CSUEB
Pandemic Business Continuity Plan

FOR AVIAN INFLUENZA AND OTHER INFECTIOUS DISEASES

MAY, 2006

DISCLAIMER

This document is based on the systemwide Avian (Bird) Pandemic Influenza Business Continuity Planning Guide produced by the California State University Office of Risk Management. Every effort has been made to ensure inclusion of the most important elements in an influenza pandemic plan. Over time, modifications, improvements and enhancements will be transmitted to campuses. Please address comments and recommendations to the Department of Environmental Health and Safety at (510) 885-4139.

1. Introduction and Purpose
   1.1. This Pandemic Business Continuity Plan (Plan) addresses the campus preparedness activities and response to pandemic (worldwide epidemic) threats designed to minimize the impact of the pandemic on campus operations, employees and students. The Plan is designed to be read, understood, and exercised in response to threats and occurrences of pandemic influenza or any disease outbreak that becomes a worldwide pandemic. The focus of this Plan is to reduce the impact of a pandemic on CSUEB by reducing the spread / transmission and outlining an effective response.
2. Campus Community.

The CSU East Bay Hayward Campus consists of 39 buildings and facilities including XXX students in residential housing. In the Spring, 2006, there were XXXX registered students. Of this number, XXX students were from XXX countries In addition, the Early Childhood Center provides childcare for XXX preschool children of students, employees, and community at large.

The CSU East Bay Concord Campus consists of five buildings and 39 classrooms. Approximately XXX registered students attend this site during the year.

The CSU East Bay Oakland Center consists of one leased building and XX classrooms. Approximately XXX registered students attend this site during the year.

During the summer months, approximately XXX youth participate in various academic and athletic programs on campus.

3 Past Pandemics

3.1 Spanish Flu (1918-19)

This pandemic was caused by an avian influenza virus that many experts believe was the deadliest disease in human history. Death estimates worldwide range from 20 million to more than 100 million. The pandemic occurred in two waves. The first wave was highly contagious but did not cause many deaths. The second wave had a death rate 10 times greater than the first. Most deaths occurred among people between 15 and 35 years old. With most influenza strains the majority of deaths occur among the very young, very old, or immune compromised. The pandemic infected 25-30% of the world population.

3.2 Asian Flu (1957-58)

As with the Spanish Flu, the Asian Flu pandemic occurred in two waves with the second killing more than the first. As is the case today, vaccine manufacturers lacked capacity to produce sufficient doses even though vaccines were available by 1957.

3.3 Hong Kong Flu (1968-69)

The last pandemic of the 20th century was also the least severe of the three. Severity and mortality were much lower than the Asian Flu. Since only 11 years had passed between the two pandemics, many people who had been exposed to the Asian Flu had developed some level of immunity to it.

3.4 SARS Outbreak (2002-03)

A previously unknown coronavirus known as Severe Acute Respiratory Syndrome or SARS was detected in Fall 2002. It was controlled by Summer 2003 but had killed nearly 10% of the 8000 people it infected worldwide. Less than 100 cases were reported in the US. Severe travel restrictions were instituted, quarantines and office closures invoked, and many business disrupted . Although SARS provides a recent case study for ideas in planning for avian flu, SARS was mild compared to the potential impact of an influenza pandemic.

3.5 Similarities to and differences from other emergencies

Traditional Disaster and Business Continuity Plans focus on damage to property and equipment with limited loss of personnel; and to get an organization back into normal operation as quickly as possible. Also, most natural disasters tend to be site specific. A highly virulent strain of influenza and its impact is quite another scenario for continuity planning. While CSUEB has spent time and money on disaster preparedness, the threat of a pandemic is growing and preparation is crucial.

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3. Similarities and differences between seasonal flu, avian flu and pandemic flu
   3.3. Seasonal Flu
      3.3.1. In an average year approximately 36,000 people in the United States succumb to seasonal influenza (the flu). The vast majority of those stricken with the common flu will recover, and their bout with the virus or receiving a "flu shot" creates immunity to that strain of flu. As the virus is transmitted from person to person across the globe, it gradually mutates, eventually changing to a form sufficiently different from its original state and capable of re-infecting the same individuals. Most people who are exposed to and become ill with the flu do so during the winter months, as they spend more time indoors where the virus can more easily spread between individuals.
   3.4. Avian Flu
      3.4.1. Over the past nine years medical experts throughout the world have been watching the slow but steady rise of a new flu virus. Like most such influenza viruses, it originates from birds. The virus, known among scientists as the H5N1 virus, is commonly called the "avian flu" by the news media. Medical and public health professionals have expressed alarm at the lethality of the virus – the death rate among the humans who have become ill thus far with H5N1 is over 50 percent, compared to a rate of less than one percent with seasonal flu. Most of the international spread of the avian flu virus to date can be attributed to migrating birds. The virus has also been spread from wild birds to domestic flocks of chickens and other fowl, millions of which have had to be destroyed in attempts to stem the spread of the virus.
   3.5. Pandemic Flu

3.5.1. To date the H5N1 virus remains an "avian" flu, meaning it spreads mostly between birds. But it also has a limited capability to spread to other animals and to humans. As the virus spreads to more birds, more animals and more humans, it mutates to adapt to its new hosts, and to counter the natural resistance found in every form of life. The more mutations the virus undergoes, the greater its chance to develop into a virus capable of transmission from human to human. If the flu becomes capable of human-to-human transmission, no person in the world will have any immunity to it, which means that it could spread easily and might spread rapidly. Scientists believe that the lethality will likely have diminished to something much less than 50 percent, but the possibility exists that it could still take a heavy toll on humanity. The virus could spread very fast because, in most cases, people will unknowingly shed the virus for one or two days before they begin to feel symptoms. Further, the amount of regional and international travel done today, and the speed of that travel, suggests that if the virus attains the ability to spread between humans, it could possibly spread very fast, reaching most parts of the globe within a relatively short time. It would likely move through geographic areas in several waves, each lasting six to eight weeks or longer.

The Current Pandemic Threat: H5N1 Virus

To create a pandemic, the H5N1 virus must mutate so that it can be transmitted human to human. This has not yet occurred. Although each contamination of a human increases the chance of a mutation more dangerous to humans, the widening avian outbreak does not mean the world is closer to the onset of a human pandemic. There is no confirmation that the H5N1 even has the capacity to become transmissible into humans.

Pandemic Stages

Stages of a Pandemic

The World Health Organization (WHO) has defined the stages of a pandemic,
Interpandemic period

Phase 1 : No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.

Phase 2: No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.

Pandemic alert period

Phase 3: Human infection(s) with a new subtype but no human-to-human spread, or at most rare instances of spread to a close contact.

Phase 4: Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

Phase 5: Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans but may not yet be fully transmissible (substantial pandemic risk).

Pandemic period

Phase 6: Pandemic: increased and sustained transmission in general population.

CSUEB subphases of a pandemic

These subphases apply once WHO phase 5 or 6 is reached

Subphase A: avian influenza cases occurring among birds in the United States
Subphase B: avian influenza cases among birds in California
Subphase C: human avian influenza cases in the United States
Subphase D: human avian influenza cases in California
Subphase E: suspected human avian influenza case in CSUEB student or employee
Subphase F: confirmed human influenza case at CSUEB
Subphase G: avian influenza cluster outbreak at CSUEB

4. Planning Assumptions

When developing the plan, the following assumptions were made regarding the possible impact a pandemic outbreak or wave in Northern California would have on the University's ability to continue its operations.

- Outbreaks will occur at multiple locations at the same time. Unlike a natural disaster, outbreaks will not be site specific. Thus, the University cannot depend on outside help to respond to the effects of the pandemic.
- Between 20% and 40% of the University's faculty, staff and students would be unable or unwilling to come to work or go to school (best case). A recent study by the Harvard School of Public Health suggests that up to 68% of faculty, students and staff would be unable or unwilling to work, go to school or have their children attend school (worse case). Thus, based on spring 2006 data, approximately 10,120 students and 1,025 faculty and staff would be unable or unwilling to come to campus during an outbreak. Under the worst case, these figures increase to 23,000 and 2,300 respectively.
- 75% of Americans will reduce or avoid travel if a human outbreak occurs. (do you have a reference source?)
- 71% of Americans will stop attending public events if a human outbreak occurs. (same for this one)
- Highest illness rates will be similar to those most impacted by the Spanish Flu, which were pregnant women and healthy individuals between the ages of 18 and 40. This occurred because, in the case of the Spanish Flu and as appears to be true with the current strain of avian flu, it was not the flu itself but the body's over-reaction to the flu that wracked those with strong immune systems more than those with weak ones.
- Of those who become ill or symptomatic, 50% will seek outpatient care. Thus, demand on the Student Health and Counseling Center may exceed its ability to provide services and/or may require continuous service. Faculty, staff and students who become ill while on campus or in the residence halls will be treated first at the SH & CC.
- At least two disease outbreaks or waves are likely, the second being more virulent than the first or any subsequent wave.
- Public health departments at the county and state levels will issue quarantine orders and require the University to close the campus for up to a month at a time. Thus, there will be limited law enforcement assistance through existing mutual aid agreements, an increase in campus property, and insufficient staff in University Police to secure treatment centers, secure the campus and establish a quarantine facility.
- Due to the inevitable lack of vaccines and antiviral drugs, non-pharmaceutical measures may be the only response available to reduce transmission and spread of the virus.
- On average, infected persons will transmit infection to approximately 2 other people.
- In an affected community, a pandemic outbreak will last about 6 to 8 weeks.
- Some students will be unable to leave the residence halls because they have no other place to live.
- Traditional methods of instructional delivery will not be adequate. However, if able to do so in a perceived safe manner, faculty and students will want to continue course activity despite the pandemic outbreak.

- Concerns about salary will be paramount to employees.
- Some facility, instructional and research equipment will fail/be damaged due to a lack of resources to maintain all equipment and research.
- Some faculty and students working with ongoing chemical and biological experiments will need to maintain a level of activity or risk losing years of work.
- Essential laboratory services will be maintained such as animal care, maintenance of cell cultures, receiving shipped critical radioactive/and biological materials. This includes maintaining laboratory operations and services such as fume hoods, cold rooms, disposal services, etc.
- Grant research will be maintained when possible.

5. University Emergency Response

As a general response to a potential avian flu epidemic, all campus departments need to be educated about the flu, including signs and symptoms, mode of transmission, preventive measures, and informational resources (i.e. Student Health Services and Environmental Health and Safety staff) to contact for questions and concerns regarding health issues.

Managers and supervisors in particular need to be proactive and supportive of actions put in place to prevent or address an epidemic. They must oversee their departments with the intent to balance the health and welfare of their staff and students with the University mission to continue to provide services. They can seek support from other University departments such as Student Health Services for advice and treatment to address employee and student illness and quarantining issues; Counseling and Psychological Services for emotional and psychological issues. Because this type of disaster affects personnel, department heads need to review their business continuity plans for key/essential personnel or functions necessary for the department to continue services, including measures such as training back up personnel for essential functions and having clear procedures for performing essential job duties that may be assumed by untrained persons or performing these functions at an alternate site (another location in the University, Concord campus, home, etc).

If a pandemic significantly impacts normal campus operations, the University will implement specific response processes and protocols to manage campus response and recovery activities utilizing the existing University Emergency Management Organizational structure based on the SEMS/NIMS as required by state law. The University organizational structure in place to deal with responding to a pandemic incident is the Emergency Operations Center (EOC), has been used successfully to address past campus emergencies, and has been adapted to address pandemic response, recovery coordination, and campus continuity planning.

The functions and responsibilities of the components of the EOC generally follow the campus Emergency Operations Plan with the notable exception being the identification of a Pandemic Manager (Influenza Manager) as a necessary advisory to the Management team. They are described below.

3.1.1. Emergency Policy Group

The University response to a pandemic will be managed by the University's Policy Group, which is comprised of the President; the Vice Presidents for Administration and Business Affairs, Academic Affairs, Student Affairs, and University Advancement; the Chief Information and Technology Officer; Assistant to the President

Responsibilities include following procedures as outlined by the Emergency Operations Plan and the following:

1. Establish communication with the EOC when activated
2. Review and consider advice and recommendations from EOC.
3. Delegate responsibility, accountability and timelines on measures to be implemented.
4. Make decisions on budgetary impact.
5. Approve communications to University community and public

3.1.2. Command Section

The Command section is responsible for integrating emergency policy decisions through implementation of an Incident Action Planning process that provides effective coordination of campus response and recovery efforts. Management section staff, headed by the Emergency Operations Center Director, have overall responsibility for providing advice to the Policy group on emergency policy matters and overall strategy formulation, including rules, regulations and policies specific to a pandemic incident. The Command Section includes the following positions whose roles are defined in the campus Emergency Operations Plan:

- EOC Director
  Chief, University Police
- AVP, Facilities Planning or Director, Facilities Management
- Public Information Officer
- Director, Environmental Health & Safety
- AVP, Finance and Risk Management

3.1.3. Operations Section

The Operations Section's primary responsibility is to coordinate all University response and recovery elements for the duration of the pandemic incident. The Operations section is also responsible for carrying out the objectives identified in this plan. The Operations section includes the following functions:

- Operations Section Chief
- Public Health Officer
- Law Enforcement, Traffic Control and Campus Access
- Facilities Management
- Health Services
- Counseling and Psychological Services
- Care and Shelter
- Other Environmental Health & Safety Staff

3,1,4,. Planning & Intelligence Section

The Planning & Intelligence section is responsible for the collection, evaluation, dissemination, and use of information regarding all campus and mutual-aid disciplines involved in the pandemic incident response and recovery, including the status of campus resources. The Section is also responsible for assembling information on alternative strategies, providing periodic predictions on incident potential, reporting significant changes in incident status and compiling and displaying incident status information. The Section also is responsible for overseeing preparation of the pandemic incident demobilization plan. The Planning & Intelligence Section includes the following functions:

- Planning &Intelligence Section Chief
- Situation Analysis Coordinator
- Resources Coordinator
- Information Display Processor
- Advanced Planning Coordinator
- Documentation Coordinator
- Student Affairs DOC Liaison
- Academic Affairs DOC Liaison

3.1.5. Logistics Section

The Logistics section's primary responsibility is to ensure the acquisition and mobilization of resources to support the pandemic response effort. The Logistics section is responsible for providing telecommunications, transportation, supplies, facilities, personnel, food, ground support and other support services as required to support the pandemic response, including within the EOC. The Logistics Section includes the following functions:

- Resource Management
- Human Resources
- Campus Information Technology
- EOC Technology Maintenance – Including Virtual EOC
- Convergent Volunteers

3.1.6.. Finance Section

The Finance Section is responsible for all financial and cost analysis aspects of the pandemic incident. This includes maintaining an audit trail, billing, invoice payments, and documentation of labor, materials, and services used during incident activities. The Finance Section also has major responsibility for preparing documentation for cost reimbursement in the event of a federally declared disaster. The Finance Section includes the following functions:

- Accounting & Compensation
- Procurement
- Time Reports

- Cost Accounting

3.1.7. Department Operating Centers

CSUEB utilizes Department Operating Centers (DOC) to provide coordination between the EOC and selected divisions and departments, such as Academic Affairs, Student Affairs, Facilities Management, and Student Health Services. These Operating Centers function organizationally using the Incident Command System and will utilize staff within their division to provide services and support. When activated, DOCs will be responsible for providing a liaison to the EOC Planning & Intelligence Section and for coordinating the personnel and resources within their area of responsibility in direct support of their assigned emergency response and recovery activities.

The Student Affairs DOC is responsible for ensuring the campus is prepared to meet student needs when a pandemic incident occurs as well as planning for post-emergency actions to coordinate those activities needed to establish normalcy to the lives of students. Of particular importance are the students with special needs.

Academics Affairs DOC. Provost responsible
The Academic Affairs DOC is responsible for pre-emergency planning activities to ensure the academic process can be maintained, at some level, during a pandemic incident and for ensuring accurate communications is disseminated to academic affairs employees regarding the status of the academic process.

Faculty should consider re-emphasizing the educational message of influenza prevention to students in classrooms including signs and symptoms of influenza, respiratory hygiene, social distancing, availability of infection control measures (antiseptic cleansing solutions, surgical masks), influenza vaccination, resources for medical evaluation when ill (Student Health Services), policies on what students should do when ill.
Faculty should prepare for possibility of widespread student absenteeism due to exposure, self quarantining, or symptoms including:

1. Review of policies on student evaluation, particularly class attendance and/or participation being counted towards a student's grade
2. Procedures on how students can make up missed lectures or classes. Possibilities include: detailed syllabus of course material, guidance by textbook, audio or visual taping of lecture for student to review at a later date, lecture notes by fellow student or organized transcription of class lecture such as audio taping of lecture and typing of contents.
3. Procedures for students missing tests and assignments due to absenteeism/illness

Faculty should consider preparations for self illness or quarantining and personal absence form the classroom. Measures to consider could include:

1. Preparation of alternative assignments or activities for students besides classroom lectures
2. Lecturing by distance learning: telephone audio conferencing or audiovisual conferencing
3. Substitute teaching (agreement with another faculty)
4. Identify Alternative Methods to Deliver Services and Classes

a. Internet teaching
b. Blackboard

Instructional Media Center and Information Technology.

1. Assist with Communications and SHS with various media in getting the educational messages to students and staff and in communicating the recommendations of the BCP committee (radio, TV, Internet, electronic board)
2. Assist faculty in developing alternative methods of instruction (see Academic Affairs above)
3. Assist faculty in communicating with students who are absent

International programs. Including ALP and international students.

1. Develop a policy on screening students recently arrived from foreign countries especially those with higher risk of avian influenza.
2. Consider domestic students who travel for personal reasons or have family members who travel that an educational message be given to them.

4 Risk Assessment

The risks associated with pandemics are: an unpredictable timeline for when the event will occur; an indeterminate duration should the event occur; human suffering; disruption of normal life and business activities; disruption of transportation and other public services. Activities to mitigate these risks include: planning and responding in a caring, compassionate and prudent manner; reducing the spread and continued transmission of the disease and delivering essential services to allow CSUEB to continue in its important and vital mission.

The World Economic Forum annually attempts to identify current and emerging systemic risks and assess their likely "frequency" and "severity." "Frequency" measures the probability that the risk will occur regardless of the potential magnitude. "Severity" measures the negative impact that would result if the risk occurred.

Based on this analysis, the Forum suggests that the short-term risk (through the end of 2006) posed by a pandemic, while very severe, only has a moderate likelihood of occurring. The long-term risk (through the end of 2015) is not as severe or as likely to occur due to medical advances and increased immunity.

Although it is difficult to say when a pandemic may occur, if ever, leading experts believe that the avian flu will likely be found in the continental United States in the fall of 2006. A human infection due to contact with an ill bird or animal will likely occur within months thereafter

3. Human Resource Issues Human Resources. AVP, Human Resources responsible
To prepare for an infectious outbreak, Human Resources should consider issues regarding employee absenteeism due to illness, exposure, emotional/psychological, university imposed or self quarantine. The CSU Vice Chancellor, Human Resources should be contacted for the most up to date information affecting employees. This includes:

1. worker compensation (work related absences)
2. Absenteeism and sick leave policy
   A flu pandemic could precipitate employee absentee rates of 20 - 30percent or higher. Some absent individuals could be ill while others could be caring for members of the household or children unable to attend closed schools or daycare centers
3. Psychological resources
4. Quarantining due to exposure
5. ability to work at home
6. Collective Bargaining issues

2.5. Pandemic Manager

The Pandemic Manager is the Student Health Center Director and Health Officer who also is responsible for other airborne infectious diseases such as SARS, TB, etc. Backup Health Officers are the SHC Nursing Director, Medical Director, and Director of Environmental Health and Safety. The Pandemic Manager serves as the primary advisor to the EOC Director for infection control related issues.

3.6 Core Personnel

Appendix X contains a listing of core University personnel who will be required to perform aspects of the plan to respond to the pandemic threat. These individuals will be treated as first responders and they and their families will receive priority in the distribution of vaccines.

3.7 Communications and Training

The University will communicate the broad plan to the campus community through the established academic and administrative structure (President's Advisory Board, Academic Senate Executive Committee, Council of Deans, Academic Affairs Deans and Directors, Administration Extended Managers). Articles in University publications such as Dateline will raise awareness on the campus and encourage a dialogue on the university's plan to respond to this health emergency. Information will also be communicated to the campus community and the public via the university's webpage.

Each individual in the Core Personnel listing will be required to attend training in the activities and functions of a pandemic response. In summer 2006, the plan will be tested through table-top exercises and lessons learned will be incorporated.

4. Travel.

Travel would likely suffer immediate, major impacts. If a pandemic advisory is declared by medical authorities, commercial travel would likely suffer immediate, major impacts. Public Health authorities could impose travel and quarantine restrictions on all travel to or from other countries or quarantine individuals or groups.. In addition, other countries could impose their own restrictions on travel. Any travel contemplated by students or University staff should anticipate and allow for all possible health-related contingencies.. Review personal and department travel to high risk countries or area including a risk assessment of activities while there. Include an evaluation on when to limit or stop travel. Consult with the University Risk Manager and Pandemic Manager for latest information and opinions.

3. 7. RESPONSE

4. 7.1. Pandemic Phases and Suggested Actions

The appendix includes the expected phases of any pandemic, an action stage and objectives and actions for each level.

7.2. Activation

Alerts equivalent to Phase 4 and above will be transmitted to the Pandemic Managers for notification of the President, Vice Presidents, Deans, and Directors. The CSUEB Emergency Operations Center can be activated by the President, after consultation with the Executive Policy Group, Alameda County Public Health or the Emergency Manager.

7.3. CSUEB Emergency Operations Center

Any campus-wide emergency beyond the campus' ability to manage with day-to-day operations would result in activation of the Emergency Operations Center for centralized coordination of response, relief and recovery efforts. The EOC, located in Student Services Hub, 1191, would be opened for a pandemic response based on an order from the President. Once open, campus actions would be coordinated through the EOC.

7.4. Preparing for a Partial or Total Closure of the Campus

The decision to close the campus or substantially curtail most major activities of the campus would be a difficult decision and the decision to do so would require careful thought and consideration, and coordination at the highest levels of the organization. The final decision for a partial or total closure of the University will be made by the President in consultation with the Emergency Policy Group and communicated through the EOC to the campus and community.

It is important to recognize that closure of the University may be directed by any of the following :

7.4.1. The California Department of Health Services through the County Health Department has the authority to order quarantines, isolation and other public health related actions.

7.4.1. The CSU Chancellor may direct campus closures, cancellation of classes and cessation of all but critical functions. .

7.4.1. The University President may order specific closures and shutdown of all but critical functions within their college, department, and unit.

5. 7.6. Implementing Pandemic Business Continuity Plans

Once the EOC is activated for a campus-wide emergency response, the Pandemic Business Continuity Plan developed by each college, school and unit should be activated and all actions coordinated and communicated to the EOC.

7 RECOVERY PROCESSES

Recovery begins immediately and continues throughout the response phase of an emergency/disaster. With a pandemic, recovery efforts may be thwarted by an unknown duration of the actual event and the unknown number of faculty, staff and students effected. Planning for recovery before an event occurs will assist available faculty, staff and students to make the transition as seamless as possible.

7.1 Establish criteria and processes for Business Recovery and Resumption

Based on information as developed by the EOC and ongoing reviews of the international/national/local situation and discussions with each CSUEB college, department, and unit, the EOC will advise the Emergency Policy Group when a partial, incremental or total return to normal operations is most appropriate. Any such decisions would be communicated to and coordinated with each college, department, and unit.

7.2 Communication

Responsibility for communicating recovery actions and intentions begins with the EOC Public Information Officer and continues into each college, school and unit, as stated in Section 4.4.2. Notice to all faculty/staff and students of a full or partial reopening should be disseminated as widely and quickly as possible.

7.3 Analysis and After Action Reports

Once a complete return to operations is accomplished, the Pandemic Managers and Emergency Management Advisory Council will convene a debriefing, to discuss the response, recovery and any changes necessary to this plan..

1. Appendices
   a. Appendix A Difference Between Common Cold and Flu
   b. Appendix B Education Strategies
   c. Appendix C Influenza Manager
   d. Appendix D Safety Officer
   e. Appendix E Intake Form
   f. Appendix F Sample Education Poster -
   g. Resources
      h.

Appendix A Differences between the common cold and the flu

Although both colds and flu are caused by viruses, the symptoms of each illness make its identification easy.

Symptoms	Cold	Flu
Fever	Rare	Characteristic; high (102-104 °F); lasts 3-4 days
Headache	Rare	Prominent
General Aches, Pains	Slight	Usual; often severe
Fatigue, Weakness	Quite mild	Can last up to 2-3 weeks
Extreme Exhaustion	Never	Early and prominent
Nausea, vomiting, diarrhea	Rare	In children <5 years old
Stuffy Nose	Common	Sometimes
Sneezing	Usual	Sometimes
Sore Throat	Common	Sometimes
Chest Discomfort, Cough	Mild to moderate; hacking cough	Common; can become severe
Complications	Sinus congestion or earache	Bronchitis; pneumonia; can be life-threatening
Prevention	None	Annual vaccination; antiviral medicines – see your doctor
Treatment	Only temporary relief of symptoms	Antiviral medicines – see your doctor
Fatalities	Not reported	Well recognized

Source: National Institute of Allergy and Infectious Diseases, National Institutes of Health, April 2001

Appendix B

California State University East Bay
Pandemic Influenza
Business Continuity Plan

Name of Function:	Influenza Manager
Primary:	Director, Student Health Services
Alternate:	Student Health Nursing Manager
2nd Alternate:	Medical Director, Student Health Services

Responsibilities:

The Influenza Manager is responsible for monitoring and assessing potentially unsafe situations and for developing measures to ensure safe environmental working/learning conditions on campus for CSU East Bay faculty, staff, students, and the public. The Influenza Manager advises the EOC Director on appropriate actions to take involving

Pandemic Planning Phase
The Influenza Manager is responsible for monitoring the global status of the avian flu and advising the Vice President, Administration and Business Affairs and the Director of Environmental Health and Safety of any change in status that would impact the campus community.

Develop and deliver information sessions to the campus community regarding campus preparedness for avian pandemic influenza.

Develop an on-line Notification Intake form for suspected influenza cases at work and an on-line reporting procedure for periodic collection of suspected influenza cases from campus managers, faculty, or other sources.

Serve as the conduit between the campus and the Chancellor's Office for information concerning avian pandemic influenza planning and preparedness.

Pandemic Alert Phase
Notify the Vice President, Administration and Business Affairs of a World Health Organization (WHO) status change from the Pre-Pandemic to the Pandemic Alert Phase. Continues to monitor the global status of the avian flu to provide current and accurate information to the Vice President, Administration and Business Affairs and other administrators as appropriate.

Serve as a member of the pandemic management team responsible for the operationalization of the campus Avian Pandemic Influenza Business Continuity Plan.

Assist the Public Information Officer by providing updated information for inclusion in campus avian influenza communication.

Advise campus managers, faculty or other personnel as deemed appropriate of the requirements of the Notification Intake from for suspected influenza cases at work and the campus on-line reporting procedures.

Pandemic Phase
Alert the Vice President, Administration and Business Affairs of the change in pandemic status. Make recommendations concerning social distancing measures to be initiated on campus.

Receive periodic information concerning the number of faculty and staff unable or unwilling to report to work and the number of students absent from class. Communicate this information to the pandemic management team.

Continue to monitor the global status of the avian pandemic influenza and assists the Public Information Officer by providing updated information for inclusion in campus avian influenza communication.

Initiate implementation of the on-line Notification Intake form and reporting procedures; collect and compile data to be reported in various statistical formats. Provide periodic reports to the Vice President, Administration and Business Affairs, and others as required on the number of suspected influenza cases involving campus faculty, staff, and students.

Name of Function: Safety Officer

Primary: Safety and Industrial Hygiene Manager

Alternate: Environmental Compliance Manager

2nd Alternate: Environmental Compliance Manager

Responsibilities:
The Safety Officer is responsible for monitoring and assessing potentially unsafe situations and for developing measures to ensure safe environmental working/learning conditions on campus for CSU East Bay faculty, staff, students, and the public.

Pre-Pandemic Planning Phase
The Safety Officer is responsible for identifying opportunities and supplies/equipment to improve the public health infrastructure of the campus (i.e., recommending cleaning products with high efficacy in reducing bacterial and viral counts on hard services; personnel protective supplies and other barrier devices; and other protective measures including the use of hand-washing/sanitizing procedure.)

Review campus Respiratory Protection Plan and amend as necessary. Identify employee classifications or duties requiring respiratory protection. Identify respiratory protection types for core personnel and surgical masks for faculty/staff as appropriate. Coordinate with occupational medical provider to confirm ability to provide required physical assessment and ensure that campus process to obtain assessments is current and appropriate. Identify alternate occupational medical provider in the event that primary provider is unable to conduct assessments.

Assist the Student Health Center to develop an on-line Notification Intake form for suspected influenza cases at work and an on-line reporting procedure for periodic collection of suspected influenza cases from campus managers, faculty, or other sources.

Pandemic Alert Phase
Coordinate with Student Health Services to verify the inventory of necessary supplies/equipment and take immediate action to obtain required inventory levels.

Assess the production of medical waste on campus and notify campus medical waste provider of increased production and expectation of increase waste volume. Review existing medical waste removal contract and adjust terms and conditions if necessary. In coordination with the Director,

Environmental Health and Safety ensure adequate budget to address increased medical waste service.

Continue assessment of public health infrastructure and advise the Influenza Manager of adequacy or inadequacy of existing measures. Recommend opportunities to improve or modify existing measures.

Coordinate required physical assessment for respiratory protection use of core personnel. Maintain accurate and current records of approved respirator users and provide Personal Protective Equipment (PPE) training and fit testing as appropriate.

Provide hygiene and other protective measures training to the campus community.

Advise campus managers, faculty or other personnel as deemed appropriate of the requirement of the Notification Intake Form for suspected influenza cases at work and the campus on-line reporting procedures.

Pandemic Phase

Continue to monitor the inventory of necessary supplies and equipment necessary to support the public health infrastructure and take immediate action to obtain additional supplies and equipment to maintain adequate levels.

Monitor and ensure appropriate use of PPE by campus personnel. Provide refresher training as needed to include appropriate disposal.

Initiate implementation of the on-line Notification Intake Form and reporting procedures; collect and compile data to be reported in various statistical formats. Provide periodic reports to the Influenza Manager or others as required on the number of suspected influenza cases involving campus faculty, staff and students.

Post-Pandemic Phase

Provide appropriate training to personnel involved in facilities cleaning and sanitation to ensure a safe and health work operation. Ensure that employees involved in reactivating closed facilities are provided with required PPE and its appropriate use.

Appendix A Differences between the common cold and the flu

Although both colds and flu are caused by viruses, the symptoms of each illness make its identification easy.

Symptoms	Cold	Flu
Fever	Rare	Characteristic; high (102-104 °F); lasts 3-4 days
Headache	Rare	Prominent
General Aches, Pains	Slight	Usual; often severe
Fatigue, Weakness	Quite mild	Can last up to 2-3 weeks
Extreme Exhaustion	Never	Early and prominent
Nausea, vomiting, diarrhea	Rare	In children <5 years old
Stuffy Nose	Common	Sometimes
Sneezing	Usual	Sometimes
Sore Throat	Common	Sometimes
Chest Discomfort, Cough	Mild to moderate; hacking cough	Common; can become severe
Complications	Sinus congestion or earache	Bronchitis; pneumonia; can be life-threatening
Prevention	None	Annual vaccination; antiviral medicines – see your doctor
Treatment	Only temporary relief of symptoms	Antiviral medicines – see your doctor
Fatalities	Not reported	Well recognized

Source: National Institute of Allergy and Infectious Diseases, National Institutes of Health, April 2001

Appendix E

SAMPLE NOTIFICATION INTAKE FORM:
SUSPECTED INFLUENZA CASE AT WORK

Details of Ill Employee Campus: _____

Name: _____ Department: _____

Job Title: _____ Year of Birth: _____

City of Residence: _____

Tel. Numbers: w: _____ h: _____ cell: _____

Symptoms Reported:

Fever	Y	N	Body Aches	Y	N
Headache	Y	N	Fatigue	Y	N
Dry Cough	Y	N	Other _____		
Cold	Y	N	_____		
Sore Throat	Y	N	_____		

Time of Fever Onset: _____

Any member of family ill with influenza Y N

Relationship(s)
_____

Countries Visited:
_____

Flights Taken: Departure City_____ Arrival Cities _____

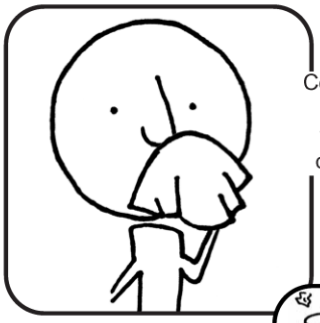
Contact List (See reverse)

Details of Reporting Party_____

Name:

Stop the spread of germs that make you and others sick!

Cover your Cough



Cover your mouth and nose with a tissue when you cough or sneeze

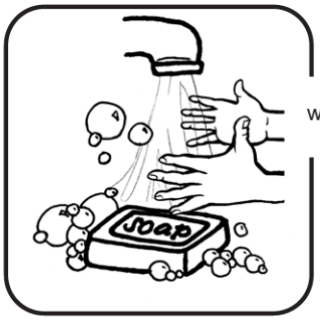
or

cough or sneeze into your upper sleeve, not your hands.

Put your used tissue in the waste basket.

Clean your Hands

after coughing or sneezing.



Wash hands with soap and warm water

or

clean with alcohol-based hand cleaner.

Minnesota Department of Health
717 SE Delaware Street
Minneapolis, MN 55414
612-676-5414 or 1-877-676-5414
www.health.state.mn.us

Minnesota Antibiotic Resistance Collaborative

APIC
ASSOCIATION FOR PROFESSIONALS IN INFECTION CONTROL AND EPIDEMIOLOGY, INC

Command Section responsibilities include:

1. Communications. Director of Public Affairs (Public Information Officer)

Responsible for overall communication, public education, and awareness

1. Develop procedure and processes to communicate with students
2. Develop procedure and processes to communicate with employees
3. Develop procedure on what to communicate and from whom, with the necessary approvals.
4. Develop plan on communications with the media
5. Coordinate with Student Health Services Health Education unit to ensure consistent communiqués and alerts.

Operations Section responsibilities include::

Health Services, Director Student Health Services responsible
Student Health Services will assist and support the Influenza manager (See job duties of influenza manager). In addition, SHS will:

1. Keep up to date on latest testing for avian influenza, have available or through contracted laboratories (Quest or Public health) depending on budget and CLIA limitations
2. Staff trained in the evaluation and treatment of University staff and students including personal protective equipment for health center personnel, respiratory training/fit testing/ N95 respirators and isolation rooms.
3. Medical screening of recently arrived students or staff who have traveled.
4. Medical clearance for ill or exposed persons to return to work or class
5. Treatment with anti-virals, work with health dept to obtain
6. Influenza vaccination including for avian influenza (when available)
7. Considers purchase of supplies, stockpiling including quantities and in consideration of budgetary limitations Prepare educational material for distribution
    a. Coordinate mass communication with Public Information Officer, Student Health Services Health Educators, etc
    b. Recruit volunteers from Nursing program for assistance

Counseling and Psychological Services, Director, CaPS responsible)

1. Prepare for potential impact of a disaster: large numbers of students, type of emotional responses, and personal safety (personal protective equipment, counseling by phone or other communication tool)
2. CaPS and Employee Assistance Program should coordinate activities for addressing mental health impact of the disaster.

Care and Shelter, Housing Director responsible

1. Develop policy and procedure on a confirmed case of avian influenza in the residences, possible case, and potentially exposed students.

2. Evaluate quarantining procedures including isolation rooms or alternative housing.
3. Coordinate with University Union Food Services to provide food.

Environmental Health and Safety-Director EHS responsible

1. Establish and disseminate campus policy on avian exposure, prevention and personal protection.
2. Work with Influenza manager to establish a policy and procedure on a potential case in a classroom, office or department including cleaning and disinfection of the area,
3. Review implementation of protective measures on campus: social isolation, protective barriers.
4. Implement policy and procedure on the distribution of personal hygiene supplies: antiseptic cleansing solutions, surgical masks, etc.
5. Assist Housing with potential isolation rooms for potential outbreak in residential students.
6. Develop policy and procedure for Facilities personnel to clean and disinfect an area and for other workers who may enter an area or building.
7. Considers purchase of personal protective equipment and supplies, stockpiling including quantities and in consideration of budgetary limitations

Facilities Management – Director Facilities Management responsible

1. Survey campus for exposure to birds whether incidental (lake or ponds with waterfowl, facility and grounds cleanliness attracting pigeons and other birds, bird feeders or other feeding of birds), or intentional (working with birds in research or other university function, pet birds).
2. Review ventilation systems and airflow of buildings.
3. Work with Influenza manager to establish a policy and procedure on a potential case in a classroom, office or department including cleaning and disinfection of the area, determine time for re-occupancy, and effect on persons in adjacent rooms, rest of building and persons who have entered the building but who do not reside there.
4. Prepare for temporary re-location of classrooms and offices.
5. Assist housing with potential for isolation rooms for potential outbreak in residential students.
6. Coordinate utilization of space and offices with Concord campus.
7. Implement policy and procedure on protective equipment for Facilities personnel to clean and disinfect an area and for other workers who may enter an area or building.
8. Work with Environmental Health and Safety to evaluate efficacy of barrier construction.
9. Consider purchase of cleaning supplies, stockpiling including quantities and in consideration of budgetary limitations

Logistics Section – Director Procurement Services

Responsible for procuring Supplies and Equipment

ii. Current Inventory of Essential Supplies

Shortages may occur due to transportation system disruption or inability of suppliers to meet demand due their own staffing shortages. The usual seventy-two (72) hours of being on your own may be extended to weeks and we should plan to have additional quantities of food and water for essential workers that stay on site. Environmental Health and Safety should determine quantities of supplies to have on hand.

3.2. 2. Vendor Agreements

Coordinate with Purchasing for developing a plan to procure the necessary supplies in a timely manner. Discuss with key suppliers a plan for regular shipments in the event of shortages or disruptions in transportation systems. Airfreight may not be available in a global pandemic. Travel restrictions on supply lines may also be affected.

2. Supplies and Protective Equipment

Each campus should complete an inventory of all supplies identified as essential and ensure that adequate inventory and availability is maintained as well as a contingency supply. Shortages of supplies may occur during a pandemic due to increased demand (i.e. medications and medical supplies, cleaning supplies)

1. Respirators (N95) – EHS responsible for maintaining
2. Patient masks – SHS responsible for maintaining
3. Disinfectant wipes – SHS?

Suggested actions based on phase of epidemic

<table>
<tr><th>Phase</th><th>Action</th></tr>
<tr><td rowspan="3">3</td><td>PREVENTION.
1. Personal protective equipment: consider purchase of antiseptic cleansing solutions (alcohol based hand rub)and disposable surgical masks. In this phase, the purpose for purchasing would be to stockpile in advance as shortages could occur during an outbreak. Whether to purchase or not and the quantity will depend on budgetary constraints.
2. Educational messages: provide general information to campus community about
• the state of avian influenza at this point globally
• respiratory hygiene, infection control and social distancing measures that can be applied to the usual cold and flu season
• precautions to be taken with exposure to birds and poultry in research, occupational, recreational settings
• travel tips and precautions to countries with higher incidence of avian influenza that the U.S.</td></tr>
<tr><td>TESTING.
Available at SHS as a participant in the nationwide influenza sentinel program. Rapid testing on-site and confirmatory culture through Alameda County public health lab available to CSUEB community</td></tr>
<tr><td>TREATMENT.
1. Anti-virals: efforts to purchase Tamiflu in fall 2005 were limited to 3 doses by the manufacturer and, at time of the writing of this policy (March 2006), no additional doses were being sold. Urgency and need to stockpile at this phase is elective, same as for protective equipment above.
2. Vaccine: not available yet.</td></tr>
<tr><td>4</td><td>Discuss with BCP committee the increased risk with upgrade in WHO phase. Includes all actions under phase 3 with heightened need for stockpiling and greater emphasis on educational preventive measures.</td></tr>
</table>

	PREVENTION. 1. Strongly consider purchase and distribution of antiseptic cleansing solutions, tissue, and surgical masks. 2. Educational messages: • intensify educational messages from phase 3. • Augment with information to the campus community on signs and symptoms of avian influenza with instructions to seek medical attention/receive medical clearance before coming to school/work.
	TESTING. Distribute information on medical resources for evaluation and testing
	TREATMENT. Strongly consider obtaining a limited supply of anti-virals to contain a limited outbreak and prophylaxis
	MANAGING AN OUTBREAK 1. Develop policy and procedure to monitor employees for avian influenza illness. 2. Develop policy on quarantine and work at home: for symptomatic or asymptomatic employees whether precautionary, exposed, or elective 3. Develop procedure for medically clearing employees to return to work 4. Develop policy and procedure to monitor students for illness 5. Develop policy on making up missed classes 6. Develop methods of alternate instruction: web based, distance learning 7. Review travel policy for employees to at risk countries, restrictions as needed. Review travel program for students 8. Develop monitoring system for int'l/ALP and other students recently arrived 9. Develop procedure on quarantining in housing: for students exposed, symptomatic or suspected
5/6 A→D	If no vaccine available yet, risk to campus increases with every upgrade in phase and subphase. Campus outbreak is imminent. Includes all actions in phases 3 and 4.

	PREVENTION. 1. Personal equipment: use of antibacterial cleansing solutions, tissue and surgical masks become elective→mandatory 2. Educational messages: Disseminate and reinforce the campus policies on avian influenza implemented below
	TREATMENT. Anti-virals: urgency to obtain larger supply increased or secure reliable source (ie. public health) in event of an outbreak
	MANAGING AN OUTBREAK 1. Implement policy and procedure to monitor employees for illness 2. Implement policy on quarantine and work at home: for symptomatic or asymptomatic employees whether precautionary, exposed, or elective. Implement procedure for medically clearing employees to return to work. 3. Implement policy and procedure to monitor students for illness 4. Implement policy on missed classes for students quarantined at home due to illness or exposure 5. Develop methods of alternate instruction: web based, distance learning 6. Review travel policy for employees to at risk countries, restrictions as needed 7. Review travel program for students 8. Implement monitoring system for int'l/ALP and other students recently arrived 9. Prepare counseling to meet possible upsurge in demands for services
5/6 E→G	Are we prepared?

Appendix G

Resources

The following are recommended resources for further individual study:
Avian (Bird) Pandemic Influenza Business Continuity Planning Guide, Charlene Minnick, Senior Director, California State University Office of Systemwide Risk Management, November 19, 2005

~~An up-to-date, well researched and very readable blog on avian influenza can be found at http://reports.typepad.com/pandemic_plan/avian_flu/index.html~~

World Health Organization, http://www.who.org

WHO webpage for disease outbreak news http://www.who.int/csr/don/en/

United States Department of Health and Human Services (HHS), http://www.HHS.gov

United States National Influenza Plan, http://www.hhs.gov/pandemicflu/plan/

United States National Strategy for Pandemic Influenza, http://www.whitehouse.gov/homeland/pandemic-influenza.html

Centers for Disease Control http://www.cdc.gov/page.do

Centers for Public Health Preparedness, http://www.asph.org

U.S. Department of HHS dedicated website for Pandemic Flu, http://pandemicflu.gov

National Institute for Allergy and Infectious Disease, http://www.niaid.nih.gov

State of California, Governor's Office of Emergency Services, http://www.oes.ca.gov

State of California Department of Health Services, http://www.dhs.ca.gov

California Department of Health Services webpage, Surveillance for Avian Influenza A (H5N1) in California http://www.dhs.ca.gov/dcdc/VRDL/html/FLU/H5N1/Main%20Avian%20Flu%20page.htm