

Division of Tuberculosis Elimination Strategic Planning

The Centers for Disease Control and Prevention (CDC), Division of Tuberculosis Elimination (DTBE) strategic planning focuses on the following domestic and global goals:

- **Domestic - Elimination of tuberculosis (TB) in the United States (defined as less than 1 case per million population); and**
- **Global - Contribute to reductions in global TB incidence and mortality (by 50% each compared to 1990 baseline, based on the Global Plan to Stop TB 2006-2015 [<http://www.stoptb.org/globalplan/>]).**

DTBE has been carrying out strategic planning sessions periodically since 1989, using surveillance trends data and findings from published scientific reports to identify directions for new project proposals. DTBE launches new projects through an internal peer-review process, selecting those with the greatest potential for having an impact on eliminating TB in the United States and contributing to global TB control efforts.

In January and February 2008, DTBE senior staff (branch chiefs, deputies, team leads, and office of the director employees) again conducted strategic planning to refine and guide domestic and global TB efforts. This year's sessions were carried out in the context of the lowest TB rates in history, but with a slowing of the rate of decline, greater complexity in the identification and successful treatment of cases, continued increases in foreign-born TB cases, excess rates in racial and ethnic minorities, concern over HIV-associated TB and drug-resistant TB, and the United States Government's growing role in addressing TB globally.

As a result of the 2008 planning sessions, DTBE established five priorities to guide efforts toward these goals:

1. Interrupt transmission of *Mycobacterium tuberculosis*.
2. Reduce tuberculosis (TB) in foreign-born persons residing or traveling in the United States.
3. Reduce TB in U.S. racial and ethnic minority populations.
4. Reduce global impact of multidrug-resistant and extensively drug-resistant TB.
5. Reduce HIV-associated TB.

In addition, DTBE identified 12 core functions that are required for implementing priority activities. DTBE considers these core functions as uniquely federal responsibilities, and critical for providing national and global leadership. DTBE core functions are to:

1. Conduct routine surveillance (including drug susceptibility surveillance) and periodic surveys.
2. Provide funding and technical assistance to state and local programs for case finding, contact investigation, and completion of treatment, including support for care and treatment with assistance provided by the Regional Training and Medical Consultation Centers (RTMCCs [<http://www.cdc.gov/tb/rtmcc.htm>]).
3. Guide preparedness and outbreak responses.
4. Conduct program evaluation (e.g., National TB Indicators Project [NTIP]).
5. Provide laboratory diagnostic services and help build laboratory capacity.
6. Conduct critical, programmatically relevant operational research to develop and evaluate new tools and interventions for diagnosis, treatment, prevention, and control of TB (to help programs work more effectively and more efficiently).
7. Provide data management, statistical, and information technology support (with the Strategic Science and Program Unit, Coordinating Center for Infectious Diseases [CCID] and the National Center for Public Health Informatics [NCPHI]).

8. Support intramural services (salaries, travel, equipment, and supplies) required for maintaining a strong infrastructure for TB program staffing.
9. Obtain external expert consultation and advice (e.g., Advisory Council for the Elimination of TB, CCID Board of Scientific Counselors, and *ad-hoc* consultations) to ensure DTBE research and program activities are responsive to emergent public health concerns.
10. Develop and evaluate evidence-based training and educational materials, policies, and guidelines to ensure program and health care competency in TB prevention, control, diagnosis, treatment, and laboratory capacity.
11. Develop education, risk, and media communications (web and print based) to aid in preparedness and public awareness of TB prevention and control issues.
12. Cultivate relevant external partnerships (e.g., Stop TB USA, National TB Controllers Association, American Thoracic Society, Infectious Diseases Society of America, American Academy of Pediatrics, the Association of Public Health Laboratories, affected individuals and their families, and others), as well as collaborations within CDC and across other federal agencies.

In addition, DTBE uses strategic planning sessions to review previously published Strategic Plans for the Elimination of TB. These plans have been developed by CDC and partner organizations to respond to changes in the TB epidemic over time. They include:

1. "A Strategic Plan for the Elimination of Tuberculosis in the United States," published in the Mortality and Morbidity Weekly Report (MMWR) in 1989 (<http://www.cdc.gov/mmwr/preview/mmwrhtml/00001380.htm>). Three steps of this strategic plan include:
 - Step 1. More effective use of existing prevention and control methods, especially in high-risk populations;
 - Step 2. The development and evaluation of new technologies for diagnosis, treatment, and prevention; and
 - Step 3. The rapid assessment and transfer of newly developed technologies into clinical and public health practice.

2. The National Action Plan to Combat Multidrug Resistant Tuberculosis, published in the MMWR in 1992. This updated plan by the Federal Tuberculosis Task Force (originally created by CDC Director, Dr. William Roper, in 1991) responded to the unprecedented resurgence of TB in the United States, along with several outbreaks of HIV-associated multidrug-resistant tuberculosis (MDR TB). It provides a blueprint for action by federal agencies, recognizing the need for cooperation among many sectors of society (<http://www.cdc.gov/mmwr/preview/mmwrhtml/00031159.htm>). Action steps outlined in this plan focus on each of the following nine areas:

- Surveillance and epidemiology to determine the magnitude and extent of the problem;
- Laboratory diagnosis, to make the laboratory diagnosis of MDR TB more rapid, sensitive, and reliable;
- Patient management, to prevent patients with drug-susceptible TB from developing drug-resistant disease and effectively manage those patients with MDR TB;
- Screening and preventive therapy, to identify persons infected with or at risk of developing MDR TB and prevent them from developing clinically-active TB;
- Infection control, to minimize the risk of transmission of MDR TB to patients, workers, and others in institutional settings;
- Outbreak control, to limit transmission of MDR TB;
- Program evaluation, to ensure effective management of patients and preventing the development of MDR TB;
- Information dissemination, training, and education to effectively disseminate information about MDR TB and its prevention and control; and
- Research to identify better methods for combating MDR TB.

3. The Institute of Medicine (IOM) report "Ending Neglect" with specific recommendations for the control and elimination of tuberculosis in the United States, published by the National Academy of

Sciences Press in 2000. These recommendations formed the basis for updated strategic planning for the elimination of tuberculosis in the United States by the Federal Tuberculosis Task Force, with the resultant “Federal Tuberculosis Task Force Plan in Response to the Institute of Medicine Report, Ending Neglect: The Elimination of Tuberculosis in the United States,” produced in “desktop publishing” format in 2003 (<http://www.cdc.gov/tb/pubs/iom/TaskForcePlan/PDF/taskforcebooklet1.pdf>).

Additional strategic planning at CDC yielded the companion plan “CDC’s Response to Ending Neglect: The Elimination of Tuberculosis in the United States,” produced in “desktop publishing” format in 2002 with specific goals, objectives, and action steps (<http://www.cdc.gov/tb/pubs/iom/iomresponse/iomresponse.pdf>). This plan is organized around six goals framed in the context of IOM’s recommendations:

- Goal I. Maintain control of TB through timely diagnosis and management of TB patients and their contacts;
- Goal II. Accelerate the decline of TB through targeted testing and treatment of persons with latent TB infection;
- Goal III. Develop new tools for the diagnosis, treatment, and prevention of TB;
- Goal IV. Reduce the global burden of TB by increasing the United States involvement in global TB control activities;

- Goal V. Mobilize and sustain support for TB elimination by engaging policy and opinion leaders, health care providers, affected communities, and the public; and
 - Goal VI. Track progress toward the goal of TB elimination.
4. The Federal Tuberculosis Task Force conducted updated strategic planning in 2007, in response to the global description and occurrence of persons with virtually untreatable extensively drug-resistant tuberculosis in 2006. This recently-developed coordinated response plan is presently undergoing inter-agency clearance, for publication in a future issue of the MMWR. The plan’s nine sections cover the most critical components of an action plan:
- Diagnostic Laboratory;
 - Surveillance, Epidemiology, and Outbreak Investigations;
 - Infection Control;
 - Clinical and Programmatic Interventions;
 - Ethical and Legal Issues;
 - Communication and Education;
 - Biomedical Research;
 - Partnerships; and
 - Cost Analysis.