

1999

Tuberculosis Control Program New York City Department of Health

INFORMATION SUMMARY



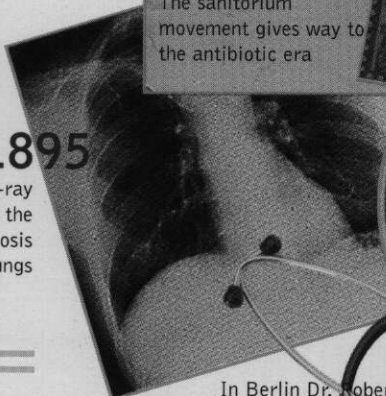
2400 BC

Evidence of tuberculosis found in Egyptian mummies



1940s

The sanatorium movement gives way to the antibiotic era



1895

Invention of X-ray photography allows the diagnosis of tuberculosis in the lungs



1882

In Berlin Dr. Robert Koch discovers the tubercle bacillus



1944

Tubercle bacillus is successfully treated by the discovery of streptomycin



1990s

Advocacy increases awareness that tuberculosis is curable today



tb =
mycobacterium
tuberculosis
phthisis

Tuberculosis
through the years

MISSION STATEMENT

The mission of the Tuberculosis Control Program is to prevent the spread of tuberculosis (TB) and eliminate it as a public health problem in New York City.

The goals of the TB Control Program are:

1. To identify all individuals with suspected or confirmed TB disease and ensure their appropriate treatment, ideally on a regimen of directly observed therapy.
2. To ensure that individuals who are at high risk for progression from latent infection to active disease (e.g., contacts of active cases, immunocompromised individual, recent immigrants from areas where TB is widely spread) receive treatment for latent TB infection and do not develop disease.

The Program achieves its goals through direct patient care, education, surveillance, and outreach. Its mandated activities include the following:

1. Ensuring that suspected and confirmed cases of TB identified in all facilities in New York City are reported to the Program and documented on the computerized confidential TB disease registry.
2. Conducting intensive case interviews and maintaining an effective outreach program so that TB cases remain under medical supervision until completion of a full course of treatment and identified contacts receive appropriate medical care.
3. Monitoring and documenting the treatment status of all patients with active TB.
4. Setting standards and guidelines and providing consultation on the prevention, diagnosis, and treatment of latent TB infection and disease in New York City, at no cost to the patient.
5. Operating clinical sites throughout New York City that provide state-of-the-art care for persons with suspected or confirmed TB disease and their close contacts, at no cost to the patient.
6. Ensuring care for persons who have or are suspected of having active TB disease, in accordance with New York State Public Health Law §2202, Article 22, Title 1, at no cost to the patient.

Public health law mandates that health care providers report two groups of patients to the New York City Department of Health within 24 hours of detection.

1. All suspected and confirmed tuberculosis cases which have:
 - A smear (from any anatomic site) positive for acid-fast bacilli (AFB);
 - A nucleic acid amplification test (e.g., Amplicor®, Gen-Probe®) result suggesting *Mycobacterium tuberculosis*;
 - A culture positive for *Mycobacterium tuberculosis*; or
 - Started on two or more anti-tuberculosis medications for treatment of suspected or confirmed active tuberculosis.
2. All children younger than 5 years with positive tuberculin skin tests.

Mycobacteriology and pathology laboratories are required to report to the New York City Department of Health in the following findings which suggest or confirm tuberculosis:

- AFB positive smears
- Cultures positive for *Mycobacterium tuberculosis*
- Rapid diagnostic results that identify *Mycobacterium tuberculosis*
- Results of susceptibility tests performed on *Mycobacterium tuberculosis* cultures
- Pathology findings consistent with tuberculosis, including the presence of AFB and granulomata

Information on ordering reporting forms is on the inside back cover.

* Product names are provided for information only and do not imply endorsement by the New York City Department of Health.

**NEW YORK CITY DEPARTMENT OF HEALTH
TUBERCULOSIS CONTROL PROGRAM**

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HIGHLIGHTS

1. In 1999, 1,460 new cases of tuberculosis were reported in New York City, a 6.3% decrease from the 1,558 cases reported in 1998 and a 61.7% decrease from the 3,811 cases reported in 1992, the peak of the current epidemic. New York City's tuberculosis rate in 1999 was 19.9 cases per 100,000 persons, compared with 21.3 in 1998 and 52.0 in 1992.
2. Despite several years of progress, New York City's 1999 tuberculosis rate is still more than three times the national rate of 6.4 per 100,000, and is higher than any other jurisdiction reporting more than 100 cases. The city's rate remains far above the national goal established for tuberculosis control by the year 2000, of 3.5 cases per 100,000 persons.
3. In 1999, 31 of New York City's tuberculosis patients had strains of *Mycobacterium tuberculosis* that were resistant to at least isoniazid and rifampin (the two most important medications available to treat tuberculosis), an 18.4% decrease from the 38 cases reported in 1998 and a 93.0% decrease from the 441 cases reported in 1992.
4. Directly observed therapy (DOT) and intensive case management continue to result in high rates of completion of therapy: of the cohort of eligible patients diagnosed in 1998, 1,154 (88.5%) completed treatment within 365 days. Excluded from this index are patients found not to have tuberculosis, those who died, those who never started anti-tuberculosis therapy, those less than 21 years of age with bone, military, or meningeal tuberculosis, and those with *Mycobacterium tuberculosis* isolates initially resistant to rifampin.
5. Improved case management and infection control procedures have reduced transmission of infectious tuberculosis and led to decreases in the diagnosis of active tuberculosis in settings where it was flourishing in 1992: homeless shelters, prisons and hospitals. As the epidemic has been brought under better control among persons born in the United States, an increase has been observed in the proportion of total cases which are foreign born. The trend toward a predominance of foreign-born cases continued for the third consecutive year in 1999: 834 of 1999 cases were foreign born (57.1%), 605 were U.S. born (41.4%), and 21 (1.4%) had an unknown country of origin. In contrast, in 1992, only 17.7% of tuberculosis cases diagnosed in New York City were foreign born. Increases in foreign-born cases in Queens and Staten Island are in part responsible for the increases in the total number of cases reported in these boroughs and the increase in the number of cases aged 35 through 44 years.
6. The proportion of total cases known to be infected with the human immunodeficiency virus (HIV) in 1999 (22.0%, 321 cases) was similar to the percent known to be HIV-positive in 1998 (22.2%, 346 cases).
7. To reduce the future burden of tuberculosis in New York City, greater emphasis has been placed on ensuring that persons infected with *Mycobacterium tuberculosis* complete a course of treatment for latent infection, especially if they are recently infected contacts to active cases or otherwise at high risk of progression to active disease. In 1998, 11,830 individuals started taking treatment for latent tuberculosis infection; 513 discontinued treatment for medical reasons or died during treatment and 6,434 (56.9%) of the remaining 11,317 completed treatment. Of those starting treatment for latent tuberculosis infection, 8,384 (70.9%) started receiving their care at Department of Health chest clinics.