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MDR TB Trends in US

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In CDC's 1991 and 1992 first-quarter surveys of tuberculosis (TB) drug susceptibility, TB was found to be resistant to at least isoniazid (INH) in 9.1% and 9.6%, respectively. Multidrug-resistant (MDR) TB; resistant to both INH and rifampin) was found in 3.5% of all case-patients in 1991 and 1992.

The CDC recently reported the results from the first 4 years, 1993 through 1996, of national surveillance of drug resistance among all reported TB case-patients in the United States. Overall resistance to at least INH was 8.4%; rifampin, 3.0%; both INH and rifampin (MDR TB), 2.2%; pyrazinamide, 3.0%; streptomycin, 6.2%; and ethambutol hydrochloride, 2.2%. Rates of resistance were significantly higher for case patients with a prior TB episode.

Among those without prior TB, INH resistance of 4% or more was found in 41 states, New York City, and the District of Columbia. A total of 1,457 MDR TB cases were reported from 41 states, New York City, and the District of Columbia; 38% were reported from New York City. Rates of INH and streptomycin resistance were higher for cases among US-born compared with foreign-born patients, but rates of rifampin resistance and MDR TB were similar. Among US-born patients, resistance to first-line drugs, particularly rifampin mono-resistance, was significantly higher among those with HIV infection.

The CDC concluded that, compared with the US surveys in 1991 and 1992, INH resistance has remained relatively stable. In addition, the percentage of MDR TB has decreased, although the national trend was influenced significantly by the marked decrease in New York City. Foreign-born and HIV-positive patients and those with prior TB infection have higher rates of resistance. The widespread extent of INH resistance confirms the need for drug susceptibility testing to guide optimal treatment of patients with culture-positive disease.

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