

UCSF COVID-19 CONTROL PLAN

I. Program Administration

Hospital Epidemiology and Infection Prevention (HEIP) is coordinated by the System Director, Medical Directors, and Associate and Assistant Medical Directors who are 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 Services, Environmental Health and Safety, Medical Center Facilities Management, Patient Placement Services, Hospitality Services, and Clinical Laboratory Services. Input from other departments/individuals with required expertise is sought as needed.

II. Background

COVID-19 is an illness caused by the SARS-CoV-2 virus. Spread in the healthcare setting can occur through person-to-person transmission.

III. Contacts for Additional Guidance

A. Contact the adult or pediatric ID services for clinical guidance.

B. Hospital Epidemiology and Infection Prevention

(HEIP) COVID-19 RN team

Available Monday – Friday

8am-4pm 415-476-6408

covidmteam@ucsf.edu

C. Additional support including after hours:

ML Hospital Supervisor Spectralink (415) 353-8036 or (415) 353-1964

MB Adult Hospital Clinical Resource Nurse (415) 502-0728

Benioff Children's Hospital-SF Hospital Supervisor (415) 502-0728

D. Public Health Departments

- a. For Parnassus, Mission Bay, and Mount 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
- b. For BCH Oakland, contact the Alameda County Department of Public Health (ACDPH) at 510-267-3250, or during non-business hours call 925-422-7595.

IV. General Practices to Prevent Transmission of COVID-19 in the Healthcare Setting

a. UCSF Employees

1. UCSF employees who develop COVID-compatible symptoms or have a positive COVID-19 test should use the UCSF Mobile COVID-19 Health Screener for guidance regarding testing, reporting, and return to work.
2. The criteria for employee continue to work/return to work are available in the [UCSFOccupational Health Services Return to Work guideline](#).

b. Patients and Visitors

1. Patients with symptoms consistent with COVID-19 or other respiratory illness will be asked to wear a medical mask (unless there are medical contraindications or younger than 2 years of age). This is consistent with the Standard Precautions/Respiratory Hygiene practices applied to all patient encounters.
2. Visitors, including caretakers, with symptoms consistent with COVID-19 or respiratory illness will ideally be asked leave and return when well. Essential visitors/caretakers with symptoms who cannot leave will be asked to wear a medical mask (unless there are medical contraindications or younger than 2 years of age).

c. Source Control Measures:

1. Healthcare personnel (HCP) masking
 - During mandatory masking periods (including but not limited to November 1st through April 30th of every year), all UCSF Health employees are required to wear a UCSF-provided medical mask while providing care for patients as specified in the UCSF Health Masking Policy.
 - HCP will also continue to be required to wear an appropriate UCSF-provided medical mask or respirator based on Standard and Transmission-based precautions
 - If indicated, HCP will also continue to be required to wear an appropriate medical mask for return to work purposes after a COVID-19 exposure or infection
 - HCP can choose to wear a UCSF-provided mask or respirator at other times.
 - For more details, refer to this [masking FAQ](#).
2. Patients, visitors, and caretaker masking
 - During mandatory masking periods, patients, visitors, and caretakers are strongly recommended, but not required, to wear a medical mask while at UCSF Health.

d. Hand hygiene:

1. Encourage and educate patients, visitors and HCP to perform frequent hand hygiene, especially before and after adjusting masks, patient encounters, or contact with high touch surfaces.

e. Vaccination:

1. All HCP of UCSF Health must adhere to the UC-wide [vaccine policy](#).
2. Provide resources and education and strongly encourage vaccination for all employees, visitors, and patients.

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

- A. Early identification of patients with possible COVID-19 infection:
 - a. Rapid identification of individuals with compatible symptoms and institution of appropriate isolation measures are critical to reducing the risk of COVID-19 transmission.
- B. COVID-19 testing is available and does not require approval.
- C. Consult the adult and pediatric ID services to assist with clinical management.

VI. COVID-19 Testing

- A. Use COVID-19 microbiology laboratory-based nucleic acid amplification testing (NAAT) or COVID-19 antigen tests for the diagnosis of COVID-19.
- B. Testing should be guided by the COVID-19 testing [FAQs](#) and does not require additional approval.
- C. Appropriate PPE to wear during test collection:
 - a. Obtaining a nasopharyngeal (NP), mid-turbinate (MT), anterior nares (AN), or oropharyngeal (OP) specimen is not considered an aerosolizing procedure and a negative pressure/airborne infection isolation room is not required.
 - b. Perform testing in a room with the door closed.
 - c. Healthcare personnel obtaining swabs for COVID-19 testing must perform hand hygiene and don:
 - i. Fit-tested N95 respirator and eye protection OR powered air purifying respirator (PAPR)
 - ii. Gloves
 - iii. Gown
- D. Test review and reporting
 - a. When a positive COVID-19 test is reported, the Microbiology lab and HEIP will report the result to the San Francisco Department of Health or other local county health department where patient resides.
 - b. HEIP will review test results routinely
 - c. HEIP will report test results as per legislative and public health requirements
- E. Contact the adult or pediatric ID services with COVID-19 management/treatment- related questions.

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

- A. In order to rapidly identify and isolate patients who may be infectious, providers should evaluate each patient presenting with symptoms concerning for COVID-19.
- B. Management of symptomatic patients with suspected COVID-19, COVID-19 exposed, and confirmed COVID-positive patients will be similar.
- C. Place patient on "[Novel Respiratory Isolation](#)".
 - a. PPE for all health care personnel will include:
 - 1. Fit-tested N95 and eye protection or PAPR
 - 2. Gloves
 - 3. Gown
- D. Room placement
 - 1. A private room with the door closed is required.
 - 2. For patients receiving [aerosol generating procedures](#), an AIIR/negative pressure room is preferred, when available.
 - 3. Do not place a patient with suspected or confirmed COVID-19 in a positively-pressured room (e.g., do not place in a Protected Environment room).
- E. Signage: Post the 'Novel Respiratory Isolation' sign on the door of the patient's room. Keep doors to the patient room, including anteroom doors if relevant, closed except when healthcare personnel or patients enter or exit the room.
- F. For all patient care irrespective of concern for COVID-19 infection: Healthcare personnel are recommended to wear the following PPE noted in this [guidance](#).
- G. ED Discharge to home: If the patient is not admitted to the hospital and is discharged home and has a COVID-19 test pending:
 - a. Instruct the patient to quarantine at home pending the COVID-19 test result.

VIII. After patient leaves the ED:

- A. Clean room with approved hospital disinfectant including blood pressure cuff, stretcher, counters, bedside table etc. Discard contaminated supplies.
- B. If an AGP was performed, keep exam room empty with door closed and maintain appropriate isolation signage for 1 hour after the last AGP was performed.
- C. If the patient support assistant wears the appropriate PPE described above, they can clean the room prior to the one-hour wait time since the last AGP.
- D. Discontinuation of isolation criteria for COVID-19 confirmed patients:
 - a. For COVID-19 positive patients refer to the following [guidance](#). If questions arise, contact HEIP.
 - b. If date of symptom onset cannot be determined, or patient is asymptomatic, the date of the first positive COVID-19 PCR test should be used.

VIII. Ambulatory Areas

- A. Refer to [COVID-19 Clinical Resources](#).
- B. If an ambulatory patient arrives in the clinic and is noted to have symptoms concerning for COVID-19 or has a known COVID-19 diagnosis:
 - a. Room the patient immediately with door closed
 - b. Place 'Novel Respiratory Isolation' sign on door
 - c. Healthcare personnel entering room must wear PPE consistent with Novel Respiratory Isolation.

IX. Procedural and Operative Areas

- A. The perioperative and preprocedural PPE and workflow recommendations are available [here](#).

X. Inpatient Management

- A. Inpatient management of symptomatic patients with suspected COVID-19, COVID-19 exposed, and confirmed COVID-positive patients
 - a. In order to rapidly identify and isolate patients who may be infectious, providers should evaluate each patient for signs or symptoms concerning for COVID-19.
 - b. Place patient on 'Novel Respiratory Isolation. PPE for all health care personnel must include:
 - a. Fit-tested N95 and eye protection or PAPR
 - b. Gloves
 - c. Gown
- B. Room placement
 - a. A private room with the door closed is required.
 - b. Do not place a patient with suspected or confirmed COVID-19 in a positively-pressured room (e.g., do not place in a Protected Environment room).
 - c. For patient receiving [aerosol generating procedures](#), an AIIR/negative pressure room is preferred, when available.
 - Prior to admitting a patient into an AIIR/negative pressure room, the accepting primary nurse will verify from Facilities via [MCSS Work Order](#) that the room is at negative pressure for patient in an AIIR and the green Facilities tag is affixed to the door(s).

- C. Signage
 - a. Post the 'Novel Respiratory Isolation' sign on the door of the patient's room.
 - b. For patients on Novel Respiratory Isolation, keep doors closed at all times except when healthcare personnel or patients enter or exit the room.
- D. Isolation Order
 - a. In Apex, order '**Novel Respiratory Isolation**' at the time of admission
 - b. Educate the patient about the reasons for isolation precautions.
 - c. Instruct patients
 - i. Ask patients to cover their mouth and nose with a tissue when coughing or sneezing. Patients are strongly recommended to wear a medical mask when healthcare personnel or visitors are in the room and anytime that they need to leave their room assuming no medical or age contraindications
 - ii. Ask patients to remain in the room at all times with the doors closed unless emergency diagnostic or therapeutic procedures (e.g., CT scan, surgery, etc.) are urgently required and cannot be performed in the patient's room.
 - iii. During transport, the patient must disinfect hands, put on a clean hospital gown, put on a medical mask (if safe and age appropriate), and a clean sheet on the patient's body (See "[Transport of Patient](#)"). If the patient is a younger child, cover the crib with a clean sheet during transport if safe.
- E. During admission
 - a. Contact the adult or pediatric ID services for COVID-19 management/treatment-related questions.
- F. Discontinuation of isolation for patients with confirmed COVID-19:
 - a. [Guidance for Discontinuing Isolation for COVID-19 positive patients](#)
 - b. For patients who are select severely immunocompromised follow: [Immunocompromised workflow](#)
 - c. For additional guidance and if questions arise, contact HEIP.
- G. For COVID-19 exposed patients, follow this [guidance](#) to determine the duration of quarantine.
- H. COVID-19 confirmed discharges:
 - a. **Notify the Pathology Department prior to autopsy** procedures for deceased patients with suspected or confirmed COVID-19. See "[Autopsy Guidance](#)."
 - b. For environmental and equipment cleaning instructions, see "[Cleaning and Disinfection of Environment and Equipment](#)."

XI. Limiting staff contacts

- A. Dietary personnel and non-essential personnel should not enter 'Novel Respiratory Isolation' rooms

XII. Laboratory

- A. All clinical specimens for patients with suspected or confirmed COVID-19 infection should be handled using Standard Precautions in accordance with routine procedures. Standard precautions include:
 1. No need for separate labeling of specimens as suspected/confirmed COVID-19
 2. No need for double bagging of specimens
 3. Acceptable to submit specimens via the [pneumatic tube system](#)

XIII. Food service

- A. Nutrition and Food services staff should not enter 'Novel Respiratory Isolation' rooms
- B. Manage food service according to routine procedures. Nutrition and Food services staff can receive the soiled tray wearing gloved hands directly outside of the patient room. Place the soiled tray in the soiled food service cart. Remove gloves and clean hands.
- C. Use of disposable trays is not recommended.

XIV. Trash and Linen

- A. Ensure accessibility to trash receptacles inside and outside the patient's room.
- B. Coordinate with Hospitality to hand off soiled linen and trash at times other than daily room clean.
- C. Hospitality will handle trash and linen according to routine processes.
- D. Sharps and non-hazardous pharmaceutical containers will be handled according to routine processes.

XV. Cleaning and Disinfection of Environment

- A. Room Pre-Occupancy Preparation (no PPE required)
- B. Follow the recommendations in the [Hospitality Isolation Sign and Cleaning Responsibilities](#)
- C. Place soiled linen collection container in anteroom, or in patient room if no anteroom.
- D. Personal Protective Equipment (PPE): Clean hands before putting on and after removing PPE every time.
 - 1. Hospitality staff will wear PPE as directed on the isolation sign.
 - 2. Clean hands prior to entering room and when removing PPE.
- E. Cleaning Procedures
 - 1. Follow standard procedures for routine daily and discharge patient room cleaning (see XIV. Trash and Linen above).
- F. Following discharge or transfer from the room
 - 1. For 'Novel Respiratory Isolation', default to considering the patient room contaminated for 1 hour (>99% removal efficiency) after the patient leaves. Keep the room closed with the Novel Respiratory Isolation sign on the door and wait for that interval of time before admitting the next patient into that room. Depending on the number of air changes per hour, the time the room needs to remain closed may be less than 1 hour.
 - 2. Hospitality staff must wear all PPE required for Novel Respiratory Isolation if entering the room to perform discharge cleaning during the 1 hour following patient discharge.
 - 3. Change privacy curtains.

XVI. Cleaning and Disinfection of Equipment

- A. Perform hand hygiene before putting on and after removing PPE.
- B. Clean equipment and/or devices that are not disposable to remove any blood or body fluids and disinfected with hospital-approved detergent-disinfectant. Cleaning and disinfection must be completed before the equipment is stored in the clean equipment area and before being used for other patients.
- C. Clean and disinfect equipment in the patient room or in the anteroom unless space constraints make this impossible.
- D. Thoroughly wet equipment surface(s) with hospital approved detergent-disinfectant and allow to remain undisturbed for the contact time specified by the disinfectant.
- E. All persons entering a 'Novel Respiratory Isolation' room will clean hands and wear PPE as directed on the isolation sign.

- F. If cleaning/disinfecting equipment in the anteroom, perform hand hygiene and wear PPE as directed on the isolation sign.

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., CT scan, surgery, etc.) are required and cannot be performed in the patient's room.

- A. Notify the receiving area to which the patient is being transported that the patient is on 'Novel Respiratory Isolation.'
- B. For detailed information, review the [PPE recommendation for transport](#) guidance. Transporters will wear PPE as directed on the isolation sign prior to entering the patient's room and before transferring the patient to a wheelchair or gurney.
- C. Before leaving the room, the patient should clean their hands, put on a clean hospital gown, and put on a medical mask. Use a clean sheet that was not stored in the room to cover the patient's body before leaving the room. If the patient is a younger child, cover the crib during transport if safe.
- D. Once the patient has been transferred to a wheelchair or gurney, the transporter should remove gowns and gloves in the anteroom or patient room if no anteroom, clean hands, and keep face protection on during transport (N95 and eye protection or PAPR). If direct patient care is expected, the transporter can use their clinical judgement and leave the gowns and gloves on during transport. If this is done, then staff cannot touch buttons, railings, and their surroundings with gloved hands.
- E. If direct patient care is not expected and gloves and gowns are removed, the transporter will bring extra PPE (gown, gloves, medical mask) in case an emergency occurs during transport or the patient's mask becomes wet.
- F. Receiving personnel (e.g., in radiology) and the transporter (if assisting with transfer) should perform hand hygiene and wear the PPE indicated for the study (i.e., N95 and eye protection or PAPR, addition of gown and gloves if direct contact with the patient is anticipated).
- G. If still wearing their original face protection, the transporter should take care to avoid self-contamination when donning the remainder of the recommended PPE.
- H. Patients traveling to the Operating Room must be transported directly to the OR from their rooms.

XVIII. Visitation Guidance

- A. Detailed recommendations, including for pediatric caretakers, are available in the [UCSF Health COVID-19 Guidelines for Restrictions and Exceptions](#).

XIX. Exposure Management and Contact Tracing

- A. Definition of Exposure: Any contact with someone with confirmed COVID-19 during their infectious period for ≥ 15 minutes within 6 feet of the infected person without appropriate PPE cumulatively over a 24-hour period, or presence during an aerosol generating procedure without appropriate PPE for any amount of time. The infectious period for the infected source begins 48 hours before symptom onset or if asymptomatic, the date of the positive test. See [Exposure Definitions for Testing and Return to Work Decisions](#)
- B. Responsibilities of Hospital Epidemiology and Infection Prevention (HEIP)/COVID-19 Contact Tracing team:
 - 1. Review the positive culture report Monday through Friday during business hours for

positive COVID-19 test results.

- If needed, perform a clinical review of the case to determine additional testing recommendations.
- During business hours, the HEIP Contact Tracing team will contact trace COVID-19 UCSF healthcare-associated patient exposures and will relay notification, testing, and isolation recommendations to the patient's provider team.
 - For patient to patient, household to patient, or visitor to patient COVID-19 exposures, the HEIP contact tracing team will recommend:
 - That the provider team notify the patient and provide the patient an exposure notification letter
 - HEIP will place a 'COVID exposure' flag
 - During the quarantine period, Novel Respiratory Isolation will be recommended including for outpatient visits. For inpatients, providers will need to write a Novel Respiratory Isolation order
 - COVID-19 testing is recommended if COVID-19 symptoms develop or as per this [guidance](#).
 - For healthcare personnel to patient COVID-19 exposures, the HEIP contact tracing team will recommend:
 - That the provider team notify the patient and provide the patient an exposure notification letter
 - HEIP will NOT place a 'COVID exposure' flag
 - Novel Respiratory Isolation is NOT recommended during the quarantine period unless the patient develops COVID-19 symptoms or is COVID-19 infected
 - COVID-19 testing is recommended if COVID-19 symptoms develop or as per this [guidance](#).

2. Following identification of hospital-onset COVID-19 infections or potential COVID-19 clusters, collaborate with OHS to send out an SBAR summary e-mail notification to stakeholders communicating decisions and follow up actions.

C. Responsibilities of Occupational Health Services (OHS):

1. An overview of [exposure, testing, return to work, and contact tracing is available](#) here.
2. Provide self-monitoring instructions to all healthcare personnel with possible healthcare exposures to COVID-19.
3. Record all exposures and exposed employee information.
4. Arrange for post-exposure education and monitoring.
5. Evaluate employee exposures and symptoms to determine the need for work restrictions and/or COVID-19 testing. Employees who have had COVID-19 infections must obtain OHS/EHS clearance prior to returning to work.

D. Responsibilities of Supervisors/Directors and Service Chief/Attending Roles:

2. Assist OHS with identification of the services and staff/providers involved in care of patient.
3. If an email notification is indicated as part of the contact tracing process, will assist in dissemination to those affected providers, staff, and/or learners.

XXII. Engineering Controls

- A. 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.
- B. AIIR/ATD rooms in the Emergency Department
 - 1. The Parnassus and MB Emergency Department AIIRs must be verified by Facilities as “negative” before being used for patients in an AIIR/negative pressure room.
 - 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
 - 1. During any aerosol generating procedure on a patient with suspected or confirmed COVID-19 or on Novel Respiratory Isolation due to COVID-19 exposure, healthcare personnel in the patient’s room must wear a gown, gloves, PAPR or N95 respirator and eye protection during the procedure and whenever entering room during the hour after the AGP.
 - 2. PPE guidance for aerosol-generating procedures is available [here](#).
 - 3. Avoid sputum induction for patients with suspected or confirmed COVID-19.
- B. Bronchoscopy
 - 1. Bronchoscopy can be performed on suspected or confirmed COVID-19 patients when medically necessary.
 - 2. Patients with suspected or confirmed COVID-19 requiring bronchoscopy must have the procedure performed in an AIIR or negative pressure HEPA filtered area (e.g., Bronchoscopy Suite).
 - 3. Patients must remain in the room until coughing has subsided. Advise the patient to cover their mouth and nose with a tissue when coughing.
 - 4. A medical mask will be worn by the patient during transport.
 - 5. The procedure room should be closed for the appropriate amount of time following the bronchoscopy procedure to allow for appropriate air clearance. Depending on the location and number of air changes per hour, the amount of time that the room should be closed may be less than 1 hour.

XXIV. Decedent care

- A. Follow standard routine procedures when transporting the body after specimens have been collected and the body has been bagged. Disinfect the outside of the bag with a product with EPA-approved emerging viral pathogens claims expected to be effective against COVID-19 applied according to the manufacturer’s recommendations. Wear disposable nitrile gloves when handling the body bag.

XXV. Clinical Laboratory and Autopsy Procedures

- A. Clinical laboratories
 - Send specimens to UCSF Microbiology Laboratory.
- 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 with suspected or confirmed COVID-19.
 - a. The autopsy will occur in the AIIR of the Pathology Laboratory.
 - b. See CDC recommendations for collection of postmortem clinical and pathology specimens for SARS-CoV-2 testing [here](#).
 - c. Limit the number of personnel working in the Autopsy suite during the autopsy procedure.
 - d. Staff involved in the autopsy procedure must wear a fluid-resistant or impervious gown with full sleeve coverage; waterproof apron; goggles or face shield, or eye protection; 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.
 - e. Staff may wear surgical scrub suits, surgical cap, and shoe covers per Autopsy routine protocols.
 - f. 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.
 - g. The autopsy AIIR will be vacated for at least 1 hour following completion of the autopsy.
 - h. 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 will:

1. When a positive COVID-19 test is reported, the Microbiology lab will report the result to the San Francisco Department of Health or other local county health department where patient resides.
2. HEIP will report COVID clusters to local and California Department of Public Health