Pandemic Influenza
Tabletop Exercise
For Schools
Table of Contents

Introduction
Exercise Structure
Exercise Guidelines
Module One
Module Two
Module Three
Wrap-up
Closing

Appendices
Appendix A - Stages of a Pandemic
Appendix B - The Next Influenza Pandemic an Overview
INTRODUCTION

PURPOSE
Today’s Pandemic Influenza Tabletop Exercise offers participants an opportunity to gain an understanding of problems they could possibly face in response to an epidemiological incident.

SCOPE
This Tabletop Exercise for __________________________ will focus on an epidemiological incident effecting the United States. The exercise is intended to focus on the overall response and decision-making process and is not a test of detailed response procedures. The exercise will emphasize communication, emergency response coordination, resource integration, problem identification, and resolution.

OBJECTIVES
1. Local Decision-Making Process. Exercise the local and regional decision-making process and identify areas needing refinements. Identify key actions to be taken and by whom.
2. Affected Area Access / Quarantine. Review Local, State and Federal operations for area access control and possible quarantine issues resulting from an epidemiological incident.
3. City / County / State / Federal Agencies and Private / Public Sector Interface. Examine the local interface among City / County / State / Federal agencies in the conduct of crisis and consequence management activities. Examine Local, State, and Federal interactions with the private and public sector during the threat or actual occurrence of an epidemiological incident.
4. Public Information and Media Control. Discuss options to provide timely information to the population and assist in minimizing chaos. Review plans to preclude dissemination of conflicting data. Assess the adequacy of local plans for interface with and use of media resources. Discuss how media will be coordinated when State and Federal agencies are involved.
5. Medical Monitoring / Surveillance. Review the local medical, emergency medical transport, and public health department capabilities to recognize, identify, monitor and respond to an incident involving a pandemic influenza.
EXERCISE STRUCTURE

ROLES
PARTICIPANTS respond to the situations as presented based on experience and knowledge as well as the current plans and procedures utilized within their agencies.

OBSERVERS may support the participants in the group as they develop responses to the situation. However, they are primarily invited to observe the exercise and preparedness process.

FACILITATORS provide situation updates and moderate group discussions. They also provide additional information or answer questions, as required.

Although, participants as well as observers are encouraged to move among groups to ensure through provoking discussion, participants will be grouped into functional areas for the purposes of this exercise.

EXERCISE MATERIALS
Each exercise participant receives a Situation Manual (this document) that provides a written storyline or scenario to accompany presented situation updates. Following each corresponding module in the storyline are a series of questions provided to highlight pertinent issues for consideration. These questions are supplied as a catalyst for the group discussion. Participants are not required to answer every question nor are they limited to those topics.

Participates are encouraged to use their Situation Manual (SITMAN) as a reference throughout the exercise. To this end, resource materials are provided in the appendices of the SITMAN.
EXERCISE GUIDELINES

• This is not a test. Varying viewpoints, even disagreements, are expected. This is intended to be an open, low stress environment.
• The exercise setting is the ideal opportunity to consider different approaches and suggest improvements to current resources, plans and training.
• Responses should be based on current capabilities (i.e., you may utilize only existing abilities and assets).
• You are not stuck in your group. Feel free to interact with other agency representatives and get answers when needed.

EXERCISE ASSUMPTIONS AND ARTIFICIALITIES
In any exercise, a number of assumptions and artificialities may be necessary to complete discussion within the time allotted. During the Pandemic Influenza Tabletop Exercise, the following apply.
• There is no “Hidden Agenda” nor are there any trick questions.
• All participants receive information at the same time.
• Participants should assume that all jurisdictions are implementing their plans, procedures and protocols.
Module One - Incubation

In Mid-October of 2002, an outbreak of unusually severe respiratory illness is identified in a small village in South China. At least 25 cases have occurred, affecting all age groups; 20 patients require hospitalization, 5 of whom died. Surveillance in surrounding areas increases, and new cases begin to be identified throughout the province. Viral cultures collected from several of the initial patients are positive for type A influenza virus. The isolates are sent to the World Health Organization (WHO) Reference Center for influenza at the Centers for Disease Control and Prevention (CDC) in Atlanta, for further characterization. CDC determines that the isolates are type A H5N1, a subtype never before isolated from humans.

This information is immediately transmitted back to the Chinese Ministry of Health, and throughout the WHO network. CDC dispatches a team of epidemiologists and laboratory personnel to further study the disease, and notifies quarantine stations and large hospitals at major United States ports of entry to be on the alert for arriving passengers with severe respiratory illness.

Isolates of the new strain are sent to the Federal Drug Administration (FDA) to begin work on producing a reference strain for vaccine production, and influenza vaccine manufacturers are placed on alert.

The novel influenza virus begins to make headlines in every major newspaper, and becomes the lead story on major news networks. Key United States government officials are briefed on a daily basis as surveillance is intensified throughout Southeast Asia and the Pacific Rim. Calls are received daily from worried parents who have heard that schools may close if the situation escalates.

By November, outbreaks have begun to appear in Hong Kong, Singapore, South Korea and Japan. Although cases are reported in all age groups, young adults appear to be the most severely affected, and case-fatality rates approach 5%. Widespread panic begins because vaccine is not yet available and supplies of antiviral drugs are severely limited. In early December, the CDC reports that the H5N1 virus has been isolated from ill airline passengers arriving from Hong Kong and Tokyo in Los Angeles, Honolulu, Chicago and New York. State and local agencies are asked to intensify influenza surveillance activities and vaccine manufacturers are requested to go into full production.

The arrival of the new flu strain is anticipated to be in California within the next few weeks. Some staff members are requesting protective supplies for their classrooms, such as gloves, masks, and hand sanitizer.
Module One - Questions

• Based on this information what assumptions can be made?

• How do we prepare to address school related concerns? How will information be communicated to parents, students and staff?

• What types of health and hygiene programs will be implemented? What types of personal protective equipment will you provide to staff members?

• What kind of communications plan should be put in place for informing parents and staff members? Are there any special considerations for the non-english speaking populations?

• What is happening in the rest of the state and how will this impact our county?

• What other contingencies are predictable and need to be planned for?

• How are responsibilities for decision making roles determined?

Establish your chain of command structure here:
Module Two - Intensification

It is now early December and local outbreaks have been reported in major cities throughout the United States.

In ____ your county ____ County, the impact has begun to be felt in earnest. Best estimates from surveillance of clinics and the hospital are that approximately 10% of the population are ill at this time (est. ________ ) with 40% of those (est. ________ ) seeking medical care. Phones at school offices begin to ring constantly. Both parents and staff members are expressing escalating concerns due to fear about the new strain of virus.

Rates of absenteeism in schools begin to rise. Similarly, personnel in key positions (teachers, principals, district administrators) are absent due to illness or caring for ill family members at a rate of about 10%. In the student population, absences appear to be in the 20-25% range already. It is unclear whether all of those absences are due to illness or if worried parents are keeping students at home.

Nationwide, exaggerated accounts of illness are reported by the media. Citizens begin to clamor for the vaccine, but national projections are that only 20% of the estimated needs will be available each month for the next five months. The county has been allotted and has received a small supply of vaccine and anti viral medication from the State of California health department. CDC has defined the order of priority of populations to receive the vaccine, starting with personnel in health care, public health, community safety/security, and telecommunications.

Angry phone calls to elected officials, including the Superintendents Office, reflect a frustration and lack of understanding about why the limited vaccine is being targeted only at certain personnel and not distributed to the general public.
Module Two - Questions

• Given the apparent nature of the incident, how would information be collected to assess the situation? What types of information would you be seeking based upon the escalating scenario?

• What new information should be communicated to students, parents and staff members?

• How would your agency work with local and state agencies in sharing information and coordinating strategies?

• Is there a surveillance system in place for tracking / monitoring infectious diseases? If so, are key personnel trained in proper reporting procedures?

• What procedures are in place to track student illnesses that may be due to the new strain of flu?

• In what areas are shortages of personnel and supplies expected and how can these be replenished? How will the your agency deal with potential staff shortages?

• What procedures are in place to monitor what other county offices and school districts are doing in response to the escalating scenario?

• If the situation escalates and schools close, how will remote educational services be coordinated?

• What mechanism should be used to update parents, staff and students? How will this or other information be communicated to the media?
Module Three - Escalation

It is now early January, several weeks later. Your county is overwhelmed by the number of influenza cases. Although surveillance is sketchy, rough estimates of the number ill with influenza are 40 - 50% of the population. There are currently approximately 700 people needing hospitalization.

Local hospitals and outpatient clinics are extremely short-staffed when 50 - 60% of physicians, nurses and other health-care workers are absent due to illness, caring for family members, or simply fear for their safety. Intensive care units at the counties hospitals are overwhelmed, and soon there is a shortage of mechanical ventilators for treatment of patients with severe respiratory syndromes or postoperative needs.

Your agency is contacted by the Public Health Officer and receives a written declaration of a public health emergency and orders social distancing measures which include the closure of all schools. They also ask if you have any school sites that could be used to support the medical needs of the general population.

Law enforcement, emergency medical personnel, health care, and local utility companies (power and water) also have personnel shortages in the range of 50 - 60%, resulting in some cutbacks in routine services. Grocery stores are suffering shortages of food supplies due to the nationwide impact of ill truckers who deliver those supplies.

Many area residents (particularly those with chronic, unstable medical conditions) are afraid to venture out for fear of becoming seriously ill with influenza. Hundreds are staying home and their essential supplies, such as food, are becoming depleted.

You receive calls from parents and staff members who are distraught and outraged when loved ones die within a matter of a few days. Funeral homes are overwhelmed by the numbers of dead (approximately 425 in the last three weeks) and are unable to keep up with the need for services.
Module Three – Questions

• What new information should be communicated to students, parents and staff members?

• Which sites, if any, will you allow the health care agency to use for medical needs of the community?

• Because you have many students on free or reduced lunch programs, what mechanisms can be used to deliver food to those who are staying in their homes?

• How will possible food shortages be addressed?

• How will you pay teachers and other staff members who are now forced to stay home either due to illness or due to school closures?

• How do you identify and maintain essential services?

• What steps could be taken to allow employees to work from home?

• What special issues need to be considered related to the emotional needs of staff, students, and their families?
### Stages of a Pandemic

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Novel Virus Alert</strong></td>
<td>• novel virus detected in one or more humans</td>
</tr>
<tr>
<td></td>
<td>• little or no immunity in the general population</td>
</tr>
<tr>
<td></td>
<td>• potential, but not inevitable precursor to a pandemic</td>
</tr>
<tr>
<td><strong>Pandemic Alert</strong></td>
<td>• Novel virus demonstrates sustained person-to-person transmission and causes multiple cases in the same geographic area.</td>
</tr>
<tr>
<td><strong>Imminent</strong></td>
<td>• Novel virus causing unusually high rates of morbidity and/or mortality in multiple, widespread geographic areas.</td>
</tr>
<tr>
<td><strong>Pandemic</strong></td>
<td>• Further spread with involvement of multiple continents; formal declaration made.</td>
</tr>
<tr>
<td><strong>“Second Wave”</strong></td>
<td>• Recrudescence of epidemic activity within several months following the initial wave of infection.</td>
</tr>
<tr>
<td><strong>Over</strong></td>
<td>• Cessation of successive pandemic &quot;waves&quot;, accompanied by the return (in the U.S.) of the more typical wintertime “epidemic” cycle.</td>
</tr>
</tbody>
</table>
The Next Influenza Pandemic
An Overview

What is pandemic influenza?
“Pandemic” simply means a worldwide epidemic. So, an influenza pandemic is a worldwide epidemic of the flu. Influenza is unique in its ability to cause sudden and widespread serious illness. That is due in part to the fact that it is very communicable. It is also due to the virus’ ever-changing nature. Every year – in fact, constantly – the flu virus changes slightly, a process we call “drift.” But every now and then a major change – or “shift” – happens to the structure of the virus. This creates a new subtype, never before seen in humans. And that can lead to a pandemic.

What is the history of influenza pandemics?
In past century, there were three pandemics:
• 1918-19 Spanish Flu which left 20-40 million dead worldwide, 500,000 in the US
• 1957-58 Asian Flu which left 70,000 dead in the US
• 1968 Hong Kong Flu leading to 34,000 deaths in the US
These pandemics caused not only overwhelming numbers of deaths, but complete disruption in normal life and service delivery. These three pandemics were separated by approximately 10 – 30 years. If there is any pattern to this phenomenon, we are essentially “overdue.”

Why should we plan?
Influenza experts all agree that another pandemic is inevitable. It is not known exactly when it will occur, but it will happen. There have been recent scares (Swine flu in 1975; Hong Kong Avian flu 1997) which did not materialize into pandemics, but illustrated the need for better preparedness.

What will the next pandemic be like?
There will be very little warning that the next pandemic is coming. It is estimated 1 - 6 months lead time. There will be a prolonged impact of about 6 - 8 weeks. This is quite different from the timelines for responding to other disasters.

The impact will be essentially simultaneous throughout the United States. This means that shifting human and material resources – which normally happens during major disasters – will not be possible. Health care workers, health care supplies and equipment, emergency personnel, etc, will not be available from other parts of the country. Vaccine and antiviral medications will be in short supply because it takes at least six months to produce a new flu vaccine. The local health department will have to prioritize which subpopulations will get vaccine/anti viral medications first. There will need to be a local system to deliver vaccine in an orderly and systematic fashion. Health care workers and first responders – who will be critical in providing health
care – will be at higher risk of exposure to the virus. There will be personnel shortages due to illness in critical community services such as police, fire, utilities, transportation, and communications.

**What will the impact be?**

Based on CDC estimates, the following can be projected for California and Orange County:

<table>
<thead>
<tr>
<th>Percentage of Population Affected by the Next Pandemic</th>
<th>Number of Affected in California (Population 32,268,301)</th>
<th>Number of Affected in Orange County (Population 2,846,289)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 35% will become ill</td>
<td>11,293,906</td>
<td>996,201</td>
</tr>
<tr>
<td>Up to 19% out patient services</td>
<td>6,054,763</td>
<td>540,795</td>
</tr>
<tr>
<td>Up to 0.4% hospitalized</td>
<td>127,442</td>
<td>11,385</td>
</tr>
<tr>
<td>Up to 0.1% result in death</td>
<td>28,409</td>
<td>2,846</td>
</tr>
</tbody>
</table>

*Replace with the correct numbers for your county*