COVID19
AIRWAY & PROCEDURES
TEAM MANUAL
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GUIDING PRINCIPLES

SAFETY FIRST

Developing an expert team of ANES Airway experts confident and trained in DON/DOFF procedures is the best way to ensure the safety of valuable healthcare providers.

- Limit personnel exposed to Sars-CoV2
- Ensure all providers are properly protected with PPE including during Don/Doff procedures
- Protecting trainees (student, resident, fellow) by limiting involvement in high risk patient care and/or high risk patients

HIGH RISK PATIENTS:
COVID+ or PUI

HIGH RISK PATIENT CARE:
Aerosolizing procedures such as intubation, open suctioning, bronchoscopy, some ENT procedures, high-flow or high-pressure oxygen delivery (BMV, NIPPV, HiFlow NC), chest compressions

GOALS of AIRWAY TEAM PROCEDURES:

1) **Limiting Exposure/Contamination**
2) **Decreasing Aerosolization**

- Preference for most experienced person performing high-risk patient care
  - Most experienced at procedures AND Don/Doff procedures i.e. COVID-Airway Team
  - Anesthesia attendings only on COVID Airway Team
- Use most protective form of PPE available at the time
  - Order of preference CAPR shroud > CAPR Shield > N95 + Full face shield
  - **IF** N95 + face shield, **THEN** consider surgical hood (blue cloth) or other neck coverage during aerosolizing procedures
  - Use checklist EVERY TIME
  - Use DON/DOFF buddy EVERY TIME
  - **DOFFING IS MOST DANGEROUS TIME FOR CONTAMINATION**
  - **HAND HYGIENE, HAND HYGIENE, HAND HYGIENE**
  - Bring only what you need into room
    - Create a “contamination” bin/bag in which to place equipment/meds & bring in room

<table>
<thead>
<tr>
<th>CONSIDER</th>
<th>AVOID</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSI + VL as 1st choice</td>
<td>bag-ventilation</td>
</tr>
<tr>
<td>Early LMA over BMV</td>
<td>Patient coughing</td>
</tr>
<tr>
<td>Low pressure and low volume if bag used</td>
<td>HFNC, NIPPV</td>
</tr>
<tr>
<td>O2 by NC &lt;6 LPM or NRB =15L/min</td>
<td>Large Vt or High pressures with bag</td>
</tr>
</tbody>
</table>
RESPONSIBILITIES and PRIORITIES

Why a COVID Airway Team?
ROLE CLARITY: A Team of Airway Experts and Proceduralists who are also Experts in safe DON/DOFF Procedures

● 1st Priority: Offloading the ICU teams during COVID19 Surge
  ○ Perform COVID+/PUI non-emergent intubations
    ■ ICU decides when to intubate but will ask for our opinion as we are the airway experts
    ■ Discuss with the ICU teams, plans for ventilator settings, oxygen delivery, sedation, hemodynamic management
      ● prior to intubation
      ● after extubation
    ■ readiness to extubate?
      ● **NO PM EXTUBATIONS**
    ■ ease/difficulty of re-intubation
    ■ presence at the bedside until patient is stable after extubation
  ○ Assist with all procedures in the ICU, including but not limited to arterial lines, central lines, feeding tubes, chest tubes, difficult IV placement, others
  ○ Assist with airway control during prone/supine positioning for ICU-ARDS patients
  ○ Critical care decisions should be made by critical care team
    ■ The COVID Airway Team member should work to stabilize the patient pre-procedure, intra-procedure, and post-procedure but sign out to ICU fellow and nurse once appropriate

● 2nd Priority: Airway Coverage
  ○ If available - respond to all CODE Blue airways, whether PUI/COVID+ or NOT
  ○ REDUNDANCY in the airway coverage system in time of COVID19 SURGE
  ○ The COVID Airway Team is NOT to replace any current airway responder or change the current workflow

● 3rd Priority: Safety and support of other ANES providers
  ○ Supervising and assisting OR ANES with intubations/extubations
  ○ Help with transporting COVID+/PUI patients
  ○ Teaching PPE
  ○ Sharing TIPs and guidance

● 4th Priority: Helping everywhere else Wards/ED/Other
  ○ We may occasionally be called to help with other procedures across the hospital
  ○ This is the decision of each COVID Airway Team member, but we encourage all to help others to ensure the greatest safety for all providers and all patients
  ○ Just remember to write a note and charge capture wherever you are able!
DAILY WORKFLOW
SUBJECT TO CHANGE

7am – 6pm Day shift:

● DAY TIME WORKFLOW:
  ○ 7 am: Sign into VOALTE on COVID Airway Phone
    ■ Once in-hospital 24/7 we can do warm handoffs with phone
    ■ Respond to CODE BLUE TEST page: Pager 13064
  ○ “COVID AIRWAY TEAM LIST” under shared patient lists
    ● Review MICU and SICU patient lists for COVID+/PUI patients
      that may be unstable or require procedures
    ● Review the “Active Covid-19 Infection” list and add any patient
      with increasing oxygen requirements to the COVID Airway Team
      list
    ● Intubated patients should stay on the list until extubation and
      subsequent stability of airways
    ● PUI patients that receive negative test results should be
      removed from the list
  ○ Review ANES Airway Schedule to determine who is on CODE Blue
    response team (Periop Attending, 500P Scheduler, 300P scheduler,
    ANES resident) and touch base about CODE Blue response - They are
    primary & we respond if available
    ■ 7:30 – HUDDLE (E2ICU front desk)
      ○ Charge RN, Response RN, MICU Triage fellow, others
      ○ Discuss patients at risk for intubation
      ○ Discuss patients for possible extubation
      ○ Discuss patients needing proning
      ○ Communicate needed workflow around intubations
      ○ All stakeholders should understand equipment,
        personnel, processes
  ○ Verify with Anesthesia techs understanding of workflow
    ○ Non-emergent ICU airways
    ○ CODE Blue
    ○ 500P 724-0219
    ○ 300P 736-1850
  ○ Frequent check in with MICU Triage Fellow during the day (Find role
    MICU TRIAGE FELLOW on Voalte or call 650-724-8820, ext 48820 in the
    hospital)
○ They will keep you updated on how patients are doing on the floor and those that are being moved to the ICU due to worsening resp failure
○ Check in on procedures needed in ICU patients
○ **Critical Care Resource Nurses and Administrative Nursing Supervisor:**
  These nurses are invaluable at monitoring the hospitals for deteriorating patients and will call you if they think intubation may be likely
○ **Mid-morning ~ 10 AM:** Prone Protocol
  ● Patients are supine 8 AM – 6 PM (8hrs) and prone for 16 hrs (6 PM to 10 AM) so we turn them prone at the end of the day. This is why day shift ends around 6 PM, you will be responsible to help prone these patients. If volume becomes too large you could activate the night person to help prone patients
  ● As ICU personnel become more familiar with proning, this role may subside
○ **During the afternoon check in with the MICU teams** (Find Role on Voalte: MICU GREEN FELLOW OR MICU BLUE FELLOW)
  ● Discuss how patients are doing and err on the side of an early intubation for those that are not doing well and have had escalation on their oxygen requirement, requires multidisciplinary discussion
  ● Check in on procedures needed in ICU patients
○ Respond to CODE BLUE
  ■ Be sure to coordinate with other ANES Airway attendings as able
○ 5-6 pm – SIGNOUT Considerations
  ○ MICU Triage fellow
  ○ +/- MICU attending
  ○ COVID Night MD (by phone if available)
  ● 6pm: Sign out of VOALTE

6pm – 7am Evening Shift:
- In-House WORKFLOW:
- 6pm: Sign into VOALTE on COVID Airway phone
  o Touchbase with the MSD Faculty on call as you two will be first responders to CODE BLUES
- **CALLED FOR INTUBATION PROCEDURE BY MICU WORKFLOW:**
  o Review patient info with MICU by phone:
    ▪ Patient location
      ● Can they move to ICU?
    ▪ Current Oxygen requirement
      ● Place on NRB @10-15L for pre-oxygenation
    ▪ Potassium and relevant labs
- Airway exam
- Tell MICU to Initiate:
  - “Intubation Order Set”
  - “Post-intubation sedation orders”
  - “Place ventilator order and settings”
  - “Inform nurse to setup for COVID intubation workflow”
  - “Call RT to setup for COVID intubation set-up”
  - “Call PHARM to assist with medication preparation”

**CODE BLUE WORKFLOW**
- IF unable or unlikely, THEN call ICU and discuss activation of back-up COVID Airway or CODE Blue if necessary
  - Calling 211/CODE BLUE is always the best way to get all needed resources quickly
  - AVOID calling “CODE Difficult Airway” unless surgeon is needed
- IF primary COVID Airway team member is unavailable, THEN:
  - Direct MICU to call in back-up team member
  - Primary COVID Airway calls in back-up COVID Airway person
  - MICU should activate 211/CODE BLUE

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**Call/Shift Credit**
*(as of 3/23/2020 per Dr. Pearl/Lorenzo)*

Starting this Monday March 23, 2020, the day credit is a regular clinical day credit
For now, **PLEASE KEEP TRACK OF YOURhiftS AND HOURS and submit to Nicky Chu/Rosario Ngo by email**
INTUBATION PROCESSES

In this section:
- Scenario 1: Urgent Intubations - CODE Blue
- Scenario 2: Non-urgent Intubations - ICU
- Equipment Lists
- Difficult Airway Considerations
- Medication Considerations
- Useful Tips from COVID Airway Colleagues
AIRWAY RESPONSE TEAM
EMERGENT SCENARIO
CODE BLUE

Although some intubations will be controlled in the ICU with time for pre-planning and organization, many will be time-sensitive or time-critical. CODE BLUE response teams are the same as pre-COVID19 with the exception of our team added as ADDITIONAL airway responders. We are experts in airways AND experts in safe DON/DOFF workflows.

IF we are unavailable, THEN the MSD ANES attending will need to intubate.

**Please carry your own N95 & Face shield. You may arrive prior to the resource nurses. Your safety is NOT to be compromised for any reason**

We have COVID Airway Team Backpack for PPE

We have a dedicated iPhone [(650) 387-5008; Passcode 202020] and a dedicated COVID Airway pager number: 13064. We will receive all CODE BLUE pages through this phone. COVID+/PUI patients will be designated on the CODE BLUE as “COVID.”

Airway intubation procedure in order of preference during CODE BLUE is as follows:

- Primary = COVID Airway Attending
- Secondary = Anesthesia Attending (Scheduler 500P, Scheduler 300P, Peri-op Attending)
- Third order = Most skilled airway provider available who is confident with PPE
  - try to spare our trainees at all costs

GUIDELINES:

- PPE is NOT to be compromised for any reason
- Anesthesia residents and technicians should NOT enter the room but should remain on standby
- Providers in anteroom must have gown, N95, face shield, gloves
- IF no anteroom, THEN providers close to room door must don PPE or step away
- ALL NON-ESSENTIAL PERSONNEL must step away from room to avoid contamination from aerosolization
- Doors to anteroom and/or patients room MUST REMAIN CLOSED as much as possible
- IF anteroom, THEN ONLY ONE door can be open at a time
- USE CHECKLISTS
- Refer to Stanford Hospital Airborne Precautions Policy
AIRWAY RESPONSE TEAM
NON-EMERGENT SCENARIO
ICU INTUBATIONS

Unlike intubations on the floor or during CODEs, ICU intubations allow and require more planning, discussion, and management of sedation and hemodynamics. See equipment lists and medication considerations below.

There is significant overlap in this workflow and roles between the COVID Airway Team member and the ICU Team. Communication is key. Please discuss with the ICU team resident or fellow, regarding the management of the patient’s procedure and the medications needed:

- EPIC Intubation Order set
  - Anxiolysis
  - Induction
  - Muscle relaxant for RSI
    - Check all electrolytes
  - Post-intubation sedation
    - Midazolam and Dilaudid preferred
  - Hemodynamic management (hypotension, hypertension, bradycardia, tachycardia)
    - Review hemodynamic trends during chart review
    - Echo

- Pharmacy should be called to assist with medication preparation for all intubations
- Use Intubation Checklist
- Use DON Checklist
- Use DOFF Checklist
- Review Equipment List, medication considerations, difficult airway considerations, and TIPs below
# EQUIPMENT LIST

## 1. Obtain from Bedside RN or Charge Nurse or Nursing Supervisor:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Vendor</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPE</td>
<td>Specify number of PPE needed</td>
<td></td>
<td>Preference: CAPR-Shroud &gt; CAPR-Shield &gt; N95+goggle/shield</td>
</tr>
</tbody>
</table>

## 2. Obtain from Anesthesia Workroom/Anesthesia Technicians:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Vendor</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIDEO LARYNGOSCOPE (CMAC or Glidescope)</td>
<td>On stand with clear plastic equipment cover</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COVID Airway Kit (See Below)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## 3. Obtain in ICU Storage Room (RN can grab for you):

**ICU Intubation Box**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Vendor</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Select only what you will need to take into the room</strong></td>
</tr>
</tbody>
</table>

## 4. Confirm with RN:

**Suction (Avoid if possible)**

- Preferred Yankaur available
- Canister set-up and turned ON

**IV and Drips**

- IV fluid bag and tubing
- Ensure it runs freely; ENSURE IV WORKS; Opposite arm from NIBP
- IV manifold for infusions
- Ensure enough ports for post-intubation drips
- SpO2
- Audible at highest volume, Opposite arm from NIBP

Whether A-line is needed and if kit available

## 5. Confirm with RT:

**Ambu Bag with filter (VFE 99.9%)**

- Avoid bag-ventilation if possible; Consider LMA early
<table>
<thead>
<tr>
<th>Mechanical Ventilator with filter (VFE 99.9%)</th>
<th>Set with PEEP &amp; FiO2 per ICU</th>
</tr>
</thead>
<tbody>
<tr>
<td>PetCO2 on side port</td>
<td>Calibrated and running on monitor</td>
</tr>
</tbody>
</table>

### i. INSIDE Room: ANES: decides equipment needed in room, place in contamination bag or bin, leave rest outside, notify RUNNER or ASST if additional items needed in room

### ii. OUTSIDE Room (If need anticipated; or call EARLY)

- Difficulty Airways Cart
- Fiberscope 4.0 mm and 5.0 mm; AMBU Scope and Screen

Airway assistant should be available inside or outside room if anticipated difficult airway with PPE available or DONned.

<table>
<thead>
<tr>
<th>COVID Airway Kit (Brought by Anes Techs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Surgical Hoods (blue cloth)</strong></td>
</tr>
<tr>
<td><strong>Video Laryngoscope (CMAC Blades 3, 4, &amp; D)</strong></td>
</tr>
<tr>
<td><strong>Bougie</strong></td>
</tr>
<tr>
<td><strong>Stylets</strong></td>
</tr>
<tr>
<td><strong>iGel</strong></td>
</tr>
<tr>
<td><strong>Clean Equipment cover</strong></td>
</tr>
</tbody>
</table>
**DIFFICULT AIRWAY CONSIDERATIONS**

* IF non-emergent, THEN have airway assistant available OR in room with PPE

* Call for help early • Activate second ANES attending

* Call for difficult airway cart

* Place iGel early to avoid Bag-Ventilation

* Try D-Blade on CMAC

* AVOID surgical airways

**MEDICATION CONSIDERATIONS**

Intubation Medications (ANES/RN give; PHARM prepares)

TIP: ANES choses which meds he/she plans to use

TIP: PHARM prepares meds unless unavailable, then ANES/RN prepare

TIP: Avoid coughing • RSI and adequate sedation/paralysis

TIPS from COVID Airway Team Providers:
- Concern regarding awareness → Midazolam pre-induction
- Succinylcholine wears off and patient coughs → Rocuronium for RSI
- Patients are coughing after extubation → Use Dilaudid drip for post-intubation sedation
- Hypotension is common → have rescue drugs and drips ready
- During DOFFing full focus is needed → communicate with other providers to manage sedation/hemodynamics

<table>
<thead>
<tr>
<th>Medication</th>
<th>Amount (TBW)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midazolam</td>
<td>4 mg IV</td>
<td>syringe</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>100mcg IV</td>
<td>syringe</td>
</tr>
<tr>
<td>Dilaudid</td>
<td>2 mg IV</td>
<td>syringe</td>
</tr>
<tr>
<td>Propofol</td>
<td>2.5 mg/kg</td>
<td>syringe</td>
</tr>
<tr>
<td>Ketamine</td>
<td>1-2 mg/kg</td>
<td>syringe</td>
</tr>
<tr>
<td>Etomidate</td>
<td>0.3 mg/kg</td>
<td>syringe</td>
</tr>
<tr>
<td>Rocuronium</td>
<td>1.5 mg/kg</td>
<td>syringe</td>
</tr>
<tr>
<td>Succinylcholine</td>
<td>1.5 mg/kg</td>
<td>syringe</td>
</tr>
</tbody>
</table>

Post-Intubation Sedation (ICU orders, RN prepares)

<table>
<thead>
<tr>
<th>Medication</th>
<th>Amount (TBW)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dilaudid</td>
<td>1 - 2 mg/hour</td>
<td>Infusion + pump</td>
</tr>
<tr>
<td>Propofol</td>
<td>0 – 100 mcg/kg/min</td>
<td>Infusion + pump</td>
</tr>
<tr>
<td>Dexmedetomidine</td>
<td>0.7 – 1.2 mcg/kg/hour</td>
<td>Infusion + pump</td>
</tr>
<tr>
<td>Midazolam</td>
<td>1 - 5 mg/hour</td>
<td>Infusion + pump</td>
</tr>
</tbody>
</table>

Rescue Medications (ANES gives, PHARM prepares)

<table>
<thead>
<tr>
<th>Medication</th>
<th>Amount (TBW)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenylephrine</td>
<td>100 mcg/mL</td>
<td>syringe</td>
</tr>
<tr>
<td>Epinephrine</td>
<td>10 mcg/mL</td>
<td>syringe</td>
</tr>
</tbody>
</table>
USEFUL TIPS FROM COVID AIRWAY COLLEAGUES

**TIP: Medications**
- ANES chooses which meds he/she plans to use
- PHARM prepares meds unless unavailable, then ANES/RN prepare
- Avoid coughing → RSI and adequate sedation/paralysi
- Concern regarding awareness → Midazolam pre-induction
- Succinylcholine wears off and patient coughs → Rocuronium may be better for RSI
- Patients are coughing after extubation → Use Dilaudid drip for post-intubation sedation
- Hypotension is common → have rescue drugs and drips ready and accessible
- During DOFFing full focus is needed for ANES, RT, RN → communicate with other providers to manage sedation/hemodynamics

**TIP: SAFE DON/DOFF Procedures**
- Go Slow
- Use a Buddy
- DOFF one at a time
- Use a DOFF checklist
- Hand Hygiene between EVERY step
- Remember your neck
- Some units have someone to DOFF your CAPR helmet into a bag so you may not need to wipe it down
- Change your scrubs

**TIP: Communication is Key**
- Run checklists before entering room
- Communication is difficult in PPE
- Use written communication as needed: paper or whiteboard and pen in room

**TIP: Limit Contamination**
- Use Negative pressure rooms when available
- Bring in only what you need as anything brought into room is contaminated
- Clean equipment thoroughly prior to leaving patient room, then clean again outside room
- Hand Hygiene, Hand Hygiene, Hand Hygiene
- Please wipe the VL down inside the room and remove clear cover, then after DOFF final PPE outside the room, clean thoroughly again to protect our anesthesia techs.
EPIC NOTES AND CHARGES
FOR INTUBATIONS AND LINES

After all procedures, we must write procedure notes and capture charges in EPIC. DO NOT create an OOR record.

“Change context” from “ANESTHESIOLOGY” to “CRITICAL CARE SPECIALTY” by clicking the down arrow to the right of the “Log Out” button

Search for and choose CRITICAL CARE SPECIALTY IN THE POP-UP WINDOW

- Procedure notes
  - Please use “Create in NoteWriter” option and click through options for intubations, a-lines, other procedures
- Evaluation Progress Note
  - NOT Mandatory but if you find useful information or have an airway exam this is a good way to store it for others
  - Use Smart Phrase “.AMCCOVAW” or create your own
Billing for Critical Care Time for Prone-Supine Positioning

Please follow these steps:

You will need a Note to bill for Critical Care Time. The note needs a physical exam, a list of critical care activities that justifies time and a ROS. Luckily, this is all in a smartphrase and it will take you less than 5 minutes to write this note.

Use these same steps when turning a patient from prone to supine just be mindful to change in the note a few things to clarify if you are turning supine versus prone.

**Step 1:**
Log into EPIC under Critical Care SPLTY (NOT ANESTHESIA SPLTY)

**Step 2:**
Open a new Note, designate this note as a “Progress Note”

Use smartphrase: .COVIDPRONING

It should look like this:
Step 3:
The smartphrase will generate a note you will have to press F2 to work through all the required fields. You’ll need to write a brief summary line for the patient. It can be very brief: “70 M with severe ARDS due to COVID-19 infection. The rest of the note should look like this:

Prone Team identified and sequence of event discussed and reviewed outside of room
PPE donned (contact, airborne and droplet precautions)
FiO2 turned to 100% approximately 10 mins before proning
EKG leads placed anteriorly
Circuit connections taped to minimize disconnection.
Hemodynamics managed with drips and IV pushers as needed
Oropharynx suctioned
Patient turned supine with prone team
Pressure point padded and eyes checked
IV tubing checked, no kinks or disconnects
Infusions resumed and ventilator settings checked.

Physical Exam

General Appearance: [NO ACUTE DISTRESS:26277::"No acute distress"]
HEENT: {ENT:26278::"Not examined"}
Neck: {NECK:26279::"Not examined"}
Lungs: {EXAM:ICU;PULMONARY:30413406::"Normal symmetry and expansion"}
Cardiac: {EXAM:ICU;CARDIAC:30413405::"Regular rate and rhythm"}
Abdomen: {ABDOMEN:26280::"Normal bowel sounds"}
Extremities: {EXTREMITY:26284::"No edema, no pitting"}

Step 4:
Work through all the details of the physical exam. You do not need all the systems but you should focus on the most important:

Example:
Gen: Intubated and Sedated
Lungs: Bilateral breath sounds, intubated.  
Cardiac: RRR  
Abdomen: Soft, nontender, nondistended  
Skin: Warm, intact, etc  

**Step 5:**  
Select the Critical Care Services Performed. For the most part you will select almost all of them.  
Select “Critically Ill”  
Select time spent doing this from start to finish. Usually 45 min – 60 mins (could be longer)  
See below:

**Critical Care Services Performed**
- Telemetry review  
- Hemodynamic measurement interpretation  
- ECG interpretation  
- Ventilatory management  
- Blood gas interpretation  
- Radiology image review  
- Laboratory data interpretation  
- Discussion of patient’s care with other medical staff

**Current Status of the Patient**
- Critically ill: I personally spent 40 minutes performing critical care services.  
- Critical Care Time: 99291 (1st hour)

Javier Lorenzo, MD  
3/27/2020, 4:37 PM

**Step 6:**  
Go to Charge Capture Tab  
NOTE: if you can’t find a Charge Capture Tab you can always go to the Chart Search bar in the top right corner and “Jump To” Charge Capture, see below:

**Step 7:**  
Select “Charge Capture” in Left Column  
Select “Inpatient”  
Select “Critical Care Time:
Select the designated time you took (usually “30-74 mins”, if longer you can bill for an additional 30 mins, you’d have to select them both if longer than 75 mins)

Step 8:
Select the Critical Care Charge by clicking on it
It will open a window (see below)
Here you can link to a diagnosis.
Use SARS-associated coronavirus infection
If no diagnosis listed you can always search for it under “other diagnosis”
Click ACCEPT
CHECKLISTS ARE DRAFTS ONLY
NOT STANFORD APPROVED DOCUMENTS
COVID+/PUI INTUBATION
Checklist

PRE-PROCEDURE

1 | People
   - Notify RN
   - Notify RT
   - Notify PHARM
   - Identify Runner
   - Discuss with ICU team/Chart review

2 | Equipment
   - PPE (From bedside RN, ANS or Crisis RN)
     CAPRs (shield/shroud) or N95 (with full face shield)
   - Anesthesia technicians
     - 300P: 736-1850
     - Video Laryngoscope w/ clear equipment cover
     - 300P: 724-0219
     - COVID Airway Kit
   - ICU Equipment Room
     - ICU Intubation Box
   - Contamination bin or bag
     - Place needed equipment to bring in room
   - Large biohazard receptacle outside room
     - For DOFFing head PPE and final gloves

3 | Drugs
   - Induction and muscle relaxant
   - Rescue medications
   - Sedation drips

4 | Verify with RN
   - Suction canister with Yankaur turned on
   - IV Bag and tubing free flowing
   - Post-intubation
     - Drapes made, programmed, connected, ready
   - IV Manifold
     - Ports for medication push and sedation drips

5 | Verify with RT
   - Viral Filter on Bag and Ventilator
     - Ambu or Jackson-Rees at Low VT
   - Oxygen
     - Nasal cannula, non-Rebreather
   - Ventilator
     - Appropriate LPV parameters set
   - PETCO2
     - Connected, calibrated, monitor waveform present

6 | Verify with RT and RN
   - Review checklist and plan prior to procedure start
   - Stop: Go to Don checklist

PROCEDURE/TIME OUT

- Preoxygenate 5 minutes with NC and NRB
- RSI and Video Laryngoscopy
- AVOID aerosolization, bag-vent or coughing
- Think early LMA, not bag-vent
- Inflate ETT cuff before ventilation

POST-PROCEDURE

- Remove outer gloves
- Clean VL, cord & visualizer with germicidal wipes;
  Place in bin; Remove clear equipment cover
- Stop: Go to Doff checklist
- DOFF gown & gloves with BUDDY
- Hand Hygiene, then clean gloves
- Open door and Exit with CMAC
- DOFF head PPE and final gloves
- Wash hands, forearms, neck as needed for 2 minutes
- Call anesthesia technicians for pick up
  - 300P: 736-1850
  - 500P: 724-0219
## DONNING Checklist

### DON CAPR SHROUD

**BEFORE ENTERING A PATIENT’S ROOM • USE A DON BUDDY**

1. **Hand Hygiene**
   - Gel or soap and water for 2 minutes
2. **Assemble helmet and shroud**
   - Sizes: Sm or Med/Lg secondary and filter cap
3. **Place head covering**
   - Bonnet or hair covering cap
4. **Battery on waist**
   - Use belt if necessary
5. **Gown**
6. **Surgical gloves**
   - Longer to cover wrists
7. **Nitrile gloves**
   - Second pair to assist donning later
8. **Helmet cord**
   - Pass cord down back inside gown and plug into battery
9. **Helmet face shield**
   - Chin in first then adjust inner shield to seal in face
10. **Helmet fit**
    - Adjust knob at occiput clockwise to tighten
11. **Shroud**
    - Pull down over shoulders
    - High tie under chin
    - Low tie through loops at sternum

### DON CAPR SHIELD

**BEFORE ENTERING A PATIENT’S ROOM • USE A DON BUDDY**

1. **Hand Hygiene**
   - Gel or soap and water for 2 minutes
2. **Assemble helmet and shield**
   - Snaps to helmet
3. **Battery on waist**
   - Use belt if necessary
4. **Gown**
5. **Surgical gloves**
   - Longer to cover wrists
6. **Nitrile gloves**
   - Second pair to assist donning later
7. **Helmet cord**
   - Pass cord down back inside gown and plug into battery
8. **Helmet face shield**
   - Chin in first then adjust inner shield to seal in face
9. **Helmet fit**
   - Adjust knob at occiput clockwise to tighten

### DON N95

**BEFORE ENTERING A PATIENT’S ROOM • USE A DON BUDDY**

1. **Hand Hygiene**
   - Gel or soap and water for 2 minutes
2. **Place head covering**
   - Hair Bonnet and/or Surgical Hood
3. **N95 mask**
   - Verify size and seal check
4. **Face/Neck covering**
   - Full face shield
5. **Gown**
6. **Surgical gloves (under)**
   - Longer to cover wrists
7. **Nitrile gloves**
   - Second pair to assist donning later
## Doffing Checklist

### Before Leaving a PT's Room

**Use a Buddy/Monitor**

1. Remove outer gloves
   - Contaminated by intubation or procedures
   - Grasp outside of glove at wrist
   - Peel glove away from body inside out
   - Throw 1st outer glove away
   - Place clean finger(s) inside second outer glove at wrist
   - Peel second outer glove off inside out
   - Throw away 2nd outer glove
2. Hand hygiene
   - Gel sanitizer on surgical under glove
3. Re-glove
   - New nitrile glove over surgical under glove
4. Equipment
   - Clean any equipment with OXIVIR wipes and place near door
5. CAPR Shroud
   - Undo upper tie and pull over head toward face bringing it into view
   - Tie upper tie strands together to control and keep in view
   - Undo lower tie and pull forward in front of body and tie together to control two strands
   - Starting from occiput, pull hood forward toward face peeling the hood inside out
   - Hood should be inverted, surrounding head like a lion's mane
   - Inside toward face is contaminated
   - Outside toward back is "clean"; do not touch
6. Outer gloves
   - Remove as above (Step 1)
7. Hand hygiene
   - Gel sanitizer on under glove
8. Gown
   - Remove gown by pulling forward, away from body, breaking ties and neck connection
   - Surgical under glove will be removed with gown
   - Discard gown
9. Hand hygiene and re-glove
   - Gel sanitizer
10. Leave patient's room to ante chamber room or outside

### In Antechamber Room/Outside

11. Open door
    - Use sanitized but gloved hand
12. Remove head PPE
    - Doff head PPE into red biohazard bin/trash outside room
13. Remove gloves
14. Hand hygiene
    - Gel sanitizer on bare hands
15. Re-glove with clean nitrile gloves
    - Clean CAPR helmet and cord with OXIVIR wipes and place in return bag
16. Hand hygiene
    - Remove gloves
    - Hand wash for 2+ mins with soap & water up to elbows
    - Consider scrubs change
COVID AIRWAY TEAM SCHEDULE AND USEFUL CONTACTS

https://docs.google.com/spreadsheets/d/1V8Er_ZhmO_0mICad7AGLOCuLtGdDiExv6Rzna5Mvcws/edit#gid=1079804413

COVID AIRWAY TEAM iPhone

- Role: SHC Attending
- Unit: SHC Anesthesiology
- Voalte “name”: SHC COVID Airway
  - Username: covidair
  - Password: 11111
  - Team: COVID19 Airway Access
- Phone Number: 650-387-5008
  - Passcode 202020
- Pager Number 13064
- iPhone owner: Patient Care Services
  - Contact person: Amanda Giordano

Alphabet Acronym Soup (AAS)

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCRN</td>
<td>Critical Care Resource Nurse</td>
</tr>
<tr>
<td>ANS</td>
<td>Administrative Nurse Supervisor</td>
</tr>
<tr>
<td>AAU</td>
<td>Adaptive Acuity Unit</td>
</tr>
<tr>
<td>ACRT</td>
<td>Acute Care Response Team</td>
</tr>
<tr>
<td>PCS</td>
<td>Patient Care Services</td>
</tr>
<tr>
<td>MERC</td>
<td>Medical Emergency Response Committee</td>
</tr>
<tr>
<td>CNO</td>
<td>Chief Nursing Officer</td>
</tr>
<tr>
<td>OPL</td>
<td>One Point Lesson</td>
</tr>
<tr>
<td>CORT</td>
<td>Clinical Operations Resource Team (Top Stanford Clinical Leadership)</td>
</tr>
</tbody>
</table>
ONLINE RESOURCES

COVID19 ICU Task Force: https://sites.google.com/view/stanford-covid/home

Stanford Intranet: https://stanfordhealthcare.org/campaigns/portal.html

Departmental Resources: http://ether.stanford.edu

CDC DON/DOFF Video: 
https://cdnapisec.kaltura.com/html5/html5lib/v2.75/mwEmbedFrame.php/p/2550282/uic onf_id/44123452/entry_id/0_kahwkhtn?wid=2550282&iframeembed=true&playerId=kaltura_player&entry_id=0_kahwkhtn&flashvars