BjC Recommended Conservation Strategies as of March 31st, 2020:

**Gloves**: Standard Operations.

**Isolation gowns**: Limited use recommended. See below.

**Isolation masks, N95s, goggles, face shields, CAPRs, PAPRs, Isolation Stethoscopes**: Reuse and/or extended use recommended. See below.

Standard doffing protocol in Appendix A.

**Isolation Stethoscope Reuse Protocol**:

<table>
<thead>
<tr>
<th>Situation</th>
<th>Process</th>
<th>Additional Information</th>
</tr>
</thead>
</table>
| Reuse isolation stethoscope on multiple patients | Stethoscope should be dedicated to one patient on contact precautions for use between multiple providers for duration of patient’s stay  
  - Stethoscope should travel with patient upon transfer within facility | Stethoscope dedicated to one patient for duration of stay  
  - Discard if becomes damaged or unsuitable for use |
|                               | When patient has been discharged or transferred from facility:        |                                                                                         |
|                               |  - Wear gloves to disassemble stethoscope                              |                                                                                         |
|                               |  - Wipe each component with hospital-approved disinfectant wipe (large alcohol wipes preferred, if available) |                                                                                         |
|                               |  - Allow to air dry                                                     |                                                                                         |
|                               |  - Reassemble components                                                |                                                                                         |
|                               |  - Dedicate to different patient on contact precautions                 |                                                                                         |

**Isolation Gown Limited Use Protocol**:

<table>
<thead>
<tr>
<th>Situation</th>
<th>Process</th>
<th>Additional Information</th>
</tr>
</thead>
</table>
| Contingency operations | Consider alternatives to isolation gowns such as non-sterile surgical gowns and/or aprons  
  1) Consider alternatives to isolation gowns  
  Gowns should be prioritized for the following activities: | Do not use isolation gowns to care for patients who are colonized without active infection |
INFECTION PREVENTION RECOMMENDATIONS FOR CONSERVATION OF PPE DURING COVID-19 OUTBREAK

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 2) Use risk-based approach to prioritize use of isolation gowns | o During patient care where splashes and sprays are anticipated, including aerosol generating activities  
 o During high-contact patient care (e.g., bathing, showering, transferring, changing linens, assisting with toileting and underclothes changes, wound care, device care) |
| 3) Limit gown use for transmission-based precautions for patients with active MDRO infections | Limit use of isolation gowns to patients with active MDRO infections, CDI (identified during this hospital admission and/or have open, draining wounds) and those on indefinite contact precautions for CP-CRE. |
| 4) Promote use of hand hygiene and glove changes | Promote importance of hand hygiene and appropriate glove changes in accordance with hospital policy |
| 5) Discontinue active surveillance | Discontinue active surveillance for MDROs such as MRSA and VRE in all areas except NICUs |

### Isolation Mask Extended Use Protocol:

<table>
<thead>
<tr>
<th>Isolation Masks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Situation</strong></td>
</tr>
</tbody>
</table>
| 1) Extend use of isolation masks where applicable | **Process for Extending Use of Isolation Masks:**  
For healthcare workers, an extended use of facemasks is the practice of wearing the same facemask for repeated close contact encounters with several different patients, without removing the facemask between patient encounters.  
  1. Staff continue wearing same mask between patients  
  2. If COVID-19 ward staffing is in place, HCP to wear one isolation mask when on ward  
Reinforce the need to minimize unnecessary contact with the surface of the mask, strict adherence to hand hygiene practices, and proper | Do not pull mask down around neck or place on top of head between patient encounters |
INFECTION PREVENTION RECOMMENDATIONS FOR CONSERVATION OF PPE DURING COVID-19 OUTBREAK

Personal Protective Equipment (PPE) donning and doffing technique.

Perform hand hygiene with soap and water or an alcohol-based hand sanitizer before and after touching or adjusting the isolation mask (when necessary for comfort or to maintain fit).

Discard isolation mask if mask is:
- Visibly soiled
- Moist or wet

Discard any isolation mask that is obviously damaged or becomes hard to breathe through.

PPE should be removed before leaving the floor/ward or when consecutive patient care activities have been completed. Face shield and goggles should be cleaned and stored for reuse.

---

### N95 Respirator Reuse and Extended Use Protocols:

<table>
<thead>
<tr>
<th>Situation</th>
<th>Process for Reusing N95 Respirators:</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Reuse N95 respirators where applicable (e.g. provider with occasional contact with COVID patients or other patients requiring N95s such as TB; provider performing occasional Aerosol Generating Procedures; used in presence of surgical smoke; provider administering hazardous drugs)</td>
<td>1. Employees needing an N95 for their task(s) should obtain an appropriate respirator from their unit leader(s), along with paper bag and instructions for reuse 2. Write first and last name on paper bag; write date of first use on bag 3. Use N95 per standard protocol 4. After use, remove N95 per standard doffing sequence (attached) and place in pre-labeled paper bag for reuse.</td>
<td>N95 respirators must only be used by a single wearer  • Secondary exposures can occur from respirator reuse if respirators are shared among users and at least one of the users is infectious (symptomatic or asymptomatic). To prevent inadvertent sharing of respirators label paper bags used for storing N95 respirators or label the respirator itself (e.g., on the straps) between uses with a unique identifier (e.g., first name, last initial) to reduce accidental usage of another person’s respirator.</td>
</tr>
</tbody>
</table>

Discard N95 respirator if N95 is:
- Visibly soiled
- Moist or wet
- Used during aerosol-generating procedures, unless N95 was protected by a face shield*
## INFECTION PREVENTION RECOMMENDATIONS FOR CONSERVATION OF PPE DURING COVID-19 OUTBREAK

**2) Suspend fit-testing requirements**

5. To reuse:
   - a. Perform hand hygiene
   - b. Retrieve N95 from bag and place on face, ensuring proper fit (seal-check)
   - c. Perform hand hygiene
   - d. Finish donning PPE, as applicable, prior to entering patient room or care area
   - e. Perform hand hygiene any time after N95 is touched

Reinforce the need for proper respirator donning techniques including inspection of the device for physical damage (e.g., Are the straps stretched out so much that they no longer provide enough tension for the respirator to seal to the face?, Is the nosepiece or other fit enhancements broken?, etc.).

Discard any respirator that is obviously damaged or becomes hard to breathe through.

Pack or store respirators between uses so that they do not become damaged or deformed.

*N95 use should not be extended by covering with an isolation mask at this time, as isolation masks are also in short supply. This recommendation may change.*

**N95 masks should not be used for fit testing until supply replenished. Users should perform seal check when donning respirator to ensure proper fit.**
INFECTION PREVENTION RECOMMENDATIONS FOR CONSERVATION OF PPE DURING COVID-19 OUTBREAK

3) Extend use of N95 respirators where applicable
   (e.g. provider caring for multiple COVID pts in an ICU setting; provider performing multiple aerosol generating procedures on multiple COVID pts [ie RT on COVID ward])

<table>
<thead>
<tr>
<th><strong>Process for Extending Use of N95 Respirators:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Extend the use of N95 respirators by wearing the same N95 for repeated close contact encounters with several different patients, without removing the respirator between patient encounters.</td>
</tr>
<tr>
<td>• The respirator must maintain its fit and function.</td>
</tr>
</tbody>
</table>

Reinforce the need to minimize unnecessary contact with the respirator surface, strict adherence to hand hygiene practices, and proper Personal Protective Equipment (PPE) donning and doffing technique.

Perform hand hygiene with soap and water or an alcohol-based hand sanitizer before and after touching or adjusting the respirator (when necessary for comfort or to maintain fit).

Discard N95 respirator if N95 is:
   a. Visibly soiled
   b. Moist or wet
   c. Used during aerosol-generating procedures, unless N95 was protected by a face shield*

Discard any respirator that is obviously damaged, loses seal, or becomes hard to breathe through. If not discarded, store in a paper bag for reuse.

PPE should be removed before leaving the floor/ward. Face shield and goggles should be cleaned and stored for reuse.

For extending use AND reusing, N95 respirators must only be used by a single wearer.

Secondary exposures can occur from respirator reuse if respirators are shared among users and at least one of the users is infectious (symptomatic or asymptomatic).

To prevent inadvertent sharing of respirators label paper bags used for storing N95 respirators or label the respirator itself (e.g., on the straps) between uses with a unique identifier (e.g., first name, last initial) to reduce accidental usage of another person’s respirator.

*N95 use should not be extended by covering with an isolation mask at this time, as isolation masks in short supply. This recommendation may change.*
## Face shields/Goggles/CAPR/PAPR Reuse Protocol:

### Goggles

<table>
<thead>
<tr>
<th>Situation</th>
<th>Process</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goggles assigned to healthcare worker for duration of shift (preferred)</td>
<td>• Touch goggles with clean hands only&lt;br&gt;• Observe goggles for visible soiling with blood / body fluids or hazardous drugs. If elastic portion of goggles is visibly soiled, move to safe location and discard per hospital policy. If healthcare worker believes there was an exposure during patient care activities, even if not visibly soiled, discard at point of use.&lt;br&gt;• If visibly soiled, remove PPE per standard doffing sequence, clean hands and don clean gloves&lt;br&gt;• Use an alcohol/quaternary ammonium (purple-top Super Sani or similar) disinfectant wipe to clean of visible soil&lt;br&gt;• Disinfect goggles after each patient encounter with alcohol/quaternary ammonium (purple-top Super Sani or similar) disinfectant wipe. Store cleanly, in a way that prevents contamination, until next use</td>
<td>• If healthcare worker touches goggles with dirty hands, goggles must be washed after use, immediately after leaving the patient’s room, prior to being used in another patient’s room.</td>
</tr>
<tr>
<td>Goggles shared between healthcare workers during shift</td>
<td>• Touch goggles with clean hands only&lt;br&gt;• Observe goggles for visible soiling with blood / body fluids or hazardous drugs. If elastic portion of goggles is visibly soiled, move to safe location and discard per hospital policy.&lt;br&gt;• If visibly soiled, remove PPE per standard doffing sequence, clean hands and don clean gloves&lt;br&gt;• Use an alcohol/quaternary ammonium (purple-top Super Sani or similar) disinfectant wipe to clean of visible soil&lt;br&gt;• Disinfect goggles after each patient encounter with alcohol/quaternary ammonium (purple-top Super Sani or similar) disinfectant wipe&lt;br&gt;• Store cleanly, in a way that prevents contamination, until next use</td>
<td></td>
</tr>
</tbody>
</table>

### Face Shield

<table>
<thead>
<tr>
<th>Situation</th>
<th>Process</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face shield assigned to single healthcare worker</td>
<td>After each patient encounter:&lt;br&gt;1. Don clean gloves</td>
<td>• If face shield is grossly soiled, one disinfectant</td>
</tr>
</tbody>
</table>
**Face shield shared between healthcare workers during shift**

- Face shield should not be shared between healthcare workers due to inability to clean and disinfect cloth components adequately.

- Do not share face shields between healthcare workers.

### CAPR

<table>
<thead>
<tr>
<th>Situation</th>
<th>Process</th>
<th>Additional Information</th>
</tr>
</thead>
</table>
| CAPR assigned to single healthcare worker for multiple uses | Follow CAPR manufacturer’s instructions for reuse.  
- Wipe down between patients using a hospital-approved disinfectant wipe.  
- Apply disinfectant to wipeable surfaces for appropriate time (e.g., 2 minutes) | CAPR approved for use instead of plastic face shield, where available  
- Do not reuse CAPR if grossly soiled on non-wipeable areas of the mask; if torn, damaged, or low visibility. |
### INFECTION PREVENTION RECOMMENDATIONS FOR CONSERVATION OF PPE DURING COVID-19 OUTBREAK

| CAPR shared between healthcare workers during shift | Follow CAPR manufacturer’s instructions for reuse.  
- Wipe down between patients using a hospital-approved disinfectant wipe.  
- Apply disinfectant to wipeable surfaces for appropriate time (e.g., 2 minutes) | CAPR approved for use instead of plastic face shield, where available  
- Do not reuse CAPR if grossly soiled on non-wipeable areas of the mask; if torn, damaged, or low visibility. |

### PAPR

<table>
<thead>
<tr>
<th>Situation</th>
<th>Process</th>
<th>Additional Information</th>
</tr>
</thead>
</table>
| **PAPR assigned to single healthcare worker for multiple uses** or **PAPR shared between healthcare workers during shift** | Follow PAPR manufacturer’s instructions for PAPR hood reuse: 3M TR-300 S-series | **PAPR approved for use instead of plastic face shield, where available, outside of OR**  
**Do not reuse PAPR hood if torn, damaged, or low visibility.** |
Appendix A: Standard Doffing Sequence

Removing Personal Protective Equipment (PPE)

❖ Gloves
   ❖ Outside of gloves is contaminated!
   ❖ Grasp outside of glove with opposite gloved hand, peel off.
   ❖ Hold removed glove in gloved hand.
   ❖ Slide fingers of ungloved hand under remaining glove at wrist without touching outside of glove.
   ❖ Peel glove off over first glove.
   ❖ Discard gloves in waste container.
   ❖ If wearing gown and gloves — can remove together (see gown removal).

❖ Goggles or Face Shield
   ❖ Outside of goggles or face shield is contaminated!
   ❖ To remove, handle by head band or ear pieces.
   ❖ Clean according to facility guidelines, place in designated receptacle for reprocessing or discard in waste container.

❖ Gown
   ❖ Gown front and sleeves are contaminated!
   ❖ Use clean hands to unfasten back ties (if needed).
   ❖ Pull away from neck and shoulders; break neck/back ties.
   ❖ Turn gown inside out. Can remove gloves with gown.
   ❖ Fold or roll into a bundle and discard.

❖ Isolation Mask, N95 Respirator/PAPR*/CAPR**
   ❖ Front of mask/respirator is contaminated - do not touch!
   ❖ Grasp bottom, then ties or elastics and remove.
   ❖ Discard in waste container.

❖ Hand Hygiene
   ❖ Perform hand hygiene after removal of PPE.

*PAPR — Powered Air Purifying Respirator
**CAPR — Controlled Air Purifying Respirator