

N95 Tool Kit: Algorithms and Compliance 11.19.20 1100

Spectrum Health contact: Steve Mogridge and Brent Petersen *Highlight
denotes new content

Document reviewed: 11.18.2020

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.





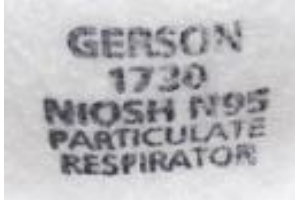
Included in this Tool Kit

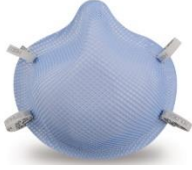

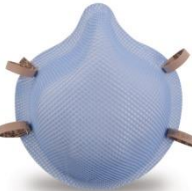


- N95 Respirator Usage Guidelines Table
- N95 Respirators, 3M Brand- What's the Difference?
- Non-Surgical Staff N95 Fit Testing Algorithm
- Surgical Staff N95 Fit Testing Algorithm
- RNC Staff N95 Fit Testing Algorithm
- PPE and Facial Hair

Reference: https://www.michigan.gov/coronavirus/0,9753,7-406-98178_98455---,00.html

N95 Respirator Usage Guidelines Table

Respirator Model	Description	Approved Usage
<p>3M 1860</p>  <p><small>3M™ Health Care Particulate Respirator and Surgical Mask 1860</small></p>	<ul style="list-style-type: none"> ▪ Dome-shaped ▪ Blue-green ▪ Stamped with “1860” on the front. ▪ Regular fit ▪ Lawson # 651394 	<ul style="list-style-type: none"> ▪ Fluid resistant ▪ Approved for use in surgical and procedural areas
<p>3M 1860S</p> 	<ul style="list-style-type: none"> ▪ Dome-shaped ▪ Blue-green ▪ Stamped with “1860S” on the front. ▪ Smaller fit ▪ Lawson # 651395 	<ul style="list-style-type: none"> ▪ Currently in use for Surgical Services only ▪ May use in other patient care areas as supplies allow
<p>3M 8210</p> 	<ul style="list-style-type: none"> ▪ Dome shaped ▪ White ▪ Stamped with “3M 8210” on the front. ▪ Universal fit ▪ Lawson # 654150 	<ul style="list-style-type: none"> ▪ Approved for use in non-surgical/non-procedural areas
<p>3M 8210 Plus</p> 	<ul style="list-style-type: none"> ▪ Dome shaped ▪ White ▪ Stamped with “3M 8210 plus” on the front. ▪ Universal fit ▪ Lawson # 654150 	<ul style="list-style-type: none"> ▪ Face shield required when splash anticipated

<p>3M 8110S</p> 	<ul style="list-style-type: none"> ▪ White ▪ Stamped with “8110S” on the front ▪ Smaller fit ▪ Lawson #654152 	<ul style="list-style-type: none"> ▪ Approved for use in non-surgical/non-procedural areas ▪ Face shield required when splash anticipated
<p>3M 9205+</p> 	<ul style="list-style-type: none"> ▪ White ▪ Three panels ▪ Stamped with “9205+” on the front. Universal fit ▪ Universal fit ▪ Lawson # 654898 	<ul style="list-style-type: none"> ▪ Approved for use in non-surgical/non-procedural areas ▪ Face shield required when splash anticipated
<p>Makrite</p> 	<ul style="list-style-type: none"> ▪ Dome shaped ▪ White ▪ Stamped with “Makrite 9500-N95” on the front. ▪ Universal fit ▪ Lawson # 139485 	<ul style="list-style-type: none"> ▪ Fluid resistant ▪ Currently for use on Surgical Services only ▪ Approved for use in surgical and procedural areas
<p>*Being discontinued, please fit test to new model Gerson 1730</p>  	<ul style="list-style-type: none"> ▪ Dome shaped ▪ White ▪ Stamped with “Gerson 1730” on the front. ▪ Universal fit ▪ Lawson # 139486 	<ul style="list-style-type: none"> ▪ Fluid resistant ▪ Currently for use on Surgical Services only ▪ Approved for use in surgical and procedural areas

<p>Moldex 1511 (Small)</p>  <p>Moldex 1512 (Medium)</p>  <p>Moldex 1513 (Large)</p> 	<ul style="list-style-type: none"> ▪ Dome shaped ▪ Molded nose ▪ Light blue ▪ Has WHITE straps ▪ Small - typed on top strap ▪ Lawson # 138928 	<ul style="list-style-type: none"> ▪ Fluid resistant ▪ Approved for use in surgical and procedural areas ▪ Currently for use on Surgical Services only ▪ May use in other patient care areas as supplies allow
<ul style="list-style-type: none"> ▪ Dome shaped ▪ Molded nose ▪ Light blue ▪ Has LIGHT BLUE straps ▪ Medium - typed on top strap ▪ Lawson # 138927 		
<ul style="list-style-type: none"> ▪ Dome shaped ▪ Molded nose ▪ Light blue ▪ Has TAN straps ▪ Large - typed on top strap ▪ Lawson # 138926 		
<p>Uniair</p> 	<ul style="list-style-type: none"> ▪ Peaked Dome shape ▪ White ▪ Stamped with "SH3500" on front ▪ Universal fit ▪ Lawson # 640125 	<ul style="list-style-type: none"> ▪ Approved for use in non-surgical/non-procedural areas ▪ Face shield required when splash anticipated
<p>*Being discontinued, please fit test to new model</p> <p>Dasheng</p> 	<ul style="list-style-type: none"> ▪ Dome shaped ▪ White ▪ Stamped with "DTC3W" on front ▪ Universal fit ▪ Lawson # 640124 	<ul style="list-style-type: none"> ▪ Approved for use in non-surgical/non-procedural areas ▪ Face shield required when splash anticipated

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 9205+ or 8210+, staff should don a face shield.

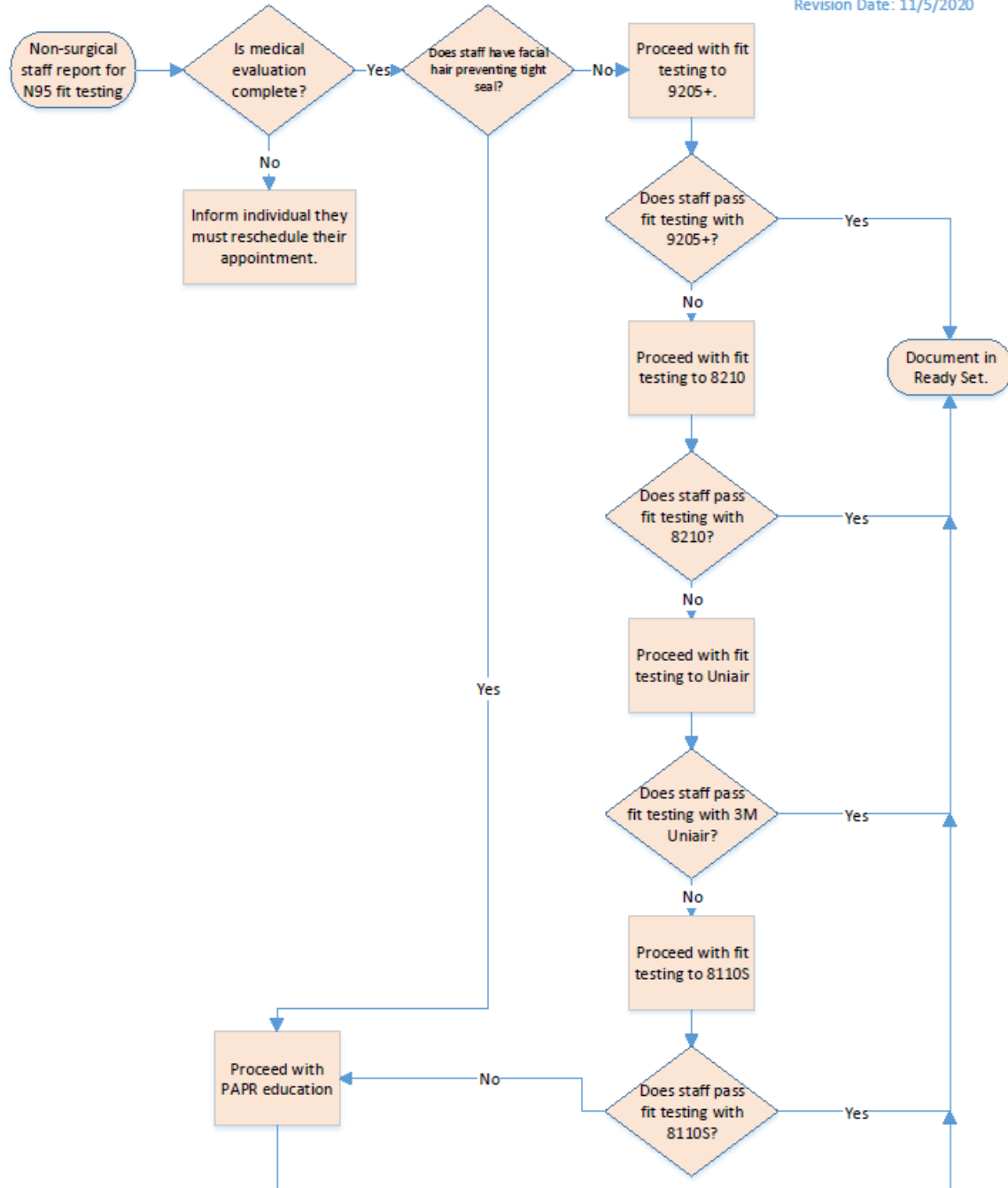
3M 1870+ and 1860



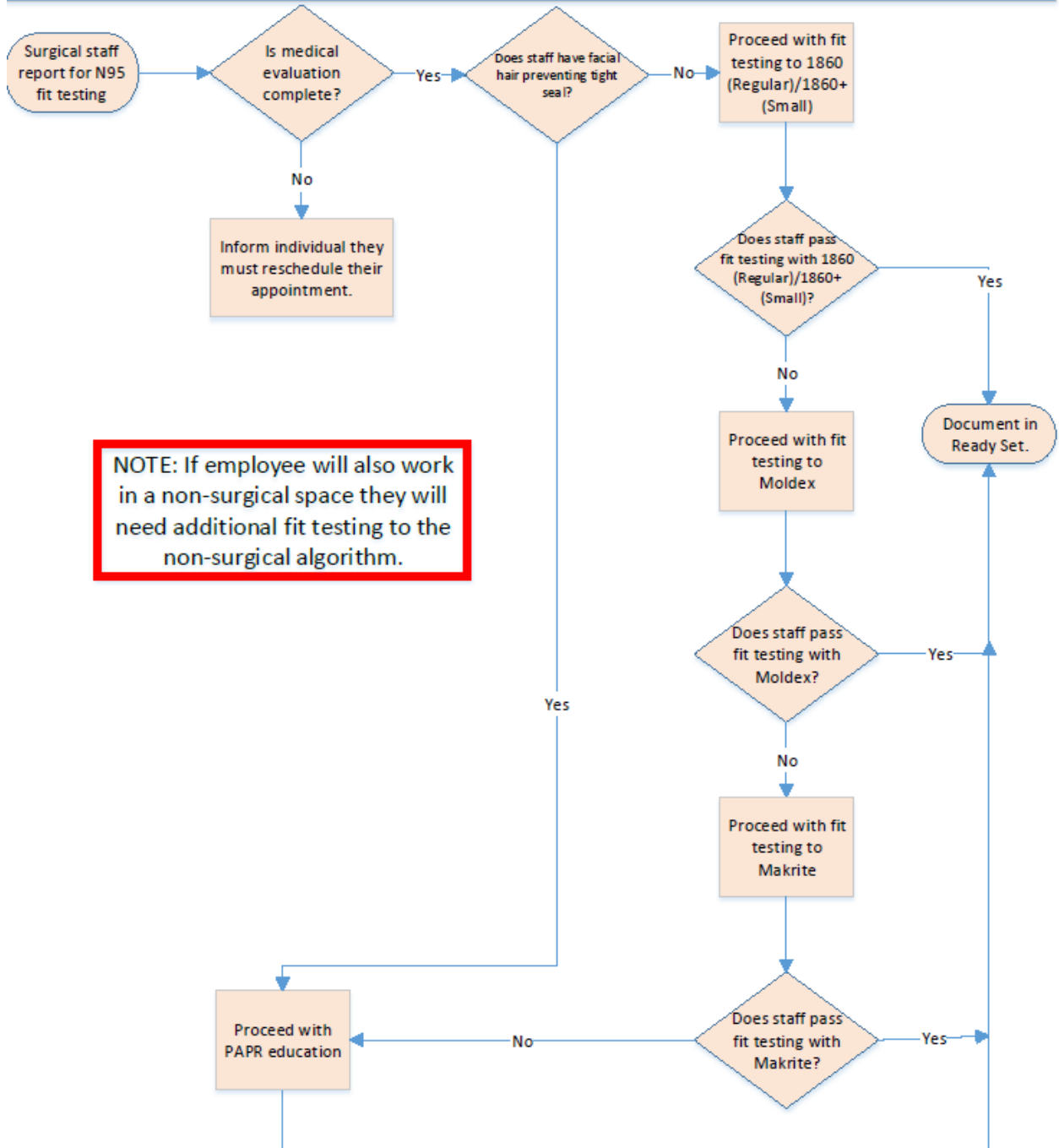
- Due to extremely limited quantity, 3M 1870+ and 1860 will be sequestered for surgery and procedural spaces due to anticipated splash risk.
- 1870+ and 1860 may be available for non-surgery/procedural area staff until they can be fit tested to a non-surgical grade N95 respirator (ex. Uniair, Dasheng,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

Non-Surgical Staff N95 Fit Testing Algorithm

Revision Date: 11/5/2020

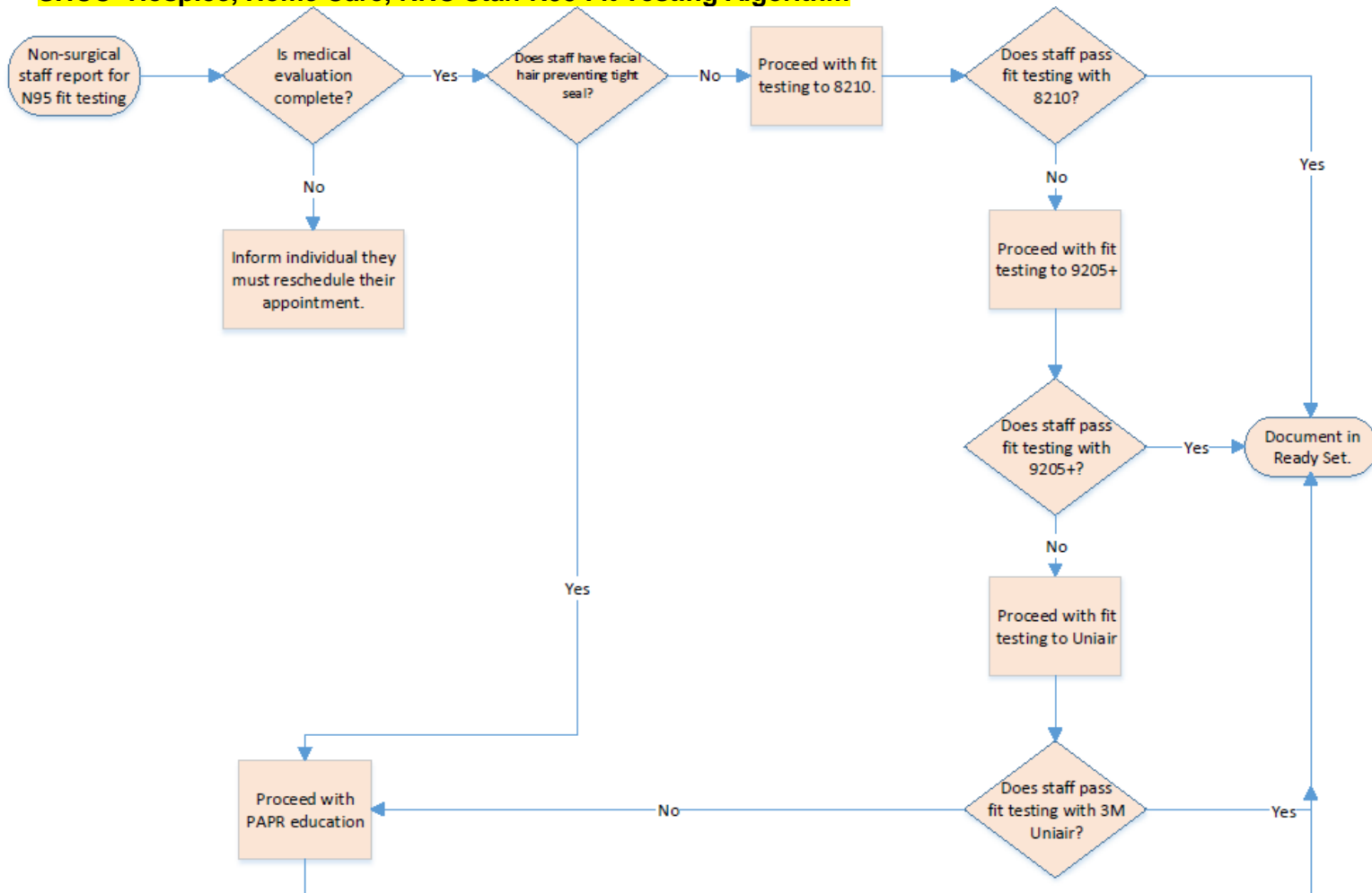


Surgical Staff Fit Testing Algorithm



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

SHCC- Hospice, Home Care, RNC Staff N95 Fit Testing Algorithm



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:

Facial Hairstyles and Filtering Facepiece Respirators

Intended for workers who wear tight-fitting respirators



*If your respirator has an exhalation valve, some of these styles may interfere with the valve working properly if the facial hair comes in contact with it.
 †This graphic may not include all types of facial hairstyles. For any style, hair should not cross under the respirator sealing surface.
 Source: OSHA Respiratory Protection Standard
https://www.osha.gov/publications/occupational_safety_and_health_document/ps_labelstandards&pg_id=12716
 Further Reading: NIOSH Respirator Trusted Source Webpage
https://www.cdc.gov/niosh/ehp2/topical/respirator/using_parts/respirator3.html



Centers for Disease Control and Prevention
 National Institute for Occupational Safety and Health

Original image vector by freetier/Sutterstock.com