Section I. Introduction to the 4th Edition

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Director's Statement

This manual describes policies, protocols and recommendations for the prevention, treatment and control of tuberculosis from the New York City Department of Health and Mental Hygiene (NYC DOHMH). It was written primarily for the medical providers of the New York City Bureau of Tuberculosis Control (BTBC) as a reference guide on tuberculosis diagnosis, treatment and prevention. Originally published in 1993, with subsequent editions in 1997 and 1999, the 4th edition of the manual has been updated to reflect changes in national recommendations and BTBC protocols. We continue to use our modified version of the International Classification of Tuberculosis (see inside back cover) for patient classification.

While this manual is comprehensive and covers both routine and complex issues, it cannot and should not be substituted for the best judgement of individual physicians in specific clinical situations. Strict adherence to clinical protocols, however, will result in improved care and consequent control of TB for most patients. Clinicians in the BTBC chest centers and others who use this manual are strongly encouraged to seek expert consultation when needed, particularly in special situations such as drug-resistant tuberculosis.

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About the 4th Edition

This manual was first published in 1993 to guide New York City in our struggle to bring the tuberculosis epidemic under control. Based on national guidelines and the best current consensus of clinical and published data, subsequent editions were published in 1997 and 1999 for use in our chest centers and by New York City physicians for the diagnosis, treatment and prevention of tuberculosis (TB). The 4th Edition incorporates national guidelines published in 2003.

Like most areas of medical treatment, TB control is an evolving field. New medications and treatment protocols continue to be researched and introduced. This edition includes new policies and procedures for diagnosing and treating active TB, and screening and treatment of latent tuberculosis infection (LTBI) adopted by the Centers for Disease Control and Prevention (CDC), American Thoracic Society (ATS), Infectious Diseases Society of America (IDSA) and American Academy of Pediatrics. The CDC now refers to preventive treatment as treatment of LTBI—this change in terminology is reflected in the current edition of the manual.

Treating TB is beneficial to individuals and to the community as a whole as it reduces transmission. Physicians who properly treat TB and ensure successful completion of therapy are therefore performing an essential public health service.

This version of the provider manual has been reorganized to prioritize TB control activities. The sections on the evaluation and treatment of patients with active TB are presented first because the principal strategy for controlling TB is (1) to promptly identify individuals with infectious TB and (2) to quickly and permanently render them noninfectious through effective treatment.

Keeping patients under care until they complete treatment can be very challenging; therefore, an extensive case management section is included to reflect this important public health aspect of TB control. Contact investigation remains the next most important priority, and updated and detailed BTBC guidelines are included herein. Targeted testing and treatment of LTBI guidelines have been moved to the end of the manual and incorporate the most recent ATS/CDC/IDSA recommendations. Note: In this manual, M. tb generally refers to all the organisms of the M. tb complex, not just M. tuberculosis.

For information not included in this manual, consult one of the individuals listed on p. 11.

The 2003 National Guidelines

The ATS, CDC and the IDSA published revised guidelines for the treatment of TB in 2003 (visit: <u>www.cdc.gov/MMWR/PDF/rr/rr5211.pdf</u>). New features include:

- Patient-centered case management, with an adherence plan that emphasizes directly observed therapy (DOT) as the initial treatment strategy
- Use of rifapentine and isoniazid once weekly in the continuation phase of treatment (months 3–6) for select HIV-negative patients
- Recommendations to obtain sputum cultures at the end of the intensive phase of treatment (end of month 2) to identify those at increased risk of subsequent relapse. If cultures are positive, the continuation phase of treatment should be prolonged for certain individuals (see p. 43).

The 2003 national guidelines clearly assign responsibility for successful treatment to private providers and public health programs, **not** to the patient. Physicians should ensure that every TB treatment plan stresses the use of DOT. For patients with drug-susceptible TB, providers should use intermittent regimens to facilitate the provision of DOT. To achieve TB treatment goals, physicians and the BTBC need to increase their commitment to collaborate. By coordinating care with local public health authorities, physicians are more likely to achieve better outcomes for their patients.

Rifapentine

Rifapentine is a recently approved anti-TB drug that is not yet widely used in clinical settings. Clinical data support intermittent use of rifapentine with isoniazid during the continuation phase of TB treatment for patients with culture-positive non-cavitary pulmonary TB whose sputum is smear negative for acid-fast bacilli (AFB) at the end of the 2-month intensive phase. Rifapentine (600 mg) is administered once weekly with isoniazid (900 mg) in the continuation phase of treatment. This combination should only be given under direct observation. As with rifampin, drug-drug interactions are common and patients should be monitored regularly. Ease of administration makes this regimen attractive for both TB control programs and patients.

Rifapentine should not be used in HIV-infected patients, given their increased risk of developing rifampin resistance on currently recommended dosages. Data are inadequate to recommend rifapentine in children younger than 12 years of age, pregnant or lactating women, or individuals with culture-negative or extrapulmonary tuberculosis.

Use of Fluoroquinolones in the Treatment of Tuberculosis

The use of fluoroquinolones in the treatment of TB has become more common. They are preferable for use because they are oral agents, have few major side effects and the newer fluoroquinolones appear to be as potent as certain first-line TB drugs. Fluoroquinolones are indicated when first-line TB drugs are not tolerated, in liver sparing regimens and for disease with strains resistant to first-line TB drugs.

The most commonly used agents in patients with active TB are levofloxacin and moxifloxacin. This manual provides recommendations for the use of old and new agents, and highlights adverse effects, especially the newly recognized blood sugar control issues with the use of fluoroquinolones (see p. 91).

BTBC Guidelines vs. ATS/CDC/IDSA Guidelines

The BTBC guidelines are similar to the national guidelines. Differences are summarized below.

• Prolonged treatment for patients with a positive culture at 2 months. CDC/ATS/IDSA guidelines recommend 9 months of treatment for individuals with drug-susceptible TB who have a cavity on initial chest X-ray (CXR) and who are still culture positive at 2 months. In addition, they recommend that anyone with cavitation or positive culture at 2 months receive 9 months of treatment at the discretion of their physician. The BTBC agrees with the former, but in addition recommends prolonged treatment for anyone with a positive culture at 2 months regardless of CXR results. Cavitation alone is not given as a criterion for prolonged treatment.

• Intermittent therapy for HIV-infected patients. The 2003 national guidelines recommend either daily or 3 times a week intermittent therapy for patients who are HIV infected, with a CD4 T-lymphocyte cell count of less than 100/mm³.

However, BTBC recommends that such patients be treated with a daily regimen in the intensive phase of TB treatment, and either daily or 3 times a week in the continuation phase.

For patients with CD4 count greater than or equal to 100 cells/mm³ at the time of TB diagnosis, the BTBC recommends a daily regimen in the intensive phase and regimens of either 2 times or 3 times a week in the continuation phase. All patients who are HIV infected should receive TB treatment with DOT.

• Duration of therapy for smear- and culturenegative active pulmonary TB. The BTBC now follows the CDC/ATS/IDSA recommendations with respect to treatment for smear- and culture-negative TB by recommending that patients with smear- and culture-negative TB be started initially on 4 drugs (isoniazid, rifampin, pyrazinamide and ethambutol), in the intensive phase. At the 2-month assessment, if the patient is responding to therapy and no other etiology is identified, treatment can continue with only isoniazid and rifampin under certain conditions (e.g., patient has never been treated before). The common BTBC term for this regimen is "4 for 2 and 2 for 2."

The ATS/CDC/IDSA guidelines recommend an initial CXR and a repeat CXR at 2 months. The BTBC follows these recommendations and, in addition, recommends a CXR at the completion of 4 months of therapy.

- Evaluation and management of patient with old fibrotic changes on CXR consistent with TB. A "4 for 2 and 2 for 2" regimen is considered acceptable for old TB, and is preferred over the 9-month isoniazid regimen.
- Use of pyrazinamide in pregnancy. The ATS/CDC/IDSA guidelines do not recommend the use of pyrazinamide during pregnancy, although the World Health

Organization does. In this manual, the BTBC recommends treating pregnant women with isoniazid-resistant tuberculosis with rifampin, pyrazinamide and ethambutol.

- Use of ethambutol in children. The BTBC recommends treating children with standard 4-drug therapy, provided that visual testing can be done or if they are at high risk of having drug-resistant TB. In addition, ethambutol dosage in children should be 20 mg/kg daily, based on new literature (see p. 59).
- Sputum and chest X-ray at completion of therapy for drug-sensitive patients. The BTBC recommends collecting sputum at the end of treatment to document cure, plus a new baseline CXR in case the patient relapses or develops another pulmonary disorder. The BTBC also recommends a CXR at the completion of treatment to provide a baseline for comparison with future CXRs.

There is no specific recommendation for sputum collection at the end of treatment according to ATS/CDC/IDSA guidelines; the guidelines suggest that a CXR at the end of treatment is useful, but not essential.

• Follow-up after treatment completion. At the end of treatment for multidrug-resistant TB (MDRTB), the BTBC recommends that all patients with MDRTB be followed for 2 years, including clinical evaluation, sputum collection and CXR every 3 months in the first year after completion of therapy, and every 6 months during the second year. Patients who did not receive rifampin or rifabutin should also be followed in this manner. Recommendations for follow-up care of non-MDRTB patients who received non-standard regimens are also provided (see pp. 115-16, including Table VI-2).

Treatment of Patients Who Are Co-Infected with Tuberculosis and HIV

Treatment of patients co-infected with TB and HIV should be coordinated between the TB and HIV providers to ensure optimal treatment for both diseases.

Treatment of TB in the presence of HIV infection is complicated by drug-drug interactions between rifamycins and the protease inhibitors (PIs) and nonnucleoside reverse transcriptase inhibitors (NNRTIs) used to treat HIV infection.

Specific recommendations related to rifampin:

- Previous recommendations specifically contraindicate the use of rifampin with any PIs or NNRTIs.
- New data indicate that rifampin can be used for treating active TB in patients whose antiretroviral regimen includes efavirenz with 2 or more nucleoside/nucleotide reverse transcriptase inhibitors. Nevirapine may be used with rifampin in selected patients (see p. 51).
- Use of rifampin with boosted saquinavir at any dose seems to be contraindicated.

Specific recommendations related to rifabutin:

- Rifabutin can be used with regimens containing efavirenz or nevirapine, or a single PI (<u>except</u> <u>saquinavir alone</u>), with some dose adjustments.
- It can also be used with several ritonavirboosted combinations.
- Data is lacking on the use of rifabutin in antiretroviral regimens containing combinations of NNRTIs and PIs, or multiple PIs, and should be used with caution.

Hospitalization and Discharge Guidelines

Diagnostic assessment and treatment of TB can be achieved in an outpatient setting for most individuals. The decision to admit a patient to a hospital should take into account all relevant aspects of care, including the costs associated with unnecessary admissions. With the advent of modern anti-TB chemotherapy, hospitalization is no longer necessary for effective TB treatment. Studies have shown outpatient TB treatment achieves cure rates that are comparable to inpatient care, and that outpatient therapy is not associated with an increase in TB transmission in the community.

This manual provides detailed guidelines for patients with infectious TB, regarding admission, airborne isolation, discharge and return to work, school and other congregate settings (see p. 121).

Targeted Testing and Latent Tuberculosis Infection

Despite the dramatic decline in the number of reported cases of TB in New York City, many New Yorkers remain at high risk for developing active tuberculosis disease once they are infected with Mycobacterium tuberculosis (M. tb). Groups at especially high risk include contacts of persons with active TB, HIV-infected persons, individuals with certain predisposing medical conditions and recent immigrants from countries with high rates of TB.

In April 2000, the ATS and CDC revised their guidelines for the treatment of LTBI, which were subsequently endorsed by IDSA and the American College of Physicians: <u>www.cdc.gov/mmwr/preview/mmwrhtml/</u> <u>mm5231a4.htm</u>; sections on infants and children were endorsed by the AAP. New developments since that time are detailed below.

- In 2003, the CDC revised its guidelines on the use of rifampin and pyrazinamide for the treatment of LTBI due to unacceptable levels of hepatotoxicity: www.cdc.gov/mmwr/preview/mmwrhtml/mm5231a4.htm.
- In October 2004, the Pediatrics Tuberculosis Collaborative Group published revised recommendations on targeted tuberculin skin testing and treatment of LTBI in children and adolescents: <u>http://pediatrics.aappublications.org</u> /cgi/content/full/114/4/S2/1175.
- The tuberculin skin test (TST) performed by the Mantoux method is the most commonly used method for identifying TB infection. Since 2001, blood-based testing has become available as an alternative to the TB skin test (see p. 183).

This manual provides updated recommendations based on all of the above guidelines and summarizes fundamental aspects of testing and treatment of LTBI. Topics covered include whom to test for TB, revised LTBI treatment regimens, updated recommendations on the treatment of individuals who are HIV-positive and who are receiving antiretroviral agents and rifamycins, screening and treatment of children and information on the use of blood-based TB tests.

Terminology in this manual has been changed to reflect the availability of blood-based tests for TB infection. The term TST is only used in this manual in specific instances that reference the tuberculin skin test. A more general term, test for TB infection, is generally used instead. The manual also covers new recommendations on the treatment of LTBI in certain groups of patients.

Key Sources

The key sources included in this manual have served as the basis for most of the BTBC guidelines and provide readers with sources for further information on managing the many difficult issues around the treatment of patients with TB. The references are listed by section and are arranged alphabetically; none are cited individually in the text of the manual. Drug monographs and manuals from manufacturers are **not** listed and should always be consulted as needed. An extensive reference list is available at <u>www.nyc.gov/health/tb</u>.

Appendices

Many of the appendices in prior versions have been removed as the national guidelines are easily accessible online. BTBC forms are available on the BTBC Intranet <u>www.nyc.gov/html/doh/html/tb/tb-hcp.shtml#form</u>, and others are on the BTBC Web site. Important aspects of management, previously located in the appendices, have been incorporated into the various sections.

Tuberculosis Surveillance and Epidemiology

Surveillance

Surveillance is a key component of TB control; it is the ongoing collection, analysis, interpretation and dissemination of health data essential to the development and evaluation of public health programs. The objectives of TB surveillance are to:

- Ensure complete reporting of patients suspected of having or confirmed to have tuberculosis
- Maintain and improve the quality and integrity of information on persons with TB
- Facilitate the management of patients with TB
- Ensure the prevention of the transmission of *M. tb* via timely contact investigations

Surveillance data are validated and verified using case review, data validation checks, analysis of timeliness of reporting and audits at microbiology and pathology laboratories. Surveillance data are used to produce data reports and outcome indicators, answer research questions and evaluate interventions.

The reporting of tuberculosis by laboratories and clinical providers is mandated by the New York City Health Code and New York State regulations. Reports must be received at the Health Department within 24 hours of diagnosis, specimen collection or start of anti-TB treatment. Providers can provide reports via telephone, fax, overnight mail or electronic "Universal Reporting Form" (URF) (Form PD-6), available online at www.nyc.gov/html/doh/html/hcp/hcpurf.shtml. Click "Information & Services for Health Care Providers." As of July 1, 2006, all laboratories in New York City must report electronically, either via file transfer or via direct entry into a Web page. See p. 229, Appendix II-A for reporting requirements.

The Office of Surveillance also ensures the transfer of patients suspected or confirmed with TB to and from NYC. As patients with TB travel or relocate, it is essential that their care continues to be coordinated when travel is long term or involves permanent relocation.

Tuberculosis Epidemiology in New York City

Since the peak of the most recent TB epidemic in 1992, the **number** of TB cases has declined by more than 74%, from 3,811 in 1992 to 984 in 2005 (the first time there have been less than 1,000 cases). The **rate** of TB declined from 51.1 cases per 100,000 in 1992 to 12.3 per 100,000 in 2005. The dramatic decrease in cases is attributable to improved case finding strategies, standard treatment with 4 anti-TB drugs, comprehensive patient management practices and DOT. In addition to reducing active TB cases, the intensive effort by BTBC to control the epidemic in the city has also led to decreases in drug resistance and TB deaths—there were 95% fewer MDRTB cases in 2005 than in 1992 and almost 90% fewer patients co-infected with HIV.

While TB has decreased considerably in NYC both overall and among U.S.-born individuals, the proportion of non-U.S.-born persons increased substantially, from about 18% in 1992 to 70% in 2005. The cases originate from all over the world, but the greatest numbers are from Asia, and Central and South America.

Similar to the U.S., most TB cases in NYC (almost 80%) are among adults aged 25 to 64 years, two-thirds are male and cases are nearly equally divided among Hispanic, black-non-Hispanic and Asian people. From 2001 to 2005, 76% of TB cases were culture positive, half were AFB smear positive from any site, 80% had pulmonary disease and 16% were HIV infected. Of culture-positive patients, 2% to 4% had MDRTB, while 12% to 15% had other drugresistance patterns. In the last few years, approximately 32% of TB cases were residents of Queens, 32% of Brooklyn, 20% of Manhattan and 16% of the Bronx; these numbers include some 18 to 30 inmates of correctional facilities with TB each year.

The continued immigration of large numbers of people from countries with a high incidence of TB, and the plethora of homeless and HIVinfected persons in NYC pose a serious challenge to TB control in the city.

Confidentiality and Health Insurance Portability and Accountability Act Regulations

Protection of patient confidentiality is of the utmost importance to public health. Maintaining confidentiality assures that patients, their families and their communities have the trust necessary to collaborate with the Department of Health regarding patient treatment, contact investigation and other issues. Violation of a patient's confidentiality is a very serious infraction of New York State Public Health Law, New York City Health Code, Policies and Procedures of the BTBC and Standards of Conduct of the City of New York.

Laws Governing Confidentiality

• Article 11 (Reportable Disease and Conditions) of the NYC Health Code: Lists basic provisions related to reporting, control and confidentiality of communicable diseases, including TB. Section 11.07 also allows the DOHMH to furnish "appropriate information... to any person when necessary for the protection of health."

- Public Health Law 2221: Outlines confidentiality of TB records and information obtained or maintained by state and local health departments.
- State Sanitary Codes 2.17 and 2.18: Outlines laws regarding the confidentiality of general medical records.
- State Sanitary Code, Part 2, Section 2.6(c): Directs public health personnel to "instruct a responsible member of the household of the means to be taken to prevent further spread of the disease and to put into effect those other recognized measures which tend to reduce morbidity and mortality."
- Public Health Officers Law, Code of Ethics, Section 74.3.C: Provides that an employee who knowingly and intentionally violates its provisions may be fined, suspended or removed from employment.
- New York State HIV Confidentiality Law, Article 27F: Requires that information about AIDS and HIV be kept confidential and anyone receiving an HIV test must sign a consent form first. The law strictly limits disclosure of HIV-related information. When disclosure of HIV-related information is authorized by a release signed by the patient, the person who has been given the information must keep it confidential; new disclosure may occur only with another authorized signed release from the patient. The law only applies to people and facilities providing health or social services.
- The Health Insurance Portability and Accountability Act of 1996 (HIPAA): A privacy rule that protects all individually identifiable health information in any form (electronic or non-electronic) that is held or transmitted by a covered (e.g., hospitals, physicians) entity. It gives individuals the right to inspect, copy and request amendment to their medical record.

HIPAA Privacy Rule

On August 14, 2002, the U.S. Department of Health and Human Services (HHS) published final HIPAA Privacy regulations. Most providers covered by HIPAA Privacy regulations were required to comply with these regulations as of April 14, 2003. These rules provide the first national standards for protecting the privacy of health information and certain individually identifiable health data, referred to as protected health information (PHI). PHI is individually identifiable health information that is transmitted or maintained in any form or medium (e.g., electronically, on paper, or orally), but excludes certain educational records and employment records.

In enacting HIPAA, Congress was very clear in its intent that the regulations not impede public health practice [42 USCA Section 1320d-7(b)]. HHS similarly recognized the importance of continuing to authorize the sharing of protected health information for public health purposes. The federal regulations authorize covered entities to disclose protected health information without an individual's authorization or the opportunity for the individual to agree or object, to a public health authority "...authorized by law to collect or receive such information for the purpose of preventing or controlling disease, injury, or disability, including, but not limited to, the reporting of disease, injury, vital events such as birth or death, and the conduct of public health surveillance, public health investigations, and public health interventions..." [45 CFR Section 164.512(b)(1)(i)].

Furthermore, the privacy regulations authorize providers to disclose protected health information without an individual's authorization or the opportunity for the individual to agree or object when disclosure is required by law [45 CFR Section 164.512(a)]. The New York City Health Code, the New York State Sanitary Code (effective in New York City) and the New York State Public Health Law authorize and in fact require the reporting of numerous diseases or conditions (for example, communicable diseases such as TB, severe acute respiratory syndrome [SARS], immunizations administered to a child under the age of 7 years and HIV/AIDS [Health Code Sections 11.03 and 11.04, 10 NYCRR Section 2.10 and Public Health Law Section 2130]).

In addition to the information routinely required to be reported to DOHMH, there may be instances when DOHMH may request information necessary for a public health activity. Privacy regulations, with limited exceptions, require covered entities to limit the amount of information disclosed to the minimum necessary to accomplish the intended purpose. Disclosing the minimum necessary is not applicable to disclosures required by law [45 CFR Section 164.502(b)(2)(v)]. As per the Privacy regulations, when the Department requests information as authorized by law, the covered entity may rely on the Department's representation that the information requested is the minimum amount of information necessary to carry out the authorized public health activity [45 CFR Section 164.514(d)(3)(iii)].

To ensure compliance and cooperation, access to paper and electronic medical records as necessary should be provided to DOHMH staff with appropriate credentials. Failure to report information to NYC DOHMH, as required by law, would be a violation of the public health laws outlined above and may result in legal sanctions.

NYC DOHMH is legally mandated to ensure the confidentiality of all information received from providers, and continues to attach the highest level of confidentiality to reported information.

Talking to Tuberculosis Patients and Contacts

The laws and regulations about confidentiality and tuberculosis should be explained to every patient at the beginning of treatment and reinforced when appropriate. The explanation should help ensure protection of the patient's confidentiality. If translation is necessary, it is advisable to use BTBC employees or a language translation service, since using a family member or outside translator may breach confidentiality.

When evaluating contacts, BTBC employees may not disclose the source case's identity, address or any medical conditions, including TB. Contacts may be told that the DOHMH believes they have been exposed to someone with infectious TB. However, if an infectious person is going to be treated as an outpatient, the household members need to be told of this and be taught how to minimize their exposure. (See p. 126 and Appendices III-E and III-F.)

Often family, friends and co-workers already know that the patient is on treatment; however, BTBC employees cannot confirm that information. In these situations BTBC employees should say, "I am sorry, but I am legally bound by laws of confidentiality and cannot reveal any information."

It is BTBC policy that rules of confidentiality apply to patients even if they have died; an exception may be made when doing the initial interview of the next of kin. In that circumstance, the diagnosis and transmission of tuberculosis must be explained to the next of kin in order to obtain information regarding contacts. Beyond that initial interview, BTBC employees may not disclose any confidential information regarding the deceased when talking to contacts of a person who is diagnosed with TB at death.

Exceptions to Confidentiality Rules

Confidentiality protection is not absolute. Generally, the exceptions to the rule are based on a "need-to-know"—either to treat the individual patient or to protect the public health. When questions arise about disclosure of protected health information, the decision to disclose should be made in consultation with the employee's supervisor and with the approval of a BTBC authorized staff who is acting on a need-to-know basis and under the guidance of the DOHMH law unit. Such release of information must be carefully documented in the patient record and other relevant documents such as a case investigation record.

The following are the general areas of exception:

Protection of the Public Health

This is a broad exception that requires the patient's right to confidentiality balanced against the threat to the public health. The risk of transmission must be so great that a breach of confidentiality is warranted. Exceptions may occur when the patient provides consent or staff is confronted with an exceptional situation in which the patient is knowingly endangering the health of others. In these instances, the decision to disclose information should be made in consultation with a supervisor.

Reporting

Physicians are required to report every suspected or confirmed case of TB and the BTBC is required to monitor the TB treatment of all reported cases. Physicians are also required to examine all household contacts or refer them to the BTBC for examination. Therefore, even though it may seem like a breach of confidentiality to obtain information about patients from private doctors, this is an essential part of the BTBC's work and is required by law.

Contact Investigations

When conducting TB exposure evaluations, it may be necessary to reveal the identity of a patient to a site administrator. This might occur when there is a need to identify a TB patient's working area or school classes to determine specifically which co-workers or students have had close contact with the patient. The patient's name may only be revealed to an administrator or school principal with the understanding that the information will not be released to other employees or students. The administrator or principal is bound by the Americans with Disabilities Act to protect the identity of the worker or student.

Sharing of Information with Other Agencies

The law allows the release of TB information to physicians or institutions providing examination of or treatment to a patient. When there is an ongoing need to share information to protect the public health, agreements may be negotiated between agencies, establishing the type of information to be shared and who will have access to it. There must be a legitimate medical or public health need for the information—and these organizations are not permitted to re-disclose the information unless necessary to treat the patient or protect the public health.

Mission Statement, New York City Bureau of Tuberculosis Control

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

The goals of the BTBC are:

- 1. To identify all individuals with suspected or confirmed tuberculosis (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 individuals and recent immigrants from areas where TB is widespread) receive treatment for latent TB infection and do not develop disease.

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

- Ensuring that suspected and confirmed cases of TB identified in all facilities in New York City are reported to the BTBC and documented on the computerized, confidential TB Registry.
- 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.
- Monitoring and documenting the treatment status of all patients with active TB.
- Setting standards and guidelines, and providing consultation on the prevention, diagnosis and treatment of latent TB infection and disease in New York City.
- 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.
- 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.
- Collaborating with community-based organizations and health and social agencies in New York City and New York State to improve case-finding and the prevention and control of TB through education, outreach and targeted screening in communities at high risk for TB.

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