

**COMMUNITY-BASED TUBERCULOSIS SCREENING USING QUANTIFERON®-TB GOLD:
THE SAN FRANCISCO EXPERIENCE**

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AIMS

To describe the San Francisco Department of Public Health's (SFDPH) experience using the QuantiFERON®-TB Gold (QFT-Gold) whole-blood interferon-gamma blood assay for targeted community tuberculosis (TB) testing and its impact on TB control and prevention activities in San Francisco.

METHODS

A retrospective cohort review of all QFT-Gold tests done between March 1, 2005 and October 31, 2006 was performed. Persons tested were matched to the TB Control Section's patient management database to assess referral and evaluation outcomes. Additional detailed analyses including analysis of age-dependent quantitative interferon-gamma response is pending.

RESULTS

Out of 11,420 blood samples sent for QFT-Gold testing, 10% (1,131) were positive for TB, 4% (486) were indeterminate, and 3% (322) were not tested. Among the homeless, 6% tested positive, a 77% and 65% decline from prior TST (26%) and QFT-TB (17%) positive rates, respectively. Among the foreign-born, 16% were QFT-Gold positive, a 57% decline from TST and QFT-TB positive rates (both 37%). Three persons with negative results became cases within 1 year of testing. All 3 were linked to recent transmission. One percent of community referrals (based on positive QFT) were identified as cases.

DISCUSSION

The use of QFT-Gold has expanded accurate LTBI surveillance to participating clinics through centralized laboratory data collection. Dramatic declines in the TB infection rates were seen across different populations and no cases were missed due to negative QFT-Gold results. Further analysis on the impact of these findings on TB control and prevention activities is pending.