

COVID-19 PPE Code Response – March 30, 2020

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Situation

While most people with COVID-19 have uncomplicated or mild illness (81%), some will develop severe illness requiring oxygen therapy (14%) and approximately 5% will require intensive care unit treatment. Of those critically ill, most will require mechanical ventilation (2, 10). The most common diagnosis in severe COVID-19 patients is severe pneumonia (WHO/2019-nCoV/clinical/2020.4).

Background

In order to ensure the health and safety of healthcare workers, OSHA requires hospitals to develop, implement, and maintain a respiratory protection program. NIOSH approved N95 filtering facepiece masks are an essential part of these programs. Normal supply chain inventory and purchasing habits are based on past usage and projected needs. When operating under normal conditions, this model provides adequate levels of these products. The current supply chain for enhanced respiratory protective devices is not meeting the demand.

Assessment

Current reporting for the number of COVID-19 patients requiring intubation and mechanical ventilation, coupled with current practice to have up to 11 clinicians assisting in a code, would strain an already weak supply chain for N95 masks. We must work to preserve the supply of N95 masks for those clinicians in direct patient care where an N95 mask, or equivalent, is essential for life safety.

Recommendation

Limiting the number of code responders to only those directly involved with patient care and reducing the use of N95 masks to those at the head of the patient will help reduce the usage amount for N95 masks. Team member recommendations for codes:

In room

Position	Task	Mask Type
Physician	Team Leader	N95
Physician / ICU APP / Fellow (1)	Intubation / Procedure	N95
Respiratory Therapist	Airway Management	N95
Nurse	Medication/ Defib	N95
HCW	1 st Compressions	N95
HCW	2 nd Compressions	N95

Outside of the room, in doorway

Nurse	Recorder	Isolation
Pharmacist	Crash Cart / Meds	Isolation
HCW	Gatekeeper	Isolation

***Additional team members may be considered at the direction of the Team Leader.*

Apply airborne precautions when performing an aerosol-generating procedure. Ensure health care workers performing aerosol-generating procedures (e.g. open suctioning of respiratory tract, intubation, bronchoscopy, cardiopulmonary resuscitation) use the appropriate PPE, including gloves, long-sleeved gowns, eye protection,

and fit-tested particulate respirators (N95 or equivalent, or higher level of protection). A scheduled fit test should not be confused with a users' seal check before each use. Whenever possible, use adequately ventilated single rooms when performing aerosol-generating procedures, meaning negative pressure rooms with a minimum of 12 air changes per hour or at least 160 L/second/patient in facilities with natural ventilation. Avoid the presence of unnecessary individuals in the room by relying on "gatekeeper" role to ensure standards are followed. Care for the patient in the same type of room after mechanical ventilation commences.