

WORKSHEET XI: PERSONAL PROTECTIVE EQUIPMENT FOR PANDEMIC INFLUENZA

Personal Protective Equipment (PPE)

Until the route of transmission is determined, it is recommended that healthcare providers use:

- *Standard precautions:* hand hygiene
- *Contact precautions:* gloves, gown, dedicated equipment
- *Eye protection:* goggles or face shield

Respiratory Protection

- *Airborne precautions:* N-95 mask or higher on provider and/or susceptible persons when coming within three feet of a suspected case, surgical mask on patient
- Special care should be exercised when doing any aerosol-producing procedure
- Ensure proper removal of all personal protective equipment upon exiting room
- For the current avian influenza H5N1, full infection control measures should remain in effect for 7 days after the resolution of fever for adults >12 years, and for 21 days after the onset of illness in children ≤12 years

Types of Masks

NIOSH-Approved N-95 (and above) Respirator

Purpose	According to its name (N-95, N-99, N-100), particulate respirators are designed to filter out 95%, 99%, or 99.97% of inhalable particles, and also are named according to their resistance to degradation from oil. It is currently advisable for all healthcare providers coming within 3 feet of a suspected case of avian influenza H5N1 OR a pandemic flu strain to wear a fit-tested, NIOSH certified N-95 or higher.
Considerations	<ul style="list-style-type: none"> ▪ Respirator must be fit-tested and adjusted to face to be effective; wearer must be medically cleared ▪ Several sizes should be ordered to facilitate fit-testing ▪ It must fit closely to form a tight seal over nose and mouth—some people may feel claustrophobic ▪ Any facial hair will prohibit respirator from forming the necessary tight seal around nose and mouth ▪ Must be safely removed and discarded
Supply	You should be able to order N-95s, N-99s, or N-100s through your current medical supplier. For a list of NIOSH-certified disposable respirators, visit www.cdc.gov/niosh/nppt/topics/respirators/disp_part
Cost	Approximately \$1.00 each
Reusability	Disposable masks and respirators ideally should be disposed of once used. However, in a pandemic situation, where respirator availability will be very limited, an Institute of Medicine committee suggested that if necessary, a non-contaminated respirator could be reused by a single wearer with precautions: <ul style="list-style-type: none"> ▪ A protective covering (medical mask or plastic face shield) was worn over it to protect the respirator from contamination—if contaminated, respirator must be disposed of properly ▪ The respirator was carefully stored between uses ▪ The wearer washed his hands after touching the respirator and the device used to shield it

Surgical or Procedural Mask

Purpose	Prevent organisms in the nose and mouth from falling into the sterile field of a surgical site; also provides droplet protection to wearer. In a pandemic, if N-95s are still available to providers, surgical masks might best be used on the patient to lower the risk of transmission whenever someone is within three feet of the patient
Considerations	Does not provide protection to wearer from diseases with airborne transmission
Supply	Order through your current medical supplier
Cost	\$0.10-\$0.20 each
Reusability	No recommendations at this time