vast majority of avian influenza viruses do not infect humans. An influenza pandemic happens when a new subtype emerges that has not previously circulated in humans.

The strain responsible for the recent outbreak, avian H5N1, has been identified as a strain with pandemic potential, since it might ultimately mutate into a strain that is contagious among humans. Once this adaptation occurs, it will no longer be a bird virus – it will be a human influenza virus.

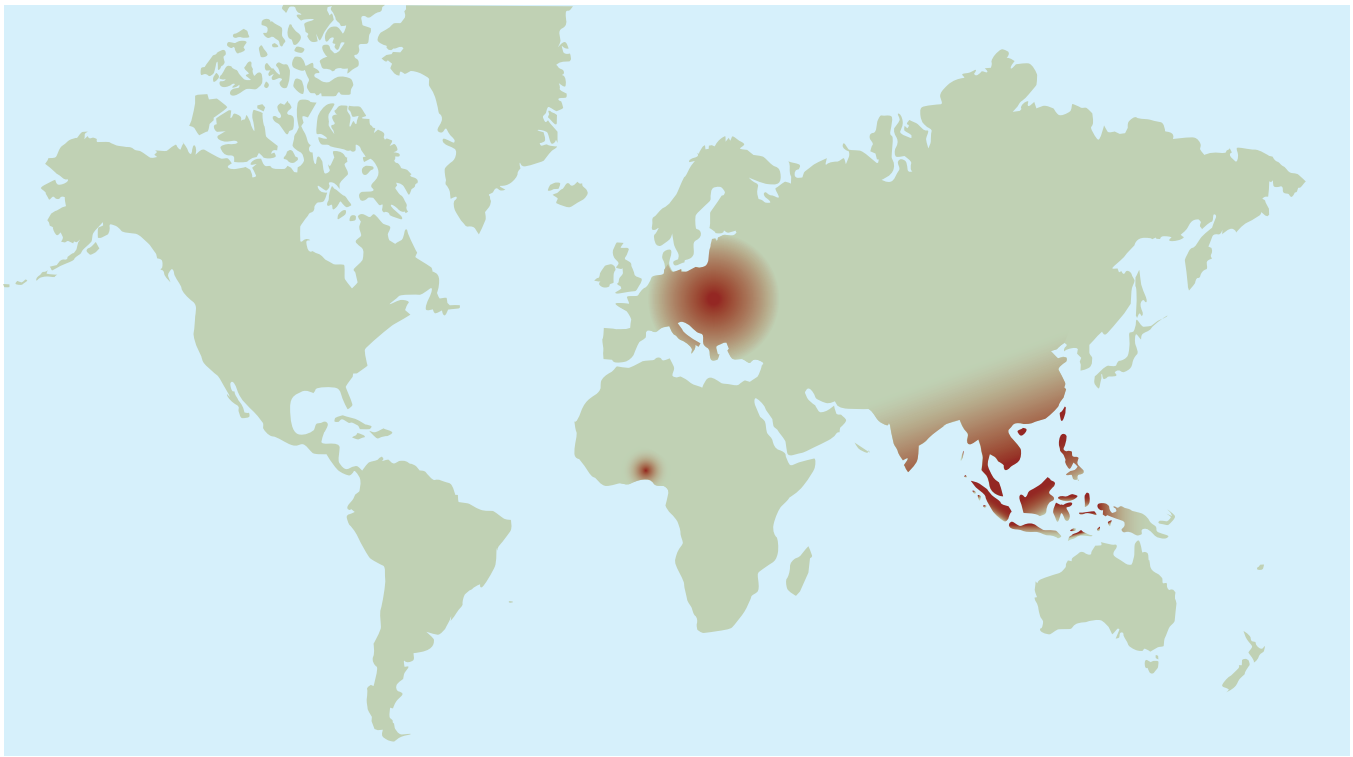
Global Spread

The current outbreaks of highly pathogenic avian influenza are the largest and most severe on record.

The virus is now considered endemic in many parts of Indonesia, Vietnam, and some parts of Cambodia, China, Thailand, and Laos, despite the death or destruction of an estimated 150 million birds[2].

Government attempts to halt the spread of this disease through culling infected flocks have been unsuccessful. The virus has become established in both domestic ducks and some migratory bird species, resulting in a rapid escalation of countries infected to include Russia, Kazakhstan, Mongolia, Turkey, Romania, Croatia, Italy, Germany, Austria, and France.

This virus, which was essentially confined to Asia, has not only found its way onto the European continent but has also surfaced on the African continent, in Nigeria. In February 2006, it further expanded its global reach, touching down upon the Indian subcontinent.



Source: World Health Organization.

[2] World Health Organization.

Potential for a Pandemic

The World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), and national governments believe that the world is now closer to another influenza pandemic than at any time since the last of the previous century's three pandemics, which occurred in 1918, 1957, and 1968.

This belief is not based upon the simple assumption that mankind is due for another pandemic – although history does provide a strong pointer to this effect – but on the fact that the current avian influenza strain is:

- at endemic proportions in several countries and is continuing its global spread;
- one of the few strains that has the capacity to jump the species barrier to infect humans; and
- already causing human deaths, albeit on a limited scale.

Indeed, since December 2003 there have been 170 confirmed human cases of avian influenza resulting in 92 deaths[3], a mortality rate of 54%, although recent research in Vietnam suggests that there may be a much greater infection rate than previously believed with a much broader spectrum of clinical disease.

Should this be the case, symptoms might range from very benign, similar to the common cold, to very severe and possibly fatal respiratory infection such as has caused the observed deaths. Such a presentation would effectively reduce the mortality rate to 1-2%. The reality is that the likely effective mortality rate will be somewhere between these two extremes.[4]

"Since December 2003 there have been 170 confirmed human cases of avian influenza resulting in 92 deaths[3], a mortality rate of 54% ..."

An influenza pandemic is a rare but recurrent event. As the following table illustrates, three pandemics occurred in the previous century, the most severe of which, the Spanish Flu, was estimated to have caused up to 50 million deaths.

Influenza Pandemics of the 20th Century[5]

Name	Year	Estimated Global Deaths
Hong Kong flu	1968-69	1 million
Asian flu	1957-58	1-2 million
Spanish flu	1918-19	40-50 million

A pandemic occurs when a new influenza virus emerges and starts spreading as easily as normal influenza – by coughing and sneezing. Because the virus is new, the human immune system will have no pre existing immunity. This makes it likely that people who contract pandemic influenza will experience more serious disease than that caused by normal influenza.

A pandemic occurs when a new influenza virus emerges and starts spreading as easily as normal influenza – by coughing and sneezing.

Health experts have been monitoring the current H5N1 strain since 1997, when it was responsible for 18 human infections resulting in six deaths. This incidence of human infection coincided with an epidemic of highly pathogenic avian influenza of the same strain in Hong Kong's poultry population.

The subsequent investigation of this outbreak determined that close contact with live infected poultry was the source of this human infection. The virus had, in fact, jumped directly from birds to humans.

The rapid destruction (over three days) of Hong Kong's entire poultry population of approximately 1.5 million birds reduced opportunities for further transmission and, in all probability, averted a pandemic.

That event alarmed public health authorities as it marked the first time that an avian influenza virus was transmitted directly to humans and caused severe illness with high mortality.

[3] World Health Organization, Cumulative Number of Confirmed Human Cases of Avian Influenza A/(H5N1) Reported to the World Health Organization, 20 February 2006.

[4] Dr. Stephen Jelbart, Executive Health Management.

[5] World Health Organization, Ten things you need to know about pandemic influenza, 14 october 2005.

Pathways for human infection

There are two principal means by which the H5N1 avian influenza virus can be transmitted to human populations.

The first of these is classified as a "re-assortment" event, in which genetic material is exchanged between human and avian viruses. Health experts have long recognized that the conditions favoring the emergence of re-assortment arise when humans and animals live in close proximity.

Pigs are susceptible to infection with both avian and human strains so they are able to serve as an intermediate host for the scrambling of genetic material from avian to human viruses, which can result in the emergence of a novel subtype.

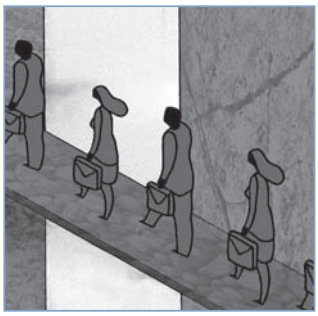
Human contact with infected poultry meat or feces is the main cause of human infection with avian influenza. Most cases have occurred in rural areas in Asia, as many Asian households depend on poultry for income and food and will sell or slaughter and eat birds even when signs of illness appear in a flock.

Prevailing agricultural practices in rural Asia, particularly in southern China, are characterized by dense populations living in close proximity to domestic animals. There is a higher risk of viruses from birds, pigs, and humans exchanging genetic material – a fact that is magnified by the population explosion in Asian countries, especially China. The following data[6] illustrates this. In 1968, the time of the most recent pandemic:

- China's human population was 790 million, today it is 1.3 billion;
- there were 5.2 million pigs in China, today there are 508 million; and
- the poultry population was 12.3 million, today it is 13 billion.

If the avian influenza virus mutates and there is a "re-assortment" of genetic material so that the virus adapts into a strain that is contagious among humans, there may be widespread human infection resulting in very severe disease.

The second means for this virus to be transmitted to human populations is a more gradual process of adaptive mutation. Under this scenario, the capability of the virus to bind to human cells increases during subsequent cases of human infection. This would initially manifest itself as small clusters of human cases with some evidence of human-to-human transmission, which would potentially give the world some time to take defensive action.



Prevailing agricultural practices in rural Asia, particularly in southern China, are characterized by dense populations living in close proximity to domestic animals.

6 Michael T. Osterholm, "Preparing for the Next Pandemic", Foreign Affairs, July/August 2005.

How serious is the current pandemic risk?

The WHO suggest that the risk of a global pandemic is high, but that there is no way of predicting when it will occur.

With the H5N1 virus now firmly entrenched in large parts of Asia, there is an increasing risk that more human cases will occur. With each additional human case, the virus has the opportunity to improve its transmissibility in humans and develop into a pandemic strain.

Domestic ducks are now able to excrete large quantities of highly pathogenic virus without showing signs of illness, readily transmitting the virus to other birds, including domestic poultry flocks.

There is mounting evidence that migratory birds are now directly spreading the H5N1 virus in its highly pathogenic form. In recent months, the virus has become entrenched in Europe and has surfaced in Nigeria and India.

The WHO suggest that the risk of a global pandemic is high, but that there is no way of predicting when it will occur.

The behavior of the virus in its natural reservoir, wild waterfowl, may be changing. In 2005, the deaths of 6,000 migratory birds at a nature reserve in central China, caused by highly pathogenic H5N1, was highly unusual and probably unprecedented[7]. This indicates that the H5N1 virus may have changed to a more pathogenic form than the previous strain isolated in Hong Kong in 1997.

H5N1 has expanded its host range, infecting and killing mammalian species previously considered resistant to infection with avian influenza viruses.

The H5N1 virus now circulating is showing to be more lethal to experimentally infected mice and ferrets (a mammalian model) compared to similar viruses from 1997 and 2004.

WHO suggest that the signs already exist to indicate that the world is on the brink of an influenza pandemic. All the prerequisites for the start of a pandemic have been met with the exception of the establishment of efficient and sustained human-to-human transmission of the virus.[8]

The risk that the H5N1 virus will acquire this ability will persist as long as opportunities for human infections occur. This is forecast to last for several years due to the spread of the disease in bird populations.

WHO suggest that the signs already exist to indicate that the world is on the brink of an influenza pandemic.

As the evolution of the pandemic cannot be predicted, a sensitive early warning system is desirable to detect signs of changes in the behavior of the virus. However, in risk-prone countries, disease information systems and health care, veterinary, and laboratory capacities are inadequate and ill-prepared.

Most affected countries cannot compensate farmers for culled poultry so there is no incentive to initiate culling and inadequate policing of directives to do so. Outbreaks of illness in flocks are therefore unlikely to be reported in the rural areas where the vast majority of human cases of infection have occurred.

Few countries possess the resources necessary to adequately monitor, detect, and investigate the emergence of sporadic cases of the clinical symptoms of influenza-like illnesses that might herald a potential outbreak. This constitutes an essential warning signal that seems lacking in under-developed countries.

[7] World Health Organization.

[8] World Health Organization, Ten things you need to know about pandemic influenza, 14 October 2005.

How fast would the pandemic spread?

The speed with which the pandemic would spread regionally and internationally depends upon several factors. Important contingencies include:

- rate of transmission/incubation period and number of people initially infected;
- the virulence of the virus (i.e., what percentage die from the infection);
- vulnerability of the affected population and movement by infected parties across geographical boundaries; and
- effectiveness of preventive measures.

The influenza virus is highly contagious and spreads largely by droplet/aerosol infection from coughing and sneezing. These infective particles can remain viable and suspended in the air for perhaps 30 minutes or more.

During the incubation period of the disease, it will be possible for the disease to be transmitted by persons who are asymptomatic. A short incubation period will help to limit the spread of the disease. A long incubation period will enhance spread.

Once a fully contagious virus emerges, its global spread is considered inevitable by WHO due to the volume of international air travel today. Countries might, through measures such as border closures, quarantine, and travel restrictions, delay arrival of the virus, but cannot stop it. The pandemics of the previous century encircled the globe in six to nine months, even when most international travel was by ship.

Given the speed and volume of international air travel today, the virus could spread more rapidly, possibly reaching all continents in less than three months. Organizations and individuals may have little or no time to prepare against the pandemic once human-to-human transmission has commenced. Most scientists believe that there will be two or three waves of infection before the pandemic disappears and that there will be a very short interval of perhaps only weeks between the discovery of the mutant virus that causes the next influenza pandemic and the declaration of global pandemic status.

WHO Pandemic Alert Monitoring

The WHO uses a six-phase Pandemic Alert protocol. Currently, the world is at Phase 3 of pandemic alert, characterized by *no or very limited human-to-human transmission*.

World Health Organization Pandemic Alert Protocol

Period	Phase	Characteristics
Inter pandemic	1	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.
	2	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.
Pandemic Alert	3	Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread, to a close contact.
	4	Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.
	5	Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.
Pandemic	6	Pandemic increased and sustained transmission in general population.

The WHO has warned that while neither the timing nor the severity of the next pandemic wave can be predicted, the probability that a pandemic will occur has increased. There are well-defined guidelines and regimented procedures (available on the WHO website) for rapid response and containment of outbreaks of human-to-human transmission.

Given the unpredictability of the behavior of the virus and its indeterminate progress to pandemic status, the WHO is likely to continue to sustain the Phase 3 alert for several years, as the H5N1 virus is already endemic in bird populations.

The WHO and governments have been creating a stockpile of antiviral drugs that they hope to deploy strategically to contain a pandemic at its source or at least slow its spread, thereby gaining time to implement emergency measures and augment vaccine supplies.

But this strategy depends on a number of assumptions, including:

- The first clusters of human cases caused by the virus will be detected and reported and correctly identified.
- Initially, these viruses will not be highly transmissible.
- The emergence of such viruses will be in a well defined geographic area.
- Antiviral drugs will be rapidly mobilized.
- Movement of people will be strictly quarantined.

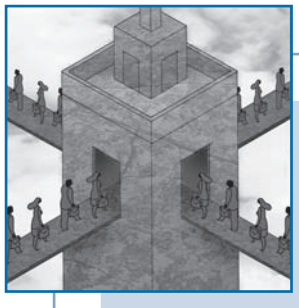
Historically, given that no effort has ever been made to alter the natural course of a pandemic by intervening at its source, the success of this strategy in halting a pandemic or delaying its spread has no precedent.

Organizations and individuals may have little or no time to prepare against the pandemic once human-to-human transmission has commenced.

Supplies of vaccines and antiviral drugs – the two most important medical interventions for reducing illness and deaths during a pandemic – will be inadequate in most countries at the start of a pandemic and for several months thereafter.[9] Inadequate supplies of vaccines are of particular concern, as vaccines are considered the first line of defense for protecting populations. On present trends, many developing countries may have limited or no access to vaccines lasting the duration of a pandemic.

One of the challenges confronting the developed countries is the lack of manufacturing capacity to produce a vaccine in quantities sufficient to mount a rapid response to provide adequate immunity for the population at large.

Even if a vaccine could be developed within two months of the outbreak of the disease, initial supplies might not be available for a further three to six months.



[9] World Health Organization.

What will be the impact of a pandemic?

It is not feasible to accurately forecast the impact of the next human influenza pandemic in anything other than broad terms. There are simply too many variables whose progress remains indeterminate until such time as a pandemic breaks cover.

However, history provides a reliable guide which should be assessed in this pre pandemic planning phase.

Mortality Rate

The severity of disease caused by the next pandemic virus will not be known prior to the emergence of the virus. During past pandemics, infection rates reached 25-35% of the total population.

In the event of a relatively mild virus, it is estimated that, globally, there would be 2 million to 7.5 million deaths. This calculation is based upon data from the 1957 pandemic.[10]

Estimates of mortality rates vary considerably, with some authorities predicting a death toll in excess of 100 million. The key factor is the virulence of the virus (the infection rate of the virus taken in conjunction with the case fatality rate).

Business and Social Disruption

For the purposes of Business Continuity Planning (BCP), organizations need to prepare for a "best case" and "worse case" situation in considering the effect on personnel and the subsequent financial effects.

High rates of illness and worker absenteeism are expected, and these will contribute to social and economic disruption. Past pandemics have spread globally in two and sometimes three waves over a period of months. Not all parts of the world or of a single country are expected to be severely affected at the same time.

Social and economic disruptions could be temporary and last only a few weeks, but may be amplified in today's closely interrelated and interdependent systems of trade and commerce. Social disruption may be greatest when rates of absenteeism impair essential services, such as power, transportation, and communications.

History provides a strong pointer as to the duration of the next pandemic. Because populations will be fully susceptible to a pandemic virus, rates of illness could peak fairly rapidly within a given community.

With successive waves of the virus, potentially more virulent then the first, it may take up to two years before the pandemic will have run its course.

Economic Impact

The World Bank has estimated a global economic impact of US$800 billion[11]. To put this in perspective, the SARS crisis of 2003 cost the economies of Asia-Pacific some US$40 billion and reduced air traffic in the region by 45%.[12] Yet the total number of people infected was just 8,000 over a five-month period.

With a possible duration of one to two years and a global geographic spread, it is anticipated that a pandemic will have a severe impact on corporate financial health and employment levels.

In the initial phase of a pandemic, those industries likely to be hardest hit include travel, tourism, hospitality, power, transport, communications, and retail. Other industries, including healthcare, hygiene, and home-delivered supplies will experience a rapid escalation in demand.

In the event of a prolonged pandemic, virtually every sector of the economy would be adversely affected. It is anticipated that global financial markets would spiral downwards as investors react to the likely change to consumer behavior, leading to a rapid global sell-off of equities and bonds and consequent flight to safety in gold and cash.[13]

Employee Absenteeism

All organizations should anticipate absenteeism rates of between 20-60% for periods of two to four weeks at the height of each pandemic wave. Each wave may last from three to eight weeks.

[10] World Health Organization, Ten things you need to know about pandemic influenza, 14 October 2005.

[11] World Bank, November 2005, East Asia Update.

[12] Lowy Institute for International Policy.

[13] Lowy Institute for International Policy.

A key component of the containment strategy will be a ban on all public gatherings. Cinemas will be closed, concerts and sporting events cancelled.

Employee absenteeism will be caused by several factors. Expatriates and travelers may be quarantined and refused entry to the workplace if returning from a virus-infected region. There will be those who are ill with the infection, and those who are immune and remain healthy but become primary caregivers for sick family members. Death within family units will also contribute to absenteeism.

The pandemic virus does not discriminate. Senior managers and executives will be just as susceptible to the impact of the virus as shop floor workers, those on production lines, and call center employees.

Restriction on Movement

Once the WHO moves to Phase 4 risk alert, *evidence of increased human-to-human transmission,* it is anticipated that governments globally will step up containment measures including border control, isolation of the sick, and quarantining those who have had contact with H5N1 infected persons.

At this point, international travel will become more difficult. On progression to WHO Phase 5 or 6 alert, international travel will effectively cease. Rigid quarantine procedures will likely prevent or significantly delay expatriates from return travel to their home.

A key component of the containment strategy will be a ban on all public gatherings. Cinemas will be closed, concerts and sporting events cancelled. Given the pathological history of children transmitting influenza viruses it is anticipated that school closures will follow the emergence of a pandemic.

Availability of Vaccines and Anti-Virals

Although a vaccine against the H5N1 virus is under development in several countries, no vaccine is ready for commercial production and no vaccines are expected to be widely available until several months after the start of a pandemic.

Because the vaccine needs to closely match the pandemic virus, large-scale commercial production will not start until the new virus has emerged and been characterized. Current global production capacity falls far short of demand expected during a pandemic.[14]

Tamiflu and Relenza are two anti-viral medications available that may modify and reduce the severity and duration of the virus. These need to be administered within 48 hours of the onset of symptoms to be of any benefit. Scientists are cautious about the efficacy of these drugs given the limited clinical data available.

National governments and the WHO have built strategic stockpiles of these drugs in a bid to contain the first wave of a pandemic, potentially limit its spread, and provide it to health care workers and other essential services personnel who are likely to be initially exposed to the virus.

Demand on Health Care Services

The demand on health care services in areas affected by the virus will possibly be overwhelmed by the influx of sick people. At all levels of the health care continuum resources will severely taxed, particularly in the event of a major outbreak.

There may be a significant increase in demand for hospital treatment and severe shortages in supply of beds, medical staff, and essential medications may result. This is likely to be exacerbated by the loss of front-line medical personnel to the virus. As the first wave of the virus spreads over a community, hospitals will come under pressure and may have to refuse new cases of infection.

Breakdown in Law & Order

One of the significant challenges that may confront government, organizations, and community leaders is a sense of fear and panic in the community as a pandemic takes hold. Human reactions of fear and panic, which are deeply embedded in society, are very rarely correlated to the severity of the disease in terms of actual rates of infection and death.[15]

[14] World Health Organization.

[15] Lowy Institute for International Policy.

With increased absenteeism among law enforcement units and emergency services personnel due to the virus, there may be deterioration in law and order consistent with other regions that have experienced natural disasters, the most notable recent examples being Hurricane Katrina in 2005 and the Asian Tsunami of 2004.

Duress on Governments/Essential Services

Despite an advance warning that has lasted almost two years, the world is ill-prepared to defend itself during a pandemic.[16] The WHO has urged governments globally to develop preparedness plans, but to date, only around 40 have done so. On present trends, most developing countries will have no access to vaccines and antiviral drugs throughout the duration of a pandemic.

In first world countries that have prepared for the pandemic, there may still be supply problems with essential services such as transportation, communications, waste disposal, water, power, and gas due to employee attrition and significant spikes in demand levels.

Demand on Basic Commodities

In the first wave of the pandemic, there is likely to be explosive demand for such basic commodities as rubber gloves, surgical masks, disinfectants, bottled water and essential medications. Demand will far outstrip supply further agitating consumer sentiment.

As the pandemic endures, basic foodstuffs will disappear off supermarket shelves due to the breakdown of transport and supply infrastructure, and staff shortages across all industries.

Summary

Across the spectrum of natural disasters, a human influenza pandemic possesses several unique characteristics:

- its impact is felt globally, not regionally; and
- its primary target is people, not buildings, inventory, or other physical assets.

"Despite an advance warning that has lasted almost two years, the world is ill-prepared to defend itself during a pandemic."

Once a pandemic arrives, organizations may be involved in a war of attrition, constantly monitoring the health and operational status of their workforce. Employees will fall into one of the following categories:

- those who have been effectively protected through vaccination or quarantine;
- those who have been struck down with the virus;
- those who are at home acting as primary caregivers;
- those who have managed to avoid the virus; and
- those who are in recovery mode and physically able to return to work.

[16] World Health Organization.

Organizational preparedness for a pandemic

While a pandemic presents a unique set of challenges from a risk management perspective, it also provides management with a window of opportunity to develop and implement those strategies essential to business continuity.

Undoubtedly, it is the human resource challenges that will manifest themselves through the pandemic cycle that will constitute the most critical consideration of the business continuity process.

The organizational parameters which need to be addressed in this regard are as follows:

Critical considerations in building a Crisis Management Team:

- cross-functional representation;
- representation across different regions;
- pandemic preparedness training; and
- level of seniority.

Leadership

The financial and physical risks that threaten corporate continuity will be multiplied if organizations fail to exercise decisive leadership. The threat of a pandemic demands that companies develop and implement pro-active crisis leadership strategies.

These skill sets are necessary for a company not only to mitigate the immediate financial threat of a pandemic, but also to protect and enhance its reputation with its own employees along with other major stakeholders, including customers, suppliers, and the general community.

During the course of a pandemic, it is probable that the executive or managerial group will proportionately suffer the same attrition rate as the general employee population. Therefore, all the people normally responsible for making commercially critical decisions may not be available.

This uncertainty of tenure may impose a significant strain upon organizations, given that management will have no idea who will be available to exercise leadership in different locations and at different times during a pandemic.

It will therefore be necessary to develop awareness among all staff that they may be called upon to exercise authority in areas extraneous to their normal job function and bounds of responsibility. A Pandemic Crisis Management Team should ideally be formed that assumes collective responsibility for operational decisions throughout the pandemic cycle.

Underpinning this need for crisis leadership is the knowledge that circumstances and events will change rapidly throughout the pandemic cycle. Effective business continuity will be contingent upon thorough, comprehensive planning and flexibility of approach and implementation.

Defining Core Activities

The risk mitigation strategy must address the question of which activities and processes are essential to guiding the business through a pandemic. Understandably, most employees and divisions will view their organizational role as being critical to the success of the company, not least for fear that their position could disappear in the next round of corporate restructuring.

In order to appease this level of employee anxiety, organizations should ensure that this task is placed in the appropriate contextual framework. Companies should also ensure that all staff understand that their contribution will be critical through the pandemic cycle.

It is vital to identify these roles and the individuals who perform them, and to commence cross-training to ensure that, in the midst of a possible absenteeism rate of 50%, these roles continue to be performed.

Critical considerations in building a skills inventory:

- define core activities essential to business continuity;
- conduct a skills inventory measuring organizational capacity against these activities;
- implement cross training and skills development;
- continual monitoring through the course of a pandemic; and
- establish a back up site for business-critical functions.

Communication

Allied with the development of crisis leadership skills, an effective communication strategy is of paramount importance for several reasons.

Through the pandemic cycle employees will be exposed to information on the spread of the virus, the frequency and intensity of which will fluctuate according to the prevailing circumstances. As new risk factors emerge, including additional regions to be infected with the H5N1 virus and the ongoing human fatalities, the mainstream media will provide intensive and often emotionally charged coverage.

One of the consequences of this media focus will be the creation of fear and panic among the general population. In some respects, the community is more at risk from an epidemic of fear than we are from the actual virus itself.

Organizational surveys consistently show that most employees expect their company to be a supplier of accurate, timely information on issues that may affect operations and personnel. In the event that the company fails to provide such information employees may be concerned that management is either unaware of the problem or is unprepared to act.

Communication strategy core elements:

- accurately define the nature of the threat;
- aommunicate the organization's capacity to manage this threat;
- build communication through multiple channels; and
- provide timely communication around any change in level of pandemic threat.

Should the WHO escalate the pandemic alert status to Phase 4 or beyond, there may rapidly develop a pervasive sense of fear in the community. Many people will endeavor to cling to their employment out of economic necessity, the need for security, and to satisfy primal social needs. Implicit within their expectations of what constitutes the employer/employee relationship will be the provision of accurate and timely information and advice.

The company's communication strategy should demonstrate:

- awareness of the potential for a pandemic and the company's capability to manage it;
- the existence of a business continuity plan; and
- clear, timely, and proactive advice to staff as events unfolds.

The company's intranet site should include a comprehensive overview of the current pandemic threat including links to the World Health Organization, Centers for Disease Control and Prevention (CDC), and local Ministry of Health websites.

Review HR Policies and Procedures

In anticipation of the potential consequences of a pandemic, it is essential that comprehensive human resource policies and procedures relevant to a pandemic be available. These might include:

Leave Policies

In the event of a full blown pandemic, there may be significant levels of absenteeism, infection, and potentially, a high mortality rate. Sick leave, caregivers leave, and bereavement leave policies all need to be reviewed to ensure that they reflect the organization's strategy concerning absenteeism.

In particular, this needs to be consistent with policy development on social distancing and quarantining of those employees who are either at severe risk of contracting the virus or are already displaying symptoms.

Crisis Support

Employees and their families may require considerable assistance to cope with the physical and emotional trauma of a pandemic. This will extend well beyond the level of support afforded by Employee Assistance Programs (EAP).

Human resource teams need to strategize the nature and extent of the issues that will manifest themselves, formulate what level of support the organization will offer, and contract appropriate resources to deliver these services.

Quarantine Policies
It is inevitable that the virus may be directly brought into the workplace either by staff or visitors. Policy development needs to focus upon how to:

- isolate these individuals to minimize the consequent risk of further infection;
- provide the necessary level of care and medical treatment; and
- transport these individuals to appropriate quarantine facilities.

As part of the communications strategy, employees need to be thoroughly briefed on the symptoms of the virus, what action to take if they believe they are at risk, and who to contact internally should they believe that another staff member or visitor is showing symptoms.

Monitor Employee Levels
The Pandemic Crisis Management Team, inclusive of human resource input, will on a daily basis need to review available personnel levels to determine which employees will be called upon to fulfill business-critical functions. Rigorous cross-training of business-critical functions prior to a pandemic will be needed to ensure continuity of core functions.

Review of Insurance Policies
Companies need to undertake an urgent review of their corporate insurance policies to understand how they will respond to a pandemic crisis. The range of policies included in this review will include:

- health
- disability
- salary continuance
- business travel
- life insurance

This will need to be done on a country-by-country basis accounting for variations in infrastructure, legal requirements, and policy wording.

Social Distancing

In general terms, social distancing is a key component of containment activities designed to limit the spread of a virus through reducing the frequency of contact between people. While this term is typically used in defining government strategy to the impending influenza pandemic, it is equally pertinent to the work environment where an organization's strategies could include:

- increased utilization of telephony and video conferencing facilities in order to avoid face-to-face meetings;
- avoidance of unnecessary travel, including cancellation of meetings, workshops, and training sessions;
- encouragement of employees to work from home or work flex hours to avoid crowding at the workplace;
- avoidance of public transport, at least during peak hours;
- where operationally allowed, teams encouraged to split into different work locations to improve business continuity functionality and avoid cross infection; and
- screening of all personnel and visitors entering company premises.

Modified Travel Rules

For organizations with a significant expatriate population or transient workforce, this will constitute a key component of the BCP process. A major consideration will be that when the WHO moves to alert Phase 4, national governments will impose strict rules governing the movement of people along with rigid quarantine procedures.

Companies will need to upgrade their travel policies with respect to the following parameters:

- development of repatriation guidelines consistent with WHO risk alert phases;
- strict notification/monitoring of employee locations while traveling;
- region-specific travel warnings and updates;
- revised approval processes; and
- resource-specific guidelines, including Personal Protective Equipment (PPE).

Employees will fall broadly into one of three categories:

- those with future travel commitments whose travel may be delayed/cancelled;
- those already in infected areas who require urgent advice/assistance or repatriation; and
- those recently returned from infected areas requiring quarantine facilities.

One of the key challenges will be finding the right balance between protecting expatriate employees and avoiding the perception of abandoning the interests of local employees.

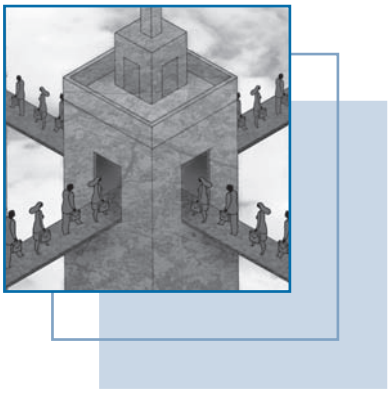
Upgraded Hygiene

One of the primary factors mitigating the effects of the pandemic will be the enforcement and communication of upgraded hygiene rules on a regional basis no later than WHO Phase 4 being declared.

Within the office environment there will be upgrades to cleaning protocols in areas such as:

- general office environment;
- maintenance of air-conditioning systems;
- telephone handsets, doorknobs and access buttons, elevator buttons; and
- common areas, including lunchrooms, bathrooms, elevators, etc.

Employees should also be issued instructions recommending adherence to personal hygiene guidelines in both the office and home environment. This should include topics such as preparation and consumption of poultry products, upgrading of basic hygiene procedures, and the supply/purchase of Personal Protective Equipment (PPE) such as face masks and disposable gloves.



Summary

Analysis by the WHO and other authorities suggests that a pandemic based on the current H5N1 influenza virus would devastate global markets, and the alert flags for such an event are already flying.

Since late 2003, conditions favoring another pandemic have been unfolding in parts of Asia. Warnings that a pandemic may be imminent have come from both changes in the epidemiology of human and animal disease and an expanding geographic presence of the virus, creating further opportunities for human exposure.

According to Dr Klaus Stohr, WHO Global Pandemic Project, "Once a pandemic virus emerges, it is too late to begin planning or to begin collaboration. There will only be a 20-30 day window between emergence and pandemic."

The majority of business risks, including natural disasters, are of a short-term nature, with most business continuity plans contemplating a return to normal operations within a period of 30 days. Conversely, a pandemic is likely to come in waves that last several months with one to two years required before the pandemic risk abates. There is also likely to be a prolonged recovery phase.

"Once a pandemic virus emerges, it is too late to begin planning or to begin collaboration. There will only be a 20-30 day window between emergence and pandemic."

There will likely be a high rate of infection and significant disruptions to essential and government services. Organizations and individuals need to plan to be self-sufficient in order to effectively survive a pandemic.

Organizational preparations for a pandemic should be characterized by:

- alignment with WHO alert levels;
- recognition that this is a unique event – while there are useful lessons to be learned from SARS and other recent disasters, the scale and potential impact are so radically different as to suggest a complete misapprehension of the risk;
- rapid development of crisis management capabilities – the virus is just as likely to take down the individual who has the most intimate knowledge of the company's business continuity plan;
- identification of your company's essential functions and those who perform them, and cross-training;
- assumption of an absenteeism rate of 20-60% at the height of the pandemic;
- ensuring that all employees are informed and educated on the potential threat of a pandemic, company preparedness, and required actions;
- revision and updating of human resource policies commensurate with the scale of the risk;
- recognition that the scale of the risk and geographical threats will change rapidly; and
- a sense of urgency in planning for the eventuality of a global pandemic.

Appendix A

Acknowledgements

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- World Health Organization
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