

Standard Operating Procedure

Modality: Ultrasound Division	Modality Manager: Chelsy Coco Phone: 415-353-9264
Location: 505 Parnassus – Moffitt/Long 1975 4 th Street – Mission Bay Hospital	Approvers: David Sostarich, K. Pallav Kolli, MD
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	Revision: 1
Title: Ultrasound ED/In-Patient COVID-19/PUI Workflow, Parnassus and Mission Bay	
Precautions/Isolation Types:	
<ul style="list-style-type: none"> • Novel Respiratory Isolation With Negative Pressure= Airborne/contact PPE – N95 or PAPR, face shield, gown, gloves <ul style="list-style-type: none"> ○ Video: UCSF Donning/Doffing Video • Respiratory Illness Evaluation Without Negative Pressure = Droplet/contact PPE – surgical mask, face shield, gown, gloves <ul style="list-style-type: none"> ○ Document: UCSF Donning/Doffing PDF • UCSF Guidelines on PPE Reuse 	
Pre-Imaging Tasks:	
<p><i>By agreement between hospitalist service and ultrasound division, an ultrasound imaging study should only be performed on patients with confirmed or suspected COVID-19 (PUIs) when the results of the study are reasonably expected to alter a patient's management during the acute phase of the patient's illness.</i></p>	
<p>Workflow:</p> <ul style="list-style-type: none"> • Clinical team will place order for ultrasound study in APEX on COVID-19+/PUI patient • Sonographer will receive order and bring to ultrasound service attending for review • Ultrasound service attending will take one of two actions: <ul style="list-style-type: none"> ○ Approve study as the indication meets the criteria set forth above, <i>OR</i> ○ Initiate discussion with referring team to discuss clinical scenario and to jointly determine if the imaging study and indication meet the criteria set forth above • All ED/inpatients - All clinically warranted ultrasound exams will be performed bedside by one Sonographer • Ensure appropriate US order is placed in APEX • US imaging team to assess patient's current isolation status by: <ul style="list-style-type: none"> ○ Reviewing the patient's chart for isolation precautions and patient's general condition ○ Speaking to the patient's RN regarding the isolation status prior to entering the patient's room. 	

- US imaging team to check that snap cover for imaging console, ultrasound probe covers, and brown paper bags for PPE reuse are present with ultrasound unit before departing department

Imaging Workflow:

Scan all COVID-19+/PUI patients with dedicated US system (UP1 at Parnassus, MBUSP1 at Mission Bay)

- Sonographer will begin portable US exam in Apex/Radiant in department
- **Outside of patient's room:**
 - **Staff should wear don appropriate PPE prior to entering patient room**
 - PPE for **Novel Respiratory Isolation With Negative Pressure** = N95 or PAPR + Face shield + Gown
 - PPE for **Respiratory Illness Evaluation Without Negative Pressure** = Mask + Face shield + Gown
 - Affix snap cover on US unit console
 - Prep all US probes with single use disposable probe covers
 - US exam are performed using **ONLY** single use US gel packets
 - Reduce the number of transducers on the ultrasound machine to 2 if possible (one low-frequency 1-6 MHz) and (one high-frequency (2-9 MHz).
- **Sonographer will enter the patient's room with US unit**
 - Query exam and patient information on US machine
 - Confirm and verify positive patient ID
 - Perform ultrasound imaging study

Post-Imaging Tasks:

- **Sonographer will Doff PPE in the following sequence:**
 - Remove snap cover, all US probe covers, gown and gloves in the **patient room**.
 - Staff will grasp the gown in front and pull away from body so that the gowns ties break, touching outside of gown only with gloved hands. (If staff hands get contaminated during gown or glove removal, they will immediately wash their hands or use an alcohol-based hand sanitizer.)
 - While removing the gown, they will fold or roll the gown inside-out into a bundle adding the gloves in at same time, only touching the inside of the gown.
 - Staff will place the gown and gloves into a waste container.
 - Perform hand hygiene
- **EXIT patient room**
 - Perform hand hygiene
 - Keeping the mask and goggles on, don new gloves
 - Sonographer will thoroughly disinfect entire US unit and all probes with hospital approved Clorox Hydrogen Peroxide Wipes (contact time = 1 minute)
 - Discard gloves in a waste container
 - Perform hand hygiene
 - Sonographer will remove eye goggles or face shield from the back by lifting headband and without touching the front of the goggles or face shield.

- **Store for reuse if possible, otherwise discard in a waste container**
 - Staff will remove surgical mask by: not touching the front of the mask
 - Release bottom ties or elastics of the mask, then the ones at the top, and remove without touching the front
 - If hands get contaminated during mask removal, immediately perform hand hygiene
 - **Store for reuse if possible, otherwise discard in a waste container**
 - Staff will wash hands or sanitize hand by using alcohol-based hand sanitizer
- Sonographer will ensure all pertinent images are captured
- Sonographer will complete and end exam in Apex/Radiant upon return to the department.