

## *Just the Facts...*

### *Mycobacterium Tuberculosis (MTB) – Airborne or Droplet Transmitted Diseases*

When the local medical or infection control authorities determine that personnel are at risk of exposure to MTB, organizations must -

#### **Provide respiratory protection.**

- Provide personnel with National Institute for Occupational Safety and Health (NIOSH)-approved high efficiency particulate air (HEPA) respirators. Filters classified as N95, N99, N100, R95, R99, R100, P95, P99, and P100 meet the NIOSH criteria for TB protection. Filters classified as N95 are the minimum acceptable level when employees perform high hazard procedures.
- Whenever personnel wear respirators to protect themselves against MTB, a complete respirator protection program in accordance with 29 CFR 1910.139 must be in place.

#### **Control the release of infectious aerosols.**

- Temporarily place a surgical mask or disposable cloth over the remains' mouth and nose to contain any aerosols that may be generated when the remains are moved.
- Place human remains and disassociated portions in plastic burial pouches.
- Conduct autopsies in rooms with:

- Biological hazard warning signs posted at the entrance indicating the potential presence of a biohazard, and include the wording "NO ADMITTANCE WITHOUT WEARING A TYPE N95 OR MORE PROTECTIVE RESPIRATOR."

- Negative air pressure with respect to adjacent areas,

- Ventilation that provides at least an airflow of 12 air changes per hour (3 of the air changes should be from the outside),

- Downdraft local exhaust ventilation over the autopsy table, and

- An exhaust system to exhaust air directly to the outside of the building and away from intake vents, personnel, and the general public.

NOTE: Recirculation of HEPA-filtered air within the room or ultraviolet germicidal irradiation may be used to supplement the recommended ventilation requirements.

- Refrigerated body holding rooms should be under negative pressure in relation to adjacent areas with an airflow of 10 air changes per hour.

#### **Use Engineering Controls.**

- Use electric saws equipped with safety devices such as protective guards and vacuum attachments to capture and remove aerosolized contaminants.
- Use slanted autopsy tables with raised edges to capture drainage.

#### **Develop and implement safe work practices for high-risk procedures.**

- Limit access to autopsy rooms to only those personnel necessary to perform the work.
- Keep doors closed.
- Develop and implement schedules and procedures for cleaning and disinfecting work areas. NOTE: Phenolic compounds are preferred disinfectants for necropsy areas because formaldehyde reacts with hypochlorite and produces bis-chloromethyl ether, a carcinogen.
- Ventilate autopsy rooms following high-risk autopsies according to CDC recommendations before allowing personnel to enter the room without respiratory protection.

### **Train workers.**

Personnel must receive information and training to include the hazard of TB transmission, its signs and symptoms, medical surveillance and therapy, tasks and procedures having potential for exposure; site-specific protocols including the purpose and proper use of engineering controls, safe work practices, and PPE; and procedures for reporting exposure incidents and illness.

### **Manage waste.**

Guidance for the classification of waste from handling human remains that are or suspected of being contaminated with MTB (or any other highly contagious disease agent) should be obtained from the nearest infection control official or public health physician. Management of the remains and the waste is dictated by the classification.

### **Implement a medical surveillance program.**

- Conduct screening for tuberculosis by tuberculin skin test (TST) per AR 40-5, para. 4-3. The local preventive medicine authority may increase the frequency of any screening as mission considerations suggest per AR 40-5, para 4-3h. Skin test conversions should prompt and assessment of procedures and protocols.
- Keep records of employee exposures to TB, skin tests, and medical evaluations and treatment.

### **Document infections and disease.**

Tuberculosis infections (positive TB skin test) and tuberculosis disease are recordable illnesses on the OSHA Occupational Injury and Illnesses Log. Tuberculosis (not skin test conversion alone) is reportable to the Army Reportable Medical events System.