

Efforts to eliminate tuberculosis in US by 2010 fall far short of benchmarks

February 1 2008

The U.S. is likely to fall far short of its benchmark goals toward eliminating tuberculosis as a public health problem, according to data from a nationwide survey.

Latent TB infection (LTBI) prevalence in the 1999-2000 U.S. population (excluding homeless and incarcerated individuals) was found to be 4.2 percent, according to the survey. The current infection rate would have to be 1 percent and decreasing if the U.S. were on course to reach its goal of TB incidence of less than one per million by 2010. These are the first survey-based national LBTI estimates since 1971-1972.

The findings were published in the first issue for February of the American Journal of Respiratory and Critical Care Medicine, published by the American Thoracic Society.

“Persons with LTBI are not infectious and cannot transmit TB to others, and only 5-10 percent of individuals with LTBI will go on to develop active TB, which is infectious. But because the risk of progression to TB can be substantially reduced by preventive treatment, it is crucial that LTBI be detected and treated,” said lead author Diane Bennett, M.D., M.P.H., of the Centers for Disease Control and Prevention.

The National Health and Nutritional Examination Survey (NHANES), a cross-sectional series of nationally representative health examination surveys, suggests that of the 11,213,000 with LTBI in the overall U.S. population, only one in four had been diagnosed, and only 13 percent

had been prescribed treatment.

"The LTBI rates among non-Hispanic whites, 1.9 percent, is close to that required for TB elimination, but the far higher rates among all other groups make U.S. TB elimination by 2010 unlikely," wrote Dr. Bennett and senior author Kenneth Castro, M.D., M.P.H.

In this study, researchers used data from 1999-2000 on 7,386 participants with TB skin test results. They intentionally over-sampled people with low income, adolescents, people over age 60, African-Americans, and Mexican-Americans so as to allow for separate analyses of these groups. The survey estimated that approximately 11 million individuals had LTBI in 1999-2000. While that represents a marked decline from the early 1970s, it also masks the shifting demographics of those who have LTBI.

Latent TB infections among individuals living below the poverty level, at 6.1 percent, were significantly higher than the 3.3 percent among individuals living above the poverty level. Because the data excludes homeless and incarcerated individuals, who make up much of the U.S. population living below the poverty line, the association may be even stronger than suggested.

Race and ethnicity were also associated with LTBI, even after accounting for socioeconomic status. "Among individuals born in the United States, higher LTBI rates were seen among non-Hispanic blacks and Mexican Americans compared with non-Hispanic whites," wrote Dr. Bennett.

Most striking, however, was the rate of infection among foreign-born individuals. In this survey, 18.7 percent of foreign-born individuals were infected with TB, compared to 1.8 percent of those born in the U.S. In 1999-2000, 6.9 million of the individuals with LTBI were foreign-born,

as compared with 4.1 million U.S.-born; only 12 percent of the foreign-born and 16 percent of the U.S.-born had received treatment.

“The higher LTBI rates among some subgroups suggest that specific public health actions should be taken for and with immigrant communities, racial minorities and individuals living in poverty,” Dr. Bennett said. “While LTBI is not infectious and latently infected individuals are not a threat to others, increased outreach for education, diagnosis and provision of appropriate preventive treatment could prevent many future cases of active TB.”

Source: American Thoracic Society

Citation: Efforts to eliminate tuberculosis in US by 2010 fall far short of benchmarks (2008, February 1) retrieved 4 May 2024 from <https://medicalxpress.com/news/2008-02-efforts-tuberculosis-fall-short-benchmarks.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.