N95 Tool Kit: Algorithms and Compliance 1.19.21
1100
Spectrum Health contact: Steve Mogridge and Brent Petersen
*Highlight denotes new content
Document reviewed: 3.25.21

Situation
Supply Chain has secured several types on N95 respirators. Some of these N95s are not intended for surgical/procedural areas. The PPE Integrated Workgroup has developed an algorithm and guide to help determine which respirators are appropriate for use.

Background
Spectrum Health Supply Chain has worked to secure stock of different brands/models of N95 respirators due to the 3M shortage. Since there are several types of N95s, Occupational Health has established fit testing clinics to ensure proper fit of N95 respirators.

Assessment
There is an abundant supply of N95s procured by Supply Chain. In order to provide enough N95s for team members, we must utilize appropriate N95s makes/models for all units to ensure that we have enough supply through the COVID-19 pandemic.

Recommendation
▪ The PPE Integrated Workgroup is asking that team members are fit tested and using N95 respirators appropriate for their area.
▪ If fit testing has not been completed, team members may use a 3M 9205+ N95 respirator with a proper seal check.
▪ If your unit has stock of N95s not approved for your area, please send these back to Supply Chain.

Included in this Tool Kit
▪ N95 Respirator Usage Guidelines Table
▪ N95 Respirators, 3M Brand- What’s the Difference?
▪ Non-Surgical Staff N95 Fit Testing Algorithm
▪ Surgical Staff N95 Fit Testing Algorithm
▪ RNC Staff N95 Fit Testing Algorithm
▪ PPE and Facial Hair

Reference: https://www.michigan.gov/coronavirus/0,9753,7-406-98178_98455---,00.html
## N95 Respirator Usage Guidelines Table

<table>
<thead>
<tr>
<th>Respirator Model</th>
<th>Description</th>
<th>Approved Usage</th>
</tr>
</thead>
</table>
| 3M 1860          | - Dome-shaped  
                   - Blue-green  
                   - Stamped with “1860” on the front.  
                   - Regular fit  
                   - Workday # ITM-1157760 | - Fluid resistant  
                   - Approved for use in surgical and procedural areas  
                   - Currently in use for Surgical Services only  
                   - May use in other patient care areas as supplies allow |
| 3M 1860S         | - Dome-shaped  
                   - Blue-green  
                   - Stamped with “1860S” on the front.  
                   - Smaller fit  
                   - Workday # ITM-114927 | |
| 3M 8210          | - Dome-shaped  
                   - White  
                   - Stamped with “3M 8210” on the front.  
                   - Universal fit  
                   - Workday # ITM-1091693 | - Approved for use in non-surgical/non-procedural areas  
                   - Face shield required when splash anticipated |
| 3M 8210 Plus     | - Dome shaped  
                   - White  
                   - Stamped with “3M 8210 plus on the front.  
                   - Universal fit  
                   - Workday # ITM-1091693 | |
<table>
<thead>
<tr>
<th>Product</th>
<th>Features</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3M 8110S</strong></td>
<td>• White</td>
<td>• Approved for use in non-surgical/non-procedural areas</td>
</tr>
<tr>
<td></td>
<td>• Stamped with “8110S” on the front</td>
<td>• Face shield required when splash anticipated</td>
</tr>
<tr>
<td></td>
<td>• Smaller fit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Workday # ITM 1091695</td>
<td></td>
</tr>
<tr>
<td><strong>3M 9205+</strong></td>
<td>• White</td>
<td>• Approved for use in non-surgical/non-procedural areas</td>
</tr>
<tr>
<td></td>
<td>• Three panels</td>
<td>• Face shield required when splash anticipated</td>
</tr>
<tr>
<td></td>
<td>• Stamped with “9205+” on the front</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Universal fit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Workday # ITM 1149491</td>
<td></td>
</tr>
<tr>
<td><strong>Makrite</strong></td>
<td>• Dome shaped</td>
<td>• Fluid resistant</td>
</tr>
<tr>
<td></td>
<td>• White</td>
<td>• Currently for use on Surgical Services only</td>
</tr>
<tr>
<td></td>
<td>• Stamped with “Makrite 9500-N95” on the front</td>
<td>• Approved for use in surgical and procedural areas</td>
</tr>
<tr>
<td></td>
<td>• Universal fit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Workday # ITM 1024240</td>
<td></td>
</tr>
<tr>
<td><strong>Gerson 1730</strong></td>
<td>• Dome shaped</td>
<td>• Fluid resistant</td>
</tr>
<tr>
<td></td>
<td>• White</td>
<td>• Currently for use on Surgical Services only</td>
</tr>
<tr>
<td></td>
<td>• Stamped with “Gerson 1730” on the front</td>
<td>• Approved for use in surgical and procedural areas</td>
</tr>
<tr>
<td></td>
<td>• Universal fit</td>
<td></td>
</tr>
</tbody>
</table>

*Being discontinued, please fit test to new model*
<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
</table>
| Moldex 1511 (Small) | - Dome shaped  
- Molded nose  
- Light blue  
- Has WHITE straps  
- Small - typed on top strap  
- Workday # ITM-1023654 | |
| Moldex 1512 (Medium) | - Dome shaped  
- Molded nose  
- Light blue  
- Has LIGHT BLUE straps  
- Medium - typed on top strap  
- Workday # ITM-1023653 | - Fluid resistant  
- Currently for use on Surgical Services only  
- Being phased out |
| Moldex 1513 (Large) | - Dome shaped  
- Molded nose  
- Light blue  
- Has TAN straps  
- Large - typed on top strap  
- Workday # ITM-1023652 | |
| Uniair | - Peaked Dome shape  
- White  
- Stamped with “SH3500” on front  
- Universal fit  
- Workday # ITM-1127459 | - Approved for use in non-surgical/non-procedural areas  
- Face shield required when splash anticipated |
| Dasheng | - Dome shaped  
- White  
- Stamped with “DTC3W” on front  
- Universal fit | - Approved for use in non-surgical/non-procedural areas  
- Face shield required when splash anticipated |

**Being discontinued, please fit test to new mode**
N95 Respirators, 3M Brand- What’s the Difference?

*Spectrum Health* is planning to utilize multiple versions of 3M brand N95 respirators to support staff safety.

- 3M produces both industrial (9205+ and 8210+) and medical (1870+ and 1860) N95 respirators.
- The particulate filtration efficiency with all versions is identical.
- Respirators appear similar. They are identified by the information printed on the front.

**3M 9205+ and 8210+**

- The 3M 9205+ and 8210+ are **NOT approved for use in surgery or procedural areas due to anticipated splash risk** due to lack of a fluid barrier.
- If splash is anticipated with the 3M 9305+ or 8210+, staff should don a face shield.

**3M 1870+ and 1860**

- Due to extremely limited quantity, 3M 1870+ and 1860 will be sequestered for surgery and procedural spaces due to anticipated splash risk.
- 1870+ and 1860 may be available for non-surgery/procedural area staff until they can be fit tested to a non-surgical grade N95 respirator (ex. Uniair, Dasheng, etc brands).
Non-Surgical Staff N95 Fit Testing Algorithm

1. Non-surgical staff report for N95 fit testing

2. Is medical evaluation complete?
   - Yes
     - Proceed with fit testing to 9205+.
   - No
     - Does staff have facial hair preventing tight seal?
       - Yes
         - Proceed with fit testing to 9205+.
       - No
         - Does staff pass fit testing with 9205+?
           - Yes
             - Proceed with fit testing to 8210 or 8210 Plus
           - No
             - Does staff pass fit testing with 8210 or 8210 Plus?
               - Yes
                 - Proceed with fit testing to Unair
               - No
                 - Proceed with fit testing to Unair

3. Does staff pass fit testing with 3M Unair?
   - Yes
     - Proceed with fit testing to 8110S
   - No
     - Proceed with fit testing to 8110S

4. Does staff pass fit testing with 8110S?
   - Yes
     - Document in ReadySet
   - No
     - Proceed with PAPR education
Surgical Staff Fit Testing Algorithm

Surgical staff report for N95 fit testing

Is medical evaluation complete?

- Yes
  - Proceed with fit testing to 1860 (Regular/1860+ (Small))

- No
  - does staff have facial hair preventing tight seal?
    - Yes
      - Does staff pass fit testing with 1860 (Regular/1860+ (Small))?
        - Yes
          - Proceed with fit testing to Makrite
        - No
          - Document in Ready Set
    - No
      - Proceed with fit testing to 9205+ (& face shield)

Inform individual they must reschedule their appointment.

NOTE: If employee will also work in a non-surgical space they will need additional fit testing to the non-surgical algorithm.

Proceed with PAPR education

Revision Date: 12/1/2020
SHCC- Hospice, Home Care, RNC Staff N95 Fit Testing Algorithm

- Non-surgical staff report for N95 fit testing
  - Is medical evaluation complete?
    - Yes → Proceed with fit testing to 8210
    - No → Does staff have facial hair preventing tight seal?
      - Yes → Proceed with fit testing with 8210
      - No → Inform individual they must reschedule their appointment.
- Does staff pass fit testing?
  - Yes → Document in Ready Set
  - No → Proceed with fit testing to 9205+ (if applicable)
- Does staff pass fit testing with 9205+?
  - Yes → Document in Ready Set
  - No → Proceed with fit testing to Unair
- Does staff pass fit testing with 3M Unair?
  - Yes → Document in Ready Set
  - No → Proceed with PAPR education

Revision Date: 10/8/2020
PPE and Facial Hair

Facial hair provides a barrier to the proper fit of an N95 respirator. The presence of facial hair compromises the ability of the respirator to fully protect the team member, making it impossible to verify an adequate seal of the respirator to the face. Spectrum Health team members who are required to wear an N95 respirator for their role must remove facial hair that prevents a proper fit in line with the CDC approved facial hair guidance. PAPRs will be reserved for team members who cannot fit into an N95 due to the size/shape of their face. Exemptions can be made for individuals who have a cultural or religious reason for facial hair.

The presence of facial hair compromises the ability of the mask to fully protect you:

- Certain facial hair, stubble, mustaches and beards – make it impossible to get a good seal of a mask to the face.
- Respirators rely on a good seal against the face so when you breathe air in it is drawn into the filter material where the air is cleaned.
- If there are gaps around the edges of the mask, ‘dirty’ air will pass through these gaps and into your lungs.

Team members can schedule a fit testing appointment by calling the Employee Health Event Team Hotline at 616.486.5544 or 1.877.548.3871 or email the Employee Health Services Event Team at healthassessments@spectrumhealth.org.

The CDC recommends the following facial hair styles: