

Office of Origin: Department of Hospital Epidemiology and Infection Control

I. PURPOSE

The purpose of this policy is to:

- assign actions and responsibilities for confirming an exposure;
- identify those people likely to have been exposed to a communicable disease;
- determine the risk of transmission and appropriate follow-up activities;
- guide the institutional response to a communicable disease outbreak;
- recommend Institutional actions in response to a communicable disease outbreak;
- meet California regulatory requirement (Title 17 California Code of Regulations (CCR) §2500, §2593, §2641.5-2643.20, and §2800-2812 Reportable Diseases and Conditions*) for communicable disease reporting; and
- meet California regulatory requirement ACS1288.7(b) for seasonal and pandemic influenza control plans.

II. REFERENCES

San Francisco Communicable Disease Control and Prevention

<http://www.sfcdep.org/IDemergencies.html>

World Health Organization Global Alert and Response

<http://www.who.int/csr/en/>

CDC Global Health Global Disease Detection and Emergency Response

<https://www.cdc.gov/globalhealth/healthprotection/errb/index.html>

CDC Emergency Preparedness and Response

<http://emergency.cdc.gov/>

UCSF Medical Center Emergency Response Plan

<http://safety.ucsfmedicalcenter.org/>

UCSF Emergency Response Plan (campus)

<http://police.ucsf.edu/index.php/?Preparing-for-Emergencies/emergency-response-plan.html>

III. DEFINITIONS

A. Exposure

Potential contact by a susceptible person with a communicable disease as defined by the UCSF Technical Advisors (section V, B. 3).

B. Outbreak is defined as:

- Hospital onset: 2 or more cases of the same illness, in the same time period, on the same unit (HEIC confirmed)
- Community onset epidemic: Department of Public Health (DPH) confirmed

C. Staff

All medical center employees, faculty, temporary workers, trainees, volunteers, students, and vendors, regardless of employer. This includes staff who provide services to or work in UCSF Medical Center patient care or clinical areas.

IV. POLICY

- A. As required by the California Labor Code Section 6401 (Injury and Illness Prevention Program), and as institutional experts in communicable disease prevention and control, the Department of Hospital Epidemiology and Infection Control (HEIC) takes a lead role to:
- prevent the introduction of a communicable disease threat into the organization;
 - conduct routine surveillance for person-to-person transmission of communicable disease;
 - recognize that a communicable disease has been introduced;
 - provide specific guidance regarding activities of patients and visitors; and/or
 - contain the spread of the communicable disease threat if it is introduced.
- B. In the event of a communicable disease outbreak, provision of healthcare will shift from individual-based care provision to population-based care through the allocation of scarce resources (e.g., equipment, supplies, personnel) in order to save the largest number of lives.
- C. All templates associated with this policy may be changed in order to fit the nature of the exposure or outbreak. For example, reporting to local health authorities may be required daily initially, then become less frequent; line lists may be developed electronically rather than on paper, etc.

V. PROCEDURES

A. Rapid Response Checklist

HEIC implements and tracks key actions identified in this procedure using the Rapid Response Checklist. [Appendix I.](#)

B. Exposure or Outbreak Identification & Confirmation

1. HEIC receives notification of suspicious patterns of symptoms or of confirmed cases from Emergency Department, clinical units, Ambulatory Clinics, lab, Occupational Health Services (OHS), Student Health Services (SHS), Department of Public Health, Office of Environment, Health & Safety (EHS), LPPI, or other emergency response entity.
2. [Appendix I](#) summarizes key actions and action owners for investigation, confirmation, communication, testing, and reporting. Action owners include HEIC, OHS, SHS, clinical leadership, institutional leadership. Full details of all actions are provided in the policy.
3. Technical Advisors:
 - A. Purpose
The purpose of the Technical Advisor is to
 - i. Determine the severity of the exposure or outbreak
 - ii. Confirm the case definition
 - a. A case definition will be used as the inclusion or exclusion criterion for cases, and will be distributed in the most efficient manner available to targeted patient care areas, senior administration and ancillary departments. The case definition will include epidemiologic and geographic links to define the limits of disease risk.
 - b. If a case definition has not yet been developed by the federal Department of Health and Human Services (DHHS), California Department of Public Health (CA DPH) or San Francisco Department of Public Health (SFDPH), HEIC will develop a case definition for use by all clinicians, and communicate that definition to SFDPH.

HOSPITAL EPIDEMIOLOGY AND
INFECTION CONTROL:
COMMUNICABLE DISEASE EXPOSURE RESPONSE
POLICY

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- c. The case definition will be updated as needed according to changes from city, county, state, or federal DHS.
 - d. All distributed copies will bear the date and time of the most recent revision to ensure consistent application across the continuum of care.
 - e. Since case definitions may change as an outbreak progresses, tracking the case definition is imperative to ensure consistent application of the same information.
- iii. Confirm exposure definition, including concentric circles of exposure
 - iv. Initiate additional case identification
 - v. Recommend follow-up actions
 - vi. Act as the single source of information and direction
 - vii. Determine whether to recommend establishing Incident Command
- B. Membership
- i. Chief Medical Officer (CMO)
 - ii. Infectious Disease Physicians (ID)
 - iii. Executive Director, Patient Safety & Quality Services (PSQS)
 - iv. Hospital Epidemiology & Infection Control (HEIC)
 - v. Occupational Health Services (OHS)
 - vi. Student Health Services (SHS)
 - vii. Office of Environment, Health & Safety (EHS)
- C. Any member may initiate a Technical Advisors' Meeting.
[Appendix II](#): Case Definition Tracking Form
4. HEIC and designees will follow established methods for surveillance, contact tracing, isolation and notification, and will oversee surveillance.
In the event of a novel communicable disease (CD), HEIC will refer to World Health Organization Phases of Pandemic Alert (**Fig. 1**) as a model to direct and anticipate actions associated with the pandemic phases.

WHO Phase	Description	Phase	Action
Inter-Pandemic Phase New CD in animals, no human cases	Low risk of human cases	1	Routine Business
	Higher risk of animal-to-human transmission	2	
Pandemic Alert Phase New CD causes human cases	No or very limited human-to-human transmission	3	Routine Business
	Evidence of increased human-to-human transmission	4	Pp. 4-8
	Evidence of significant human-to-human transmission into at least two counties in one WHO region. Declaration of Phase 5 signals that pandemic is imminent.	5	Pp. 4-8
Pandemic Phase	Efficient and sustained human-to-human transmission. Designation of Phase 6 indicates that global pandemic is underway.	6	Pp. 8-10
Post Peak	Pandemic activity appears to be decreasing; however, be prepared for a second wave.	7	
Post Pandemic	Pandemic virus is expected to behave as a seasonal influenza A virus.	8	

Figure 1: WHO Phases of Pandemic Alert¹

- World Health Organization.
<http://www.who.int/influenza/preparedness/pandemic/h5n1phase/en/index.html>

C. Notifications & Communications

- HEIC makes Medical Center notifications and updates status reports according to UCSF Communication Algorithm for Communicable Diseases ([Appendix III](#)). (EHS is responsible for notifications to Campus leadership identified on [Appendix III](#).)
 - HEIC is the contact for San Francisco and California Departments of Public Health (SFDPH) & (CDPH).
 - HEIC supports content development for written communications and signage.
 - HEIC notifies other employers (e.g., first responders, transferring facilities) of the date, time, nature of exposure and other pertinent information.
- SFDPH and CDPH Communications
If a regional (or larger) outbreak is suspected, SFDPH will communicate via emailed or faxed Health Alerts and/or satellite EM communications system to the ED and HEIC.
 - Faxed Health Alerts may arrive up to 24 hours after they are sent by SFDPH.
 - If internet support is unaffected, alerts regarding increases in incidence of communicable diseases may be sent to HEIC personnel via email from CDPH.
- Educational or situational status communications to the institution, campus, or external to UCSF will be approved by the Technical Advisors/CMO and implemented by the responsible department specified in Outbreak Rapid Response Checklist [Appendix I](#).

4. Messaging to patients, families, and visitors is approved and implemented by CNO/ CMO/HICS.

D. Patient Screening, Case Identification, Tracking, and Management

1. Screening

Patients entering the healthcare system (home care, ambulatory, emergency, inpatient) will be screened for outbreak illness or exposure to outbreak cases, and placed in appropriate precautions for the suspected or confirmed communicable agents (refer to the Infection Control Manual, Section 3 for disease-specific isolation procedures).

[Appendix IV](#): UCSF Precautions for Febrile Respiratory Illness

2. Case Identification

HEIC and designees will ensure that the case definition is being applied appropriately.

3. Tracking

A. Line Lists

- i. Departments will utilize electronic or hard-copy Line Listing Forms to record outbreak cases.

[Appendix V](#): Line List Form – Emergency Department

[Appendix VI](#): Line List Form – Inpatient

- ii. Occupational Health Services will maintain a Line List to record staff outbreak cases.

[Appendix VII](#): Line List Form – Staff

B. Outbreak Progression

HEIC and designees will maintain records of locations of affected patients

[Appendix VIII](#): Outbreak Progression by Unit

C. HEIC and designees will report statistics as required to SFDPH.

[Appendix IX](#): Weekly Surveillance Report

4. Transmission Control Measures

HEIC:

- i. confirms transmission control measures
- ii. communicates and educates
- iii. audits adherence

5. Patient Housing Strategies

In conjunction with Technical Advisors, HEIC recommends patient housing strategies which may require progressive isolation measures as affected numbers increase. Measures may include:

A. Limiting movement

B. Limiting admissions

C. Limiting elective procedures

D. Cohorting

- a. Single room
- b. Cohort in semi-private room
- c. Cohort in ward room
- d. Cohort by floor
- e. Cohort by wing
- f. Cohort by building
- g. Spatial separation in large enclosed rooms (e.g., gymnasium, conference rooms)

[Appendix X:](#) Infection Control Triage Flowchart

- E. HEIC will assess alternate locations and make recommendations for enhancements or changes that would facilitate infection prevention and transmission control.

[Appendix XI:](#) Alternate Care Locations

- F. Alternate locations' supervisory personnel will report infections to HEIC using the Alternate Site Line List Form.

[Appendix XII:](#) Line List Form – Alternate Site

E. Laboratory Surveillance and Communications

The objective of the laboratory surveillance is to confirm cases of an outbreak organism.

1. Patient care areas with suspect cases will contact Clinical Microbiology Laboratory @ China Basin at 353-1268 (7:30a-midnight) for instructions for sample collection and specimen submission procedures.
 - Back-up # (midnight-7:30a): Clinical Labs Specimen Processing at Parnassus: 353-1667. Night shift supervisor may contact Sr Supervisor or Microbiology Director as needed.
2. The testing laboratory may limit the number of specimens accepted for testing, and may require specific forms for specimen submittal.
3. Clinical Microbiology Laboratory will communicate with local and state labs for protocol changes including preparation to increase the number of specimens processed, transportation of an increased number of specimens to state or local labs or determining when specimens will no longer be tested in order to conserve critical personnel and resources.
4. SFDPH or CDPH laboratories perform testing for novel organisms.
 - For suspect novel organisms, UCSF Medical Center clinical laboratories will submit requested reports and specimens to the SFDPH lab, who then coordinate with the CDPH lab.

F. Personnel Management: Assessment and Exposure; Vaccination and Prophylaxis

1. OHS is responsible for staff. OHS will:
 - a. Identify and notify potentially exposed healthcare workers
 - b. Develop syndromic surveillance algorithms depending upon disease distribution, organism and circumstances (see templates).
 - c. Develop and implement screening tools to be applied to healthcare workers reporting for duty.
 - d. Maintain a Line List to record staff outbreak cases.
[Appendix VII:](#) Line List Form – Staff
 - e. Develop isolation and quarantine directives based upon disease transmission characteristics.
 - f. Develop, assemble and distribute information sheets, supply kits (e.g., masks, Tylenol) for symptomatic healthcare workers.
 - g. Develop automated “hotline” messages with notice to Public Affairs Office or the PIO if HICS is activated.
 - h. Organize and distribute mass prophylaxis/vaccine.
2. SHS is responsible for assessment and exposure management for students. Students will be included in institutional vaccination and prophylaxis operations organized by OHS.
[Appendix XIII:](#) OHS Employee Screening, Evaluation, Tracking and Decision-Making Tools
 - Communicable Disease Pre-Placement Medical Evaluation
 - Guidelines for “YES Desk” Screening – STAFF Only
 - Communicable Disease Self-Monitoring Form

- Communicable Disease Tracking Form
- Communicable Disease Exposure Rubric

G. Personal Protective Equipment (PPE)

Standard Precautions will be practiced, requiring symptom-based use of personal protective equipment (PPE) (masks, eye protection, gowns, gloves), hand cleaning agents, surface disinfection solutions and materials. See [HEIC Standard and Transmission-Based Precautions](#) for disease-specific, transmission-based precautions.

H. Training and Education

1. Education regarding outbreak potential will be directed by HEIC and approved by Technical Advisors/CMO
2. Education may be accomplished by:
 - a. Formal presentation
 - b. Informal presentation
 - c. Email
 - d. Fax
 - e. Internal and US postal mail services
 - f. Newsletters
 - g. HEIC Website: <http://infectioncontrol.ucsfmedicalcenter.org/>
 - h. Posters & signage

I. Visitor Policy and Management

1. In order to protect patients from communicable disease, the Medical Center may recommend and implement visitor access restrictions coordinated by Technical Advisors and Hospital Incident Command System (HICS).
2. [Appendix XIV](#) describes three levels of access ranging from normal to emergency levels of restrictions.
3. Depending upon the nature of the outbreak, additional considerations for visitor limitations may include:
 - a. Vaccination status assessment (if applicable)
 - b. Verification of vaccination status
 - c. Antiviral treatment status
 - d. Crowding potential assessment
 - e. Food, water and sanitation available at site
 - f. Ability to comply with barrier precautions
 - g. Availability of PPE (masks, gloves, etc.)
 - h. Availability of hand hygiene facilities and ability to educate visitor

[Appendix XIII: Visitor Screening and Restrictions During Communicable Disease Emergency](#)
[UCSF Medical Center Visitor Policy](#)
[HEIC Patient Visitor Policy 4.3](#)

J. Changes in Service Delivery

1. Decisions related to changes in service delivery and altered levels of care will be made by Senior Leadership or Hospital Incident Command System (HICS) and may include decisions such as thresholds for alterations in routine functions.

[Appendix XV](#): Model Thresholds for Alterations in Routine Functions

2. Distribution of scarce resources will be determined by Incident Command. Input by Senior Leadership, HEIC and ID (and Technical Advisors) may be used to guide decision-making.

[Appendix XVI](#): Distribution of Scarce Resources

3. Surge Planning

Projected numbers of population affected can be modeled after the initial onset of an outbreak using a CDC-developed tool,

<http://www.cdc.gov/flu/pandemic-resources/tools/flusurge.htm>.

K. Additional Outbreak Response Guidance to Hospital Incident Command System (HICS) or Ancillary Departments

[Appendix XVII](#): provides additional recommendations to HICS or Ancillary Departments regarding key issues to consider during a communicable disease emergency.