Covid-19 Guidelines for Adult Patients within the Perioperative Environment
(Moffitt Long, Mount Zion, Mission Bay)

Last updated 09.29.20

UNIVERSAL N95/PAPR RECOMMENDATION FOR Aerosol-Generating Procedures (AGPs):

As of 9/17/20, it is recommended for healthcare workers to don an N95 respirator + eye protection or PAPR for all aerosol generating procedures, regardless of pre-procedure COVID-19 PCR test results. This change to the perioperative and periprocedural PPE guidance is based on the following:

- This change is aimed at protecting healthcare personnel from possible exposure events that can result in increased infection risks and staff quarantines
- Though in the setting of universal testing any one procedure carries a tiny risk of undetected infection, because UCSF performs thousands of procedures a year, the cumulative risk of having patients with undetected infections come through the perioperative area rises
- Patients will continue to be clinically screened and tested for COVID-19 within 4 days of their procedure – this remains a requirement for all elective surgeries.

Helpful links:

A. Triaging of OR procedures for patients with Confirmed/Suspected/Exposed COVID-19*

1. When safe for the patient, procedures should be delayed until official results of COVID-19 testing are available (for suspected patients) or the patient clinically recovers.
2. Whenever possible, AGPs and high-risk procedures should be done at bedside in a negative pressure room.
3. If the surgical procedure is emergent (i.e., risk to life or limb), follow these steps:
   a. schedule the patient by calling the OR Front Desk
      i. ML OR – 415.353.1545
      ii. MB OR Adults – 415.476.1015
      iii. MZ OR- 415.885.7359
   b. Inform the E1 and Charge Nurse of the patient’s COVID 19 Status
      c. At all sites, the case should be scheduled as a “last case” of the day whenever possible
      d. Patients are transported directly to the OR and are not permitted in OR hallways or the PREOP/PACU areas.
     e. If feasible, consider intubating the patient in a negative pressure airborne isolation room prior to transport to the OR.
     f. Intubation should be done per ICU protocol. All staff should don an N95 respirator + eye protection or a PAPR in addition to gown and gloves
     g. Limit individuals in the all surgical areas to essential personnel

* Refer to the surgical storyboard as the sole source of truth of a patient’s COVID status.

ECT patients will continue to be scheduled in OR 1.

Properly fitted N95 respirators or PAPRs (for those who are not fit-tested, have facial hair, or fail N95 fit-testing) will provide adequate respiratory protection when performing aerosol generating procedures

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4. **Moffitt Long (M/L) Prioritization Plans: (A, B, C):**

   a. **Plan A:** OR 21/22. Every effort should be made to do the case in OR 21/22 as these ORs are physically sequestered from the rest of the OR. Waiting for OR 21/22 to be available, may mean the case won’t be done until later in the day/evening. When done in OR 21 or 22, the second room will be a supply staging area for backup equipment, supplies, instruments, case cart, etc. Communication will be by phone and/or the window between OR 21/22.

   b. **Plan B:** OR 1 will be used if the case is emergent and if OR 21/22 are not available. The sub sterile space to OR 1 is negative pressure. All entry/exit will be through the sub sterile space, except for the patient who must be transported in and out through the double doors. When possible, consider the use of Procedure Room (M406) for induction, intubation, extubation and recovery. (See Addendum G: Guiding Location Selection for COVID-19 Confirmed/Suspected Patients at ML) In order to limit the potential spread of aerosol, providers must wait 15 minutes after the last AGMP before exiting OR 1 with the patient through the double doors. Communication will be by phone.

   c. **Plan C:** Alternate ORs if OR 21/22/1 not available. This decision is made collaboratively between the E1 and the charge nurse.

5. **At Mission Bay (MB),** the case will be scheduled in OR 12. Communication will be by phone. (See Addendum H: Guiding Location Selection for COVID-19 Confirmed/Suspected Patients at MB)

6. **At Mount Zion (MZ),** the case will be scheduled in OR 11. The small anteroom will be a supply staging area for back up equipment, supplies, instruments, case carts, etc. Communication will occur by phone.

7. The ORs remain positive pressure but the anteroom is negative pressure compared to the ORs and the corridor or core. It is vital to keep all OR and anteroom doors closed as much as possible to keep room pressures regulated.

8. These patients are on Novel Respiratory Isolation and upon entry, all personnel must wear an N95 respirator plus eye protection or a PAPR, in addition to gown and gloves. This is required throughout the duration of the case to the end of the case.

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**B. Staffing of Surgical Cases**

1. Staffing for the surgical case should be minimized to the following:
   a. Nursing team (2 RNs or 1 RN/1 Scrub Technician).
   b. 1 backup circulator/technician will be stationed immediately outside the OR *(at ML/MB/MZ)* to obtain supplies and equipment, needed for the case and assist people with donning and doffing PPE.
   c. Attending anesthesiologist/CRNA or resident.
   d. Attending surgeon with senior resident.
   e. Relief for breaks should be provided only as necessary to decrease the number of people in and out of the room.

**C. Transporting Patients with Suspected or Confirmed COVID-19 Infection to the OR**

1. Prior to the patient’s transport and arrival to the OR, all members of the surgical team (surgical attending, anesthetic attending and all members of the nursing team from the OR and the PACU) will huddle and the following will be reviewed:
   a. COVID status + PPE requirements.
   b. Anesthesia plans, especially planned AGMPs and disposition for recovery.
   c. Surgical plans.
   d. Case and OR readiness: instruments, supplies, equipment, signage, physical barriers, donning/doffing set up, etc.

2. Nursing Leadership/Charge nurse coordinates the notification to the appropriate team members for the huddle.

3. In most cases the huddle will be led by the surgical attending. Anesthesia will lead the discussion for aerosolized generating medical procedures (AGMPs). The Huddle checklist and/or the Time Out protocol can be used as a reference.

4. Patients will be transferred directly to the OR and not permitted in the PREOP/PACU areas or the OR Hallways. Non-intubated patients require a surgical mask over their mouth and nose prior to transport. Intubated patients must have the HMP filter between the ambu bag and the ET tube (see link).

5. Transport team to the OR direct will include:
   a. Anesthesia attending/CRNA.
   b. Primary circulator.
   c. Service Coordinator (if needed).

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6. When transporting a patient:
   a. Prior to transport clean stretcher handles and IV pole surfaces with wipes.
   b. All persons involved in transporting a patient will obtain appropriate PPE (see below) required for transport from OR supplies, carry PPE to the patient’s location, and don PPE prior to entry into the patient’s room.
   c. One person is designated to attend to the patient and will avoid touching environmental surfaces (e.g., elevator buttons, door controls).
   d. An additional member of the transport team is designated to interact with the environment (e.g., elevator buttons, door controls).
   e. If two people are needed to move the bed, both must wear required PPE and a third person must accompany to interact with the environment.

7. Obtain PPE required for transport from the novel isolation cart:
   a. M/L - kept clean in M419
   b. MB – call equipment specialist assigned to the OR
   c. MZ – kept clean in front of OR 11

8. Transport of a Non-intubated patient
   a. Patient will wear a surgical mask, worn over nasal cannula at lowest minimum flows, if used.
   b. Prior to entry into the patient’s room, transport staff having direct contact with the patient will don Novel Respiratory Isolation precautions.
   c. Team member designated to interact with the environment will wear a N95 + eye protection or PAPR only. This person should not touch the patient during transport to avoid risk of contaminating the environment.

9. Transport of a patient on mechanical ventilation:
   a. Consider switching patient to a portable ventilator in the negative pressure ICU room (clamping ETT briefly during switch):
      i. Ensure a high efficiency hydrophobic filter is in place between the ETT and Ambu bag/Jackson-Reese or ventilator to avoid releasing infectious material to the surroundings.
      ii. Do not use the single-limb transport ventilator.
      iii. Consider using the portable ventilator in the OR with TIVA to avoid disconnects
   b. Prior to entry into the patient’s room, transport staff having direct contact with the patient will don an N95 respirator plus eye protection (face shield or goggles) or a PAPR, in addition to an isolation gown and gloves.
   c. Team member designated to interact with the environment will wear an N95 + eye protection or PAPR

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D. Procedures Before Arrival to Operating Room and During Surgery

1. To alert all OR team members to the presence of a COVID 19 case, the following additional cautionary measures will be taken:
   a. Physical barriers (magnetic strips, orange safety cones and signage) will block hallways and all access doors to minimize traffic and/or prevent accidental entry. These physical barriers will also serve to protect donning and doffing PPE station areas.

2. RN Circulator will set up PPE donning (clean) and doffing (soiled) stations:
   a. ML OR 21/22 – the corridor outside the M406
   b. MB OR 12 – semi-restricted corridor
   c. MZ OR 11 – hallway near the code cart
   d. For all other ORs, set up in the semi-restricted corridor outside the corresponding OR

3. For ML OR 21/22, MB OR 12, MZ OR 11, the transporters and patients should enter through the exterior door to the anteroom with patient and allow door to close.
   a. Once the anteroom door is closed, they should enter the interior door to the OR with the patient.
   b. Once the patient transfers to the OR table, the bed/gurney will be placed in the anteroom (OR 21/22 at ML). At MB and MZ, the gurney will remain in the OR.

4. For OR 1 at ML, the patient will be transported through the main double doors
   a. The bed linens should be stripped, and the bed wiped down and moved to the hallway before any AGP is performed.

5. At ML, the primary circulator will strip the bed of the linens and wipe down the bed. The backup circulator/technician will place new linens on the clean bed

6. At MZ and MB, the primary circulator will perform both duties.

7. The backup circulator/technician will remain clean and wear gown, gloves, eye protection and N95. They will remain in the 2nd OR or the anteroom and should not be entering the OR with the patient.

8. The PPE cart will be stored
   i. M419 (M/L)
   ii. Call the Equipment Specialist assigned to the room (MB)
   iii. Near OR 11 (MZ)

9. Use of double gloves is standard practice in the OR. Indicator gloves are encouraged.

10. At all times, all OR personnel must don Novel Respiratory Isolation precautions.
    a. Once an AGMP is performed, additional OR personnel entering the OR suite (including the anteroom/scrub sink area) must don PPE outside of the anteroom/scrub sink area.
    b. If not scrubbed during the intubation, sterile personnel should wait 15 minutes prior to entering the room after intubation to gown and glove.

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11. If general anesthesia is not required, the patient will continue to wear the surgical mask throughout the procedure.
12. If general anesthesia is required, the surgical team should step out of the room for 15 minutes during intubation and extubation, unless the surgical team (e.g. OHNS) is directly involved in airway management.
13. Consider disposable covers (e.g., plastic sheets for surfaces) to reduce droplet and contact contamination of equipment and other environmental surfaces.
14. Smoke evacuation electrosurgical pencils will be used to address the possibility of virus in electrosurgical smoke. Neptune suction machines have a HEPA filter for smoke.
15. For robotic and laparoscopic cases, use the pneumoclear desufflation mode. At Mission Bay, use AirSeal or the PALL Laproscopic Filter.

E. End of Case Procedures for Patients with Suspected or Confirmed COVID-19 Infection
1. Move the patient from the OR table on to a regular floor bed prior to the surgical and anesthesia team’s departure.
2. If the ICU patient will be transported back to the ICU, keep Novel respiratory protection in place and don a new isolation gown and gloves.
3. For team members who are leaving the OR, doff gowns and gloves in the operating room and discard into regular trash receptacle, then perform hand hygiene. Exit the OR and the anteroom with respiratory protection (face shields, N95 respirators or PAPRs) in place, and continue to the outside corridor.
4. Respiratory protection should only be doffed outside the OR and anteroom at the end of the case. N95 Respirators and PAPRs should not be worn outside the Perioperative departments, unless during transport of a patient on Novel Respiratory Isolation.
5. Doffing respiratory protection: if wearing a face shield and N95 respirator, perform hand hygiene then carefully remove face shield by holding the elastic band and place on a table for subsequent cleaning. Repeat hand hygiene, then carefully remove the N95 respirator and store for reuse if applicable. Repeat hand hygiene. Wearing non-sterile gloves, use disinfectant wipes to clean the face shield. Remove gloves and repeat hand hygiene.
6. If wearing a PAPR, perform hand hygiene then carefully remove the PAPR. Detach the PAPR face shield and place on a table for subsequent cleaning. Repeat hand hygiene. Wearing non-sterile gloves, use disinfectant wipes to clean the outer surface of the PAPR and the PAPR face shield. Remove gloves and perform hand hygiene

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F. If the patient will be is recovered in the OR:
   a. For ML and MZ patients, PACU staff will follow the procedure guidelines: MLPACU COVID-19 POSITIVE SUSPECTED OR CONFIRMED INFECTION OPERATING ROOM RECOVERY PROCEDURE
   b. At MB, patients will be recovered in the negative pressure room in PACU (total of 3 negative pressure rooms: 1 adult side and 2 Pedi side)

G. The scrub person: At the end of the case, the primary circulator will bring the empty case cart into the OR. The scrub person will place dirty instruments in the case cart and spray instrumentation with approved enzymatic cleaner. The closed case cart will be wiped in the anteroom with hydrogen peroxide wipes prior to it being sent to the sterile processing department (SPD).

H. If the patient came from an ICU, the patient will recover in the ICU.

I. Prior to assisting with transporting the patient back to the inpatient location, OR team members involved in the transport will don appropriate PPE as described in the Transport section above (A.6)

J. After completion of patient delivery to the receiving inpatient location, OR/PACU/ANES team members involved in the transport will immediately doff PPE and perform hand hygiene. Face shields and PAPR face shields should be cleaned with a disinfectant wipe outside the patient’s room. Used N95 respirators will follow the extended use/re-use guidelines: https://infectioncontrol.ucsfmedicalcenter.org/sites/g/files/tkssra4681/f/Reuse_Guidelines_PPE.pdf

K. After the patient has left the OR, leave the room closed for one hour. The OR suite can then undergo routine terminal cleaning with an EPA-approved hospital disinfectant after the one-hour downtime. Technicians can use PPE routinely utilized for OR environmental cleaning and disinfection.

L. After the patient has left the OR, leave the room closed for one hour. The OR room can then undergo routine terminal cleaning with an EPA-approved hospital disinfectant after one-hour downtime. Technicians can use PPE routinely utilized for OR environmental cleaning and disinfection.

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Links to information/resources/guidance:

Infection Control Website: COVID 19 Algorithms and Clinical Guidance
https://infectioncontrol.ucsfmedicalcenter.org/coronavirus/algorithms
https://infectioncontrol.ucsfmedicalcenter.org/coronavirus/ppe
https://infectioncontrol.ucsfmedicalcenter.org/coronavirus/signage

Anesthesia Adult, Pediatric and Obstetric Perioperative Guidelines for the Care of Confirmed/Suspected Patients with COVID-19 at UCSF

Perioperative and Periprocedural PPE and Workflow Guidance During the COVID 19 PANDEMIC + Updates on Use of the Abbott ID Now Platform
https://infectioncontrol.ucsfmedicalcenter.org/sites/g/files/tkssra4681/f/Asymptomatic_COVID_PPE.pdf

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Addendum A: Isolation Precautions and Personal Protective Equipment (PPE) Updated Summary

Addendum B: Summary Table: Preoperative Scenarios for PPE and OR workflow

Addendum C: Isolation Signage Update (8.5.20)

Addendum D: Covid Case Huddle Checklist

Addendum E: CVT Surgical Procedures Workflow (6.1.20)

Addendum F: Handling of OR Specimens

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**Addendum A: Isolation Precautions and Personal Protective Equipment (PPE); Summary Update (8.11.20)**

<table>
<thead>
<tr>
<th>Isolation sign on door</th>
<th>Asymptomatic patient awaiting COVID-19 admission/pre-procedure test result</th>
<th>Symptomatic patient with suspected COVID (PUI) or COVID-positive patient NOT needing continuous aerosol generating procedure (AGP)¹</th>
<th>Symptomatic patient with suspected COVID (PUI) or COVID-positive patient NEEDING continuous aerosol generating procedure (AGP)¹</th>
<th>Exposed to COVID (tested negative or not tested, but requires quarantine due to an exposure)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>AGP in progress sign for intermittent/discrete AGPs²</em></td>
<td>Droplet Isolation</td>
<td>Novel Respiratory Isolation</td>
<td>Novel Respiratory Isolation</td>
<td>Novel Respiratory Isolation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Isolation flags in Apex</th>
<th>Asymptomatic patient awaiting COVID-19 admission/pre-procedure test result</th>
<th>Symptomatic patient with suspected COVID (PUI) or COVID-positive patient NOT needing continuous aerosol generating procedure (AGP)¹</th>
<th>Symptomatic patient with suspected COVID (PUI) or COVID-positive patient NEEDING continuous aerosol generating procedure (AGP)¹</th>
<th>Exposed to COVID (tested negative or not tested, but requires quarantine due to an exposure)</th>
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</tbody>
</table>

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<thead>
<tr>
<th>Type of COVID flag in Apex</th>
<th>Asymptomatic patient awaiting COVID-19 admission/pre-procedure test result</th>
<th>Symptomatic patient with suspected COVID (PUI) or COVID-positive patient NOT needing continuous aerosol generating procedure (AGP)¹</th>
<th>Symptomatic patient with suspected COVID (PUI) or COVID-positive patient NEEDING continuous aerosol generating procedure (AGP)¹</th>
<th>Exposed to COVID (tested negative or not tested, but requires quarantine due to an exposure)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>COVID pending or COVID confirmed</td>
<td>COVID pending or COVID confirmed</td>
<td>COVID pending or COVID confirmed</td>
<td>COVID exposed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of room</th>
<th>Asymptomatic patient awaiting COVID-19 admission/pre-procedure test result</th>
<th>Symptomatic patient with suspected COVID (PUI) or COVID-positive patient NOT needing continuous aerosol generating procedure (AGP)¹</th>
<th>Symptomatic patient with suspected COVID (PUI) or COVID-positive patient NEEDING continuous aerosol generating procedure (AGP)¹</th>
<th>Exposed to COVID (tested negative or not tested, but requires quarantine due to an exposure)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideally private (not negative pressure)</td>
<td>Private (AIIR/negative pressure NOT needed)</td>
<td>AIIR/negative pressure--order Airborne Isolation in addition to Novel Resp)</td>
<td>Private or AIIR/neg pressure (order Airborne isolation for this in addition to Novel Resp) depending on need for AGPs</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PPE needed</th>
<th>Asymptomatic patient awaiting COVID-19 admission/pre-procedure test result</th>
<th>Symptomatic patient with suspected COVID (PUI) or COVID-positive patient NOT needing continuous aerosol generating procedure (AGP)¹</th>
<th>Symptomatic patient with suspected COVID (PUI) or COVID-positive patient NEEDING continuous aerosol generating procedure (AGP)¹</th>
<th>Exposed to COVID (tested negative or not tested, but requires quarantine due to an exposure)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgical mask + Eye protection (face shield, eye shield, or goggles)</td>
<td>N95/PAPR + Eye protection (face shield preferred) + Gown and gloves</td>
<td>N95/PAPR + Eye protection (face shield preferred) + Gown and gloves</td>
<td>N95/PAPR + Eye protection (face shield preferred) + Gown and gloves</td>
<td></td>
</tr>
</tbody>
</table>

¹ Continuous AGPs include high flow oxygen, non-invasive ventilation, mechanical ventilation, patient with tracheostomy

² “Aerosol Generating Procedure in Progress” sign requires N95 and eye protection or PAPR during and for one hour after the intermittent/discrete AGP (e.g., administration of nebulized medication)

³ Refer to the surgical storyboard as the sole source of truth of a patient’s COVID status.

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Version 4_4.1.20
### Addendum B: Summary Table: Perioperative Scenarios (9.17.20)

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Anesthesia Provider PPE</th>
<th>Surgery/ Nursing/ Scrub PPE</th>
<th>Workflow</th>
</tr>
</thead>
</table>
| 1 – COVID-19 PUI/ Confirmed for ANY surgery/procedure                   | - Reusable N95 + face shield/goggles or PAPR  
- Gown  
- Double gloves | - Reusable N95 + face shield/goggles or PAPR  
- Gown  
- Double gloves | - [Adult Perioperative Guidelines for Patients with Suspected/Confirmed COVID-19](#)  
- [Anesthesia Perioperative Adult, Pediatric and Obstetric Guidelines for the Care of Patients with Known/Suspected COVID-19](#) |
| 2 – Asymptomatic patient WITH OR WITHOUT TESTING WITHIN 4 DAYS for HIGH RISK surgery/procedure | - Reusable N95 + face shield/goggles or PAPR | - Reusable N95 + face shield/goggles or PAPR | - See Scenario 2 details in Guidance section above |
| 3 – Asymptomatic patient WITH TESTING WITHIN 4 DAYS for LOW RISK surgery/procedure involving general anesthesia | - Reusable N95 + face shield/goggles or PAPR for AGP events  
- Standard PPE allowed outside of AGP events and corresponding time afterwards for 99% air clearance | - If present in the room during or within period before 99% air clearance:  
  - Reusable N95 + face shield/goggles or PAPR  
  - Standard PPE allowed outside of AGP events and corresponding time afterwards for 99% air clearance | - See Scenario 3 details in Guidance section above |
| 4 – Asymptomatic patient WITH OR TESTING WITHIN 4 DAYS for LOW RISK surgery/procedure WITHOUT general anesthesia | - Standard PPE* | - Standard PPE* | - See Scenario 4 details in Guidance section above |
| 5 – EMERGENCY case in ASYMPTOMATIC/NON-PUI patient with NEGATIVE Abbott ID NOW TEST and pending confirmatory test | - See Scenario 5 details in Guidance section above  
- Follow Scenarios 2-4 but providers MUST don N95 respirator + eye protection or PAPR + gown for all AGPs and portions of the case.  
- Ensure a confirmatory standard COVID RT-PCR has been sent. If not, send from O.R. (Airborne PPE for specimen collection) | - | |

*Providers may elect to don N95/PAPR as long as they are re-used and stored in accordance with UCSF PPE reuse policies.

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Version 4_4.1.20
Addendum D: Covid 19 Huddle Checklist

<table>
<thead>
<tr>
<th>COVID-19 CASE HUDDLE CHECKLIST (before patient transport to OR)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ATTENDING SURGEON(S) (includes all panels if more than 1 service):</strong></td>
</tr>
<tr>
<td>- Patient, MRN</td>
</tr>
<tr>
<td>- Surgical procedure &amp; plan/ planned length of procedure</td>
</tr>
<tr>
<td>- Consent &amp; notes</td>
</tr>
<tr>
<td>- Instruments/ supplies/ sutures/ equipment/ implants</td>
</tr>
<tr>
<td>- Allergies/ systemic meds (ABX, DVT) needed</td>
</tr>
<tr>
<td>- Specimens (need to alert pathology)</td>
</tr>
<tr>
<td>- Disposition (15L or ICU)</td>
</tr>
<tr>
<td><strong>ATTENDING ANESTHESIA + CRNA/ SENIOR RESIDENT:</strong></td>
</tr>
<tr>
<td>- Comorbidity concerns</td>
</tr>
<tr>
<td>- Lab results</td>
</tr>
<tr>
<td>- Anesthesia plan</td>
</tr>
<tr>
<td>- PPE</td>
</tr>
<tr>
<td><strong>CIRCULATOR + BACKUP CIRCULATOR/ SCRUB:</strong></td>
</tr>
<tr>
<td>- Prep solutions</td>
</tr>
<tr>
<td>- Blood products</td>
</tr>
<tr>
<td>- Meds on field</td>
</tr>
<tr>
<td><strong>SCRUB:</strong></td>
</tr>
<tr>
<td>- Gloves for scrubbed members</td>
</tr>
<tr>
<td><strong>PACU RN:</strong></td>
</tr>
<tr>
<td>- Orders in APEX</td>
</tr>
<tr>
<td>- Interpreter needs</td>
</tr>
</tbody>
</table>

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Addendum E: CVT Surgical Procedures (OR 26 and OR 29) – page 1 of 2

Patients Transferred from Outside Hospital to ED or Direct to OR or from Off-site Locations (Cath Lab, EP, ICU, etc.)

*As per guidelines, prior to transport, all members of the surgical team will huddle to review surgical and anesthesia plans, to ensure the room is ready, and all supplies, equipment, blood and other materials are available in the OR and in working order. This team review will include, at minimum, the surgical attending, the anesthesia attending, the circulator and scrub, and back up circulator/technician
*All transfer patients should be considered COVID confirmed or suspected whether tested or not

- Emergent Cardiac Surgery Patients
  - Personnel must follow guidelines for Suspected or Confirmed COVID 19 patients
  - Every effort should be made to do these cases in OR 21/22
  - Staffing of cases should follow guidelines
  - Personnel must adhere to Novel Respiratory Isolation precautions with regards to PPE (N95 mask plus eye protection or PAPR in addition to gown and gloves)

- Endovascular Cases – Stable Patients
  - Personnel must follow guidelines for Suspected or Confirmed COVID 19 patients
  - Endovascular cases should be done in OR26/29, for better imaging. Room must be cleared of unnecessary supplies and/or implants. Anesthesia carts should have minimum supplies in their cart.
  - Staffing of cases should follow guidelines
  - Patient should go directly to OR 21/22/Procedure Room A (M406) for Intubation. The backup RN or ST (runner) will stay with the patient and Anesthesia Team and will help transport to OR 26/29.
  - Before transporting, all personnel must change PPE inside OR 21/22 and go directly to OR 26/29. Transport patient per guidelines.
  - Personnel in OR 26/29 should adhere to Novel Respiratory Isolation precautions.
  - Once patient is transferred to the OR table, the primary circulator will strip the gurney of the linens and wipe it down. This should be done inside the OR. Once dry, the bed can be pushed out to the hallway, and PCA should be called to wipe again and put clean linen.
  - The backup circulator/technician will take off gown and gloves in OR, change in small room in OR 29 or sub sterile OR26 and stay “clean”. He/she should not be entering the OR anymore.

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o All doors must always remain closed, and supplies should only be passed through the small room where the runner is.
o If plan to extubate, the backup circulator / tech will come in and help Anesthesia Team to transport to OR 21/22/Procedure Room A (M406). Patient will recover in OR with PACU nurses
o If transporting to the ICU intubated, the backup circulator/tech will assist the Anesthesia team and will be the person who can interact with the environment. After transport team members involved should remove PPE and perform hand hygiene before going back to OR.
o Follow Post-surgical procedures per guidelines.

• Endovascular Cases – Unstable
  o Personnel must follow guidelines for Covid PUI or Covid confirmed patients
  o Patient will go directly into OR 26/29
  o Small Room in OR 29 and sub sterile 26 will be the clean rooms
  o All doors must remain closed during the case, only minimal opening should be done

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Addendum F: Handling of OR specimens from COVID cases – Pathology – Page 1 of 3

Frozen Sections (FS):

- Should only be performed on suspected/confirmed COVID 19 patients when absolutely necessary to guide patient treatment.
- FS on suspected/confirmed COVID 19 patients will need the pathologist’s approval.
- Prior to sending a FS the surgeon and pathologist need to have a discussion to determine medical necessity and/or if an alternative assessment could be performed (e.g. gross only evaluation or cytologic smear/touch preparations.
- For all sites, follow these general procedures:
  - Contact Gross Room or on-call resident following usual procedures for FS
  - Provide patient’s name, MRN and OR room #
  - Notify verbally of suspected or confirmed COVID-19 status
  - Pathologist will call OR for discussion with surgeon

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Mission Bay (MB)</th>
<th>Parnassus (Parn)</th>
<th>Mount Zion (MZ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal business hours</td>
<td>Mon-Fri, 07:00-18:00 MB Gross Room phone: 514-3711</td>
<td>Mon-Fri, 07:00-17:00 Parn Gross Room phone: 353-1608</td>
<td>Mon-Fri, 08:00-17:00 MZ Gross Room phone: 885-7304</td>
</tr>
<tr>
<td>After-hours</td>
<td>Follow after-hours notification procedure</td>
<td>Page pathology resident on-call: 443-1166</td>
<td>Follow after-hours notification procedure</td>
</tr>
</tbody>
</table>

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Permanent Specimens:

- Contact Pathology (see table below)
  - Provide patient’s name and MRN
  - Notify verbally of suspected or confirmed COVID status
- Do NOT leave specimen in OR refrigerator (exception below) or place in a TUG
  - Specimen should be delivered directly to Pathology (MB) or have pick-up requested (Parn or MZ)
  - Specimen can be placed in Pathology refrigerators after-hours after notifying the on-call resident

<table>
<thead>
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| **Normal business hours** | Mon-Fri, 07:00-18:00 MB Gross Room phone: 514-3711  
Deliver specimen to M2379 | Mon-Fri, 07:00-17:00 Page Pathology resident: 443-1166  
Pathology will pick up specimen(s) directly from the specific OR | Mon-Fri, 08:00-17:00 MZ Gross Room phone: 885-7304  
Deliver specimen to B215 |
| **After-hours**          | Page on-call resident: 443-1166  
Specify you are calling from MB OR and that specimen will be placed in Pathology pass-through refrigerator (M2379) | Page on-call resident: 443-1166  
Specify you are calling from Parn OR and that specimen will be placed in refrigerator in sub-sterile 1 | Page on-call resident: 443-1166  
Specify you are calling from MZ OR and that specimen will be placed in Pathology refrigerator in B215 |

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Addendum F: Handling of OR Specimens from COVID Cases – Pathology – Page 3 of 3

**Requisition and Container Labeling**

- **Requisition**: Use a sharpie and write with big letters: “Suspected COVID-19” or “Confirmed COVID-19.”
- **Container**: Use a sharpie and write with big letters: “Suspected COVID-19” or “Confirmed COVID-19” on the lid of the container.

If you have any questions, please do not hesitate to contact Bob Grefka (Gross Room Supervisor) or Dr. Soo-Jin Cho (Medical Director of Gross Rooms):

- **Bob Grefka**:
  - Office phone: 353-1608.
  - Pager: 443-2623 (also in Pager Box).
  - Robert.Grefka@ucsf.edu

- **Soo-Jin Cho**:
  - Office phone: 885-7586.
  - Pager: 443-0528 (also in Pager Box).
  - Soo-Jin.Cho@ucsf.edu

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