

**ព្រះរាជាណាចក្រកម្ពុជា**

**ជាតិ សាសនា ព្រះមហាក្សត្រ**

Kingdom of Cambodia  
Nation Religion King

**ក្រសួងសុខាភិបាល**

Ministry of Health

**គោលនយោបាយ និង យុទ្ធសាស្ត្រសុខាភិបាលជាតិ  
ស្តីពី  
ការប្រយុទ្ធនឹងជំងឺរបេង ក្នុងព្រះរាជាណាចក្រកម្ពុជា  
២០១១-២០១៥**

**National Health Policies and Strategies  
for  
Tuberculosis Control in the Kingdom of Cambodia  
2011-2015**

**មជ្ឈមណ្ឌលជាតិកំចាត់រោគរបេង និង បាច់សិន**

**កក្កដា ឆ្នាំ ២០១០**

National Center for Tuberculosis and Leprosy Control (CENAT)  
June 2010

## FOREWORD

This document of the National Health Policies and Strategies for Tuberculosis (TB) Control 2011-2015 was developed in accordance with the wider overall National Health Strategic Plan 2008-2015 as well as the Global Stop TB Strategies and Plan 2006-2015. It is the third paper of its kind formulated by the National Center for Tuberculosis and Leprosy Control (CENAT) in close consultation with its partners.

This third policy and strategy paper gives priorities and directions for TB control in the Kingdom of Cambodia from 2011 to 2015. Priorities encompass quality services, involvement of community and TB patients, TB/HIV, Public Private Mix for DOTS, multi-Drug resistant TB, Childhood TB, information and research, partnership and advocacy as well as human resource development.

I believe that this document is the basis for the NTP for the development of its third five-year strategic plan for the purpose of achieving the targets of the NTP, which contribute to the attainment of the goals and objectives of the overall National Health Strategic Plan, which contribute to attaining MDG targets by 2015.

In addition, I believe that this policy and strategy paper is also of great importance for partners concerned including health officials, donor and technical agencies to understand, participate and support the successful implementation of these policies and strategies.

Phnom Penh, 20 July 2010 *at home*

Minister of Health



*Mam Bun Heng*

Dr. Mam Bun Heng

## Acknowledgements

On behalf of the National Centre for Tuberculosis and Leprosy Control (CENAT), I would like to express our sincere gratitude to all who have been involved in the process of the development of this very important National Health Policies and Strategies for Tuberculosis Control 2011- 2015.

I would like to extend our deep thanks to the members of Sub-technical Working Group for TB Control previously known as the Inter-agency Coordination Committee (ICC) for TB control, who have made tremendous contribution to the finalization of this policy and strategy paper.

I wish to express our great thanks to the World Health organization for both technical and financial support as well as other partners within and outside the government for technical inputs for the development of this document.

I would like to emphasize that without strong support, full and active participation of all partners and working group members as well as other people involved, the finalization of this policy and strategy document could not successfully take place.

Phnom Penh, 15 July 2010

National Center for TB and Leprosy Control  
Director



Mao Tan Eang, MD, MPH

## I. INTRODUCTION

Despite great efforts made during nearly the last two decades in tuberculosis (TB) control the disease is still a major global public health problem. Globally, though the incidence rate has recently been on a slight decline, the overall case load is still on the rise. 9.4 million TB cases of all forms and around 1.8 million deaths occurred in 2008, of which more than 1/4 were associated with HIV/AIDS (1).

In its overall national health strategic plan, the Ministry of Health of the Kingdom of Cambodia gives the highest priority to the control of communicable diseases in the country with tuberculosis being ranked as one of the most important (2).

Cambodia is among the 22 countries in the world with a high burden of tuberculosis. In 2007, the TB incidence rate of all forms was estimated at 495/100,000 inhabitants, that of smear-positive pulmonary form at 219 /100,000 population, and the estimate of death rate was 95/100,000 population(3). These rates are also the highest in the Western Pacific Region (WPR).

In response to the need for controlling the disease in the country, the National Tuberculosis Control Program (NTP) has been set up since 1980. From 1980 to 1993, treatment approaches of long duration were applied. In 1994, the Ministry of Health adopted the Directly Observed Treatment, Short-course (DOTS) strategy, which is one of the most cost-effective health interventions recommended by WHO for developing countries.

There are five integral components in the DOTS strategy namely, political commitment; diagnosis of smear positive cases by microscopy; directly observed treatment (DOT); uninterrupted drug supply; and good recording and reporting system. In 1995, the National Committee for TB control was established, honorably headed by Samdech the Prime Minister, which clearly demonstrates the political commitment from the government.

Due to the collaborative efforts made by all partners concerned the NTP was able to accomplish its tasks with considerable achievements during the last ten years. For instance, 100% coverage of DOTS services at health center level was attained by the end of 2004; since 1995 the NTP has been still able to maintain high cure rate of over 85%.The program attained the 70% case detection rate by 2005 as planned.

For the last five years, major achievements include the ability to maintain the proper functioning of HC DOTS services, the expansion of C-DOTS and TB/HIV to 75% and 98 % by end of 2009;the start of MDR-TB services from 2006;the scale-up of PPM-DOTS to 11 provinces and 39 ODs by end of 2009; the organization of NTP first Joint Program Review and the second TB drug resistance survey in 2006;and the organization of the HIV sero-prevalence among TB patients survey in 2007 and 2009.

In Cambodia, the number of new TB cases seen at public health facilities were over doubled during the last decade. The number of new TB cases of all types were 18,892; 36,121; and 40,199 in 2000, 2005 and 2009 respectively (4). Consequently, the prevalence of TB of all cases dropped from 928/100,000 population in 1997 to 664 / 100,000 pop in 2007(3).The impact of some issues including that of HIV/AIDS on TB is currently enormous in Cambodia, resulting in the highest number of cases ever notified in NTP.

Despite considerable progress made during the past ten years in combating the disease, a number of challenges still remain to be addressed so that the NTP would be able to gear toward MDG goals. These include the still high disease prevalence and incidence; resources to maintain the functioning of the existing huge DOTS services; quality assurance issues; resources to embark on or expand more innovative interventions such as community DOTS, TB/HIV, PPM-DOTS; MDR-TB; new technology; laboratory strengthening; and staff capacity and motivation.

The main purpose of this document is to provide policy and strategy directions of the Ministry of Health (MoH) concerning the control of TB in the kingdom, covering the period from 2011 to 2015. The directions mainly focus on the management structure; strategies, plans and guidelines; service provision; health information system; ACSM; research; investment; drugs and laboratory supplies; as well as financing and partnership for the TB control program in Cambodia, in line with the overall National Health Strategic Plan as well as the Global Stop TB Strategy and Plan.

## II. STOP TB STRATEGY and GLOBAL PLAN TO STOP TB

The Stop TB Strategy is the approach recommended by WHO to reduce the burden of TB in line with global targets set for 2015. The strategy is summarized in **TABLE 1** (1). The Stop TB Partnership's Global Plan to Stop TB 2006-2015 sets out the scale at which the interventions included in the Stop TB Strategy need to be implemented to achieve the 2015 targets.

**TABLE 1: The Stop TB Strategy at a glance**

<b>VISION</b>
A TB-free world
<b>GOAL</b>
To dramatically reduce the global burden of TB by 2015 in line with the Millennium Development Goals and the Stop TB Partnership targets
<b>OBJECTIVES</b>
<ul style="list-style-type: none"> <li>• Achieve universal access to quality diagnosis and patient-centred treatment</li> <li>• Reduce the human suffering and socioeconomic burden associated with TB</li> <li>• Protect vulnerable populations from TB, TB/HIV and drug-resistant TB</li> <li>• Support development of new tools and enable their timely and effective use</li> <li>• Protect and promote human rights in TB prevention, care and control</li> </ul>
<b>TARGETS</b>
<ul style="list-style-type: none"> <li>• MDG 6, Target 6.C: Halt and begin to reverse the incidence of TB by 2015</li> <li>• Targets linked to the MDGs and endorsed by Stop TB Partnership: <ul style="list-style-type: none"> <li>- 2015: reduce prevalence of and deaths due to TB by 50%</li> </ul> </li> </ul>

- 2050: eliminate TB as a public health problem

## **COMPONENTS**

### **1. Pursue high-quality DOTS expansion and enhancement**

- a. Secure political commitment, with adequate and sustained financing
- b. Ensure early case detection, and diagnosis through quality-assured bacteriology
- c. Provide standardized treatment with supervision, and patient support
- d. Ensure effective drug supply and management
- e. Monitor and evaluate performance and impact

### **2. Address TB/HIV, MDR-TB, and the needs of poor and vulnerable populations**

- a. Scale-up collaborative TB/HIV activities
- b. Scale-up prevention and management of multidrug-resistant TB (MDR-TB)
- c. Address the needs of TB contacts, and of poor and vulnerable populations

### **3. Contribute to health system strengthening based on primary health care**

- a. Help improve health policies, human resource development, financing, supplies, service delivery, and information
- b. Strengthen infection control in health services, other congregate settings and households
- c. Upgrade laboratory networks, and implement the Practical Approach to Lung Health (PAL)
- d. Adapt successful approaches from other fields and sectors, and foster action on the social determinants of health

### **4. Engage all care providers**

- a. Involve all public, voluntary, corporate and private providers through Public-Private Mix (PPM) approaches
- b. Promote use of the International Standards for Tuberculosis Care (ISTC)

### **5. Empower people with TB, and communities through partnership**

- a. Pursue advocacy, communication and social mobilization
- b. Foster community participation in TB care, prevention and health promotion
- c. Promote use of the Patients' Charter for Tuberculosis Care

### **6. Enable and promote research**

- a. Conduct programme-based operational research
- b. Advocate for and participate in research to develop new diagnostics, drugs and vaccines

### **III. MAIN GOALS AND OBJECTIVES OF NTP**

The main goal of the Cambodia NTP is to contribute to improving the health of the Cambodian people in order to contribute to socio-economic development and poverty reduction in Cambodia by reducing the morbidity and the mortality due to tuberculosis.

The overall objectives for 2011-2015 are to ensure equity and universal access to quality TB services; maintain a high cure rate of more than 85%; and reduce the prevalence of TB and death due to tuberculosis by 50 % by 2015 \* relative to the 1990 figures in order to contribute to attaining the Millennium Development Goals (MDG).

The major objectives of the NTP are :

- to consolidate and maintain high quality TB services nationwide in order to achieve universal access to quality diagnosis and treatment;
- to improve and ensure equitable access to TB services focusing on the poor and community participation;
- to effectively respond to TB/HIV co-infection and drug-resistant TB, childhood TB and other high risk groups and challenges;
- to ensure adequate resources and strengthening coordination for TB control and contribute to health system strengthening;
- to strengthen Monitoring and Evaluation System and to promote research activities for TB control.

## **IV. POLICY AND STRATEGIES FOR TB CONTROL IN THE KINGDOM OF CAMBODIA 2011-2015**

### **1. Management Structures**

*The National Center for Tuberculosis and Leprosy Control (CENAT) assumes overall responsibility for the National Tuberculosis Control Program (NTP) to be implemented countrywide through the health care delivery system in Cambodia.*

The major roles and functions of the NTP are:

- Formulation, monitoring and evaluation of the national policies, strategies, guidelines, protocols and plans for TB control with the purpose of providing quality TB services to all TB patients.
- Promotion of Human Resource Development for TB Control at all levels.
- Provision and/or reinforcement of supervision, monitoring and evaluation of TB control activities at all levels.
- Organization of surveillance and research on topics relevant to the NTP.
- Promotion of advocacy communication and social mobilization for TB control.
- Strengthening of the National TB Reference Laboratory and the TB laboratory network, including networking with supra-national TB reference laboratory.
- Coordination of TB control activities including those conducted by other government agencies, IOs, NGOs, private providers and communities.
- Coordination of partners and resource mobilization for TB control.
- Contribution to the strengthening of the health care system in both public and private sectors.

### **2. Policy, Plan and guidelines**

#### **A. Policy**

*The National TB Control Program ensures the existence of clear and practical Policies, Strategies, Plans and guidelines for TB control.*

#### **B. Strategies**

- The National Health Policies and Strategies and Plans for TB Control need to be regularly set up, revised and disseminated.
- Important guidelines should be developed or updated in appropriate time and manner and distributed for effective use to ensure continuing improvement in quality.
- The implementation of those policies and strategies, plans and guidelines need to be appropriately and regularly monitored and evaluated.



- The NTP should be involved in the process of the development of the overall national health policy and plan as well as related policy and plan formulation to the NTP.

### **3. Service Provision**

#### **A. Policy**

*The National TB Control Program ensures, according to the national protocol and guidelines and in line with the International Standard of Tuberculosis Care, good quality, diagnostic, curative, preventive and promotive TB services, which are accessible to the community and free of charge.*

#### **B. Strategies**

- Ensure free of charge TB diagnosis and treatment services in public health services ; and support subsidization for service providers if appropriate .
- Seek additional resources to support activities related to TB screening and diagnosis, which include support for accessing service facilities, antibiotic therapy and DST examination as well as capacity building in related fields.
- Intensify case finding, including active case finding among selected groups such as TB contacts especially children, people living with HIV/AIDS (PLHA), and targeted people in high prevalence areas/settings or with high risk.
- Enhance the DOTS strategy to provide quality services by trained staff and persons using hospitalization, ambulatory, and DOT at home approaches, giving emphasis on the implementation of DOTS at health center and in the community.
- Address more effectively adverse anti-TB drugs side effects.
- Improve and expand specific activities to deal with TB/HIV, multi-drug-resistant TB (MDR-TB), smear negative pulmonary TB, extra-pulmonary TB and TB in children.
- Retool and expand laboratory network including culture and DST facilities and embark on new technologies, which include LED fluorescent microscopy, liquid culture, molecular and other tests such as Line Probe Assay to ensure accessibility to quality TB laboratory services.
- Further involve community in TB control, including community members and TB and former TB patients.
- Further promote public private mix approach which include partnership with private sector including corporate sector, NGOs, IOs, private providers and other government institutions for TB control, including General Department of Prisons of the Ministry of interior.
- Promote BCG vaccination to be delivered to all children according to the national immunization program strategies.

- Promote preventive activities including such measures as infection control in health facilities and in the communities.
- Promote the provision of chemoprophylaxis, including IPT and CPT, to relevant target groups such as people living with HIV/AIDS (PLHIV) and TB contacts under five years of age.
- Promote physiotherapy to TB patient as a supplement to curative care at hospital level.
- Explore the possibility of embarking on special approaches to deal with TB and lung diseases like Practical Approach to Lung Health (PAL), and TB and Tobacco.
- Employ all appropriate means to improve ACSM activities, including such strategies related to health education as mass media and interpersonal health education like peer group education, health education through health facility staff, schools, and communities as well as communication between patients and service providers.
- Strengthen the referral system from the community level to the hospital level and vice versa.
- Promote social and nutritional support to TB patients within the context of comprehensive approach to TB care and control.

#### **4. Financing, Anti-TB Drugs and TB Diagnostic and Laboratory Supplies**

##### **A. Policies:**

*The Ministry of Health will seek to ensure that financial inputs are fully mobilized from all sources for TB control activities and used effectively and efficiently in TB control, and that there is uninterrupted supply of good quality drugs 1<sup>st</sup> and second line anti-TB drugs, TB diagnosis and laboratory equipment and supplies.*

##### **B. Strategies:**

- NTP will formulate a 5-year budget plan in line with its strategic plan in consultation with partners, including indication of funding gaps.
- NTP will fully mobilize funds to successfully implement the plan.
- MoH will ensure timely disbursement of funds for NTP.
- NTP will monitor the consumption of current anti-TB drugs, TB diagnostics/ laboratory supplies, estimate future requirement and provide information about anticipated requirement and estimated budget.
- MoH will ensure that there is uninterrupted supply of 1<sup>st</sup> and 2<sup>nd</sup> line anti-TB drugs , TB diagnostics /lab reagents and materials and consumables to TB network.

- NTP will take appropriate and immediate action to correct shortages of drugs and diagnostic and laboratory supplies and to prevent similar situation in the future.
- MoH will ensure that good quality drugs and diagnostic/laboratory materials and consumables are supplied to the Central Medical Store (CMS), properly stored and timely distributed.
- OD pharmacies will be responsible for proper storage and timely distribution to the TB units and health centers providing DOTS; and also be responsible for maintaining the buffer and security stocks and monitoring expiry dates of drugs and laboratory supplies.
- NTP will ensure that TB drugs are used according to the national protocol and should adhere to the rational use of drugs.

## **5. Investment on Material and Human Resources**

### **A. Policies**

*The Ministry of Health will seek to ensure that priority is given to investment in human and material resources for TB control activities.*

### **B. Strategies:**

- Enhance institutional capacity by strengthening of the management structure at all levels.
- Build capacity of health professionals and TB health workers giving emphasis on both basic and continuing training according to identified needs.
- Pay attention to health workforce planning for TB control.
- Give emphasis on human resources management, especially motivation and retention of TB health workers at all levels, including community level and TB patients.
- Seek appropriate technical assistance to improve program performance.
- Invest in physical infrastructure, diagnostic equipment including conventional and digital X-Rays, LED microscopes; and in logistic support for the delivery of appropriate TB services, which include TB wards, laboratory and x-ray facilities.

## **6. Monitoring and Evaluation and Research**

### **A. Policies**

*NTP will strengthen the information system and promote research activities in order to better manage the program. Research topics include the epidemiological patterns of the disease, health-seeking behavior and other issues related to TB in Cambodia.*

## **B. Strategies:**

- Strengthen database management for the recording and reporting system as well as promote the analysis, interpretation and use of TB health information.
- Update tools for program monitoring, evaluation and supervision activities at all levels.
- Enhance information technology (IT) including the use of telecommunication, appropriate database, electronic system, and GIS software, home page for effective planning, monitoring and evaluation.
- Publish periodic reports, including yearly, quarterly reports/newsletters and bulletins and disseminate information and statistics to all concerned institutions and organizations.
- Conduct surveys that are critical for the NTP such as TB Prevalence Survey, Drug Resistance Survey, etc.
- Organize other studies including clinical/operational research necessary for the NTP such as the health-seeking behaviors of TB patients, diagnostic delay, client satisfaction, impact of TB on socio-economic development etc.
- Ensure that the survey/study findings are published, disseminated and taken into account in developing policies, strategies and plans.
- Encourage and support the presentation of the findings at national and international forum.

## **7. Partnership and Coordination**

### **A. Policies**

*Both internal and external partnership should be seen as a core element in achieving NTP objectives. All resources should be mobilized and coordinated in such a way that would improve TB control activities at all levels within and outside the health care system.*

### **B. Strategies:**

- Establish and strengthen appropriate mechanisms of coordination with all partners which include international, government, non-government agencies, private/corporate sectors and local communities in TB control activities
- Network with international organizations involved in TB control activities and identify areas of cooperation and funding for program.
- Collaborate with organizations, universities and research institutions within country and abroad.
- Share experiences and mutual concerns with other countries and programs, in particular through country, inter-country, regional, and global forum.
- Promote advocacy activities to keep TB control as high priority including efforts for resource mobilization.

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