## Appendix 9-1 Archdiocese of Seattle Respirator Program

**Policy & Practices:** 

Term of Use and Reuse of Disposable N95 Respirators for COVID-19 Exposure Risk Prevention Approved by: David Leonard CIH, Asst. Respirator Program Manager Version Date: October 21, 2020

### **Policy & Practices Executive Summary:**

- This document, an Appendix to the Archdiocese's Respirator Program, describes the policies and practices for the limited reuse of NIOSH-certified N95 filtering facepiece respirators (commonly called "N95 respirators", "N95s" and "Disposable N95s").
- Disposable N95 respirators, when used as part of the many strategies the Archdiocese of Seattle implemented to prevent occupational exposure to COVID-19, can be safely used and reused for a total of up to 8 hours following the Respirator Program's donning, doffing and storage practices described below until contaminated, damaged, or no longer able to form a good seal.
- In addition, TO REUSE DISPOSABLE N95 RESPIRATORS, the Archdiocese of Seattle IS REQUIRING THE USE OF A FACESHIELD AT THE SAME TIME WHEN USING THEM for COVID-19 Exposure Risk Prevention during OSPI/L&I/DOH defined high risk or extremely high risk situations.
- If a disposable N95 respirator cannot be reasonably obtained, as stated in the OSPI/L&I/DOH SAFETY REQUIREMENTS FOR SCHOOL SCENARIOS (9/30/20) document (1), a face shield plus an FDA approved surgical mask, procedural mask, or a KN95 mask with a face shield is acceptable for use when in a OSPI/L&I/DOH defined high risk or extremely high-risk situations.
- Also, following the OSPI/L&I/DOH allowance in the previous paragraph, what is stated in this Policy and Practices document regarding use and reuse of disposable N95 respirators also applies to FDA approved surgical masks, procedural masks, or a KN95 masks when used as a substitute.
- It is the user's responsibilities to maintain an accurate record of a respirator's use and know when the 8-hour maximum has been reached.

## OSPI/L&I/DOH Transmission Risk Definitions Synopsis:

### 1. HIGH Transmission Risk

- Close quarters with 10 or more people where 6 feet distance is not maintained and/or job tasks require sustained/close together (>10 min/hr) multiple times a day <3 feet apart.
- Bus Driver needing frequent <3 ft contact with non-suspect COVID-19 person

#### 2. EXTREMELY HIGH Transmission Risk

- Care Duty with Potential COVID-19 Person, i.e. "School Nurse duty"" or "Isolation Room Monitoring" and in close proximity with probable or known COVID-19 person.
- Clean and sanitize areas recently occupied by someone with known COVID-19 illness.

### **Background & Purpose**

Needing to safeguard workers to prevent occupational exposure to COVID-19, comply with applicable worker safety regulations identified in the Archdiocese of Seattle's Respirator Program and have clear guidance to conserve disposable N95 respirators supplies, this policy and practice document was developed after review of:

- Guidelines from the Centers for Disease Control and Prevention (CDC) (1)
- OSPI/L&I/DOH Document re SAFETY REQUIREMENTS FOR SCHOOL SCENARIOS (9/30/20)
- Washington State Department of Labor and Industries Respirator Standard (3)
- Review of the Manufacturer's Instructions for the N95 respirators currently in use (4).

<u>Term of Use and Reuse of Disposable N95 Respirators for COVID-19 Exposure Risk Prevention</u>

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The recommendations below are designed to provide practical advice so that N95 respirators are discarded before they become a significant risk for contact transmission or their functionality is reduced. Risk of Reuse:

## The CDC (1) states:

- The reuse of respirators has the potential benefit of conserving limited supplies of disposable N95 respirators, concerns about the practice have been raised.
- The most significant risk is of contact transmission from touching the surface of the contaminated respirator. One study found that nurses averaged 25 touches per shift to their face, eyes, or N95 respirator during extended use.
- Contact transmission occurs through direct contact with others as well as through indirect contact by touching and contaminating surfaces that are then touched by other people.
- 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 (i.e., self-inoculation). While studies have shown that some respiratory
  pathogens remain infectious on respirator surfaces for extended periods of time, in microbial
  transfer and reaerosolization studies more than ~99.8% have remained trapped on the respirator
  after handling or following simulated cough or sneeze.

## **COVID-19 Exposure Control Strategies Currently In Place:**

The reuse of N95 respirators is permitted in recognition of and adherence to the, multiple strategies in place to control the potential exposure risk to the COVID-19 virus, which include:

- Any school that has in person learning has a documented COVID-19 Plan and is following Washington State re-opening requirements, which require:
  - Keeping people who have or may the COVID-19 virus away from our schools and not allowing them into the buildings — this includes educating students, families and staff to stay home when sick, and using screening when people come to our schools.
  - Physical distancing minimizing close contact (less than six feet) with other people.
  - Practicing good hand hygiene frequent washing with soap and water or using alcoholbased hand gel.
  - Universal face masking The wearing of masks that covers both the mouth and nose, in both indoor spaces, except when alone in an office, and in the outdoors when not able to consistently maintain social distancing from individuals.
  - Environmental cleaning and disinfection especially of high-touch surfaces.
  - Improving indoor ventilation
  - Establishing Cohorts conducting all activities in small groups that remain together over time with minimal mixing of groups.
  - Isolation of people if they develop signs/symptoms when in the building. Sick people are to leave the school ASAP.
  - Considering outdoor activities as safer than indoor activities.

As part of these strategies, in high risk and extremely high risk situations, such as a school health worker helping an ill student, higher levels of protection offered by respirators like N95s are needed.

### **Definitions:**

 N95 or N95 Respirator: A NIOSH/CDC approved N95 Face Filtering Respirator (FFR). Using any respirator, including N95s, require compliance with the Washington State Department of Labor and Industries Respiratory Protection Standard WAC 296-842.

<u>Term of Use and Reuse of Disposable N95 Respirators for COVID-19 Exposure Risk Prevention</u>

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- KN95 Mask A mask regulated by the Chinese government. Currently, KN95s have temporary CDC/NIOSH approval in the US for use for COVID-19 protection only as a substitute for N95 Respirators. Per OSPI/L&I/DOH (1), "If an employer cannot reasonably obtain an N95 or equivalent, they may use a face shield plus an FDA approved surgical mask, procedural mask, or a KN95 mask until a respirator can be obtained". In other words, if a KN95 is used to substitute for an N95 respirator, IT CAN ONLY BE USED PER OSPI/L&I/DOH IF A FACE SHIELD IS ALSO USED.
- Term of Use: The length of time an N95 can be used.
- Reuse: The practice of a person using the same N95 respirator multiple times by removing it ('doffing') after each use, properly storing it and then putting it on again ('donned') for the next use. As stated by the CDC (1), N95 respirator reuse is often referred to as "limited reuse". Limited reuse has been recommended and widely used as an option for conserving respirators during previous respiratory pathogen outbreaks and pandemics.
- Masks are loose fitting and may not provide full protection from breathing in airborne pathogens, such as viruses. Typically worn so the wearer does not create aerosolized droplets. There are different levels of masks.
  - <u>Face masks</u> (non-surgical masks) which can be made at home have no specific requirements regarding construction or approval.
  - <u>Surgical masks</u> (approved by FDA) are fluid-resistant, disposable, and loose-fitting devices
    that create a physical barrier between the mouth and nose of the wearer and the immediate
    environment. They are for use in surgical settings and do not provide full protection from
    inhalation of airborne pathogens, such as viruses.
- Respirators are personal protective equipment (PPE) that tightly fit the face and filter airborne particles to protect health care workers. They provide a higher level of protection against viruses and bacteria when properly fit-tested. Respirators require N95s are respirators.
- For the purpose of this document, when KN95 masks are used as a substitute for an N95 respirators, KN95s are being considered "respirators", and as such, the requirements of the Respiratory Program, including medical clearance, fit testing, training are required, along with the policies and procedures for reuse described in this document.

#### **Disposable N95 Respirators Policies and Practices:**

The Policies and Practices listed are intended to provide practical advice so that N95 respirators are discarded before they become a significant risk for contact transmission or their functionality is reduced. Also, ensure adherence to administrative and engineering controls to limit potential N95 respirator surface contamination

- The maximum Term of Use of an N95 respirator should not be more than 8 hours of continuous or intermittent usage. There is no absolute maximum usage hours stated in the regulations or by the manufacturer's instructions for use, particularly when N95 respirators are used for protection to COVID-19 exposure. This maximum number of hours is selected by the Archdiocese of Seattle's Respiratory Program Manager and is based on the concept of having a respirator discarded before is functionality is reduced.
- No sharing of respirators. This Policy and Practice is for the use and reuse of a respirator by a single user.
- Discard N95 respirators that become contaminated, wet or dirty.
- The respirator must maintain its fit and function. Discard any respirator that is damaged or becomes hard to breathe through.
- Proper donning, doffing and storage is critical to ensure a respirator protects the user during first time and any subsequent reuse. This includes:
  - <u>Donning (Putting On)</u>: Inspect the respirator before each use to ensure that it is in good operating condition. Examine all the respirator parts for signs of damage including the two headbands, attachment points, nose foam and nose clip. Enlarged holes resulting from

Term of Use and Reuse of Disposable N95 Respirators for COVID-19 Exposure Risk Prevention

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- ripped or torn filter material around staple punctures are considered damage. Respirators are to be disposed of immediately upon observation of damaged or missing parts.
- Use a pair of clean (non-sterile) gloves when donning a used N95 respirator and performing a
  user seal check in order to minimize the potential of contaminating hands with the virus.
- Put on a face shield.
- <u>Doffing (Taking Off)</u>: Take off the face shield. Then use hands covered with clean gloves to remove the respirator taking caution not to touch the inside of the respirator. If inadvertent contact is made with the inside of the respirator with a contaminated glove, discard the respirator and perform hand hygiene.
- <u>Storage:</u> The intent is to: 1) keep respirators clean, 2) allow small amounts of normal exhaled breath moisture to dry by having storage conditions that allow air to passively circulate over the respirator to keep it dry and deteriorate any COVID-19 virus, and 3) not allow conditions that could contaminate or damage a respirator during storage. This can be accomplished many ways, including hanging used respirators in a designated clean storage area (away from contaminated areas) or keeping them in a clean, breathable container such as a paper bag between uses. To minimize potential cross-contamination, respirators need to be stored in such a way that they do not touch each other and the person using the respirator is clearly identified. Based on type, storage containers should be disposed of or cleaned regularly. Label containers used for storing respirators or label the respirator itself (e.g., on the straps) between uses with the user's name to reduce accidental usage of another person's respirator.
- Other than what is described above for storage, DO NOT DO ANY OTHER ACTIONS WITH THE
   INTENT TO DECONTAMINATE N95s.

   This means do not do any actions such as spraying them
   with a disinfectant, heating them, steaming them, placing them in a microwave or exposing them
   to UV light.
- Re-Donning: Use a pair of clean (non-sterile) gloves when donning a used N95 respirator and performing a user seal check to insure hands are not contaminated.
- When at all possible with a person who potentially has COVID-19:
  - Also wear a cleanable face shield to reduce the potential of aerosolized droplets depositing on the N95 surface.
  - Maintain social distancing and minimize person to person contact
- 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).
- It is the user's responsibilities to maintain an accurate record of a respirator's use and know when the 8-hour maximum has been reached.

### Cleaning a Face Shield for Re-use:

- While wearing gloves, carefully wipe the inside, followed by the outside of the face shield using a clean cloth saturated with a neutral detergent solution or a cleaning wipe.
- Carefully wipe the outside of the face shield using a wipe or clean cloth saturated with EPA-registered hospital disinfectant solution.
- Wipe the outside of face shield clean with a towel and water or alcohol to remove residue.
- Fully dry (air dry or a use clean absorbent towel).
- Remove gloves and perform hand hygiene.

### Referenced:

1. PANDEMIC PLANNING: Recommended Guidance for Extended Use and Limited
Reuse of N95 Filtering Facepiece Respirators in Healthcare Settings - CDC (Centers
for Disease Control and Prevention)
www.cdc.gov/niosh/topics/hcwcontrols/recommendedquidanceextuse.html

Term of Use and Reuse of Disposable N95 Respirators for COVID-19 Exposure Risk Prevention

Approved by: David Leonard CIH, Asst. Respirator Program Manager Version Date: October 21, 2020

2 OSPI/L&I/DOH Document re SAFETY REQUIREMENTS FOR SCHOOL SCENARIOS (9/30/20)

https://www.k12.wa.us/sites/default/files/public/communications/Employer-Health-and-Safety-Requirements-for-School-Scenarios.pdf

Washington State Department of Labor and Industries Respiratory Protection Standard WAC 296-842

https://www.lni.wa.gov/safety-health/safety-rules/chapter-pdfs/WAC296-842.pdf

4 N95 Manufacturer's Instructions - 3M 8210

https://multimedia.3m.com/mws/media/1656794O/3m-particulate-respirator-n95-8210-8110s-user-instructions.pdf