

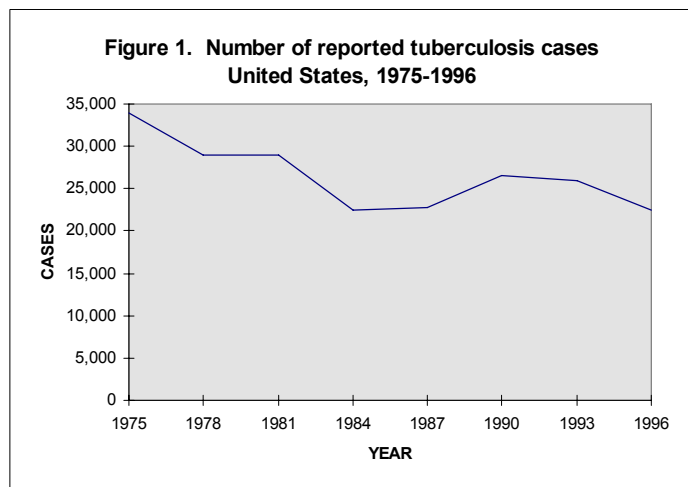
## CDC Update on Tuberculosis Progress Made— Continued Efforts Needed Managing the Risk

Application Note LC-121

Transmission of infectious tuberculosis (TB) is a risk to patients, visitors and workers in healthcare facilities. Although the number and rate of reported TB cases in the United States continues to decline, TB incidence for 1996 (8.0 cases per 100,000 population) exceeded the national goal of TB elimination (an incidence of less than 1 case per million population by 2010), with an interim incidence target rate of 3.5 cases per 100,000 population by the year 2000.

During 1996, a total of 21,337 cases of TB were reported to the Centers for Disease Control and Prevention (CDC) from the 50 states and the District of Columbia (DC). This total represents a 6.7% decrease from 1995 (22,860 cases [8.7 per 100,000 population]). This is the fourth consecutive year that the number of reported TB cases has decreased (Figure 1), resulting in the lowest number and rate of reported TB cases since national reporting began in 1953. This report summarizes TB surveillance data for 1996 and compares these data with selected data for previous years. The findings indicate a continuing decrease in the number of TB cases among U.S.-born persons and a leveling or slight decrease in the number of cases among persons born outside the United States and its territories (i.e., foreign-born).

During 1996, a total of 29 states reported fewer TB cases than in 1995, and 21 states and DC reported no change or more cases in 1996 than in 1995. In 1996, TB rates by state ranged from 0.7 per 100,000 population in Vermont to 16.9 in Hawaii. The rate in DC was highest of all reporting areas (25.6). Nineteen states met the interim target rate for the year 2000 of less than or equal to 3.5, compared with 16 in 1995. Compared with 1995, the number of reported TB cases in 1996 decreased in each sex and age group and all racial/ethnic groups.



### Enforcement

An Occupational Safety and Health Administration (OSHA) directive (OSHA Instruction CPL 2.106) gives agency compliance officers detailed instructions for inspecting facilities for TB hazards. According to OSHA, inspections for workplace exposure to TB should be conducted in response to employee complaints, fatalities or catastrophes, or as part of all industrial hygiene inspections. These inspections are



conducted in five workplaces, identified by CDC as having higher incidence of TB infection than other parts of the general population. Those workplaces include:

- Healthcare Facilities
- Correctional Facilities
- Long-Term Care Facilities for the Elderly
- Homeless Shelters
- Drug Treatment Centers

The directive further specifies that coverage of healthcare facilities include:

- Hospitals where patients with confirmed or suspect TB are treated or to which they are transported
- Workers in non-hospital healthcare settings such as doctor's offices and clinics, who are present during the performance of high-hazard procedures on suspect or active TB patients
- Dental healthcare workers who treat suspect or active TB patients in a hospital or correctional facility

Upon entering healthcare facilities, OSHA compliance officers should request the presence of the infection control, employee health, or other professional responsible for occupational hazard control. The compliance officer should establish whether or not the facility has had a suspect or confirmed TB case within the previous six months. If so, the officer should proceed with the TB portion of the inspection.

Employers may be cited for TB hazards under OSHA's General Duty Clause (Section 5a1) which requires employers to provide a workplace free of hazards that may cause death or serious physical harm.

Additional compliance pressures should also come from a three-year partnership between the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and OSHA. Initially, a cross education and training of JCAHO and OSHA staffs is taking place, aimed at increasing the technical abilities of the JCAHO surveyors.

## Compliance and Risk Management

The 1994 TB Guidelines issued by the CDC require hospitals to either conduct daily smoke and velocity tests to determine direction and magnitude of air flow, or to continuously monitor room pressures in rooms occupied by TB patients. Continuous monitoring not only frees up valuable personnel time, but validates that room pressure conditions are constantly maintained. If high or low limits are exceeded, both visual and audible alarms will activate notifying personnel that an unsafe condition exists. Additional management information is available by alarm contact tie-in and analog data recording via a building management system. Building management system interface not only records alarm conditions, but also facilitates documentation of incidents.

For more information on TSI healthcare monitoring and control products, call customer service toll-free at 800-876-2685 or visit the TSI website at <http://www.tsi.com>.

## References

1. *CDC Document #250150 dated September 3, 1997*
2. *1994 CDC Guidelines for Preventing Microbacterium Tuberculosis in Health Care Facilities*
3. *Health Care Safety Management Report, October 1996*

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