

Z2: ENVIRONMENT, HEALTH & SAFETY

Draft May, 2007

University of California, Berkeley Influenza Pandemic Emergency Operations Plan Additional Unit Information

This DOC Plan Annex contains additional information specific to Environment, Health & Safety (EH&S) response to a pandemic influenza event. Building upon existing emergency response and business resumption initiatives, this contingency plan will *supplement* the existing campus Emergency Operations Plan (EOP) and Department Operations Center (DOC) Plan.

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I. EXECUTIVE SUMMARY

This Department Operations Center (DOC) Plan annex is developed for Environment, Health & Safety (EH&S) and specifically covers the critical functions and positions, and response actions for our department as they apply to an influenza pandemic scenario.

a. Pandemic Flu Planning Team

The Pandemic Planning Team is responsible for coordinating internal DOC activities to develop a DOC Plan annex for pandemic flu, regular plan review and updates as needed. The Team is charged with keeping information current and available to all EH&S personnel. Additional duties include, but are not limited to, working with University Health Services (UHS) and other campus units as required; evaluating operational needs and appraising EH&S senior management of recommended actions and policies.

EH&S Pandemic Flu Planning Team:

Name	Office Address and Mailcode	Function/Role	E-mail(s)	Office Phone #
Mark Freiberg	317 University Hall #1150	Director	freiberg@berkeley.edu	
Alma Valencia	317 University Hall #1150	Associate Director	alma_v@berkeley.edu	
Steve Maranzana	317 University Hall #1150	Assistant Manager	stevemar@berkeley.edu	
Ave Tolentino	317 University Hall #1150	EH&S Specialist	avert@berkeley.edu	
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II. UNIT RESPONSE CHECKLIST

UC Berkeley Phase	GENERAL UNIT ACTIONS	SPECIFIC UNIT ACTIONS
1 – Pre-Event Planning <i>New virus in animals, no human cases</i>	<ul style="list-style-type: none"> • Develop comprehensive unit plans • Develop and test unit communication plans • Conduct operations test during staff or safety meetings • Check the http://www.uhs.berkeley.edu/pandemicflu/ website regularly for updates and new information • Communicate developments with staff/faculty/students • Refer general questions from staff/faculty/students to http://www.uhs.berkeley.edu/pandemicflu/ • Encourage adoption of hygiene etiquette behavior • Encourage personal preparedness plans for staff/faculty/students 	<ul style="list-style-type: none"> • Assess campus respiratory protection plan and resources • Develop a prioritization and distribution plan for N-95 respirators • Purchase additional mask fit testing equipment • Develop information resources (fact sheets) for PPE (selection/care/use) and cleaning & disinfecting surfaces in conjunction with UHS • Update emergency contact information for EH&S staff (pocket directory) • Work with purchasing to create purchasing accounts to ensuring access to necessary supplies (PPE, response supplies, environmental disinfectants, etc) in the event of vendor supply-chain failure • Review <u>specific procedures</u> included in this comprehensive <u>EH&S DOC Plan Annex</u>
2 – Animal Outbreak of Highly Pathogenic Avian Influenza in North America	<ul style="list-style-type: none"> • Same as 1 • Suspend incoming animal orders • Limit access to animal colonies • Priority setting for health and welfare of research and teaching animals 	<ul style="list-style-type: none"> • Educate all appropriate parties about the details of EH&S Pandemic Plan and Response • Anticipate concerns of clients and create resources to address concerns • Schedule preparedness workshops with expected clients to address concerns • Distribute PPE as directed by the prioritization planning efforts and campus leadership • Cross-train staff for fit-testing and other essential functions • Assess quantity of needed supplies onsite • Establish accounts with vendors
3 – Confirmed Human to Human Outbreak Overseas <i>Evidence of Sustained Human-to-Human Transmission</i>	<ul style="list-style-type: none"> • Same as 2 plus: • Gather unit decision makers for preplanning; review list of critical and noncritical functions for unit • Contact staff/faculty/students on travel – refer to website for additional travel information specific to UC Berkeley • Begin monitoring daily absenteeism of staff/faculty/students 	<ul style="list-style-type: none"> • Same as 2 plus: • DOC members meet regularly (as often as needed) • Conduct a daily census of staff – determine who is on vacation, off-campus and out sick. • Review cleaning & disinfecting procedures to reduce transmission with campus departments • Anticipate increased need for fit-testing of responders • Develop prioritization plan for waste pick-up • Stockpile supplies (list to be determined)

4 – Confirmed Human Outbreak in North America	<ul style="list-style-type: none"> • Same as 3 plus: • Mandate adoption of hygiene etiquette behavior • Hold regular meetings with decision makers • Report to campus EOC: <ul style="list-style-type: none"> ▪ Daily absenteeism reports of staff/faculty/students • At direction of EOC, prepare to activate plans to continue critical functions and implement alternate plans for non-critical functions 	<ul style="list-style-type: none"> • Same as 3 plus: • Activate DOC as directed • Conduct rapid fit-testing and training for essential personnel • Begin periodic checks with vendors to ascertain their ability to function • Acquire and distribute additional PPE (Need to develop PPE distribution priority list) • Serve as consultant for questions for faculty and staff on EH&S issues (including PPE) • Inventory campus oxygen supply and develop a transport plan. UHS will obtain permission from labs to “borrow” the oxygen. • Review/update cylinder transport Job Safety Analysis
5 – Widespread Pandemic Overseas and North America <i>Sustained Transmission = Pandemic*</i>	<ul style="list-style-type: none"> • Same as 4 plus: • Other information as directed by the EOC 	<ul style="list-style-type: none"> • Same as 4 plus: • Redistribute staff as needed • Consult on cleaning of isolation spaces • Consult with the yet to be determined unit that will be tasked with transporting patients to isolation and quarantine • Facilitate oxygen delivery to meet UHS needs (Need to develop an oxygen redistribution plan)
6 – Recovery	<ul style="list-style-type: none"> • Support gradual resumption of instruction, research and business activities • Debriefing and After-Action Reports (including lessons learned) • EOC moves into Recovery mode and determines activation status 	<ul style="list-style-type: none"> • Same as 5

*A Pandemic Severity Index will be applied as an influenza pandemic emerges (see Appendix C).

III. CRITICAL FUNCTIONS

a. EH&S Mission

The mission of EH&S is to provide guidance and services to the UC Berkeley campus community that promote, health, safety, and environmental stewardship.

a.1 OLAC Mission

The mission of OLAC is to provide guidance and services to the research and teaching community with regard to animal care and welfare issues for the Berkeley campus.

b. Critical Functions

The critical functions that are essential to EH&S's mission:

- Health and safety consultation
- Environmental protection
- Hazardous materials management
- Emergency response
- Fire and life safety

The EH&S response to an influenza pandemic will vary depending on the severity and impact of the outbreak. In a severe pandemic scenario, it may not be possible to maintain all critical functions. It is anticipated that the following critical functions will need to be maintained: 1) Health and safety consultation, 2) Hazardous materials management, and 3) Emergency response. Personnel and resources will be diverted, as needed, to sustain these operations.

Procedures for implementing the critical functions identified as priorities are documented in the EH&S DOC Plan and department job descriptions.

Key functions that can be performed off-site (i.e. home, secondary locations):
Consultation
Most office tasks that have online or web-based resources

c. Predicted Areas of Impact

1) Health and Safety Consultations – Providing consultation for compliance with federal, state and local laws and regulations.

Predicted Areas of Impact:

- Increased volume of calls to front desk and e-mails to EH&S and specialists regarding requirements.
- If information request are concentrated on pandemic flu issues, staff may have to re-prioritize work in order to address the concerns. This may involve phone communications, development of new Fact Sheets, or website updates.

This function remains critical if either 1) UC Berkeley travelers arrive on campus from the affected areas and cannot be quarantined or 2) an outbreak occurs in California. If the pandemic scenario is maintained with localized human-to-human transmission OUTSIDE the bay area, concerns will eventually die down and health and safety consultations may become a non-critical function.

Resources Required:

- Subject matter experts and training equipment
- Marketing coordinator
- Training manager and training equipment
- Biosafety Officer
- IT resource for web updates

2) Hazardous Materials Management – pick up of hazardous (chemical, medical/biological and radioactive) waste and proper disposal.

Predicted Areas of Impact:

- Increased requests for biological waste pick up from laboratories.
- Increased requests for inspection to make sure that a laboratory is safe.
- Increased need for training of staff assigned to pick up wastes and to inspect laboratories.

If the requests are overwhelming, waste pick-up can be prioritized by [Hazardous Materials and Radiation Safety Team](#) (HMRS). Critical function can be downgraded to non-critical after pick up of waste and after inspection.

Resources Required:

- Trainer and Biosafety officer
- Necessary training equipment
- Staff who pick up medical waste, truck and carts

Supplies Needed:

- Bags
- Drums
- Labels
- PPE (disposable)
- Respirators and associated supplies (cartridges, disinfecting solutions)

3) Emergency Response – Hazardous materials releases and indoor air quality concerns and related issues e.g., personal protective equipment (PPE) in the workplace.

Predicted Areas of Impact:

- Increase phone calls to the front desk and to technical staff.
- Increase in requests for appropriate respiratory protection (masks) as campus client’s anxiety increases.
- Increase in requests for fit-testing N-95 respirators and training for essential campus personnel on respiratory protection.
- Increased requests for Emergency response services (bio-spills or other).

If emergency response requests overwhelm the EH&S Dedicated Spill Response Team (DSRT), secondary responders will be reassigned to provide assistance.

This critical function can become non-critical when the number of spills decreases due to effective critique sessions with laboratory staff covering prevention, good housekeeping, and procedures in cleaning small releases safely. Another factor to downgrading this critical function is the satisfaction of client requests for respiratory protection (masks). Resources and personnel will be diverted as needed to conduct rapid fit-testing for N-95 respirators and training for essential campus personnel on respiratory protection.

Resources Required:

- Training manager
- Needed equipment.
- DSRT coordinator

Supplies Needed:

- Stockpile of PPE
- One (1) additional fit-testing machine

d. Essential Positions

Personnel in the following roles have been cross trained to provide leadership for the three critical functions identified as high priorities:

High Priority Critical Function:	Position/Job Classification:
Compliance with appropriate federal/state laws and regulations.	1. Associate Director – Health and Safety Team (Brandon DeFrancisci) 2. Associate Director – Hazardous Materials and Radiation Safety Team (Pat Goff) 3. Associate Director – Environmental Protection Team (Greg Haet)

	4. Director/Assistant Director – Office of Laboratory Animal Care (Helen Diggs/Quig Driver)
Proper hazardous waste pick-up and disposal.	1. Associate Director – Hazardous Materials and Radiation Safety Team (Pat Goff) 2. Assistant Manager – Hazardous Materials and Radiation Safety Team (Hazardous Materials - Phil Kruse) 3. Assistant Manager – Hazardous Materials and Radiation Safety Team (Radioactive Materials - Julia Ryan)
Emergency Response (PPE).	1. Dedicated Spill Response Team 2. Dedicated Spill Response Team 3. Dedicated Spill Response Team

IV. UNIT COMMUNICATIONS PLAN

a. Communications Liaisons

The EH&S Communications Liaisons are responsible for gathering internal and external communications and distributing the information to both internal and external campus units (including campus administration and other DOCs). The liaisons are also responsible for ensuring that all members of the department receive current and accurate information regarding pandemic flu.

EH&S/OLAC Communications Liaisons:

Name	Office Address and Mailcode	Function/Role	E-mail(s)	Office Phone #
Mark Freiberg	317 University Hall #1150	Director	freiberg@berkeley.edu	
Alma Valencia	317 University Hall #1150	Associate Director	alma_v@berkeley.edu	
Brandon DeFrancisci	317 University Hall #1150	Associate Director	defran@berkeley.edu	

Helen Diggs	203 NAAF #7150	Director	hdiggs@olac.berkeley.edu	
Quig Driver	4203 NAF #7150	Assistant Director	qdriver@olac.berkeley.edu	

b. Principal Stakeholders and Audiences

The principal stakeholders and audiences that EH&S will need to communicate with in the event of pandemic flu include:

- EH&S Staff
- OLAC Staff
- Department Safety Coordinators
- Building Coordinators
- University Health Services (UHS)
- UC Police Department (UCPD)

c. Modes of Communication

To communicate urgent information with the principal stakeholders previously identified, EH&S will utilize high priority email and phone messages.

Less timely information will be distributed via regular email, phone messages and paper memos. Information will also be posted on the EH&S website (<http://www.ehs.berkeley.edu/>).

V. ACTION STEPS PENDING

1) Health and Safety Consultations – Providing consultation for compliance with federal, state and local laws and regulations.

Action Plan:

- Anticipate concerns of clients and list them and the answers to those concerns.
- Schedule preparedness workshops with expected clients to address concerns.

2) Hazardous Materials Management – pick up of hazardous (chemical, medical/biological and radioactive) waste and proper disposal.

Action Plan:

- Train more staff to meet increased requests for waste pick-up.
- Establish relation with medical waste contractor to increase frequency of pick up of waste from campus as necessary.

- Stockpile bags, drums, appropriate PPE to be ready when needed.
- Outline waste pick-up prioritization scheme if all requests cannot be met.

3) Emergency Response – Hazardous materials releases and indoor air quality concerns and related issues e.g., personal protective equipment (PPE) in the workplace.

Action Plan:

Laboratories

- Train responders to conduct thorough and effective critique sessions with laboratory staff of affected locations.
- Recommend that laboratory staff stockpile appropriate absorbents and other supplies in preparation for spills.
- Continue to train the DSRT and alternate responders on proper spill cleanup procedures.

PPE

- Determine amount of PPE for stockpiling.
- Determine secure location for storing PPE stockpile.
- Secure vendors for obtaining PPE.
- Develop a prioritization and distribution plan for PPE.
- Cross-train staff for N-95 respirator fit-testing.
- Purchase one (1) additional fit-testing machine.

Information Resources

- Develop fact sheets.
 - Hazards of pandemic flu
 - Cleaning and disinfecting standards
 - Respiratory protection