

Personal Protection Equipment

"Universal Precautions" and PPE are not new topics to EMS/1st responders, but often actions seldom go beyond blood and blood borne precautions.

ALWAYS WEAR GLOVES!

A **surgical mask** is intended to be worn by health professionals during surgery and at other times to catch the pathogens shed in liquid droplets and aerosols from the wearer's mouth and nose. Surgical masks primarily provide protection to the patient but also protect the health care professional from inhaling droplets, splash and inadvertent hand-mouth contact. When tolerated and oxygen is NOT being administered, patients should be given surgical masks to wear to limit the amount of droplets released into the air through coughing or sneezing. **Oxygen masks on sick, coughing, sneezing patients also provide a level of protection for the provider from droplets.**



Respirators are designed to protect the wearer from very small particles in specific environments. The proper respirator is chosen after reviewing the work environment, particle or pathogen hazard and length of exposure. Respirators require the wearer to complete a health screening, respirator training and fit testing for OSHA compliance.

Respirators come in many shapes and varieties. Healthcare respirators typically are referred as disposable mask-styled 'N-95' respirators. Standards related to health care respirators primarily are based on risks associated with respiratory diseases like tuberculosis, SARS, and other such biological agents.



The other common healthcare respirator is the powered air purifying respirator (a.k.a. PAPR). This is a battery

operated unit that draws air through a high efficiency particulate filter and blows clean air into a hood worn by the health care provider. The wearer is protected by positive pressure inside the hood similar to a SCBA.

Self contained breathing apparatus (SCBA) can be used to provide protection as an alternative to N-95 respirators.

The '95' refers to the ability to filter 95% of particles greater than 0.3 microns in diameter.

Infection in the Community

If signs or symptoms of acute febrile respiratory illness are not present, proceed with normal patient care.

Threat based assessment and actions

Mild illness in community (September-October, 2009)

Currently, novel H1N1 influenza illness severity is low to mild for most of the population. EMS/1st Responders should employ standard precautions as determined by patient condition and care to be given. Providers **should always consider** adding (to gloves) at least a surgical mask when in the vicinity of a patient with Influenza Like Illness (ILI).

In general, responders can limit their exposure and risk by limiting how many responders are providing close care (i.e. within 6 feet of patient). Providers should conduct a "doorway assessment" Before entering a room, the patient is asked if they have or think they have a fever... if they have a cough or have been sneezing. This allows the responder to take proper PPE actions.

Patients with fever and respiratory symptoms should be instructed in "cough etiquette", given a surgical mask or other barrier.

Note: Oxygen masks on patients also provide a level of protection from droplets.

Personal protective equipment can be disposed as normal waste as long as not visibly contaminated by blood or other body fluids. As always, any contaminated or potentially contaminated equipment should be cleaned and disinfected. Minimizing equipment that is brought to the patient's side can help limit the spread of infection as well.

Responders and providers **should wash their hands frequently**, especially after contact with ill patients. Alcohol based hand sanitizers have been prove effective against H1N1 influenza.

Moderate to severe illness in community

If influenza illness severity should increase, EMS/1st responders should limit patient contact as above. Responders and providers **should wear a surgical mask and eye protection**. Responders and providers **should always utilize respirators (i.e. N-95 mask) AND eye protection** when performing aerosolizing procedures such as nebulizer treatments or when performing intubation, ventilation or if close patient contact is required. It has always been best practice to consider adding a **gown** to the standard PPE for droplet contamination.

In the presence of severe outbreak, consider treating discarded PPE as contaminated waste.*