



California
Department of
Health Services

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State of California—Health and Human Services Agency
Department of Health Services



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February 28, 2007

Tony Paz, MD
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Dear Dr. Paz:

The Occupational Health Branch (OHB) of the California Department of Health Services (CDHS) strives to improve worker health and safety through a program of public health activities including surveillance, worksite investigations, hazard evaluation, and development of policy recommendations. In October 2006, the CDC *Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Healthcare Settings, 2005* (CDC Guidelines) prompted the CDHS Tuberculosis Control Branch to request OHB to render a written opinion regarding reducing the frequency of tuberculosis (TB) tests in health care workers (HCWs). CDHS OHB recommends that health care facilities in California continue to perform annual TB tests. We further recommend that facilities that are considering reducing the frequency of TB testing perform both a community and an institutional risk assessment as described below, and obtain the approval of the local health officer as required by Title 22 of the California Code of Regulations (CCR).

Summary of CDC Guidelines

The CDC Guidelines recommend that each health-care setting conduct initial and ongoing (preferably annual) evaluations of the risk for transmission of *M. tuberculosis*. This includes reviewing the “community profile of TB disease in collaboration with the state or local health department” and consulting “the local or state TB-control program to obtain epidemiologic surveillance data necessary to conduct a TB risk assessment for the health-care setting.” This multi-step risk assessment is recommended to determine the types of administrative, environmental, and respiratory-protection controls needed for a health-care facility (page 9).

The CDC Guidelines define three risk classifications of health-care settings that guide TB testing frequency: low-risk, medium-risk, or potential ongoing transmission.

Appendix C of the CDC Guidelines states that the classification of patient treatment facilities into low- and medium-risk categories is determined by the annual number of TB patients treated at the facility. CDC recommends that the classification of low-risk should be applied to settings in which a risk assessment has determined that HCWs will “never be exposed to persons with TB

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disease or to clinical specimens that might contain *M. tuberculosis*.” The classification of medium-risk is to be applied to settings in which the risk assessment has determined that HCWs may be exposed to “persons with TB disease or to clinical specimens that might contain *M. tuberculosis*.” CDC recommends baseline two-step tuberculin skin testing (TST) or blood assay for *M. tuberculosis* (BAMT) for all HCWs upon hire. However, annual testing with TST or BAMT is recommended only for medium-risk facilities. HCWs in low-risk facilities are not required to be in a serial testing program following baseline testing on initial hire. If there is evidence of ongoing transmission of TB, more frequent testing of HCWs is required, regardless of the setting.

Justification for OHB Recommendations

OHB considered the following criteria in formulating recommendations for frequency of TB testing in California HCWs:

1. California’s tuberculosis case incidence rate remains among the highest in the nation. The risk of TB transmission in California is high primarily because of its large immigrant and other high-risk populations. Cases are often misdiagnosed at the initial treating facility. This may result in erroneous classification of a health-care setting into a low-risk category, latent exposures of HCWs, and delayed case detection. The risk in HCWs is apparent; 83 (3%) of the state’s 2,903 TB cases reported in 2005 were health care workers. (Note that surveillance data don’t differentiate whether the infection was acquired occupationally or in the community.)
2. Less frequent testing of HCWs may result in delayed detection of TST and BAMT conversions if an exposure didn’t trigger a complete contact investigation. Delayed detection of conversions results in lost opportunities for timely and effective therapy to prevent active TB from developing. If less frequent testing results in delays in diagnosis of cases of active disease in health care workers, TB can spread in the facility and community.
3. The majority of health-care facilities in California (60%) have less than 200 beds. The CDC Guidelines require only three TB cases a year for these small facilities to be classified as medium-risk and to result in annual testing requirements (Appendix C). One missed TB case can result in a facility being incorrectly classified into a
4. low-risk category, potentially resulting in exposure and disease among multiple HCWs and patients.
5. Historical data show that populations served by a health-care facility vary with management changes. Given the frequent management shifts recently observed among California facilities, variations in the patient population may result in rapidly shifting TB risks which may not be reflected in the facility risk classification. Health care workers also may be employed by several facilities, not all of which may be “low risk.”
6. Failure to conduct periodic TB testing in workers at a health-care setting classified as low-risk may give HCWs a false sense that the facility and its workers are not at risk for TB. Since the risk of TB is high throughout most of the state and since the risk may change depending on population and worker migration, HCWs should be aware that they may always be at risk of TB exposure.

7. Title 22 CCR gives the local health officer the ability to approve less than annual TB testing among HCWs in acute care hospitals. Specifically, Ch 1 §70723 (b) (3) states:

“Less frequent testing for tuberculosis, but never less than every four years, may be adopted as hospital policy when documented in writing as approved by the Infection Control Committee, the medical staff and the health officer of the health jurisdiction in which the facility is located.”

Title 22 CCR also allows flexibility in TB testing frequency among HCWs who work in psychology clinics (Ch 7.2 §75335) and psychiatric health facilities (Ch 9 §77121).

The following types of health-care settings are required to perform annual TB testing of HCWs according to Title 22: acute psychiatric hospitals, skilled nursing facilities, intermediate care facilities, home health agencies, primary care clinics, intermediate care facilities for the developmentally disabled, chemical dependency recovery hospital, and correctional treatment centers.

Based on the above criteria, OHB recommends the following:

1. Health-care facilities should protect HCWs from work-related TB infections by: a) assessing the number of patients with TB treated annually at the facility, and b) assessing the TB incidence in the community annually. These two components of the TB risk assessment must be performed annually according to procedures outlined in the 2005 CDC Guidelines. Corrective actions suggested by the risk assessment should be implemented and documented. The assessment and corrective actions must be reviewed and approved by the local health officer.
2. HCWs are best protected by annual TB screening; this allows for early detection and treatment and results in decreased morbidity and improved prognosis in the event of disease.
3. Acute care hospitals that demonstrate both low TB risk at the facility and low incidence in the community and that wish to lengthen the interval of TB screening among HCWs must obtain the approval of the local health officer. The interval of TB screening should be no less frequent than every two years, so that conversions can be detected (defined as a change within 24 months from negative to positive test for latent TB infection).
4. Acute care hospitals that elect to perform HCW TB screening biannually should notify the California Department of Health Services, Licensing and Certification District Office in their jurisdiction of their decision process and document that the decision was made with the approval of the local health officer.
5. Psychology clinics and psychiatric health facilities that demonstrate both low TB risk at the facility and low incidence in the community and that wish to lengthen the interval of TB screening among HCWs, must obtain the approval of the local health officer. The interval of TB screening should be no less frequent than every two years. Facilities that elect to perform biannually HCW TB screening must inform the CDHS Licensing and Certification Program of their decision process and must document that the decision was made with the approval of the local health officer.
6. Health-care settings that are required by Title 22 CCR to perform annual TB testing of HCWs may not decrease testing frequency at this time.

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In summary, to optimize early case detection and treatment outcome, OHB recommends annual TB screening of HCWs. Health-care facilities (acute care hospitals, psychology clinics, and psychiatric health facilities) that wish to perform less frequent screening must perform institutional and community risk assessments and must obtain the approval of the local health officer. These facilities must perform TB

screening of HCWs at least every two years. Please contact Dr. Rupali Das at (510) 620-5763 if you have any questions.

Sincerely,
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