Catholic Health	POLICY AND PROCEDURE	
TITLE: PPE Conservation for COVID-19 and other Pandemic Events	**POLICY NUMBER:**	**PAGE # 1**
RESPONSIBLE DEPARTMENT: Infection Prevention and Control	**POLICY LEVEL:** Acute	**EFFECTIVE DATE:** 3/23/20
PREPARED BY: Infection Prevention and Control	**APPROVED BY:**	

PURPOSE: To provide guidance for the conservation of personal protective equipment (PPE) and prevention of SARS-CoV-2 transmission in the healthcare setting.

APPLIES TO: Applies to acute care sites.

POLICY: The SARS-CoV-2 virus responsible for COVID-19 is transmitted through droplet and contact routes in most instances. Aerosol transmission is considered possible during aerosol generating procedures (AGP's) Current guidance from the Centers for Disease Control and Prevention recommend a tiered approach to PPE based on potential for AGP's and resource availability.

A key strategy in exposure prevention is to reduce the frequency of interactions healthcare workers (HCW's) with potentially contagious environments whenever possible. Reductions in the frequency of doffing PPE decreases the likelihood of self-contamination events. Reducing non-essential personnel from entering isolation zones further decreases the overall risk of HCW exposure events.

During pandemic events PPE resources become scarce, thereby further threatening HCW safety when critical shortages result in an inability to utilize proper safety precautions. Therefore, in times of critical PPE supply shortages, additional measures to conserve PPE must be taken to ensure the ongoing safety of HCW's caring for COVID-19 patients.

PRINCIPLES AND PROCEDURE

Minimize Staff and Visitor Entry into Isolation Areas

1. **Visitors:** Visitors are restricted from entering isolation areas except when visitor presence is essential to the care of the patient; including times of comfort care. Patient care services staff are responsible for monitoring and advising on the safe use of PPE for visitors granted entry into isolation areas.

2. **Bundle Care Activities:** Bundle activities of care to avoid multiple room entries. Prior to room entry consider all other necessary in-room actions planned and utilize the room entry event to accomplish multiple tasks. Plan to bundle multiple tasks whenever possible before room entry. Utilize team members outside of patient care spaces to obtain and to deliver forgotten or needed patient care items.

3. **Phlebotomy:** Nursing should perform routine phlebotomy whenever possible. Specimen collection should be bundled with other care activities to minimize multiple room entries. "Lab add on" orders should be utilized whenever possible to reduce unneeded phlebotomy. Nursing may change provider orders to "Lab add on" when prior available specimens allow after confirming no need for a new specimen with the provider.

4. **Diagnostic Testing:** Laboratory studies (e.g. CBC, chemistries) should be ordered **only** when a strong clinical indication is present to do so. "Lab add on" orders should be utilized whenever possible to reduce unneeded phlebotomy. "Routine" scheduled blood work should not be ordered in advance for any patient under isolation.

   Portable imaging modalities should be utilized whenever possible to minimize HCW exposures in the facility. Avoid repeat imaging studies unless new clinical change dictates necessity. "Routine" chest imaging ordered in advance without a clear clinical indication should not occur.

5. **Medication Administration:**
   a. Avoid multiple dose per day medications when able. Prescribe only necessary medications and use longer half-life agents whenever possible. Medications (including nebulizers) that require multiple doses per day may be interchanged with a longer acting agent and/or dose frequency adjusted by the pharmacy when such changes are expected to offer similar therapeutic benefit.
   b. Place IV pumps outside of patient rooms if space and equipment allow. Pharmacy and Nursing may collaborate to keep IV pumps outside of rooms to facilitate medication changes without room entry if space, equipment and the clinical status of the patient allow.

6. **Avoid Aerosol Generating Procedures (AGP's):**
   a. Avoid nebulizer treatments unless clinical status suggests reversible airway obstruction that would respond to therapy. Respiratory therapy staff should engage providers ordering nebulizers to review necessity and discontinue if inappropriate.
   b. When nebulizer treatments are needed utilize PRN dosing and schedule as infrequently as needed. Pharmacy may interchange to PRN and extend dosing frequency as deemed necessary for appropriate care.
   c. Allow patients to use home maintenance inhalers in lieu of nebulizers when clinically equivalence allows. Pharmacy may allow patient's home inhalers when appropriate.
   d. Careful consideration of using mechanical ventilation (intubation) over non-invasive positive-pressure ventilation (e.g. BIPAP) should be made. BIPAP carries substantial AGP risk and may not alter eventual need for intubation in severe COVID-19 disease.

7. **Consultations:** Consultants should avoid entering isolation units and isolation rooms unless there is a strong clinical indication to do so. Consultants may use the primary provider exam and history to inform decision making. Exam and history documentation should note use of primary provider notes and reason for use (suspect or confirmed COVID-19 case or other pandemic pathogen). Additional patient history should be obtained whenever possible through telecommunication to patient, family and other caregivers to avoid unneeded exposures.

1. **Avoid PPE Misuse:** PPE utilized without an indication poses a risk to all associates. PPE may not be worn by outside of appropriate indications in the clinical/room cleaning setting or as instructed by associate health or by public health order.

2. **Extended use of N-95 respirators:** N95 respirators may be used continuously between patients (regardless of their infection diagnosis) for up to 8 hours. HCW's must refrain from touching the respirator unless necessary for adjustment. **Hand hygiene MUST be performed before and after touching the respirator** during extended use to avoid self-contamination and contamination of the healthcare environment.

3. **Re-use of N-95 respirators:** When there is a critical shortage of respirator equipment (N95 respirators), re-use of these items is appropriate to continue patient care activities while also protecting healthcare workers. Safe single-person reuse of N95 masks is possible and CDC guidelines exist with recommendations to guide this process. See attachment A for specific procedure for N95 re-use.

4. **Defer Annual Fit Testing:** During times of critical shortages of N95 respirators, annual fit testing may be deferred for individuals with prior fit testing that have not developed and major changes to facial anatomy that could change expected respirator sizing from prior fit tests.

5. **Re-use of eye protection:** When there is a critical shortage of eye protection re-use of these items is appropriate to continue patient care activities while also protecting healthcare workers. See Attachment A for specific procedure on eye protection re-use.

6. **Extended Use Procedure Masks:** Extended use of procedure masks is the practice of wearing the same facemask for repeated close contact encounters with several different patients, without removing the facemask between patient encounters.

    a. The facemask should be removed and discarded if soiled, damaged, or hard to breathe through.

    b. HCW must take care not to touch their facemask. If they touch or adjust their facemask they must immediately perform hand hygiene.

    c. HCW should leave the patient care area if they need to remove the facemask.

7. **Patient Cohorting:** Patients with **confirmed** COVID-19 may share rooms (or wards). Caregivers may wear the same PPE while caring for patients within a room containing cohorted patients.

8. **Restricted Isolation Units:** In times of high infection case volumes and critical supply shortages, entire units may be designated as restricted isolation zones ("hot zones") whereby PPE may be worn continuously within the unit. PPE must be donned prior to entry into restricted isolation units and doffed upon exit. The entire restricted isolation unit is considered contaminated space. Patients without confirmed infection should not be placed in restricted isolation units.

	Date/ Initials	Date/ Initials	Date/ Initials	Date/ Initials	Date/ Initials	Date/ Initials	Date/ Initials	Date/ Initials
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REFERENCES: https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html