

INFECTION CONTROL SNAPSHOT

Infection Control for Tuberculosis



Tuberculosis, or TB, is not a highly contagious disease in that *M. tuberculosis* requires prolonged or frequent close contact with an infectious source for transmission to a susceptible host. Patients infected with *M. tuberculosis* occasionally seek urgent dental treatment at outpatient dental settings; however overall, the risk borne by DHCP for exposure to a patient with active TB disease is probably low. Only one report exists of TB transmission in a dental office. However, in certain cases, DHCP or the community served by the dental facility might be at relatively high risk for exposure to TB. Therefore, all USAF dental clinics must follow MTF guidance and current CDC recommendations for developing, maintaining, and implementing a written TB infection-control plan; managing a patient with suspected or active TB; completing a community risk-assessment to guide employee tuberculin skin tests and follow-up; and managing DHCP with TB disease. This "SNAPSHOT" provides an overview of general infection control recommendations for managing patients with TB.

- When taking a patient's initial medical history and at periodic updates, DHCP should routinely ask all patients whether they have a history of TB disease or symptoms indicative of TB.
- During clinical assessment and evaluation, a patient with suspected or confirmed TB disease should be instructed to observe strict respiratory hygiene and cough etiquette procedures. The patient should also wear a surgical or procedure mask, if possible. These patients should not be kept in the dental facility any longer than required to evaluate their dental condition and arrange a referral.
- Elective dental treatment should be deferred until a physician confirms that the patient does not have infectious TB, or if the patient is diagnosed with active TB disease, until confirmed the patient is no longer infectious.
- If urgent dental care must be provided for a patient who has suspected or confirmed infectious TB disease, dental care should be provided in a setting that meets the requirements for an airborne infection isolation (AII) room. Standard surgical face masks do not protect against TB transmission; DHCP should use respiratory protection (at least a fit-tested N-95 disposable respirator) while performing procedures on these patients.

TB Signs/Symptoms

- Chronic persistent/productive cough
- Coughing up blood (bloody sputum)
- Fever
- Malaise
- Unexpected weight loss



N-95 Respirators

The majority of surgical masks are not NIOSH-certified as respirators, do not protect the user adequately from exposure to TB, and do not satisfy OSHA requirements for respiratory protection. However, certain surgical masks (i.e., surgical N-95 respirator) do meet the requirements and are certified by NIOSH as respirators. The level of protection a respirator provides is determined by the efficiency of the filter material for incoming air and how well the face piece fits or seals to the face (e.g., qualitatively or quantitatively tested in a reliable way to obtain a face-seal leakage of <10% and to fit the different facial sizes and characteristics of HCP).

When using respirators to treat patients with diseases requiring airborne transmission precautions (e.g., TB), they should be used in the context of a complete respiratory protection program. This program should include training and fit testing to ensure an adequate seal between the edges of the respirator and the wearer's face. USAF facilities should contact Bioenvironmental Engineering for additional information on N-95 respirators and fit testing.

Abbreviations: CDC=Centers for Disease Control & Prevention; DHCP=Dental Health-Care Personnel; HCP=Health-Care Personnel; MTF=Military Treatment Facility; NIOSH=National Institute for Occupational Safety & Health; OSHA=Occupational Safety & Health Administration; TB=Tuberculosis.



- Do you have information in your dental infection control operating instruction about managing patients with TB?
- Is your dental clinic equipped to treat TB patients? If no, what is your referral policy?
- Has anyone in your dental clinic been fit-tested for an N-95 respirator?

If you want more info

- CDC Guidelines for Infection Control in Dental Health-Care Settings (www.cdc.gov/oralhealth).
- CDC Tuberculosis Web site: www.cdc.gov/tb/topic/basics/default.htm.
- USAF Guidelines for Infection Control in Dentistry (<http://airforcemedicine.afms.mil/decs>).



Infection Control SNAPSHOTS provide a brief overview of infection control topics and highlight several important issues; they are not intended to be a comprehensive review of the subject matter. Possible uses may include, but are not limited to presentations at staff meetings or sending out e-mail reminders to the dental staff.

USAF Dental Evaluation & Consultation Service/Dental Infection Control <http://airforcemedicine.afms.mil/decs>

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