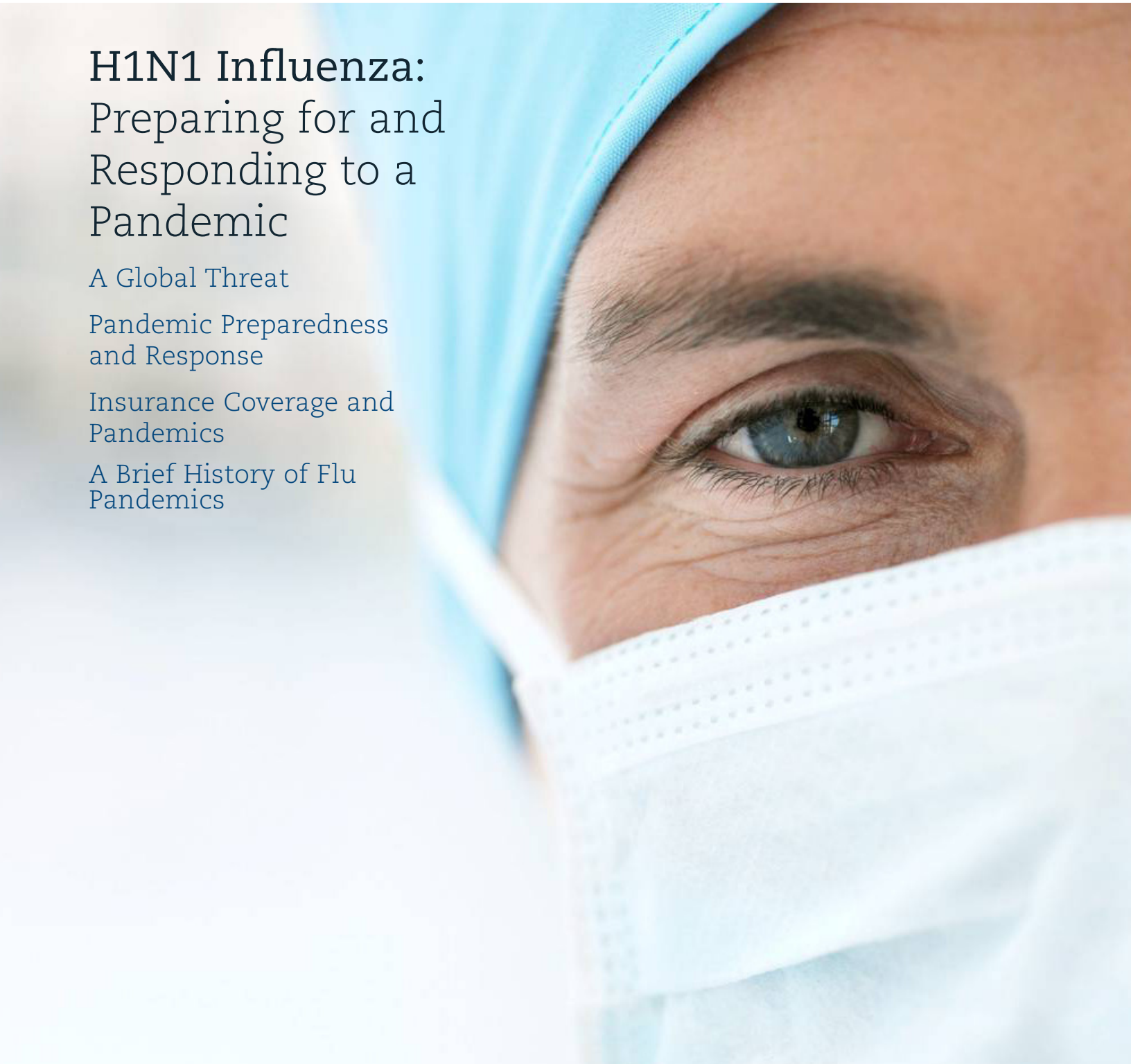
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MARSH

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Risk Alert



H1N1 Influenza: Preparing for and Responding to a Pandemic

A Global Threat

Pandemic Preparedness and Response

Insurance Coverage and Pandemics

A Brief History of Flu Pandemics

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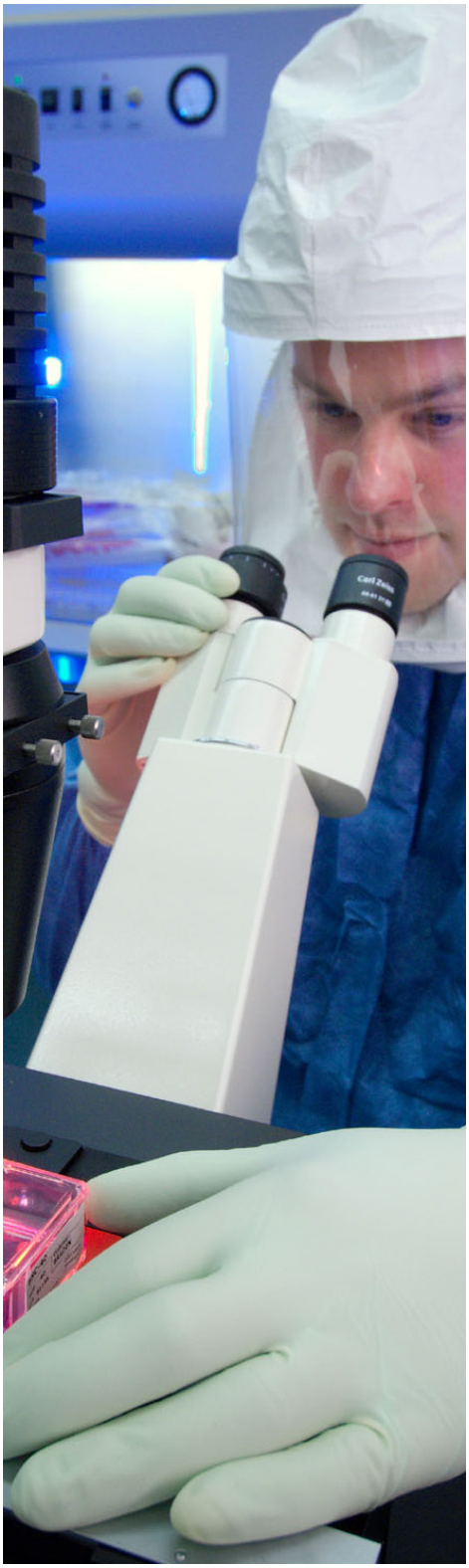
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Introduction

In the Spring of 2009, a new variation of influenza—H1N1—began to infect people in Mexico. The virus quickly spread to countries around the world, and is potentially on its way to becoming the first pandemic in more than 40 years.



Introduction

WHO Pandemic Levels

The World Health Organization (WHO) has adopted a six-phase approach to characterize the level of pandemic alert.

Phase 1: No viruses circulating among animals have been reported in humans.

Phase 2: An animal influenza virus that is circulating among animals has been known to infect a human and is therefore considered a potential pandemic threat.

Phase 3: An animal or human-animal mix of an influenza virus has caused small clusters of disease in people, but there has not been sustained human-to-human spread.

Phase 4: There has been sustained human-to-human transmission of an animal or human-animal mix of influenza virus. This level indicates that the risk of a pandemic has increased significantly, but is not imminent.

Phase 5: Verified human-to-human spread of the virus in at least two countries in one WHO region. A level 5 alert "is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short," according to WHO.

Phase 6: Pandemic phase, meaning that community level outbreaks have occurred in at least one additional country in another WHO region. A global pandemic is underway.

In addition, WHO identifies two periods after the pandemic has been declared:

Post-peak period: Pandemic disease levels in most countries will have dropped below peak levels. Uncertainty remains about whether additional waves will occur.

Post-pandemic period: Flu activity will have returned to normal.

Source: World Health Organization

As of this publication date, the virus has been confirmed as the cause of death in 16 cases in Mexico and one in the United States, and is being investigated as the cause in more than 100 other deaths. Thousands of other people are believed to be infected, with laboratory confirmation thus far in about 600 cases.

The World Health Organization (WHO) has said the virus will almost certainly become a pandemic. The clock is now ticking for businesses—already struggling with the global economic crisis—to close the gaps in their business continuity and other emergency plans and gear up to respond.

The current outbreak of the H1N1 virus underscores the critical importance of effective pandemic influenza response to minimize the potential for human morbidity and mortality, to reduce social and economic disruptions, and to mitigate against organizational risk exposures. It should be emphasized that the situation involving the H1N1 pandemic is evolving rapidly, and must be monitored closely. Pandemic plans and response must include the ability to react quickly and with flexibility in response to changing scenarios in accordance with the current phase of the pandemic.

A pandemic could escalate quickly, last for months, and infect 25 percent or more of the world's population, according to public health experts. Many organizations believe that at the peak of a severe pandemic, up to 75 percent of the workforce could be absent from work. With that in mind, businesses would be well-advised to ensure their emergency-response and business-continuity plans are up-to-date and include specific planning for dealing with a pandemic. This issue of *Risk Alert* aims to:

- discuss organizational pandemic preparedness and response and business continuity management (BCM);
- provide background information on the H1N1 virus and human influenza pandemics;
- highlight the international implications of a pandemic; and
- outline some of the potential insurance coverage issues related to pandemics.

A Global Threat

In upgrading its pandemic alert level to Phase 5 on April 29, 2009, WHO Director-General Margaret Chan said: "All countries should immediately now activate their pandemic preparedness plans….It really is all of humanity that is under threat in a pandemic."



Naming of the H1N1 Influenza Virus Strain

The H1N1 virus commonly is being referred to as "swine flu;" however, that name may be somewhat of a misnomer. The federal government and World Health Organization are officially referring to it as the "H1N1 flu." Officials said they are avoiding the term "swine flu" because it incorrectly implies that the virus is being spread by pigs or pork products, which is not the case.

Pig and bird populations are reservoirs for many influenza A viruses. Pigs can be infected by several viruses at the same time—human, bird, and swine. In sick animals, the viruses can swap genes and create new strains. Four main strains of swine influenza have been identified: H1N1, H1N2, H3N2, and H3N1.

The H1N1virus is a mix of genetic material from swine, bird, and human influenza viruses. Influenza A viruses are named based on the two sets of proteins that extend from their outer surface like spikes on a mace.

The "H" stands for hemagglutinin, of which there are 15 subtypes, H1 to H15. The "N" stands for neuraminidase, of which there are nine subtypes, N1 to N9. All of the H and N subtypes have been found in birds, but only the H1, H2, and H3 subtypes are known to have shown the ability to transmit freely among humans over the past 100 years.

One of the red flags of the recent avian flu virus, H5N1, is that it is a subtype to which humans have had no exposure. Similarly, most people—apart from those who have regular contact with pigs—likely do not have immunity to swine influenza viruses. This increases the risk of a pandemic should human-to-human transmission of the H1N1 become effective.

Sources: World Health Organization and The Centers for Disease Control

A human influenza pandemic represents the extreme end of what risk managers call low frequency/high severity events. Like hurricanes, tsunamis, and earthquakes, we know the risk of a pandemic exists. And like those catastrophes, we won't know the severity of a pandemic until it is over. But unlike hurricanes, tsunamis, and earthquakes, a pandemic will not limit its damage to one or a few countries or a single geographic region. A pandemic's worldwide consequences could include:

- more than 7 million deaths from even a mild pandemic, according to the WHO (death estimates vary wildly—some top 350 million—and will ultimately depend on the virulence of a pandemic strain);
- 25 percent or more of countries' workers needing to take between five and twenty days of sick leave, according to the United Kingdom Department of Health;
- more than $3 trillion in worldwide economic damage from a severe pandemic, according to The World Bank; and
- major disruptions to every industry, particularly those with strong ties to travel, tourism, sports and entertainment, lodging, and health care.

In its initial stage, the swine flu virus made many think of Severe Acute Respiratory Syndrome (SARS), which emerged in 2003 and the avian flu (A/H5N1) virus that first made headlines in 2005. But the H1N1 virus quickly showed a greater ability to spread from person to person, leading the WHO to declare on April 29, 2009 that a pandemic is "imminent."

The hardest hit companies in any industry are likely to be those with worldwide operations, global supply chains, and/or international customers. Some local, state, and national governments have already curtailed travel, closed schools, quarantined individuals and communities, and/or banned public gatherings, or are preparing to do so. The decision by the WHO to move the pandemic alert level to Phase 5—and a potential move to Phase 6—will only hasten such steps, many of which were taken during the SARS epidemic, especially in Asia where the disease was most prevalent. Such measures—while necessary to help slow the spread of the disease and allow time for medical efforts to ramp up—will impede commerce at a time the world economy is already in distress.

Response to a pandemic influenza outbreak considers that we may need to make health, social, and economic triage decisions. Examples include the allocation of scarce medical commodities such as drugs

and ventilators; social engineering determinations regarding mandatory quarantine, canceling of public events, closing airports, and access control to country borders; and economic prioritization as to which products, supply chains, and resources are most needed to keep the organization operating.

Lessons Learned From SARS

In late 2002, SARS began to work its way around the world. By the time the outbreak ended in July 2003, about 800 people in 26 countries had died from the disease, just under 10 percent of those believed to have been infected. The vast majority of SARS cases were reported in Asia, although 38 people in Canada also died and 75 cases were reported in the United States. Concerns about the disease led to severe travel restrictions in some countries, closure of premises by government authorities, quarantines, and other business disruptions. The Asian Development Bank estimated the total lost business revenue at about $60 billion.

SARS was not an influenza virus, but rather a coronavirus, so-named for its appearance when viewed under an electron microscope. SARS is a droplet infection, meaning that it spreads when a relatively large droplet containing the virus is coughed or sneezed by an infected person and then inhaled or otherwise ingested by another. Influenza, on the other hand, typically spreads more quickly, as it is an aerosol infection involving smaller droplets able to suspend in the air and travel greater distances.

“It’s critical to give employees consistent guidance, thus avoiding confusion.”

The SARS experience is on many people’s minds as they consider a potential H1N1 pandemic. For businesses with employees working or traveling overseas, particularly in countries where the virus has appeared, some of the “lessons learned” could be relevant should an avian flu outbreak occur. The following are some steps to bear in mind:

- Maintain regular communication between the home office and other operations, with frequent and detailed updates about the unfolding situation. It’s critical to give employees consistent guidance, thus avoiding confusion.
- Work closely with your office building’s management to get complete and updated information on any containment, safety, or other measures implemented, and any incidents involving other building tenants. If necessary, press them hard to reveal the true situation—

they will be in direct contact with civil authorities on these issues. Good information from the building's management will help reassure employees.

- Anticipate that the anxiety among your work force may be driven by concerns over being sent to a quarantine camp—as was done in China during the SARS epidemic—should infections be discovered in your office building.
- Be ready to permit staff to work from other cities or from home.
- Anticipate that companies will respond to government instructions and refuse to accept visits or meetings. Again, this was true in China during SARS.
- Maintain close contact with clients by phone. Respect any requirements they may have limiting or eliminating physical contact, such as in-person meetings.
- Be prepared that if you or your employees are coming from an infected area, your own head office and firms you intend to visit in North America may require you to spend a week or more in a hotel before coming into the office.

Although SARS provides a recent case study to which risk managers can look for ideas in planning for pandemic flu, they should keep in mind that SARS was mild compared to the potential impact of an influenza pandemic.

Pandemic Preparedness and Response

In the face of a likely pandemic, organizations should be sure that their risk management controls, human resource, and other pandemic policies and practices are in place in order to mount an effecticve response



Business Questions About Flu/Pandemic Preparedness

Here are some questions risk managers should consider asking themselves about a potential pandemic.

- How do we anticipate risks from a pandemic that could harm our company?
- How can we respond effectively to the threat of a pandemic?
- What should we do if employees are exposed to or develop H1N1 flu?
- Can we keep our business operating if employees, a critical function or a key relationship (e.g. supplier) are affected?
- How can we manage pandemic-related disruptions in our supply chains?
- How should we communicate to our customers, employees, and suppliers the steps we are taking to deal with pandemic flu?
- Will property and/or casualty policies cover pandemic-related claims?
- How much will a pandemic flu cost?
- What are the potential impacts to our markets?

Many businesses, particularly large multinational corporations, established pandemic planning committees in the four years since avian flu first grabbed headlines. Some have created task forces combining their strategic planning, operations-continuity procedures, human resources, and health services to adopt event-specific measures in anticipation of a pandemic. Others, primarily in parts of the food industry that use pork, are preparing marketing campaigns aimed at allaying fears about the use of their products—and thus protecting their brands in the midst of the H1N1 outbreak. Health experts have said repeatedly that it is not possible to become infected with H1N1 by eating pork products.

It's also likely that many companies did not make any special preparations in advance of what they have seen as the slim likelihood of a flu pandemic; instead they have operated under the belief that should one occur, either it will not affect them, or they will respond as the need arises.

An outbreak of pandemic flu will severely test even the best-constructed business-continuity plans and require implementation of an effective crisis management structure. Businesses are well-advised to review and revise their plans immediately in the light of the H1N1 threat. In theory, a strong organization preparedness program that includes emergency response, business-continuity management (BCM) and crisis management should already be in place to identify, respond to, and recover from a broad range of potential incidents. Pandemic influenza, however, isn't a "normal" business risk. Some of a pandemic's unique characteristics include:

- an international impact with no demarcation by culture, industry, or geography;
- the potential to escalate quickly and last for many months;
- a projected infection rate of 25 percent or more of the world's population, according to many public health experts;
- extreme taxation of health care facilities, public health agencies, and their work forces; and
- a macro impact on regional and global economies—potentially exacerbated by the current financial crisis—that could result in a significant shift in the way that companies conduct their businesses and their ability to continue operations.

There are a number of steps companies should be taking and issues they should be considering before, during and after an outbreak. The following guidelines do not present an exhaustive picture of such preparations, but are intended to foster discussion.

If H1N1 does not manifest as a pandemic, the time spent on planning and preparation will not have been wasted. Consider that pandemic flu is a good proxy for potential bioterrorism; bioterrorism is a good proxy for other forms of terrorism. Corporate preparedness is a transferable skill—even if the risk emerges from a totally different direction or source than anticipated.

Before an Outbreak

Risk managers and other executives with risk management responsibilities should consider the following before a pandemic begins:

- Understand the nature of the disease and the potential means by which it could directly and indirectly affect their operations, resources, reputations, and financial fitness.
- Define economic priorities; which products and/or services are of greatest value to the organizations.
- Identify the location and key contacts of third party providers used to support your organization's critical supply chains, such as upstream tier 1, 2, 3, 4 suppliers, raw material providers, and public infrastructure providers.
- Review existing corporate preparedness plans, procedures, and policies, including crisis management plans, business continuity plans, risk management controls, human resource policies, communications capabilities, critical suppliers and vendors, and potential sales impacts. All existing plans should be reviewed, updated, and tested based on the threat posed by a pandemic. For example, companies should ask themselves, "Will my plan work in the event of having fewer people, losing certain critical people, or having staff working from remote locations? Will the real or perceived fear of an infection affect sales? How can we position the company to respond positively to this negative event?"
- Define the criteria such as WHO stage, factory shutdown, or employee infection, that will be used to declare the need for plan activation or escalate to other individuals, groups, or agencies such as the CDC, boards of directors, or media.
- Regularly contact governments, international agencies, and industry groups about the availability of guidance from which the company and its staff could benefit.
- Companies should also ensure they know what to do and whom to inform should they identify a suspected case of H1N1 flu or other

Vaccines and Antiviral Medications

Vaccines: Every year, millions of people around the world receive a vaccination against the flu type(s) determined to be the most likely in a coming flu season. The vaccines work by triggering an immune response, bolstering the body's ability to fight off a virus.

There is currently no available vaccine for the H1N1 influenza strain, although development of a vaccine for H1N1 is currently in progress.

Antiviral therapy: Medications that help reduce the duration and severity of the flu are called antivirals. At present, two classes of antivirals are known to show an ability to combat H1N1— adamantanes and neuraminidase inhibitors.

At present, only the neuramindase inhibitors are recognized as being effective against H1N1. The neuramindase inhibitors contain the drugs oseltamivir (sold as Tamiflu) and zanamivir (sold as Relenza).

To be effective these medications must be administered properly, which will also help to avoid the potential development of resistant strains of the virus.

communicable disease among their employees. Agree internally on what circumstances relative to H1N1 flu would trigger invocation of various response capabilities within the company—what are the key risk indicators?

- Re-examine the supply chain, and assess what additional risks H1N1 flu presents to the continuation of service from suppliers and vendors. Consider the increased risk presented from using international versus regional suppliers, particularly from areas already infected.
- Review or develop employee health procedures to minimize the potential for transmission of infectious diseases to other workers.
- Issue periodic "news releases" to employees to educate them about the disease and what health care precautions they need to take at home and in the workplace.
- Test crisis management and operations continuity plans regularly. If a company believes that H1N1 presents a significant risk, it should consider running a rehearsal using various outbreak scenarios to test the plan's effectiveness. Each time a virus threatens a pandemic, the company should quickly conduct table top exercises on the new threat to guide quick improvements.
- Try to ensure that senior managers have the unique skills and background knowledge to manage such an event before it becomes a crisis.

"Test crisis management and operations continuity plans regularly."

Upon Outbreak

During a pandemic, the ability of an organization to identify problems and respond quickly and effectively will make a significant difference to the success or failure of protecting staff, profits, and reputation and, ultimately, to the company's survival.

Companies should consider structuring their corporate preparedness plans for a pandemic crisis into four to six escalating action thresholds that would provide advanced warning information and allow individual facilities, regions, and businesses to detect an emerging event and respond appropriately at each escalated threshold. Tiered planning should provide applicable guidance pertaining to:

- Allocation of company resources;
- Health and safety issues and procedures;

- Operations responses;
- Human-resource/benefits involvement;
- Internal and external communications;
- Financial-resource allocation and impact analyses;
- Government involvement; and
- Product, facility, information technology (IT) and intellectual property security controls.

Companies should review their existing preparedness plans and consider how—and if—they will be able to answer the following questions during an outbreak:

Information and Communication Concerns

- What is the nature of the disease? How is it transmitted, what are its symptoms, and what health care precautions are appropriate?
- Do employees know what to do and who to contact if they are infected or may have been exposed to the virus?
- Will the company communicate with its employees if they are not at work?
- At what point do managers need to communicate to upper management that there is a potential problem?
- How will potential problems be communicated to employees and clients?
- Have call centers been set up to maintain contact with suppliers, clients, and employees?

Human-Resource/Benefit Concerns

- What is the company's position if an employee wants to work at home?
- What happens if an infected employee comes to work?
- What if a non-native employee wants to be temporarily transferred to another region? What about his/her family?
- Is or should the company be prepared to provide family death support?

Operational Concerns

- Can the company operate with 25 percent or greater absenteeism?
- Can the company have employees work remotely? What infrastructure support is needed to support a shift to an at-home work force?
- 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 decontaminate the facility and its heating, ventilation, air-conditioning systems, electronic equipment, and soft materials (blankets, curtains, and so on)?
- What assurances need to be provided to the facility staff that they are safe at work?
- At what point does the company prohibit staff from traveling to certain geographic areas?
- How will traveling employees be brought home, particularly if they are sick?
- Are there escalation procedures to get additional resources?
- Is there a trained crisis-management team that includes on-call staff? Do the team members know what is expected of them? Are the correct personnel—management and others—designated to participate on the team?

Risk-Communication Concerns

- Are executives ready and capable of delivering the right messages?
- Have press releases been prepared that can be adapted to fit the situation?
- Are mechanisms in place for managing internal and external communications?
- What if the current means of communication fail?
- Are there trained spokespeople for dealing with the media and other stakeholders?

During an Escalating Pandemic

Businesses looking to ensure continued operations during the pandemic and in its immediate aftermath may find the following questions critical:

- Is the crisis management structure functioning well? Does it have access to forecasts and current status information on the pandemic? Does it have access to forecast of operational impacts and market reactions in the coming weeks and months?
- Is the business-recovery team operating effectively? Does it have the necessary and readily available resources to support its activities? Where will the team and its support resources stay if they have to travel or relocate to a facility?
- Has the team initially identified and monitored changes of the recovery-time objectives for each of the critical business processes that may be interrupted?
- Have continuity strategies been developed for each process? Have they been integrated in an effective manner or prioritized, particularly if multiple facilities and regions are affected?
- Have supply-chain dependencies been identified and alternative channels identified and secured in case of disruption? What happens if the backup fails?
- Are there alternative premises and facilities within and outside of an affected region that can be used? Are transport links likely to be sufficient to get people and resources to the alternate sites?

“The actual timing and severity of a pandemic, the nature of a particular business or industry, and other variables will all come into play during an actual incident and subsequently as the spread of the disease progresses.”

Timing of Corporate Responses

As stated earlier, the foregoing questions are meant only as a general starting point for companies. The actual timing and severity of a pandemic, the nature of a particular business or industry, and other variables will all come into play during an actual incident and subsequently as the spread of the disease progresses.

For example, at what point should a college or university with a large number of students living on campus decide to cancel classes and/or shut down the campus? In that situation, a balance will need to be struck between acting too soon, which could mean canceling school unnecessarily, and acting too late, which could force students to attempt travel in a time of major transportation disruptions.

Likewise, a professional services company may have a significant number of employees traveling overseas. At what point should it curtail overseas travel? How much of its resources should it be dedicating to increasing its ability to conduct business through teleconferencing?

A manufacturer may be able to mitigate worker exposure by instituting mandatory hygiene practices and providing workers with protective clothing—gloves, masks, hand disinfectants, and so on. At what point should it move to do so? What thresholds would trigger a shift of manufacturing operations to another location and a complete plant shut down?

It is incumbent on corporate officers to ensure that their companies have evaluated pandemic risks and implemented the appropriate steps to mitigate those risks.

Health Care System Faces Immense Challenges

A pandemic will touch every business sector, but few will be as heavily involved as the health care industry, from the frontline doctors, nurses, and others treating patients to the companies that will eventually handle a potentially massive number of insurance claims.

While companies in many other industries will be able to tell their workers to work from home or take time off, health care providers will not only be expected to provide care, but also may be expected to work longer hours if volume and acuity increase. Additionally, they will be under the same stresses as others, including caring for family members who become ill, becoming sick themselves, and facing the fear—a heightened fear—of being exposed to the virus at work.

Numerous government agencies and other industry groups have prepared guidelines for health care facilities and workers to help them prepare for a pandemic. Patient-education material, planning guides for health care facilities, diagnostic-testing guidelines, infection-control guidelines, and more are available from the CDC, the Department of Health and Human Services, and others.

The Center for Biosecurity of the University of Pittsburg Medical Center recommends that hospitals should aim to make 30 percent of beds available within one week and double the licensed bed capacity within two weeks, and should anticipate their supply needs (including

medications). The CDC's FluSurge 2.0 software is one tool that can help to guide planning. Additionally, hospitals should focus on methods to limit social spread of the virus by stockpiling a three-week supply of surgical masks, anticipating use by everyone in the facility; having N95 respirators for use by health care workers; preventing infected staff from working; limiting exposures by cohorting patients; and improving hospital surveillance.

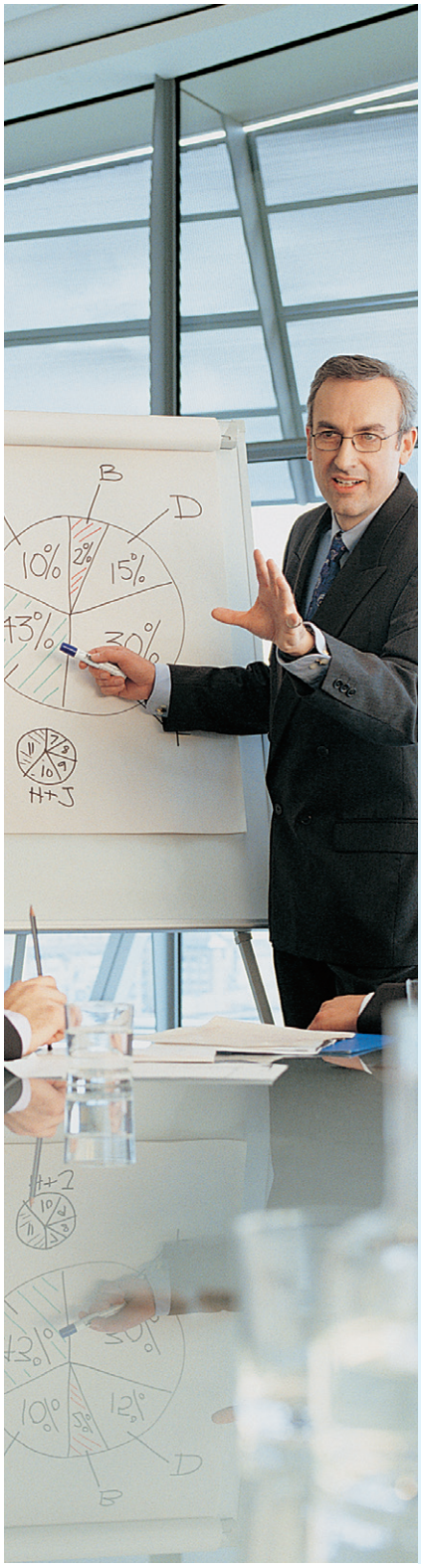
Additional challenges faced by hospitals will include:

- maintaining and augmenting the health care workforce;
- having rapid influenza testing readily available;
- administering antiviral agents within hours of the onset of symptoms;
- organizing in-home childcare in the event of school closures;
- maintaining open communication;
- expanding occupational health services;
- providing ongoing education to staff;
- implementing contingency staffing to augment current numbers of staff; and
- coordinating with other regional hospitals to allocate resources, coordinate activities and share information.

While the challenges faced by health care organizations are immense, history also recognizes that U.S. hospitals and health care workers have risen to face these challenges when events such as September 11 have occurred. However, response will place additional burden on an already taxed system.

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Insurance Coverage and Pandemics

In the event of a pandemic, businesses around the world could suffer severe economic damage, the extent of which will depend on the severity of the outbreak. Whenever businesses suffer a loss, owners naturally look to their insurance policies for help. As was the case with the SARS virus, many claims stemming from a flu pandemic are likely to lead to disputes.

Although the outcome of any claim is dependent on its facts and the legal rules in the applicable jurisdiction, there are some generalizations that can be drawn. Experience derived from the SARS outbreak may also be instructive.

The following is a brief discussion of pandemic-related issues that may arise under several common types of coverage. Understanding these issues and potential responses may assist in planning and preparation.

General Liability

The commercial general liability (CGL) policy provides coverage against a broad range of liabilities alleged to result from the acts or negligence of the insured. It also provides a defense against claims actually or potentially falling within the coverage. Some variation of this coverage is held by almost all businesses and is, therefore, likely to be at issue in any pandemic flu-related event.

The standard policy typically responds to bodily injury, sickness, or death allegedly caused by the insured. Insurers are, therefore, likely to closely scrutinize the alleged causal connection between a claimed infection or exposure and the actions of the insured. Because insurers take the position that the policy extends only to actual injuries, they are also likely to look closely at the nature of injuries alleged by third parties and may reject claims based on fear of exposure, exposure without actual symptoms, or other mental or emotional injuries. However, under the "bodily injury" and/or the "personal injury" language of some policies and the law of some jurisdictions, such emotional injuries may be covered, so careful review is necessary.

"Because insurers take the position that the policy extends only to actual injuries, they are also likely to look closely at the nature of injuries alleged by third parties."

The policy also typically responds to third-party property damage, but usually requires physical injury or destruction of tangible property, so insurers may take the position that certain types of claimed damage are not covered or that the mere presence of the virus in or on property does not constitute physical injury.

The standard policy contains coverage for "personal injury"—a number of specified wrongs, including wrongful eviction. Policy language varies, as does applicable law; but in some situations, it might be possible to argue that the actions of a landlord or other similar insured that result in closure of a building or evacuation of premises fall within the reach of this definition.

Most liability policies also contain a broadly worded pollution exclusion, which applies, among other things, to all "solid, liquid or gaseous…contaminants or irritants." Although there are grounds to argue that this language should apply only to industrial chemicals and waste, insurers have used the broad language to deny claims for damage caused by substances as common as smoke, grease, and mud. Courts have split on this argument, with some holding the exclusion applies only to industrial chemicals and others holding that it must be read broadly to apply to anything that is potentially an irritant or contaminant. It is, therefore, possible some insurers will argue that viruses constitute a "contaminant" within the meaning of the exclusion and use that as a basis to deny claims.

Because of the varied wording of CGL policies and the varied legal interpretations of the policy language, cases potentially falling within the reach of the coverages need to be reported to the primary and excess insurers as soon as there is knowledge of a claim. Umbrella policies are generally broader than the primary coverage, so it is important to make sure that the umbrella insurer is also on notice for the types of employers liability claims noted in the following section.

> "Workers' compensation will undoubtedly be an issue in the event of a H1N1 or other pandemic."

Workers' Compensation

Workers' compensation will undoubtedly be an issue in the event of a H1N1 or other pandemic. As with any insurance coverage issue, the facts of individual cases will vary, as will the coverage afforded under various policies according to state and federal laws and the terms and conditions of policies that provide coverage beyond that which is mandated by law. Exposure falls into three categories:

- Potential exposure in the U.S. or Canadian workplace.
- Short-term or temporary assignments outside the United States and Canada.
- Long-term work assignments outside the United States and Canada.

Exposure inside the United States

Depending on the language in each state's statute relative to occupational disease, workers' compensation could be the mechanism to cover medical bills and reimburse lost wages for pandemic flu-related disability as long as the exposure meets the jurisdictional compensability standard. The definition of injury is consistent within the majority of states, requiring it to be "…arising out of and in the course of…" employment.

Occupational disease is defined more narrowly in some states, which use language such as "hazards in excess of those ordinarily incident to employment in general and/or…peculiar to the occupation in which the employee is engaged." Some states list those occupational diseases that are "covered"; still others consider whether the risk of exposure is greater on the job than it would be to the general public.

No state specifically references H1N1 in its workers' compensation law. However, claims for disability related to H1N1 by employees on work assignments in geographic areas where the risk is identified should be filed under the appropriate policy. Now that H1N1 has reached the United States, the workers' compensation issues will be different from those posed by overseas exposure.

Exposure to H1N1 in the United States will become less of a workers' compensation issue due to the extent of potential exposure. Although health care employees and some employees in other industries may face a risk of exposure arising out of and in the course of employment, the nexus between employment and illness will blur as the general public faces exposure from multiple sources outside employment.

Overseas exposure

Workers' compensation coverage for employees injured while working temporary assignments outside of the United States will depend on the extraterritorial coverage provisions of the applicable state law. Many states extend benefits to those injured outside their borders (whether in another state or outside the country), provided that the contract of hire was made in the state or the principal location of employment is in the state. However, circumstances can arise under which such employees would not be entitled to state workers' compensation benefits.

The other coverage that might apply is employers liability, also covered under the standard workers' compensation policy used in most states. But while employers liability coverage applies to injuries to employees temporarily outside of the United States or Canada—as long as the employer is legally liable for damages as a result—many employers prefer to address this exposure by arranging for a foreign voluntary compensation benefits endorsement or a separate, standalone policy for this coverage. This endorsement or policy provides voluntary coverage for the workers' compensation benefits of a given jurisdiction to employees not covered by state workers' compensation law.

Because U.S. nationals assigned to work outside of the United States for an extended period or indefinitely may not have protection under domestic workers' compensation policy, coverage under a foreign voluntary workers' compensation policy or endorsement is generally preferable. The language is usually very similar to that of the National Council on Compensation Insurance (NCCI) voluntary compensation endorsement plus language providing coverage for endemic disease—such as H1N1—and repatriation expense.

An endemic disease is one that is peculiar to a particular country. The endemic disease coverage language of a foreign voluntary workers' compensation endorsement establishes that coverage applies to injury or death arising out of endemic disease even if the disease is not covered under the workers' compensation or occupational disease law of the designated state. The repatriation expense coverage provides for the cost of bringing the employee or his/her remains back to the United States.

It is important to note, at this juncture, that foreign voluntary compensation coverage—whether by endorsement or standalone policy—is not a standard coverage. There is wide variation in the terms and conditions of coverage from one insurer to the next. Policy forms and endorsements should be analyzed in detail to be sure that coverage will apply as expected. Additionally, there are coverage limitations with an endorsement (primarily time limits) so a foreign voluntary policy is preferable if employees are out of the country for extended periods.

Infection from returning employees

Exposure within the United States or Canada to employees who may have been infected with H1N1 outside of the United States and Canada, present additional coverage questions. Most state workers' compensation statutes do not view illness contracted due to exposure to fellow employees as a compensable occurrence, as the exposure to illness is not usually limited to the workplace. The exposure to H1N1 would have to be proven to be solely a result of a workplace exposure to be considered for coverage under a standard workers' compensation policy in any jurisdiction.

If an employee alleges a workplace exposure to H1N1, the employer should report the incident to its claims administrator and cooperate in any investigation. Compensability of each case must be determined on the merits of the situation and the law of the jurisdiction.

Pollution

Insureds may also have separate coverage for damage arising out of pollution. These policies may provide a basis for seeking coverage, but it is important to be aware of potential issues and possible insurer responses.

A typical pollution policy provides coverage for "pollution conditions," which must result from a "discharge, dispersal, release, seepage, migration, or escape." The term "pollution condition" is usually defined broadly and includes, as a general category, both "contaminants" and "irritants." Insurers have typically resisted attempts to recover for nonindustrial pollution or living microorganisms requiring a host cell.

General liability and property insurer responses to widespread mold claims included revising policy definitions so that they now contain exclusionary or limiting language. Environmental insurance policies have been designed to respond to this gap in coverage; however, environmental policies often exclude "naturally occurring substances" and "microbial matter," which would also exclude viruses. In addition to these changes to policy wording, insurers have argued that the mechanism by which the virus spreads does not constitute "discharge, dispersal, release, seepage, or migration," specifically because of the fact that a host cell is required for transmission.

Some insurers have also argued that the broad definition of "pollution" was intended to apply only to industrial pollution and chemicals, rather than to any substance that could be considered an irritant or contaminant; and in some states there is case law that will support this argument.

Finally, pollution policies often contain a provision requiring that expenses be incurred only in response to a government order and that the order be issued in accordance with a law or regulation governing and setting standards for the remediation of the pollutant. The likely purpose of this language is to protect the insurer against voluntary acts or cleanups or governmental overreaching; however, it is likely that in the event of an outbreak of H1N1 or other communicable disease at any premises, a governmental mandate would be triggered in response to the protection of public health. However, there may be challenges with respect to remediation, in that insurers may take the position that governmental closure or decontamination orders are not supported by specific authority, that no standards exist, that governmental directives are not orders, that the entity issuing the order does not constitute the government, or that costs are voluntary. It is, therefore, important to consider governmental mandates in structuring environmental policies.

Property

Another area that will inevitably lead to insurance questions centers on the possible extent of coverage under an insured's first-party property policy. The hospitality, food service, gaming, and airline industries are among those likely to be most affected in this area.

Generally speaking, each insured's policy should be reviewed individually. Unless the policy provides specific time element coverage for "infectious disease outbreaks/notifiable disease," coverage is unlikely to be triggered by a pandemic. Coverage would not be triggered simply by a fear that pandemic flu or any other communicable disease may be present in or near the insured's property, thereby leading to employee absences or diminished customer traffic.

"Another area that will inevitably lead to insurance questions centers on the possible extent of coverage under an insured's first-party property policy."

Coverage may be provided—if the insured has an extended policy—in the notifiable disease, communicable disease, or outbreak provision/extension. Coverage may require a necessary suspension of the insured's business activities at an insured location if the suspension is caused by the order of an authorized governmental agency. The policy extension may also cover the reasonable and necessary costs for the removal of an actual substance that is causing the spread of a communicable disease; this coverage may have a qualifying period.

The policies should also provide a definition of "notifiable disease," and there are typically sublimits that will apply. Typical first-party property contracts generally require physical damage triggers by an insured peril either to the insured's property or to property which precludes ingress/egress to the insured's property. This includes civil authority extensions.

Civil authority

The civil authority extension is commonly found in business interruption and other time-element forms where coverage will need to be reviewed relative to this question. Generally, this extension covers the actual business interruption or other time element loss caused by the action of civil authority that prohibits access to the premises covered under the policy, due to direct physical loss or damage to property other than at the described premises, and arising from a covered cause of loss. Other restrictions may apply, such as a maximum time period for recovery, usually three consecutive weeks

after a 72-hour waiting period. Other forms may limit the scope of coverage to a specified distance from where the damage occurred. In addition, a sublimit may also be applicable.

Therefore, in any claim involving this extension, the facts and circumstances of the loss and of the governmental action will be critical. Given possible insurer responses, governmental closure based on suspicion may be treated differently than governmental closure that occurs because of the actual presence of the virus. In either case, it is likely that insurers will rely on the contamination exclusion as a basis for denial. Insurers are more than likely to take an "absolutely no coverage" position if an insured evacuates or closes voluntarily without an actual order from the civil authorities.

Physical loss or damage

Most insurers are likely to take the position that the mere presence of H1N1 or other pandemic virus does not constitute "physical loss or damage" under the policy. Even if an insured was successful in establishing physical damage, it should be expected that insurers would put forth the "contamination" exclusion in most forms as being applicable.

Some large hospitality and entertainment companies have obtained programs that contain a policy extension that may supply some coverage for losses resulting from closure of premises by a public authority from contagious disease. These extensions need to be reviewed very carefully as they may have distance limitations or other restrictions.

If an insured feels they may have a claim resulting from an occurrence of a notifiable disease, they should immediately begin the process of gathering documentation to support a potential claim. This should include details of the specific case to the extent information is available to the public, including:

- where the case was diagnosed;
- where in relation to the property was the individual(s);
- what authorities have been or are required to be notified; and
- the specific date of the occurrence.



Conclusion

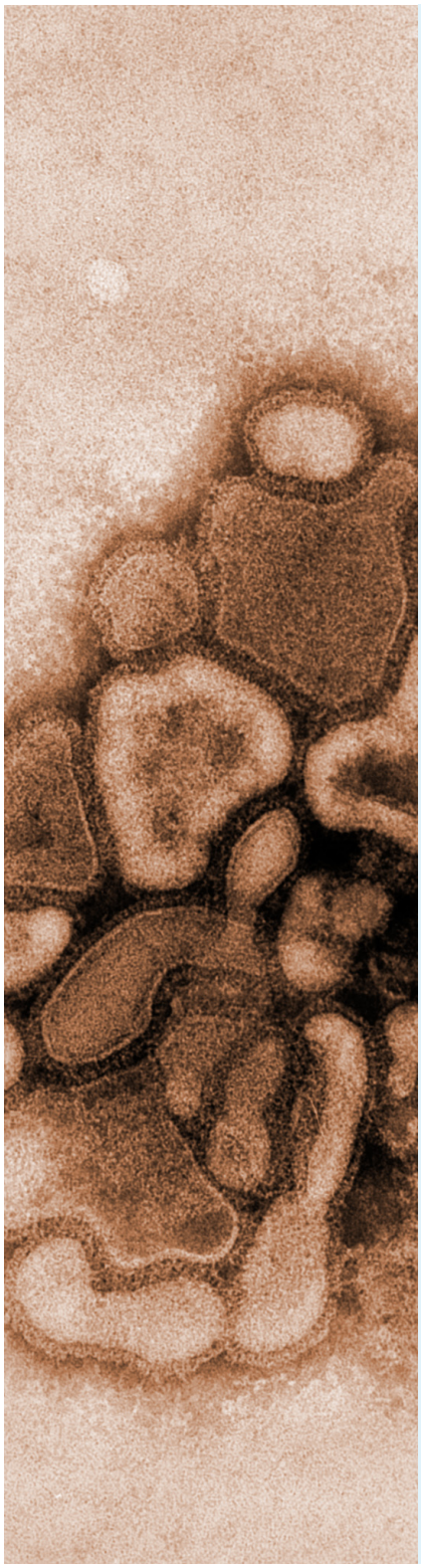
The sudden emergence of a new strain of influenza virus—H1N1—will test governments, businesses, and all manner of organizations.

Unlike the avian flu worries of 2005-2006, the question is no longer, "Just how worried should we be about the threat of a flu pandemic?" Instead, the question has become, "Did we do enough to prepare?"

The answer is not simple and will likely be different for different organizations. SARS and avian flu raised awareness of pandemic and communicable disease risks, elevating them as issues that corporate leaders, boards of directors, and governments need take into account. Now the H1N1 virus looks to raise the stakes and test just how well entities have actually prepared.

The objective of pandemic planning and response is to recognize and manage an influenza pandemic in order to: reduce transmission of the pandemic virus strain to decrease case numbers, hospitalizations and deaths while maintaining essential services. Additionally, effective pandemic response can reduce the economic and social impact worldwide. The lessons we will learn from our current response efforts to the H1N1 pandemic will be used to direct future pandemic planning for other disasters created by the emergence of new, highly transmissible and communicable diseases.

"The lessons we will learn from our current response efforts to the H1N1 pandemic will be used to direct future pandemic planning for other disasters created by the emergence of new, highly transmissible and communicable diseases."



Appendix: A Brief History of Flu Pandemics

A pandemic occurs when a new strain of the influenza A virus strikes humans, spreads easily from person to person, and causes serious illness with a high death rate. Since at least the 16th century, flu pandemics have swept the globe an average of three times per century, emerging every 10 to 50 years.

In the past 100 years, pandemics emerged in 1918, 1957, and 1968. Nearly 40 years after the last pandemic, the appearance of an especially virulent strain of flu in birds in 1997 and again in 2004-2005 raised an alarm among world health authorities when it infected a small number of people, but with a fearsome mortality rate.

The appearance of the new H1N1 strain has sharply focused the world's attention on the potential risks a pandemic poses. No one yet can predict with accuracy the extent of damage that the H1N1 outbreak might cause. Projections of deaths, illness, and economic damage are generally built by extrapolating from past pandemics. Following is a brief look at the characteristics of the three pandemics of the 20th century.

Influenza Pandemic Comparisons

Year	Worldwide death estimates (millions)	Worldwide population (billions)
1918-1919	20-100	1.8
1957-1958	2	2.8
1968-1969	1	3.6

Sources: Population data from U.S. Census Bureau
Death estimates from World Health Organization and others

The Spanish Flu of 1918-1919

The first pandemic of the 20th century is widely regarded as the deadliest disease in human history. Death estimates worldwide range from 20 million to more than 100 million. The following are some of the characteristics of the 1918 flu outbreak:

- Outbreaks occurred simultaneously in Europe and several states in the United States.
- The pandemic broke in two waves. The first, in the spring and summer of 1918, was highly contagious, but did not cause many deaths. The second wave crashed across the world with remarkable speed and lethality. The death rate was 10 times greater in the second wave than the first.
- One of the Spanish Flu's most troubling aspects was that most deaths occurred in people in "the prime of life," between 15 and 35 years old. With most influenza strains, the majority of deaths occur among the very young, the very old, and people with compromised immune systems.

"The first pandemic of the 20th century is widely regarded as the deadliest disease in human history."

- The flu infected about 25 percent to 30 percent of the world's population, striking every continent.

The Pandemic of 1957-1958

Science and medicine made immense strides between 1918 and 1957. By 1957, vaccines for seasonal flu existed; antibiotics had been discovered that could be used to treat flu-related pneumonia; and the World Health Organization's (WHO) Global Influenza Surveillance Network, which monitors and tracks influenza's spread, was 10 years old. The following are some of the characteristics of the 1957-1958 pandemic:

- A milder strain of the flu virus was at the root of the pandemic compared to the 1918 pandemic.
- Detection of outbreaks in Hong Kong and Singapore in early May led to the identification of the exact virus strain; so that by the end of the month, samples of the virus were available to vaccine manufacturers.
- The pandemic touched all corners of the world within six months. As was the case in 1918, the first wave of the pandemic caused fewer deaths than the second wave.
- An estimated 2 million people died during the pandemic. Unlike 1918, deaths were primarily among the elderly.
- As is the case now, one of the major stumbling blocks to producing sufficient amounts of the vaccine was the lack of manufacturing capacity.

The Pandemic of 1968-1969

The last pandemic of the 20th century was the mildest of the three. The following are some of the characteristics of the 1968-1969 pandemic:

- Symptoms were much milder, and the mortality rate was much lower than the 1957 pandemic, possibly because it was a similar strain to that virus. Since only 11 years had passed between the two pandemics, many people were alive who had been exposed to the 1957 flu and, thus, had received some level of natural protection.
- The pandemic led to about 1 million deaths.

The Emergence of A/H5N1—Avian Flu

In 1997, an outbreak of avian influenza among poultry in Hong Kong was traced to the A/H5N1 virus strain. The outbreak was accompanied by 18 cases of human infection; six of those people died. There was immediate apprehension among world health officials, as this was the first time an avian flu virus was known to have infected humans. Concern about A/H5N1 heightened after scientists reported in October 2005 that genetic detective work had traced the 1918 influenza to an avian flu virus. An aggressive response, in which more than 1.5 million chickens and other fowl were destroyed, helped stem the 1997 outbreak; and the threat disappeared—temporarily.

In late 2003, the A/H5N1 virus was identified as the culprit in the deaths of chickens at a commercial farm in South Korea. Soon after, more human cases were detected, mostly in Asia. Most cases of avian flu in humans appear to have resulted from contact with infected birds—such as breathing in dust containing bird feces—from contaminated surfaces, or from ingestion of uncooked or undercooked poultry or poultry products. As long as the disease lacks the ability to move easily from person to person, there will be no pandemic. But the possibility exists for a mutation to occur that will allow easy human-to-human infection and give rise to a pandemic.

The number of laboratory confirmed cases of avian flu peaked at 115 in 2006; however, 26 cases have been reported through April 2009. Since 2003, WHO reports 421 people were confirmed infected, 257 of those people died.

The Latest Threat: H1N1

In early 2009, cases of H1N1 were diagnosed in humans in Mexico. Normally, the respiratory disease caused by the H1N1 virus is confined to pigs; however, transmission to humans is possible, generally moving from an infected animal to a person who comes in close contact with the animal. Influenza viruses regularly mutate and it is evident that a mutation in the H1N1 virus has allowed it to not only cross over to humans, but to spread from person to person.

Appendix: A Brief History of Flu Pandemics

At the time of publication, events are moving quickly regarding this virus. News reports say it has been detected in at least 10 countries, with deaths occurring in Mexico and the United States. The World Health Organization has said the H1N1 flu strain has "pandemic potential" and quickly raised its level of pandemic alert from Phase 3 in mid-April to Phase 4 and then Phase 5 on April 29, the second highest level of alert. The organization declared that containment of the outbreak is not possible and that a pandemic appears inevitable.

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Web Sites of Interest

More information on pandemics and H1N1 flu can be found at the following Web sites, most of which provide regular updates on the situation:

- American Medical Association
  http://www.ama-assn.org
- The Centers for Disease Control and Prevention
  http://www.cdc.gov
- Official U.S. government Web site for pandemic information
  http://www.pandemicflu.gov
- Trust for America's Health
  http://Healthyamericans.org
- UK Department of Health
  http://www.dh.gov.uk
- U.S. Department of Health and Human Services
  http://www.dhhs.gov
- World Health Organization
  http://www.who.int

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Risk Alert

H1N1 Influenza: Preparing for and Responding to a Pandemic

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