

ANNEX PHEP
Public Health Emergency Plan
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Introduction

The UCSF Emergency Operations Plan (EOP) is an all hazards plan. This Public Health Emergency Plan (PHEP) serves as an Annex to the EOP. It is beyond the scope of an emergency operations plan to specifically address the public health and medical characteristics, prevention, treatment, and control of all diseases capable of causing a pandemic or widespread public health emergency and disrupting UCSF's mission or critical infrastructure.

In the development of this Plan, it recognizes public health and medical information, guidelines and response strategies issued by lead Federal, State and local public health agencies/authorities responsible for the emergency response are likely to evolve during the course of the emergency. Therefore, this Plan will outline the University's core emergency coordination and response components to a public health emergency.

As a general public health emergency plan the Annex PHEP provides a response framework applicable to naturally occurring public health emergencies (Pandemics, Epidemics, communicable disease outbreaks) as well as acts of Bioterrorism.

Unlike geologic or weather-related disaster planning which focuses on a discrete event, public health emergencies, specifically pandemic events are expected to have worldwide impact with an unpredictable timeline, possibly occurring in multiple waves over 18 months or longer. Disruptions are likely in critical infrastructure including communications, transportation, and utilities. Public health emergencies have the potential to disrupt the health care, research, service and educational missions of UCSF.

UCSF is a global enterprise with staff living and working throughout California, the United States, Europe, Asia, and South America. In addition to fixed national and international locations where UCSF personnel may be assigned, UCSF faculty, staff, and learners travel throughout the world in the course of short-term projects, business, and lectures.

The UCSF Emergency Operations Center (EOC) Director has emergency management responsibility for the UCSF Enterprise therefore takes into consideration the national and global implications of public health emergencies as they impact or threaten UCSF faculty, staff, and learners, wherever their work location may be.

In the event of an actual or potential public health emergency, subject matter experts from the medical center and campus will be appointed to a Technical Advisory Group (TAG). The EOC director will consult with the TAG and UCSF Medical Center Chief Medical Officer on all public health strategies and public information messages applicable to the UCSF Enterprise. (See [Communication Algorithm](#))

Overview to Plan

The Public Health Emergency Plan provides guidance to the EOC Staff and EOC Policy Group in coordinating an enterprise-wide emergency response to a pandemic outbreak or other communicable disease emergencies that threaten the critical infrastructure, resources and functions of the UCSF Enterprise.

The Public Health Emergency Plan does not supersede the UCSF Medical Center Outbreak Response Plan developed to guide the hospital's response in the provision of patient care. Instead, the enterprise-wide plan is intended to be synergistic with the Medical Center Outbreak Response Plan and address enterprise-wide issues that the Medical Center's Outbreak Plan may not address.

Objectives

This UCSF enterprise-wide Public Health Emergency Plan strives to address the following objectives:

- Protect and support the health, safety and welfare of our faculty, staff, students and affiliates as well as the assets and property of the university;
- Protect and support the university's mission to provide teaching, research and service, as long as possible;
- If any university operations must be suspended, interrupted or are in any way impacted, recover from these disruptions as quickly and efficiently as possible;
- Establish a multi-modal method to communicate with the campus and community and UCSF personnel Enterprise-wide;
- Establish benchmarks or "triggers", in advance of a pandemic, to signal university response or alternative actions;
- To the extent feasible, extend the services or expertise of the Enterprise to San Francisco and larger regional community.

Scope and Limitations

The UCSF Medical Centers (Moffitt Long, Mt Zion, and Children's Hospitals) maintain incident management teams, which report and coordinate emergency response operations through the Hospital Command Center (HCC). The HCC coordinates directly with the San Francisco Department of Public Health's Departmental Operations Center for health and medical resources. The Medical Centers provides pandemic or communicable disease subject matter experts to the Technical Advisory Groups (TAG) which provides health and medical advice to the UCSF EOC in how the Enterprise may respond to the Pandemic or communicable disease outbreak (Refer to Technical Advisory Group Annex).

It is beyond the scope of this Plan to identify and describe each communicable disease that poses a risk of becoming a Pandemic and the surveillance, prevention, prophylaxis strategies, which may be employed for each. Therefore, the Enterprise EOC Incident Management Team will look to the UCSF Medical Center and Campus Public Health Officer to monitor and review the critical sources of public health emergency management information and advise the appropriate EOC Command and General Staff. Case definitions are generally made through the Center for Disease Control (CDC).

The Medical Center and Technical Advisory Group should strive to frame its recommendations in terms of strategies applicable to the City/County of San Francisco, San Francisco Bay Area, State, and Nation. The TAG should include Global Health Sciences and Risk Management (utilizing the University's international travel assistance contractor) in developing recommendations applicable to countries in which UCSF has personnel living/working, studying or traveling to or from.

Should the national or global consequences of the pandemic or communicable disease outbreak, exceed the resources of the Medical Center & TAG to adequately address location specific public health strategies, the Enterprise EOC Director may need to defer to State Health Department, CDC and or WHO recommendations for UCSF interests located outside of the City & County of San Francisco.

UCSF is classified as a local government by the San Francisco and State emergency management agencies. As such the enterprise EOC scope of responsibility takes into consideration how it implements emergency public health strategies in relation to:

Critical Infrastructure: Communicable disease control and prevention strategies and information may need to address worksite and workforce needs specific to Critical Infrastructure as well as general public health information for the UCSF Community. (Refer to Critical Infrastructure Annex)

Operational Areas (Counties): UCSF public health information and recommendation disseminated within the Counties of Alameda, Fresno, and/or San Francisco, will be coordinated with local operational area, State, and Federal officials' represented in a Joint Information Center. Similarly, campus strategies for vaccinations, personal protective measures, or other preventative and safety measures will be in compliance with measures taken by local, state and federal emergency management and public health authorities.

Statewide/Nationwide: Strategies for vaccinations, personal protective measures, or other preventative and safety measures outside of San Francisco County may need to be modified and based on State Health Departments, CDC or WHO guidelines, with instructions to UCSF personnel located domestically but outside of San Francisco to refer to their local health department's recommendations.

International: The UCSF EOC, in consultation with the TAG, Global Health Sciences, and Risk Management (utilizing the University's international travel assistance

contractor) will advise overseas personnel regarding precautions they should take which may include host nation public health recommendations, WHO or CDC, and/or State Department recommendations. UCSF may recommend personnel traveling overseas (or planning to travel) return to UCSF (or cancel travel plans).

UCSF Critical Infrastructure

In a pandemic or major communicable disease outbreak, the Enterprise may need to prioritize the distribution of resources (vaccines, antivirals, antibiotics, personal protective equipment) to those personnel essential to maintaining Critical Infrastructure, Services and Functions.

In a pandemic or other public health emergency, Federal and State emergency management agencies may provide supplies to local governments and agencies for use in protecting critical infrastructure. It is important therefore for UCSF to be ready to identify and quantify its critical infrastructure when required in order to receive supplies of limited resources. (Refer to Critical Infrastructure Annex [Secured Document])

Critical Infrastructure includes Physical assets, *including people*, whose incapacity or destruction would have a debilitating impact on the economic or physical security of the UCSF Enterprise.

Critical Services are those services without which a building would be “disabled” such as utilities (water, gas, electric, etc.) and standby power systems, environmental control systems or communication networks.

Critical Functions: Critical operational and/or UCSF business support functions include those that could not be interrupted or unavailable for more than a mandated or predetermined timeframe without significantly jeopardizing the University (i.e.; Payroll, Human Resources - Staffing, Office of Academic and Administrative Information Systems (OAAIS), academic records, critical research.)

The Critical Infrastructure Annex of the UCSF Emergency Operations Plan identifies critical infrastructure necessary in enabling the University’s response and recovery to emergencies. Additionally the *Departmental Pandemic Influenza Contingency Planning* (Appendix P) provides guidelines to the UCSF Control Points and their Divisions and Departments on contingency plans they should develop as part of their Business Continuity Plan in the event non-critical UCSF functions and services should be suspended.

Essential Personnel

During a pandemic or communicable disease outbreak UCSF Division and Departments may need to identify Essential Personnel. Essential Personnel are most likely the same categories of personnel or individuals identified under Critical Infrastructure. Departmental and Division Business Continuity Plans should also list essential personnel by name.

Technical Advisory Group (TAG)

The Technical Advisory Group serves as a subject matter expert advisory team to the UCSF EOC on the health, medical, environmental and veterinary impacts or threats from public health (epidemic and pandemic), bio-safety, chemical, biological, nuclear, radiologic, or Zoonotic emergencies.

The TAG will be comprised of subject matter experts from the Medical Center and/or Campus depending upon the specific pandemic or communicable disease threat.

The TAG recommends strategies and tactics for the University's response and recovery and may assist Public Information/Media with Communication public health and medical strategies and risks regarding emergency. (Refer to Technical Advisory Group Annex for description of functions.)

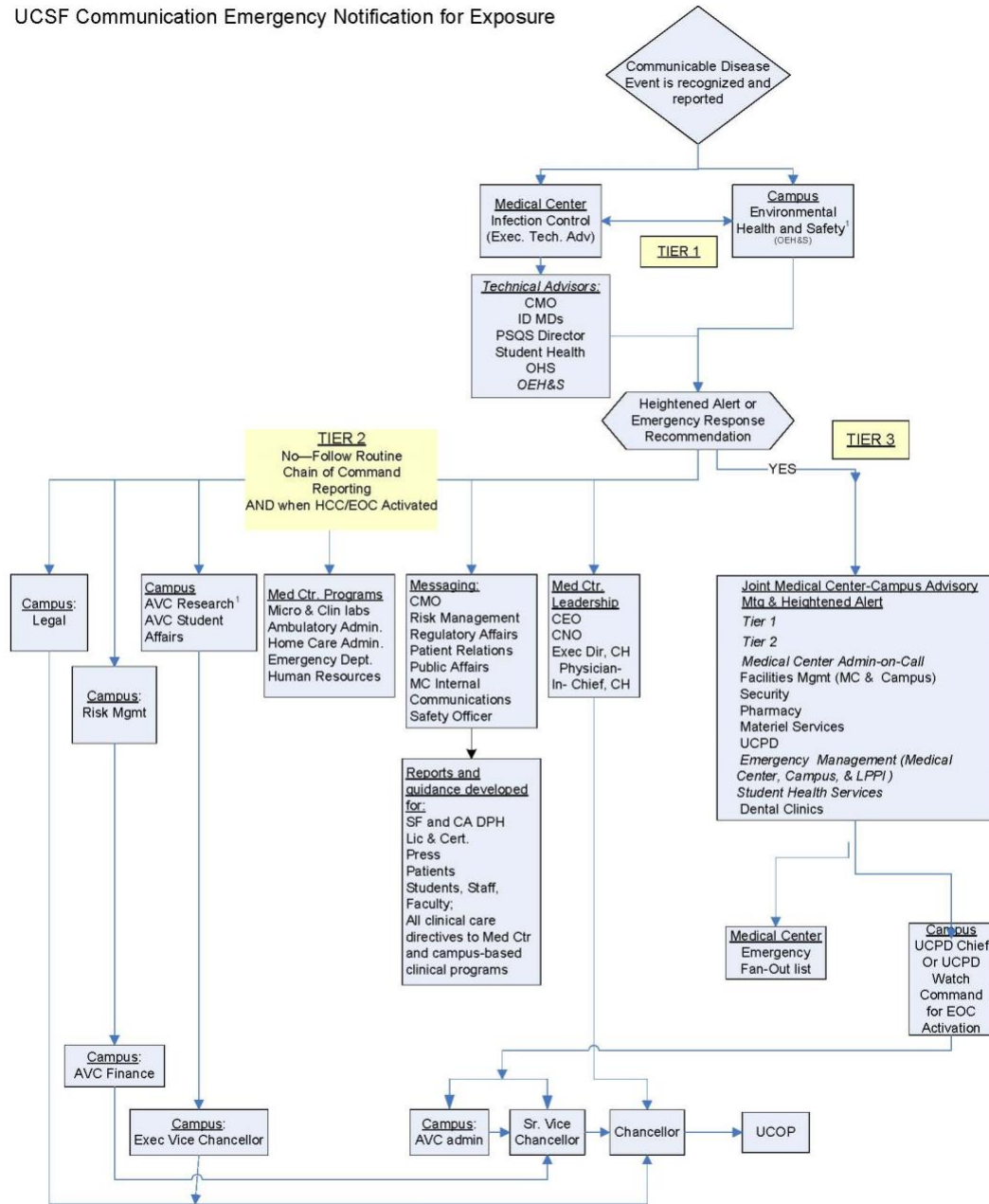
Communication Algorithm

Since UCSF Medical Center disease surveillance programs are most likely to identify or be informed about a local case of a communicable disease, they are also the responsible starting point for campus-wide notifications to leadership, staff, the Infectious Disease technical advisory group, and programs that support emergency response efforts.

See *UCSF Communication Emergency Notification for Exposure* algorithm below for a description of how the UCSF medical Center will notify the UCSF Emergency Operations Center and or UCSF leadership of a communicable disease which may have the potential for becoming a public health emergency.

UCSF Communication Emergency Notification for Exposure

UCSF Communication Emergency Notification for Exposure



¹Consider external reports: e.g., CalOSHA, Fed OSHA, NIH

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Federal/State/Local EM actions, directives, declarations standards.

UCSF shall comply with the *California Standardized Emergency Management System (SEMS)* and *National Incident Management System (NIMS)*. The Federal Department of Health and Human Services (HHS) has been designated as the lead federal agency for public health emergencies as per the *National Response Framework (NRF)*.

California State Pandemic Influenza Operations Plan provides a framework for pandemic influenza preparedness, response, and recovery activities to be conducted by California Department of Public Health (CDPH) in coordinating response to a pandemic with Local Health Departments, the healthcare community, other state agencies, the federal government, and other key partners.

CDPH issued a *Guidance for Student Dismissals During an Influenza Pandemic* (July 2008). While outlining CDPH guidelines for schools, including Colleges and Universities, the *Guidance* states orders to close schools may not be applicable to all Higher Education institutions if other social distancing strategies may be effective.

UCSF as a statewide, national and global enterprise presents the EOC with unique challenges. Specifically a pandemic or communicable disease outbreak may affect communities, states, and nations differently and at different times. A pandemic may also occur in waves lasting several months, two to three times over a 12 to 18 month period. Because the virulence, morbidity and mortality may be different across the state, nation and world at any point in time, Public Health emergency disease control strategies may vary amongst local, state and national public health agencies where UCSF interests are located.

As a result, health and medical recommendations and strategies recommended by the UCSF Medical Center or TAG may not be applicable to UCSF operations in Fresno, Buenos Ares, Tokyo or other national and international locations.

In such instances, the UCSF EOC, Medical Center and TAG need to confer with Global Health Sciences, and Risk Management defer. CDC and or WHO guidelines may be primary resources when preparing guidelines, instructions, or other communications with UCSF personnel located outside of the county of San Francisco.

Prevention of Spread

The UCSF EOC shall refer to the UCSF Medical Center Infection Control for disease specific recommendations applicable to campus facilities and personnel. The UCSF EOC Operations Section, Health and Medical Branch or it units, and the EH&S unit in the EOC will collaborate to implement infection control recommendations provided by the Medical Center Infection Control.

Working with the UCSF EOC PIO, the Medical Center Infection Control, the EOC Health and Medical Branch and others as appropriate will assist in supporting a

campus-wide public information campaign on disease specific infection control. There may be circumstances in which health and medical recommendations must be adapted for the global enterprise and tailored for specific international UCSF locations.

Examples of Pandemic Influenza Strategies include, but are not limited to those listed in the OSHA Guidance on Preparing the Workplaces for an Influenza Pandemic: (http://www.osha.gov/Publications/influenza_pandemic.html#organizations_protect)

- **Personal Hygiene:** make tissues, hand soap, no-touch trash and towel dispensers, hand sanitizers
- **Practice Cough Etiquette** <http://www.sfcdcp.org/index.cfm?id=97>
- **Clean work services, computers, telephones, computer equipment and avoid sharing these work tools**
- **Education and Information**
- **Seasonal Influenza Vaccine**
UCSF offer seasonal flu vaccination at no charge to all UCSF staff, faculty, and students. The vaccination program is managed by the UCSF Occupational Health Services program. Vaccine is generally available between October and March, depending on supply. A focused flu vaccine campaign is offered each fall, usually in October and November. Information about seasonal flu vaccine is posted on UCSF Today.
- **Social Distancing**
Social distancing measures will be recommended or mandated by local, state, or federal public health authorities if necessary. Social distancing strategies may include:
 - Telecommute or modified work schedules
 - Reduce face-to-face meetings and interactions
 - Cancel Public Gatherings
 - Engineering controls such as physical barriers
 - Exclusion from work
 - Return to work clearance
 - Dismissal of school programs (includes university and child care)
- **Quarantine or Isolation**
Under limited and extenuating circumstances, at the direction of the local public health authority, quarantine or isolation of individuals or groups may be enforced.

Self-Monitoring of Flu-Like Symptoms

The World Health Organization encourages everyone to implement prompt self-monitoring and diagnosis of flu-like symptoms.

Staff and Students with fever, upper respiratory symptoms, or diarrhea should follow the UCSF Work Place Guidelines.

Exclusion from Work

Staff and Students who become ill at work should be sent home and referred to their health care provider (private provider for staff or Student Health Services for students).

Criteria by which employees or students may return to work will be issued based upon the federal, state and local public health information, in consultation with the TAG.

Environmental Controls & Job Function Actions

Depending upon the causative organism for the pandemic or communicable disease outbreak, there may be environmental control strategies which may reduce or prevent the spread of the disease. UCSF TAG, EH&S, Public Health and Occupation Health SMEs may be asked by the EOC to develop specific procedures and guidelines for the following (Not a comprehensive listing):

Environmental Controls

HVAC – Adjustment of HVAC systems to change, divert or close airflow. Cleaning or replacement filters including addition of HEPA filters.

Surfaces – Phones, elevator buttons, and public computer keyboards (I.e.: library, labs, kiosk computers, Etc.)

Vehicles & Shuttle buses – disinfecting (handrails, seat backs), keeping windows open, cleaning steering wheels and instrumentation between drivers, symptomatic passengers, etc.

Housekeeping – Cleaning of doorknobs, handrails, bathrooms, classroom desks, changes in type of cleaning solutions, use of disposable rags, etc.

Rearrangement of worksite, classrooms or cafeterias - Spacing of desks and tables may be implemented.

Job Function

Dental Services – PPE, Vaccinations, and changes in dental area surface cleaning procedures

Childcare Centers – Disinfecting of toys, beds, play areas. Work-status of staff with family members with influenza like illness.

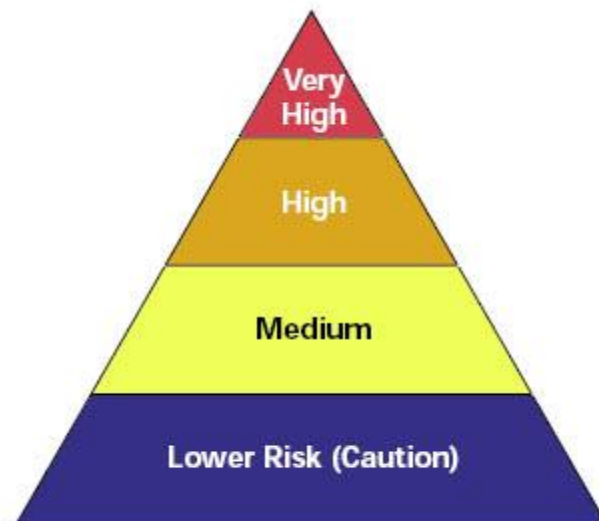
Confined spaces – Some occupation categories may have prolonged exposure to pre-symptomatic infectious persons in confined spaces such as Police (suspects in police cars & interrogation rooms) researchers, utility workers, etc.

Employee Exposure Risk

OSHA uses the classification scheme below to categorize employee risk for exposure to pandemic flu:

<http://www.osha.gov/Publications/OSHA3327pandemic.pdf>

Occupational Risk Pyramid for Pandemic Influenza



Very High Exposure Risk:

- Healthcare employees (for example, doctors, nurses, dentists) performing aerosol-generating procedures on known or suspected pandemic patients (for example, cough induction procedures, bronchoscopies, some dental procedures, or invasive specimen collection).
- Healthcare or laboratory personnel collecting or handling specimens from known or suspected pandemic patients (for example, manipulating cultures from known or suspected pandemic influenza patients).

High Exposure Risk:

- Healthcare delivery and support staff exposed to known or suspected pandemic patients (for example, doctors, nurses, and other hospital staff that must enter patients' rooms).
- Medical transport of known or suspected pandemic patients in enclosed vehicles (for example, emergency medical technicians).

- Performing autopsies on known or suspected pandemic patients (for example, morgue and mortuary employees).

Medium Exposure Risk:

- Employees with high-frequency contact with the general population (such as schools, high population density work environments, and some high volume retail).

Lower Exposure Risk (Caution):

- Employees who have minimal occupational contact with the general public and other coworkers (for example, office employees).

Employers of critical infrastructure and key resource employees (such as law enforcement, emergency response, or public utility employees) may consider upgrading protective measures for these employees beyond what would be suggested by their exposure risk due to the necessity of such services for the functioning of society as well as the potential difficulties in replacing them during a pandemic (for example, due to extensive training or licensing requirements).

Utilizing the Federal Target groups for Vaccination (see Prophylaxis and Immunization: *Vaccination Goals and Objectives*) the UCSF EOC recognizes UCSF Critical Infrastructure personnel may require or request Personal Protective Equipment. Recommendations will be made by UCSF Occupational Health Program (which includes UCSF Occupational Health Services, UCSF Environmental Health and Safety, UCSF Medical Center Infection Control) to the UCSF Communicable Disease Technical Advisory Committee. The Technical Advisory Group will, in turn, make recommendations to the EOC Director, EOC Safety Officer, or Policy Group as requested to implement a Personal Protective Equipment Plan for critical infrastructure personnel and others. EOC distribution of scarce resources will be based upon local, state, and federal public health and emergency management practices when possible. (Refer to Annex PIC1: Pandemic Influenza Occupational Exposure Risk Classification for UCSF Campus Critical Infrastructure Personnel)

Personal Protection Measures.**PPE:**

Personal protective equipment (PPE) includes gloves, goggles, face shields, surgical masks and respirators. PPE does not take the place of cough etiquette, hand hygiene, or engineering controls. Types of PPE recommended during a Pandemic will be based on the communicable disease risk while working and the availability of PPE. Since PPE may become a scarce resource during a prolonged epidemic, supplies will be strictly managed and allocated to target employee groups.

Responsibility for identification of PPE is with:

- Medical Center Infection Control is responsible to identify appropriate PPE for Medical Center Employees.
- The EOC Safety Officer is Responsible to identify appropriate PPE for emergency responders

- The UCSF Occupational Health Program is responsible to identify appropriate PPE for campus employees and faculty. The OHP in conjunction with Student Health Services is responsible to identify appropriate PPE for students

When applicable, occupational exposure based Personal Protective Equipment (PPE) recommendations may be used. Novel strains may require revised exposure based criteria for PPE during the course of a pandemic or communicable disease outbreak. Severe shortages of PPE may require distribution based upon prioritized critical infrastructure and exposure risk (Refer to Critical Infrastructure Annex).

Review of the Critical Infrastructure will help identify critical functions and the personnel who must continue to perform those functions during a pandemic. Daily exposure may vary for some functions based upon location of where work is to be performed and proximity to known or possible infected individuals.

Critical personnel may have increased risk of exposure, or may perceive an increased risk if required to report to work, but must travel by public transit.

Depending upon the virus or bacteria, communicability may be possible prior to onset of symptoms, in which cases, critical personnel may demand personal protective equipment (PPE) or measures (prophylaxis, vaccinations) as a condition of reporting to work.

Vaccination & Prophylaxis

Vaccine & Prophylaxis Recommendations: Disease specific vaccinations, antivirals, and other medical prophylaxis will be identified by Federal, state and local health authorities. The TAG, EH&S, Public Health and Occupation Health SMEs may be tasked with providing strategies for the vaccination and prophylaxis of Critical infrastructure personnel and their families.

Critical infrastructure & Limited Resources: It is beyond the scope of this plan to predict which communicable diseases will result in shortages of vaccines, antivirals or other prophylaxis. In the event there is a scarcity of resources, the UCSF EOC shall collect an updated count of critical resource personnel and prepare a resource request form ready to submit via the San Francisco EOC as soon as State and federal vaccines, antivirals or other prophylaxis resources are made available.

Administration of Vaccine & Prophylaxis: The UCSF EOC shall coordinate with the Medical Center the dispensing or administration of Vaccine & Prophylaxis to critical infrastructure personnel. In the event Medical Center is unable to accommodate the critical infrastructure personnel, UCSF Occupational Health and Student Health clinicians may be requested to assist with vaccination and prophylaxis.

Medical Center: It is assumed the Medical Centers will secure appropriate vaccines and prophylaxis from the San Francisco DPH DOC for essential staff and patients.

UCSF Personnel Staff, faculty, students, researchers, affiliates who are not critical resources may be directed to local public health and point for distribution for receipt of vaccinations and prophylaxes as mass prophylaxis capabilities may be limited at UCSF.

Vaccination & Prophylaxis Outside of San Francisco: Staff, Students, Researchers, Affiliates residing/studying elsewhere in the Enterprise will be directed to local public health and point for distribution for receipt of vaccinations and prophylaxis. Risk Management and Global Health Sciences, working with the UCSF Travel Health contractor shall coordinate dissemination of accurate health information, recommendations and repatriation assistance as permissible under the global health emergency.

Logistics Coordination: Medical Center HCC and UCSF EOCs logistics shall communicate and coordinate medical supplies and their distribution. HCC & EOC coordination may be required to support cold storage, security, and other receipt, storage and distribution requirements.

Treatment

Employee health insurance and health care providers will be the primary source for medical treatment for pandemic or communicable disease.

Travel Health

The UCSF Risk Management Department hosts a Travel Safety website which provides links to register for Travel Accident Insurance as well as medical evacuation and emergency evacuation. <https://www.rmis.ucsf.edu/RMISDetails.aspx?Panel=9>

That site also includes a link to <https://travelregistration.state.gov/ibrs/ui/> so that travelers abroad can register with US Embassies and Consulates to receive warnings and announcements from these diplomatic posts.

UCSF staff, faculty or students who travel outside the country may also check for information at CDC Traveler's Health <https://wwwnc.cdc.gov/travel>

If a public health emergency overseas is of significant concern, UCSF may recommend travel restrictions by UCSF staff or return to the US by those already traveling in the affected areas. The State Department may have additional travel recommendations.

EOC Activations

Levels of Emergency Operations Center (EOC) Activation

Emergency conditions vary with each incident and activation. As a guide, three levels of emergency are specified, as follows:

Level 3 (Standby/Alert) – emergency incident in which normal UCSF emergency response services can handle. While there may be some damage and/or interruption, the conditions are localized and the EOC is usually not needed. One Departmental Operations Center, including the Hospital Command Center may be activated.

Level 2 (Partial Activation) – emergency incident is significant and causes damage and/or interruption to UCSF operations. A partial activation of the UCSF EOC is needed. UCSF may be the only affected agency. UCSF notifies the City and County of San Francisco of the incident.

Level 1 (Full Activation) – disaster conditions in which UCSF must activate the full EOC in order to address immediate emergency response. Emergency conditions are wide spread and UCSF must be self-sufficient for a period of hours to several days. UCSF may request mutual assistance from the City and County of San Francisco, sister campuses, other Universities, or from State and Federal emergency management agencies.

Criteria

EOC activations will be based upon a number of criteria including:

- HCC activation (EOC activation for support)
- Virulence of the disease, particularly in the Bay Area
- Morbidity & Mortality, particularly in the Bay Area
- Absenteeism impacting UCSF operations.
- Threat or impact to overseas UCSF enterprise interests/personnel.
- Disease of low virulence that causes public fear or panic.

WHO Phases & UCSF Actions

WHO Phase	Description	Phase	UCSF Action
Inter-Pandemic Phase New virus in animals, no human cases	Low risk of human cases	1	Routine Business
	Higher risk of human cases	2	EOC Level 0 (not activated)
Pandemic Alert Phase New virus causes human cases	No or very limited human-to-human transmission	3	Routine Business Monitoring of WHO, CDC, State & Local Public Health websites by UCSF Infection Control, Public Health and Emergency Management. Periodic updates and prevention information to UCSF community. EOC Level 0-1
	Evidence of increased human-to-human transmission	4	Same as Phase 3 plus: Regular communication & coordination between Medical Center and UCSF Emergency Management. Increase level of updates and prevention & control information/recommendations to UCSF community EOC Level 0-2
	Evidence of significant human-to-human transmission	5	Same as Phase 4 or: Based upon Local, State and Federal Health authorities, may initiate recommendations or requirements for social distancing, increased public health measures, travel advisories, administrative controls. EOC Level 0-3
Pandemic Phase	Efficient and sustained human-to-human transmission	6	Same as Phase 4 or: Based upon Local, State and Federal Health Authorities, may initiate more stringent recommendations or requirements for social distancing (Cancellation of meetings, conferences, teleconferencing, telecommuting) increased public health measures (isolation or quarantine), travel restrictions, administrative controls. EOC Level 0-3

Pandemic Phase Based UCSF Preparedness & Response Actions

Phase/Alert level 3 (No human infections.) and
Phase/Alert Level 2 – (Known to have caused infection in humans, and is therefore considered a potential pandemic threat.).

- Control Points and their Divisions and Department conduct Business Impact Analysis to identify critical functions.
- Ongoing development or updating of Business Continuity Plans
- UCSF identifies its critical infrastructure, services and functions.
- Assess personal protective equipment, vaccine, medical prophylaxis & treatment requirements for Medical Center and enterprise critical infrastructure (and general population as feasible).
- Budget for acquisition and rotation of Public Health Emergency supplies cache.
- Ongoing cache management.
- Review existing UCSF HR workplace flexibility guidelines and update as indicated. (<http://ucsfhr.ucsf.edu/index.php/general/article/common-questions-and-answers-to-communicable-disease-emergencies-and-all-ha/>)
- Control Points assure their Divisions, Departments, and appropriate Units/Labs are developing and maintaining up-to-date Public Health Emergency Action Plans.
- HR develops system to account for, track, and report staff absenteeism.
- Academic programs develop system to account for, track, and report student and faculty absenteeism.
- UCSF contractors supply staff supporting critical infrastructure, services, functions develop system to account for, track, and report employee absenteeism to UCSF.
- Academic programs develop and update alternate lesson plans/lectures for teaching (Pod-Cast, Web-Cast, Webinar, Tele-conference, etc.).

Phase/Alert level 1 – (Small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances.)

- Continue steps from Phase/Alert level 2.
- Advise Control Points to develop contingency plans for telecommuting. (*Refer to above HR website*)
- Advise Control Points to develop contingency plans for employees to take leave. (*Refer to above HR website*)
- Advise Control Points to develop contingency plans for cancelling classes.
- Advise Control Points to develop contingency plans for closing administrative offices. (*Refer to above HR website*)
- Develop criteria and contingency plans for repatriation of overseas staff, faculty & students.
- Develop criteria and contingency plans to cancel staff, faculty, and student travel to affected areas.

<p>Phase/Alert level 4 (Community-level outbreaks)</p> <p>Cases are reported in US or international locations where UCSF personnel work/study.</p> <p>If the UCSF Emergency Operations Center recommends social distancing measures, or if host nations where UCSF personnel are located recommend social distancing, examples of steps that may be taken include:</p>	<p>Phase/Alert level 4 (Community-level outbreaks.)</p> <p>Cases have not been reported in US or international locations where UCSF personnel work/study.</p> <p>UCSF Emergency Operations Center has not recommend social distancing measures, examples of steps that may be taken include:</p>
<ul style="list-style-type: none"> • Advise Control Points to distribute contingency plans for maintaining essential functions during high absenteeism to staff, student and/or faculty. • Advise Control Points to distribute contingency experimental protocols to identified essential research labs and plans for possible interruptions in research schedules to non-essential research labs. • Advise Control Points to update departmental websites with service specific information as conditions evolve over time • Advise Control Points to update and post/schedule alternate lesson plans/lectures for teaching (Pod-Cast, Web-Cast, Webinar, Tele-conference, etc.). • Assure that any outstanding emergency supply cache orders were processed or delivered. • Assure emergency supplies cache has adequate security. • Advise Control Points to repatriate overseas staff, faculty, students • Advise Control Points to allow employees to telecommute. 	<ul style="list-style-type: none"> • Continue steps from Phase/Alert level 2. • Advise Control Points to: <ul style="list-style-type: none"> ○ Identify, notify and prepare selected employees for the possibility of telecommuting. ○ Identify, notify and prepare selected employees the possibility of taking leave. ○ Identify, notify and prepare selected faculty & Students for possible cancellation of classes. ○ Identify, notify and prepare staff, students, families and Deans of possible closing residence halls. ○ Identify, notify and prepare staff for possible closing administrative offices

Phase/Alert level 5 (Regional-level breakout in several countries)

Continue steps from Phase/Alert level 4 that may need to be taken in response to EOC Policy Group decisions:

- Distribute Control Point, Division or Departmental contingency plans for staff, student and/or faculty absenteeism
- Distribute contingency experimental protocols to identified essential research labs and plans for possible interruptions in research schedules to non-essential research labs.
- Update departmental websites with service specific information as conditions evolve over time. (Refer to the UCSF Today website for current campus-wide pandemic response activities.)
- Update and post/schedule alternate lesson plans/lectures for teaching (Pod-Cast, Web-Cast, Webinar, Tele-conference, etc.).
- Assure essential supply orders were processed or delivered. (Suppliers will be impacted, and deliveries may be delayed during Pandemics.
- Secure supplies in storage.
- If the UCSF Emergency Operations Center recommends or requires social distancing measures*, examples of steps to be taken include:
 - Allow employees to telecommute.
 - Allow non-essential employees to take leave.
 - Consider cancelling classes.
 - Consider closing UCSF housing.
 - Consider closing administrative buildings.

* See: <http://ucsfhr.ucsf.edu/index.php/general/article/common-questions-and-answers-to-communicable-disease-emergencies-and-all-ha/>

Phase/Alert Level 6 (Outbreaks within several regions in several countries).

At the direction of the Policy Group, steps to be taken may include:

- Close non-critical facilities.
- Close UCSF housing.
- Cancel classes.
- Suspend unnecessary research.
- Deploy alternate teaching methods.
- Implement protective measures for crucial infrastructure as recommended by TAG, local, state or federal public health authorities as applicable to affected UCSF global enterprise activities.

Other Pandemic Federal Pandemic Response or Severity Indexes Which May Be Used By Federal Agencies or The Media:

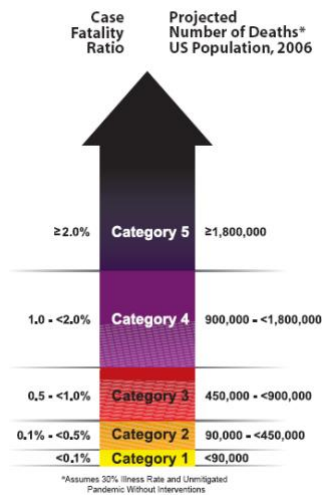
CDC Pandemic Severity Index

The CDC categorizes flu epidemics as Category 1 through 5 just like hurricanes are categorized. A Cat 5 flu would be far more devastating than a Cat 5 hurricane. It would leave 1.8 million dead and it would shut down major cities for months. The new categories are part of a Pandemic Severity Index released as part of a new comprehensive strategy to deal with a severe influenza outbreak.

(http://www.pandemicflu.gov/plan/community/community_mitigation.pdf)

The CDC PSI uses case-fatality ratio (CFR) as the critical factor for categorizing the severity of the pandemic. The CDC's Director shall designate the category of the emerging pandemic based on the PSI and consideration of other available evidence.

Characteristics	Pandemic Severity Index				
	Category 1	Category 2	Category 3	Category 4	Category 5
Case Fatality Ratio (percentage)	<0.1	0.1-<0.5	0.5-<1.0	1.0-<2.0	≥2.0
Excess Death Rate (per 100,000)	<30	30-<150	150-<300	300-<600	≥600
Illness Rate (percentage of the population)	20-40	20-40	20-40	20-40	20-40
Potential Number of Deaths (based on 2006 U.S. population)	<90,000	90,000-<450,000	450,000-<900,000	900,000-<1.8 million	≥1.8 million
20 th Century U.S.Experience	Seasonal Influenza (illness rate 5-20%)	1957,1968 Pandemic	None	None	1918 Pandemic



US Government Pandemic Response Stages

The Federal Implementation Plan details a U.S.-specific matrix for Federal Government Response Stages (see below) for pandemic alerts focused on the domestic situation and our nation's interests. For the United States, the HHS Secretary recommends to the President the specific U.S. pandemic response stage in coordination with the global alert phase. In practice, the severity, speed, and reach of a pandemic may blur the distinction between the various alert phases, underscoring the need for flexibility from all partners.

PANDEMIC INFLUENZA			
WHO Global Pandemic Phases and the Stages for Federal Government Response			
WHO Phases		Federal Government Response Stages	
INTER-PANDEMIC PERIOD			
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 disease is considered to be low.	0	New domestic animal outbreak in at-risk country
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			
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.	0	New domestic animal outbreak in at-risk country
		1	Suspected human outbreak overseas
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.	2	Confirmed human outbreak overseas
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			
6	Pandemic phase: increased and sustained transmission in general population.	3	Widespread human outbreaks in multiple locations overseas
		4	First human case in North America
		5	Spread throughout United States
		6	Recovery and preparation for subsequent waves

(<http://www.pandemicflu.gov/plan/federal/pandemic-influenza-implementation.pdf>)

AUTHORITIES

California:

California Emergency Service Act (Government Code Title 2, Division, Chapter 7, Section 8550 et seq.): Confers emergency powers upon the Governor and chief executives of political subdivisions of the state to provide for state assistance in organization and maintenance of emergency programs; establishes the Governor's Office of Emergency Services; assigns functions to state agencies to be performed during an emergency and provides for coordination and direction of emergency actions of those agencies; and establishes mutual aid procedures. Authority for the creation of standby orders exists in Government Code section 8567. Authority to suspend statutes and agency rules exists in Government Code section 8671.

California Health and Safety Code Sections Pertaining to State Authorities:

- **Sections 100170-100180:** Establishes the authority of CDHS to enforce regulations to address threats to the public health.
- **Sections 120125-120140:** Establishes the authority of CDHS to investigate and control communicable disease within the state.
- **Sections 120145-120150:** Establishes the authority of CDHS to take actions related to persons, animals, or property to control threats to public health, including quarantine, isolation, inspection, disinfection, and destruction of property.

California Health and Safety Code Sections Pertaining to Local Authorities:

- **Sections 101000, 101025, 101030:** Establishes the authority of county health officers to preserve and protect the public health by enforcing county orders, ordinances, and statutes pertaining to public health.
- **Sections 101375, 101400, 101405, 101415, 101450, 101460, and 101470:**
 - Establishes authority of cities to consent or contract with the county to provide performance of public health functions and statute enforcement. In the absence of consents or contracts with the county, authorizes cities to appoint a health officer to enforce and observe all orders, ordinances, quarantines, regulations, and statutes relating to public health.
- **Sections 101040, 101475:** Authorizes county and city health officers to take preventive measures during emergency.
- **Section 120175:** Authorizes the local health officer to take measures necessary to control the spread of communicable diseases.

California Food and Agriculture Code 9562: Establishes provisions for the state veterinarian to quarantine animals or animal products and to take appropriate disease control action to control or eliminate diseases from animal populations.

California Government Code 8549.10 and 8549.11: Establishes the Emergency Response Team for State Operations of eight specific Directors including the CDHS Director, and allows CDHS to enhance the continuity of government during major events, such as a pandemic influenza outbreak.

Executive Order No. W-9-91: Mandates that each state agency and department (e.g., CDHS) is responsible to prepare for and respond to emergencies. It mandates emergency preparedness and response assignments for all state agencies and departments under the coordination of OES.

Executive Order No. S-04-06: Directs state agency and department heads to meet on a regular basis to establish common strategies and actions for continued and enhanced emergency preparedness, response, recovery and mitigation efforts.

Administrative Order No. 79-22: Details the emergency preparedness and response functions of each department (e.g., CDHS). This Administrative Order guides OES and all departments in coordinating priority tasks and programs related to emergency preparedness, response, and recovery in accordance with the OES *State Emergency Plan*.

REFERENCES

California Department of Health Services, Public Health Emergency Response Plan and Procedures, November 2005.

Emergency Medical Services Authority, Disaster Medical Response Plan, July 1992.

Memorandum of Understanding, Department of Health Services and Emergency Medical Services Authority, July 1988: Details the relationship between CDHS and EMSA in planning for and responding to a catastrophic disaster and describes the specific responsibilities of each department.

Governor's Office of Emergency Services, State Emergency Plan, May 1998: Defines the emergency management system used for all emergencies in California. The plan describes the state government's response to disasters, including the response of all levels of government and certain private-sector organizations to all natural and human-made emergencies that threaten life, property, and the resources of California. It focuses on the basic requirements for disaster management and coordination under SEMS. It is intended to be used in conjunction with city, county, operational areas, and state agency plans and associated standard operating procedures. The State Emergency Plan recognizes and designates CDHS as the lead State department for public health response.

Federal Emergency Management Agency, National Response Plan, December 2004: An all-discipline, all-hazards plan that provides a single, comprehensive framework for managing domestic incidents. It provides the structure and the

mechanisms for coordinating delivery of federal assistance and resources to augment efforts of state, local, and tribal governments overwhelmed by a major disaster or emergency. It includes 32 signatory partners, including numerous federal departments, the American Red Cross, the National Voluntary Organizations Active in Disaster, and other organizations. It supports implementation of the Robert T. Stafford Disaster Relief and Emergency Assistance Act and for exercising direct federal authorities and responsibilities. For events that rise to the level of an Incident of National Significance, it provides operational or resource coordination for federal support to on-scene incident command structures.

Regional Disaster Medical and Health Coordinator Emergency Plans: These plans are prepared by each Regional Disaster Medical/Health Coordinator to describe their local disaster response roles.

Health Officer Practice Guide for Communicable Disease Control in California, December 12, 2005: A compilation of statutes, examples, and interpretations by local public health officials, county counsels, and others to provide a guide for local planning and actions during a public health emergency. The document can be found on the California Department of Health Services website at www.dhs.ca.gov/EPO.

National Strategy for Pandemic Influenza, November 2005 Homeland Security Council: Establishes the national perspectives on planning and preparedness for addressing a pandemic influenza outbreak on the national, state, and local levels.

Implementation Plan for the National Strategy for Pandemic Influenza, May 2006, Homeland Security Council: Clarifies the roles and responsibilities of governmental and non-governmental entities and provides preparedness guidance for all segments of society.

Pandemic & Public Health Emergency Plans

Federal

HSC National Strategy for Pandemic Influenza – Implementation Plan May 2006

<http://www.pandemicflu.gov/plan/federal/pandemic-influenza-implementation.pdf>

HHS Pandemic Influenza Implementation Plan

<http://www.hhs.gov/pandemicflu/implementationplan/intro.htm>

HHS Pandemic Influenza Plan, November 2005

<http://www.hhs.gov/pandemicflu/plan/pdf/HHSPandemicInfluenzaPlan.pdf>

HHS/CDC Interim Pre-pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States— Early, Targeted, Layered Use of Non-pharmaceutical Interventions

http://www.pandemicflu.gov/plan/community/community_mitigation.pdf

OSHA Guidance on Preparing Workplaces for an Influenza Pandemic
http://www.osha.gov/Publications/influenza_pandemic.html#organizations_protect

State

CDHS Pandemic Influenza Preparedness and Response Plan – September 8, 2006
<http://bepreparedcalifornia.ca.gov/NR/rdonlyres/A2B2A561-A148-4DA1-A828-FBB29501E4D9/0/PandemicPlan.pdf>

San Francisco

SFDPH Infectious Disease Emergency Response Plan (Draft) October 2007
<http://www.sfcddcp.org/iderplan.html>

Public Health Agency Websites

Local

San Francisco Department of Public Health Communicable Disease Control and Prevention
<http://www.sfcddcp.org/>

State

California Department of Health Services
http://www.dhs.ca.gov/ps/dcdc/izgroup/diseases/pandemic_flu.htm

Federal

Centers for Disease Control
<http://www.cdc.gov/flu/avian/>

US Department of Health and Human Services
<http://www.pandemicflu.gov/>

International

World Health Organization
http://www.who.int/csr/disease/avian_influenza/en/