

Pre-Exercise Scenario Brief

FBIIC/FSSCC Pandemic Flu Exercise

This update covers the **scenario timeline** of
August 27th through September 23rd

Note: This exercise is designed to create an opportunity for the participants to experience a series of possible pandemic influenza environments. These scenarios are not necessarily predictive, nor do they represent the official viewpoint of any organization, group, or entity. The exercise is intended to allow the participants and their organizations to explore possible situations and to consider their options for responses and mitigation approaches. The sponsors understand that no scenario can present all aspects of a possible situation, and that there is no way to know definitively the actual circumstances that might be present during a pandemic.

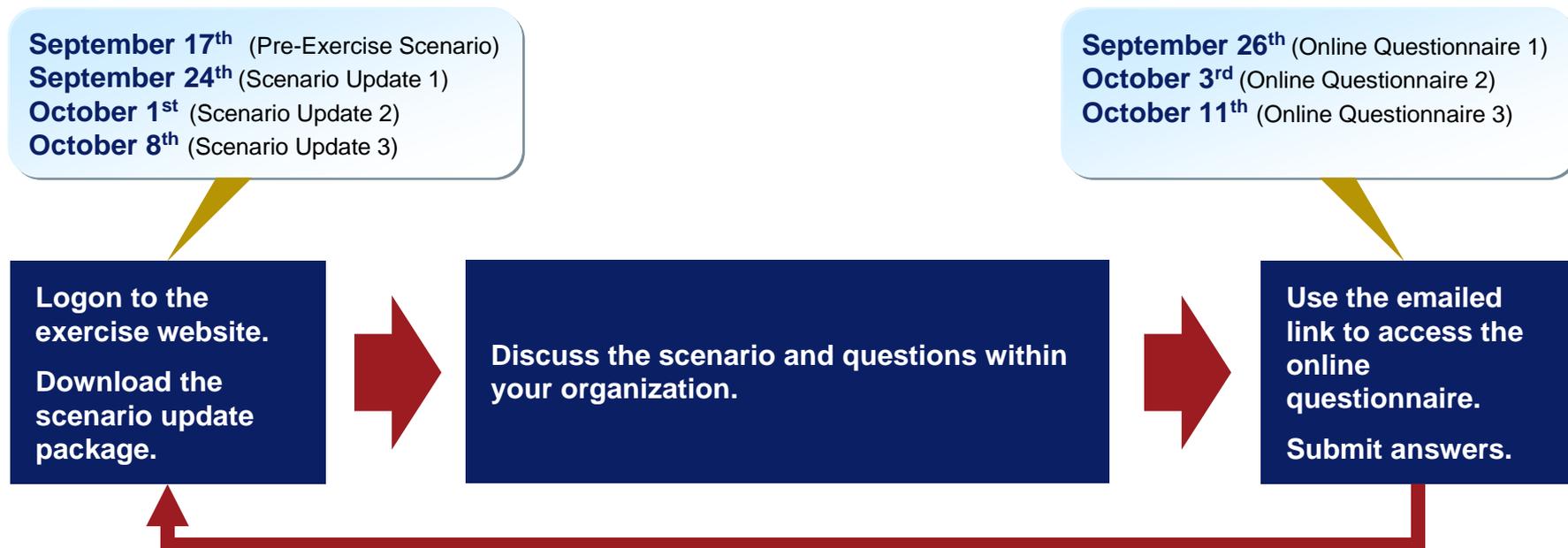
Scenario Materials and Market Status

▶ How to Participate in the Exercise	2-5
▶ Pre-Exercise Scenario.....	6-20
– Pandemic Update.....	7-11
– Healthcare Sector Update	12
– Economic and Financial Market Update.....	13-18
– School Closings.....	19
– Travel and Transportation.....	20
▶ Pre-Exercise Scenario Matrix.....	21-24
▶ Absenteeism Distribution for the Next Scenario Update.....	25-26

Exercise Overview

- ▶ **HOW TO PARTICPATE:** Financial organizations within the United States are voluntarily registered for the exercise on the website (www.fspanfluexercise.com). This website serves as the point of distribution for the exercise briefing materials and the scenario information.
- ▶ **WHO SHOULD BE INVOLVED:** This exercise and its accompanying scenario have been designed to be flexible and to allow each organization to engage as many functions as it deems appropriate. These functions may include business continuity, operations, human resources, and even senior leadership decision making.
- ▶ **SCENARIO UPDATE PACKAGE:** The scenario is presented in two formats for your convenience. The first – a detailed briefing – provides the status of the pandemic with details on absenteeism, and economic, market, and societal impacts. The second – a matrix – parallels the briefing but contains less detail for quick reference.
- ▶ **FINDING ADDITIONAL INFORMATION:** Background information regarding pandemic influenza, financial services sector preparedness issues, and Federal government roles and responsibilities related to a pandemic, as well as a glossary, are available in the Exercise Briefing Book located on the exercise website. Please note that the exercise will not simulate the provision of regulatory relief.

Exercise Construct/Mechanism



- ▶ On Monday at 9:00am (EDT) each week of the exercise, a scenario update and a set of questions will be released for participants to download via the exercise website (www.fspanfluexercise.com). The point of contact will receive an automatically generated email from fspanfluexercise@surveymonkey.com containing a link for the organization to complete the online questionnaire. Participants will have until 5:00pm (EDT) on Wednesday each week to complete the online questionnaire.
- ▶ The same process and timing will occur each week of the exercise, with the exception of the final week of the exercise. Participant involvement in the exercise will end by 5:00pm EDT on Thursday, October 11th (due to the Columbus Day holiday) with each participant's final response to the online questionnaire.

Using the Absenteeism Distribution Information

- ▶ As part of this exercise, we are including absenteeism distribution information for those organizations that wish to simulate at an individual level who will or will not be working during each phase of the pandemic. While the scenario will set the absenteeism in society for each phase, the absenteeism distribution information enables each financial organization to explore the implementation of their business continuity plans against a list of specific staff who are unable to work.
 - Being “absent” in the context of the exercise means that an individual is **unavailable to work**, even if he or she has telecommuting capabilities.
- ▶ Each week, a list of letters of the alphabet will be provided with the exercise materials. These letters represent the first letters of the last names of your employees. Employees whose last names begin with these letters should be considered as absent during the entire period of the next scenario update. If you are participating as a business unit, and not as an entire organization, apply the list of letters to your business unit alone to discover who will be absent.
- ▶ In the exercise, absent individuals are simulated to be absent from their normal roles. Individuals who are part of your exercise team may continue to help your organization participate in the exercise even if the absenteeism distribution information has indicated that they are absent from their normal roles.
- ▶ Please note that the letters indicating the absent individuals will be provided to you a week in advance of when they will be used. This will provide you with an adequate amount of time in which to review your Human Resources records, identify the absent individuals, and determine the distribution of the absent employees among your various departments/units/etc. as appropriate. Do not begin to simulate the absenteeism until the you have received the next scenario update.

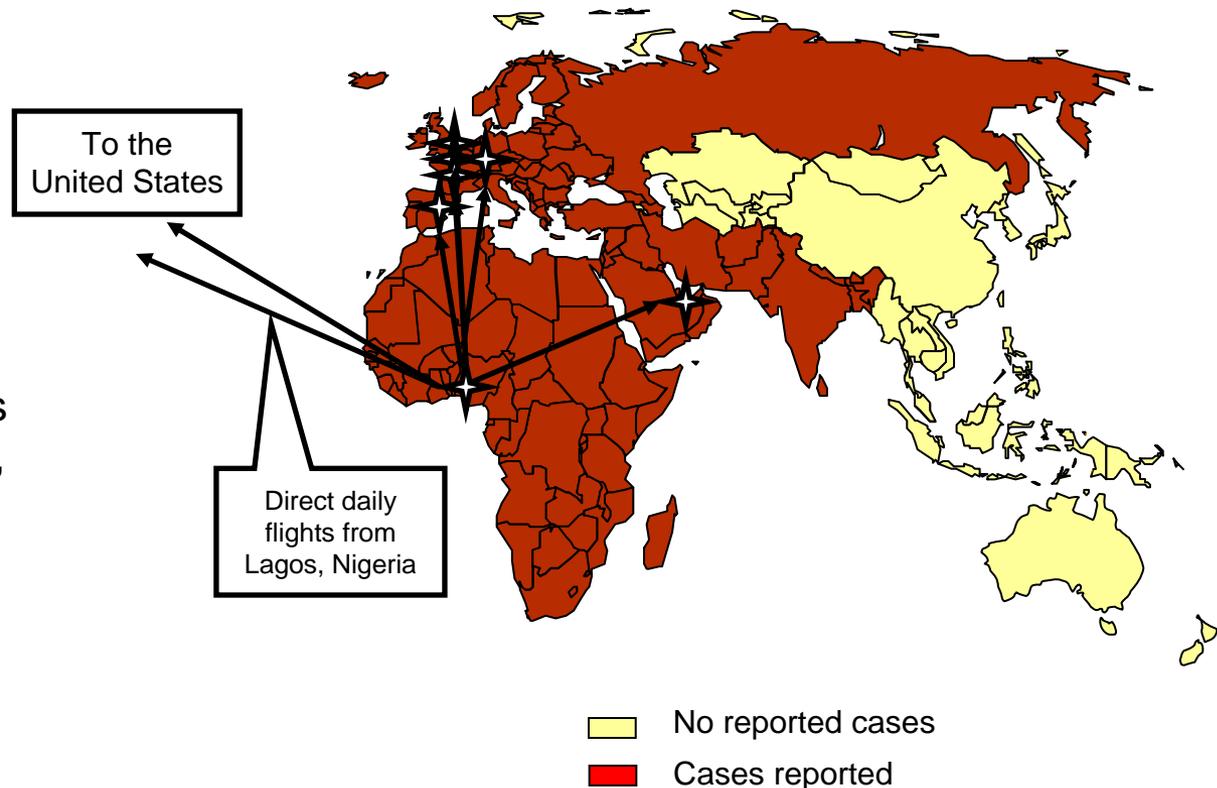
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Today's date is September 23rd. The information contained here represents all that has happened from August 27th through September 23rd.

Significant Human-to-Human H5N1 Transmission Confirmed

- ▶ On August 27th, the World Health Organization (WHO) issued a statement confirming that case clusters of human-to-human influenza H5N1 have been found in Africa, the Middle East, Europe, and South Asia
 - WHO reports that the current observed overseas Case Fatality Rate is ~4%
- ▶ The disease is believed to have originated in Nigeria and spread abroad rapidly due to daily direct air flights to Europe, the Middle East, and North America
- ▶ WHO and the Centers for Disease Control and Prevention (CDC) have deployed response teams to the known, impacted regions



Individual Cases of H5N1 Virus Reported in the United States

- ▶ The CDC releases the following statement: “Human-to-human cases of H5N1 have been identified in the United States; these cases are linked to travelers arriving from Lagos in New York City, Atlanta, Chicago, Houston and San Francisco.”
- ▶ While individual cases have been identified in the United States, the CDC cannot confirm any case clusters



WHO and U.S. Federal Response Stages

- ▶ The WHO sets the Pandemic alert to Phase 5
- ▶ Following CDC confirmation that the infections are influenza H5N1, the U.S. Pandemic Response Phase is raised to Stage 4

World Health Organization Phases		U.S. Federal Government Response Stages	
INTER-PANDEMIC PERIOD			
1	Low risk of human case	0	New domestic animal outbreak in at-risk country
2	Higher risks of human cases		
PANDEMIC ALERT PERIODS			
3	No, or very limited human-to human transmission	0	New domestic animal outbreak in at-risk
		1	Suspected human outbreak overseas
4	Increased human to human transmission	2	Confirmed human outbreak overseas
5	Significant human-to-human transmission		
PANDEMIC PERIOD			
6	Pandemic phase: Increased and sustained transmission in general population	3	Widespread human outbreaks in multiple locations overseas
		4	First human cases in North America
		5	Spread throughout United States
		6	Recovery and preparation for subsequent waves

U.S. Government Acting to Mitigate Pandemic Spread

- ▶ The Secretary of the U.S. Department of Health and Human Services (HHS) has declared a Public Health Emergency
- ▶ The Federal government also announces that they have begun distribution of stockpiled pre-pandemic vaccines and antivirals to state governments
 - Health experts estimate that a vaccine for the current pandemic influenza strain will not be available for 4-6 months from the onset of the pandemic
 - A pre-pandemic vaccine may provide early limited protection in the months before a vaccine for the human-to-human pandemic strain will become available
 - Antivirals are medications presumed to be at least partially effective against the H5N1 viral stain
- ▶ The CDC broadens its nationwide efforts to educate the public with the facts surrounding the H5N1 virus, pandemic outbreaks, and recommended mitigation strategies (public and private sectors, and personal/family)

Impact on the Healthcare Sector

- ▶ Local health departments and medical providers are reporting increased inquiries and requests for information
- ▶ So far, according to a CNN broadcast, the U.S. healthcare system has not seen a notable increase of patients due to respiratory illness or influenza, and no U.S. fatalities have been reported

Goods and Services

- ▶ There are minimal problems with the availability and distribution of goods and services in the United States
- ▶ In the first U.S. cities to be impacted by the pandemic, there are initial signs of increased purchases of non-perishables and “survival resources,” such as generators and personal protective equipment



Financial Markets

- ▶ S&P 500, FTSE, and NIKKEI all show signs of volatility as stocks decline across the globe
- ▶ Major European markets have been particularly hard hit and have fallen 5-15 percent since the start of the pandemic, with evidence that investors are shifting their funds out of Europe and into Asian and U.S. markets
- ▶ The value of the U.S. dollar on foreign exchange markets has risen 5 percent in response to “safe haven” demands



Market Impacts

- ▶ Market indicators:
 - Emerging market equity indices witness sharp sell-offs on heavy volumes
 - Prices of internationally traded commodities have dropped 10% as demand declines
 - Crude oil prices fall \$5 per barrel
 - The prices of U.S. government securities are bid up as investors worldwide seek to reduce their exposure to risk
 - The yield on the U.S. ten-year bond falls 25 basis points
 - Pricing emerging market securities and some European securities is becoming difficult due to liquidity constraints and high absenteeism rates at market data contributors overseas
- ▶ There is an increased interest in the purchase of individual health and life insurance and in increasing/changing coverage on existing policies
- ▶ Clearing and settlement of emerging market securities, and even some European securities, are delayed
 - Some foreign markets are extending their settlement cycles

Financial Service Operations

- ▶ Absenteeism in the U.S. financial services sector is within each organizations' normal operating range for the season
 - Employers are increasingly receiving feedback from their employees that, unless they know that their family is safe, they will not come to/perform work
 - Employees are demanding to know what their companies have been doing to make their workplace safe for them to come to work

- ▶ There is concern that existing insurance policies may be inadequate in areas of worker compensation and business interruption expenses



Financial Overview: Major Indicator Reactions (Value)

Change During Pre-Exercise	
FTSE	-5%
S&P 500	0
NIKKEI	-5%
Spot Commodity Prices (CRB Industrials)	-5%
Spot Crude Oil (change in \$/barrel, West Texas intermediate)	-\$5
USD (\$) (FRB trade weighted index)	5%
US Federal Funds Rate (basis points)	0
US 3-Month T-bill Rate (basis points)	0
US 10-Year Treasury Security (basis points)	-25

Financial Overview: Major Market Reactions (Volumes)

Average Daily Volume for Pre-Exercise	
NYSE and NASDAQ combined	8 billion shares (normal level)
CME	12 million contracts (normal level)
UK	1.5 billion shares (below normal level)
Hong Kong	4.3 billion shares (normal level)
Japan	2.1 billion shares (normal level)

Schools

- ▶ Nationwide, schools are experiencing no reported problems or issues, and remain open
- ▶ To prepare for the possibility of having to close, many school systems are making plans to use the internet and community television to maintain a basic level of teaching



Travel and Transportation

- ▶ The U.S. Department of State reiterates its warning against travel to affected areas
- ▶ The outbreak, along with the WHO and CDC deployment, has raised concerns among international communities, causing regional disruptions to travel
- ▶ International flight schedules are increasingly impacted, and have experienced crew shortages and a 20% drop in passengers
- ▶ An estimated 10% of flight crews are refusing to fly to the affected areas



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INFORMATION CATEGORIES	DETAILS ON WHAT IS OCCURRING DURING THIS SCENARIO UPDATE Scenario Timeline: August 27th through September 23rd
World Health Organization Pandemic Phases / U.S. Pandemic Stages	WHO - Phases 4-5 (Increased human-to-human transmission – Significant human-to-human transmission) U.S. – Stage 3 (Widespread human outbreaks in multiple locations overseas)
U.S. Absenteeism Rates	Within normal range for August-September timeframe
Human to Human Transmission of the Virus Appears in the United States <ul style="list-style-type: none"> • Status of Pandemic around the world • WHO statements • CDC and other U.S. Government statements 	<p>On August 27, the World Health Organization (WHO) issued a statement confirming that case clusters of human-to-human influenza H5N1 have been found in Africa, the Middle East, Europe, and South Asia. WHO reports that the current observed overseas Case Fatality Rate is ~4%.</p> <p>The disease is believed to have originated in Nigeria and spread abroad rapidly due to daily direct air flights to Europe, the Middle East, and North America. WHO and the Centers for Disease Control and Prevention (CDC) have deployed response teams to the known, impacted regions.</p> <p>The CDC releases the following statement: “Human-to-human cases of H5N1 have been identified in the United States; these cases are linked to travelers arriving from Lagos in New York City, Atlanta, Chicago, Houston and San Francisco.”</p> <p>While individual cases have been identified in the United States, the CDC cannot confirm any case clusters. The WHO sets the Pandemic alert to Phase 5. Following CDC confirmation that the infections are influenza H5N1, the U.S. Pandemic Response Phase is raised to Stage 4. The Secretary of the U.S. Department of Health and Human Services (HHS) has declared a Public Health Emergency.</p> <p>The Federal government also announces that they have begun distribution of stockpiled pre-pandemic vaccines and antivirals to state governments.</p> <ul style="list-style-type: none"> ▶ Health experts estimate that a vaccine for the current pandemic influenza strain will not be available for 4-6 months from the onset of the pandemic. ▶ A pre-pandemic vaccine may provide early limited protection in the months before a vaccine for the human-to-human pandemic strain will become available.

INFORMATION CATEGORIES	DETAILS ON WHAT IS OCCURRING DURING THIS SCENARIO UPDATE Scenario Timeline: August 27th through September 23rd
	<ul style="list-style-type: none"> ▶ Antivirals are medications presumed to be at least partially effective against the H5N1 viral strain. <p>The CDC broadens its nationwide efforts to educate the public with the facts surrounding the H5N1 virus, pandemic outbreaks, and recommended mitigation strategies (public and private sectors, and personal/family).</p>
U.S. Healthcare System Update	<p>Local health departments and medical providers are reporting increased inquiries and requests for information.</p> <p>So far, according to a CNN broadcast, the U.S. healthcare system has not seen a notable increase of patients due to respiratory illness or influenza, and no U.S. fatalities have been reported.</p>
Goods and Services	<p>There are minimal problems with the availability and distribution of goods and services in the United States. In the first U.S. cities to be impacted by the pandemic, there are initial signs of increased purchases of non-perishables and “survival resources,” such as generators and personal protective equipment.</p>
Financial Markets	<p>S&P 500, FTSE, and NIKKEI all show signs of volatility as stocks decline across the globe. Major European markets have been particularly hard hit and have fallen 5-15 percent since the start of the pandemic, with evidence that investors are shifting their funds out of Europe and into Asia and U.S. markets.</p> <p>The value of the U.S. dollar on foreign exchange markets has risen 5 percent in response to “safe haven” demands.</p>
	<p>Market indicators:</p> <ul style="list-style-type: none"> ▶ Emerging market equity indices witness sharp sell-offs on heavy volumes. ▶ Prices of internationally traded commodities have dropped 10% as demand declines. ▶ Crude oil prices fall \$5 per barrel. ▶ The prices of U.S. government securities are bid up as investors worldwide seek to reduce their exposure to risk. ▶ The yield on the U.S. ten-year bond falls 25 basis points. ▶ Pricing emerging market securities and some European securities is becoming difficult due to liquidity constraints and high absenteeism rates at market data contributors overseas.

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	<p>There is an increased interest in the purchase of individual health and life insurance and in increasing/changing coverage on existing policies.</p> <p>Clearing and settlement of emerging market securities, and even some European securities, are delayed. Some foreign markets are extending their settlement cycles.</p>
Financial Services Sector Operations	<p>Absenteeism in the U.S. financial services sector is within each organizations' normal operating range for the season.</p> <p>Employers are increasingly receiving feedback from their employees that, unless they know that their family is safe, they will not come to/perform work. Employees are demanding to know what their companies have been doing to make their workplace safe for them to come to work.</p> <p>There is concern that existing insurance policies may be inadequate in areas of worker compensation and business interruption expenses.</p>
Schools (e.g., day care, K-12, University)	<p>Nationwide, schools are experiencing no reported problems or issues, and remain open.</p> <p>To prepare for the possibility of having to close, many school systems are making plans to use the internet and community television to maintain a basic level of teaching.</p>
Travel and Transportation	<p>The U.S. Department of State reiterates its warning against travel to affected areas.</p> <p>The outbreak, along with the WHO and CDC deployment, has raised concerns among international communities, causing regional disruptions to travel.</p> <p>International flight schedules are increasingly impacted, and have experienced crew shortages and a 20% drop in passengers. An estimated 10% of flight crews are refusing to fly to the affected areas.</p>

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Absenteeism Distribution for Scenario Update 1

- ▶ The target absenteeism rate for Scenario Update 1 is 25%
- ▶ During the next scenario update, assume that all individuals from your organization with last names that begin with the following letters are absent and not available to work: **A, E, F, J, K, N, O, Q, T, U, V, X, Y, and Z**
 - Given a normal distribution of last names across the alphabet, using these letters will achieve a 25% absenteeism rate
- ▶ Reasons for absence may include but are not limited to:
 - Taking care of dependents
 - Fear of infection
 - No access to transportation
 - Illness
 - Death