

What Workers Need to Know About Pandemic Flu

Respirators: One Way to Protect Workers Against Pandemic Flu

How does the pandemic flu virus spread in the workplace?

Workers can get the pandemic flu virus by breathing in small particles (very small pieces of matter) that contain the virus. These particles are spread through the air when a person who has the virus coughs, sneezes, or talks. Workers can breathe these particles into their lungs and become infected with the virus.

Employers need to set up “infection control programs’ to make sure this does not happen. One part of an infection control program is for workers to wear particulate respirators. This fact sheet explains what respirators are and how they are supposed to be used.

SURGICAL MASKS ARE NOT RESPIRATORS – THEY DO NOT PROTECT WORKERS FROM BREATHING IN THE FLU PARTICLES.

What are “particulate respirators”?

Workers can wear respirators to make sure they do not breathe in these particles and become infected with the virus. The type of respirator workers need to wear is called a *particulate respirator*. Surgical masks (like the ones that doctors wear to prevent their saliva from getting on the patient) do not protect workers. Employers must follow all of the rules in OSHA’s Respiratory Protection Standard before giving workers a respirator. These rules are explained below.

Are there different types of particulate respirators?

Three types of particulate respirators will work to protect workers from breathing in the pandemic flu virus:

- **Disposable filtering facepieces:** These respirators can be used once and then they must be thrown away.
- **Reuseable elastomeric respirators:** These respirators can be used again after cleaning, disinfecting and replacing the used filters.
- **Powered air purifying respirators (PAPRs).** These respirators run off of a battery that pulls the contaminated air through the filter. They can be used again after cleaning, disinfecting and replacing used filters. Some PAPRS have loose-fitting hoods and some are tight-fitting.

Each of these particulate filtering respirators is rated by their ability to filter out small particles: 95%, 99%, and 100%. The filters are also rated for their resistance to oil: “N” (not resistant), “R” (somewhat resistant), and “P” (oil proof).

How do particulate respirators work?

A particulate respirator protects workers by filtering out particles that are in the air. These particles may contain the flu virus. Respirators must seal tightly around the nose, mouth and face in order for them to work properly (except for PAPRs with loose-fitting hoods). This way, when a worker breathes, the air is pulled through the filters before it goes into the worker’s lungs.

Can any respirator be used in the workplace?

The National Institute for Occupational Safety and Health (NIOSH) is a federal government agency. NIOSH is responsible for testing and certifying all respirators used in workplaces in the United States. Under OSHA’s respirator standard, only NIOSH certified respirators can be worn by workers.

Surgical masks are not respirators. A surgical mask does not give workers any protection from breathing in particles. These masks do not have a tight seal around the nose, mouth and face. Particles that contain the flu virus can easily get through the gaps between the mask and face and enter the lungs. Also, the material used in surgical masks is not made to filter small particles. Surgical masks are not certified by NIOSH as respirators. OSHA does not allow them to be used in the workplace to protect workers from breathing in chemicals or particles. **Surgical masks must never be used to prevent workers from breathing in pandemic flu virus particles!**

Does OSHA have any guidelines for choosing a particulate respirator to protect workers from the pandemic flu virus?

OSHA has the following recommendations for choosing a particulate respirator:

- Use N95 or higher-rated filter respirators for “high-risk” workers like health care workers and workers who respond to emergencies.
- Wear a powered air purifying respirator (PAPR) if health care workers have to insert an instrument into the patient’s airway (for example, to do a bronchoscopy or intubation).
- Consider using a respirator if workers have a lot of contact with people on the job (like schools, crowded workplaces, and busy stores). This is especially important if there is close contact with people who might have pandemic flu.

NOTE that the AFL-CIO recommends using a more protective particulate respirator for high risk workers (like health care workers and emergency responders). The AFL-CIO recommends a P100 respirator with an elastomeric (rubber-like) facepiece seal or a PAPR with filters that have a high rating for filtering out small particles.

What does OSHA’s Respiratory Protection Program require?

In a flu pandemic, workers may be required to wear a respirator to protect them from breathing in the flu virus particles. But an employer should not

just give a worker a respirator and tell him or her to wear it. Instead, any time workers have to wear a respirator, OSHA requires employers to have a complete respiratory protection program under OSHA's Respirator Standard 1910.134. For employers who are not covered by OSHA (which is mainly some state and local government employers), the standard is a good model to follow in order to protect workers.

OSHA's Respirator Standard 1910.134 requires employers to:

- Use “feasible **engineering controls**” (like portable ventilation systems, plastic sneeze guards, and special rooms for infected workers) **before using respirators**. Engineering controls are the most effective way to keep workers from breathing in the virus. (Respirators – which are “personal protective equipment,” not engineering controls – should be used to protect workers from pandemic flu only when effective engineering controls are not feasible, or while engineering controls are being installed).
- Develop a **written respiratory protection program** and identify a qualified person who will be in charge of the program.
- Give all workers a **medical evaluation** to make sure they are able to wear a respirator. Workers must be given a **written recommendation** from the doctor or nurse saying they are able to use the respirator.
- Give workers **free** respirators.
- Only give workers respirators that are certified by **NIOSH**. Surgical masks cannot be used because they will not keep workers from breathing in the pandemic flu virus.
- Choose respirators that will protect workers from the kind of hazard they are facing. In the case of the pandemic flu virus, this would be a **particulate filtering respirator**.
- Do a **fit test** on each worker to make sure the respirator fits and seals tightly around the face. Fit testing is required when first giving the

respirator and **every year** after that (except for PAPRs with loose-fitting hoods).

- Make sure workers do not have beards or facial hair or any other condition that might not give the respirator a tight seal.
- Give workers **training** and information **before** using a respirator and **every year** after that. This training includes (but is not limited to):
 - uses and limitations of respirators,
 - how to inspect a respirator,
 - how to put on and take off the respirator, and
 - how to do a user seal check to make sure the respirator seals tightly.
- Do a **program evaluation** to make sure the written respiratory protection program is working well. This evaluation includes worker interviews to make sure they are using the respirator in the right way.
- **Keep records** like medical evaluations, fit test results, and a copy of the current written respiratory protection program. These records must be available to workers when they ask for them.

These are the key points:

- Workers can get the pandemic flu virus by breathing in small particles that contain the virus.
- Particulate respirators are the only kind of respirators that can protect workers from the pandemic flu virus – surgical masks are not respirators and will not protect workers from breathing in the flu virus particles.
- OSHA requires all employers to follow the rules in its Respiratory Protection Standard if workers use respirators.

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