The Microbiological Threat to Food and Agricultural Institutions

Advanced Pandemic Planning for Executives

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Preface

On February 26, 2008, executives from some of the country's leading food service and agricultural institutions came together in New York City to participate in the *Executive Roundtable Series: Advanced Pandemic Planning for Food and Agricultural Leaders.* They came to share what is working in their companies, think creatively about their pandemic quandaries, and discuss pressing concerns such as 'pandemic fatigue.' Attendees participated in experiential exercises, confronting issues likely to arise in a real-world pandemic. The two simulations looked at (1) avian flu confined to Hong Kong and Indonesia, and its impact on the United States and the world; and (2) a global pandemic, including widespread cases in North America.

This extraordinary group of experienced and thoughtful leaders represented the following companies:

- Compass Group, North American Division
- Food Lion
- Nestle, Inc.
- PepsiCo, Inc.
- SYSCO Corporation
- Target

This paper extracts key points and observations from the Roundtable and integrates them with the authors' experiences and observations to create a guide with the most current thinking on pandemic planning for use by opinion leaders and decision makers.

The authors, Regina Phelps and Joseph McMenamin, are experts in two different arenas of pandemic preparedness. They designed the Roundtable format, led the exercises, and served as exercise facilitators.

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Executive Summary

A global influenza pandemic could be devastating. A serious pandemic such as the one that occurred in 1918 will kill millions and cripple the global economy. Although infectious disease professionals are unable to tell us when we will have our next influenza pandemic, there is one point that everyone agrees on: There will be another.

What will make the difference for companies and government is thoughtful planning. When it's not known when an event is likely to occur, however, it is difficult to garner executive commitment, financial resources, and staff time to prepare. Therefore, it is important to remember that pandemic planning is all about enterprise resiliency. Eighty to 90 percent of most pandemic plans is simply thoughtful and comprehensive continuity planning.

Strategic Implications

- Your company will be judged by your plans and actions by all of your stakeholders after a pandemic. What are they likely to see? Will you present a well-organized response? Or will you be "shooting from the hip?" These stakeholders will likely have a long memory about the quality of your response. A positive impression has a greater potential to result in a competitive advantage.

- Your employees, the people who make your business run, are often not addressed in the average business continuity plan. There is a broad assumption among most companies that after a disaster, your staff will come to work. Think again. During a pandemic with widespread illness and death, they will think first of themselves and their families, and act accordingly. If they don't believe it is safe for them to be at work, they won't come to work.
- The investments that you make in pandemic planning will garner rewards throughout the organization by providing a greater understanding of business processes, which will have a positive effect on the overall operation of your company.

Continuity Planning and Human Capital

Thoughtful continuity planning will enhance your organization's ability to survive a pandemic; for that matter, it will help your organization survive any other calamity that befalls it. Historically, business continuity plans did not take into account the people performing the work. Effective pandemic planning must clearly address all of the key questions regarding your organization's human capital.

- There are four primary tools for dealing with a disease in your workplace: personal protective equipment (PPE); cleaning; social distancing; and the trio of education, training and communication. These four pillars are key to continuing your business. Employees who do not feel safe in their work environment are not likely to come in, regardless of what you tell them.

- There is one more tool in a company's arsenal for fighting a pandemic – antivirals. The only pharmacologic option currently available for potentially preventing, shortening, or reducing the severity of influenza is an antiviral drug. Therefore, every company will have to make a decision about the use of antivirals in its plan.
- Determining who is mission-critical on your staff and where they need to work will help drive your strategies. This determination will also establish the type of supplies and equipment you will need to procure.
- A key aspect of every food company's pandemic plan is to assess the complicated supply chain web. This may be an Achilles' heel for many companies, and will require careful planning and outreach to vendors.
- Employment, pay, and benefit policies during a pandemic remain a sticking point for many companies. Making basic policy decisions now doesn't preclude modification later if the business situation changes. Decisions made in the heat of a pandemic are likely to be flawed. Your company is likely to be judged by how you treat your employees. The basic decisions must be made now and executive leadership is critical to resolving these important issues.
- Training and cross-training staff to step into appropriate jobs might make the difference between continuing to operate or not. It will also create greater redundancy and continuity, as well as encourage analytical thinking and decision-making skills across the enterprise.
- Timely communication will be essential in a pandemic. Your employees will be watching the network news, surfing the Internet, and reading blogs almost around the clock after the pandemic begins. In order for your staff to trust you as a reliable source of information, you must be able to produce timely, honest and thoughtful communication in a responsive manner.

Legal

While legal issues are subordinated to the fundamental need to survive, they are seldom in the shadows for long. Smart planning will include identification and analysis of legal pitfalls, to reduce the likelihood that liability exposure will augment the problems inherent in pandemic itself.

- To what extent are the officers and directors of a corporation under a duty to prepare? It is more-or-less inevitable that a pandemic will cause financial losses economy-wide. If the shareholders see their losses as partially avoidable, however, or greater than they should have been, will they look to the company's leadership for compensation?
- At a time when most if not all businesses will have trouble even keeping their doors open, to what extent can a company, as a buyer, require its suppliers to live up to their agreements? Conversely, to what extent can the company's customers compel it to honor its commitments, when a high proportion of its workforce is unavailable?
- To what extent, if any, is the company insured against losses occasioned by pandemic-related business disruption? If it is uninsured, or under-insured, can it take steps to improve its insurance position?

- The company's communications are likely to be scrutinized closely, especially by anyone dissatisfied with its performance during the crisis. Can it deliver its messages in a risk-sensitive way, so as to decrease the likelihood that an adversary may be able to use the company's own words against it?
- The impact of pandemic upon the workforce is, of course, the reason the threat is so significant. Can you tailor your HR policies to cope with the extraordinary demands upon the company and its employees during the crisis? What laws and regulations must be considered to protect the company and its workers, not only from the existential danger inherent in exposure to a potentially fatal communicable disease, but from missteps that could lead to litigation?

A Disaster with a New Twist

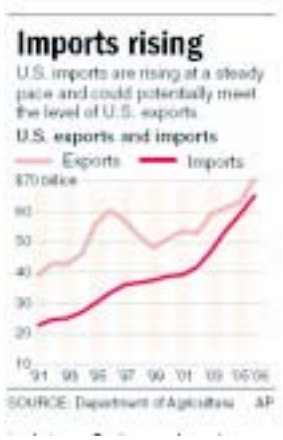
By Regina Phelps, Emergency Management & Safety Solutions (EMSS)

Pandora's Box

The first cases of human infection with avian influenza A (H5N1) were identified in 1997 in Hong Kong. The virus infected 18 persons and caused 6 deaths.[1] Avian influenza A has reared its head several times since then, but had been successfully beaten down by culling millions of domestic poultry. Since late 2003, however, the H5N1 virus has spread to the domestic and wild bird populations in over 65 nations, and infected humans in 14 countries.[2] Pandora's Box has been opened and will not likely close without a fight.

The global nature of food

While the United States maintained its status as the largest exporter of agricultural products in 2007, the U.S. was also the largest importer. The USDA estimates that the U.S. imported over $70 billion worth of agricultural products in 2007. This is $6 billion more than the previous year's level. Imports only grew at 9.4 percent, however, compared to the 11.3 percent five-year average.[3]



Each year, the average American eats about 260 pounds of imported foods, including processed and ready-to-eat products, as well as single ingredients. Imports account for about 13 percent of the annual American diet. "Never before in history have we had the sort of system that we have now, meaning a globalization of the food supply," said Robert Brackett, director of the FDA's Center for Food Safety and Applied Nutrition.[4]

One does not have to be clairvoyant to imagine what the impact to the food supply is likely to be in a global pandemic.

What to expect

How might the food industry be impacted in the face of a global health threat?

- Once the virus has mutated to a version that is easily spread from human to human, it will spread like wildfire. If the health care system and governments in the infected area are slow to respond, it will spread outside of that area and then throughout the world, creating the pandemic.

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[1] Avian influenza A (H5N1) in humans and poultry in Viet Nam, WHO, January 13, 2004.

[2] "Areas reporting confirmed occurrence of H5N1 avian influenza in poultry and wild birds since 2003", World Health Organization for Animal Health (OIE), March 3, 2008.

[3] U.S. Agricultural Trade Update, American Farm Bureau Federation, December 20, 2007.

[4] U.S. food imports rarely inspected, MSNBC/AP, April 16, 2007.

- From the time the disease begins to spread successfully, it could be in the United States in less than six weeks.
- Neighboring countries will react quickly by shutting down their borders. Ports and airports in the region will likely close as well, impeding the movement of goods. With the global sourcing of food, this will likely impact the U.S. food supply quickly.
- Many economists predict a worldwide recession and, very likely, a global depression.[5] "An Investors Guide to Avian Flu" forecasted:
    - A dramatic slowdown in the economy, equal to the Great Depression. A sudden decline in spending would result from people panicking.
    - High levels of unemployment, with many people unable to work.
    - Travel restrictions on the free-flow of goods and people across borders. "In a world that depends so heavily on global trade, this would have a very damaging effect on economic activity," said author Sherry Cooper.
    - A collapse in the housing market.
- As the illness progresses, more and more people will be missing from work, further impacting commerce and the availability of goods and services.
- Supply chains will be affected; the availability of many goods and services will become unpredictable. For many food companies, this will be the "soft spot" in their business model and continuity planning. One Roundtable participant noted that his company had identified products that would be high-demand items and reached out to their key suppliers to make delivery agreements. Those negotiations are still in process; ultimately, they know there is no guarantee. "All of our vendors will be faced with the same issues and challenges as we will," he noted.

Some may think that these events are not likely to happen as they did in 1918 because modern medicine will come to our rescue. Unfortunately, that belief is unfounded. Egg-based vaccines are still the norm, and it will likely be at least six months from the time the disease begins to spread in its new form to the time a vaccine is available. Although cell-based vaccines may well be available some day, at present this is not a viable option. When the vaccine is first offered, it will be in limited supply, initially given to "mission-critical" workers such as health care professionals, police, fire, and the military before it is given to the general population. The pandemic is likely to be well into its second wave before vaccinations are widely available to the public. The only other medications that will offer some protection or which could be used for treatment of influenza are antivirals. It is true that, unlike 1918, modern medicine can offer antibiotics for bacterial infection, which can often be superimposed upon the underlying viral disease. But while these medications are clearly valuable for those with bacterial superinfections, they unfortunately have no effects at all against the flu, the locomotive driving the pandemic train.

[5] An Investor's Guide to Avian Flu, BMO Nesbitt Burns Research, August 2005

Current situation – Is there any new guidance?

Since 2003 much has been written about a possible pandemic: what is likely to happen, what needs to be done to get ready, evaluations about the overall level of preparedness, and the preparedness work still remaining to be done. The good news is that in the past four years, a tremendous amount of research has been done on public health matters, more than has been done in the previous fifty years. All of this work and research will yield significant societal benefits beyond a pandemic.

Three recent research studies provide guidance to companies on three rather thorny issues. These are topics that most firms have been grappling with since the pandemic threat first emerged in 2003: Telecommunication vulnerabilities, the use of antivirals, and the use of facemasks.

Pandemic Influenza Impact on Communications Networks Study[6]

This study was undertaken to address the following questions:

1. Will a telecommuting strategy succeed during a pandemic influenza?
2. What preparations can be done to better prepare for telecommuting during a pandemic influenza?

The study concluded that for the existing commercial communications infrastructure, without any additional preparations:

- In a low-absenteeism pandemic scenario, the telecommuting strategy is anticipated to be successful for the majority of telecommuters.
- In a 40 percent-absenteeism scenario, the telecommuting strategy is expected to be significantly impacted for most telecommuters during the peak of the pandemic.
- In a high-absenteeism scenario, the telecommuting strategy is expected to be unusable for the majority of telecommuters during the peak of the pandemic.

Proposed Considerations for Antiviral Drug Stockpiling by Employers In Preparation for an Influenza Pandemic Draft[7]

This draft document provides guidance to employers who are considering an antiviral program to respond to a pandemic. This includes determining who might receive outbreak prophylaxis and post-exposure prophylaxis treatment. The thrust of the draft document is to encourage employers to consider stockpiling antiviral drugs for use during an influenza pandemic as a part of a comprehensive pandemic plan. This is a major shift from the previous government position of no advice on the issue to one that is now supportive of stockpiling and asking that corporations consider prophylaxis, not just treatment.

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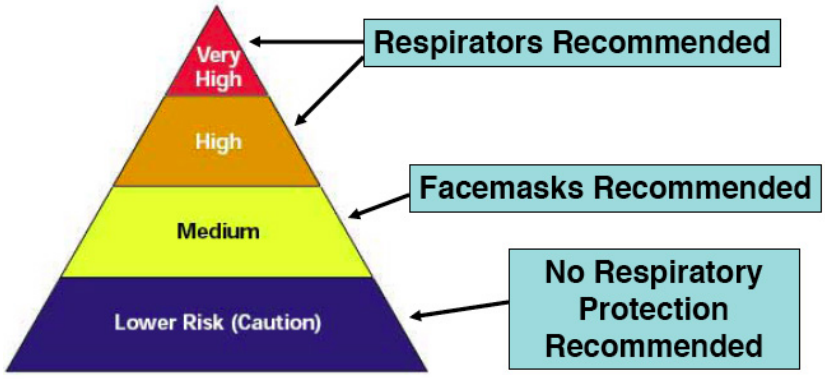
[6] Pandemic Influenza Impact on Communications Networks Study – Department of Homeland Security, December 2007

[7] Guidance on Antiviral Drug Use and Stockpiling of Antiviral Drugs and Respirators and Facemasks, Department of Health and Human Services, November 2007

Proposed Considerations for Respirator and Facemask Stockpiling by Employers In Preparation for an Influenza Pandemic[8]

Roundtable attendees familiar with this document found it helpful, as it provided guidance in three areas:

1. Encourages employers to stockpile respirators and facemasks so they can better protect employees during a pandemic.
2. Discusses various types of respirators and facemasks available for use.
3. Provides estimates of the quantity of N-95 respirators and/or facemasks employers should stockpile.



The release of these three studies at the end of 2007 demonstrates the need for all companies to regularly review their pandemic plans to see if changes will need to be made in light of new research and findings.

"Pandemic Fatigue"

Many public health organizations have raised the alarm repeatedly. For a time, many were listening, but it appears that "pandemic fatigue" – a sense of complacency about the flu risk – has begun to sneak into the consciousness of many business and government leaders. The key issues all planners now face is how to keep executives engaged and concerned about a pandemic.

Pandemic exercises

One option to combat "pandemic fatigue" is to exercise your plan. There are only two ways to "test" a plan. One is to have a disaster, in this case, a pandemic; the other is to conduct an exercise. Most would prefer the latter to the former. Exercises are great learning tools. They give you the opportunity to go back and make changes to the plan that will make a difference. During the Roundtable, we conducted two simulations demonstrating the different types of impacts and incidents that may be experienced in the pandemic continuum. The two scenarios were presented to the participants as:

[8] Guidance on Antiviral Drug Use and Stockpiling of Antiviral Drugs and Respirators and Facemasks, Department of Health and Human Services, November 2007

- The World Health Organization (WHO) raising the global pandemic threat phase to “four.”
- Six weeks into a WHO phase “six.”

In the first narrative – going to WHO 4 – there were border closures in the countries with documented human cases, and these border and port closures impaired the movement of goods around the world. There was widespread news coverage, which raised the anxiety level of people at work and in the community. There were “runs” on staple foods, and people began to demonstrate the hoarding behavior one sees during regional storms. Without having even a single case of the flu in the United States, the plan was immediately put under fire. “You need to build bridges today with all of your key stakeholders such as public health and the media so that you’ll feel comfortable reaching out to them when a pandemic happens, and they’ll know who you are,” noted one participant.

The second exercise highlighted what life would be like in a WHO 6 situation, where there were human flu cases in the U.S. In this exercise, there was illness and death in the community and the company. There were high absenteeism rates, supply chain disruptions, economic impacts, and plant and distribution delays. One key aspect of the exercise was to tell participants that they could not change a decision that was made in the first exercise that would impact them in the second. For example, if they opted not to purchase masks or antivirals in the first exercise, for the second exercise they couldn’t say that these items had been purchased. At the height of the disaster, when the vision was clearer, some participants regretted their earlier choices. This may well be a reflection of how things are likely to play out in the real world.

A goal of any exercise is for the team to identify shortcomings in their plans. After the exercise, team participants will need to develop strategies to address those shortcomings. It may be a simple documentation update, it may require a change to team roles and responsibilities, or it may demand a shift in processes. In order to enable your plan to remain viable, always identify specific findings, identify who is accountable for addressing those findings and amending the plan, and determine the timetable for completing the changes. It’s also a good idea to take these exercises “on the road” and conduct them at mission-critical locations and departments throughout the company, such as at distribution centers, manufacturing facilities, and business and technology groups. All mission-critical departments should experience several different iterations of the pandemic exercise. Roundtable participants found exercises to be one of their best tools to educate executives and their peers, and bring critical issues to life.

Benchmark your peers

Looking around the food industry as to what the leaders are doing can be a great motivator. The Roundtable allowed the participants to hear what each company was doing, learn what had worked well and what was challenging, and got ideas to build on going forward.

Keep current

Although at present the pandemic threat is not front-page news in the contemporary press, Roundtable participants recognized that it remains a real and significant threat. Sign up for the ProMED listserve at www.promedmail.org. This excellent infectious disease information source provides daily updates on the movement of infectious diseases around the world.

Summary

- The global nature of the food industry will likely mean that the U.S. food supply will be impacted quickly after a pandemic breaks out.
- A global influenza pandemic will have cause major disruption in the supply chain, making many agricultural items unavailable. This will require companies to go back and revisit what products they produce, and what they are able to provide their customers.
- New pandemic research and guidance is coming out frequently. This requires all companies to go back and revisit their pandemic plans on a regular basis to ensure that the plan reflects the most current thinking.
- “Pandemic fatigue” has set in with many individuals and entities. All planners are challenged to keep their firms engaged in the preparation effort. The use of periodic company pandemic exercises, as well as annual benchmarking in their industry, will help to keep the plans alive.

The Pillars of a Pandemic Plan

By Regina Phelps, EMSS

Four Pillars

What sets pandemic plans apart from other continuity strategies? These plans are built upon four basic and distinct pillars:

1. Education and communication.
2. Personal protective equipment (PPE).
3. Facility cleaning.
4. Social distancing.

When you stop and think about it, these four unpretentious pillars are fundamental to protecting a business. Each one must be strong and well-built to support the organization adequately. Just like the legs of a milk stool, all must be equal, or the stool will wobble.

Education and communication

One critically important pillar to any pandemic program is education and communication. The two go together hand-in-hand.

Education

Once the pandemic threat advances, your employees will begin to seek information from many sources. Some will be less credible or reliable than others. It is critical for every employer to be viewed as a valid source of information. If you have already provided disease-based training (i.e., seasonal flu programs) or pandemic training, this level of trust is more likely to be established, because your employees know they can come to you for information. Live training, printed materials, and an internal pandemic website are some of the ways that Roundtable participants have reached employees. Several were developing programs now to be ready when the pandemic advanced. One excellent web-based training program has been done by Aetna and is available on-line: www.aetna.com/employer/pandemic/.

One key education topic is hygiene. Although hand hygiene practices are the simplest things to do, they are also the most effective and the most recommended by all agencies and medical experts. Influenza is a highly contagious respiratory illness that is spread by droplet nuclei that are expelled during the acts of breathing, coughing, sneezing, and speaking. Although not sufficient in and of itself, proper hand hygiene is absolutely essential to limit the spread. Staff must be educated not only about thorough hand washing (20 seconds, warm water, and soap), but also to to avoid touching their faces.

It is also important to teach proper cough and sneeze etiquette. Always cough or sneeze into your elbow, ideally into fabric. (A very amusing and thoughtfully designed video tool is called "Why don't we do it in our sleeves?" and can be viewed and ordered at http://www.coughsafe.com/media.html). All Roundtable participants had seasonal flu-shot programs, and provided health education alongside flu shot administration.

Another important area in education is teaching employee preparedness. This is critical for your overall company readiness. In May 2007, the American Public Health Association (APHA) reported that only 13 percent of Americans responding to a national opinion survey said they were fully prepared for a public health crisis or disaster. About 90 percent of those surveyed said they had not taken enough steps to prepare for a health threat or other emergency. In fact, nearly one-third reported that they had taken no steps at all to prepare. About 40 percent of respondents said they took some steps to prepare for an emergency situation after terrorists attacked the United States in 2001. Those respondents admitted, however, that they had since let their preparedness plans lapse.[9]

Communication

Prompt, effective, and efficient communication will make the difference between what is viewed as a thoughtful and timely response, and one that is perceived as sloppy and hurried. This requires your communications team to develop pre-approved template communication materials now, and to develop lists of all identified key stakeholders. If we go to a WHO Level Four tomorrow, can you imagine the likely media frenzy? If you have not prepared communications materials and gotten them approved by management now, how long will it take you to develop them in the thick of the "battle"? Think of all the key stakeholders you need to communicate with, and design those communiqués now.

Personal Protective Equipment

There will likely be work that must be performed, but where staff cannot be separated a minimum of six feet. This could be in a data center, or it might be a task that requires several people to work in close contact for a period of time. In a retail environment, it would be where employees are taking cash, stocking shelves, or providing assistance to others. In these instances, personal protective equipment (PPE) will be required. The type of PPE will vary based on the workers and the work situation. Some Roundtable participants had a combination of N-95 respirators[10] and surgical masks on hand.

Health and Human Services (HHS) and the CDC issued interim guidance on the use of masks in May 2007, stating that facemasks and respirators could provide added value when used in combination with other preventive measures.[11] Dr. Michael Bell, associate director for infection

[9] APHA poll: "Americans are not ready for public health crises," http://www.apha.org/publications/tnh/archives/2007/May07/APHANews/APHAPollNation.htm

[10] All respirators used in the workplace are required to be tested and certified by the National Institute for Occupational Safety and Health (NIOSH). NIOSH-approved respirators are marked with the manufacturer's name, the part number, the protection provided by the filter (e.g., N95), and "NIOSH." Guidance on Preparing Workplaces for an Influenza Pandemic, OSHA 3327-02N 2007.

[11] HHS Issues Interim Guidance for the Use of Facemasks and Respirators in Public Settings During an Influenza Pandemic, May 3, 2007 http://www.hhs.gov/news/press/2007pres/05/pr20070503a.html

control at CDC's Division of Healthcare Quality Promotion, noted that facemasks and respirators have different qualities and offer different types and levels of protection. "Facemasks are not designed to protect people from breathing in very small particles, such as viruses," said Bell. "Rather, facemasks help stop potentially infectious droplets from being spread by the person wearing them. They also keep splashes or sprays from coughs and sneezes from reaching the mouth and nose of the person wearing the facemask. Respirators are designed to protect people from breathing in very small particles, which might contain viruses. Thus, if you're caring for someone who is ill with pandemic flu, proper use of a well-fitted respirator may be a reasonable choice."

The facemask guidance referenced in chapter 3 is the first government document to provide clear guidelines on mask use.[12] This document encourages employers to stockpile masks, discusses the various options and gives a matrix on how many masks a company might need. This document suggests that medium risk[13] employers plan for 120 days of facemask use and two masks per day. Higher risk employers (health care, emergency responders) should plan on using N-95 masks and having one to eight masks per shift (for 120 days) depending on the type of exposure.

When developing a PPE program, other questions that will need to be answered include:

- When will the PPE be distributed?
- Who will develop the training needed to support use of PPE?
- Who will deliver initial and refresher training?
- Who will develop a security plan so that the supplies of PPE are secure during the pandemic?

Attendees planned on having masks available for employees who wanted them, requiring them only in areas where close contact was likely. Most believed it was likely that staff would wear them only in situations where they could not socially distance themselves from others. One participant expressed the fear of many when he said, "What scares me is that we're not going to have enough antivirals or masks when we need them if we don't get them now."

The other PPE discussed at the Roundtable was gloves. There is currently no official government guidance on the use of gloves in a pandemic. For those involved in providing medical assistance, it is clear that gloves are appropriate to provide care and conduct treatments. Gloves should then be disposed of immediately after that use. An employee wearing the same pair of gloves for a period of time during the day while conducting his normal job duties is not likely receiving any protection from those gloves. According to OSHA, "While the use of gloves may make employees more aware of potential hand contamination, there is no difference between intentional or unintentional touching of the mouth, nose or eyes with either a contaminated

[12] Guidance on Antiviral Drug Use and Stockpiling of Antiviral Drugs and Respirators and Facemasks, Department of Health and Human Services, November 2007

[13] Medium risk employees are those with high-frequency contact with the general population (such as schools, high population density work environments, and some high volume retail). Guidance on Preparing Workplaces for an Influenza Pandemic, OSHA 3327-02N 2007.

glove or a contaminated hand. If an employee does wear gloves, they should always wash their hands with soap or sanitizing solution immediately after removal to ensure that they did not contaminate their hand(s) while removing them."[14]

Facility Cleaning

Respiratory illnesses are spread by droplet nuclei, and our hands carry bacteria and viruses to our faces, where we can then breathe them into our lungs. This makes extensive cleaning of all commonly touched areas absolutely essential. During a pandemic, however, janitorial staff is likely to be in short supply. The solution will be a combination of well-trained janitorial staff, and employees cleaning their own areas.

First, it is important to work with your janitorial staff to assess current cleaning practices and cleaning agents. You must then determine if changes to existing protocols are necessary to provide a sanitary and safe work environment.

- Develop and/or refine procedures for facility cleaning to minimize disease spread during a pandemic.
- Identify procedures and work practices that may need to be changed for janitorial contractors and employees.
- Identify which cleaning agents will be used. Ideally, products should have both anti-bacterial and antiviral properties.

To help ease concerns about facility cleanliness, Roundtable attendees discussed providing employees with the equipment to clean their own areas. Several companies provided cleaning kits on-site for employees to use. This would enable individuals to control the frequency and degree of cleaning, especially important if the company has to operate with a reduced janitorial staff.

Employees will need to have supplies and basic training about the importance of cleaning all commonly touched surfaces in their areas. In the office, the most "germy" surfaces are the phone, desktop, keyboard, mouse, and doorknobs. Also, common sense guidelines would include such directives as:

- Use your own phone only.
- Open doors with paper towels or cloth.
- Push buttons in elevators and on phones with your own pen or pencil.
- Use your own pens or pencils only.
- Wash your hands frequently with soap and water. Use hand sanitizers if you can't wash immediately.

In retail, of course, cleaning protocols can refer to customers as well. The Roundtable attendees discussed options they had considered, options that were in their plans. One participant said his company had increased cleaning frequency of those areas that were common touch points such as doors, railings, and cash register areas. Others had installed hand sanitizers at store entrances

[14] Guidance on Preparing Workplaces for an Influenza Pandemic, OSHA 3327-02N 2007.

and outside restrooms. One company expanded its cart-wipe program (providing sanitary wipes to clean off cart handles), but another stopped a similar program owing to limited use.

Social Distancing

Social distancing is a technique used to minimize close contact among persons in public places, such as work sites and public areas. It involves keeping people three to six feet apart. This can be a challenge in some work environments. Some options to social distance staff include:

- Split teams into different work locations. This can help avoid cross-infection and also build some backup and redundancy – in other words, don't keep all of your eggs in one basket!
- Stagger shift changes so staff can be more easily separated. This can also minimize contact and congestion in locker rooms, security areas, lobbies, stairs, and elevators.
- Prohibit face-to-face meetings. Whenever possible, use technology solutions to conduct business, including telephones, video conferencing, and the Internet.
    - o If face-to-face meetings can't be avoided, minimize meeting time, choose large conference rooms, and have participants sit at least six feet from each other.
- Avoid all unnecessary travel. Cancel or postpone non-essential meetings, gatherings, workshops, and training sessions.
- Contrary to recommendations pertinent to non-pandemic situations, advise your employees to avoid public transportation and drive to work. Or, allow a version of "flex time" that will work for you, with employee work hours shifted earlier or later to avoid rush-hour crowds on public transport. Consider enlarging the parking lot, if necessary.
- Introduce staggered lunchtimes to minimize numbers of employees in lunchrooms at any one time.
    - o Encourage employees to bring lunch and eat at their desks or away from others. Encourage them to avoid eating in the cafeteria, lunchrooms, and crowded restaurants.
- Advise employees not to congregate in break rooms or smoke-break areas where people normally socialize. If they do, advise them to keep three to six feet from their colleagues.
- Advise employees to avoid shaking hands or hugging.
- Close company gyms, childcare centers, and recreation areas.
- In areas where workstations may be shared (such as call centers) provide each worker with his or her own keyboard and headset or phone. Remind employees not to share their equipment.

What triggers would call for social distancing at work? The first cases of pandemic influenza in your area would probably prompt formal social distancing procedures, but you may want to initiate some practices early on to allow people to grow accustomed to a different way of working. It is also likely that some training will be required so that staff may more fully understand how social distancing works. Be sure to include this information in your pandemic staff education.

Although social distancing makes sense, is strongly encouraged by CDC and WHO, and is apt to conform to the desire of employees anyway, it must be recognized that there is little scientific evidence supporting the adequacy of a three foot or six foot separation — or, indeed, of any other specific distance. Nor is it likely that an experiment could be designed to answer such questions — and, if one were, it is hard to imagine that many would volunteer to participate. Unless some better source of advice materializes, then, it is probably best, to the extent practical, to adhere to CDC/WHO social distancing recommendations.

How does one social distance in a manufacturing environment or food processing line? Or what about a retail store? That becomes much more difficult and that is where the introduction of personal protective equipment may make the difference between being open or closed.

The Fifth Pillar – Antivirals

One cannot conclude a chapter on the pandemic pillars without discussing antivirals. At present, the only pharmacologic option for potentially preventing, shortening, or reducing the severity of illness is an antiviral for influenza. Vaccines cannot be developed until the pandemic strain has evolved and is spreading from human to human. Once that occurs, it is expected to take six to eight months to develop and prepare a vaccine, and initially, supplies will be limited. Moreover, vaccines prevent illness from occurring; they offer no help to those already infected. Offering employees antivirals as part of a prevention or treatment strategy could be a cost-effective way of improving the chances that critical staff are able to come to work, reducing worker absenteeism and bolstering employees' and customers' confidence in your company.

The most effective antivirals currently available work by interfering with the release of the influenza virus from infected human cells into the rest of the body. These medications require a physician's prescription and can be given prophylactically or at the time of illness. Given the critical nature of the food and agriculture sector, and the fact that medications exist that can treat the illness, every institution in that sector needs to ask if antivirals should be part of its pandemic strategy. The questions that were discussed at the Roundtable included:

- Will antivirals be used as a strategic response to a pandemic?
    - If so, for whom?
    - Will the company program cover the employee's family or just the employee?
- When would the medications be ordered?
- How would they be ordered?
    - Through an internal medical department?
    - Through an outside medical group?
    - Through a drug distributor?
- Where will antivirals be stored?
    - How will they be protected during storage?
    - What is their shelf life?

- When will they be distributed?
- How will they be distributed?
- How will employees be educated about their use and storage?
    - How will you discourage employees from using them for ordinary colds and seasonal flu?

These questions and your answers to them are crucial. Although there is a sufficient supply of antivirals today, once the pandemic threat advances, the drugs are likely to become scarce. It is important that companies evaluate the threat and the options while options still exist. In the absence of a readily available, effective vaccine — which will take months to produce and will have limited availability — antiviral drugs appear to be the best pharmaceutical hope for mitigating disease and preventing death.

Although there are no guarantees in investments or medications, the current antivirals oseltamivir (Tamiflu®) and zanamivir (Relenza™) currently report excellent efficacy, and Tamiflu® is the medication recommended by the WHO for clinical management of human infection with avian influenza A (H5N1) virus.[15]

All participants came to the realization that if they did not order antivirals while the world was at a WHO Level Three, when the level was raised to Four, antivirals might no longer be available. With the current draft guidance on the use of antivirals during a pandemic, every company will need to use current information and conduct a serious discussion to decide whether to include antivirals in its pandemic plans. It is important that companies evaluate the threat and the options while options still exist.

[15] WHO "Clinical management of human infection with avian influenza A (H5N1) virus," http://www.who.int/csr/disease/avian_influenza/guidelines/clinicalmanage07/en/index.html

Two Types of Antiviral Programs

Companies generally have two options when looking at antiviral programs. You can choose to distribute the medications to employees now, or wait until a pandemic seems imminent. Antivirals have a five-year shelf life and, as of the writing of this paper, are widely available.

Bulk Purchase

In this option, a company would purchase a bulk supply of antivirals from a pharmaceutical distribution company. The purchasing company can then arrange for prescribing the drug at a time of its choosing by either using its own medical department or contracting with an outside medical group. The advantage to this option is that the company holds all medications securely and under the proper environmental conditions until it decides they should be distributed.

There are several disadvantages, though. Physicians may not be available to prescribe the medication when you need it, distribution may be difficult, there could be security challenges in protecting the supply, and there is always the possibility that the government could seize the medications in a public health emergency.

Pre-Distribution

Another option is to distribute the medications at the time the program is established. This approach would require education and physician assessment. The medication can then be given to the employee at the time of the consultation or sent to the employee's home using a mail-order delivery service.

Summary

- The foundation that all pandemic plans are built on is the four pillars:
  1. Education and communication.
  2. Personal Protective Equipment.
  3. Facility cleaning.
  4. Social distancing.
- Education on basic health measures such as hand washing and cough hygiene will be critical leading up to and during a pandemic.
- Pre-written and management-approved communications to all identified key stakeholders will help to ensure timely and focused communications.
- Identification of the types and amounts of PPE must be done now to ensure timely procurement.

- Facilities will likely be cleaned by a combination of janitorial and regular staff during the pandemic. Supplies and appropriate training will be important to ensure a safe and clean work environment.
- Social distancing plans and training will be necessary to ensure that staff feels safe coming to work.
- All companies must review the question of whether to use antivirals in their pandemic plans and make a decision while those medications are widely available.

Think Resiliency – The Key to Recovery

By Regina Phelps, EMSS

When developing a pandemic plan, think resiliency. Everything you do in your plan will make your company recover more quickly from any disaster it faces, but that's also what your business recovery and disaster recovery plans are supposed to do. Why, then, would you create a separate pandemic plan? Why can't you use your "regular" business recovery and disaster recovery plans? Because a pandemic violates the two most basic rules of continuity planning:

1. You get back to "business as usual" in thirty days or less. Bad news: historically, influenza pandemics have lasted around 18 months, not 30 days.
2. You go from the affected site to the unaffected site and resume work. More bad news: during a pandemic, there is no place to go. There is no "unaffected site" – the entire population, the world, is affected.

This chapter focuses on general planning concerns that all companies need to address when preparing their pandemic plan.

Pandemic Task Force

Most of the members of the Roundtable had been significantly engaged in pandemic planning for the past two years, and all had some type of pandemic task force (PTF) in place. A pandemic touches virtually every aspect of a business. Because of the depth of the impact of a pandemic and its duration, the task force needs to include all of the great thinkers across the enterprise. The PTF's role is to develop and test the pandemic plan, serve as pandemic ambassadors across the company, share specific expertise, and participate in meetings and exercises.

Companies participating in the Roundtable had PTF membership from the following corporate departments:

- Business continuity planning
- Corporate communications
- Executives/administration
- Human Resources
- Key lines of business (retail, manufacturing, distribution)
- Legal
- Purchasing/procurement
- Risk management
- Safety
- Security
- Technology
- Telecommunications
- Travel

Management Response

Participants attending the Roundtable were asked to characterize their executive committee's orientation to a pandemic. The majority described it as an important – but not an urgent – consideration. The lack of pressing and threatening daily news has led to the perception in some companies that the threat is waning.

Executive Management

When dealing with a highly contagious, possibly deadly, disease, you will need to think carefully about a work and travel strategy for your executives. Would you have all executives come to work on a daily basis? When might you suspend executive travel? As unpleasant as it may be to address the topic, a key aspect of planning is to develop your leadership continuity strategy and succession planning for all key positions in the company. In addition, when situations arise during the pandemic, you will need to determine who is authorized to permit and/or direct departures from the plan and under what circumstances.

Public-Private Partnerships

Most organizations don't have a working relationship with their Department of Public Health (DPH). The local DPH is tasked with local management of a health emergency and pandemic. It has tremendous power and authority. By invoking public health law, it can essentially control the destiny of your organization. This situation will be particularly challenging for a retailer with many locations, as each state, county, and local municipality health officer could easily have different rules, guidance, and requirements during the pandemic.

Identify your company's point of contact for your local city or county DPH, and meet with key DPH personnel to share your plans. They may well be able to make helpful suggestions or point out problems that can be addressed in advance. It will also be helpful for you to learn not only what you can expect from them, but what their plans may be expecting from you. Knowledge such as that will foster coordination and collaboration, so a more organized response can be mounted. One Roundtable described his communication with his local health departments: "I talked to the county department of health. During a pandemic, they said they'd be giving out a lot of information initially but would then be overwhelmed…. They won't be able to hold our hands through a pandemic and we'll need to do things on our own." All the heads were nodding around the table.

The Fragile Supply Chain – Raw Materials, Equipment, and Supplies

During a pandemic, will you have what you need? Will you be able to get supplies from your regular vendors? Will the supply chain be disrupted? Is your supplies model based on "just in time" ordering? Will you be able to manufacture your products if you are missing key ingredients? Of all of the business continuity issues, this is one of the most challenging.

This is a mind-boggling issue in the food sector in particular. Take a moment to pick up a package of cereal or a box of crackers. Look at the ingredients. Sometimes there are 10 or 20 items in that one package. Where did they come from? How many vendors were involved? How many countries? As the global nature of the food supply continues to evolve, this is an even more difficult nut to crack (so to speak).

In a global economy, raw materials, supplies, and equipment come from all over the world. An assessment of your mission-critical supply chain is essential – and a somewhat monumental and humbling task. It is likely that you receive critical inventory today from countries that have already experienced an avian flu outbreak. Each Roundtable attendee was struggling with this issue, and had weighed many questions. This included:

- Can we limit production to core "shelf" items?
- What products would be in high demand?
- What customers would see a decrease in business (restaurants, school cafeterias) and what customers would see an increase (health care)?
- Did any products have the propensity to harbor the H5N1 virus?
- Would chicken and poultry products still be used during a pandemic?

The following checklist provides some guidance to get started on a supply-chain assessment. When assessing products:

- Identify minimum inventories required for critical supplies and products. You will need to take into account peak periods.
- Collaborate with suppliers and exchange information on plans and strategies for addressing supply chain disruption and "people risks" during a pandemic.
- Determine whether critical vendors pose any exposure risk to staff and visitors.
    - Identify and evaluate pandemic plans your vendors may have. If some vendors lack plans, or lack reasonably adequate plans, consider developing relationships with competing firms.

Roundtable participants also considered ways to help, guide, or assist key vendors to enhance their pandemic readiness. There was also discussion on providing incentives to foster availability of services or products, as well, although current plans among participants did not include such incentives for vendors. Some companies were including pandemic planning requirements in new contracts going forward.

Keeping Facilities Open

Maintaining a clean, safe workplace is essential for employees to feel protected enough to continue to come to work, and for customers to feel safe enough to shop. Cleaning was addressed in an early chapter. The remaining issues include security, facility restrictions, and emergency procedures.

Security

When communities have "battened down the hatches," the question of how to keep the staff safe and secure was a point of discussion. Review your existing security post orders for management of infectious diseases. It is quite likely there will be no mention of this issue. Food stores, manufacturing facilities, and distribution centers could be targets for looting and thefts – security will be a prime concern for employees and customers.

- Develop security protocols for a pandemic scenario and develop infectious disease/ pandemic response plans.
- Train security staff at major locations to back each other up in case one facility is shut down or has a severe shortage of security staff.
- Identify how the facility can be secured despite reduced availability of security staff.
- Discuss with local police how the facility can be protected should there be an increased response time from local law enforcement. Make sure the police know how to enter and leave your facility.
- Identify how the facility can be protected in event of civil disturbance and unrest.
- Consider contracting with private security firms for preferential treatment in case of need. Evaluate the pandemic preparedness plan of any such candidate firm.

Facility Restrictions

All Roundtable participants plan to significantly restrict visitors during WHO phase 6 and, in some cases, WHO phase 5. Everyone plans to conduct some type of screening, and some have thought about taking temperatures. Since people become contagious before they become symptomatic, however, and since in a pandemic there may be many causes of fever besides influenza, it is questionable whether that step will provide value sufficient to justify the burden.

As cases develop in your area, it is probable that you would restrict access to your facility as well as shut down all internal gathering places. Many attendees planned to close gyms, cafeterias, daycare centers, and break areas. Even if you decide not to close such facilities, eventually, your local county health officer is likely to require it.

Accordingly, consider the following as part of your assessment process:

- Identify restrictions on visitor access that may be needed and when those would begin.
- Identify any changes to building access procedures that may be needed.
    - Determine if special lobby security procedures would be required.
    - Determine when they would be implemented.

- Decide whether special training or equipment would be required for those in the lobby who greet employees and visitors.
- Consider special screening for visitors, vendors, and possibly employees. (See *Screening Questionnaire*, page 51.)

- Identify which internal services and gathering places will be closed.
  - Include cafeterias, day-care centers, gyms, and break rooms.
  - Determine when they will be closed and what criteria are to be applied.
- In a retail environment, you will need to consider policies on restricting customers who appear obviously ill, what to do with someone who gets suddenly ill while shopping, how to apprehend and manage a possibly ill shoplifter, and protocols for minimizing close interactions with customers.

Emergency Procedures

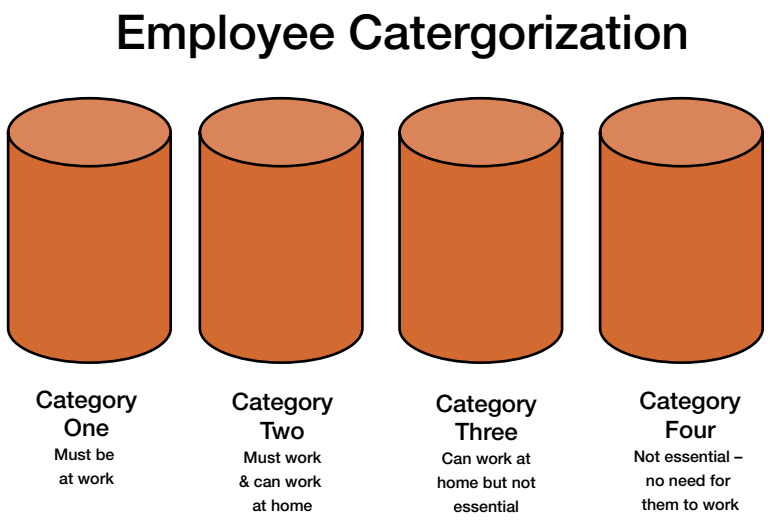
How will you handle medical emergencies at work? If you have a medical department, how will it cope with a patient load greatly exceeding what it was designed for? What happens if you dial 9-1-1 but are told there will be no response because of staffing constraints? How do you care for someone on site until help arrives? Most companies never consider these situations, but they could arise during a pandemic. Identify which rooms will be used as temporary care and isolation rooms should someone become ill while at work and 9-1-1 is not able to respond. Ideally, these rooms have hard surfaces for easy cleaning (no carpet or fabric furniture), a portable HEPA filter, masks and gloves for the ill person and care providers, and easy access.

Train your company emergency responders on how to handle a respiratory emergency during a pandemic and identify additional training required if an incident occurs at work. Training would include how to properly don and remove gloves and masks without contaminating oneself or others, as well as protocols to move the ill person to the isolation room until help arrives. Determine whether you will alter first-responder protocols, especially with respect to traditional mouth-to-mouth respiration in event of respiratory arrest. There is an emerging line of thought that in a cardiac arrest, mouth-to-mouth respiration may actually be less important than has long been believed, but close contact with a victim may entail risk even if this step is omitted. Unfortunately, you should also consider how you would deal with a corpse (or corpses) in the event of work site deaths.

Categorization of Employees

An important tool in pandemic planning is the categorization of employees into one of two basic "buckets" according to mission-critical or non-mission-critical functions. This categorization is essential for future identification of necessary resources including acquisition of PPE and training. Within each of those categories there are two sub-categories.

- Mission-critical functions and staff:
  - Category One – Those who perform a mission-critical activity and **must be on-site** to perform the work.
  - Category Two – Those who perform a mission-critical activity and **may work remotely** (e.g., from home or from an alternate work location via remote access)?
- Non-mission-critical functions and staff:
  - Category Three – Those who perform an activity that is not mission-critical but **could be performed via remote access** if sufficient appropriate resources (such as bandwidth or equipment) are available. (These staff could also "backfill" the Category One and Two staff.)
  - Category Four – Those who perform an activity that is **not mission-critical** and **cannot be performed via remote access** (e.g., mail room clerk or shipping attendant).



Making It Safe for Category One Staff

If the company cannot make the Category One staff feel safe, these individuals will be reluctant to come to work. What options are available to promote their safety while on the job? The primary ways to make someone feel safe goes back to the four pillars:

1. Education and communication
2. Personal protective equipment (PPE)
3. Facility cleaning
4. Social distancing

The other option is the addition of antivirals to a pandemic plan.

Connecting the Category Two Staff

Category Two staff is mission critical, but can work remotely. There are two parts to the work-from-home solution: One part you can control (equipment, company systems, and network), and one part you can't (telecommunications and the "last mile"). The recent DHS study referenced in Chapter 3 notes clearly that at times of high absenteeism, the remote work solution might not work.

Key strategies for Category Two staff include:

- Identify equipment needed to support work via remote access.
  - Who needs additional equipment?
  - What type of equipment? Consider laptops, printers, faxes, and scanners.
  - Will the company pay to provide additional equipment?
  - Will the company pay for high-speed connections at home?
- Identify amount of bandwidth the company needs to meet projected demands for remote access for all Category Two staff.
  - Increase as needed to meet projected demand.
- Identify alternative work options for call center environments. These may include agent-at-home, distributing work to numerous centers to spread the risk, and encouraging customers to use the website for service.
- Increase capacity and number of conference call bridges to meet anticipated meeting requirements.
- Provide training on how to use remote meeting technology, e.g., web meetings, conference bridges, and teleconferences.
- Train staff to provide sufficient Help Desk support to those who will need to work via remote access during a pandemic.
- Once the strategy is developed, require Category Two staff to work from home one day a month to "work out the bugs."

What about Category Three and Four Staff?

Those employees identified as category Three and Four (not mission critical and will not be working) bring up issues of employment policies, pay, and benefits. Many employers prefer to develop these human resource policies "in the moment." This is strongly discouraged. Policies made in the "heat of battle" may not have considered all of the options and employees will have limited warning as to what is likely to occur.

- Get the best possible human resources and communications advice. Bring in outside experts if necessary to develop policies.
- Develop pay and benefit policies now. Consult with your labor attorneys to be clear about what you can – and cannot – do.
- Would you incent staff to come to work? What is the downside of doing that? Upside?

- Will you extend medical or family leave? If so, how long?
- What if Category One staff refuse to come to work? Or are unable to?
- If staff have sick family members at home, do you want them to come to work?

Travel

Most participant companies carry some form of health travel insurance that covers employees with medical emergencies outside the United States, as well as evacuation assistance (medical, non-medical, and repatriation of remains). No companies were yet providing emergency medical travel kits that included masks, gloves, hand sanitizer, and antivirals. The group discussion focused on the company travel policy before and during a pandemic.

There are some key questions you will need to explore:

- What would trigger implementation of pandemic travel policy?
  - At what point will international travel be restricted?
    - What restrictions will apply?
    - To whom will they apply?
    - To what extent, if any, should you consider challenging legal obstacles to repatriation of U.S. nationals detailed abroad?
  - At what point will domestic travel be restricted?
    - What restrictions will apply?
    - To whom will they apply?
  - What information will be provided ahead of time to travelers?
    - What health and hygiene precautions will be recommended?
    - What pharmaceutical remedies and PPE will be provided?
    - If the situation is in flux, how will information be updated and disseminated?
  - What information will be required from travelers ahead of time?
    - Will all travel need to be booked through a central agency/department?
    - Does this include all business travel?
    - Does this include all personal travel?
  - Will you provide any type of travel kit as noted above?
- Develop procedures for employees who become ill while traveling. This is likely to become an issue if health care services are restricted or overcrowded.

Sample Travel Guidelines

Develop simple guidelines that managers and staff can use to restrict company travel.

At a Phase Four – All travel is suspended to the country where the "Four" occurred.

At a Phase Five – All travel is suspended to the region where the "Five" occurred.

At a Phase Six – All international travel is suspended immediately (possible exceptions: expatriates, and those traveling back to their home country). All US travel to be suspended in seven days.

Look into travel insurance for all staff traveling abroad. This insurance should cover medical care and physician referrals while traveling, medical evacuation, evacuation during civil unrest or other country emergencies, and an expatriation of remains if necessary.

Summary

Preparing for a pandemic is all about creating a resilient organization. Focus your pandemic plan on enterprise resiliency – how will you weather a long-term disruption to your 'normal' way of doing business?

Task Force

- Establish a well-rounded pandemic task force (PTF), supported by your senior management.

Facilities

- Facilities preparation includes site security, facility and visitor restrictions, and emergency procedures to care for those may suddenly get ill.

Staff Categorization and Employee Policies

- Determine who is mission critical, who must be at work, and who can work remotely.
- Develop human resource policies now.

Travel

- When would you restrict travel and how would you care for stranded travelers?

Partnerships and Enterprise Resiliency

- Since no company is an island, an effective plan requires you to have deeper relationships with local government entities such as county and state Departments of Public Health.
- When you look at your organization's current risk portfolio, the changing climate, and all associated risks, there is a great deal of value in using pandemic planning as a tool to create a disaster-resilient company – regardless of the threat.

Pandemic Flu: The Legal Issues

By Joseph McMenamin, McGuireWoods LLP

The Legal Discussion Was Different

As in other Roundtables in this series, time and the array of nonlegal issues at the Roundtable prevented extensive interaction concerning legal questions. Instead, legal matters were raised in a more didactic fashion. While classic law school-style give-and-take has its advantages, it has some limits here, because the full array of legal issues may not yet be fully definable. Many public health laws, for example, date from the 19th Century, long before the "rights revolution" of the mid-to-late 20th Century. Tension between the sweeping powers given government by the former and restrictions on that power imposed by the latter have not been entirely resolved. In this chapter, we will attempt to identify some of the more prominent and perhaps somewhat less settled legal questions and consider how they might be answered.

There is at least one other reason why the legal discussion differs from the rest of this paper. The nature of legal advice is such that guidance must be individualized to a client's specific situation, and that requires detailed knowledge of the characteristics of each company. What is offered here, then, is a general discussion intended to be useful, but it is not and cannot be legal advice such as that which you can seek from your inside or outside counsel.

Why Pandemic Raises Legal Issues

A pandemic is a virtual certainty. History suggests that pandemics occur, on average, about every 25-35 years. Within the last several centuries, the longest pandemic-free interval has reportedly been about 39 years.[16] Recently, data from two of the largest reported family clusters were analyzed; investigators found statistical evidence of human-to-human transmission in Sumatra, although they could not determine whether sustained human-to-human transmission is presently possible.[17] The recurring nature of pandemics, and their potential for causing great harm, create sound business and legal grounds for food companies to examine their readiness to operate in a pandemic environment and to take reasonable steps to enhance that readiness.

The most predictable characteristic of a pandemic is its disruptive effect. The absenteeism that will follow may make it very difficult for many companies to continue to provide their goods and services. The problem will be compounded, of course, because the suppliers of those companies, and the suppliers' suppliers throughout the supply chain, will be facing the same problems. Federal, state, and local governments may impose restrictions, possibly severe, on the movement of persons and goods. They may control the sale and distribution of commodities

[16] *See, e.g.*, PAHO Strategic and Operational Plan for Responding to Pandemic Influenza. (stating that the "longest recorded inter-pandemic interval is 39 years").). http://www.paho.org/English/AD/DPC/CD/vir-flu-PAHO-Plan-9-05.pdf (last visited March 10, 2008).

[17] Yang Yang, Halloran, M.E., Sugimoto, J.D., and Longini, I.M., "Detecting Human-to-Human Transmission of Avian Influenza A (H5N1)," 13 (9) *Emerging Infec. Dis.* 1348 (Sept. 6, 2007).

and declare certain buildings, highways, or sections of town off limits. They might request – or require – that certain persons be confined to their homes or to hospitals. The ability to carry on business as usual may be severely compromised or even impossible altogether.

Negligence Claims against Companies and Their Directors

A cause of action for negligence lies – that is, can be asserted – for harms arising from the failure to exercise ordinary care.[18] For food businesses, the standard of care is ordinarily the behavior of reasonable companies in the industry in similar circumstances. In theory, a company whose carefulness equals or surpasses that of "reasonably prudent" companies in the same industry has complied with the standard of care, and cannot be held liable even if the outcome is poor.[19]

The reasonableness of a course of action must be analyzed in light of the circumstances at the time it is taken.[20] These circumstances are difficult to anticipate, since no one knows how severe the problem will be. In judging what level of preparedness is needed, companies should consider the likely behaviors of other actors. This includes, but is not limited to, the conduct of other companies in the space. The ability of the government to respond to a pandemic and its consequences should also be factored in, especially since government will probably be limited in its response capacity. The federal government has repeatedly indicated that it lacks resources necessary to deal with an influenza outbreak in 5,000 communities simultaneously.[21] One participant contacted his state health department, and was told that at the onset the department would provide abundant information, but would likely be overwhelmed with requests thereafter. Another reported that despite written promises from a Governor, "with Katrina … that meant nothing." The anthrax attacks of 2001 illustrate the difficulties that public health authorities will face. Overlapping responsibilities, real or imagined gaps in authority, a lack of reliable data, political interference in public health decisions, and an inability to conduct calm and dispassionate scientific study of the problem all contributed to the generation of tardy, confusing,

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[18] *See, e.g., Comer v. Smith*, 2007 U.S. Dist. LEXIS 4690, *5 (W.D. Va. Jan. 23, 2007) (stating that, under Virginia law, negligence is the "failure to do what a reasonable and prudent person would ordinarily have done under the circumstances"); *Chesler v. Trinity Indus.*, 2002 U.S. Dist. LEXIS 14559, *26 (N.D. Ill. Aug. 7, 2002) (defining negligence as the failure to exercise ordinary care). *See also*, Glossary.

[19] The business judgment rule "insulates an officer or director of a corporation from liability for a business decision made in good faith if he is not interested in the subject of the business judgment, is informed with respect to the subject of the business judgment to the extent he reasonably believes to be appropriate under the circumstances, and rationally believes that the business judgment is in the best interests of the corporation." *See Cuker v. Mikalauskas*, 692 A.2d 1042 (Pa. 1997) (citing 1 ALI, Principles of Corporate Governance: Analysis and Recommendations (1994) ("ALI Principles") § 4.01(c)).

[20] *See*, Restatement (Second) of Torts § 285-d (standard of conduct is "that of a reasonable man under the circumstances which, at the time of his action, the actor knows or has reason to know").

[21] *See, e.g.,* Remarks as Delivered by the Honorable Mike Leavitt Secretary of Health and Human Services Commonwealth Club of California, March 14, 2006. (stating that "Any community that fails to prepare with the expectation that the federal government will be able to step in and save them at the last moment will be sadly disappointed. It is not because we lack will, and not because we lack wallet, but rather because we lack a way. There is no way that any government or agency will be able to reach out to every community at the same time. Local preparedness is the foundation of preparation for a pandemic"). http://www.hhs.gov/news/speech/2006/060314.html (last visited March 10, 2008). The California Department of Health recently released "surge capacity guidelines" that contemplate a relaxation of privacy, credentialing, staffing ratios, and paperwork rules for health care providers in the midst of a disaster, with provision for outright care rationing. See, "Standards and Guidelines for Healthcare Surge During Emergencies," at http://bepreparedcalifornia.ca.gov/EPO/CDPHPrograms/PublicHealthPrograms/EmergencyPreparednessOffice/EPOProgramsServices/Surge/SurgeStandardsGuidelines/, last visited March 11, 2008.

and often outright conflicting recommendations from public health authorities.[22] Companies may question whether governmental performance will be any better in event of a pandemic.

What Is the Company's Duty?

Negligence lies for harms caused by breach of duty. But that proposition begs the question: In a pandemic, just what is the company's duty?

The members of the Board of Directors of a publicly held company owe a fiduciary duty to the shareholders.[23] As fiduciaries, the Board members are under the highest duty known to the law.[24] Shareholders dissatisfied with the performance of their directors may, and often do, bring claims against them in court. Sometimes such claims succeed.[25] A company experiencing significant losses for failure to take adequate precautions against the consequences of a pandemic, or taking precautions that plaintiffs' lawyers and their experts are willing to characterize as inadequate, may face such suits.

Following natural disasters, litigation often ensues.[26] Whether it will after a pandemic is unknown. It would not be surprising, however, if shareholders experiencing substantial losses attempted to recover damages against corporate boards, especially if as a result of superior planning competitors lose less.

Proving the Standard of Care

As noted, practice within an industry generally establishes the standard of care. If other companies in the food sector are not stockpiling masks and other PPE, for example, then as a rule the standard does not require your company to do so either.[27] In some circumstances, however, courts may impose a duty of care higher than that prevailing in the industry or

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[22] *See*, Gursky, E., Inglesby, T.V., O'Toole, T., "Anthrax 2001: Observations on the Medical and Public Health Response," 1 (2) *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science* 97 (2003). The problem may be compounded by healthcare workers' fears. *See, e.g.,* Nickell, L.A., et al., "Psychosocial effects of SARS on hospital staff: Survey of a large tertiary care institution," 170 *Can. Med. Assoc. J.* 793-8 (2004) (At a Toronto teaching hospital, a General Health Questionnaire suggested that the probability of "emotional distress" was more than double that seen in the general population).

[23] *See, e.g.*, *In re Doctors Hosp. of Hyde Park, Inc.*, 474 F.3d 421(7th Cir. 2007) (directors owe fiduciary duties to shareholders); *Fagin v. Gilmartin*, 432 F.3d 276 (3rd Cir. 2005) (plaintiffs alleged that officers and directors breached their fiduciary duties to shareholders).

[24] *See, e.g., La Scala v. Scrufari*, 479 F.3d 213 (2nd Cir. 2007); *Welt v. Sasson (In re Dollar Time Group*), 223 B.R. 237 (S.D. Fl. 1998); *Enzo Biochem v. Johnson & Johnson*, Fed. Sec. L. Rep. (CCH) P97,053 (S.D. NY 1992).

[25] *See, e.g., Syracuse Television, Inc. v. Channel 9, Syracuse, Inc*., 273 N.Y.S.2d 16 (Sup. Ct. 1966) (successful suit by shareholder for losses incurred allegedly because of mismanagement); *Selheimer v. Manganese Corp. of America*, 224 A.2d 634 (Pa. 1966) (holding that the officers and directors were liable to reimburse the corporation, but remanded for a determination of which losses were caused by the negligent and wasteful conduct of the officers and directors).

[26] *See, e.g., Danos, et al. v. Bass Ent. Prod. Co.*, No. 05-4212 (E.D. La., Sept. 21, 2005) (commercial fishermen in Louisiana filed a class action suit against oil and gas companies, alleging that the negligence of the corporate defendants caused more than seven million gallons of crude oil to be discharged from storage tanks and pipelines after Katrina). Owners of a nursing home that was not evacuated as Katrina approached were prosecuted, albeit unsuccessfully, for negligent homicide. Foster, M., "Failed prosecution in Katrina nursing home deaths cost more than $360,000," SignOnSanDiego.com, available at, http://www.signonsandiego.com/news/nation/20080208-1250-katrina-nursinghomedeaths.html, last visited March 10, 2008.

[27] But note that in February 2007, the Occupational Safety and Health Administration of the US Department of Labor published its *Guidance on Preparing Workplaces for an Influenza Outbreak*. OSHA's guidance recommends the use of face masks to protect employees in medium risk workplaces (to be considered a medium risk workplace, employees must have frequent contact with the general public.) *See* http://www.osha.gov/Publications/OSHA3327pandemic.pdf (last visited March 10, 2008).

profession at the time.[28] One company, for example, has evaluated its products and determined that H5N1 could be introduced into one of them. It has therefore decided not to produce that item during a pandemic. None of the other companies represented at the Roundtable reported taking similar steps, but a creative plaintiffs' lawyer might allege that under the circumstances such precautions are required.

Negligence cases are decided by lay juries with limited understanding of the complexities of the food business and of what conduct is "reasonable" within the industry. At trial, the standard of care is ordinarily established by the testimony of experts, persons whose knowledge, training, and experience qualify them to testify about practices with the industry.[29] In most jurisdictions, however, such testimony is not the only potential source of evidence of the standard of care. Plaintiffs will doubtless seek to offer as many proof sources as they can to try to establish the standard of care and a breach thereof. These may include statutes,[30] regulations,[31] and professional codes.[32] In pandemic-related litigation against the industry, another possible proof source could be the pronouncements of the Food and Agriculture Sector Coordinating Council, which works in cooperation with the Agriculture Department.[33] Companies should examine these authorities, both to assess current and probable future compliance and to identify rules and regulations that in a pandemic will be onerous or perhaps even impossible to obey. Federal officials have repeatedly invited businesses to confer with their regulators, to seek relaxation for the pandemic's duration of at least some of the less highly valued, more burdensome regulations. Companies should accept this invitation, both to make continued operations less difficult during the crisis and to reduce litigation exposure afterwards.

Absent tort reform legislation enacted to prevent it, plaintiffs may also attempt to use your own plans as evidence of the standard.[34] This possibility suggests that, in drafting its plans, a business should be realistic and not ask of itself more than it can reasonably be expected to accomplish. After all, you control what your plan says. To have any chance of advancing

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[28] A handful of cases has imposed a duty of care higher than the prevailing practice in the industry or profession. *See, e.g., The T.J. Hooper*, 60 F.2d 737, 740 (2nd Cir. 1932); *Gleason v. Title Guarantee Co.*, 300 F.2d 813 (5th Cir. 1962); *Helling v. Carey*, 519 P.2d 981 (Wash. 1974) (what others in the industry or profession do may not necessarily define the standard of care). *See also, Alvarado v. J.C. Penney Co., Inc*., 737 F.Supp. 371, 374 (D. Kan. 1990); *Gryc v. Dayton Hudson Corp.*, 197 N.W.2d 727 (Minn. 1980); *Dawson v. Chrysler Corp*., 630 P.2d 950 (3rd Cir. 1980).

[29] Under Texas law, for example, an expert's qualifications can be established by showing knowledge, skill, training, experience, or education. Tex. R. Civ. Evid. 702.

[30] *See, eg., Parker Bldg. Servs. Co. v. Lightsey,* 925 So. 2d 927 (Ala. 2005) ("the doctrine of negligence per se [see, Glossary] is applicable to a violation of an ordinance as well to violation of a statute"); *Cerretti v. Flint Hills Rural Electric Coop. Ass'n,* 837 P.2d 330 (Kan. 1992) ("Whether the company is negligent, even though it complied with the code, is usually a question to be determined by the jury under proper instructions by the court"); *Henry v. Britt,* 220 So.2d 917 (Fla. Ct. App. 1969) ("The effect of a violation of a statute or ordinance as constituting negligence cannot be avoided by the fact that the act complained of was done in accordance with the custom or practice of other persons engaged in the same type of work in the community"); *Va. Elec. & Power Co. v. Savoy Co.,* 294 S.E.2d 811, 817 (Va. 1982) (violation of building code is negligence per se). *See also,* Ark. Code Ann. § 20-21-402(b)(3) (2001).

[31] *See. e.g.*, 29 C.F.R. 1910.38(a)(2) (requiring that an employer have an emergency action plan whenever required by OSHA; requirements for emergency action plans in a variety of situations).

[32] National Fire Protection Association, NFPA 1600 Standard on Disaster/Emergency Management and Business Continuity Programs (2007 Ed.), http://www.nfpa.org/assets/files/PDF/NFPA1600.pdf (last visited March 10, 2008).

[33] *See* FASCC home page, at http://www.pcis.org/FASCC/index.htm, last visited March 10, 2008.

[34] A preliminary step may be to argue that a failure to develop a plan at all violates the standard of care. Citing the Deloitte Center for Health Solutions, "Business Preparations for Pandemic Flu" (2006), for example, DHS has asserted that "Most large businesses have extensive contingency plans on hand for managing natural and man-made disasters." 4.1 The Business Continuity of Operations Plan-Essential (COP-E), *The Pandemic Influenza Preparedness, Response, and Recovery Guide for Critical Infrastructure and Key Resources* (19 Sept. 2006) at 20.

preparedness, of course, the plan should balance this reality with articulation of clear and meaningful requirements that personnel should be expected to meet. But a company should not let itself be hoisted on its own petard. Unless it has a realistic chance of successfully invoking a claim of privilege (see below), it should assume that its own words can and will be used by adversaries alleging inadequate preparedness. To the extent that it has a voice in the pronouncements of the industry as a whole, such as the recommendations of trade associations, companies should exercise similar circumspection. Groups purporting to speak for companies in an entire industry must provide useful guidance on effective preparations yet be cautious not to conflate mere aspirations with actual, appropriate, feasible recommendations.

Ironically, the government's effort to contain the harms of a pandemic may have increased the legal risks of companies regarded as part of the critical infrastructure. Particularly notable in this regard is the letter of December 6, 2005, from the Secretaries of HHS, DHS, and Commerce. It states in pertinent part: "Companies that provide critical infrastructure services, such as power and telecommunications, also have a special responsibility to plan for continued operation in a crisis and should plan accordingly. As with any catastrophe, having a contingency plan is essential."[35] No legal authority defines the metes and bounds of this alleged "special responsibility." Nor can cabinet secretaries, merely by signing letters, make law. Companies should anticipate, nevertheless, that in fashioning claims plaintiffs' lawyers will attempt to utilize pronouncements such as this. As they articulate their policies and position statements, federal agencies and officers should develop a heightened sensitivity to the potential for such mischief. Otherwise, such statements could do more harm than good. Industry representatives may wish to acquaint legislators and agency personnel with the unintended harmful consequences that could arise from statements such as these.

Antivirals

Does the standard of care require the purchase of antivirals? This question undoubtedly shoots at a moving target. At this writing, a majority of food companies have probably not stockpiled these medicines, although some have. At least one company, however, has provided oseltamivir to employees in certain locations; another, to employees at a certain rank. The standard of care is not established by a plebiscite; that which is "reasonable" may not necessarily be the same as what the majority of companies are doing. Nevertheless, a company that can show that most of its competitors are not taking a particular step it is criticized for omitting has gone at least some distance towards a successful defense. Over time, however, practices could change; companies should watch developments as they unfold across the industry. If food companies, especially those seen as industry leaders, begin to adopt a particular course of action to prepare for pandemic, whether it be stockpiling or distribution of antivirals or any other measure, it may be wise to re-evaluate your initial decisions on such questions to determine whether they remain sound and legally defensible.

[35] Pandemic Flu Business Letter, 12/6/05, from Michael O. Leavitt, Secretary, Department of Health and Human Services, Carlos M. Gutierrez, Secretary, Department of Commerce, and Michael Chertoff, Secretary, Department of Homeland Security, http://www.pandemicflu.gov/plan/workplaceplanning/panbusletter.html (last visited March 10, 2008.).

As with many pandemic-related questions, both the benefits and risks of stockpiling should be considered.[36] Stockpiling has the potential to save many lives, and, as a by-product, to enable a company that would otherwise be crippled to survive and perhaps even prosper.[37] But purchasing antivirals is no panacea. To be effective as a treatment, neuraminidase inhibitors should be taken within 48 hours of the onset of symptoms. In the event of a pandemic, distributing the drug rapidly enough to reach the sick in time for effective treatment could be problematic. Moreover, some companies may be concerned, as their Roundtable representatives suggested, that government could seize stockpiled drugs to meet the needs of other citizens. That possibility is part of why some companies have decided not only to procure antivirals for their personnel (and sometimes for the families of employees as well), but to distribute these medicines in advance of need after extensively educating workers in their proper use. There may be some risk that the organism could develop resistance[38], and companies may want to consult with medical experts on whether that risk may be increased with advance distribution of medications. In the right setting, antivirals could prove to be particularly valuable prophylactically, as government has recently recognized. One advantage of prophylactic administration, of course, is that the 48-hour time sensitivity characteristic of treatment use is eliminated. On the other hand, development of resistance may pose a greater threat than with administration of drug for treatment alone. Then, too, all drugs have side effects. Some taking antivirals may claim to have developed side effects or adverse reactions.[39] If a company furnishes antivirals to some employees, but not all, those excluded might bring claims; even if no such claims arise, the effect upon morale of perceived discrimination could be harmful.

Neuraminidase inhibitors are relatively new compounds, so humanity's experience with them, and our knowledge about them, are necessarily more limited than with older, better-known

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[36] For a comparison of the efficacy of antivirals and vaccination, for example, *see*, Longini, I.M., et al., "Containing pandemic influenza with antiviral agents," 159 *Am. J. Epidemiol.* 623-633 (2004).

[37] Very recently, at the International Symposium on Respiratory Viral Infections in Singapore, physicians from Indonesia reported that survival among patients treated with Tamiflu (oseltamivir) was considerably better than among those not treated, particularly when the drug was given within 48 hours of the onset of symptoms. Antiviral and therapeutics session, X International Symposium on Respiratory Viral Infections, Singapore, Mar. 2, 2008. *See,* Medical News Today, "Reports of increased survival in bird flu patients taking Tamiflu," March 4, 2008, available at http://www.medicalnewstoday.com/articles/99289.php, last visited March 12, 2008.

[38] *See, e.g.*, Lipsitch, M., et al., "Antiviral resistance and the control of pandemic influenza," PLoS Medicine, available at http://www.medscape.com/viewarticle/556454 (last visited March 10, 2008) (The benefits of antivirals may be reduced, but not completely offset, by development of drug resistance). Resistance appears to be an uncommon problem, however, Gubareva, L.V., et al., "Selection of influenza virus mutants in experimentally infected volunteers treated with oseltamivir," 183 *J. Infect. Dis.* 523-31 (2001). According to the latest CDC data available at the time of writing, 6.1% of influenza viruses from the U.S. have been found to be resistant to oseltamivir. All of the resistant viruses were HINI. CDC Weekly Report: Influenza Summary Update, 2007-08 Influenza Season Week 9, ending March 1, 2008, available at http://www.cdc.gov/flu/weekly/, last visited March 12, 2008. When resistance does arise, it seems to decrease the organism's growth and transmissibility. Lipsitch, M., *supra*, citing, e.g., Ven, H.L., et al., "Neuraminidase inhibitor-resistant influenza viruses may differ substantially in fitness and transmissibility," 49 *Antimicrob. Agents Chemother.* 4075-84 (2005), and Herlocher, M.L., et al., "Influenza viruses resistant to the antiviral drug oseltamivir: Transmission studies in ferrets," 190 *J. Infect. Dis.* 1627-30 (2004). *See also,* Carr, J., et al., "Influenza virus carrying neuraminidase with reduced sensitivity to oseltamivir carboxylate has altered properties *in vitro* and is compromised for infectivity and replicative ability *in vivo"*, 54 *Antiviral Res.* 79-88 (2002).

[39] Workers' compensation law may be relevant here. *See* discussion below. Tamiflu® packaging warns of hallucinations, delirium, abnormal behavior, and delusions that may lead to injury or even fatal outcomes. These side effects have been observed primarily in the pediatric population, and the contribution of the drug to such effects, if any, has not been established. These problems could be related to the high rate of encephalitis associated with influenza in Japan, where most of these reports originated. *See*, Maxwell, S.R., "Tamiflu and neuropsychiatric disturbance in adolescents," 334 *BMJ* 1232-33 (2007). Similar reports have suggested an association between these behaviors and zanamavir.

drugs. For understandable reasons, controlled clinical trials have not been conducted.[40] Nevertheless, oseltamivir used both therapeutically and prophylactically has interrupted an outbreak of influenza A in a long-term care facility.[41] In animal models, oseltamivir was effective in preventing death from H5NI infection and drug resistance did not develop.[42] Zanamavir protected mice against death from H5NI and chickens against H7N7.[43] Computer models have suggested that neuraminidase inhibitors may be able to contain a potential strain of influenza at its source.[44] No drug is 100 percent effective, and of course in pandemic there is no way to predict which pathogen will emerge as the villain, never mind which, if any, pharmaceutical will be effective against it. Based on mathematical modeling, however, combined interventions (hospital and community control measures, antivirals, and vaccines) are expected to be more effective then reliance upon any one modality alone.[45] Companies may wish to consult their own in-house physicians or outside consultants and public health departments for guidance here. There are also other potential sources of information.

In sum, the decision to stockpile antivirals, or the decision to distribute them in advance, should be made only after carefully weighing the medical and legal risks and benefits.

Decision-Making in a Pandemic

In anticipation of the probability that some corporate decisions during a pandemic may require Board action and that achieving a quorum could be impossible, the Board may want to amend its bylaws in advance of need to permit decision-making during a crisis, perhaps by authorizing an executive committee to act as the Board's agent. If such a committee already exists, it may be wise to make provision for how the committee is to act in case even its much smaller quorum cannot be assembled.

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[40] WHO, "Clinical Management of Human Infection with Avian Influenza A (H5NI) Virus," Updated advice 15 Aug. 2007 at 5, 6 available at, http://www.who.int/csr/disease/avian_influenza/guidelines/clinicalmanage/07/en, last visited March 10, 2008.

[41] Chang, Y.-M., et al., "Use of oseltamivir during an outbreak of influenza A in a long-term care facility in Taiwan," 68 *J. Hosp. Infec.* 83-87 (2008).

[42] These include ferrets, Govorkova, E.A., Ilyushina, N.A., Boltz, D.A., et al., "Efficacy of oseltamivir therapy in ferrets inoculated with different clades of H5NI influenza virus," 51(5) *Antimicrob. Agents Chemother.* 1414-24 (2007); and mice, Govorkova, E.A., Leneva, I.A., Goloubeva, G, et al., "Comparison of efficacies of RWJ-270201, zanamavir, and oseltamirir against H5N1, H9N2 and other avian influenza viruses," 45 *Antimicrob. Agents Chemother.* 2723-32 (2001); Leneva, I.A., Roberts, N. Govorkova, E.A., et al., "The neuraminidase inhibitor GS 4104 (oseltamivir phosphate) is efficacious against A/Hong Kong/156/97 (H5NI) and A/Hong Kong/1074/99 (H9N2) influenza viruses," 48 *Antivir. Res.* 101-15 (2000).

[43] Gubareva, L.V., Penn, C.R. and Webster, R.G., "Inhibitors of replication of avian influenza viruses by the neuraminidase inhibitor 4-guanidino-2, 4-dideoxy-2, 3-dehydro-N-acetylneuraninic acid," 212 *Virology* 323-330 (1995); Gubareva, L.V., McCullers, J.A., Bethell,R.C., and Webster, R.G., "Characterization of influenza A/HongKong/156/97 (H5NI) virus in a mouse model and protective effect of zanamivir on H5NI infection in mice," 178 *J. Infect. Dis.* 1592-96 (1998).

[44] Longini, I.M., Nizam, A., Xu, S., et al., "Containing pandemic influenza at the source," 309 *Science* 1083-7 (2005); Ferguson, N.M., Cummings, D.A.T., Cauchomez, S., et al., "Strategics for containing an emerging influenza pandemic in Southeast Asia," 437 *Nature* 209-14 (2005).

[45] Nuno, M., Chowell, G., and Gunel, A.B., "Assessing the role of basic control measures, antivirals and vaccine in curtailing pandemic influenza: Scenarios for the US, UK and the Netherlands," 4 *J.R. Soc. Interface* 505-21 (2006), available at at http://math.lanl.gov/~gchowell/publications/pandemicflu-scenarios.pdf, last visited 25 April 2008.

Privilege

In their internal communications, companies should factor in the possibility that, if a suit is filed, a plaintiff may seek to discover board resolutions and minutes, the plan itself, drafts of the plan, correspondence, e-mail pertinent to a pandemic or to the plan, the content of Web pages, announcements to personnel, vendors, and others, — in short, virtually any communications pertinent to pandemic preparation that company employees have developed or participated in. Documents circulated publicly, of course, cannot be protected — that cat is already out of its bag. In fact, even strictly internal documents may well be discoverable. It may be possible, however, at least in some jurisdictions, to shield some of these documents from discovery under the critical self-analysis doctrine, which is based on the need to promote candid self-evaluation. One of the primary purposes of this doctrine is to prevent a chilling effect on self-evaluation undertaken to protect the public.[46] The theory is that if a company is aware that by setting high standards for itself it significantly enhances its liability exposure, then in rational defense of its own self-interest it will avoid doing so, to the detriment, possibly, of its customers and perhaps even society as a whole.

In addition, to the extent that an articulable threat of litigation exists, it may be possible to shelter some portion of this trove from discovery under the work product doctrine.[47] If an investigation into a relevant question is undertaken in anticipation of litigation, especially at the request of counsel, a colorable claim of privilege may arise. It may be prudent to consider whether, and how, advantage of this approach might be taken. Companies should recognize, nevertheless, that sheltering such documents from discovery may be difficult or impossible in jurisdictions ruling adversely on the issue in other circumstances. The best approach is to take such precautions as seem appropriate to maximize the chances that privilege protection will be afforded, but to draft all pertinent documents as though it was clear that adversaries will, in fact, be able to obtain and use them at trial.

Labor and Employment

The applicable law may well set a floor for companies' decisions respecting employment issues in a pandemic setting, but it probably will not set a ceiling, and many non-legal considerations may shape a company's judgments in this area. Roundtable participants expressed varied views, for example, on paying compensation to workers absent from work because of fear of contracting disease at the work site. It is necessary, nevertheless, to have a basic working knowledge of some of the more prominent employment laws as you wrestle with how best to handle employment-related problems that a pandemic will cause.

Notwithstanding the discussion of industry-based standards of care, employers will generally be required by applicable occupational health and safety laws to take reasonable steps to maintain a safe working environment. In the food industry, a problem raised by some of our participants

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[46] *See, e.g., Granger v. National R. Passenger Corp.*, 116 F.R.D. 507 (E.D. Pa. 1987) (explaining that "one of the purposes of the [critical self-analysis] doctrine is to prevent a 'chilling' effect on self-analysis and self-evaluation prepared for the purpose of protecting the public by instituting practices assuring safer operations"); *Hogan v. City of Easton*, 2006 U.S. Dist. LEXIS 90235 (E.D. Pa. 2006) (denying admissibility of various police studies because, among other reasons, they were conducted for the purpose of self-evaluation).

[47] The work product doctrine allows a party to discover material prepared in anticipation of litigation or for trial only upon a showing that the requesting party has a substantial need for the material and cannot obtain the material or its equivalent elsewhere without incurring a substantial hardship. *See* Fed. R. Civ. P. 26(b)(3).

was “presenteeism,” the tendency of some workers to report for duty when they should not — as, for example, when contagious. Hence, the existence of a pandemic will introduce a two-edged sword into the workplace. Not only must employers be cognizant of their treatment of infected or potentially infected workers who need to be away from the workplace, but employers must take reasonable steps to maintain a safe environment for those who are not infected. Otherwise, healthy employees may refuse to work, thus compounding the staffing problems caused by the pandemic itself.

The General Duty Clause

The Occupational Safety and Health (OSH) Act[48] is the primary federal law regulating safety and health conditions in the workplace, and it applies to virtually all private sector employers in the United States.[49] In addition to complying with all duly promulgated safety and health standards, employers must comply with the OSH Act’s general duty clause, which provides that each employer “shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees.”[50] Violations do not give rise to a private right of action, however.

Leave and the FMLA

At this stage, the actual attack rate of whatever organism eventually causes a pandemic cannot be predicted. Experts estimate, however, that over time as many as 40 percent of the workforce could be affected. Companies should scrutinize their leave policies in light of the extraordinary levels of sickness that may attend a true pandemic.

There is a strong likelihood that infected workers will qualify for protection under the Family and Medical Leave Act (FMLA),[51] which requires the provision of a certain amount of unpaid leave, the option to substitute unused sick leave or vacation, and job restoration to the same or a substantially equivalent position. Over half the states also have their own family and medical leave acts, some of which apply to public employees only. A few laws go beyond the federal law, such as by covering smaller employers.[52] While most companies generally comply with the FMLA, the increased hardship associated with a pandemic’s high absenteeism will require a greater level of planning by employers in order to maintain compliance levels.

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[48] 29 U.S.C. §§ 651-678.

[49] *See generally,* Mark A. Rothstein, *Occupational Safety and Health Law* § 12, St. Paul: West Group (4th ed. 1998).

[50] 29 U.S.C. § 654(a)(1), § 5(a)(1) of the OSH Act. Employers can be cited for violating the General Duty Clause if there is a recognized hazard and they do not take reasonable steps to prevent or abate the hazard. U.S. Department of Labor, Occupational Safety & Health Administration, Guidance on Preparing Workplaces for an Influenza Pandemic, OSHA 3327-02N (undated, but issued in May, 2007), at http://www.osha.gov/Publications/influenza_pandemic.html, last visited March 10, 2008. An employer can be found to be in violation of the general duty clause if it can be shown that: 1. A hazard existed. 2. The hazard was likely to cause death or serious physical harm. 3. It had knowledge of the hazard or should have had knowledge because the hazard had been recognized by the employer, its industry, or common sense. 4. The hazard was foreseeable. 5. Workers were exposed to the hazard. *See,* U.S. Chamber of Commerce Small Business Center’s Website: http://www.uschamber.com/sb/business/P04/P04_8421.asp (last visited March 10, 2008).

[51] *See* 29 U.S.C. §§ 2601-2654 (applies to employers of 50 or more employees). To be eligible for the protections of FMLA, an employee must 1) work for a covered employer; 2) work in a location with 50 or more employees within a 75 mile radius; 3) work at least 12 months (need not be consecutive); and 4) work at least 1,250 hours during the 12 month period preceding leave request. For information on Federal labor laws, *see,* www.dol.gov, last visited March 10, 2008

[52] For instance, California employees are entitled to up to six weeks of paid leave. Cal. Unemp. Ins. Code §§ 3300-3305.

Workers' Comp

Employees out of work because of the flu are unlikely to be able to claim workers' compensation, because it will be difficult, if not impossible, to prove that the illness was contracted in the course of employment.[53] The result may differ, however, if a worker can show that he developed a medical problem because his employer, as a condition of employment, required him to take medication, submit to vaccination, or undergo some other form of treatment.

Consider the legal principles applicable in Virginia as an example of one state's approach. When an employee is injured at a place where his employment requires him to be while engaged in an activity reasonably connected with or incidental to his employment, the injury is compensable under Virginia's workers' compensation statute.[54] The Virginia Workers' Compensation Commission ("Commission") has held that in certain situations, injuries caused by vaccination or inoculation injections may fall within the realm of workers' compensation.[55] For a vaccination or inoculation to be a compensable injury, "the claimant must prove that the vaccination or inoculation arose out of and in the course of employment, and resulted in an 'obvious sudden mechanical or structural change in the body.' "[56] Where the employer has required the employee to undergo an injection or vaccination, the Commission has found that the claimant's adverse reaction to the injection or vaccine was a compensable injury.[57] There would seem to be no reason why a different conclusion would be reached if the compulsory treatment were the taking of a medication.

There does not seem to be a Commission decision or any case law discussing how the standard is applied when an injection, vaccination, or other treatment is offered by an employer to its employees on a completely voluntary basis. It is possible, however, to draw an analogy looking at how the Commission and courts have addressed injuries sustained during recreational activities. Under certain circumstances, an injury sustained as a result of a voluntary recreational activity can be a compensable worker's compensation injury.[58] "The dispositive question is whether the social or recreational function is so closely associated with the employment to be considered an incident of it."[59] The factors to consider in making this determination include: (1) the degree to which the employer derives a benefit from the activity; (2) the degree of sponsorship and participation by the employer; (3) whether the activity occurs on the employer's premises; (4) when the activity occurs in relation to the work day; and (5) the frequency or period over which the activity has been conducted.[60] Each factor is relevant; however, no one factor is essential to a determination that the event was or was not within the course of employment.[61]

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[53] To be compensable, the illness must have "arisen out of and in the course of employment." *See, e.g.,* Va. Code Ann. § 65.2-101. If the workplace exposes the employee to additional risk of infection, it may be possible for him to make out a compensation claim.

[54] *Kim v. Sportswear*, 10 Va. App. 460, 464 (1990).

[55] *Lovinger v. Children's Hosp.*, 2002 WL 149373, VWC File No. 186-90-44 (Va. Workers' Comp. Comm'n Jan. 7, 2002).

[56] *Id.*

[57] See Dempsey v. Henrico (County of) Fire, 2000 WL 33117008, VWC File No. 196-40-41 (Va. Workers' Comp. Comm'n Dec. 12, 2000), aff'd, 2001 WL 1496549, No. 0086-01-2 (Va. App. Nov. 21, 2001); Overton v. Commonwealth of Va./Augusta Corr. Ctr., 1994 WL 1039861, VWC File Non. 161-10-26 (Va. Workers' Comp. Comm'n July 1, 1994).

[58] *Mullins v. Westmoreland Coal Co.*, 10 Va. App. 304, 307 (1990).

[59] *Kim*, 10 Va. App. at 466.

[60] *Id.* at 465-66.

[61] *Id.* at 468.

Whether a court would analogize from company-sponsored recreational activities to company-sponsored antiviral treatment is difficult to predict. Courts often reason by analogy, however. If that occurred in this context, several of these factors could weigh in favor of compensability in the context of influenza vaccinations or other prophylaxis or treatment. In other states, injuries suffered as a result of an adverse reaction to a voluntary inoculation or vaccination have been determined to be compensable workers' compensation injuries.[62]

Thus, depending on the state, it is possible that an adverse reaction to a flu vaccine or medication could be a compensable injury whether the vaccination is voluntary or involuntary, if the factors discussed above are met. This possibility does not mean, of course, that providing access to vaccines and/or to antivirals is unwise. It merely means that in weighing risks and benefits, companies should factor in the cost of the risk that, among that fraction of those treated who can show they were thereby harmed, some may become entitled to compensation.

Quarantine

Individuals quarantined but who never develop disease probably have no compensable illness or injury.[63] Nor do they enjoy any special protection from adverse employment decisions. Food companies may wish to think carefully, however, about the effect in the court of public opinion of adverse job actions against such workers, or upon morale among employees. One participant noted the "huge" beneficial effect upon employee goodwill to be realized if companies can manage to get cash to employees during pandemic; another described hand-delivering paychecks to employees during hurricanes.

The ADA

It is unlikely in a pandemic that the Americans with Disabilities Act will provide any protection for workers either.[64] The ADA may impose certain restrictions, however, on an employer's ability to seek medical information from employees, and may require that employers take steps to protect that information. Title I of the ADA limits an employer's ability to "make disability related inquiries or require medical examinations."[65] In its enforcement guidance, the EEOC takes the position

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[62] *See, e.g., Hicks's Case*, 820 N.E.2d 826 (Mass. App. Ct. 2005) (finding the injury resulting from a voluntary flu shot offered by the claimant's employer compensable because the employer, a medical center, was necessarily benefited by preventing or limiting the potential its own employees might spread a contagious illness); *E.I. Dupont de Nemours & Co. v. Faupel*, 859 A.2d 1042 (Del. Super. 2004) (affirming the state Industrial Accident Board's determination that the claimant's injury was compensable where the claimant volunteered to get a flu vaccine offered by her employer and the Board found that the vaccination, as a preventative measure, benefited the employer by providing good employer-employee relations and decreasing absenteeism); *Monette v. Manatee Mem. Hosp*., 579 So.2d 195 (Fla. Dist. Ct. App. 1991) (finding a hospital worker's injury resulting from a voluntary flu vaccination offered by her employer to be compensable because "the claimant's effort to avoid illness that would impair her work performance is incidental to her employment" and the "employer derives a benefit from maintaining the health of employees"); *City of Austin v. Smith*, 579 S.W.2d 84 (Tex.Ct. App. 1979); *Lampkin v. Harzfeld's,* 407 S.W.2d 894 (Mo. 1966) (holding that the injury arose out of the employment because the employee was "administered the influenza inoculation by an agent of her employer on her employer's premises during regular work and normal work hours").

[63] Rothstein, M.A., Craver, C.B., Schroder, E.P., Shoben, E.W., *Employment Law*, 3d ed., St. Paul, Minn.: West (2004). Discharge while under quarantine, however, could possibly violate Title I of the ADA, §§ 12101-12213, or an analogous state disability law.

[64] ADA protection extends to individuals otherwise qualified to perform the essential duties of their jobs but who labor under a "disability" defined to mean (1) "a physical or mental impairment that substantially limits one or more of the major life activities of such individual"; or (2) "a record of such an impairment; or (3) "being regarded as having such an impairment." 42 U.S.C. § 12102(2). Short term illnesses such as flu do not generally qualify as disabilities under the Act.

[65] 42 U.S.C. §§ 12101-12117, 12201-12213 (1994)(codified as amended).

that these limitations apply to all employees, not just those with actual or perceived disabilities.[66] Thus, questions that are broad and might elicit information about a disability, or those that relate to a specific disability, must be job-related and consistent with business necessity. Employers must be careful, if seeking information regarding the health status of potentially infected employees, to avoid disability-related inquiries.

Likewise, there must be a demonstrable need for requiring employees to undergo medical examinations.

> A "medical examination" is a procedure or test that seeks information about an individual's physical or mental impairments or health. The guidance on Pre-employment Questions and Medical Examinations lists the following factors that should be considered to determine whether a test (or procedure) is a medical examination: (1) whether the test is administered by a health care professional; (2) whether the test is interpreted by a health care professional; (3) whether the test is designed to reveal an impairment or physical or mental health; (4) whether the test is invasive; (5) whether the test measures an employee's performance of a task or measures his/her physiological responses to performing the task ; (6) whether the test normally is given in a medical setting; and, (7) whether medical equipment is used.[67]

Finally, information obtained pursuant to any medical inquiries must be kept in separate files, and must be treated as confidential.[68]

Health Insurance

Whether employees insured under the company's policies will have adequate health care coverage will, of course, vary with the company. If influenza behaves as it has historically, however, the great majority of patients will probably either die or recover quickly – within a week or two. In dollar terms, then, healthcare costs may be relatively modest.

Organized Labor

For unionized employers, changes to leave or benefit policies, as well as cross training to permit a greater level of continuity during periods of high absenteeism rates, may all require bargaining with union representatives before implementation.[69] All the companies represented at the Roundtable employed some unionized workers. Several have engaged union representatives in discussions of issues likely to arise in event of a pandemic, and the consensus was that this approach was beneficial to all concerned. One company in the retail space has discussed with another retailer that anticipates a sharp drop in demand for its products temporarily hiring the second company's employees during a pandemic.

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[66] EEOC Enforcement Guidance: "Disability-related inquiries and medical examinations of employees under the ADA," available at http://www.eeoc.gov/policy/docs/guidance-inquiries.html, last visited March 10, 2008.

[67] *Id.*

[68] 29 CFR §1630.14.

[69] *See, generally,* the National Labor Relations Act, 29 U.S.C. §§ 151-169.

Contracts

Every food ompany is both a buyer and a seller. Most commercial contracts contain *force majeure* clauses.[70] As a buyer, a company should consider whether, in a pandemic environment, its suppliers would be excused for nonperformance under the *force majeure* clauses of its existing contracts. As a seller, the company should determine whether its nonperformance will be so excused. *Force majeure* clauses vary, but they tend to be narrowly construed and seldom mention pandemic expressly. Omission of this specific "force" from the list may preclude effective application of the clause.[71] Sometimes *force majeure* law in a given jurisdiction will excuse nonperformance for natural phenomena beyond the control of the parties. In other jurisdictions, however, nonperformance is excused only if the natural phenomena were not only beyond human control, but unforeseeable.[72] It would be difficult to characterize a pandemic as unforeseeable.

Even where a viable *force majeure* defense exists, it may fail in some jurisdictions if some other factor, not a *force majeure* or "act of God," played a role in the outcome.[73] In some jurisdictions, where harm is caused concurrently by a *force majeure* and human acts, the defendant is liable for only that portion of the damages caused by the latter.[74]

The party invoking *force majeure* has the burden of proof.[75] Whether a *force majeure* arose is a question of fact for the jury.[76]

Food companies should examine their contracts to see what provisions help and hurt them. They may wish to renegotiate those agreements in pursuit of better terms, although renegotiation might well require payment of additional consideration.[77]

In addition, companies in the food sector should be making inquiries of their suppliers, particularly those that supply critical items, to determine what those companies are doing

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[70] *Force majeure* (French: a "superior force") means an event or effect that cannot be anticipated or controlled; it includes both acts of nature (i.e. floods or hurricanes) and acts of people (i.e. riots, strikes, or wars). Black's Law Dictionary 263 (Pocket Edition 1996). *See,* Glossary.

[71] *See, Seitz v. Mark-O-Lite Contractors, Inc.*, 210 N.J. Super. 646, 510 A.2d 319 (1986) (if a law refers to autos, trucks, tractors, motorcycles, and other motor-powered vehicles, "vehicles" would not include airplanes).

[72] *See, e.g., URI Cogeneration Partners, Inc. v. Board of Governors for Higher Education,* 915 F. Supp. 1267, 1287 (D.R.I. 1996) (holding that the court will extend a *force majeure* provision to only those situations that were unforeseeable at the time of the contract); *Watson Labs., Inc. v. Rhone-Poulenc Rorer, Inc*., 178 F. Supp. 2d 1099 (holding that the shutdown of the plant was foreseeable and therefore defendants could not rely on the *force majeure* clause). *See also, Lane v. G&M Statuary, Inc.*, 156 S.W.3d 498 (Mo. Ct. App. 2005); *Bradford v. Stanley*, 355 So.2d 328, 330 (Ala. 1978) (flood). For cases of possible historical interest, *see Charing Cross Co. v. London Hydraulic Co.*, 3 K.B. 442, 449 (1913); *Pandorf v. Hamilton*, 17 Q.B.D. 670, 675 (1886).

[73] *Cooper v. Horn*, 248 Va. 417 (1994) (defendants allowed trees to grow in earthen dam, so even though dam failed during a three-day storm, clearly a *force majeure*, human agency contributed to the flood damage and the defense failed). *See also*, *Central Ga. Elec. Membership Corp. v. Heath*, 4 S.E.2d 700 (Ga. Ct. App. 1939) (lightning strike was an act of God, but failure to ground line was not "free of human agency," so liability lay).

[74] *Webb v. Platte Valley Pub. Power & Irrigation Dist.*, 18 N.W. Ind. 563 (Neb. 1945) (burst dam); *Anderson v. Highland Lake Co.*, 258 S.W. 218 (Tex. Civ. App. 1924) (same).

[75] *Naxera v. Watham*, 159 N.W.2d 513, 517 (Iowa 1968).

[76] *Lee v. Mobil Oil Corp.*, 452 P.2d 857, 861 (Kan. 1969).

[77] *See, e.g., Demasse v. ITT Corp.*, 984 P.2d 1138 (Ariz. 1999) (holding that any modification to layoff policy was ineffective absent additional consideration).

to prepare for a potential pandemic and to determine what those companies are doing to determine the adequacy of preparations farther down the supply chain. You should also ask them to allow you to see and evaluate the plans they have developed. Poor oversight of a food company's third-party relationships could significantly increase the company's risk profile, for example, so the company should exercise effective oversight and controls on its third-party relationships to promote preparedness and to mitigate the company's risk of inferior performance by the third party.

To minimize additional risks such as these, a food company should develop a contingency plan against the possibility that the third party becomes unable to perform as expected, and the company should also review the third party's business resumption contingency planning and testing to ascertain that it has a plan on how it can continue to provide and/or restore services within acceptable time limits. And as discussed above, food companies may wish to assess their own policies regarding stockpiling critical supplies in light of a pandemic's expected duration.

Insurance

Insured companies may seek to recover some of their losses from their carriers. The position of the insurance industry, however, is that the risks of a pandemic are essentially uninsurable.

Business Interruption Insurance

Business interruption coverage is insurance coverage designed to protect business owners from the loss of income caused by interruptions of normal business activities. Traditionally, business interruption insurance has applied only when the interruption is caused by direct physical loss or damage to the insured property. For all its formidable powers of destruction, the virus attacks humans only, not bricks and mortar.

Over the years, insurers have enhanced the coverage available under business interruption policies by offering coverage extensions for other types of business losses, including losses caused by acts of civil authorities that prevent access to an insured location or interruptions at supplier businesses that interrupt the insured's supply chain. Even with these coverage extensions, however, insurers are likely to take the position that business interruptions caused by an outbreak of an infectious disease do not result from a physical loss to property and so are not covered. Any business faced with a loss attributable to supply chain interruptions, employee absenteeism, or decreased customer demand as a consequence of an infectious disease outbreak should consider conferring with legal counsel familiar with insurance coverage issues regarding whether coverage is available under the particular terms and condition of the insured's policy.[78] And because the insurance industry may not be entirely monolithic on this point, it may be worthwhile now, in advance of need, to shop for the best possible coverage.

[78] *See, Archer-Daniels-Midland Co. v. Phoenix Assur. Co. of New York,* 936 F.Supp. 534 (N.D. Ill. 1996) (business was entitled to coverage for extra transportation expenses incurred after disruption of barge traffic on Mississippi River based on language in contingent business interruption policy that provided coverage for losses resulting from damage to the property of any "supplier"; the Army Corps of Engineers and Coast Guard qualified as "any supplier of goods or services" within the meaning of the policy by virtue of their roles in constructing improvements to the navigability of the Mississippi River); *see also Western Fire Insurance Co. v. First Presbyterian Church,* 437 P.2d 52 (Colo. 1968) (holding that the term "direct physical loss" in insurance policy extended coverage to damages resulting from the loss of use of a building where an accumulation of gasoline vapors rendered the property uninhabitable).

If no carrier will agree to provide coverage explicitly designed for pandemic-related business interruption, there might be ways to challenge the carriers' position on coverage already in force. If regular maintenance is deferred for the duration, for example, plant and equipment could deteriorate, and the company might be able to invoke such deterioration in support of its claim. Then, too, consider an analogy to the airline industry. Airlines have on occasion successfully sued their insurers for losses occasioned by hijackings, even where losses from hijackings are not expressly covered by the applicable contracts of insurance. The courts have reasoned that in the modern era, hijacking is unfortunately a fact of life, a risk inherent in the operation of airlines, and companies insuring such airlines have to anticipate that they will be on the hook for those losses.[79] Carriers denying coverage for losses occasioned by Katrina have also been sued, both privately[80]and by the Louisiana Attorney General.[81] After a pandemic, coverage litigation between insured companies and their carriers is likely.

Challenging Quarantine

Influenza is an equal opportunity threat. Your janitorial staff and your C-suite are more-or-less equally at risk. There is a real possibility that members of your top leadership could be subjected to isolation or quarantine, and if that happens, their ability to lead and to make decisions could be threatened.

In proper circumstances, quarantine diminishes contagion and so saves lives. Quarantine is also a massive violation of civil liberties, however. The law does provide protections from abuse of power by the civil authorities,[82] and it may be possible to challenge imposition of quarantine orders if procedural requirements are not met or constitutional rights are violated. While a full discussion of this topic is beyond the scope of this document, you may wish to consider whether and under what circumstances you might challenge a quarantine order imposed on, for example, your CEO or Board Chairman.

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[79] *See, Pan American World Airways v. Aetna Casualty & Surety Co.*, 505 F.2d 989 (2d Cir. 1974) (losses from hijacking covered because not excluded from "all risk" policy).

[80] *See, e.g.,* Complaint, *McIntosh v. State Farm Fire & Casualty Co. and Forensic Analysis and Engineering Corp.,* Civil Action No. 1:06CV1081LTSRHW (S.D. Miss. 2006), available at http://www.insurancecoverageblog.com/McIntosh%20complaint.pdf (last accessed March 10, 2008) (alleging *inter alia* fraud, breach of contract, bad faith, civil conspiracy, negligence, and gross negligence). In the aftermath of Katrina, a reported 6600 insurance-related suits have been filed in District (federal) Court in Louisiana, of which 3700 are still pending; thousands more have been filed in state court there. Eaton, L. and Treaster, J.B., "Insurers Bear Brunt of Anger in New Orleans," *N.Y. Times,* 3 Sept. 2007, available at http://www.nytimes.com/2007/09/03/us/nationalspecial/03orleans.html, last visited March 10, 2008.

[81] Pantesco, J., "Louisiana AG sues insurance industry over alleged Hurricane Katrina conspiracy," Paper Chase Newsburst, available at http://jurist.law.pitt.edu/paperchase/2007/11/louisiana-ag-sues-insurance-industry.php, last visited March 10, 2008.

[82] The best example is the writ of *habeas corpus.* (Latin: you should have the body.) *Habeas* is a writ employed to bring a person before a court, most frequently to ensure that the party's imprisonment is not unlawful. *See,* Glossary. *Habeas* "is not an action or suit, but is a summary remedy open to the person detained. It is civil rather than criminal in nature and is a legal and not equitable remedy." *State ex rel. Deeb v. Fabisinski,* 152 So. 207, 209 (Fla. 1933). In general, any person "restrained of his liberty under any pretense whatever, may prosecute a writ of *habeas corpus.*" See, e.g., RCW 7.36.010. Generally, the petitioner will need to show actual prejudice resulting from constitutional error. *In re Hagler,* 97 Wash.2d 818, 825-26, 650 P.2d 1103 (1982). If it determines that his detention is unlawful, the court is to release the detainee. Ind. Code § 34-25.5-1. Some states explicitly provide that *habeas* is not to be suspended during execution of public health statutes. *See, e.g.*, Ind. Code § 12-26-2-1.

Communications

We have already considered internal communications above, in connection with litigation that might be brought against the company by shareholders or others. Let us now consider briefly the vulnerability of external communications to exploitation by other adversaries.

In a pandemic, food companies may be called upon to communicate clearly, early, and often. Several companies have created a dark Web site that will go live when needed, even though the Web may well be vulnerable to slowdowns. A variety of other mechanisms are in use or are under consideration, including land lines, ham radio, VPNs, satellite phones, text messaging, ring down phones, SKYPE, Yahoo groups, Webex accounts, and push to talk. The audience will include customers, employees, suppliers, shareholders, regulators, legislators, and the media. As some of our participants observed, most companies already have designated individuals to deal with the press; employees speaking without authorization to media representatives may be subject to discipline up to and including discharge. One approach may be to identify topics likely to be important and what the company wishes to say about them, so that templates are available for use when needed.

In a pandemic, all of the company's audiences will want information quickly and frequently. Unfortunately, at the time they are called upon to speak, those responsible for such communications may have far less information and far less reliable information than they would ideally like to have, even if they have prepared templates or outlines in advance. They will be under tremendous pressure and will likely have significant difficulty in meeting the information demands of their various constituencies. And as at least one participant observed, those designated to speak for the company may be unavailable. The possibility of inaccuracy is high. To the extent that members of your audience detrimentally rely on your statements, you could be subject to claims.[83] It may be prudent to confer with counsel about any templates you prepare in advance, to spot and, where possible, diminish legal pitfalls. In communications you disseminate well ahead of time, you may also want to point out, as a couple of Roundtable participants did, that you are not in the news business.[84]

Conclusion

A pandemic is first and foremost a threat to public health. All other issues pale in comparison. As discussed at the outset, however, the ability of food companies to operate in a pandemic environment will have a direct impact on the extent of the threat to public health. Also, for any business organization, but especially for food companies and other segments of the "critical infrastructure," a pandemic implicates an array of legal issues as well. In developing their plans, companies in the sector must factor in these issues to be in the best position to survive the disease and its aftermath.

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[83] *See, e.g., Hoeppner v. Jess Howard Elec. Co.*, 780 N.E.2d 290 (Ohio Ct. App. 2002) (to invoke the doctrine of equitable estoppel, plaintiff must show detrimental reliance on misrepresentation).

[84] Although geared mainly to public information officers in public health, and not the food industry, Lowrey, W., et al., "Effective media communication of disasters: Pressing problems and recommendations," 7 *BMC Public Health* 97 (2007) presents an analysis of some of the biggest problems attending media responses to health-related risks as well as possible solutions.

Summary

- Corporate boards could face claims that, as a result of their failure to exercise due care, pandemic-related losses were larger than necessary.
  - The reasonableness of decisions will be analyzed in light of the circumstances, including the limits of governmental capabilities.
  - Plaintiffs may invoke multiple proof sources to establish the standard of care.
    Companies should compare their actions and decisions with those of competitors whose actions may be held up as standards.
    Companies should examine legal authorities such as statutes and regulations for revelance and compliance.
    Companies should temper the requirements they impose on themselves so that adversaries will not be able to convert a statement of aspirations into a pseudo-legal requirement.
    Companies should consider whether to confer with governmental officials about the unintended adverse consequences that the officials' pronouncements could have upon the post-pandemic litigation positions of critical infrastructure businesses.
  - Companies should weigh and periodically re-evaluate the risks and benefits of antivirals and other health measures and compare their decisions with those made by others.
  - Companies may wish to promote:
    Tort reform
    Regulatory relief
  - To the extent feasible, companies may wish to attempt to shelter sensitive documents from discovery, yet prepare them with the supposition that in fact the documents will be discoverable.
- Labor and employment law must inform corporate personnel policies
  - The OSHA General Duty Clause imposes a duty to maintain a worksite "free from recognized hazards."
  - Workers' comp claims will probably fail, but if a worker is harmed by a treatment required by his job, or even, possibly, by a treatment given voluntarily, such claims might succeed.
  - The federal FMLA and its state analogues may provide protection for infected workers.
  - Companies may wish to evaluate the adequacy of their workers' health insurance and the cost of augmenting it.
  - Companies with unionized employees should discuss pandemic policies with union representatives in advance of need.

- In a pandemic, it may be difficult to live up to contracts.
    - Scrutinize *force majeure* clauses in your contracts.
        - As a buyer can you require your vendors to supply what they promised?
        - As a seller, can you invoke your clause as a defense to your own non-performance?
    - To what extent have your suppliers made reasonable preparations?
        - Do you wish to request to see their plans?
    - Consider whether to stockpile critical supplies, and if so, which ones and how.
- Insurance
    - Confer with your carriers' representatives or your counsel, or both, respecting adequacy of coverage.
    - Solicit their recommendations on risk management.
    - Consider legal challenges to denials of coverage.
- Quarantine
    - Identify the circumstances, if any, under which you would challenge an order of quarantine or isolation.
- Communication
    - Consider developing templates to assist the communication effort.
    - In developing templates, confer with your counsel to minimize legal risks.

Conclusion: Keeping food on the shelves

After the pandemic everyone will judge your company and how it conducted itself during the pandemic. You will be compared to your peers, some of whom might have heeded the warnings and aggressively prepared. Hindsight will, of course, be 20/20.

How does one prepare for what could be the greatest threat of our lifetime?

- First of all, take this threat seriously and think about broad initiatives to promote resiliency in any disaster. Medical experts, scientists, and historians all tell us a pandemic flu is a matter of when, not if. “Pandemic fatigue” has set in and will continue to be an issue as the pandemic threat disappears from the front pages of contemporary news publications. Many will breathe a collective sigh of relief and assume that we are now “safe.” Nothing could be farther from the truth.
- Evaluate your progress on the four basic pandemic pillars:
  - Education and communication
  - Personal protective equipment
  - Facility cleaning
  - Social distancing
- Make a decision on antivirals. The government has issued draft recommendations that you will likely be judged against. Evaluate the cost and benefits carefully.
- Engage your organization at all levels. Education and knowledge are key – and one of the four pandemic pillars. From your CEO to the check-out clerk, all should have some knowledge about the illness and ways to keep themselves and their families safe. This will help mitigate fear and minimize illness.
- Be decisive. Many of the policy issues and questions are difficult. Make a decision now, when you have the luxury of time. You can always change the policy if the situation dictates it. Decisions made under pressure or duress are often ill-formed and fraught with issues.

Get started and stay focused.

Glossary

Antivirals: A type of drug that interferes with the ability of a virus to replicate in the human body. This class of medication may be given as a prophylactic to prevent infection. Once symptoms appear, it is also used to prevent the illness from progressing.

Broad-spectrum: Effective against a wide range of organisms.

Case fatality ratio (CFR): Proportion of cases of a condition that are fatal; the number of deaths attributed to the condition divided by the number diagnosed.

Categorization of employees: Placing staff into groupings to assist in the development of business pandemic plans. Often, four categories are created:

Category One: Performs a mission-critical activity and must be at work.
Category Two: Performs a mission-critical activity and may work remotely (i.e., from home).
Category Three: Does not perform a mission-critical activity, but the activity could be done remotely (i.e., from home) if feasible (sufficient bandwidth) or possible (has the necessary equipment).
Category Four: Does not perform a mission-critical activity, and the activity cannot be done remotely (for example, a mail room clerk or shipping attendant).

Categorization of pandemics:

Category One - CFR of less than 0.1 percent
Category Two - CFR 0.1 percent to 0.5 percent (1957 and 1968)
Category Three - CFR 0.5 percent to 1 percent
Category Four - 1 percent to 2 percent
Category Five - 2 percent or higher (1918)

Centers for Disease Control and Prevention (CDC): One of the major operating components of the Department of Health and Human Services. Its mission is to promote health and quality of life by preventing and controlling disease, injury, and disability.

Disinfectant: An agent that frees from infection, such as a chemical that destroys vegetative forms of harmful microorganisms.

Droplet nuclei: Small (1 to 5 microns [1 micron = one-millionth of a meter]) particles that are discharged when a person breathes, speaks, coughs, or sneezes. The mode of transmission for respiratory illnesses.

Epidemic: An illness affecting, or tending to affect, an atypically large number of individuals within a population, community, or region at the same time.

Fiduciary: One who owes to another the duties of good faith, trust, confidence, and candor.

Fit test: The use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual.

***Force majeure*:** [French for a "superior force"] An event or effect that cannot be anticipated or controlled; it includes both acts of nature (e.g., floods or hurricanes) and acts of people (e.g., riots, strikes, or wars).

Hemagglutinin (H): Protein on the outer surface of the virus that helps the virus attach to cells.

Incubation: The provision of proper conditions for growth and development of microorganisms.

Incubation period: The period of time from when a pathogen enters the body to the time the first signs and/or symptoms appear.

Infection control: Measures practiced by health care personnel in health care facilities to decrease transmission and acquisition of infectious agents (e.g., proper hand hygiene, scrupulous work practices, use of personal protective equipment [PPE] such as masks or respirators, gloves, gowns, and eye protection). Infection control measures are based on how an infectious agent is transmitted and include standard, contact, droplet, and airborne precautions.

Influenza: An acute, highly contagious respiratory virus disease, characterized by sudden onset, fever, prostration, severe aches and pains, and progressive inflammation of the respiratory mucous membranes. It is often further delineated with the letter A, B, or C to denote disease caused by a virus of a specific one of the three genera.

"Last mile": The final leg of delivering connectivity from a communications provider to a customer.

Negligence: The harmful failure to conform to the standard of care: that which a reasonably prudent person would have exercised in the same or in a similar situation.

Negligence *per se*: negligence as a matter of law, so that breach of the duty is not a jury question; negligence per se usually arises from a violation of a statute or regulation.

Neuraminidase (N): Protein on the outer surface of the virus that helps the virus break out of the cells it has invaded and release new viral particles that will attack previously uninfected cells.

Pandemic: Disease outbreak occurring over a wide geographic area and affecting an exceptionally high proportion of the population.

Pathogens: Organisms, frequently microorganisms, that cause disease. Examples include bacteria, viruses, and protozoa.

Personal protective equipment (PPE): Any device(s) or clothing worn by the worker to protect against hazards in the environment and create a barrier against workplace hazards. Examples are respirators, masks, gloves, and chemical splash goggles.

Social distancing: Technique used to minimize close contact among persons in public places, such as work sites and public areas. It involves keeping people at least three to six feet apart.

Universal precautions: A set of standard procedures required to achieve a basic level of infection control, and which are recommended best practices. They include good hygiene practices such as washing hands, the use of protective barriers (i.e., gloves and masks) when dealing with a potential infectious agent or person, and appropriate handling and disposal of contaminated or infectious waste.

Vaccine: Suspension of killed or attenuated microbial pathogens administered for prevention of infectious diseases.

World Health Organization (WHO): The directing and coordinating authority for health within the United Nations system. WHO is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries, and monitoring and assessing health trends.

Screening Questionnaire

Use the following questionnaire to screen visitors, vendors, and possibly employees once a WHO 6 has been declared or if there are human cases in your area. Forms such as this were used extensively during the SARS 2003 outbreak. To minimize contact, have sufficient pens/pencils on site and instruct the applicant to keep the writing device. Temperatures are not required (and may be falsely elevated). Use disposable thermometers if taking temperatures and dispose of properly.

Section A

1. Have you had close contact (within 3 – 6 feet) of a person with respiratory flu symptoms?

No Yes

Section B

2. Have you traveled outside the United States in the past 10 days?

No Yes

Section C

3. Are you experiencing any of the following symptoms?

- Myalgia (muscle aches) **OR**
- Malaise (severe tiredness or feeling unwell) **OR**
- Severe headache (worse than usual) **OR**
- Cough (onset within 7 days) **OR**
- Shortness of breath (worse than what is normal for you) **OR**
- Feeling feverish, or have had a fever in the last 24 hours

No Yes

Section D

4. Record temperature using an accurate thermometer. Temperature _____° F

Is the temperature above 100.4 °?

No Yes

PASS Response is NO to Sections A, B, C and temperature is normal

FAIL Response is YES to Sections A, B or C and/or temperature is above 99 ° F

I declare that to the best of my knowledge the information that I have provided for the purpose of completing the Health Screening Tool is true.

Interviewee Signature: _____ **Date:** _____

Faculty

Regina Phelps is founder and CEO of Emergency Management and Safety Solutions (EMSS), an emergency management consulting practice founded in 1982.

EMSS provides incident/crisis management team training and development, EOC design, emergency exercises, and business continuity planning consulting services. Ms. Phelps became interested in pandemic planning in the mid-1990s, and since then has assisted more than 150 companies develop domestic and global pandemic plans. She is a popular speaker at Disaster Recovery Journal's Spring World and Fall World, Contingency Planning and Management conferences, the World Conference on Disaster Management, and other emergency management conferences. She is the recipient of numerous awards, including the Award for Excellence in Business Continuity Planning by the Business Recovery Managers Association (BRMA). The EMSS website is www. ems-solutionsinc.com; Regina can be reached at regina@ems-solutionsinc.com.

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Mr. McMenamin is an attorney and a former emergency physician with an interest in medico-legal topics generally, and related litigation in particular. He advises companies on legal issues pertinent to business disruption and pandemic preparedness. Board Certified in Legal Medicine, Joe is active in the Pandemic Preparedness Committee of the Homeland Security Division of the U.S. Chamber of Commerce, and lectures and publishes widely on these and related topics. He is an associate professor of Legal Medicine at Virginia Commonwealth University and also chairs the Board of the Richmond Ambulance Authority, responsible for all pre-hospital care there. McGuireWoods' website is www.mcguirewoods.com; Joe can be reached at jmcmenamin@mcguirewoods.com.

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