

# **Summary of the University of Pittsburgh's Pandemic Preparedness Plan September 2007**

An epidemic is an outbreak of disease that affects a disproportionately large number of individuals within a population or community. A pandemic is a worldwide epidemic. Pandemics have been documented throughout recorded history, and in recent history, pandemics have occurred about every 30-50 years. Over the past several years, public health authorities have become increasingly concerned about an avian influenza virus that has infected more than 200 people in several countries, predominantly in the Middle East and in Southeast Asia. This viral strain is remotely similar to a virus associated with a previous influenza pandemic that killed millions of persons around the globe in 1918. Milder diseases also created pandemics in 1957 and 1968. An important note regarding the viral strain associated with the pandemic influenza of 1918 is that there was a higher mortality rate in healthy adults ages 18-34.

The current form of avian influenza is not effective in human-to-human transmission. However, a singular mutation of the virus could result in an easily transmissible disease with a virulent profile. International health authorities have been urging governments, institutions, and the general populace to begin planning for pandemic influenza. In March 2006, the Department of Health and Human Services and the Centers for Disease Control and Prevention promulgated a Pandemic Preparedness Plan for the U.S. government and a checklist to assist colleges and universities in developing plans to prepare for and respond to an influenza pandemic.

## **UNIVERSITY OF PITTSBURGH RESPONSE**

In April 2006, Emergency Executive Jerome Cochran requested that a multi-disciplined team be assembled to draft an emergency preparedness plan for an influenza pandemic impacting the University of Pittsburgh. Jay Frerotte, director of Environmental Health and Safety, was selected to lead this effort.

## **INITIAL WORKGROUP DETERMINATIONS**

Although health officials claim that it is a matter of "when," not "if," a pandemic influenza re-emerges, the timing of the next influenza pandemic is unclear. The symptoms associated with future pandemic conditions remain unknown. How the disease will spread, the incubation period between viral exposure and symptom onset, and the efficiency rate for spread from human-to-human cannot be precisely defined. This uncertainty led the Workgroup to develop a plan that could be applied to any communicable disease outbreak that is widespread and severely impacts the members of the University community. Additionally, the Pandemic Preparedness Plan is applicable to the entire University framework, and it has been created as an appendix to the existing University of Pittsburgh Emergency Response Guidelines.

Early Workgroup discussions led to a realization that a Pandemic Preparedness Plan would have a very broad scope and must account for a continuum of outcomes. The Pandemic Preparedness Workgroup assigned four subgroups to closely examine the multitude of aspects that affect a focused segment of the University community: Student Preparedness, Research Continuity, Academic Considerations, and Administrative Operations and Functions. These Subgroups were led by Kathy Humphrey, Jay Frerotte, Robert Pack, and John Kozar, respectively.

## DEFINING LEVELS OF UNIVERSITY RESPONSE

Extensive deliberations were held at Workgroup meetings in order to identify triggers that dictate a set of responses and actions. As stated, there is a continuum of possibilities for the next pandemic. There likely will not be one isolated trigger that clearly necessitates increased response, especially at early stages of awareness regarding an emerging pathogen. Factors that will have forbearance on decisions to implement the response levels described below will include:

- government directives and/or travel advisories;
- proximity of disease to University campuses;
- severity of disease;
- mortality rates;
- public perceptions and response;
- social order / social unrest;
- time within academic calendar year;
- positions and responses of peer institutions; and
- positions and responses of local institutions.

Because triggers and criteria for decision making are dynamic and relevant to only a unique set of circumstances, the response levels are associated with a milestone activity. The resulting plan outlines departments, activities, and resources that are necessitated by milestone decisions. Milestone decisions are incrementally presented: A) the current planning phase; B) enhanced communication due to reports of effective human-to-human disease transmission elsewhere in the world; C) social distancing of students to reduce illness and disease transmission on campus; D) suspension of normal University operations due to pandemic conditions; and E) plans for responding to ill individuals on campus.

## RESPONSE LEVEL A—PLANNING LEVEL

The University remains engaged in pandemic planning, which has been triggered by circumstances and events that have prompted international experts to anticipate human-to-human transmission of an emerging or re-emerging pathogen. This document provides tangible products representative of the University's response.

## RESPONSE LEVEL B—HIGH ALERT

This response level (B) is likely to be necessitated by confirmed reports of efficient and sustained human-to-human transmission of an emerging or re-emerging virulent pathogen anywhere in the world. It is fully expected that such reports will generate a flurry of media activity across the globe, which in turn will multiply external and internal queries about the disease and situation.

The University, through the Office of Public Affairs, has already created a Web site to provide the latest information regarding such reports. This page [www.pitt.edu/avianflu](http://www.pitt.edu/avianflu) also provides a wealth of links to government and expert panel Web sites, UPMC response information, travel advisories, frequently asked questions, and information for protecting family and loved ones. Although the page is currently titled “avian influenza,” it can be easily modified for any pandemic (or epidemic) situation.

During this High-Alert level, the University must be ready to respond to internal queries from its faculty, staff, and students and to external queries from concerned parents, visitors to the University of Pittsburgh, and the media. While the Web site will be central to this effort, a telephone hotline is also planned. This hotline will include a pre-recorded message that will be updated as necessary to provide the most current information available. The hotline may be accessed directly by a soon-to-be-determined telephone number, via the University of Pittsburgh emergency number (412-624-2121), and via the University's central information number. As the situation warrants, touch-tone pad options for additional information will be added to the end of the pre-recorded message. Such options could include outlets for parents to locate students or to discuss specific measures the University is taking to protect its students, as well as information on travel restrictions, academic schedules, and health advisories.

During the High-Alert level, communications will also be fortified using multi-media approaches. The information will remain consistent via centralization through the Office of Public Affairs. As necessary, print and voice communications will be targeted to specific audiences, (e.g. parents, students, staff, or faculty) to provide a more effective message.

During the High-Alert level, the University will be mindful of members of the University community that are in foreign countries. A system is in place to identify students who are off campus for University-related functions. The whereabouts of individuals performing University functions would be helpful in a pandemic scenario due to impending or enforced travel restrictions. Also, it may be necessary to be aware that an individual's recent travel destinations have included areas where illness is prevalent, so that the individual may be appropriately screened or quarantined before returning to campus. The University is prepared to enact such screening as necessary.

### *Research continuity planning*

The Research Continuity Subgroup discussions focused on the development and distribution of a guide for researchers to begin an analysis of their research activities within the context of pandemic preparedness and the scenarios described in this document. A “Pandemic Preparedness Guide for Researchers” is a questionnaire style guide that will be distributed to those departments that participate in the research enterprise along with direction to distribute the guide to each of their principal investigators or laboratory managers. The information will be compiled by the departmental administration and reviewed for deficiencies, needs, and available resources at the departmental level. This exercise will have an added advantage in that it should provide information that will be applicable to many emergency situations.

#### RESPONSE LEVEL C—FULL ALERT (SOCIAL DISTANCING)

This response level is associated with confirmed reports that there has been human-to-human transmission of an emerging or re-emerging pathogen anywhere in the vicinity of a University of Pittsburgh campus. The vicinity of a University of Pittsburgh campus is defined by an area that encompasses all locales that are within a typical daily commuting distance by automobile from any University of Pittsburgh campus.

This response level is prompted by a scenario where emerging illness is spreading across the globe and the nation. There is non-stop media coverage and reported deaths in North America. There is a heightened fear among the regional population. The University is receiving hundreds of inquiries per day regarding the status of student whereabouts, classes, social events, research studies, and provision of other services. Assuming that a majority of social activities such as grade school, high school, sporting events, meetings, and other gatherings have been suspended, there will be increased pressure to disperse students from campus in order to reduce the spread of disease. (There may even be a government mandate to disperse.)

### *Social distancing*

Absent a government mandate, early decision making to enact “social distancing” at University campuses may be prudent to minimize the demand for on-campus medical care of students and for housing and support services for well students during this period of social stresses. In essence, social distancing for the University would encompass a temporary suspension of classroom activity. (This is not equivalent to a temporary suspension of all classes. Many classroom activities can continue via distance learning.) Additionally, students would be encouraged, advised, or required to return to their homes to reduce the spread of illness.

It is recognized that there are legal, financial, and reputational risks in acting too early (and too late). Parents demanding to retrieve their students from campus will also apply additional factors for consideration. The duration of social distancing will be determined

by the disease profile, external circumstances, and the timing of the decision relative to the academic calendar. In the event of a decision to enact social distancing, an organized dispersal of students from campus will be attempted using a multiple-day process that mirrors the current “arrival survival” process.

While planning a social-distancing process, the Pandemic Preparedness Workgroup conducted an analysis to account for those students who may be incapable of returning to their homes due to travel restrictions, financial hardship, or other reasons. It is widely assumed that at least 95% of undergraduates could be dispersed to their own homes or to the homes of classmates. The Pandemic Preparedness Plan provides a framework for the University to maintain services to the 5% of undergraduates remaining on campus under a social-distancing directive.

For the sake of the social-distancing portion of this plan, only residence hall students are accounted for. Those students not residing in residence halls will be instructed to follow the direction of and obtain services from the Allegheny County Health Department, as residents of Allegheny County.

#### *Absenteeism*

During this response level (C) in which social distancing is assumed and classroom activity is temporarily suspended, the faculty and staff are assumed to be available to work. Based on the social stressors that are anticipated during this scenario, absenteeism rates of 10-25% are projected. Human Resources is examining existing policies surrounding sick time, leave of absence, FMLA, and paid time off in response to these scenarios. The Workgroup has identified essential departments through its planning activities, and in collaboration with these departments has explored the ramifications of an absenteeism rate of 10-25%.

Faculty and staff who indicate any of the symptoms associated with the pandemic disease profile will be instructed to immediately leave campus and seek treatment through their health care provider. Information will also be communicated to faculty and staff that if they become sick, under no circumstances are they to report to campus. Anyone who is out sick during such periods will be required to obtain clearance in writing from their personal physician and then receive additional medical clearance from a representative of Employee Health prior to returning to their worksite on any University of Pittsburgh campus. Any ill student on a University of Pittsburgh campus will prompt a response outlined in Level E.

During this response level (C), the University will be focused on housing and feeding the remaining students, enhancing communication, maintaining campus security and computer networks, and sustaining the research enterprise.

#### *Academic considerations*

Academic considerations prior to enacting a social distancing response will be critical in decision-making. Robert Pack, members of the Workgroup, and select deans compiled an analysis of academic considerations for pandemic preparedness. The academic considerations are highly dependent on existing academic policies, and the period of the academic calendar in which the social-distancing decision arises. Timing for tuition reimbursement, scheduling of classes, and matriculation of new students (to name a few) will all be considered in the decision to enact social distancing.

The academic hierarchy—Chancellor/Provost-Senior Vice Chancellor for the Health Sciences/Deans/Department Chairs—will be the primary communication process for academic considerations during any emergency. Detailed contact lists for both telephone and e-mail communications are in place and widely distributed. Existing communication chains utilizing all appropriate technologies will be utilized at each level to the extent possible during the period of the emergency to provide the most reliable and structured dissemination of information as to immediate actions.

### *Communications*

Per the existing Emergency Response Guidelines, the emergency command post will be assembled in the Public Safety Building when an emergency scenario is declared by the Emergency Executive. In the various pandemic scenarios, the emergency command post may extend beyond University officials to incorporate local, state, or federal officials responsible for coordination of activities, such as traffic control or emergency supply needs.

The University's home page will be used for institutional announcements, particularly to students and parents, as well as to the general public. Specific announcements directed to faculty, staff, and students will be developed and available through my.pitt.edu to appropriate groups. The University's secure VPN will be utilized to provide a reliable means of communication with faculty, staff, and students. E-mail will be utilized as appropriate to communicate directly with individuals and groups. In addition, emergency text and voice messages to personal mobile devices would be delivered to individuals through the University's emergency notifications service.

The University's communications will be maintained at the highest level of efficiency. It is critical that the University's computer and telephone networks remain fully staffed and operational to ensure secure and reliable communications. Staffing network and telephone operations will be given the highest priority, and ensuring the continued availability of key individuals will be critical. A hierarchy of key personnel will continue to be kept current.

Given the necessary reliance on multiple means of communications, it is critical that one office have responsibility for ensuring that all communications are consistent and timely. The Office of Public Affairs will assume this role.

### *Suspension of classroom activity*

Classroom activity will be formally cancelled on a campuswide basis when, in the judgment of the Chancellor/Provost/Campus President, acting upon the advice of competent authorities and pursuant to an agreed upon response level, class attendance would pose a risk of contagion or when a sufficient number of faculty and staff are not available to conduct classes or provide appropriate levels of support for students.

Individual faculty may not unilaterally cancel classes except under the types of conditions in which they now may do so, which is largely limited to short-term illness. Individual faculty may not change the method of instruction utilized for individual classes, such as substituting online instruction for classroom instruction, unless approved by their department chair and dean. The announcement of the cancellation of classes will be communicated centrally through the Pitt Home Page, as well as via the telephone and e-mail contact lists.

Activities located in other places, such as study-abroad or distance-education programs, should continue if possible. Certain classes over which the University may not have scheduling control, such as internships, may be cancelled unilaterally by the sponsoring agencies. In such instances, any credits associated with the experience are suspended until the activity can be resumed.

In the event of the cancellation of classroom activities, academic work in specific courses may or may not be suspended. If classes are cancelled after the twelfth week of the term, individual faculty may either award credit for the course on the basis of work already completed or assign additional work to be completed independently and subsequently submitted, preferably electronically. If agreed to by individual students, faculty may assign an S grade rather than a letter grade. If classes are cancelled between the sixth and twelfth week of the term, faculty will, to the extent possible, utilize on line assignments or other distance assignments during the period of the disruption to minimize the long-term effect on the class schedule. For students or faculty who do not have access to necessary computing capability, alternative arrangements will be made for the completion of the work. For those courses in which the faculty are unable to provide online instruction, the classes will be suspended until normal activity can resume and students enrolled in those classes will receive an incomplete (G grade). Students may also elect not to participate in such instruction and may choose to receive a G grade, making up the academic work at an appropriate later time as specified by the instructor. Classes cancelled before the sixth week will be repeated in their entirety once a regular schedule can be resumed.

The impact of the cancellation of classes on the academic calendar should be as minimal as possible, and every effort will be made to return to the normal calendar quickly. Subsequent academic terms should not be reduced in length; rather, the summer months should be used to provide the necessary flexibility in scheduling.

### *Faculty*

Faculty who become ill, whose family members become ill, or who are subject to quarantine and cannot conduct their assignments will be subject to the normal University policies as specified in the faculty and medical and family leave policies. Faculty who are able to do so will normally be expected to carry on to the greatest extent possible their academic responsibilities even if classes are cancelled, pursuant to the class cancellation policy described above. To the extent possible, faculty should utilize online or other appropriate distance forms of instruction and communication with students to ensure the continuation of appropriate academic work and to maintain the integrity of instruction and evaluation. The University's network and applications such as Blackboard will be critical to this effort, as will the secure Virtual Private Network (VPN), in terms of providing remote access to appropriate institutional resources. These resources will permit some level of academic work to continue during the period of the emergency, whether the students are home or are quarantined on campus. The extent to which this is possible will depend upon the severity and extent of the disruption and will be largely dependent upon the academic judgment of individual faculty.

### *Deans*

Deans of the individual schools are responsible for developing and implementing broad policies governing appropriate forms of faculty instruction during the period of any disruption. It is particularly important that units in which external accreditation is an issue have clear guidance from their accrediting agencies about the flexibility they have to implement alternative forms of instruction.

### *Staff*

Academic support staff essential to the continuation of programs of instruction and research will be identified and notified of their designation and responsibilities. Faculty and staff who fulfill these responsibilities should continue to receive their regular salaries during the period they are doing so. Personnel actions, including leaves of absence for essential personnel, may be suspended during the period of the disruption.

### *Students*

Students will be given the greatest opportunity possible under the circumstances to continue their course work within the procedures described above. Should classes be cancelled prior to the sixth week of the term or should the personal health circumstances of individual students make it impossible for them to attend, University policies and procedures 09-05-08 and 09-05-03 will be applicable. Under this guidance, all charges for the term are removed and all registrations cancelled. Individual students may also, after the sixth week of classes, depending upon their personal circumstances and consistent with regular University policy, choose to request a G grade and make up the work at a later time.

Students who voluntarily withdraw from classes will receive tuition reimbursement consistent with the existing schedule. Students who enroll at other institutions during the period in which classes are disrupted at the University may receive transfer credit subject to normal policies.

*The quandary of essential personnel*

As stated, the anticipated absenteeism for this scenario is projected at 10-25%. For certain key functions or for smaller departments, this level of absenteeism may lead to the quandary posed by designating “essential personnel.” The failure to report to duty based on documented illness or documentation regarding sick family members is managed through existing policies, but a failure to report to duty based on fear or the perceived need to protect ones' family, future, or livelihood is being evaluated by Human Resources with respect to current employee policies.

RESPONSE LEVEL D—PANDEMIC PERIOD

The response level (D) entitled Pandemic Period is self-evident and is associated with widespread, efficient, and virulent disease that is entrenched throughout the region of Western Pennsylvania. It is assumed that the health care delivery system is extremely over-taxed and most public services are minimized. There is widespread public distress and pervasive media coverage. In this scenario, social distancing as described in the previous response level is assumed, and for the sake of this plan, the temporary suspension of normal University operations is also assumed.

University operations will be reduced to a minimal level necessary to maintain security, support students remaining on campus, sustain research models, and protect buildings. The performance of these functions will be impacted by the assumption that there will be a 40% absenteeism rate at any given time due to illness in the community. Additional absenteeism also is assumed due to illnesses encountered at home or fear of public travel. A 5% mortality rate is also assumed.

Through the activities of the Pandemic Preparedness Workgroup, selected departments conducted planning for the concept of 40% absenteeism and 5% mortality in relation to their capabilities for sustaining minimal operations at the University for a period that coincides with a 6-12 week “wave” of high infection rates. Historically there have been waves of this duration occurring in multiple cycles, prior to permanent deflation of disease rates.

*Research continuity in a pandemic*

Sustaining research continuity during the described pandemic period was examined. The University will seek clarification from its major funding agencies with regard to their plans for extension of grant funding and reporting requirements in the case of an unavoidable disruption of funded research programs. In the event of any unavoidable

disruptions, the impact on the research program will be identified and addressed with the funding agency.

The Pandemic Preparedness Guide for Researchers is intended to collect information on the critical aspects of sustaining research. Research programs that are dependent upon controlled environments, regular monitoring, and/or animals will be identified and specific methods for ensuring minimal disruption during the period of the emergency will be developed. Separate meetings regarding sustaining research animals are under way. The suspension of some or all research activities may not coincide with the suspension of other operations. Further discussion will occur to establish criteria for delineating levels of research that would be permitted to continue under the scenarios described in this plan.

#### *Suspension of normal operations*

Another key consideration during a period of suspended normal operations will be the maintenance of University buildings. Strategy meetings were held at the Facilities Management Division to delineate the number of personnel and the activities necessary to sustain buildings throughout such a period. Such activities include provision of minimal heat to avoid rupture of plumbing in cold weather, providing minimally conditioned air to sustain computer systems and animal models, and providing clean and reliable sources of water and sanitary facilities to those areas where remaining students are housed or where personnel are maintaining operations for security forces, emergency response, decision-making, and other essential functions.

Maintaining a secure campus in such a scenario will become increasingly important as the University may be perceived as an area of refuge for those in distress. Further, capabilities of emergency response may be minimized and extra vigilance and monitoring of University facilities may be necessary to protect property and health.

Under the scenario described for the pandemic period, the University may be providing support for a number of students still housed on campus. Strong consideration will be given to consolidate those students into one facility to preserve resources. In order to further preserve and maintain resources for commodities, selected departments have initiated the exercise of validating that contracts with key vendors are in place and that an alternate source for the commodity has been identified (should the vendor also have a suspension of normal operations during the pandemic period).

The following items will be stored centrally for an indefinite period of time to be utilized in an emergency: masks, liquid barrier gloves, hand soap, paper towels, waterless hand cleaner, concentrated disinfectant, ready-to-use disinfectant spray, wiping cloths, buckets, and trash bags for potentially infectious waste.

#### **RESPONSE LEVEL E—MANAGEMENT OF PANDEMIC CASES ON CAMPUS**

This response level is necessitated by a confirmed case of an emerging or re-emerging pathogen on any University of Pittsburgh campus. It is feasible that a case of pandemic

influenza, or some other illness, would first emerge in Western Pennsylvania on a University of Pittsburgh campus. Such a finding would obviously negate the incremental approach to pandemic preparations described in this document.

It is possible that the first identified case(s) in the region could be entered into the health care delivery system. However, since placement of a sick student in the health care delivery system may not be possible, the Pandemic Preparedness Workgroup has planned for a student confirmed with pandemic illness on the Pittsburgh campus to be immediately relocated from their housing site to fraternity house #9, which within several hours notice can become a dedicated building for sick individuals. The facility will be staffed and operated by the Student Health Services in conjunction with Housing, and with support from the University Police, Environmental Health and Safety, and other University services. Upon case confirmation, the family of the student will be notified by the Office of the Dean of Students, and close personal contacts of the sick student may be quarantined.

If the confirmed case is a University student that lives outside of a University of Pittsburgh residence hall, the case will be referred to the Allegheny County Health Department for management. If the case involves a visitor to a University of Pittsburgh campus, the individual will be referred to the local health care network for treatment and management. If the case involves a faculty or staff member, the individual will be promptly directed to return to their residence and seek health care through their health care delivery system.

The Student Health Services has devised a series of plans and standard operating procedures that can be readily adopted to meet the health care needs of the students placed in the isolation facility. It is estimated that approximately 20 infected students could be isolated in fraternity house #9.

If it is suspected that fraternity house #9 will not accommodate an increasing number of students presenting with pandemic symptoms, the Pittsburgh campus is prepared to engage Sutherland Hall as an isolation and quarantine facility. Sutherland Hall was selected due to the presence of a food service facility, its proximity to adjacent health care delivery facilities, and its east and west tower arrangement. This arrangement will allow the University to dedicate one tower for housing infected students and the opposite tower for quarantining well students who have reported significant exposure to a sick student (e.g. roommate), while providing centralized services on the common lower floors. Food service will be provided using disposable supplies, and a stockpile of an 8-week food and water supply is being assembled. Each tower has a separate entrance so that those quarantined and those sick will not mingle, and the facility is easy to secure via the usual means utilized for residence halls.

## COMMUNICATION PLAN

Throughout these various response levels, centralized and consistent communications will be necessary. The Office of Public Affairs has conducted elaborate planning in anticipation of these response levels.

## OTHER PLANNING POINTS FOR CONSIDERATION

### *UPMC*

The Pandemic Preparedness Workgroup has coordinated University efforts with the UPMC Pandemic Preparedness Taskforce. In a scenario where human-to-human transmission is reported in the Western Pennsylvania region, the UPMC Health System may seek to utilize certain resources of the University that have been specified and approved in advance. In summary, it is the intent of UPMC (should the situation warrant) to utilize the Cost Center as a triage facility or as a site to assist surge capacity of the UPMC Presbyterian Hospital. Additionally, UPMC may request the use of Trees Hall to provide UPMC staff and volunteers with a place for shelter, rest, food, showering and hygiene. Lastly, the Fitzgerald Field House has been identified as a possible site for palliative care of patients.

It has been agreed by both institutions that when University faculty also are in possession of a clinical appointment with UPMC, the clinical appointment shall take priority but fundamental academic and research obligations must be maintained. Additionally, UPMC is collaborating with the Schools of the Health Sciences to garner the use of the valuable health care expertise found in advanced graduate students who elect to volunteer for clinical-related duties.

### *Allegheny County Health Department*

The Pandemic Preparedness Workgroup has coordinated efforts with the Allegheny County Health Department (ACHD). The current pandemic plan of the ACHD does not include any facilities or specific resources from the University of Pittsburgh. The point of distribution for ACHD service, medication, and vaccines for the Oakland area has been designated as the Oakland Catholic High School.

### *Volunteerism*

The University will defer to UPMC, the Allegheny County Health Department, and community-assistance organizations to convey volunteer opportunities.