

Annex R: Pandemic Influenza Response**Table of Contents**

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I. Purpose and Scope

The University of Minnesota response to an influenza pandemic will be guided by the Emergency Operations Plan. Due to the complicated issues posed by a pandemic and the anticipated extended length of time needed for response, additional planning is warranted to supplement the Emergency Operations Plan. This annex is designed to provide additional emergency response guidance developed specifically for a pandemic influenza event.

This annex is intended to supplement, not replace, other Annexes within the Emergency Operations Plan. It provides a basic framework for anticipated pandemic influenza response actions on campus and delineates department-level responsibilities for those responses. Detailed standard operating procedures and additional guidelines are maintained and updated at the department level and are referenced here.

II. Background

In May, 2005, the University of Minnesota conducted a pandemic influenza tabletop exercise to explore the unique challenges faced in the university campus setting, and to further refine the respective response roles of the University, state health department, local health departments, and the University of Minnesota Medical Center. Based upon lessons learned from that exercise, as well as federal and state pandemic influenza response guidelines, a series of planning activities were initiated from 2005 – 2007. Extensive assessments were completed in key response areas across the University through a combination of individual assignments, informal workgroups, formal task forces, and subcommittees. Although an extensive amount of work has been completed and is reflected in this annex and in standard operating procedures and guidelines held at the department level, work continues on many fronts. This annex will be updated on an annual basis to reflect additional campus-level planning and additions or modifications to state and federal pandemic influenza response guidelines.

Correspondingly, at the University of Minnesota Duluth a Pandemic Influenza Committee began to meet on June, 2006. This committee has worked to address the same issues for the UMD campus.

III. Direction and Control/Internal Coordination

As outlined in Annex B – Direction and Control, the Officer of the Day has the responsibility and authority to implement this pandemic influenza response plan and provide overall policy direction of University of Minnesota resources during an emergency. Emergency operations include coordination of University and community resources to save lives, protect property and provide for the continuity of University operations. The Office of the Day may communicate with the Twin Cities Health Emergency Response Team (HERT), coordinated by the Academic Health Center Office of Emergency Response (AHC-OER), which will convene as needed throughout the course of an influenza pandemic to maintain situational awareness and develop specific response recommendations for consideration by the Officer of the Day.

UMD has identified eleven pandemic flu response areas with principal personnel responsible that have been identified for those areas. Principal personnel are responsible for the maintenance of their response plans and the creation of standard operating procedures to ensure successful implementation of those plans. Principal pandemic influenza response personnel will be notified by AHC-OER or Department of Emergency Management (DEM) when sustained human-to-human transmission has been confirmed anywhere in the world and will receive periodic situational reports throughout the course of the pandemic. DEM will ensure coordination with coordinate campuses.

Internal coordination will be supported through use of situational briefings, conference calls, meetings, and/or activation of the Emergency Operations Center as deemed necessary by the Officer of the Day. In addition, Department Operations Centers may be established to coordinate activities within individual response areas. Plans for Department Operations Centers are in development within various UMD departments.

IV. External Coordination

Unlike most emergencies, which are localized, an influenza pandemic will likely occur simultaneously across the globe. Coordination between the University and external partners, particularly state public health and emergency management officials, will be extremely important. DEM will maintain regular communications with the State Department of Public Safety, Homeland Security and Emergency Management Division, as well as other city and county emergency managers, throughout the duration of a pandemic. AHC-OER will maintain communications with the Minnesota Department of Health and local public health departments, through 24/7 monitoring of the Health Alert Network, MNTrac (Minnesota system for Tracking Resources, Alerts, and Communications), and through direct communications. AHC-OER will also receive all requests for health response assistance from state and local partners, such as requests for assistance from the U of M Medical Reserve Corps. UMD will keep contact with the University DEM, the county Department of Health, St. Louis County Emergency Manager, and the Duluth Emergency Manager.

V. Prioritization of University Services and Functions

Although many response actions will be taken based upon recommendations from outside sources such as the Minnesota Department of Health, Centers for Disease Control and Prevention, or Homeland Security and Emergency Management, there may be many instances during a pandemic when response actions will be based upon the unique issues or circumstances on campus. The following principles have been developed to guide decision-making in those instances:

Principles for Prioritization

1. Health, welfare, and safety of faculty, staff, students, and others present on campus.
2. Health, welfare, and safety of animals housed on campus.
3. Maintenance of essential mission functions of research, teaching, and outreach (as determined by each unit).
4. Maintenance of essential campus services to support essential mission functions.

Based upon these principles, campus services and programs will be categorized as follows during a large scale emergency, such as an influenza pandemic:

- Priority 1 Services:** Services that address an immediate threat to human and/or animal health and safety. These activities must remain uninterrupted.
- Priority 2 Services:** Disorder or an economic impact may develop if not delivered in a few days. Activities that can be disrupted temporarily or might be periodic in nature, but must be re-established within a few days.
- Priority 3 Services:** Services required by law or rule that can be suspended by law or rule during an emergency. Activities that can be disrupted temporarily (a few days or weeks) but must be re-established sometime before the emergency is over (<6 weeks).
- Priority 4 Services:** Services that could be suspended during an emergency and are not required by law or rule. Activities that can be deferred for an extended period of time, such as the duration of a pandemic influenza wave (6-12 weeks).

It is noted that total and complete "closure" of a university campus is a rare event. It is anticipated that although face-to-face coursework may be temporarily discontinued, or other social distancing methods instituted, it is unlikely that the University will close in its entirety. A targeted, or graduated approach, may be implemented in response to a large-scale emergency (Table 1).

Table 1: Potential Tiers to a Scalable Campus "All Hazards" Closure Plan Based Upon Principles of Prioritization

Tier	Description
NA	Business as Usual
1	Suspension or Dismissal of Select Classes- Cancellation of Select Public Events
2	Suspension or Dismissal of All Classes- Cancellation of All Public Events
3	Closure of Select Business Functions
4	Closure of Select Buildings
5	Closure of Select Campuses
6	Closure of all Units except those that support Priority Areas 1-3
7	Total Closure: Total closure would not be an option selected by the administration. If total closure were caused by external forces (such as a large scale natural disaster), it would be catastrophic.

VI. Operational Plans by Response Areas

A. Campus Infrastructure

Principal Response Personnel: The Office of the Vice Chancellor for Finance and Operations is responsible for monitoring and addressing campus infrastructure issues during an influenza pandemic.

The principles for prioritizations and priority service designations outlined in Section V. will be utilized to plan for and manage campus infrastructure considerations. The following list of infrastructure services have been determined to be either priority 1 or priority 2 services and will remain in operation regardless of the situation:

- Provision of Utilities (and tiered shutdown of utilities if warranted)
 - Steam
 - Electricity
 - Water
 - Natural Gas
- Protection of People
 - UMDPD
- Protection of Assets/Infrastructure
 - Building Systems Automation Center (BSAC)
 - UMDPD
 - Telephone system
 - E-mail system
 - Web system
 - Data network
- Protection of Research
- Provisions for Hazardous Materials
- Support for Increased Computing and Internet Design
- Custodial Support for Buildings
 - Classroom/Office buildings
 - Research buildings
 - Residential buildings
- Maintenance Support for Buildings

Each organizational unit maintains an operational continuity plan outlining specific procedures for the maintenance or re-establishment of critical operations during an emergency. Operational continuity plans will be activated as deemed necessary by the Officer of the Day, in consultation with University administrators.

B. Communications

Principal Response Personnel: University Relations has primary responsibility for assuring timely communications to the University community through multiple channels during an influenza pandemic, according to their written plan.

The University's emergency communications system will be used to provide information to the campus community. This system includes the following components:

- Campus-wide email messages
- Text messages
- Tone alert radios
- Emergency Preparedness website
- Media briefings

During an influenza pandemic, daily updates and information will be provided through the Health Emergency section of the Emergency Preparedness website which will be easily accessible from the UMD home page.

C. Teaching

The University will make all reasonable efforts to continue its teaching mission during an H1N1 influenza outbreak with the goal of enabling students to continue to make progress in their studies and to complete their academic programs in a timely manner. The University will base its influenza academic and teaching decisions on the best public health interest of faculty, students and staff by seeking out and following Minnesota Department of Health and Centers for Disease Control (CDC) recommendations regarding social distancing measures designed to prevent the transmission of influenza.

Information about the status of University classes will be communicated broadly and repeatedly through multiple communication channels throughout the course of the flu outbreak (see Section VI.B. on Communications).

I. Principal Response Personnel

To insure uniformity and fairness across all colleges and departments, and to minimize confusion, decisions regarding the status of classes during all phases of an influenza outbreak will be made by the Vice Chancellor for Academic Administration (VCAA) in consultation with appropriate University of Minnesota Duluth senior administrators. If the VCAA is ill or unavailable, decision-making authority is delegated to one of the Associate Vice Chancellors for Academic Administration.

This policy allows for current practices regarding individual class cancellation, but widespread H1N1 influenza-related cancellation of classes does not reside at the collegiate or departmental level.

Specific guidelines and policies are maintained by the Office of the VCAA which will be communicated and implemented based upon H1N1 influenza-specific information.

Each college will implement procedures to insure that as many classes as possible can be offered online or using other formats in the event that face-to-face gatherings are restricted.

II. Limited Cancellation of Classes

In the absence of official cancellation of classes by the University, instructors are expected to teach their classes unless they are ill and students who are well are expected to attend class.

II.A. Responsibilities of Instructors (including teaching assistants)

Instructors, individually and with their colleagues, should create strategies for instructor teaching and student learning to continue should student and/or instructor absenteeism increase possibly to levels that severely disrupt the teaching mission of the University. Collegiate units are responsible to support, facilitate implementation of and provide oversight for such strategies.

- Instructors who are ill should notify their department head immediately so a substitute instructor can be found. Instructors who are ill will be governed by the Sick and Disabilities Leave Policy and the UEA Contract as appropriate.
- If a substitute instructor cannot be found or an alternative delivery method cannot be implemented, students will be notified immediately that the class will not meet until further notice.
- Strategies for instructors to consider may include
 - Increase capacity to offer instruction and assignments online, via email lecture notes, on-line homework, electronic submission of work, etc.
 - Anticipate growing requests to make up work and create appropriate ways for students to complete a course. At this time, CDC Guidelines indicate that a student with the flu may miss up to one week of classes.
 - Anticipate an increase in the number students requesting to withdraw from a course, for an incomplete and/or permission to turn in late work.
 - In consultation with and approval by their department and college, an instructor may offer their classes in an alternative format.
 - Instructors should provide appropriate alternative methods for grading in courses with attendance requirements.
 - Instructors of credit bearing courses and activities such as laboratories, performances, etc are encouraged to increase the number of makeup opportunities.
 - Field trip leaders should recognize that some students may not be able to participate in a field trip and should identify how to accommodate these students, as appropriate.

II.B. Responsibilities of students

- All students are expected to be aware of and follow recommended hygiene practices in order to minimize their risk of acquiring or spreading the virus.
- Students who are ill should stay home, manage symptoms and seek medical attention if symptoms are severe.
- If a student becomes ill, the student should inform the instructor who will report the student's name and date and date of illness to the college.
- When the student is well, the student is responsible for arranging make up work with the instructor.

III. Extensive Cancellation of Classes

If classes, individually or campus-wide, are cancelled or suspended for some period of time, every effort should be made to arrange for completion of the semester.

- In the event classes are cancelled or suspended campus-wide for some period of time, the University will determine whether enough class time has been held in order to certify completion of a semester and assignment of a grade, consistent with financial aid regulations and accreditation and licensure requirements. The University may alter the normal calendar in order to achieve the objective of completing the semester.
- In the event individual classes are cancelled or suspended for some period of time, the relevant collegiate unit should, in consultation with the Vice Chancellor for Academic Administration and the Vice Chancellor for Academic Support and Student Life and consistent with financial aid regulations and accreditation and licensure requirements, determine whether credit can be granted and a grade assigned, whether an alternative means of completing the course can be offered, whether the calendar for the course can be extended, whether break time during the remainder of the semester can be used to compensate for missed class time or whether the class will simply need to be cancelled.

D. Research

Principal Response Personnel: The Office of the Vice Chancellor for Academic Administration has responsibility for determining and communicating all research-related response actions during an influenza pandemic.

It is anticipated that the major impact of a pandemic on research operations will be a reduction in the availability of research support personnel either as a result of illness, requirement for social distancing, or university-directed closure of specific buildings or functions. The maintenance of animal health and welfare is the most critical research services at risk from the anticipated consequences of an influenza pandemic as they represent priority 1 services.

Animal Care

UMD has no animal care research that will be influenced by a pandemic outbreak.

Research and Laboratory Safety

The Office of the Vice Chancellor for Academic Administration will announce the need to implement research continuity plans as needed throughout the course of an influenza pandemic. Research laboratory plans will include strategies to manage lab-specific consequences, including plans to "hibernate" some or all of the laboratory's activities depending on staffing levels and/or social distancing recommendations.

Clinical Human Subjects Research

Individual Principal Investigators will be directed to review clinical protocols to assess potential impact from research staff absenteeism, critical supply delays or other issues. Specific response plans will be developed and implemented by individual Principal Investigators based upon specific clinical and healthcare objectives for subjects enrolled in clinical trials research.

Administrative Issues

All administrative issues related to obligations associated with sponsored research will be negotiated and/or managed by Sponsored Research Administration (SPA).

E. Housing

Principal Response Personnel: The Director of Housing and Residential Life (H&RL), along with the Assistant Directors of H&RL are responsible for implementing the response actions outlined in this section with administrative oversight from the Director of Auxiliary Services.

It is anticipated that some residents who live on campus may begin to leave the University prior to the cancellation of in-person classes by the University. Therefore, response plans address both an exodus of students from the University prior to the cancellation of in-person classes, as well as plans to address the needs of residential students if the University cancels in-person classes due to an influenza pandemic.

HRL will maintain basic custodial and maintenance services (trash removal, cleaning of bathrooms, critical repairs) in all residential facilities through the reassignment of staff and through the closing of various public bathrooms and recreational/lounge facilities, if necessary.

Monitoring Occupancy

At the earliest stages of an influenza pandemic, based upon recommendations from campus administration, Housing & Residential Life will monitor the occupancy in university housing facilities through the combination of self-reporting via email of residents who leave campus, staff monitoring, and a review of daily meal count data provided by UMD Food Service. When instructed, HRL will distribute a prepared communication to all residents with detailed instructions for residents leaving the University. The communication will be sent via e-mail, through paper communication

placed in all resident mailboxes, and posted in bathrooms, dining centers, and other common posting areas in housing facilities. All communications sent to campus residents will be posted on the HRL and Emergency Preparedness websites, and will be sent to the Parent's Program Office for posting on the Parent Program website.

Monitoring Student Resident Health

Housing & Residence Life staff will assist Health Services with distribution of information and notices to campus residents. Information will include precautions they should take, and symptoms to monitor on a daily basis through a variety of methods. Students who develop symptoms/become ill will be instructed to report their daily health status to Health Services.

Thresholds for Closing or Consolidating Residential Facilities

It is anticipated that all residential facilities will remain open and operational unless the campus closes. Some services may be reduced dependent upon availability of staffing.

Should the University of Minnesota Duluth close, HRL will inform residents that all UMD housing facilities will close and they will be expected to return home. Residents may need to remove their personal belongings from their rooms/apartments dependent on the anticipated length of campus closure. It is anticipated that 80 residents may be unable to leave the University if classes are cancelled (international students and students that live more than an 8 hour drive from Duluth). If the UMD campus closes due to an influenza outbreak, international students living in UMD housing facilities will be offered housing on the UMTC campus. UMD Housing and Residence Life will coordinate housing arrangements with UMTC Housing and Residence Life. UMD Auxiliary Services will coordinate transportation through Jefferson Lines or one of the local charter bus service companies.

F. Health Services

Principal Response Personnel: The UMD Health Service Director and UMD Health Service Counseling Director will have responsibility for the provision of health services on campus during an influenza pandemic.

Health Services anticipates a need to provide care in conjunction with the University's general response plan grid, recognizing that staffing and resources may impact the ability to meet the demand for health-care delivery. Health Services response plans assume that there may be an initial surge of students wishing to access information, advice, and medical care followed by an exodus of students as they return home. Plans assume the need to meet the increased demand for services early in a pandemic then a transition to provision of care for any students remaining on campus (best estimate of no more than 80 international students and students living greater than an 8 hr drive from Duluth) in the event of University closure. Health Services and HRL at UMD will work closely to facilitate care of students remaining on-campus. However, due to limited resources and staffing, as well as potential transition of the virus to higher Pandemic Severity Indices, the need for potential relocation of these students to the Twin Cities campus may be necessary.

-Clinical Services in early stages of Pandemic:

- Suspect case monitoring and assessment including modified clinic entry instructions, separate, partitioned waiting rooms for suspected cases, and triage protocols. Triage system would focus preferentially on use of telephone and electronic communication for assessment. (Reference: Telephone Triage of Patients with Influenza, Temte, Jonathan, American Family Physician, May 2009)
- Infection control protocols including use of personal protective equipment, self isolation and a limited formal isolation protocol available early in the development of on-campus cases.
- Treatment of suspect cases and prophylaxis of appropriate students following MDH and CDC guidelines.
- Patient follow-up and communication.
- Protocol for provision of care and assessment to those students in University housing either following closure of the University or those students formally isolated early in the evolution of the pandemic.
- Suspension of some or all routine non-emergent care by HS staff to provide care consistent with a surge model.
- Assessment and facilitation of cross training of Health Services staff to cover projected absenteeism of employees within Health Services.

-Patient Communication

- Informational phone lines
- Posted information on HS and Emergency Preparedness websites
- Email notices
- Collateral materials including patient directed educational materials focused on recognition of signs and symptoms of influenza, recognition of co-morbid conditions such as pregnancy, diabetes, asthma, immune suppression, etc. which would increase the risk of complications and necessitate anti viral therapy; mitigation strategies to reduce transmission such as self isolation, use of a surgical mask when leaving residence hall or using communal spaces such as bathrooms; vigorous hand-washing, covering cough, etc.
- Remote phone lines for counseling if the campus closes. Students without illness will continue to be seen at HS. Students who are ill will be counseled via phone.

-Internal HS Communication**G. Human Resources**

Principal Response Personnel: The Office of the Vice President for Human Resources has responsibility for monitoring human resource issues during a pandemic and developing policies and procedures as needed. These decisions will be made on a system-wide level by the Vice President for Human Resources and/or the Office of Human Resources.

Human resources policies will be developed at the time of the event based upon the specifics of the pandemic situation. Policies will be communicated broadly and repetitively through multiple channels as outlined in Section VI. B. Communications. The Office of Human Resources will provide detailed instructions to the UMD Department of Human Resources who will disseminate the information to UMD administrators, managers, and supervisors throughout the course of a pandemic.

The following guiding principles have been developed related to human resource issues during an influenza pandemic:

Ensuring Continuity of Priority Services on Campus

University departments will be instructed to be as flexible as possible to enable all faculty, staff, graduate assistants, and student-employees to work. These efforts shall include the opportunity to work from home and other remote locations where possible; allowing full-time employees to work part-time; using flexible work schedules; and other appropriate solutions.

Unless directed otherwise, individuals who are able to work should report for work, given their capabilities, and support the department or university in whatever capacity is needed. Faculty, staff, graduate assistants, and student-employees may be required to work outside their usual classifications.

Faculty, staff, graduate assistants and student employees will be asked to be as flexible as possible with regard to type of assignment and length or schedule of shifts, or other changes to their work that may arise during a pandemic crisis. Depending on availability of personnel, training may or may not be available. No employee will be asked to perform work that would endanger their health or safety.

Implementing Social Distancing Measures

To minimize the spread of disease, employees may be directed not to report to the workplace. If so directed, employees are not to report to the workplace. Employees shall follow procedures outlined by their department or unit for maintaining contact for assignments and call-in.

Compensation and Benefits

The University shall work within budgetary parameters to ensure the continuation of compensation and health care benefits for all employees, whether able to work or not, through the duration of a pandemic crisis. Health care benefits will continue to be available to employees throughout a pandemic influenza crisis. Benefits will not be cut off due to lack of paid status or an employee's inability to provide the employee portion of the cost. The University hopes to provide a minimum of two weeks of paid leave to all employees who are required to stay home during a partial closure of the campus during a pandemic flu. The length of this leave period will be determined based on an analysis of conditions after the crisis has passed.

Throughout a pandemic crisis, as the number of affected employees rises to the level that services such as local payroll are affected, all employees will continue to receive pay

and benefits as if they remained working their regular schedule. As things return to normal, any necessary adjustments shall be made for usage of vacation, sick leave, and/or other leave as appropriate. Supervisors and managers will be expected to follow instructions for tracking the status of their employees throughout the crisis, e.g. actively working, working part time, ill and unable to work, able but without work, so that adjustments to leave balances, if necessary, may be made after the crisis.

H. Public Health Response

UMD will maintain communication with local and state public health agencies, the AHC and the Assistant Vice President for Public Health Response for the system.

Disease Containment Strategies

Pandemic influenza disease containment strategies may include:

- Formal isolation, early in the evolution of the pandemic, for a limited number of individuals using a limited number of available campus housing options in an attempt to reduce disease transmission. It is improbable that quarantine would be logistically feasible. (See E. Housing)
- Infection control measures such as respiratory etiquette, hand hygiene or the use of personal protective equipment.
- Reduction in routine University-related activities as part of a "snow days" strategy and social distancing strategies for employees who must work because their work is deemed essential (e.g. cancellation of face-to-face meetings, staggering of work shifts etc.).
- University-wide containment measures including cancellation of in-person classes or public gatherings.

University departments have the following responsibilities related to disease containment strategies:

Health Services

Health Services will support formal isolation measures early in the evolution of a pandemic. This strategy would attempt to provide greater disease containment. Students in isolation would be monitored and assessed by health-care personnel, while HRL would provide meals, linens, and other supplies to such students. Housing resources available for such formal isolation measures are extremely limited and the rapid transmissibility of influenza from person to person, particularly in a university, residential setting may render these measures ineffectual. Health Services will work with HRL and MDH to ensure that the monitoring and housing standards are consistent with HHS and MDH guidelines. A protocol will be developed for entry of healthcare personnel into an isolation site including use of PPE.

Housing and Residential Life

HRL will designate and have available a limited number of housing units for isolation which meet HHS and MDH standards. It is improbable that quarantine measures would be attempted. Housing staff will coordinate with their Twin Cities campus counterparts

on the relocation and transportation of students to TC campus when indicated. HRL will also work with Health Services to monitor the census of students remaining in housing.

University of Minnesota Duluth Police Department

The UMDPD will ensure the safety and security of all individuals working on campus.

Department of Environmental Health and Safety

The Department of Environmental Health and Safety will ensure the availability of emergency fit-testing of personal protective equipment for departments other than Health Services, and will review and address issues related to facility ventilation.

Mass Dispensing/Mass Assessment

It is unlikely that a system of mass dispensing or mass assessment (large scale non-acute patient triage) will be utilized in Minnesota during an influenza pandemic. However, UMD and its physical resources could be utilized for the greater need of the community in the event of a pandemic if approved by the administration of UMD.

Stockpiled Supplies

Stockpiled supplies such as personal protective equipment, hand sanitizer, etc are stored on campus. HS will coordinate with Federal and State governments to assess the feasibility of obtaining a stockpile of antiviral pharmaceuticals. These materials would be purchased and stored as funding and space constraints allow for use during an influenza pandemic.

Behavioral Health

Health Services counseling staff will continue to see students in person if they do not have symptoms. If the student is ill, counseling will be provided by phone. Counseling staff will have remote phones at their homes for providing counseling if the campus closes. The University Employee Assistance Program will have their plans for helping staff.

I. Athletics Program

Principal Response Personnel: Director of Athletics

There are approximately 450 student-athletes competing in 14 sports at the University of Minnesota-Duluth Campus. Each year, hundreds of competitive events are scheduled from August through June.

In the event of a campus-wide suspension of in-person classes due to public health recommendations for social distancing, athletics events will also be cancelled. Decisions regarding cancellation of events will be made by the Director of Athletics in consultation with the Officer of the Day, including cancellations necessitated by illness reported at a school to which a University team is scheduled to travel.

VII. University Response Action Grids

The University’s response actions in each of the nine areas outlined in Section VI will likely happen simultaneously with their timing determined by the specific nature of the pandemic over time. Pre-determined phases for pandemic planning and response have been developed at the international, national, and state level (Table 2). Response actions will also vary depending upon the severity of the pandemic. The CDC will determine the severity of a given pandemic based upon the proportion of deaths reported among clinically ill persons early in the pandemic and designate a Pandemic Severity Index of 1-5. The CDC will recommend specific community mitigation strategies based upon the designated Pandemic Severity Index (Table 3).

Table 2: International, Federal, and State Planning and Response Phases

Highly Pathogenic Avian Influenza (HPAI) Outbreak	WHO Phase	U.S. Stage	Minnesota Response Phase
	Phase 1: Low risk of human cases	Stage 0: New domestic animal outbreak in at-risk country	Phase A0: HPAI outbreak nonexistent or overseas
	Phase 2: Higher risk of human cases		Phase A1: HPAI outbreak in wild animal in North America
	Phase 3: No or very limited human-to-human transmission		Phase A3: HPAI outbreak in domestic animal in North America
			Phase A4: HPAI outbreak in domestic animal in Minnesota
			Phase A5: Recovery
Pandemic Influenza Outbreak	Phase 3: No or very limited human-to-human transmission	Stage 1: Suspected human outbreak overseas	Phase P0: Suspected human outbreak overseas
	Phase 4: Evidence of increased human-to-human transmission	Stage 2: Confirmed human outbreak overseas	Phase P1: Confirmed, sustained human-to-human transmission overseas
	Phase 5: Evidence of significant human-to-human transmission		
	Phase 6: Efficient and sustained human-to-human transmission	Stage 3: Widespread human outbreaks in multiple locations overseas	Phase P2: Suspected or confirmed human case in North America
		Stage 4: First human case in North America	
		Stage 5: Spread throughout the U.S.	
Phase P4: Suspected or confirmed human case in Minnesota			
Phase P5: Limited outbreak in Minnesota			
			Phase P6: Widespread throughout Minnesota

		Stage 6: Recovery and preparation for subsequent waves	Phase P7: Recovery and preparation for subsequent waves
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Table 3: Summary of Community Mitigation Strategies by Pandemic Severity Index (CDC)

Interventions* by Setting	Pandemic Severity Index		
	1	2 and 3	4 and 5
Home Voluntary isolation of ill at home (adults and children): combine with use of antiviral treatment as available and indicated	Recommend	Recommend	Recommend
Voluntary quarantine of household members in homes with ill persons (adults and children): consider combining with antiviral prophylaxis if effective, feasible, and quantities sufficient	Generally not recommended	Consider	Recommend
School Child social distancing -dismissal of students from schools and school based activities, and closure of child care programs -reduce out-of-school social contacts and community mixing	Generally not recommended	Consider: ≤4 weeks	Recommend: ≤12 weeks
	Generally not recommended	Consider: ≤4 weeks	Recommend: ≤12 weeks
Workplace/Community Adult social distancing -decrease number of social contacts (e.g. encourage teleconferences, alternatives to face-to-face meetings) -decrease distance between persons (e.g. reduce density in public transit, workplace) -modify, postpone, or cancel selected public gatherings to promote social distance (e.g. stadium events, theater performances) -modify work place schedules and practices (e.g. telework, staggered shifts)	Generally not recommended	Consider	Recommend
	Generally not recommended	Consider	Recommend
	Generally not recommended	Consider	Recommend
	Generally not recommended	Consider	Recommend

The University Response Action Grids (Grids A-F), presented in Table 4, are designed to reflect the likely response actions in each of the nine response areas at each phase of the pandemic (utilizing state-level response phases as a reference) and for various Pandemic Severity Indexes. The Response Action Grids will serve as a reference point for the Officer of the Day, and other administrators, throughout the course of the pandemic. Grids A-F are organized as follows:

- Grid A** **Minnesota Response Phase P1**
Confirmed, sustained human-to-human transmission overseas
- Grid B** **Minnesota Response Phase P2-P3**
P2: Suspected or confirmed human case in North America
P3: Outbreak in the U.S.
Pandemic Severity Index > 1
- Grid C** **Minnesota Response Phase P4-P6**
P4: Suspected or confirmed human case in Minnesota
P5: Limited outbreak in Minnesota
P6: Widespread cases
Pandemic Severity Index 1
Voluntary home isolation of ill adults and children recommended.
No other social distancing recommended.
- Grid D** **Minnesota Response Phase P4-6**
P4: Suspected or confirmed human case in Minnesota
P5: Limited outbreak in Minnesota
P6: Widespread cases throughout Minnesota
Pandemic Severity Index 2 and 3
Voluntary home isolation of ill adults and children recommended.
Voluntary quarantine of household members in homes with ill persons recommended.
Child and adult social distancing is recommended by the MDH for a period of 4 weeks.
- Grid E** **Minnesota Response Phase P4-6**
P4: Suspected or confirmed human case in Minnesota
P5: Limited outbreak in Minnesota
P6: Widespread cases throughout Minnesota
Pandemic Severity Index 2 and 3
Voluntary home isolation of ill adults and children recommended.
Voluntary quarantine of household members in homes with ill persons recommended.
Child and adult social distancing recommended by the MDH for a period of 12 weeks
- Grid F** **Minnesota Response Phase P7**
Recovery and preparation for subsequent waves

Table 4: University Response Action Grids by Minnesota Response Phase, CDC Pandemic Severity Index and Response Area on Campus

GRID A	
Minnesota Response Phase P1	
Confirmed, sustained human-to-human transmission overseas	
Internal Coordination	<ul style="list-style-type: none"> ▪ Officer of the Day notifies all pandemic influenza response plan principal personnel with request to review respective response plan. ▪ HERT meets to review information from state, federal, and international sources. ▪ HERT develops recommendations for U of M travelers in affected areas. ▪ Officer of the Day obtains briefing from HERT ▪ DEM contacts representatives from coordinate campuses.
External Coordination	<ul style="list-style-type: none"> ▪ Maintain communications with AHC-OER and MDH through routine channels.
Communications	<ul style="list-style-type: none"> ▪ Acknowledge change in pandemic phase through normal communications channels; reference UMD pandemic influenza response plans. ▪ Create additional messaging for students, staff, parents and faculty as needed. ▪ Send alert of international travel recommendations through campus-wide email as needed. ▪ Ensure functionality of Health Emergency section of Emergency Preparedness website.
Campus Infrastructure	<ul style="list-style-type: none"> ▪ Response plan review by administrators and their back-ups. ▪ Review and confirm 24/7 contact information. ▪ Review and confirm essential personnel rosters for essential services based on Operational Continuity Plans. ▪ Discuss current ITSS resources for distance education and remote worksites.
Teaching	<ul style="list-style-type: none"> ▪ Response plan review by administrators and their back-ups. ▪ Review and confirm 24/7 contact information. ▪ Notice is sent to all faculty regarding pandemic influenza response plan policies. ▪ In preparation for potential in-person class dismissal within weeks, all School and Colleges organize and prioritize distance education strategies.
Research	<ul style="list-style-type: none"> ▪ Response plan review by administrators and their back-ups. ▪ Review and confirm 24/7 contact information. ▪ Notify Principal Investigators about the potential for social distancing recommendations and assess impact on current research initiatives.

Housing	<ul style="list-style-type: none"> ▪ Response plan review by administrators and their back-ups. ▪ Review and confirm 24/7 contact information. ▪ University Dining Services: Consider need for expanded non-perishable food item orders.
Health Services	<ul style="list-style-type: none"> ▪ Response plan review by administrators and their back-ups. ▪ Review and confirm 24/7 contact information. ▪ Conduct just-in-time training for health care professionals. ▪ Activate surveillance system for patients seeking medical attention at HS. ▪ Ensure use of masks for patients with a cough while visiting HS. ▪ Behavioral Health: Prepare for possible transfer to remote services.
Human Resources	<ul style="list-style-type: none"> ▪ Response plan review by administrators and their back-ups. ▪ Review and confirm 24/7 contact information.
Public Health Response	<ul style="list-style-type: none"> ▪ Review and confirm health emergency essential personnel roster (VCFO office) ▪ Contact CDC quarantine officer to reconfirm notification plan. (HS) ▪ Review and update, as relevant, postings for emergency website to address the possibility of an influenza outbreak (HS & UR) ▪ Administer seasonal influenza vaccine and H1N1 vaccine when available.
Athletics	<ul style="list-style-type: none"> ▪ Response plan review by administrators and their back-ups. ▪ Review and confirm 24/7 contact information. ▪ Ensure hygienic athletic training environment. ▪ Consider just-in-time training for athletic staff in the recognition of signs/symptoms of flu.
Other	<ul style="list-style-type: none"> ▪ To be determined.

GRID B	
Minnesota Response Phase P2-P3	
P2: Suspected or confirmed human case in North America	
P3: Outbreak in the U.S.	
Pandemic Severity Index >1	
Internal Coordination	<ul style="list-style-type: none"> ▪ Communicate with HERT about briefing and recommendations for Officer of the Day.
External Coordination	<ul style="list-style-type: none"> ▪ Communicate with MDH regarding appropriate PPE and I/Q protocols based on available surveillance information.
Communications	<ul style="list-style-type: none"> ▪ Send messaging to students, staff, faculty and parents via website, email, and text-messaging as appropriate. ▪ Create Pandemic Influenza Section for Emergency Preparedness website; ensure easy access for UMD homepage.
Campus Infrastructure	<ul style="list-style-type: none"> ▪ Ensure 3 deep essential personnel for utilities, security, ITSS, facilities management.
Teaching	<ul style="list-style-type: none"> ▪ Prepare for potential in-person class dismissal in days to weeks. ▪ Assess progress on continuity of education plans ▪ Discuss potential class dismissals with VCAA/VCASSL.
Research	<ul style="list-style-type: none"> ▪ Review laboratory-specific hibernation plans. ▪ Ensure emergency power availability for essential research equipment and storage. ▪ Assess stockpile of animal feed, bedding, euthanasia materials, human food and water for essential personnel.
Housing	<ul style="list-style-type: none"> ▪ Prepare to evacuate students as needed to UMTC. ▪ Prepare process for evacuating students.
Health Services	<ul style="list-style-type: none"> ▪ Review HS Emergency Operations Plan. ▪ Review antiviral and other relevant supplies. ▪ Institute heightened surveillance for flu-like symptoms. ▪ Ensure and enforce use of face masks for all ill patients visiting HS. ▪ Consider utilization of N95s for healthcare personnel.
Human Resources	<ul style="list-style-type: none"> ▪ Determine need for messaging to employees regarding continued employment responsibilities.

Public Health Response	<ul style="list-style-type: none">▪ Review campus disease containment plan (including isolation) with HRL.▪ Behavioral Health: Post materials on Mental Health website. (HS & UR)▪ Administer seasonal influenza vaccine and H1N1 vaccine when available.
Athletics	<ul style="list-style-type: none">▪ Ensure hygienic athletic training environment.▪ Institute heightened surveillance for flu-like symptoms among athletes and staff.▪ Prepare for potential cancellation of athletic events.▪ Avoid travel to affected areas.
Other	<ul style="list-style-type: none">▪ To be determined.

GRID C	
Minnesota Response Phase P4-P6	
P4: Suspected or confirmed human case in Minnesota	
P5: Limited outbreak in MN	
P6: Widespread cases	
Pandemic Severity Index 1	
Voluntary home isolation of ill adults and children recommended.	
No other social distancing recommended.	
Internal Coordination	<ul style="list-style-type: none"> ▪ Officer of the Day to debrief with HERT for implications and strategy. ▪ Brief other administrators as deemed necessary by the Officer of the Day.
External Coordination	<ul style="list-style-type: none"> ▪ Request guidance from MDH on appropriate social distancing and healthcare guidelines.
Communications	<ul style="list-style-type: none"> ▪ Provide campus-level information on influenza symptoms and recommendations for voluntary home isolation.
Campus Infrastructure	<ul style="list-style-type: none"> ▪ Plan for business as usual, but prepare for potential worsening and possibility of shutting down the campus
Teaching	<ul style="list-style-type: none"> ▪ Clarify and communicate student absentee policies and procedures. ▪ Advise ill students and faculty/staff to stay home. ▪ In-person class dismissal instituted only if recommended by the MDH (unlikely). ▪ No other class dismissal unless absenteeism rates dictate and in consultation with the VCAA.
Research	<ul style="list-style-type: none"> ▪ Advise ill researchers to stay home. ▪ Ensure redundancy in essential animal care and research personnel.
Housing	<ul style="list-style-type: none"> ▪ Assist with communications about influenza symptoms and recommendations for home isolation. ▪ Prepare for students to leave
Health Services	<ul style="list-style-type: none"> ▪ Continue heightened influenza surveillance and appropriate PPE for staff. ▪ Work with housing on influenza disease prevention.

Human Resources	<ul style="list-style-type: none"> ▪ Reinforce recommendations for ill employees to stay home. ▪ Review sick leave policies. ▪ Unit directors monitor and confer regularly regarding patterns of service demands and staff availability. Staffs are informed of outbreak service trends and recommendations to maximize availability of healthy staff. ▪ Communicate detailed instructions to supervisors and managers.
Public Health Response	<ul style="list-style-type: none"> ▪ Coordinate with health services distribution of antivirals to ill students and contacts if available (HS) ▪ Ill students needing isolation will utilize limited Housing resources dedicated to isolation early in the evolution of a potential pandemic. Once those resources are utilized, ill students will be encouraged to socially isolate in their own rooms, stay at home if living off campus or consider going home to their parents if feasible ▪ Ensure ample available tissues, alcohol-based sanitizer in public domains (FM, Housing) ▪ Make face masks available for students who are ill (HS) ▪ Coordinate with MDH on appropriate surveillance procedures (HS) ▪ Behavioral Health: mental health providers determine need for additional campus-wide strategies as needed (HS/HR)
Athletics	<ul style="list-style-type: none"> ▪ Reinforce recommendations for ill athletes to stay home. ▪ Ensure hygienic athletic training environment.
Other	<ul style="list-style-type: none"> ▪ To be determined.

GRID D	
<p>Minnesota Response Phase P4-6</p> <p>P4: Suspected or confirmed human case in Minnesota</p> <p>P5: Limited outbreak in Minnesota</p> <p>P6: Widespread cases throughout Minnesota</p>	
<p>Pandemic Severity Index 2 and 3</p> <p>Voluntary home isolation of ill adults and children recommended.</p> <p>Voluntary quarantine of household members in homes with ill persons recommended.</p> <p>Child and adult social distancing recommended by the MDH for a period of 4 weeks.</p>	
Internal Coordination	<ul style="list-style-type: none"> ▪ Open EOC as indicated and useful for the situation. ▪ Open DOCs as needed (FM, ITSS, housing, HS, HR). ▪ Prepare to close campus.
External Coordination	<ul style="list-style-type: none"> ▪ Confer with MDH on likelihood and timing of Governor’s declaration of state of emergency.
Communications	<ul style="list-style-type: none"> ▪ Conduct daily messaging via Emergency Preparedness website accessed through U of M homepage. ▪ Consider mass email and/or text-messaging to alert students, staff, faculty, and parents to website availability. ▪ Consider use of emergency voicemail system to communicate in-person class dismissal information as needed.
Campus Infrastructure	<ul style="list-style-type: none"> ▪ Ensure 3 deep essential personnel for utilities, security, ITSS, facilities management. ▪ FM to assist in preparation for possible lodging of essential personnel. ▪ Communicate ITSS barriers and options for distance education and remote worksites. ▪ Consider potential for tiered building shutdown based on lack of essential personnel.
Teaching	<ul style="list-style-type: none"> ▪ Prepare for a possible in-person or full scale class dismissal which could last for several weeks. ▪ Discuss timing implications with VCAA/VCASSL. ▪ Determine those classes that require full dismissal due to inability to continue online or via some other mechanism.
Research	<ul style="list-style-type: none"> ▪ Contact researchers regarding continuity of research plans. ▪ Consider implementation of laboratory hibernation plans. ▪ <i>Ensure adequate stockpile of animal feed, bedding, and euthanasia supplies.</i>
Housing	<ul style="list-style-type: none"> ▪ Assist with communications about influenza symptoms and recommendations for home isolation. ▪ Consolidate housing resources as indicated in housing plan.

Health Services	<ul style="list-style-type: none"> ▪ Implement planned reductions in routine services. ▪ Activate emergency triage and communication plan as indicated by number of students needing care and staff available. ▪ Administer antivirals as indicated. ▪ Continue appropriate PPE for all HS staff. ▪ Behavioral Health: Transition to remote services based on need for services. Decide extent to which regular services can be maintained or only crisis assistance provided.
Human Resources	<ul style="list-style-type: none"> ▪ Reinforce recommendations for ill employees to stay home. ▪ Implement social distancing protocols for employees as recommended by MDH. ▪ Communicate detailed instructions to supervisors and managers.
Public Health Response	<ul style="list-style-type: none"> ▪ Students needing isolation will be sent home if possible once limited Housing resources dedicated to formal isolation are utilized. If not possible for the student to go home, social isolation will be encouraged for those residing on-campus and off- campus. ▪ Begin pre-planning and coordination of possible relocation of international students and students living greater than 8hrs drive from home with Housing, HS and Twin Cities campus personnel. ▪ Coordinate distribution of antivirals to ill students and contacts if available (HS) ▪ Ensure ample available tissues, alcohol-based sanitizer in public domains. (FM & Housing) ▪ Distribute face masks for students who are ill. (HS) ▪ Distribute and confirm proper fit of N95 masks for personnel who have direct contact with an ill student. (HS & EHS) ▪ Behavioral Health: determine need for additional campus-wide strategies as needed. (HS)
Athletics	<ul style="list-style-type: none"> ▪ Advise ill athletes to stay home. ▪ Plan for potential cancellation of athletic events for up to 4 weeks.
Other	<ul style="list-style-type: none"> ▪ Assess current and projected campus-level financial implications.

GRID E	
Minnesota Response Phase P4-6	
P4: Suspected or confirmed human case in Minnesota	
P5: Limited outbreak in Minnesota	
P6: Widespread cases throughout Minnesota	
Pandemic Severity Index 4 and 5	
Voluntary home isolation of ill adults and children recommended.	
Voluntary quarantine of household members in homes with ill persons recommended.	
Child and adult social distancing recommended by the MDH for a period of 12 weeks.	
Internal Coordination	<ul style="list-style-type: none"> ▪ Open EOC. ▪ Open DOCs as needed (Housing, ITSS, HS, Other). ▪ Prepare to close campus
External Coordination	<ul style="list-style-type: none"> ▪ Confer with MDH and Governor’s office on state of emergency.
Communications	<ul style="list-style-type: none"> ▪ Conduct daily messaging via Emergency Preparedness website accessed through U of M homepage. ▪ Consider mass email and/or text-messaging to alert students, staff, faculty, and parents to website availability. ▪ Consider use of emergency voicemail system to communicate in-person class dismissal information as needed. ▪ Provide campus-level information on influenza symptoms and recommendations for voluntary home isolation. ▪ Ensure adequate behavioral health components within community messages.
Campus Infrastructure	<ul style="list-style-type: none"> ▪ Ensure 3 deep essential personnel for utilities, security, ITSS, facilities management. ▪ FM to assist HRL in preparation for possible lodging of essential personnel. ▪ Communicate ITSS barriers and options for distance education and remote worksites. ▪ Consider potential for tiered building shutdown based on lack of essential personnel.
Teaching	<ul style="list-style-type: none"> ▪ Activate in-person class dismissal plans as recommended by the MDH. ▪ Prepare for up to 12 week in-person class dismissal. ▪ Determine those classes that require full dismissal due to inability to continue online or via some other mechanism. ▪ Discuss timing implications with Registrar.

Research	<ul style="list-style-type: none"> ▪ Contact researchers regarding continuity of research plans. ▪ Laboratory hibernation plans activated or ready to activate. ▪ Ensure adequate stockpile of animal feed, bedding, and euthanasia supplies. ▪ Prepare for potential building shutdown and implementation of surveillance plan. ▪ Consider activation of RAR disaster plan.
Housing	<ul style="list-style-type: none"> ▪ Evacuate housing. ▪ Consolidate housing resources as indicated in housing plan. ▪ Send students without close homes to UMTC.
Health Services	<ul style="list-style-type: none"> ▪ Behavioral Health: Continued monitoring of demand for remote services. ▪ Attend to remaining students living in campus housing (international students or students living greater than 8 hr drive from home) until they can be sent home or relocated to the Twin Cities campus.
Human Resources	<ul style="list-style-type: none"> ▪ Reinforce recommendations for ill employees to stay home. ▪ Recommend cancellation of non-essential in-persons meeting as recommended by the MDH. ▪ Provide means for communication among staff when units are closed. Monitor which services may be provided remote service. ▪ Modify worksite to maximize distance between workers. ▪ Modify work schedules and practices as needed. ▪ Communicate detailed instructions to supervisors and managers.
Public Health Response	<ul style="list-style-type: none"> ▪ Ensure ample available tissues, alcohol-based sanitizer in public domains. (FM & Housing) ▪ Distribute face masks for students who are ill. (HS) ▪ Distribute and confirm proper fit of N95 masks for personnel who have direct contact with an ill student. (HS & EHS) ▪ Implement campus disaster behavioral health response plan by use of phones. (HS, ITSS, HR)
Athletics	<ul style="list-style-type: none"> ▪ Advise ill athletes to stay home. ▪ Prepare for potential cancellation of athletic events for up to 12 weeks.
Other	<ul style="list-style-type: none"> ▪ Assess current and projected campus-level financial implications.

GRID F	
Minnesota Response Phase P7	
<i>Recovery and preparation for subsequent waves</i>	
Internal Coordination	<ul style="list-style-type: none"> ▪ Review timing to reconvene in-person classes as needed.
External Coordination	<ul style="list-style-type: none"> ▪ Request recommendation on suspension of social distancing measures from MDH as needed.
Communications	<ul style="list-style-type: none"> ▪ Communicate plans for re-institution of in-person classes as needed. ▪ Ensure adequate behavioral health components within community messages. ▪ Review information needed on Emergency Preparedness website.
Campus Infrastructure	<ul style="list-style-type: none"> ▪ Re-open shuttered buildings if staff available. ▪ Assess ITSS capabilities and re-configure for next wave.
Teaching	<ul style="list-style-type: none"> ▪ Re-institute in-person classes. ▪ Assess successes/failures of distance learning. ▪ Evaluate need for replacement instructors.
Research	<ul style="list-style-type: none"> ▪ Re-open hibernated laboratories if staff available. ▪ Assess stockpiled animal food, bedding and medication.
Housing	<ul style="list-style-type: none"> ▪ Prepare to re-open closed University housing. ▪ Sanitation procedures per MDH.
Health Services	<ul style="list-style-type: none"> ▪ Suspend phone triage. ▪ Assess pharmaceutical cache. ▪ Assess PPE cache. ▪ Behavioral Health: As health concerns subside and staff are available, transition services back to campus. Assess toll of the pandemic on HS staff.
Human Resources	<ul style="list-style-type: none"> ▪ Assess workforce by department. ▪ Review leave/pay policies with existing situation. ▪ As health concerns subside and staff are available, transition services back to campus. Assess toll of the pandemic on unit staff and support staff personal recovery efforts.
Public Health Response	<ul style="list-style-type: none"> ▪ Prepare for vaccination clinics as vaccine becomes available. (HS & Pharmacy School) ▪ Behavioral Health: Review web materials for addressing current mental health issues such as grief and loss, continuing preoccupation with future health issues, and adjusting to “new normal” life circumstances. (HS & UR) ▪ Behavioral Health: determine need for additional campus-wide strategies. (HS & HR)
Athletics	<ul style="list-style-type: none"> ▪ Re-institution of athletic schedule as staff and athlete availability dictate.
Other	<ul style="list-style-type: none"> ▪ Assess current and projected campus-level financial implications.

VIII. Principal Personnel by Response Area

This information is on file with the Department of Emergency Management and the UMD Office of the Vice Chancellor for Finance and Operations.

IX. Relevant External Plans and Guidelines

Minnesota Department of Health. Pandemic Influenza Plan All Hazards Response and Recovery Supplement. Draft – Version 2.5. April 2006.

<http://www.health.state.mn.us/divs/idepc/diseases/flu/pandemic/plan/mdhpanfluplan.pdf>

Minnesota Department of Employee Relations. State Agency Pandemic Influenza Service Continuation Guide. September 1, 2006. <http://www.doer.state.mn.us/PandemicFlu.htm>

Minnesota Department of Public Safety, Homeland Security and Emergency Management (HSEM). Service Continuation Planning Guide for Local Jurisdictions. Version 2.0. September 14, 2006.

http://www.hsem.state.mn.us/uploadedfile/Pandemic_Service_Continuation_Guide_II.pdf

Centers for Disease Control and Prevention. Colleges and Universities Pandemic Influenza Planning Checklist. Version 2.2. March 20, 2006.

<http://www.pandemicflu.gov/plan/school/collegeschecklist.html>

Centers for Disease Control and Prevention. Interim Pre-pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States. February 2007.

<http://www.pandemicflu.gov/plan/community/commitigation.html>