

ANNUAL REPORT
of the
**National Programme for Tuberculosis Control
and Chest Diseases**

2013



NPTCCD
Ministry of Health
Sri Lanka

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List of Abbreviations

ACSM	<i>Advocacy, Communication and Social Mobilization</i>
AFB	<i>Acid Fast Bacilli</i>
AIDS	<i>Acquired Immune Deficiency Syndrome</i>
AMC	<i>Anti-Malaria Campaign</i>
AMO	<i>Assistant Medical Officer</i>
ART	<i>Anti-Retroviral Therapy</i>
BCG	<i>Bacillus Calmette–Guérin</i>
BMICH	<i>Bandaranaike Memorial International Conference Hall</i>
BSL	<i>Biosafety Level</i>
CHW	<i>Chest Hospital Welisara</i>
CPT	<i>Cotrimoxazole Preventive Treatment</i>
CRP	<i>Consultant Respiratory Physician</i>
DCC	<i>District Chest Clinic</i>
DDG (PHS)	<i>Deputy Director General (Public Health Services)</i>
DEO	<i>Data Entry Operator</i>
DM	<i>Diabetes Mellitus</i>
DOTS	<i>Directly Observed Treatment Short-course</i>
DST	<i>Drug Susceptibility Testing</i>
DTCD	<i>Diploma in Tuberculosis and Chest Diseases</i>
DTCO	<i>District Tuberculosis Control Officer</i>
ePIMS	<i>Electronic Patient Information Management System</i>
EPTB	<i>Extra Pulmonary Tuberculosis</i>
EQA	<i>External Quality Assessment</i>
FDC	<i>Fixed Dose Combination</i>
GDF	<i>Global Drug Facility</i>
GFATM	<i>Global Fund to fight AIDS, Tuberculosis and Malaria</i>
GLC	<i>Green Light Committee</i>
GP	<i>General Practitioner</i>
HIV	<i>Human Immune Deficiency</i>
IUATLD	<i>International Union Against Tuberculosis and Lung Diseases</i>
MDG	<i>Millennium Development Goals</i>
MDR-TB	<i>Multi Drug Resistant Tuberculosis</i>
MO	<i>Medical Officer</i>

<i>MoH</i>	<i>Ministry of Health</i>
<i>MOH</i>	<i>Medical Officer of Health</i>
<i>MTB</i>	<i>Mycobacterium tuberculosis</i>
<i>NIHS</i>	<i>National Institute of Health Sciences</i>
<i>NPTCCD</i>	<i>National Programme for Tuberculosis Control and Chest Diseases</i>
<i>NSACP</i>	<i>National STD/AIDS Control Programme</i>
<i>NTRL</i>	<i>National Tuberculosis Reference Laboratory</i>
<i>OPD</i>	<i>Out Patient Department</i>
<i>PAL</i>	<i>Practical Approach to Lung health</i>
<i>PHI</i>	<i>Public Health Inspector</i>
<i>PPM</i>	<i>Public-Private Mix</i>
<i>PLWHA</i>	<i>People Living With HIV/AIDS</i>
<i>PTB</i>	<i>Pulmonary Tuberculosis</i>
<i>RMO</i>	<i>Registered Medical Officer</i>
<i>SAARC</i>	<i>South Asian Association for Regional Cooperation</i>
<i>SEARO</i>	<i>Regional Office for South-East Asia (WHO)</i>
<i>TB</i>	<i>Tuberculosis</i>
<i>WHO</i>	<i>World Health Organization</i>

Foreword

It is with great pleasure, I am presenting the Annual Report of the National Programme for Tuberculosis Control and Chest Diseases – 2013 which contains the important data on status of tuberculosis in Sri Lanka in 2013.

In this year many new ventures were launched to increase the case detection, to improve the case holding and technological and management advances were introduced to the programme to improve the performance. I am confident that the results of these interventions will be reflected as positive outcomes in the near future.

I am thankful to the Secretary, Ministry of Health, Director General of Health Services and Deputy Director General (Public Health Services I) for the guidance given to us. I do highly appreciate the support rendered by staff of NPTCCD, District TB Control Officers (DTCOs), consultants and all other members of our team in both centre and periphery for the control of TB.

I am particularly thankful to GFATM, WHO and SEARO for the support rendered in most of our activities.

I appreciate the staff of the Health Information Management Unit for compiling and publishing this report and panel of writers for making this task a success.

Dr. K. N. Gamini Senevirathne

Director,

NPTCCD

Preface

Progress, Activity and Administration Report is an annual publication of the National Programme for Tuberculosis Control and Chest Diseases.

The objective of this annual report is to provide information to the wide range of stakeholders on the progress and the performance of TB control activities in Sri Lanka.

Part I of the report gives the performance of the National Tuberculosis Control Programme. Data collected during 2013 are analyzed and presented. This would be useful for policy makers to take appropriate policy decisions in order to improve TB care services. In addition, District Tuberculosis Control Officers and other central and district level health professionals can utilize this information to focus their activities more precisely to reach national targets of TB Control.

Part II of the report provides information regarding the tuberculosis control activities carried out in Sri Lanka during the year 2013 at central and district level.

Part III of the report describes the administrative framework of the NPTCCD and facilities affiliated to TB control services.

PART I
Progress Report

Introduction

National Programme for Tuberculosis Control and Chest Diseases

National Programme for Tuberculosis Control and Chest Diseases (NPTCCD) is a decentralized unit in the Ministry of Health, which is headed by the Director, NPTCCD. The programme functions under the Deputy Director General (Public Health Services I) of the Ministry of Health. The central unit of the NPTCCD, National Tuberculosis Reference Laboratory, Central Drug Stores of the NPTCCD, District Chest Clinics (DCCs) of Colombo and Gampaha and chest ward at DH Kopay are under the direct administrative purview of the Director, NPTCCD.

NPTCCD provides its services through a network of chest clinics, chest wards and laboratories. Inward facilities for TB patients are provided at the National Hospital for Respiratory Diseases (NHRD) situated in Welisara and 13 other chest wards situated in government hospitals.

Diagnostic services are provided through National TB Reference Laboratory (NTRL), Intermediate Culture Laboratories in Kandy and Ratnapura, district chest clinic laboratories and 160 microscopy centers.

Central Drug Store of the NPTCCD is responsible for estimation, procurement, storage and distribution of anti TB drugs to District Chest Clinics.

TB and respiratory disease control activities at the district level are carried out by the 26 district chest clinics situated in 25 districts. All the district chest clinics except Colombo and Gampaha are under the administrative scope of respective provincial and district health authorities.

NPTCCD is responsible for infrastructure development and financial management of the institutions under its direct administrative purview. It also provides technical guidance and financial assistance from funds obtained from donor agencies for implementation of the TB control activities at the district level.

In addition, NPTCCD is responsible for the formulation of policies and guidelines for control of TB and other respiratory diseases and for planning, implementation, monitoring and evaluation of the TB control activities carried out in the entire country. TB surveillance is another main activity carried out by the NPTCCD. It also acts as a coordinating body between the central ministry and provincial health sector and other governmental and non governmental organizations.

NPTCCD carries out training of medical and paramedical staff engaged in TB care and carries out public awareness through various channels of communication.

The Government of Sri Lanka is the main source of funding for the NPTCCD. In 2013 approximately, 151 million rupees was allocated from the government funds and it was mainly used for payment of salaries and wages and for major constructions. In addition, TB control activities are supported by the GFATM. WHO provides technical assistance to the programme and GDF provides Fixed Dose Combination anti TB drugs. In 2013, World Bank also provided financial assistance to upgrade NTRL to Bio Safety Level 3 and to strengthen TB control Activities at provincial level.

Vision

Sri Lanka free of Tuberculosis and other respiratory diseases.

Mission

To contribute to the socio-economic development of the nation by committing ourselves to create a TB free Sri Lanka and to reduce the morbidity and mortality due to respiratory diseases by formulation of policies, planning, coordinating and monitoring of all TB and other respiratory disease control activities in the country.

Objectives

- ✓ To ensure that every patient with TB and respiratory diseases have access to effective diagnosis, treatment and cure.
- ✓ To interrupt transmission of TB.
- ✓ To prevent the emergence of multidrug - resistant tuberculosis.
- ✓ To reduce the social and economic burden caused by TB and other respiratory diseases.

Targets

To reach and thereafter to sustain the 2005 global targets achieving at least 70% case detection and at least 85% treatment success among TB cases under DOTS; in order to,

- ✓ reach the interim targets of halving TB deaths and prevalence.
- ✓ halt and reverse the incidence of TB as stated in the Millennium Development Goals set for 2015 (MDG-6 Target 6c) (Table 1).

Table 1: MDG Targets for 2010 and 2015

Indicator	1990 Estimates	2010 Targets	2015 Targets
Case Detection Rate under DOTS	N/A	86%	90%
Treatment Success Rate	N/A	>85%	>85%
Incidence (per 100,000 Population)	60	42	30
Mortality (per 100,000 Population)	10	2.2	2.0

Methods

Surveillance of TB

Notification System

TB Case Notification

TB is a notifiable disease since 1948. NPTCCD receives case notifications in a special form (Health 816 A) from District Chest Clinics, other government health institutions and from private health institutions.

Once a TB patient is diagnosed at a chest clinic, he or she should be registered in the District TB Register and should be notified to Central unit of the NPTCCD and to National Epidemiological Surveillance System through Medical Officer of Health. Patients diagnosed at other institutions are also referred to the relevant chest clinics for registration, notification and further management.

TB Death Notification

TB deaths are notified to the central unit by Health 814. A detailed report on deaths occurred among TB patients during the period of treatment are collected by form TB 17.

Deaths due to TB are also notified to the Registrar General's Department through vital registration system.

Monthly and Quarterly Records and Returns

Data on case detection (TB-08), sputum conversion (TB-09), treatment outcome (TB-10), programme management (TB-12) and TB and Non TB wards (TB-13) are collected quarterly from District Chest Clinics.

TB screening activities in prisons and OPD returns on TB suspects are collected monthly on the standard data collection forms. Data on culture specimens are sent from NTRL to Central Unit. DTCO is responsible for sending completed returns and reports accurately and timely.

Presentation of Data

NPTCCD analyses the data and compiles the national reports. Performance at district level is discussed at the review meetings held bi-monthly at NPTCCD as well as at the district reviews held annually in respective districts.

Dissemination of Data

NPTCCD provides information to government and international organizations such as Epidemiology Unit and other units of Ministry of Health, Central Bank of Sri Lanka, WHO, SAARC, GFATM etc.

In addition, information on TB is provided to provincial and regional health authorities and to DTCOs for further reference and interventions.

Indices

The main indices used to measure the progress in TB control are,

- ✓ Case Detection Rate
- ✓ Treatment Success Rate
- ✓ Sputum Conversion Rate
- ✓ Defaulter Rate
- ✓ Death Rate

Case Detection Rate

The term “detection” as used in this report, means that a patient is diagnosed as having TB and is reported to the NPTCCD by TB-08.

Case Detection Rate is defined as “percentage of total number of incident TB cases notified out of the total number of estimated incident cases of TB during the given year”.

$$\text{Case Detection Rate} = \frac{\text{Total number of incident (new / relapse) TB cases notified during the specified year}}{\text{Estimated number of incident cases of TB for the same year}} \times 100$$

Incidence of TB

The Incidence of TB is defined by the WHO as the number of new and relapse cases reported in a specified time period.

Estimation of TB Incidence

Estimation of TB incidence is calculated by WHO using a mathematical model which is revised annually. Accordingly, the case detection rate in this report is based on 2012 WHO estimates (66.0 per 100,000 population).

Treatment Success Rate

Treatment Success Rate is defined as the percentage of TB cases registered in a given year that **successfully completed** their entire course of treatment with or without bacteriological confirmation of cure (“cured” + “treatment completed”).

$$\text{Treatment Success Rate} = \frac{\text{Number of patients who have successfully completed treatment in the given period}}{\text{Number of patients registered in the same period}} \times 100$$

Sputum Conversion Rate

Sputum Conversion Rate is the percentage of smear positive pulmonary TB cases registered in a specified period that converted from smear positive to smear negative at the end of intensive phase of treatment.

$$\text{Sputum Conversion Rate: } \frac{\text{Number of smear positive pulmonary TB cases registered in a specified period that are smear negative at the end of the intensive phase of treatment}}{\text{Total number of smear positive pulmonary TB cases registered for treatment in the same period}} \times 100$$

Defaulter Rate (Lost to Follow Up Rate)

The Defaulter Rate is defined as the percentage of TB cases registered in a specified period that interrupted treatment for more than two consecutive months.

$$\text{Defaulter Rate: } \frac{\text{Number of TB cases registered in a specified period that interrupted treatment for more than two consecutive months}}{\text{Total number of TB cases registered in the same period}} \times 100$$

Death Rate

The Death rate is defined as the percentage of TB cases registered in a specified period that died from any reason during the course of treatment.

$$\text{Death Rate : } \frac{\text{Number of TB cases registered in a specified period that died from any reason during the course of the treatment}}{\text{Total number of TB cases registered in the same period}} \times 100$$

DOTS Population Coverage

DOTS population coverage is the percentage of people living in areas where health service has adopted the Directly Observed Treatment Short-course (DOTS) strategy. The units of population covered are usually the administrative districts in the country and the outcome is usually expressed as a percentage of the national population.

Results

Surveillance of Tuberculosis

➤ TB Case Notifications (H 816 A)

During the year 2013, 8697 cases of all forms of Tuberculosis were notified to the center by the form H 816 A. In contrast to this, registered TB cases reported to the NPTCCD by TB-08 were 9496 (Table 9)

➤ TB Death Notification (H 814)

During the year 2013, 314 TB deaths were notified by H 814 (Table 7).

Incidence of Tuberculosis

The incidence (new and relapse) rate of TB in 2013 in Sri Lanka was 44.1 (8767 new and 243 relapse cases) per 100,000 population. There was an increase when compared with incidence rate of year 2012, which was 43.2 (8507 new and 245 relapse cases) per 100,000 population (Figure 1).

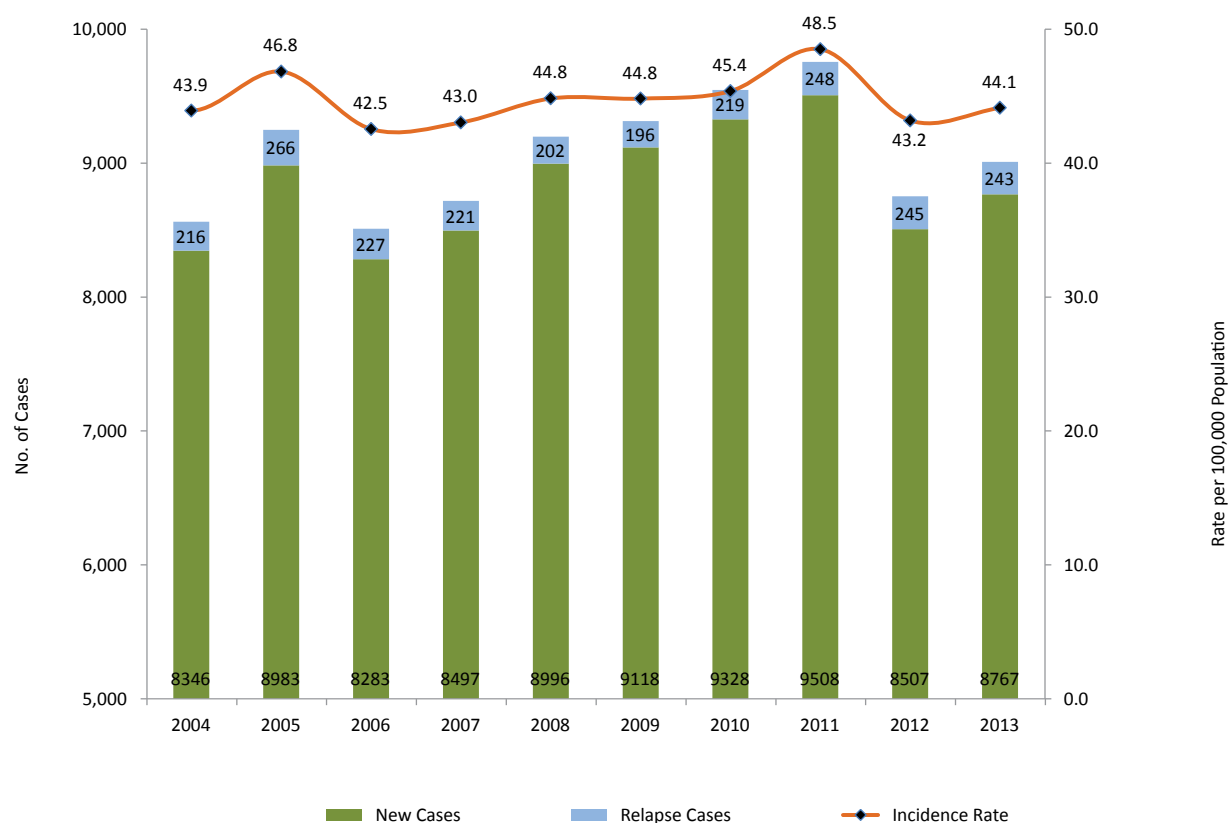


Figure 1: Incidence Rate of TB from 2004 - 2013

Case Detection of Tuberculosis

The total number of all forms of TB cases reported from DCCs was 9496. When compared to 2012, there was a slight increase of all forms of TB in 2013 (Figure 2).

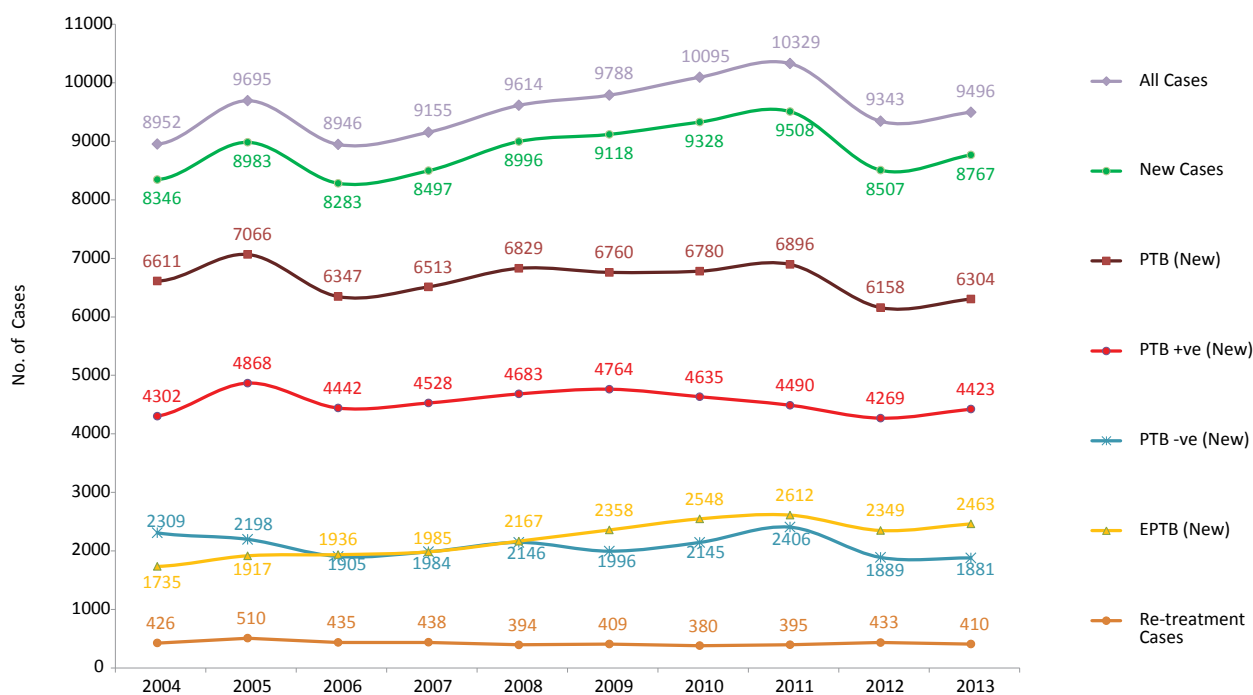


Figure 2: Case Detection of TB by Type from 2004 - 2013

Out of this, 8767 (92.3%) were new cases and 410 were re-treatment cases (Relapse, Treatment after Failure and Treatment after Default). Out of all new cases, 6304 were new pulmonary cases, of which 4423 were smear positive and 1881 were smear negative. Number of EPTB cases was 2463 (Figure 3).

A gradual decline of new smear positive PTB cases was observed during the period of 2009 to 2012 but in 2013, there was an increase of new smear positive PTB cases.

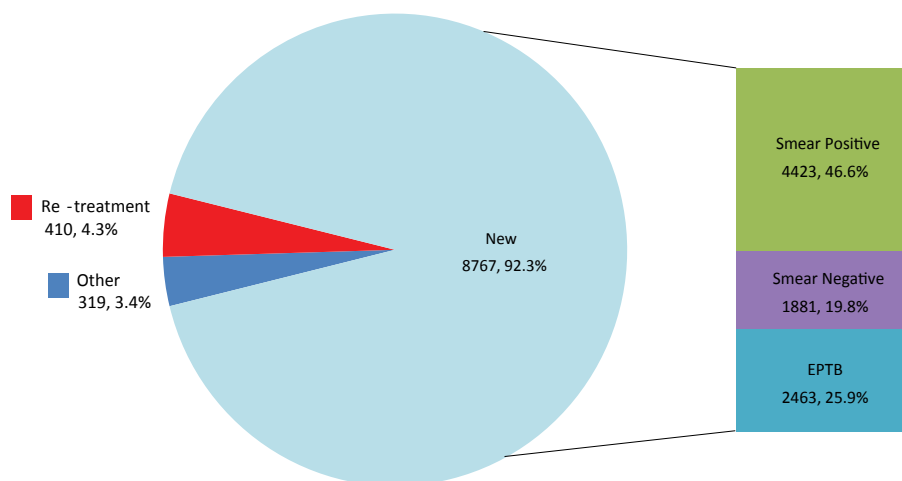


Figure 3: Case Detection of TB by Type in 2013

There was a high disparity of detection of TB cases between districts (Figure 4). The highest number of TB cases was detected from Colombo district (2300 cases, 24%). High numbers of cases were reported from Gampaha (1017), Kandy (720), Kalutara (687), Ratnapura (579) and Kurunegala (560) districts respectively.

Colombo district also accounted for the highest number of relapse cases (64 cases, 26%) and defaulters (43 cases, 41%) (Table 9). Lowest number of TB cases (26) was reported from Mullaitivu district.

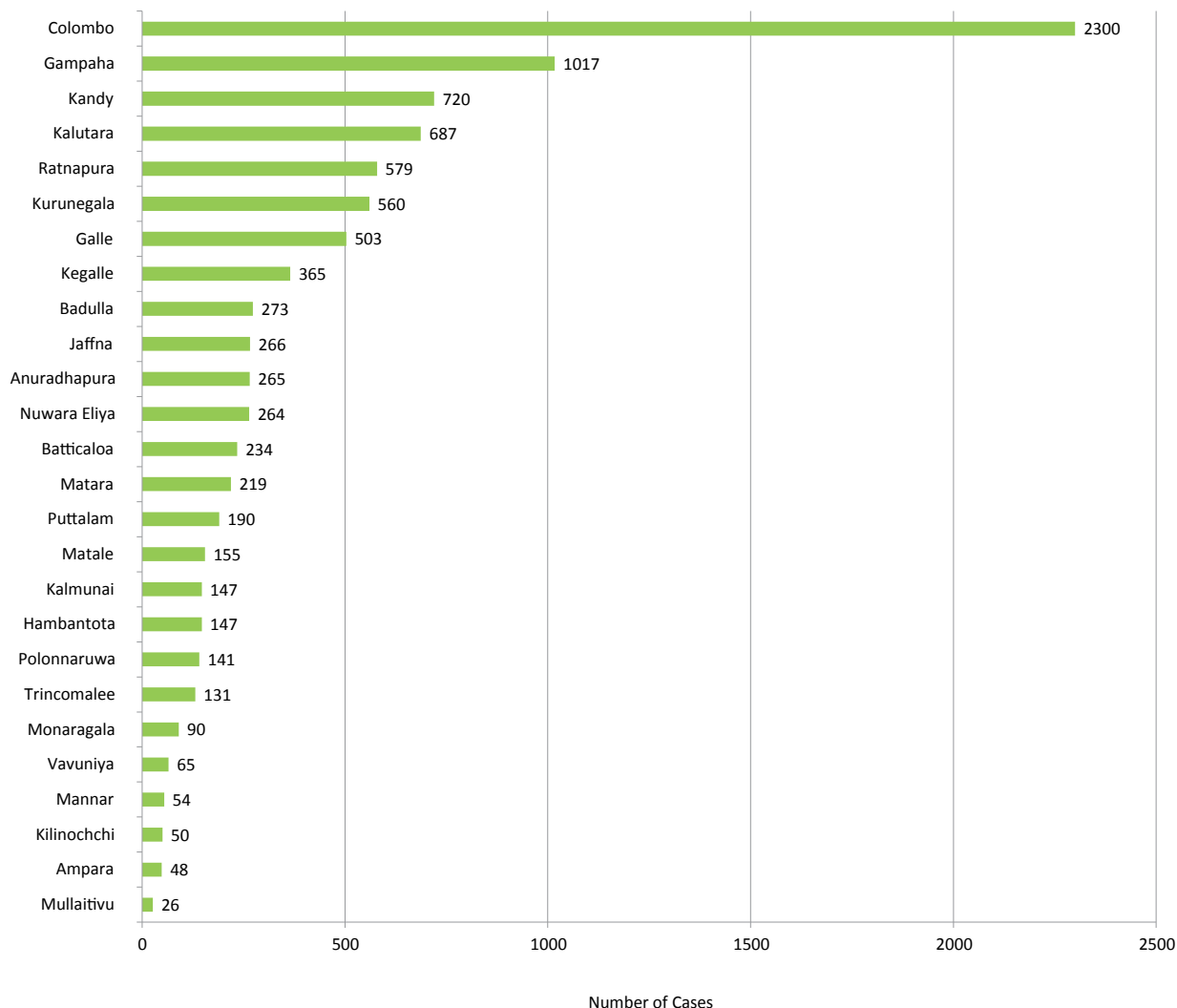


Figure 4: Case Detection of TB by District of Registration in 2013

New TB Cases

There was a disparity of distribution of new cases among districts (Figure 5). In Anuradhapura district, more than 65.6% of cases were smear positive while in Jaffna, Kandy and Mannar districts, smear positive cases accounted for less than 40% of total cases reported in respective districts. The number of smear negative cases detected was more than the smear positives in Kandy and Mannar districts. Only 1.6% of total cases were smear negative in Vavuniya district.

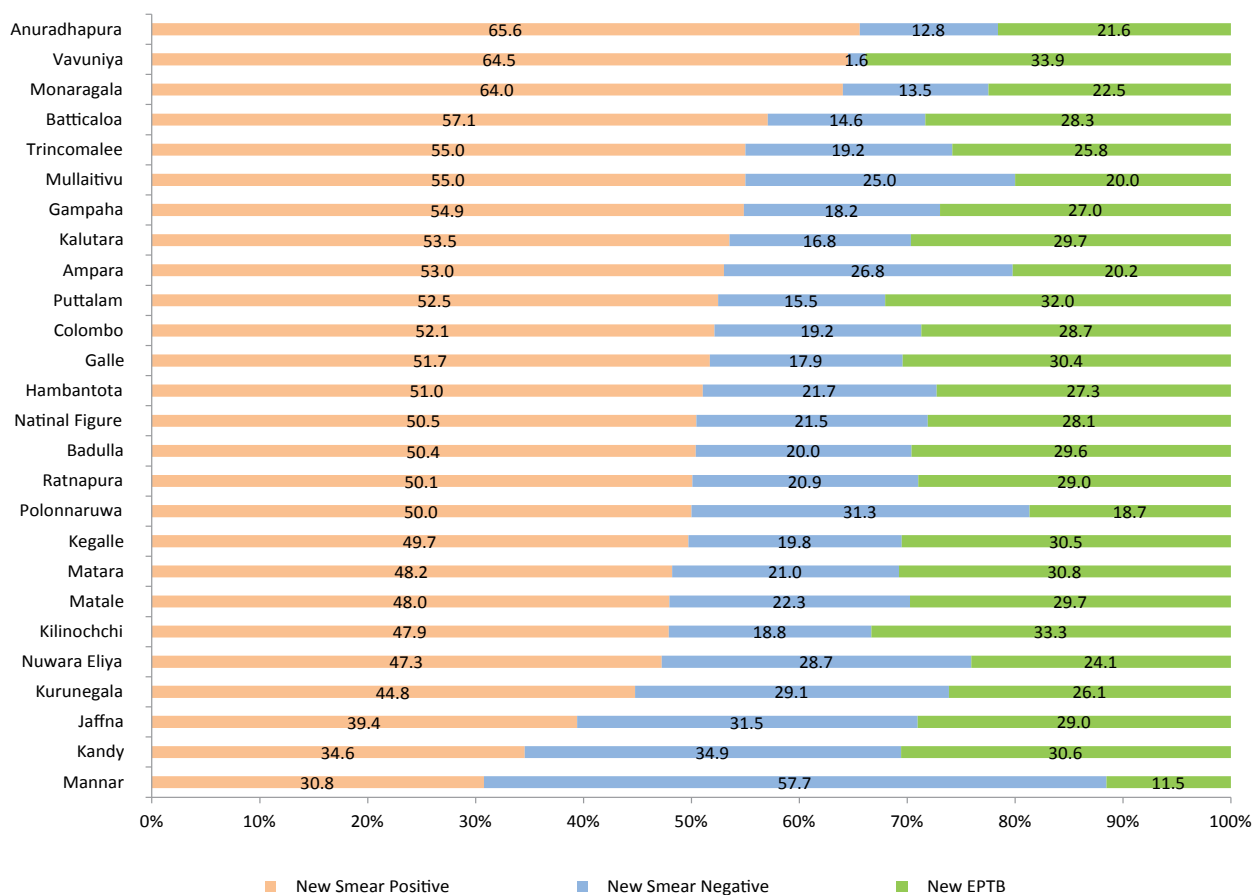


Figure 5: Percentage Distribution of New Cases of TB by Type and District in 2013

➤ New Smear Positive Pulmonary TB

The highest number (1101) and rate (47.5 per 100,000 population) of smear positive cases were reported from Colombo district and this accounted for 25% of the national figure. Second highest number of smear positive pulmonary TB cases was reported from Gampaha district (519) though rate was 22.4 per 100,000 population (Figure 6).

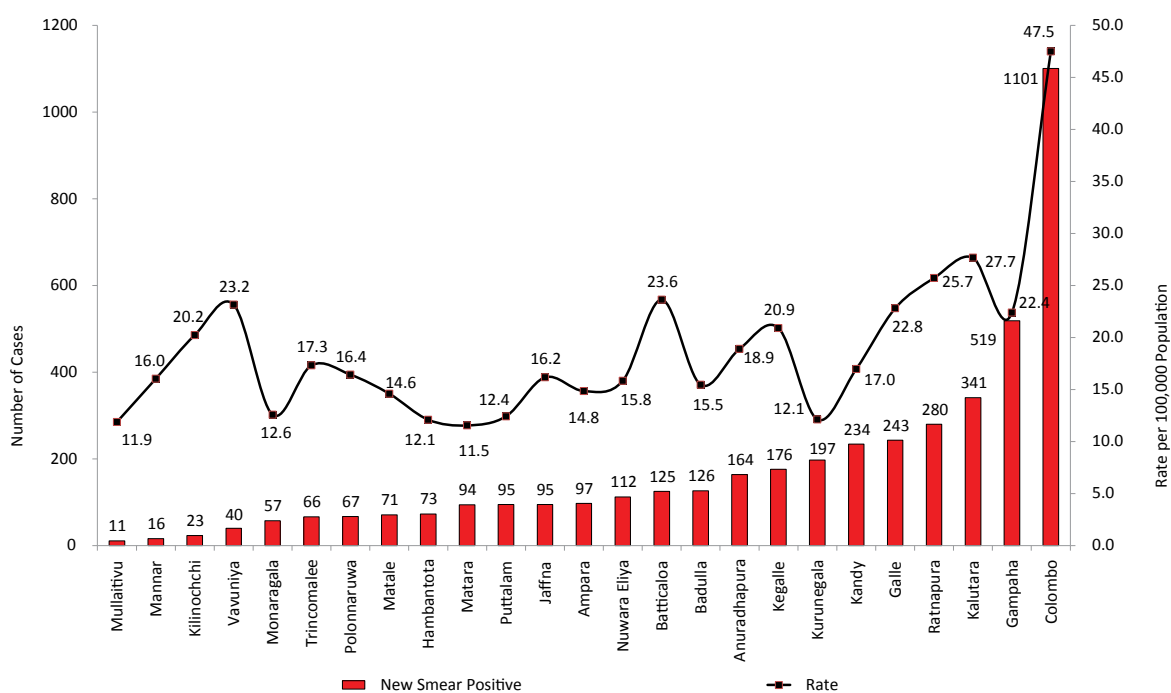


Figure 6: Distribution of New Smear Positive TB Cases Detection by District in 2013

High numbers of cases were reported from Kalutara (341), Ratnapura (280) and Galle (243) districts respectively. However, higher smear positive rates per 100,000 population were reported from Kalutara (27.7), Ratnapura (25.7), Batticaloa (23.6) and Vavuniya (23.2) districts (Figure 6).

➤ New Smear Negative Pulmonary TB

The highest number of smear negative cases was reported from Colombo district (405). However, the highest rate was reported from Mannar district (30.1 per 100,000 population) followed by Colombo (17.5 per 100,000 population), Kandy (17.1 per 100,000 population) and Jaffna (12.9 per 100,000) districts respectively. The number of smear negative cases detected was more than the smear positives in Kandy and Mannar districts (Figure 5).

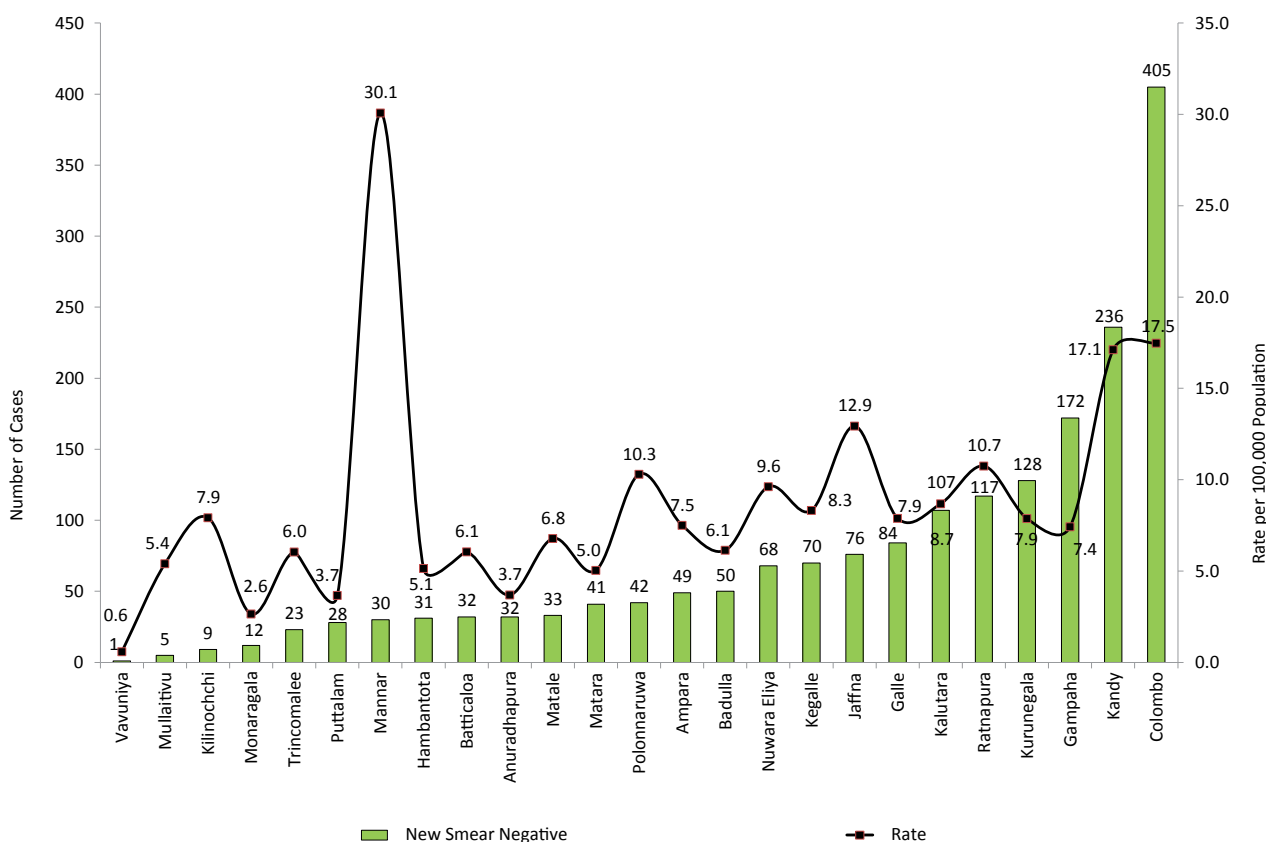


Figure 7: Distribution of New Smear Negative TB Cases Detection by District in 2013

➤ Extra Pulmonary TB

New EPTB Case Detection

Total of 2463 cases of new extra pulmonary TB were reported in 2013. Colombo district reported the highest number and rate of EPTB cases (606 cases, 26.1 per 100,000 population). The second highest rate (15.3 per 100,000 population) of EPTB was reported from Kalutara district though only 189 cases were reported (Figure 8).

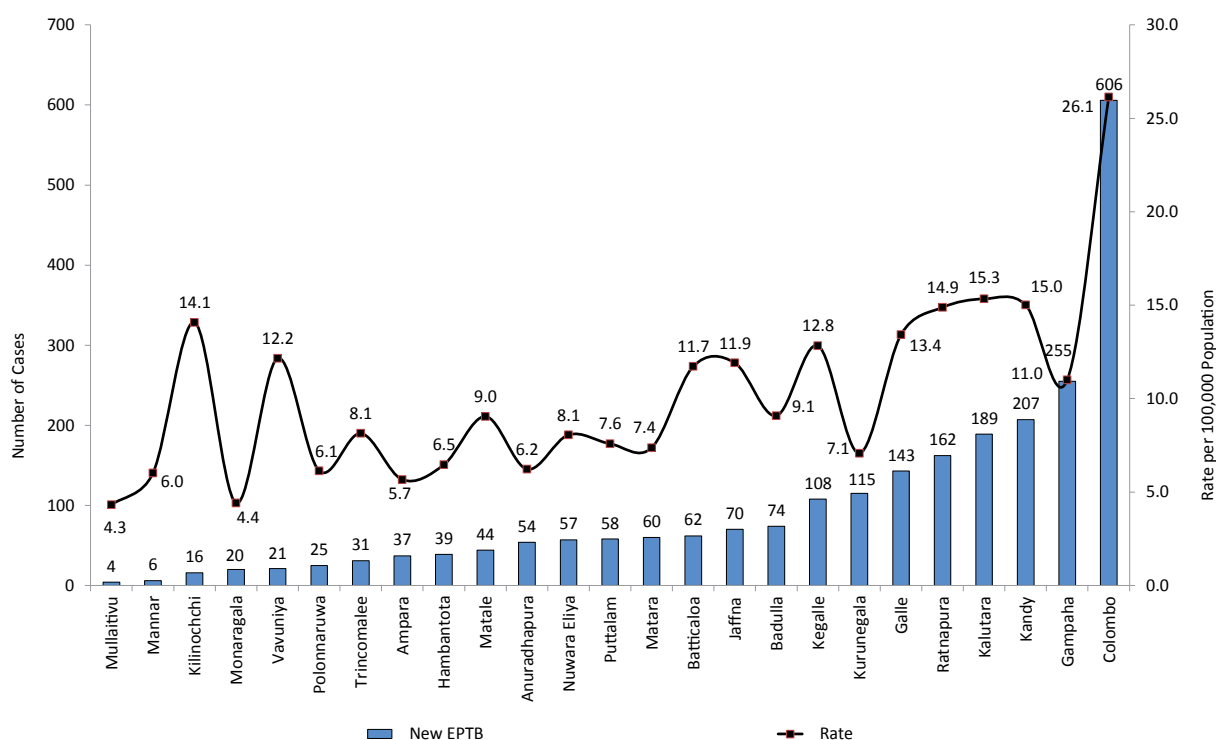


Figure 8: Distribution of New Extra Pulmonary TB Cases Detection by District in 2013

Sites of EPTB Cases

Out of all EPTB cases (New and Other), tuberculous pleurisy accounted for 638 (24.7%) cases and 613 (23.7%) were cases of tuberculous peripheral lymphadenopathy. In addition, 118 (4.6%) cases of tuberculosis of eye, 99 (3.8%) cases of tuberculosis of nervous system-unspecified, 91 (3.5%) cases of tuberculous meningitis and 31 (1.2%) of milliary TB cases were reported in 2013 (Table 2).

Table 2: Distribution of All Cases of Extra Pulmonary Tuberculosis by Site in 2013

Classification	Number	Percentage
Tuberculous pleurisy	638	24.7
Respiratory tuberculosis unspecified	32	1.2
Tuberculous meningitis	91	3.5
Meningeal tuberculoma	14	0.5
Tuberculosis of nervous system, unspecified	99	3.8
Spinal TB	58	2.2
Tuberculosis of other bones and joints (Excluding spinal TB)	78	3.0
Tuberculosis of genitourinary system	41	1.6
Tuberculous peripheral lymphadenopathy (TB adenitis)	613	23.7
Tuberculosis of intestines, peritoneum and mesenteric glands	76	2.9
Tuberculosis of skin and subcutaneous tissue	64	2.5
Tuberculosis of eye	118	4.6
Tuberculosis of adrenal glands	11	0.4
Pericardium	7	0.3
Milliary TB	31	1.2
Primary TB	49	1.9
Site not specified	567	21.9
Total	2587	100.0

➤ Age and Sex Distribution of New TB Cases

The highest number (1738) of new TB cases was in 45-54 age group. The lowest number was in 0-14 age group (307 cases). Out of 8767 new cases, 61.8% cases were in the productive age group of 15-54. More males (66%) were detected than the females (34%). The highest number of new TB cases among males was found in the age group of 45-54 years (21% of 5810 male cases), while that in the females was in the age group 55-64 (18% of 2957 female cases) (Table 13).

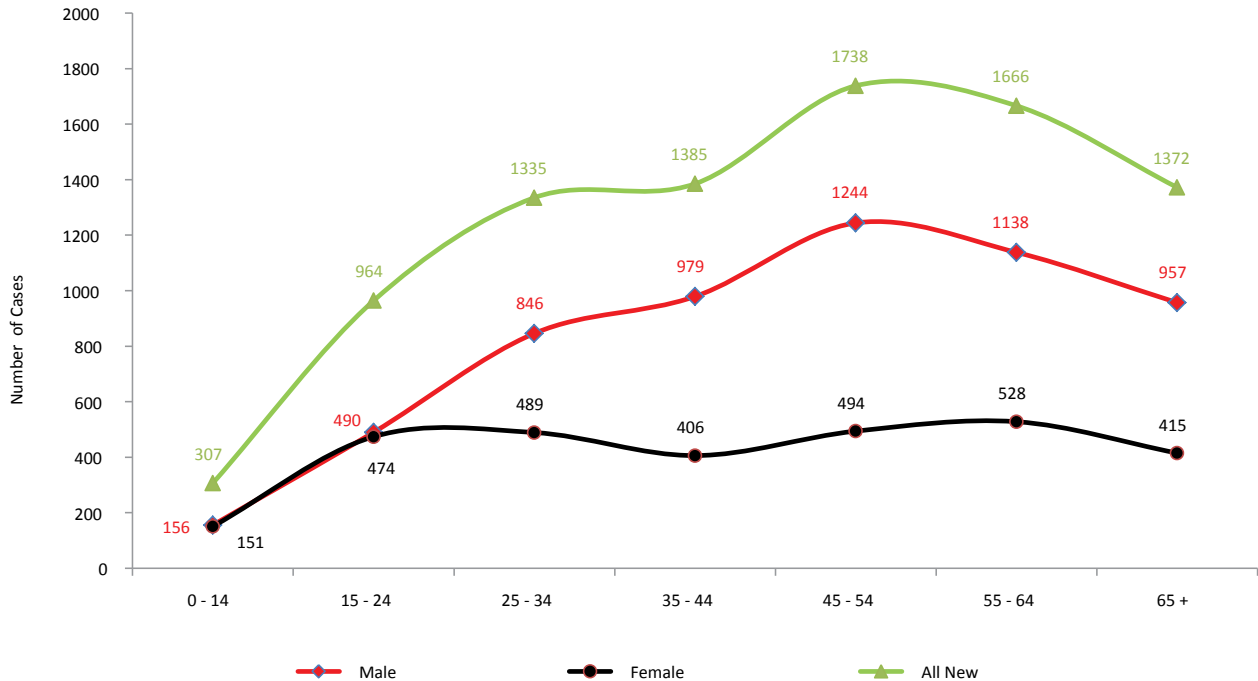


Figure 9: Distribution of All New Cases of TB by Age Group in 2013

Re-treatment TB Cases

In 2013, 410 (4.3%) re-treatment cases were reported of which 243 (2.6% out of all cases of TB) were Relapse, 63 (0.6%) were Treatment after Failure and 104 (1.2%) were Treatment after Default cases (Table 9).

The highest number of re-treatment cases (123 cases, 30%) was reported from Colombo district and the second highest number was reported from Gampaha district (56 cases, 13.6%). The total number of re-treatment cases in 2013 was lower than in 2012 (433).

Among Relapse cases the higher numbers were reported from Colombo, Gampaha, Kalutara, Galle, Ratnapura and Kurunegala districts respectively (Table 9).

Treatment after Failure cases were reported in higher numbers in Colombo and Gampaha districts.

Colombo, Gampaha and Kalutara were the districts which reported higher numbers of Treatment after Default cases. Colombo district contributed a significant number of cases for the national figure (Table 9).

In Kilinochchi, Kalmunai, Vavuniya and Hambantota districts, only Relapse cases contributed to the total of re-treatment cases. In contrast to this, only Treatment after Failure cases contributed to the total of re-treatment cases in Ampara district (Figure 10).

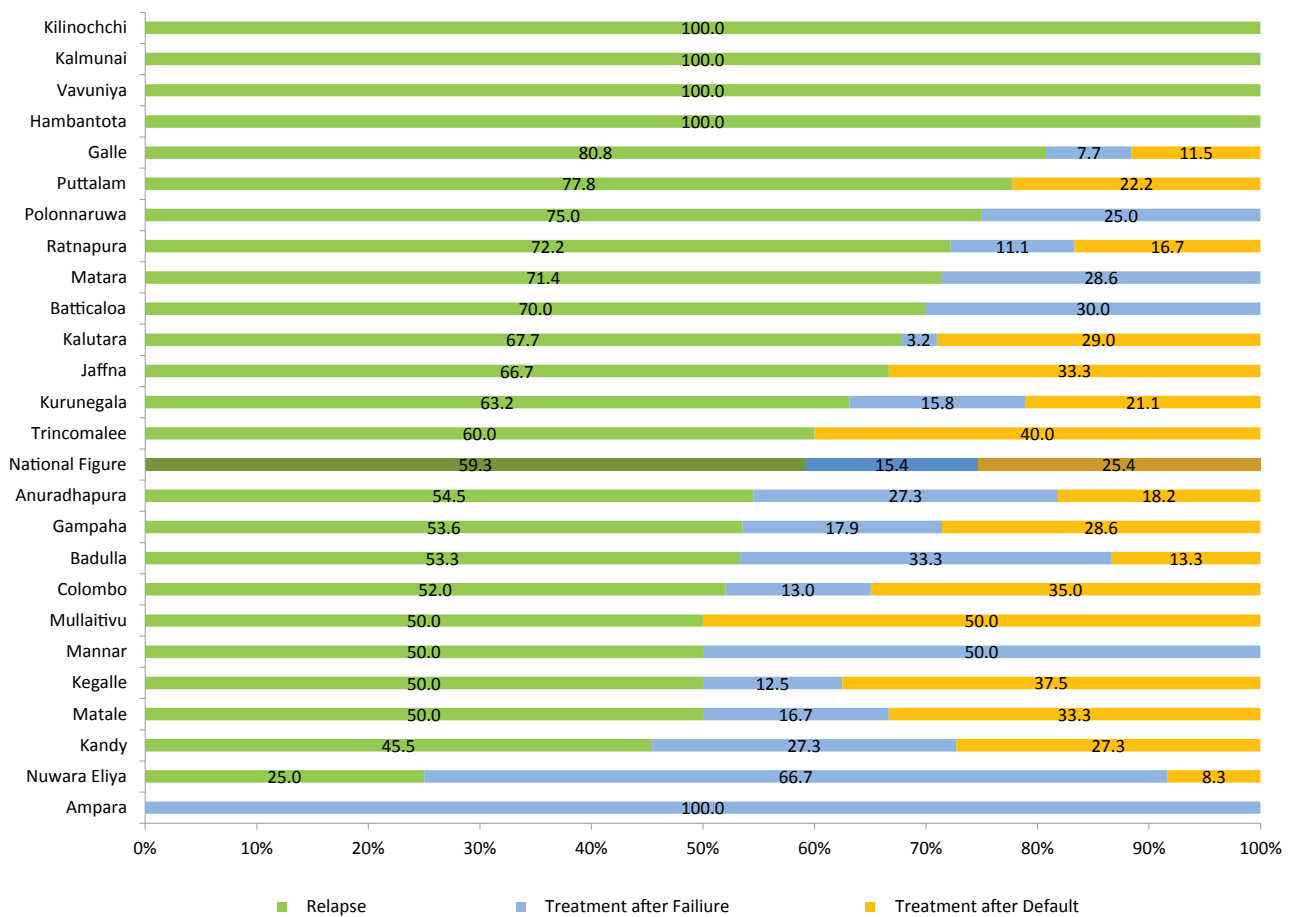


Figure 10: Percentage Distribution of Re-treatment TB Cases by Type and District in 2013

Multi Drug Resistant Tuberculosis (MDR-TB)

MDR-TB is not a big threat to Sri Lanka when compared to other countries in the SEARO region. Four cases of MDR-TB were reported in year 2013 and all of them were enrolled for treatment.

TB/HIV Co-Infection

HIV testing of all TB patients was made mandatory since 2013. In 2013, 4646 TB patients were screened for HIV. Of these patients, 6 patients were found positive. In addition, there were 9 patients with known HIV status at the time of diagnosis of TB, contributing to a total of 15 patients with HIV/ TB co-infection in 2013.

Treatment Outcome of Tuberculosis

Outcome data presented below are based on the information provided for cohort of patients of 2012.

Treatment Outcome of All Forms TB Cases

Total number of cases registered for treatment in 2012 was 9343. Out of this, outcome of 248 (2.7%) were not evaluated and in this report, outcome is presented for the rest of the cases (Table 18).



Figure 11: Treatment Outcome of All Forms of TB Cases from 2003-2012

Treatment Success Rate

The cure rate among registered cases was 40.3% (3766 cases) and a further 42.6% (3977 cases) completed treatment, accounting for an overall treatment success rate of 82.9% (7743 cases). This shows a decrease in comparison to 2011 where the treatment success rate was 87.1 (8995 cases) (Figure 11). There were 15 districts with treatment success rate below the global target of 85%. Out of them, Mullaitivu (58.1%), Nuwara Eliya (73.5%), Kurunegala (74.5%), Gampaha (77.5%), Kandy (78.4%), Hambantota (79.1%), Colombo (80.1%), Jaffna (80.6%) and Badulla (82.4%) districts were below the national figure. Trincomalee district showed the highest treatment completed rate (67.2%) and the highest cure rate was reported from Monaragala district (51.4%) (Figure 12).

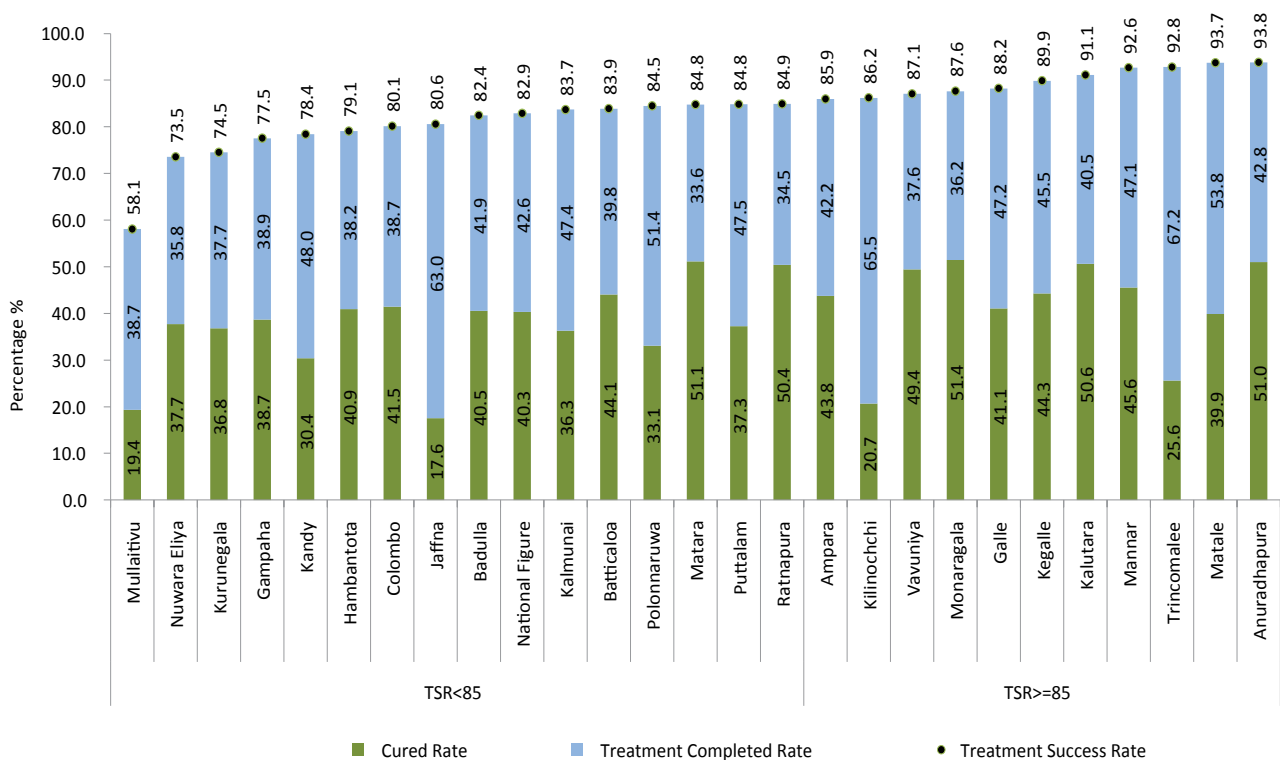


Figure 12: Treatment Success Rate of All Forms of TB Cases by District in 2012

➤ Treatment Failure Rate

The treatment failure rate was 0.7% in 2012. There was a slight gradual decrease of treatment failure rate since 2010. Badulla district reported the highest treatment failure rate (2.7%). Mannar (1.5%), Polonnaruwa (1.4%), Kandy (1.3%) and Colombo (1.1%) districts also reported high treatment failure rates (Table 18).

➤ Defaulter Rate

The defaulter rate was 4.6% in Sri Lanka in 2012 and there was a slight increase when compared with year 2011 (3.9%). The highest defaulter rate was reported from Mullaitivu district (22.6%). Gampaha (8.4%), Colombo (8.0%), Puttalam (6.9%), Nuwara Eliya (6.4%) and Kandy (5.8%) districts also reported high defaulter rates (Table 18).

➤ Death Rate

The number of TB patients died during the treatment period in year 2012 was 511 (5.5%) and the highest death rate was reported from Hambantota district (10%, 11 cases). The highest number of deaths occurred in Colombo district (122 cases, 5.6%) and 16 districts showed death rates above 5% (Table 18).

Treatment Outcome of New PTB Cases

➤ Treatment Success Rate

In 2012, 6158 new PTB cases were registered for treatment. Of these cases 130 (2.1%) were in the category of Not Evaluated. The cure rate among registered cases was 56.2% (3463 cases) and a further 29.3% (1806 cases) completed treatment, giving an overall treatment success rate of 85.6% (5269 cases). The lowest treatment success rate was reported from Mullaitivu district (70.6%, 12 cases). Colombo, Gampaha, Kandy, Nuwara Eliya, Hambantota, Puttalam, Badulla, Jaffna and Mullaitivu districts were below the global target of 85% of TSR (Table 20).

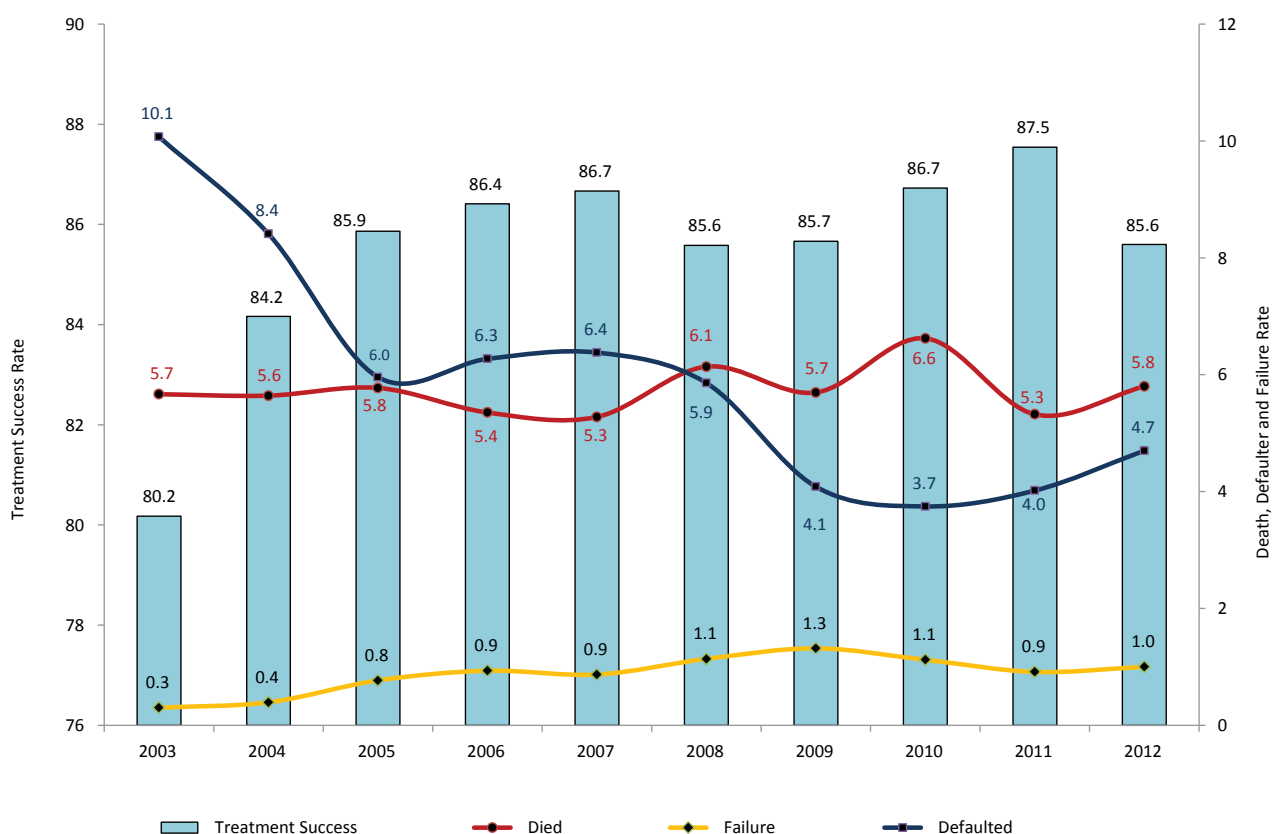


Figure 13: Treatment Outcome of New Pulmonary TB Cases from 2003-2012

➤ Treatment Failure Rate

Treatment failure rate among all new cases was 1%. Highest Treatment failure rate (4% of all new PTB cases) was from Badulla district (Table 20).

➤ Defaulter Rate

The defaulter rate was 4.7% among all new PTB cases. The highest defaulter rate was reported from Mullaitivu district (17.6%). Gampaha (8.4%), Colombo (8.2%), Puttalam (8.1%), Kandy (7.1%), Jaffna (6.6%) and Nuwara Eliya (5.8%) districts also showed high defaulter rates (Table 20).

➤ Death Rate

The death rate was 5.8% among all new PTB cases and highest death rate was from Batticaloa district (12.6%, 13 cases). Hambantota (12.3%), Ampara (9.8%), Nuwara Eliya (8.6%), Polonnaruwa (7.5%) and Kurunegala (7.3%) districts also showed high death rates (Table 20).

Treatment Outcome of New Smear Positive TB Cases

➤ Sputum Conversion Rate

Sputum conversion rate at the end of intensive phase for Sri Lanka was 85.3% in 2013 and varied from lowest of 49.5% (Jaffna) to highest of 95.8% (Ampara) (Figure 14).

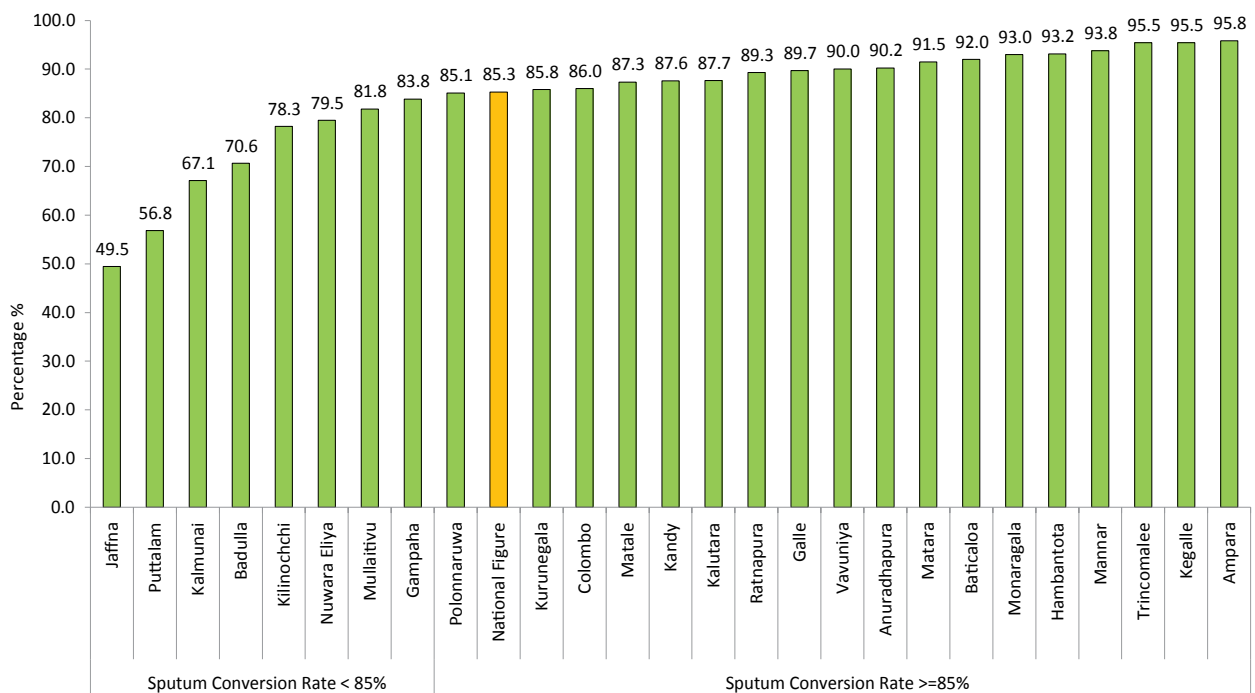


Figure 14: Sputum Conversion Percentage of New Smear Positive TB Cases by District in 2013

➤ Treatment Success Rate

In 2012, 4269 new smear positive cases were registered for treatment. Of these cases, only 62 (1.5%) were in the category of Not Evaluated. The cure rate among registered cases was 81.1% (3463 cases) and a further 5.1% (217 cases) completed treatment, giving an overall treatment success rate of 86.2% (3680 cases).

The highest treatment success rate was reported from Matale district (96.5%) and the lowest (66.7%) was reported from Mullaitivu district. Treatment success rate of more than 85% was observed in 20 districts (Figure 15). Trincomalee, Colombo, Badulla, Nuwara Eliya, Gampaha and Mullaitivu districts were below the global target of 85% of TSR.

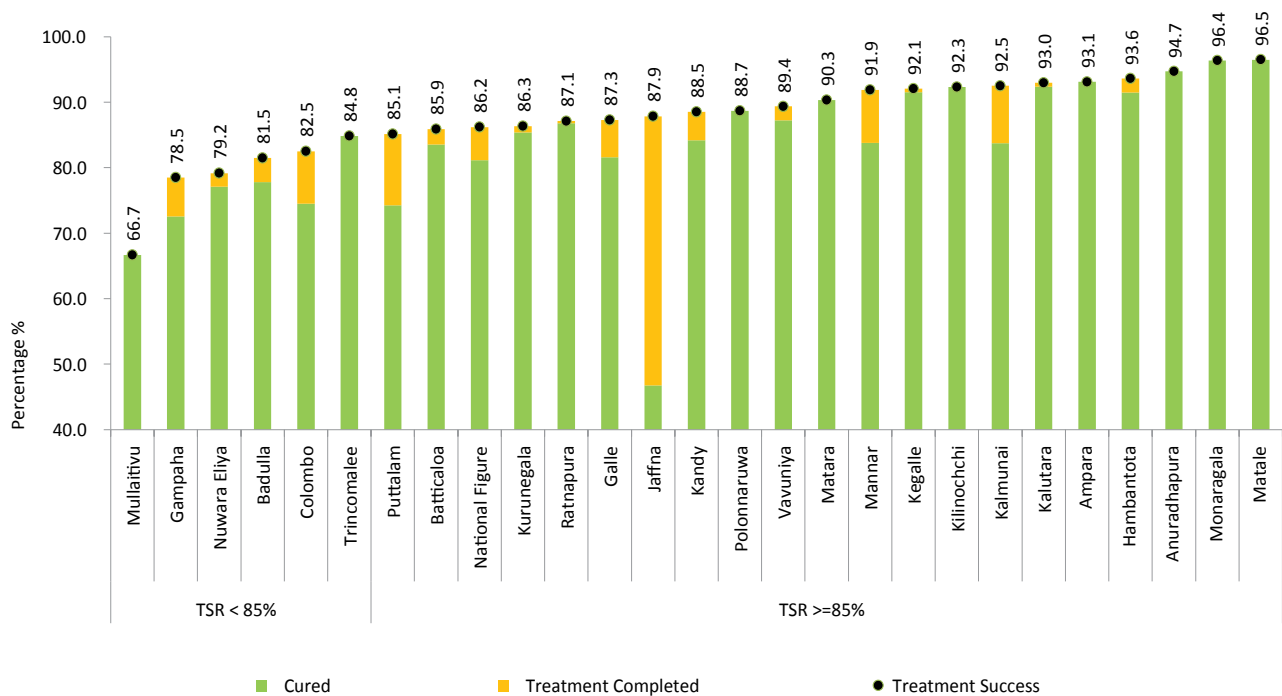


Figure 15: Treatment Success Rates of New Smear Positive TB Cases by District in 2012

➤ Treatment Failure Rate

The treatment failure rate among new smear positive cases was 1.3% in 2012. Thirteen districts had not reported any treatment failures in 2012. The highest treatment failure rate was 5.6% (6 cases) which was reported from Badulla district (Table 21).

➤ Defaulter Rate

The defaulter rate among new smear positive cases was 4.9% (208 cases) in 2012. High defaulter rates were reported from Mullaitivu (22.2%), Gampaha (9.1%), Colombo (8.3%), Puttalam (7.9%), Kilinochchi (7.7%), Jaffna (5.6%) and Nuwara Eliya (5.2%) districts while no cases were reported from five districts (Table 21).

➤ Death Rate

The death rate in new smear positive cases was 5.5% (235 cases) in 2012 and is almost the same when compared with 2011 (5.4%). The highest death rate was reported from Batticaloa (11.8%, 10 cases). Trincomalee (9.1%, 6 cases), Matara (8.1%, 10 cases) and Kurunegala (7.8%, 16 cases) districts also showed high death rates (Table 21).

Treatment Outcome of Re-treatment Cases

In 2012, of the 433 registered re-treatment cases, 261 cases were cured while another 29 cases had completed treatment giving a treatment success rate of 67%. The low treatment success rate in this group was mainly due to the high defaulter rate (13.9%, 60 cases) and high death rate (10.6%, 46 cases). In addition, there was 0.2% (1 case) treatment failure rate among re-treatment cases in 2012. Another 6.9% (30 cases) was not evaluated (Table 24).

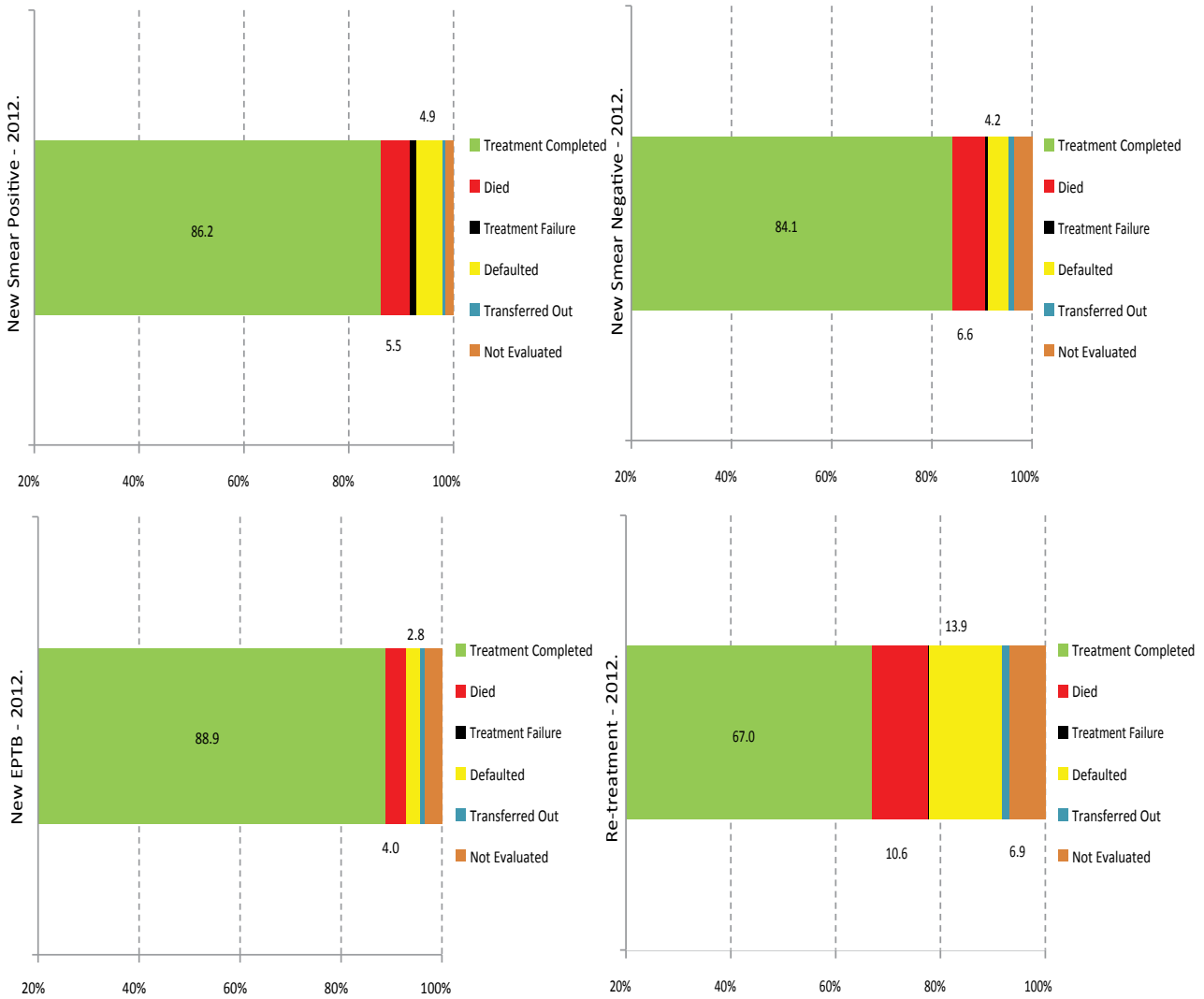


Figure 16: Treatment Outcome Summary of TB Cases (New Smear Positive, New Smear Negative, New EPTB and Re-treatment) in 2012

DOTS Coverage

Population coverage of DOTS in the country is 100% since 2010 (Figure 17).

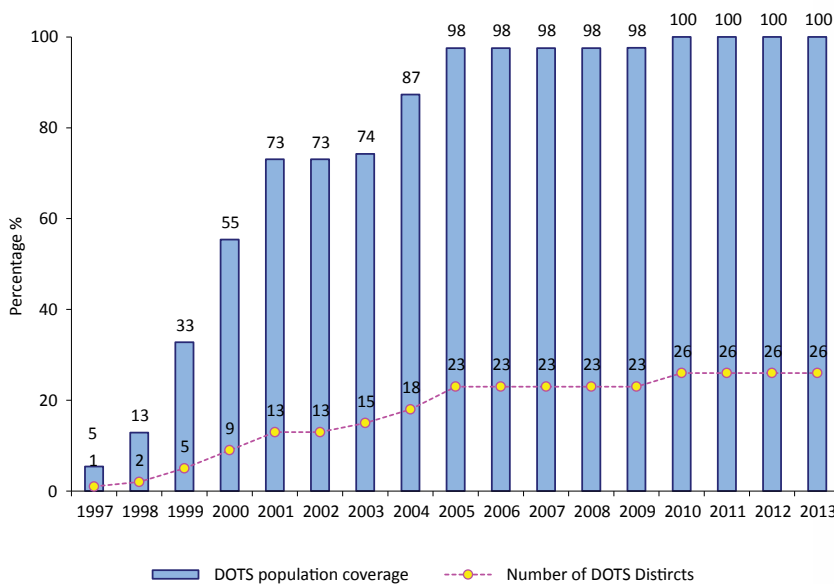
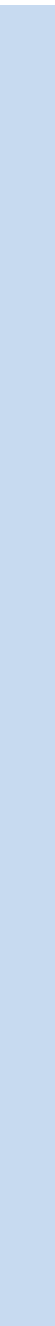


Figure 17: DOTS Coverage from 1997-2013 with Map of Year Achieved



PART II
Activity Report

Activities

The following TB control activities were conducted under main strategies of TB control.

Strategy 1: Improved access to quality services in order to enhance case finding and to further improve treatment outcomes

➤ Steps were taken to develop new documents or revise the existing policies, guidelines and manuals in accordance with current updates and development

- ✓ Steps were taken to prepare Management Guidelines on Extra-pulmonary TB for Clinicians.
- ✓ Handbook on Practical Approach to Lung health (PAL) was prepared based on the previously developed guidelines.
- ✓ Guidelines for Management of TB/HIV Co-Infection was printed and distributed among DTCOs, MO-STDs and other relevant medical officers. Initial steps were taken to prepare TB/HIV cross referral formats which will be implemented in year 2014.

➤ Steps were taken to strengthen the Diagnostic Services

- ✓ The construction process of the BSL3 laboratory was started in year 2013 following recommendations of the Monitoring Mission – 2009.
- ✓ Construction of the third Regional Culture Laboratory was initiated in year 2013 at Galle district and planning to complete the construction in year 2014.
- ✓ **External Quality Assessment of the Sputum Microscopy** - NTRL provided technical guidance to strengthen the EQA facilities in the peripheral microscopy centers. There were 163 TB microscopy centers showing adequate performance in EQA for smear microscopy among the total number of 190 laboratories (86%) in district level that undertake smear microscopy, up to December 2013.
- ✓ Twenty six refrigerators were procured and distributed to the district laboratories to improve storage facilities of sputum samples.
- ✓ WHO recommended new rapid diagnostic tests were introduced for diagnosis of drug resistant TB.

➤ Continuous supply of quality assured anti TB drugs was ensured.

- ✓ Completed the procurement of Fixed Dose Combination anti-TB Drugs through the Global Drug Facility as a free grant for year 2013 and the procurement of individual drugs through the Medical Supplies Division of Ministry of Health was continued.

- ✓ *The Second Line Drugs were procured through the GDF/GLC mechanism.*
- ✓ *The Global Drug Facility provided pediatric drugs to the NPTCCD as a free grant to treat childhood TB patients.*
- ✓ *The NPTCCD initiated the minor civil works of the Central Drug store and funds were provided for the refurbishment of district drugs stores of Kalutara, Vavuniya and Anuradhapura.*

➤ **Capacity building of health staff and other stake holders.**

- ✓ *NPTCCD has completed only limited capacity building activities under GFATM grant due to grant fund disbursement delays in year 2013. However, NPTCCD conducted more than 50 training programmes for medical officers, nurses and other health workers utilizing both government and donor funds.*
- ✓ *The central and district level staff of the NPTCCD attended several international meetings, conferences, training programmes and workshops.*

➤ **Monitoring and evaluation of the TB control activities were further strengthened.**

- ✓ *Bi-monthly DTCO reviews were conducted regularly at the central level to monitor and evaluate district chest clinic activities.*
- ✓ *Provincial/District reviews were conducted annually with a large participation of the officers from government and private health sector, NGOs and other government organizations in order to monitor the activities carried out by district staff and to strengthen the collaboration between different stakeholders functioning at district level.*
- ✓ *Regular supervisory visits were conducted by the team from central unit of the NPTCCD and NTRL to monitor the progress of TB control activities and to identify the issues and constraints for provision of diagnostic, curative and preventive care. In addition, chief pharmacist of the Central Drug Stores regularly visited chest clinic drug stores and provided guidance for drug and stores management.*
- ✓ *An Epidemiological Assessment was carried out to review the status of TB in Sri Lanka.*
- ✓ *National TB programme was also regularly monitored by International Monitoring Missions. The third Green Light Committee (GLC) monitoring mission visited Sri Lanka from 30th September to 5th October 2013 and provided several recommendations to strengthen the management of MDR-TB in the country. They have provided technical guidance to finalize the MDR-TB guidelines and reviewed the MDR-TB expansion plan prepared by the NPTCCD.*

➤ **Data recording and reporting systems further strengthened**

- ✓ *Initial discussions were held to develop a website for the NPTCCD and an open source Health Information Management System.*
- ✓ *Data Entry Operators were trained regularly in order to get their services more efficiently and effectively.*
- ✓ *Work on designing of new recording and reporting formats for TB/HIV co-infection was initiated.*

Strategy 2: Targeted approaches for case detection among high risk categories for TB

➤ Case detection among prisoners and other incarcerated persons were strengthened

- ✓ Several discussions were held with prison officials in order to strengthen TB control activities in prisons and steps were taken to carry out initial screenings at the point of entry to prison.
- ✓ A PHI from the NPTCCD was appointed to carry out prison health activities.
- ✓ Routine screening of prisoners by chest clinic staff was strengthened.
- ✓ Steps were taken to screen inmates of probation and rehabilitations homes.

➤ Services for estate and urban poor strengthened

- ✓ Discussions were held with Directorate of Estate Health and Plantation Human Development Trust in order to get their maximum support for TB control activities at estate sector.
- ✓ Several TB screening programmes were held in CMC area in collaboration with CMC.
- ✓ Screening of drug addicts were started in collaboration with National Dangerous Drugs Control Board.

➤ TB control activities among patients with chronic NCDs initiated

- ✓ Screening of patients with diabetes and chronic renal disease were further strengthened.

Strategy 3: Implement a tailored advocacy, communication and social mobilization campaign for TB and other respiratory diseases

➤ Commitment of political leaders and policy makers towards TB control strengthened

- ✓ Advocacy meetings were held in Kegalle and Kurunegala for local politicians and policy makers in order to get their maximum contribution towards TB control.
- ✓ An Advocacy meeting was held at NHRD Welisara with participation of more than 90 care providers of TB.

➤ Community participation strengthened through public awareness

- ✓ A media seminar was conducted at Health Education Bureau in view of sensitizing media personal and to disseminate message to the community through media. A large number of media personnel representing both leading print and visual media institutions participated in this seminar.
- ✓ Three Focus group meetings with community and opinion leaders were held in Nugegoda MOH area for the health workers and community workers.
- ✓ Awareness and screening programmes were conducted focusing the high-risk groups to detect new cases of TB and to reduce the transmission of TB. These were done at Sri Jothikarama Temple, Diwulapitiya and 'Suwa Udana Programme' conducted by the Ministry of Health at Mullaitivu district.

- ✓ Exhibitions were held at Bollogama MMV Kalutara, St. Anthony's College Kandy, MOH Nawalapitiya, Urubokka National College Matara and Colombo South International School Nugegoda in order to create public awareness.



World TB Day

- ✓ The World TB Day was commemorated on 24th March 2013 at the Town Hall of Kegalle under the theme "Stop TB in My Lifetime". The event included a parade within the Kegalle city limits followed by a TB Day seminar which included several presentations on current updates of TB and variety of entertainment events. In par with this national event, many activities were conducted island wide by the staff of District Chest Clinics.
- ✓ In addition, NPTCCD conducted an art competition island wide to transmit the message of the World TB Day to the general public.



Strategy 4: Conduct operational research with a focus to improve programme performance

- ✓ A new survey titled 'TB among young people' was conducted in randomly selected districts in Sri Lanka under SAARC funds.
- ✓ Pharmacovigilance survey which was started in the latter part of 2012 was further continued.

New Global Fund Grant

The NPTCCD was engaged in signing of new grant agreement with the Global Fund in June 2013 for the Transitional Funding Mechanism (TFM) which was US\$ 1.9 million for the two years starting from 1st of January 2013 to 31st of December 2014.

GFATM held its 29th board meeting on 18 - 19 of June 2013 at Hilton Hotel, Colombo.

Other Activities

NPTCCD conducted several activities to strengthen the interrelations between all staff categories in the NPTCCD network.

- ✓ *The annual cricket tournament was held at the Health Ground, with the participation of teams from GFATM Project, NPTCCD, AMC and NSACP.*
- ✓ *The Wesak festival was celebrated with a preaching of Bana for the staff of the Public Health Complex.*
- ✓ *The Welfare Society of the NPTCCD organized a one-day annual trip to Laya Beach Hotel at Wadduwa. Staff members participated in several fun games and the cricket match with their family members.*

Major Challenges

The following factors were identified as major challenges.

- *Maintaining adequate number of human resources in the face of high turnover of trained staff.*
- *Reaching the unreached population groups such as population groups with limited access to services, urban slums, prison population and population in tea and rubber estates.*
- *Scaling up TB control services among returning migrants and re-settling population in Northern and Eastern provinces.*
- *Addressing the high disease burden and high defaulter rate in urban areas, especially in Colombo.*
- *Overcoming the TB-related stigma.*
- *Constraints in human resources including respiratory physicians, medical officers and paramedical staff.*
- *Inadequate social benefits and nutritional support for TB patients and their families.*
- *Financial sustainability of the National Tuberculosis Control Programme.*

PART III
Administration Report

OPD Attendance and Ward Admissions

During the year 2013, 259,172 new patients were registered at District Chest Clinics and NHRD, Walisara. Out of these patients, 126,326 (48.7%) were self-referrals. Others included referrals from general health institutions or private practitioners 46,807 (18.1%), contacts of TB patients 8,225 (3.2%) and persons coming for medical examinations 77,814 (30.0%).

Table 3: Utilization of TB/Respiratory Curative Care Facilities in 2013

Health Facility	Total OPD Attendance (First Visits)	No of beds	Inward patients*			
			TB		Non TB	
			Male	Female	Male	Female
Chest Clinics	203,512					
Chest Hospital Welisara	55,660	637	6,082	1,864	10,412	4,352
Chest Wards						
PGH Badulla		36	148	64	646	292
TH Batticaloa		15	119	55	4	1
BH Udugama		42	54	10	0	0
DH Kopay		20	141	65	0	0
DGH Kalutara		60	267	91	639	333
DGH Matale		39	109	33	657	307
BH Puttalam		13	44	16	13	2
DH Eheliyagoda		39	131	31	0	0
BH Cheddikkulam		149	63	18	2,386	2,248
TH Anuradhapura		33	181	26	323	209

* Calculated by adding data of each quarter. Data from NHSL, TH Kandy and PGH Kurunegala are not available.

Laboratory Services

➤ Sputum Smear Microscopy

Sputum smear examinations are done for diagnosis of TB and for monitoring of treatment. The patients having symptoms suggestive of TB, attending to the healthcare facilities are screened for TB by sputum examination. During the period of treatment all pulmonary TB patients are monitored with sputum examinations at regular and specified intervals

➤ Sputum Culture for AFB

TB culture and DST facilities are available at the National TB Reference Laboratory at Welisara. Only culture facilities are available in Regional Laboratories at Kandy and Ratnapura. Sputum cultures are being done for smear negative PTB cases, all re-treatment cases before initiation of anti TB treatment and on presumptive MDR-TB cases.

Table 4: Utilization of Diagnostic Care Facilities in 2013

Institution	Sputum Smear Microscopy	Sputum Culture Specimens		Culture of other Specimens	
	No. done	No. done	No. +ve	No. done	No. +ve
Microscopy Centres	167,996				
DCC Laboratories	215,835				
Culture Lab Kandy	17,748	1,435	158	1,460	52
NTRL		9,636	1,283	4,101	129

➤ External Quality Assessment of Sputum Smear Microscopy

Quality assessment of sputum smear microscopy is an important component of the National Programme. Slides are being sent from all laboratories of District Chest Clinics and NHRD to the NTRL for EQA. Sputum smears done in microscopy centers of general health institutions are being sent to laboratories at District Chest Clinics for EQA.

In 2013, 22,300 slides were checked for EQA and 19 (1.5%) false positives and 24 (0.1%) false negatives were identified (Table 5).

Table 5: EQA Results of Sputum Smear Microscopy in 2013

Initial Reading	No. of slides Checked	Reference Laboratory Reading		Percentage of Deviations
		No. + ve	No. - ve	
+ve slides	1,246	1,224	19	1.52
-ve slides	21,054	24	21,030	0.11

X-Ray Facilities

X-ray facilities are available only in some chest clinics namely; Colombo, Kurunegala, Kandy, Badulla, Kalutara, Ratnapura, Galle and Matara. The other clinics obtain this facility from the nearest hospital. Microfilms (70 mm) and standard size films are used in these clinics.

The number of X-ray films of the two types consumed in 2013 at the Chest hospital and Chest Clinics were as follows.

- ✓ **Number of Micro Films** : 9,252 (+ 60 Rolls)
- ✓ **Number of Large Films** : 130,199
- ✓ **Digital Films** : 11,600
- ✓ **Total** : **151,051 (+ 60 Rolls)**

BCG Vaccination

The BCG vaccination is an essential component of Expanded Programme of Immunization in Sri Lanka. Accordingly, all newborns are being vaccinated within 24 hours of delivery. BCG vaccination will protect the child from two deadly forms of Tuberculosis in children, i.e.; TB Meningitis and Millitary TB (Disseminated TB).

Chest clinics provide services whenever revaccination is necessary, in situations such as absence of BCG scar in children below 5 years of age. There were 1782 revaccinations carried out in chest clinics in 2013.

Detailed Tables

Table 6: Notification of New TB Cases in Sri Lanka from 2004 – 2013

Year	PTB		EPTB		Total		PTB Positive	
	No	Rate	No	Rate	No	Rate	No	Rate
2004	7164	36.7	1525	7.8	8689	44.6	4629	23.7
2005	7927	40.1	1521	7.7	9448	47.9	5241	26.5
2006	6771	33.9	1831	9.2	8602	43.0	4892	24.5
2007	6845	33.8	1969	9.7	8814	43.5	4805	23.7
2008	7041	34.3	2173	10.6	9214	44.9	4941	24.1
2009	7271	35.0	2372	11.4	9643	46.4	5186	25.0
2010	7055	33.5	2430	11.6	9485	45.1	4925	23.4
2011	6789	33.5	2420	11.9	9209	45.4	4465	22.0
2012	6169	30.4	2353	11.6	8522	42.1	4276	21.1
2013	6062	29.7	2166	10.6	8228	40.3	4342	21.3

Source: Health 816 A

Table 7: Annual Mortality of All TB Cases from 2004-2013

Year	Estimated Mid Year Population (In Thousands)	Mortality	
		Number	Rate per 100,000 Population
2004	19,495	422	2.2
2005	19,745	446	2.3
2006	20,001	347	1.7
2007	20,257	205	1.0
2008	20,517	355	1.7
2009	20,781	275	1.3
2010	21,037	395	1.9
2011	20,110	358	1.8
2012	20,264	203	1.0
2013	20,417	314	1.5

Source: Health 814

Table 8: Rates of All Forms of TB Cases by District of Residence in 2013

District	Estimated Mid-Year Population	No. of Cases Detected	No. of Cases per 100,000 Population
Colombo	2,317,893	2,300	99.2
Gampaha	2,318,046	1017	43.9
Kalutara	1,232,232	687	55.8
Kandy	1,378,803	720	52.2
Matale	486,473	155	31.9
Nuwara Eliya	706,941	264	37.3
Galle	1,065,441	503	47.2
Matara	814,119	219	26.9
Hambantota	603,597	147	24.4
Batticaloa	528,871	234	44.2
Ampara	653,306	195	29.8
Trincomalee	380,867	131	34.4
Kurunegala	1,625,275	560	34.5
Puttalam	764,791	190	24.8
Anuradhapura	867,620	265	30.5
Polonnaruwa	407,812	141	34.6
Badulla	814,924	273	33.5
Monaragala	453,296	90	19.9
Ratnapura	1,088,662	579	53.2
Kegalle	841,706	365	43.4
Jaffna	587,520	266	45.3
Vavuniya	172,729	65	37.6
Mannar	99,754	54	54.1
Mullaitivu	92,600	26	28.1
Kilinochchi	113,676	50	44.0
Total	20,416,956	9,496	46.5

Table 9: TB Case Detection by District of Registration in 2013

District	New Cases				Relapse	Others				Treatment After Failure	Treatment After Default	Total
	Smear Positive	Smear Negative	EPTB	Total		Smear Positive	Smear Negative	EPTB	Total			
Colombo	1101	405	606	2112	64	15	25	25	65	16	43	2300
Gampaha	519	172	255	946	30	3	5	7	15	10	16	1017
Kalutara	341	107	189	637	21	3	4	12	19	1	9	687
Kandy	234	236	207	677	5	2	16	14	32	3	3	720
Matale	71	33	44	148	3	0	1	0	1	1	2	155
Nuwara Eliya	112	68	57	237	3	2	7	6	15	8	1	264
Galle	243	84	143	470	21	0	3	4	7	2	3	503
Matara	94	41	60	195	5	1	4	12	17	2	0	219
Hambantota	73	31	39	143	3	0	0	1	1	0	0	147
Batticaloa	125	32	62	219	7	1	0	4	5	3	0	234
Ampara	24	11	12	47	0	0	0	0	0	1	0	48
Kalmunai	73	38	25	136	6	2	1	2	5	0	0	147
Trincomalee	66	23	31	120	6	0	0	1	1	0	4	131
Kurunegala	197	128	115	440	12	2	78	21	101	3	4	560
Puttalam	95	28	58	181	7	0	0	0	0	0	2	190
Anuradhapura	164	32	54	250	6	1	1	2	4	3	2	265
Polonnaruwa	67	42	25	134	3	0	3	0	3	1	0	141
Badulla	126	50	74	250	8	2	2	4	8	5	2	273
Monaragala	57	12	20	89	0	1	0	0	1	0	0	90
Ratnapura	280	117	162	559	13	0	2	0	2	2	3	579
Kegalle	176	70	108	354	4	0	1	2	3	1	3	365
Jaffna	95	76	70	241	10	0	5	5	10	0	5	266
Vavuniya	40	1	21	62	1	1	0	1	2	0	0	65
Mannar	16	30	6	52	1	0	0	0	0	1	0	54
Mullaitivu	11	5	4	20	2	0	1	1	2	0	2	26
Kilinochchi	23	9	16	48	2	0	0	0	0	0	0	50
Total	4423	1881	2463	8767	243	36	159	124	319	63	104	9496

Table 10: Distribution of TB Cases by Province in 2013

Province	Number of Patients											
	Smear Positive	Rate	Smear Negative	Rate	EPTB	Rate	All New	Rate	Re-Treatment	Rate	All TB	Rate
Western	1961	33.4	684	11.7	1050	17.9	3695	63.0	210	3.6	4004	68.2
Central	417	16.2	337	13.1	308	12.0	1062	41.3	29	1.1	1139	44.3
Sothorn	410	16.5	156	6.3	242	9.7	808	32.5	36	1.4	869	35.0
Northern	185	17.4	121	11.3	117	11.0	423	39.7	24	2.3	461	43.2
Eastern	288	18.4	104	6.7	130	8.3	522	33.4	27	1.7	560	35.8
North Western	292	12.2	156	6.5	173	7.2	621	26.0	28	1.2	750	31.4
North Central	231	18.1	74	5.8	79	6.2	384	30.1	15	1.2	406	31.8
Uva	183	14.4	62	4.9	94	7.4	339	26.7	15	1.2	363	28.6
Sabaragamuwa	456	23.6	187	9.7	270	14.0	913	47.3	26	1.3	944	48.9
Total	4423	21.7	1881	9.2	2463	12.1	8767	42.9	410	2.0	9496	46.5

* Rate per 100,000 population

Table 11: Distribution of New Cases of TB by Age and Type in 2013

Age Group	Number of Patients									
	Smear Positive	Rate	Smear Negative	Rate	EPTB	Rate	All New	Rate	Rate	Rate
0 - 14	26	0.5	97	1.8	184	3.4	307	3.4	307	5.7
15 - 24	479	12.6	144	3.8	341	9.0	964	9.0	964	25.4
25 - 34	650	19.4	189	5.7	496	14.8	1335	14.8	1335	39.9
35 - 44	790	29.9	193	7.3	401	15.2	1385	15.2	1385	52.4
45 - 54	967	59.6	356	21.9	415	25.6	1738	25.6	1738	107.1
55 - 64	873	82.1	445	41.8	348	32.7	1666	32.7	1666	156.6
65 +	638	25.2	457	18.0	277	10.9	1372	10.9	1372	54.2
Total	4423	21.7	1881	9.2	2462	12.1	8767	12.1	8767	42.9

* Rate per 100,000 population

Table 12: Distribution of New Cases of TB by Age and Sex in 2013

Age Group	Male			Female			Total		
	Estimated Mid-Year Population	No	Rate	Estimated Mid-Year Population	No	Rate	Estimated Mid-Year Population	No	Rate
0 - 14	2,778,748	156	5.6	2,633,787	151	5.7	5,412,535	307	5.7
15 - 24	1,676,678	490	29.2	2,123,363	474	22.3	3,800,042	964	25.4
25 - 34	1,678,274	846	50.4	1,663,982	489	29.4	3,342,256	1335	39.9
35 - 44	1,090,265	979	89.8	1,551,689	406	26.2	2,641,954	1385	52.4
45 - 54	826,887	1244	150.4	796,262	494	62.0	1,623,149	1738	107.1
55 - 64	565,550	1138	201.2	498,174	528	106.0	1,063,723	1666	156.6
65 +	1,290,352	957	74.2	1,242,946	415	33.4	2,533,298	1372	54.2
Total	9,906,753	5810	58.6	10,510,203	2957	28.1	20,416,956	8767	42.9

* Rate per 100,000 population

Table 13: : Age and Sex Distribution of All New TB Cases by District in 2013

District	0 - 4		5 - 14		15 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 - 74		> 75		Total		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total		
	Colombo	27	26	22	24	122	125	208	87	268	112	320	127	242	115	144	64	55	24	1408	
Gampaha	2	0	10	8	49	38	85	41	119	43	156	58	130	68	75	24	28	12	654	292	946
Kalutara	3	3	7	4	36	37	67	37	81	34	88	25	72	35	56	28	17	7	427	210	637
Kandy	8	16	14	7	25	33	70	38	60	18	90	27	94	41	57	39	28	12	446	231	677
Matale	1	0	0	0	8	8	6	15	10	5	21	5	26	9	16	9	8	1	96	52	148
Nuwara Eliya	1	2	7	5	25	18	28	21	24	11	31	17	21	7	9	3	5	2	151	86	237
Galle	2	0	5	4	29	20	51	27	45	27	68	35	48	29	33	18	23	6	304	166	470
Matara	0	1	1	1	15	14	16	16	22	8	20	5	27	15	8	12	10	4	119	76	195
Hambantota	0	0	1	1	10	8	10	7	17	9	21	7	24	5	11	1	6	5	100	43	143
Batticaloa	0	0	5	1	13	8	25	19	12	9	29	22	29	14	22	6	4	1	139	80	219
Ampara	0	0	0	0	3	2	8	3	7	1	6	2	6	3	1	3	1	1	32	15	47
Kalmunai	0	1	1	0	6	9	5	7	20	5	14	7	30	9	11	2	8	1	95	41	136
Trincomalee	1	1	1	5	5	8	4	8	9	8	16	11	14	8	14	2	3	2	67	53	120
Kurunegala	0	0	3	6	10	16	36	18	55	17	76	26	66	30	41	17	13	10	300	140	440
Puttalam	1	3	4	2	12	3	21	4	22	7	30	12	22	14	15	6	1	2	128	53	181
Anuradhapura	4	3	2	3	11	9	22	11	31	7	48	11	51	9	15	5	7	1	191	59	250
Polonnaruwa	1	1	1	3	3	4	10	9	10	4	22	10	25	9	14	5	2	1	88	46	134
Badulla	1	1	0	6	25	31	32	14	27	9	30	11	23	15	16	4	3	2	157	93	250
Monaragala	1	0	0	0	5	6	16	5	8	5	10	4	10	1	11	4	3	0	64	25	89
Ratnapura	1	2	5	2	48	39	54	42	61	31	56	29	64	39	48	12	21	5	358	201	559
Kegalle	3	0	2	2	11	21	38	38	35	14	51	18	47	21	28	14	8	3	223	131	354
Jaffna	2	1	3	2	6	10	20	11	13	12	25	16	39	17	29	22	7	6	144	97	241
Vavuniya	0	0	0	0	5	1	4	4	11	5	9	2	10	3	7	0	1	0	47	15	62
Mannar	0	0	2	3	5	3	3	2	5	0	6	3	5	7	4	1	1	2	31	21	52
Mullaitivu	0	0	0	0	0	1	1	1	1	3	1	0	4	2	4	0	0	2	11	9	20
Kilinochchi	0	0	1	1	3	2	6	4	6	2	0	4	9	3	4	1	1	1	30	18	48
Total	59	61	97	90	490	474	846	489	979	406	1244	494	1138	528	693	302	264	113	5810	2957	8767

Table 14: Age and Sex Distribution of New Smear Positive TB Cases by District in 2013

District	0 - 4		5 - 14		15 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 - 74		> 75		Total		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Colombo	0	0	2	7	62	50	124	22	185	56	216	58	139	52	68	24	27	9	823	278	1101
Gampaha	0	0	1	3	25	26	39	16	73	24	100	28	85	25	41	10	16	7	380	139	519
Kalutara	0	0	0	0	16	19	40	13	52	17	56	11	46	13	33	16	6	3	249	92	341
Kandy	0	1	0	0	11	12	31	9	29	6	41	4	42	15	14	8	9	2	177	57	234
Matale	0	0	0	0	2	4	4	8	8	1	11	0	14	1	10	5	3	0	52	19	71
Nuwara Eliya	0	0	1	1	11	11	13	13	13	5	18	7	13	1	2	1	2	0	73	39	112
Galle	0	0	2	0	13	12	35	13	31	9	37	16	22	10	17	10	12	4	169	74	243
Matara	0	0	0	0	10	6	7	4	13	3	12	2	15	4	6	6	5	1	68	26	94
Hambantota	0	0	0	0	5	3	5	3	11	3	15	2	16	1	3	0	4	2	59	14	73
Batticaloa	0	0	0	0	7	4	9	9	9	4	20	11	22	9	14	3	3	1	84	41	125
Ampara	0	0	0	0	1	1	3	1	2	1	4	2	4	2	1	2	0	0	15	9	24
Kalmunai	0	0	0	0	3	5	2	4	10	3	10	4	20	3	4	1	4	0	53	20	73
Trincomalee	0	0	0	0	4	6	1	3	7	4	8	6	9	4	9	2	2	1	40	26	66
Kurunegala	0	0	2	1	6	6	17	7	27	8	46	8	30	4	17	5	8	5	153	44	197
Puttalam	0	0	0	1	4	2	13	2	13	2	19	8	13	6	9	1	1	1	72	23	95
Anuradhapura	0	0	2	0	5	8	11	3	24	5	37	4	43	5	9	2	6	0	137	27	164
Polonnaruwa	0	0	0	0	3	2	3	4	7	2	14	2	16	7	5	1	1	0	49	18	67
Badulla	0	0	0	1	11	17	17	9	15	4	17	6	13	5	8	1	2	0	83	43	126
Monaragala	0	0	0	0	0	3	11	4	4	2	9	2	8	0	10	2	2	0	44	13	57
Ratnapura	0	0	0	0	29	21	33	16	31	10	34	11	43	12	25	5	7	3	202	78	280
Kegalle	0	0	0	0	5	12	21	18	20	6	27	2	25	9	18	5	6	2	122	54	176
Jaffna	0	0	0	1	2	2	13	4	6	3	10	1	20	4	12	12	2	3	65	30	95
Vavuniya	0	0	0	0	3	1	3	3	8	4	4	1	6	2	5	0	0	0	29	11	40
Mannar	0	0	0	0	3	1	2	0	4	0	2	0	1	2	1	0	0	0	13	3	16
Mullaitivu	0	0	0	0	0	1	0	0	1	2	1	0	3	1	1	0	0	1	6	5	11
Kiinochchi	0	0	0	0	2	1	4	1	1	2	0	3	6	2	1	0	0	0	14	9	23
Total	0	1	10	15	243	236	461	189	604	186	768	199	674	199	343	122	128	45	3231	1192	4423

Table 15: Age and Sex Distribution of New Smear Negative TB Cases by District in 2013

District	0 - 4		5 - 14		15 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 - 74		> 75		Total		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
	Colombo	5	5	4	4	20	14	20	10	30	18	60	24	65	31	45	20	20	10	269	
Gampaha	0	0	1	0	10	2	16	5	12	6	27	10	25	20	20	7	8	3	119	53	172
Kalutara	0	1	0	2	5	4	3	7	10	3	15	4	13	11	11	8	7	3	64	43	107
Kandy	6	12	7	5	3	6	12	9	8	6	28	13	35	14	34	19	14	5	147	89	236
Matale	1	0	0	0	3	2	1	0	1	1	5	1	5	3	4	1	4	1	24	9	33
Nuwara Eliya	0	1	5	2	8	1	8	3	6	3	7	3	6	6	6	0	2	1	48	20	68
Galle	1	0	0	0	3	2	5	2	3	1	13	7	16	8	8	4	10	1	59	25	84
Matara	0	1	1	0	1	4	3	4	0	1	2	1	6	6	1	4	4	2	18	23	41
Hambantota	0	0	0	1	2	2	1	1	2	0	4	1	6	3	5	1	1	1	21	10	31
Batticaloa	0	0	2	0	0	0	4	2	0	4	5	4	2	4	5	0	0	0	18	14	32
Ampara	0	0	0	0	1	0	0	0	2	0	1	0	2	0	0	1	1	1	7	4	11
Kalmunai	0	0	1	0	1	0	2	0	7	0	3	1	6	5	7	1	4	0	31	7	38
Trincomalee	0	0	0	0	0	1	2	1	2	2	5	0	4	2	4	0	0	0	17	6	23
Kurunegala	0	0	0	2	2	4	5	3	15	6	16	9	23	12	19	6	4	2	84	44	128
Puttalam	0	1	0	0	0	0	5	0	3	0	5	2	4	2	4	1	0	1	21	7	28
Anuradhapura	3	0	0	0	2	0	2	2	3	1	4	3	5	0	5	1	1	0	25	7	32
Polonnaruwa	1	0	1	1	0	1	4	2	2	1	6	5	7	2	4	4	1	0	26	16	42
Badulla	0	1	0	3	3	3	3	2	2	0	6	4	5	6	7	3	1	1	27	23	50
Monaragala	0	0	0	0	2	1	2	0	1	1	0	0	2	0	0	2	1	0	8	4	12
Ratnapura	0	0	1	1	9	9	6	10	9	3	10	7	13	13	18	2	5	1	71	46	117
Kegalle	1	0	2	2	1	3	5	4	4	3	10	3	10	5	8	7	1	1	42	28	70
Jaffna	0	0	2	0	1	5	5	2	5	3	8	7	11	10	8	6	2	1	42	34	76
Vavuniya	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Mannar	0	0	2	3	1	1	0	2	1	0	4	2	2	5	3	1	1	2	14	16	30
Mullaitivu	0	0	0	0	0	0	0	1	0	1	0	0	1	1	1	0	0	0	2	3	5
Kiinochchi	0	0	1	1	0	0	0	1	1	0	0	1	2	0	1	0	1	0	6	3	9
Total	18	22	30	27	79	65	114	75	129	64	244	112	276	169	228	99	93	37	1211	670	1881

Table 16: Age and Sex Distribution of All New PTB Cases by District in 2013

District	0 - 4		5 - 14		15 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 - 74		> 75		Total		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Colombo	5	5	6	11	82	64	144	32	215	74	276	82	204	83	113	44	47	19	1092	414	1506
Gampaha	0	0	2	3	35	28	55	21	85	30	127	38	110	45	61	17	24	10	499	192	691
Kalutara	0	1	0	2	21	23	43	20	62	20	71	15	59	24	44	24	13	6	313	135	448
Kandy	6	13	7	5	14	18	43	18	37	12	69	17	77	29	48	27	23	7	324	146	470
Matale	1	0	0	0	5	6	5	8	9	2	16	1	19	4	14	6	7	1	76	28	104
Nuwara Eliya	0	1	6	3	19	12	21	16	19	8	25	10	19	7	8	1	4	1	121	59	180
Galle	1	0	2	0	16	14	40	15	34	10	50	23	38	18	25	14	22	5	228	99	327
Matara	0	1	1	0	11	10	10	8	13	4	14	3	21	10	7	10	9	3	86	49	135
Hambantota	0	0	0	1	7	5	6	4	13	3	19	3	22	4	8	1	5	3	80	24	104
Batticaloa	0	0	2	0	7	4	13	11	9	8	25	15	24	13	19	3	3	1	102	55	157
Ampara	0	0	0	0	2	1	3	3	4	1	5	2	6	2	1	3	1	1	22	13	35
Kalmunai	0	0	1	0	4	5	4	4	17	3	13	5	26	8	11	2	8	0	84	27	111
Trincomalee	0	0	0	0	4	7	3	4	9	6	13	6	13	6	13	2	2	1	57	32	89
Kurunegala	0	0	2	3	8	10	22	10	42	14	62	17	53	16	36	11	12	7	237	88	325
Puttalam	0	1	0	1	4	2	18	2	16	2	24	10	17	8	13	2	1	2	93	30	123
Anuradhapura	3	0	2	0	7	8	13	5	27	6	41	7	48	5	14	3	7	0	162	34	196
Polonnaruwa	1	0	1	1	3	3	7	6	9	3	20	7	23	9	9	5	2	0	75	34	109
Badulla	0	1	0	4	14	20	20	11	17	4	23	10	18	11	15	4	3	1	110	66	176
Monaragala	0	0	0	0	2	4	13	4	5	3	9	2	10	0	10	4	3	0	52	17	69
Ratnapura	0	0	1	1	38	30	39	26	40	13	44	18	56	25	43	7	12	4	273	124	397
Kegalle	1	0	2	2	6	15	26	22	24	9	37	5	35	14	26	12	7	3	164	82	246
Jaffna	0	0	2	1	3	7	18	6	11	6	18	8	31	14	20	18	4	4	107	64	171
Vavuniya	0	0	0	0	4	1	3	3	8	4	4	1	6	2	5	0	0	0	30	11	41
Mannar	0	0	2	3	4	2	2	2	5	0	6	2	3	7	4	1	1	2	27	19	46
Mullaitivu	0	0	0	0	0	1	0	1	1	3	1	0	4	2	2	0	0	1	8	8	16
Kiinochchi	0	0	1	1	2	1	4	2	2	2	0	4	8	2	2	0	1	0	20	12	32
Total	18	23	40	42	322	301	575	264	733	250	1012	311	950	368	571	221	82	4442	1862	6304	

Table 17: Age and Sex Distribution of New EPTB Cases by District in 2013

District	0 - 4		5 - 14		15 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 - 74		> 75		Total		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
	Colombo	22	21	16	13	40	61	64	55	53	38	44	45	38	32	31	20	8	5	316	290
Gampaha	2	0	8	5	14	10	30	20	34	13	29	20	20	23	14	7	4	2	155	100	255
Kalutara	3	2	7	2	15	14	24	17	19	14	17	10	13	11	12	4	4	1	114	75	189
Kandy	2	3	7	2	11	15	27	20	23	6	21	10	17	12	9	12	5	5	122	85	207
Matale	0	0	0	0	3	2	1	7	1	3	5	4	7	5	2	3	1	0	20	24	44
Nuwara Eliya	1	1	1	2	6	6	7	5	5	3	6	7	2	0	1	2	1	1	30	27	57
Galle	1	0	3	4	13	6	11	12	11	17	18	12	10	11	8	4	1	1	76	67	143
Matara	0	0	0	1	4	4	6	8	9	4	6	2	6	5	1	2	1	1	33	27	60
Hambantota	0	0	1	0	3	3	4	3	4	6	2	4	2	1	3	0	1	2	20	19	39
Batticaloa	0	0	3	1	6	4	12	8	3	1	4	7	5	1	3	3	1	0	37	25	62
Ampara	0	0	0	0	1	1	5	0	3	0	1	0	0	1	0	0	0	0	10	2	12
Kalmunai	0	1	0	0	2	4	1	3	3	2	1	2	4	1	0	0	0	0	11	14	25
Trincomalee	1	1	1	5	1	1	1	4	0	2	3	5	1	2	1	0	1	1	10	21	31
Kurunegala	0	0	1	3	2	6	14	8	13	3	14	9	13	14	5	6	1	3	63	52	115
Puttalam	1	2	4	1	8	1	3	2	6	5	6	2	5	6	2	4	0	0	35	23	58
Anuradhapura	1	3	0	3	4	1	9	6	4	1	7	4	3	4	1	2	0	1	29	25	54
Polonnaruwa	0	1	0	2	0	1	3	3	1	1	2	3	2	0	5	0	0	1	13	12	25
Badulla	1	0	0	2	11	11	12	3	10	5	7	1	5	4	1	0	0	1	47	27	74
Monaragala	1	0	0	0	3	2	3	1	3	2	1	2	0	1	1	0	0	0	12	8	20
Ratnapura	1	2	4	1	10	9	15	16	21	18	12	11	8	14	5	5	9	1	85	77	162
Kegalle	2	0	0	0	5	6	12	16	11	5	14	13	12	7	2	2	1	0	59	49	108
Jaffna	2	1	1	1	3	3	2	5	2	6	7	8	8	3	9	4	3	2	37	33	70
Vavuniya	0	0	0	0	1	0	1	1	3	1	5	1	4	1	2	0	1	0	17	4	21
Mannar	0	0	0	0	1	1	1	0	0	0	0	1	2	0	0	0	0	0	4	2	6
Mullaitivu	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	1	3	1	4
Kiinochchi	0	0	0	0	1	1	2	2	4	0	0	0	1	1	2	1	0	1	10	6	16
Total	41	38	57	48	168	173	271	225	246	156	232	183	188	160	122	81	43	31	1368	1095	2463

Table 18: Distribution of Treatment Outcome of All Forms of TB Cases by District in 2012

District	Cured		Treatment Completed		Treatment Success		Died		Treatment Failure		Defaulted		Transferred Out		Not Evaluated		Total
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	
Colombo	908	41.5	847	38.7	1755	80.1	122	5.6	23	1.1	176	8.0	5	0.2	75	3.4	2190
Gampaha	370	38.7	372	38.9	742	77.5	55	5.7	8	0.8	80	8.4	24	2.5	38	4.0	957
Kalutara	330	50.6	264	40.5	594	91.1	27	4.1	1	0.2	13	2.0	0	0.0	5	0.8	652
Kandy	194	30.4	307	48.0	501	78.4	31	4.9	8	1.3	37	5.8	5	0.8	15	2.3	639
Matale	57	39.9	77	53.8	134	93.7	4	2.8	1	0.7	0	0.0	0	0.0	2	1.4	143
Nuwara Eliya	77	37.7	73	35.8	150	73.5	14	6.9	2	1.0	13	6.4	4	2.0	12	5.9	204
Galle	202	41.1	232	47.2	434	88.2	26	5.3	2	0.4	13	2.6	3	0.6	5	1.0	492
Matara	114	51.1	75	33.6	189	84.8	14	6.3	1	0.4	2	0.9	0	0.0	1	0.4	223
Hambantota	45	40.9	42	38.2	87	79.1	11	10.0	0	0.0	2	1.8	3	2.7	3	2.7	110
Batticaloa	82	44.1	74	39.8	156	83.9	16	8.6	0	0.0	4	2.2	0	0.0	2	1.1	186
Ampara	28	43.8	27	42.2	55	85.9	5	7.8	0	0.0	0	0.0	0	0.0	3	4.7	64
Kalmunai	69	36.3	90	47.4	159	83.7	10	5.3	0	0.0	3	1.6	0	0.0	9	4.7	190
Trincomalee	64	25.6	168	67.2	232	92.8	12	4.8	0	0.0	4	1.6	1	0.4	1	0.4	250
Kurunegala	205	36.8	210	37.7	415	74.5	30	5.4	4	0.7	11	2.0	1	0.2	17	3.1	557
Puttalam	76	37.3	97	47.5	173	84.8	7	3.4	0	0.0	14	6.9	5	2.5	5	2.5	204
Anuradhapura	156	51.0	131	42.8	287	93.8	9	2.9	3	1.0	0	0.0	0	0.0	2	0.7	306
Polonnaruwa	49	33.1	76	51.4	125	84.5	10	6.8	2	1.4	2	1.4	6	4.1	1	0.7	148
Badulla	90	40.5	93	41.9	183	82.4	11	5.0	6	2.7	1	0.5	5	2.3	11	5.0	222
Monaragala	54	51.4	38	36.2	92	87.6	6	5.7	0	0.0	2	1.9	2	1.9	2	1.9	105
Ratnapura	270	50.4	185	34.5	455	84.9	37	6.9	3	0.6	16	3.0	8	1.5	16	3.0	536
Kegalle	179	44.3	184	45.5	363	89.9	26	6.4	2	0.5	5	1.2	0	0.0	2	0.5	404
Jaffna	56	17.6	201	63.0	257	80.6	20	6.3	0	0.0	17	5.3	0	0.0	16	5.0	319
Vavuniya	42	49.4	32	37.6	74	87.1	2	2.4	0	0.0	3	3.5	2	2.4	0	0.0	85
Mannar	31	45.6	32	47.1	63	92.6	3	4.4	1	1.5	1	1.5	0	0.0	0	0.0	68
Mullaitivu	6	19.4	12	38.7	18	58.1	0	0.0	0	0.0	7	22.6	0	0.0	5	16.1	31
Kilinochchi	12	20.7	38	65.5	50	86.2	3	5.2	0	0.0	2	3.4	0	0.0	0	0.0	58
Total	3766	40.3	3977	42.6	7743	82.9	511	5.5	67	0.7	428	4.6	74	0.8	248	2.7	9343

Table 19: Distribution of Treatment Outcome of All Forms of New (PTB and EPTB) Cases by District in 2012

District	Cured		Treatment Completed		Treatment Success		Died		Treatment Failure		Defaulted		Transferred Out		Not Evaluated		Total
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	
Colombo	801	41.6	808	42.0	1609	83.5	97	5.0	23	3.1	129	6.7	5	0.3	63	3.3	1926
Gampaha	341	38.5	368	41.5	709	80.0	49	5.5	8	1.7	68	7.7	21	2.4	31	3.5	886
Kalutara	315	50.8	262	42.3	577	93.1	27	4.4	1	0.3	10	1.6	0	0.0	5	0.8	620
Kandy	176	30.8	304	53.2	480	84.1	29	5.1	8	4.0	35	6.1	5	0.9	14	2.5	571
Matale	55	40.1	76	55.5	131	95.6	3	2.2	1	1.8	0	0.0	0	0.0	2	1.5	137
Nuwara Eliya	74	39.4	69	36.7	143	76.1	14	7.4	2	2.1	13	6.9	4	2.1	12	6.4	188
Galle	186	40.6	229	50.0	415	90.6	23	5.0	2	0.9	10	2.2	3	0.7	5	1.1	458
Matara	112	56.9	72	36.5	184	93.4	11	5.6	0	25.0	1	0.5	0	0.0	1	0.5	197
Hambantota	43	42.6	41	40.6	84	83.2	10	9.9	0	0.0	2	2.0	3	3.0	2	2.0	101
Batticaloa	71	43.3	73	44.5	144	87.8	15	9.1	0	0.0	4	2.4	0	0.0	1	0.6	164
Ampara	27	43.5	27	43.5	54	87.1	5	8.1	0	0.0	0	0.0	0	0.0	3	4.8	62
Kalmunai	67	39.2	87	50.9	154	90.1	10	5.8	0	0.0	2	1.2	0	0.0	5	2.9	171
Trincomalee	56	23.2	168	69.7	224	92.9	11	4.6	0	0.0	4	1.7	1	0.4	1	0.4	241
Kurunegala	175	40.1	209	47.9	384	88.1	26	6.0	4	2.3	8	1.8	1	0.2	13	3.0	436
Puttalam	75	37.9	93	47.0	168	84.8	7	3.5	0	0.0	14	7.1	5	2.5	4	2.0	198
Anuradhapura	143	49.8	131	45.6	274	95.5	9	3.1	3	2.0	0	0.0	0	0.0	1	0.3	287
Polonnaruwa	47	33.1	76	53.5	123	86.6	9	6.3	2	3.8	2	1.4	5	3.5	1	0.7	142
Badulla	84	41.4	90	44.3	174	85.7	9	4.4	6	5.6	1	0.5	4	2.0	9	4.4	203
Monaragala	53	52.5	38	37.6	91	90.1	6	5.9	0	0.0	2	2.0	1	1.0	1	1.0	101
Ratnapura	249	48.7	185	36.2	434	84.9	36	7.0	3	1.0	16	3.1	7	1.4	15	2.9	511
Kegalle	173	45.1	180	46.9	353	91.9	23	6.0	2	1.1	5	1.3	0	0.0	1	0.3	384
Jaffna	50	16.9	195	65.9	245	82.8	18	6.1	0	0.0	17	5.7	0	0.0	16	5.4	296
Vavuniya	41	51.9	32	40.5	73	92.4	2	2.5	0	0.0	2	2.5	2	2.5	0	0.0	79
Mannar	31	46.3	32	47.8	63	94.0	2	3.0	1	2.7	1	1.5	0	0.0	0	0.0	67
Mullaitivu	6	22.2	12	44.4	18	66.7	0	0.0	0	0.0	5	18.5	0	0.0	4	14.8	27
Kilinochchi	12	22.2	38	70.4	50	92.6	2	3.7	0	0.0	2	3.7	0	0.0	0	0.0	54
Total	3463	40.7	3895	45.8	7358	86.5	453	5.3	66	0.8	353	4.1	67	0.8	210	2.5	8507

Table 20: Distribution of Treatment Outcome of All New PTB Cases by District in 2012

District	Cured		Treatment Completed		Treatment Success		Died		Treatment Failure		Defaulted		Transferred Out		Not Evaluated		Total
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	
Colombo	801	57.2	339	24.2	1140	81.4	76	5.4	22	1.6	115	8.2	5	0.4	43	3.1	1401
Gampaha	341	52.3	171	26.2	512	78.5	42	6.4	8	1.2	55	8.4	15	2.3	20	3.1	652
Kalutara	315	71.6	91	20.7	406	92.3	22	5.0	1	0.2	7	1.6	0	0.0	4	0.9	440
Kandy	176	43.3	161	39.7	337	83.0	21	5.2	7	1.7	29	7.1	2	0.5	10	2.5	406
Matale	55	59.8	33	35.9	88	95.7	3	3.3	1	1.1	0	0.0	0	0.0	0	0.0	92
Nuwara Eliya	74	53.2	33	23.7	107	77.0	12	8.6	2	1.4	8	5.8	3	2.2	7	5.0	139
Galle	186	53.3	127	36.4	313	89.7	20	5.7	2	0.6	10	2.9	3	0.9	1	0.3	349
Matara	112	78.9	18	12.7	130	91.5	10	7.0	0	0.0	1	0.7	0	0.0	1	0.7	142
Hambantota	43	66.2	12	18.5	55	84.6	8	12.3	0	0.0	1	1.5	0	0.0	1	1.5	65
Batticaloa	71	68.9	17	16.5	88	85.4	13	12.6	0	0.0	2	1.9	0	0.0	0	0.0	103
Ampara	27	52.9	17	33.3	44	86.3	5	9.8	0	0.0	0	0.0	0	0.0	2	3.9	51
Kalunai	67	47.9	60	42.9	127	90.7	8	5.7	0	0.0	2	1.4	0	0.0	3	2.1	140
Trincomalee	56	28.0	128	64.0	184	92.0	10	5.0	0	0.0	4	2.0	1	0.5	1	0.5	200
Kurunegala	175	53.5	109	33.3	284	86.9	24	7.3	4	1.2	7	2.1	1	0.3	7	2.1	327
Puttalam	75	61.0	28	22.8	103	83.7	4	3.3	0	0.0	10	8.1	3	2.4	3	2.4	123
Anuradhapura	143	68.1	58	27.6	201	95.7	5	2.4	3	1.4	0	0.0	0	0.0	1	0.5	210
Polonnaruwa	47	44.3	44	41.5	91	85.8	8	7.5	2	1.9	0	0.0	4	3.8	1	0.9	106
Badulla	84	56.0	39	26.0	123	82.0	9	6.0	6	4.0	1	0.7	4	2.7	7	4.7	150
Monaragala	53	70.7	16	21.3	69	92.0	5	6.7	0	0.0	0	0.0	1	1.3	0	0.0	75
Ratnapura	249	69.6	60	16.8	309	86.3	21	5.9	3	0.8	12	3.4	4	1.1	9	2.5	358
Kegalle	173	64.1	73	27.0	246	91.1	17	6.3	2	0.7	4	1.5	0	0.0	1	0.4	270
Jaffna	50	27.6	101	55.8	151	83.4	12	6.6	0	0.0	12	6.6	0	0.0	6	3.3	181
Vavuniya	41	68.3	14	23.3	55	91.7	2	3.3	0	0.0	2	3.3	1	1.7	0	0.0	60
Mannar	31	57.4	19	35.2	50	92.6	2	3.7	1	1.9	1	1.9	0	0.0	0	0.0	54
Mullaitivu	6	35.3	6	35.3	12	70.6	0	0.0	0	0.0	3	17.6	0	0.0	2	11.8	17
Kilinochchi	12	25.5	32	68.1	44	93.6	1	2.1	0	0.0	2	4.3	0	0.0	0	0.0	47
Total	3463	56.2	1806	29.3	5269	85.6	360	5.8	64	1.0	288	4.7	47	0.8	130	2.1	6158

Table 21: Distribution of Treatment Outcome of New Smear Positive TB Cases by District in 2012

District	Cured		Treatment Completed		Treatment Success		Died		Treatment Failure		Defaulted		Transferred Out		Not Evaluated		Total
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	
Colombo	801	74.5	86	8.0	887	82.5	53	4.9	18	1.7	89	8.3	3	0.3	25	2.3	1075
Gampaha	341	72.6	28	6.0	369	78.5	32	6.8	8	1.7	43	9.1	8	1.7	10	2.1	470
Kalutara	315	92.4	2	0.6	317	93.0	16	4.7	1	0.3	6	1.8	0	0.0	1	0.3	341
Kandy	176	84.2	9	4.3	185	88.5	10	4.8	5	2.4	8	3.8	0	0.0	1	0.5	209
Matale	55	96.5	0	0.0	55	96.5	1	1.8	1	1.8	0	0.0	0	0.0	0	0.0	57
Nuwara Eliya	74	77.1	2	2.1	76	79.2	6	6.3	2	2.1	5	5.2	3	3.1	4	4.2	96
Galle	186	81.6	13	5.7	199	87.3	16	7.0	2	0.9	9	3.9	2	0.9	0	0.0	228
Matara	112	90.3	0	0.0	112	90.3	10	8.1	0	0.0	1	0.8	0	0.0	1	0.8	124
Hambantota	43	91.5	1	2.1	44	93.6	1	2.1	0	0.0	1	2.1	0	0.0	1	2.1	47
Batticaloa	71	83.5	2	2.4	73	85.9	10	11.8	0	0.0	2	2.4	0	0.0	0	0.0	85
Ampara	27	93.1	0	0.0	27	93.1	2	6.9	0	0.0	0	0.0	0	0.0	0	0.0	29
Kalimunai	67	83.8	7	8.8	74	92.5	4	5.0	0	0.0	2	2.5	0	0.0	0	0.0	80
Trincomalee	56	84.8	0	0.0	56	84.8	6	9.1	0	0.0	3	4.5	1	1.5	0	0.0	66
Kurunegala	175	85.4	2	1.0	177	86.3	16	7.8	3	1.5	5	2.4	1	0.5	3	1.5	205
Puttalam	75	74.3	11	10.9	86	85.1	3	3.0	0	0.0	8	7.9	3	3.0	1	1.0	101
Anuradhapura	143	94.7	0	0.0	143	94.7	5	3.3	3	2.0	0	0.0	0	0.0	0	0.0	151
Polonnaruwa	47	88.7	0	0.0	47	88.7	3	5.7	0	0.0	0	0.0	2	3.8	1	1.9	53
Badulla	84	77.8	4	3.7	88	81.5	7	6.5	6	5.6	1	0.9	1	0.9	5	4.6	108
Monaragala	53	96.4	0	0.0	53	96.4	1	1.8	0	0.0	0	0.0	1	1.8	0	0.0	55
Ratnapura	249	86.8	1	0.3	250	87.1	13	4.5	3	1.0	10	3.5	3	1.0	8	2.8	287
Kegalle	173	91.5	1	0.5	174	92.1	10	5.3	2	1.1	3	1.6	0	0.0	0	0.0	189
Jaffna	50	46.7	44	41.1	94	87.9	7	6.5	0	0.0	6	5.6	0	0.0	0	0.0	107
Vavuniya	41	87.2	1	2.1	42	89.4	2	4.3	0	0.0	2	4.3	1	2.1	0	0.0	47
Mannar	31	83.8	3	8.1	34	91.9	1	2.7	1	2.7	1	2.7	0	0.0	0	0.0	37
Mullaitivu	6	66.7	0	0.0	6	66.7	0	0.0	0	0.0	2	22.2	0	0.0	1	11.1	9
Kilinochchi	12	92.3	0	0.0	12	92.3	0	0.0	0	0.0	1	7.7	0	0.0	0	0.0	13
Total	3463	81.1	217	5.1	3680	86.2	235	5.5	55	1.3	208	4.9	29	0.7	62	1.5	4269

Table 22: Distribution of Treatment Outcome of New Smear Negative TB Cases by District in 2012

District	Treatment Completed		Died		Treatment Failure		Defaulted		Transferred Out		Not Evaluated		Total
	No	%	No	%	No	%	No	%	No	%	No	%	
Colombo	253	77.6	23	7.1	4	1.2	26	8.0	2	0.6	18	5.5	326
Gampaha	143	78.6	10	5.5	0	0.0	12	6.6	7	3.8	10	5.5	182
Kalutara	89	89.9	6	6.1	0	0.0	1	1.0	0	0.0	3	3.0	99
Kandy	152	77.2	11	5.6	2	1.0	21	10.7	2	1.0	9	4.6	197
Matale	33	94.3	2	5.7	0	0.0	0	0.0	0	0.0	0	0.0	35
Nuwara Eliya	31	72.1	6	14.0	0	0.0	3	7.0	0	0.0	3	7.0	43
Galle	114	94.2	4	3.3	0	0.0	1	0.8	1	0.8	1	0.8	121
Matara	18	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	18
Hambantota	11	61.1	7	38.9	0	0.0	0	0.0	0	0.0	0	0.0	18
Batticaloa	15	83.3	3	16.7	0	0.0	0	0.0	0	0.0	0	0.0	18
Ampara	17	77.3	3	13.6	0	0.0	0	0.0	0	0.0	2	9.1	22
Kalmunai	53	88.3	4	6.7	0	0.0	0	0.0	0	0.0	3	5.0	60
Trincomalee	128	95.5	4	3.0	0	0.0	1	0.7	0	0.0	1	0.7	134
Kurunegala	107	87.7	8	6.6	1	0.8	2	1.6	0	0.0	4	3.3	122
Puttalam	17	77.3	1	4.5	0	0.0	2	9.1	0	0.0	2	9.1	22
Anuradhapura	58	98.3	0	0.0	0	0.0	0	0.0	0	0.0	1	1.7	59
Polonnaruwa	44	83.0	5	9.4	2	3.8	0	0.0	2	3.8	0	0.0	53
Badulla	35	83.3	2	4.8	0	0.0	0	0.0	3	7.1	2	4.8	42
Monaragala	16	80.0	4	20.0	0	0.0	0	0.0	0	0.0	0	0.0	20
Ratnapura	59	83.1	8	11.3	0	0.0	2	2.8	1	1.4	1	1.4	71
Kegalle	72	88.9	7	8.6	0	0.0	1	1.2	0	0.0	1	1.2	81
Jaffna	57	77.0	5	6.8	0	0.0	6	8.1	0	0.0	6	8.1	74
Vavuniya	13	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	13
Mannar	16	94.1	1	5.9	0	0.0	0	0.0	0	0.0	0	0.0	17
Mullaitivu	6	75.0	0	0.0	0	0.0	1	12.5	0	0.0	1	12.5	8
Kilinochchi	32	94.1	1	2.9	0	0.0	1	2.9	0	0.0	0	0.0	34
Total	1589	84.1	125	6.6	9	0.5	80	4.2	18	1.0	68	3.6	1889

Table 23: Distribution of Treatment Outcome of New EPTB Cases by District in 2012

District	Treatment Completed		Died		Treatment Failure		Defaulted		Transferred Out		Not Evaluated		Total
	No	%	No	%	No	%	No	%	No	%	No	%	
Colombo	469	89.3	21	4.0	1	0.2	14	2.7	0	0.0	20	3.8	525
Gampaha	197	84.2	7	3.0	0	0.0	13	5.6	6	2.6	11	4.7	234
Kalutara	171	95.0	5	2.8	0	0.0	3	1.7	0	0.0	1	0.6	180
Kandy	143	86.7	8	4.8	1	0.6	6	3.6	3	1.8	4	2.4	165
Matale	43	95.6	0	0.0	0	0.0	0	0.0	0	0.0	2	4.4	45
Nuwara Eliya	36	73.5	2	4.1	0	0.0	5	10.2	1	2.0	5	10.2	49
Galle	102	93.6	3	2.8	0	0.0	0	0.0	0	0.0	4	3.7	109
Matara	54	98.2	1	1.8	0	0.0	0	0.0	0	0.0	0	0.0	55
Hambantota	29	80.6	2	5.6	0	0.0	1	2.8	3	8.3	1	2.8	36
Batticaloa	56	91.8	2	3.3	0	0.0	2	3.3	0	0.0	1	1.6	61
Ampara	10	90.9	0	0.0	0	0.0	0	0.0	0	0.0	1	9.1	11
Kalmunai	27	87.1	2	6.5	0	0.0	0	0.0	0	0.0	2	6.5	31
Trincomalee	40	97.6	1	2.4	0	0.0	0	0.0	0	0.0	0	0.0	41
Kurunegala	100	91.7	2	1.8	0	0.0	1	0.9	0	0.0	6	5.5	109
Puttalam	65	86.7	3	4.0	0	0.0	4	5.3	2	2.7	1	1.3	75
Anuradhapura	73	94.8	4	5.2	0	0.0	0	0.0	0	0.0	0	0.0	77
Polonnaruwa	32	88.9	1	2.8	0	0.0	2	5.6	1	2.8	0	0.0	36
Badulla	51	96.2	0	0.0	0	0.0	0	0.0	0	0.0	2	3.8	53
Monaragala	22	84.6	1	3.8	0	0.0	2	7.7	0	0.0	1	3.8	26
Ratnapura	125	81.7	15	9.8	0	0.0	4	2.6	3	2.0	6	3.9	153
Kegalle	107	93.9	6	5.3	0	0.0	1	0.9	0	0.0	0	0.0	114
Jaffna	94	81.7	6	5.2	0	0.0	5	4.3	0	0.0	10	8.7	115
Vavuniya	18	94.7	0	0.0	0	0.0	0	0.0	1	5.3	0	0.0	19
Mannar	13	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	13
Mullaitivu	6	60.0	0	0.0	0	0.0	2	20.0	0	0.0	2	20.0	10
Kilinochchi	6	85.7	1	14.3	0	0.0	0	0.0	0	0.0	0	0.0	7
Total	2089	88.9	93	4.0	2	0.1	65	2.8	20	0.9	80	3.4	2349

Table 24: Distribution of Treatment Outcome of Re-treatment TB Cases by District in 2012

District	Cured		Treatment Completed		Died		Treatment Failure		Defaulted		Transferred Out		Not Evaluated		Total
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	
Colombo	90	54.9	7	4.3	19	11.6	0	0.0	37	22.6	0	0.0	11	6.7	164
Gampaha	25	45.5	4	7.3	6	10.9	0	0.0	11	20.0	2	3.6	7	12.7	55
Kalutara	14	82.4	0	0.0	0	0.0	0	0.0	3	17.6	0	0.0	0	0.0	17
Kandy	17	94.4	0	0.0	1	5.6	0	0.0	0	0.0	0	0.0	0	0.0	18
Matale	2	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2
Nuwara Eliya	3	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3
Galle	16	66.7	2	8.3	3	12.5	0	0.0	3	12.5	0	0.0	0	0.0	24
Matara	1	25.0	0	0.0	1	25.0	1	25.0	1	25.0	0	0.0	0	0.0	4
Hambantota	2	66.7	0	0.0	1	33.3	0	0.0	0	0.0	0	0.0	0	0.0	3
Batticaloa	11	78.6	1	7.1	1	7.1	0	0.0	0	0.0	0	0.0	1	7.1	14
Ampara	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1
Kalmunai	2	33.3	3	50.0	0	0.0	0	0.0	1	16.7	0	0.0	0	0.0	6
Trincomalee	8	88.9	0	0.0	1	11.1	0	0.0	0	0.0	0	0.0	0	0.0	9
Kurunegala	16	66.7	1	4.2	2	8.3	0	0.0	1	4.2	0	0.0	4	16.7	24
Puttalam	1	16.7	4	66.7	0	0.0	0	0.0	0	0.0	0	0.0	1	16.7	6
Anuradhapura	10	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10
Polonnaruwa	2	50.0	0	0.0	1	25.0	0	0.0	0	0.0	1	25.0	0	0.0	4
Badulla	5	50.0	0	0.0	2	20.0	0	0.0	0	0.0	1	10.0	2	20.0	10
Monaragala	1	33.3	0	0.0	0	0.0	0	0.0	0	0.0	1	33.3	1	33.3	3
Ratnapura	21	87.5	0	0.0	1	4.2	0	0.0	0	0.0	1	4.2	1	4.2	24
Kegalle	6	54.5	1	9.1	3	27.3	0	0.0	0	0.0	0	0.0	1	9.1	11
Jaffna	6	42.9	6	42.9	2	14.3	0	0.0	0	0.0	0	0.0	0	0.0	14
Vavuniya	1	50.0	0	0.0	0	0.0	0	0.0	1	50.0	0	0.0	0	0.0	2
Mannar	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	1
Mullaitivu	0	0.0	0	0.0	0	0.0	0	0.0	2	66.7	0	0.0	1	33.3	3
Kilinochchi	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	1
Total	261	60.3	29	6.7	46	10.6	1	0.2	60	13.9	6	1.4	30	6.9	433

Table 25: Distribution of Treatment Outcome of Other TB Cases by District in 2012

District	Cured		Treatment Completed		Died		Treatment Failure		Defaulted		Transferred Out		Not Evaluated		Total
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	
Colombo	17	17.0	32	32.0	6	6.0	0	0.0	10	10.0	0	0.0	1	1.0	100
Gampaha	4	25.0	0	0.0	0	0.0	0	0.0	1	6.3	1	6.3	0	0.0	16
Kalutara	1	6.7	2	13.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	15
Kandy	1	2.0	3	6.0	1	2.0	0	0.0	2	4.0	0	0.0	1	2.0	50
Matale	0	0.0	1	25.0	1	25.0	0	0.0	0	0.0	0	0.0	0	0.0	4
Nuwara Eliya	0	0.0	4	30.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	13
Galle	0	0.0	1	10.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10
Matara	1	4.5	3	13.6	2	9.1	0	0.0	0	0.0	0	0.0	0	0.0	22
Hambantota	0	0.0	1	16.7	0	0.0	0	0.0	0	0.0	0	0.0	1	16.7	6
Batticaloa	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	8
Ampara	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1
Kalmunai	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	30.8	13
Trincomalee	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Kurunegala	14	14.4	0	0.0	2	2.1	0	0.0	2	2.1	0	0.0	0	0.0	97
Puttalam	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Anuradhapura	3	33.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	11.1	9
Polonnaruwa	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2
Badulla	1	11.1	3	33.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	9
Monaragala	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1
Ratnapura	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1
Kegalle	0	0.0	3	33.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	9
Jaffna	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	9
Vavuniya	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4
Mannar	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Mullaitivu	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1
Kilinochchi	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3
Total	42	10.4	53	13.2	12	3.0	0	0.0	15	3.7	1	0.2	8	2.0	403

Table 26: Distribution of Sputum Conversion of New Smear Positive TB Cases at the End of the Intensive Phase by District in 2013

District	Negative		Positive		Died		Defaulted		Transferred Out		No Result		Total
	No	%	No	%	No	%	No	%	No	%	No	%	
Colombo	947	86.0	15	1.4	36	3.3	5	0.5	19	1.7	79	7.2	1101
Gampaha	435	83.8	22	4.2	9	1.7	17	3.3	3	0.6	33	6.4	519
Kalutara	299	87.7	15	4.4	16	4.7	1	0.3	0	0.0	10	2.9	341
Kandy	205	87.6	0	0.0	13	5.6	4	1.7	8	3.4	4	1.7	234
Matale	62	87.3	4	5.6	5	7.0	0	0.0	0	0.0	0	0.0	71
Nuwara Eliya	89	79.5	3	2.7	6	5.4	1	0.9	2	1.8	11	9.8	112
Galle	218	89.7	8	3.3	10	4.1	0	0.0	1	0.4	6	2.5	243
Matara	86	91.5	1	1.1	6	6.4	1	1.1	0	0.0	0	0.0	94
Hambantota	68	93.2	1	1.4	1	1.4	1	1.4	0	0.0	2	2.7	73
Batticaloa	115	92.0	1	0.8	5	4.0	0	0.0	0	0.0	4	3.2	125
Ampara	23	95.8	1	4.2	0	0.0	0	0.0	0	0.0	0	0.0	24
Kalmunai	49	67.1	1	1.4	4	5.5	0	0.0	0	0.0	19	26.0	73
Trincomalee	63	95.5	0	0.0	0	0.0	3	4.5	0	0.0	0	0.0	66
Kurunegala	169	85.8	10	5.1	13	6.6	1	0.5	0	0.0	4	2.0	197
Puttalam	54	56.8	3	3.2	2	2.1	2	2.1	4	4.2	30	31.6	95
Anuradhapura	148	90.2	7	4.3	7	4.3	0	0.0	0	0.0	2	1.2	164
Polonnaruwa	57	85.1	3	4.5	4	6.0	0	0.0	2	3.0	1	1.5	67
Badulla	89	70.6	4	3.2	6	4.8	4	3.2	0	0.0	23	18.3	126
Monaragala	53	93.0	1	1.8	3	5.3	0	0.0	0	0.0	0	0.0	57
Ratnapura	250	89.3	4	1.4	12	4.3	6	2.1	3	1.1	5	1.8	280
Kegalle	168	95.5	2	1.1	6	3.4	0	0.0	0	0.0	0	0.0	176
Jaffna	47	49.5	1	1.1	5	5.3	1	1.1	0	0.0	41	43.2	95
Vavuniya	36	90.0	0	0.0	3	7.5	0	0.0	0	0.0	1	2.5	40
Mannar	15	93.8	1	6.3	0	0.0	0	0.0	0	0.0	0	0.0	16
Mullaitivu	9	81.8	0	0.0	1	9.1	0	0.0	0	0.0	1	9.1	11
Kilinochchi	18	78.3	2	8.7	1	4.3	0	0.0	0	0.0	2	8.7	23
Total	3772	85.3	110	2.5	174	3.9	47	1.1	42	0.9	278	6.3	4423

Table 27: Distribution of Sputum Conversion of Re-treatment Smear Positive TB Cases at the End of the Intensive Phase by District in 2013

District	Negative		Positive		Died		Defaulted		Transferred Out		No Result		Total
	No	%	No	%	No	%	No	%	No	%	No	%	
Colombo	85	69.1	3	2.4	5	4.1	2	1.6	1	0.8	27	22.0	123
Gampaha	30	53.6	7	12.5	1	1.8	2	3.6	2	3.6	14	25.0	56
Kalutara	24	77.4	2	6.5	2	6.5	3	9.7	0	0.0	0	0.0	31
Kandy	9	81.8	0	0.0	1	9.1	0	0.0	1	9.1	0	0.0	11
Matale	4	66.7	0	0.0	0	0.0	0	0.0	0	0.0	2	33.3	6
Nuwara Eliya	10	83.3	0	0.0	0	0.0	0	0.0	0	0.0	2	16.7	12
Galle	20	76.9	3	11.5	1	3.8	0	0.0	0	0.0	2	7.7	26
Matara	7	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	7
Hambantota	3	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3
Batticaloa	7	70.0	0	0.0	1	10.0	0	0.0	0	0.0	2	20.0	10
Ampara	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1
Kalmunai	2	33.3	0	0.0	1	16.7	0	0.0	0	0.0	3	50.0	6
Trincomalee	6	60.0	0	0.0	1	10.0	0	0.0	0	0.0	3	30.0	10
Kurunegala	14	73.7	1	5.3	0	0.0	2	10.5	0	0.0	2	10.5	19
Puttalam	4	44.4	1	11.1	0	0.0	0	0.0	0	0.0	4	44.4	9
Anuradhapura	8	72.7	2	18.2	1	9.1	0	0.0	0	0.0	0	0.0	11
Polonnaruwa	3	75.0	0	0.0	0	0.0	0	0.0	0	0.0	1	25.0	4
Badulla	4	26.7	1	6.7	0	0.0	0	0.0	0	0.0	10	66.7	15
Monaragala	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Ratnapura	15	83.3	1	5.6	1	5.6	0	0.0	1	5.6	0	0.0	18
Kegalle	6	75.0	0	0.0	1	12.5	1	12.5	0	0.0	0	0.0	8
Jaffna	4	26.7	0	0.0	2	13.3	0	0.0	0	0.0	9	60.0	15
Vavuniya	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1
Mannar	1	50.0	0	0.0	0	0.0	0	0.0	0	0.0	1	50.0	2
Mullaitivu	2	50.0	0	0.0	0	0.0	0	0.0	0	0.0	2	50.0	4
Kilinochchi	1	50.0	0	0.0	0	0.0	0	0.0	0	0.0	1	50.0	2
Total	271	66.1	21	5.1	18	4.4	10	2.4	5	1.2	85	20.7	410

Maps

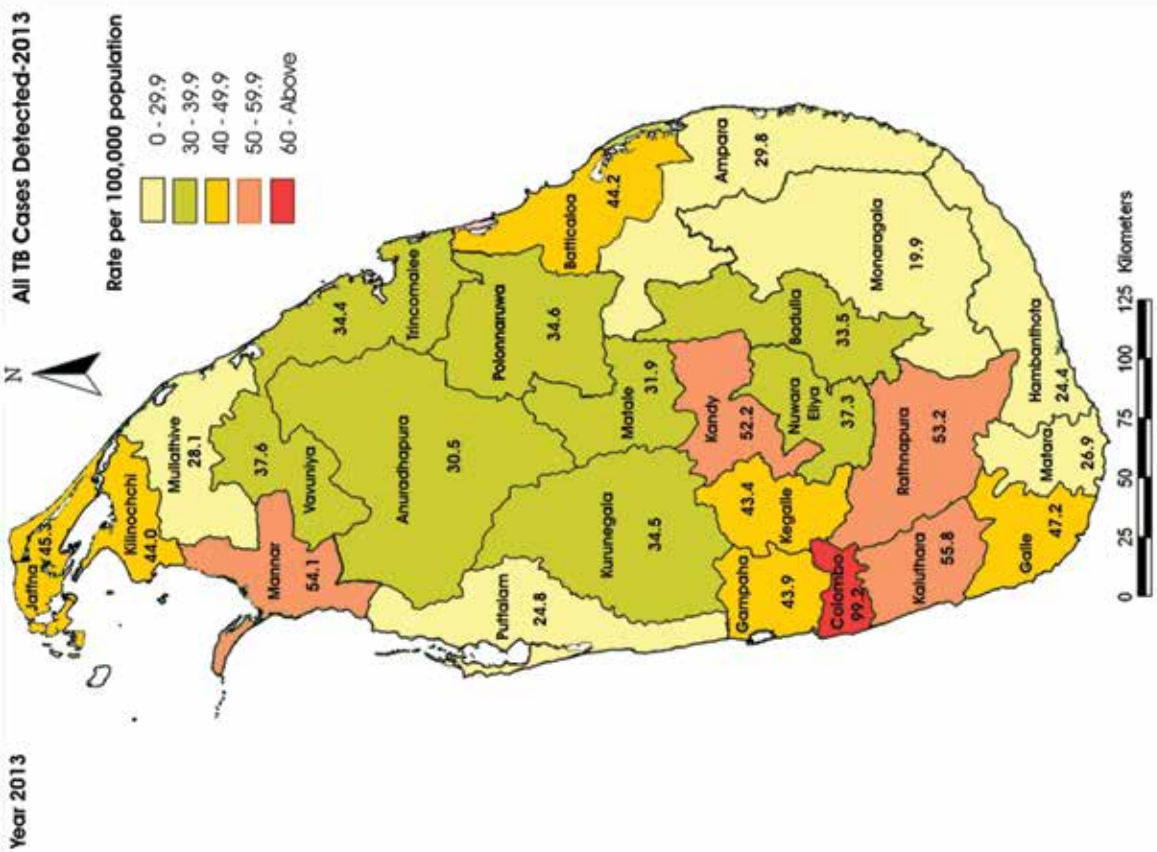


Figure 18: TB Case Notification Rates in 2013

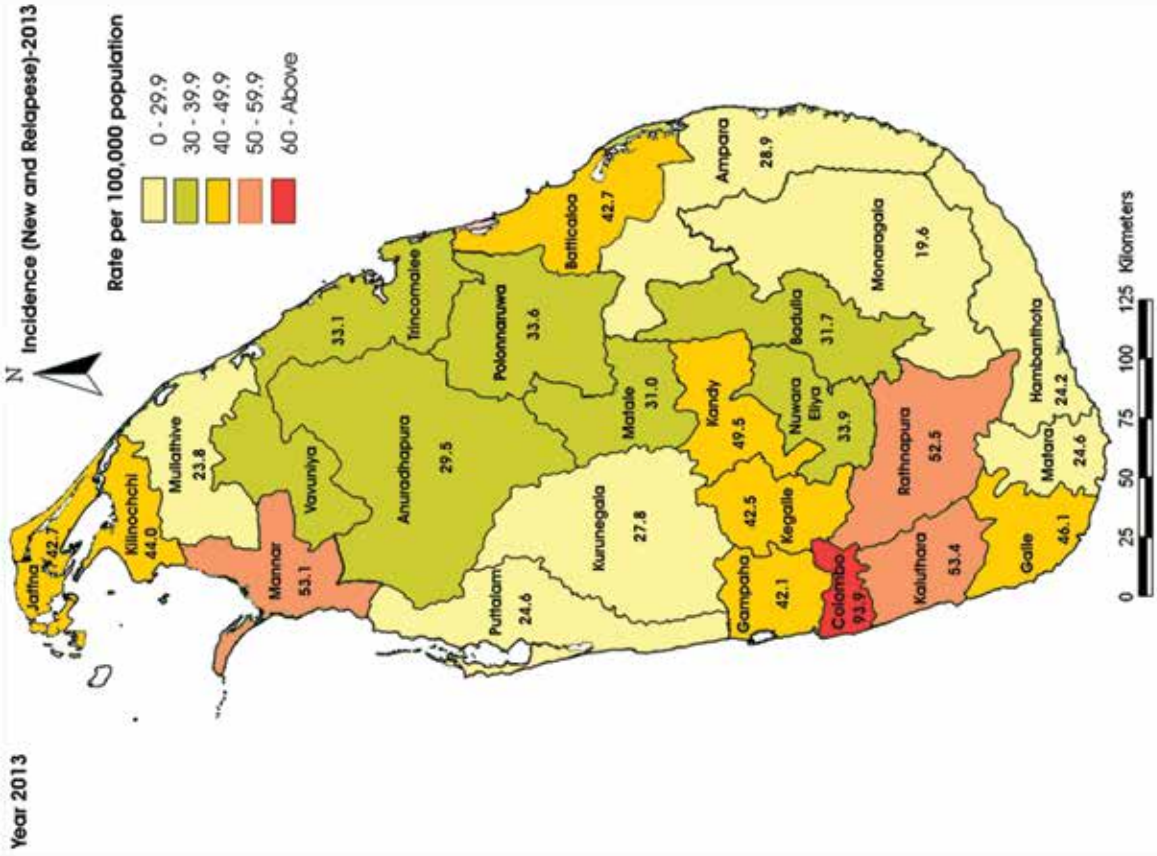


Figure 19: TB Case Incidence Rates in 2013

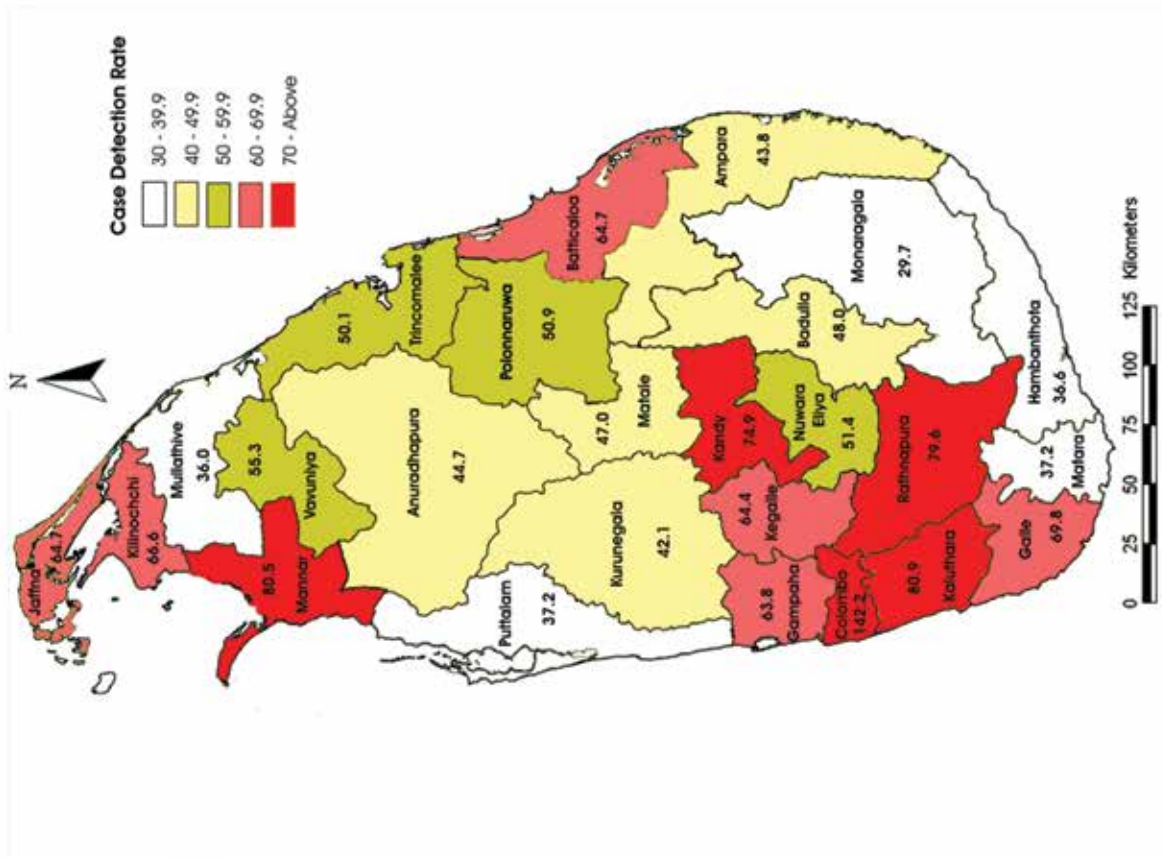


Figure 20: TB Case Detection Rates in 2013

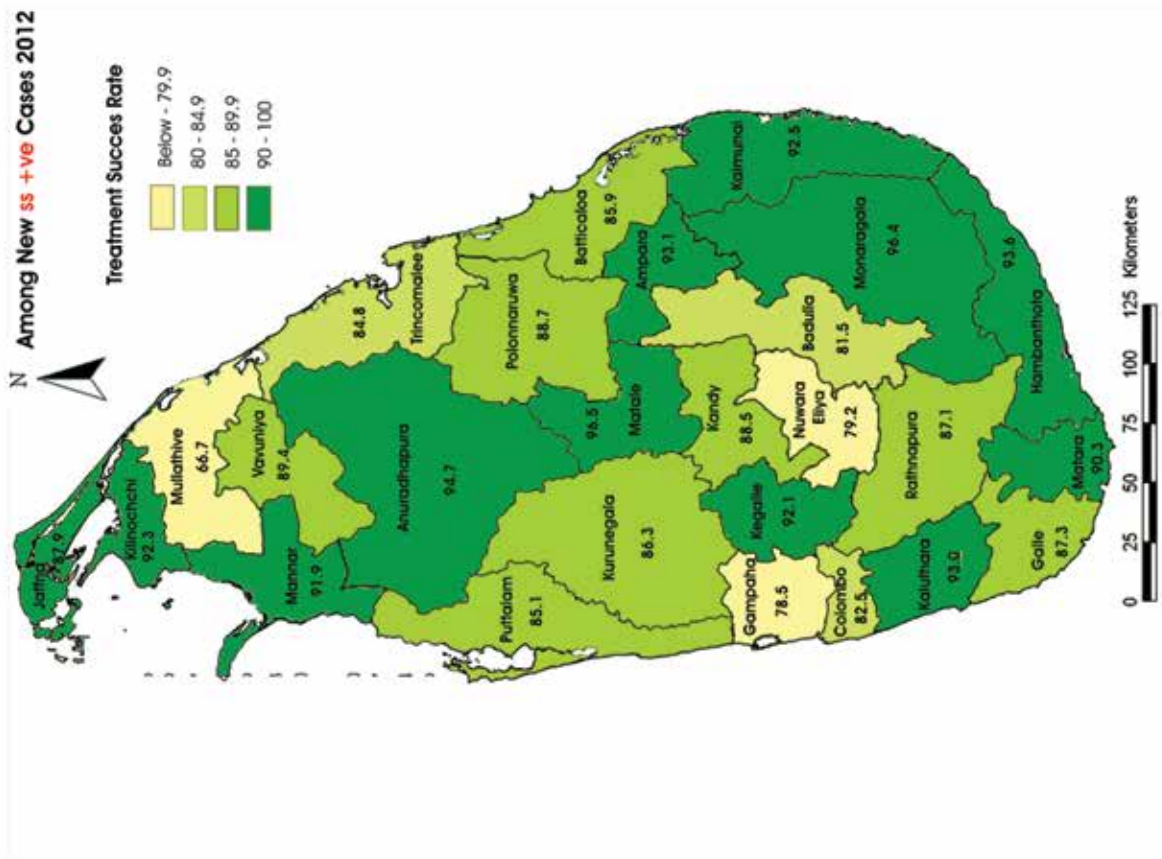


Figure 21: TB Treatment Success Rates in 2012

Annexure

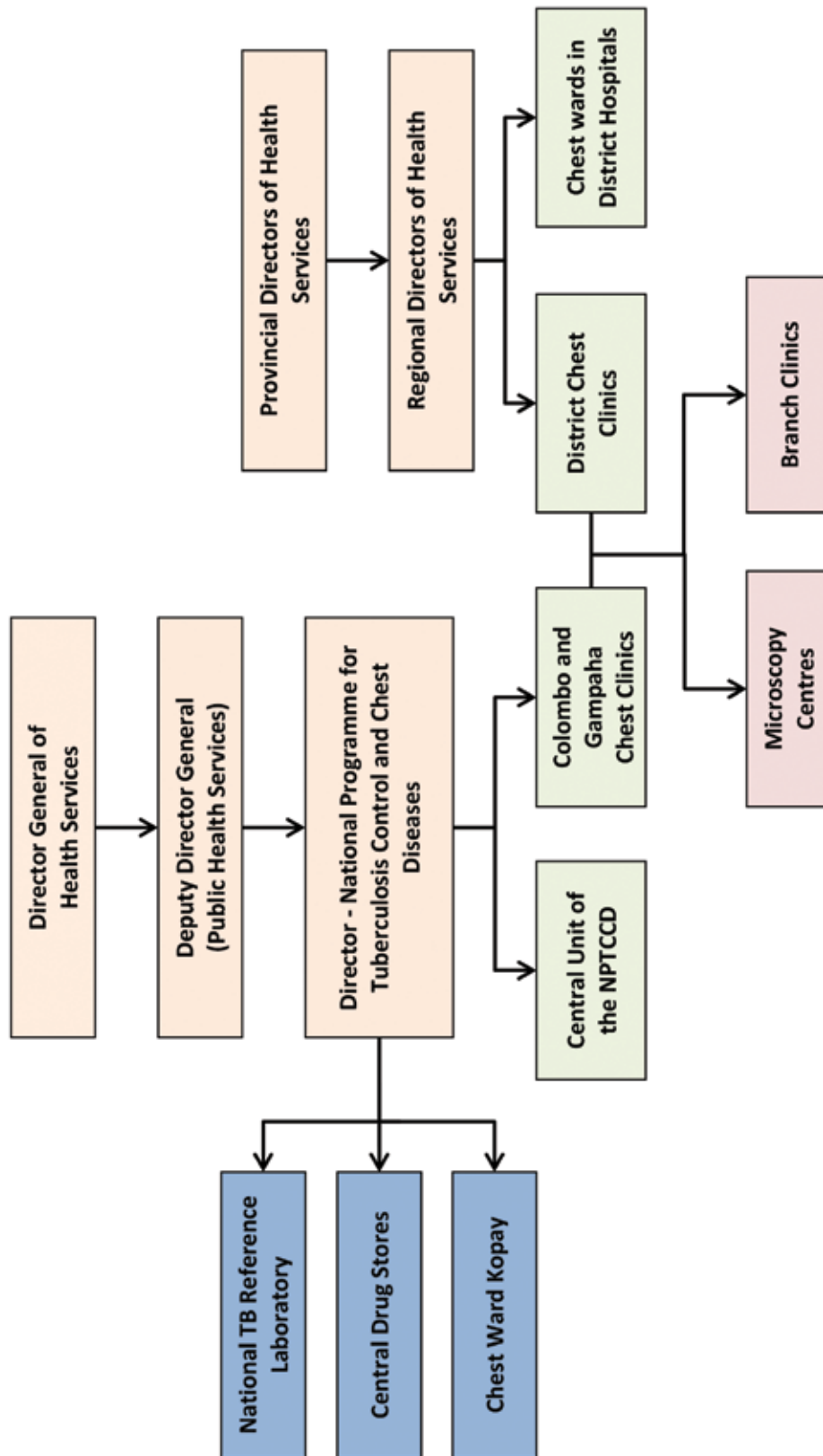


Figure 22: Organizational Structure of National TB Control Programme (2013)

Table 28: Provision of Financial Assistance to TB Patients in 2013

Province	Total No. of Patients	No. of Patients Who Received TB Assistance	Percentage of Patients Who Received TB Assistance	Total Amount (Rs.)	Average Amount per Patient (Rs.)
Western	4,004	28	0.7	319,345	11405.2
Central	1139	132	11.6	1,243,550	9420.8
Southern	869	73	8.4	204,900	2806.8
Eastern	560	129	23.0	487,700	3780.6
North Western	750	104	13.9	Not Documented	
North Central	406	62	15.3	115,500	1862.9
Sabaragamuwa	944	Not Documented			
Uva	363	Not Documented			
Northern	461	109	23.6	551,100	5056.0
Total	9,496	637	6.7	2922095	5081.9*

* Excluding North Western, Sabaragamuwa and Uva Provinces

Table 29: Expenditure from Consolidated Funds in 2013

Object Title	Amount (Rs.)
Capital Expenditure	42,090,591.55
Recurrent Expenditure	116,493,167.00
1. Personal Emoluments	94,408,639.00
2. Travelling Expenses	1,527,186.00
3. Supplies and Requests	9,573,142.00
4. Repairs and Maintenance	4,873,448.00
5. Transportation and Communication	4,522,265.00
6. Other Expenditure	1,588,487.00
Total	158,583,758.55

Table 30: Distribution of Sources of Funding for TB Control Activities in 2013 (in USD)

Activity	Funding Source and Amount (USD)			
	Government	GFATM	WHO/Other Grants	Total
Routine programme management activities*	2,747,841.78	345,997.00	0.00	2,747,841.78
Staff working for TB control	3,587,547.58	351,922.00	0.00	3,587,547.58
Procurement of drugs	15,200.00	14,697.00	375,290.76	15,200.00
Laboratory supplies and equipment	32,000.00	95,292.00	0.00	32,000.00
Management of MDR-TB (excluding drugs cost)	0.00	29,622.00	0.00	0.00
PPM, TB/HIV, ACSM and community engagement	0.00	28,131.00	0.00	0.00
Surveys and research	0.00	0.00	14,618.00	0.00
Other activities (Including technical assistance, PAL)	800.00	123,057.00	1,600.00	800.00
Total	6,383,389.36	988,718.00	391,508.76	6,383,389.36

*Including Supervision, Capacity Building and Infrastructure Development

Table 31: Training Programmes carried out at Central Level in 2013

Training Programme	Participant Category	Number of Programmes	Number Trained
Funded by GFATM			
Modular training for DCC Medical Officers (9 day raining)	DTCO / MO	02	38
Modular training for DCC Staff (5 day training)	Nurses/ PHIs	01	20
Training of DEO staff on ePIMS	Data Entry Operators	01	15
Training on Drug Supply Management	Pharmacists and Dispensers	1	26
Funded by Ministry of Health			
10 day modular training for DTCD Trainees/DCC Medical officers	MO	1	20
Update on Tuberculosis	Consultants/ MOs of NHSL	1	124
Skills development of office staff	NPTCCD Office staff	2	36
Skills development of peripheral health staff, Training on spirometer and other devices	Nurses of DCC and other hospitals, where PAL is implemented	1	15
Funded by WHO			
09 day modular training DCC Medical officers	MO	1	24
Funded by Private Sector			
Training on BCG and Mantoux	Nurses of a Private Hospital	1	6

Table 32: Training Programmes carried out at Provincial and District Levels in 2013

Training Programme	Participants category	Number of Programmes	Number Trained
Training of Nurses and PHIs at DCCs, chest wards and other staff at other health facilities both in public and unlinked public health sector	Nurses, PHIs	28	533
Training programmes for the area PHIs on household contact tracing	Area PHIs	18	499
Training programmes on infection control in North Central and Western provinces	Nurses and PHIs and other Health staff	2	124

Table 33: International Level Training programmes, Meetings and Workshops in 2013

Training Programme / Meeting/ Regional Workshop	Participants	Country Held	Organized By
SAARC regional training of trainers on Culture and DST for MTB in April 2013	Consultant Microbiologist	Bangalore	SAARC/MoH
SAARC regional training on Leadership and Strategic Management for TB and HIV control programmes on June 2013	Director (NPTCCD) and Director (NSACP)	Maldives	SAARC/MoH
WHO Regional meeting of National TB Control Programme Managers and Partners	Director (NPTCCD)	Thailand	WHO
Country Managers meeting in collaboration with NGO Partners	CCP (NPTCCD)	Indonesia	WHO
Training on Operational Research	DTCO	Nepal	IUATLD
Modular training on TB	MO, DTCO	India	WHO

Table 34: Supervision and Monitoring Activities carried out by the Central Level Staff in 2013

Type of Activity	Implementation Level	Activity Done by	No of Programs
Supervision	District	NPTCCD	18 districts covered
	District	NTRL	26 districts covered
Review Meetings	Central Level	NPTCCD	05
	District	DCC/ NPTCCD	01
Advisory Committee	Central	NPTCCD	06
Half yearly technical review meetings	Central	NPTCCD	01

Table 35: External Technical Assistance in 2013

Purpose of Obtaining an External Technical Assistance (ETA)	ETA Duration	Organized by	Funded by
Green Light Committee mission in Sri Lanka	30 th September to 5 th October 2013	WHO/GLC	WHO-SEARO/ GFATM

Table 36: Health Education Activities carried out in 2013

Activity	Location and Date	No of Persons Participated / No of IEC Developed / No of Programmes Held
Exhibitions	Urban Council Hall, Nawalapitiya - January 2013 St. Anthony's College, Katugasthota - February 2013 Bollossagama MV, Kalutara – March 2013 Urubokka National College, Matara – March 2013 Colombo South International School, Nugegoda–June 2013	5 Programmes
Awareness & Screening Programme	Sri Jothikarama Temple, Divulapitiya –April 2013	265
Awareness & Screening Programme (Suwa Udana)	Mullaitivu – Maritimepattu Divisional Secretariat – May 2013	554

