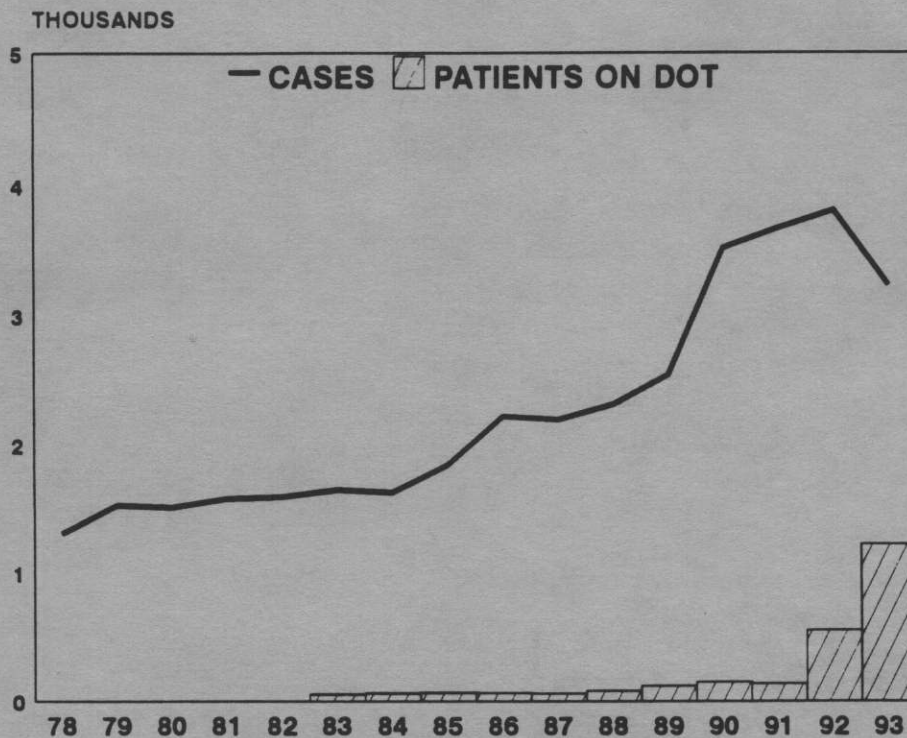


TUBERCULOSIS IN NEW YORK CITY 1993

Information Summary



**Bureau of Tuberculosis Control
New York City Department of Health**

Mission Statement

The mission of the Bureau of Tuberculosis Control is to prevent the spread of tuberculosis and eliminate it as a public health problem in New York City. The goals of the tuberculosis control program are:

- 1 To assure identification and appropriate treatment of all individuals with suspected or confirmed tuberculosis disease;
- 2 To ensure that high risk individuals (e.g., contacts, immunocompromised persons, foreign-born persons from areas of high tuberculosis prevalence) who are infected with tuberculosis but without tuberculosis disease receive preventive treatment and do not develop disease.

The Bureau achieves its goals through direct patient care, education, surveillance and outreach. Mandated activities include:

- 1 Ensuring that suspected and confirmed cases of tuberculosis identified in all facilities in New York City are reported to the Bureau and documented on the computerized, confidential tuberculosis disease registry;
- 2 Conducting intensive case interviews and maintaining an effective outreach program so that tuberculosis cases remain under medical supervision until completion of a full course of treatment, and that identified contacts receive appropriate medical care;
- 3 Monitoring and documenting the treatment status of all patients with active tuberculosis;
- 4 Setting standards and guidelines, and providing consultation, on the prevention, diagnosis and treatment of tuberculosis infection and disease in New York City;
- 5 Operating free chest clinics throughout New York City to provide state-of-the-art care for persons with suspected or confirmed tuberculosis disease and their close contacts; and
- 6 Ensuring free care for persons who have or are suspected of having active tuberculosis disease, in accordance with New York State Public Health Law 2202, Article 22, Title 1.

An Overview of Activities
of the Bureau of Tuberculosis Control

The Bureau of Tuberculosis Control operates a multifaceted program encompassing surveillance, epidemiology, outreach, clinical services, education, training, and other activities.

Clinical Services

The Clinical Services Unit operates ten chest clinics located throughout the City. The primary activity of these clinics is to provide specialty care, including directly observed therapy, for individuals with active tuberculosis. The clinics also provide preventive therapy, especially to individuals at high risk for developing TB. Services include tuberculin skin testing, chest x-rays, sputum induction, medical and nursing visits, social services, HIV counseling and testing, and other services. The clinics use a multi-disciplinary team approach to case management, in order to enhance patient adherence and treatment completion.

Outreach Services

The Bureau's outreach workers monitor hospitalized patients and outpatients, evaluate contacts of individuals with TB disease, and update patient information on a computerized registry. The unit provides medical case management, travels throughout the City to directly observe patients as they ingest their medication, locates and returns patients to medical care,

and tests contacts of individuals with TB. Specialty groups offer comprehensive care at the 30th Street Shelter and at Rikers Island, and offer services with the Division of AIDS Services single room occupancy sites in Upper Manhattan. The city operates a controlled treatment center at Goldwater Memorial Hospital for use when all other efforts have been exhausted, so that the most difficult-to-treat patients can complete a full course of treatment while the public health is safeguarded.

Directly Observed Therapy

Directly Observed Therapy (DOT) is a program in which individuals with active tuberculosis ingest their medications under the direct observation of a trained health care worker. This program ensures that individuals with active disease receive individual attention and optimal medical supervision through the entire course of treatment. DOT is provided through Department of Health clinics, outreach services, and private providers funded by the New York State Department of Health, Medicaid and Ryan White Care Act Funds. Although it is labor intensive, DOT reduces hospitalizations, decreases the costs of care, and increases the number of individuals completing the full course of treatment. DOT is the new standard of care for patients with active tuberculosis.

Directly Observed Preventive Therapy

Directly Observed Preventive Therapy (DOPT) occurs when trained health workers observe individuals infected with TB as

they ingest prescribed medication to prevent the development of active disease. DOPT is particularly important for people with TB infection who are at high risk for developing TB disease, such as those who are seropositive for HIV, substance abusers, or who are homeless. In 1993, DOPT was provided in single room occupancy hotels and in an HIV-related prevention program. DOPT workers provided substantial screening through substance abuse treatment agencies, and worked closely with several community-based organizations to prepare for on-site DOPT treatment programs. These programs will be implemented in 1994.

Epidemiology and Surveillance

The New York City Health Code requires that all health facilities and private physicians report confirmed or suspected cases of tuberculosis to the Health Department within 24 hours of diagnosis. The Surveillance Unit ensures that this reporting is done in a timely and thorough manner. The Bureau's Surveillance Unit conducts active surveillance at hospitals and laboratories throughout the City.

The Epidemiology Unit was expanded in 1993. Epidemiologists are involved in ongoing evaluations related to disease prevention and program management. The unit also conducts outbreak investigations and periodic reviews of the status of clinical and outreach patients.

Medical Affairs

Medical Affairs is a multidisciplinary unit that deals with infection control, environmental and occupational concerns, and clinical aspects of the management of TB. The unit monitors TB patients with multidrug-resistant tuberculosis, and also monitors care of contacts of these individuals.

Education and Training

In addition to providing introductory and in-service training to Department of Health (DOH) staff and non-DOH health professionals, the Education and Training Unit responds to public requests for information. The unit also provides educational brochures, fliers, posters, publications and technical articles. It distributes materials at health fairs, Department of Health clinic facilities and field offices, and other sites requesting educational documents.

Introduction

New York City continues to have one of the highest case rates of tuberculosis in the country. This report presents the demographic and geographic distribution of tuberculosis cases reported and confirmed in New York City in 1993. Rate calculations of cases per 100,000 population are based upon 1990 census data.*

In 1993, 3,235 new cases of tuberculosis were reported in the City. This incidence represents a 15.1% annual decrease since 1992's 3,811 cases, but is still a 114% increase over 1980, when 1,514 cases were reported. Case rates had been rising since 1979, and peaked at 52.0 per 100,000 in 1992. Cases rates are now 44.2 per 100,000 population (Table 1, Figure 1). The 1993 case rate is still higher than any of the City's case rates which occurred in the 1970s and 1980s (Table 1). This rate, 44.2 per 100,000, is four and a half times the national case rate of 9.8, and in 1993 New York City represented 12.8% of the nation's 25,313 reported tuberculosis cases.

Age Distribution

In 1993, people with active TB ranged in age from less than one year old to ninety-nine years old. The number of cases among

*This report uses the 1990 census to calculate case rates. The 1992 report also used the 1990 census data. Case rates from years previous to 1991 were based on the 1980 census.

children under 5 years old remained essentially stable (66 to 67) in 1993 compared with 1992. Among those aged 0 to 4 years (Table 2), black children represented 39 of the 67 cases (58%) and Hispanic children represented 21 of the 67 cases (31%).

Overall, there were 128 TB cases reported in children younger than 15 years, a 7.6% increase from 1992. This increase likely represents a surveillance artifact, since the number of culture confirmed cases in this age group decreased slightly between 1992 and 1993. There were 738 TB cases among the 25 to 34 year olds, a 20.7% decrease in incidence compared to 1992. In the 35 to 44 year age group, there were 963 cases, a 21.0% decrease since 1992 (Figure 2). Cases among those aged 45 to 64 years decreased 14.2% from 922 cases in 1992 to 791 cases in 1993. Cases among individuals over age 65 years increased 13% (364 to 412) compared to 1992.

Racial/Ethnic Distribution

Blacks and Hispanics together represent almost 80% of tuberculosis cases reported in the City (Figures 3 and 4). Blacks (males and females) represented 52.6% of all cases (Table 3). Their case rate of 92.2 per 100,000 was the highest of any racial/ethnic group. Hispanics represented 26.7% of all cases and had a case rate of 48.4 per 100,000. Blacks had the largest decrease in cases (18.0%) from 1992 of any racial/ethnic group.

The case rate of white New Yorkers, 12.3 per 100,000 population, remained the lowest of the racial/ethnic groups, even