

## UNIVERSITY PANDEMIC INFLUENZA PLANNING SUMMIT

### OVERVIEW

On April 28, 2006, the Acute Communicable Disease Control (ACDC) program of the Los Angeles County (LAC) Department of Public Health Services (DPH) held a pandemic influenza planning summit with select representatives (e.g., student health center directors, risk management, directors of student affairs) of many Los Angeles-area universities. To focus and prioritize the scope of the summit, invitations were limited to universities that maintain on-campus housing. Representatives from 17 universities as well as key LAC DPH staff attended. Prior to attending, university representatives were asked to submit a brief survey summarizing the characteristics of their campus (Table 1) and whether they have included pandemic influenza as a part of their emergency preparedness planning.

The summit agenda consisted of three informative presentations followed by a tabletop discussion. The three presentations provided information on: differentiating seasonal, avian, and pandemic influenza; understanding issues specific to avian influenza; and, detailing advanced information and guidance on pandemic influenza and planning especially for universities. Guiding the subsequent tabletop discussion was a series of hypothetical pandemic influenza-related scenarios that may impact universities (Table 2). The tabletop provided a forum for the university representatives to suggest steps they might undertake before, during, and after an influenza pandemic. In addition, the tabletop served to generate suggestions for materials that LAC DPH can provide to assist universities with their pandemic influenza planning (Table 2). In addition, many informative handouts were also provided including: supplemental information on influenza and pandemic influenza, pandemic planning checklists, and lists of public health resources.

### BACKGROUND

Pandemic influenza has the potential to cause tremendous impact on health and welfare globally, nationally, and locally. Recently, the need to prepare for a pending pandemic became more critical following the emergence of an Asian strain of avian influenza A H5N1 (commonly known as “bird flu”). The continuing spread of H5N1 in wildlife, and the continued animal outbreaks and human cases, has heightened concerns that this viral strain will eventually mutate and cause a pandemic. But unlike seasonal influenza, which circulates annually, and as such, has predetermined activities for preparation and response (i.e., established risk-groups and protocols for vaccination and treatment, etc.), pandemics are unpredictable—the onset, severity, and full range of characteristics of a pandemic are unknown. This inherent uncertainty, coupled with continual scientific advancements, responses, and changes in circumstances, greatly complicates planning.

There are many factors unique to universities, and the students that they serve, that make preparing for a potential pandemic a critical part of their emergency planning. Foremost is the fact that university students commonly live in close communal quarters (i.e., dormitories, sororities, etc.); these living arrangements typically include factors that can further the spread of illness such as sharing restrooms and eating in large-communal facilities. Moreover, college students do not typically maintain ideal hygiene and often engage in activities that can foster the spread of illnesses (i.e., sharing personal items, etc.). Accordingly, the introduction of a highly contagious illness, such as influenza, has the potential to spread rapidly, and within a short time, affect many. In addition, college campuses are known for uniting individuals from diverse countries—universities frequently invite visiting scholars, students often travel to unusual foreign lands—which can increase the likelihood of potentially introducing a novel illness.

Finally, another unique facet of universities is their system of centralized healthcare. Students (and sometimes staff) typically rely on the university student health center as their primary healthcare resource. In the event of a pandemic, the university student health center may be responsible for providing for the health and welfare of the majority of the students, and others, on their campus.

## RESULTS

Prior to attending, university representatives were asked to submit a brief survey summarizing the characteristics of their campus and the steps they have completed to prepare for an influenza pandemic—of the 17 universities represented at the event, 14 university summaries were completed.

**Student Profile:** The universities represented at the summit are responsible for a large portion of the Los Angeles-area population—the combined enrollment from the 17 universities exceeds 200,000 students. In addition, large portions of those students live on-campus—on average well over 2,000 students live on each campus (Table 1). In addition, should travel be suspended, many students will likely be forced to

<b>Table 1. Student Profile of Summit Participating Universities</b>				
<b>Student Demographics</b>	<b>Total*</b>	<b>Mean</b>	<b>Median</b>	<b>Range (Min.–Max.)</b>
Student Enrollment	184,198	14,169	8,300	350–35,625
Campus Residents	37,492	2,884	2,100	125–8,998
Out-of-State Students	19,933	1,661	1,272	100–5,000
International Students	14,362	1,104	500	10–6,881
* Since only 14 of the 17 schools completed the survey, the total numbers of student enrollment listed here underestimates the 17 universities represented at this event.				

stay on campus—the universities attending this summit reported thousands of students are out-of-state residents or international students.

**Emergency Planning:** University representatives were asked whether their campus has established an all-hazards emergency plan—all 14 universities that responded noted that they have such a plan for their campus. However, when asked if their campus presently has a pandemic influenza plan (either separately or as an adjunct to their all-hazards plan) only one university said they did; eight universities stated that they had developed some pandemic planning, but their plans were presently incomplete; and, five universities stated that they presently had no pandemic influenza plan.

**Student Health Center and Influenza Vaccination Profile:** The participants were also asked the average number of primary care visits their student health center attends to yearly; on average, the health centers reported 16,678 student visits (median 10,000 visits), but there was also a very broad range in reported visits (range: 325 to 50,000 visits). The majority of the attending universities provide influenza vaccination for their students and others on campus. Only three of the 14 responding universities do not provide influenza vaccination. Of the remaining 11 schools, four provide vaccination free of charge, and seven charge a nominal fee. Of the universities that provide vaccination, most extend coverage to health center staff (76%), faculty (61%) and campus staff (53%).

**Excerpts from the Tabletop Discussion:** To guide the tabletop discussion, a series of four scenarios were developed describing different pandemic-influenza events that may affect universities (Table 2). The scenarios followed the World Health Organization's (WHO) pandemic phases\* and were used to prompt discussion and debate regarding pandemic influenza planning and response. In addition, the scenarios helped to identify materials and resources that LAC DPH could provide to assist universities during these various events.

\* As described on [www.who.int/csr/disease/avian\\_influenza/phase/en/index.html](http://www.who.int/csr/disease/avian_influenza/phase/en/index.html).

The most common item that the representatives from the universities requested of LAC DPH was information and guidance—at every stage, the representatives noted that they would most value the expertise of LAC DPH to best respond to the scenario; the information should be easily accessed, simple to understand, and available in formats that can be easily disseminated for their use (i.e., in multiple languages, specific for students, specific for people who may travel, etc.).

<b>Pandemic Phase:* Transmission Summary</b>	<b>Hypothetical Scenario Synopsis</b>	<b>Discussion Topics</b>	<b>Suggestions for Planning Assistance</b>
3: No human-to-human transmission. No human cases in the US.	A student from your campus dies from influenza H5N1 infection while visiting family abroad. How do you quell fears and correct misinformation on your campus?	<ul style="list-style-type: none"> <li>• What similar past campus events can provide guidance for responding to <i>this</i> event?</li> <li>• What are the key facets of this event that need to be included in campus communications?</li> <li>• What facets of pandemic planning should be instituted at this stage?</li> </ul>	<ul style="list-style-type: none"> <li>• Provide talking points (streamlined message maps) to inform and summarize the situation and frequent updates for posting on websites.</li> <li>• Provide updated contact information and relevant resources.</li> <li>• Develop educational materials and posters for health centers and other campus locations.</li> </ul>
5: Large clusters of human-to-human transmission. Cases in the US. No cases on your campus.	Major human outbreaks from a novel influenza A virus have been identified. Outbreaks are occurring in neighboring cities, but not yet in LA, and not on your campus. What activities are paramount at this time?	<ul style="list-style-type: none"> <li>• How can campuses health centers enhance their surveillance?</li> <li>• Should campuses activate their Incident Command Structure at this stage?</li> <li>• Should campuses stockpile antivirals and masks? If so, what are their strategies for their use?</li> <li>• What infection control practices should be recommended? Do campuses have methods of isolating sick students who reside on campus?</li> <li>• What methods of alternative education are available (i.e., web-based lessons, etc.)?</li> </ul>	<ul style="list-style-type: none"> <li>• In addition to the suggestions described for Scenario 1, establish a toll-free information hotline and create educational materials including responses to frequently asked questions and other talking points for campus representatives.</li> <li>• Develop posters to assist in identifying symptomatic patients and to request that they wear masks to limit the spread of illness due to coughing and/or sneezing.</li> <li>• Assist campuses in defining and implementing their Incident Command Structure to ensure ease of operations during the possible spread of illness to the campus.</li> </ul>
6: Large clusters of human-to-human transmission. Cases in the US. Cases on your campus, including some of the summit participants.	The previously described pandemic-related illness has now reached the LA-area and your campus, including some of the representatives at the summit. How should activities change at this time?	<ul style="list-style-type: none"> <li>• Because some of the summit participants were classified as “sick,” their duties were described as well as any responsibilities that could not be performed if they were unexpectedly absent.</li> <li>• Other aspects of continuity of operations were discussed (i.e., what activities could and couldn’t be redirected, what campus tasks and responsibilities were essential versus what could be postponed, etc.).</li> <li>• What supplies and/or preparations does your campus have for this type of emergency?</li> <li>• Would your campus be able to monitor absenteeism and illness? Are there any groups that may be overlooked?</li> </ul>	<ul style="list-style-type: none"> <li>• Since information and available resources will likely rapidly change, a centralized website (perhaps one with private access to maintain confidential information) would be a valuable tool for monitoring the epidemic and disseminating information including potential changes in treatment, affected groups, available materials.</li> </ul>
Post-Pandemic: Peak in incident cases ended.	The first major wave of pandemic-related illness has subsided. Secondary waves of illness are likely. What activities should be conducted at this time?	<ul style="list-style-type: none"> <li>• What resources are available on your campus that may be of use during this period (i.e., counseling services, etc.)?</li> <li>• At what point would your campus return to “business as usual”?</li> </ul>	<ul style="list-style-type: none"> <li>• Summary reports describing many facets of the pandemic (i.e., “lessons learned”) would be valuable—especially if there are issues relevant to universities, their population and/or geographic area.</li> <li>• Guidance on how to prepare for future waves of illness and resources to assist in recovery and future response.</li> </ul>

\* World Health Organization Pandemic Phases ([www.who.int/csr/disease/avian\\_influenza/phase/en/index.html](http://www.who.int/csr/disease/avian_influenza/phase/en/index.html)).

## **DISCUSSION**

Overall, the summit was very well-received—the participants were grateful for the opportunity to attend, were pleased with the materials and information that was provided, and requested future summits and updates as relevant. In response, LAC DPH developed a confidential university-specific web-portal to store information (including the materials provided during the summit), allow universities to share information including their pandemic influenza plans, and post and respond to questions that may arise. In addition, LAC DPH has developed many educational materials such as posters to hang in student health centers to assist in identifying patients with novel respiratory viruses and to facilitate infection control. Finally, a follow-up summit was held six months later to provide updated information and materials.