

Respiratory Precautions

Clinical Indications:

In cases where infectious agents transmitted by an airborne route are prevalent in the community or have reached pandemic status a provider pre-alert system may be implemented in the communications center. In these cases providers will be advised of the potential need for increased precautions at the time of dispatch.

In the absence of pre-arrival notification respiratory protection should be considered when confronted by any patient presenting with an acute febrile respiratory illness, which may include fever plus one or more of the following:

- nasal congestion/ rhinorrhea,
- sore throat
- or cough

Contraindications:

Not Applicable

Notes/Precautions:

- EMS providers should be aware of the signs and symptoms of infectious respiratory diseases and the procedures necessary for protecting themselves. Not all respiratory infections are transmitted in the same way. Transmission can occur from direct or indirect contact, large droplets, or small droplet nuclei. The mode of transmission will depend on the etiological agent. Providers must be familiar with PPE application (donning) and removal (doffing) procedures.
- Certain procedures can also impact transmission of infectious agents by producing aerosols. These are deemed "high risk respiratory procedures" and include intubation, extubation, deep tracheal suctioning, and nebulized respiratory treatments. Fitted N95 mask is recommended for any "high risk respiratory procedure" in the setting of suspected acute febrile respiratory illness.
- More often in the field of emergency medicine, the etiologic agents of infections are unknown.

Procedure:

Droplet Precautions:

Droplet precautions should be employed for patients with febrile respiratory illness as defined above. (Examples include influenza, meningitis and pertussis as well as common respiratory viruses such as adenovirus and rhinovirus).

1. Utilize the incident information provided by Communications that alerts providers to a possibly symptomatic patient (when applicable).
2. Provide surgical masks to all patients with symptoms of a respiratory illness who can tolerate its placement.
3. For patients who cannot wear a surgical mask in addition to any medical treatment being provided, consider application of oxygen via non-rebreather face mask to limit dissemination of airborne particles.
4. Providers should wear a surgical mask and adhere to the Standard Precautions Procedure - the use of gown, gloves and eye protection if contact with bodily secretions or a contaminated environment is anticipated.
5. High risk respiratory procedures which include intubation, extubation, deep tracheal suctioning, and nebulized respiratory treatments, require the highest level of respiratory

Legend		
S	System Responders	S
B	EMT - B	B
I	EMT - I	I
P	EMT - P	P

Respiratory Precautions

- protection which is a fitted N95 respirator mask. Perform a "fit check" by molding the mask to the face and checking for air leaks after donning N95 respirators.
6. Continue to use droplet precautions to manage patients with respiratory symptoms until it is determined that the cause of symptoms is not an infectious agent that requires precautions beyond standard precautions.
 7. Be attentive to minimizing the transfer of any potentially infectious materials acquired during patient contact to medical equipment, stretchers, and other ancillary tools so as to lessen the chances of cross contamination and infection.
 8. Exercise caution in the removal of PPE to prevent inadvertent self-inoculation in the event the PPE has been contaminated with potentially infectious materials.
 9. Initiate hand hygiene as soon as feasible after doffing your PPE.

Airborne Precautions (All Hazard):

Airborne precautions include Standard Precautions, Contact Precautions and the Droplet Precautions outlined above. Airborne precautions should be employed in cases where the infectious agent is spread via an airborne vector which forms small particles that may remain airborne for an extended period of time. (Examples include tuberculosis, measles, chicken pox, small pox and pandemic illness). In addition Airborne Precautions may be called for in the early phases of pandemic illness when the exact mechanism of transmission is unknown.

Tuberculosis should be considered when the patient exhibits the following symptoms:

- A protracted cough lasting 3 weeks or longer
 - Cough productive of bloody sputum
 - Cough in conjunction with the following:
 - Fever/chills and
 - Night sweats and/or
 - Weight loss
1. Utilize the incident information provided by Communications that alerts providers to a possibly symptomatic patient requiring this level of protection.
 2. Providers should limit the number of personnel who have initial contact with the patient by conducting the "View from the Door."
 3. Such a view can provide the necessary impression that will assist to determine the need for extensive medical intervention requiring multiple providers.
 4. Should such an impression not be clearly evident, only 1 first responder, in the appropriate PPE (described above), should make patient contact and conduct the initial patient assessment.
 5. Providers should don a fitted N95 mask for all patient contact and perform a "fit check" by molding the mask to the face and checking for air leaks after donning.
 6. Provide surgical masks to all patients with symptoms of a respiratory illness who can tolerate its placement.
 7. For patients who cannot wear a surgical mask in addition to any medical treatment being provided, consider application of oxygen via non-rebreather face mask to limit dissemination of airborne particles.
 8. Continue to use airborne precautions to manage patients with respiratory symptoms until it is determined that the cause of symptoms is not an infectious agent that requires precautions beyond standard precautions.