**System Incident Management Update**

**March 31, 2020**

**Distribution: All Yale New Haven Health System Employees and Medical Staff Leadership**

**New Updates In RED**

**Personal Protective Equipment (PPE) Updates**

**Guidance regarding substitution of small-sized N95s with universal N95s given shortages**

The Health System’s supplies of small-sized N95 respirators have become extremely limited. We have begun to sterilize and reprocess used small-sized N95s, and we expect stocks to be replenished in the coming days. Until the small sized N95s are back in stock, healthcare workers can safely switch to the universal-size 1870 N95 respirator for the care of COVID-19 patients. A repeat fit test is not required as long as care does not include participation in an aerosol-generating procedure such as intubation, bronchoscopy, upper endoscopy, or sputum induction. Such procedures should be carried out by individuals wearing a respirator for which they have been fit tested.

**Clarification regarding PPE guidance issued on March 27, 2020**

We continue to calibrate the distribution and implementation of the use of masks for hospital-based healthcare workers as described on Friday, March 27. It should be made clear that when working in any clinical area within the hospital, the expectation is that everyone will be wearing a mask that is appropriate for the risk in that area (N95 vs face mask). The grid circulated on Friday provides detailed guidance for duration of mask use and when respirators should be used. That document remains the primary reference for operational implementation of the policy.

**Clarification regarding the use of N95 respirators for intubation**

PPE recommendations across YNHHS call for use of N95 respirators, face shields, gown and gloves when providing care to patients who have tested positive for COVID-19, *including when such patients are undergoing aerosol generating procedures such as intubation or receiving ICU level care*. Our current supply of N95 respirators is sufficient to support these recommendations, which are in accordance with current national guidelines.
Given the anticipated increase in patient volume and limited supply of N95 respirators, we are also exploring alternatives, which we may deploy more broadly as our N95 resources become limited. These include N95 reprocessing, which will scale up in the coming week, and expanding the use of our limited supply of powered air purifying respirators (PAPRs) and elastomeric respirators (industrial cartridge respirators), currently being piloted in some areas. There is no evidence that PAPRs or elastomeric respirators are more effective in preventing transmission of viral respiratory diseases than are N95 respirators. **Intubations may be safely performed with either N95s, PAPRs or elastomeric respirators, along with gown, gloves and eye protection.**

**Implementation of revised PPE guidelines (3/27)**
As a reflection of our commitment to ensuring our front-line healthcare workers are protected to the maximum degree possible during the COVID-19 pandemic, new guidelines clarifying the appropriate clinical indications for the use of PPE, including N95 respirators and facemasks, were implemented on March 27. We currently have adequate supplies to protect all healthcare workers who cannot socially distance. We will continue to calibrate the communication of the policy, as well as improve the effective and efficient distribution of these supplies.

**YNHHS Procedure for re-processing of personal protective equipment (PPE)**
Please continue to ensure that used N95 respirators, goggles, and face shields that are not torn, broken, or visibly soiled are not discarded in the garbage and are placed in designated collection bins for reprocessing.

**Use of makeup while using PPE**
Our supply chain and central sterile supply departments developed an innovative process to safely and effectively reprocess critical types of PPE, including N95 respirators, face shields and protective goggles. The process can only be performed on items that have not been visibly soiled. 25 percent of collected used PPE currently has to be discarded because of makeup stains. Front-line healthcare workers who use these critical PPE items should not wear makeup to work. Cooperation is critical to our ability to have a sustainable source of essential PPE items, which are in short supply across the country.

**Clinical Care/Operations Update**

**Updated ICU practice guideline for patients with severe COVID19**
A multidisciplinary group representing the Intensive Care Units across the system has developed detailed practice guidelines for treatment of patients with COVID19 who require critical care support. In addition, guidelines for respiratory care of patients with COVID-19, and information on the provision of extracorporeal membrane oxygenation (ECMO) to patients with severe respiratory failure, are attached.

**Updates on COVID-19 testing availability**
The Lab Medicine departments across the health systems have added the capability to do a limited number of rapid COVID-19 tests with a 2 hour turnaround. This
capability augments our existing ability to do roughly 400 tests with a 6 hour turnaround time through Yale Virology. At present we continue to be able to conduct in-house testing for inpatients with fever or respiratory symptoms and healthcare workers at the York Street and St. Raphael's Campuses. Healthcare workers at other delivery networks will be sent to the local reference labs of choice. Availability of in-house testing remains dynamic, and will expand or contract based upon the availability of test kits and reagents, which we continue to make all efforts to secure.

Conversion to new supply distributor
The Supply Chain Department has completed a long-planned conversion from our previous primary distributor (Owens & Minor) to Medline, effective Sunday, March 29th. This has been an enormous project, and the transition has gone quite smoothly, with 95% of orders filled without incident in the first 2 days. Challenges currently being worked on include a difference in units of measure between the distributors, ensuring that inventory trends remain continuous, and a few other minor issues. There has been no disruption to critical supplies, and Medline has made deliveries of critical items including disinfecting wipes and other items essential to navigating the COVID-19 crisis.

COVID-19 Related Operational Snapshot
Below you will find an overview of the total number of inpatients who are positive or under investigation with COVID-19 and updated testing results from across the Health System. These numbers are from our JDAT team.
Logistics Update

No Changes