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## Information for N95 and Other Dust Mask Respirator Users

Due to the increased use of illicitly manufactured fentanyl and its analogs, the U.S. Department of Justice Drug Enforcement Administration (DEA) has recommended that law enforcement personnel and other first responders wear an N95 respirator and other personal protective equipment during certain situations. The intent of this document is to outline basic information on N95 and other dust mask respirators so that personnel can understand the protection provided by and the limitations of this type of respiratory protection.

A summary of the DEA's fentanyl briefing guide can be found at: <u>DSPS Public Section Safety - Summary of DEA's "Fentanyl, A Briefing Guide for First Responders"</u>

There are several different types of respirators available. Each type of respirator is manufactured to provide different levels of protection for different types of contaminants. One of the more common respirators utilized is a dust mask. Dust masks are formally known as "filtering facepieces" and protect the user from airborne particles.

Dust masks come in nine different configurations based on the mask's ability to filter out particles larger than 0.3 microns in diameter and the mask's resistance to degradation by oil. The filtering levels are 95, 99 and 99.97. The 99.97 level is referred to as 100. The three levels of oil resistance are N (not oil resistant), R (oil resistant) and P (oil proof).

One of the more popular dust masks is an N95. An N95 dust mask can filter out 95% of particles 0.3 microns or larger is not resistant to oil. An N95 dust mask is considered a "tight-fitting facepiece" respirator. Two of the requirements for wearing a tight-fitting respirator are that a person be medically approved to wear the respirator and that the person pass a fit test before using a respirator. Additional requirements and assistance meeting these requirements can be found on the Department of Safety and Professional Services Public Sector Employee Safety Publications web page:

## Public Sector Employee Safety - Publications - Respiratory Protection Checklists

Both the Occupational Safety and Health Administration (OSHA) and the Department of Safety and Professional Services (DSPS) require that any respirator worn in the workplace be certified by the National Institute for Occupational Safety and Health (NIOSH). Two key aspects of certification involve NIOSH conducting tests on the respirator and review of the manufacturer's quality control programs.

NIOSH's review of the quality control programs helps ensure that the manufacturer will consistently produce a product that meets specifications, while the NIOSH testing verifies that the respirator is capable of providing the protection factor claimed by the manufacturer. The protection factor of a respirator is one of the main reasons a particular respirator is chosen.

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Regardless of the assigned protection factor, the ability of a respirator to protect a user is limited by how well the respirator fits the user. A tight fitting respirator cannot protect a wearer when there is an improper seal between the respirator and the user's face. Without a proper seal contaminated air will bypass the filter and go directly into the wearer's lungs.

Some conditions that can interfere with the seal of a dust mask include facial hair, jewelry, or missing teeth/dentures. Fit testing confirms that a proper fit between an individual and the respirator they will be wearing can be achieved. Fit testing must be performed on all tight-fitting respirators, including most dust masks.

Once a person has been medically approved to wear a respirator and has successfully passed a fit test, fit testing is then performed on an annual basis or when a different respirator size, make or model is used. Fit testing is also performed when a person experiences changes in their physical condition which could affect the fit of the respirator such as, but not limited to:

- Weight gain or loss
- Facial scarring
- Dental changes
- Cosmetic surgery

Respirator wearers must also perform a user seal check <u>each time</u> they wear a dust mask. User seal checks are a means to confirm that a proper seal has been achieved. Respirator manufacturers are required to provide instructions on how to perform a user seal check for their product. A fit test is <u>not</u> a substitute for a user seal check.

A fit test demonstrates that the user can achieve a proper seal with a particular make, model, and size respirator. A user seal check confirms that a proper seal has been achieved immediately before the respirator is to be worn.

NIOSH has a web page dedicated to dust masks ("NIOSH-Approved Particulate Filtering Face-piece Respirators") which provides listings of approved dust masks and links to the manufacturers' fitting procedures. <a href="MIOSH-Approved Dust Masks">MIOSH-Approved Dust Masks</a> Additional information on this page includes the required markings found on NIOSH certified dust masks.

Due to the reliance on respirators for both everyday work functions and times of crises, the occurrence of counterfeit respirators is increasing. Two common signs of a counterfeit respirator are a lower cost or typographical errors in the NIOSH required markings. The <a href="NIOSH-Approved Dust Masks">NIOSH-Approved Dust Masks</a> page provides a listing of counterfeit respirators that have been discovered along with other helpful information on this topic.

Questions concerning dust mask respirators or other respiratory protection can be directed to: <u>Ann.Jurkowski@wisconsin.gov</u>

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