



Worker Safety

Reusable Respirators and PAPRs in Healthcare Settings

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Healthcare workers often use *surgical masks and filtering facepiece respirators (FFR), such as N95s*, while caring for patients. However, what you may not realize is that there are other forms of respiratory protection that are effective for a variety of applications in healthcare settings. Let's take a look and find out more about the reusable respirator (RR) and the powered air purifying respirator (PAPR).

Watch this short video to see how 3M is protecting frontline workers with reusable respirators and PAPRs.

Reusable Respirators (RR)

Often referred to as half-face or elastomeric respirators, this type of reusable respiratory personal protective equipment (RR PPE) is widely used across a variety of industries. Not only do reusable respirators come with a variety of cartridges, but there are many different filters that can also be used. They can be used with stethoscopes.

Many components of the reusable respirator can be disinfected and reused. This means that with proper care and maintenance, RR PPE can last longer than N95s. Reusable respirators need to be fittested to the individual, which means your employer will need to implement and follow a respiratory protection program. The fit testing for RR PPE is the same as Filtering Facepiece Respirator (FFR) fit testing.

The U.S. Occupational Safety and Health Administration (OSHA) governs workplace respirator use in the United States including use in healthcare settings. If your facility is already using FFR, such as N95s, then it is likely you already have a *respiratory protection program* in place. The OSHA Respiratory Protection Standard (29 CFR 1910.134) specifies the requirements for employers assigning respiratory protection to workers, which requires employers to develop and implement a written respiratory protection program that includes the procedures and elements for respirator use at their specific workplace. The written program must include all the elements required by OSHA including the following:

- Procedures for selecting respirators for use in the workplace
- Medical evaluations of employees required to use respirators
- Fit testing procedures for tightfitting respirators (*Video*)
- Procedures for proper use of respirators
- Procedures for cleaning, disinfecting, storing, inspecting, repairing, discarding and otherwise maintaining respirators
- Training of employees (Video)

You can also learn more about practical considerations for respirator use in healthcare settings, such as if you can use *filtering facepiece respirators, such as N95 respirators, beyond their shelf life*, how to extend the use of FFR, and how to disinfect powered air purifying respirators (PAPR) or half facepiece reusable (elastomeric) facepieces.

Powered Air Purifying Respirators (PAPRs)

A PAPR, as defined by U.S. OSHA, is an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering (the hooded facepiece). PAPRs can offer an Assigned Protection Factor (APF) up to 1000. APF means the workplace level of respiratory protection that a respirator or class of respirators is expected to provide to employees when the employer implements a continuing, effective respiratory protection program as specified by this section [meaning 29 CFR 1910.134].

They offer positive pressure respiratory protection that when properly selected and used with a HEPA filter can also filter out 99.97% of particulates. The term "positive pressure" implies that the pressure within the respiratory inlet covering (facepiece, hood or helmet) is somewhat greater than ambient pressure, and that any air movement will be outward. Since air contaminants are unlikely to travel upstream, it follows that **positive pressure devices** should provide high levels of protection.

PAPRs allow for limited amounts of facial hair (which RRs and N95s do not allow) and offer other benefits such as:

- Eliminates fit testing if used with loose-fitting facepieces, hoods or helmets
- Potentially increases comfort to the wearer
- Potentially allows the wearer to integrate multiple types of PPE into one NIOSH-approved system (head, eye, face and respiratory protection)

You can learn more about the benefits of using a PAPR in a healthcare setting by *reading this blog*. To speak with a technical specialist who can help you select the right kind of respiratory protection for your setting, *please contact 3M today*.

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