

CDC Clinician Communication Update: Interim Guidance for the Use of Facemasks and Respirators in Public Settings During an Influenza Pandemic

May 3, 2007

This is a special COCA update.

HHS ISSUES INTERIM GUIDANCE FOR THE USE OF FACEMASKS AND RESPIRATORS IN PUBLIC SETTINGS DURING AN INFLUENZA PANDEMIC.

Facemasks and Respirators Could Provide Added Value When Used in Combination with Other Preventive Measures

The Department of Health and Human Services' (HHS) Centers for Disease Control and Prevention (CDC) today released interim advice to the public about the use of facemasks and respirators in certain public (non-occupational) settings during an influenza pandemic. There is very little research about the value of masks to protect people in public settings. These interim recommendations are based on the best judgment of public health experts who relied in part on information about the protective value of masks in healthcare facilities.

The guidance stresses that during an influenza pandemic a combination of actions will be needed, including hand washing, minimizing the likelihood of exposure by distancing people who are infected or likely to be infected with influenza away from others and treating them with antiviral medications, having people who are caring for ill family members voluntarily stay home, and encouraging people to avoid crowded places and large gatherings. When used in conjunction with such preventive steps, masks and respirators may help prevent some spread of influenza.

"Pandemic influenza remains a very real threat. We continue to look for ways to protect people and reduce the spread of disease," Secretary Mike Leavitt said. "The guidance issued today is a good step forward in the broader, multifaceted federal effort to prepare the nation for an influenza pandemic."

"During an influenza pandemic, we know that no single action will provide complete protection," said Dr. Julie Gerberding, CDC director. "We also know that many people may choose to use masks for an extra margin of protection even if there is no proof of their effectiveness. If people are not able to avoid crowded places, large gatherings or are caring for people who are ill, using a facemask or a respirator correctly and consistently could help protect people and reduce the spread of pandemic influenza."

Gerberding noted that while studies are underway in an effort to learn more about whether masks and respirators can provide protection from influenza and how people would use such things, the CDC guidance was designed to be a "best estimate" based on what is currently known. It is designed to help guide people's decisions regarding the use of masks.

In the guidance recommends that:

People should consider wearing a facemask during an influenza pandemic if ...

- They are sick with the flu and think they might have close contact with other people (within about 6 feet).
- They live with someone who has the flu symptoms (and therefore might be in the early stages of infection) or will be spending time in a crowded public place and thus may be in close contact with infected people. During a pandemic, people should limit the amount

of time they spend in crowded places and consider wearing a facemask while they are there.

- They are well and do not expect to be in close contact with a sick person but need to be in a crowded place. Again, people should limit the amount of time they spend in crowded places and wear a facemask while they are there.

People should consider wearing a respirator during an influenza pandemic if...

- They are well and will be, or expect to be, in close contact (within about 6 feet) with people who are known or thought to be sick with pandemic flu. People should limit the amount of time they are in close contact with these people and wear a respirator during this time. These recommendations apply if people are taking care of a sick person at home (and if a respirator is unavailable, use of a mask should be considered).

Dr. Michael Bell, associate director for infection control at CDC's Division of Healthcare Quality Promotion, noted that facemasks and respirators have different qualities and offer different types and levels of protection. According to Bell, the primary factor that should be considered by a well person before deciding to whether to wear a facemask or a respirator for personal protection during a pandemic is whether close contact is expected with someone who has pandemic influenza.

"Facemasks are not designed to protect people from breathing in very small particles, such as viruses," said Bell. "Rather, facemasks help stop potentially infectious droplets from being spread by the person wearing them. They also keep splashes or sprays from coughs and sneezes from reaching the mouth and nose of the person wearing the facemask. Respirators are designed to protect people from breathing in very small particles, which might contain viruses. Thus, if you're caring for someone who is ill with pandemic flu, proper use of a well-fitted respirator may be a reasonable choice."

Bell stressed that neither a facemask nor a respirator will provide complete protection from a virus. To reduce the chances of becoming infected during a pandemic, people will need to practice a combination of simple actions, including: washing hands often with soap and water, staying away from other people when they are ill, and avoiding crowds and gatherings as much as possible.

Pandemic Influenza

A flu pandemic is a global outbreak caused by a new flu virus that spreads around the world. The virus will spread easily from person to person, mostly by close contact (within about 6 feet) with individuals who are infected, and mostly through coughing and sneezing. Because the virus will be new to people, everyone will be at risk of getting it. Much of the transmission will most likely occur in non-healthcare settings, such as schools, public gatherings, mass transit, and households. The severity of the infection from an influenza virus in a pandemic is not knowable in advance. Severity could range from a level comparable to seasonal influenza to the level that occurred in the pandemic of 1918.

What is a facemask?

Facemasks are loose-fitting, disposable masks that cover the nose and mouth. These include products labeled as surgical, dental, medical procedure, isolation, and laser masks.

Facemasks 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 are not designed to protect the person wearing it against breathing in very small particles.

Facemasks should be used once and then thrown away in the trash.

What is a respirator?

A respirator (e.g., an N95 or higher filtering facepiece respirator approved by the National Institute for Occupational Safety and Health) is designed to protect people from breathing in very small particles, which might contain viruses. Most of the time, N95 respirators are used in construction and other jobs that involve dust and small particles. Healthcare workers, such as nurses and doctors, also use respirators when taking care of patients with diseases that can be spread through the air.

“N95” means the filter on the respirator screens out 95 percent of the particles (0.3 microns and larger) that could pass through (and higher numbers mean a higher percentage of particles are screened). The filter and the tightness of fit together determine overall effectiveness of a respirator. To be most effective, these types of respirators need to fit tightly to the face so that the air is breathed through the filter material. “Fit testing” is the usual method for assuring proper fit in workplaces where respirators are used. Respirators are not designed to form a tight fit on people with small faces (e.g., children) or facial hair. Men who have beards need to shave before using. N95 and higher respirators are less comfortable to wear than facemasks because they are more difficult to breathe through. If people have a heart or lung disease or other health condition, they may have trouble breathing through respirators and should talk with their doctor before using a respirator.

Like surgical masks, most N95 respirators should be worn only once and then thrown away in the trash. Reusable respirators are available, but special precautions need to be followed when using them. For more information about respirators, see NIOSH Safety and Health Topic: Respirators (www.cdc.gov/niosh/npptl/topics/respirators/).

For more information on the proper use and removal of masks and respirators, or to learn more about these (including pictures) and other issues relating to pandemic influenza, <http://www.pandemicflu.gov/vaccine/mask.html>

This guidance is now part of other community preventive measures available at www.pandemicflu.gov/plan/community/commitigation.html.

Members of the public with questions about masks, respirators and pandemic influenza can also call the CDC information line, 1-800-CDC-INFO.

The CDC and HHS logos are the exclusive property of the Department of Health and Human Services and may not be used for any purpose without prior express written permission.

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services. Links to non-Federal organizations are provided solely as a service to our users. Links do not constitute an endorsement of any organization by CDC or the Federal Government, and none should be inferred. The CDC is not responsible for the content of the individual organizations.

Please send us your feedback or comments: <http://www.cdc.gov/flu/coca/feedback.htm>.

Our Clinician Communication Team is committed to excellence in reporting our weekly updates. Please e-mail should you note any written errors or discrepancies or if you need further information or technical help, please send an e-mail message to: coca@cdc.gov.

If you need to unsubscribe or update your information, please go to our website: <http://www.bt.cdc.gov/clinregistry>