Pandemic Response Annex

Introduction

Pandemic: *a global outbreak of an infectious disease of variable severity which spreads easily from person to person causing illness to which people have little or no immunity.*

Influenza is a viral respiratory infection that is highly contagious, and a known source of pandemic illness. Other emerging infectious diseases (e.g., SARS-associated coronavirus) can also result in pandemic infections, and this Annex applies equally to the response in those cases. In the United States seasonal outbreaks of influenza often occur in communities during the fall and winter. During a typical flu season 5% - 20% of people in the U.S. become ill; more than 200,000 are hospitalized; and about 36,000 die. Influenza spreads from person to person mainly in respiratory droplets from coughs and sneezes or from handling of contaminated objects. Yearly immunization with the influenza vaccine is the most effective way of preventing influenza.

At unpredictable intervals a novel (new) influenza virus appears in humans to which we have no immunity. If the novel influenza virus is transmitted easily from person to person and causes significant illness this creates the setting for an influenza pandemic; a global outbreak of influenza illness with rapid spread from person to person and country to country. The World Health Organization (WHO) is responsible for announcing a global influenza pandemic.

Pandemic influenza is global in nature, of prolonged duration and primarily affects people – University students and staff as well as individuals in the surrounding community – with secondary effects on University activities, operations and services as increasing numbers of students and staff become ill.

Pandemic influenza may persist in the University community for weeks to months and may occur in repeated waves of illness as new groups of individuals are infected. The human, operational, and economic impacts of a pandemic depend on several variables: the severity of illness, the speed of spread within the community, the availability of a vaccine or other preventive medications, the effectiveness of social distancing practices and other non-pharmaceutical interventions (NPIs), the timing of implementation of social distancing practices, and the number of students and staff who are ill at any given time during the pandemic.

A severe influenza pandemic may lead to a public health emergency with much higher rates of infection, many more hospitalizations and significantly more deaths[1]. Such a pandemic has the potential to overwhelm normal healthcare systems and negatively affect local, regional, national and global economies.

[1] See Appendix F: Pandemic Severity Index

Planning Considerations

Issues and Challenges

Pandemic infectious diseases can appear suddenly with a rapid increase in the number of infected individuals over a short period of time. While many public health models predict that the next influenza or other infectious disease pandemic will begin outside the U.S., the international nature of the University increases the risk of early appearance of pandemic illness locally.

In responding to a pandemic the University of Oregon has a number of unique issues and challenges related to its role as a major university with strong commitments to learning, research and service locally, regionally and internationally. These issues and challenges include but are not limited to:

- Students in residence halls – higher potential attack rate
- Students with families – affected by family health, higher attack rate among school-age children and K-12 school closures
- International students – may be unable to return home if the University closes
- Students and employees with certain chronic medical conditions – at higher risk of serious illness, complications, and hospitalization
- International travelers – may be unaware of University pandemic response actions or requirements for those returning to campus
- Students currently studying abroad – study abroad programs should be assessed very early during a pandemic to determine if students should be brought home while travel is still possible
- Greek Houses
- Childcare facilities
- UO programs at other locations

Family Educational Rights and Privacy Act (FERPA)

FERPA-protected information may not be shared outside the University and may be shared with UO "school officials" only if the school official has a "legitimate educational interest". A "school official" is a person employed by the University; a person or entity, including a governmental entity, with whom the University has contracted; a person serving on the University's governing board; or a student serving on an official committee or assisting another school official in performing his or her duties. "Legitimate educational interest" means a reasonable need to know information in the course of carrying out one's duties.

The Incident Commander(s) should consult with UO General Counsel or other appropriate officials prior to releasing FERPA-protected information to entities other than school officials with a need to know the information in order to perform their duties.

Assumptions

- Absence of immunity to pandemic infection will be universal.
- The incubation period will average 2 days for influenza, and for an undetermined period for emerging infectious diseases. Persons who are infected can transmit the infection to others prior to the onset of symptoms.
- Some individuals will be infected but not become ill. Infected individuals with minimal or no symptoms can still transmit the infection to others.
- Rates of illness, hospitalizations and deaths due to influenza, or other emerging infectious disease, will be significantly higher than those occurring during seasonal influenza.
- The rate of illness may exceed 30% at the University during a pandemic.
- Illness rates may approach 40% among students living in residence halls.
- At least 50% of students with infectious disease will seek medical care on campus.
- An effective vaccine will not be immediately available. It may take several months after onset of a pandemic to develop and produce a vaccine.
- Vaccine supplies will initially be limited requiring prioritization of vaccine recipients.
- Antiviral medications may not be effective or may be in limited supply requiring prioritization of who will receive medication.
- NPIs[2] may be the only means of limiting pandemic spread prior to distribution of an effective vaccine. Their effectiveness in limiting the spread of a pandemic is unknown.
- Timing will be crucial in the decision to cancel classes or close the University. Premature implementation may lead to unnecessary disruption while late implementation may render such actions ineffective.
- In the absence of interventions, rates of absenteeism at the University may reach 40% during the peak weeks of a pandemic.

Authorities

University Pandemic Response Plan utilizes four phases to identify key decision points for University response during a pandemic. Decisions, while involving a number of factors and variables, will normally be based on the most reliable information available regarding the extent of geographic spread and the severity of the pandemic. Reliable information sources during a pandemic include the U.S. Centers for Disease Control and Prevention (CDC), the Oregon Health Authority and the Lane County Public Health Department.

[2] NPI: Non-pharmaceutical interventions

The Oregon Health Authority, working through the Lane County Public Health Department and in collaboration with the U.S. CDC, will provide information and guidance to communities and institutions regarding the pandemic and steps and actions to be taken in response to a pandemic event. **The Oregon Health Authority has the legal authority to mandate class cancellations and other highly disruptive mitigation strategies if required.** The UO can implement mitigation strategies prior to being mandated to do so by the Oregon Health Authority or Lane County Public Health.

Concept of Operations

The Pandemic Response Plan will utilize the Incident Management Team plus representatives from other impacted units currently not represented on the IMT:

Business Continuity Planning

Departments on campus are encouraged to develop business continuity plans to address potential impacts and coping strategies for high rates of staff absenteeism and cancellation or closure of services and events. Department level business continuity plans will be an important tool during a pandemic.

Pandemic Disease Phases

The pandemic disease response plan utilizes six phases which are determined by severity, spread, attack rate, and morbidity of the disease as well as proximity to campus and impact on the campus community.

There is no certainty that the phases will be activated in a progressive manner from lowest to highest. There is a very real possibility that cases of pandemic infection will already be present in the United States or even in Oregon when a pandemic is announced by the World Health Organization (WHO). As a result, the Pandemic Response Plan may be activated at any of the six phases. Activation of a particular University Phase assumes that all actions in preceding levels will be completed as necessary and as rapidly as possible.

- **Phase 0 – Preparedness -** No pandemic event is occurring and campus activities are operating at normal levels.
- **Phase 0/IR – Increased Risk –** Indicators of new infectious disease spreading in other parts of the country or internationally. International travel advisories, warning and restrictions may be occurring. The University will maintain normal operations, however will enforce its travel policies and increase planning.
- **Phase 1 – Disease in Eugene/Springfield Metro/On Campus –** University will maintain normal operations, but will implement appropriate mitigation measures mitigation measures.
- **Phase 2 – Significant campus absenteeism –** Will begin implementing altered operating environment including use of e-learning for classroom, telecommuting for non-critical staff, possible cancellation of events and other measures.
- **Phase 3 – Essential Operations Only -** Classes and research suspended, University closed, only essential staff and those who cannot leave on campus. Departmental business continuity plans are activated and only those enterprise essential functions are maintained.
- **Phase 4 – Recovery –** Actions to return to normal operations

Response Actions by Phase

Decision Points and Prevention or Response Options

Specific preparation and response cannot be known in advance but generic expectations can identify action thresholds. The IMT and Policy Group will make response decisions based upon the information available at the time of the outbreak, epidemic, and/or pandemic. General indicators and actions are listed below.

Phase 0/IR – Preparedness

The University will maintain normal operations, but may enforce travel restrictions, increase planning, begin outreach, and consider mitigation measures.

Phase 1 – Disease in Eugene/Springfield Metro Area / On Campus

The University will attempt to maintain normal operations but will consider mitigation measures.

Recommendations may also be made by the IMT to implement measures to decrease transmission of infection on campus which may include:

- Formally activate IMT and Policy Group to develop the Incident Action Plan
- Consider activating the Emergency Operations Center or Virtual Emergency Coordination Center.
- Assessing severity and timing of the disease
- Focusing messaging on campus on preventing disease transmission
- Organizing pharmaceutical dispensing sites for campus community if necessary
- Recommending that students, faculty and staff avoid travel to areas where disease is known to exist
- Establishing assessment and, if necessary, isolation procedures for members of the campus community who have traveled to areas where the disease already exists.
- Decide if personal protective equipment will help prevent transmission of the disease and ensure that essential personnel receive appropriate training
- Recommend list of self-isolation supplies
- Plan for increased wipe-down of high traffic surfaces (e.g., tables, doorknobs, computers, phones, etc.)
- Increased availability of hygiene items (tissues, paper towels, soap, hand sanitizer, etc.)
- Availability of personal protective equipment for the general public (e.g., masks, gloves)
- Maintain contact with Lane County Public Health, the Oregon Health Authority, CDC and WHO

Phase 2 – Significant campus absenteeism

The University will follow emergency procedures in consultation with federal, state, and local health authorities.

- The University will work closely with local and state public health to obtain prophylactic medications or vaccines for the campus community if appropriate and available.
- Required prophylaxis for students, faculty and staff if available and decide if immunization can be offered to family members.
- Decide methods and locations necessary to identify and isolate individuals who are either infected or exposed to the disease.
- Train support personnel for isolated housing if it is intended
- Identify, prepare and pre-position stocks to support isolation housing for students
- If useful, direct distribution of personal protective equipment
- Message regarding methods to self- isolate effectively at home and consider telecommuting
- Consider need to alter or cancel planned events and assemblies on campus
- Consider the need for suspending on-campus classes and conducting alternate instruction to complete quarter requirements.

Phase 3– Essential Operations Only

Classes and research suspended, University closed to all but essential staff and those who cannot leave campus.

- The Emergency Operations Center or Virtual Emergency Coordination Center is open and evaluating impacts on campus
    - Evaluate needs and availability of support services (housing, feeding, medical) for students who cannot return home
    - Enterprise essential functions are being maintained and resources are being allocated and prioritized to keep these functions working (see annex x)
    - Non-essential buildings are in shut down mode and secured
    - Maintain contact with federal, state, and local authorities on progress of disease impacts and what projections are being made as to the duration
    - Alternate work arrangements are in effect
    - Alternate academic operations are in effect, if feasible and research is restricted to most critical areas

Phase 4– Recovery

Recovery will rely heavily on department level business continuity plans. The IMT will assist where needed.

Appendices

Appendix A: Briefing Template / Situation Report

Briefing Template

During a pandemic certain information regarding the pandemic illness will need to be provided on a regular basis to the IMT, Policy Group, and the University community. This information will need to be updated whenever there is a change in the status of the pandemic. The following questions are intended to serve as a guide to the information which should be gathered, monitored and shared whenever changes occur during the course of a pandemic.

- What is the causative agent of the pandemic illness?
- How is it transmitted?
- What is the current Pandemic Severity Index?
- What is the attack rate (% of population who become ill)?
- What is the incubation period?
- What are the signs and symptoms of infection?
- How severe is the illness?
- What is the duration of illness?
- Which specific groups are at increased risk of infection or complications?
- What is the current geographic extent of pandemic spread?
- Which NPIs are recommended by public health officials?
- Is there an effective vaccine?
- Are there medications which are effective for treatment or prevention of illness? Are these medications available for students and/or staff?
- How are other college campuses / Oregon campuses responding to the pandemic?

Situation Report

The following is a sample of the Situation Report for use in distributing updated information to the Incident Management Team and Policy Group.

IMT & Senior Leadership Brief
<NAME infectious disease event>
<TIME> <DATE>
Situation Report #

Emergency MANAGEMENT PROGRAM

Newly updated information in bold print.

The next Briefing is scheduled for <TIME> <DATE> <LOCATION>.

Background: <Brief summary of events prior to first situation report>

	No	Yes	Notes
Federal Emergency Declaration			
National Public Health Emergency Declaration			
CDC and U.S. State Department Travel Advisory			
State of Oregon – Declaration of Emergency			
State of Oregon – Emergency Operations Center Activation			
Oregon K-12 School Closures			
College/University Closures			
University of Oregon			
Activation – Campus Incident Management Team			
Activation – Emergency Operations Plan			
– Pandemic Plan			
– Daily Incident Action Plan (IAP)			
– Daily Situation Reports (SitReps)			
UO Closures			
UO Event Cancellations			
WHO Pandemic Alert	**Phase 6 – "a global pandemic is underway"**		

Current Situation – Oregon

Summary:
<DATE>:

-

Current Situation- World and U.S. National

<DATE>:

-

Current Situation – University of Oregon

Summary:
<DATE>:

-

UO EOP AND PANDEMIC PLAN OPERATIONS STATUS:

Current Operational Period 1700 <DATE> to 1700 <DATE>
Current Staffing: <List active positions>
Staffing for <DATE – next day> is in progress; staffing for remainder of week being developed
Situation Reports # <Most recent report> at <TIME> on <DATE>

IAP for next operational period at <TIME>

***Policy Group** Meeting:*

Summary:
<DATE>

Liaison Officer

Summary (from ICS form 214):
<DATE>:

Public Information Officer

Summary (from ICS form 214):
<DATE>:

-

Finance Section

Summary (from ICS form 214):
<DATE>:

-

OPS <NAME> Group

Summary (from ICS form 214):
<DATE>:

-

OPS <NAME> Group

Summary (from ICS form 214):
<DATE>:

-

OPS Environmental Health & Safety Group

Summary (from ICS form 214):
<DATE>:

-

Federal Agencies/Departments

Summary (from ICS form 214):
<DATE>:

-

APPENDIX A: UOEMC Webpage Analysis

APPENDIX B: U.S. and International Report Archives

Archived *Current Situation - U.S. National* Reports

<DATE>:

-

Archived *Current Situation* - International

<DATE>:

-

APPENDIX C: Helpful Links

CDC

DHHS

DHS

Google Maps H1N1 Flu Tracking Tool:

U.S. Department of State

Disaster Resilient University H1N1 at institutions of higher education

Google Map H1N1 Flu Tracking (Colleges and Universities): http://tinyurl.com/HigherEdH1N1Map

Pan American Health Organization:

World Health Organization:

Other Colleges and Universities

Other Links

Appendix B: UO Social Distancing Guidelines

Social distancing refers to various community, workplace and classroom non-pharmaceutical interventions (NPIs) intended to limit the spread of an infectious disease by reducing opportunities for close contact between individuals. The CDC recommends timely implementation of social distancing options as the primary means of controlling the spread of pandemic illness in the absence of an effective vaccine. Normally implementation of social distancing options will be based on specific recommendations from the CDC and/or county public health.

Social Distancing Policy & Communications
The Policy Group will consider policies to guide social distancing actions selected for implementation if necessary. Selected actions may be based on recommendations or mandates from public health. Social distancing policy decisions will be communicated to the Incident Commander for operational implementation. The decisions and the rationale for those decisions will also be communicated to all students, parents, faculty, staff, and the general public to promote compliance and cooperation.

Implementation of Selected Social Distancing Actions
In most cases social distancing actions will be implemented by the University on the instructions of State and county public health officials; however the University may decide to implement such actions prior to instructions from public health.

The following discussion of social distancing provides general considerations for implementation of specific social distancing actions. Implementation during a pandemic must be tailored to meet the requirements of the actual event which may differ substantially from the assumptions on which this discussion is based.

Social Distancing

In order to decrease the risk of transmission of the influenza virus from person to person public health experts recommend that individuals maintain a minimum 6 foot distance between one another when occupying the same room or space. Social distancing will likely be most effective in the form of on-line education. Moving classes into larger classrooms to accommodate the 6 foot distance is not feasible.

Social distancing actions will be more effective if accurate information is developed and widely distributed regarding the reasons for each action. Faculty and staff support will be critical for success. Faculty and staff should be provided with all necessary information in a readable format and possibly through in-person training sessions. Faculty should be asked to review and reinforce social distancing recommendations with students regularly during a pandemic.

Voluntary Isolation

Isolation is the physical separation of persons with a contagious infectious illness from those who are healthy. Persons with influenza are considered to be contagious beginning one day prior to the onset of symptoms through day 14 of the illness. Compliance with voluntary isolation can be difficult to maintain for a variety of reasons including a perceived need to return quickly to work or class.

- Communication – Compliance with voluntary isolation is increased if the reasons for such recommendations are fact-based, clearly stated, widely distributed, repeated regularly, and supported by University actions.
- Class Absence Policies – Students who are ill must be encouraged to stay home during a pandemic. A more flexible class absence policy applied on a consistent, campus-wide basis is an option for demonstrating University support for this recommendation.
- Sick Leave Policies – Faculty and staff who are ill must be encouraged to stay home during a pandemic. Implementation of a more flexible sick leave policy.
- Residence hall students – Residence halls do not normally have space available to separate even a small number of ill students from those who are well. In normal circumstances, students who are ill with a significant infectious disease are encouraged to go home until they are well. Those who cannot do so normally remain in their room and are provided with support by friends and Housing staff. During a pandemic 40% of residence hall students may become ill (~1,360 students) and many may be unable to return home. This would make it very difficult to isolate ill students within the residence halls and would place a significant strain on Housing staff providing support for ill students.

Voluntary Quarantine

Quarantine is the physical separation of those at increased risk of developing influenza (close contacts of an ill person such as roommates, housemates, caretakers, etc.) from those who are well. In view of the difficulties in isolating those who are already ill, it is unlikely that voluntary quarantine will be successful unless the resultant illness is severe. During a serious pandemic effective communication and community pressure may make this approach more viable. All considerations listed for voluntary isolation also apply to voluntary quarantine.

Classroom Options

The difficulties in increasing student spacing in classrooms depend on variables such as the number of students in the class, the number of open seats and the configuration of the classroom. Given current classroom utilization, addressing social distancing through moving classrooms is likely not feasible. Possible actions to implement social distancing may include:

- Technology – Use of technology to provide instruction without use of classrooms. Options may include taped or televised lectures, instant messaging discussions, e-mail assignments, and other distance learning methods. It will be critical to identify, develop, and test any identified technological solutions prior to a pandemic.
- Availability of tissues and alcohol-based hand cleaner in classrooms – During a pandemic students, faculty and staff should both practice and encourage good infection-control habits including frequent hand washing and covering coughs with a tissue or upper sleeve.

Workplace Options

Implementation of workplace options will involve advance planning and preparation as well as collaboration with UO Human Resources staff to ensure that University work requirements and contractual obligations are met.

- Split shifts – Public health officials suggest split shifts to allow workers to maintain social distancing space. This would be a less satisfactory solution for those units normally providing face-to-face services during standard business hours. Contract issues may also play a part in determining the viability of split shift options.
- Work-From-Home Options – Some employees perform work which could be done from home allowing such employees to continue working while avoiding close contact with others. It would be important for departments to identify those employees prior to a pandemic and ensure that they had the necessary equipment, software and data access to work effectively from home. Refer to the Human Resources telecommuting page for pertinent information, requirements and policies. Current policy is to limit Banner access off campus, so functions needing access to Banner would not be appropriate for a work from home option.
- Teleconferencing and Videoconferencing – Telephone and video conference calls may provide an effective substitute for face-to-face meetings. Necessary information can be distributed to participants via e-mail prior to the conference call. UO Telecommunications Services can provide information and assistance in setting up conference calls. Refer to their teleconferencing web page.
- Availability of tissues and alcohol-based hand cleaner at work – During a pandemic students, faculty and staff should both practice and encourage good infection-control habits including frequent hand washing and covering coughs with a tissue or upper sleeve.

Event Cancellation

Ideally there will be sufficient early warning to allow planning for event cancellations. This may not be the case during a pandemic. Pre-planning for event cancellation should begin immediately if the CDC and OPHD announce 1) that there is substantial risk of a pandemic (University Pandemic Response Alert Phase) or 2) that a pandemic has begun (Activate Phase).

The University calendar should be reviewed for upcoming campus events and individual departments should be asked to identify upcoming events that they may be sponsoring or participating in. The steps necessary to cancel each event (notification of speakers, participants and attendees; contractual obligations; venue reservations; etc.) should be identified to allow quick implementation if a decision is made to cancel events.

Sporting Event Cancellation

Cancellation of sporting events involves many of the same steps necessary for cancellation of other public events in terms of pre-planning to avoid a last minute rush. Events to be considered include not only intercollegiate athletic events but also club and intramural events. The Department of Intercollegiate Athletics should be involved at the onset of planning. Club Sports should also be included in planning discussions.

For intercollegiate and possibly club events, team travel arrangements must be taken into account in planning for potential cancellation. If home athletic events are cancelled a decision on cancellation of UO team or individual travel to away events and competitions is also necessary.

Suspension of Classroom Instruction

Advance planning is critical to ensure that, if necessary, suspension of classroom instruction can be accomplished with the least amount of disruption. Planning must begin at the earliest identification of substantial risk of a pandemic. A number of considerations must be taken into account during planning including:

- Duration of class suspension – Current CDC guidance indicates that classes may need to be suspended for 4 -12 weeks depending on the severity of the pandemic.
- Timing of class suspension – Advance planning may identify natural breaks in the academic schedule that could be incorporated as a part of the suspension. Also, late in a term there may be opportunities to condense and complete the term more rapidly.
- Options for continuation of instruction – Prolonged suspension of classroom instruction could be highly disruptive to student education. Continuity of operations planning by academic departments will be critical to explore and develop ways in which instruction can be continued. Another option might be to restructure the academic year by using the summer session as an academic term.
- Financial considerations – Suspension of classroom instruction may affect collection (or retention) of tuition and fees. Financial aid to students may also be affected by prolonged suspension.

Residence Hall Closure

With suspension of classroom instruction of any significant duration or a campus closure, the residence halls will close and resident students will be instructed to return home. Students living off campus may also be encouraged to return home particularly if the University is planning to reduce student services. Advance planning and early notification will be important. Considerations include:

- Student move-out and travel from campus or the community
- Residence hall room, student property & building security
- Accommodation for residence hall students unable to travel home or find alternate living arrangements
- Housing/Food Services financial and contractual considerations

University Reduction of Services

Many campus academic, administrative, and support operations may be suspended if the decision is made to suspend classes, send students home, and limit University staffing to personnel performing mission-critical functions. Continuity of operations planning will be necessary for successful implementation of this highly disruptive social distancing action. A number of issues must be considered including:

- Continuation of campus-essential resources and services
- Continuation of work by personnel performing mission-critical functions
- Options for continuation of critical research activities dependent upon campus facilities

- Financial consequences of reduction in services
- Provision of care for research animals
- Building security
- Campus safety
- Communication with students, faculty, staff and the general public
- Protection of vital records and data
- Provision of utilities to occupied and unoccupied buildings.
- Cessation of normal daily housekeeping and maintenance

Suspension of Research

Research activity is highly dependent upon non-interchangeable personnel and expertise (faculty, post-docs, graduate and undergraduate students, and technical staff). Institutional planning for either the maintenance of research or the temporary suspension of research due to the spread of a pandemic illness is primarily the responsibility of the Office of the Vice President for Research and Innovation, and is supported by appropriate faculty, departmental, and center/institute resources.

Principal Investigators have the primary responsibility to maintain their own research and to undertake contingency planning for their research. In a brief disruption, individual faculty members are best positioned to determine the extent to which their labs have been or could be disrupted and to determine what remedial action is necessary.

Except as otherwise noted, Principal Investigators are responsible for the following:

- *Development of Business Continuity Plans* – Through early and careful identification of critical research functions, facilities, equipment, and records, the impact of a pandemic can be reduced and the loss of both research and equipment can be mitigated. PIs should develop plans that address the essential functions, facilities, equipment, and required maintenance. Arrangements should be in place to assure there are individuals trained as back-up to individuals who provide essential functions such as the operation of critical complex equipment that may not be easily shut down, stabilized, or maintained by someone unfamiliar with its operation. UO Emergency Management & Continuity (UOEMC) can provide technical assistance on business continuity plans for use by Principal Investigators, departments, and units. Once developed, these plans should be shared with UOEMC.
- Notification of Changes to Research Methodologies - Research projects may be compromised when people become unavailable due to illness. Principal Investigators may need to develop alternative methodologies based on available personnel or other resources and may need to seek sponsor approval for such changes and/or provide sponsors with actions taken in response to an emergency situation as quickly as possible. If alternative research methods involve humans or animals, review and approval by the Institutional Review Board and or the Institutional Animal Care and Use Committee (or other research oversight committee) would be required.

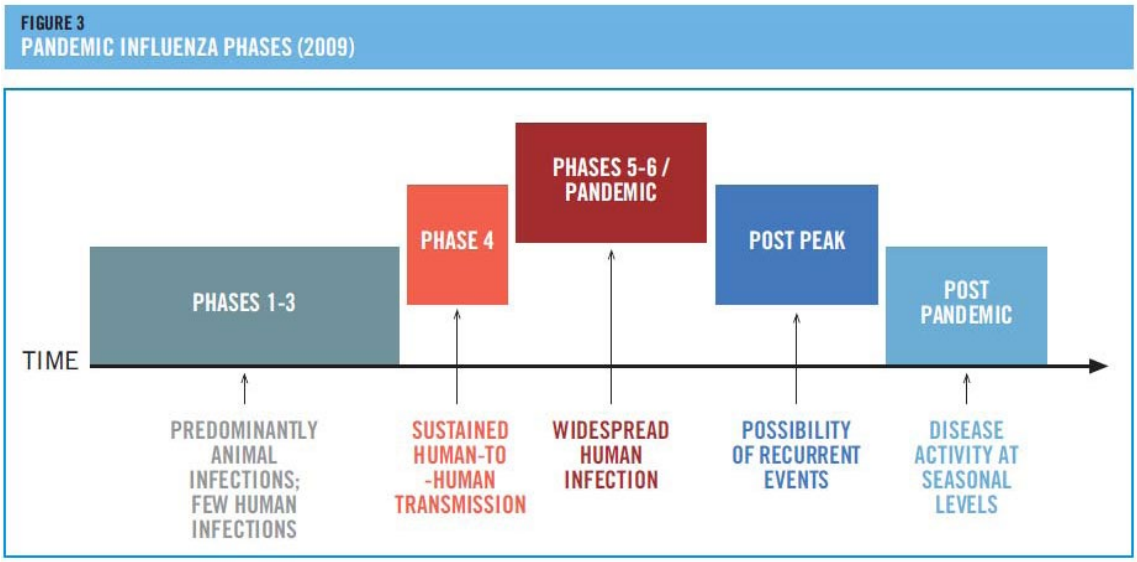
- Communication with Research Partners – If research activities are significantly impacted by absenteeism or other pandemic related conditions, Principal Investigators should inform the Sponsored Project Services, research collaborators, and/or partners about the type and degree of impact. While methods of communications to and from research partners may change during a pandemic, they should be maintained or increased to provide continuity of effort.
- Notification of Suspension of Research – If the Principal Investigator is unable to continue normal research activities, he/she should notify his/her Department Head, and/or Center/Institute Director and Sponsored Project Services. Under the most severe circumstances, the Vice President for Research and Innovation, or other designated official, may need to suspend some or all research activities. If research activities are suspended, the UO Office of Research Services and Administration coordinates notification to the appropriate office and/or official at the sponsoring agency.

Appendix C: Infection Control Recommendations

During a pandemic, the risk for infection can be reduced through a combination of simple actions. No single action provides complete protection, but an approach combining the following steps may help decrease the likelihood of infection:

- Wash hands frequently with soap and water or an alcohol-based hand cleaner if soap and water are not available
- Cover the mouth and nose with a tissue or upper sleeve when coughing or sneezing
- Avoid touching your eyes, nose and mouth
- Stay home if ill with symptoms consistent with pandemic illness and minimize contact with others
- Avoid close contact (within 6 feet) with persons with symptoms of pandemic illness
- Avoid crowded or congested social settings whenever possible

Appendix D: WHO Pandemic Influenza Phases[3]



Definition of the phases

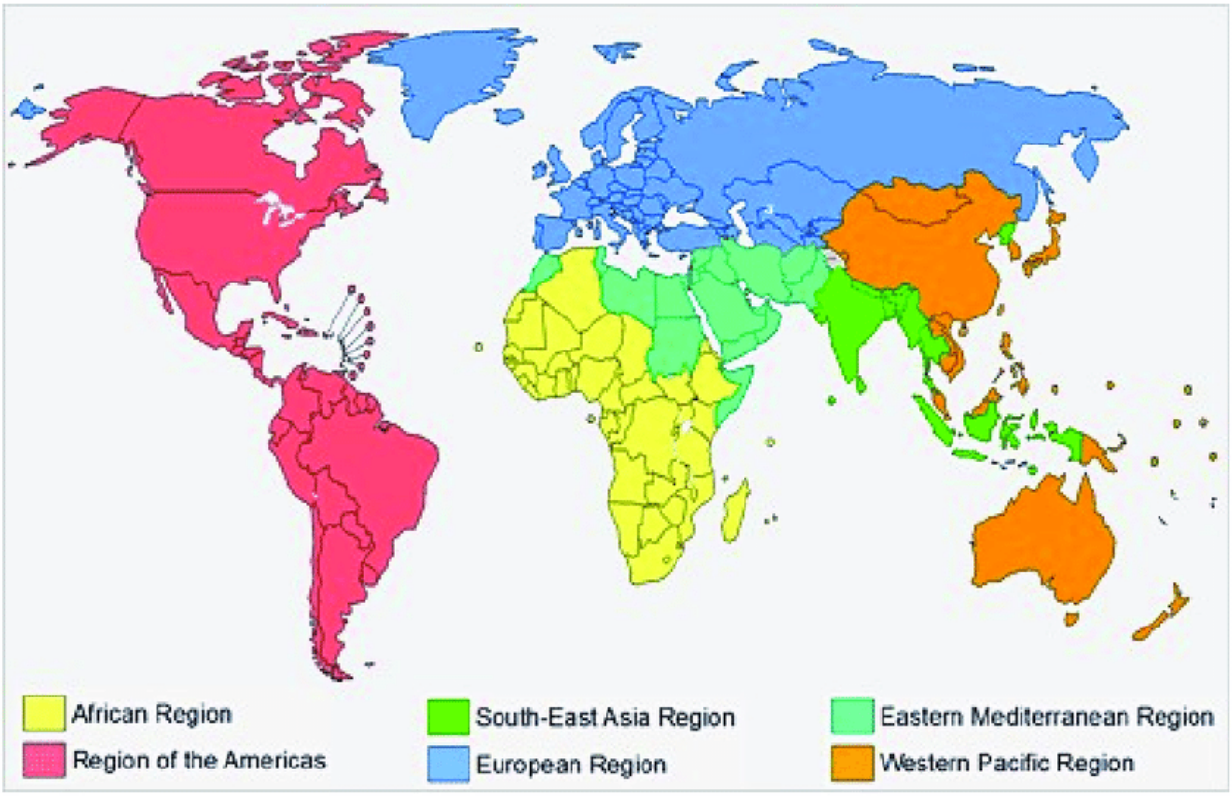
Phase 1: In nature, influenza viruses circulate continuously among animals, especially birds. Even though such viruses might theoretically develop into pandemic viruses, in *Phase 1* no viruses circulating among animals have been reported to cause infections in humans.

Phase 2: In *Phase 2* an animal influenza virus circulating among domesticated or wild animals is known to have caused infection in humans, and is therefore considered a potential pandemic threat.

Phase 3: In *Phase 3*, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances; for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

Phase 4: *Phase 4* is characterized by verified human-to-human transmission of an animal or human-animal influenza reassortant virus able to cause "community-level outbreaks." The ability to cause sustained disease outbreaks in a community marks a significant upwards shift in the risk for a pandemic. Any country that suspects or has verified such an event should urgently consult with WHO so that the situation can be jointly assessed and a decision made by the affected country if implementation of a rapid pandemic containment operation is warranted. *Phase 4* indicates a significant increase in risk of a pandemic but does not necessarily mean that a pandemic is a foregone conclusion.

Phase 5: *Phase 5* is characterized by human-to-human spread of the virus into at least two countries in one WHO region (Figure 4). While most countries will not be affected at this stage, the declaration of *Phase 5* is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.



Phase 6: *Phase 6*, the pandemic phase, is characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in **Phase 5**. Designation of this phase will indicate that a global pandemic is under way.

Post-Peak: During the *post-peak* period, pandemic disease levels in most countries with adequate surveillance will have dropped below peak observed levels. The post-peak period signifies that pandemic activity appears to be decreasing; however, it is uncertain if additional waves will occur and countries will need to be prepared for a second wave.
Previous pandemics have been characterized by waves of activity spread over months.
Once the level of disease activity drops, a critical communications task will be to balance this information with the possibility of another wave. Pandemic waves can be separated by months and an immediate "at-ease" signal may be premature.

Post-Pandemic: In the *post-pandemic* period, influenza disease activity will have returned to levels normally seen for seasonal influenza. It is expected that the pandemic virus will behave as a seasonal influenza A virus. At this stage, it is important to maintain surveillance and update pandemic preparedness and response plans accordingly. An intensive phase of recovery and evaluation may be required.

As in the 2005 guidance, each of the phases applies worldwide once announced. However, individual countries will be affected at different times.

Appendix E: ACHA Recommendations – Medical Supplies[3]

Supplies / Equipment / Services

Once a pandemic starts, it may be difficult, if not impossible, to obtain medical supplies. Purchasing ahead and storing nonperishable goods is a prudent strategy. Quantities should be based on a best estimate of the number of students who may not be able to leave campus and the attack rate discussed earlier.

- Compile a list of supplies that would be needed, such as respiratory protection equipment, gloves, gowns, protective eyewear, medications (antibiotics), disinfectants, and IV fluids.
- Identify supply sources and a storage area.
- Provide administration with a cost estimate for securing supplies.
- Maintain a stock supply of necessary medications and equipment; inventory and rotate supplies as appropriate.
- Investigate the feasibility of establishing negative pressure rooms in the clinic, equipment necessary, and cost/benefit. Consult with Department of Environmental Health and Safety on your campus for assistance in this area.
- Establish a plan for continuation of cleaning services and waste removal services including triggers to increase the frequency of the scheduling of these services.

Pandemic Supply List

Once a pandemic starts, it will be difficult, if not impossible, to secure needed supplies due to increased demand coupled with delays in shipments because of fuel shortages and illness and absenteeism in the transportation industry.

Given the just-in-time purchasing practices of most organizations and the fact that most medical supplies and medications are manufactured overseas, it is anticipated that current medical supplies in the United States will be exhausted quickly under pandemic circumstances. Therefore, schools should determine whether stockpiling of critical supplies would be prudent and, if so, the amount of funding necessary to establish and store supplies.

Below is a general list of supplies that student health services might consider stockpiling. The list is intended to be helpful but not prescriptive, recognizing that the services that student health may provide will vary from campus to campus.

- Adhesive tape (1 inch and l/2 inch)
- Angio caths (#20 and #22 needles)
- Biohazard bags
- Blankets
- Blood pressure cuffs
- Disposable thermometers
- Disinfectant cleaning agents
- Emesis basins
- Gauze bandages
- Gloves (latex and vinyl)
- Hand washing solutions
- IV administration kits
- IV fluids

[3] Text and list of recommended supplies from the American College Health Association's *Guidelines For Pandemic Planning* developed by the ACHA Taskforce for Pandemic Planning (July 7, 2006) at: http://www.acha.org/info_resources/06_Pandemic_Guidelines.pdf

- Oral fluids (Gatorade, apple juice, bottled water, etc.)
- Paper products
- Drapes
- Pillowcases
- Exam table paper
- Gowns
- Peak flow meters
- Pillows
- Pretzels, crackers
- Pulse Oximeters
- Surgical masks
- Thermometer probe covers

Medications

- Acetaminophen (suppositories and oral tabs)
- Antibiotics
- Anti-emetics (suppositories and injection)
- Cough suppressants (liquid syrups, lozenges)
- Decongestants
- NSAIDs

Personal Protective Equipment

- US NIOSH-certified N95 or equivalent respirator
- Face shield, visor, or goggles
- Non-sterile long-sleeved gowns - disposable and fluid resistant