 **Preparation for PPE shortage crisis**

Within the next couple of weeks, we are going to see a shortage crisis of Personal Protective Equipment (PPE) in the healthcare system. PPE (gloves, masks, gowns, shoe protectors, eyewear etc.) is a vital necessity for the health care workers to protect themselves from infectious diseases and keep one another safe.

To be prepared WHEN this crisis occurs we ask that any community businesses or members that have PPE that is not being used, to donate it to the healthcare workers during this time. Ways to conserve the PPE that is available can include:

* Reuse gowns in the same patient’s room throughout the day
  + These gowns can ONLY be used with the same patient and need to be kept in their room hung up-labeled per healthcare provider. At the end of the shift they need to be properly disposed of per facility policy.
  + If blood products or droplet products spill onto the gown proper disposal should be practiced.
  + Reuse of gowns should not be practiced with critically ill patients.
* Reuse N-95 mask
  + When reusing N-95 masks, they must be disinfected, the best way found to disinfect this type of mask while protecting from breakdown of the mask is to use an autoclave or water steam.
    - Autoclave- 70C/158Fheat for 30 minutes
    - Hot water vapor- Boil hot water for 10 minutes
    - Avoid touching the inside of the respirator. If inadvertent contact is made with the inside of the respirator, discard the respirator and perform hand hygiene as described above.
    - Use a pair of clean (non-sterile) gloves when donning a used N95 respirator and performing a user seal check. Discard gloves after the N95 respirator is donned and any adjustments are made to ensure the respirator is sitting comfortably on your face with a good seal.
    - Hang used respirators in a designated storage area or keep them in a clean, breathable container such as a paper bag between uses. To minimize potential cross-contamination, store respirators so that they do not touch each other and the person using the respirator is clearly identified. Storage containers should be disposed of or cleaned regularly
    - Discard N95 respirators following close contact with any patient co-infected with an infectious disease requiring contact precautions.
    - Discard N95 respirators following use during aerosol generating procedures.
    - Discard N95 respirators contaminated with blood, respiratory or nasal secretions, or other bodily fluids from patients.
    - Discard N95 respirators following close contact with, or exit from, the care area of any patient co-infected with an infectious disease requiring contact precautions.
    - Consider use of a cleanable face shield (preferred) over an N95 respirator and/or other steps (e.g., masking patients, use of engineering controls) to reduce surface contamination.
    - Perform hand hygiene with soap and water or an alcohol-based hand sanitizer before and after touching or adjusting the respirator (if necessary for comfort or to maintain fit).
  + Are there risks related to reuse of N-95 masks?
    - Reuse of N-95 masks can increase the risk of contact transmission and secondary exposure however during a crisis PPE shortage we must do what we can to accommodate the situation.
    - Respiratory pathogens can potentially be transferred by the health care provider touching the N-95 mask and then by touch of another surface.
    - Respirators might also become contaminated with other pathogens acquired from patients who are co-infected with common healthcare pathogens that have prolonged environmental survival (e.g., methicillin-resistant Staphylococcus aureas, vancomycin-resistant enterococci, Clostridium difficile, norovirus, etc.). These organisms could then contaminate the hands of the wearer, and in turn be transmitted via self-inoculation or to others via direct or indirect contact transmission.
    - Respiratory pathogens on the respirator surface can potentially be transferred by touch to the wearer’s hands and thus risk causing infection through subsequent touching of the mucous membranes of the face
* Reuse of gloves
  + - Reuse of gloves should never be practiced, however, if there would be a glove shortage crisis antibacterial handwashing with the gloves and a disinfectant may be used. Risk: wear and tear on the glove material. Gloves should be thrown and discarded after X amount of patients.
* Reuse of shoe protectors
  + - Reuse of shoe protectors may be practiced when there is a PPE storage. However, if blood or droplet products spill on the shoe protectors, proper disposal should be practiced.
* Reuse of eyewear
  + - Eyewear should be disinfected after each exposure between patients along with the facemask.
    - Hang used eyewear in a designated storage area or keep them in a clean, breathable container such as a paper bag between uses. To minimize potential cross-contamination, store respirators so that they do not touch each other and the person using the respirator is clearly identified. Storage containers should be disposed of or cleaned regularly.