



Interim Guidance on Personal Protective Equipment for Healthcare Workers Involved in Aerosol-Generating Procedures for Patients with Confirmed or Suspected Ebola Infection

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The Oregon Public Health Division recommends that healthcare workers performing or assisting with aerosol-generating procedures for Ebola patients use an increased level of respiratory protection.

Workers involved in those procedures should wear either a Powered Air Purifying Respirator (PAPR) or a full-face elastomeric respirator with a P100 cartridge.

Research from the National Institute for Occupational Safety and Health (NIOSH) suggests that, while a face shield is effective at blocking large particles and droplets, aerosols can remain suspended, and could come in contact with mucous membranes or be inhaled.ⁱ

Aerosol-generating procedures include:

- Administration of nebulized medication
- Diagnostic sputum induction
- Bronchoscopy
- Airway suctioning
- Endotracheal intubation
- Positive pressure ventilation via face mask (e.g., biphasic intermittent positive airway pressure ventilation or continuous positive airway pressure ventilation)
- High-frequency oscillatory ventilation

Elastomeric full face respirators and PAPRs provide integrated protection of the eyes, as well as protection from inhalation hazards. Additionally, these respirators offer a more effective way of verifying proper function (user seal check for elastomeric, flow check for PAPR) than do N95 respirators.

ⁱ Lindsley WG, et al. Efficacy of face shields against cough aerosol droplets from a cough simulator. J Occup Environ Hyg 2014;11(8);509-18.