

**Tuberculosis and Respiratory Protection**

- What is Tuberculosis?
  - Tuberculosis is a contagious bacterial infection caused by Mycobacterium tuberculosis (TB).
  - The lungs are primarily involved, but the infection can spread to other organs.
  - Tuberculosis can develop after inhaling droplets sprayed into the air from cough or sneeze by someone infected with Mycobacterium tuberculosis.
  
- Dangers to Health care workers
  - Healthcare workers must wear HEPA filtered respiratory protective devices in the following situations:
    - Inadequate ventilation during procedures that are likely to produce bursts of droplet nuclei on patients with known or suspected TB, (intubations, administration of nebulized medications, suctioning, etc.).
    - When employees enter rooms housing individuals with suspected or confirmed infectious TB disease.
    - When emergency medical response personnel or others must transport, in a closed vehicle, an individual with suspected or confirmed TB disease.
  - The respirator should be placed prior to entering the room/place of possible contamination and removed only after patient contact is completed.
  - All Catawba County EMS employees and volunteers may use the approved HEPA filter respirators when entering area of possible contamination.
  - Disposable HEPA filter respirators may be used. Respirators should be placed in a clean plastic bag. Other objects should not be stored in bag with respirator and attempts should be made to avoid crushing or damaging the respirator.
  - Damaged or visible soiled respirators should be immediately disposed of in a regular waste receptacle.
  - **RESPIRATORS SHOULD BE IMMEDIATELY DISPOSED OF FOLLOWING EACH USE.**
  
- Procedure for dealing with patients suspected of having TB
  - When EMS personnel or volunteers must transport patients who have confirmed or suspected active TB, a surgical mask should be placed, if possible, over the patient's mouth and nose.

## Catawba County Emergency Medical Services

- Because administrative and engineering controls during emergency transport situations cannot be ensured, EMS personnel or volunteers should wear respiratory protection when transporting such patients.
- If feasible, the windows of the vehicle should be kept open. The heating and air-conditioning system should be set on a non-recirculating cycle.
- Annual employee TB testing
  - EMS personnel or volunteers shall be included in a comprehensive PPD screening program and shall receive a baseline PPD test and follow-up testing on an annual basis.
  - CCEMS employees should also be included in the follow-up of contacts of a patient with infectious TB.
- N95 Respirators
  - N95 respirators used in health care settings are able to efficiently filter the smallest particles in its range.
  - Fit testing with a saccharine solution is performed on an initial basis and then as needed due to changes in facial features, weight gain or loss, etc.
  - Fit testing is performed on all new employees prior to being released into the pre-hospital environment.
  - Prior to being fitted for an N95 TB respirator, all Catawba County EMS employees and volunteers must attend the TB and Infection Control training conducted by EMS. This training is covered in the required Safety and Infection Control training sessions. The required medical questionnaire must be completed and signed off by the Employee Health Nurse prior to fit testing being performed.