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| <b>Title:</b><br><b>Application of N95 Masks</b> |                                    | <b>Guideline Number:</b><br>CPG-13-02         |  |
| <b>Section:</b><br>Guidelines                    |                                    | <b>Authorization:</b><br>Board of Directors   |  |
| <b>Date issued:</b><br>June 2013                 | <b>Revisions:</b><br>December 2013 | <b>Date of Last Review:</b><br>September 2014 |  |

1. Registered Respiratory Therapists (RRT) and Graduate Respiratory Therapists (GRT), are required to follow employer guidelines and policies for Routine Practices and Infection Control Precautions.
2. As a standard of practice for the healthcare professional, RRT's, and GRT's are also required to apply an N95 mask in the following situations, where patient contact may occur:
  - a. Patients with known or suspected cases of Tuberculosis mycobacterium
  - b. Patients with known or suspected cases of H1N1 or related influenzas
  - c. Patients with known or suspected cases of SARS or SARS-like illness
  - d. Patients with airborne-transmitted illnesses such as measles or chicken pox where the RRT or GRT is not immune. If the Respiratory Therapists are unsure of immunity status, an N95 mask shall be worn.
3. Respiratory Therapists who perform high-risk aerosol-generating procedures are also required to wear an N95 mask. These procedures include, but are not limited to:
  - a. Intubation and extubation
  - b. Sputum induction
  - c. Bronchoscopy
  - d. Open suctioning of the airway
  - e. Cardiopulmonary resuscitation
4. The Respiratory Therapist is to be fit-tested, re-tested as needed, and trained on the proper use of the N95 mask according to employer policy and procedure.

#### References/Resources:

1. 2009 Guidelines for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings; Healthcare Infection Control Practices Advisory Committee (HICPAC). Centre for Disease Control and Prevention.  
<http://www.cdc.gov/H1N1flu/recommendations.htm2009>

2. Biscotto C R, Pedroso E R P, Starling C E F, Roth, V R. Evaluation of N95 respirator use as a tuberculosis control measure in a resource-limited setting. *Int. J of Tuberculosis Lung Disease* 2005; 9(5) 545-549.
3. Griffith D E, Hardeman J L, Zhang Y, Wallace R J, Mazurek G H. Tuberculosis outbreak among healthcare workers in a community hospital. *Am J Respir Crit Care Med* 1995; 152:808-811.
4. Routine Practice: Droplet Aerosol Generating Procedures – Precautions Required; Infection Control, St. Thomas Elgin General Hospital, 2011.  
[https://policy.stegh.on.ca/Site\\_Published/intranet/document\\_render.aspx?documentRender.IdType=6&documentRender.GenericField=&documentRender.Id=12595](https://policy.stegh.on.ca/Site_Published/intranet/document_render.aspx?documentRender.IdType=6&documentRender.GenericField=&documentRender.Id=12595).
5. WRHA Infection Prevention and Control Manual: Additional Precautions.  
[http://www.wrha.mb.ca/professionals/students/files/ManualHospital\\_Precautions.pdf](http://www.wrha.mb.ca/professionals/students/files/ManualHospital_Precautions.pdf)
6. SARS among Critical Care Nurses, Toronto  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3322898/>
7. Aerosol Generating Procedures and Risk of Transmission of Acute Respiratory Infections to Healthcare Workers: A Systematic Review  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3338532/>
8. Intubation of SARS patients: infection and perspectives of healthcare workers.  
<http://www.ncbi.nlm.nih.gov/pubmed/16434750>
9. Protecting healthcare workers from pandemic influenza: N95 or surgical masks?  
<http://www.ncbi.nlm.nih.gov/pubmed/20095070>
10. Airflow Dynamics of Human Jets: Sneezing and Breathing - Potential Sources of Infectious Aerosols  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3613375/>

## APPENDIX A:

### **WRHA Addendum: RESPIRATORY PROTECTION FOR AEROSOL GENERATING MEDICAL PROCEDURES (AGMPs)**

| <b>Wear fit-tested N95 respirators in the following situations:</b>  |   |  |
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| <b>AT ALL TIMES</b>  | <b>DIAGNOSIS UNKNOWN</b>  | <b>NON-RESPIRATORY TB</b>  |
| <ul style="list-style-type: none"><li>• Respiratory TB or other pathogens spread by the airborne route are known or suspected</li><li>• Emergent intubation*</li><li>• Cardiopulmonary resuscitation*</li><li>• Autopsy*</li><li>• Sputum induction*</li><li>• Bronchoscopy*</li></ul> | <ul style="list-style-type: none"><li>• Open tracheal suctioning</li><li>• Planned break in ventilator circuit</li><li>• Extubation</li></ul> | <ul style="list-style-type: none"><li>• Non-respiratory TB highly suspected or diagnosed, and there is potential for aerosolization from the site (e.g., open abscess or wound irrigation)</li></ul> |

\*According to Point of Care Risk Assessment (refer to Routine Practices)

The above table is taken from the WRHA Infection Prevention and Control Policy Manual

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