PANDEMIC PLANNING

Personal Protective Equipment

This fact sheet provides information on how individuals can protect themselves from an infectious disease during a pandemic through the use of personal protective equipment (PPE).

BACKGROUND

A severe pandemic is defined as a worldwide epidemic in a vulnerable population. Communities, individuals, employers, schools, and other organizations can prepare and plan for how to help limit the spread of disease. Pandemic concerns have increased due to the more recent impacts of disease outbreaks such as the SARS coronavirus (SARS-CoV) in 2002, pandemic H1N1 in 2009, MERS coronavirus (MERS-CoV) in 2012, and novel coronavirus (COVID-19) in 2019. Future disease outbreaks are likely, but difficult to predict.

General

Individuals interacting with the general population should use basic Personal Protective Equipment (PPE) during a pandemic to prevent infected liquid droplets (from talking, coughing, or sneezing) from contacting their nose or mouth. (See "Uses and Considerations for Different Face Masks" and "Pandemic Planning—Home and Family Preparedness" fact sheets.)

Surgical Masks and Respirators

Surgical masks provide protection from visible liquid droplets. Respirators, such as N95 respirators, may be used (if available). Follow the surgical mask or respirator manufacturer's fitting instructions to ensure proper fit and usage. (See "Uses and Considerations for Different Face Masks")

Eye Protection

Eye protection generally is not required to prevent many pandemic diseases such as influenza or COVID-19. Eye protection may be required if you are a health-care worker.

Handwashing

Individuals should wash hands frequently with soap and water or hand sanitizer to prevent hands from transferring potentially infectious material from surfaces to their mouths or noses.

Gloves

While individuals may choose to wear gloves, the concern

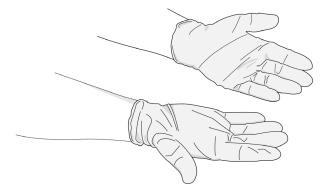
is touching the mouth and nose with a contaminated hand and exposure to the virus through broken skin (for example, cuts or scrapes). While the use of gloves may make individuals more aware of potential hand contamination, there is no difference between touching of the mouth, nose, or eyes with either a contaminated glove or a contaminated hand.

Proper Removal of PPE

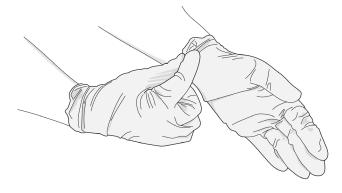
Remove PPE in the proper sequence to avoid contamination.

<u>STEP 1: Remove Gloves</u>—Because gloves are considered the most contaminated piece of PPE, remove them first. To remove gloves, do the following:

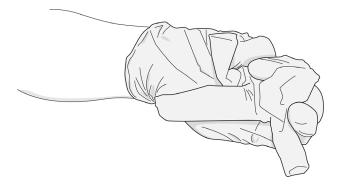
1. Do not touch the outside of gloves with your bare hands during removal.



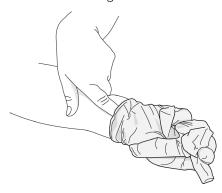
2. With both gloves on, pinch opposite hand glove with gloved hand and pull off opposite hand.



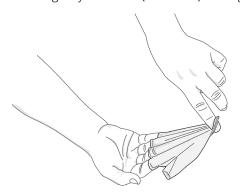
3. Grasp removed glove in fist of gloved hand.



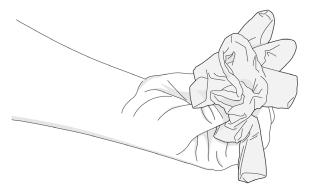
4. Put finger from bare hand down glove at wrist of gloved hand, being careful to avoid touching the outside of the glove.



5. Peel remaining glove off gloved hand, reversing the glove so it wraps around both gloves. Ensure you are handling only the inside (clean side) of the glove.



6. If you contaminate your hands during the removal process, wash them before continuing.



<u>STEP 2: Remove Mask</u>—Surgical masks or N95 respirators may be contaminated because droplets may have landed on them or you may have touched your face by mistake while wearing your PPE (see "How to Wear a Mask").

- Touch only the ties or straps at the back of your head.
 Do not touch the mask itself (this is contaminated).
- 2. Slowly remove the straps, ensuring that the mask or respirator does not touch your bare skin or clothing.
- If you touch the mask with your bare skin, wash with soap and water or an alcohol-based hand sanitizer immediately. If it touches clothing, launder in hot water immediately.

<u>STEP 3: Dispose of Used PPE</u>—Ensure all PPE materials are disposed of properly to avoid spreading disease.

- Dispose of used PPE in a plastic-lined trash can or a plastic bag.
- 2. Seal the plastic bag for later disposal.
- 3. Hold the bag by the outside, and avoid any rush of air as you seal it.

STEP 4: Wash Hands—Always wash your hands thoroughly with soap and water or hand sanitizer immediately after PPE removal. (See "Personal Hygiene" for proper handwashing technique.)

Summary

When selecting PPE, consider factors such as function, fit, long-term comfort, ability to be decontaminated, disposal, and cost. Sometimes, when a piece of PPE will have to be used repeatedly for a long period of time, a more expensive and durable piece of PPE may be less expensive in the long run than a disposable piece of PPE. During a pandemic, recommendations for PPE use may change, depending on information on PPE effectiveness in preventing the spread of disease.

REFERENCES

Guidance on Preparing Workplaces for an Influenza Pandemic. OSHA 3327-05R 2009. https://www.osha.gov/ Publications/OSHA3327pandemic.pdf

www.who.int Coronavirus disease, pandemic preparedness plan, guidelines.

