



*University of Oklahoma Health Sciences Center*

**Pandemic Influenza  
Tabletop Exercise  
Situation Manual (SITMAN)**

*Sponsored by: Southwest Center for Public Health Preparedness*

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## INTRODUCTION

This exercise will focus on existing plans and authority at the University of Oklahoma Health Sciences Center during a Pandemic Influenza incident. This exercise focuses on a pandemic flu incident that poses a severe threat to the public's health and safety. The time frame for this exercise scenario is March–November 2009.

This exercise will emphasize the role of assets from the University of Oklahoma Health Sciences Center campus in response to the potential consequences of a pandemic incident. **Processes and decision making are more important than minute details.**

A tabletop exercise utilizes a scenario to review and test decision making processes and existing plans. For this exercise participants will be comprised of senior level leadership. Participants will review the scenario, answer questions and log their likely actions in response to injects. During this exercise participants will need to rely on their own resources to manage the incident. Afterwards, participants will discuss their experience, what they've learned, and suggest improvements to their emergency planning and preparedness.

## Overall Goals and Objectives

The overall goal of the exercise is to:

1. Assess the validity of the draft University of Oklahoma Health Sciences Center Pandemic Influenza Response Plan.
  - a. Work-at-home or administrative leave
  - b. Tele-working
  - c. Distance learning (P/VOD course casting)
  - d. Social distancing
  - e. Suspension of classes or closing University
  - f. Re-opening the University
  - g. Academic crediting
2. Assess how the existing emergency response structure at your campus will address the challenges posed by a pandemic influenza event.
  - a. Travel enforcement and quarantine
  - b. Essential services and personnel
  - c. Crisis communications

3. Assess how your campus will coordinate its response with your campus health service, area hospitals, and state and local public health agencies.
  - a. Point of Dispensing (POD), Mass medication or vaccination dispensing
  - b. Congregate care (support for ill students remaining on campus)
  - c. Ethical and administrative issues for distribution of limited vaccination supplies
4. Identify gaps and issues to be addressed in your campus response plan.
5. Identify the next steps in the planning process.
  - a. Business Continuity
  - b. Continuation of research
  - c. Financial implications to University
  - d. Identify training, communication and resource needs

## **Roles and Responsibilities**

This is a facilitated tabletop exercise with the following roles and responsibilities:

Participants respond to the situation presented based upon their knowledge, current plans and procedures.

Group Facilitator moderates discussion.

## **Exercise Modules**

This will be a multimedia facilitated Tabletop Exercise. The exercise scenario is divided into four distinct response situations, plus a debriefing. Participants will respond to the following scenario modules.

### **Module 1:**

**Sustained human-to-human transmission**

### **Module 2:**

**Outbreak in the U.S.**

### **Module 3:**

**Suspension of Classes**

**Module 4:****Business Continuity and Recovery****Exercise Debriefing****Exercise Conduct**

Each module will be conducted as follows:

- The Group Facilitator will introduce each module.
- In each module, scenario information and events will be provided in the order in which they occur.
- All information will be provided to all participants.
- At the end of each module, the scenario will be suspended for questions and discussion.

**Exercise Assumptions and Instructions**

A tabletop exercise is intended to be a safe environment that encourages open and wide-ranging discussion. Differing viewpoints, even professional disagreements, are expected.

- The scenario is plausible, and events occur as they are presented.
- Respond based on your knowledge of current plans and capabilities. You may not use non-existent assets.
- There is no pre-determined solution to this exercise. Make your best decision based on the circumstances presented.
- Decisions are not precedent setting and do not necessarily reflect OUHSC's position on a given issue. This exercise is an opportunity to discuss and present multiple options and possible solutions.
- Assume cooperation and support from other responders and agencies. Assume that state and federal responders are initiating their plans, procedures, and protocols while you are concentrating on the University's response. Draw upon your own experience

and knowledge of how local, state, and federal agencies work together in any emergency response situation.

- The presented events, information, written material and resources serve as the basis for discussion.
- The response process and decision-making are more important than details.

## **Additional Resources**

During the exercise, you may need some specific information to assist you in making a decision. The appendices to this Situation Manual contain additional information you may use in your discussion. As you participate, draw on your experience and knowledge of how Federal, State, and local agencies work together in an emergency response situation.

## **EXERCISE SCHEDULE**

0830	Registration
0900	Welcome and Introduction
0905	Narrative
0930	Module 1 Sustained Human-to-Human Transmission
1015	Module 2 Outbreak in the U.S.
1130	Module 3 Suspension of Classes
1215	Module 4 Business Continuity and Recovery
1245	Exercise Debriefing (Working Lunch)
1300	Review and Conclusion
1315	Closing Comments

## MODULE I: Sustained Human-to-Human transmission

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### March 5 to Oct 11, 2009

#### March

- During the spring of 2009, human cases of novel H1N1 influenza first reported from Mexico.
- March 5, 2009, the Mexican Ministry of Health reported that public health officials are investigating a hospital-associated outbreak of H1N1 influenza. The outbreak appears to be the result of person-to-person transmission.
- The U.S. government announced that a H1N1 vaccine is being rushed into development but it might be twelve months before it can be distributed.
- Novel H1N1 causes illness in Mexico and U.S.
- An unknown number of students, faculty, and staff from OUHSC and OU Norman have been travelling to and from Mexico

#### April

- 1<sup>st</sup> case diagnosed with laboratory confirmation in U.S.
- U.S. government declares novel H1N1 national public health emergency
- 1<sup>st</sup> death outside of Mexico caused by novel H1N1
- The Centers for Disease Control and Prevention (CDC) issues a Travel Health Warning for those traveling to and from Mexico, and a Travel Health Precaution for those traveling to Mexico and South America.

#### June 11

- The World Health Organization declares influenza pandemic at level 6.

#### June 17

- CDC removes travel advisory notice regarding travel to Mexico because of cases being identified worldwide

#### June 19

- All 50 states and Puerto Rico have diagnosed at least one case of novel H1N1.

- July 27**
- The Daily Oklahoman is asking all Oklahoma colleges and universities to provide a copy of their Pandemic Influenza Emergency Plan to reprint in a Special Pandemic Planning Issue on August 14th.
- August**
- Cumulative number of novel H1N1 cases in U.S. is estimated to exceed 1 million (700+ reported cases to OSDH)
  - 9,079 H1N1-related hospitalizations reported in U.S. (39 hospitalizations reported to OSDH)
  - 593 H1N1-related deaths reported in U.S. (2 identified deaths in OK)
  - Risk factors associated with H1N1 infection include:  
Pregnancy, obesity, asthma, heart disease, diabetes, age < 65 years
- Aug. 6**
- CDC detects resistance to Oseltamivir among cases previously administered doses appropriate for prophylaxis. (All novel H1N1 strains are susceptible to Zanamivir and all are resistant to Amantadine and Rimantadine)
- Aug. 20**
- CDC disseminates H1N1 influenza information resources for universities and colleges
- Aug. 31**
- Number of ILI-related outpatient visits in Southeastern region of U.S. equal to number of ILI-related visits during previous peak influenza seasons
  - Hospitalization rates among persons aged 5-17 years and 18-49 years exceeds rates during typical influenza seasons. (Rates among other age groups, particularly 65+ years have rates lower than baseline)
- Sep. 14**
- OSU reports at least 95 cases of H1N1 on campus and OU Norman reports dozens of confirmed H1N1 cases on campus
  - USA Today reports 30,000 – 90,000 H1N1 deaths are expected during the 2009-10 influenza season (assuming a 0.1% case-fatality rate)
  - 20 students depart for China for some field research. An unknown number of faculty, staff, and students are traveling to various areas of the world for research, meetings, conferences, etc.

**Oct. 1**

- CDC announces 1 dose of H1N1 vaccine is sufficient to elicit a protective immune response. Vaccine is not yet available.
- OSDH and OUHSC begin vaccinating against seasonal flu

## Discussion

1. At this stage of the scenario, what specific level of threat exists?
2. Are the pandemic influenza planning and response measures taken to date by the campus adequate and fully understood by all mission critical personnel?
3. Review discussions regarding travelers to and from the affected areas? Points to consider include:
  - Did OUHSC legal authority prove adequate to restrict travel?
  - Should health concerns drive decisions related to travel, or is it appropriate for other factors to predominate?
  - How is student, faculty, and staff travel monitored? How is this information used to enhance campus preparedness?
  - How are affected areas defined?
  - What are threshold criteria necessary to change existing travel policies for faculty, staff, and students? How will a restrictive travel policy affect foreign students coming from H1N1-affected areas to begin studies in Spring 2010? How will OUHSC address students, faculty, and staff returning from affected areas abroad?
  - How will the OUHSC travel policies impact invitation of guests and visitors?
  - Would these travel policies need to be coordinated with OCCHD and surrounding county health departments and the CDC?
4. Is it necessary to conduct surveillance for novel H1N1 on campus? Who is responsible to provide surveillance for pandemic influenza on the campus? Points to consider include:
  - How will the number of cases on campus affect decision making?
  - How will the number of cases in Oklahoma County (and surrounding counties) affect decision making?
5. Will the University publish the pandemic emergency management plan? What are the limitations, potential liabilities or legal exposure for doing so?

## MODULE 2: Outbreak in the U.S.

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### October 12 – October 24, 2009

- Oct. 12**
- Anecdotal reports from faculty and staff at OUHSC indicate influenza-related absenteeism in classes is approximately double the typical influenza season and earlier than normal (typically peaks in Jan-Feb)
  - OSDH reports one pregnant student (OUHSC, College of Nursing) is in ICU with H1N1-related complications
    - There could be more students hospitalized with H1N1 that have not yet come to the attention of public health officials or university administrators
  - OSDH reports 5 H1N1-related deaths in OK in the last 2 weeks. One of which was an 8 month old child of staff at OUHSC
- Oct. 15**
- OUHSC and Norman campuses are reporting increased employee absenteeism and some employees are requesting approval to work-at-home.
- Oct. 16**
- The first batch of H1N1 vaccine is available for distribution (approximately 25% of the total supply ordered)
- Oct. 19**
- Spain reports H1N1 case-fatality rate in ICUs = 35%
  - The following countries are reporting an increased overall H1N1 case-fatality rate of 1%: Azerbaijan, El Salvador, Laos, and Romania. (This is approximately 10 times the case-fatality rate previously estimated in the U.S.)
    - They also report the secondary attack rate is 3 times as great as reported in U.S.
- Oct. 21**
- A handful of students' parents, spouses, etc, have called insisting classes be cancelled and the student allowed to return home
  - Officials on public education boards in Tulsa are encouraging schools to cancel all extra-curricular activities such as athletic events and music rehearsals
- Oct. 23**
- Essentially every Emergency Department in Oklahoma is experiencing severe crowding and is short-staffed. Patients are experiencing wait times up to 12 hours

- Approximately 80% of all H1N1 strains in China are reported to have resistance to Oseltamivir
- The 20 students who left for China in September are scheduled to come home soon

## Discussion

**The following questions should be considered in the context of the current specific level of threat as identified in the emergency plan.**

1. What are the most urgent and critical impacts that need to be addressed?
2. Do you activate your incident management system?
3. What needs to be communicated to the students (and parents) who have decided to self-shield (self-generated action or actions to prevent contact or interaction with others) by leaving the campus?
4. What needs to be communicated to the campus community and the general public? Who will craft appropriate press release information affording full disclosure of information? Does appropriate delegated authority exist for release of all necessary information to the public?
5. What are the policy issues for faculty and staff who want to work-at-home citing fears of being exposed to an infectious person during their incubation period?
6. What issues or coordinating activities does the Campus Health Service need to be addressing with the state and county health departments?
7. How do you interpret the finding that the case-fatality rate appears to be increasing in less industrialized countries? Is this sufficient evidence that the virus is mutating or is it confounded by lack of healthcare-related resources in those countries?
8. Will public gatherings/events be canceled, such as student socials? Who makes this decision? What are the triggers?
9. Coach Stoops and President Boren solicit your opinion about cancelling OU football games. What is your advice?
10. What are the decision points for suspending classes or closing the University? Are you willing to set the precedent for suspending classes or are you going to wait and see what other institutions do?
  - What are the triggers? Number of deaths and/or cases, case-fatality rate?
  - Are the triggers for cancelling classes different from those to ask faculty to work from home?

11. When should stores of anti-viral medications be dispensed? Is it time to setup a Point of Dispensing site for anti-viral medications even though the vaccine is not yet available? Who would be involved in making this decision? Who will receive the medication?
12. The Oklahoma State Regents have called the Office of the Provost requesting that facilities and vaccine supplies at the Health Sciences Center be made available, and staff provided, to include physician oversight, to vaccinate faculty, students and staff from Rose State, Oklahoma City Community College, University of Central Oklahoma, Bethany Nazarene, and Oklahoma City University. A decision and announcement is requested within 24 hours. Assurance is provided that the OSRHE will attempt to assist in securing more supplies if necessary, and will address funding issues. (Note: At this point, the decision to open a POD for OUHSC has not been made.)
13. Should there be any travel restrictions to China?
  - What kind of surveillance, quarantine, or isolation measures should be undertaken for the students returning home from China?
14. Does the Incident Command Team have the authority to acquire more resources (medical supplies, security, personnel, etc)?
15. What authorities are in place or need to be developed to handle the above issues?
16. Do you have a liaison officer with the Oklahoma State Department of Health (OSDH)?

## MODULE 3: Suspension of Classes

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### October 25 to November 7, 2009

- Oct. 25**
- CDC reports receiving numerous strains of H1N1 from countries across the world that have a key mutation allowing the virus to infect deeper into the lung. This evidence supports a true increase in mortality associated with H1N1

- Oct. 26**
- Assuming classes are still being held, the administrative offices are deluged with calls demanding that the University suspend classes
  - CDC reports the following changes in severity of H1N1 infection in U.S.:

Severity	Summer '09	Fall '09
Asymptomatic	15%	5%
Mild	35%	20%
Typical	40%	45%
Severe	10%	30%

- Oct. 27**
- Governor Henry orders the public school system (K-6) be closed and recommends that all other grades also suspend classes
  - OSU suspends classes
  - OUHSC General Administration indicates that as many as 45% of all employees are refusing to return to work, either because of illness, self-shielding, or caring for young children/ill family members
  - OU Medical Center, the VA, and our campus health service are report being besieged with calls and people worried about their symptoms
- Nov. 2**
- Essential personnel are ordered to report for work; over several days, at any given time, only 35% of the total required workforce reports
  - Researchers are demanding access to their research facilities, complaining that critical experiments, health of research animal, activities, etc, are in jeopardy and express concern that funding could be threatened if not allowed to continue their efforts.

**Nov. 6**

- The next batch of H1N1 vaccine arrives (an additional 35% of total order) and is available to be distributed through a point of dispensing (POD), mass medication dispensing/vaccination site. (If the decision is made to support other colleges and universities in the area, will the vaccine be shared?)
- Healthcare workers and essential personnel are prioritized to be vaccinated first. OCCHD has asked the campus administration to designate additional personnel who may receive the vaccination before it is dispensed through a POD.
- The Incident Response Team, in concert with the administration submits a list of personnel to OCCHD to receive the vaccination.
- Shipments of food and other essentials are delayed because the national transportation network has been decimated by absenteeism
- 8 deaths have been reported on university campuses in OK and hundreds of students lie ill within their dormitory rooms and residences
- CDC estimates the H1N1 vaccine has approximately 70% efficacy in persons with normal immune systems

## Discussion

1. If you **didn't** cancel classes or close the University in Module 2, do you do so now?
  - To what extent will you use capabilities for video-streaming lectures so that students don't miss out on course work? What are the key factors in making decisions related to this area?
  - How will you address missed work for courses requiring in-class participation (*i.e.*, courses that aren't amenable to watching video-streamed lectures?)
2. Do you setup a Point of Dispensing (POD) for your Mass Immunization/Prophylaxis Site (MIPS) for vaccination given you only have 35% of the total order? Do you still dispense anti-viral medications?
  - If yes, who do you ask to be involved?
  - Will you involve students (medical, nursing, and public health) who have volunteered to be involved?
3. What are the issues regarding essential personnel who refuse to show up for work?
4. What business continuity planning clause might affect vendors who don't deliver?
5. What mechanisms are in place to deal with contract operations that fail to meet conditions and requirements, especially those identified as critical to continued operations of the HSC?
6. Hospital and campus clinic capacity has been rapidly exceeded, how is their status being monitored? What approaches to managing surge capacity will be used? Are all necessary authorities in place to deal with the full range of surge capacity issues?
7. Are you concerned about the lack of food and medication supplies being delivered to the campus? If yes, what plans do you have to secure food and/or medical supplies?
8. Do you require those employees critical to maintaining the operation of the campus to wear N-95 masks while at work?
  - If there are shortages of N-95 masks, do you still require them to show-up for work?
9. What mechanisms are in place to address mental health issues for students, faculty, and staff? (Potential issues include death/hospitalization of loved-ones, stress related to postponing graduation, missed work, etc.)

## MODULE 4: Business Continuity and Recovery

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### November 8 to November 20, 2009

- Nov. 8**
- The Daily Oklahoman and the Tulsa World reports that nearly 2000 people have died in Oklahoma and 180,000 nationwide (double the earlier predictions)
  - Fewer than half of the essential personnel employees are showing up for work and the supply is critically low. Human Resources is trying to identify those employees who may have recovered from the flu in order to re-supply the numbers of essential personnel
  - Notification is made for essential point of dispensing (POD) personnel to report to the campus on Tuesday. Many are hard to locate and the POD Administrator worries that there will be enough personnel to staff it.
- Nov. 9**
- The POD is activated. There are not enough personnel to run it at the designated rate. Hundreds of people are waiting to get into the facility. POD personnel are shaken by some security breaches. People are getting unruly. How are family members of students, faculty, and staff identified and will they receive the vaccine/medications? Will family members of OUHSC personnel be treated differently than students, faculty and staff from other educational institutions?
  - Parents and students are demanding refunds of tuition until the University re-opens
  - The area hospitals are refusing to accept any more patients since the hospital and the Alternate Care Facility is overwhelmed. They have asked the state for permission to utilize more rooms to expand their capacity.
- Nov. 16**
- National media are reporting that the first wave is subsiding.
  - Hospitals throughout the state are reporting a rapid decline in the number of new cases.
- Nov. 20**
- The President appears on national television to announce that CDC and WHO have concluded that the First Wave is nearly over, but warns that a Second Wave could appear in two to three months.

## **Discussion**

1. What alternate care facilities have been identified? How will they be staffed?
2. What are the ethical and administrative guidelines for selecting those for vaccination?
3. How do Human Resources identify those who have recovered from the flu?
4. Will students, faculty, staff be required to have medical clearance to return to campus? If so, who monitors?
5. What policy covers those students and employees who refuse to return to campus until they feel it is safe to return?
6. How can your campus identify more Point of Dispensing (POD) personnel and also maintain security at the POD?
7. What public information/risk communication is being conveyed?
8. What are the issues regarding tuition reimbursements, credits, etc?
9. What are the triggers to reopen classes?

## **Debriefing Questions**

1. Identify the three most important activities accomplished during this tabletop exercise.
2. What are the three most important gaps identified during this exercise?
3. What are the three most important lessons learned from participating in this exercise?
4. Identify three things that could help improve this exercise.