



BLUEFIELD STATE COLLEGE

COMMUNICABLE DISEASE REACTION-RESPONSE STRATEGY

**(PANDEMIC FLU
RESPONSE PLAN)**

October, 2009

Table of Contents

I. Introduction and Purpose

II. General Information

III. Response Plan

a. Code Zero: Plan

i. Risk Assessment Summary

ii. Critical Control Strategies

1. Prevention

2. Protection

3. Essential Services Preparation

b. Code One: Prepare

i. Risk Assessment Summary

ii. Critical Control Strategies

1. Prevention

2. Protection

3. Essential Services Preparation

c. Code Two: Mobilize

i. Risk Assessment Summary

ii. Critical Control Strategies

1. Prevention

2. Protection

3. Essential Services Preparation

d. Code Three: Sustain

i. Risk Assessment Summary

ii. Critical Control Strategies

1. Prevention

2. Protection

3. Essential Services Preparation

IV. For More Information

V. Common Terms & Definitions

Attachments:

1. [WHO Pandemic Phases with BSC Response Levels](#)

2. [Personal Preparedness](#)

3. [CDC Guidance on Use of Personal Protective Equipment Respirators and Face Masks](#)

I. INTRODUCTION AND PURPOSE

The Bluefield State College (BSC) Advisory Committee on Communicable Diseases (ACCD) has been charged with the development of appropriate strategies to manage potential outbreaks of communicable diseases at the College. This Communicable Disease Reaction-Response Strategy has been prepared to provide the College with general and specific control strategies to address the management of and response to potential pandemic events. While some pandemic events cause disruptions due to prolonged absence of student, faculty and/or staff members, other pandemic events could result in significant life-threatening conditions. This document is designed to address the majority of “disruptive” events and provide base-line guidance for significant life-threatening pandemic events. The document should be considered a “living document,” in that it will undergo modifications as might be dictated by more recent information and/or events. Although the document was prepared in response to the current concerns (fall, 2009) regarding an impending H1N1 pandemic, the general structure, design and courses of action will apply in the College’s response to most pandemic events, unless announced otherwise.

Any decisions regarding modification of the College’s schedule of operations will be made by the President, and announced immediately, based upon information and recommendations received from the President’s Cabinet, Members of the Staff and Faculty, and the College’s Advisory Committee on Communicable Diseases. Such recommendations will, in turn, be based upon the latest information from the World Health Organization, the Centers for Disease Control and the Mercer County Health Department.

Announcements of any modifications of schedules of operations will specify whether those modifications will affect the main campus only, a specific–off-campus site, or all locations.

II. GENERAL INFORMATION

A “pandemic” event is an epidemic (a sudden outbreak) that becomes very widespread and affects a whole region, a continent, or the world. In many instances this involves a new strain of a disease that individuals have little or no immunity against. While human influenza is generally a seasonal disease caused by known viral agents and spread primarily by exposure to infected airborne droplets over short distances, with certain diseases transmission may occur in situations that favor close person to person contact or handling objects that have become contaminated with respiratory secretions. The availability of effective vaccines for prevention of both influenza and pneumococcal pneumonia as well as effective antimicrobial drugs for treatment contribute to control of influenza outbreaks and their complications in the general population. Because many pandemic events occur from new strains or variants it often takes the medical community some period of time to develop vaccines to prevent the disease from infecting people. The Centers for Disease Control (CDC) recommends the use of specific drugs for the treatment of pandemic events. Because pandemic illnesses tend to be caused by variant strains and mutations of viral agents the data on the most effective drugs can/will change based on the infection.

III. THE COLLEGE'S RESPONSE PLAN FOR MANAGING A PANDEMIC

The College has unique characteristics that influence its planning for the possibility of a pandemic event. It has many international students and encourages foreign exchanges for educational opportunities and research among its students and faculty. It is never fully closed and operates remote sites and has departments that operate year round. These aspects have been considered in developing the pandemic response plan detailed below. The college's plan is based on the World Health Organization (WHO) phases, but the phases have been combined into four codes of planning for critical control strategies at the college. (These are also shown in Attachment #1).

The four response levels are:

Code "Zero": Plan

The college takes steps to prepare for any pandemic. Code Zero encompasses WHO levels 1, 2, and 3).

Code "One": Prepare

There are the confirmed cases of the infection in the United States, Mexico and/or Canada. This level is equivalent to WHO level 4.

Code "Two": Mobilize

There are suspected or confirmed cases of infection in the areas around the college campuses. Level Two is equivalent to the WHO level 5 which indicates that significant human to human transmission is occurring.

Code "Three": Sustain

There is efficient and sustained human-to-human transmission throughout the area. Level Three is equivalent to WHO pandemic alert phase #6.

Code "Four": Evaluate

The pandemic event is over. Evaluation of the effectiveness of the response is done by each department. The results of the evaluation used to modify the plan to incorporate "lessons learned".

The critical control strategies linked with each response level reflect a cautious approach and the college's concern about the potential for transmission in densely populated classrooms and workspaces. The college plan is also cognizant of necessary interactions with the jurisdictional health department during an epidemic or pandemic that requires certain mandated restrictions. It is anticipated that the college's procedures may change as new information regarding this disease continues to evolve.

The guidance in the following sections provides a systematic approach for minimizing the risk of infection on the campus, as well as at other off site facilities, and for responding in the event of a community wide epidemic. The primary goal of the pandemic response plan is to promote the safety and well-being of BSC students, faculty, visitors, and staff by:

1. preventing the spread of the disease;
2. protecting BSC workers who will need to keep BSC running; and
3. providing support for the essential services that must be maintained.

These goals are particularly pertinent to the activities of operations that will be needed 24/7 throughout all response levels. Such units include, but are not limited to:

- Health Center
- Power Plant/Facilities Infrastructure support
- Food Services

CODE “ZERO” RESPONSE PLAN

CODE ZERO RESPONSE: PLAN

Code Zero Risks and Critical Control Strategies:

(Code Zero at the college encompasses WHO levels 1, 2, and 3 and is composed of activities that should be taken to prepare for any pandemic)

Risk Assessment Summary:

The World Health Organization phases 1 through 3 reflect a transition from a low risk to increasing risks for human cases coupled with no or very limited human to human transmission. The transition reflects the first identification of a new virus in animal populations to the point when human cases are seen. With human cases, a pandemic alert is issued.

At this level, the college faces only potential risks. The risk factor that needs to be considered at this phase is the potential for an unanticipated introduction of the virus into the campus or community through carriers and/or an infected person visiting the college. There is a great deal of information in the popular media, and this may give rise to increased levels of anxiety among students, staff, and faculty. Lack of business continuity planning, inadequate preparation, training, and supplies that are largely ordered on an “as needed” basis compromise the ability of the campus faculty and staff to maintain the campus on a 24/7 basis in an event where excessive absenteeism occurs.

Critical Control Strategies

1. Prevention

General Strategies

The importance of practical, common sense approaches to controlling the spread of any communicable disease are also basic to preventing cases of any specified pandemic infection. Each college employee and student needs to take responsibility for his/her own personal health and to be cognizant of basic health practices important for the control of the transmission of any infectious disease, such as:

- Wash hands frequently;
- Avoid sharing utensils, water bottles, towels and bedding without first washing these items with soap and hot water;
- Clean surfaces soiled with body fluids with a household disinfectant, such as bleach and wear gloves while cleaning;
- Keep the immune system strong with regular exercise, good diet, sufficient sleep, and plenty of water;
- Cover nose and mouth when sneezing or coughing and avoid spitting;
- Stay home and do not come to work, attend classes, or attend public events when sick, particularly when a fever is present and there are respiratory symptoms, such as coughing; and
- If symptoms compatible with the specified infection develop, contact a health care provider if it is a recommended course of action by the CDC and/or the Mercer County Health Department.

All faculty, staff, and students are encouraged to seek annual immunization against influenza to reduce the risk of illness and possible co-infection with seasonal and novel influenza strains. The flu vaccine appropriate for the current influenza season usually becomes available in September-October every year, and may be obtained from regular health care providers or from special “flu shot” clinics held at clinics, pharmacies, supermarkets, and shopping malls.

Environmental controls and personal hygiene are also important. Heavily used public surfaces such as door handles, counters, work stations and public reception, registration, and waiting areas in all college departments, but particularly in health care facilities should be wiped clean with disinfectant on a regular schedule. Having hand sanitizer dispensers and disposable paper tissues easily accessible in such areas can potentially help reduce the risk of disease transmission. Good hand hygiene and covering coughs and sneezes (respiratory etiquette) will contribute to reducing environmental contamination and person to person transmission. Surgical masks may be offered to persons who are actively coughing and sneezing to decrease infected droplet contamination.

2. Protection for International Travelers

Employees and students traveling internationally should check with the Public Health Department in their county/state of residence to obtain information and immunizations necessary prior to travel. In the event that some type of health screen is recommended by national and local public health guidelines before persons returning from international travel are allowed to return to campus classes or workplaces, employees and students must provide evidence of that screening to the college

3. Protection

Students and faculty traveling on assignment to areas with known pandemic cases need to obtain pre-travel advice, plan for potential illness abroad, and assure appropriate health insurance coverage exists, including emergency evacuation insurance. Some students and faculty may be advised to defer travel if certain underlying medical conditions are present.

4. Essential Services Preparation

The following matrix establishes the actions that specific college units need to take at “Code Zero: Plan” Phase. In addition to the basic preparation and education, noted previously, the most critical control action at this phase is to plan at the unit level for business continuity.

BSC Code Zero Responsibility Matrix

<i>Responsible Unit</i>	<i>Critical Control Action Strategies</i>
<i>President, President’s Staff, and Cabinet</i>	<ul style="list-style-type: none"> • Receive briefings and review and modify as appropriate the policy for suspended operations, HR policies, and review fiscal implications of potential pandemic requiring a BSC suspension of operations.
<i>President/Vice President for Academic Affairs</i>	<ul style="list-style-type: none"> • Direct academic and administrative units to prepare and plan for business continuity, including but not limited to considerations for teleconferencing, telecommuting, and on-

<p><i>President/Vice President for Academic Affairs (continued)</i></p>	<p>line course offerings as options for classes in the event of a regional restriction on movement.</p> <ul style="list-style-type: none"> • Direct HR to provide guidance regarding coverage and other issues for BSC faculty and staff who may be requested to work with community medical and/or public health entities in the event of a wide spread regional epidemic.
<p><i>Advisory Committee on Communicable Disease (ACCD)</i></p>	<ul style="list-style-type: none"> • Coordinate the development and dissemination of the college’s guidance for management of a pandemic event. • Clarify its role in emergency communications and actions with the college. • Monitor the guidance from the Health Center including their reports from the Centers for Disease Control and Prevention (CDC), reports from the World Health Organization (WHO), information from the state and local health jurisdictions in West Virginia, and developments in other institutions of higher education in order to have access to the best possible information and science as a basis for college policies and procedures. • Brief the President’s Cabinet as needed.
<p><i>Food Services and Student Housing</i></p>	<ul style="list-style-type: none"> • Identify potential housing necessary for quarantine and/or isolation facilities. • Amend contract language to allow use of facilities in an emergency situation. • Determine just-in-time food supply options and potential stockpiling of emergency supplies. • Develop staffing back up plan. • Determine need for personal protection, get appropriate training and fit testing for respirators, and begin to stockpile supplies of respirators. • Identify essential food service personnel and develop plan for sufficient presence during an epidemic.
<p><i>Health Center</i></p>	<ul style="list-style-type: none"> • Maintain monitoring of local, regional, national and global infection outbreak status and collaborate with the college departments on analysis of implications for BSC. • Clarify and solidify relationship with local health departments/local health officers for potential communicable disease control activities. • Carefully watch for patients who may exhibit symptoms consistent with the identified infection and maintain liaison with Health Department epidemiologists. • Develop a medical provider backup plan for provision of medical services in the event of high staff absenteeism.

<p><i>Health Center (continued)</i></p>	<ul style="list-style-type: none"> • Promote appropriate personal protection and emergency plans for health center staff. • Participate in the development of a campus response plan, and also a distribution plan for critical pharmaceuticals, medical supplies, and equipment. • Participate with MountainView in the development of a plan for students in residence halls who may have been exposed and/or need transport to medical/quarantine facility. • Develop protocol for notification and transfer of students requiring hospital evaluation or care to hospital facilities. • In conjunction with Mercer County Health Department, advise students traveling in affected regions. • Provide expert medical advice to BSC Departments. • Brief the President’s Cabinet as needed.
<p><i>Deans</i></p>	<ul style="list-style-type: none"> • Develop a draft policy for suspension of classes due to pandemic event and route to the President for consideration. • Clarify student discipline policy for compliance with emergency health directives. • Develop advance communication plans, notices and travel information.
<p><i>Emergency Management</i></p>	<ul style="list-style-type: none"> • Develop and disseminate business continuity planning resources and provide training for business continuity development. • Provide emergency references/documents to responsible functional units • Clarify roles and responsibilities for campus wide communicable disease emergency. • Test communications, including updating call-up lists and 24/7 of essential personnel and cabinet officials. Determine if additional backup personnel are required for each critical office/unit/department. • Develop plan for a virtual vs. a physical ACCD and President’s Cabinet activation to minimize person-person contacts in time of emergency. • Develop, implement, and evaluate tabletop exercises (dealing with disease outbreak) as appropriate.
<p><i>Facilities Services</i></p>	<ul style="list-style-type: none"> • Develop cross training to enable electrical, water services, and other critical services to be maintained in the event of a campus epidemic. • Stockpile appropriate personal protective equipment (PPE) and critical supplies. • Provide training to staff regarding communicable disease issues and assure all staff have respiratory protection training and fit testing. • Review potential impacts of travel restrictions to BSC operations and review alternative transportation plans • Plan for sanitizing vehicles and providing PPE for staff

<i>Facilities Services (continued)</i>	<p>assigned to clean those vehicles.</p> <ul style="list-style-type: none"> • Assure infectious waste management vendors can handle increased volumes.
<i>Human Resources/President's Cabinet</i>	<ul style="list-style-type: none"> • Develop materials to assist units identify the critical functions they may perform (if any), and the critical inputs and outputs to and from their units. • Review information about BSC practices that would facilitate “social distancing” and update/augment if required (e.g. telework, alternative work schedules). • Develop FAQ for issues related to possible pandemic, including information for employees identified as essential, leave options and policies. • Review possible training needs and determine whether preparedness courses should be offered/required. • Review BSC suspended operations policy for pandemic applicability and revise as necessary. • Review HR policies and union contracts in the context of health emergency actions and develop appropriate resources as necessary.
<i>Purchasing</i>	<ul style="list-style-type: none"> • Assist with stockpiling of critical supplies. • Assure advanced contracts provide for sufficient use of necessary food and supplies, as identified by critical functional units.
<i>Communications/IT</i>	<ul style="list-style-type: none"> • Identify essential services needed to maintain college operations and communication systems. • Identify essential staff functions and cross train. • Identify need and capacity issues for increased telecommunications.
<i>News and Media Relations</i>	<ul style="list-style-type: none"> • Maintain liaisons for coordinated delivery of community messages in the event of an emergency. • Develop “canned”, ready-to-go templates for news releases.
<i>Public Safety</i>	<ul style="list-style-type: none"> • Review the mutual aid agreements with local police jurisdictions. • Assure the staff is appropriately trained for possible enforcement of quarantine and/or isolation actions on campus. • Provide training to staff regarding communicable disease issues and assure all staff have respiratory protection training and fit testing.
<i>Athletic Department</i>	<ul style="list-style-type: none"> • Review travel/game schedule to identify pandemic event implications. • Ensure athletes, where medically applicable and advised by CDC, have received appropriate vaccinations. • Provide training to staff regarding communicable disease issues and assure all staff have respiratory protection training and fit testing. • Train all coaching staff on pandemic plan to avoid scheduling practices during elevated risk periods.

Department Heads	<ul style="list-style-type: none"> • Identify, on a calendar basis, critical personnel necessary to maintain operations during elevated pandemic conditions. • Maintain written procedures to assist stand-by personnel in the performance of necessary tasks in the event the primary person responsible for the task cannot come to work.
-------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

CODE “ONE” RESPONSE PLAN

CODE ONE RESPONSE: PREPARE

Code One Risks and Critical Control Strategies:

(Code One -at the college encompasses WHO level 4 and will be activated upon the first confirmed case of the identified infection in the United States, Mexico and/or Canada)

Risk Assessment Summary:

The Risk Assessment in “Code Zero” is applicable at this level and is enhanced because of the evidence of increased human to human transmission. Real and significant risks are present for the potential spread of the illness throughout the world.

Based on the assessment of current information, the college has identified two major risk factors related to the potential transmission of pandemic infection, should human to human transmission be documented. These risk factors are:

1. Close personal contact
2. Rapid spread due to travel; particularly if travel destinations involve sites with human to human transmission of the disease (The CDC Travel Criteria related to the current CDC case definition provides the risk information.)

Critical Control Strategies

1. Prevention

The Code One response includes the following prevention strategies.

General Strategies

The controls noted in “Code Zero”, such as basic hygiene, working with private health care providers to receive vaccinations and enhanced educational efforts, are also critical prevention strategies that need to be followed by all members of the college community. *At this point, the College may opt to suspend classes or at least public activities such as sporting events, as a precautionary measure to limit close contacts between students, thus minimizing disease transmission.*

Recognizing that a “social distancing” strategy could be enforced by local public health at any time, and that travel restrictions could conceivably be part of that strategy, getting students away from the campus and dispersed to their homes could be important to do while travel is possible.

College Sponsored Travel

- To the greatest degree possible, Departments will be asked to stop authorizing sponsored travel for students or staff to any areas with CDC travel advisories for the identified pandemic.

If an individual believes there is a compelling college-related reason for travel to these areas, he/she must notify his/her chair, Dean, or Vice President, who will inform the

President of this travel. The Health Center should also be notified. Travel without such approval will not be reimbursed from college budgets.

- BSC students and staff currently in those areas with CDC travel advisories will be provided with as much information and assistance as possible, including website access to updates and information available from the CDC, the WHO, public health officials and the State Department. Students and staff returning from these areas will be asked to contact the Health Center for symptom review checks and possibly a number of days of voluntary quarantine and medical surveillance.
- Recognizing voluntary personal travel can occur at any time, the college will strongly urge all employees and students to avoid nonessential travel to any areas for which CDC has established Travel Advisories and Alerts. College employees and/or students who travel to any of the high-risk areas subject to travel alerts or travel advisories from the CDC have access to the information for travelers available on the CDC website (<http://www.cdc.gov/ncidod/>), and can contact the Health Center to schedule a personal consultation for pre-travel health advice and preparation. In addition, local public health officials will have updated information regarding international travel.

2. Protection

- Departments who have an employee or student returning from a pandemic-affected region may be required to have their colleagues contact the Health Center to complete a health status questionnaire, and monitor his/her health status carefully for a number of days after returning. No one may come to or remain at work or classes or activities, or engage in any contact with other persons if fever or respiratory symptoms develop, and the Health Center may need to be contacted immediately.
- Transmission of pandemic infections may be more likely among people living together when opportunities for close personal contact increase. Any individual who wishes to reside in MountainView (contracted housing) and who has been in an pandemic-affected region for which there is either a CDC Travel Advisory or a CDC Travel Alert, as described in the travel criteria of the current U.S. Centers for Disease Control and Prevention (CDC) case definition, will be provided accommodations at MountainView ***ONLY IF ALL THE FOLLOWING CONDITIONS ARE MET:***

- He/she is completely symptom-free when arriving on campus.
- He/she can certify to the college's satisfaction and provide credible documentation that he/she has been out of the pandemic-affected country/ countries for at least seven days prior to arriving on campus. (Documentation may include ticket stubs, passports, and visa information.)
- He/she undergoes a mandatory health screening at the Health Center or another approved college facility.
- He/she receives and certifies that he/she understands information about the college procedures regarding pandemic events and local health services available to him/her should any illness symptoms develop while at BSC.

Any individual who does not meet these requirements at check-in will not be allowed to reside in BSC contracted housing. Those individuals who do not meet the foregoing criteria and who feel there are extenuating circumstances that should be reviewed must contact the Health Center for such a review, guidance and assessment.

- The college is using CDC definitions and local health department guidance in determining what constitutes “*close personal contact*” for purposes of establishing appropriate risk reduction procedures. Based on that input, examples of close contact include kissing or embracing, sharing eating or drinking utensils, close conversation, and any other direct physical contact between persons. Close contact generally does not mean the casual contact typified by attending the same class or meeting or walking by a person.

- Transmission of pandemic infections is more likely among health care providers having close personal contact with infected patients. To reduce the potential for transmission among those college employees, the Health Center will have implemented infection control mechanisms, including designated screening areas and the use of personal protective equipment by those providers having close contact with potentially infected patients in the clinical setting. In addition, surgical masks will be offered to any person who is coughing and/or sneezing while in waiting and reception areas of the Health Center, as the masks can minimize the exposure of others to airborne respiratory secretions and illness due to other common respiratory infections (influenza, pertussis, tuberculosis, etc).

3. Essential Services Preparation

The completion and continuation of the preparations outlined in Code Zero, and detailed in unit response plans should be considered the foundation on which Code One preparation builds. In addition to Code Zero actions, the following actions are needed at level one.

BSC Code One Responsibility Matrix

<i>Responsible Unit</i>	<i>Critical Control Action Strategies</i>
<i>President, President’s Staff, and Cabinet</i>	<ul style="list-style-type: none"> • Review updates and reports by the President’s office on the continuing prevention and preparation activities conducted by college officials and staff.
<i>President/Vice President for Academic Affairs</i>	<ul style="list-style-type: none"> • Determine type of campus wide suspension and potential travel restrictions and give directives to college leadership. • Implement requirement for tracking absenteeism. • Determine type of campus wide suspension and potential travel restrictions and give directives to college leadership. • Request campus units update business continuity plans and put critical action plans in place.
<i>Advisory Committee on Communicable Disease (ACCD)</i>	<ul style="list-style-type: none"> • Provide guidance to Administration and organizational units through the communicable disease management plan.
<i>Food Services and Student Housing</i>	<ul style="list-style-type: none"> • Ensure plans are in place to prepare for a potential college closure. • Provide up-to-date communication to employees and Residence Advisors regarding the threat, prevention, and treatment of the pandemic infection. • Confirm procedures for potential student evacuation. • Create an emergency staffing plan to attend to students’

<p><i>Food Services and Student Housing (continued)</i></p>	<p>needs.</p> <ul style="list-style-type: none"> • Identify rooms and/or buildings to house students unable to vacate. • Identify locations for sick students requiring isolation and quarantine. Identify a way to monitor students' health. • Provide information for students and employees regarding basic health practices. • Place informational posters on residential bulletin boards and in restrooms. • Provide essential training to staff requiring close contact with isolated and/or quarantined students. • Identify and gather supplies needed to carry out emergency plan. • Prepare a Food Distribution Team for potential future action. • Ensure food delivery process is planned and delivery supplies are on hand. • Identify protective equipment needed for staff and residents and begin to stockpile protective and sanitary equipment. • Purchase and store recommended equipment and supplies in several storage sites. • Assure appropriate supplies for students and staff, including packing boxes, tags, protective face masks for implementing respiratory protection and cough etiquette, N-95 respirators, ethanol-based hand sanitizer, and food transport supplies. • Identify essential food service personnel and develop plan for sufficient presence during an epidemic.
<p><i>Health Center</i></p>	<ul style="list-style-type: none"> • Track carefully incidence of respiratory illness. • Assure staffing and PPE programs are in place.
<p><i>Deans</i></p>	<ul style="list-style-type: none"> • Review updates and reports by the President's office on the continuing prevention and preparation activities. • Intensify good hand and cough hygiene practice information communication. • Universal posting of information. • Review suspended operations measures, modify if necessary. • Develop telecommuting practices for staff not needed on campus. • Encourage telecommuting planning for non-essential employees.
<p><i>Emergency Management</i></p>	<ul style="list-style-type: none"> • Identify alternate campus staff or volunteers to supplement staff.
<p><i>Facilities Services</i></p>	<ul style="list-style-type: none"> • Implement business continuity plan. • Assure all staff have appropriate PPE, training, testing. • Confirm vendors and contracts are firm for waste handling.

<i>Human Resources/President's Cabinet</i>	<ul style="list-style-type: none"> • Confirm that units identified as essential have business continuity plans in place and backup plans for provision of essential service. • Work to address any HR concerns that may arise. • Launch preplanned communication campaign to remind employees of personal hygiene practices and to encourage that essential employees receive vaccination for current “normal” influenza strain(s) and any other vaccinations applicable.
<i>Purchasing</i>	<ul style="list-style-type: none"> • Work with major emergency and operational units to order additional emergency response, medical and mass-care supplies and equipment. • Contact key vendors (medical supplies, food, water and personal care supplies) to ensure timely delivery or critical supplies.
<i>Communications/IT</i>	<ul style="list-style-type: none"> • Review updates and reports by the President's office on the continuing prevention and preparation activities. • Intensify good hand and cough hygiene practice information communication. • Universal posting of information. • Review suspended operations measures, modify if necessary.
<i>News and Media Relations</i>	<ul style="list-style-type: none"> • Maintain liaisons for coordinated delivery of community messages in the event of an emergency; • Revise as necessary “canned”, ready-to-go templates for news releases.
<i>Public Safety</i>	<ul style="list-style-type: none"> • Be ready to enforce suspended operations • Be ready to provide oversight of quarantine/isolation restrictions on access • Coordinate with other law enforcement jurisdictions.
<i>Athletic Department</i>	<ul style="list-style-type: none"> • Continue to review travel/game schedule to identify pandemic event implications. • Ensure athletes, where medically applicable and advised by CDC, have received appropriate vaccinations. • Review updates and reports by the President's office on the continuing prevention and preparation activities. • Intensify good hand and cough hygiene practice information communication. • Universal posting of information. • Review suspended operations measures, modify if necessary. • Re-train all coaching staff on pandemic plan to avoid scheduling practices during elevated risk periods.
<i>Department Heads</i>	<ul style="list-style-type: none"> • Cross-train critical personnel necessary to maintain operations during elevated pandemic conditions. • Revise, as necessary, written procedures to assist stand-by personnel in the performance of necessary tasks in the event

<i>Department Heads (continued)</i>	the primary person responsible for the task cannot come to work.
-----------------------------------------	------------------------------------------------------------------

CODE “TWO” RESPONSE PLAN

CODE TWO RESPONSE: MOBILIZE

Code Two Risks and Critical Control Strategies

(Code Two coincides with the WHO level 5 phase for a pandemic alert, which indicates there is significant human to human transmission occurring. For BSC, this means that there are suspected or confirmed cases of the pandemic infection on the campus or in the community.)

Risk Assessment Summary:

If a member of the college community has become a suspect or actual case of the identified pandemic infection, the potential exists for rapidly introducing this infection into the college environment.

The ease of transmission of the illness by close contact between individuals allowing the droplet spread of the disease will quickly multiply the number of campus cases.

The rapidly increasing numbers of sick staff will compromise the delivery of essential services.

There is a high likelihood that members of the campus community will be sick and/or have family members sick. In the early stages of the infection, there may be symptoms similar to other infections which will complicate control measures.

Emotional and mental health issues will rise as staff and students face the reality of coping with severe loss of family, friends, and colleagues.

There could be the risk of civil unrest on the campus, particularly for potential backlash caused by involuntary confinement.

There will be shortages of vendor supplied materials, food, and support services as vendors also face labor shortages.

Critical Control Strategies

The controls used for previous levels must be maintained and strengthened at this stage.

Public health authorities may issue specific directives for quarantine, isolation and social distancing. In the latter case, if it has not already done so, the college may suspend operations and limit all activities except the provision of essential services defined as necessary.

1. Prevention

- The college may suspend operations, including public activities such as sporting events, as a precautionary measure to limit close contacts between students, thus minimizing disease transmission. In the event of a confirmed campus case of the pandemic infection, the campus may go under full suspended operations and only staff essential for maintaining the facilities infrastructure. Public health response teams may be working on campus.
- Departments will be asked to assure that their visitors to any campus facility, who are arriving from the geographic areas where the CDC has established travel advisories or alerts contact the Health Center or the other designated clinical facilities, upon arrival. At that time, and preferably through telephone contact, the visitor will receive a symptom

review and receive further health information regarding health monitoring and appropriate actions to take should symptoms compatible with the pandemic infection become evident while the visitor is at the college. The college will link the visitor with the local public health authorities in the event that identified symptoms are evident at the time of screening.

- Individuals showing those symptoms will be excluded from campus activities/facilities, and referred to public health authorities.
- Students who show those symptoms will be excluded from campus activities, and referred to medical and public health authorities. Should isolation be needed outside a medical care facility, the student will be requested to enter the campus isolation facility and be monitored by campus health authorities, if access to permanent home is not possible.
- A person who has been in a situation where he/she has been potentially exposed to an infected patient and who develops fever or respiratory symptoms within seven days of arrival at the college should immediately call the Health Center. The person should share his/her travel history and symptoms with the health-care provider and avoid all close contact with others, and practice voluntary quarantine and not go to work, school, or public areas until the health-care provider has assessed the person's health condition.

2. Protection

- In the event that a college employee or student is having symptoms consistent with the pandemic infection, that person should follow the CDC guidelines. Employees should contact their supervisors and report the illness as they would do with any absence due to any infectious disease. This notification will allow the providers and campus officials to use the necessary and appropriate personal protective equipment when interacting with the employee or student as well as help gauge the spread of the epidemic.
- Any person who becomes symptomatic within seven days after travel to an area with community transmission of the pandemic or contact with an infected patient should stay in his/her room as much as possible. A symptomatic person should not come to class, report to work, or engage in any public activities where there could be contact until that person has been without symptoms (and not taking medications to mask the symptoms) for the period of time recommended by the CDC.
- Recognizing that MountainView provides housing for a number of resident students, the college has assessed its facilities and has identified acceptable housing that would be used to quarantine or isolate resident students who do not require hospitalization but are unable to return home. This housing will be readied as needed.
- The college, including the Health Center, has an established protocol and liaison for collaborating and working with local and state public health departments for communicable disease events.
- The college developed materials for and links with several information and communication resources will be available on a designated website as needed in the event of a pandemic event.
- Units performing essential services will implement first stage disease avoidance strategies including social distancing strategies.

3. Essential Services Preparation

Continue with work in Code Zero and One and add the following:

BSC Code Two Responsibility Matrix

<i>Responsible Unit</i>	<i>Critical Control Action Strategies</i>
<i>President, President's Staff, and Cabinet</i>	<ul style="list-style-type: none"> • Receive regular updates and reports on campus activities, restrictions and suspension of operations, via "virtual" meetings • Be cognizant of business continuity issues.
<i>President/Vice President for Academic Affairs</i>	<ul style="list-style-type: none"> • Encourage teleconferencing and on-line courses.
<i>Advisory Committee on Communicable Disease (ACCD)</i>	<ul style="list-style-type: none"> • Monitor the spread of the pandemic event and provide all departments with up-dated information. • Develop ad-hoc policies and official statements for review and dissemination by the President's Cabinet.
<i>Food Services and Student Housing</i>	<ul style="list-style-type: none"> • Based on directives from local health officials and the College concerning the official college-wide restrictions/closures, MountainView will send notices to student residents with appropriate instructions. • The Quarantine and Isolation units at MountainView may be prepared for potential use. • The Food Distribution and Cleaning teams at MountainView will be activated and put on stand by. • Training and equipping of staff with personal protective equipment will be finalized. • Arrangements will be confirmed with vendors regarding uninterrupted delivery of food and supplies. • Hospital grade cleaning and infection control will be instituted in the residence areas, as well as quarantine and isolation facilities, if activated.
<i>Health Center</i>	<ul style="list-style-type: none"> • Work with local public health authorities as appropriate.
<i>Deans</i>	<ul style="list-style-type: none"> • Encourage teleconferencing and on-line courses. • Restrict number and type of meetings face to face. Encourage teleconferences.
<i>Emergency Management</i>	<ul style="list-style-type: none"> • Identify alternate campus staff or volunteers to supplement staff.
<i>Facilities Services</i>	<ul style="list-style-type: none"> • Activate staff back up plans.
<i>Human Resources/President's Cabinet</i>	<ul style="list-style-type: none"> • Work to address any HR concerns that may arise. • Restrict number and type of meetings face to face. Encourage teleconferences. • Work with operational departments to ensure adequate staffing of critical business continuity functions. • Serve as resource to answer questions and respond to HR issues that arise.

<i>Purchasing</i>	<ul style="list-style-type: none"> • Review staffing levels and adjust hours and backup. Consider multiple shifts. • Monitor and correct supplies and supply pipeline as needs change.
<i>Communications/IT</i>	<ul style="list-style-type: none"> • Review updates and reports by the President’s office on the continuing prevention and preparation activities.
<i>News and Media Relations</i>	<ul style="list-style-type: none"> • Maintain liaisons for coordinated delivery of community messages in the event of an emergency. • Revise as necessary “canned”, ready-to-go templates for news releases.
<i>Public Safety</i>	<ul style="list-style-type: none"> • Be ready to enforce suspended operations. • Be ready to provide oversight of quarantine/isolation restrictions on access • Coordinate with other law enforcement jurisdictions.
<i>Athletic Department</i>	<ul style="list-style-type: none"> • Restrict number and type of meetings face to face. Encourage teleconferences.
<i>Department Heads</i>	<ul style="list-style-type: none"> • Restrict number and type of meetings face to face. Encourage teleconferences.

CODE “THREE” RESPONSE PLAN

CODE THREE RESPONSE: SUSTAIN

Code Three Risks and Critical Control Strategies

(Code Three at the college coincides with the WHO pandemic alert phase #6, which indicates there is efficient and sustained human-to-human transmission.)

Risk Assessment Summary:

At this level, it is anticipated that a major world wide pandemic and regional epidemic is impacting the population at a level that parallels the crises presented by the 1918 Influenza pandemic. This could result in a prolonged mass casualty event, which will disrupt critical infrastructure, essential services, and delivery of supplies. Most businesses, including the college will be facing absenteeism rates ranging from 10 to 50% at different periods, and a second or third wave of absenteeism is likely. The ability to maintain the college’s infrastructure, provide classes, and conduct business will be challenged, and the business continuity plans will need to be implemented.

The stress of multiple waves of pandemic illness may require that BSC provide crisis-intervention and other support services for staff and students who must face the loss of family, friends, and co-workers, which will strain available resources. At some point, there may be a need to formalize the horrendous losses through some type of specialized memorial meeting/service.

The scarcity of supplies could cause civil unrest on the campus.

The limited support services from the community could cause interruptions in the hazardous, solid, and infectious waste contracting, increasing the accumulation of such wastes on campus, and potentially increasing vector control problems.

Critical Control Strategies:

1. Prevention

The preventive activities detailed in previous response levels will be continued.

2. Protection

The protection strategies of the previous response levels will need to be continued at this time.

3. Essential Services Preparation

The activities outlined previously will need to be sustained by the organizational units, while fully implementing business continuity planning.

IV. FOR MORE INFORMATION

Pandemic information is routinely being updated on several web sites listed below.

CDC website: <http://www.cdc.gov/ncidod/>

Travel information from CDC: <http://www.cdc.gov/travel/>

V. COMMON TERMS / DEFINITIONS

Antiviral: A medication that may be used to treat people who have been infected by a virus to help limit the impact of some symptoms and reduce the potential for serious complications. People who are in high risk groups are often given antiviral drugs because of their increased potential to develop additional health issues.

Avian Flu: A highly contagious viral disease with up to 100% mortality in domestic fowl caused by influenza A virus subtypes H5 and H7. All types of birds are susceptible to the virus but outbreaks occur most often in chickens and turkeys. The infection may be carried by migratory wild birds, which can carry the virus but show no signs of disease. Humans are only rarely affected.

ACCD: BSC Advisory Committee for Communicable Disease

CDC: United States Centers for Disease Control and Prevention

Isolation: The physical separation of a person suffering from an infectious or contagious disease from others in a community.

H1N1: 2009 H1N1 (referred to as “swine flu” early on) is a new influenza virus causing illness in people. This new virus was first detected in people in the United States in April 2009. This virus is spreading from person-to-person worldwide, probably in much the same way that regular seasonal influenza viruses spread. On June 11, 2009, the World Health Organization (WHO) signaled that a pandemic of 2009 H1N1 flu was underway.

H5N1: A variant of an influenza virus that occur naturally among wild birds. Low pathogenic AI is common in birds and causes few problems. H5N1 is highly pathogenic, deadly to domestic fowl, and can be transmitted from birds to humans. There is no human immunity and no vaccine is available. It was first identified in Italy in the early 1900s and is now known to exist worldwide.

Quarantine: The physical separation of healthy people who have been exposed to an infectious disease for a period of time from those who have not been exposed.

Pandemic: The worldwide outbreak of a disease in humans in numbers clearly in excess of normal.

Pandemic Flu: Pandemic flu is virulent human flu that causes a global outbreak, or pandemic, of serious illness. Because there is little natural immunity, the disease can spread easily from person to person.

Panzootic: The worldwide outbreak of a disease in animals in numbers clearly in excess of normal.

Seasonal Flu: A respiratory illness that can be transmitted person to person. Most people have some immunity, and a vaccine is available. This is also known as the common flu or winter flu.

Social Distancing: A disease prevention strategy in which a community imposes limits on social (face-to-face) interaction to reduce exposure to and transmission of a disease. These limitations could include, but are not limited to, school and work closures, cancellation of public gatherings and closure or limited mass transportation.

Travel Advisory: Where an outbreak of a disease is occurring in a geographic area, and there is a recommendation against nonessential travel to the area.

Travel Alert: Where an outbreak of a disease is occurring in a geographic area, and there is no recommendation against nonessential travel to the area, although recommendations regarding personal health protection in such settings are available.

Vaccine: An injection, usually of an innocuous (weak or killed) form of the virus, that stimulates the production of antibodies by the immune system to help prevent or create resistance to an infection. Vaccines are usually given as a preventive measure.

WHO: World Health Organization

Attachment #1:

WHO Pandemic Phases linked with BSC Response Levels

(Reference: www.cdc.gov/flu/pandemic/phases.htm)

WHO level		BSC Code		Activities
1	No virus	Code 0	Plan/Surveillance	Code 0 goes along with the WHO levels 1,2,3 whereby the campus is at an increasing risk for infection. The college at this level only faces potential risk. At this level prevention and surveillance are of the utmost importance. Communication of common sense ideas for controlling the spread of disease is stressed. Posters, BSC Home Page, the Marquee will be utilized for important communication regarding ways to prevent spreading the disease, monitoring campus activities, and alerting the campus of the level of alert. Prevention: includes cleaning, having available supplies and maintaining attendance and reporting. Surveillance. Snapshots of attendance will be taken by instructors for selected classes three (3) times a week and this information is to be reported to the Vice President for Academic Affairs. The Health Center will monitor WHO levels, CDC reports, K-12 areas schools status, results from reported
2	Increased H2H cases	Code 0	Plan/Surveillance	
3	Human spread with regional sporadic cases	Code 0	Plan/Surveillance	

				cases at the Health Center, and state health department. The results of this surveillance will also be reported to the Vice President for Academic Affairs on a daily basis.
4	Community level outbreak	Code 1	Prepare/ Surveillance	Code 1 correlates with the WHO level 4 where the college is at an increased risk. At this level, based on information submitted to the Vice President for Academic Affairs, classes, sporting events or any other event may be suspended or cancelled. Non-essential travel will be strongly discouraged. Faculty will be asked to become vigilant in visually assessing the classrooms for ill individuals. If the faculty feels a student is ill they will be sent to the Health Center for an evaluation
5	Increased H2H transmission with pandemic eminent	Code 2	Implement/ Surveillance	This is when the actual campus has been affected and the campus will show a compromise in the delivery of essential services. This level correlates with WHO level 5. All previous levels will be followed. Faculty will need to devise creative or innovative ways to continue instruction if classes are not cancelled by utilizing the web or other programs.
6	Pandemic	Code 3	Evaluate/Surveillance	Pandemic level causing disruption and crisis in providing services to the student and correlates to

				level 6 by the WHO. Prevention/ Cleaning and Surveillance will continue as in previous levels.
Post pandemic	Post pandemic	Code 4	Evaluate/Surveillance	Impact Assessment and Gap Assessment done by department to identify needed improvements to the plan.

Attachment #2:

Personal Preparedness

Take these everyday steps to protect your health:

- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- Wash your hands often with soap and water. If soap and water are not available, use an alcohol-based hand rub.
- Avoid touching your eyes, nose or mouth. Germs spread this way.
- Try to avoid close contact with sick people.
- If you are sick with flu-like illness, CDC recommends that you stay home for at least 24 hours after your fever is gone except to get medical care or for other necessities. (Your fever should be gone without the use of a fever-reducing medicine.) Keep away from others as much as possible to keep from making others sick.

Other important actions that you can take are:

- Follow public health advice regarding school closures, avoiding crowds and other social distancing measures.
- Be prepared in case you get sick and need to stay home for a week or so; a supply of over-the-counter medicines, alcohol-based hand rubs, tissues and other related items might be useful and help avoid the need to make trips out in public while you are sick and contagious



What is the best way to keep from spreading the virus through coughing or sneezing?

If you are sick with flu-like illness, CDC recommends that you stay home for at least 24 hours after your fever is gone except to get medical care or for other necessities. (Your fever should be gone without the use of a fever-reducing medicine.) Keep away from others as much as possible. Cover

your mouth and nose with a tissue when coughing or sneezing. Put your used tissue in the waste basket. Then, clean your hands, and do so every time you cough or sneeze.

If I have a family member at home who is sick with 2009 H1N1 flu, should I go to work?

Employees who are well but who have an ill family member at home with 2009 H1N1 flu can go to work as usual. These employees should monitor their health every day, and take everyday precautions including washing their hands often with soap and water, especially after they cough or sneeze. Alcohol-based hand cleaners are also effective. If they become ill, they should notify their supervisor and stay home. Employees who have an underlying medical condition or who are pregnant should call their health care provider for advice, because they might need to receive influenza antiviral drugs to prevent illness. For more information please see General Business and Workplace Guidance for the Prevention of Novel

Influenza A (H1N1) Flu in Workers
(<http://www.cdc.gov/h1n1flu/guidance/workplace.htm>).

What is the best technique for washing my hands to avoid getting the flu?

Washing your hands often will help protect you from germs. Wash with soap and water or clean with alcohol-based hand cleaner. CDC recommends that when you wash your hands -- with soap and warm water -- that you wash for 15 to 20 seconds. When soap and water are not available, alcohol-based disposable hand wipes or gel sanitizers may be used. You can find them in most supermarkets and drugstores. If using gel, rub your hands until the gel is dry. The gel doesn't need water to work; the alcohol in it kills the germs on your hands.

What should I do if I get sick?

If you live in areas where people have been identified with 2009 H1N1 flu and become ill with influenza-like symptoms, including fever, body aches, runny or stuffy nose, sore throat, nausea, or vomiting or diarrhea, you should stay home and avoid contact with other people. CDC recommends that you stay home for at least 24 hours after your fever is gone except to get medical care or for other necessities. (Your fever should be gone without the use of a fever-reducing medicine.) Stay away from others as much as possible to keep from making others sick. Staying at home means that you should not leave your home except to seek medical care. This means avoiding normal activities, including work, school, travel, shopping, social events, and public gatherings.

If you have severe illness or you are at high risk for flu complications, contact your health care provider or seek medical care. Your health care provider will determine whether flu testing or treatment is needed.

If you become ill and experience any of the following warning signs, seek emergency medical care.

In children, emergency warning signs that need urgent medical attention include:

- Fast breathing or trouble breathing
- Bluish or gray skin color
- Not drinking enough fluids
- Severe or persistent vomiting
- Not waking up or not interacting
- Being so irritable that the child does not want to be held
- Flu-like symptoms improve but then return with fever and worse cough

In adults, emergency warning signs that need urgent medical attention include:

- Difficulty breathing or shortness of breath
- Pain or pressure in the chest or abdomen
- Sudden dizziness
- Confusion
- Severe or persistent vomiting

- Flu-like symptoms improve but then return with fever and worse cough

Are there medicines to treat 2009 H1N1 infection?

Yes. CDC recommends the use of oseltamivir or zanamivir for the treatment and/or prevention of infection with 2009 H1N1 flu virus. Antiviral drugs are prescription medicines (pills, liquid or an inhaled powder) that fight against the flu by keeping flu viruses from reproducing in your body. If you get sick, antiviral drugs can make your illness milder and make you feel better faster. They may also prevent serious flu complications. During the current pandemic, the priority use for influenza antiviral drugs is to treat severe influenza illness (for example hospitalized patients) and people who are sick who have a condition that places them at high risk for serious flu-related complications.

Attachment #3

CDC Guidance on the Use of Personal Protective Equipment, Respirators and Face Masks Attachments

Interim Recommendations for Facemask and Respirator Use to Reduce Novel Influenza A (H1N1) Virus Transmission

August 5, 2009 5:00 PM ET

This document has been updated in accordance with the CDC Recommendations for the Amount of Time Persons with Influenza-Like Illness Should be Away from Others . This document provides interim guidance and will be updated as needed

This document provides updated interim guidance on the use of facemasks and respirators for decreasing the exposure to novel influenza A (H1N1) virus. This guidance replaces other CDC guidance on mask and/or respirator use that may be included in other CDC documents in regards to the outbreak of novel H1N1 virus. No change has been made to guidance on the use of facemasks and respirators for health care settings. This document includes guidance on facemask and respirator use for a wider range of settings than was included in previous documents and includes recommendations for those who are at increased risk of severe illness from infection with the novel H1N1 virus compared with those who are at lower risk of severe illness from influenza infection. For more information about human infection with novel influenza A (H1N1) virus, visit the CDC H1N1 Flu website. Other CDC novel H1N1 guidance will be updated with the information contained in this document as soon as possible.

Detailed background information and recommendations regarding the use of facemasks and respirators in non-occupational community settings can be found on PandemicFlu.gov in the document Interim Public Health Guidance for the Use of Facemasks and Respirators in Non-Occupational Community Settings during an Influenza Pandemic. Information on the use of facemasks and respirators in health care settings can be found at http://www.cdc.gov/h1n1flu/guidelines_infection_control.htm.



Information on the effectiveness of facemasks and respirators for decreasing the risk of influenza infection in community settings is extremely limited. Thus, it is difficult to assess their potential effectiveness in decreasing the risk of novel influenza A (H1N1) virus transmission in these settings. In the absence of clear scientific data, the interim recommendations below have been developed on the basis of public health judgment, the historical use of facemasks and respirators in other settings for preventing transmission of influenza and other respiratory viruses, and on current information on the spread and severity of the novel influenza A (H1N1) virus.

In areas with confirmed human cases of novel influenza A (H1N1) virus infection, the risk for infection can be reduced through a combination of actions. No single action will provide complete protection, but an approach combining the following steps can help decrease the likelihood of transmission. These recommended actions are:

- Wash hands frequently with soap and water or use alcohol-based hand cleaner when soap and water are not available.
- Cover your mouth and nose with a tissue when coughing or sneezing.
- Avoid touching your eyes, nose and mouth

- People who are sick with an influenza-like illness (ILI) (fever plus at least cough or sore throat and possibly other symptoms like runny nose, body aches, headaches, chills, fatigue, vomiting and diarrhea) should stay home and keep away from others as much as possible, including avoiding travel, for at least 24 hours after fever is gone except to get medical care or for other necessities. (Fever should be gone without the use of fever-reducing medicine).
- Avoid close contact (i.e. being within about 6 feet) with persons with ILI.

In addition, influenza antiviral medications are an important tool for the treatment and prevention of influenza, including novel H1N1.

Facemasks and Respirators

Recommendations for the uses of facemasks and/or respirators are listed for different settings where a person may be exposed to novel H1N1 virus. These recommendations also differ based on whether the person exposed to novel H1N1 is in a group at increased risk for severe illness from influenza infection. More information on preventing influenza transmission in health care settings can be found in the Interim Guidance for Infection Control for Care of Patients with Confirmed or Suspected Novel Influenza A (H1N1) Virus Infection in a Healthcare Setting.

In community and home settings, the use of facemasks and respirators generally are not recommended. However, for certain circumstances, a facemask or respirator may be considered, specifically for persons at increased risk of severe illness from influenza.

Use of N95 respirators or facemasks generally is not recommended for workers in non-healthcare occupational settings for general work activities. For specific work activities that involve contact with people who have ILI, such as escorting a person with ILI, interviewing a person with ILI, providing assistance to an individual with ILI, the following are recommended:

- workers should try to maintain a distance of 6 feet or more from the person with ILI;
- workers should keep their interactions with ill persons as brief as possible;
- the ill person should be asked to follow good cough etiquette and hand hygiene and to wear a facemask, if able, and one is available;
- workers at increased risk of severe illness from influenza infection should avoid people with ILI (possibly by temporary reassignment); and,
- where workers cannot avoid close contact with persons with ILI, some workers may choose to wear a facemask or N95 respirator on a voluntary basis.

In the occupational healthcare setting, respiratory protection is recommended. Because infection control precautions, including respiratory protection, are imperfect, workers who are at increased risk of severe illness from influenza, and who are caring for a patient with known, probable, or suspected novel H1N1 or ILI, may consider temporary reassignment to avoid exposure.

There are important differences between facemasks and respirators. Facemasks do not seal tightly to the face and are used to block large droplets from coming into contact with the wearer's mouth or nose. Most respirators (e.g. N95) are designed to seal tightly to the wearer's face and filter out very small particles that can be breathed in by the user. For both facemasks and respirators, however, limited data is available on their effectiveness in preventing transmission of H1N1 (or seasonal influenza) in various settings. However, the use of a facemask or respirator is likely to be of most benefit if used as early as possible when exposed to an ill person and when the facemask or respirator is used consistently. (Ref. 1. MacIntyre CR, et al. EID 2009;15:233-41. 2. Cowling BJ, et al. Non-pharmaceutical interventions to prevent household transmission of influenza. The 8th Asia Pacific Congress of Medical Virology, Hong Kong, 26-28 February 2009.)

Facemasks: Unless otherwise specified, the term "facemasks" refers to disposable facemasks cleared by the U.S. Food and Drug Administration (FDA) for use as medical devices. This includes facemasks labeled as surgical, dental, medical procedure, isolation, or laser masks. Such facemasks have several designs. One type is affixed to the head with two ties, conforms to the face with the aid of a flexible adjustment for the nose bridge, and may be flat/pleated or duck-billed in shape. Another type of facemask is pre-molded, adheres to the head with a single elastic band, and has a

flexible adjustment for the nose bridge. A third type is flat/pleated and affixes to the head with ear loops. Facemasks cleared by the FDA for use as medical devices have been determined to have specific levels of protection from penetration of blood and body fluids. Facemasks help stop droplets from being spread by the person wearing them. They also keep splashes or sprays from reaching the mouth and nose of the person wearing the facemask. They are not designed to protect against breathing in very small particle aerosols that may contain viruses. Facemasks should be used once and then thrown away in the trash.

Respirators: Unless otherwise specified, "respirator" refers to an N95 or higher filtering face piece respirator certified by the CDC/National Institute for Occupational Safety and Health (NIOSH). A respirator is designed to protect the person wearing the respirator against breathing in very small particle aerosols that may contain viruses. A respirator that fits snugly on the face can filter out virus-containing small particle aerosols that can be generated by an infected person, but compared with a facemask it is harder to breathe through a respirator for long periods of time. Respirators are not recommended for children or people who have facial hair.

Where respirators are used in a non-occupational setting, fit testing, medical evaluation and training are recommended for optimal effectiveness.

When respiratory protection is required in an occupational setting, respirators must be used in the context of a comprehensive respiratory protection program as required under OSHA's Respiratory Protection standard (29 CFR 1910.134). This includes fit testing, medical evaluation and training of the worker. When required in the occupational setting, tight-fitting respirators cannot be used by people with facial hair that interferes with the face seal.

When respirators are used on a voluntary basis in an occupational setting, requirements for voluntary use of respirators in work sites can be found on the OSHA website.

Employers should continue to evaluate workplace hazards related to the novel H1N1 influenza A situation in accordance with CDC and OSHA guidance. Mandatory use of respiratory protection may be required when work activities in occupational settings confer risk that is task/function based, and risk analyses conducted by the employer could identify hazardous work activities. For example, performing activities which generate large amounts of aerosols require respiratory protection regardless of the setting in which it is performed (i.e. in a hospital, an outpatient setting, a prison).

For additional information on facemasks and respirators, see the CDC/NIOSH website, the Food and Drug Administration website, and the Occupational Safety and Health Administration website.