

PANDEMIC PREPAREDNESS & RESPONSE PLANNING



FOR COLLEGES AND UNIVERSITIES



Public Health Preparedness
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PLANNING WORKBOOK
Colleges & Universities

Safeguarding our community's health

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The objective of this workbook on pandemic planning and response is to assist colleges and universities in preparing to manage an influenza pandemic.* Planning can help to reduce transmission or limit the spread of the pandemic virus strain, thereby decreasing hospitalizations and deaths, while helping to maintain essential services, and reduce the economic and social impact of a pandemic.

The impact of a pandemic on college or university operations would likely include unprecedented demands on student health services, possible relocation of students in residence halls and even the establishment of on-campus quarantine sites. Widespread sickness among staff and faculty could result in 25% reductions in the work force, and community-wide, we would see essential services hampered – perhaps unavailable. A pandemic could create financial havoc due to significant loss of tuition revenues from closure of the institution, and non-returning students.

Higher Education will be among the industries most severely impacted because of risks resulting from international travel by students, faculty, and staff; and with open and accessible campuses to the local community at-large. Proactive steps toward protecting the health and safety of students, employees, and their families are essential to surviving the physical, economic, and social effects of a pandemic.

Because a pandemic reaches far beyond campus boundaries, cooperation and partnership with local authorities and community stakeholders is extremely important. Further, it is advisable that any existing emergency preparedness and business continuity plans are reviewed for relevance and as a means to save time before starting to develop a new plan that may already have many similarities.

Now is the time to begin constructing a plan in the instance that a pandemic occurs in your area. These activities are to encourage thoughts that will aid in developing a plan and ensuring that you, your staff, and students are prepared, and that your response is in harmony with those of your community.

This workbook contains three sections that may be used for the planning process, including a checklist and a template for the actual plan itself.

Should you have any questions about the content, please do not hesitate to contact Tarrant County Public Health at 817-321-4700 or visit our website at www.tarrantcounty.com/eHealth. There are Pandemic Flu Educators who can provide programs for staff and students, as well.

** The strategies and guidelines from this Workbook can be adapted for broader contingency plans encompassing other disasters caused by bioterrorism and the emergence of any new, highly transmissible and/or severe communicable diseases. Pandemic scenarios should also be incorporated into other institutional emergency plans.*

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PANDEMIC INFLUENZA PREPAREDNESS AND RESPONSE ‘PIPR’

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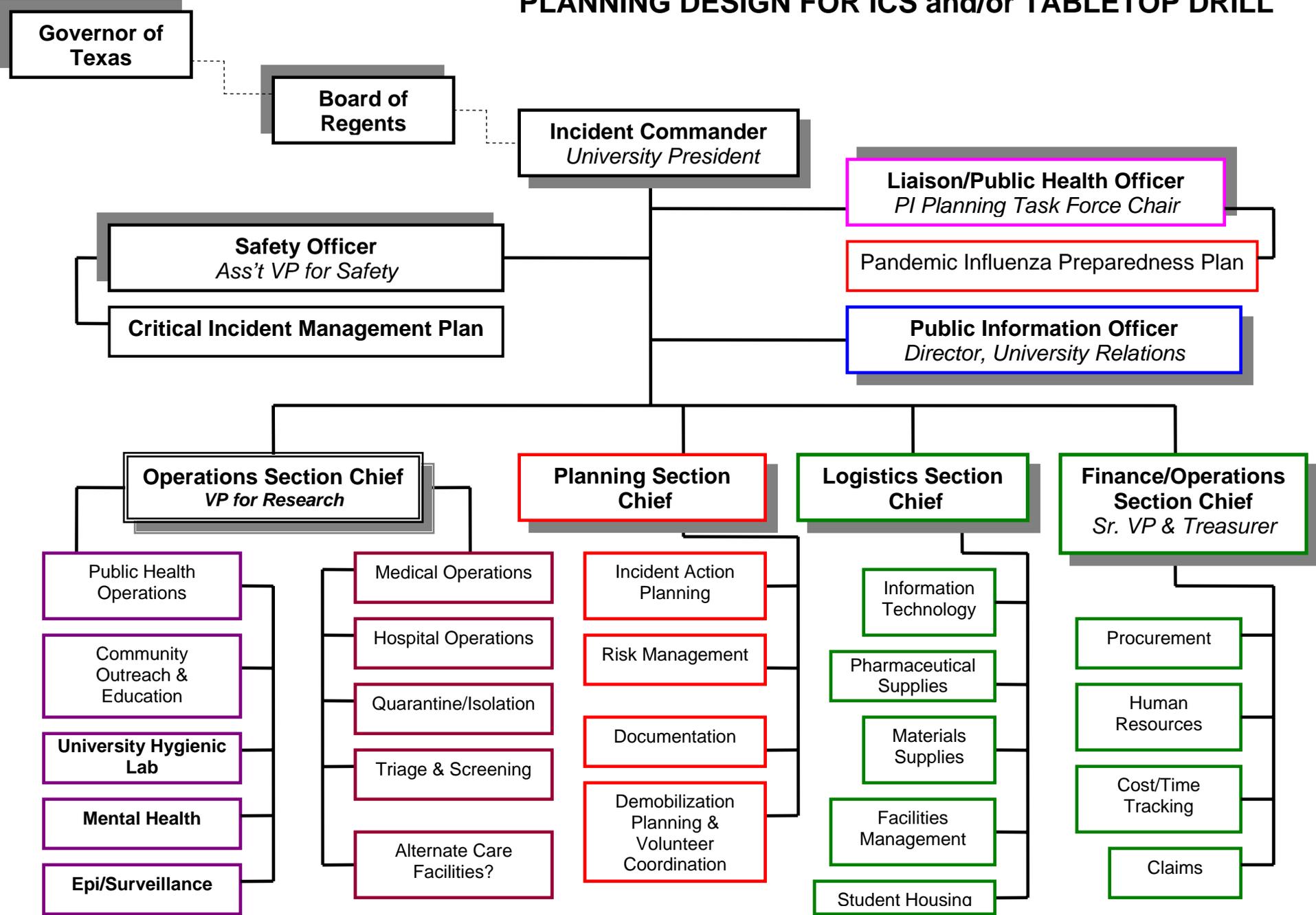
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PLANNING DESIGN FOR ICS and/or TABLETOP DRILL



First Considerations and Planning Steps

Steps	Planning Notes
<p>Identify a Pandemic Coordinator. This individual serves as the Project Leader during the planning process, but may also assume the Leadership role during the Pandemic event when your Pandemic Influenza Planning & Response (“PIPR”) Plan is activated.</p>	<p><i>It may be appropriate for the Safety Officer or the Chief of Campus Police to assume this position; however in many instances, these individuals are better utilized as committee members.</i></p>
<p>Create a pandemic response team that includes various campus sectors, such as</p> <ul style="list-style-type: none"> • campus health services & mental health staff • student housing personnel • security • communications staff • physical plant staff • food services director • academic staff • student representatives • other, such as alternative means of communicating with students who have special (physical) needs, etc. 	<p><i>Decide in advance who will serve in the LEAD positions in the event of a pandemic. Their first priority will be to decide on the major goals of your institution’s plan. For example, life safety, protection of property, preservation of financial stability, and the protection of laboratory research and animal care, etc. Each LEAD must identify and appoint those who will have a “command and control” function within their area of the plan.</i></p>
<p>Identify the specific components of the operational plan.</p> <ol style="list-style-type: none"> A. Preparedness (Mitigation) B. Phase I (Pandemic is reported elsewhere) C. Phase II (Chance of Pandemic is great) D. Phase III (Response to Local Pandemic) E. Recovery 	<p><i>Using a 3-phase Response approach is highly recommended because until the pandemic is truly a local event (Phase 3), your school’s response will likely be surveillance and precautionary measures (Phase 2).</i></p>
<p>Delineate accountability and responsibility for key personnel engaged in planning and executing specific components of the operational plan.</p> <ol style="list-style-type: none"> A. Academic Affairs B. Human Resources C. Physical Plant & Facilities D. Student Housing Services E. Exchange or International students F. Counseling G. Campus Security 	<p><i>As previously noted, it is important to engage not only your school’s employees but also to have frequent contact with public health officials and other community stakeholders to assure cohesive response for the community.</i></p>
<p>Delineate resources for key personnel engaged in planning and executing specific components of the operational plan.</p> <ol style="list-style-type: none"> A. Infection Control B. Communication, both internal and external C. Human Resources policies (sick days, etc.) D. Surveillance and Reporting E. Equipment, lab animals, research data, etc. 	<p><i>Thoughtfully approaching the variety of issues presented by a pandemic will lead to multi-level conversations about the ramifications of a long-term event, and the many facets of formulating an adequate response.</i></p>

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<p>How will the PIPR Plan be made known to employees and students? Will it become part of the Employee or Student Handbook or be posted in all campus buildings? How and when will the PIPR Plan be activated?</p> <p>Be certain to include</p> <ul style="list-style-type: none"> • timelines • deliverables • performance measures • other 	<p><i>How will faculty, staff and students be informed of the Plan? Who will activate the Plan?</i></p> <p><i>It is important that you are able to measure the efficacy of your response, but having a plan that your faculty and staff can perform over an extended period of time is essential. A pandemic may come in waves of 6-8 weeks, with intervals of 3-6 months.</i></p>
<p>Your PIPR Plan must include a contingency plan for out-of-state, non-local, and foreign & exchange students who depend on student housing and food services.</p>	<p><i>Be sure to address:</i></p> <ul style="list-style-type: none"> • <i>Language & cultural differences</i> • <i>Quarantine situations</i> • <i>Other circumstances that may infringe on personal privacy or civil rights</i>
<p>Develop community containment measures such as closing (and re-opening) the college/university with respect to identifying</p> <ul style="list-style-type: none"> • legal authority • decision makers • trigger points • thresholds 	<p><i>Provide direction or sources for how to obtain reliable information about local containment activities such as travel limitations and social distancing.</i></p> <p><i>Be explicit about which conditions will set off closure of the college/university, AND under what circumstances it will re-open.</i></p>
<p>Identify and review the college/university's legal responsibilities and authorities for executing infection control measures:</p> <ul style="list-style-type: none"> • case identification • reporting information about ill students and employees • isolation • movement restriction • provision of healthcare on campus • other 	<p><i>In a pandemic, the community's main defense will be to limit the spread of the disease; therefore, infection control measures should be used at <u>all</u> levels, including custodial staff, student health workers, food prep, and within all campus facilities.</i></p>
<p>Ensure that this PIPR Plan is consistent with the <i>existing</i> college/university emergency operations and response plan "EOP", and that it coordinates with the pandemic plan of the community. The PIPR Plan must also adhere to any guidelines established by the state's higher education agency.</p>	<p><i>This plan should become an annex to your existing Emergency Response Plan.</i></p>

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<p>Plan for surge capacity for healthcare, mental health, and social services to meet the needs of the college/university (and perhaps for the local community) <i>during and after</i> a pandemic</p> <ul style="list-style-type: none"> • campus designated as contingency hospital • campus designated as other contingency shelter or distribution site • on-campus feeding vulnerable populations • community utilization of campus healthcare and mental health staff 	<p><i>In order to initiate the use of your institution's facilities during an emergency or disaster situation, a pre-existing signed agreement must be in place. Consult the administration or facilities management at your campus.</i></p> <p><i>If your healthcare and mental health staff members are not occupied on campus, we suggest that they volunteer their expertise through the local Medical Reserve Corps.</i></p>
<p>Establish an emergency communication plan identifying</p> <ul style="list-style-type: none"> • key contacts • the chain of communications • alternate mechanisms of communication 	<p><i>Reliable sources include your local public health officials, state higher education officials, and possibly alternate contacts.</i></p>
<p>In order to effectively implement and manage this PIPR Plan, and to improve the chances of successful outcome community-wide, committee members and key personnel must be trained on the Incident Command System (ICS).</p>	<p><i>Utilize one of the following online National Incident Management System (NIMS) compliant trainings:</i> ICS 100: http://training.fema.gov/EMIWeb/IS/is100.asp ICS 700: http://www.training.fema.gov/EMIWEB/IS/is700.asp</p>
<p>Implement an exercise/drill to test your plan.</p>	<p><i>Writing the PIPR Plan is only part of the process. Walking through the PIPR Plan assures that the steps to response are workable and helps all those involved to understand their role of responsibility. We also strongly recommend that you review and revise emergency communication plan on a regular basis.</i></p>
<p>Participate in exercises of the community's pandemic plan.</p>	<p><i>Your participation adds valuable input to the community's planning and response process.</i></p>
<p>Remember that your Recovery Plan should deal with consequences of the pandemic</p> <ul style="list-style-type: none"> • loss of students • loss of staff • financial and operational disruption • other 	<p><i>A pandemic can last an extended period of time, which can have long-term effects on the physical, financial, and social conditions of your institution. It is advisable to plan a recovery for the worst scenario, or perhaps for 2 or 3 less severe scenarios leading up to the worst.</i></p>

Response Plan by Pandemic Phase

Steps	Planning Notes
<p>PHASE ONE of the PIPR Plan should include detailed information and direction regarding preparation and possible mitigation activities when a pandemic strain has been identified that threatens humans.</p>	<p><i>These directives might include coordinated efforts to provide regular updates on Pandemic Status, possibly including on-campus efforts to detect, monitor and report any unusual acute illnesses or medical conditions among students, staff & faculty, especially those who travel or upon returning from studies abroad.</i></p> <p><i>It is beneficial to have already identified a point of contact at the local Public Health Office who can provide accurate information on the incidence and prevalence of infection internationally, regionally, and locally. See Phase 1 of the example</i></p>
<p>PHASE TWO of the PIPR Plan should provide detailed information and direction regarding the continuation of activities in Phase One, PLUS the additional procedures necessary for preparation and protection in connection with wide-spread disease, including testing, reporting, implementing infection control measures, educating all audiences about the threat that is at hand, and ALSO about the subsequent steps that lead to recovery.</p>	<p><i>Pandemic disease will be easily and rapidly spread, and containment may be the only defense option for weeks; therefore, it will be essential to establish & maintain a “READY” position <u>early</u> among faculty, staff, and students. Accurate, frequent information is vital to this effort so your communications plan must be pre-determined. This effort should go a long way toward controlling panic among all of the populations. See Phase 2 of the example</i></p>
<p>PHASE THREE of the PIPR Plan should incorporate the responses already described in the Continuity of Operations Plan “COOP” for local emergencies, plus specific directives that reduce the risk of infection or limit the spread to faculty & staff, students, and the community. This phase will also address the distribution of prophylaxis or vaccine to faculty & staff, students, and whether your institution has been designated as an alternative shelter, care site, or distribution site.</p>	<p><i>Activities such as Isolation of those who are sick (and protection from them) must be addressed in this phase. Issues about housing and food services, vital business activities, and directives for continuation, limited, or closure of classes should be specifically outlined and posted in easily accessed formats (signage, web sites, via television or radio, etc.)</i></p> <p><i>Any use or designation of campus buildings for alternative shelter, care site, or distribution site must be agreed to and accepted in advance—and in writing – with the municipality or entity that has given the directive (such as local or county government, hospital, or other). See Phase 3 of the example</i></p>

Communications Planning

Internal Communications	
Assess readiness to meet communications needs in preparation for an influenza pandemic, including regular review, testing, and updating of communications plans that link with public health authorities and other key personnel (See www.hhs.gov/pandemicflu/plan/sup10.html).	<i>Being able to report incidence and prevalence to the local health department will be vital to the entire community during a pandemic. To ensure this information is sent and received, regularly test and evaluate the process with your local health department. Once the Pandemic Plan has been activated, requests for other needs should be made to the local Office of Emergency Management, which will then respond or relay the request further.</i>
Develop a dissemination plan for communication with employees, students and families, including lead spokespersons and links to other communication networks. Ensure language, culture and reading level appropriateness in communications.	<i>The communications plan should take into consideration an overview of all available campus media channels (internet, e-mail, voice, text messaging, press, campus radio & TV, 800 numbers, etc.) and also alternative devices & means for special needs students & staff. As with any disaster, a spokesperson should be designated, or a process of appointing that person should be included in the PIPR.</i>
Develop and test platforms (e.g., hotlines, telephone trees, dedicated websites, local radio or television) for communicating college/university response and actions to employees, students and families.	<i>Remember that a pandemic will result in absenteeism, and a lack of accurate information will further complicate the work/campus environment. The PIPR must include options for reporting health/work/campus status and for relaying messages and information, both internally and externally.</i>
Ensure the provision of redundant communication systems/channels that allow for the expedited transmission and receipt of information.	<i>Redundant communications should already be addressed and delineated in the overall Campus Emergency Response Plan; however, testing & evaluating these devices and pathways are part of the PIPR as well.</i>
Advise employees and students where to find up-to-date and reliable pandemic information from federal, state and local public health sources.	<i>We recommend using reliable sources such as the local health authority and/or hospitals to provide accurate and timely information.</i>
Disseminate information about the college/university's plans for preparedness and response. This should include the potential impact of a pandemic on student housing closure, and the contingency plans for students who depend on student housing and campus food service, including how student safety will be maintained for those who remain in student housing.	<i>Information such as the PIPR could be made available via campus website or other media; however, the time to release such information should be pre-determined and noted in the PIPR. Releasing this information too soon could lead to confusion and/or lack of urgency. Staff should be fully involved in the planning process to assure adequate and effective response.</i>

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<p>Disseminate information from public health sources covering routine infection control (e.g., hand hygiene, coughing /sneezing etiquette), pandemic influenza fundamentals (e.g., signs and symptoms of influenza, modes of transmission), personal and family protection and response strategies (including the HHS Pandemic Influenza Planning Guide for Individuals and Families at www.pandemicflu.gov/plan/tab3.html), and the at-home care of ill students or employees and their family members.</p>	<p><i>Education and practice will help stem anxiety and quell fears once the pandemic begins. Making information readily available will help student, faculty & staff feel better-equipped to respond personally, and will also help alleviate phone-line overload. Taking the initiative to practice the response plan also engages the campus as a whole, giving participants an opportunity to assess their personal preparedness and awareness.</i></p>
<p>Anticipate and plan communications to address the potential fear and anxiety of employees, students and families that may result from rumors or misinformation.</p>	<p><i>Utilizing existing professional staff for these services could go a long way towards avoiding, reducing, or effectively managing the anxiety that will abound during a pandemic. Also, we suggest getting input as to phrasing of alerts and warnings to convey the proper message at the proper emotional level.</i></p>

External Communications	
<p>Identify and/or define the process for reviewing and approving all external communications.</p>	<p><i>Timely, accurate, and consistent information is critical at all levels in order to minimize unwanted and unforeseen social disruption and economic consequences.</i></p>
<p>The external communications plan addresses different target groups (e.g. parents, donors, boards, press, general public, and health-care workers), key messages to be conveyed, possible materials that are needed (web sites, brochures, information in different languages, etc.) and distribution mechanisms to reach each target group.</p>	<p><i>Information such as suspension or cancellation of gatherings (sporting events, concerts, ceremonies, etc.) could be made available via website or other media; however, the timing of the release of such information should be pre-determined and noted in the PIPR. Realize that releasing this information too soon could lead to concern or confusion.</i></p>
<p>Disseminate information from public health sources covering routine infection control (e.g., hand hygiene, coughing /sneezing etiquette), pandemic influenza fundamentals (e.g., signs and symptoms of influenza, modes of transmission), personal and family protection and response strategies (including the HHS Pandemic Influenza Planning Guide for Individuals and Families at www.pandemicflu.gov/plan/tab3.html), and the at-home care of people who fall ill.</p>	<p><i>Because local academic institutions are not only sources of community pride but also frequently sources of trusted information, it would be helpful to the community at large to have a link to Pandemic Preparedness on the website.</i></p> <p><i>A means of communicating or relaying daily briefings on campus/institution health or physical status should be considered in the PIPR, especially to share this information with the local community.</i></p>

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Anticipate and plan communications to assist the community by addressing fear and anxiety that may result from rumors or misinformation.	<i>Often, the response by the campus will help set the tone of response for the community at large.</i>
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Organizational Policies & Procedures

Steps	Planning Notes
<p>The PIPR must outline a command & control structure, identifying the management and decision-making processes of all departments involved in response. Moreover, those key decision-makers are aware of their duties, and replacements have been named & notified, should the need arise.</p>	<p><i>Such information is frequently already provided in the overall Emergency Response Plan, but the responders in a pandemic event may differ from those for other types of events.</i></p> <p><i>Roles & responsibilities should be defined and explained in the operational plans for each department.</i></p>
<p>The institution should address the legal impacts of public health measures that are likely to be proposed in preparation for and in response to a pandemic.</p> <p>Besides the liability issues, a protracted or prolonged pandemic could also increase ethical considerations, as well.</p>	<p><i>Some of the issues that should be addressed in advance are: travel and movement restrictions, including leaving and entering areas where infection has been detected; the legal and ethical issues related to personal freedom, as may occur during isolation & quarantine practices; questions related to compulsory vaccination for essential employees; and so on.</i></p>
<p>The PIPR Plan should incorporate a Continuity of Operations plan (COOP) for maintaining the essential operations of the college/university including</p> <ul style="list-style-type: none"> ● payroll ● ongoing communication with employees, students and families ● security ● maintenance ● housekeeping ● food service ● student housing 	<p><i>Detailed information and direction regarding the continuation of daily operations or essential functions should be included in the PIPR Plan.</i></p> <p><i>Remember that there may be significant reduction in staff due to illness, which will require cross-training of staff and/or pre-designates for coping with duties beyond regular functions.</i></p> <p><i>Using current technologies such as direct deposits banking, online communications, and website updates should be strongly considered.</i></p>
<p>Establish policies and procedures for employee and student sick leave absences unique to a pandemic influenza.</p>	<p><i>These policies should take into account the possibility that a pandemic event could last longer than 30 days, and is likely to have “waves” of recurrence over a period of months. Consider liberal leave policies that are also non-punitive. Faculty and staff should also make personal response plans in the event that their offices or classrooms become off-limits.</i></p>

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<p>Establish absenteeism and sick leave policies for employees and students with known or suspected pandemic influenza</p>	<p><i>The PIPR Plan should include examples of signage and postings that clearly express that procedure to follow if one falls ill during a pandemic event. This information should include:</i></p> <ul style="list-style-type: none"> • <i>instruction to <u>not</u> attend classes</i> • <i>instruction on getting care or being tested</i> • <i>isolation and/or transportation procedures if become ill during class (while in classroom buildings)</i> • <i>whether or not to remain on campus</i> • <i>when to return to campus</i>
<p>The PIPR Plan should include Standard Operating Procedures for the following:</p> <ul style="list-style-type: none"> • outbreak verification, reporting, & alert • information flows and for disseminating public information • obtaining medical/scientific consensus during the pandemic 	<p><i>Delineate instructions for determining the prevalence of the pandemic on campus. Include steps to inform local health authorities.</i></p> <p><i>The PIPR Plan must outline the processes that are to be followed to assure least liability in the event that non-licensed people are tasked with duties that are normally performed by others.</i></p>
<p>Evaluate staff access to mental health services, social services, grief counseling, etc.</p>	<p><i>Due to the nature of a social disaster such as a pandemic, mental and emotional support will be critical, and force protection should be directly address in your PIPR Plan.</i></p>
<p>Will buildings or residence halls be closed? Will the campus be closed? Who will make that decision and on what basis?</p>	<p><i>Define the procedures required for closing and securing buildings, residence halls, and the campus.</i></p> <p><i>Can the campus police enforce such closures?</i></p>

Continuity of Instruction & Academic Affairs

Steps	Planning Notes
<p>Because classroom instruction may not be possible – due either to student absenteeism or illness of faculty – the development and utilization of alternative procedures to assure continuity of instruction is necessary.</p>	<p><i>Web-based distance instruction, telephone trees, mailed lessons and assignments, instruction via local radio or television stations are all good alternatives to in-classroom instruction, assignments, and discussion.</i></p>
<p>In the event of college/university closures, determine a process for either continuing classes or issuing extensions of timelines and reporting</p>	<p><i>The PIPR should provide faculty with the parameters for modifying classroom times, or for changing locations, and also when</i></p>

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assignments.	<i>classes can be called off or discontinued. These thresholds may change as the Phase of the pandemic progresses or as the pandemic passes.</i>
Establish absenteeism parameters for students unique to a pandemic influenza. Clearly state when these parameters become effective and when they are deactivated.	<i>A pandemic event could last longer than 30 days, and is likely to have “waves” of recurrence over a period of months. Frequently, reaching a pre-determined threshold of absenteeism is a “trigger” for activating the PIPR Plan.</i>
Identify and delineate the means of continuing the business of the institution with regard to funding for payroll, purchasing, etc. during a pandemic.	<i>Estimate the financial impact of a pandemic so that a system can be arranged to maintain accounts, transfer or secure funds, etc. and meet regulatory guidelines as needed.</i>
Develop a policy to address academic and financial concerns of students resulting from prolonged absences or temporary closure	<i>What are the state/national educational agencies that require notification of closure? What aspects of student financial aid could be affected? Should we set “minimum attendance” levels to maintain class credit viability?</i>
Develop a policy to address decreased tuition receivables if there is a significant reduction in returning students or faculty	<i>What are the financial consequences to a prolonged pandemic event? What is the process for replacing / recruiting faculty and students, and what are the associated costs?</i>
Develop criteria for communications with relatives of students re: status of health, grades, costs, etc.	<i>Since many students are not minors, it will be necessary to either suspend normal privacy requirements, or to replace them with temporary requirements in order to divulge current information to families.</i>

Core Operations & Essential Services

Steps	Planning Notes
Identify Core Operations and Essential Services (such as power, water & sewage, telecommunications, etc.)	<i>Based on the academic institution's mission & priorities, Core Operations will vary (such as teaching or research) but Essential Services should include all services necessary to maintain health in the campus environment, and/or to avoid or limit damage to property or people.</i>
Each designated Essential Service should develop emergency contingency plans in the event of a pandemic.	<i>From Essential Services, develop a list of Essential Personnel, including level of threat posed in the event of their absence. Designate personnel as back up. If training is needed, arrange for instruction.</i>
Assure that Campus Security protocols are aligned with those of local law enforcement.	<i>Encourage their participation in Drills to test the PIPR Plan. Arrange to control access to campus and specific facilities when any have been designated as "public" or when they have been declared "off limits".</i>
Plan to secure and protect the campus from encroachment by neighbors and other non-campus populations seeking services or shelter in the event of panic	<i>What level of protection will the campus security force be allowed to enforce?</i>
Develop protocols for utilizing and training volunteers (even students) if the need arises due to absenteeism of designated essential personnel.	<i>Encourage their participation in Drills, and also in Cross training efforts, to familiarize them with the protocols and practices.</i>
Compare the institution's needs AND services with those of the community at large, and secure Memorandum of Understanding or Mutual Aid agreements with other entities as service providers.	<ul style="list-style-type: none"> ● <i>Available alternative housing for students who cannot travel or are moved out of their dorms</i> ● <i>Shelters for science lab animals</i> ● <i>Alternative food supplies</i> ● <i>Other</i>

Infection Control Policies and Procedures

Steps	Planning Notes
Identify the person (by name and title) whose primary responsibility is campus infection control. A replacement/alternate for this person should also be noted.	<p><i>Title</i> <i>Name</i> <i>Location</i> <i>Phone</i> <i>Email</i></p>
<p>Implement infection control policies and procedures known to limit the spread of influenza on campus.</p> <p>Deploy campus-wide education efforts.</p>	<ul style="list-style-type: none"> • <i>Distribute information about routes of infection, symptoms, sources of info, etc.</i> • <i>Promote hand hygiene</i> • <i>Post cough/sneeze etiquette brochures</i> www.fyiahec.org/resources • <i>Encourage students and staff to get annual influenza vaccine</i> • www.cdc.gov/flu/protect/preventing.htm
Promote good hygiene and healthy habits now in order to help protect employees and students from many infectious diseases such as influenza.	<ul style="list-style-type: none"> • <i>hand hygiene</i> • <i>cough/sneeze etiquette</i> • <i>proper nutrition</i> • <i>daily activity and exercise</i> • <i>relaxation / stress management</i> • <i>proper rest</i>
<p>Procure, store and provide sufficient and accessible infection prevention supplies.</p> <p>If the institution is providing respiratory protection, arrange or train for Fit Testing.</p>	<p><i>Initially include soap, alcohol-based/waterless hand hygiene products, tissues, receptacles for proper waste disposal; however the list of items will expand as the pandemic escalates, and supplies may include N95 masks, latex gloves, eye goggles, etc. Stockpiling personal protective equipment is recommended. Be sure to have a pre-determined process for distributing this equipment.</i></p>
Provide instruction for personnel who will need special in-depth training because of the likelihood of exposure, such as Maintenance & Custodial, Facilities Management, on-campus infirmary staff, security, food services, etc.	<p><i>Develop protocols for waste disposal to prevent spread or exposure</i> <i>Establish protocols for handling, transfer, and storage of deceased</i> <i>Also see the Facilities Management section</i></p>
Establish a pandemic plan for campus-based healthcare facilities that addresses issues unique to healthcare settings.	<p>www.cdc.gov/flu/pandemic/healthprofessional.htm</p>

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<p>Ensure health services or clinics have identified critical supplies needed to support a surge in demand and ensure that those supplies are on hand</p>	<p><i>If it is decided that the institution will provide on-campus care for known cases or for those suspected to be infected, there may only be prophylaxis to offer (because a vaccine will not be available for weeks or months). Determine a process for stockpiling these drugs, along with designating a storage space and also a process for distributing them.</i></p>
<p>Social Distancing, Isolation, etc.</p>	
<p>Education of the campus community about how to achieve protection and contribute to limiting the spread of the disease, including teaching the public health measures that might be implemented, such as social distancing and isolation.</p>	<p><i>Utilizing the science classes to provide basic instruction about limiting the spread of infections, and to acknowledge and discuss potential responses has been a successful tactic recently.</i></p> <p><i>Use any readily-available media resources to provide instruction and information.</i></p>
<p>Determine & implement infection control guidelines for non-medical places where people gather or where there is a high risk of spread or infection (residence halls, cafeteria, athletic facilities, lecture halls, etc.)</p>	<p><i>This information could also be contained in the overall Emergency Response Plan, but should be kept on-hand in these locations for quick reference.</i></p>
<p>Determine locations / destinations for infected or ill students & employees.</p>	<p><i>Will they be allowed into the dormitory or other buildings? Will they need to leave campus? If so, what transportation arrangements have been made?</i></p> <p><i>Is it necessary to designate one or more on-campus buildings to be used as medical surge facilities?</i></p>
<p>Determine the process for limiting or cancelling on-campus events & gatherings.</p>	<p><i>How will this information be made known? Can the campus police enforce these measures?</i></p>
<p>Travel Restrictions</p>	
<p>Adopt CDC travel recommendations during an influenza pandemic.</p> <p>Be able to support voluntary and mandatory movement restrictions.</p>	<p><i>Recommendations may include:</i></p> <ul style="list-style-type: none"> ● <i>restricting travel to and from affected domestic areas</i> ● <i>restricting travel to and from affected international areas</i> ● <i>recalling nonessential employees working in or near an affected area when an outbreak begins</i> ● <i>distributing health information to persons who are returning from affected areas</i> ● <i>other</i> ● <i>consult www.cdc.gov/travel/</i>

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To limit the spread or risk of infection, determine the process for restricting and monitoring destinations of visitors on campus, including vendors, supply chain, and others.	<p><i>How will this information be made known?</i></p> <p><i>Can the campus police enforce these measures?</i></p>
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On-Campus Residence Issues

Steps	Planning Notes
Evaluate and Designate on-campus housing that may be used for isolation of students who cannot return home off-campus.	<i>Considerations include re-circulated air; private bathrooms, security, etc.</i>
Develop “shelter in place” guidelines and distribution protocols	<i>How will this information be made known? When will these steps be taken? How will they be enforced?</i>
Establish triage protocols for students who believe they have been exposed or who exhibit symptoms	<i>This effort will escalate as the pandemic expands, and will require trained medical/health personnel; therefore, it is necessary to plan for increased staff or volunteers to perform these tasks.</i>
Evaluate the impact of a pandemic on food deliveries and other supply chains, laundry services, waste pick up, etc. and plan for alternatives or other ways to limit exposure and spread.	<p><i>Address expected deficiencies by systematically stockpiling non-perishable foods, advance agreements with outside vendors, etc.</i></p> <p><i>Some alternatives to reduce exposure might include the use of prepackaged plastic utensils and meals, machine vending, etc.</i></p>

Testing the Plan

Steps	Planning Notes
Periodically review, test, and revise the PIPR Plan.	<i>In the absence of outbreaks, establish a schedule that calls for reviewing, testing, and revising the PIPR Plan. For example, annually, or at the beginning of each semester, etc.</i>
Designate the person who is responsible for arranging and conducting the test(s). “Drill”	<i>Name the person by title and by name in the PIPR Plan. This person may delegate various aspects of the Drill planning, such as contacting all those outside of campus who will be participating.</i>

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<p>The test or DRILL will be conducted based on meeting specific and measurable Objectives. These objectives will determine the extent and length of the Drill.</p>	<p><i>Objectives should be established based on several factors, including</i></p> <ul style="list-style-type: none"> ● <i>What part(s) of our PIPR Plan need to be evaluated initially?</i> ● <i>What process(es) do we want to prove?</i> ● <i>How will we communicate most effectively?</i> ● <i>What will be the process for closing buildings on campus?</i>
<p>Develop scenarios that address the institution's functioning based on having several levels of illness in students and employees, and different types of community containment interventions. Scenarios might also include variations in severity of illness, mode of transmission, and rates of infection in the community.</p>	<p><i>Some ideas include using these variables:</i></p> <ul style="list-style-type: none"> ● <i>Cancellation of classes</i> ● <i>Announcement of outbreak prior to a sporting event</i> ● <i>Returning international student who falls ill soon after coming into the classroom.</i>
<p>Once the Drill has been completed, a process for reviewing the Drill, noting what was successful and what was not, and revising the PIPR Plan must be determined.</p>	<p><i>The process could be handled various ways., for example:</i></p> <ul style="list-style-type: none"> ● <i>Have each sector or department that was involved in the Drill report</i> ● <i>Use Post-Drill Evaluation Forms</i> ● <i>Film the Drill, or have observers in place who could identify and note problems/challenges</i>
<p>Participate in local Pandemic Flu Response Drills</p>	<p><i>Academic Institutions can both contribute to and learn from drills that are set up by other entities. It is tremendously valuable for input and ideas for all parties, due to the "shared" nature of the disaster in the community, besides providing opportunities for clarifying information, experiences, and existing planning processes.</i></p>

Adapted from the US Department of State Health Services Pandemic Influenza Preparedness Checklists
(expanded versions available online at www.pandemicflu.gov)
by the Pandemic Influenza Planning team, Tarrant County Public Health.

EXAMPLE OF UNIVERSITY PIPR PLAN
by Phases: Level 1, Level 2, and Level 3
March 2008
Pandemic Response

Avian Influenza Response Levels:

1. Confirmed cases of human-to- human transmission of avian flu
2. Suspected case(s) on Campus or suspected/confirmed cases in Local area
3. Confirmed case(s) on Campus [Only essential personnel required to report to campus.]

Department	Level 1	Level 2 (in addition to Level 1 actions)	Level 3 (in addition to Level 2 actions)
1. Assessment Team (EH&S, Health Center & Univ. Police) in connection with the Local Health Authority	<ol style="list-style-type: none"> 1. Bring in Director of Health Center as Incident Commander 2. Monitoring situation 3. Contact Media Relations* 4. Bring in Housing/Dining for isolation planning. 5. Essential personnel receive fit test & training on respiratory protection from Environmental Health & Safety (EH&S) 	Essential personnel receive N95 respirators from EH&S	1. Maintain contact amongst Assessment Team.

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Academic Institutions

Department	Level 1	Level 2 (in addition to Level 1 actions)	Level 3 (in addition to Level 2 actions)
<p>2. Incident Commander (Director of Health Center)</p>	<ol style="list-style-type: none"> 1. Communicate with [redacted] County Health Department and UPMC regarding planning and surveillance. 2. Communicate and benchmark other college Health Services and EH&S Depts. 3. Alert Admin & Faculty ICS Coordinators 4. Establish communication with deans and Sr. Director of Global Security regarding status of preparedness. 5. Update emergency action plan with Assessment Team & Admin/Faculty ICS Coordinator as situation evolves. 6. In conjunction with the PI Team Coordinator, issue communication(s) to campus community regarding status of disease spread, self protection and university response. (e-mail, website, town meetings) 	<ol style="list-style-type: none"> 1. Notify [redacted] County Health Dept. 2. Notify Student Affairs and Counseling and Psychological Services (CAPS). 3. Notify Housing & Dining on number of potential contacts that may require isolation. 4. Compose communications with Media Relations and the Advisory Group Coordinator for the campus community regarding signs/symptoms, protocol for referral of suspected cases. 5. Essential personnel receive N95 respirators from EH&S 	<ol style="list-style-type: none"> 1. Advise Advisory Group Coordinator* to activate Emergency Operations Center (EOC) 2. Recommend temporary closure of building(s) and suspension of student and academic activities to Advisory Group Coordinator. 3. Implement Emergency Action Plan with Assessment Team & Advisory Group Coordinator. 4. Ensure that each Operations Group function is covered.
<p>3. University Police</p>	<ol style="list-style-type: none"> 1. Health Center trains dispatchers, security, and police on avian flu. 2. Alert Student Health Center if encountering individual(s) with flu-like symptoms. 3. Essential personnel receive fit test and training on respiratory protection from EH&S 	<ol style="list-style-type: none"> 1. Implement policy on transporting individual to hospitals. 2. Essential personnel receive N95 respirators from EH&S 	<ol style="list-style-type: none"> 1. Secure buildings & post signage 2. Assist Health Center

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Department	Level 1	Level 2 (in addition to Level 1 actions)	Level 3 (in addition to Level 2 actions)
4. Facilities Management	<ol style="list-style-type: none"> Identify building ventilations systems. Essential personnel receive fit test and training on respiratory protection from EH&S 	Essential personnel receive N95 respirators from EH&S	<ol style="list-style-type: none"> Stand by to shut off utilities as directed by Incident Commander, if necessary
5. Environmental Health & Safety	<ol style="list-style-type: none"> Assess respiratory protection plan and resources. Contract with hazardous material company for professional cleanup. Train and fit essential personnel for respirators 	<ol style="list-style-type: none"> Arrange for additional medical waste pickups. Distribute N95 to essential personnel. 	<ol style="list-style-type: none"> Assist w/notification of Emergency Coordinators* Assist Health Care Center
6. President's Office PI Team Coordinator	<ol style="list-style-type: none"> Receive information from Incident Commander Review content of internal and external public information bulletins and announcements. Work with Media Relations to select appropriate university spokesperson(s) for media reporting. Essential personnel receive fit test and training on respiratory protection from EH&S Consider restricting movement on and off campus for activities/athletic events. 	<ol style="list-style-type: none"> Advise Executive Management on response options. Activate EOC Receive N95 respirators from EH&S 	<ol style="list-style-type: none"> Provide oversight for student, staff, & faculty family notifications if appropriate.
President's Office Executive Management	<ol style="list-style-type: none"> Based on U. S. State Department recommendations, University recommends campus community not to travel to affected countries. Receive fit test and training on respiratory protection from EH&S 	<ol style="list-style-type: none"> Evaluate information on institutional effects of the incident and set response priorities as appropriate. Essential personnel receive N95 respirators from EH&S 	<ol style="list-style-type: none"> Authorize temporary suspension of classes or closure.

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Department	Level 1	Level 2 (in addition to Level 1 actions)	Level 3 (in addition to Level 2 actions)
7. Media Relations	1. Draft internal and external bulletins and announcements, with the Advisory Group Coordinator.	<ol style="list-style-type: none"> 1. Appoint liaison to interface with the Advisory Group. 2. Write and record bulletins and updates on the University's Emergency Information Hotlines. 3. Write scripts for phone tree with approval from PI Team Coordinator. 4. Request to campus that faculty and staff and their families to report all flu cases to Incident Commander. 	<ol style="list-style-type: none"> 1. Organize phone banks, if necessary (phone banks can refer callers to emergency services, take messages, support rumor control) 2. Establish a Media Relations Center: coordinate press releases, and manage news teams and interviews, etc.
8. Emergency Coordinators	Not applicable	<ol style="list-style-type: none"> 1. Place on <i>Campus Newspaper</i> front page and disseminate information to Floor Marshals. 2. Remain available for further instructions 	Same as Level 2
9. Student EMS <i>or</i> <i>volunteers who have pre-registered</i>	<ol style="list-style-type: none"> 1. Health Center trains EMS on avian flu. 2. Notify Health Center if suspected cases are encountered. 3. Essential personnel receive fit test and training on respiratory protection from EH&S 	Not applicable	Not applicable
10. Radio Club	Not applicable	Not applicable	Not applicable
11. Parking	Not applicable	Not applicable	Clear <i>indicate</i> Parking lot for medical staging area.

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Department	Level 1	Level 2 (in addition to Level 1 actions)	Level 3 (in addition to Level 2 actions)
12. Housing and Dining	<p>Enact planning for Isolation (or quarantine) of students:</p> <ol style="list-style-type: none"> 1. Health Center trains essential personnel on risks and response. 2. Identify potential rooms and/or buildings to be used for quarantined students. Update by semester based on current occupancy. 3. Notify current occupants in spaces that will be needed of the potential or need for them to move. 4. Ensure emergency response menu is planned for various degrees of need. 5. Stockpile additional food stuffs and water. 6. Ensure food delivery process is planned and delivery supplies are on hand. 7. Essential personnel receive fit test and training on respiratory protection from EH&S 	<p>Enact plan for quarantine of students:</p> <ol style="list-style-type: none"> 1. Set up Housing and Dining command center and recall essential personnel. 2. Enact emergency phone contact tree. 3. Identify meal delivery need and method for quarantined students. 4. Communicate situation and needs to owners and landlords of rented properties. 5. Identify roles of essential staff: leadership, communications, food production, food delivery, maintenance and housekeeping. 6. Essential personnel receive N95 masks from EH&S 7. Activate emergency locator tracker on housing website for use by displaced students to report their temporary addresses. 	<ol style="list-style-type: none"> 1. Activate plan from level 2 to quarantine students in conjunction with the guidance from the County Health Department.
13. Dining Services	See above	See above	See above.

Planning Workbook
Academic Institutions

Department	Level 1	Level 2 (in addition to Level 1 actions)	Level 3 (in addition to Level 2 actions)
14. Risk Management	<ol style="list-style-type: none"> 1. Identify risk exposures for which insurance can and cannot be obtained including associated financial impact. 2. Identify steps that must be taken to monitor and protect insurance coverage. 3. Benchmark risk management response and insurance coverage options with peer universities. 	<ol style="list-style-type: none"> 1. Communicate with insurance carriers on evolving campus issues. 	<ol style="list-style-type: none"> 1. Assess actual risk/insurance claim issues.
15. Medical Services	<ol style="list-style-type: none"> 1. Post entry door notifying patients with influenza profile and have traveled to (or have been visited by persons from) affected countries to call HEALTH SERVICES 2. Isolated exam room 3. Arrange for negative pressure machines. 4. Standard precautions in place 5. Respiratory protection equipment in place. 6. In-service training for avian flu. 7. Follow County protocol for patient testing. 8. Monitor Health Care workers. 9. Essential personnel receive fit test and training on respiratory protection from EH&S 10. Policy on transporting individual to hospitals. 	<ol style="list-style-type: none"> 1. Isolate & monitor suspected cases. 2. Identify exposures of suspected cases. 3. Communicate with parents of suspected cases and explain procedure. 4. Initiate prophylaxis of contacts based on strength of patient presentation. 5. Update Incident Commander 6. Establish phone triage lines for Student Health Services and Counseling. 7. Initiate pre-event counseling for essential personnel. 8. Initiate poster, e-mail campaign on self- protection. 9. Essential personnel receive 	<ol style="list-style-type: none"> 1. Isolation room in Health Center (negative pressure) 2. Locating people contacted by patient. 3. Arrange for screening of people who have had contact. 4. Arrange for counseling services 5. Contact Coroner's office if necessary

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Department	Level 1	Level 2 (in addition to Level 1 actions)	Level 3 (in addition to Level 2 actions)
		respirators from EH&S.	
16. Computing & Telecommunications	1. Assess supplemental telecomm./computing hardware/software needs: <ul style="list-style-type: none"> • Student Affairs • Health Services • Public Relations • Counseling Center • Human Resources • Telecommunications 2. Assess needs for webpage support. 3. Develop plan for adding volunteers to public email addresses. 4. Develop plan for distributing telephone calls to homes or phone banks.	1. Purchase/contract for supplemental telecommunications/computing hardware/software needs.	1. Add additional phone lines to EOC, quarantine areas, and functional groups. 2. Publish messages from Public Relations on a periodic basis on University website front page. 3. Assist with email message distribution 4. Set up podium and microphones for media center at <i>designate</i> . 5. Provide guidance for forwarding phones and setting up “bounce messages.”

EXAMPLE

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Department	Level 1	Level 2 (in addition to Level 1 actions)	Level 3 (in addition to Level 2 actions)
17. Student Affairs & Housing/Resident Assistants	<ol style="list-style-type: none"> 1. Health Center trains; Office International Education (OIE), CAPS, Housing/Resident Assistants and other offices within the Division on avian flu. 2. OIE monitors student travelers entering from affected regions and assists with communication to international students and their families. 3. OIE formulates and rehearses plan to address needs/support for graduate and commuter students. 4. Resident Assts – Formulate and rehearse plan to address needs/support for undergraduates. 5. Student Life – Formulate and rehearse plan to address needs/support for Greek organizations. 6. CAPS – see addendum 7. Identify division personnel available for telephone support work. 8. Receive fit test and training on respiratory protection from EH&S 	<ol style="list-style-type: none"> 1. Arrange for monitoring/delivery of medications, other goods and services to isolated cases. 2. Assist with relocation of students for quarantine 3. Assist with telephone consultation and support. 4. Essential personnel receive respirators from EH&S. 	<ol style="list-style-type: none"> 1. Identify student events where confirmed patients have attended. 2. Residential staff assists Health Center.
18. Human Resources	<ol style="list-style-type: none"> 1. Identify essential personnel. 2. Monitor faculty & staff travelers entering from effected regions. 3. Prepare a call-off policy 4. Identify personnel available for telephone support work. 	Same as Level 1	Activate call-off policy.

*Refer to Communication Matrices for all telephone numbers

COLLEGES AND UNIVERSITIES PANDEMIC INFLUENZA PLANNING CHECKLIST



In the event of an influenza pandemic, colleges and universities will play an integral role in protecting the health and safety of students, employees and their families. The Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) have developed the following checklist as a framework to assist colleges and universities to develop and/or improve plans to prepare for and respond to an influenza pandemic. Further information on pandemic influenza can be found at www.pandemicflu.gov.

1. Planning and Coordination:

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Identify a pandemic coordinator and response team (including campus health services and mental health staff, student housing personnel, security, communications staff, physical plant staff, food services director, academic staff and student representatives) with defined roles and responsibilities for preparedness, response, and recovery planning.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Delineate accountability and responsibility as well as resources for key stakeholders engaged in planning and executing specific components of the operational plan. Assure that the plan includes timelines, deliverables, and performance measures.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Incorporate into the pandemic plan scenarios that address college/university functioning based upon having various levels of illness in students and employees and different types of community containment interventions. Plan for different outbreak scenarios including variations in severity of illness, mode of transmission, and rates of infection in the community. Issues to consider include: <ul style="list-style-type: none"> ■ cancellation of classes, sporting events and/or other public events; ■ closure of campus, student housing, and/or public transportation; ■ assessment of the suitability of student housing for quarantine of exposed and/or ill students (See www.hhs.gov/pandemicflu/plan/sup8.html); ■ contingency plans for students who depend on student housing and food services (e.g., international students or students who live too far away to travel home); ■ contingency plans for maintaining research laboratories, particularly those using animals; and ■ stockpiling non-perishable food and equipment that may be needed in the case of an influenza pandemic.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Work with state and local public health and other local authorities to identify legal authority, decision makers, trigger points, and thresholds to institute community containment measures such as closing (and re-opening) the college/university. Identify and review the college/university's legal responsibilities and authorities for executing infection control measures, including case identification, reporting information about ill students and employees, isolation, movement restriction, and provision of healthcare on campus.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ensure that pandemic influenza planning is consistent with any existing college/university emergency operations plan, and is coordinated with the pandemic plan of the community and of the state higher education agency.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Work with the local health department to discuss an operational plan for surge capacity for healthcare and other mental health and social services to meet the needs of the college/university and community during and after a pandemic.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Establish an emergency communication plan and revise regularly. This plan should identify key contacts with local and state public health officials as well as the state's higher education officials (including back-ups) and the chain of communications, including alternate mechanisms.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Test the linkages between the college/university's Incident Command System and the Incident Command Systems of the local and/or state health department and the state's higher education agency.

1. Planning and Coordination: *(continued)*

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Implement an exercise/drill to test your plan, and revise it regularly.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Participate in exercises of the community's pandemic plan.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Develop a recovery plan to deal with consequences of the pandemic (e.g., loss of students, loss of staff, financial and operational disruption).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Share what you have learned from developing your preparedness and response plan with other colleges/universities to improve community response efforts.

2. Continuity of Student Learning and Operations:

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Develop and disseminate alternative procedures to assure continuity of instruction (e.g., web-based distance instruction, telephone trees, mailed lessons and assignments, instruction via local radio or television stations) in the event of college/university closures.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Develop a continuity of operations plan for maintaining the essential operations of the college/university including payroll; ongoing communication with employees, students and families; security; maintenance; as well as housekeeping and food service for student housing.

3. Infection Control Policies and Procedures:

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Implement infection control policies and procedures that help limit the spread of influenza on campus (e.g. promotion of hand hygiene, cough/sneeze etiquette). (See Infection Control www.cdc.gov/flu/pandemic/healthprofessional.htm). Make good hygiene a habit now in order to help protect employees and students from many infectious diseases such as influenza. Encourage students and staff to get annual influenza vaccine (www.cdc.gov/flu/protect/preventing.htm).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Procure, store and provide sufficient and accessible infection prevention supplies (e.g., soap, alcohol-based hand hygiene products, tissues and receptacles for their disposal).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Establish policies for employee and student sick leave absences unique to pandemic influenza (e.g., non-punitive, liberal leave).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Establish sick leave policies for employees and students suspected to be ill or who become ill on campus. Employees and students with known or suspected pandemic influenza should not remain on campus and should return only after their symptoms resolve and they are physically ready to return to campus.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Establish a pandemic plan for campus-based healthcare facilities that addresses issues unique to healthcare settings (See www.cdc.gov/flu/pandemic/healthprofessional.htm). Ensure health services and clinics have identified critical supplies needed to support a surge in demand and take steps to have those supplies on hand.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adopt CDC travel recommendations (www.cdc.gov/travel/) during an influenza pandemic and be able to support voluntary and mandatory movement restrictions. Recommendations may include restricting travel to and from affected domestic and international areas, recalling nonessential employees working in or near an affected area when an outbreak begins, and distributing health information to persons who are returning from affected areas.

4. Communications Planning:

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Assess readiness to meet communications needs in preparation for an influenza pandemic, including regular review, testing, and updating of communications plans that link with public health authorities and other key stakeholders (See www.hhs.gov/pandemicflu/plan/sup10.html).

4. Communications Planning: *(continued)*

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Develop a dissemination plan for communication with employees, students, and families, including lead spokespersons and links to other communication networks. Ensure language, culture and reading level appropriateness in communications.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Develop and test platforms (e.g., hotlines, telephone trees, dedicated websites, local radio or television) for communicating college/university response and actions to employees, students, and families.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Assure the provision of redundant communication systems/channels that allow for the expedited transmission and receipt of information.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Advise employees and students where to find up-to-date and reliable pandemic information from federal, state and local public health sources.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Disseminate information about the college/university's pandemic preparedness and response plan. This should include the potential impact of a pandemic on student housing closure, and the contingency plans for students who depend on student housing and campus food service, including how student safety will be maintained for those who remain in student housing.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Disseminate information from public health sources covering routine infection control (e.g., hand hygiene, coughing /sneezing etiquette), pandemic influenza fundamentals (e.g., signs and symptoms of influenza, modes of transmission), personal and family protection and response strategies (including the HHS Pandemic Influenza Planning Guide for Individuals and Families at www.pandemicflu.gov/plan/tab3.html), and the at-home care of ill students or employees and their family members.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Anticipate and plan communications to address the potential fear and anxiety of employees, students and families that may result from rumors or misinformation.



Pandemic Influenza Preparedness Plan
for
Name of Academic Institution

This Pandemic Influenza Preparedness Plan has been approved by:

President Date

Pandemic Influenza Coordinator Date

Note: The signature(s) will be based upon normal administrative practices. Typically, the individual having primary responsibility for the leadership of this organization signs the Plan in the first block and the individual responsible for managing this emergency function signs in the second signature block. Alternatively, each person assigned tasks within the Plan may sign the Plan.

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Date **Change/Addition** **Page**

Approved by **Date**

Approved by **Date**

Approved by **Date**

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Remote Work Locations

Point of DispensingSection 2
(Include this section only if your campus has opted to be or has been designated as a POD site)

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6. Financial impact is an important part of our PIPR Plan, and costs have been estimated by the tangible and intangible impact of a Pandemic Event.

Tangible Impacts include - reduced number of students attending, decision to limit or close public gatherings, supplier interruptions, lack of transportation, other;

Intangible Impacts include - lost education, hiring temporary help, adjusted benefits, increased education load after event, other

Tangible Impacts		Intangible Impacts	
0-24 hours	\$ _____	0-24 hours	\$ _____
2-7 days	\$ _____	2-7 days	\$ _____
8-14 days	\$ _____	8-14 days	\$ _____
15+ days	\$ _____	15+ days	\$ _____
Other	\$ _____	Other	\$ _____

7. The following personnel expenses will be addressed for high absenteeism:

**This section to be completed using existing policy, upon agreement by the board of regents, or by government mandate.*

- Overtime cost
- Vacation/sick leave
- Temporary agency costs
- Excessive medical benefits cost
- Potential workers compensation claims
- Other

8. Education interruptions due to staff, faculty, and /or student shortage will be handled as follows:

- Cross training
- Canceling extra-curricular activities
- Restricted visitation / travel / mass transit
- Web-based instruction
- Modified hours for campus facilities
- Student Housing Isolation / Quarantine
- Campus closure – *last resort*
- Student Housing Closure – *last resort*
- Other

* All information pertaining to these changes will be dispersed to staff and students as the need for these changes is declared.

9. We will discontinue classroom teaching operations when the following criteria are met:

- Staff absenteeism reaches _____ %
- Student absenteeism reaches _____ %
- On-campus transportation is interrupted
- Supply interruption
- Local Health Authority issues restriction orders
- Other

10. Guidelines will be developed to limit face-to-face contact during a Pandemic Event by implementing the following procedures:

- Web-based conference
- Teleconferencing
- Email
- Posting Boards
- Other

11. The following infection control measures will be taken at all campus locations:

- Gloves
- Hand-washing supplies
 - Soap
 - Alcohol based hand sanitizer
 - Clean paper towels at all sinks
 - Proper trash receptacles
- Facial tissue
- Surgical Masks for employees/students
- Anti-bacterial wipes
- 3M-N95 particulate respirators
 - Fit testing equipment
 - Wall posters
- Other

12. We will identify critical supplies needed to support surge demand, and take steps to have those supplies on hand, and include these among budgeted items.

12. Our location has been designated as a Point of Dispensing (POD) for our campus... our local community ... See Section ___ of the PIPR Plan

13. Because school transportation is crucial to operations, the following issues will be addressed in a Pandemic Event:

- Adequate staffing for continuing on-campus bus service
- Posting Warning signage at parking lots, kiosks, on busses, etc.
- Sanitizing on-campus buses
- Transport of ill students
- Local public transportation
- Other

14. If quarantines or border closures interrupt regular domestic travel, international travel, or supply chain functions, but we have not met the thresholds for closing our campus, the following steps will be implemented to maintain regular core/education functions:

- Internationally located/Traveling faculty, staff, and students will remain in their location until instruction is received for their safe return
- Alternate supplier of materials
- Web-based meetings
- Alternate labor pools
- Other

15. We will evaluate staff, faculty, and student access to mental health services. The following services should be available during and following the event:
- Emotional/psychological counseling services
 - Social services
 - Community support
 - Faith based resources (although not necessarily on campus)
 - Other
16. PI Plan termination will be determined by the PI Coordinator. Based on functioning capabilities the college may reopen as usual or operations may be modified based on internal staffing and attendance issues.

COMMUNICATIONS

1. When activated, this PIPR Plan will be communicated to employees by the following:
- E-mail or text messaging
 - Employee information boards – time-clock postings
 - Training/in-services
 - Telephone
 - Postings in all campus buildings
 - Other
2. We will ensure that language, culture, and reading level appropriateness are considered when disseminating college health related messages.
3. Medical information will be obtained from several reliable sources. These sources include the Local Health Authority, Tarrant County Public Health, or designated campus physician. *See Appendix C*
4. We will regularly communicate with the following Local and State public health agencies about the health status on our campus, and the process for reporting suspected and confirmed cases is outlined on page ___ of this Plan. *See Appendix B*
- Local City Public Health Department
 - Local County Public Health Department
 - Department of State Health Services- Public Health Region 2/3
 - Other
- Local Health Authority
or Region 2/3 office*
5. To improve our Pandemic Event response efforts, the following businesses and local entities will be contacted to share essential practices. **See Appendix B**
- Neighboring businesses
 - Local Public Health
 - City / community services
 - Trade groups and major employers
 - Suppliers
 - State educational agencies
 - Other

EMPLOYEES

1. This PIPR Plan will be made available to our employees prior to activating the Plan. Our institution will strive to anticipate employee fear, anxiety, and rumors and will provide accurate, timely information in a variety of media. Our employees and will be allowed time off for the purpose of seeking medical consultation and advice and/or to visit their family physician concerning PI. Local Public Health contact information will be posted as another means of receiving accurate answers to their questions.
2. Annual flu vaccinations will be encouraged for all employees.
3. Programs and materials about Pandemic Event preparation fundamentals, personal and family protection, and response strategies will be provided to all employees and to students.
 - Symptoms of contagion
 - Modes of transmissions
 - Hand hygiene
 - Coughing/sneezing etiquette, etc.
 - Pandemic Preparedness and Response Plan
 - Other
4. Policies have been developed for preventing influenza spread, and for minimizing potential exposure to other staff and students. These include:
 - Limit face-to-face encounters; provide/use respiratory hygiene and protection
 - Room layout; shared facilities and transportation
 - Infection control measures: hand hygiene products, disposal bins, hand shaking
 - Immediate mandatory sick leave
 - Room or building isolation
 - Working sick (non-infectious illness only)
 - Return to work policies
 - Other
5. Policies have been established for restricting affected campus sites.
 - All on-campus buildings (admin, classrooms, labs, etc.)
 - Athletic arena, locker rooms, student recreation areas within a campus
 - Student centers and residence halls
 - Library
 - Other
6. The following essential operations should continue to be provided for as long as possible through the event:
 - Security
 - Maintenance
 - Housekeeping
 - Food Service
 - Student Housing
 - Other

Based on staffing and student needs, these services may be discontinued.

7. Based on critical employee needs, certain employees will be cross trained for alternate job or classroom duties. As this cross- training is completed a list will be developed to indicate the alternate job roles these trained individuals can be assigned. *See Appendix E*
8. Employees may be allowed to work from other locations or home to ensure basic program functions are completed. These functions will be based on availability of technology assets. *See appendix F*
 - Administration (including disease reporting, payroll & benefits, etc)
 - Continued communication with staff and students
 - Other
9. All employees must regularly provide updated Emergency Contact Information to Human Resources. This information includes name, best phone number, alternate phone, whom to inform in case of emergency, etc.
10. Compensation and exceptions for absenteeism will be handled by the following criteria:
**This section to be completed by company policy or government mandate*
 - Personal illness
 - Family illness
 - Community containment orders
 - Government mandated isolation or quarantine
 - Local School districts closure
 - Business closure – i.e. daycare, city services, etc.
 - Public transportation closure
 - Other
11. Special needs for employees will be addressed and reasonable solutions will be incorporated into our PIPR Plan.
12. In the event of family illness or school closure, those who are caregivers for family members will be asked to stay home without penalty. Staff members should feel comfortable when leaving their family for work as well as when leaving work for family.
13. A recovery or waiting period will be determined for employees returning to work after contracting an infectious illness. Public health or government agency mandate will supersede campus policy.

STUDENTS

1. Student attendance is a very important part of keeping our college operating. In the event of a Pandemic Outbreak we will continue to meet student needs and provide information to the best of our ability. Our college will communicate with students by:
 - Radio/Television advertisements
 - Phone
 - Website
 - E-mail, text messaging, posted mail
 - Newspaper; posting flyers and posters
 - Other

2. All students exhibiting PI symptoms will be directed to the campus clinic or local doctor or pre-determined care center for treatment (depending on availability), and must receive written medical clearance before returning to class unless directed otherwise.
3. Student absenteeism will be handled as follows:
**To be filled out in accordance with existing institution guidelines*
4. Based on the Phase of the Pandemic, these Infection Control measures may be implemented:
 - When possible protective masks will be made available for students entering our school as well as receptacles for discarding them after use.
 - Waterless hand cleaner, disposable towels, and trash receptacles will be placed strategically throughout buildings and campus locations.
5. Students with special needs will be accommodated when reasonably possible. At no time will the school put staff or other students at risk.
6. When possible housing and meal accommodations will be made available for students but restrictions may be enacted for the duration of the pandemic event.
7. A contingency plan has been developed to accommodate commuting students who fall ill while on campus. This plan includes information to notify relatives, provides options for care, housing, transport, etc.
8. Limiting or restricting movement, visitation, social gatherings, and the like, will be recommended and/or ordered when the need arises, and students are expected to comply. Non-compliant students will be penalized...
9. To augment our response team, we have encouraged students to serve in volunteer capacities, and we have arranged for them to be pre-registered and trained to assist...

EXERCISE

1. The academic institution's PI Coordinator will periodically and regularly stage a simulated pandemic disaster in order to exercise the PIPR Plan.
2. Objectives for the drill/exercise will be established using several criteria, including reporting mechanisms, processes to be tested, parts of the plan to be evaluated, etc.
3. The simulated pandemic disaster should include performing and evaluating the following:
 - Critical employee call list
 - Viability of all emergency communications platforms
 - Distribution and implementation of infection control measures
 - Core functions and education continuity
 - Vendor status
 - Student status
 - Supplier status

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- Communicate status of college to stakeholders
 - Other
4. Periodically, a simulated disaster exercise will be conducted and campus-wide participation will be encouraged. Following the drill/exercise, the PI Team will review the PIPR Plan's effectiveness and changes or revisions will be made according to those results. Subsequently, these modifications to the PIPR Plan will be communicated to all personnel and students.
 5. The academic institution's PI Coordinator will periodically and regularly participate in similar drills and exercises in the community, assessing the institution's role in such an event, and evaluating the existing PIPR Plan for the campus for continuity with those of the community.

GLOSSARY of Terms Related to Avian (“Bird”) Flu

Term	Definition
Adenovirus	A group of viruses that cause respiratory tract and eye infections and are relatives of the common cold virus; researchers are using adenoviruses in attempts to make recombinant influenza vaccines.
Adjuvant	A chemical that is added to vaccines to increase their effectiveness; it allows researchers to reduce the amount of antigen that needs to be put into a vaccine.
AI	See avian influenza.
Amantadine	An antiviral drug approved by the US Food and Drug Administration in 1976 to treat influenza A in adults. Some reports say amantadine was used to treat poultry in China for avian influenza, which may have led to the emergence of H5N1 virus strains that are resistant to the drug. It is structurally similar to rimantadine and is sold under the brand names Symmetrel and Amentrel.
Antibody	A molecule produced by the immune system that helps fight infections. The structure of each antibody allows it to interact with a specific antigen. The interaction between an antibody-antigen pair is described as 'binding'.
Antigen	A substance that is foreign to the body and that prompts the immune system to fight infection. They form the active ingredient of vaccines.
Antiviral drug	A class of drugs used to kill viruses.
Asian influenza	A 1957 pandemic of influenza A, thought to have originated in China. The Asian influenza pandemic was caused by the H2N2 virus, and according the World Health Organization killed 1-4 million people.
Avian influenza	A disease affecting birds, caused by an influenza virus first identified more than 100 years ago. Avian influenza can be caused by any one of several dozen influenza viruses. The recent outbreaks in Asia, however, have been largely caused by a highly contagious and virulent strain, known as H5N1.
Bird flu	Common name for avian influenza.
CDC	See Centers for Disease Control.
Cell-based vaccine production	A system for producing vaccines that uses cell cultures. Traditionally, influenza vaccines are produced using eggs (see egg-based vaccine production) but this takes considerably more time and space than a cell-based system would. Influenza vaccines made using cell-based systems are still undergoing research and it could be several years before the first makes it to the market.

Center for Infectious Disease Research & Policy (CIDRAP) The Center for Infectious Disease Research & Policy is affiliated to the University of Minnesota, United States, and aims to promote public health preparedness. www.cidrap.umn.edu

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Centers for Disease Control & Prevention (CDC)	Part of the US government's Department of Health and Human Services. The CDC conducts research and takes action to prevent and control infectious and chronic diseases, injuries, workplace hazards, disabilities and environmental health threats. www.cdc.gov
CIDRAP	See Center for Infectious Disease Research and Policy.
Clinical trial	Research that tests how safe and effective a new drug, vaccine or other medical device is in humans. Clinical trials happen in three phases. Phase I trials test the safety of the new device in a small number of people. Phase II trials test the safety in a large number of people. Phase III trials test the device's efficacy.
Cull (to cull)	To kill a large number of animals; one of the methods used to prevent the spread of bird flu.
DNA	The genetic material of living organisms. It is a large, double-stranded, helical molecule that encodes genetic information, including instructions for growth, development, and replication. DNA stands for deoxyribonucleic acid.
Egg-based vaccine production	The traditional method for producing influenza vaccines. Influenza virus is injected into eggs, where it replicates. It is later harvested and used to make vaccine. This method is criticized for being slow and cumbersome. Compare to cell-based vaccine production and recombinant vaccines.
Endemic	Relating to a disease that is constantly present in an area or particular to persons in such an area.
Epidemic	An outbreak of a disease that affects a large number of individuals within a population or region at the same time. Compare to pandemic.
Epidemiology	The study of epidemics and the diseases that cause them, especially the factors that influence the incidence, distribution and control of infectious diseases.
FAO	See Food and Agriculture Organization.
Flu	Common name for influenza.
Food and Agriculture Organization	United Nations agency concerned with food and agriculture, which aims to raise living standards and eliminate hunger by improving the production, processing, marketing, and distribution of food and agricultural products. www.fao.org
Galactose	A type of sugar and part of the system that helps the H5N1 virus enter the cells they infect: the influenza virus's hemagglutinin protein attaches to galactose molecules on the surface of the cells it the virus seeks to infect.
Genotype Z	Since 2002, the dominant form of the H5N1 virus in Asia.
H1N1	The influenza A virus that triggered the 1918 flu pandemic, also known as 'Spanish flu'. H1 refers to the type of hemagglutinin protein the virus carries, while N1 describes its neuraminidase protein.
H2N2	The virus that caused the 1957 influenza pandemic, often called the 'Asian influenza pandemic'. H2N2 went on to cause annual flu epidemics until 1968, when it vanished after the emergence of the H3N2 virus. As a result, people born after 1968 are expected to have limited or no immunity to

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H2N2. H2 refers to the type of hemagglutinin protein the virus carries, while N2 describes its neuraminidase protein.

H3N2	The virus that caused the 1968 influenza pandemic called 'Hong Kong influenza'. The H3N2 virus still circulates, causing seasonal flu. H3 refers to the type of hemagglutinin protein the virus carries, while N2 describes its neuraminidase protein.
H5	Refers to the type of hemagglutinin (or 'HA') protein carried by the H5N1 avian flu virus. Together with the neuraminidase protein, the type of HA protein on a virus helps scientists identify which virus they are dealing with.
H5N1	An influenza A virus that first emerged in people in China in 1997 and has since become endemic in Asia. At the time of writing (May 2006), the virus had spread to Africa, Europe and the Middle East. The H5N1 virus spreads easily between birds. It rarely infects humans, but kills about half the people it does infect.
HA	See hemagglutinin.
Hemagglutinin	One of three proteins that sticks out from the shell of influenza viruses, the other two being neuraminidase and the M2 protein. Hemagglutinin allows the virus to bind to the cells it infects.
Highly pathogenic avian influenza	Refers to an avian influenza virus that is particularly apt at causing disease. H5N1 is an example of a highly pathogenic avian influenza virus.
Hong Kong influenza	A pandemic of influenza A virus that happened in 1968, and was caused by the H3N2 virus and thought to have originated in Hong Kong. The World Health Organization estimates that 1-4 million people died during this pandemic.
HPAI	See highly pathogenic avian influenza.
Immune	A person or animal is said to be immune to a virus, bacterium or any other agent that can trigger disease when infection by that agent does not result in the animal or person falling ill.
Immune system	The body's system of defense against disease that involves recognizing and attacking 'foreign' invaders such as bacteria and viruses.
Immunity	The state of not being susceptible to disease; being able to resist disease. An effective vaccine gives a person or animal immunity to a disease.
Influenza	A common and highly contagious viral disease characterized by headaches, fever, inflammation of the respiratory tract, muscular aches and pains, weakness, and coughing. It often causes epidemics among birds as well as humans.
Influenza A	One of three types of viruses responsible for flu. Influenza A viruses primarily infect animals other than humans. The other two types are influenza B and influenza C.

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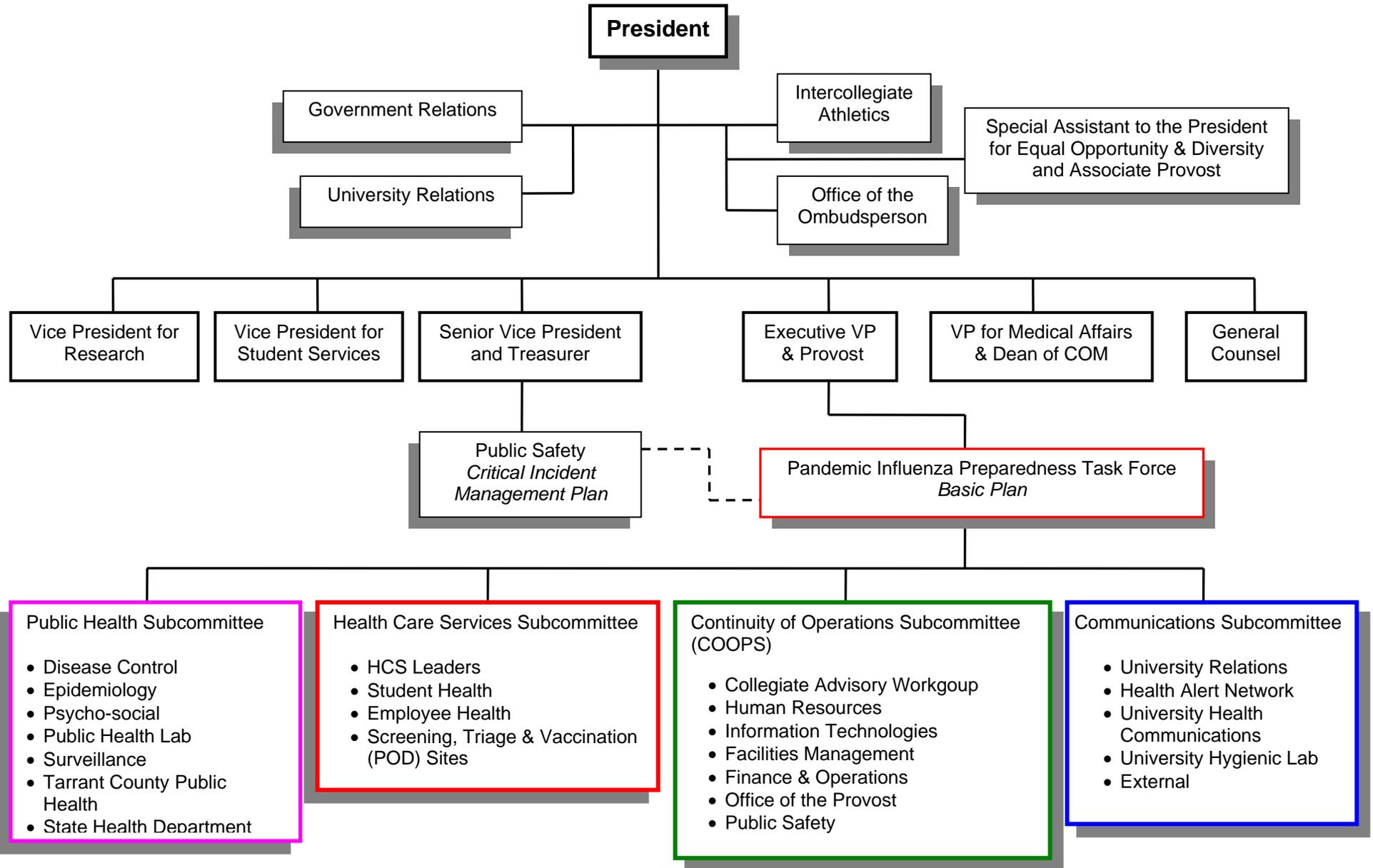
Isolation	<p>Voluntary Isolation – the individual agrees to stay home</p> <p>Involuntary Isolation – Health Authority orders immediate involuntary detention after reasonable efforts to obtain voluntary isolation have failed and are documented as such and further seeking voluntary isolation would create a risk.</p> <p>Involuntary Detention – reason to believe that person(s) pose a serious risk to the health and safety of others if not detained. Requires an emergency detention order and cannot exceed 10 days of duration. Violation of the order is a felony of the third degree or a Class B misdemeanor.</p>
Live attenuated vaccine	A type of vaccine made from a pathogen that has been altered so it no longer causes disease.
Live vaccine	A type of vaccine that contains a live pathogen. Live vaccines are more effective than vaccines containing dead pathogens because live pathogens can replicate after the vaccine has been injected, which amplifies their effect.
M2 protein	One of three proteins that stick out from the surface of influenza viruses, the other two being hemagglutinin and neuraminidase. The M2 protein moves ions in and out of the virus.
MDCK cell	Abbreviation for Madin Darby canine kidney cell. A type of dog kidney cell used in cell-based vaccine production.
Mutation	A change in genetic material. Mutations occur naturally, but they can also be triggered by exposure to radiation or chemicals.
NA	See neuraminidase.
National Institute of Allergies and Infectious Diseases (NIAID)	Part of the US National Institutes of Health, it conducts and supports basic and applied research to better understand, treat, and prevent infectious disease and allergies. www3.niaid.nih.gov
National Institutes of Health (NIH)	The main US agency that funds and conducts biomedical research. www.nih.gov
Neuraminidase	One of three proteins that stick out from the shell of influenza viruses, the other two being hemagglutinin and the M2 protein. After the virus has replicated inside an infected cell, neuraminidase helps the virus cut its way out of the cell.
Neuraminidase inhibitor	A type of anti-flu drug that inhibits the function of neuraminidase.
NIAID	See National Institute of Allergies and Infectious Diseases.
NIBSC	See National Institute for Biological Standards and Control.
NIH	See National Institutes of Health.
OIE	See World Organization for Animal Health.
Oseltamivir	A neuraminidase inhibitor used to both treat and protect against influenza A and influenza B. It was developed by Gilead Sciences and is currently marketed by Hoffman La Roche (Roche) under the

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	trade name Tamiflu.
Outbreak	A sudden appearance of many cases of a disease in a specific geographic area.
Pandemic	An epidemic occurring over a large area, crossing international boundaries and usually affecting many people. A global epidemic.
Pathogen	An organism that causes disease in another organism.
Pathogenic	Capable of causing disease.
Quarantine	Enforced detention of person(s) which must be "by least" restrictive means necessary. During the quarantine period, individuals will be monitored for health status, attending tot heir needs and providing a safe and hygienic environment. Cultural and religious beliefs are to be considered to the extent possible. <i>SEE Isolation - Involuntary Detention</i>
Reagents	A substance used in a chemical reaction to detect, measure or produce other substances.
Re-assortment	Refers to the exchange of genetic information between two organisms, such as two influenza viruses. A type of recombination.
Recombinant vaccine	A type of vaccine that contains a genetically modified pathogen. For instance, researchers in the United States have made an experimental flu vaccine from an adenovirus that was modified to include a piece of the H5N1 virus.
Recombination	Refers to the exchange of genetic information between two organisms. In the context of laboratory research, recombination is one way of genetically engineering an organism (see recombinant vaccine).
Relenza	see Zanamivir
Replicate	To copy. Once they have infected cells, viruses replicate, producing multiple copies of themselves which then go on to infect more cells.
Resistance	A pathogen is said to be resistant to a drug when the drug has no effect on it. Pathogens can evolve to become resistant to a drug through repeated exposure to it. In October 2005, research had found a strain of H5N1 that was resistant to oseltamivir (see Tamiflu-resistant bird flu found in Vietnam).
Rimantadine	A drug used to treat and, in rare cases, prevent influenza A. Rimantadine's structure is similar to that of amantadine. It is sold under the brand name Flumadine, manufactured by Forest Pharmaceuticals, and was approved by the US Food and Drug Administration in 1994.
RNA	A form of genetic material related to DNA. Unlike DNA, RNA is single-stranded. It acts as a go-between for DNA and the proteins it encodes for. 'RNA' stands for 'ribonucleic acid'.

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Seasonal flu vaccine	A vaccine, produced fresh each year that protects against that year's strain of influenza. Different types of influenza viruses and different variants within virus types circulate each year.
Spanish Flu	The Spanish Flu Pandemic, also known as 'The Great Influenza Pandemic', and 'La Grippe' killed 20-50 million people between 1918 and 1919. It was the most deadly flu pandemic in human history, and was triggered by the influenza A virus H1N1.
Split inactivated vaccine	A type of vaccine containing fragments of the pathogen it protects against
Stockpile	An accumulation of drugs or vaccines saved for future use.
Tamiflu	Roche's trade name for oseltamivir.
Vaccine	A substance containing dead or weakened pathogens, or parts of them, that is used to prepare a person's immune system against future infection by the pathogen.
Vero cell	Cells derived from the kidneys of the African green monkey (<i>Cercopithecus aethiops</i>). The cells are used in laboratories as host cells for growing viruses that can be used for drug testing or to make vaccines.
Virulence	The ability of a virus or a bacterium to cause damage to its host.
Virus	A small parasitic particle that can reproduce only by invading and taking over cells in plants, animals or bacteria.
WHO	see World Health Organization
Whole inactivated vaccine	A vaccine made from a pathogen that has been inactivated or killed in some way.
World Health Organization (WHO)	A United Nations agency set up in 1948 to promote international cooperation to improve human health and quality of life.
World Organization for Animal Health (OIE)	An intergovernmental organization founded in 1924 to control contagious animals and zoonotic diseases. It determines animal health standards for international trade and advises veterinary services in member countries.
Zanamivir	A neuraminidase inhibitor used to both treat and protect against influenza A and influenza B. It is currently marketed by GlaxoSmithKline under the trade name Relenza.
Zoonotic disease	Any disease that can be passed from animals to people; also called a zoonosis.



Pandemic Influenza Task Force Organizational Chart