A Strategic Plan for the Elimination of Tuberculosis in the Southeastern States

In October 2001, the state of Virginia hosted the 19th Annual Meeting of the Southeastern TB Controllers. This group represents ten states and one reporting area, including Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and the District of Columbia. Although 2000 census figures indicate that the population of the region accounts for 23% of the total U.S. population, it has contributed more than 26% of U.S. TB morbidity annually since 1996. In calendar year 2000, the case rate for the region was 6.6 per 100,000 population compared to 5.8 per 100,000 population for the country as a whole. Four of the southeastern states were ranked in the top ten nationally according to rate, and the case rate of the District of Columbia exceeded the rates of these four states. The region accounted for 43% of all U.S. cases occurring in the black population and 14.5% of all non-U.S.-born cases. Within the region, blacks accounted for 52% of the morbidity and the non-U.S. born accounted for 25%. While the number of cases in the black population in the southeast has decreased by 21% since 1996, the number of foreign-born cases has increased by 16%.

Non Hispanic Black Population- Percent of State Morbidity
In response to and preparation for possible passage of House Bill 1167 - the Comprehensive Tuberculosis Elimination Act of 2002, the 2001 host state, Virginia, suggested that the meeting be devoted to the development of a regional strategic plan for the elimination of TB in the southeast. The Bill proposes that $528 million dollars be invested in TB elimination activities, beginning in 2002, a staggering amount of funding compared to current levels. The TB Controllers agreed, and this document is the result of that meeting. The Controllers and other staff from each state worked during the three days to identify and document the core elements necessary to produce a strategic plan for the region. The resulting plan had to meet four requirements:

- It must be a collaborative effort developed entirely by the workshop participants.
It must result in a document that will help decision makers understand our individual and corporate needs.

It must identify and address individual state needs that cannot be met with current state and federal funding.

It must identify common goals that may be addressed by additional funding and opportunities for sharing resources to meet these needs.

The initial document identified 11 core elements to be included in the plan. These elements are:

- Special Needs of Non-US Born Populations
- Legal and Policy Issues
- Patient Care and Case Management
- Training and Education
- Laboratory
- Communication/Information Technology
- Research
- Catastrophic Coverage
- Needs of Special Populations-Not Foreign Born
- Personnel
- Empowerment

The TB Controllers agreed to establish a steering committee to develop a draft plan, oversee a review and comment period, and compose the final document. The following pages present the draft plan.

The reader will note that some Strategies/Action Steps and Objective Measures occur in more than one core element. The Steering Committee determined that the duplications were necessary to the development of the respective core elements, and left them in the document. The Southeastern TB Controllers and the Steering Committee recognize that Problems, Strategies/Actions and Objective Measures are not universally applicable, and that each state will tailor the Plan according to its own situation and to meet its specific needs, but always with the goal of regional TB elimination in mind.

**Southeastern TB Controllers Strategic Plan for TB Elimination**

I. **Special Needs of the Non-US Born Population**

Effective control of any illness is improved by a multi-tiered approach that increases the understanding of the disease in the community, those affected, and those who provide care. The multi-cultural aspects associated with disease play an even greater role in attempts to control TB. Identifying and establishing community resources for high-risk patients to remove barriers to effective treatment regimens and basic needs is critical in dispelling the myths and negative associations with TB.
Problem statement No. 1: There is a need for an updated and detailed definition of foreign-born persons and the risk factors that increase their risk of tuberculosis disease and infection.

Strategies/Action Steps:
1. Expand the data elements collected on foreign-born populations. These should include literacy, socioeconomic status, travel patterns, length of stay, etc. and be done independently of CDC.
2. Identify a working group within the S.E. TB Controllers to develop data elements for the above. Once identified, use the NTCA membership to further refine the elements.
3. A well reasoned list of high prevalence countries should be routinely furnished to state programs.

Objective measures:
1. Identify a working group to develop data elements. (Done Oct. 2001)
2. By _______, CDC will develop a list of high prevalence countries.

Problem No. 2: Language, literacy and cultural barriers present significant barriers to successfully treating this population.

Strategies/Action Steps:
1. Establish a resource directory of specialized knowledge and skills currently in existence within the public health staff of the S.E. region.
2. Utilize identified staff with special expertise to provide training via webcast, video conferencing, etc.
3. Provide funding for baseline cultural sensitivity training for all staff involved with TB control.
4. Identify funding for resources such as the ATT Language Line or other comparable translation/translator services.

Objective measures:
1. By _______, establish a specialized resource list of current staff with specific skills related to the foreign born population.
2. By _______, provide specialized training derived from resource list and posted on the NTCA web site.
3. Each SE State will provide cultural sensitivity training to all employees within one year of initial employment.
4. Standardized training for outreach staff will be offered within 90 days of employment. The model centers will be invited to lead this project.
5. By _______, the SE TB Controllers will investigate opportunities for language line use.

Problem statement No. 3: Large influxes of foreign-born immigrants and refugees pose special problems and enormous drains on resources.

Strategies/Action Steps:
1. Require advance notification of arrival designations prior to arrival.
2. Identify an accessible resource network (VOLAG’s, CBO’s, etc.) to assist in the evaluation and management of this issue.
3. Improve approaches to contact investigations in this population.

Objective measures:
1. By __________, CDC to investigate advance notification of new arrivals and report at the June National TB Controllers Workshop. The Division of Global Migration and Quarantine will assist in this effort through the Electronic Notification project- TB and Refugee Notification System (TBRN).

*Problem statement No. 4: Undocumented residents are especially problematic in regards to adherence.*

**Strategies/Action Steps:**
1. Examine the process of issuing visa’s to undocumented residents as an incentive for completing therapy and explore viable incentives for the diagnosis and treatment of TB disease in this population.
2. Identify additional funding sources for costs associated with management of this population.
3. Explore cooperative arrangements for screening of this population among employers of suspected or undocumented residents.

*Problem Statement No. 5: Currently, the SE States have no formal plan in place for working with culturally diverse populations.*

**Strategies/Action Steps:**
1. Develop a comprehensive cultural diversity plan.
2. Identify lead trainers from each state who will network with other state counterparts for updating and sharing of plans.

**Objective measures:**
1. By __________, each state will have developed a plan for working with culturally diverse populations.

**II. Legal and Policy Issues**

“Because of its communicable nature, tuberculosis is treated differently than other nonairborne infectious diseases, as there are many state laws specific to the control of TB. Many of these laws predate the current public health recommendations for the prevention and control of TB… States updating TB control laws should incorporate current recommendations and guidelines from CDC (Centers for Disease Control and Prevention), ACET (Advisory Committee for the Elimination of Tuberculosis) and the American Thoracic Society. State laws should permit policies and practices to be rapidly reviewed and amended as new data becomes available and new recommendations and guidelines are published.”

1
Problem Statement No. 1: The ability of tuberculosis programs to treat, prevent and control tuberculosis is compromised when health care providers do not (a) submit isolates to public health authorities for confirmation, sub-typing, and anti-microbial testing, or (b) report results of these tests to the appropriate public health authority. Failure to retain isolates for future molecular testing can weaken control efforts, particularly with respect to identifying and responding to outbreaks.

Strategies/Action Steps:
1. Every jurisdiction will have laws to support this.
2. Every state TB program designates a laboratory to do this.

Objective Measures:
1. By _______, identify and review all legislation related to laboratory reporting and testing.
2. By _______, TB Controllers, Laboratory Directors and public health attorneys will have drafted legislation that requires the immediate reporting of anti-microbial testing and the retention of isolates.
3. By _______, identify and, if necessary contract with, the laboratory that will receive initial isolates for testing and retention.

Problem Statement No. 2: Lack of immediate access to health law-specific legal expertise and advice can compromise the quality and timeliness of statutory and regulatory enforcement of tuberculosis and communicable disease laws. This problem is compounded when legal services are not available within the public health agency.

Strategies/Action Steps:
1. Develop and implement a fast track process for securing legal services.
2. Train/educate legal staff about tuberculosis.

Objective Measures:
1. By _______, develop, obtain agency approval for and implement a fast track process for securing necessary legal services.
2. By _______, develop an education/training component for legal professionals and paraprofessionals.

Problem Statement No. 3: Tuberculosis treatment, prevention, and control services are inadequately funded in the southeast. Substantial segments of the population receiving these services are medically indigent.

Strategies/Action Steps:
1. Secure across the board Medicaid funding for tuberculosis treatment, prevention and control services. Authorizing legislation is already in place (OBRA 93).

Objective Measures:
1. By _______, establish the Medicaid Waiver (OBRA 93) potential for respective jurisdictions, identify partners and secure agency approval to meet with Medicaid representatives and other appropriate partners.

2. By _______, complete preliminary discussions and collect necessary data to define the scope of the waiver.

3. By _______, finalize Medicaid waiver agreement(s).

Problem Statement No. 4: The lack of adequate legal remedies to address noncompliance with prescribed treatment regimens compromises the ability of TB programs to meet their respective statutory mandates to control and prevent tuberculosis.

Strategies/Action Steps:
1. Educate the public, health care professionals, legislators, decision-makers, and the ACLU about the need for adequate and appropriate measures to address noncompliance.

2. Develop a model law to provide for isolation, confinement, emergency detention, health orders, and other appropriate needs.

Objective Measures:
1. By _______, identify required legislation obtain necessary agency approval and write draft.

2. By _______, develop appropriate campaigns and materials to educate key partners and stakeholders in TB control.

3. By _______, start the legislative process.

Problem Statement No. 5: There is no uniform policy in place that ensures that health care providers assess all TB patients (disease and latent infection) for HIV risk factors and provide/assure confidential HIV testing, when appropriate.

Strategies/Action Steps:
1. Inform and educate health care providers about the importance of HIV risk factor assessment and confidential testing in the medical and case management of TB infection and disease.

2. Assist health care providers with policy development and implementation.

Objective Measures:
1. By _______, assemble educational and training materials appropriate to the various health care settings.

2. By _______, identify and meet with providers in need of education and training, present information and schedule additional meetings to assist with policy development and implementation.

Problem Statement No. 6: There is no uniform policy in place that ensures that health care providers assess all HIV patients for TB risk factors and provide/assure appropriate screening.

Strategies/Action Steps:
1. Inform and educate health care providers about the importance of TB risk factor assessment and screening in the medical and case management of HIV infection.
2. Assist health care providers with policy development and implementation.

Objective Measures:
1. By _______, assemble educational and training materials appropriate to the various health care settings.
2. By _______, identify and meet with providers in need of education and training, present information and schedule additional meetings to assist with policy development and implementation.

Problem Statement No. 7: Managing tuberculosis outbreaks can require the expenditure of significant human and fiscal resources. Without a tuberculosis outbreak response plan (inter- and intra-state), these costs can be much higher than necessary.

Strategies/Action Steps:
1. Adopt the national TB outbreak response plan.
2. Convene the Southeastern TB Controllers to write a regional TB outbreak response plan.

Objective Measures:
1. By _______, adopt the national TB outbreak response plan, or establish an MOU between states to cooperate in outbreaks to the extent to which resources will allow.
2. By _______, the Southeastern TB Controllers will draft a regional outbreak response plan, using the national plan as the outline, and identify appropriate partners.
3. By _______, finalize and adopt a regional outbreak response plan.

Problem Statement No. 8: Targeted testing policies and procedures that are not based on state and local data will lack effectiveness.

Strategies/Action Steps:
1. Identify and evaluate all appropriate data sources to select appropriate populations for targeted testing.
2. Review current screening policies and legislation and change as necessary.

Objective Measures:
1. By _______, identify and evaluate available data, and identify additional data needs, sources and methods for collection.
2. By _______, begin drafting targeted testing policies based on data.
3. By _______, implement state targeted testing policies.

### III. Patient Care and Case Management

TB Control Program priorities include 1) detecting tuberculosis disease and assurance that patients are prescribed appropriate medications and complete adequate therapy and, 2) insuring that all contacts are evaluated for disease and treated for LTBI as indicated. Treatment of patients who are homeless, have drug resistant disease, HIV, or recalcitrant behavior is often difficult. Costly services associated with management of drug resistant TB and HIV are often beyond the reach of local health care providers.

*Problem statement No. 1: Inpatient and outpatient treatment costs are distinct barriers for optimal patient care and management.*

**Strategies/Action Steps:**
1. Seek sources of discretionary funding for patient care, both public and private.
2. Develop local relationships with resources for funding housing, patient care, etc.
3. Actively seek third party reimbursement
4. Consistently and accurately track needs for resources

**Objective Measures:**
1. Local Program Managers should immediately begin the search for identifying discretionary funds for patient care and document the availability of these resources.

*Problem statement No. 2: Contact Investigation and Interviewing skills are in need of continual improvement.*

**Strategies/Action Steps:**
1. Conduct a needs assessment to assess current training needs.
2. Develop a certification course and require all appropriate personnel to complete the course within established time frames.
3. Increase staff where appropriate to aid in investigations
4. Develop national minimal standards for interviewers and investigators.

**Objective Measures:**
1. By _______ training needs assessment to be completed.
2. Model Centers and CDC will assist states in the development of minimal national training standards as defined by the needs assessment.

*Problem statement No. 3: Providing comprehensive patient care and case management to populations who have concurrent debilitating medical conditions such as HIV disease pose tremendous challenges to health care providers.*
Strategies/Action Steps:
1. Identify sources of funding which are related to HIV/AIDS related foundations, charitable organizations, or grants to states TB Control Programs.
2. Advocate TB staff become actively involved in local community HIV/AIDS consortiums and as a result, develop relationships with resources for funding housing, patient care, etc.

Objective Measures:
1. Program Managers should network with local Social Service Agencies, faith based organizations, hospitals, etc and document the results.

IV. Training and Education

The adequate training of TB staff and other professionals involved with tuberculosis is a concern of all Southeastern TB Controllers. Resources, including funding, should be secured or provided to enhance the limited training and educational capabilities currently in existence throughout the region. Well-trained and knowledgeable TB control staff is essential to achieve TB elimination. Current training and education initiatives are too few and limited in scope. Additional funding will result in better coordination of training initiatives and resources, and enable sharing among TB control programs.

Problem statement No. 1: Inconsistent levels of training and knowledge concerning all aspects of tuberculosis and tuberculosis control exist among program staff and other health care professionals.

Strategies/Action Steps:
1. Provide all TB control staff, including outreach workers, consistent initial training. This training should include, at a minimum, courses of study such as TB 101, contact investigation techniques, interviewing skills, skin testing, case management, cultural sensitivity training, and laboratory information.
2. Secure additional funding to hire one Health Educator per state who can focus totally on needs assessments, training, educational program development, and educational policy for the state. These efforts should be coordinated with other health educators in the region.
3. Provide adequate resources/funding for travel and educational resources for training staff and targeted populations.
4. Provide support and funding for qualified speakers.
5. Utilize already existing programs such as Model Centers, TB Today and TB Now, Black Mountain training conducted in NC; HIV\TB Mini Residency Training conducted in Ga.
6. Explore and locate necessary resources to develop Web capability to disseminate educational materials and communicate ideas throughout the region.

Objective measures:
1. In __________, at least one TB dedicated health educator position will be
established for each State TB Control Program.

2. In ________, establish a central depository (web based) for NTCA approved educational resource materials providing tuberculosis control programs easy access to culturally sensitive and language specific information.

Problem No. 2: A low index of suspicion regarding TB among health care providers can lead to dangerous and unnecessary delays in identifying, referring, and treating TB patients.

Strategies/Action Steps:
1. Use health educators to provide or arrange for appropriate training and information for health care providers concerning symptoms and signs of TB. Using opportunities such as Grand Rounds and offering CME units may also be of value. Incorporate the techniques of Academic Detailing utilized by pharmaceutical companies.
2. Streamline the process of reporting and provide clinical algorithms for early detection and treatment of TB to ER and urgent care centers.
3. Educate health care providers about TB control programs and resources through mailings, handouts, and by providing speakers at meetings.
4. Collaborate with health educators at universities and other facilities.

Objective measures:
1. In ________, survey health care providers, hospitals, and other facilities (including schools and universities) to obtain level of need and appropriate methods for disseminating information.
2. In ________, provide information for accessing NTCA approved educational resource materials.
3. In ________, establish, maintain, and publicize speakers’ list for educational/training opportunities.
4. In ________, coordinate and facilitate efforts to streamline reporting process.

Problem statement No. 3: The general public and foreign-born populations have inadequate knowledge and awareness of TB

Strategies/Action Steps:
1. Use health educators to design and administer an educational needs assessment for each targeted population group.
2. Determine local resources to support TB education in local communities.
3. Seek appropriate information to provide culturally appropriate information.
4. Obtain buy-in support of local community leaders, using incentives if necessary.
5. Identify key concepts for education such as: latent TB infection (LTBI) and BCG, signs and symptoms, treatment of active disease, medications and side effects, transmission.
6. Work with local physicians (incentives).
7. Work with local media and use additional funds to purchase radio time in English or appropriate language.
8. CDC to develop educational materials and place in downloadable formats.
9. Train TB staff in cultural sensitivity.

Objective measures:
1. In ________, establish network with community based organizations involved in providing services.
2. In ________, identify community leaders in at-risk populations to provide peer group educational opportunities.
3. In ________, establish a central depository (web based) for NTCA approved educational resource materials providing tuberculosis control programs easy access to culturally sensitive and language specific information.

V. Laboratory

Timely and accurate diagnostic methods are critical for eventual elimination of TB. Clinical specimens for TB assessment are less consistently being sent to public health-associated TB laboratories, causing delays in diagnosis and susceptibility testing. It also hampers the ability to evaluate strain relatedness and for use in making epidemiology inferences. Public health departments must have access to a laboratory that has the support to stay abreast of the latest advances in the field, to support the diagnosis of TB cases and document sputum conversion. New techniques, including nucleic acid amplification for use on sputum specimens, and interferon-\(\gamma\) serum assays for diagnosis of latent TB infection, need continued evaluation and possible addition to TB laboratories’ diagnostic arsenal.

**Problem Statement No. 1:** Clinical specimens for TB assessment are less consistently being sent to public health-associated TB laboratories, causing delays in diagnosis and susceptibility testing.

**Strategies/Action Steps:**
1. Ensure that public health-associated TB laboratories provide state-of-the-art TB laboratory services
2. Provide support for ongoing education and training for laboratory staff for newest diagnostic methods
3. Develop a program to inform hospitals and clinics that state-of-the-art TB laboratory services are available and without additional cost, at public health-associated TB laboratories
4. Develop a program to assess quality of non-public health-associated TB laboratories for prompt diagnosis of TB and susceptibility testing, and reporting.

**Objective measures:**
1. By January 2004, each state’s TB control program will have access to a state or regional public health-associated laboratories that performs state-of-the-art TB diagnostic services

**Problem Statement No. 2:** TB isolates from non-public health-associated TB laboratories are not routinely made available public health-associated TB laboratories, precluding meaningful molecular epidemiology studies.
Strategies/Action Steps:
1. Develop a model law or rule that can be used by states to require TB isolates to be sent to public health-associated TB laboratories
2. Develop an informational method to inform other laboratories of the requirement.

Objective measures:
1. By January 2004, >90% of all culture-positive TB cases in each state will have at least one specimen at their public health-associated laboratories.

Problem Statement No. 3: Public health-associated TB laboratories do not consistently have the space, equipment, training, and reagents to perform rapid diagnostic tests (e.g., nucleic acid amplification (NAA) tests on selected specimens (such as smear-positive specimens).

Strategies/Action Steps:
1. Provide consistent support for NAA tests

Objective measures:
1. By January 2004, each state TB control program will have NAA results on all AFB-smear positive specimens within 72 hours of submission.

Problem Statement No. 4: TB Control programs do not consistently have access to public health-associated laboratories with the capability of doing restriction fragment length polymorphism (RFLP) analysis for use in identifying clusters of TB transmission.

Strategies/Action Steps:
1. Provide consistent and full support for regional laboratories to perform RFLP testing on isolates from a state on a periodic but prompt basis.

Objective measures:
1. By January 2004, each state TB control program will have access to a laboratory that will perform RFLP analysis on identified specimens on request, quarterly.

Problem Statement No. 5: Public health-associated laboratories do not have the staff or time to engage in studies of more effective means of TB diagnosis

Strategies/Action Steps:
1. Provide staffing for laboratories who want to engage in trials to evaluate new diagnostic techniques

Objective measures:
1. Provide expertise in molecular epidemiology analysis to state TB control programs for analysis of patterns to identify patterns of transmission.
Problem Statement No. 6: Public health-associated laboratories do not have the staff or reagents to routinely do second-line drug testing or testing for TB serum levels.

Strategies/Action Steps:
1. Provide stable federal funds to support second-line drug testing and testing for TB serum levels when requested by local TB control programs. The most efficient mechanism (regional, referral lab, etc) should be sought.

Objective measures:
1. By January 2003, each state TB control program will have access to a laboratory that can perform second-line TB drug susceptibility testing and serum levels for TB drugs.

VI. Communications/Information Technology

The ability to effectively perform core functions within state TB Programs is dependent upon each state having access to sophisticated client management software. Such software would include but not be limited to: case management (cases, suspects, and latent TB infection), surveillance, targeted testing, program management reports (ARPE’s), inter and intra state reporting, and field/outreach activities. Realizing that there are various limitations within each state to achieve an optimal level of automation, the availability of a universally adaptable and acceptable Client Management System for state TB Programs to subscribe to is long overdue.

Problem statement No. 1: Relatively few state TB Programs have designed, developed, implemented, and are successfully running sophisticated Client Management Systems.

Strategies/Action Steps:
1. Form a Southeastern Technical Group, allowing those state that have established Client Management Systems, and are participating in the national development of such systems, to share knowledge and resources with others in the southeast region.
2. Use this channel to communicate state system needs for incorporation into national standards.
3. Make sure local systems can conform or adapt to national standards (local programs are compatible).

Objective measures:
1. By ________, more representatives from the Southeastern TB Controllers will be actively involved in the CDC/National development of a web-based, universally applicable client management system.

Problem Statement No. 2: Lack of hardware, communications, IT support staff, and local staff to support a data base system.

Strategies/Action Steps:
1. States should complete a technical needs assessment to build hardware requirements, need of communication tools, etc. and build standards around these.
2. Provide more dedicated IT resources, more people with appropriate training, and consistency of support across locales.
3. Train personnel in the use of new technologies and hardware.
4. Secure budget resources for technology and support.
5. Investigate alternative hardware resources.
6. Communicate TB program needs to state IT plans.

Objective measures:
1. By ________, a comprehensive needs assessment will be completed allowing state TB Programs to identify hardware requirements, and the need of communication tools so that current standards can be built around these.

Problem Statement No. 3: Present means of timely and accurate interpretation of X-rays need to shift towards teleradiology technology.

Strategies/Action Steps:
1. Explore what already exists and form strategic partnerships with those already using the technology or know how to develop it.

Objective measures:
1. By ________, a more sophisticated means of reading and reporting X-ray results utilizing teleradiology technology will be made available for implementation in state TB programs.

Problem Statement No. 4: Newer technologies & services need to be identified and accessible to states to enhance other TB program activities.

Strategies/Action Steps:
1. Strengthen the existing network of interstate and intrastate reporting activities by automated means that can be incorporated into client management systems.
2. Incorporate Aggregate Reports for TB Program Evaluation (ARPE) into client management systems.
3. Share resources and costs.
4. When state TB programs establish technologically innovative programs, share them with other disciplines that are not just TB (increases justification for costs and resources).
5. Train as necessary (and get buy-in to training), or contract out and let other agents provide the expertise from outside the public health arena.

Objective measures:
1. By ________, an improved process of communicating Interstate and Intrastate Reports using IT resources.
VII. Research

There is currently CDC funding for clinical trials research for TB through the TB Trials Consortium and for epidemiological research through the TB Epidemiology Studies Consortium. Research priorities as delineated by the CDC do not always coincide with priorities identified in the field. Furthermore, some of the “requests for proposals” are difficult to respond to given the constraints of the contract mechanism and inability for dialog and collaborative development of protocols.

One of the priorities for the SE TB Controllers is to find a shorter, but well-tolerated and effective treatment regimen for latent TB infection so that a higher proportion of latently infected people with initiate and complete therapy. The TBTC is currently embarked on such a study, with no assurance that there is enough funding to enroll the 8000 patients necessary for this efficacy trial comparing 9-months of INH to 3-months of once-weekly, directly-observed INH and rifapentine. Furthermore, new agents (e.g., fluoroquinolones) and potential TB vaccines are on the horizon, which hold great promise for shorter courses of treatment and more effective disease prevention. However, studies required to assess their usefulness will further stretch the resources of the currently funded entities.

Problem Statement No. 1: Research priorities as delineated by the CDC do not always coincide with priorities identified in the field.

Strategies/Action Steps:
1. In collaboration with NTCA, the CDC will poll state, big city and territorial TB controllers for input on research agendas, as well as protocol development and data collection tools

Problem Statement No. 2: Research “requests for proposals” are difficult to understand, and respond to.

Strategies/Action Steps:
1. In collaboration with NTCA, the CDC will poll state, big city and territorial TB controllers for input on research agendas, as well as protocol development and data collection tools

Objective measures:
1. By _______, in collaboration with NTCA, the CDC will poll state, big city and territorial TB controllers for input on research agendas, as well as protocol development and data collection tools

Problem Statement No. 3: TB elimination is unlikely to succeed with current 40-60% completion rates for treatment of latent TB infection

Strategies/Action Steps:
1. Commit necessary funds for U.S. and international sites to recruit and retain
patients in the USPHS Study 26 protocol

Objective measures:
1. By __________, the TBTC will be fully funded to support accrual of 8000 patients to Study 26

*Problem Statement No. 4: TB treatment that currently requires 6 months of public health staff directly observed therapy and monitoring is increasingly difficult to support. Shorter courses of therapy with the same or increased efficacy will save time, money and can be quickly exported to countries with high TB incidence rates.*

Strategies/Action Steps:
1. Commit necessary funds for U.S. and international sites to recruit and retain patients in future studies of promising new agents or regimens, as well as animal model studies and phase 1 and 2 studies required before initiating large Phase III clinical trials.
2. Commit necessary funds for economic analyses to demonstrate usefulness of different treatment strategies for use in industrialized as well as struggling economies

Objective measures:
1. By __________, the TBTC will be fully funded to develop and recruit patients for a trial of newer agents for shorter course TB treatment.

*Problem Statement No. 5: TB elimination requires a TB vaccine with much greater efficacy than BCG vaccine. NIH supports the basic science developed for such efforts (and should get increased support), but clinical trials in the U.S. will also be required before FDA licensing.*

Strategies/Action Steps:
1. Using the HIVNET model, cohorts should start to be organized in the U.S. and at international sites, for future vaccine efficacy trials.

Objective measures:
1. By __________, U.S. and international vaccine testing sites will be identified and funded for testing TB vaccines

**VIII Common Need: Catastrophic Coverage**

Many states must operate on a bare-bones budget covering only essential daily activities and personnel of the TB Control Program. A Catastrophic Event (such as multi-drug resistant cases and associated contact investigations incurring extraordinary treatment cost, outbreaks of disease occurring in HIV/AIDS patients, or the influx of high-risk populations requiring an enormous outflow of resources) very quickly depletes available resources. Availability of resources, both human and financial, to provide services during these extraordinary events are a great concern to the Southeastern TB Controllers. CDC and the Division of Tuberculosis Elimination should
clarify and streamline the process to access funding available to the states to provide timely assistance in the event of these extraordinary or emergency occurrences.

*Problem statement No. 1: Lack of available funds to cover catastrophic events.*

**Strategies/Action Steps:**
1. Recommend establishing a centralized (or regionalized) fund to be administered by CDC/NTCA personnel to cover expenditures associated with extraordinary TB control events.
2. Establish guidelines for application and distribution of these funds so that access to the funds may be accomplished in a timely, relevant manner. Guidelines should be written by members of the National TB Controllers Association and approved by all eligible voting members.
3. Utilize established CDC personnel and chain of command reporting systems to track catastrophic events.
4. Identify personnel to assist states in the cost analysis and data management of catastrophic events. (Example: Prevention Effectiveness Section, Field Services Branch)
5. Identify sources to meet extraordinary or unusual treatment needs (locating sources for drugs).

**Objective measures:**
1. By _______, a Catastrophic TB Fund will be available to TB Control Programs.
2. By _______, process of application and distribution of these funds will be completed and approved by NTCA membership.
3. By _______, analyze existing data and outcomes of previous catastrophic events to estimate future funding level needed.
4. By _______, establish process for locating hard to find or “out of stock” drugs for extraordinary or emergency needs.

*Problem statement No. 2: Lack of a standard outbreak response plan.*

**Strategies/Action Steps:**
1. Recommend establishing/finalizing the Division of Tuberculosis Elimination Outbreak Response Plan
2. Establish a reporting/communication system at CDC to track outbreaks or extraordinary events in TB Control Programs.
3. Organize, train, and implement teams of experts within the Field Services Branch and the Surveillance and Epidemiology Branch to assist TB Control Programs during extraordinary events and emergencies.

**Objective measures:**
1. By _______, Division of Tuberculosis Elimination Outbreak Response Plan finalized.
Needs of Special Populations Not Foreign Born

Southeast states have a diverse mix of TB patients that live in pockets of poverty in inner cities and in the rural countryside where access to care and compliance to TB treatment is often problematic. Health is seldom the main priority of TB patients with difficult life circumstances such as homelessness, substance abuse, and mental illness. Special strategies need to be developed to overcome barriers to care of TB patients with these special needs.

Problem statement No. 1: A comprehensive approach to care has to be developed for TB patients with special needs

Strategies/Action Steps:
1. Establish networks with key resources in the community already serving these populations.
   a. Community resources and faith communities that provide transportation for the sick and disabled
   b. Agencies or facilities that provide services to inner city populations, substance abusers, and homeless persons
   c. Facilities that admit TB patients with mental health problems
2. Hire social workers who can develop and maintain working relationships with appropriate community resources and utilize them to address the non-medical problems that affect a patient’s ability to complete treatment.

Objective Measures:
1. By _______, linkages and working relationships between TB programs and appropriate community resources should have been established.
2. By __________, each state should have one Social Worker in their employment.

Problem statement no. 2: Providing medical care to TB patients and contacts to TB cases with special needs is very work intensive and requires extraordinary effort on the part of both the patient and provider to ensure treatment completion.

Strategies/Action Steps:
1. Provide strong incentives and enablers to TB patients and contacts with LTBI to improve treatment completion
2. Provide incentives to outreach workers to maintain training certification and to recognize outstanding performance

Objective Measures:
1. By 2002, completion of therapy rates should have improved (states will define goals individually)

Problem Statement no. 3: Case management and outreach services are often provided by health care workers who do not mirror the population being served.

Strategies/Action Steps:
1. Insure that employees are culturally and ethnically similar to the population served.

Objective Measures:
1. By 2002, every program should document a plan that will address the recruitment of employees that are culturally and ethnically similar to the targeted population.

X. Personnel

Treatment, prevention and control activities are becoming more complex, even as TB morbidity decreases. Personnel recruitment and retention is becoming increasingly difficult. Contributing factors to recruitment and retention problems include national, state and local budget reductions, early retirement plans, noncompetitive salaries and poorly funded operational budgets.

Problem Statement No. 1: In order to meet budget reductions public health agencies are implementing early retirement programs to encourage eligible staff to retire, resulting in the loss of senior, experienced personnel at all levels of staffing.

Strategies/Action Steps:
1. Develop a plan for redistributing responsibilities.
2. Develop procedures to allow retiring staff to remain through the transition period.
3. Train and prepare remaining staff to assume responsibilities.
4. Explore options for making it more attractive for experienced staff to continue working.

Objective Measures:
1. By __________, obtain agency approval to develop plans, procedures, training programs and options to implement the Strategies/Action Steps, and identify potential funding sources.
2. By __________, obtain other necessary approvals (e.g., state human resource agency, procurement codes, etc.) to proceed with plans, procedures, programs and options.

Problem Statement No. 2: State-imposed barriers to hiring and program operations can compromise effective tuberculosis treatment, prevention and control activities. Barriers include level funding despite increased costs, budget reductions, and hiring and expenditure freezes which apply to all sources of funding.

Strategies/Action Steps:
1. Document and inform decision makers of the impact of state-imposed barriers to tuberculosis control activities (e.g., missed doses of DOT, increased case loads, delayed initiation and incomplete contact investigations).
2. Identify, educate and recruit outside advocates (e.g., the American Lung Associations and state affiliates, community based organizations, medical associations, etc.).
3. Find alternatives for service provision, such as using contractors, temporary agencies, and other service providers/agencies.

Objective Measures:
1. By __________, assemble documentation of the impact of state-imposed barriers.
2. By __________, establish partnerships with outside advocates.
3. By __________, identify alternative service providers, negotiate agreements, and locate funding sources, where necessary.

Problem Statement No. 3: Salaries for tuberculosis control professional and other staff are not competitive with the private sector and, in some cases, with other public agencies, making recruitment and retention difficult; job classifications are not commensurate with job complexities.

Strategies/Action Steps:
1. Collect data showing that salaries are not competitive.
2. Develop the argument for why tuberculosis work is complex and necessary.
3. Use the argument to justify and obtain approval for job reclassifications and necessary funding.
4. Establish a career ladder that will make tuberculosis control work more attractive for recruitment and retention purposes.
5. Establish stipends to support additional training.
6. Establish internship programs with universities and colleges that will allow graduates to enter the public health field at an appropriate point above entry level.

Objective Measures:
1. By __________, have all information necessary to present the argument for the complexities and necessity of tuberculosis work
2. By __________, rewrite job classifications.
3. By __________, present argument, obtain approval for job reclassifications, and identify necessary funding.
4. By __________, seek support and approval for the development of a career ladder and the establishment of internship programs.
5. By __________, seek support and approval for training stipends, and identify funding sources.

Problem Statement No. 4: As tuberculosis morbidity continues to decrease and the complexities of treatment, prevention and control activities increase, directing and targeting funding, staff and other resources become more necessary. Tuberculosis programs must have epidemiological expertise to ensure that resources are used efficiently and effectively.

Strategies/Action Steps:
1. Secure the services of a full or part time epidemiologist.
2. Work with appropriate internal and external entities to increase salary levels for epidemiologists, if necessary.

Measurable Objectives:
1. By __________, establish the level of need for state and local epidemiological expertise.
2. By __________, identify ways to obtain epidemiologist services and potential funding sources.
3. By __________, present information to agency decision makers and obtain their approval and support for hiring and funding.

XI. Empowerment

Participation in federal TB program and policy decisions by stakeholders is a major concern of all SE TB controllers. The decision-making process at CDC should be broadened to include more partners that directly implement TB elimination policies so that national TB policies are more responsive to program needs.

Problem statement No. 1: Lack of representation in federal policy development.

Strategies/Action Steps:
1. Recommend representation of each region in the Advisory Council for TB Elimination (ACET).
2. Identify representatives from the SE TB Controllers, state, and city TB Controllers to bring concerns of SE TB programs to CDC and other federal agencies that have an interest in TB elimination.
3. Explore the possibilities of using other organizations such as the American Lung Association (ALA) for input into the CDC decision-making process.
4. Use the collective voice of the SE TB controllers association to advocate for concerns of the Southeast region.

Objective measures:
1. In ________, more representatives from SE TB Controllers and SE chapters of ALA will be members of the ACET.
2. In 2002, the SE Strategic Plan for TB Elimination will have been submitted to CDC.

Problem statement No. 2: Poor communication between CDC and state TB programs, and between state and local TB programs

Strategies/Action Steps:
1. Identify the person/s at CDC and the states to be held accountable for explaining CDC policy decisions and resource allocation.
2. Re-examine the role of the state TB consultant from CDC
   a. States should take control of site visits by ensuring that local program concerns are raised and responded to.
b. Request advance notice of schedules and agenda of site visits.

c. Evaluate site visits of state TB consultants.

3. Obtain buy-in at all levels for major policy decisions by improving intrastate communication.

4. Promote greater awareness of less urban areas and remote rural areas.

Objective measures:

1. In ________, CDC state TB consultants will have conducted more frequent site visits.

2. In ________, a survey of individual programs will be conducted to assess improvements in communication between CDC and state TB programs and within states.