UCSF COVID-19 CONTROL PLAN

I. Program Administration

Hospital Epidemiology and Infection Prevention (HEIP) as coordinated by the Director, Medical Directors and Associate Medical Director is responsible for designing, implementing, evaluating, and maintaining the UCSF COVID-19 Control Plan. HEIP collaborates with representatives from Occupational Health Services, Nursing, Hospital Administration, Emergency, Environmental Health and Safety, Facilities, Admitting, Hospitality, and Clinical Laboratories. Input from other departments/individuals with required expertise is sought as needed.

II. Background

COVID-19 is a respiratory illness caused by the SARS-CoV-2 virus that was identified as the cause of a respiratory illness outbreak first detected in Wuhan City, China. Person-to-person transmission is now widespread across the globe and community transmission in the United States is occurring at increasing frequency.

III. Identification and evaluation of patients with possible COVID-19 infection

Early identification of a Patient Under Investigation (PUI):

Rapid identification of individuals with compatible symptoms and institution of appropriate isolation measures are critical in reducing the risk of COVID-19 transmission. The current CDC Persons Under Investigation (PUI) definition is available here https://www.cdc.gov/coronavirus/COVID-19/clinical-criteria.html.

Clinicians should use their judgment to determine if a patient has signs and symptoms compatible with COVID-19. COVID-19 testing will be more readily available and not require approval. Consultation with the COVID ID attending for adult patients and HEIP for pediatric patients is available 24 hours a day to assist with case evaluation and management.

Most patients with confirmed COVID-19 have developed fever and/or symptoms of acute respiratory illness (e.g., cough, difficulty breathing). Clinicians should test for other causes of respiratory illness, including infections such as influenza, in addition to SARS-CoV-2.

Epidemiologic factors that may help guide decisions on whether to test include: healthcare workers, those who have had close contact with a laboratory-confirmed COVID-19 patient within 14 days of symptom onset, or a history of travel from affected geographic areas.

The criteria are intended to serve as guidance for evaluation. Patients should be evaluated on a case-by-case basis.

IV. Contacts for additional guidance

COVID-19 ID Attending for Adults
Page: 415-443-0190 available 24 hours a day

COVID peds ID service
628-248-8292, Voalte COVID Pediatrics ID

Hospital Epidemiology and Infection Prevention (HEIP)

i. Moffitt-Long or Mt. Zion: (during business hours) 415-353-4343; (during non-business hours) ML Hospital Supervisor Spectralink 415-353-8036 or 415-353-1964;

ii. Mission Bay: (during business hours) 415-353-4343; (during non-business hours) Benioff Children's Hospital-SF Hospital Supervisor 415-502-0728; MB Adult Hospital Clinical Resource Nurse 415-502-0562;
iii. Benioff Children's Hospital Oakland: (during business hours) 510-428-3733; (during non-business hours) cellphone 510-459-3702, pager 510-718-1466, or BCHO Nursing supervisor 510-428-3885 ext 6997

Public Health Departments

i. For Moffitt-Long, Mission Bay, and Mt. Zion, contact the San Francisco Department of Public Health (SFDPH) Communicable Disease Control at (415) 554-2830; if calling during non-business hours, (415) 554-3613 to reach the SFDPH on-call physician
ii. For BCHO, contact the Alameda County Department of Public Health (ACDPH) at 510-267-3250, or during non-business hours call 925-422-7595.

V. Testing

There is increased COVID-19 testing availability. The decision to test should be driven by the clinical algorithms and will not require additional approval. Refer to the 'Algorithms' section on the infection prevention website for testing recommendations:

https://infectioncontrol.ucsfmedicalcenter.org/coronavirus

Appropriate PPE to wear during test collection
Healthcare personnel obtaining nasopharyngeal or oropharyngeal swabs for COVID-19 testing must perform hand hygiene and then put on:

i. N95 respirator plus face shield/goggles OR powered air purifying respirator (PAPR)
ii. gloves
iii. gown

What samples to collect and how to order the test
A nasopharyngeal and oropharyngeal swab should be collected to test for COVID-19. Please refer to the following link for detailed information on ordering and collecting the test:

https://infectioncontrol.ucsfmedicalcenter.org/sites/g/files/tkssra4681/f/PracticeUpdate-COVID19RNATest_multiplekits.pdf

What additional samples can be collected?
Please contact the COVID-ID attending (adult patients) or Pediatric Infectious Diseases (pediatric patients) service if concern for false-negative COVID-19 result to discuss additional testing. Induced sputum is not recommended.

When a positive COVID-19 test is reported, the Microbiology lab will fax the result to the San Francisco Department of Health.

VI. Precautions for Emergency Department (ED) and OB Triage

In order to rapidly identify and isolate patients who may be infectious, providers should evaluate each patient presenting with respiratory symptoms according to the adult and pediatric algorithms. The algorithms are available in the 'Algorithm' section on the infection prevention website and should guide room type, PPE recommendations, and isolation signage/orders:

https://infectioncontrol.ucsfmedicalcenter.org/coronavirus

Healthcare personnel obtaining nasopharyngeal or oropharyngeal swabs for COVID-19 testing must perform hand hygiene and then put on:

i. N95 respirator plus face shield/goggles OR powered air purifying respirator (PAPR)
ii. gloves
iii. gown

Obtaining an NP swab is not considered an aerosolizing procedure.

If a patient gets nebulized medication or discrete aerosol-generating procedure, place the aerosol-generating procedure sign on door during and for 1 hour after the procedure: https://infectioncontrol.ucsfmedicalcenter.org/sites/g/files/tkssra4681/f/COVID_AGP%20stop%20sign.pdf

Appropriate PPE includes:

i. N95 respirator plus face shield/goggles OR powered air purifying respirator (PAPR)
ii. gloves
iii. gown

ED Discharge to home
If the patient is not admitted to the hospital and is discharged home:

1. Teach the patient about infection control practices to use at home including diligent handwashing, cough etiquette, and remaining at home while ill and strict return to care precautions.
2. Patient should remain at home pending COVID-19 testing result.
3. Contact HEIP for any positive COVID-19 results. For management questions of adult patients call COVID ID attending (415-443-0190) and for pediatric patients COVID peds ID service (628-248-8292, Voalte COVID Pediatrics ID).
4. For additional information, give them a copy of the CDC's interim guidance https://www.cdc.gov/coronavirus/COVID-19/guidance-prevent-spread.html
5. Give patient a surgical mask to wear as they are leaving the hospital.

After patient leaves the ED

1. Keep exam room empty with appropriate isolation signage for 1 hour with the door closed if an aerosol-generating procedure was performed (including nebulized medication). Obtaining an NP swab is not considered an aerosolizing procedure and does not require the room to be empty for one hour.
2. Clean room with approved hospital disinfectant including blood pressure cuff, stretcher, counters, bedside table etc. Discard contaminated supplies.
3. If the cleaner wears the appropriate PPE described in the algorithms above, he/she can clean the room prior to the one-hour wait time.

VII. Precautions for Respiratory Screening Centers (RSCs) and Ambulatory Care Units (ACUs)

All patients presenting to RSC and ACU locations suspected of having COVID-19 based on symptoms (cough, dyspnea, fever or influenza-like illness), known exposure or travel history should be given a surgical mask and the ambulatory steps outlined in the ambulatory algorithm followed. The algorithms are available in the 'Algorithm' section on the infection prevention website and should guide room type, PPE recommendations, and isolation signage/orders:

https://infectioncontrol.ucsfmedicalcenter.org/coronavirus

Important steps to highlight:

1. Place patient in single room with door closed. Patient escort wears surgical mask; gowns and gloves if there is direct patient contact
2. Place Contact/Droplet Isolation sign on door

3. HCW entering room to use gloves, gown, surgical mask and eye protection unless aerosol generating procedure anticipated.
4. Triage acuity of patient (vitals, brief history, exam)
5. Contact HEIP for any positive COVID results. For management questions of adult patients call COVID ID attending (415-443-0190) and for pediatric patients the COVID peds ID service (628-248-8292, Voalte COVID Pediatrics ID).

Ambulatory Clinic Personal Protective Equipment (PPE) Key Points
Don gown, gloves, N95 with eye protection or PAPR while obtaining nasopharyngeal and oropharyngeal swabs. If not available, use surgical mask with eye protection, gown, gloves.

For nebulized medications and other discrete aerosol-generating procedures wear N95 with eye protection (or PAPR) plus gown/gloves during procedure and when entering room 1 hour after procedure. Place the aerosol-generating procedure sign on door during and for 1 hour after the procedure:
https://infectioncontrol.ucsfmedicalcenter.org/sites/g/files/tkssra4681/f/COVID_AGP%20stop%20sign.pdf

Appropriate PPE for discrete aerosol-generating procedures includes:
i. N95 respirator plus face shield/goggles OR powered air purifying respirator (PAPR)
ii. gloves
iii. gown

Ambulatory Clinic Post Discharge Room Care
If aerosol-generating procedure performed including nebulized medications, wait 1 hour and then clean high touch surfaces with approved hospital disinfectant. Obtaining an NP swab is not considered an aerosolizing procedure and does not require the room to be empty for one hour. Subsequent patients can be roomed after this process.

For additional questions, please call HEIP.

VIII. Precautions for inpatients with respiratory symptoms who are requiring inpatient admission with COVID-19 testing

In order to rapidly identify and isolate patients who may be infectious, providers should evaluate each patient presenting with respiratory symptoms according to the adult and pediatric clinical algorithms. The algorithms are available in the 'Algorithm' section on the infection prevention website and should guide room type, PPE recommendations, and isolation signage/orders:

https://infectioncontrol.ucsfmedicalcenter.org/coronavirus

IX. Management of inpatients with COVID-19 test pending and for confirmed cases

For all patients with respiratory symptoms irrespective of testing results limit nursing and physician staff to essential personnel.

a) Refer to the adult and pediatric clinical algorithm for room type, PPE recommendations, and isolation signage/orders:
https://infectioncontrol.ucsfmedicalcenter.org/coronavirus

b) Place a surgical mask on all persons with COVID-19 testing pending or who is a confirmed case during transport.

c) Specimen Collection

All medical personnel obtaining nasopharyngeal or oropharyngeal swabs for COVID testing must perform hand hygiene and then put on:

i. N95 respirator plus goggles/face shield OR powered air purifying respirator(PAPR)
ii. gloves
iii. gown

d) For patients requiring "Novel Respiratory Isolation with Negative Pressure Isolation"

i. Place patient in negative-pressure room preferentially. If not available, place patient in private room with door closed. Do not place patient in a protective environment room that is positively-pressured.
ii. Prior to admission of these patients, the accepting primary nurse must:
    1. Make sure the negative-pressure room is verified by Facilities to be "Negative".
    2. Confirm with Facilities via MCSS Work Order (https://fss.ucsfmedicalcenter.org/facilities/docs/howTo.pdf) that the room is at negative pressure.
    3. Obtain and follow guidance in the Novel Respiratory Isolation Evaluation Room Packet: https://infectioncontrol.ucsfmedicalcenter.org/sites/g/files/tkssra4681/f/Novel%20iso%20cart%20packet.pdf
    4. Order 'Novel Respiratory Isolation' cart
    5. Order 'Novel Respiratory Isolation with Negative Pressure Isolation.' Post a healthcare personnel sign-in sheet. Before entering the patient's room, all healthcare personnel will indicate entry into the patient's room by completing a row on the sheet (Appendix B).
    6. Keep doors to the negative-pressure isolation rooms, including anteroom doors, closed at all times except when healthcare personnel or patients enter or exit the room.
    7. Post the 'Novel Respiratory Isolation' sign on the door of the patient's room.

iii. At the time of admission
    1. Educate patient about the reasons for isolation precautions. In addition, instruct patients to cover their mouth and nose with tissue when coughing or sneezing
    2. The patient should remain in the room at all times with the doors closed unless emergency diagnostic or therapeutic procedures (e.g., CAT scan, surgery, etc.) are urgently required and cannot be performed in the patient's room. When leaving the room, the patient must disinfect hands, put on a clean hospital gown, put on a surgical mask, and be covered with a clean gown (See "Transport of Patient").

iv. During admission
    1. For any positive COVID-19 results, contact:
        a. HEIP **AND**
        b. For adult patients call COVID ID attending (415-443-0190)
        c. For pediatric patients the COVID peds ID service (628-248-8292, Voalte COVID Pediatrics ID).
    2. Follow clinical algorithm to adjust room, PPE, and signage/order requirements based on respiratory viral testing results.
    3. For questions about COVID-19 treatment or additional diagnostic questions (including discussion of false negative results) follow algorithm. Contact the COVID ID attending for adult patients and the COVID peds ID service for pediatric patients.
    4. Discontinuing isolation

Follow the clinical algorithm to determine changes in isolation. Consideration can be made for discontinuing precautions if COVID-19 is no longer being considered as a diagnosis (i.e., there is an alternative diagnosis and concern for COVID-19 is low).

For COVID-19 positive patients the timing and appropriateness of discontinuing isolation will be decided on a case-by-case basis in consultation with the HEIP and the COVID ID Attending and the COVID peds ID service. Maintain isolation until the patient tests negative and is cleared by HEIP.

v. For discharge
   1. For COVID-19 positive inpatients, call HEIP for discharge approval.
   2. **Notify the Pathology Department prior to autopsy** procedures for deceased patients with suspected or confirmed COVID-19. See below for Autopsy procedure recommendations.
   3. The patient room is considered contaminated for 1 hour (>99.9% removal efficiency) after the patient leaves; keep vacant with doors closed for that interval of time. After 1 hour, discharge cleaning of the room will be performed prior to the admission of the next patient (see "Cleaning and Disinfection of Environment and Equipment").

e) Patients requiring "Respiratory Illness Evaluation without Negative Pressure"
   i. Place patient in private patient room with door closed. Do not place patient in a protective environment room that is positively-pressured.
   ii. Prior to admission of these patients, the accepting nurse must:
      1. Obtain and follow guidance in the Respiratory Illness Evaluation Room Packet: https://infectioncontrol.ucsfmedicalcenter.org/sites/g/files/tkssra4681/f/Resp%20inf%20cart%20packet.pdf
      2. Order "Respiratory Illness Evaluation without Negative Pressure." Post a healthcare personnel sign-in sheet. Before entering the patient's room, all healthcare personnel will indicate entry into the patient's room by completing a row on the sheet (Appendix B).
      3. Keep doors closed at all times except when healthcare personnel or patients enter or exit the room.
      4. Post the 'Respiratory Illness' isolation sign on the door of the patient's room

   iii. At the time of admission
      1. Educate patient about the reasons for isolation precautions. In addition, they should be instructed to cover their mouth and nose with tissue when coughing or sneezing
      2. The patient should remain in his/her room at all times with the doors closed unless emergency diagnostic or therapeutic procedures (e.g., CAT scan, surgery, etc.) are urgently required and cannot be performed in the patient's room. When leaving his/her room, the patient must disinfect hands, put on a clean hospital gown, put on a surgical mask, and be covered with a clean gown (See "Transport of Patient").

   iv. During admission
      1. For nebulized medications or other discrete aerosol-generating procedures, wear an N95 & eye protection or PAPR in addition to gloves/gown during procedure and when entering room 1 hour after. Place aerosol-generating procedure sign on door during the procedure and for 1 hour after procedure.

2. Follow clinical algorithm to adjust room and PPE requirements based on respiratory viral testing results
3. For any positive COVID-19 results contact HEIP, for adult patients call the COVID ID attending (415-443-0190) and for pediatric patients the COVID peds ID service (628-248-8292, Voalte COVID Pediatrics ID).
4. If the COVID-19 test is positive, continue "Respiratory Illness Evaluation without Negative Pressure" including gown, gloves, surgical mask with eye protection unless aerosol-generating procedure will be performed (except nebulized medications and discrete aerosol-generating procedures). Refer to clinical algorithm for details.
5. For questions about COVID-19 treatment or additional diagnostic questions (including discussion of false negative results) contact the COVID ID attending for adult patients and the pediatric infectious disease service.
6. Discontinuing isolation
   Follow the clinical algorithm to determine changes in isolation. Consideration can be made for discontinuing precautions if COVID-19 is no longer being considered as a diagnosis (i.e., there is an alternative diagnosis and concern for COVID-19 is low).

   For COVID-19 positive patients the timing and appropriateness of discontinuing isolation will be decided on a case-by-case basis in consultation with the HEIP and the COVID ID Attending for adult patients and the COVID peds service isolation. Maintain isolation until the patient tests negative and is cleared by HEIP.

v. For discharge
1. For COVID-19 positive inpatients, call HEIP for discharge approval.
2. **Notify the Pathology Department prior to autopsy** procedures for deceased patients with suspected or confirmed COVID-19. See below for Autopsy procedure recommendations.

X. Discontinuing isolation

a) Follow the clinical algorithm to determine changes in isolation. Consideration can be made for discontinuing precautions if COVID-19 is no longer being considered as a diagnosis (i.e., there is an alternative diagnosis and concern for COVID-19 is low).

   For COVID-19 positive patients the timing and appropriateness of discontinuing isolation will be decided on a case-by-case basis in consultation with the HEIP and COVID ID Attending and the COVID peds ID service. Maintain isolation until the patient tests negative and is cleared by HEIP.

XI. Limiting staff contacts

For all patients with respiratory symptoms irrespective of respiratory viral testing results limit nursing and physician staff to essential personnel.

a) Instruct dietary personnel and non-essential personnel not to enter the patient room for patients with pending COVID-19 testing and those with confirmed COVID-19.
b) All healthcare personnel entering the patient's room must sign in on the Room Entry Log once per shift (Appendix B).

XII. Laboratory

a) All clinical specimens for patients who have pending COVID-19 testing or confirmed infection should be handled using Standard Precautions in accordance with routine procedures.

XIII. Food service

a) Nutrition and Food services staff should not enter the room of a suspected or confirmed COVID-19 patient.
b) Management of food service should be performed in accordance with routine procedures. Nutrition and Food services staff can receive the soiled tray wearing gloved hands directly outside of the patient room. The soiled tray should then be delivered to the dirty food service cart. The gloves can then be removed and hand hygiene performed.

XIV. Trash and Linen

a) Place a trash receptacle into the anteroom (or patient room if no anteroom).
b) Place trash, including discarded isolation gowns and gloves, into the anteroom/room trash receptacle.
c) Place a trash receptacle in the hall outside the anteroom (or outside patient room if no anteroom).
d) Place discarded N95 respirators (handle by straps, not by the face protection portion), PAPR disposable shields, surgical masks, faceshields, and goggles into the regular trash receptacle outside of the patient's room.
e) Coordinate with Hospitality to hand off soiled linen and trash at times other than daily room clean.
f) Trash will be transported by Hospitality staff per normal process.
g) Sharps and non-hazardous pharmaceutical containers will be picked up by Hospitality staff via a transport tote.
h) Soiled linen from a patient with testing pending or confirmed COVID-19 is transported and laundered in the same manner as all hospital linen. Place soiled linen in a soiled linen bag and hold in the patient's room or anteroom until it is transported for laundering.

XV. Cleaning and disinfection of environment

a) Room Pre-Occupancy Preparation (no PPE required)
b) Place soiled linen collection container in anteroom, or in patient room if no anteroom.
c) Personal Protective Equipment (PPE)
    i. Hospitality staff must wear PPE as directed on the isolation sign.
    ii. Perform hand hygiene prior to entering room and immediately after removing PPE.
d) Cleaning Procedures
    i. Follow standard procedures for routine daily and discharge cleaning of patient room. Place all soiled linen into the soiled linen bag in the hamper in the anteroom or within the patient room.
e) Following discharge or transfer from the room
    i. For 'Novel Respiratory Isolation' the patient room is considered contaminated for 1 hour (>99.9% removal efficiency) after the patient leaves and should remain vacant with doors closed for that interval of time. After 1 hour, discharge cleaning of the room will be performed prior to the admission of the next patient (see "Cleaning and Disinfection of Environment and Equipment").
    ii. For "Respiratory Illness Evaluation without Negative Pressure," follow routine cleaning procedures *unless* the patient received a nebulized medication or other discrete aerosol-generating procedure in which case the patient room is considered contaminated for 1 hour after the patient leaves and should remain vacant with doors closed for that interval of time.
f) Change privacy curtains.
g) Following cleaning
    1. NOVEL RESPIRATORY ISOLATION sign: Hospitality staff will page the Hospitality supervisor to report that cleaning is complete. The supervisor must visually inspect the room then will remove the NOVEL RESPIRATORY ISOLATION sign and inform nursing unit staff that the room has been cleaned and is ready for re-occupancy.
    2. RESPIRATORY ILLNESS sign: follow routine cleaning procedures.

XVI. Cleaning and disinfection of equipment

a) Equipment and/or devices that are not disposable must be cleaned to remove any blood or body fluids and disinfected with the approved hospital disinfectant. Cleaning and disinfection must be completed before the equipment is stored in the clean equipment area and before being used for other patients.

b) Clean and disinfect equipment in the patient room or in the anteroom unless space constraints make this impossible.

c) Equipment surface(s) must be THOROUGHLY WET with the disinfectant agent and allowed to remain undisturbed for the contact time specified by the surface disinfectant.

d) Persons cleaning/disinfecting equipment in a room housing a suspected or confirmed COVID-19 patient must wear PPE as follows:

e) All persons entering a 'Novel Respiratory' isolation room must perform hand hygiene and then put on:

   i. N95 respirator and face shield or googles
   OR powered air purifying respirator [PAPR].
   ii. gloves
   iii. gown

f) All persons entering a 'Respiratory Illness' isolation room must perform hand hygiene and then put on:

   i. Surgical mask with eye protection (face shield or googles)
   ii. gloves
   iii. gown

   If a discrete aerosol generating procedure was performed, an N95 with eye protection or PAPR should be used instead of a surgical mask.

g) If cleaning/disinfecting equipment in the anteroom, wear a gown and gloves.

h) Disinfect hands before putting on personal protective equipment and after removing equipment.

XVII. Transport

The patient should remain in his/her room at all times with the doors closed unless emergency diagnostic or therapeutic procedures (e.g., CAT scan, surgery, etc.) are required and cannot be performed in the patient's room.

a) Before leaving the room, the patient will disinfect their hands, put on a clean hospital gown, and put on a surgical mask. Use a clean sheet that was not stored in the room to cover the patient before leaving the room.

b) Transporters will follow the recommended sequence of donning PPE for COVID-19 prior to entering the patient's room and before transferring the patient to a wheelchair or gurney.

c) Once the patient has been transferred to a wheelchair or gurney, the transporter will remove gowns and gloves in the anteroom, perform hand hygiene, but will keep the N95 respirator/eye protection or PAPR or surgical mask with eye protection on during transport.

d) The transporter will continue to wear the N95 respirator/eye protection or PAPR or surgical mask with eye protection during transport. The transporter will bring extra PPE as outlined (gown, gloves and depending on isolation N95 respiratory/eye protection, surgical mask/eye protection) in case an emergency occurs during transport.

e) Bring a clean surgical mask in the event the patient's mask becomes wet during transport.

f) Notify the area to which the patient is being transported that the patient has COVID-19 testing pending or is a confirmed case so that appropriate accommodations can be made. If possible, schedule these patients at the end of the day or when waiting rooms are not crowded.

g) After arrival at their destination, receiving personnel (e.g., in radiology) and the transporter (if assisting with transfer) will perform hand hygiene and wear the recommended PPE for 'Novel Respiratory Isolation' (gown, gloves, and N95 respiratory with eye protection OR PAPR) or for 'Respiratory Illness' Isolation (gown, gloves, and N95 respiratory with eye protection OR PAPR

OR surgical mask with eye protection) depending on if patient is receiving discrete aerosol-generating procedure.

h) If still wearing their original N95 with eye protection, PAPR, or surgical mask with eye protection the transporter will take care to avoid self-contamination when donning the remainder of the recommended PPE.
i) Patients traveling to the Operating Room must be transported directly to the OR from their rooms.

XVIII. Restricting visitors

Visitor restriction policies for the ED and inpatient setting are dictated by City and County of San Francisco Department of Public Health Order of the Health Office No.C19-06 issued March 13, 2020.

a) Adult patients will not be allowed visitors except for those deemed necessary (see below)
b) Pediatric patients will be restricted to one single care giver permitted at the bedside
c) Necessary visitors
    i. Pediatric patients restricted to one single care giver permitted at the bedside.
    ii. Laboring patients will be allowed a single person at the bedside.
    iii. Family members of patients who are at the end of life or experiencing an acute life threatening event who, in the judgement of the provider team, is expected not to survive the current hospital stay.
    iv. Visit by those legally authorized to make decisions for the patient whether by operation of a DPOA or conservatorship, or a surrogate decision-maker as recognized by the provider team for patients who lack decisional capacity.
    v. Support persons for patients with developmental disabilities who require assistance.
    vi. Support persons who must be trained on how to care for a patient after discharge or who are necessary to help discharge a patient.
    vii. Visits by family and legal advisors to update a patient's will or other legal papers.
    viii. Support persons for patients with delirium and or dementia where the presence of the visitor is necessary to reduce the patient's delirium, reduce the risk of falls, and otherwise reduce the risk of medical or clinical harm.
    ix. Others to be discussed on a case by case basis.

Encourage use of alternative mechanisms for patient and visitor interactions such as video-call applications on cell phones or tablets.

Necessary visitors need to comply with the following instructions:

1. Will be screened for fever, respiratory symptoms at the time of arrival. They must be asymptomatic. If they are symptomatic, they will not be allowed to visit and may be referred to the Respiratory Screening Clinic.
2. Before visitors enter patients' rooms, review diligent hand hygiene, limiting surfaces touched, and expectation to not go to common spaces in the hospital.
3. If the patient is on 'Novel Respiratory' isolation or 'Respiratory Illness' isolation:
    I. Explain the rationale for wearing PPE in the patient room, offer PPE (surgical mask with eye protection, gloves, gown) to be used while in the patient room, and give instructions for donning and doffing.
    II. Visitors will not be present during AGPs or other specimen collection procedures unless there are extenuating circumstances such as a pediatric patient.
4. Visitors will be instructed to only visit the patient room. They shall not go to other locations in the facility including common spaces.

XIX. Specific caretaker indications for pediatric patients presenting to the ED and for admission

a) At the point of entry, screen all accompanying people for fever, respiratory symptoms.

b) If accompanying people are symptomatic
    i. If they are symptomatic, they will be asked to leave and may be referred to the Respiratory Screening clinic. If this is not possible due to an extenuating circumstance, then place a surgical mask on them and room them as soon as possible.
    ii. Implement appropriate PPE as outlined above.
    iii. For the ED and ambulatory settings, cohort the symptomatic pediatric and adult patients.
c) If accompanying people are asymptomatic
    i. See above for the limitation of visitors
    ii. If a pediatric patient requires admission:
        a) The asymptomatic caretaker will be asked to report and will be screened for fever, respiratory symptoms daily. They must comply with the following instructions:
            (a) Review diligent hand hygiene
            (b) If possible given the age and developmental stage of the patient, caretakers should not be present during AGPs or other specimen collection procedures.
            (c) Caretakers should stay in the patient room (food tray brought to their room, etc.). They will not go to other locations in the facility.
        b) While the patient is on 'Novel Respiratory' isolation or 'Respiratory Illness' isolation:
            (a) Explain the rationale for wearing PPE in the patient room, offer PPE (surgical mask with eye protection, gloves, gown) to be used while in the patient room and give instructions for donning and doffing.

XX. Staff Screening

a) Healthcare personnel will be required to:
    i. Perform daily screening that includes questions on symptoms and travel prior to starting work for the day.
    ii. The criteria for presenting to work will be the UCSF Occupational Health Services Return to Work guideline: https://occupationalhealthprogram.ucsf.edu/sites/g/files/tkssra4062/f/wysiwyg/UCSF_Stay_at_Home_Return_to_Work_Guidelines_Rev%203-9-2020.pdf

XXI. Follow-up of potential healthcare worker and patient exposures

a) HEIP responsibilities:
- Review the medical record of any positive COVID-19 patient to ascertain whether proper isolation measures were instituted.
- Review the patient's status
- Determine whether any potential exposure to hospital personnel occurred.
- Determine whether any potential exposure to patients occurred.
- Report exposures to Occupational Health Services.

b) Responsibilities of Occupational Health Services:
- Identify all healthcare personnel who have entered a 'Novel Respiratory' or 'Respiratory Illness' isolation room by utilizing the sign-in sheets posted outside the room.
- Provide self-monitoring instructions to all healthcare personnel who have entered the patient's room.
- Contact the supervisors of departments with exposed employees. Provide supervisors with an exposure follow-up form which states that a COVID-19 exposure has occurred in their department, including the name and MRN of the source. Supervisors are required to submit a

list of the names and employee ID numbers of their exposed employees to Occupational Health Services by the end of the business day on which the supervisor is notified.
- Record all exposures and exposed employee information.
- Arrange for post-exposure education and monitoring.
- Definition of Exposure: Any contact with a patient diagnosed or suspect for COVID-19 before initiation of appropriate isolation precautions.
- Exposed employees must measure their own temperatures twice daily and can continue to work as long as they do not have fever >100.0°F or respiratory symptoms (e.g. cough, shortness of breath or trouble breathing).
- Exposed employees at the SF campuses must telephone OHS (415) 353-4341 daily prior to reporting for each work shift for symptoms evaluation. At BCH-Oakland, call Employee Health at 510-428-3620.
- Employees determined to have suspect COVID-19 are restricted from work from the time of presentation of symptoms until clearance by OHS. Employees must obtain OHS/EHS clearance prior to returning to work.

XXII. Engineering Controls

A. Airborne Infection Isolation rooms (AIIRs)
1. A table of AIIRs is located in Appendix A.
2. Ventilation requirements for these rooms include:
   3. a minimum of 12 air changes/hour airflow
   4. direct air exhaust to the outside or HEPA filtration of air prior to recirculation
   5. sealing of rooms to enable maintenance of negative pressure relationships with the adjacent corridor

B. Regular monitoring and maintenance of engineering controls
1. Engineering controls, including all negative air pressure areas of the hospital and HEPA filtration systems, undergo regular monitoring and maintenance by the Facilities Management.

C. AIIRs in the Emergency Department
1. The Parnassus and MB Emergency Department AIIRs must be verified by Facilities as “negative” before being used for patients on Airborne Precautions.
2. The Oakland campus has no AIIRs in the Emergency Department. Room 5 has negative pressure and would be the preferred location for a suspect COVID-19 patient.

XXIII. Sputum Induction and Bronchoscopy Procedures
A. Policies and procedures

During any aerosol-generating procedure, healthcare workers in the patient room must wear a gown, gloves, PAPR or N95 with googles/face protection during procedure and when entering room 1 hour after procedure. Place aerosol-generating procedure sign on door during and for 1 hour after the procedure.
https://infectioncontrol.ucsfmedicalcenter.org/sites/g/files/tkssra4681/f/COVID_AGP%20stop%20sign.pdf

For examples of aerosol-generating procedures refer to

https://safety.ucsf.edu/sites/g/files/tkssra256/f/UCSF%20MC%20PAPR%20Alert_FINAL_April%202017.pdf

Sputum Induction
1. Cough- and aerosol-generating procedures such as nebulizer treatments, sputum induction, bronchoscopy, open suctioning and endotracheal intubation may facilitate transmission of the COVID-19 virus to healthcare workers.

2. During any aerosol-generating procedure, healthcare workers in the patient room must wear a gown, gloves, PAPR or N95 with googles/face protection and for 1 hour after procedure. Sputum induction in COVID-19 patients should be avoided.

Bronchoscopy

1. Cough- and aerosol-generating procedures such as nebulizer treatments, sputum induction, bronchoscopy and endotracheal intubation may facilitate transmission of the COVID-19 virus to healthcare workers.
2. During any aerosol-generating procedure, healthcare workers in the patient room must wear a gown, gloves, PAPR or N95 with googles/face protection
3. Bronchoscopy will be performed on suspected COVID-19 patients only when medically necessary.
4. Patients with diagnosed or suspected COVID-19 requiring bronchoscopy must have the procedure performed in an AII room or area or HEPA filtered room (e.g., Endoscopy Suite).
5. Patients must remain in the room until coughing has subsided. Advise the patient to cover their mouth and nose with a tissue when coughing.
6. A surgical mask must be worn by the patient during transport.
7. The procedure room must not be used for at least 1 hour following bronchoscopy to allow sufficient time for appropriate ventilation.

XXIV. Clinical Laboratory and Autopsy Procedures

A. Clinical laboratories

1. Send specimens to UCSF Microbiology Laboratory. The Microbiology Laboratory will package the specimens and will arrange for transport of the specimens to the SFDPH Laboratory to transport to the CDC.

B. Other Clinical Laboratory Tests

Do NOT order viral isolation (culture) to be performed at UCSF. Specimens will not be accepted for viral isolation/culture. PCR testing (rapid influenza/RSV and respiratory viral panel) may be ordered.

C. Autopsy

1. Notify Pathology prior to autopsy on a patient being ruled out for or with confirmed COVID-19.
   i. The autopsy will occur in the AIIR of the Pathology Laboratory.
   ii. See CDC recommendations for collection of postmortem clinical and pathology specimens for SARS-CoV-2 testing here https://www.cdc.gov/coronavirus/COVID-19/hcp/guidance-postmortem-specimens.html
   iii. Limit the number of personnel working in the Autopsy suite during the autopsy procedure.
   iv. Staff involved in the autopsy procedure must wear a fluid-resistant or impervious gown with full sleeve coverage; waterproof apron; goggles or face shield; N95 respirator that they have been fit tested for or PAPR; and double surgical gloves with an interposed layer of cut-proof synthetic mesh gloves.
   v. Staff may wear surgical scrub suits, surgical cap, and shoe covers per Autopsy routine protocols.
   vi. Protective outer garments must be carefully removed when leaving the autopsy room and discarded in appropriate orange biohazard-lined trash and soiled laundry receptacles immediately outside the entrance. Hands must be disinfected upon removal of personal protective equipment. Clean and disinfect any reusable PPE per manufacturer's instructions prior to reuse.
   vii. The autopsy AIIR will be vacated for at least 1 hour following completion of the autopsy.
   viii. Avoid aerosol-generating procedures such as the use of oscillating saws whenever possible to decrease the risk of occupational exposure. Consider the use of hand shears as an alternative cutting tool. If an oscillating saw must be used, attach a vacuum shroud to contain aerosols.

XXV. Coordination with the Department of Public Health

Upon notification of a possible COVID-19 case, HEIP or the COVID ID Attending (415) 443-0190 will:

1. Evaluate the possibility that the patient has COVID-19.

2. If the patient meets the CDC's PUI criteria, HEIP will report pertinent information immediately to the Department of Public Health.

Attachments:
Appendix A: UCSF West Bay Campuses: Airborne Infection Isolation Rooms (AIIRs)
Appendix B: Room Entry Log

Appendix A

UCSF West Bay Campuses: Airborne Infection Isolation Rooms (AIIRs)

NEGATIVE VENTILATION AND ATD/AII ROOM STATUS PARNASSUS			
FLOOR	PERMANENT NEGATIVE ROOMS MEETING ATD/AII AT ALL TIMES	PERMANENT NEGATIVE ROOMS REQUIRING ADDITION OF SCRUBBER TO ACHIEVE ATD/AII	ROOMS THAT CAN BE MADE NEGATIVE & ATD/AII COMPLIANT THROUGH AIR MANIPULATION AND ADDITION OF SCRUBBER
1st	Long L105 Endoscopy, L152 ED	Long ED L135E, L141, L144	
6th		Long L659, L664	Moffitt 6S-03, 6S-04, 6S-05, 6S-06, 6S-07, 6S-08, 6S-09, 6S-10 Moffitt 6PICU beds 3 thru 10
7th		Long L707, L712, L774	M702P, M702N, M702K, M702J, M702G, M702F, M702C, M702B Moffitt 7East PCICU beds 1 thru 8
8th			Long L803, L804, L816, L866, L868, L872, L873 Moffitt 8NICU beds 1 thru 8
9th			Long L904, L905, L916, L963, L964, L968, L973, L974 Moffitt 9ICU beds 1 thru 16
10th		Long L1007	Long L1012, L1014, L1016, L1018, L1059, L1068, L1074 Moffitt ICC beds 1 thru 3 and 5 thru 9, 10South M1043, M1044, M1046
11th	Moffitt 11 ICU beds 5 and 6, L1132		
12th	Moffitt M1221, Long L1232		
13th	Long L1331, L1332 Moffitt M13ICU beds 13&14		
14th			Long L1403, L1414, L1416, L1418, L1422, L1432, L1468, L1473, Moffitt M1405, M1406, M1407, M1408, Moffitt M1416, M1417, M1418, M1419, M1420, M1421, M1424, M1425, M1427, M1430, M1431
15th	L1530, L1531, L1535, L1537, L1539		

NOTE ! "AIRBORNE PRECAUTION" eMR designations REQUIRE Facilities Work Order to effect ATD/AII Negative Pressure designation and regulatory monitoring - as well as a Work Order to return to regular pressure in order to return to normal. Includes PERMANENT NEGATIVE!

NEGATIVE VENTILATION AND ATD/AII ROOM STATUS MT. ZION			
FLOOR	PERMANENT NEGATIVE ROOMS MEETING ATD/AII AT ALL TIMES	PERMANENT NEGATIVE ROOMS REQUIRING ADDITION OF SCRUBBER TO ACHIEVE ATD/AII	ROOMS THAT CAN BE MADE NEGATIVE & ATD/AII COMPLIANT THROUGH AIR MANIPULATION AND ADDITION OF SCRUBBER
1st	Mount Zion Endoscopy B121, B118, B116 and B115		
4th			Mount Zion A434B, A434D, A434E, A434G
5th			Mount Zion A515, B523

NOTE ! "AIRBORNE PRECAUTION" eMR designations REQUIRE Facilities Work Order to effect ATD/AII Negative Pressure designation and regulatory monitoring - as well as a Work Order to return to regular pressure in order to return to normal. Includes PERMANENT NEGATIVE!

NEGATIVE VENTILATION AND ATD/AII ROOM STATUS MISSION BAY			
FLOOR	PERMANENT NEGATIVE ROOMS MEETING ATD/AII AT ALL TIMES	PERMANENT NEGATIVE ROOMS REQUIRING ADDITION OF SCRUBBER TO ACHIEVE ATD/AII	ROOMS THAT CAN BE MADE NEGATIVE & ATD/AII COMPLIANT THROUGH AIR MANIPULATION AND ADDITION OF SCRUBBER
1st	Emergency C1875, C1877		
2nd	RECOVERY TREAT 6 A2569 RECOVERY TREAT 13 C2835 RECOVERY, TREAT 14 C2837		
3rd	POSTPARTUM UNIT A3547 TRIAGE A3664, A3668 LABOR AND DELIVERY A3745 ANTEPARTUM UNIT A3847 INTENSIVE CARE NURSERY C3419, C3893, C3925, C3934, C3989		
4th	ADULT ICU A4547, A4549 CHILDREN'S ICU C4847, C4849 CHILDREN'S CARDIAC TCU C4899 CHILDREN'S CARDIAC ICU C4939 ICU ROOM, ADULT, ISOL A4543		
5th	ADULT ACUTE CARE SURGICAL UNIT/S A5547, A5549 CHILDREN'S MED SURGE UNIT C5843, C5847, C5849 CHILDREN'S TCU C5935 PATIENT ROOM, PEDS, ISOLATION C5907		
6th	ADULT ACUTE CARE SURGICAL UNIT/S A6547, A6549 CHILDREN'S HEM/ONC UNIT C6807, C6843, C6847, C6849		

NOTE ! "AIRBORNE PRECAUTION" eMR designations REQUIRE Facilities Work Order to effect ATD/AII Negative Pressure designation and regulatory monitoring - as well as a Work Order to return to regular pressure in order to return to normal. Includes PERMANENT NEGATIVE!

East Bay Campuses: Airborne Infection Isolation Rooms

Negative Ventilation and ATD/AII Room status Oakland 52nd Street Campus			
Floor	Permanent Negative Rooms Meeting ATD/AII at all times	Permanent Negative Rooms Requiring Addition of Scrubber to achieve ATD/AII	Rooms that can be made negative & ATD/AII compliant through air manipulation and addition of a scrubber
2nd	PICU BED 16 PICU BED 17		
4th	4 South 4307 4 South 4312		
Negative Ventilation and ATD/AII Room status Oakland Summit Campus			
4th	4 Med/Summit 4003, 4045, 4051		
5th	5 Med/Summit 5464		

Appendix B

UCSF Health

Room Entry Log

INSTRUCTIONS:	1. Each person entering this room must sign in once per shift 2. Start a new log at 7 a.m. daily (or when log is full) 3. Fax previous log to Occupational Health Services @ 415-353-7769 4. Contact the Unit Charge Nurse with any questions
Patient MRN:	**Room #:**

Print Name (First and Last)	Personal Contact Phone #	Date	Time in

Please fax Logs to Occupational Health Services *Daily* at 415-353-7769