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**Re: Employee Safety and Health During COVID-19 Epidemic
Nurses at Albany Medical Center (AMC)**

At the request of the New York State Nurses Association (NYSNA) I have reviewed the complaints submitted by Nurses represented by NYSNA regarding infection prevention with SARs-CoV-2 at Albany Medical Center located in Albany, NY. Based on the review of those papers, it is my professional opinion that the nurses at Albany Medical Center (AMC) have been placed at unreasonable risk of exposure to COVID-19 while performing their jobs. I base my opinion on the following:

1. Reuse of N95 Filtering Facepiece Masks - N95 respirators are not designed or intended for reuse, however nurses at Albany Medical are required to reuse N95 respirators over an extended period of time. It was reported that masks are collected after use and treated using a Bioquell process, which involves large scale disinfection using aerosolized hydrogen peroxide. The National Institute for Occupational Safety and Health (“NIOSH”) and the Occupational Safety and Health Administration (“OSHA”) guidelines, and the standard in the field of safety and health, all instruct that disposable or “single-use” N95 respirators are not intended for reuse.¹ In fact, the major manufacturer of N95 respirators in the United

¹ OSHA/NIOSH, *Hospital Respiratory Protection Toolkit*, page 16, 2015 Occupational Safety and Health Administration (OSHA), available at <https://www.osha.gov/Publications/OSHA3767.pdf>.

States, 3M, does not recommend reuse or cleaning of disposable N95 respirators. 3M warns that filtering facepiece N95 respirators are not intended to be decontaminated.² The treatment with hydrogen peroxide has been shown to disinfect the mask, however, hydrogen peroxide (H₂O₂) is a strong oxidizer and will degrade the straps on the mask and mask material as well. H₂O₂ reacts with most organic compounds including polyethylene, which is the principal component of masks and straps. As the straps are oxidized by the hydrogen peroxide they can stretch out affecting the fit of the N95. Albany Medical does not have a policy of refit-testing employees on masks that have been worn by the nurse and treated with hydrogen peroxide over multiple cycles. It is more than likely as the mask and straps are weathered by repeated H₂O₂ treatments, the fit of the mask is impacted. This results in a mask that may have fit a nurse when new, but no longer fits after multiple sterilization events. In fact it was reported that when employees were fitted on recycled masks, the hospital found a high fit test failure rate and has not acted upon this.

2. Masks Are not discarded even when visibly soiled or damaged - It was reported that N95 face pieces are often observed to have visible contamination or are misshapen due to folding when returned after disinfection treatment. OSHA mandates that users should discard respirators when they become damaged, misshapen, soiled or become unsuitable for further use due to excessive breathing resistance (for example, particulates clogging the filter).³ Re-using damaged soiled masks is a health hazard and will not protect the worker. Additionally, it was reported that disposable N95 masks are being cleaned up to 20 times. The Centers for Disease Control advise that limited cleaning and reuse of N95 masks may be possible, but there are many warnings. These include disposal after use around aerosol generating procedures, disposal if misshapen or stained or obviously damaged. CDC warns

² *3M Technical Bulletin, Decontamination of 3M Filtering Facepiece Respirators, such as N95 Respirators, in the United States - Considerations* – September 2020 Revision 11

³ OSHA/NIOSH, *Hospital Respiratory Protection Toolkit*, page 27, 2015 Occupational Safety and Health Administration (OSHA), available at <https://www.osha.gov/Publications/OSHA3767.pdf>.

that reuse of filtering facepiece masks (disposable masks) should be limited to no more than 5 donnings of the mask due to the impact on the fit.⁴

3. Cleanable Respirators are Available to AMC and not Used – If Albany Medical wants to reuse respirators, it can do so safely by purchasing respirators that are intended for cleaning and reuse -- tight-fitting elastomeric respirators with replaceable and disposable filters. A nurse could safely wear an elastomeric respirator into a COVID-19 patient area and then sanitize the respirator using wipes designed by the manufacturer. Furthermore, these masks can be worn with a surgical mask over the exhalation valve to filter exhaled air and thereby prevent infection. These elastomeric masks have a long track record of over 50 years and have been demonstrated to be easily cleaned and sanitized and to maintain good fit after cleaning. Instead, Albany Med has chosen to issue disposable, single use N95s, which are not designed to be reused or cleaned.
4. Standard infection prevention controls are not used - It was reported that patients are often in the emergency department waiting areas and are not distanced by 6 feet. In some cases patients who may have tested positive for SARs-CoV-2 are waiting to be admitted or treated and are seated with other patients. Patients are transported and moved into and out of elevators comingling COVID patients and other patients and visitors. It should be required that all patients wear masks when indoors and follow 6 foot distancing between patients. Elevator occupancy should be strictly limited to provide distancing. This is standard practice for reducing exposure and controlling infection. One nurse reported that a training seminar was done with over 20 nurses in the room and the instructor not wearing a mask. In my recent experience working at three NYC hospitals, employees in seminars, classroom areas or conference rooms are required to wear a mask and observe social distancing rules. In fact, a large NYC hospital center has recently instituted a policy that all meetings and trainings must be done by web based platforms with in-person meetings forbidden. Albany Medical should be meeting these same standards of care and infection prevention observed in other hospitals and public places.

⁴ Centers for Disease Control (CDC) *Implementing Filtering Facepiece Respirator (FFR) Reuse, Including Reuse after Decontamination, When There Are Known Shortages of N95 Respirators*; October 2020.

5. Failure to Provide Negative Pressure Isolation Rooms for COVID-19 Patients - Nurses report that COVID-19 patients are sometimes placed in rooms that are not negative pressure isolation rooms. One way that ventilation can be used to contain infectious disease is through differential pressure. Exhausting more air from a room than is supplied will create negative pressure, which prevents airborne contaminants from escaping from the room. Isolation rooms are specially designed to have negative pressure. But it is also possible to adjust the supply and exhaust ventilation to a room to convert it to a negative pressure room. Portable air filtration devices can be equipped with a flexible duct that is discharged outside in order to quickly and temporarily establish negative pressure in a standard patient room used for COVID patients. The use of engineering controls is the first level of exposure control for employees and takes precedence over use of personal protective equipment such as masks in the hierarchy of controls.
6. Nurses Have not been adequately trained in the use of PPE including respirators – Nurses report that they are issued powered air purifying respirators (PAPRs), but have not been trained in the use of the respirator. The report that the use of N95s in the operating room is not mandated and no clear direction is given when specific PPE is required and must be worn. The OSHA personal protective equipment standard (1910.132(f)(1) requires employee PPE training to include the following:
 - When PPE is necessary
 - What PPE is necessary
 - How to properly don, doff, adjust and wear PPE;
 - The limitations of the PPE;
 - The proper care, maintenance, useful life, and disposal of the PPE.

Re-training is required when the requirements for PPE change, when employees demonstrate inadequate knowledge or use of the assigned PPE or have not retained the requisite skill, or there are changes in the workplace. The employer must perform a hazard assessment with documentation and certification of the assessment including the person making the assessment and the date.