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Lung alert

Increasing numbers of isoniazid-monoresistant TB in the USA

In the USA between 1993 and 2003, while the incidence of multidrug resistant (MDR) tuberculosis (TB) decreased, the incidence of isoniazid-monoresistant TB (IMTB) increased. Understanding the reasons for isoniazid resistance is vital for successful TB treatment.

Data from the National Tuberculosis Surveillance System (NTSS) were collected on patients with IMTB and TB susceptible to isoniazid, rifampicin, pyrazinamide and ethambutol. The highest proportion of IMTB (43.0%) and drug-susceptible TB (36.9%) was among individuals aged 25–44 years. 59.1% of IMTB cases occurred in foreign-born patients. People of Asian or Pacific Island origins (US and foreign-born) represented the highest proportion of isoniazid-monoresistant cases (33.0%). There was a significant association between IMTB and a previous history of TB. An important finding was a link between IMTB and residence within a correctional facility. The importance of drug susceptibility testing in correctional facilities was highlighted. Unfortunately, 54.6% of cases had missing HIV data making comment on any association difficult.

This study highlights some important characteristics of IMTB. It also highlights areas where information is lacking. Almost 40% of all TB cases recorded by the NTSS were excluded from the study because they lacked data on drug susceptibility. The reason for increased numbers of IMTB while MDR TB is diminishing remains unexplained. Further information and analysis is needed to reduce the incidence of IMTB within the USA.

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338 Thorax April 2009 Vol 64 No 4