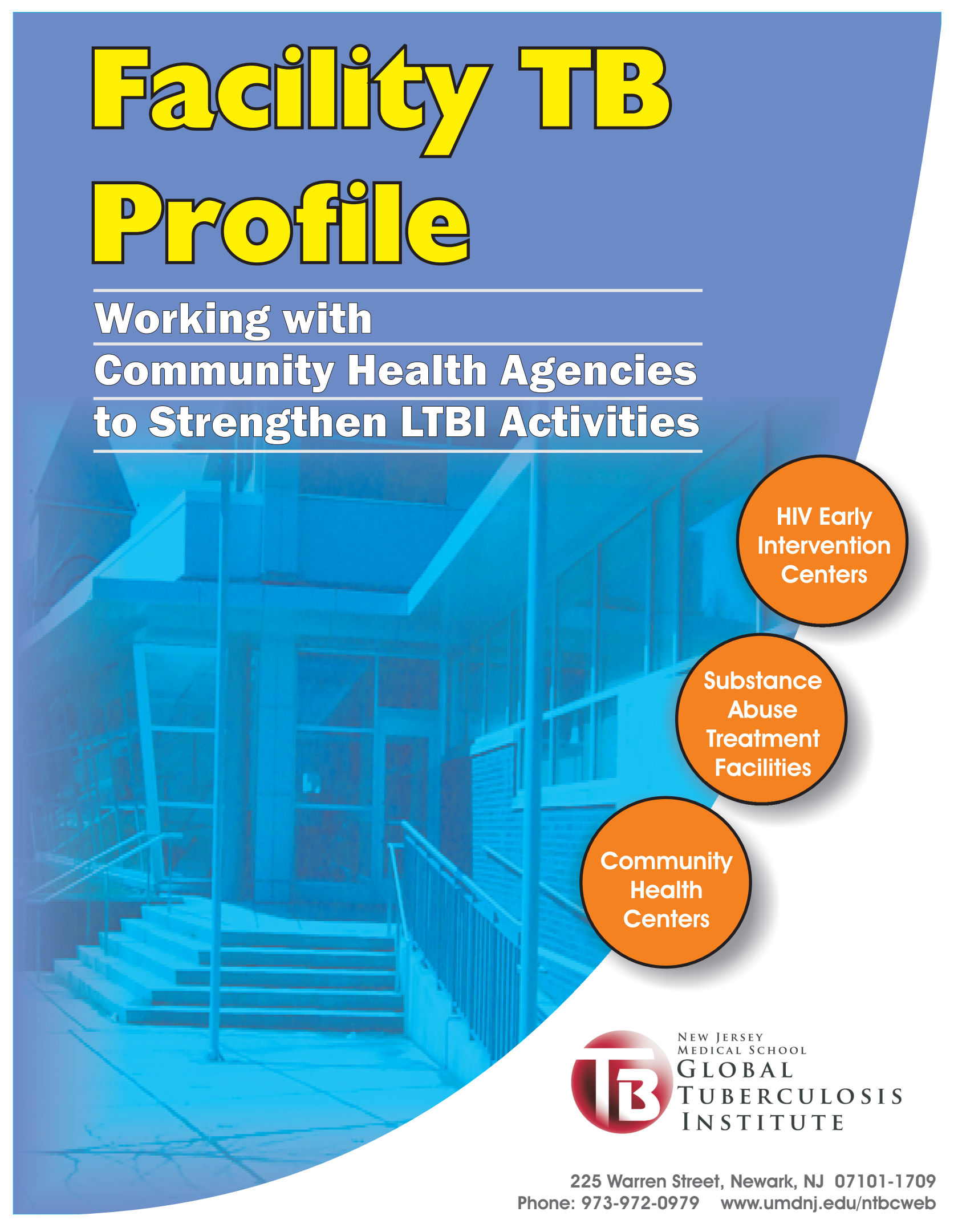
Facility TB Profile

Working with Community Health Agencies to Strengthen LTBI Activities



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Introduction:

Why this resource was developed

Targeted tuberculin testing for latent tuberculosis infection (LTBI) has been identified as a strategic component of TB control. [1, 2] TB control programs which are successful in achieving national objectives for treating active TB and carrying out contact investigations should introduce or strengthen well-planned LTBI activities. These activities can be inefficient and expensive if low-risk persons are included, because large numbers of such individuals must be tested and treated to prevent each case. Therefore, TB programs should restrict targeted testing activities to well-delineated projects, ones that have the potential for efficiency, and ones that have feasible implementation and evaluation components. General factors that improve efficiency are:

- Access to the target population
- High prevalence of LTBI
- High risk of LTBI-infected persons developing active TB
- Methods to ensure that persons with LTBI complete therapy

Because health departments often lack sufficient staff and because they may not have ready access to high-risk populations, the role of the health department should focus less on direct service and more on planning, coordinating, setting performance standards, training, consultation, quality assurance, and evaluation of services. These efforts should be directed at health care facilities which serve clients at high risk for TB and should focus on building capacity of staff in these facilities to carry out TB testing and treatment of LTBI.

The **underlying step** in developing a targeted TB testing and treatment of latent TB infection (LTBI) program is to conduct a detailed **epidemiological analysis** in order to identify trends (over time) in the magnitude (number of cases) and distribution (e.g., by demographic, TB risk factors, and geographic variables) in the community. Through these data analyses, TB programs frequently find that an increasing proportion of their cases arise from under-served, difficult to reach population groups, such as persons who are foreign born, substance abusers, homeless, HIV infected, poor, or incarcerated. These data may suggest the types of facilities in the community where persons at risk are already receiving some level of health care, e.g., HIV care centers, drug treatment programs, community health centers, correctional facilities, and schools.

This resource will provide health departments with the ability to identify health care facilities in the community where targeted TB testing and treatment of LTBI are likely to be most successful and efficient, i.e., those that serve high-risk clients and that have the potential capacity to strengthen on-site LTBI activities.

Used in conjunction with another product developed by the New Jersey Medical School National TB Center (NTBC) (*Identifying Missed Opportunities for Preventing TB*), health departments should be able to make a compelling case for strengthening activities in specific facilities in the community.
Once a facility has agreed to collaborate, health departments can use a **third resource** under development by the NTBC to plan and implement a specific program. This product will include tools for (1) conducting a detailed needs assessment, (2) assigning facility and TB program responsibilities and resources, and (3) collecting and evaluating data.

1. ***Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection (MMWR 2000; 49 (No. RR-6))***
   http://www.cdc.gov/mmwr/PDF/rr/rr4906.pdf

2. ***Ending Neglect: The Elimination of Tuberculosis in the United States, a Report by the Institute of Medicine*** (National Academy Press 2000).
   http://www.cdc.gov/tb/pubs/IOM/iomreport.htm

Resource Format Development

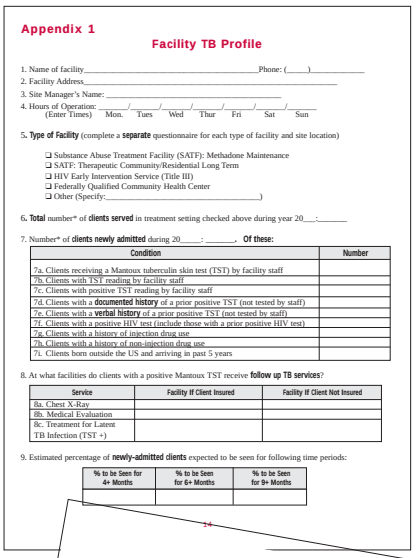
The impetus for this resource stems from the epidemiological analysis of Report of Verified Case of TB (RVCT) data in one urban New Jersey county. The data revealed that most of the TB cases occurred among foreign-born persons from high-prevalence countries, substance abusers, and HIV-infected persons. NTBC staff identified 3 types of facilities in the community that receive federal funding to serve these populations:

- **Substance Abuse Treatment Facilities (SATFs),** funded in part by the Center for Substance Abuse Treatment (CSAT) at the Substance Abuse and Mental Health Services Administration (SAMHSA)
- **HIV Early Intervention Programs (EIPs)**, funded in part by Title III of the Ryan White Care Act as part of the Health Resources and Services Administration (HRSA)
- **Federally-Qualified Community Health Centers (CHCs),** funded in part by the HRSA's Bureau of Primary Health Care

A Facility TB Profile questionnaire was developed for each type of facility in order to identify:

- The estimated level of TB infection and TB risk factors among clients served by the facility
- Current TB testing, follow up, and treatment practices for LTBI
- Potential capacity for strengthening on-site targeted TB testing and treatment of LTBI

NTBC staff contacted staff at CSAT and HRSA to identify demographic and TB-related data items which local facilities were required to report. Based on field testing at selected local facilities and feedback from staff at the state agencies which fund these facilities, a separate Profile and cover letter were developed for each of the three types of facilities. In October 2001, the letters and Profiles were sent to 7 drug treatment centers (9 sites), 4 HIV care facilities, and one Community Health Center (4 sites). Follow up calls were made to many facilities to clarify responses once the Profiles were returned.



Appendix 1

Facility TB Profile

1. Name of facility_____Phone: (____)_____
2. Facility Address_____
3. Site Manager's Name: _____
4. Hours of Operation: _____/_____/_____/_____/_____/_____/_____
(Enter Times) Mon. Tues Wed Thur Fri Sat Sun

5. **Type of Facility** (complete a **separate** questionnaire for each type of facility and site location)

❑ Substance Abuse Treatment Facility (SATF): Methadone Maintenance
❑ SATF: Therapeutic Community/Residential Long Term
❑ HIV Early Intervention Service (Title III)
❑ Federally Qualified Community Health Center
❑ Other (Specify:_____)

6. **Total** number* of **clients served** in treatment setting checked above during year 20___:_____

7. Number* of **clients newly admitted** during 20_____: _____. **Of these:**

Condition	Number
7a. Clients receiving a Mantoux tuberculin skin test (TST) by facility staff	
7b. Clients with TST reading by facility staff	
7c. Clients with positive TST reading by facility staff	
7d. Clients with a **documented history** of a prior positive TST (not tested by staff)	
7e. Clients with a **verbal history** of a prior positive TST (not tested by staff)	
7f. Clients with a positive HIV test (include those with a prior positive HIV test)	
7g. Clients with a history of injection drug use	
7h. Clients with a history of non-injection drug use	
7i. Clients born outside the US and arriving in past 5 years	

8. At what facilities do clients with a positive Mantoux TST receive **follow up TB services**?

Service	Facility If Client Insured	Facility If Client Not Insured
8a. Chest X-Ray		
8b. Medical Evaluation		
8c. Treatment for Latent TB Infection (TST +)		

9. Estimated percentage of **newly-admitted clients** expected to be seen for following time periods:

% to be Seen for 4+ Months	% to be Seen for 6+ Months	% to be Seen for 9+ Months

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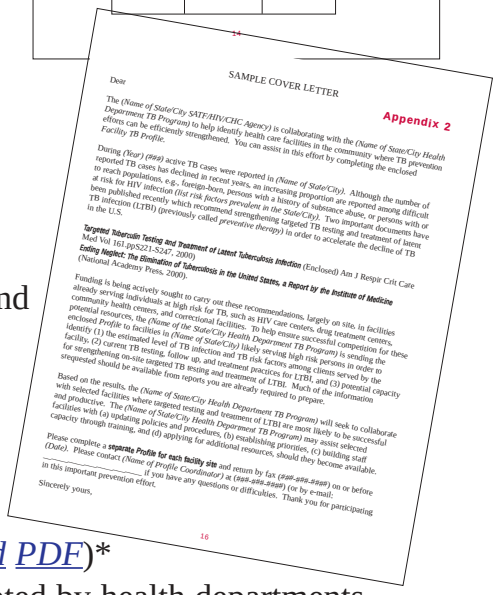
Based on this experience, we developed a single **Facility TB Profile** (Appendix 1 *Word* *PDF*)* that could be used with these three and other types of facilities and developed a prototype **cover letter** (Appendix 2 *Word* *PDF*)* that could be adapted by health departments for different types of facilities.



SAMPLE COVER LETTER

Appendix 2

Dear

The *(Name of State/City SATF/HIV/CHC Agency)* is collaborating with the *(Name of State/City Health Department TB Program)* to help identify health care facilities in the community where TB prevention efforts can be efficiently strengthened. You can assist in this effort by completing the enclosed *Facility TB Profile*.

During *(Year) (###)* active TB cases were reported in *(Name of State/City)*. Although the number of reported TB cases has declined in recent years, an increasing proportion are reported among difficult to reach populations, e.g., foreign-born, persons with a history of substance abuse, or persons with or at risk for HIV infection *(list risk factors prevalent in the State/City)*. Two important documents have been published recently which recommend strengthening targeted TB testing and treatment of latent TB infection (LTBI) (previously called *preventive therapy*) in order to accelerate the decline of TB in the U.S.

Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection (Enclosed) Am J Respir Crit Care Med Vol 161 pp5221-5247, 2000)

Ending Neglect: the Elimination of Tuberculosis in the United States, a Report by the Institute of Medicine (National Academy Press, 2000).

Funding is being actively sought to carry out these recommendations, largely on site, in facilities already serving individuals at high risk for TB, such as HIV care centers, drug treatment centers, community health centers, and correctional facilities. To help ensure successful competition for these potential resources, the *(Name of the State/City Health Department TB Program)* is sending the enclosed *Profile* to facilities in *(Name of State/City)* likely serving high risk persons in order to identify (1) the estimated level of TB infection and TB risk factors among clients served by the facility, (2) current TB testing, follow up, and treatment practices for LTBI, and (3) potential capacity for strengthening on-site targeted TB testing and treatment of LTBI. Much of the information requested should be available from reports you are already required to prepare.

Based on the results, the *(Name of State/City Health Department TB Program)* will seek to collaborate with selected facilities where targeted testing and treatment of LTBI are most likely to be successful and productive. The *(Name of State/City Health Department TB Program)* may assist selected facilities with (a) updating policies and procedures, (b) establishing priorities, (c) building staff capacity through training, and (d) applying for additional resources, should they become available.

Please complete a **separate Profile for each facility site** and return by fax *(###-###-####)* on or before *(Date)*. Please contact *(Name of Profile Coordinator)* at *(###-###-####)* (or by e-mail: _____) if you have any questions or difficulties. Thank you for participating in this important prevention effort.

Sincerely yours,

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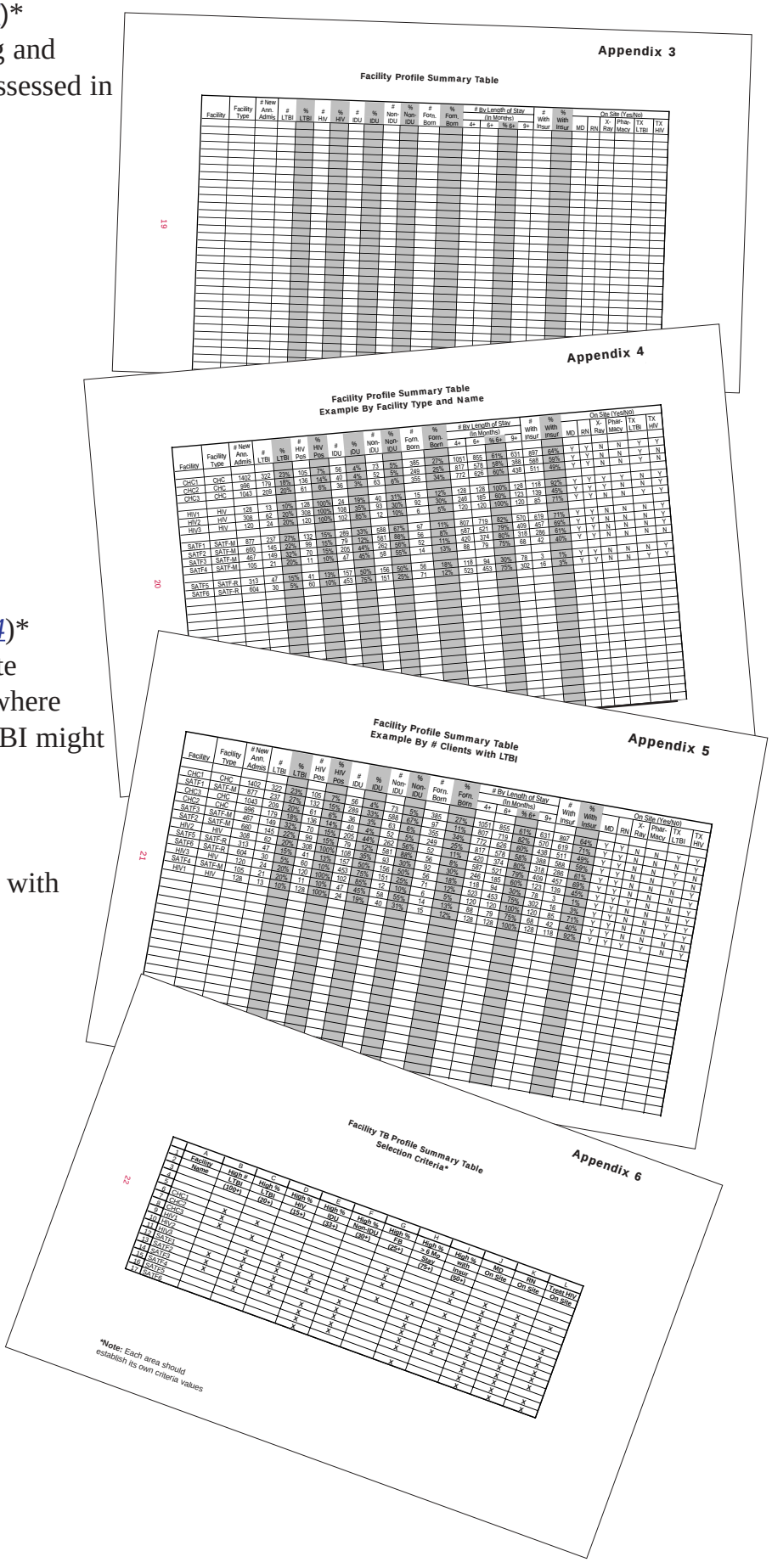
*Internet connection required.

A **Summary Table** (Appendix 3 *Excel* *PDF*)* was developed in Excel® for displaying and organizing key data from all facilities assessed in the community, such as:

- Name and type of facility
- Annual number of new admissions
- Annual new admissions with LTBI and various TB risk factors
- Number of clients expected to be enrolled for a sufficient time to complete treatment for LTBI
- Number of clients with no third-party health insurance coverage
- Current on-site, TB-related medical services

Once data has been entered (*Appendix 4*)* the spreadsheet sort feature will facilitate analysis and identification of facilities where targeted TB testing and treatment of LTBI might be most productive (*Appendix 5*)*.
A table with selection criteria (Appendix 6 *Excel* *PDF*)* may also be used to help prioritize sites with which to potentially collaborate.

*Internet connection required.



Types of Facilities

This section describes approaches and resources to use when planning to send the Facility TB Profile to the following types of facilities:

- **Substance Abuse Treatment Facilities (SATFs)**
- **HIV Early Intervention Programs (EIPs)**
- **Federally-Qualified Community Health Centers (CHCs)**

These three types of facilities were selected because they exist in most states and big cities and they receive federal funding which helps ensure national uniformity in data collection. Nevertheless, the Facility TB Profile lends itself to be used with other types of facilities which serve persons at high risk for TB (e.g., correctional facilities, homeless shelters, poultry processing plants, university student health centers, or school-based clinics). If there is a state or municipal coordinating or funding agency for these facilities, the principles listed under the "Coordination with Your State Substance Abuse/HIV AIDS/Primary Care Association" sections will apply. In addition, the Facility TB Profile and Cover Letter can be tailored to reflect the type of facility being assessed.

Substance Abuse Treatment Facilities (SATFs)

Background

The Substance Abuse and Mental Health Services Administration (SAMHSA), through its Center for Substance Abuse Treatment (CSAT), administers Substance Abuse Prevention and Treatment (SAPT) Block Grants to states in order to expand the availability of effective treatment and recovery services for alcohol and other drug problems.

Public Law 102-321 45 CFR 96 – Rules and Regulations *http://www.access.gpo.gov/nara/cfr/waisidx_00/45cfr96_00.html* – see Section 96.121 – Definitions and Section 96.127 – Requirements Regarding Tuberculosis) stipulate that facilities receiving Block Grant funds provide, or arrange for, TB services for each individual receiving substance abuse services. TB services include:

- Counseling the individual with respect to TB
- Testing to determine whether the individual has been infected with *Mycobacterium tuberculosis* to determine the appropriate form of treatment for the individual
- Providing or referring the infected individual for appropriate medical evaluation and treatment

Identifying SATFs in Your Jurisdiction

CSAT maintains an **Inventory of Substance Abuse Treatment Services (I-SATS)** which lists all known public and private substance abuse treatment facilities in the United States and its territories. A list of treatment facilities by state, city, county, or zip code can be accessed at the following website: *http://findtreatment.samhsa.gov/listsearch.htm.* Searches can be refined by specifying parameters such as Services Provided (e.g., methadone vs. detoxification) and Type of Care (e.g., outpatient or residential).

Coordination with Your State Substance Abuse Agency

CSAT administers Substance Abuse Prevention and Treatment (SAPT) Block Grants through each state's substance abuse agency. A list of the official substance abuse agency in each state can be accessed at the following website: *http://findtreatment.samhsa.gov/ufds/abusedirectors.*

Contact your state substance abuse agency (SSAA) in order to:

- Obtain support for sending the Profile. Explain to SSAA staff the purpose of sending the Profile and obtain their endorsement. Ask them to review and comment on the Profile and the cover letter. If possible, have the SSAA co-sign the cover letter.
- Help decide to which SATFs you want to send the Profile. Focus on facilities that administer methadone or on residential facilities, since these sites will likely have daily access to high-risk clients for a sufficient length of time to complete treatment of LTBI on a directly observed basis.
- Obtain the name and phone number of key staff in each SATF:
  - Director (to whom cover letter will be directed)
  - Medical Director
  - Nursing Director
- Obtain data to answer several questions on the Profile. Through the Treatment Episode Data Set (TEDS), CSAT requires SATFs to annually report data through the SSAA on the demographic and substance abuse characteristics of each client admitted to their facilities. The data set elements used can be accessed on pages 32-89 (Appendix B –TEDS Data Dictionary) of the TEDS State Instruction Manual at the following website: *http://wwwdasis.samhsa.gov/dasis2/manuals/teds_adm_manual.pdf.*

Data related to the Facility TB Profile include:

- Race – Minimum Data Set (MDS) Element 10
- Ethnicity – MDS Element 11
- Routes of Drug Administration (e.g., injection) – MDS Element 15A-C
- Opiod Replacement Therapy (e.g., methadone) Planned – MDS Element 19
- Expected Source of Payment – Supplementary Data Set (SuDS) Element 11

HIV Early Intervention Programs (EIPs)

Background

Title III Ryan White Care ACT Data (HRSA) supports comprehensive primary health care and other services for individuals who have been diagnosed with HIV infection or AIDS disease. Title III services include:

- Risk-reduction counseling on prevention, antibody testing, medical evaluation, and clinical care
- Antiretroviral therapies; protection against opportunistic infections; ongoing medical, oral, nutritional, psychosocial, and other care services for HIV-infected clients
- Case management to assure access to services, and continuity of care for HIV-infected clients
- Attention to other health problems that occur frequently with HIV infection, including tuberculosis and substance abuse

Identifying HIV EIPs in Your Area

HRSA's HIV/AIDS Bureau provides an updated list of Title III-funded facilities by state at the following website:
http://hab.hrsa.gov/programs/t3eis.htm
Program data reports for each Title III EIS grantee can be obtained at the following website: *http://hab.hrsa.gov/data/hab2001/index1.cfm*. Reports include data on number of clients served by year, race/ethnicity, age, gender, HIV exposure category, and type of service

Coordination with State HIV / AIDS Agency

All Title III EIS grant applications must be consistent with each Statewide Coordinated Statement of Need which is maintained by the Title II Director in each state. A list of Ryan White CARE Act Title II Directors can be accessed at the following website: *ftp://ftp.hrsa.gov//hab/T2roster.pdf*.

Contact your state HIV/AIDS agency in order to:

- Obtain support for sending the Profile. Ask them to review and comment on the Profile and the cover letter. If possible, have the HIV/AIDS agency co-sign the cover letter
- Confirm the facilities receiving Title III EIS funds
- Obtain the name and phone number of key staff in each EIS facility:
  —Director (to whom cover letter will be directed)
  —Medical Director
  —Nursing Director
- Obtain data to answer several questions on the Profile. All Ryan White Care Act Title recipients are required annually (by March 15) to submit the *Ryan White CARE Act Data Report (CADR)* to reflect aggregate data on clients and services provided during the prior year. This form may be accessed at the following website:
  ftp://ftp.hrsa.gov/hab/CADRForm03.pdf
  Data related to the Facility TB Profile include:
  —Total Number of New Clients HIV Positive (item #25)
  —Ethnicity (item #28)
  —Race (item #29)
  —Medical Insurance (item #32)
  —HIV Risk Factors, e.g., IDU (item #46)
  —TB Services Provided (item #47)
  —TB-related AIDS Diagnosis (item #48)

Federally-Qualified Community Health Centers (CHCs)

Background

The Community Health Center (CHC) Program is a Federal grant program funded under Section 330 of the Public Health Service Act to provide for primary and preventive health care services in medically-underserved areas throughout the U.S. and its territories. CHCs are funded by HRSA's Bureau of Primary Health Care (BPHC).

CHCs provide family-oriented primary and preventive health care services for people living in rural and urban communities that are medically underserved. CHCs exist in areas where economic, geographic, or cultural barriers limit access to primary health care for a substantial portion of the population, and services are tailored to the needs of the community. The BPHC administers grants to over 700 community-based public and private nonprofit organizations that develop and operate CHCs, and in turn support over 3,000 clinics.

Locating CHCs in your area:

The BPHC provides a searchable database *(http://ask.hrsa.gov/pc)* by which users can identify information about individual facilities (e.g., location, types of services) or lists of facilities in their jurisdiction based on search criteria (e.g., state, city, zip code, program type, or service type).

Coordination with State Primary Care Association

Each Community Health Center is strongly encouraged to work closely with its state-based Primary Care Associations (PCAs) in planning and developing of applications for HRSA grant funds. A list of these associations can be obtained at the National Association of Community Health Centers website: *http://www.nachc.com/primcare/srpcalist.asp.*

Contact your state PCA in order to:

- Obtain support for sending the Profile**.** Ask them to review and comment on the Profile and the cover letter. If possible, have the PCA co-sign the cover letter
- Confirm the facilities which are receiving HRSA funds
- Obtain the name and phone number of key staff in each CHC facility:
  - — Director (to whom cover letter will be directed)
  - — Medical Director
  - — Nursing Director
- Obtain data to answer several questions on the Profile. The Unified Data System (UDS) is an integrated reporting system used by all grantees of HRSA's Bureau of Primary Health Care (BPHC). The UDS manual and forms can be accessed at the following website: *ftp://ftp.hrsa.gov/bphc/pdf/uds/udsmanual2003.pdf*.
  Data related to the Facility TB Profile include:
  - — Race/Ethnicity (Table 3B)
  - — Principal Third Party Insurance Source (Table 4)
  - — Staffing and Utilization (Table 5)
  - — Selected Diagnoses, including TB, HIV, and Drug Dependence (Table 6)

Instructions for Completing the Facility TB Profile (See Appendix 1 Word PDF)*

Purpose of Profile: To identify (1) the estimated level of TB infection and TB risk factors among clients served by the facility, (2) the current practices regarding TB testing, follow up, and treatment of LTBI, and (3) the potential capacity for strengthening on-site targeted TB testing and treatment of LTBI.

Overall Responsibility: Assign a single individual in the TB program overall responsibility for carrying out the following activities:

- Contacting the state agencies which fund or provide oversight to facilities to which the Profile potentially will be sent in order to:
  - Obtain support for sending the Profile
  - Identify specific facilities to which the Profile will be sent
  - Identify management contacts in each facility to which the Profile will be sent
  - Obtain data that may be available at the state agency level to complete portions of the Profile for each facility
- Contacting the management staff at each facility to which the Profile will be sent in order to:
  - Obtain support for completing the Profile
  - Identify the individual who will be responsible for completing the Profile
  - Preparing the cover letter and Profile to be sent to each facility
  - Following up with facility staff to ensure that the Profile is returned in a timely manner
  - Answer questions about completing the Profile
  - Clarify missing or discrepant data on completed Profiles, especially question 7
  - Compiling and analyzing data from the completed Profiles
  - Making recommendations based on results

Programs may want to consider using a university student (e.g., through internship or field experience program) to assist with the administrative tasks of collecting and analyzing data.

Cover Letter (Appendix 2 *Word PDF*)*: A prototype cover letter has been developed that can be adapted by health department staff for different types of facilities. As discussed in the Types of Facilities section (pages 6-9), collaborate with your state/city substance abuse agency, HIV/AIDS agency, and/or Primary Care Association in tailoring letters to each type of facility.

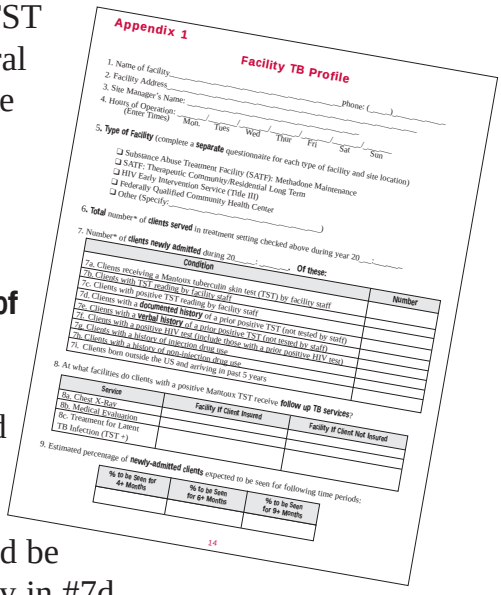
Question # 5 - Type of Facility: It is important that a separate Profile questionnaire be completed for each facility. Facilities with multiple sites (i.e., at different locations) should complete a separate Profile for each site.

Questions # 6 - Number of Clients Served During Year: The facility should indicate the number of individuals served during the time period specified, not the number of visits. Individuals seen multiple times during the year should be counted only once.

Question # 7 - Number of Clients Newly Admitted During the Year: Indicate the number of individuals newly admitted during the year, not the number of visits. The **conditions** of new clients (Questions 7a-7i) are the most critical of the Profile and may be the most difficult for facility staff to complete. The lead person for this project should carefully review data from this question on completed profiles and clarify missing or potentially discrepant data with the health care facility. Our experience suggests that just the process of completing the Profile may prompt facilities to more vigorously collect and maintain this information in the future.

*Internet connection required.

Questions # 7a – 7c - Mantoux tuberculin skin test (TST) results: Most facilities are required to perform a TST on new admissions. Many facilities keep a "PPD" or "TB Skin Test" log on which to chronologically reflect dates of testing/reading, TST results, and referral information (if the TST result is positive).


Appendix 1

Facility TB Profile

1. Name of facility
2. Facility Address
3. Site Manager's Name: Phone: ( )
4. Hours of Operation: (Enter Times) Mon. / Tues / Wed / Thur / Fri / Sat / Sun
5. Type of Facility (complete a separate questionnaire for each type of facility and site location)
❑ Substance Abuse Treatment Facility (SATF): Methadone Maintenance
❑ SATF: Therapeutic Community/Residential Long Term
❑ HIV Early Intervention Service (Title III)
❑ Federally Qualified Community Health Center
❑ Other (Specify:)
6. Total number* of clients served in treatment setting checked above during year 20__
7. Number* of clients newly admitted during 20__ Of these:

Condition	Number
7a. Clients receiving a Mantoux tuberculin skin test (TST) by facility staff	
7b. Clients with TST reading by facility staff	
7c. Clients with positive TST reading by facility staff	
7d. Clients with a documented history of a prior positive TST (not tested by staff)	
7e. Clients with a verbal history of a prior positive TST (not tested by staff)	
7f. Clients with a positive HIV test (include those with a prior positive HIV test)	
7g. Clients with a history of injection drug use	
7h. Clients with a history of non-injection drug use	
7i. Clients born outside the US and arriving in past 5 years	

8. At what facilities do clients with a positive Mantoux TST receive follow up TB services?

Service	Facility if Client Insured	Facility if Client Not Insured
8a. Chest X-Ray		
8b. Medical Evaluation		
8c. Treatment for Latent TB Infection (TST +)		

9. Estimated percentage of newly-admitted clients expected to be seen for following time periods:

% to be Seen for 4+ Months	% to be Seen for 6+ Months	% to be Seen for 9+ Months

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Question # 7d - Documented history of a prior positive TST: These individuals would not be expected to be tested by the facility, but should be counted separately in #7d.

Question # 7e - Verbal history of a prior positive TST: Unless a history of a prior positive TST can be documented, the facility should perform the TST and count the result in #7a. In practice, however, many facilities accept the client's verbal history and simply refer the client for a chest x-ray in order to rule out active TB. If the verbal history is accepted, these clients should be counted in #7e.

Question # 7f-7i - TB risk factor data: The following information is asked to determine the number of clients who, if infected, would likely benefit from treatment of LTBI.

- **Question # 7f - Clients with a positive HIV test result:** HIV is the highest known risk factor for the development of active TB among persons with LTBI. This number should include clients with a prior positive HIV test, as well as clients tested and found positive by the facility (#7f). The state HIV/AIDS agency may have data on blinded HIV surveys or HIV counseling and testing conducted at the facility where the Profile is being completed. These data may help in determining the prevalence of HIV infection at the facility.

- **Question # 7g - Clients with a history of injection drug use:** Injection drug users with LTBI are at increased risk of developing active TB, even in the absence of HIV infection.

- **Question # 7h - Clients with a history of non-injection drug use:** Although non-injection drug use is not an independent risk factor for developing active TB in persons with LTBI, many of these persons are members of high-risk groups (e.g., HIV-infected persons, homeless, residents of correctional facilities, and medically-underserved, low-income persons) and should be included in targeted TB testing programs.

- **Question # 7i - Clients born outside the United States:** Persons entering the US within the past 5 years from areas with a high prevalence of TB (e.g., Asia, Africa, Latin America, and the Caribbean) may have been recently infected and, therefore, at high risk of developing active TB.

Question # 8 - Which newly admitted clients receive a TST: This question is intended to elicit the facility's policy regarding which clients routinely receive a TST upon admission. If the facility indicates that all new admissions receive a TST, then one should expect that most (if not all) of the clients newly admitted during the year (Question #7) would have received a Mantoux TST (Question #7a). Any discrepancy should be explored with facility staff.

Question # 9 - Follow-Up TB Services: If the TST result is positive, the facility will generally refer the client to the health department or to another facility for a chest x-ray (8a), medical evaluation to rule out active TB (8b), and treatment for LTBI (8c) (if active TB is ruled out). Clients with health insurance may be referred to a local hospital or other health care facility. Occasionally, one or more of the follow-up services may be performed on site by the facility. Clients without insurance are usually referred to the health department for follow up.

Question # 10 - Length of Stay: The purpose of this question is to determine the number of new admissions who, if infected with TB, would likely remain under the facility's care for a sufficient length of time to complete one of the recommended regimens to treat LTBI (i.e., 4 months of rifampin, 6 months of isoniazid, or 9 months of isoniazid). These values will likely be estimates or based on a retrospective assessment of length of stay in a cohort of discharged clients.

Question # 11 - Race and Ethnicity: Racial and ethnic minorities comprise a disproportionately large number of reported TB cases in the United States. Case rates among minorities are several-fold times higher than the case rates among non-Hispanic whites. Minority race/ethnicity is not in itself a risk factor for TB, but may reflect other factors associated with risk such as birth in a high prevalence country, crowded living conditions, or limited access to health care services.

Question # 12 - Expected Payment Source: This information will help determine whether or not the facility would consider providing services on site for clients with LTBI. If the facility will receive payment from a third party, it is much more likely to provide follow-up evaluation and treatment services for clients with LTBI.

Question # 13 - Health-Related Staff: This information will determine whether the facility has medical staff on site that, with appropriate training and oversight, could perform TB follow-up and treatment of LTBI services.

Questions # 14-18 - Current On-Site Medical Services: Some facilities may have radiology and/or pharmacy services on site, which would facilitate the provision of a chest radiograph and TB medications for clients with a positive TST result. Having a locked area for medication would be essential, if the facility were to provide on-site treatment of LTBI. Staff in facilities with experience in providing on-site treatment of LTBI or treatment of HIV infection may be more amenable to implementing a strengthened targeted TB testing and treatment program for LTBI.

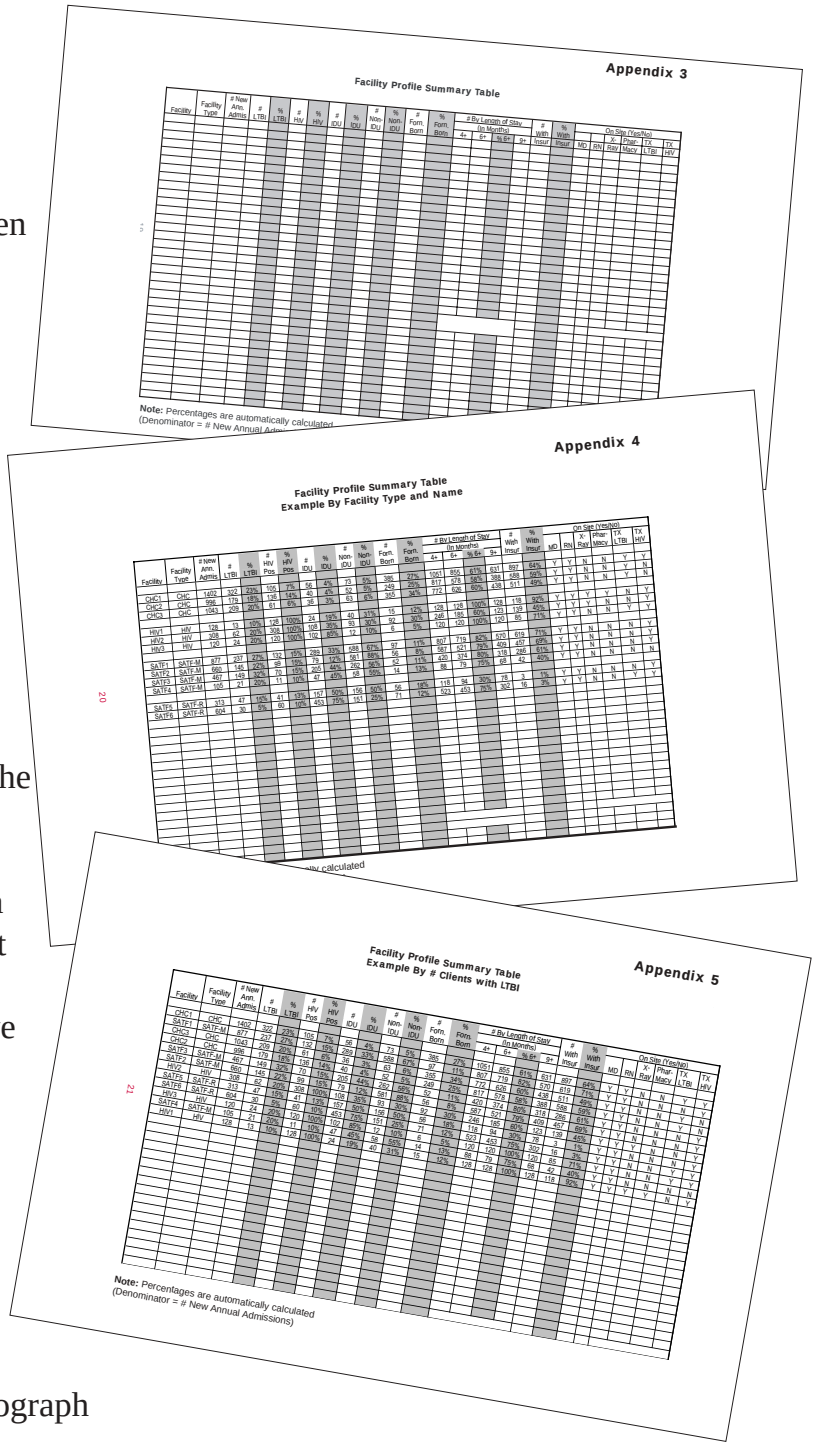
Displaying Data for Analysis

A line list, Facility TB Profile Summary Table, (Appendix 3 *Excel* *PDF*)* has been developed on which to summarize and organize key information from the completed Profiles.

By using an Excel® (or other electronic) spreadsheet, one can sort the data by any of the column headings to facilitate analysis. For instance, *Appendix 4** is a completed sample of the Facility TB Profile Summary Table sorted by facility type and then by facility name.

*Appendix 5** is the same table sorted by the number of clients with LTBI. This helps identify the facilities that serve large numbers of infected clients. Review data from the other columns to see if clients at this facility:

- Have risk factors for developing active TB (e.g., HIV infection or IDU history)
- Are likely to receive care at the facility for a sufficient length of time to complete treatment of LTBI
- Are likely to have insurance
- Have on-site access to physician, nursing, and other services that may facilitate the provision of a chest radiograph and TB medications or clients with a positive TST result



*Internet connection required.

Translating Data into Action

By reviewing completed *Facility TB Profiles* and completing the *Facility TB Profile Summary Table*, users will have a list of providers and a picture of where strengthened TB testing and on-site provision of treatment for LTBI might be most successful and productive. There is no simple method to rank facilities, except to bear in mind the factors which foster success and productivity:

- Access to the target population
- High prevalence of LTBI
- High risk of TB-infected persons developing active TB
- Methods to ensure that persons with LTBI complete therapy

The overriding consideration should be the numbers of TB-infected persons at highest risk of developing TB who complete therapy. The table below demonstrates the relative productivity of treating TB-infected persons with various TB risk factors. It is only necessary to treat one or two TB-infected persons who are co-infected with HIV to prevent a single case of TB, compared with 12 TB-infected immigrants from high prevalence countries or with 77 TB-infected persons with no TB risk factors.

From information in the Example Summary Table *(Appendix 5)*, one may want to focus on the first 3 SATF methadone facilities, since the data show that they:

- Serve clients with:
  - — A high prevalence of LTBI
  - — Strong risk factors for developing active TB (HIV infection and injection drug use history)
- Admit large numbers of clients who would remain in treatment for a sufficient length of time to complete a course of treatment for LTBI
- Have physician and nursing staff on site
- Currently provide on-site treatment for HIV infection

In addition, these facilities provide clients with methadone daily or several times a week when LTBI treatment could be given on a directly observed basis. Although CHCs have large numbers of clients with LTBI, the presence of other important risk factors (e.g., HIV infection and injection drug use) is much lower.

To assist with ranking facilities, it may also be helpful to create a spreadsheet summary table of selected criteria with values assigned, based on local epidemiology and on the Facility TB Profile results as summarized in *Appendix 4*. The criteria values assigned in *Appendix 6 Excel PDF** is an example of how this might be used.

*Internet connection required.

TB Risk	Annual Risk of TB Without Treatment**	# Completing Treatment to Prevent One Case of TB Over a 20-Year Period***
Injection Drug Use and HIV+	.0706	1
HIV + Only	.0350	2
LTBI < One Year (i.e., Contacts)	.0129	5
Injection Drug Use Only	.0100	6
New Immigrants (< 5 Years)	.0048	12
No Risk	.0007	77

**Based on published studies

***Calculated using a mathematical model programmed in Microsoft Excel 2000®

However, each program should establish its own criteria. This table may be useful in identifying the sites serving clients with multiple and important TB risk factors and which may be amenable to efficient interventions. The table does not include a priority numerical ranking, because local circumstances may place greater weight on other considerations. For example, an increasing number of TB cases among recent immigrants seen largely by a community health center may lend additional weight to that criterion.

Follow-up discussions with facility staff often reveal additional information that can be helpful in developing interventions, e.g., that:

- Staff may often accept a verbal history of a prior positive TST result
- Clients with a positive TST result may be referred to the health department of the client's residence that was often different than the health department in which the SATF was located.
- Health departments may not be consistent in starting clients with LTBI on treatment
- Clients on treatment for LTBI often find it difficult to keep appointments at the health department and to adhere to medication, since it is self-administered

Potential strategies based on the Facility TB Profile data and follow up discussions might include:

- Conducting in-service training for facility staff to clarify recommended procedures for targeted TB testing and treatment of LTBI
- Developing a prototype protocol by which clients with positive TST results would be treated for LTBI on site by facility staff. For example, in SATFs, TB medication might be given concurrently with methadone on a directly observed basis to ensure adherence
- Seeking funding to implement protocols
- Collaborating with the State substance abuse, HIV/AIDS, or primary care agency in developing or updating TB-related sections of regulations or licensing requirements to ensure that TB procedures are current and explicit
- Adding TB testing and treatment fields to client databases that may be maintained by state substance abuse, HIV/AIDS, or primary care agencies
- Developing a wallet-sized card or portable record that facilities can give to clients to document TST and LTBI treatment results, thus reducing the likelihood that these procedures would be unnecesarily repeated by other health care providers who serve these clients in the future. (NJMS National TB Center is developing an LTBI Card which will be available on its website in Summer of 2004: *http://www.umdnj.edu/ntbcweb*

Appendix 1 Facility TB Profile

Click on Question for Instruction Then click on Adobe back arrow to return to form

1. Name of Facility_____Phone: (_____)_____

2. Facility Address_____

3. Site Manager's Name: _____ Email:_____

4. Hours of Operation: _____/_____/_____/_____/_____/_____/_____
(Enter Times) Mon. Tues Wed Thur Fri Sat Sun

5. **Type of Facility** (complete a **separate** questionnaire for each type of facility and site location)

- ❑ Substance Abuse Treatment Facility (SATF): Methadone Maintenance
- ❑ SATF: Therapeutic Community/Residential Long Term
- ❑ HIV Early Intervention Service (Title III)
- ❑ Federally Qualified Community Health Center
- ❑ Other (Specify:_____)

6. **Total** number* of **clients served** in treatment setting checked above during year 20___:_____

7. Number* of **clients newly admitted** during 20_____: _____. **Of these:**

Condition	Number
7a. Clients **receiving a Mantoux tuberculin skin test** (TST) by facility staff	
7b. Clients with **TST reading** by facility staff	
7c. Clients with **positive TST** reading by facility staff	
7d. Clients with a **documented history** of a prior positive TST (not tested by staff)	
7e. Clients with a **verbal history** of a prior positive TST (not tested by staff)	
7f. Clients with a **positive HIV test** (include those with a prior positive HIV test)	
7g. Clients with a history of **injection drug use**	
7h. Clients with a history of **non-injection drug use**	
7i. Clients **born outside the US** and arriving in past 5 years	

8. Which newly admitted **clients routinely receive a TST**?
❑ All ❑ Selected (specify_____)

9. At what facilities do clients with a positive Mantoux TST receive **follow up TB services**?

Service	Facility If Client Insured	Facility If Client Not Insured
9a. Chest X-Ray		
9b. Medical Evaluation		
9c. Treatment for Latent TB Infection (TST +)		

10. Estimated percentage of **newly-admitted clients** expected to be seen for following time periods:

% to be Seen for 4+ Months	% to be Seen for 6+ Months	% to be Seen for 9+ Months

**Note: Individuals seen multiple times during the year should be counted only once.*

Appendix 1, cont'd

Click on Question for Instruction Then click on Adobe back arrow to return to form

11. Distribution of **clients newly-admitted** during 20___ by **race and ethnicity**:

Race / Ethnicity	Number
White, Non-Hispanic	
Black, Non-Hispanic	
Hispanic	
Asian/Pacific Islander	
Other (Specify_____)	

12. Distribution of **clients newly admitted** during 20___ by **expected payment source**:

Payor Source	Number
Private Insurance	
Medicaid/Medicare	
County/State Fund	
Self-Pay	
Other (_____)	

13. Number of full-time equivalent (FTE) **health-related staff on site** (use fractions, e.g., 0.5, if appropriate):

Service Category	# FTEs
Physicians	
Nurses	
Other (_____)	

	Yes	No
14. Does facility have **radiology equipment on site?**	❑	❑
15. Does facility have a **licensed pharmacy on site?**	❑	❑
16. Does facility have a locked area in which to **store medication?**	❑	❑
17. Does facility provide **on site treatment for latent TB infection** (LTBI)?	❑	❑
If yes, unduplicated* number of clients treated during 20___:_____		
18. Does facility provide **on site medical care and anti-retroviral drug therapy** for **HIV-infected individuals?**	❑	❑

19. Name of person completing form: _____ Phone:_____Email_____

Fax completed questionnaire to *(Profile Coordinator)* at *(###-###-####)*
Questions – Call *(Profile Coordinator)* at *(###-###-####)* or contact by e-mail: _____

SAMPLE COVER LETTER

Appendix 2

Dear

The (*Name of State/City SATF/HIV/CHC Agency)* is collaborating with the *(Name of State/City Health Department TB Program)* to help identify health care facilities in the community where TB prevention efforts can be efficiently strengthened. You can assist in this effort by completing the enclosed *Facility TB Profile*.

During *(Year) (###)* active TB cases were reported in *(Name of State/City)*. Although the number of reported TB cases has declined in recent years, an increasing proportion are reported among difficult to reach populations, e.g., foreign-born, persons with a history of substance abuse, or persons with or at risk for HIV infection *(list risk factors prevalent in the State/City)*. Two important documents have been published recently which recommend strengthening targeted TB testing and treatment of latent TB infection (LTBI) (previously called *preventive therapy*) in order to accelerate the decline of TB in the U.S.

Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection (Enclosed) Am J Respir Crit Care Med Vol 161.ppS221-S247, 2000)

Ending Neglect: The Elimination of Tuberculosis in the United States, a Report by the Institute of Medicine (Executive Summary Enclosed) (National Academy Press, 2000).

Funding is being sought to carry out these recommendations, largely on site, in facilities already serving individuals at high risk for TB, such as HIV care centers, drug treatment centers, community health centers, and correctional facilities. To help ensure successful competition for potential resources, the *(Name of the State/City Health Department TB Program)* is sending the enclosed *Profile* to facilities in *(Name of State/City)* likely serving high risk persons in order to identify (1) the estimated level of TB infection and TB risk factors among clients served by the facility, (2) current TB testing, follow up, and treatment practices for LTBI, and (3) potential capacity for strengthening on-site targeted TB testing and treatment of LTBI. Much of the information requested should be available from reports you are already required to prepare.

Based on the results, the *(Name of State/City Health Department TB Program)* will seek to collaborate with selected facilities where targeted testing and treatment of LTBI are most likely to be successful and productive. The *(Name of State/City Health Department TB Program)* may assist selected facilities with (a) updating policies and procedures, (b) establishing priorities, (c) building staff capacity through training, and (d) applying for additional resources, should they become available.

Please complete a **separate *Profile* for each facility site** and return by fax (###-###-####) on or before *(Date)*. Please contact *(Name of Profile Coordinator)* at (###-###-####) (or by e-mail: _____ if you have any questions or difficulties. Thank you for participating in this important prevention effort.

Sincerely yours,

Appendix 3

Facility Profile Summary Table

Facility	Facility Type	# New Ann. Admis	# LTBI	% LTBI	# HIV	% HIV	# IDU	% IDU	# Non-IDU	% Non-IDU	# Forn. Born	% Forn. Born	# By Length of Stay (In Months)				# With Insur	% With Insur	On Site (Yes/No)					
													4+	6+	% 6+	9+			MD	RN	X-Ray	Phar-Macy	TX LTBI	TX HIV

Note: Percentages are automatically calculated
(Denominator = # New Annual Admissions)

Facility Profile Summary Table
Example By Facility Type and Name

Facility	Facility Type	# New Ann. Admis	# LTBI	% LTBI	# HIV Pos	% HIV Pos	# IDU	% IDU	# Non-IDU	% Non-IDU	# Forn. Born	% Forn. Born	# By Length of Stay (In Months) 4+	6+	% 6+	9+	# With Insur	% With Insur	On Site (Yes/No) MD	RN	X-Ray	Phar-Macy	TX LTBI	TX HIV
CHC1	CHC	1402	322	23%	105	7%	56	4%	73	5%	385	27%	1051	855	61%	631	897	64%	Y	Y	N	N	Y	Y
CHC2	CHC	996	179	18%	136	14%	40	4%	52	5%	249	25%	817	578	58%	388	588	59%	Y	Y	N	N	Y	N
CHC3	CHC	1043	209	20%	61	6%	36	3%	63	6%	355	34%	772	626	60%	438	511	49%	Y	Y	N	N	Y	N
HIV1	HIV	128	13	10%	128	100%	24	19%	40	31%	15	12%	128	128	100%	128	118	92%	Y	Y	Y	Y	N	Y
HIV2	HIV	308	62	20%	308	100%	108	35%	93	30%	92	30%	246	185	60%	123	139	45%	Y	Y	Y	N	N	Y
HIV3	HIV	120	24	20%	120	100%	102	85%	12	10%	6	5%	120	120	100%	120	85	71%	Y	Y	N	N	Y	Y
SATF1	SATF-M	877	237	27%	132	15%	289	33%	588	67%	97	11%	807	719	82%	570	619	71%	Y	Y	N	N	N	Y
SATF2	SATF-M	660	145	22%	99	15%	79	12%	581	88%	56	8%	587	521	79%	409	457	69%	Y	Y	N	N	N	Y
SATF3	SATF-M	467	149	32%	70	15%	205	44%	262	56%	52	11%	420	374	80%	318	286	61%	Y	Y	N	N	N	Y
SATF4	SATF-M	105	21	20%	11	10%	47	45%	58	55%	14	13%	88	79	75%	68	42	40%	Y	Y	N	N	N	N
SATF5	SATF-R	313	47	15%	41	13%	157	50%	156	50%	56	18%	118	94	30%	78	3	1%	Y	Y	N	N	N	Y
SATF6	SATF-R	604	30	5%	60	10%	453	75%	151	25%	71	12%	523	453	75%	302	16	3%	Y	Y	N	N	Y	Y

Note: Percentages are automatically calculated
(Denominator = # New Annual Admissions)

Appendix 5

Facility Profile Summary Table
Example By # Clients with LTBI

Facility	Facility Type	# New Ann. Admis	# LTBI	% LTBI	# HIV Pos	% HIV Pos	# IDU	% IDU	# Non-IDU	% Non-IDU	# Forn. Born	% Forn. Born	# By Length of Stay (In Months)				# With Insur	% With Insur	On Site (Yes/No)					
													4+	6+	% 6+	9+			MD	RN	X-Ray	Phar-Macy	TX LTBI	TX HIV
CHC1	CHC	1402	322	23%	105	7%	56	4%	73	5%	385	27%	1051	855	61%	631	897	64%	Y	Y	N	N	Y	Y
SATF1	SATF-M	877	237	27%	132	15%	289	33%	588	67%	97	11%	807	719	82%	570	619	71%	Y	Y	N	N	N	Y
CHC3	CHC	1043	209	20%	61	6%	36	3%	63	6%	355	34%	772	626	60%	438	511	49%	Y	Y	N	N	Y	N
CHC2	CHC	996	179	18%	136	14%	40	4%	52	5%	249	25%	817	578	58%	388	588	59%	Y	Y	N	N	Y	N
SATF3	SATF-M	467	149	32%	70	15%	205	44%	262	56%	52	11%	420	374	80%	318	286	61%	Y	Y	N	N	N	Y
SATF2	SATF-M	660	145	22%	99	15%	79	12%	581	88%	56	8%	587	521	79%	409	457	69%	Y	Y	N	N	N	Y
HIV2	HIV	308	62	20%	308	100%	108	35%	93	30%	92	30%	246	185	60%	123	139	45%	Y	Y	Y	N	N	Y
SATF5	SATF-R	313	47	15%	41	13%	157	50%	156	50%	56	18%	118	94	30%	78	3	1%	Y	Y	N	N	N	Y
SATF6	SATF-R	604	30	5%	60	10%	453	75%	151	25%	71	12%	523	453	75%	302	16	3%	Y	Y	N	N	Y	Y
HIV3	HIV	120	24	20%	120	100%	102	85%	12	10%	6	5%	120	120	100%	120	85	71%	Y	Y	N	N	Y	Y
SATF4	SATF-M	105	21	20%	11	10%	47	45%	58	55%	14	13%	88	79	75%	68	42	40%	Y	Y	N	N	N	N
HIV1	HIV	128	13	10%	128	100%	24	19%	40	31%	15	12%	128	128	100%	128	118	92%	Y	Y	Y	Y	N	Y

Note: Percentages are automatically calculated
(Denominator = # New Annual Admissions)

Facility TB Profile Summary Table
Selection Criteria*

	A	B	C	D	E	F	G	H	I	J	K	L
1	**Facility**	**High #**	**High %**	**High %**	**High %**	**High %**	**High %**	**High %**	**High %**	**MD**	**RN**	**Treat HIV**
2	**Name**	**LTBI**	**LTBI**	**HIV**	**IDU**	**Non-IDU**	**FB**	**> 6 Mo**	**with**	**On Site**	**On Site**	**On Site**
3		**(100+)**	**(20+)**	**(15+)**	**(33+)**	**(30+)**	**(25+)**	**Stay**	**Insur**			
4								**(75+)**	**(50+)**			
5												
6	CHC1	**X**	**X**				**X**		**X**	**X**	**X**	**X**
7	CHC2	**X**					**X**		**X**	**X**	**X**	
8	CHC3	**X**	**X**				**X**			**X**	**X**	
9	HIV1			**X**		**X**		**X**	**X**	**X**	**X**	**X**
10	HIV2		**X**	**X**	**X**	**X**	**X**			**X**	**X**	**X**
11	HIV3		**X**	**X**	**X**			**X**	**X**	**X**	**X**	**X**
12	SATF1	**X**	**X**	**X**	**X**	**X**		**X**	**X**	**X**	**X**	**X**
13	SATF2	**X**	**X**	**X**		**X**		**X**	**X**	**X**	**X**	**X**
14	SATF3	**X**	**X**	**X**	**X**	**X**		**X**	**X**	**X**	**X**	**X**
15	SATF4		**X**		**X**	**X**		**X**		**X**	**X**	
16	SATF5				**X**	**X**				**X**	**X**	**X**
17	SATF6				**X**			**X**		**X**	**X**	**X**

***Note:** Each area should establish its own criteria values