



Prepare
& Protect

Now Is The Time to Prepare

Preparing your family or local community organization for a public health medical emergency, such as a pandemic influenza can be a daunting task. The United States Government has developed a resource, www.pandemicflu.gov,¹ to help guide individuals, families, communities and businesses through planning for a pandemic influenza event. In their “Individuals and Families Planning” section it is suggested that individuals and families plan for the potential disruption of many services including health care, government and transportation services, the closure of schools and alternative work arrangements.² Included in the list of planning resources, in the Community Guidance, is the Centers for Disease Control and Prevention’s (CDC) guidance on the use of respiratory protection during an influenza pandemic.³ 3M has been a leader in respiratory protection products for over 35 years and has the first N95 respirator for use by the general public in a public health medical emergency to be cleared by the US Food and Drug Administration (FDA).

Why Respirators May Help in a Pandemic Flu

Many experts agree that a global pandemic could involve infectious agents that are spread through the air we breathe. Vaccines exist for some infectious diseases and some medicines are useful treatments, however, reducing exposure through hand washing and avoiding others who may be sick is always recommended to help prevent illness. An additional way to help reduce exposure to airborne germs is with the proper use of respirators approved by the United States (US) National Institute for Occupational Safety and Health (NIOSH) and cleared by the FDA. The (CDC) has published information for the general public regarding respirator use. It is possible that during an outbreak of pandemic influenza many individuals would be taking care of family members that are infected and sick. The CDC’s interim guidance states individuals may consider wearing a “respirator to help prevent exposure to respiratory secretions from symptomatic individuals.”³

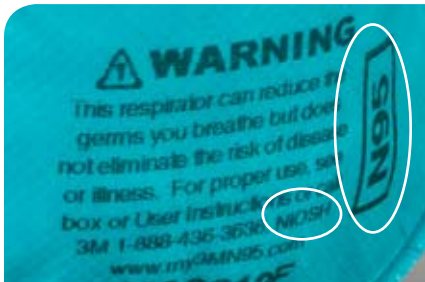


The difference between respirators and surgical masks

One type of NIOSH-approved respirator, commonly referred to as “N95”, contains filter media, fits snugly to the face and when properly used, can help reduce exposure to particles in the air. NIOSH-approved respirators like these are used in many workplaces to reduce employees’ exposure to hazardous airborne particles, including airborne germs.



Learning more about NIOSH-approved respirators will help you understand why respirators, rather than other types of masks, are designed specifically to help reduce the wearer’s exposures to airborne germs. On the other hand, the main purpose of a surgical facemask is to help prevent contamination of the operating room from large droplets (e.g. spit, mucous) expelled by the wearer. Surgical facemasks are not designed to prevent the wearer from inhaling particles. They are not necessarily designed to seal to the face, so there is the potential for germs in the air to leak around the edges. Even those masks that appear similar to NIOSH-approved respirators have not been designed to protect the wearer from airborne hazards; therefore they should not be considered an equivalent substitute to government approved respirators. Although some masks may look similar, unless the respirator is marked with the word “NIOSH” and a filtration rating such as N95, it should not be assumed to help reduce exposure to airborne particles, including those containing germs. For the rest of this article (and in all of the information on www.my3MN95.com website), when we use the word “respirator”, we are only referring to NIOSH-approved respirators.



NIOSH-approved respirators are designed specifically to reduce exposures to airborne germs



Mask

- Does not have the word **NIOSH** and the approval type (i.e. N95) printed on the product
- Is not marked on the box as a 'surgical mask'
- Usually has only 1 head strap
- Does not fit tightly to the face—there might be gaps around the edges
- Might have an adjustable clip over the nose to allow the wearer to get a more custom fit
- Has no requirement for performance, filtration or fit testing



Surgical Mask**

- Does not have the word **NIOSH** and the approval type (i.e. N95) printed on the product
- Is cleared by the FDA for use as a surgical mask
- Usually does not fit tightly to the face—there might be gaps around the edges
- Might have an adjustable clip over the nose to allow the wearer to get a more custom fit
- Helps reduce the spit and mucous the wearer **expels** out into the work area
- Tested to resist penetration from blood or other body fluids



Particulate Respirators for Occupational Use**

- Has the word **NIOSH** and the approval type (i.e. N95) printed on the product
- Is secured tightly to the face, usually with 2 head straps
- Might have an adjustable clip over the nose to allow for a more custom fit
- Filters particles from the air when properly fitted, reducing the number of particles or germs the wearer **breathes in**
- Packaging typically refers to workplace hazards and **Occupational Safety & Health Administration (OSHA)** compliance requirements



Particulate Respirator for the General Public

- Has the word **NIOSH** and the approval type (i.e. N95) printed on the product
- Is cleared by the FDA for use by the general public in public health medical emergencies
- Is secured tightly to the face, usually with 2 head straps
- Might have an adjustable clip over the nose to allow for a more custom fit
- Filters particles from the air when properly fitted, reducing the number of particles or germs the wearer **breathes in**
- Tested to resist penetration from blood or other body fluids

** Some products are tested and approved as both a surgical mask and respirator. You'll see both words on the box.

New FDA clearance of respirators for use by the general public in public health medical emergencies

A respirator's ability to help reduce the wearer's exposure to airborne particles depends on the filtration capabilities of the materials it is made of and on how well it fits the wearer. Since the majority of respirators are used primarily in workplaces, employees in those workplaces have many employer-provided resources to help them get the protection they need. The employer follows a very structured process to make sure that the right product is selected for the employee and that the employee is properly trained to use it. Unfortunately, those resources are not usually available to members of the general public when they want to choose a respirator.

To help members of the general public properly identify and use NIOSH-approved respirators, the FDA developed a process in 2007 to evaluate and clear specific respirators for use by the general public in public health medical emergencies. 3M is proud to have the first, and currently the only, respirators cleared under this FDA process and our models (3M™ Particulate Respirators 8670F and 8612F) were made available to the public in 2008. Although the structural design of the respirators themselves is very similar to models we sell to industrial workers, members of the general public will find specific instructions and training materials tailored to them.

What can you do before a pandemic event strikes?

1. Educate yourself about pandemic events and respiratory product options available to you, including FDA-cleared respirators for use by the general public in public health medical emergencies

To help you determine if you should make respiratory protection products a part of your preparedness plan, we have published a number of complimentary documents on our website. In addition to this overview document, please visit www.my3MN95.com to find product information, training and use instructions for these FDA cleared respirators.

As a leader in respiratory protection, 3M has made many informational brochures and training materials freely available on our websites.

www.my3MN95.com is a great source for information about our FDA-cleared respirators for use by the general public.



2. Buy and try a few samples of the respirators you are interested in procuring

Just like other products you might need in an emergency, such as fire extinguishers and emergency radios, the time to learn about how to use your chosen product is *before* the crisis event strikes. 3M offers two different styles of FDA-cleared respirators: a “cup-shaped” and a “flat-fold”. For respirators, getting a good seal to the face is one of the most important factors to consider and some models might be better than others in fitting your particular face type and size. You may wish to try the two respirator styles and follow the directions provided to see if you can get a good fit (meaning you cannot feel air leaking around the edges of the respirator when you check the seal). You might also find that you have specific preferences in terms of comfort especially as you consider that you might need to wear a respirator several hours per day. You can find information about buying 3M respirators, including both the 8612F and 8670F, on our website.

Calculate How Many Respirators You Might Need

How many **adults** will be using respirators? _____

x How many **weeks** is the flu outbreak expected to last? _____

x Seven days per week. _____

7

x How many respirators is each adult expected to use **per day**? _____

= The number of respirators your family might need _____

3. Estimate the number of respirators your family might need

Many public health officials estimate that a pandemic flu outbreak could last a number of weeks, with multiple waves (periods during which community outbreaks occur across the country) of illness. The number of respirators you need can depend on many factors, including the number of adults in your family and the degree to which you can use social distancing to limit contact with those who may be sick.

Note: A respirator is made to catch germs and other particles, so it is a good idea to handle used respirators carefully and dispose of them after each use. For more information, www.pandemicflu.gov is one resource to consult for information about influenza outbreaks.

4. Decide if you want to develop a home stockpile of respirators

During the SARS outbreak in 2003, many members of the general public in affected countries found that availability of NIOSH approved respirators in the market was very limited. It's reasonable to expect that there will be similar concerns regarding respirators in case of future events. Buying a home stockpile of respirators is one strategy to consider so that the respirators you've chosen will be available to you in a crisis event. Be aware, however, that most respirators have a three- to five- year shelf life and benefit from temperature and humidity-controlled storage, so you'll want to think carefully about how many to buy in advance and where you can store them properly. 3M recommends storing respirators in their original packaging and in a dry, clean area at room

temperature. If you do stockpile respirators at home, examine them occasionally to evaluate if they are being stored in a dry location, that you still have the directions and try one on at least annually, to make sure that it still fits properly.

Important Reminders:

Although respirators can be an important part of your household preparedness plans, please note that no respirator can eliminate the inhalation of all particles and/or airborne organisms and will not eliminate the risk of disease, illness, or death. The respirators cleared by the FDA for the general public in public health medical emergencies are designed for adult faces. Neither NIOSH nor the FDA has cleared or approved respirators for use by children. Additionally, respirators will not prevent entry of germs through skin, eyes, or other parts of the body. If a public health medical emergency occurs, a respirator should be used as part of a total personal protection system including hand washing, social distancing, etc.²

References:

1. www.pandemicflu.gov is an official U.S. Government Web site managed by the U.S. Department of Health & Human Services.
2. <http://www.pandemicflu.gov/plan/individual/index.html>
3. Centers for Disease Control and Prevention. 2008. Interim Public Health Guidance for the Use of Facemasks and Respirators in Non-Occupational Community Settings during an Influenza Pandemic. <http://www.pandemicflu.gov/plan/community/maskguidancecommunity.html>



**Occupational Health and
Environmental Safety Division**
3M Center, Building 235-2E-91
St. Paul, MN 55144-1000
U.S.A.
1-800-243-4630
www.3M.com/OccSafety

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