I. PURPOSE
The purpose of this policy is to:
• 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.sfcdcp.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)

III. DEFINITIONS
A. Outbreak is defined as:
• Hospital onset: 2 or more cases of the same illness, in the same time period, on the same unit (as determined by HEIP on a case by case basis) where the transmission of illness is suspected or confirmed to have taken place in the hospital setting.
• Community onset Outbreak: Specific epidemiologic criteria as determined by the San Francisco Department of Public Health (DPH) or other applicable public health or governmental authority.

B. Epidemic
• The occurrence of more cases of a disease than would be expected in a community or region during a given time period. Such as designation is not mutually exclusive with respect to an outbreak.

C. Pandemic
• A pandemic is the worldwide spread of a new or novel disease.
D. 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 prevention (HEIP) 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
- Recommend actions to contain the spread of the communicable disease threat.

B. In the event of a communicable disease outbreak, provision of healthcare may shift from individual-based care provision to population-based care through the allocation of scarce resources (e.g., equipment, supplies, and personnel) in order to save the largest number of lives. In general, such decisions will be made in accordance with the UCSF Emergency Preparedness Plan and/or in accordance with the operations of a Hospital Incidence Response System (HICS).

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

- Unless specified under documentation requirements of the UCSF Emergency Preparedness Plan and/or of a Hospital Incidence Response System (HICS), HEIP implements and tracks key actions identified in this procedure using the Rapid Response Checklist. Appendix I.

B. Outbreak Identification & Confirmation

1. HEIP receives notification of suspicious patterns of symptoms or of confirmed cases from various sources including, but not limited to: the Emergency Department, clinical units, Ambulatory Clinics, clinical laboratory, Occupational Health Services (OHS), Student Health Services (SHS), Department of Public Health, Office of Environment, Health & Safety (EHS), LPPI, or other entity.

2. Appendix I summarizes potential key actions and action owners for investigation, confirmation, communication, testing, and reporting. Action owners include HEIP, OHS, SHS, clinical leadership, institutional leadership.

3. HEIP and designees will follow established methods for surveillance, contact tracing, isolation and notification, and will oversee surveillance. In the event of a pandemic as designated by applicable government authorities, HEIP 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.
### Table: WHO Phases of Pandemic Alert

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
<th>Phase</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inter-Pandemic Phase</strong></td>
<td>New CD in animals, no human cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low risk of human cases</td>
<td>1</td>
<td>Routine Business</td>
</tr>
<tr>
<td></td>
<td>Higher risk of animal-to-human transmission</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Pandemic Alert Phase</strong></td>
<td>New CD causes human cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No or very limited human-to-human transmission</td>
<td>3</td>
<td>Routine Business</td>
</tr>
<tr>
<td></td>
<td>Evidence of increased human-to-human transmission</td>
<td>4</td>
<td>Pp. 4-8</td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td>5</td>
<td>Pp. 4-8</td>
</tr>
<tr>
<td><strong>Pandemic Phase</strong></td>
<td>Efficient and sustained human-to-human transmission.</td>
<td>6</td>
<td>Pp. 8-10</td>
</tr>
<tr>
<td></td>
<td>Designation of Phase 6 indicates that global pandemic is underway.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Post Peak</strong></td>
<td>Pandemic activity appears to be decreasing; however, be prepared for a second wave.</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td><strong>Post Pandemic</strong></td>
<td>Pandemic virus is expected to behave as a seasonal influenza A virus.</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

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**Figure 1: WHO Phases of Pandemic Alert**

1. World Health Organization.

C. Notifications & Communications

1. During an identified outbreak, HEIP makes Medical Center notifications and updates status reports according to The UCSF Emergency Preparedness Plan and/or as specified by a HICS
   a. HEIP staff may serve as the point of contact for San Francisco and California Departments of Public Health (SFDPH) & (CDPH).
   b. HEIP may support content development for written communications and signage.
   c. HEIP may notify other organizations of the actions taken by UCSF in response to an outbreak.

2. SFDPH and CDPH Communications
   If a regional (or larger) outbreak or pandemic is suspected, SFDPH may communicate via emailed or faxed Health Alerts and/or satellite EM communications system to the ED and HEIP.
   i. Faxed Health Alerts may arrive up to 24 hours after they are sent by SFDPH.
   ii. If internet support is unaffected, alerts regarding increases in incidence of communicable diseases may be sent to HEIP personnel via email from CDPH.

3. Educational or situational status communications to the institution, campus, or external to UCSF will be approved and disseminated in accordance with the UCSF Emergency Preparedness Plan and/or HICS. HEIP and designees may review and approve such communications as part of this process.

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).

2. Case Identification
   HEIP and designees may monitor appropriate application of the case definition.

3. Tracking
   A. Line Lists
      i. In general, HEIP or UCSF Emergency Management staff may provide appropriate templates for use to stakeholders.
      ii. Departments will utilize electronic or hard-copy Line Listing Templates to record outbreak cases.
      iii. Occupational Health Services will maintain a Line List to record staff outbreak cases.

   B. Outbreak Progression
      i. HEIP and designees will maintain records of locations of affected patients

   C. HEIP and designees may report statistics of an outbreak as required to SFDPH.

4. Transmission Control Measures
   HEIP may:
   i. Advise the organization on appropriate transmission control measures
   ii. Communicate and educate on the application of such measures
   iii. Audit adherence to such measures

5. Patient Housing Strategies
   In accordance with the UCSF Emergency Preparedness Plan and/or HICS, HEIP may recommend patient placement strategies which may require progressive isolation measures as an outbreak spreads. 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)
   E. HEIP may recommend alternate triage and assessment locations and make recommendations for enhancements or changes that would facilitate infection prevention and transmission control.
F. Alternate locations’ supervisory personnel will report infections to HEIP using the Alternate Site Line List Template available upon request.

E. Laboratory Surveillance and Communications
The objective of laboratory surveillance is to confirm cases of an outbreak organism.
1. Patient care areas with suspected cases of a communicable disease implicated in an outbreak will contact Clinical Microbiology Laboratory @ China Basin at 353-1268 (7:30a-midnight) for instructions for specimen collection and 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 templates 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 may perform testing for novel organisms.
   • For suspected novel organisms, UCSF Medical Center clinical laboratories will submit requested reports and specimens to the SFDPH lab, who then coordinate with the CDPH lab for appropriate testing.

F. Personnel Management: Assessment and Exposure; Vaccination and Prophylaxis
   • Staff Communicable Disease Surveillance policies and procedures are designated and referenced by the following Occupational Health Services policy, Staff Communicable Disease Surveillance. These documents detail staff assessment and exposure; vaccination and prophylaxis.

G. Personal Protective Equipment (PPE)
Standard Precautions will be practiced throughout a suspected or confirmed outbreak, requiring symptom-based use of personal protective equipment (PPE) (masks, eye protection, gowns, and gloves), hand cleansing agents, and surface disinfection materials.

See HEIP Standard and Transmission-Based Precautions for disease-specific, transmission-based precautions which may be applied in addition to standard precautions.

H. Training and Education
1. Education regarding an outbreak may be directed by HEIP and approved by senior leadership stakeholders in accordance with the UCSF Emergency Preparedness Plan and/or HICS.

2. Education may be accomplished via any of the following methods:
   a. Formal presentation
   b. Informal presentation
   c. Email
   d. Fax
   e. Internal and US postal mail services
   f. Newsletters
   g. HEIP Website: http://infectioncontrol.ucsfmedicalcenter.org/
I. Visitor Policy and Management

1. In order to protect patients from communicable disease, UCSF Medical Center may recommend and implement visitor access restrictions coordinated by HEIP in accordance with the UCSF Emergency Preparedness Plan and/or Hospital Incident Command System (HICS).

2. 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

Reference: UCSF Medical Center Visitor Policy
           HEIP Patient Visitor Policy 4.3

J. Changes in Service Delivery

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

2. Distribution of scarce resources will be determined by the UCSF Emergency Preparedness Plan or HICS. Input by Senior Leadership, HEIP and the Infectious Disease Service may be used to guide decision-making.

3. Surge Planning
   Projected numbers of population affected for influenza 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. Modeling of the impact of other pathogens may be performed by HEIP in consultation with appropriate guidance and methods.

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

Appendix II provides additional recommendations to HICS or Ancillary Departments regarding key issues to consider during a communicable disease emergency.