

Respirators and Facemasks



During an influenza pandemic, virus transmission is most likely to occur in public places such as schools, public gatherings, and mass transit. Facemasks and respirators are frequently used in medical settings to prevent infection among patients as well as medical providers. However, little research has been conducted on the value of protective masks in public settings, and currently there is no proof of their effectiveness.

Facemasks are loose-fitting, disposable masks that cover the nose and mouth. They help stop droplets from being spread by the person wearing them. They also keep splashes or sprays from reaching the mouth and nose of the person wearing the facemask. They do not provide protection against breathing in very small particles. Facemasks could be helpful during a pandemic if a person is sick with the flu, lives with someone who has flu symptoms, or will be in crowded public places. Reusable fabric masks have NOT been evaluated by the FDA for use in preventing transmission of infectious agents, and none are legally marketed in the United States for use in infection control.

Respirators should be used to protect against breathing in small particles which might contain viruses. NIOSH approves an N95 or higher filtering mouthpiece. "N95" means the filter on the respirator screens out 95 percent of the particles that could pass through (the higher the number, the higher percentage of particles screened out). These respirators are most effective and safest when the wearer has been properly fitted (i.e., fit-tested) and provided with a health assessment and training to use the device. In the non-work setting, this fit-testing, health assessment, and training may be difficult to obtain, since these activities are usually performed for workers as part of an occupational health program. They are not designed for use by children or individuals with facial hair. Persons with pre-existing heart or lung disease or other health conditions may have difficulty breathing through some respirators and should consult with their personal physicians before using a respirator. Respirators could be helpful during a pandemic if a person is well and will come in contact with someone who has pandemic influenza.

Studies are currently underway to determine the effectiveness and proper usage of facemasks and respirators. In the meantime there are numerous actions that can be taken during an influenza pandemic to minimize the risk of infection. These include:

- Hand washing,
- Proper cleaning and disinfecting,
- Social Distancing,

According to new guidance from the Centers for Disease Control and Prevention (CDC), masks and respirators may help prevent some spread of influenza when used in conjunction with other preventive steps.

For additional information see "Interim Guidance Issued for the use of Facemasks and Respirators in Public Settings during an Influenza Pandemic" at http://www.cdc.gov/od/oc/media/pressrel/2007/r070503.htm.