



PANDEMIC INFLUENZA PREPAREDNESS PLAN

I. Background

Influenza A viruses have the ability to infect many different animals including ducks, chickens, pigs, whales, horses, and seals. Influenza A viruses normally seen in one species can sometimes cross over and cause illness in another species. This creates the possibility that a new virus will develop, either through mutation or mixing of individual viruses, in turn creating the possibility for new viral strains that can be highly infective, readily transmissible and highly lethal in humans. When a pandemic virus strain emerges, 25% to 35% of the population could develop clinical disease, and a substantial fraction of these individuals could die.

II. Purpose

UNH has created this Pandemic Influenza Preparedness Plan (PIPP) to help the campus prepare and respond to a pandemic influenza outbreak. The purpose of this Plan is to describe specific action to be taken by the University in the event of an influenza outbreak. The Plan should be implemented in accordance with the UNH Emergency Operations Plan and used to advise the community about the campus response to an influenza pandemic. The PIPP encompasses the various aspects of communication and education, preparedness, emergency response, and the recovery and maintenance efforts to take place in the event of an influenza pandemic.

The development of this document is based on the following assumptions:

- In the event of an influenza pandemic the State of New Hampshire's Department of Health and Human Services (DHHS) will have minimal resources available for onsite local assistance and therefore local authorities and institutions will be responsible for community-specific response plans.
- The federal government has limited resources allocated for State of New Hampshire and local plan implementation, and therefore the State will provide supplementary resources in the event of pandemic influenza, which may include the redirection of personnel and monetary resources from other programs.
- The federal government has assumed the responsibility for developing materials and guidelines, including basic communication materials for the general public on influenza, influenza vaccine, antiviral agents, and other relevant topics in various languages; information and guidelines for health care providers; and training modules. This information is now available at the following website: <http://www.pandemicflu.gov>.
- A novel influenza virus strain will likely emerge in a country other than the United States, but could emerge first in the United States and possibly in New Hampshire.
- It is likely that moderate or severe shortages of vaccine will exist early in the course of a pandemic and also possible that no vaccine will be available.
- The supply of antiviral medications used for prevention and treatment of influenza will be limited.

III. World Health Organization (WHO) Pandemic Response Alert Phases

The World Health Organization has established six pandemic influenza response alert phases as part of its Global Influenza Preparedness Plan (see [Table 1](#) below).

TABLE 1 – World Health Organization Pandemic Response Phases

PHASES	PUBLIC HEALTH GOALS
Interpandemic period	
Phase 1. No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.	Strengthen influenza pandemic preparedness at the global, regional, national and subnational levels.
Phase 2. No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.	Minimize the risk of transmission to humans; detect and report such transmission rapidly if it occurs.
Pandemic alert period	
Phase 3. Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.	Ensure rapid characterization of the new virus subtype and early detection, notification and response to additional cases.
Phase 4. Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.	Contain the new virus within limited foci or delay spread to gain time to implement preparedness measures, including vaccine development.
Phase 5. Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).	Maximize efforts to contain or delay spread, to possibly avert a pandemic, and to gain time to implement pandemic response measures.
Pandemic period	
Phase 6. Pandemic: increased and sustained transmission in general population.	Minimize the impact of the pandemic.

The world is presently in Phase 3: a new influenza virus subtype is causing disease in humans, but is not yet spreading efficiently and sustainably among humans.

IV. UNH Pandemic Influenza Alert Matrix

In response to the WHO Pandemic Response Alert Phases and in consultation with the New Hampshire Department of Health and Human Services, UNH has established the following alert matrix for our Pandemic Influenza Preparedness Plan (see [Table 2](#)).

TABLE 2 – UNH Pandemic Influenza Alert Matrix

What type of transmission is confirmed?	Where are the cases?	Are there cases at UNH?	Alert Level
None or sporadic cases only	Anywhere in the world	No	Preparation
Person-to-person transmission	Anywhere outside North America	No	1
Person-to-person transmission	Anywhere in North America	No	2
Person-to-person transmission	At UNH	Yes	3

Specific organizational responsibilities for primary and support agencies are outlined in [Table 3 – UNH Pandemic Influenza Preparedness Matrix](#).

TABLE 3 – UNH Pandemic Influenza Preparedness Matrix

Emergency Support Function (ESF)	Preparation	Level 1 Anywhere outside North America	Level 2 Anywhere in North America (In addition to Level 1 actions)	Level 3 At UNH (In addition to Level 2 actions)
<p>ESF: Direction and Control</p>	<ul style="list-style-type: none"> • Monitor national situation through review of CDC, WHO and NH DHHS websites. • Communicate with campus housing, hospitality services, police, health services and media relations for planning efforts. • Brief UEG members on regular basis and request they identify essential staff that can maintain the University’s Facilities and Operations. • Meet and coordinate with NH DHHS Public Health Officials. • Formulate the plan for the University’s response to Pandemic Influenza. • Develop a policy for suspension of classes due to Pandemic Influenza outbreak. • Update the University’s emergency preparedness web page as appropriate. • Provide adequate number of surgical masks, N-95 respirators, and waterless hand sanitizer systems for faculty, staff, students and visitors. 	<ul style="list-style-type: none"> • Encourage campus community to follow U.S. government guidelines on foreign travel. • Meet to discuss methods to provide regular updates to staff, students and parents on preparedness and response activities. The team should meet approximately once a month. • Monitor the Health Alert Network and other communications from public health officials to review changes in recommendations about screening criteria and will communicate changes to clinicians via some combination of email, intranet or radiographic or laboratory reporting. • Provide updates to the Senior Management Group (SMG) on a monthly basis. • Essential staff will receive N-95 respirators and respiratory protection training. 	<ul style="list-style-type: none"> • Consider possible restrictions to vendors, visitors and conferences/group activities. • The UEG will meet at least weekly to review the situation as the pandemic progresses and provide updates to the SMG. • Distribute surgical masks to departments for issuing to campus community as specified by the UEG. 	<ul style="list-style-type: none"> • The UEG will recommend restricting access to certain high-density/high-use buildings in order to prevent the spread of pandemic influenza. Recommendations will be forwarded to the SMG for approval. • The UEG will recommend that activities at campus eateries (e.g., cafeterias, dining commons) and other shops be suspended. Recommendations will be forwarded to the SMG for approval. • The UEG will recommend suspension of activities, including sporting events, arts performances, and classes as determined by the UEG and SMG in consultation with NH DHHS. • The UEG may recommend to the SMG to close the University as a means to prevent the further spread of pandemic influenza. In the event of closure, a plan should be in place for dormitories to provide meals to those who cannot leave immediately.

Emergency Support Function (ESF)	Preparation	Level 1 Anywhere outside North America	Level 2 Anywhere in North America (In addition to Level 1 actions)	Level 3 At UNH (In addition to Level 2 actions)
ESF-1 : Transportation and Evacuation	<ul style="list-style-type: none"> Identify essential staff that will be available in the event of an influenza pandemic. 	<ul style="list-style-type: none"> Essential staff will receive N-95 respirators and respiratory protection training. Monitor situation and respond as needed 	<ul style="list-style-type: none"> Monitor situation and respond as needed. 	<ul style="list-style-type: none"> Campus transportation, including buses transporting students on and off campus, may be suspended. Monitor situation and respond as needed.
ESF-2: Communication and Alerting	<ul style="list-style-type: none"> Identify essential staff that can maintain the University Communications system. Update the UNH homepage as appropriate. 	<ul style="list-style-type: none"> Essential staff will receive N-95 respirators and respiratory protection training. Monitor situation and respond as needed. 	<ul style="list-style-type: none"> Advise UNH personnel, including faculty, staff, students and visitors, who have fever and cough to defer attending school or visiting the institution until their illness has resolved through e-mail or UNH website. Monitor situation and respond as needed. 	<ul style="list-style-type: none"> Monitor situation and respond as needed.
ESF-3: Public Works and Engineering	<ul style="list-style-type: none"> Identify essential staff that can maintain the University's Facilities and Operations during an influenza pandemic. 	<ul style="list-style-type: none"> Monitor situation and respond as needed. Essential staff will receive N-95 respirators and respiratory protection training. 	<ul style="list-style-type: none"> Prepare plan to shutdown ventilation systems on buildings on an individual or entire-campus basis. “Ask for a Mask” and other infection control signs will be placed at the entrance to the Student Health Center and posted at all entrances and in all common areas (in dormitories, libraries, gymnasium, auditoriums, cafeterias, classrooms and restrooms). Monitor situation and respond as needed. 	<ul style="list-style-type: none"> Shutdown building ventilation systems as instructed by the UEG. Monitor situation and respond as needed.

Emergency Support Function (ESF)	Preparation	Level 1 Anywhere outside North America	Level 2 Anywhere in North America (In addition to Level 1 actions)	Level 3 At UNH (In addition to Level 2 actions)
ESF-4: Fire Fighting	<ul style="list-style-type: none"> Identify essential staff that can maintain the life safety systems and fire fighting operations during an influenza pandemic. 	<ul style="list-style-type: none"> Follow Durham Fire Department procedures for respirator use. Monitor situation and respond as needed. 	<ul style="list-style-type: none"> Follow appropriate Durham Fire Department procedures for pandemic influenza. 	<ul style="list-style-type: none"> Follow appropriate Durham Fire Department procedures for pandemic influenza.
ESF-5: Public Information and Planning	<ul style="list-style-type: none"> Identify essential staff that will be available in the event of an influenza pandemic. 	<ul style="list-style-type: none"> Develop educational and promotional materials to promote availability and desirability of influenza vaccine for all. Encourage campus community to follow U.S. government guidelines on foreign travel. Develop a sustainable and effective plan for communication and promotion of messages relating to a potential pandemic influenza to internal and external audiences. Informed faculty, staff and students of basic readiness activities at UNH. Essential staff will receive N-95 respirators and respiratory protection training. Monitor situation and respond as needed. 	<ul style="list-style-type: none"> Write and record pandemic influenza bulletins and updates for the UNH Information Line (862-0000). Monitor situation and respond as needed. 	<ul style="list-style-type: none"> Develop daily or more frequent pandemic influenza updates to national and local media outlets. Monitor situation and respond as needed.

Emergency Support Function (ESF)	Preparation	Level 1 Anywhere outside North America	Level 2 Anywhere in North America (In addition to Level 1 actions)	Level 3 At UNH (In addition to Level 2 actions)
ESF-6: Mass Care and Shelter	<ul style="list-style-type: none"> Identify essential staff that will be available in the event of an influenza pandemic. Develop specific pandemic influenza preparedness plan for Housing Department response including quarantine procedures. 	<ul style="list-style-type: none"> Formulate plans for quarantine of students. Essential staff will receive N-95 respirators and respiratory protection training. Monitor situation and respond as needed. 	<ul style="list-style-type: none"> Monitor situation and respond as needed. 	<ul style="list-style-type: none"> Activate plans to quarantine or isolate patients in conjunction with UNH police, Health Services, and NH DHHS. Assist with the location of students if quarantined. Monitor situation and respond as needed.
ESF-7: Resource Support	<ul style="list-style-type: none"> Identify essential staff that will be available in the event of an influenza pandemic. 	<ul style="list-style-type: none"> Initiate influenza awareness training for residential advisors (RAs). Report suspicious illnesses to UNH Health Services. Essential staff will receive N-95 respirators and respiratory protection training. 	<ul style="list-style-type: none"> Develop a plan for the monitoring and delivery of medications and other goods and services to isolated cases. 	<ul style="list-style-type: none"> Activate plans to quarantine or isolate patients in conjunction with UNH police, Health Services, and NH DHHS. Assist with the location of students if quarantined. Identify student events where confirmed patients have attended.
ESF-8: Health and Medical Services	<ul style="list-style-type: none"> Identify essential staff that will be available in the event of an influenza pandemic. Develop educational and promotional materials to promote availability and desirability of influenza vaccine for all. Develop specific pandemic influenza preparedness plan for medical response. 	<ul style="list-style-type: none"> Offer all eligible staff, students, and visitors the opportunity to receive influenza vaccine on-site. This may be facilitated by holding vaccination clinics on designated days. Document the administration of influenza vaccine, preferably in a computerized database. Monitor national, regional, and local data related to pandemic influenza. Essential staff will receive N-95 respirators and respiratory protection training. 	<ul style="list-style-type: none"> Health services personnel who suspect, after initial clinical evaluation, that a patient may have pandemic influenza, should immediately consult with NH DHHS. Airborne, droplet, and contact precautions are required for all contact with any individual who has screened as a possible pandemic influenza case, until an alternate diagnosis is made. Health Services personnel will offer a surgical mask to anyone who self-identifies as possibly having pandemic influenza. 	<ul style="list-style-type: none"> N-95 masks and contact precautions are required for all campus Health Services staff having contact with any person exhibiting symptoms of pandemic influenza, until an alternate diagnosis is made. Consult with NH DHHS for additional infection control/precautions.

Emergency Support Function (ESF)	Preparation	Level 1 Anywhere outside North America	Level 2 Anywhere in North America (In addition to Level 1 actions)	Level 3 At UNH (In addition to Level 2 actions)
ESF-9: Search and Rescue	<ul style="list-style-type: none"> Identify essential staff that will be available in the event of an influenza pandemic. 	<ul style="list-style-type: none"> Essential staff will receive N-95 respirators and respiratory protection training. Monitor situation and respond as needed. 	<ul style="list-style-type: none"> Follow appropriate Durham Ambulance Corps procedures for pandemic influenza. 	<ul style="list-style-type: none"> Follow appropriate Durham Ambulance Corps procedures for pandemic influenza.
ESF-10: Food	<ul style="list-style-type: none"> Identify essential food service personnel and ensure their presence during a pandemic. Consider stockpiling food. Develop specific pandemic influenza preparedness plan for Hospitality Services and New England Center response. 	<ul style="list-style-type: none"> Formulate plans for alternate dining services for students and staff. Ensure food delivery process will not be affected during a pandemic. Essential staff will receive N-95 respirators and respiratory protection training. 	<ul style="list-style-type: none"> Consider possible restrictions to vendors, visitors and conferences/group activities. 	<ul style="list-style-type: none"> Implement Level 3 of the specific pandemic influenza action plan. Arrangements should be made to provide those quarantined with necessary daily items, including meals, water, hygiene, and telephone.
ESF-11: Law Enforcement and Security	<ul style="list-style-type: none"> Identify essential staff that will be available in the event of an influenza pandemic. 	<ul style="list-style-type: none"> Monitor situation and respond as needed. 	<ul style="list-style-type: none"> Monitor situation and respond as needed. 	<ul style="list-style-type: none"> With guidance from NH DHHS, implement quarantine recommendations of non-ill contacts. Secure buildings that have been designated for closure by the UEG.
ESF-12: Research and Environmental Safety	<ul style="list-style-type: none"> Assess respiratory protection plan and resources needed for a Pandemic Influenza outbreak. Obtain additional N95 respirators as needed. Develop a management plan for the control and disposal of increased volumes of infectious waste. Identify essential staff that will be available in the event of an influenza pandemic. 	<ul style="list-style-type: none"> Develop educational and promotional materials to promote availability and desirability of influenza vaccine for all. Essential staff will receive N-95 respirators and respiratory protection training. 	<ul style="list-style-type: none"> Monitor situation and respond as needed. 	<ul style="list-style-type: none"> Distribute additional N-95 respirators to essential personnel, as needed.

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ESF-13: Academic and Cultural Resources	<ul style="list-style-type: none"> • Monitor students traveling in affected regions. • Identify essential staff that will be available in the event of an influenza pandemic. 	<ul style="list-style-type: none"> • Essential staff will receive N-95 respirators and respiratory protection training. • Monitor situation and respond as needed. 	<ul style="list-style-type: none"> • Monitor situation and respond as needed. 	<ul style="list-style-type: none"> • Notify departmental and building coordinators with status reports and updates from the UEG.
ESF-14: Durham Community	<ul style="list-style-type: none"> • Maintain communication with town officials on pandemic influenza planning. 	<ul style="list-style-type: none"> • Monitor situation and respond as needed. 	<ul style="list-style-type: none"> • Monitor situation and respond as needed. 	<ul style="list-style-type: none"> • Monitor situation and respond as needed.
ESF-15: UNH Manchester	<ul style="list-style-type: none"> • Identify essential staff that will be available in the event of an influenza pandemic. 	<ul style="list-style-type: none"> • Essential staff will receive N-95 respirators and respiratory protection training. • Monitor situation and respond as needed. 	<ul style="list-style-type: none"> • Monitor situation and respond as needed. 	<ul style="list-style-type: none"> • See ESF-DC (Direction and Control) for recommendations.