

Pandemic Accord 2013

Continuity of Operations Pandemic Tabletop Exercise

Summary of Findings 'Tgr qt v'

**Sponsored by: FEMA Region II, DHHS Region II,
Federal Executive Board New York City, Federal Executive Board Northern New Jersey,
Clearing House Association, Securities Industry and Financial Markets Association**



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EXERCISE OVERVIEW

Exercise Name	Pandemic Accord Tabletop Exercise (TTX)
Exercise Date	November 18-21, 2013
Scope	The Pandemic Accord TTX is the first exercise in a two-part series (a full-scale exercise is scheduled for 2014) that seeks to increase readiness for a pandemic event. The TTX was designed to explore continuity planning for an influenza pandemic, foster partnerships between the public and private sectors, and identify potential promising practices as well as issues or shortfalls in pandemic plans.
Core Capability	Planning
Objectives	<ol style="list-style-type: none"> 1. Mitigate vulnerabilities during a pandemic influenza outbreak. 2. Identify gaps or weaknesses in pandemic planning or in organizations' pandemic influenza plans, policies, and procedures. 3. Encourage public and private organizations to work together to create and test their pandemic influenza plans.
Scenario	A novel influenza virus affects passengers on a cruise ship making a two-week trip around the Gulf of Mexico before ending in New York City. The virus has an attack rate of 20 to 25 percent and a case fatality rate of approximately 2 percent. The scenario was organized into three discussion modules.
Sponsor	The Federal Executive Boards in New York City and northern New Jersey in partnerships with the Federal Emergency Management Agency (FEMA) Region II, the Department of Health and Human Services (HHS) Region II, the Securities Industry and Financial Markets Association (SIFMA), and the Clearing House Association
Participants	Public and private sector organizations from New York City and northern New Jersey
Points of Contact	<p>Russell Fox Continuity Manager, FEMA Region II Russell.Fox@fema.dhs.gov (212) 680-8504</p> <p>Julius M. Jones, Jr. DHS/FEMA/National Exercise Division Julius.m.Jones@dhs.gov (202) 431-5939</p>

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BACKGROUND

On November 18-21, 2013, the Federal Executive Boards (FEBs) in New York City and northern New Jersey, in partnership with the Federal Emergency Management Agency (FEMA) Region II, the Department of Health and Human Services (HHS) Region II, the Securities Industry and Financial Markets Association (SIFMA), and the Clearing House Association conducted a tabletop exercise (TTX) to improve readiness for an influenza pandemic. The TTX was the first in a two-part series that will culminate in a full-scale exercise in 2014. The purpose of these events is to enhance continuity planning among federal departments and agencies; U.S. Courts; state, tribal, local jurisdictions; and the private sector community.

Scenario

Several passengers on a cruise ship making a two-week trip around the Gulf of Mexico become ill with influenza-like symptoms. The ship concludes its voyage in New York City after several stops at ports of call in Central America, Puerto Rico, and Key West. The disease appears to be viral and airborne transmittable from human to human, and all victims appear to have similar symptoms. Further laboratory and epidemiological investigation reveals that the novel virus has an estimated attack rate of 20 to 25 percent and a case fatality rate of roughly two percent.

When the exercise starts, there are approximately 10,000 people ill in the New York City region and 237 reported dead. However, authorities believe the number of people ill from this virus could be three to four times higher.

Format

The TTX was conducted as a facilitated discussion involving representatives from the public and private sectors. Participants were seated at tables of six to ten people each, with approximately 75-100 people attending the exercise on each of the four days.¹ In addition, individuals who could not attend in person participated in the exercise from various locations around the country via webinar and teleconference. Select companies participating via the webinar used the scenario to facilitate play among their employees. In addition, a small group of approximately 20 people participated in the exercise remotely from Chicago, Illinois.

The exercise began each day with a representative from FEMA providing opening remarks and an overview of the resources that are available through FEMA and the federal government to assist state and local planners in continuity planning (see Appendix A). Next, a representative from the New York City Department of Health and Mental Hygiene (NYC DOHMH) gave a presentation on pandemic influenza (slides for this presentation are also included in Appendix A of this report).² The exercise moderator then introduced the exercise scenario and led participants into the first of three facilitated discussions organized according to the following modules:

- **Module 1:** Preparing for a pandemic and the initial response
- **Module 2:** Decision-making and continuity activities during a pandemic “wave”
- **Module 3:** Recovery and reconstitution of business operations

¹ It is important to note that the same exercise was conducted on each day (November 18-21) for a different group of participants. A list of participating organizations is provided in Appendix D.

² Appendix B includes participant questions and answers based on the presentations.

A facilitator at each table led participants through a discussion of the key issues and decisions they might face during each module. Each module lasted approximately 30 minutes and was followed by a brief report-back to the larger group. The exercise moderator also facilitated a hotwash at the conclusion of each exercise to highlight the promising practices and key issues that were uncovered during the exercise.

SUMMARY OF FINDINGS

This report summarizes the key findings and observations from the TTX. It highlights the major themes that emerged across the four days of exercises with a focus on business continuity planning. The report is organized according to the three discussion modules. A brief description of the key discussion topics is presented for each module, as well as any promising practices or planning issues that were identified.³

Module 1: Preparing for a pandemic and the initial response

Continuity planning for a pandemic scenario involves several unique considerations. While participants noted that there are similarities between business continuity planning for a pandemic and for other types of disasters, the following key differences were highlighted:

- During an influenza pandemic, the physical infrastructure (e.g., communications systems, buildings, transportation systems) will not be impacted except to the extent that the people who operate or maintain those systems are affected. This is unlike other continuity planning scenarios (e.g., major storm or earthquake) in which it is expected that there will be significant damage to, or disruption of, physical infrastructure.
- Unlike other types of disasters that continuity managers plan for, a pandemic will not be localized to one geographical area. This makes it more difficult to relocate people or transfer services to another site.
- A pandemic will occur over an extended time frame compared to most other disasters, which tend to be short-lived (measured in hours, days, or weeks). Pandemics typically occur in a sequence of “waves” that could extend one to two years.

Participants cited the need to evaluate existing continuity plans from the pandemic perspective and proactively plan to address these distinctions. When planning for a pandemic, the focus for continuity should be on functions and personnel rather than physical infrastructure. The following promising practices were noted.

- *Promising practice:* Consider implementing seasonal vaccination programs for employees. Preventive measures such as this can help mitigate the effects of influenza outbreak on a company’s employees.
- *Promising practice:* View planning as an iterative process and review and update plans regularly based on lessons learned from other types of events. Organizations noted that Hurricane Sandy provided an excellent opportunity to test continuity plans and identify potential issues or gaps.

³ Appendix C highlights all promising practices and issues by module.

Activation (and deactivation)⁴ triggers are an important consideration for continuity plans.

A majority of participants stated that their organization's pandemic plans include triggers for activating business continuity policies and procedures. Oftentimes, companies have consulted national and local pandemic plans for guidance when developing triggers appropriate for their organization. Activation triggers can help an organization stay ahead of the curve and take proactive, decisive action to mitigate the potential effects of a pandemic on the organization and staff. Examples of triggers may include above-average employee absenteeism, school closings⁵, or advisories issued by the Centers for Disease Control and Prevention (CDC) or the World Health Organization. The following promising practices were noted.

- *Promising practice:* When an initial trigger is reached, some firms have developed influenza kits for their staffs, which include items like hand sanitizer and pamphlets on minimizing one's exposure to the virus.
- *Promising practice:* Rather than rely on Human Resources (HR) to track absenteeism, which can take too long, some firms have used surrogate measures, such as card swipe rates for entry into the building, computer logins compared to averages, and remote access capacity and use.

Continuity plans should be flexible and adaptable. Participants noted that business continuity plans, like all emergency plans, are built on assumptions that may or may not hold up during an actual incident. Therefore, it is important to have established processes in place, which have been trained on and practiced, that enable an organization to modify its policies and procedures during a pandemic. This includes a clearly defined process for convening senior leadership to make key decisions.

Communicate with employees and organizational leadership early and often. Participants emphasized the importance of communicating information to employees (all employees, not only those deemed "essential") about the organization's pandemic and continuity plans. It is important that employees know what their organization's policies are and how those policies might affect them in a pandemic scenario. In addition, continuity planners should communicate proactively to senior leadership to get their buy-in and ensure their familiarity with continuity policies.

As a pandemic unfolds, frequent communication with employees and leadership serves several important purposes, including the following:

- Empowering employees to make more informed decisions about their health and ability to work;
- Providing assurance that the organization is managing the issue and looking out for employees' well-being;
- Providing senior leadership with the data and information they need to make informed decisions about the most effective and efficient use of limited resources; and
- Reducing employee fear and anxiety, and dispelling unsubstantiated rumors.

Participants also noted that the effectiveness of a communications strategy has to do with more than just what you communicate (content of the message), but also how you communicate (method of delivery) and to whom (intended audience). Different methods of delivery may be

⁴ Additional details on plan deactivation triggers will be discussed under Module 3.

⁵ Participants noted that decisions made by the schools on whether to open or close will significantly drive what happens to the employee population. It was noted, however, that New York City will try to avoid school closures to the maximum extent possible.

more appropriate for different audiences (e.g., internal staff versus clients or vendors/partners). The following promising practices were noted.

- *Promising practice:* Make emergency planning in general, and continuity planning in particular, a fundamental aspect of normal business operations. This can help facilitate the implementation of, and adherence to, continuity policies and practices when an incident occurs.
- *Promising practice:* Send Word Now® is a web-based emergency notification system that facilitates two-way communications between an organization and its employees. This is one of many services provided by this platform. It also provides the functionality to quickly convene senior leaders for a conference call.
- *Promising practice:* Leverage internal communications to provide tips to employees on how to stay healthy.
- *Promising practice:* Use multiple tools to communicate with employees, clients, and vendors. Examples include text messages, voice messaging, email, social media, and poster campaigns around the office to promote awareness.

Identify essential staff and critical functions, and understand where the breaking points are for your organization. Nearly all participants stated that they had identified their organization's critical functions and the essential staff needed to perform those functions; however, few participants had a good grasp on what the failure thresholds were for their staff or business units. That is, what is the minimum number of staff needed to operate a business unit or perform a critical function? Establishing critical functions is not only important from a staffing standpoint, but also in terms of evaluating whether certain mitigation or response strategies, such as working from home or transferring a function to another geographical location, are feasible. In addition, for many businesses, there is a cyclical component to their work that influences whether a certain service or function is critical depending on the time of year. The following promising practices and issues were noted.

- *Promising practice:* Review and evaluate essential staff on a semi-annual basis in order to account for staff turnover or changes to the critical functions of an organization.
- *Promising practice:* When determining essential personnel, consult with senior leaders or business unit managers, who know best what is needed to execute the work.
- *Promising practice:* Give essential employees Virtual Private Network (VPN) tokens and require them to take a laptop computer home with them every day.
- *Issue:* Organizations may not know the minimum number of staff needed to perform a critical function.
- *Issue:* Participants were unclear about how to keep non-essential personnel from reporting to work, even if they appear to be sick.
- *Issue:* While participants acknowledged that different types of staff (full-time, part-time, contractors) have different Human Resources (HR) policies regarding sick time and liberal leave, many were not clear about how those policies differed.

Identify the key vendors or partners needed to operate your business and review their continuity plans and assumptions. Most participants knew who their key vendors and partners were for the critical functions they had identified; however, participants also acknowledged that they had little knowledge of their vendors' and partners' pandemic plans. Within the financial services industry, regulators ask companies whether they assess third party vendors, but do not ask *how* they assess them, which is the key issue. Reviewing vendors' pandemic and continuity

plans can help a company determine whether the vendor's assumptions and policies align or conflict with the company's assumptions and policies. The following promising practice and issue were noted.

- *Promising practice:* When conducting third-party risk assessments, ask vendors for their pandemic plans. This will help determine how long it will take a vendor that is down to get their services back up and running.
- *Issue:* Participants acknowledged that further work is needed to pre-identify alternate vendors and establish standby contracts for those vendors' services during a continuity event. Many financial services firms use the same small pool of vendors, so there will likely be competing demands for those vendors' services in a continuity situation.

Module 2: Decision making and continuity activities

Continual situational assessment is an important aspect of any response strategy. As a pandemic unfolds, most companies have procedures in place to conduct regular assessments of the impact on staff and business operations. As noted earlier, in many organizations, different business units may be deemed critical based on the time of year. Situational assessments enable an organization to continuously evaluate which business units are being hardest hit and provide valuable information to help determine where to pull resources from to cover the most critical needs. The following promising practices and issue were noted.

- *Promising practice:* Financial services firms should involve their regulatory staffs in the situational assessment process, as there may be changes in, or flexibility with, certain regulatory requirements that could significantly impact the organization.
- *Issue:* A challenge for organizations is how to track the impact influenza is having on absenteeism, since the Health Insurance Portability and Accountability Act (HIPAA) does not permit asking employees about the cause of their sick leave.
- *Promising practice:* One way to address the aforementioned issue is to benchmark absenteeism rates. For example, some companies have examined records for the past few years to determine average rates of absenteeism during different times of the year. This provides a baseline, which will then enables a company to better calculate the "true" rate of absenteeism that might be due to the pandemic (or another disaster).

Alternative work arrangements will be relied on heavily during a pandemic. A major component of all participants' business continuity plans was the use of alternative work arrangements for staff. These arrangements can take several different forms, including the following:

- **Telecommuting:** This strategy allows staff to conduct their normal operations and tasks either from home or an alternative work site. Typically, staff members are able to connect securely to their organization's network via VPN or similar capability. For most participants in the private sector, telecommuting was viewed as a feasible option, with the notable exception of traders or those handling money that comes into or flows out of companies. Regulatory requirements limit the ability of these staff to work remotely. However, several government participants stated that telecommuting is not always an option. For example, law enforcement personnel usually have to work in the field interacting with the public to perform their jobs.
- **Flexible scheduling:** An alternative to telecommuting is to establish a flexible work schedule for staff. For example, an organization might have half of its staff work morning shifts and the other half work in the afternoon. This limits the amount of personal contact

staff members have with one another, potentially reducing the risk of spreading the virus among staff members.

- **Cross-training staff:** Several participants noted that their organizations cross-train staff to carry out duties other than their usual responsibilities. This provides depth in key positions and allows organizations to make the most effective use of staff who are able to work by redirecting them to the most critical areas of the business.
- **Workload transfer:** Depending on how the impacts of a pandemic are felt nationally and globally, many organizations have examined ways in which to transfer critical functions from one location to another. This is the typical strategy when continuity plans are activated due to an impact on physical infrastructure. Its utility is less clear in the case of a pandemic; however, participants noted that it is important to keep as many options available as possible to sustain an organization's critical functions.

The following promising practices and issues were noted.

- *Promising practice:* Keeping track of previous jobs that employees have held within an organization can make it easier to identify and reassign staff to fill vacancies in a crisis.
- *Promising practice:* In some cases, companies have mapped predominant areas where their workforce lives in order to identify locations (e.g., hotels) close to staff members' homes where staff could congregate to conduct business.
- *Promising practice:* A few participants noted that their companies have resource caches in place to support staff for extended periods of time at the office, if needed. For example, they have cots and Meals Ready to Eat (MREs). Other participants stated that they might reserve blocks of rooms at hotels so staff members that may be forced to work extended shifts have someplace to go to sleep, bathe, and get food.
- *Issue:* Some participants noted that additional work was needed within their organizations to develop clear plans and guidance on flexible work arrangements, including specifying who has the authority to make those decisions, which staff is eligible, and how this strategy would be implemented.
- *Issue:* Many participants noted that telecommuting, while an effective option in some instances, has never been tested on the scale to which it would be used in a pandemic. There was doubt about the ability of computer networks and telecommunications infrastructure to handle large numbers of people working remotely over an extended period of time.

During a response, decision-making processes should be streamlined. Participants noted that the processes used to make organizational decisions during steady-state operations often will not suffice during contingency operations. For example, during steady-state operations, companies may want to give all employees an opportunity to provide input into certain decisions. During a crisis, this inclusive approach can lead to paralysis in the decision-making process. It is vital to establish upfront who will make key decisions during a major continuity event, and the process for making those decisions. Then, communicate this information to those with decision authority so they are aware of their responsibilities. The following promising practice was noted.

- *Promising practice:* An important lesson learned from Hurricane Sandy was that all staff wanted to have input into decisions, but this created delays that proved detrimental to an organization. Select a small group of people to make decisions for the organization—often this will be senior leadership across several divisions—and then push decisions down on staff rather than allow decisions to be made from the bottom up.

There was concern about the ability of continuity plans to effectively address multiple events at the same time. One scenario inject during Module 2 involved a hacker trying to gain access to a company's network at the height of the pandemic. Many participants voiced concerns about the ability of their continuity plans to successfully manage two or more events at the same time. This relates to the notion discussed in Module 1 about the need for continuity plans to be flexible and adaptable, as well as the need for ongoing situational assessments. The following promising practices were noted.

- *Promising practice:* One participant noted that previous exercises have shown that it is far more effective to invest resources in developing defenses against hackers than it is to rely on data backup systems. In the financial services industry, information gets out-of-date so fast that backup safeguards are not that useful.
- *Promising practice:* A company has vendors periodically conduct fake phishing attacks to test and identify system vulnerabilities that hackers might try to exploit.

Ongoing communications to staff, clients, and vendors during an event is essential, and it is important that messages are culturally sensitive. Participants continually emphasized the need to communicate proactively throughout the event. One of the major issues discussed was the need to consider cultural issues when developing messages for staff, clients, and key vendors or partners. In the financial services industry, companies have offices and staff around the world, and what is an accepted practice in one location may not be accepted in another. To the extent possible, consider how host countries are responding to the pandemic and develop your messaging to be consistent. For example, although it was noted that wearing face masks offers little health benefit to those who are not sick, and thus would not be recommended in New York City, such practices are commonplace in Asia. Given the dispersed location of staff, it may be necessary to develop multiple messages that reflect the social norms where the intended audience is located. The following promising practice and issue were noted.

- *Promising practice:* Proactively disseminate a communications schedule to staff so they know when they can expect to hear updated information from their companies. This can help reduce the number of requests continuity personnel have to field from staff.
- *Issue:* Several participants noted that their organizations lack redundancy in their emergency communications capability (i.e., they rely on one system).

It is important to determine whether an organization's employees, or its key partners' and vendors' employees, are unionized and how that might impact their availability. Most participants from the financial services industry noted that their direct employees are not members of a union; however, they were less certain about their vendors' employees (for example, is the cleaning staff unionized?). In the public sector, it was more common for a percentage of direct employees to be unionized. Participants discussed how union membership might impact employee availability during a pandemic and the need to provide messaging that is consistent with the information employees are receiving from their unions. The following promising practice and issue were noted.

- *Promising practice:* Many participants noted that their continuity team works with the unions to inform them about continuity policies and plans.
- *Issue:* Some organizations do not include union representatives on their continuity planning team and therefore have no insight on union policies during a pandemic.

There was variability in the extent to which organizations have developed devolution plans. While some organizations have written detailed plans about how critical functions may devolve

during a major continuity event, most participants stated that their devolution plans are basic frameworks that lack specificity. In addition, participants stated that devolution plans are rarely tested through exercises. The following issues were noted.

- *Issue:* Not all continuity plans include specific information and triggers on how certain functions may devolve during a crisis. Key staff may lack training on this process and do not know their roles and responsibilities before an incident occurs.
- *Issue:* Not all devolution plans are tested through emergency preparedness exercises so that lessons learned can be incorporated into follow-on planning cycles.

Module 3: Recovery and reconstitution of business operations

Ensure continuity plans address the reconstitution of normal business operations. In between pandemic waves, it will be important to have established processes for returning staff to their normal operations and assignments. Continuity plans should have triggers or thresholds for deactivating continuity policies or practices, such as telecommuting or workload transfer. During the recovery phase, a company may need to continue to triage critical from non-critical business as staff members return to work. There was variability in the extent to which companies have planned for reconstitution, including whether they have developed reconstitutions teams. In some organizations, reconstitution teams are well-established and are usually part of the continuity working group (i.e., the group in charge of planning for and responding to a continuity event).

One issue discussed was the ability of companies to quickly hire personnel to fill vacancies resulting from the pandemic. In the private sector, this was not viewed as an issue; however, the hiring process for government agencies is significantly longer and may not be sufficiently responsive to address critical staffing needs. That said, most participants in both the public and private sectors stated that their business operations would be mostly unaffected by a 5-percent attrition in staffing. The following promising practices and issue were noted.

- *Promising practice:* Reconstitution planning needs to occur right away. Do not wait until all is well to think about how an organization will return to “normal.” It can be difficult during to think about reconstitution, but it needs to be an item on the agenda.
- *Promising practice:* One strategy for transitioning back to full services is to adjust regional workloads depending on which areas were hardest hit and where staffing needs are greatest.
- *Promising practice:* Key staffing vacancies can be filled in the short-term by reassigning existing staff, thus allowing HR sufficient time to identify and select qualified candidates to fill the positions.
- *Promising practice:* Refer to information being made available by public authorities and consider what other companies (i.e., your competitors) are doing in terms of returning to “business as usual.”
- *Promising practice:* One organization provides training to all leaders and managers to help them spot people who may be having problems so they can be referred to HR for assistance.
- *Issue:* Many pandemic plans do not adequately address the perceptions of people regarding the risk of returning to the workplace. Be proactive in messaging about this during the response and recovery phases.

Participants stressed the need for, and importance of, continued vigilance for staff during recovery. It was widely recognized by participants that there will be an enormous need for

employee assistance during the recovery phase. Many firms have employee assistance programs in place; it is important to make sure that staff is aware of these programs, the services offered, and how to access the programs, if needed. Communicate with staff proactively, check on them and see how they are doing and refer them, if necessary, to assistance programs both inside and outside of the organization. The following promising practice was noted.

- *Promising practice:* Involve union representatives during the recovery process, particularly when unionized employees may need assistance.

Participants noted the importance of capturing lessons learned and incorporating these into follow-on planning. Nearly all participants stated that their company conducts an “after-action review” immediately following an incident to identify things that went well and things that could be improved upon. The following promising practice was noted.

- *Promising practice:* All situation reports, communications, and decisions are saved and examined after the fact to identify potential areas for improvement.

CONCLUSIONS AND NEXT STEPS

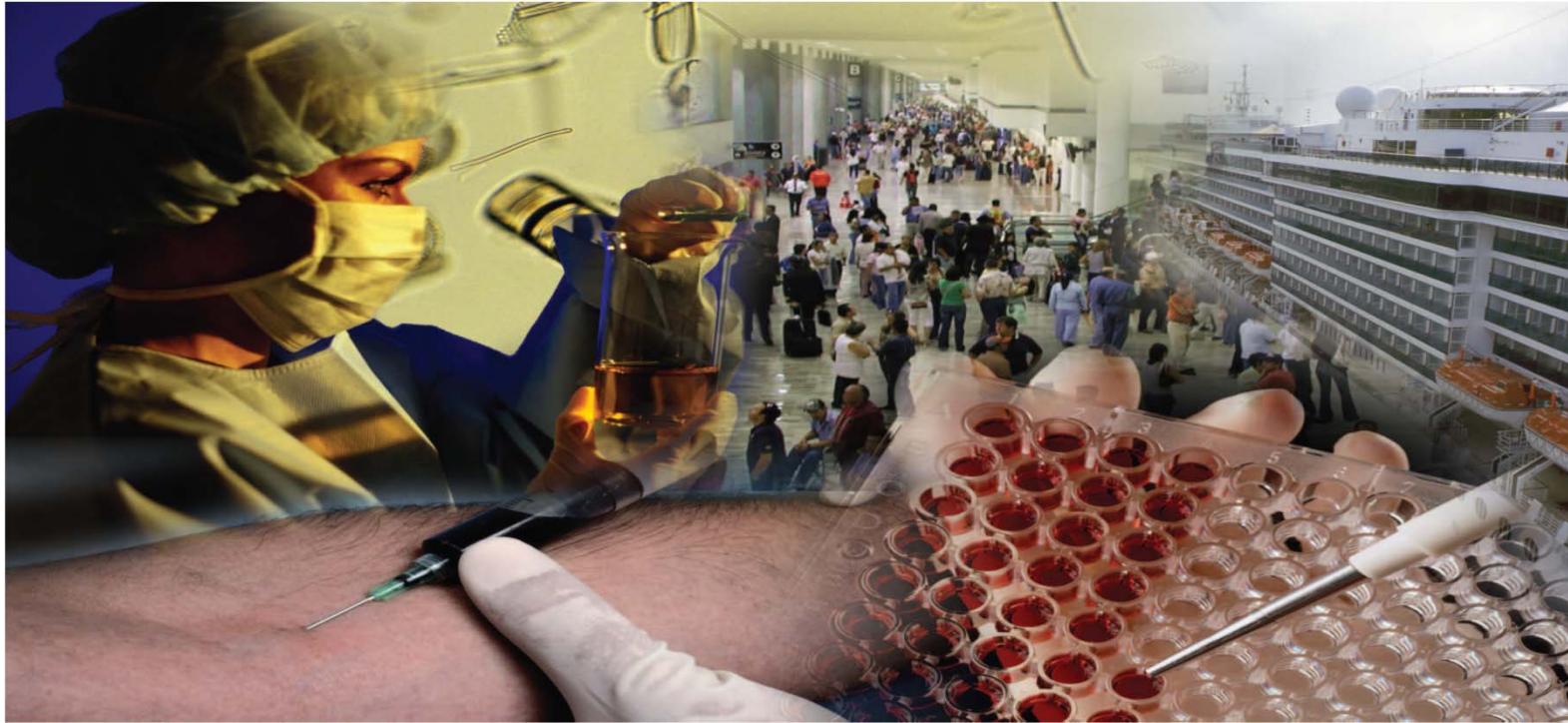
The Pandemic Accord TTX met its objectives and provided a collaborative forum in which public and private sector representatives could examine their plans for a pandemic and identify potential promising practices or issues. The exercise also provided an opportunity to build new relationships that might help to enhance pandemic and business continuity planning. It appears that most participating organizations have business continuity plans in place, and in many cases these plans were previously put to the test during Hurricane Sandy. Participants identified several critical planning considerations, including the need for continual, proactive communications to staff, clients, vendors, and partners; cultural sensitivity in messaging; the importance of flexibility and adaptability in continuity policies and procedures; the need for multiple, alternative work arrangements and the processes to support them; and the importance of remaining vigilant about supporting the staff during the recovery and reconstitution phases.

The observations and findings from this exercise will support the development of a full-scale exercise, which is scheduled to be conducted in 2014. Continued dialogue between the public and private sectors is recommended to further build on the knowledge gained from this exercise in order to enhance continuity planning for pandemic and all-hazards incidents.

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APPENDIX A: OPENING REMARKS AND PANDEMIC INFLUENZA PRIMER

The following slides were presented during the Pandemic Accord TTX. The presentation begins with an overview of why pandemic planning is important, and the resources available through FEMA and the federal government to assist state and local planners in continuity planning. This is followed by background information on influenza and pandemic, which was presented by Ms. Jessica Cole, Senior Incident Specific Planner with the NYC DOHMH.



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Continuity of Operations Pandemic Tabletop Exercise

November 18-21, 2013

Sponsored by: FEMA Region II, Federal Executive Board New York City, Federal Executive Board Northern New Jersey, DHHS Region II, Clearing House Association, Securities Industry and Financial Markets Association



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National Continuity Programs

Damon Penn, Assistant Administrator
National Continuity Programs

Eric Kretz, Director
Continuity of Operations Division

November 18-21, 2013



NCP Vision and Mission

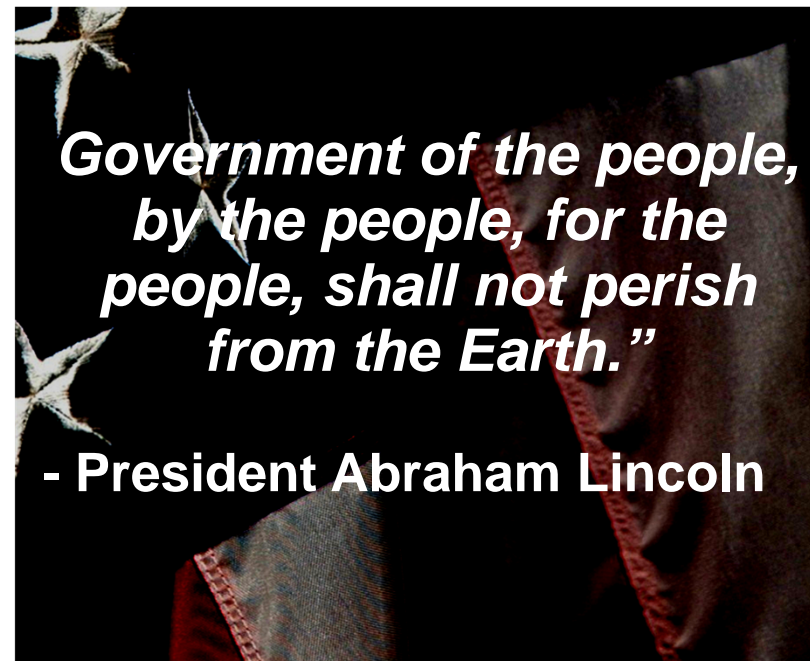
FEMA is the Federal Executive Branch Lead Agent to ensure continued functioning of our federal system of government.

- **Vision**

“The Nation’s center of excellence for government continuity planning, guidance, and operations”

- **Mission**

“To serve the public by protecting our Nation’s constitutional form of government”



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Why Continuity Is Important

- Empowers state, local, territorial and tribal governments in emergency planning, response, and recovery.
- Ensures the organization can continue to provide essential services to their stakeholders in any crisis:

A resilient organization includes the capability of individuals, communities, and systems to withstand and recover with minimal disruption from a natural or manmade incident and adapt to changing conditions to sustain acceptable levels of social and economic function.



Continuity and Pandemic Influenza Planning

- Pandemic influenza planning should consider the *Ten Elements of a Viable Continuity Capability*, as per Federal Continuity Directive 1 (FCD-1).
 - Essential Functions
 - Orders of Succession
 - Delegations of Authority
 - Continuity Facilities
 - Continuity Communications
 - Essential Records Management
 - Human Resources
 - Test, Training, and Exercises
 - Devolution of Control
 - Reconstitution

How we Prepare for a Pandemic Influenza

- Increase continuity readiness through training and exercises;
 - Conducted numerous pandemic influenza workshops across the country since the 2009 H1N1 outbreak; including 10 workshops in FEMA Region II
- Identify gaps and areas for improvement; and
- Involve continuity and key emergency planning personnel in a facilitated exchange of information, ideas, best practices, and solutions, as they pertain to continuity issues in a pandemic influenza event.



Continuity of Operations Website

Access Continuity Website:

www.fema.gov/continuity-operations

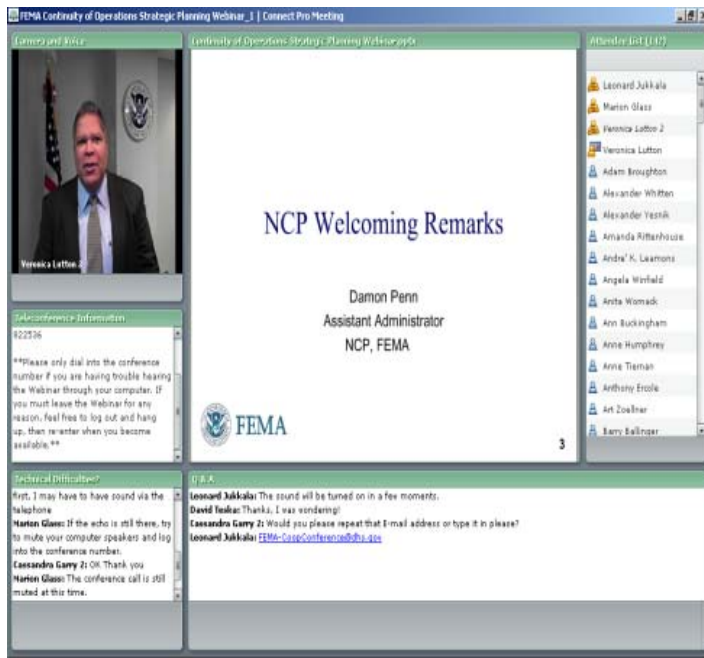


- Guidance and Directives
- Planning Templates
- Training
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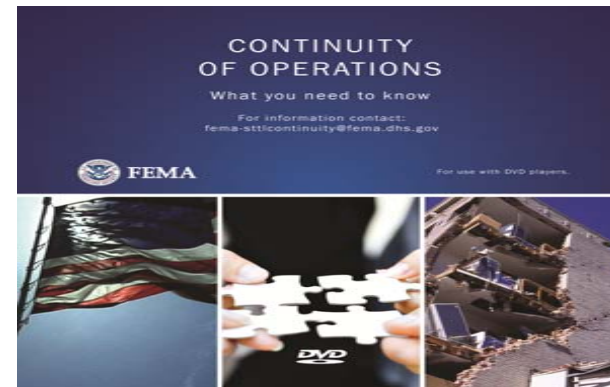
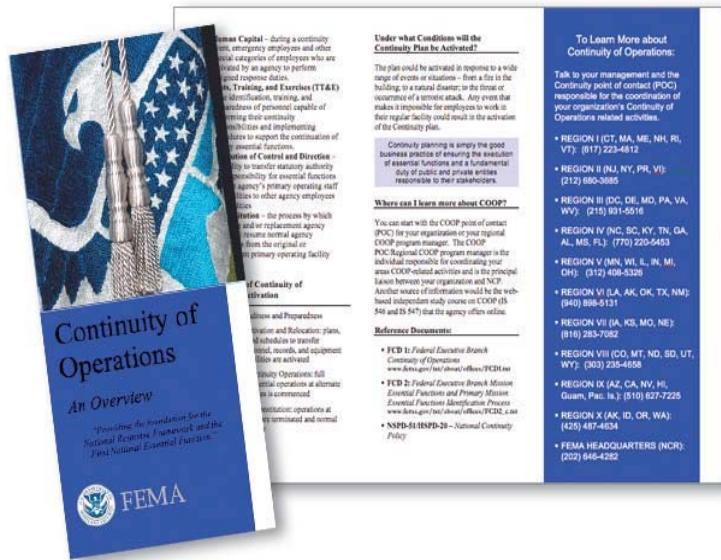


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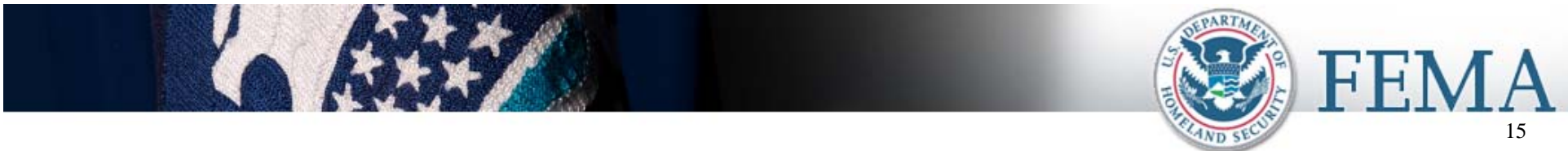
- Designed for continuity professionals throughout the Federal Government, and among our partners at the State, Territorial, Tribal, and Local governments.
- Dedicated to enhancing the excellence in the development and implementation of Continuity programs.
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<http://training.fema.gov/EMIWeb/COOP/>

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- Continuity Plan Templates
- Pandemic Influenza
- ERG Member Planning Guide
- Reconstitution Template
- Devolution Template
- Exercise Templates

www.fema.gov/planning-templates



Pandemic Influenza Brief



Pandemic Influenza in New York City: Understanding the impact on continuity

Jessica Cole, MA

Senior Incident Specific Planner

NYC Department of Health and Mental Hygiene

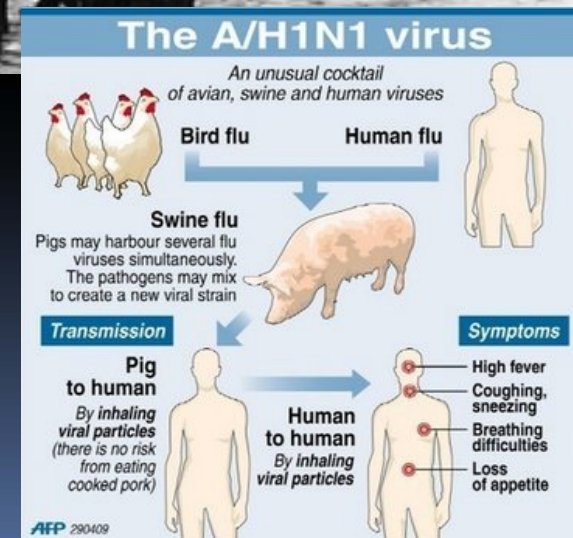
November 18-21, 2013



- What is pandemic influenza?
- What is the role of public health?
- What is the potential impact on continuity?
- Questions?

What is pandemic influenza?

- A pandemic is a global disease outbreak.
- An influenza pandemic occurs when a new influenza A virus emerges for which there is little or no immunity in the human population, begins to cause serious illness and then spreads easily person-to-person worldwide.



What is pandemic influenza?

“All that is called *flu*, is not necessarily *flu*”

Pandemic characteristic:

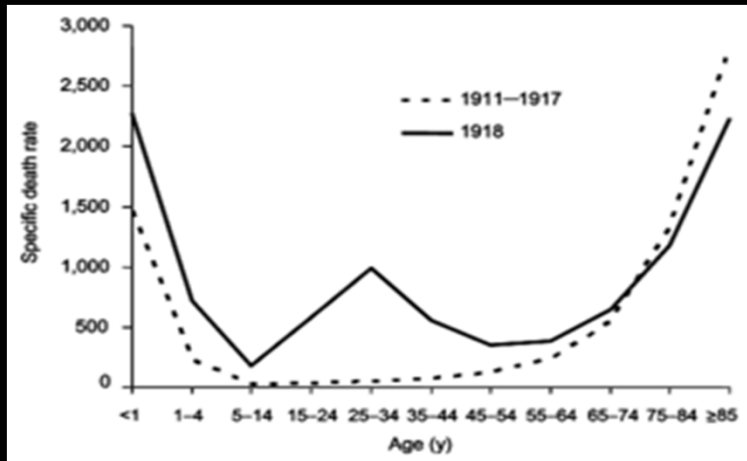
- Occurs in waves (approximately 3, 8-12 weeks each)
- Attack rate of up to 40% in school-aged children and 20% in working adults
- Fatality rate of up to 2% in infected



Symptoms:

- Fever (usually high)
- Headache
- Extreme tiredness
- Dry cough
- Sore throat
- Runny or stuffy nose
- Muscle aches
- Stomach symptoms, such as nausea, vomiting, and diarrhea, also can occur but are more common in children than adults
- Lasts up to 5 days, with some symptoms lasting up to 2 weeks
- Approx 1,100 New Yorkers die every year from seasonal flu and pneumonia

1918- The 'Spanish Flu'



- 1918-1920
 - First identified in Ft. Riley, KS
 - Within a month, 1,100 soldiers were ill
- Took approx. 6 months to travel worldwide – before commercial air flight!
- Approximately 40-70 million deaths worldwide
 - Mortality rates as high as >5% among some groups
- Unusual pattern of mortality
 - young, otherwise 'healthy' adults

1957 & 1968



- Known as the 'Asian' and 'Hong Kong' flus
- Far less deadly- approximately 1-2 million global deaths each
- More localized outbreaks
- 1957 noted for increased susceptibility and mortality in children

2009 H1N1 aka “Swine Flu”: Rapid response, long-term impacts

April 15:

CDC report on CA/TX H1N1 cases

April 23 (Thurs):

CDC call re: Human-Human trans. in CA

DOHMH sends Lab Alert requesting all flu A isolates be sent to PH Lab

Report of school cluster of “strep throat”

April 24 (Fri):

1st reports received of H1N1 in Mexico

Increasing # cases at school outbreak

DOHMH team sent to obtain swabs

April 25 (Sat):

Lab identifies non-subtypeable flu A

DOHMH Incident Command System activated

April 26 (Sun):

CDC confirms novel H1N1

NYC press conference with Mayor and Commissioner of Health



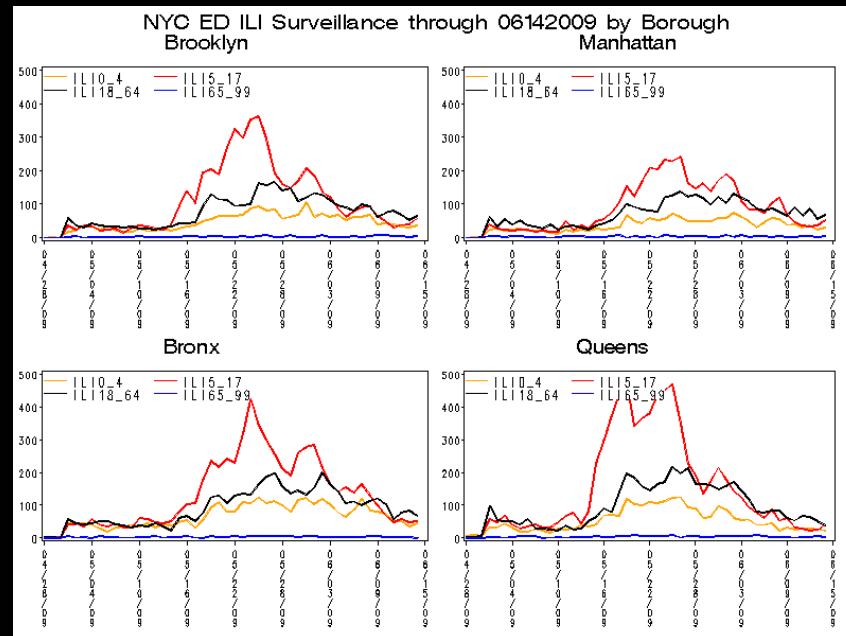
Many infections, particularly in children

- In NYC, an estimated 750,000 to 1 million people became ill with H1N1, with 65 identified deaths (April-Sept. 2009)
- Approximately half saw a health care provider
- Most recovered completely within 4 to 5 days
- Rapid spread, high rates of illness in children
- Low rates among elderly
- Outbreak period was approximately 2 months, with 2nd wave in the Fall



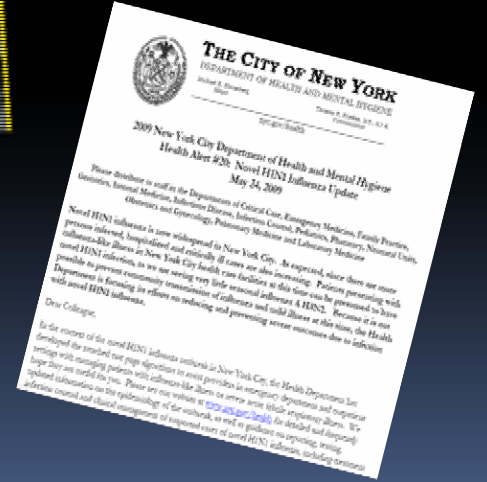
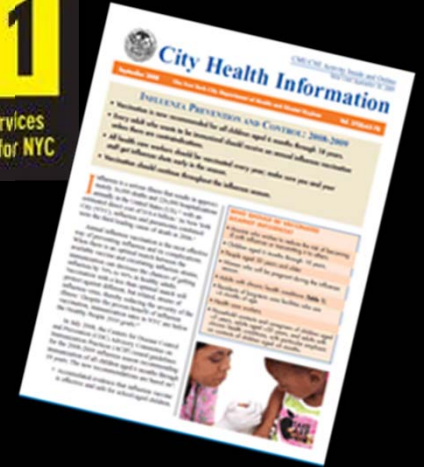
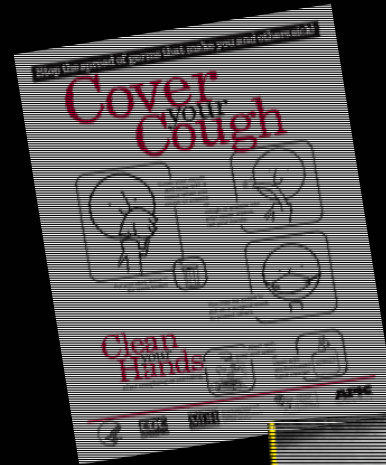
What is the role of public health?

- Surveillance & Epidemiology
 - What is it, who gets it, how bad will it be?
- Vaccine Management
 - School clinics, provider access
- Antiviral Distribution
 - Pharmacy distribution, access
- Healthcare Systems Support
 - Coordination & information
- Non-Pharmaceutical Interventions
 - Public health recommendations
- Mental Health
 - Support and guidance for providers
- Communication And Outreach
 - Public, community, and provider focused



Outreach

- Public messaging during event
 - In three languages (English, Spanish, Chinese) with capacity for many more
- Ready NY
 - In collaboration with OEM
 - 'Branded' preparedness campaign
 - Over 15,000 downloads; 300k printed
- Provider outreach
 - "HANs"
- 311
 - Over 54,000 calls (H1N1)
- Website
 - www.nyc.gov/flu



Preparing for a pandemic

Before:

- Know your staff
 - Are they vulnerable?
 - How can you assist them?
- What will your demand be?
 - Not all transactions will be impacted equally
 - Can you step-up/ cut back?
- Who do you work with?
 - Who are your partners/ contractors?
 - What is their plan?
- What is your 'breaking point'?
 - What are your critical processes?
 - At what point do you fail?

During:

- Emphasize preventive measures:
 - Stay home from work if they have fever and cough and not to return to work until 24 hours after symptoms resolve
 - Wash/sanitize hands often
 - Avoid touching mouth and nose
 - Encourage social distancing
 - Cover coughs and sneezes
- Be an information leader
- Encourage seasonal and pandemic influenza vaccinations
- Disasters are a time of increased vulnerability. Be present!

Questions?

I think it's best if I work from home today rather than risk infecting people with my paralyzing fear of swine flu.

someecards



Jessica Cole, MA
joneill@health.nyc.gov

APPENDIX B: PARTICIPANT QUESTIONS AND ANSWERS

The following questions were raised by participants during the Pandemic Accord TTX. Answers were provided by the representative from the NYC DOHMH.

Question: A questions was asked regarding contamination of the virus on cash and other surfaces, and the risk that poses to infection.

Answer: It depends on humidity, temperature, and other factors. The flu virus can survive as long as 24 hours on a stainless steel surface. It survives less on porous materials like paper, cloth. That said, the emphasis when answering these kinds of questions should be on educating the questioner regarding most common forms of transmission (i.e., coughing/ sneezing). Fomite transmission (particles on surfaces) is probably responsible for very little influenza transmission.

Question: A FEMA speaker mentioned potentially using the US Postal Service to distribute vaccines during a pandemic. However, you stated that would not be the case for NYC. Why?

Answer: That is something the federal government has been considering for distribution of some medications during a biological incident (not vaccines, since those need to be injected by a medical professional or pharmacist). The use of the postal service for antiviral medications which need to be taken within 48 hours of symptom onset is impractical for NYC. It is possible that the federal government might consider waving the need for a prescription and consider the plan for more rural or underserved areas, but New York City is working directly with the robust pharmacy groups in the city to ensure that they will have access to the drugs onsite and we [NYC DOHMH] will be aware of spot shortage issues. Additionally, a lot of our [NYC DOHMH] planning is concerning making sure those without prescription coverage or who are economically disadvantaged are able to get free or low-cost access since antivirals are expensive.

It is important to remember, as well, that antiviral drugs (of which there are two name-brand versions, Tamiflu being the most well-known) do not cure the flu; they disrupt the ability of the virus to reproduce, thus shorting the amount of time a person is ill by a day or two and possibly making symptoms less severe. Not everyone who has the flu ‘needs’ it; most people will get better on their own, without medical interventions, and with supportive or self-care (making sure they are hydrated especially) by family or friends.

Question: A question was asked about the use of quarantine measures during a pandemic.

Answer: Quarantine is not an effective measure once a pandemic has been identified and is not a measure that the NYC DOHMH would recommend during an influenza pandemic.

Question: Does NYC participate in Points of Dispensing (PODs) where companies can volunteer to assist in dispensing of antivirals or vaccine?

Answer: NYC DOHMH already has POD plans in place with supporting contracts; these plans are tested regularly. They rely on supplies provided through the Strategic National Stockpile. NYC DOHMH works closely with pharmacies for dispensing vaccine or antiviral medication.

Question: A question was asked about the identification of an H6N1 influenza strain in Taiwan?

Answer: Identification of a novel influenza is common. For example, there is one circulating through state fairs in the U.S. over the last few years. This one is not a human virus yet. Type A influenzas are all avian influenzas; pigs are good receptors as proxies for humans, but are not a necessary intermediary for making the leap to a human influenza virus.

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APPENDIX C: CONSOLIDATED PROMISING PRACTICES AND ISSUES BY MODULE

MODULE 1: PREPARING FOR A PANDEMIC AND THE INITIAL RESPONSE

<u>PROMISING PRACTICES</u>	<u>ISSUES</u>
<ul style="list-style-type: none"> • Consider implementing seasonal vaccination programs for employees. Preventive measures such as this can help mitigate the effects of influenza outbreak on a company's employees. • View planning as an iterative process and review and update plans regularly based on lessons learned from other types of events. Organizations noted that Hurricane Sandy provided an excellent opportunity to test continuity plans and identify potential issues or gaps. • When an initial trigger is reached, some firms have developed influenza kits for their staffs, which include items like hand sanitizer and pamphlets on minimizing one's exposure to the virus. • Rather than rely on Human Resources (HR) to track absenteeism, which can take too long, some firms have used surrogate measures, such as card swipe rates for entry into the building, computer logins compared to averages, and remote access capacity and use. • Make emergency planning in general, and continuity planning in particular, a fundamental aspect of normal business operations. This can help facilitate the implementation of, and adherence to, continuity policies and practices when an incident occurs. • Send Word Now® is a web-based emergency notification system that facilitates two-way communications between an organization and its employees. This is one of many services provided by this platform. It also provides the functionality to quickly convene senior leaders for a conference call. • Leverage internal communications to provide tips to employees on how to stay healthy. 	<ul style="list-style-type: none"> • Organizations may not know the minimum number of staff needed to perform a critical function. • Participants were unclear about how to keep non-essential personnel from reporting to work, even if they appear to be sick. • While participants acknowledged that different types of staff (full-time, part-time, contractors) have different Human Resources (HR) policies regarding sick time and liberal leave, many were not clear about how those policies differed. • Participants acknowledged that further work is needed to pre-identify alternate vendors and establish standby contracts for those vendors' services during a continuity event. Many financial services firms use the same small pool of vendors, so there will likely be competing demands for those vendors' services in a continuity situation.

<ul style="list-style-type: none"> • Use multiple tools to communicate with employees, clients, and vendors. Examples include text messages, voice messaging, email, social media, and poster campaigns around the office to promote awareness. • Review and evaluate essential staff on a semi-annual basis in order to account for staff turnover or changes to the critical functions of an organization. • When determining essential personnel, consult with senior leaders or business unit managers, who know best what is needed to execute the work. • Give essential employees Virtual Private Network (VPN) tokens and require them to take a laptop computer home with them every day. • When conducting third-party risk assessments, ask vendors for their pandemic plans. This will help determine how long it will take a vendor that is down to get their services back up and running. 	
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MODULE 2: DECISION-MAKING AND CONTINUITY ACTIVITIES

<u>PROMISING PRACTICES</u>	<u>ISSUES</u>
<ul style="list-style-type: none"> • Financial services firms should involve their regulatory staffs in the situational assessment process, as there may be changes in, or flexibility with, certain regulatory requirements that could significantly impact the organization. • One way to address the aforementioned issue is to benchmark absenteeism rates. For example, some companies have examined records for the past few years to determine average rates of absenteeism during different times of the year. This provides a baseline, which will then enables a company to better calculate the “true” rate of absenteeism that might be due to the pandemic (or another disaster). • Keeping track of previous jobs that employees have held within an organization can make it easier to identify and reassign staff to fill vacancies in a crisis. • In some cases, companies have mapped predominant areas where their workforce lives in order to identify locations (e.g., hotels) close to staff members’ homes where staff could congregate to conduct business. 	<ul style="list-style-type: none"> • A challenge for organizations is how to track the impact influenza is having on absenteeism, since the Health Insurance Portability and Accountability Act (HIPAA) does not permit asking employees about the cause of their sick leave. • Some participants noted that additional work was needed within their organizations to develop clear plans and guidance on flexible work arrangements, including specifying who has the authority to make those decisions, which staff is eligible, and how this strategy would be implemented. • Many participants noted that telecommuting, while an effective option in some instances, has never been tested on the scale to which it would be used in a pandemic. There was doubt about the ability

<ul style="list-style-type: none"> • A few participants noted that their companies have resource caches in place to support staff for extended periods of time at the office, if needed. For example, they have cots and Meals Ready to Eat (MREs). Other participants stated that they might reserve blocks of rooms at hotels so staff members that may be forced to work extended shifts have someplace to go to sleep, bathe, and get food. • An important lesson learned from Hurricane Sandy was that all staff wanted to have input into decisions, but this created delays that proved detrimental to an organization. Select a small group of people to make decisions for the organization—often this will be senior leadership across several divisions—and then push decisions down on staff rather than allow decisions to be made from the bottom up. • One participant noted that previous exercises have shown that it is far more effective to invest resources in developing defenses against hackers than it is to rely on data backup systems. In the financial services industry, information gets out-of-date so fast that backup safeguards are not that useful. • A company has vendors periodically conduct fake phishing attacks to test and identify system vulnerabilities that hackers might try to exploit. • One participant noted that previous exercises have shown that it is far more effective to invest resources in developing defenses against hackers than it is to rely on data backup systems. In the financial services industry, information gets out-of-date so fast that backup safeguards are not that useful. • A company has vendors periodically conduct fake phishing attacks to test and identify system vulnerabilities that hackers might try to exploit. • Proactively disseminate a communications schedule to staff so they know when they can expect to hear updated information from their companies. This can help reduce the number of requests continuity personnel have to field from staff. • Many participants noted that their continuity team works with the unions to inform them about continuity policies and plans. 	<p>of computer networks and telecommunications infrastructure to handle large numbers of people working remotely over an extended period of time.</p> <ul style="list-style-type: none"> • Several participants noted that their organizations lack redundancy in their emergency communications capability (i.e., they rely on one system). • Some organizations do not include union representatives on their continuity planning team and therefore have no insight on union policies during a pandemic. • Not all continuity plans include specific information and triggers on how certain functions may devolve during a crisis. Key staff may lack training on this process and do not know their roles and responsibilities before an incident occurs. • Not all devolution plans are tested through emergency preparedness exercises so that lessons learned can be incorporated into follow-on planning cycles.
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MODULE 3: RECOVERY AND RECONSTITUTION OF BUSINESS OPERATIONS**PROMISING PRACTICES**

- Reconstitution planning needs to occur right away. Do not wait until all is well to think about how an organization will return to “normal.” It can be difficult during to think about reconstitution, but it needs to be an item on the agenda.
- One strategy for transitioning back to full services is to adjust regional workloads depending on which areas were hardest hit and where staffing needs are greatest.
- Key staffing vacancies can be filled in the short-term by reassigning existing staff, thus allowing HR sufficient time to identify and select qualified candidates to fill the positions.
- Refer to information being made available by public authorities and consider what other companies (i.e., your competitors) are doing in terms of returning to “business as usual.”
- One organization provides training to all leaders and managers to help them spot people who may be having problems so they can be referred to HR for assistance.
- Involve union representatives during the recovery process, particularly when unionized employees may need assistance.
- All situation reports, communications, and decisions are saved and examined after the fact to identify potential areas for improvement.

ISSUES

- Many pandemic plans do not adequately address the perceptions of people regarding the risk of returning to the workplace. Be proactive in messaging about this during the response and recovery phases.

APPENDIX D: LIST OF PARTICIPATING ORGANIZATIONS

Alliance Bernstein	Federal Aviation Administration
Ameriprise Financial	Federal Bureau of Investigation
Annual Capital Management	Federal Home Loan Bank of Chicago
Aon	Federal Reserve
Axa-Equitable	Federal Reserve Bank
Bank of America	FEMA Region II
Barclays	FEMA Region V
Bingham McCutchen	Fidelity
BlackRock Investment Management Company	Fidessa
Blackstone Group	Financial Services- Information Sharing and Analysis Center
BMO Capital Markets Corp	Freddie Mac
BNP Paribas	Gartner Company
BNY Mellon	General Electric
British Petroleum (BP)	Goldman Sachs
Broadridge	GSA
Brown Brothers Hanniman	Guardian Life Insurance Company
Capital One	Health NYC.gov
Centers for Disease Control and Prevention	Immigration and Customs Enforcement
Charles Schwab & Company	Illinois Department of Public Health
Chicago Department of Public health	
Chicago First	ING Investment
Chicago Office of Emergency Management	International Security Exchange
CIBC	Internal Revenue Service
Citadel Group	JPMorgan Chase Bank
CITI	Liquidnet
City Holding	Macquaire
CLS- Services	Manulife
CME	Mastercard
CME Group	MB Financial Bank
Coast National Bank	MERCK
Commerzbank	Merridian Bank
Community Bank NA	Mesirow Financial
Cravath, Swaine & Moore LLP	Met Life
Credit-Suisse	Metropolitan College
Customs and Border Patrol	Mitsubishi
Depository Trust & Clearing Corporation	Mizuho Securities USA, Inc.
Direct Edge	MOODY's
Edward Jones	Morgan Stanley
Envestnet	National Stock Exchange
Equitable	Natixis

E-Trade	TD Ameritrade
Navy Federal Credit Union	Tellefsen
NBT Bancorporation	The Options Clearing Corporation
New York Life Insurance Company	The Spruance Group
New York Metropolitan Transportation Authority (MTA)	Thomson Reuters
Nomura	Tiles for America
Northern New Jersey Federal Executive Boards	Towne Bank
Northern Trust	Transportation Security Administration
NY State Department of Health	UBS
NYC Department of Health and Mental Hygiene	United Nations
NYC Federal Executive Boards	United States Department of Housing and Urban Development
NYC Office of Emergency Management	United States Postal Inspection Service
New York University (NYU)	United States Postal Service
Oak Tree	U.S. Attorney General's Office
Office of the Comptroller of the Currency	U.S. Courts
OHS	U.S. Department of Health and Human Services
Omgeo	U.S. Department of Homeland Security
Peace Corps	U.S. Department of Labor
PIMCO	U.S. Department of Justice
PPM America	U.S. Marshall Service
Prudential	Veteran Affairs
RBC Capital Markets	Waddell
SalesForce	Wellington
SG Corporate & Investment Banking	Wells Fargo
Shearman	West Suburban Bank
Securities Industry and Financial Markets Association (SIFMA)	Western New York Healthcare Association
Social Security Administration	William Blair & Company
Sumitomo Mitsui Banking Corporation	World Bank
SUNY College of Optometry	Zions Bancorporation
T Rowe Price	