

# Avian Flu Pandemic Response Plan

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I have met with this group to discuss the need for a plan of response to any potential avian flu pandemic. All members have researched a variety of sources, and I have done a comprehensive review of materials available about the disease and preparation for any outbreak. The report gives you a proposed plan of action in case an outbreak occurs. *Though the possibility of an avian flu pandemic is unlikely, the consequences, if it were to occur, would be great. Therefore, it pays to be both prudent and prepared.*

Basic Assumption: We will have an outbreak of avian flu of pandemic proportions. This Response Plan focuses the discussion accordingly but can be scaled back if conditions were to be less severe.

## Background to Avian Flu

What is Avian Flu?

Avian flu is an infection caused by a type of influenza virus carried by birds. A new strain (H5N1) is causing international concern because it is a particularly virulent type of influenza virus that is killing domesticated birds such as chickens, ducks, and turkeys.

How does Avian Flu spread to humans?

Avian flu does not usually infect people, but more than 130 cases have been reported by the World Health Organization over the past two years. As of December 7, 2005 WHO reports that there have been 135 reported cases with 69 deaths. It is believed that most cases of avian flu infection in humans have resulted from contact with infected poultry or contaminated surfaces. Cases have been reported in Asia (Cambodia, China, Indonesia, Thailand and Vietnam). So far the spread of the virus from person to person has been rare and has been contained. Nonetheless, because all influenza viruses have the ability to mutate, scientists are concerned that the virus one day could be able to infect humans and spread easily from one person to another. Since these viruses do not commonly infect humans, there is little or no acquired immune protection within the human population. If the virus were to gain the ability to spread easily among humans, an influenza pandemic (worldwide outbreak of the disease) could begin.

The avian flu virus is resistant to the usual antiviral medications commonly used for influenza. There currently is no commercially available vaccine to protect humans against the avian flu virus that has appeared in Asia and Europe.

The Federal government's response to the potential of a pandemic has been centered on the National Health and Human Services Flu Plan, which was released on November 1, 2005. The focus of this plan has been on international surveillance and collaboration in outbreak investigations and increasing the influenza vaccine production capacity.

In a testimony on Avian and Pandemic Flu given on November 17, 2005 before the NYC Council Committee on Health and Public Safety, Deputy Commissioner Dr. I. Weisfuse, made the following statement:

The development of our plan rests upon certain realities, including the assumption that we will not be able to prevent pandemic flu from entering New York City, and, that if it arrives, we can only try to slow its transmission, but will not be able to halt it. If avian flu viruses behave the same as human viruses, people may be contagious with influenza virus prior to getting ill, and not all infected persons may become symptomatic; therefore, given the current state of vaccine manufacturing, an effective influenza virus against the pandemic strain may not be available until at least six months after the outbreak of a pandemic. We will need to rely on providing good information to the public, pay close attention to infection control precautions, such as respiratory etiquette, judicious use of any antiviral medications available to us, and hospital preparedness to deal with the expected surge in patients during the first wave of the pandemic, which based on history, may last eight or more weeks.

Therefore, the Pace community and Pace as an institution must have a clearly considered response plan to the possibility of an avian flu pandemic. The Deputy Commissioner's prediction of the initial impact of eight weeks is accurate but incomplete. Other scientists and public health officials have estimated 6 – 18 months for the pandemic to run its full

course. Moreover, as a catastrophic event, a pandemic has impacts that are significantly different than the “usual” catastrophe that we have prepared for.

### Emergency Response Business Continuity Plan

In reviewing the Emergency Response Business Continuity Plan (Red Book), there are many aspects of the emergency planning for a pandemic that are in place. However there are some important differences, which we need to recognize.

### Practical Steps in Developing an Avian Flu Pandemic Plan

#### Administration

- Set up a Pandemic Planning and Coordination Unit (PPCU)  
This group will consist of representatives from the following units
  - Provost Office
  - Finance and Administration
  - Facilities
  - Information Technology
  - Telecommunications
  - Government and Community Relations
  - Health Care Units
  - Human Resources
  - Faculty Councils
  - Lackmann Food Service
  - Student Affairs
  - Security
  - Student Government Association
  - University Relations and Public InformationThis group could be the one that the President asked the Provost to form or it could be the Crisis Management Team.
- Assign senior executive responsibilities for initially overseeing and possibly taking control of the Pandemic Planning and Coordination activities
- Create an education program for the Pace community on University preparedness and best practices
- Hold a forum where issues, precautions and concerns could be aired
- Develop policies for operating in a Pandemic with senior management

Identification of Key Risks: These are well spelled out in the Red Book Chapter 2 and 3.

The further development of this effort under conditions of a pandemic is what follows.

## **PLAN OF ACTION IN CASE OF A PANDEMIC OUTBREAK**

Key aspects of a response program at Pace must include:

**Education:** Making the Pace community aware of both the state and symptoms of the disease and preventive measure in protecting oneself from contracting the disease.

**Communications:** constant updating of information via a Web site on avian flu to keep the Pace community informed

**Surveillance:** monitor outbreaks of flu on campus and see if avian flu is present; also monitor developments in the City, metro region, state, nation and internationally.

**Develop A Plan of Action:** create a plan to deal with the worst case scenario of a full pandemic; also develop close relationships with City and County health officials and local healthcare providers especially hospitals and emergency rooms.

Here are a series of questions that we must address and we develop the Plan of Action.

### **How should we get appropriate information from the Federal, State and Local officials?**

We have uncovered various web sites that are available and constantly updated on the avian flu. Three particularly important ones are:

New York State ([www.health.state.ny.us](http://www.health.state.ny.us)),

([www.agmkt.state.ny.us/AI/AvianFlu.html](http://www.agmkt.state.ny.us/AI/AvianFlu.html))

Westchester County ([www.westchestergov.com/health/AvianFlu.htm](http://www.westchestergov.com/health/AvianFlu.htm))

New York City ([www.nyc.gov/html/doh.html](http://www.nyc.gov/html/doh.html))

US Government:

Dept of Health and Human Services ([www.pandemicflu.gov](http://www.pandemicflu.gov))

Center for Disease Control ([www.cdc.gov/flu/avian/gen-info](http://www.cdc.gov/flu/avian/gen-info))

International

World Health Organization: ([www.who.int/csr/disease/avian\\_influenza.html](http://www.who.int/csr/disease/avian_influenza.html))

### **Will we have any leeway in our response or are we totally dependent on their directives?**

All of our actions would be governed by local health departments, which in turn would be governed by CDC and other state and federal bodies. Given the severe nature of this disease and its potential pandemic outbreak, we would have to be directly responsive to these governmental directives. The usual response is quarantine of the individuals affected. If an outbreak were to occur we would probably be asked to shut down. Key departments to contact are the NYC Health Department and the Westchester County Health Department. Pace will have to maintain up-to-date contacts with the appropriate federal, state and city officials.

**Assuming the pandemic would occur and we would be affected, what are the criteria that we would use to cancel our classes and perhaps close the University?**

The criteria used would have to center on the severity of the outbreak. One type of outbreak might be just on the campus. In this case since we do not have any facilities to quarantine students, we would have to rely on the hospitals in the area to take in the illness cases and then proceed as usual. I would say that once an outbreak occurred and Pace had cases of the illness on campus, we would have to close down.

Contingency plans to keep classes going could include the use of Internet based courses, the use of blackboard. We could not hold classes as usual because of the epidemic nature of the disease and the restrictions placed by public health officials of large gatherings of people.

**For how long can this be done and we remain able to complete our semester or wherever we happen to be in the academic cycle at that time?**

The answer to this depends on the moment of outbreak. If it were to occur at the beginning of the semester, we would have to place the contingency plans in place right away and get through the next eight weeks. If it occurred at midterm we could conceivably finish out the semester and have finals on line or as take home exams. Moreover, if a full-blown pandemic did occur, we would be looking at a 6 to 18 month period of impact with various surges of illness. This means that we would need a long-term plan of survival in order to continue as a functioning university (see Business Continuity Plan later in this document).

**What do we need to do to provide adequate first responder response for all members of the community?**

Here I think the key is surveillance. We need to have a surveillance system of the illnesses of our students, staff and faculty. We ought to gain daily reports from both the security office and health care units of any reporting of flu like symptoms. We will then have to work with the health authorities who will be monitoring for the existence of the avian flu virus. NYC is planning to monitor influenza related hospitalizations and mortality and identify unusual epidemiological or clinical features of the outbreak.

Our first responders on campus would be our resident life staff, health clinic staff, security staff, department chairs, directors and other heads of our various units.

**How do we actually monitor the spread of avian flu within our student, staff and faculty populations?**

We would have to train all members of the Pace community to be vigilant for the development of the symptoms of avian flu. The problem is that the symptoms are very similar to “regular” influenza.

Students, faculty and staff would be required to report illnesses that develop that have the flu like symptoms. Students, faculty and staff would be required to stay at home until at least 24 hours after the resolution fever and other key symptoms. All reported cases of flu would have to be reported to the University health centers and a daily report of

numbers of cases should be reported to the President. All students, staff and faculty would be educated in respiratory hygiene and cough etiquette to cut down the spread of influenza.

**What public education program do we need to put into place by the end of December to inform our community?**

There is a strong need to have a public education program for the Pace community. We need to establish three things: (1) an information Web site with the appropriate links to important government and health agencies: (2) a flu awareness campaign to encourage all students, faculty and staff to obtain flu shots and to be aware of the symptoms of flu and avian flu: and (3) a clear listing of best practices to keep individuals healthy and protect the community's health. This would include a publication of respiratory hygiene and other preventive practices and an awareness of the symptoms of general influenza as well as avian flu.

**Respiratory Hygiene:**

The best way to reduce human-to-human transmission of influenza is to observe these simple rules:

- Cover your cough and sneeze
- Wash your hands regularly and always before eating
- If you have a cough or fever stay at home and avoid contact with others

We should also encourage members of the Pace community to get flu vaccinations.

Symptoms of Influenza: Fever, cough, sore throat, chills and muscle aches

**Symptoms of Avian Flu:**

- Documented temperature of greater than 100.4 degrees F
- Cough, sore throat, shortness of breath
- Severe respiratory symptoms (main difference with "standard" flu)
- History of contact with domestic poultry in an avian flu affected area within 10 days of symptom onset

We also need to inform our community of the steps that we are taking to deal with a possible outbreak of avian flu. This should be a general communication to all faculty, students and staff about measures we are taking and preventive measure that they can take while away traveling during the holiday and January breaks.

**What special best practices need to be addressed for food handlers?**

Since avian flu is largely related to transmission via poultry, good hygiene practices need to be applied during the handling of raw poultry meat. Usual recommended cooking practices for poultry products would keep any potential risk to acceptable levels. Eggs from infected poultry could also be contaminated with the virus. Care should be taken in handling eggshells or raw egg products. Pace needs to work with Lackmann to ensure the proper safety in the handling of poultry products.

**What special best practices need to be addressed for health care workers?**

All patients who seek treatment at the University Health Care Unit with symptoms of influenza should be managed according to CDC's recommendations for respiratory hygiene and cough etiquette and questions regarding their recent travel history. Isolation precautions identifiable to those for SARS patients should be implemented for all severe patients. Since Pace does not have quarantine facilities, we should make special arrangements with local hospitals for the transport of students showing any potential symptoms of avian flu. Health care workers need to pay careful attention to standard precautions: hand hygiene, use of gloves and gowns, eye protection and airborne precautions. Information for health care workers who wish to test for cases of avian flu can be found at the CDC website.

**What supplies, medical or otherwise, do we need to stockpile to assist in meeting our needs during a pandemic?**

At present the University Health Care Unit reports that it is stocked with personal Protective Equipment (PPE) for its healthcare workers. Surgical masks are stocked in sufficient quantities for patients presenting with respiratory symptoms. The Unit also monitors the Internet sites referred to earlier and will follow recommendations for testing and identifying flu-like illnesses should the need arise.

The drug, Tamiflu, a possible treatment for influenza, has received a great deal of attention; however it is not a panacea for avian flu. When used to treat seasonal flu patients within 48 hours of the onset of symptoms, the drug decreases the duration of the illness and shedding the virus thereby decreasing transmission. However, there is no evidence that this drug is effective for treatment with avian flu. We recommend that Pace stock a certain supply of a drug like Tamiflu to handle cases of influenza (say 50 doses).

Likewise there is no hard evidence that that wearing surgical facemasks are effective in preventing the spread of avian flu. The use of such masks in health care settings is strongly encouraged where contagious patients are being cared for.

**What special programs do we need to establish to handle faculty, students and staff traveling to and from countries that are reporting outbreaks of avian influenza?**

The CDC has issued precautions for travel to countries that are reporting outbreaks of avian flu. Pace should provide a travel packet with these guidelines to anyone traveling to these areas of the world. The concern we would have is returning faculty, students and staff from such regions. Along with the information packet on travel, instructions on what to look for especially after returning home and to the University. Monitoring ones health for 10 days after returning is highly recommended. Anyone becoming ill after traveling in effected countries should be required to report this to the University Health Care Unit.

**What would our communication plan be in case we were to experience a pandemic?**

Material for communicating to staff, faculty and students about the University's response to a pandemic should be developed. Material should also be developed to handle external constituencies such as parents, public officials, the media, future potential students, etc. The most difficult communication will be to parents especially of students who live

outside the NY metro region. This communication and its implementation need to be carefully planned. Policies for the content and delivery of external and internal communications on all matters relating to the impact of the pandemic should be developed. Specific material for staff should be developed that describes not only how the University should operate in reduced circumstances but also provides information for handling personal issues (e.g., ill family members). We would also need to establish a 24/7 hot line call center as we did after 9/11. This would be staffed with trained personnel to answer questions both about the University and the flu epidemic.

University Relations will lead in this effort and:

- Act as gatekeeper and conduit for all contact between external media and all areas of the University
- Act as spokesperson and/or clearinghouse for content, format or spokesperson designation for University communication with various constituencies
- Act as conduit for distribution of information to various internal and external audiences
- Coordinate communication options
- Advance Pace's image and identity through external media

### **What are the psychological impacts on faculty, student and staff and how to respond to them?**

There are three levels of response that need to be taken into consideration, each requiring its own response.

Level I Response: first case human-to-human contact

- Determine, in conjunction with the Deans of Students and Director of Health Service, the appropriate level of intervention based on assessment of student body response.
- Train staff in psychological protocols
- Secure additional contract personnel and volunteers to assist if necessary

Level II Response: first suspected case on-campus

- Expand hours of operation and drop-in counseling services as needed
- Upgrade website to provide relevant psycho-educational information and links to appropriate sites
- Disseminate literature on coping with fears and concerns for one's health and the health of loved ones, identifying resources, etc.

Level III response: first confirmed cases to full-scale epidemic

- Assign personnel to assist Student Health Services in providing face-to-face counseling for walk-in clients
- Assign personnel to staff phone lines
- Rotate staff assignments
- Secure contract staff and volunteers and implement off-site telephone hot lines as needed.

**What changes do we need to make in our current emergency planning in order to be responsive if the pandemic were to affect our community?**

There is a critical difference in planning for a pandemic than the usual type of disasters that Universities often face. Business continuity planning has been predominantly based upon reacting to and recovering quickly from a sudden and catastrophic loss of infrastructure such as facilities or computer systems. Even after 9/11 we broaden the concerns but mainly focused on very specific catastrophes and emergencies that could be responded to in a timely fashion and quickly. Often time we relied on operating with alternative infrastructure in several dispersed locations (i.e., campuses, server sites, etc.) In the event of losing access to one site, staff or systems would normally be relocated to unaffected locations in surrounding areas and we would attempt to continue “usual” operations.

This is not a workable strategy for dealing with a pandemic where massing together at one site would be considered dangerous and strongly discouraged by government and public health officials. Moreover, transfer of personnel might lead to the spread of the disease across campuses and regions. In a pandemic, facilities and systems will largely be unaffected. Rather it is the people who use them who will be unavailable. More than likely there would be a general call from government officials and health agencies for workers to stay at home. So business continuity planning assumptions to cope with a pandemic are very different that those used in infrastructure disaster recovery planning scenarios.

Moreover, the assumption of a short-lived event is also a false premise in pandemic planning. Disruptions have often been measured in days and weeks. This is definitely not the case in a pandemic, which could last months if not years.

**If we did close or had a high illness rate, how would we ensure that our key faculty, student, staff, facility and business functions continue?**

For Business Continuity Planning, it would be prudent to make the following assumptions:

1. The impact of the pandemic would be unpredictable
2. Public officials will wish to limit human-to-human transmission of the disease and will discourage large gatherings of people
3. The major problem becomes one of managing people
4. The University might not return to normal for 6-18 months

Planning strategies for tackling a flu pandemic must address two important concerns. How can the University operate effectively with minimal contact between faculty, staff and students? How can the University continue to operate effectively with the loss of key faculty or staff for prolonged periods?

The overall strategy comes down to using IT and Internet resources much more fully than we are at present. This would involve moving to on-line courses and programs, and managing the University through telecommunications and video and teleconferencing and promoting working at home (telecommuting). There will be a great emphasis on

Broadband Internet, email, PDF formatted reports, Voice Over IP telephony, instant messaging, and mobile phones. There may even be the need for more small-scale localized decision-making.

### Telecommunications

As we can see effective telecommunications will be critical to minimizing the potential disruption resulting from a pandemic. It is suggested that the following issues should be addresses as a matter of priority. Two critical items are Interactive Voice Response (IVR) and the University Web site. The former is the technology that initially answers “customers” telephone calls and after prompting for information with questions which routes the call to an available operator. This technology would be critical to effective operations in a pandemic. The volume of calls would clearly increase multifold and call center staff would be distributed across various locations. The following actions need to be considered:

- Determine the peak capacity of the current IVR network and develop an upgrade plan for adding capacity
- Ensure sufficient IVR scripting capabilities are available and be prepared to hire additional staff if required
- Develop capabilities for switching customer calls, recording the calls and making them available to various home or call centers where staff are located or at remote locations

The Pace Web site will become the main source of information for all faculty, students and staff. Internet traffic will increase greatly in the event of a pandemic with students and faculty working on line and administration and staff working from home or remote locations. This will place considerable strain on all aspects of the University’s Web site capabilities. More staff will be needed to implement all changes to the University’s web site.

Telecommuting will also be needed to be upgraded. Faculty and staff will be encouraged to work from home for long periods in the event of a pandemic. Telecommuting though used somewhat today, has not been the primary mode of working for Pace staff. There are several concerns that would have to be overcome. These include:

- Computing capabilities: need the same capacity of computing as at workstations and desktops.
- Internet Access: need Broadband connection to gain access to increased amounts of information that staff will need to function.
- Telephone Access: to operate effectively staff will need to be able to make and receive unrestricted telephone calls. With Broadband access to the Internet, VOIP technology can be used to provide such service. Telephone conferencing capability would have to be established at home and remote locations.

### Conclusion

An avian flu pandemic would greatly change the daily lives of all faculty, students and staff. In effect, we would all become “independent operators” linked through a network working from home or small remote locations. Fortunately, we have had experience with teleconferencing, mobile phones, distance education and multiple locations. Also, we have had the experience of 9/11. We do need to plan for the worse case scenario and consider further investing in our technology and people to be prepared for such a horrific event. Pace staff, faculty and students have come through before and with careful planning can do so again.