

# Screening for pulmonary tuberculosis among military conscripts in Taiwan.

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摘要

## Abstract

**BACKGROUND AND PURPOSE:** Military service is obligatory for young men who are medically fit in Taiwan. Each year, all 19-year-old men are notified to undergo a required health check to determine their eligibility for military service. This study determined the prevalence of pulmonary tuberculosis (TB) among military conscripts in 1997 and 1998 and evaluated the effect of the mass radiographic screening program for military conscripts on the reported TB case rate. **METHODS:** During the annual health check, all 19-year-old men in Taiwan undergo miniature (70 x 70 mm) chest roentgenography (CXR). Those who have suspicious lesions on miniature films are notified to undergo follow-up CXR (14 x 14 inch) and sputum examinations. All these data for the period from 1997 to 1998 were analyzed to determine the prevalence of pulmonary TB. To evaluate the effect of the mass radiographic screening program among military conscripts on the reported TB case rates, annual data for newly diagnosed pulmonary TB in 1997 and 1998 were obtained from the National TB Register and analyzed by age and sex. **RESULTS:** A total of 305, 140 men eligible for military service underwent the required examination in 1997 and 1998. Pulmonary TB was diagnosed in 237 (0.08%) of these men, and 21 (6.9/100,000) had positive bacteriologic findings. In 1997 and 1998, the annual reported TB case rates for males and females were similar in both children and young adults, except for an early peak among men aged 19 years. **CONCLUSION:** The screening program resulted in a significant increase in the reported TB case rate among males aged 19 years. However, a low bacteriologic confirmation rate implies the possibility of over-diagnosis with CXR. Mass radiographic screening at the health check for military conscripts is inefficient in detecting bacteriologically confirmed TB, an observation with implications for screening policy development by the national TB program.