**Draft policy for CT suite management addressing hospital recommendations for post COVID imaging suite cleaning and ventilation**

1. Hospital Policy announced 4/8/2020: Room Turnover for a PUI/ COVID + Patient
* **For any room in which an aerosolizing procedure if performed, a 2 hour turnover should occur.** This means nobody should enter the room for 2 hours. Once 2 hours has passed EVS can completed the room turnover process. This will include both our negative and non-negative pressure rooms and OR’s.

*Rationale: Aerosol generating procedures pose a higher risk for transmission and the virus when aerosolized can survive for up to 2 hours in the air.*

* What is considered an aerosolizing generating procedure?

 *Answer: An aerosol generating procedure can include, but not limited to:*

*Endotracheal Intubation and Extubating Open Airway suctioning*

*Bag mask ventilation High-flow oxygen*

*Bronchoscopy and Bronchoalveolar Lavage Break in a closed ventilation system*

*Positive Pressure Ventilation (BiPAP & CPAP) CPR*

*Laparoscopic Exsufflation Tracheostomy Care*

*Nasopharyngeal washing, aspirate, and scoping Chest PT*

*Sputum induction Administration of nebulizing medications*

*Abscess or wound irrigation Electrocautery*

* If a patient is placed in a Negative Pressure Room, **but no aerosol generating procedure is performed then 30 min should pass before cleaning the room**.  This applies to the Emergency Department, Inpatient units, and Outpatient

*Rationale: The Centers for Disease Control and Prevention has stated that COVID-19 is spread through droplets (talking, sneezing, and coughing). The recommendation is for Droplet Precautions if there is no aerosolizing generating procedures.*

* **If my patient has on a mask and I have on a mask do I still need to wait 30 minutes for EVS to clean the room?**

*Answer: Yes. Regardless of source control, Infection Prevention and Control is still advising 30 minutes before cleaning the room or bringing the next patient into a room.*

* **If my patient does not have on a mask but I am wearing my mask, do I still need to wait 30 minutes for EVS to clean the room?**

*Answer: Regardless of source control, Infection Prevention and Control is still advising 30 minutes before cleaning the room or bringing the next patient into a room.*

* **What should EVS wear when cleaning the room?**

*Answer: Our EVS team will wear gown, gloves, eye protection and an N-95 mask when cleaning these rooms.*

1. Questions about above policy:
2. What is the definition of PUI for purposes of this policy? (in which patients without documentation of COVID infection are we required to adhere to this policy)
3. Please confirm that this is intended to apply to fixed-equipment imaging suites (as the above policy references “negative pressure rooms”)
4. If we were able to obtain additional HEPA filtration units for the CT suites, we may be able to achieve a higher number of air exchanges per hour theoretically decreasing the time to room turnover (chart supplied by CDC is pasted below): Facilities has told us that our CT suites have an approximate/ estimated number of 6 air exchanges per hour. This would require a room down time of 69 minutes for 99.9% efficiency of removal per CDC. Was there a different chart used to select the 2 hours time for AGPs, and if so, what number of air exchanges per hour would we be trying to target to shorten this?

| The number of air changes per hour and time and efficiency. |
| --- |
| **ACH § ¶** | **Time (mins.) required for removal99% efficiency** | **Time (mins.) required for removal99.9% efficiency** |
| 2 | 138 | 207 |
| 4 | 69 | 104 |
| 6+ | 46 | 69 |
| 8 | 35 | 52 |
| 10+ | 28 | 41 |
| 12+ | 23 | 35 |
| 15+ | 18 | 28 |
| 20 | 14 | 21 |
| 50 | 6 | 8 |

1. **Proposed policy for backup procedures in CT when emergent studies are ordered during the period of mandated room down time**

 **Rationale:** Certain imaging examinations are highly time sensitive. Due to lack of sufficient redundancy in imaging equipment at LGH we may encounter situations in which adherence of the policy could impact appropriate urgent clinical care. Code Stroke patients serve as the clearest example as CT needs to be performed within 25 minutes from time of ordering. Backup CT equipment options are limited on both campuses due to location differences and concurrent use of equipment. The following policies are proposed to help staff manage in the case of a code stroke or other acute CT need arising while room downtime is mandated by this policy.

**Proposed policy for Main campus**

Most COVID patients and PUIs will be imaged on the ED scanner. Some patients may be imaged on one of the two scanners in the Radiology department.

1. At time COVID+ or PUI meeting criteria to activate room turnover policy are scanned, CT techs operating main campus scanners in radiology department are notified of the following:
	1. They are “in window” for acute case diversion
	2. Anticipated length of time for window
		1. 35 minutes for non aerosol generating procedures (AGPs)
		2. 2 hours and 5 minutes for AGPs
2. Any emergent CT cases ordered during the case diversion window will be diverted to the backup CT suite (scanner 1 or 2 depending on availability)
3. IF neither backup CT suite is available at the time of emergent CT request (e.g. due to procedure being done on scanner, concurrent urgent imaging, or other rooms impacted by room turnover requirements), then subsequent emergent patient will be scanned in the ED scanner
	1. Appropriate precautions for droplet or aerosol exposure (depending on nature of exposure) will be applied to any patient being scanned in the room turnover time window (and will be worn by techs as well)
4. IF emergent patient in scenario 3a CANNOT wear PPE to accomplish droplet or aerosol precautions (e.g. due to mental status compromise, hypoxia, etc), then policy should state technologists shall be allowed to perform the emergent examination despite lack of policy-mandated room turnover time and despite lack of PPE on patient, as there are no available alternatives and risk benefit indicates that emergent imaging study takes precedence

**Proposed policy for Saints campus:**

Only one diagnostic CT scanner at Saints campus. The PET CT scanner serves as a backup. COVID patients and PUIs will be routinely imaged on the department CT scanner.

1. At time COVID+ patient or PUI meeting criteria to activate the room turnover policy are scanned, the tech operating the PET CT scanner should be notified that:
	1. They are “in window” for acute case diversion
	2. Anticipated length of time for window
		1. 35 minutes for non aerosol generating procedures (AGPs)
		2. 2 hours and 5 minutes for AGPs
2. Any emergent CT cases ordered during the window of room quiescence will be diverted to the PET CT suite
3. IF PET CT suite is not available at the time of emergent CT request (e.g. due to concurrent imaging, or PET suite also closed due to room turnover requirements), then the patient will be imaged on the department CT scanner, and
	1. Appropriate precautions for droplet or aerosol exposure (depending on nature of exposure) will be applied to any patient being scanned during the room turnover time window (and will be worn by techs as well)
4. IF emergent patient in scenario 3a CANNOT wear PPE to accomplish droplet or aerosol precautions (e.g. due to mental status compromise, hypoxia, etc), then policy should state technologists shall be allowed to perform the emergent examination despite lack of policy-mandated room turnover time and despite lack of PPE on patient, as there are no available alternatives and risk benefit indicates that emergent imaging study takes precedence