

Annual Report 2015



National Programme for Tuberculosis Control and Chest Diseases
Ministry of Health, Nutrition & Indigenous Medicine
Sri Lanka

❖ Panel of Writers

- Dr. Nirupa Pallewatte - Consultant Community Physician
- Dr. Priyadharshini Samarasinghe - Consultant Community Physician
- Dr.Chandima Hemachandra - Registrar in Community Medicine
- Janaka Thilakaratne - Medical Records Officer(Acting)

Contents

List of Tables	iv
List of Figures	vi
List of Abbreviations	vii
Foreword	ix
Preface	x
PART I: Progress Report	
Introduction	03
Methods	06
Results	
Surveillance of Tuberculosis	10
Incidence of Tuberculosis	10
Case Detection of Tuberculosis	11
Treatment Outcome of Tuberculosis	18
DOTS Coverage	23
PART II: Activity Report	
Activities	27
Major Challenges	33
PART III: Administration Report	
OPD Attendance and Ward Admissions	37
Laboratory Services	37
X-Ray Facilities	38
BCG Vaccination	39
Detailed Tables	41
Maps	63
Annexure	66

List of Tables

Table 1	<i>Distribution of All Cases of Extra Pulmonary Tuberculosis by Site in 2015</i>	15
Table 2	<i>Utilization of TB/Respiratory Curative Care Facilities in 2015</i>	37
Table 3	<i>Utilization of Diagnostic Care Facilities in 2015</i>	38
Table 4	<i>EQA Results of Sputum Smear Microscopy in 2015</i>	38

Detailed Tables

Table 6	<i>Notification of New TB Cases in Sri Lanka from 2005 – 2015</i>	43
Table 7	<i>Annual Mortality of All TB Cases from 2005 – 2015</i>	43
Table 8	<i>Distribution Rates of all TB cases by District of Residence in 2015</i>	44
Table 9	<i>All TB Case Detection by District of Registration in 2015</i>	45
Table 10	<i>Distribution of New Cases of TB by Province in 2015</i>	46
Table 11	<i>Distribution of New Cases of TB by Age and Type in 2015</i>	47
Table 12	<i>Distribution of New Cases of TB by Age and Sex in 2015</i>	47
Table 13	<i>Age and Sex Distribution of All New TB Cases by District in 2015</i>	48
Table 14	<i>Age and Sex Distribution of Smear Positive New TB Cases by District in 2015</i>	49
Table 15	<i>Age and Sex Distribution of Smear Negative New TB Cases by District in 2015</i>	50
Table 16	<i>Age and Sex Distribution of All New PTB Cases by District in 2015</i>	51
Table 17	<i>Age and Sex Distribution of New EPTB Cases by District in 2015</i>	52
Table 18	<i>Distribution of Treatment Outcome of All forms of TB by Districts in 2014</i>	53
Table 19	<i>Distribution of Treatment Outcome of All Forms of New (PTB and EPTB) TB Cases by District in 2014</i>	54
Table 20	<i>Distribution of Treatment Outcome of All New PTB Cases by District in 2014</i>	55
Table 21	<i>Distribution of Treatment Outcome of New Sputum Positive PTB Cases by District in 2014</i>	56
Table 22	<i>Distribution of Treatment Outcome of New Sputum Negative PTB Cases by District in 2014</i>	57
Table 23	<i>Distribution of Treatment Outcome of EPTB Cases by District in 2014</i>	58
Table 24	<i>Distribution of Treatment Outcome of Retreatment TB Cases by District in 2014</i>	59
Table 25	<i>Distribution of Treatment Outcome of Other TB Cases by District in 2014</i>	60
Table 26	<i>Distribution of Sputum Conversion of New PTB Cases at the End of the Intensive Phase by District in 2015</i>	61
Table 27	<i>Distribution of Sputum Conversion of Retreatment PTB Cases at the End of the Intensive Phase by District in 2015</i>	62

Annexure

Table 28	<i>Provision of Financial Assistance to TB Patients in 2015</i>	70
----------	---	----

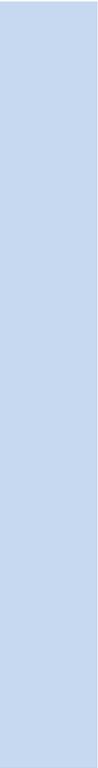
Table 29	<i>Expenditure from Consolidated Funds in 2015</i>	70
Table 30	<i>Distribution of Sources of Funding for TB Control Activities in 2015(in USD)</i>	71
Table 31	<i>Training Programmes carried out at Central Level in 2015</i>	71
Table 32	<i>Training Programmes carried out at Provincial and District Level in 2015</i>	72
Table 33	<i>International Level Training, Meetings and Workshops in 2015</i>	72
Table 34	<i>Regional Training/Meetings and Workshops in Foreign Countries in 2015 under R-06 TB Grant, SAARC and SEARO-WHO</i>	73
Table 35	<i>Supervision and Monitoring Activities Carried Out by the Central Level Staff in 2015</i>	73
Table 36	<i>External Technical Assistance in 2015</i>	74
Table 37	<i>Health Education Activities Carried Out in 2015</i>	74

List of Figures

Figure 1	Case Detection and Notification of TB by District in 2015	10
Figure 2	Incidence Rate of TB from 2005 – 2015	11
Figure 3	Case Detection of TB by Type in 2005 - 2015	11
Figure 4	Case Detection of TB by Type in 2015	12
Figure 5	TB Case Detection by District of Registration in 2015	13
Figure 6	Percentage Distribution of New Cases of TB by Type and District in 2015	13
Figure 7	Distribution of Bacteriology conformed cases New TB Cases Detection by Districts in 2015	14
Figure 8	Distribution of Smear Negative New TB Cases Detection by Districts in 2015	15
Figure 9	Distribution of New Extra Pulmonary TB Cases Detection by Districts in 2015	16
Figure 10	Distribution of All New Cases of TB by Age Group in 2015	17
Figure 11	Proportion of Re-Treatment Categories by District in 2015	18
Figure 12	Percentages of Multi Drug Resistant Tuberculosis by District in 2015	19
Figure 13	Multi Drug Resistant Tuberculosis – (2006-2015)	20
Figure 14	Percentages and Numbers of TB/HIV screening 2010-2015	21
Figure 15	Treatment Outcome of All Forms of TB Cases from 2004-2014	22
Figure 16	Treatment Success Rate of All Forms of TB According To Districts in 2014	23
Figure 17	Treatment Outcome of New Pulmonary TB Cases from 2004-2014	24
Figure 18	Sputum Conversion Percentage of New Smear-Positive Cases by District in 2015	25
Figure 19	Treatment Success Rates of New Smear Positive Cases by Districts in 2014	25
Figure 20	Treatment Outcome Summary of TB Patients (New Smear Positive, New Smear Negative New EPTB, Re-Treatment and Other history unknown cases in 2014)	26
Maps		
Figure 18	Map of Case Notification Distribution of TB in 2015	65
Figure 19	Map of Case Incidence Distribution of TB in 2015	65
Figure 20	Map of Case Detection Distribution of TB in 2015	66
Figure 21	Map of Treatment Success Distribution of TB Cases in 2014	66
Annexure		
Figure 22	Organizational Structure of National TB Control Program (2015)	69
Figure 23	IEC Materials Produced and Paper Advertisements Published in 2015	75

List of Abbreviations

AFB	Acid Fast Bacilli
AIDS	Acquired Immune Deficiency Syndrome
BCG	Bacillus Calmette–Guérin
DCC	District Chest Clinic
DOTS	Directly Observed Therapy Short-course
DST	Drug Susceptibility Testing
DTCO	District Tuberculosis Control Officers
EPTB	Extra Pulmonary Tuberculosis
EQA	External Quality Assessment
FDC	Fixed Dose Combination
GDF	Global Drug Facility
GFATM	Global Fund to fight AIDS, Tuberculosis and Malaria
HIV	Human Immune Deficiency Virus
IEC	Information, Education and Communication
MDG	Millennium Development Goals
MDR-TB	Multi Drug Resistant Tuberculosis
NPTCCD	National Programme for Tuberculosis Control and Chest Diseases
NTRL	National Tuberculosis Reference Laboratory
OPD	Out Patient Department
PTB	Pulmonary Tuberculosis
SAARC	South Asian Association for Regional Cooperation
SEARO	Regional Office for South-East Asia (WHO)
STAC	SAARC Tuberculosis and AIDS Centre
TB	Tuberculosis
WHO	World Health Organization



Foreword

It is with great pleasure, I am presenting the Annual Report of the National Programme for Tuberculosis Control and Chest Diseases – 2015 which contains the important data on status of Tuberculosis in Sri Lanka in 2015.

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 this report and panel of writers for making this task a success.

Dr. Kanthi Ariyaratne

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 2015 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 2015 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 central level organization in the Ministry of Health, Nutrition & Indigenous Medicine 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 (NTRL), Central Drug Stores (CDS) of the NPTCCD, District Chest Clinics (DCCs) of Colombo and Gampaha 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 several other chest wards situated in government Hospitals.

Diagnostic services are provided through National TB Reference Laboratory, Regional culture laboratories in Kandy and Ratnapura, district chest clinic laboratories and 156 functioning microscopy centers.

Central Drug Stores of the NPTCCD is responsible for estimation, procurement and supply of anti TB drugs. Fixed Dose combinations of anti TB drugs are procured directly from Global Drug Facility to CDS. Distribution of anti TB drugs to District Chest Clinics is carried out on quarterly basis.

TB and respiratory disease control activities at the district level are carried out by the 26 District Chest Clinics situated in 25 administrative 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 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 nongovernmental 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 2015, 319.9 million 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 were supported by the Global Fund for AIDS, Tuberculosis and Malaria (GFATM). World Health Organization (WHO) provided technical assistance to the programme. In 2015, Second Health Sector Development Project (World Bank) provided Rs 75,000,000 to strengthen TB control activities at the central 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.

Goal & Objectives of National Strategic Plan for TB control (2015-2020)

Goal: Decrease the prevalence of TB by 10 % by 2020 based on TB burden figures of 2014 as per the WHO estimates.

Objectives

Objective 1:

To improve the TB control by detecting at least 80% of incident TB cases (all forms) by 2017 and 90% of incident cases by 2020

Objective 2:

To improve the outcome of enrolled TB patients

- a) By achieving 90% treatment success rate of all forms of non MDR TB patients and;
- b) To maintain at least 75% of treatment success rate among MDR TB cases by 2017

Objective 3:

To integrate TB control activities in to general healthcare system by establishing TB diagnostic and treatment services in 40% of all hospitals up to the level of Divisional Hospitals Type B or above by 2017 and in 80% -by 2020

Objective 4:

To improve the accessibility to TB treatment and care by engaging 30% of all private health care providers (hospitals and General Practitioners) in TB control by 2017, and 50% by 2020

Objective 5:

Ensure that quality TB services in line with current international standards are provided by qualified and regularly supervised personnel at 100% of all implementation sites by 2017

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. DTCOs are 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, STAC, GFATM etc.

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

Revised WHO classification of TB

Sri Lanka has adopted revised WHO classification of TB of 2013 from 1st of January 2015 and reporting of information was started with the cohort of patients registered in 2015.

A case of tuberculosis is defined as “A patient in whom TB has been either bacteriologically confirmed in laboratory or clinically diagnosed based on a clinician’s decision taking into account clinical picture, results of other investigations and risk factors”.

➤ **Bacteriologically confirmed TB**

A patient whose sputum or another biological specimen is positive for AFB by smear microscopy or culture or WHO Approved Rapid Diagnostics (WRD) such as Xpert MTB/RIF.

➤ **Clinically diagnosed TB**

A patient who does not fulfil the criteria for bacteriological confirmation but has been diagnosed with active TB by a clinician and after consultation with a Consultant Respiratory Physician and decided to treat the patient with a full course of TB treatment

Classification based on anatomical site of the disease

➤ **Pulmonary tuberculosis (PTB)**

Any bacteriologically confirmed or clinically diagnosed case of TB involving the lung parenchyma or the tracheobronchial tree with or without the involvement of any other organs in the body.

➤ **Extra pulmonary tuberculosis (EPTB)**

Any bacteriologically confirmed or clinically diagnosed case of TB involving organs other than the lung parenchyma or tracheobronchial tree, e.g. pleura, lymph nodes, abdomen, genitourinary tract, skin, bones and joints, meninges.

Classification based on history of previous TB treatment

➤ **New patients**

- A patient who has never taken treatment for TB
- OR
- A patient who has taken anti-tuberculosis drugs for less than one month

New patients may have positive or negative bacteriology and may have disease at any anatomical site.

➤ **Previously treated patients**

Patients, who have received anti-TB drugs for one month or more in the past are classified under this category. They are further classified by the outcome of their most recent course of treatment.

- **Relapse**

Patients who have previously been treated for TB, were declared *cured* or *treatment completed* at the end of their most recent course of treatment, and are now diagnosed with a recurrent episode of TB.

- **Treatment after failure**

Patients who have previously been treated for TB and whose *treatment failed* during or at the end of their most recent course of TB treatment.

- **Treatment after loss to follow-up**

Patients who have previously been treated for TB and were declared *lost to follow-up* at the end of their most recent course of treatment. (These were previously known as treatment after default patients.)

- **Other previously treated patients**

Patients who have previously been treated for TB but whose outcome after their most recent course of treatment is unknown or undocumented

- **Patients with unknown previous TB treatment history**

Patients who do not fit into any of the categories listed above

Indices

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

- Case notification rate
- Case Detection Rate
- Treatment Success Rate
- Sputum Conversion Rate
- Lost to follow up Rate
- Death Rate

Notification rate of all TB cases

The notification rate of all TB cases is defined as number of all forms of TB cases notified in a given year out of the mid-year population of the country in the same year

Number of all forms of TB cases notified during the year

Mid-year population for the same year

X 100,000
population

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*”.

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 2015 WHO estimates (65.0 per 100,000 population).

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

Treatment Success Rate

Treatment Success Rate is defined as the proportion 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.

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

Results

Lost to follow up Rate

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

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

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.

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

Surveillance of Tuberculosis

➤ TB Case Notifications (H 816 A)

During the year 2015, 9305 cases of all forms of Tuberculosis were notified to the center by the form H 816 A (Table 6). In contrast to this, registered TB cases reported to the NPTCCD by TB 08 were 9575 (Table 9).

Gap Between (Health 816 A)&(TB 08)

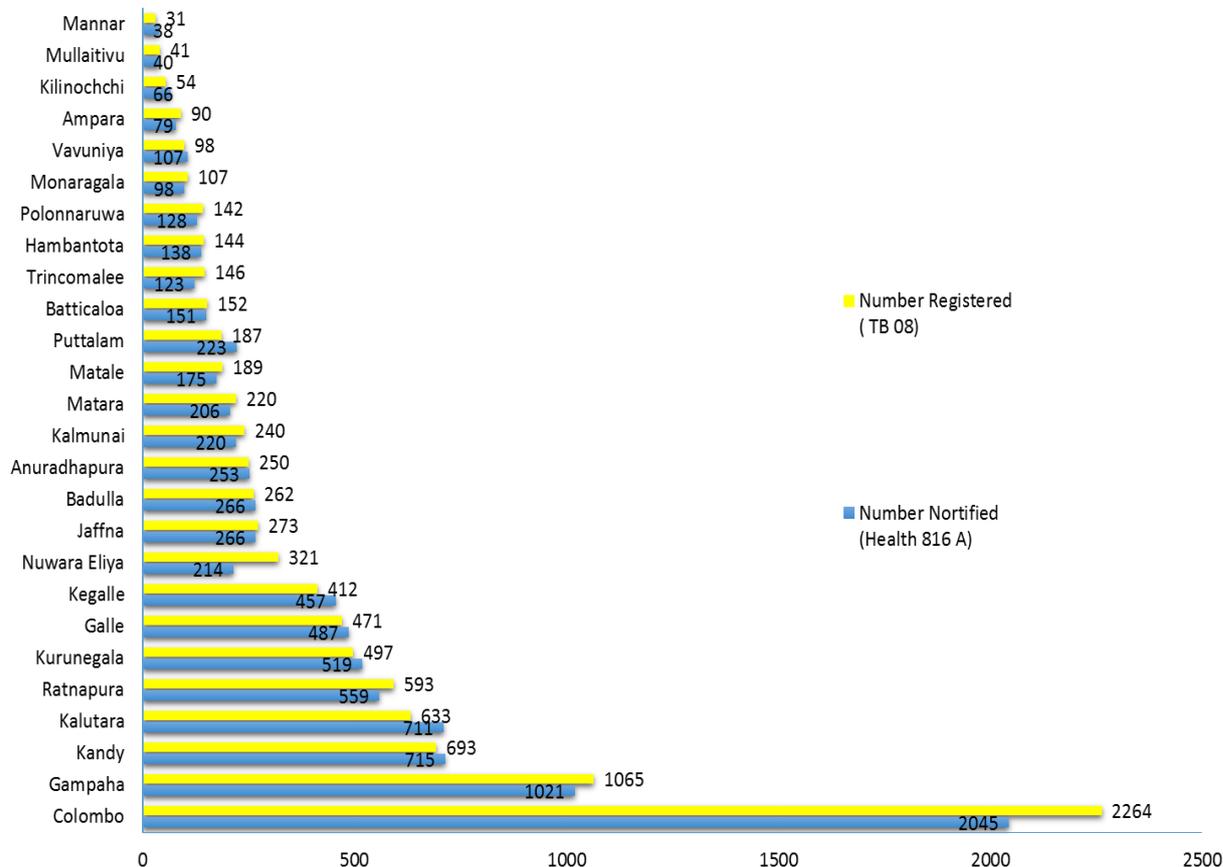


Figure 1: Case Detection and Notification of TB by District in 2015

➤ TB Death Notification (H 814)

During the year 2015, 329 TB deaths were notified by H 814 (Table 7).

Incidence of Tuberculosis

The incidence (new and relapse) rate in 2015 in Sri Lanka was 44.5 (8990 new and 303 relapse cases) per 100,000 population (Table 9). There is a slight increase when compared with incidence rate of year 2014, which was 43.7 (8692 new and 288 relapse cases) per 100,000 population (Figure 1).

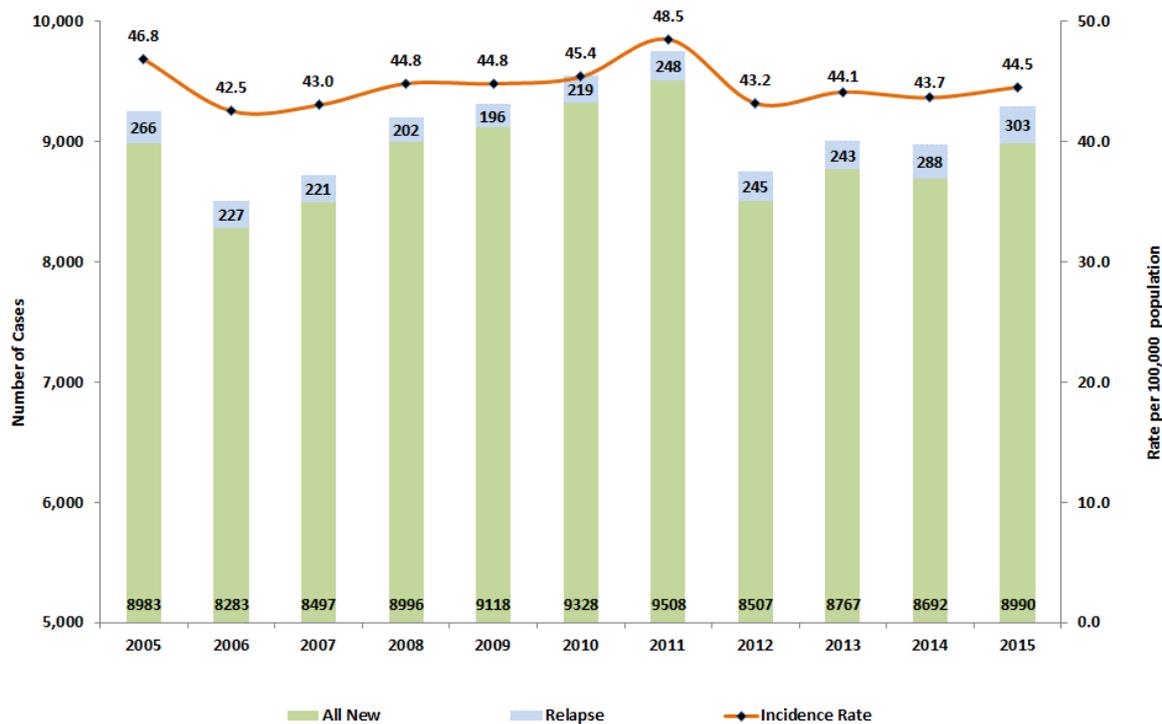


Figure 2: Incidence Rate of TB from 2005 – 2015



Figure 2: Case Detection of TB by Type from 2005 - 2015

Case Detection

The total number of all forms of TB cases reported from DCCs was 9575. When compared to 2014, there was an increase of all forms of TB in 2015 (Figure 2). Out of this, 8990 (93.9%) were new cases, 573 were re-treatment cases and 12 cases with unknown treatment history.

Out of all new cases, 4299 (47.8%) were bacteriology conformed TB cases. Of these, 4177 were sputum positive PTB, 118 (2.7%) cases were sputum negative culture positive and 4(0.09%) cases were WRD positive. There were 1992 (22.1%) cases of clinically diagnosed PTB and 2699 (30 %) EPTB cases (Figure 3).Of all the new cases, there were 6291 (70 %) new pulmonary TB cases and out of it, 4299 (68.3 %) were bacteriology conformed TB.

Out of the retreatment cases, 441(77 %) were bacteriologically confirmed, 61 (11 %) were clinically diagnosed and 71(12%) were EPTB cases of TB.

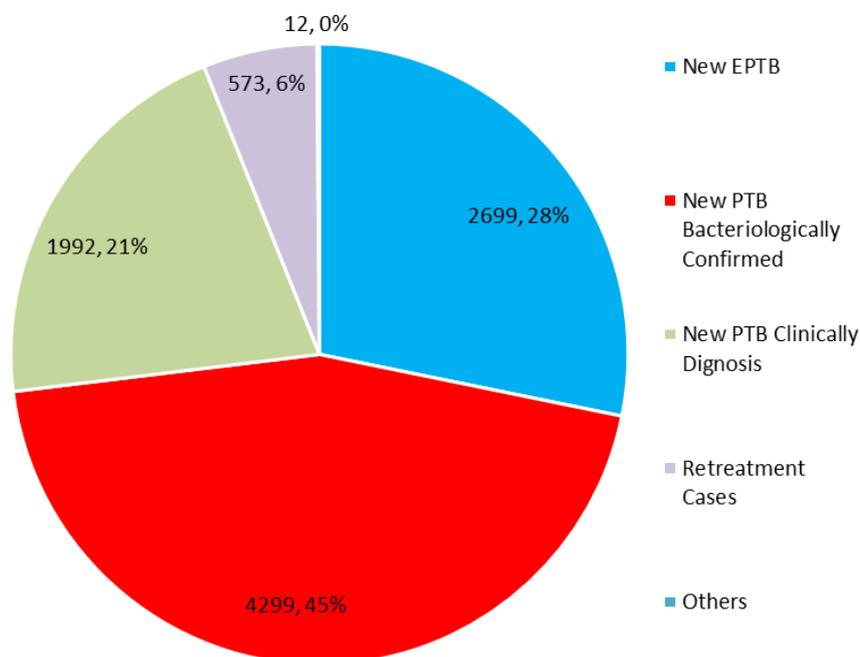


Figure 3: Case Detection of TB by Type in 2015

There was a high disparity of detection of TB cases between districts (Figure 5). The highest number of TB cases was detected from Colombo 2264 (23.6%). High number of cases were reported from Gampaha (1065), Kandy (693), Kalutara (633), Ratnapura (593) and Kurunegala (497) districts respectively.

Colombo district also accounted for highest number of relapse cases, 87 (28.7% of total relapse cases) and lost to follow up cases, 33 (39.7% of total lost to follow up cases) (Table 9). Lowest number of TB cases (31) has been reported from Mannar district.

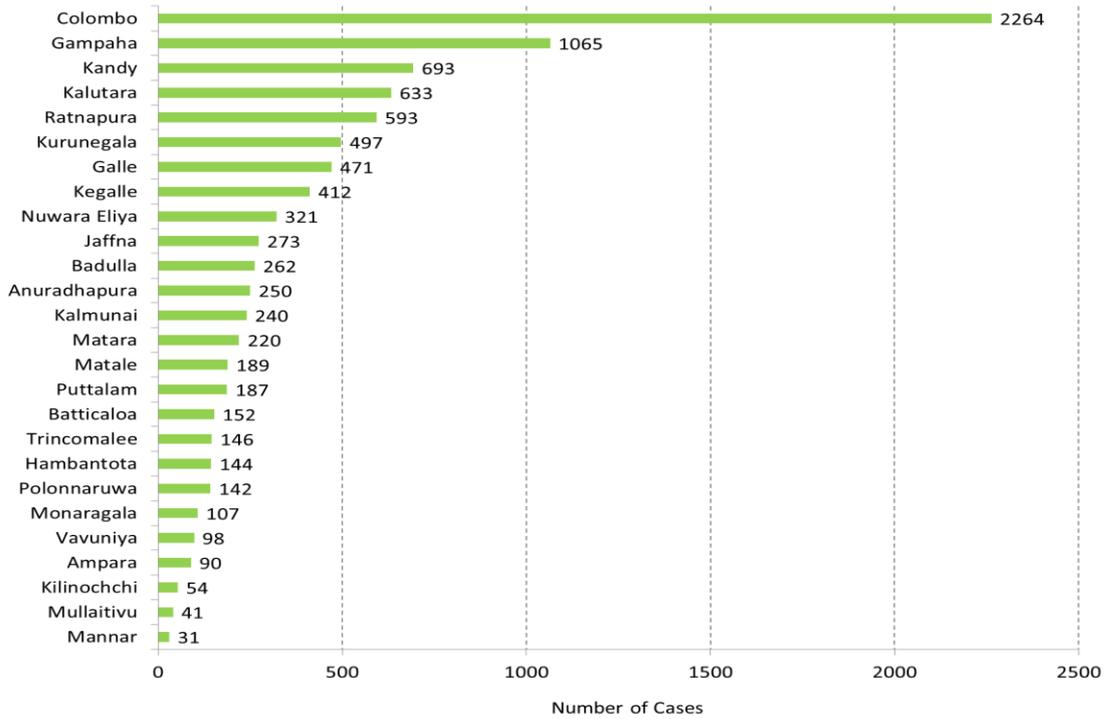


Figure 5: TB Case Detection by District of Registration in 2015

New TB Cases

There was a disparity of distribution of new cases among districts (Figure 5). In Monaragala district more than 60% of cases were bacteriologically confirmed while in Mulathive, Ampara, Kilinochchi, Kandy, Hambanthota, Kalmunai, and Trincomalee bacteriologically confirmed cases account for less than 40% of total cases reported in respective districts. The number of clinically diagnosed cases detected were more than the bacteriologically confirmed cases in Ampara, Trincomalee, Hambanthota, Kandy Killinochchi, Mullativu and Kalmunai districts.

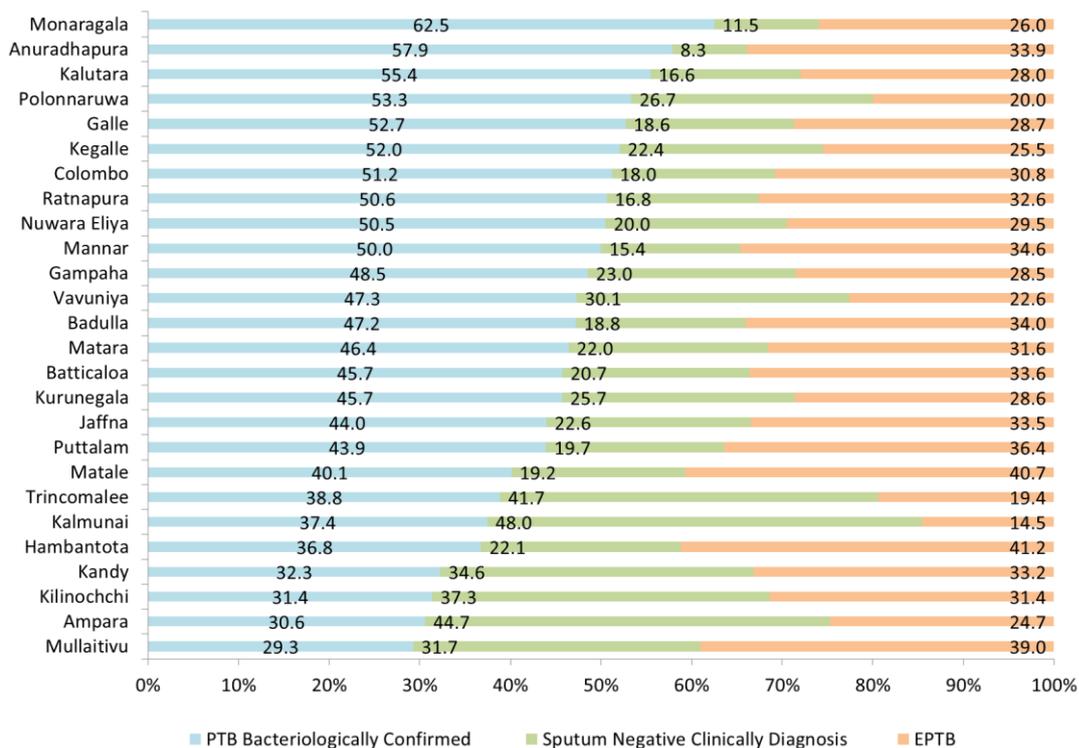
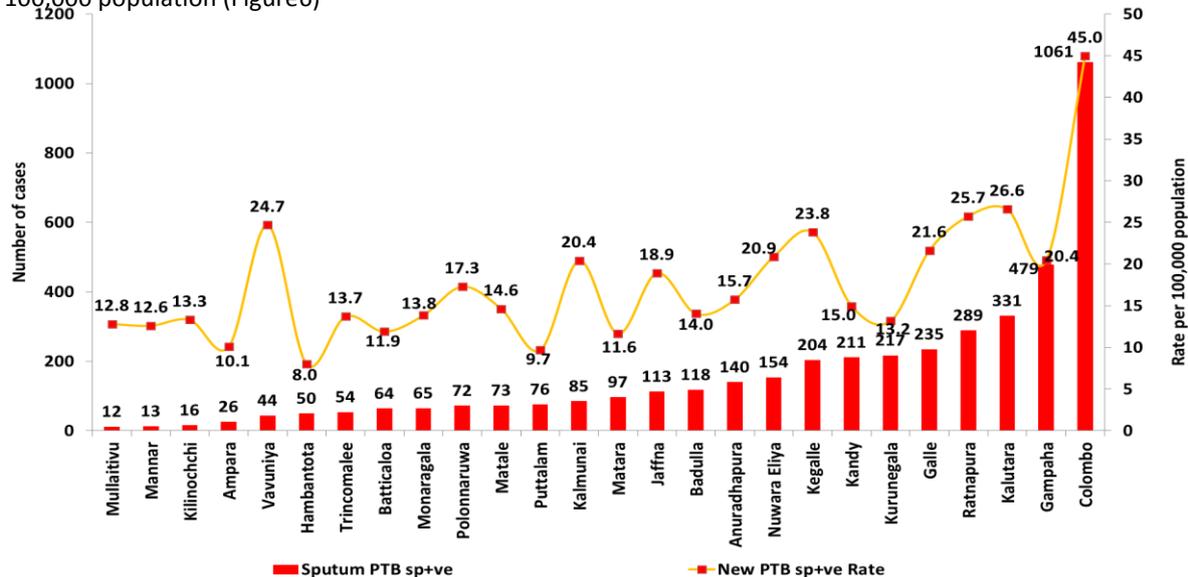


Figure 7: Distribution of Bacteriology confirmed cases New TB Cases Detection by Districts in 2015

➤ **Bacteriology conformed cases of New Pulmonary TB**

The highest number & rate (1061, 45 per 100,000 population) of bacteriologically confirmed pulmonary TB cases were reported from Colombo district and this accounts for 24.7% of national figure. Second highest number of bacteriologically confirmed pulmonary TB cases was reported from Gampaha (479) though rate was 20.4 per 100,000 population (Figure6)



High numbers of bacteriologically confirmed PTB cases were reported from Kalutara (331), Ratnapura (289) and Galle (235) districts respectively. However, higher bacteriologically confirmed rates per 100,000 population were reported from Kalutara (26.6), Ratnapura (25.7) and Vavuniya (24.7) districts (Figure 6).

New Clinically Diagnosed Pulmonary TB

A total of 1992 cases of new clinically diagnosed pulmonary TB were reported in 2015. The highest number and rate of clinically diagnosed cases was reported from Colombo district, 374 (15.9 per 100,000 population). However, higher rates were reported from Kalmunai (26.2 per 100,000 population), Kandy (16 per 100,000 population) and Kilinochchi (15.8 per 100,000) respectively. The number of clinically diagnosed cases detected were more than the bacteriologically confirmed in Ampara, Trincomalee and Kalmunai districts (Figure 5).

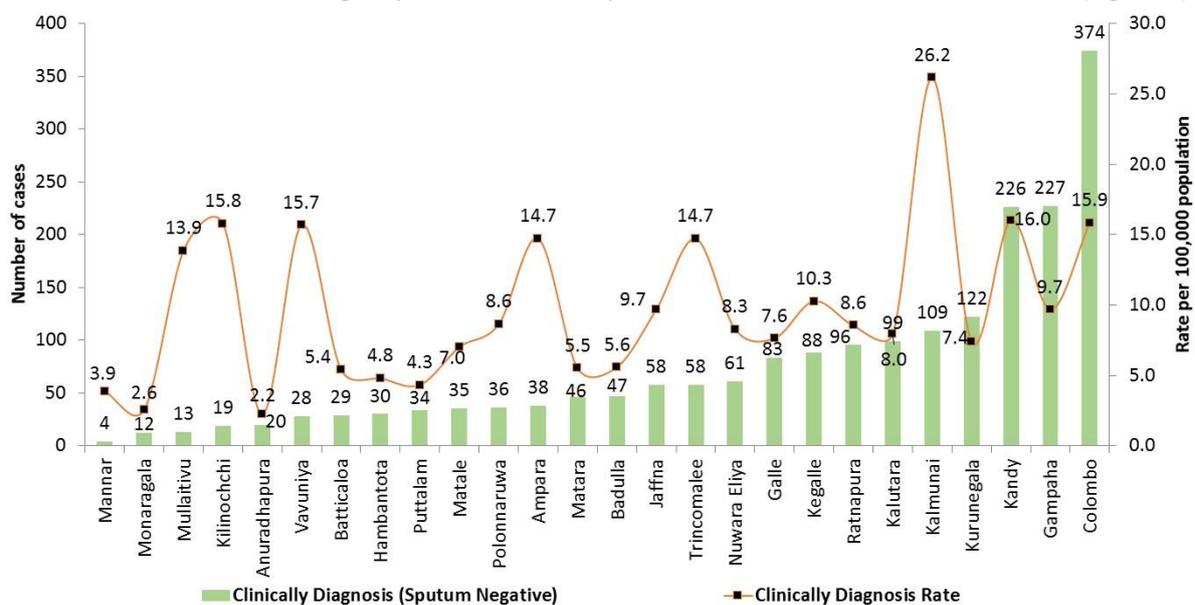


Figure 8: Distribution of clinically diagnosed pulmonary TB Cases by District in 2015

➤ **Extra Pulmonary TB**

Detection of New EPTB Cases

Total of 2699 cases of new extra pulmonary TB were reported in 2015. Colombo District accounted for highest number and rate of EPTB cases,(638, 27 per 100,000 population). The second highest rate (17.1 per 100000 population) of EPTB was reported form Mullathive though only 16 cases were reported (Figure 8).

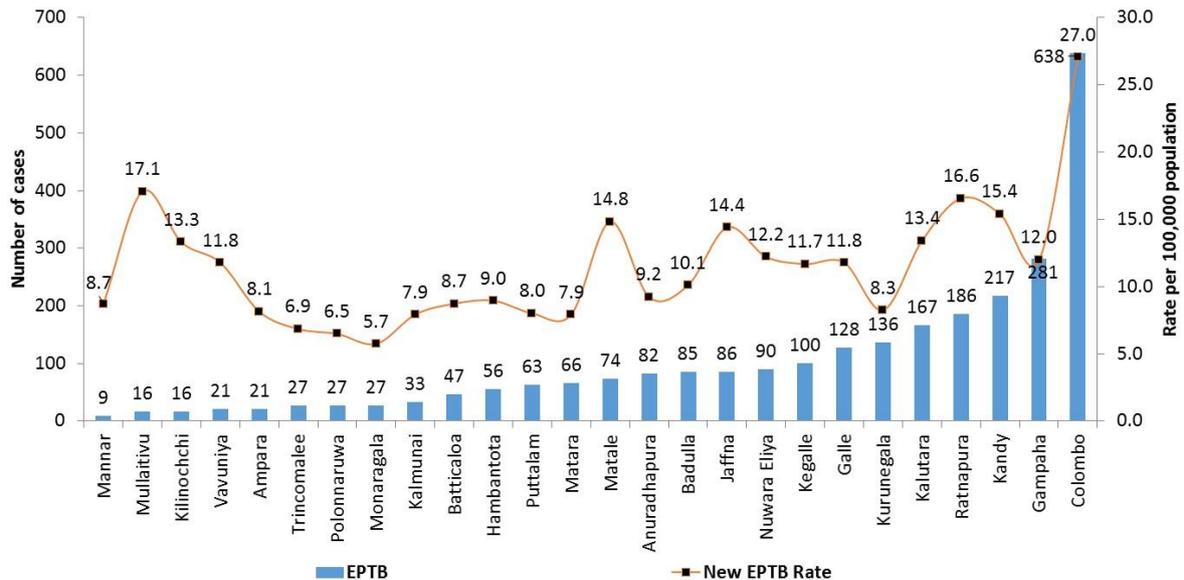


Figure 9: Distribution of New Extra Pulmonary TB Cases by District in 2015

Sites of EPTB Cases

Out of all EPTB cases, tuberculous of respiratory tract confirmed by bacteriologically and histologically (A 15), accounted for 398 cases (14.4%) and 479 (17.3%) were cases of tuberculosis of respiratory tract, not confirmed by bacteriologically or histologically (A 16).

In addition, there were 209 (7.6%) cases of Tuberculosis of nervous system, 1227(44.9%) cases of Tuberculosis of other organs, 417 (15.3%) cases of Tuberculosis of other specified organs were reported in 2015 (Table 2).

Table 9: Distribution of All Cases of Extra Pulmonary Tuberculosis by Site in 2015

ICD-10 Code	Site	Total	Percentage
A15: Respiratory tuberculosis, bacteriologically and histologically confirmed		398	14.7
A15.4	Tuberculosis of intrathoracic lymph nodes	178	6.6
A15.6	Tuberculous pleurisy	209	7.7
A15.8	Other respiratory tuberculosis (mediastinal, nasopharyngeal, nose, sinus [any nasal])	5	0.2
A15.9	Respiratory tuberculosis unspecified	6	0.2
A16: Respiratory tuberculosis, not confirmed bacteriologically or histologically		515	19.0
A16.3	Tuberculosis of intrathoracic lymph nodes	24	0.9
A16.4	Tuberculosis of larynx, trachea and bronchus	90	3.3
A16.5	Tuberculous pleurisy	368	13.6
A16.8	Other respiratory tuberculosis (mediastinal, nasopharyngeal, nose, sinus [any nasal])	26	1.0
A16.9	Respiratory tuberculosis unspecified	7	0.3
A17: Tuberculosis of nervous system		211	7.8
A17.0	Tuberculous meningitis	116	4.3
A17.1	Meningeal tuberculoma	22	0.8
A17.8	Other tuberculosis of nervous system	51	1.9
A17.9	Tuberculosis of nervous system, unspecified	22	0.8
A18: Tuberculosis of other organs		1236	45.7
A18.0	Tuberculosis of bones and joints	9	0.3
	Spinal TB (Includes Vertebral Column - M49.0*)	224	8.3
	Tuberculosis of other bones and joints (Excluding spinal TB)	47	1.7
A18.1	Tuberculosis of genitourinary system	95	3.5
A18.2	Tuberculous peripheral lymphadenopathy (TB adenitis)	521	19.3
A18.3	Tuberculosis of intestines, peritoneum and mesenteric glands	113	4.2
A18.4	Tuberculosis of skin and subcutaneous tissue	68	2.5
A18.5	Tuberculosis of eye	153	5.7
A18.6	Tuberculosis of ear	3	0.1
A18.7	Tuberculosis of adrenal glands	3	0.1
Tuberculosis of other specified organs		37	1.4
A18.8	Pericardium	37	1.4
Tuberculosis of other sites		308	11.4
	Bone marrow	5	0.2
	TB Tongue	2	0.1
	Breast	3	0.1
	Ovary	1	0.0
	Site not specified	297	11.0
Total		2705	100.0

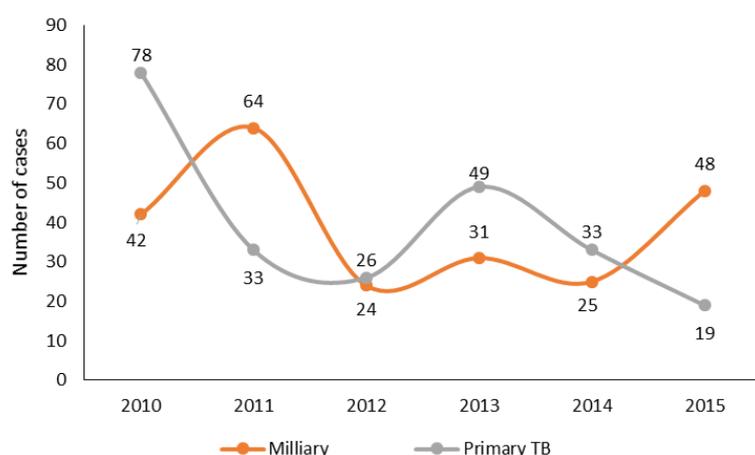


Figure 10: Distribution of Miliary and Primary TB in 2010-2015

➤ Age and Sex Distribution of New TB Cases

The highest number of new TB cases (1808) was in 45-54 age group. The lowest number was in 0-14 age group (307 cases, 3.4 %). Out of 8990 all new cases, 59.3% (5328) were in the productive age group of 15-54. More males (5859, 65.2%) were detected than the females (3131, 34.8%). The highest number of new TB cases among males was found in the age group of 45-54 years (559, 21.9%), while that in the females was in the same age group 45-54 (3131, 16.7%) (Table 13).

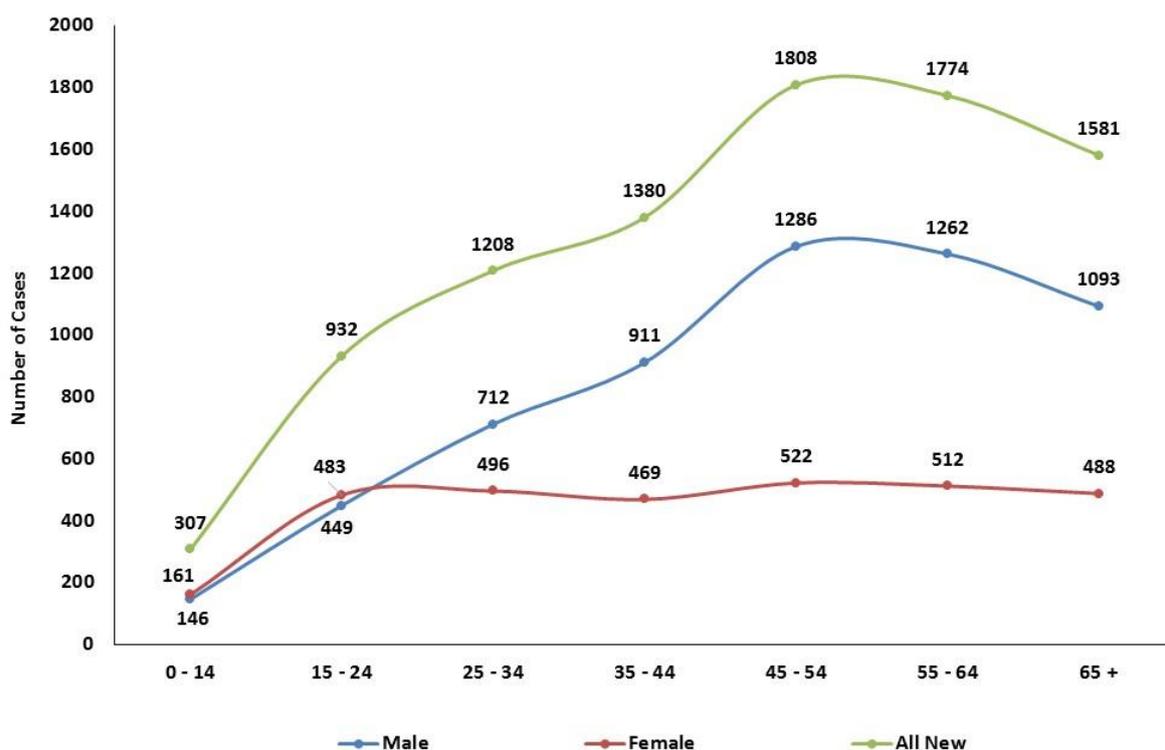


Figure 10: Distribution of All New Cases of TB by Age Group in 2015

Previously Treated TB Cases

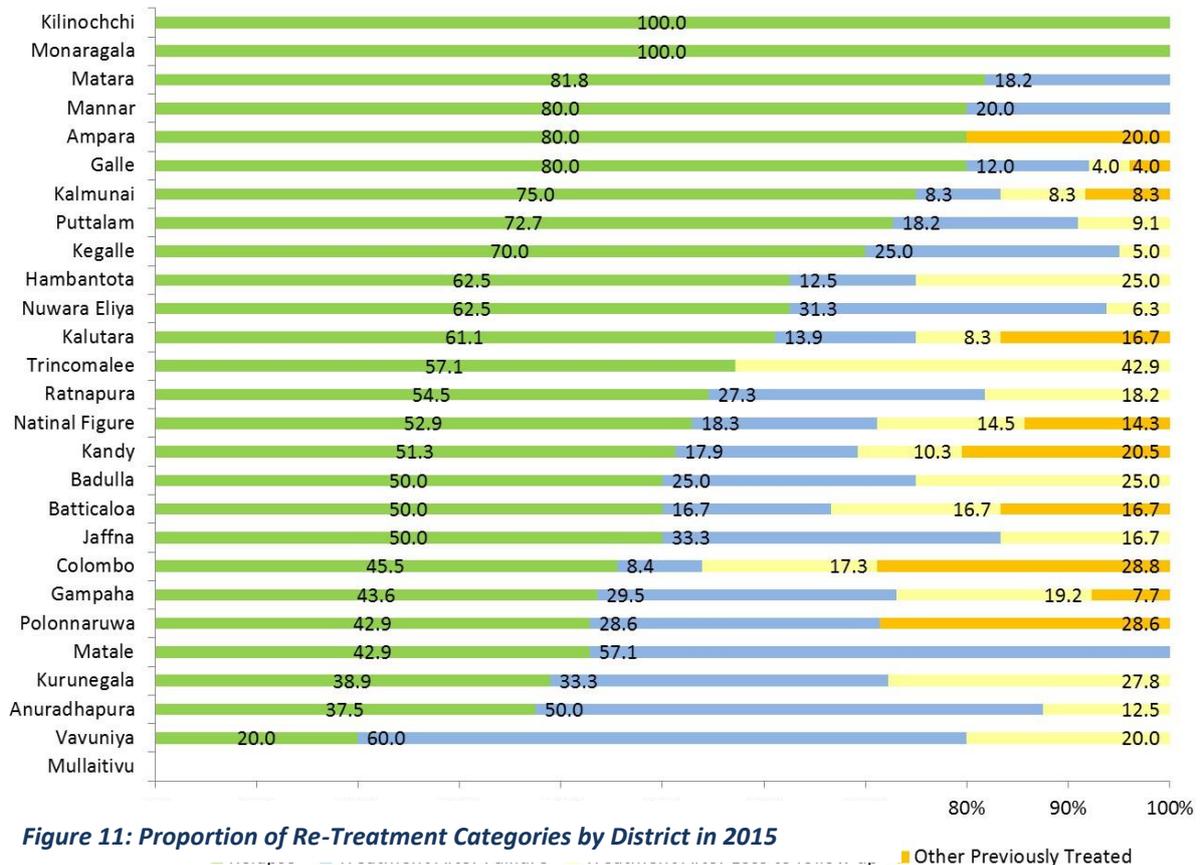
In 2015, 573 (6% of all TB cases) previously treated cases of TB were reported. Out of this, 303 (52.9%) were *relapses*, 105 (18.3%) *Treatment after Failure*, 83 (14.5%) *Treatment after lost to follow up* and 82 (14.3 %) other previously treated cases of TB (Table 9).

The highest number of previously treated TB cases (191, 33.3%) was reported from Colombo district and the second highest number was from Gampaha district (78, 13.6%). The total number of previously treated cases in 2015 was higher than in 2014 (456).

Among *relapsed* cases the higher numbers were reported from Colombo, Gampaha, Kalutara, Kandy, and Galle districts respectively (Table 9).

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

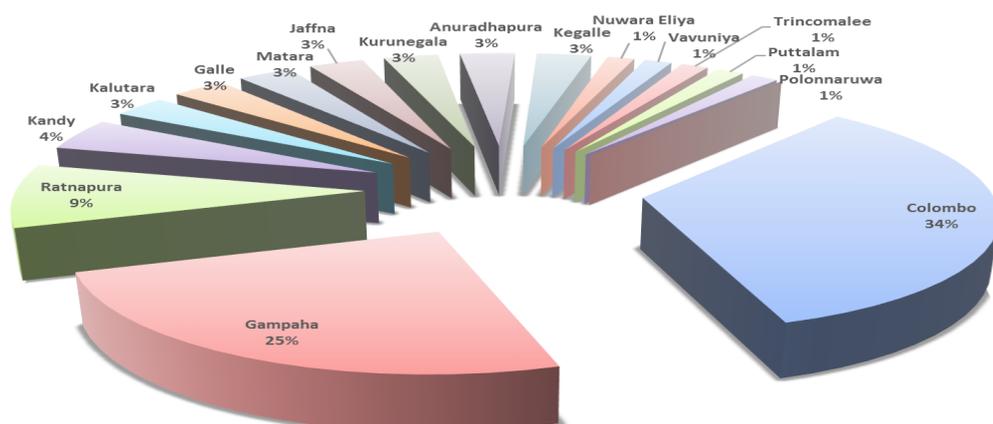
Colombo, Gampaha and Kurunegala were the districts which reported higher numbers of *Treatment after* lost to follow up cases. Colombo district contributed a significant number of cases (33, 39.8%) for the national figure (Table 9). In Mannar, Monaragala, Kalmunai, Ampara and Matale districts, Relapse cases consisted of all previously treated cases. (Figure 10).



Multi Drug Resistant Tuberculosis (MDR-TB)

The incidence of MDR-TB is low in Sri Lanka when compared to other countries in the SEARO region. Thirteen cases of MDR-TB were reported in year 2015 and all of them were enrolled in treatment. Sri Lanka uses standard treatment regimen for MDRTB patients and the period of treatment for MDR TB is at least 20 months. Out of the 4 patients of MDRTB enrolled for treatment in 2013, only 2 patients (50%) were successfully completed the treatment .

Figure 13: Multi Drug Resistant Tuberculosis – (2006-2015)



National

					14	2015
Figure 12: Multi Drug Resistant Tuberculosis cases enrolled in treatment 2010-2015						
Number of laboratory confirmed MDRTB patients	8	12	5	4	13	13
Number enrolled in treatment in the same year	4	5	4	4	11	13
Number enrolled in treatment in the next year	1	4	1	-	-	
Total number enrolled in treatment	5 (63%)	9 (75%)	5 (100%)	4 (100%)	11 (85%)	13 (100%)

TB/HIV Co-Infection

HIV testing of all TB patients was made mandatory since 2013. In 2015, 7827 (81.7%) TB patients were screened for HIV. Of these patients, 5 patients were found positive. In addition, there were 20 patients with known HIV status at the time of diagnosis of TB, contributing to the total of 25 patients with HIV/ TB co-infection in 2015.

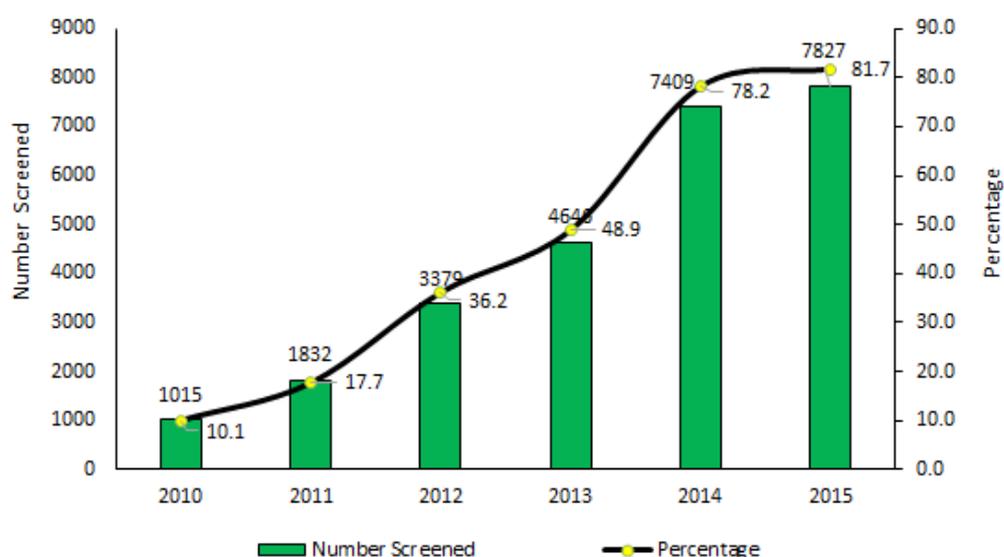


Figure 14: Percentages and Numbers of TB/HIV screening 2010-2015

TB among health care workers

In 2015, 80 health care workers had been diagnosed with TB. The majority of them (41, 51.3%) were reported from Colombo District. A higher numbers were reported from Kandy (12) and Gampaha (10) districts.

TB among foreign nationals

In 2015, 5 foreign nationals with TB were reported to NPTCCD from 1(Kandy), 1(Galle), 1(Jaffna) and 2(Vavniya) districts.

Treatment Outcome of Tuberculosis

Outcome data presented below were based on the information provided according to the previous classification for cohort of patients registered in 2014.

Treatment Outcome of All Forms of TB Cases

Total number of cases registered for treatment in 2014 was 9473. Out of this, outcome of 402 (4.2%) were not evaluated and in this report, outcome was presented for the rest of the cases (Table 18).

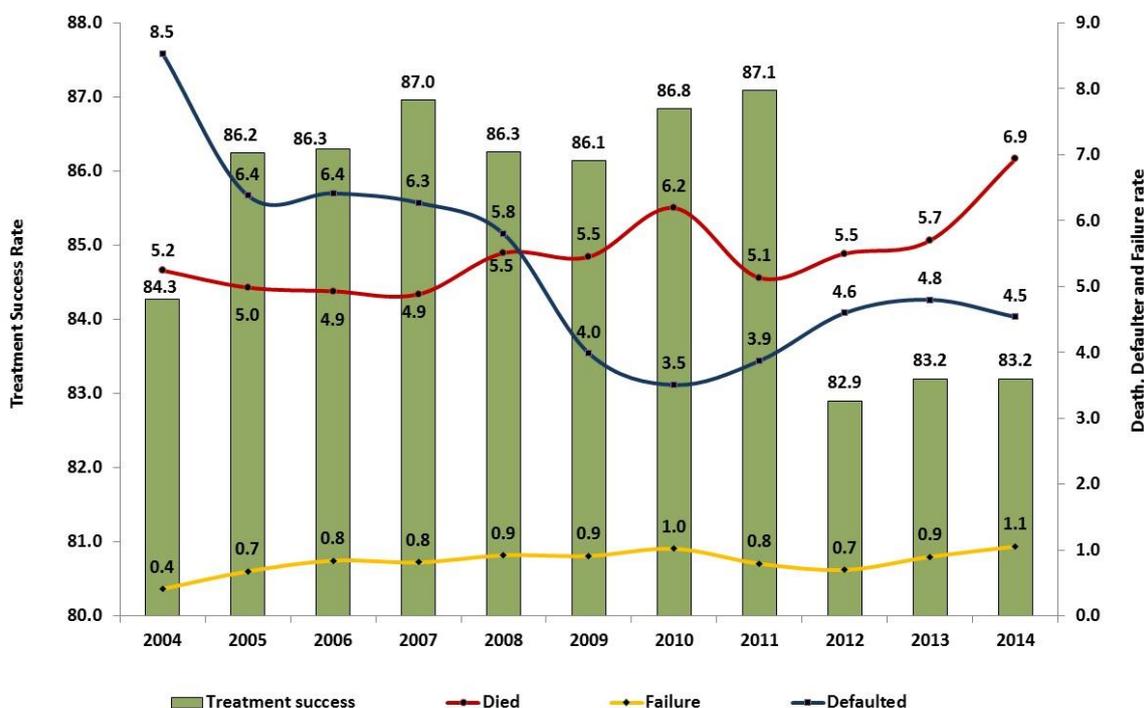


Figure 15: Treatment Outcome of All Forms of TB Cases from 2004-2014

➤ Treatment Success Rate (TSR)

The cure rate among registered cases was 39.6% (3749 cases) and a further 43.7% (4135 cases) completed treatment, accounting for an overall treatment success rate of 83.2% (7884 cases) which was as same as the TSR for year 2013. This was slightly below the WHO target of more than 85% treatment success rate (Figure 11). There were 16 districts with treatment success rate below the global target of 85%. Out of them, Nuwara- Eliya (65.2%), Kurunegala (79.6%), Vauviya (80.0%), Puttalam (80.2%), Colombo (80.3%), Kandy(80.9%), Badulla(81.2%), Kalmunai(83.1%) , Mullaitivu (83.3%) , Gampaha (82.5%) and , Jaffna(82.7%) were below the national figure. Mannar district showed the highest treatment completed rate (62%) and the lowest cure rate (24%) compared to the other districts (Figure 12).

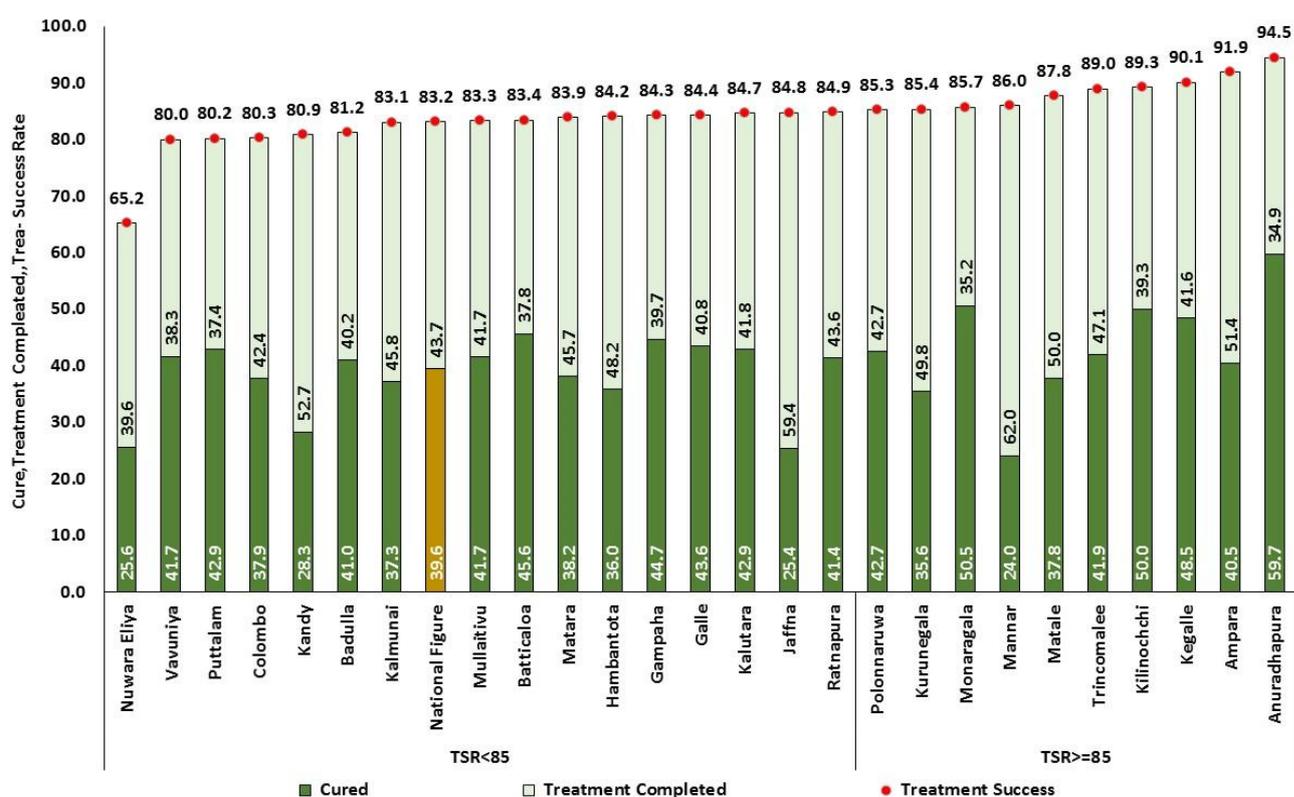


Figure 16: Treatment Success Rate of All Forms of TB According To Districts in 2014

➤ Treatment Failure Rate

The treatment failure rate was 1.1% in 2014. A slight gradual increase of treatment failure rate have been observed since 2012. NuwaraEliya district accounted for the highest failure rate(5.2%, 13 cases). Vauniya (5.0%, 3 cases), Polonnaruwa (3.5%, 5 cases), Puttalam (2.7%, 5 cases), Badulla (2.6%, 6 cases) and Anuradhapura (2.1%, 5 cases) also accounted for the high failure rates (Table 18).

➤ **Lost to Follow Up Rate**

The lost to follow up rate was 4.5% in Sri Lanka in 2014 and there was a slight decrease (4.8%) when compared to year 2013. The highest lost to follow up rate was reported from Colombo (8.5%, 200 cases). Gampaha (6.6%,70 cases) ,Puttalam (5.5%,10 cases) and Galle 23 (4.9%, cases) also accounted for high lost to follow up rates (Table 18).

➤ **Death Rate**

There were 657 (6.9%) deaths among the cohort of TB patients registered in year 2014. The highest number of deaths were reported from Colombo district (143 deaths, 6.1%). A large number of deaths were reported from Gampaha (69 deaths, 6.5%), Kalutara (50 deaths, 7.9%) and Kandy (50 deaths, 7.4 %) districts. Though number of deaths were very low, the highest death rate was reported in Mannar District (12.0%, 6 deaths). In 23 districts, the death rate was above the 5% (Table 18).

Treatment Outcome of New PTB Cases

➤ Treatment Success Rate

In 2014, 6124 new PTB cases were registered for treatment. Of these cases 188 (3.1%) were in the category of not been evaluated. The cure rate among registered cases was 55.8% (3418) and a further 27.5% (1686) completed treatment, giving an overall treatment success rate of (83.3%, 5104 cases). The lowest treatment success rate was shown in Nuwara-Eliya district (70.1%, 115 cases). Colombo, Gampaha, Kandy, Nuwara-Eliya, Matale, Galle, Matara, Hambanthota, Badulla, Jaffna, Vavuniya, Kalmunai, Puttalam, Polonnaruwa, Badulla and Mannar districts were below the global target of TSR (85%) (Table 20).

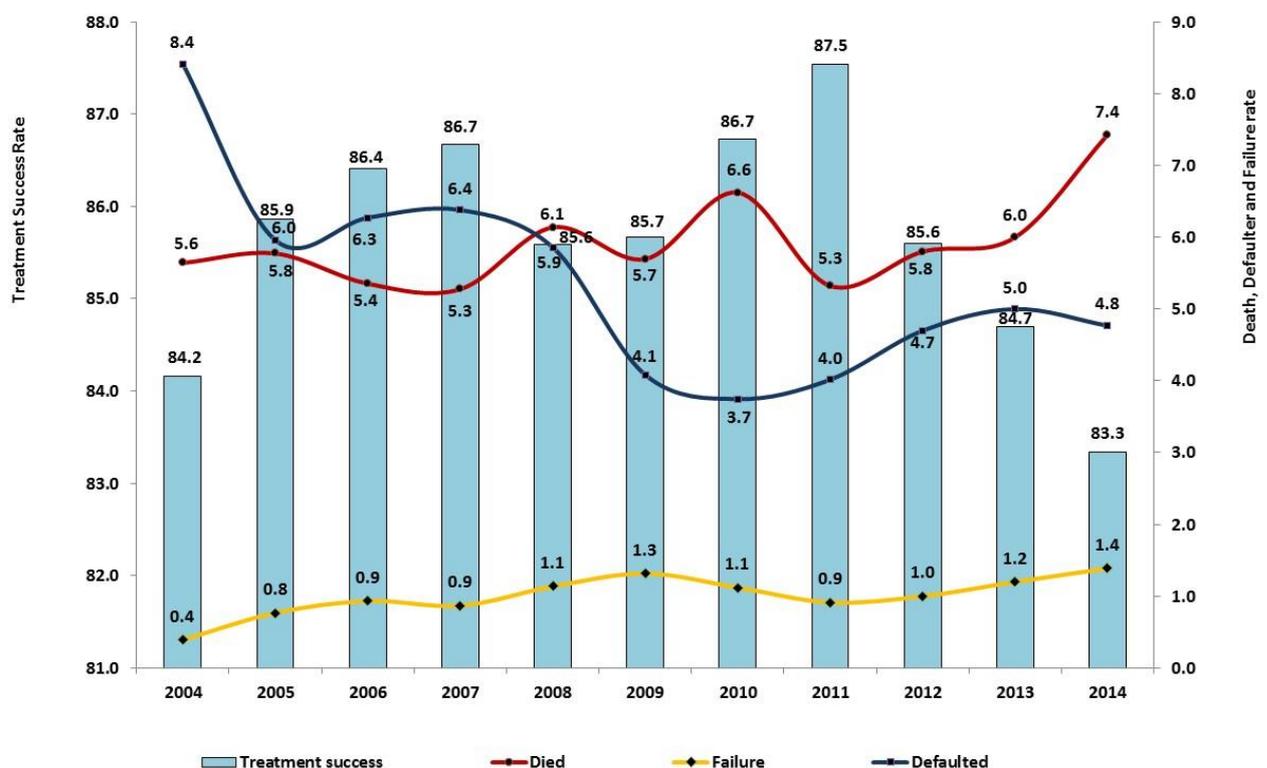


Figure 17: Treatment Outcome of New Pulmonary TB Cases from 2004-2014

➤ Treatment Failure Rate

Treatment failure rate among all new cases was (1.4%, 85 cases). A gradual increasing trend of treatment failure rate have been observed since 2011. The highest rate (6.8%, 3 cases) of all new PTB cases was reported from Vavuniya District (Table 20).

➤ Lost to Follow Up Rate

The lost to follow up rate was 4.8 % (292 cases) among all new cases. The highest lost to follow up rate was reported in Colombo 9.2% (136 cases).

Kilinochchi (8.1%, 3 cases), Gampaha (7.5%, 54 cases) and Puttalam (5.6%, 6 cases) also accounted for high lost to follow up rates which were above the global target of 5% (Table 20).

➤ Death Rate

The death rate was 7.4% (455) among all new PTB cases and the highest death rate was in Mannar District (15.4%, 4 cases). Hambantota (12.3%, 10 cases), Nuwara-Eliya (11.6%, 19 cases), Jaffna (10.6%, 16 cases,) and Ampara (10.4%, 5 cases) districts also showed higher death rates (Table 20).

Treatment Outcome of New PTB Smear Positive Cases

➤ Sputum Conversion Rate

Sputum conversion rate at the end of intensive phase for Sri Lanka was 85.0% in 2016 and varied from lowest of 16.7% (Mulathive) to highest of 97.1% (Anuradhapura) (Figure 14).

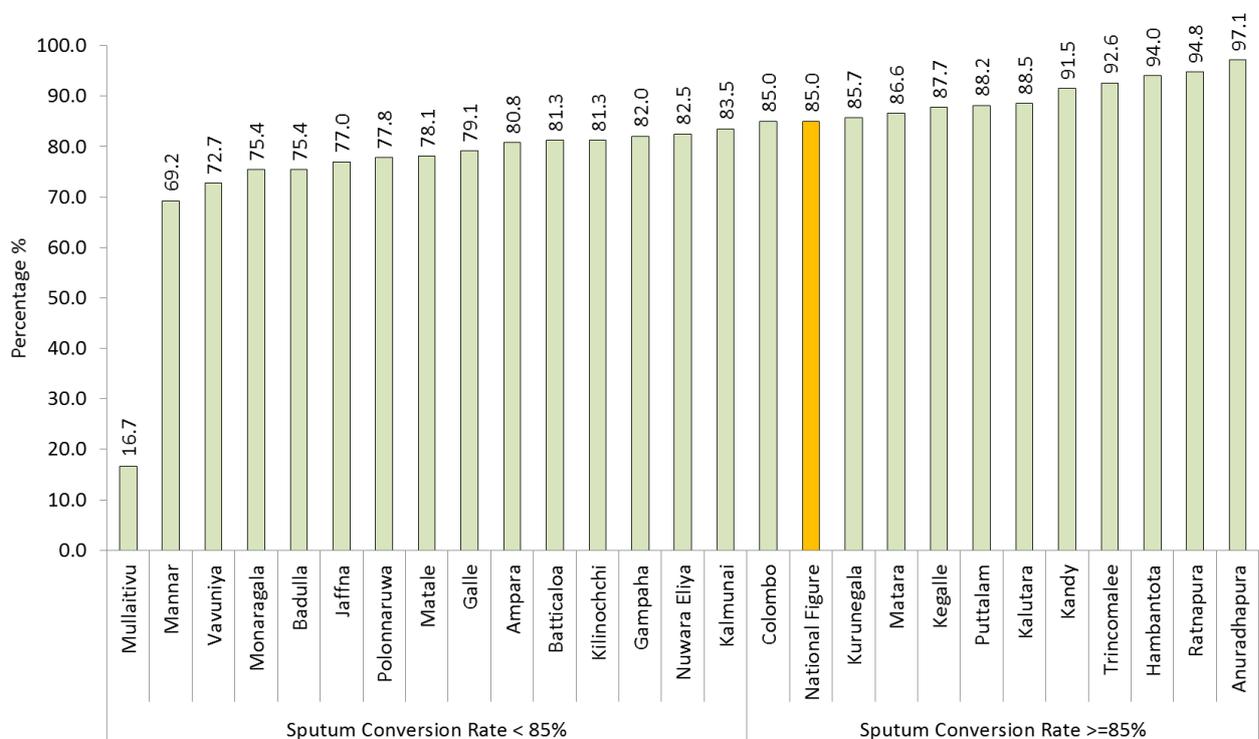


Figure 18: Sputum Conversion rate of New Smear-Positive Cases by District in 2015

➤ Treatment Success Rate

In 2014, 4293 new sputum positive cases were registered for treatment. The cure rate among registered cases was 78.3% (3363 cases) and a further 5.5% (237 cases) completed treatment (no laboratory confirmation of cure), giving an overall treatment success rate of 83.9% (3600 cases). This is a decrease in comparison to 2013 where the treatment success rate was 85.2%. The failure rate remained low at 1.8% with 7 Districts not having any single case of treatment failure. The loss to follow up rate was 5 % with only 5 Districts having lost to follow up rates above 5% (WHO target < 5%) and with 6 Districts not having any single case of lost to follow up.(Figure 15).

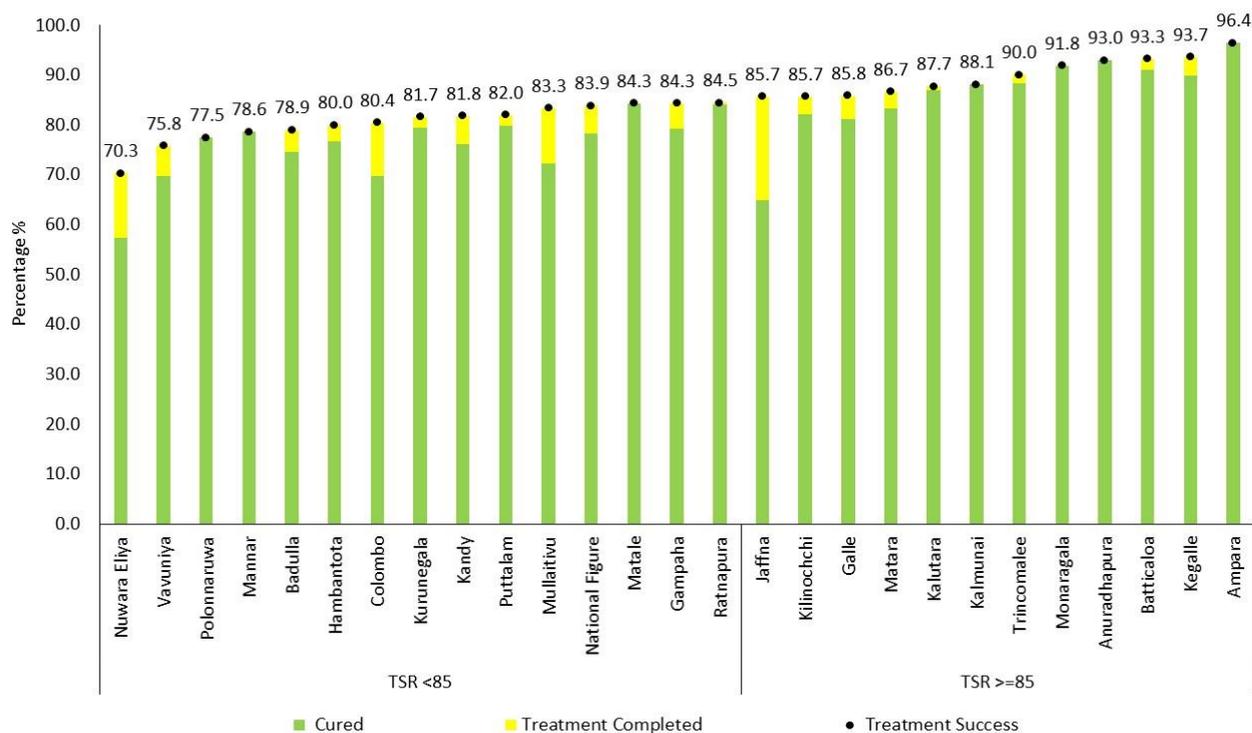


Figure 19: Treatment Success Rates of New Smear Positive Cases by Districts in 2014

➤ Treatment Failure Rate

The failure rate among new sputum smear positive cases was 1.8% in 2014. Seven districts had not reported any treatment failures in 2014. The highest failure rate was 9.1% (3 cases) which was reported from Vauniya district (Table 21).

➤ Lost to Follow Up Rate

The lost to follow up rate among new sputum smear positive cases was 5% (255 cases) in 2014. The highest lost to follow up rate was reported in Colombo district (9.1%, 102 cases). Higher lost to follow up rates were reported from Gampaha (7.6%, 41 cases), Kilinochchi (7.1%, 2 cases), Vauniya (6.1%, 2 cases) and Mullathive (5.6%, 1 case) while six districts reported zero cases of lost to follow up (Table 21).

➤ Death Rate

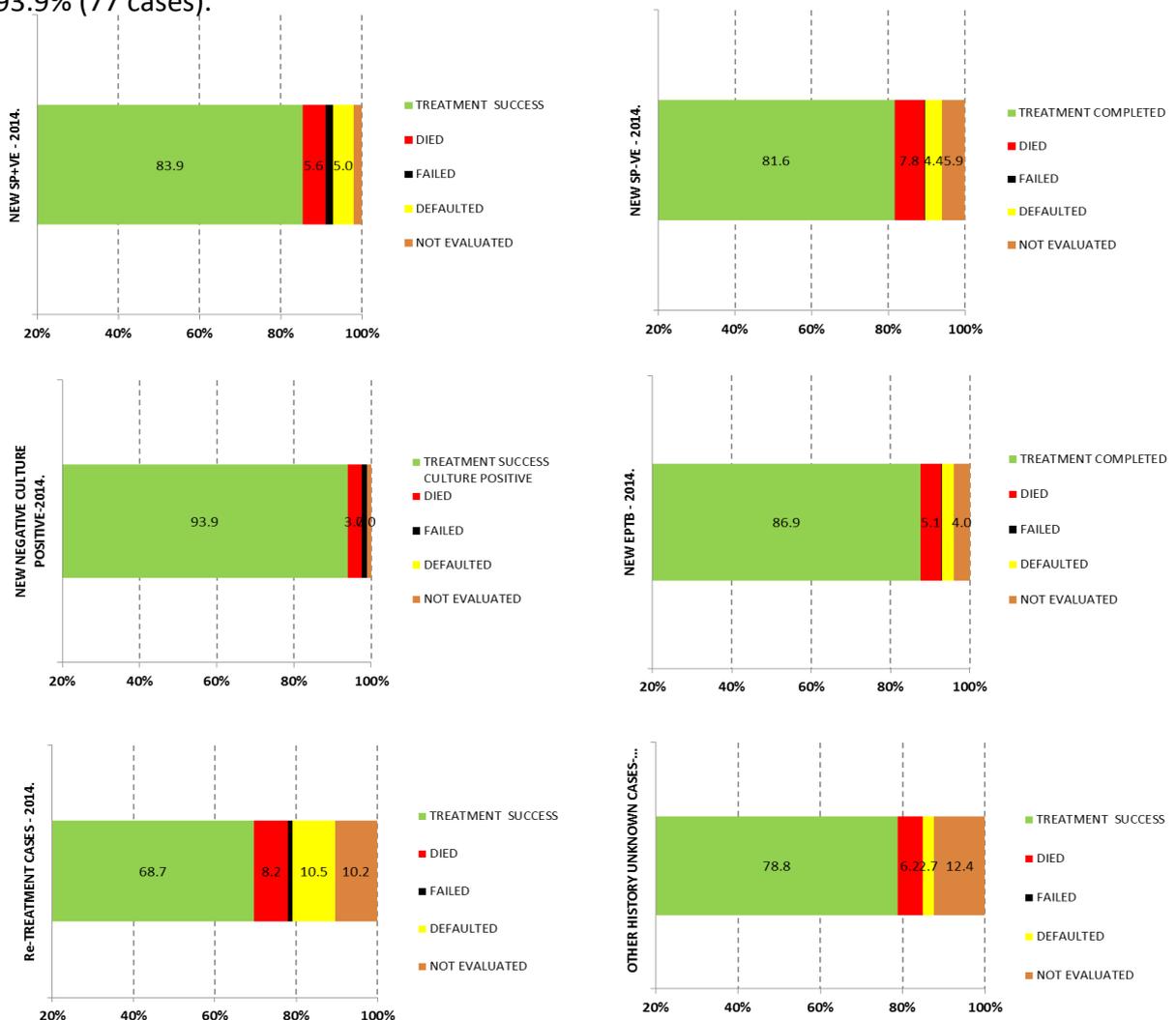
The death rate (7.4% ,316) in 2014 was increased when compared to year 2013 (5.3%, 236 deaths). The highest death rate was reported from Mannar District (21.4%, 3 deaths). Hambanthota (15%, 9 cases), Nuwara-Eliya (13.9%, 14 cases) and Badulla (10.5%, 12 cases,) also account for higher death rates (Table 21).

Treatment Outcome of Re-Treatment Patients

In 2014, of the 668 registered retreatment cases, only 301(45.1%) cases were cured while other 158 (23.7%) cases had completed treatment giving a treatment success rate of 68.7% (459 cases). The low treatment success rate in this group was mainly due to the high lost to follow up rate (10.5% 70 cases) and high death rate (9.6%, 64 cases). In addition there were 7 cases (1%) of failure among retreatment cases in 2014. Another 68 cases (10.2%) were not evaluated (Table 24).

Treatment Outcome of New PTB Smear Negative Culture Positive Cases

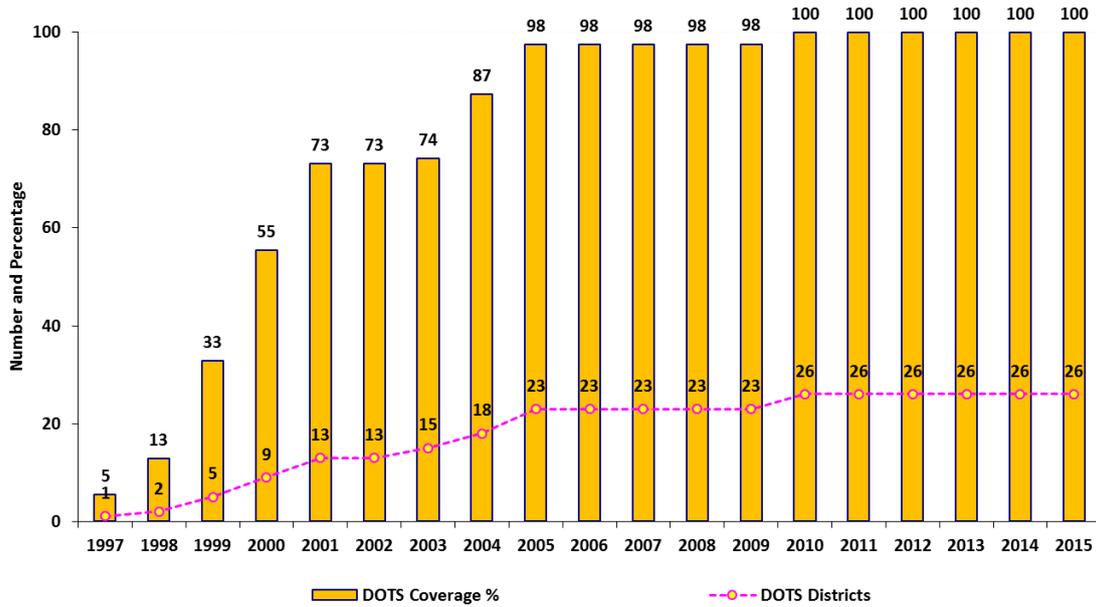
In 2014, 82 new sputum negative culture positive cases were registered for treatment. The cure rate among those cases was (67.1%, 55 cases) and a further 22 cases (26.8%) completed treatment (no laboratory confirmation of cure), giving an overall treatment success rate of 93.9% (77 cases).



DOTS Coverage

Figure 20: Treatment Outcome Summary of TB Patients (New Smear Positive, New Smear Negative, New EPTB, Re-Treatment and Other history unknown cases in 2014)

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



PART II

Activity Report

Several important activities were carried out in 2015 in view of improving the quality of services provided by the NPTCCD

Tuberculosis

- The NPTCCD has initiated the revision of existing National Manual for Tuberculosis Control in order to incorporate new advances in TB diagnostics and to include revised TB definitions.
- Guidelines for Programmatic Management of Drug Resistance TB were finalized with the technical assistance from WHO.
- Childhood TB working group has been established in view of strengthening diagnosis of TB among children and new action plan has been prepared.
- Initiated preparation of key supportive documents required for grant making i.e., Monitoring and Evaluation Plan for NPTCCD, Programmatic management of Drug Resistant TB service expansion plan, Gene X pert expansion plan.
- Green Light Committee and Global Drug Facility annual missions were carried out successfully. Useful recommendations were given to improve anti TB drug management.
- The NPTCCD has taken further steps to strengthen case detection by carrying out active screening among high risk groups for TB such as prison inmates, drug addicts, estate population.
- National Tuberculosis Reference Laboratory was upgraded to bio safety level 3.
- External Quality Assurance of microscopy centers and DCC laboratories were further continued.
- Uninterrupted supply of quality assured anti TB drugs were ensured through procurement of Fixed Dose combination of Anti TB drugs from Global Drug Facility. The Second Line Drugs were procured through the GDF/GLC mechanism.

- NPTCCD conducted training programmes for DTCOs medical officers, nurses and other health workers utilizing both government and donor funds.
- The key staff of the NPTCCD attended several International meetings and conferences. Several Medical Officers and other staff participated in international training programs 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/districts reviews were conducted annually with a large participation of the officers of *Government and Private health sector, NGOs, other government organizations* in order to strengthen the collaboration between different stake holders functioning at district level
- A regular supervisory visits were conducted by the team from central unit of the NPTCCD and NTRL 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 carried out regular visits to chest clinic drug stores and provide guidance for drug and stores management.
- World TB day was commemorated on 24th March 2015 in Colombo under the theme of “4000 undetected, Reach, Treat, and Cure for all” with the participation of large number of different stakeholders.





Respiratory Diseases

- A separate unit for control of respiratory diseases were established at NPTCCD under guidance of a Consultant Community Physician.
- Control of respiratory diseases were included in the National Strategic Plan for Non communicable diseases.
- A training of the regional staff on Practical Approach to Lung health (PAL) was conducted among Medical Officers of Outpatient Department(OPD) and for the nurses who work in the same hospitals.
- A media seminar on Asthma was conducted for nearly 75 media personnel with the Health Education Beuro, Ministry of Health. In parallel to Asthma day several radio & television programmes also conducted.
- Word Asthma Day was celebrated in 14th May 2015 with collaboration of College of Pulmonologists of Sri Lanka targeting school children



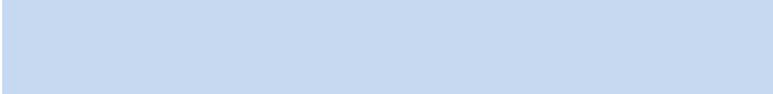
Major Challenges

The followings factors were identified as major challenges for TB control.

1. Maintaining trained health man power for TB control and addressing the maldistribution of human resources
2. Reaching the unreached population groups such as population groups with limited access to services i.e. urban poor, estate workers, drug addicts
3. Provision of continues services to prisoners for improving treatment sustainability
4. Provision of services to migrants and resettling population
5. Strengthening early detection of TB cases
6. Reduction of TB deaths and lost to follow up
7. Overcoming the TB-related stigma
8. Provision of social benefits and nutritional support for TB patients and their families
9. Financial sustainability of the National Tuberculosis Programme
10. Addressing social determinants of health

Major challenges in respiratory disease control

1. Establishment of a surveillance system for respiratory diseases
2. Strengthening coordination between all stakeholders involved in respiratory disease care and control



PART III

Administration Report

OPD Attendance and Ward Admissions

During the year 2015, 212,739 new patients were registered at District Chest Clinics. Out of these patients, 83,020,(39 %) were self-referrals. Others included referrals from general health institutions or private practitioners 50,386(23.7%), contacts of TB patients 13,933(6.5%) and persons came for medical examinations 65,400 (30.7%). There are several chest wards situated in different types of hospitals in the country which provide inward care and information was provided by the 10 wards regularly.

Table 3: Utilization of TB/Respiratory Curative Care Facilities in 2015

Health Facility	Total OPD Attendance (First Visits)	No of beds	Inward patients			
			TB		Non TB	
			Male	Female	Male	Female
Chest Clinics	212,739					
Chest Wards						
PGH Badulla		36	93	55	748	417
TH Batticaloa		34	67	31	166	97
BH Udugama		48	33	5	0	0
DGH Kalutara		80	161	67	480	291
DH Kopay		48	143	56	0	0
DGH Matale		56	133	24	1224	461
BH Puttalam		35	33	2	70	10
DH Eheliyagoda		176	197	65	0	0
BH Cheddikkulam		68	41	5	2604	2465
TH Anuradhapura		68	109	46	393	372
Total		649	1010	356	5685	4113

Data is not available for Kurunegala district

Laboratory Services

➤ Sputum Smear Microscopy

Sputum smear examinations are done for diagnosis of TB and for monitoring of treatment. The patients having symptoms suggestive for TB, attending to the healthcare facilities are screened for TB by sputum examinations. 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 only at the National Reference Laboratory at Welisara. Regional Laboratory, Kandy and Ratnapura provide culture facilities only. 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 2015

Institution	Sputum Microscopy No. done
Microscopy Centres	1,80,460
DCC Laboratories	2,21,694
NTRL	17,472

➤ Testing By WHO recommended Rapid Diagnostics (Gene X pert)

WHO recommended rapid diagnostic facilities are available only at NTRL. A total of **xxxx** tests were performed in 2015.

➤ External Quality Assurance of Sputum Microscopy

Quality assurance of sputum smear microscopy is an important component of the National TB Programme. Slides are being sent from all laboratories of District Chest Clinics & NHRD Welisara 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 2015, 16659 slides were checked for EQA and 7 (0.76%) false positives and 25(0.16%) false negatives were identified (Table 5).

Table 5: EQA Results of Sputum Smear Microscopy in 2015

Initial Reading	No. of slides checked	Correct	Low	High	Percentage of discordance
+ve slides	919	909	0	7	0.76
-ve slides	15740	15715	4	21	0.16

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 2015 at the Chest Clinics were as follows.

- ✓ **Number of Micro Films** : 158 (+ 71 Rolls)
- ✓ **Number of Large Films** : 91,003
- ✓ **Total** : **91,161 (+ 71 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 Miliary TB. (Disseminated TB).In 2015, 99% of the all the new born babies has been vaccinated with BCG.

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 1678 revaccination carried out in district chest clinics.

Detailed Tables

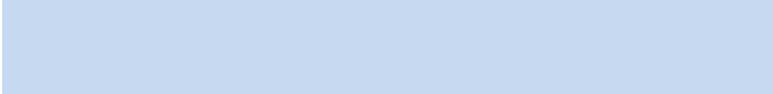


Table 6: Notification of New TB Cases in Sri Lanka from 2005 – 2015

Year	PTB		EPTB		Total		PTB Positive	
	No	Rate	No	Rate	No	Rate	No	Rate
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
2014	5818	28.3	2525	12.3	8343	40.6	4108	20.0
2015	6117	29.3	2650	12.7	8767	42.0	4250	20.4

Source: Health 816 A

Table 7: Annual Mortality of All TB Cases from 2005-2015

Year	Mortality	
	Number	Rate per 100,000 population
2005	446	2.3
2006	347	1.7
2007	205	1.0
2008	355	1.7
2009	275	1.3
2010	395	1.9
2011	358	1.8
2012	203	1.0
2013	314	1.5
2014	309	1.5
2015	329	1.6

Source: Health 814

Table 8: Distribution Rates of all TB cases by District of Residence in 2015

District	Estimated Mid-Year Population	No. of Cases Detected	No. of Cases Per 100,000 Population
Colombo	2,359,612	2264	95.9
Gampaha	2,343,587	1065	45.4
Kalutara	1,245,028	633	50.8
Kandy	1,409,882	693	49.2
Matale	499,265	189	37.9
Nuwara Eliya	737,011	321	43.6
Galle	1,086,176	471	43.4
Matara	833,412	220	26.4
Hambantota	625,405	144	23.0
Jaffna	597,232	273	45.7
Vavuniya	178,314	98	55.0
Batticaloa	538,524	152	28.2
Ampara	258,103	90	34.9
Kalmunai	416,527	240	57.6
Trincomalee	394,122	146	37.0
Kurunegala	1,648,014	497	30.2
Puttalam	786,471	187	23.8
Anuradhapura	889,435	250	28.1
Polonnaruwa	416,416	142	34.1
Badulla	840,387	262	31.2
Monaragala	469,776	107	22.8
Ratnapura	1,122,778	593	52.8
Kegalle	856,125	412	48.1
Mannar	103,169	31	30.0
Mullaitivu	93,715	41	43.7
Kilinochchi	120,276	54	44.9
Total	20868762	9575	45.9

Table 9: All TB Case Detection by District of Registration in 2015

District	New Cases				Retreatment Cases																			Treatment History unknown				Grand Total	
					Relapse				Treatment After Failure			Lost to Follow up			Other Previously Treated			Total Retreatment Cases											
	PTB Bacteriologically Confirmed (Positive)	PTB Clinically Dig.(Negative)	EPTB	Total	PTB Bacteriologically Confirmed (Positive)	PTB Clinically Dig.(Negative)	EPTB	Total	PTB Bacteriologically Confirmed (Positive)	PTB Clinically Dig.(Negative)	EPTB	Total	PTB Bacteriologically Confirmed (Positive)	PTB Clinically Dig.(Negative)	EPTB	Total	PTB Bacteriologically Confirmed (Positive)	PTB Clinically Dig.(Negative)	EPTB	Total	PTB Bacteriologically Confirmed (Positive)	PTB Clinically Dig.(Negative)	EPTB	Total					
Colombo	1061	374	638	2073	79	2	6	87	15	0	1	16	28	5	0	33	11	17	27	55	133	24	34	191	0	0	0	0	2264
Gampaha	479	227	281	987	28	5	1	34	23	0	0	23	15	0	0	15	4	0	2	6	70	5	3	78	0	0	0	0	1065
Kalutara	331	99	167	597	20	0	2	22	5	0	0	5	3	0	0	3	1	1	4	6	29	1	6	36	0	0	0	0	633
Kandy	211	226	217	654	11	3	6	20	3	1	3	7	1	1	2	4	0	6	2	8	15	11	13	39	0	0	0	0	693
Matale	73	35	74	182	1	1	1	3	4	0	0	4	0	0	0	0	0	0	0	0	5	1	1	7	0	0	0	0	189
Nuwara Eliya	154	61	90	305	9	0	1	10	5	0	0	5	0	1	0	1	0	0	0	0	14	1	1	16	0	0	0	0	321
Galle	235	83	128	446	11	5	4	20	3	0	0	3	1	0	0	1	0	0	1	1	15	5	5	25	0	0	0	0	471
Matara	97	46	66	209	9	0	0	9	2	0	0	2	0	0	0	0	0	0	0	0	11	0	0	11	0	0	0	0	220
Hambantota	50	30	56	136	4	0	1	5	1	0	0	1	2	0	0	2	0	0	0	0	7	0	1	8	0	0	0	0	144
Jaffna	113	58	86	257	3	3	0	6	4	0	0	4	2	0	0	2	0	0	0	0	9	3	0	12	0	2	2	4	273
Vavuniya	44	28	21	93	1	0	0	1	2	1	0	3	1	0	0	1	0	0	0	0	4	1	0	5	0	0	0	0	98
Batticaloa	64	29	47	140	6	0	0	6	2	0	0	2	2	0	0	2	0	2	0	2	10	2	0	12	0	0	0	0	152
Ampara	26	38	21	85	3	0	1	4	0	0	0	0	0	0	0	0	1	0	0	1	4	0	1	5	0	0	0	0	90
Kalmunai	85	109	33	227	7	2	0	9	1	0	0	1	0	0	1	1	0	1	0	1	8	3	1	12	1	0	0	1	240
Trincomalee	54	58	27	139	4	0	0	4	0	0	0	0	3	0	0	3	0	0	0	0	7	0	0	7	0	0	0	0	146
Kurunegala	217	122	136	475	7	0	0	7	6	0	0	6	5	0	0	5	0	0	0	0	18	0	0	18	4	0	0	4	497
Puttalam	76	34	63	173	8	0	0	8	2	0	0	2	1	0	0	1	0	0	0	0	11	0	0	11	0	3	0	3	187
Anuradhapura	140	20	82	242	2	1	0	3	4	0	0	4	1	0	0	1	0	0	0	0	7	1	0	8	0	0	0	0	250
Polonnaruwa	72	36	27	135	3	0	0	3	2	0	0	2	0	0	0	0	2	0	0	2	7	0	0	7	0	0	0	0	142
Badulla	118	47	85	250	6	0	0	6	3	0	0	3	2	0	1	3	0	0	0	0	11	0	1	12	0	0	0	0	262
Monaragala	65	12	27	104	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	107
Ratnapura	289	96	186	571	12	0	0	12	5	1	0	6	4	0	0	4	0	0	0	0	21	1	0	22	0	0	0	0	593
Kegalle	204	88	100	392	11	1	2	14	5	0	0	5	1	0	0	1	0	0	0	0	17	1	2	20	0	0	0	0	412
Mannar	13	4	9	26	4	0	0	4	0	0	1	1	0	0	0	0	0	0	0	0	4	0	1	5	0	0	0	0	31
Mullaitivu	12	13	16	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
Kilinochchi	16	19	16	51	1	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	3	0	0	0	0	54
Total	4299	1992	2699	8990	253	24	26	303	97	3	5	105	72	7	4	83	19	27	36	82	441	61	71	573	5	5	2	12	9575

Table 10: Distribution of New Cases of TB by Province in 2015

Province	Number of Patients													
	Smear Positive	Rate	Smear Negative	Rate	EPTB	Rate	All New	Rate	Re-treatment	Rate	Previous Treatment History Unknown	Rate	All TB	Rate
Western	1871	31.5	700	11.8	1086	18.3	3657	61.5	305	5.1	0	0.0	3962	66.6
Central	438	16.6	322	12.2	381	14.4	1141	43.1	62	2.3	0	0.0	1203	45.5
Sabaragamuwa	493	24.9	184	9.3	286	14.5	963	48.7	42	2.1	0	0.0	1005	50.8
Sorthern	382	15.0	159	6.2	250	9.8	791	31.1	44	1.7	0	0.0	835	32.8
North Western	293	12.0	156	6.4	199	8.2	648	26.6	29	1.2	7	0.3	684	28.1
Eastern	229	14.2	234	14.6	128	8.0	591	36.8	36	2.2	1	0.1	628	39.1
Northern	198	18.1	122	11.2	148	13.5	468	42.8	25	2.3	4	0.4	497	45.5
North Central	212	16.2	56	4.3	109	8.3	377	28.9	15	1.1	0	0.0	392	30.0
Uva	183	14.0	59	4.5	112	8.5	354	27.0	15	1.1	0	0.0	369	28.2
Total	4299	20.6	1992	9.5	2699	12.9	8990	43.1	573	2.7	12	0.1	9575	45.9

Table 11: Distribution of new cases of TB by Age and Type in 2015

Age Group	Number of Patients							
	Smear Positive	Rate	Smear Negative	Rate	EPTB	Rate	All New	Rate
0 - 14	26	0.5	93	1.7	188	3.4	307	5.5
15 - 24	458	11.8	160	4.1	314	8.1	932	24.0
25 - 34	570	16.7	192	5.6	446	13.1	1208	35.4
35 - 44	691	25.6	200	7.4	489	18.1	1380	51.1
45 - 54	957	57.7	352	21.2	499	30.1	1808	109.0
55 - 64	863	79.4	483	44.4	428	39.4	1774	163.2
65 +	734	28.3	512	19.8	335	12.9	1581	61.1
Total	4299	20.6	1992	9.5	2699	12.9	8990	43.1

Table 12: Distribution of New Cases of TB by Age and Sex in 2015

Age Group	Male			Female			All New Cases		
	Estimated Mid-Year Population	No	Rate	Estimated Mid-Year Population	No	Rate	Estimated Mid-Year Population	No	Rate
0 - 14	2,840,238	146	5.1	2,692,070	161	6.0	5,532,308	307	5.5
15 - 24	1,713,782	449	26.2	2,170,351	483	22.3	3,884,133	932	24.0
25 - 34	1,715,412	712	41.5	1,700,804	496	29.2	3,416,216	1208	35.4
35 - 44	1,114,392	911	81.7	1,586,026	469	29.6	2,700,418	1380	51.1
45 - 54	845,185	1286	152.2	813,882	522	64.1	1,659,067	1808	109.0
55 - 64	578,065	1262	218.3	509,198	512	100.6	1,087,263	1774	163.2
65 +	1,318,905	1093	82.9	1,270,452	488	38.4	2,589,357	1581	61.1
Total	10,125,979	5859	57.9	10,742,783	3131	29.1	20,868,762	8990	43.1

Table 13: Age and Sex Distribution of All New TB Cases by District in 2015

District	Male										Female										Male	Female	Total
	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-Over	Total	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-Ove	Total			
Colombo	29	15	114	152	225	299	265	183	47	1329	26	23	122	110	114	134	110	83	22	744	1329	744	2073
Gampaha	6	6	41	80	101	154	153	76	53	670	1	8	32	54	54	49	66	37	16	317	670	317	987
Kalutara	2	1	41	51	56	96	81	52	21	401	6	6	32	36	34	23	29	24	6	196	401	196	597
Kandy	6	5	39	47	61	79	87	63	20	407	8	4	41	40	32	38	44	29	11	247	407	247	654
Matale	1	2	3	18	20	27	31	12	9	123	0	2	11	12	5	15	8	3	3	59	123	59	182
Nuwara Eliya	4	5	25	27	39	46	28	18	4	196	4	4	16	13	24	28	13	5	2	109	196	109	305
Galle	2	4	16	32	45	67	68	52	8	294	0	2	27	27	25	20	24	18	9	152	294	152	446
Matara	1	0	9	11	21	28	33	23	11	137	0	3	10	10	14	12	8	10	5	72	137	72	209
Hambantota	1	2	3	18	16	11	27	10	6	94	1	2	4	7	5	11	5	5	2	42	94	42	136
Jaffna	3	4	14	18	21	27	28	37	8	160	7	2	12	18	18	11	10	13	6	97	160	97	257
Vavuniya	0	0	5	9	11	11	16	7	1	60	1	0	5	3	4	6	6	7	1	33	60	33	93
Batticaloa	0	1	12	11	11	21	17	14	1	88	1	3	5	7	10	12	7	6	1	52	88	52	140
Ampara	2	1	2	0	4	20	13	5	11	58	1	0	2	1	5	5	7	5	1	27	58	27	85
Kalmunai	0	6	3	14	19	36	37	23	8	146	2	2	11	7	12	8	22	11	6	81	146	81	227
Trincomalee	0	1	5	11	9	20	17	21	6	90	2	2	7	7	4	11	7	7	2	49	90	49	139
Kurunegala	2	2	15	25	50	77	86	44	18	319	0	3	17	25	19	30	32	20	10	156	319	156	475
Puttalam	1	4	6	15	17	25	29	15	7	119	2	0	7	8	8	12	11	5	1	54	119	54	173
Anuradhapura	5	2	5	17	20	42	40	13	4	148	4	3	10	15	17	17	14	12	2	94	148	94	242
Polonnaruwa	0	3	2	19	11	14	27	17	0	93	0	0	7	8	7	6	9	5	0	42	93	42	135
Badulla	3	0	15	31	25	32	29	13	3	151	2	6	21	19	9	17	9	15	1	99	151	99	250
Monaragala	1	0	8	10	12	20	9	9	3	72	0	0	4	7	3	8	4	4	2	32	72	32	104
Ratnapura	2	8	41	61	70	65	64	54	19	384	2	5	32	32	31	24	38	18	5	187	384	187	571
Kegalle	1	2	17	28	35	52	53	39	14	241	3	5	39	24	12	17	26	19	6	151	241	151	392
Mannar	0	0	2	0	4	6	6	2	0	20	0	0	3	1	0	1	1	0	0	6	20	6	26
Mullaitivu	0	0	2	4	4	4	10	4	1	29	0	0	3	2	1	3	0	1	2	12	29	12	41
Kilinochchi	0	0	4	3	4	7	8	2	2	30	1	2	3	3	2	4	2	3	1	21	30	21	51
Total	72	74	449	712	911	1286	1262	808	285	5859	74	87	483	496	469	522	512	365	123	3131	5859	3131	8990

Table 14: Age and Sex Distribution of Smear Positive New TB Cases by District in 2015

District	Male										Female										Male	Female	Total
	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-Over	Total	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-Over	Total			
Colombo	0	1	56	81	144	199	166	99	26	772	0	7	54	43	44	58	43	35	5	289	772	289	1061
Gampaha	0	0	23	37	60	101	83	35	25	364	0	3	17	25	16	18	16	14	6	115	364	115	479
Kalutara	1	0	23	25	47	63	45	27	13	244	0	2	19	18	12	12	12	11	1	87	244	87	331
Kandy	0	1	23	17	24	30	26	24	9	154	0	0	14	12	6	4	9	10	2	57	154	57	211
Matale	0	1	1	8	9	13	14	6	4	56	0	1	4	4	1	4	1	1	1	17	56	17	73
Nuwara Eliya	0	1	14	13	23	23	17	13	4	108	0	1	10	6	13	10	5	0	1	46	108	46	154
Galle	0	0	2	22	26	36	41	31	4	162	0	0	15	13	12	8	14	9	2	73	162	73	235
Matara	1	0	4	5	10	12	16	10	6	64	0	1	6	4	5	7	2	3	5	33	64	33	97
Hambantota	0	0	0	9	6	6	12	3	2	38	0	0	1	4	0	3	3	1	0	12	38	12	50
Jaffna	0	0	10	8	12	20	14	15	4	83	0	0	4	7	7	4	3	4	1	30	83	30	113
Vavuniya	0	0	4	6	7	8	13	2	0	40	0	0	1	0	0	1	1	1	0	4	40	4	44
Batticaloa	0	0	4	3	6	9	11	9	0	42	0	0	2	3	2	7	6	2	0	22	42	22	64
Ampara	0	0	1	0	1	8	4	1	3	18	0	0	1	0	1	1	4	1	0	8	18	8	26
Kalmunai	0	0	1	6	10	19	16	9	2	63	0	0	3	1	3	0	9	4	2	22	63	22	85
Trincomalee	0	0	3	3	3	12	11	6	4	42	0	0	1	3	2	4	0	1	1	12	42	12	54
Kurunegala	0	0	11	11	25	43	47	20	11	168	0	0	8	5	6	10	10	8	2	49	168	49	217
Puttalam	0	0	1	5	10	16	15	7	4	58	0	0	1	4	2	3	5	2	1	18	58	18	76
Anuradhapura	0	0	3	11	13	24	27	11	4	93	0	0	6	8	6	7	11	9	0	47	93	47	140
Polonnaruwa	0	0	1	10	5	8	15	8	0	47	0	0	5	8	3	2	3	4	0	25	47	25	72
Badulla	0	0	5	19	13	19	9	7	2	74	0	1	9	10	4	10	4	6	0	44	74	44	118
Monaragala	0	0	4	7	9	15	5	5	3	48	0	0	3	5	1	5	1	1	1	17	48	17	65
Ratnapura	0	2	23	29	38	39	35	25	9	200	0	2	21	18	13	7	17	9	2	89	200	89	289
Kegalle	0	0	13	15	21	31	25	28	5	138	0	0	20	13	7	9	6	8	3	66	138	66	204
Mannar	0	0	0	0	1	4	3	2	0	10	0	0	1	0	0	1	1	0	0	3	10	3	13
Mullaitivu	0	0	0	2	1	0	3	2	1	9	0	0	0	2	1	0	0	0	0	3	9	3	12
Kilinochchi	0	0	1	2	0	3	4	1	2	13	0	0	1	0	0	1	0	0	1	3	13	3	16
Total	2	6	231	354	524	761	677	406	147	3108	0	18	227	216	167	196	186	144	37	1191	3108	1191	4299

Table 15: Age and Sex Distribution of Smear Negative New TB Cases by District in 2015

District	Male										Female										Male	Female	Total
	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-Over	Total	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-Over	Total			
Colombo	4	4	12	20	29	50	43	52	13	227	3	5	24	19	14	24	28	24	6	147	227	147	374
Gampaha	2	2	8	15	16	21	41	27	21	153	0	0	7	5	10	14	18	13	7	74	153	74	227
Kalutara	0	0	5	6	3	13	24	11	6	68	4	0	2	1	2	1	8	8	5	31	68	31	99
Kandy	1	2	8	10	20	27	46	25	9	148	5	1	8	8	7	17	14	12	6	78	148	78	226
Matale	1	0	0	3	0	5	9	3	4	25	0	1	1	2	0	2	3	0	1	10	25	10	35
Nuwara Eliya	4	2	4	7	8	8	2	2	0	37	4	0	2	1	5	7	2	2	1	24	37	24	61
Galle	1	2	5	3	4	12	13	14	1	55	0	1	2	4	1	3	6	7	4	28	55	28	83
Matara	0	0	2	1	3	7	10	8	3	34	0	1	1	1	1	0	3	5	0	12	34	12	46
Hambantota	0	0	0	2	0	3	10	4	4	23	0	0	1	1	0	2	1	0	2	7	23	7	30
Jaffna	3	1	0	2	4	3	5	12	1	31	2	0	3	3	3	4	4	5	3	27	31	27	58
Vavuniya	0	0	0	1	2	1	1	3	1	9	1	0	3	2	0	3	4	6	0	19	9	19	28
Batticaloa	0	0	5	5	2	7	3	1	1	24	0	0	0	0	1	1	0	3	0	5	24	5	29
Ampara	1	1	0	0	2	6	6	3	6	25	1	0	1	0	1	4	2	3	1	13	25	13	38
Kalmunai	0	4	2	7	5	14	18	14	5	69	1	1	6	2	5	6	10	6	3	40	69	40	109
Trincomalee	0	0	1	6	5	2	3	13	2	32	2	0	5	2	1	4	5	6	1	26	32	26	58
Kurunegala	2	0	3	8	8	15	24	11	6	77	0	2	2	6	3	7	9	8	8	45	77	45	122
Puttalam	0	0	1	2	5	7	10	3	2	30	0	0	2	0	1	1	0	0	0	4	30	4	34
Anuradhapura	1	0	1	2	1	6	2	0	0	13	1	0	2	0	1	1	0	2	0	7	13	7	20
Polonnaruwa	0	2	1	4	1	3	10	9	0	30	0	0	1	0	0	1	4	0	0	6	30	6	36
Badulla	1	0	2	5	2	7	14	2	0	33	2	2	4	2	0	1	1	2	0	14	33	14	47
Monaragala	0	0	0	0	1	0	4	2	0	7	0	0	0	0	0	1	3	1	0	5	7	5	12
Ratnapura	2	2	5	10	9	8	14	15	4	69	1	1	3	3	3	5	7	4	0	27	69	27	96
Kegalle	0	1	1	6	6	8	17	6	5	50	3	0	7	3	1	2	15	6	1	38	50	38	88
Mannar	0	0	2	0	0	1	1	0	0	4	0	0	0	0	0	0	0	0	0	0	4	0	4
Mullaitivu	0	0	0	2	0	1	4	1	0	8	0	0	1	0	0	2	0	0	2	5	8	5	13
Kilinochchi	0	0	2	0	3	3	2	0	0	10	1	1	2	0	1	1	0	3	0	9	10	9	19
Total	23	23	70	127	139	238	336	241	94	1291	31	16	90	65	61	114	147	126	51	701	1291	701	1992

Table 16: Age and Sex Distribution of All New PTB Cases by District in 2015

District	Male										Female										Male	Female	Total
	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-Over	Total	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-Over	Total			
Colombo	4	5	68	101	173	249	209	151	39	999	3	12	78	62	58	82	71	59	11	147	999	436	1435
Gampaha	2	2	31	52	76	122	124	62	46	517	0	3	24	30	26	32	34	27	13	74	517	189	706
Kalutara	1	0	28	31	50	76	69	38	19	312	4	2	21	19	14	13	20	19	6	31	312	118	430
Kandy	1	3	31	27	44	57	72	49	18	302	5	1	22	20	13	21	23	22	8	78	302	135	437
Matale	1	1	1	11	9	18	23	9	8	81	0	2	5	6	1	6	4	1	2	10	81	27	108
Nuwara Eliya	4	3	18	20	31	31	19	15	4	145	4	1	12	7	18	17	7	2	2	24	145	70	215
Galle	1	2	7	25	30	48	54	45	5	217	0	1	17	17	13	11	20	16	6	28	217	101	318
Matara	1	0	6	6	13	19	26	18	9	98	0	2	7	5	6	7	5	8	5	12	98	45	143
Hambantota	0	0	0	11	6	9	22	7	6	61	0	0	2	5	0	5	4	1	2	7	61	19	80
Jaffna	3	1	10	10	16	23	19	27	5	114	2	0	7	10	10	8	7	9	4	27	114	57	171
Vavuniya	0	0	4	7	9	9	14	5	1	49	1	0	4	2	0	4	5	7	0	19	49	23	72
Batticaloa	0	0	9	8	8	16	14	10	1	66	0	0	2	3	3	8	6	5	0	5	66	27	93
Ampara	1	1	1	0	3	14	10	4	9	43	1	0	2	0	2	5	6	4	1	13	43	21	64
Kalmunai	0	4	3	13	15	33	34	23	7	132	1	1	9	3	8	6	19	10	5	40	132	62	194
Trincomalee	0	0	4	9	8	14	14	19	6	74	2	0	6	5	3	8	5	7	2	26	74	38	112
Kurunegala	2	0	14	19	33	58	71	31	17	245	0	2	10	11	9	17	19	16	10	45	245	94	339
Puttalam	0	0	2	7	15	23	25	10	6	88	0	0	3	4	3	4	5	2	1	4	88	22	110
Anuradhapura	1	0	4	13	14	30	29	11	4	106	1	0	8	8	7	8	11	11	0	7	106	54	160
Polonnaruwa	0	2	2	14	6	11	25	17	0	77	0	0	6	8	3	3	7	4	0	6	77	31	108
Badulla	1	0	7	24	15	26	23	9	2	107	2	3	13	12	4	11	5	8	0	14	107	58	165
Monaragala	0	0	4	7	10	15	9	7	3	55	0	0	3	5	1	6	4	2	1	5	55	22	77
Ratnapura	2	4	28	39	47	47	49	40	13	269	1	3	24	21	16	12	24	13	2	27	269	116	385
Kegalle	0	1	14	21	27	39	42	34	10	188	3	0	27	16	8	11	21	14	4	38	188	104	292
Mannar	0	0	2	0	1	5	4	2	0	14	0	0	1	0	0	1	1	0	0	0	14	3	17
Mullaitivu	0	0	0	4	1	1	7	3	1	17	0	0	1	2	1	2	0	0	2	5	17	8	25
Kilinochchi	0	0	3	2	3	6	6	1	2	23	1	1	3	0	1	2	0	3	1	9	23	12	35
Total	25	29	301	481	663	999	1013	647	241	4399	31	34	317	281	228	310	333	270	88	701	4399	1892	6291

Table 17: Age and Sex Distribution of New EPTB Cases by District in 2015

District	Male										Female										Male	Female	Total
	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-Over	Total	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-Over	Total			
Colombo	25	10	46	51	52	50	56	32	8	330	23	11	44	48	56	52	39	24	11	308	330	308	638
Gampaha	4	4	10	28	25	32	29	14	7	153	1	5	8	24	28	17	32	10	3	128	153	128	281
Kalutara	1	1	13	20	6	20	12	14	2	89	2	4	11	17	20	10	9	5	0	78	89	78	167
Kandy	5	2	8	20	17	22	15	14	2	105	3	3	19	20	19	17	21	7	3	112	105	112	217
Matale	0	1	2	7	11	9	8	3	1	42	0	0	6	6	4	9	4	2	1	32	42	32	74
Nuwara Eliya	0	2	7	7	8	15	9	3	0	51	0	3	4	6	6	11	6	3	0	39	51	39	90
Galle	1	2	9	7	15	19	14	7	3	77	0	1	10	10	12	9	4	2	3	51	77	51	128
Matara	0	0	3	5	8	9	7	5	2	39	0	1	3	5	8	5	3	2	0	27	39	27	66
Hambantota	1	2	3	7	10	2	5	3	0	33	1	2	2	2	5	6	1	4	0	23	33	23	56
Jaffna	0	3	4	8	5	4	9	10	3	46	5	2	5	8	8	3	3	4	2	40	46	40	86
Vavuniya	0	0	1	2	2	2	2	2	0	11	0	0	1	1	4	2	1	0	1	10	11	10	21
Batticaloa	0	1	3	3	3	5	3	4	0	22	1	3	3	4	7	4	1	1	1	25	22	25	47
Ampara	1	0	1	0	1	6	3	1	2	15	0	0	0	1	3	0	1	1	0	6	15	6	21
Kalmunai	0	2	0	1	4	3	3	0	1	14	1	1	2	4	4	2	3	1	1	19	14	19	33
Trincomalee	0	1	1	2	1	6	3	2	0	16	0	2	1	2	1	3	2	0	0	11	16	11	27
Kurunegala	0	2	1	6	17	19	15	13	1	74	0	1	7	14	10	13	13	4	0	62	74	62	136
Puttalam	1	4	4	8	2	2	4	5	1	31	2	0	4	4	5	8	6	3	0	32	31	32	63
Anuradhapura	4	2	1	4	6	12	11	2	0	42	3	3	2	7	10	9	3	1	2	40	42	40	82
Polonnaruwa	0	1	0	5	5	3	2	0	0	16	0	0	1	0	4	3	2	1	0	11	16	11	27
Badulla	2	0	8	7	10	6	6	4	1	44	0	3	8	7	5	6	4	7	1	41	44	41	85
Monaragala	1	0	4	3	2	5	0	2	0	17	0	0	1	2	2	2	0	2	1	10	17	10	27
Ratnapura	0	4	13	22	23	18	15	14	6	115	1	2	8	11	15	12	14	5	3	71	115	71	186
Kegalle	1	1	3	7	8	13	11	5	4	53	0	5	12	8	4	6	5	5	2	47	53	47	100
Mannar	0	0	0	0	3	1	2	0	0	6	0	0	2	1	0	0	0	0	0	3	6	3	9
Mullaitivu	0	0	2	0	3	3	3	1	0	12	0	0	2	0	0	1	0	1	0	4	12	4	16
Kilinochchi	0	0	1	1	1	1	2	1	0	7	0	1	0	3	1	2	2	0	0	9	7	9	16
Total	47	45	148	231	248	287	249	161	44	1460	43	53	166	215	241	212	179	95	35	1239	1460	1239	2699

Table 18: Distribution of Treatment Outcome of All forms of TB by Districts in 2014

District	Total Number Registered	Cured		Treatment Completed		Treatment Success		Confirmed as not due to TB		All Other Deaths		All Deaths		Failure		Lost to Follow up		Not Evaluated		Total
		No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
Colombo	2342	887	37.9	993	42.4	1880	80.3	11	0.5	132	5.6	143	6.1	13	0.6	200	8.5	106	4.5	2342
Gampaha	1066	476	44.7	423	39.7	899	84.3	35	3.3	34	3.2	69	6.5	14	1.3	70	6.6	14	1.3	1066
Kalutara	636	273	42.9	266	41.8	539	84.7	16	2.5	34	5.3	50	7.9	2	0.3	27	4.2	18	2.8	636
Kandy	676	191	28.3	356	52.7	547	80.9	8	1.2	42	6.2	50	7.4	5	0.7	19	2.8	55	8.1	676
Matale	172	65	37.8	86	50.0	151	87.8	1	0.6	11	6.4	12	7.0	1	0.6	0	0.0	8	4.7	172
Nuwara Eliya	250	64	25.6	99	39.6	163	65.2	9	3.6	13	5.2	22	8.8	13	5.2	7	2.8	45	18.0	250
Galle	473	206	43.6	193	40.8	399	84.4	8	1.7	19	4.0	27	5.7	6	1.3	23	4.9	18	3.8	473
Matara	280	107	38.2	128	45.7	235	83.9	8	2.9	19	6.8	27	9.6	5	1.8	0	0.0	13	4.6	280
Hambantota	139	50	36.0	67	48.2	117	84.2	1	0.7	12	8.6	13	9.4	0	0.0	3	2.2	6	4.3	139
Jaffna	256	65	25.4	152	59.4	217	84.8	10	3.9	18	7.0	28	10.9	4	1.6	5	2.0	2	0.8	256
Vavuniya	60	25	41.7	23	38.3	48	80.0	2	3.3	4	6.7	6	10.0	3	5.0	2	3.3	1	1.7	60
Batticaloa	193	88	45.6	73	37.8	161	83.4	2	1.0	8	4.1	10	5.2	1	0.5	4	2.1	17	8.8	193
Ampara	74	30	40.5	38	51.4	68	91.9	5	6.8	0	0.0	5	6.8	0	0.0	0	0.0	1	1.4	74
Kalmunai	177	66	37.3	81	45.8	147	83.1	8	4.5	8	4.5	16	9.0	0	0.0	4	2.3	10	5.6	177
Trincomalee	136	57	41.9	64	47.1	121	89.0	3	2.2	3	2.2	6	4.4	2	1.5	3	2.2	4	2.9	136
Kurunegala	568	202	35.6	283	49.8	485	85.4	17	3.0	22	3.9	39	6.9	4	0.7	17	3.0	23	4.0	568
Puttalam	182	78	42.9	68	37.4	146	80.2	0	0.0	15	8.2	15	8.2	5	2.7	10	5.5	6	3.3	182
Anuradhapura	238	142	59.7	83	34.9	225	94.5	0	0.0	6	2.5	6	2.5	5	2.1	1	0.4	1	0.4	238
Polonnaruwa	143	61	42.7	61	42.7	122	85.3	5	3.5	4	2.8	9	6.3	5	3.5	1	0.7	6	4.2	143
Badulla	234	96	41.0	94	40.2	190	81.2	4	1.7	14	6.0	18	7.7	6	2.6	5	2.1	15	6.4	234
Monaragala	91	46	50.5	32	35.2	78	85.7	1	1.1	7	7.7	8	8.8	0	0.0	0	0.0	5	5.5	91
Ratnapura	551	228	41.4	240	43.6	468	84.9	0	0.0	43	7.8	43	7.8	2	0.4	22	4.0	16	2.9	551
Kegalle	394	191	48.5	164	41.6	355	90.1	5	1.3	20	5.1	25	6.3	3	0.8	1	0.3	10	2.5	394
Mannar	50	12	24.0	31	62.0	43	86.0	4	8.0	2	4.0	6	12.0	0	0.0	1	2.0	0	0.0	50
Mullaitivu	36	15	41.7	15	41.7	30	83.3	4	11.1	0	0.0	4	11.1	0	0.0	1	2.8	1	2.8	36
Kilinochchi	56	28	50.0	22	39.3	50	89.3	0	0.0	0	0.0	0	0.0	1	1.8	4	7.1	1	1.8	56
Total	9473	3749	39.6	4135	43.7	7884	83.2	167	1.8	490	5.2	657	6.9	100	1.1	430	4.5	402	4.2	9473

Table 19: Distribution of Treatment Outcome of All Forms of New (PTB and EPTB) Cases by District in 2014

District	Total Number Registered	Cured		Treatment Completed		Treatment Success		Confirmed as not due to TB		All Other Deaths		All Deaths		Failure		Lost to Follow up		Not Evaluated		Total
		No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
Colombo	2073	782	37.7	918	44.3	901	43.5	11	0.5	107	5.2	118	5.7	12	0.6	160	7.7	83	4.0	2073
Gampaha	980	435	44.4	399	40.7	462	47.1	33	3.4	31	3.2	64	6.5	12	1.2	59	6.0	11	1.1	980
Kalutara	593	254	42.8	257	43.3	256	43.2	15	2.5	27	4.6	42	7.1	1	0.2	23	3.9	16	2.7	593
Kandy	623	176	28.3	335	53.8	189	30.3	8	1.3	35	5.6	43	6.9	5	0.8	17	2.7	47	7.5	623
Matale	161	59	36.6	83	51.6	59	36.6	1	0.6	9	5.6	10	6.2	1	0.6	0	0.0	8	5.0	161
Nuwara Eliya	234	58	24.8	98	41.9	71	30.3	9	3.8	13	5.6	22	9.4	13	5.6	7	3.0	36	15.4	234
Galle	438	194	44.3	181	41.3	204	46.6	8	1.8	19	4.3	27	6.2	4	0.9	16	3.7	16	3.7	438
Matara	268	100	37.3	125	46.6	104	38.8	8	3.0	18	6.7	26	9.7	5	1.9	0	0.0	12	4.5	268
Hambantota	132	46	34.8	67	50.8	48	36.4	1	0.8	11	8.3	12	9.1	0	0.0	3	2.3	4	3.0	132
Jaffna	234	59	25.2	143	61.1	78	33.3	6	2.6	16	6.8	22	9.4	4	1.7	4	1.7	2	0.9	234
Vavuniya	57	24	42.1	23	40.4	26	45.6	2	3.5	3	5.3	5	8.8	3	5.3	2	3.5	0	0.0	57
Batticaloa	177	81	45.8	71	40.1	83	46.9	1	0.6	7	4.0	8	4.5	1	0.6	4	2.3	12	6.8	177
Ampara	70	27	38.6	38	54.3	27	38.6	5	7.1	0	0.0	5	7.1	0	0.0	0	0.0	0	0.0	70
Kalmunai	165	60	36.4	79	47.9	60	36.4	8	4.8	7	4.2	15	9.1	0	0.0	3	1.8	8	4.8	165
Trincomalee	127	53	41.7	63	49.6	54	42.5	3	2.4	1	0.8	4	3.1	2	1.6	1	0.8	4	3.1	127
Kurunegala	483	173	35.8	242	50.1	183	37.9	17	3.5	18	3.7	35	7.2	3	0.6	16	3.3	14	2.9	483
Puttalam	172	71	41.3	66	38.4	73	42.4	0	0.0	15	8.7	15	8.7	5	2.9	9	5.2	6	3.5	172
Anuradhapura	226	132	58.4	82	36.3	132	58.4	0	0.0	6	2.7	6	2.7	5	2.2	1	0.4	0	0.0	226
Polonnaruwa	137	55	40.1	61	44.5	55	40.1	5	3.6	4	2.9	9	6.6	5	3.6	1	0.7	6	4.4	137
Badulla	219	89	40.6	93	42.5	94	42.9	4	1.8	14	6.4	18	8.2	6	2.7	4	1.8	9	4.1	219
Monaragala	89	45	50.6	32	36.0	45	50.6	1	1.1	6	6.7	7	7.9	0	0.0	0	0.0	5	5.6	89
Ratnapura	529	220	41.6	236	44.6	235	44.4	0	0.0	40	7.6	40	7.6	2	0.4	20	3.8	11	2.1	529
Kegalle	376	178	47.3	162	43.1	188	50.0	5	1.3	19	5.1	24	6.4	3	0.8	1	0.3	8	2.1	376
Mannar	44	11	25.0	27	61.4	11	25.0	3	6.8	2	4.5	5	11.4	0	0.0	1	2.3	0	0.0	44
Mullaitivu	34	13	38.2	15	44.1	15	44.1	4	11.8	0	0.0	4	11.8	0	0.0	1	2.9	1	2.9	34
Kilinochchi	51	23	45.1	22	43.1	24	47.1	0	0.0	0	0.0	0	0.0	1	2.0	4	7.8	1	2.0	51
Total	8692	3418	39.3	3918	45.1	7336	84.4	158	1.8	428	4.9	586	6.7	93	1.1	357	4.1	320	3.7	8692

Table 20: Distribution of Treatment Outcome of All New PTB Cases by District in 2014

District	Total Number Registered	Cured		Treatment Completed		Treatment Success		Confirmed as not due to TB		All Other Deaths		All Deaths		Failure		Lost to Follow up		Not Evaluated		Total
		No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
Colombo	1475	782	53.0	404	27.4	1186	80.4	0	0.0	94	6.4	94	6.4	12	0.8	136	9.2	47	3.2	1475
Gampaha	716	435	60.8	167	23.3	602	84.1	24	3.4	24	3.4	48	6.7	11	1.5	54	7.5	1	0.1	716
Kalutara	392	254	64.8	80	20.4	334	85.2	15	3.8	20	5.1	35	8.9	0	0.0	14	3.6	9	2.3	392
Kandy	415	176	42.4	168	40.5	344	82.9	5	1.2	25	6.0	30	7.2	4	1.0	12	2.9	25	6.0	415
Matale	103	59	57.3	28	27.2	87	84.5	1	1.0	8	7.8	9	8.7	1	1.0	0	0.0	6	5.8	103
Nuwara Eliya	164	58	35.4	57	34.8	115	70.1	7	4.3	12	7.3	19	11.6	8	4.9	4	2.4	18	11.0	164
Galle	315	194	61.6	71	22.5	265	84.1	7	2.2	17	5.4	24	7.6	4	1.3	14	4.4	8	2.5	315
Matara	184	100	54.3	55	29.9	155	84.2	4	2.2	14	7.6	18	9.8	5	2.7	0	0.0	6	3.3	184
Hambantota	81	46	56.8	20	24.7	66	81.5	1	1.2	9	11.1	10	12.3	0	0.0	3	3.7	2	2.5	81
Jaffna	151	59	39.1	68	45.0	127	84.1	4	2.6	12	7.9	16	10.6	4	2.6	4	2.6	0	0.0	151
Vavuniya	44	24	54.5	11	25.0	35	79.5	1	2.3	3	6.8	4	9.1	3	6.8	2	4.5	0	0.0	44
Batticaloa	127	81	63.8	29	22.8	110	86.6	1	0.8	3	2.4	4	3.1	1	0.8	2	1.6	10	7.9	127
Ampara	48	27	56.3	16	33.3	43	89.6	5	10.4	0	0.0	5	10.4	0	0.0	0	0.0	0	0.0	48
Kalmunai	136	60	44.1	54	39.7	114	83.8	6	4.4	6	4.4	12	8.8	0	0.0	2	1.5	8	5.9	136
Trincomalee	87	53	60.9	24	27.6	77	88.5	3	3.4	1	1.1	4	4.6	2	2.3	1	1.1	3	3.4	87
Kurunegala	363	173	47.7	136	37.5	309	85.1	14	3.9	12	3.3	26	7.2	3	0.8	12	3.3	13	3.6	363
Puttalam	107	71	66.4	12	11.2	83	77.6	0	0.0	9	8.4	9	8.4	5	4.7	6	5.6	4	3.7	107
Anuradhapura	168	132	78.6	25	14.9	157	93.5	0	0.0	5	3.0	5	3.0	5	3.0	1	0.6	0	0.0	168
Polonnaruwa	104	55	52.9	30	28.8	85	81.7	5	4.8	3	2.9	8	7.7	5	4.8	1	1.0	5	4.8	104
Badulla	155	89	57.4	36	23.2	125	80.6	2	1.3	13	8.4	15	9.7	6	3.9	3	1.9	6	3.9	155
Monaragala	65	45	69.2	12	18.5	57	87.7	1	1.5	4	6.2	5	7.7	0	0.0	0	0.0	3	4.6	65
Ratnapura	357	220	61.6	84	23.5	304	85.2	0	0.0	30	8.4	30	8.4	2	0.6	15	4.2	6	1.7	357
Kegalle	276	178	64.5	69	25.0	247	89.5	5	1.8	14	5.1	19	6.9	3	1.1	1	0.4	6	2.2	276
Mannar	26	11	42.3	10	38.5	21	80.8	3	11.5	1	3.8	4	15.4	0	0.0	1	3.8	0	0.0	26
Mullaitivu	28	13	46.4	11	39.3	24	85.7	2	7.1	0	0.0	2	7.1	0	0.0	1	3.6	1	3.6	28
Kilinochchi	37	23	62.2	9	24.3	32	86.5	0	0.0	0	0.0	0	0.0	1	2.7	3	8.1	1	2.7	37
Total	6124	3418	55.8	1686	27.5	5104	83.3	116	1.9	339	5.5	455	7.4	85	1.4	292	4.8	188	3.1	6124

Table 21: Distribution of Treatment Outcome of New Sputum Positive PTB Cases by District in 2014

District	Total Number Registered	Cured		Treatment Completed		Treatment Success		Confirmed as not due to TB		All Other Deaths		All Deaths		Failure		Lost to Follow up		Not Evaluated		Total
		No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
Colombo	1120	782	69.8	119	10.6	901	80.4	0	0.0	79	7.1	79	7.1	12	1.1	102	9.1	26	2.3	1120
Gampaha	536	425	79.3	27	5.0	452	84.3	16	3.0	17	3.2	33	6.2	10	1.9	41	7.6	0	0.0	536
Kalutara	292	254	87.0	2	0.7	256	87.7	11	3.8	11	3.8	22	7.5	0	0.0	9	3.1	5	1.7	292
Kandy	231	176	76.2	13	5.6	189	81.8	3	1.3	15	6.5	18	7.8	3	1.3	9	3.9	12	5.2	231
Matale	70	59	84.3	0	0.0	59	84.3	1	1.4	7	10.0	8	11.4	1	1.4	0	0.0	2	2.9	70
Nuwara Eliya	101	58	57.4	13	12.9	71	70.3	6	5.9	8	7.9	14	13.9	7	6.9	2	2.0	7	6.9	101
Galle	212	172	81.1	10	4.7	182	85.8	5	2.4	12	5.7	17	8.0	3	1.4	8	3.8	2	0.9	212
Matara	120	100	83.3	4	3.3	104	86.7	2	1.7	7	5.8	9	7.5	5	4.2	0	0.0	2	1.7	120
Hambantota	60	46	76.7	2	3.3	48	80.0	1	1.7	8	13.3	9	15.0	0	0.0	3	5.0	0	0.0	60
Jaffna	91	59	64.8	19	20.9	78	85.7	2	2.2	5	5.5	7	7.7	3	3.3	3	3.3	0	0.0	91
Vavuniya	33	23	69.7	2	6.1	25	75.8	1	3.0	2	6.1	3	9.1	3	9.1	2	6.1	0	0.0	33
Batticaloa	89	81	91.0	2	2.2	83	93.3	1	1.1	2	2.2	3	3.4	1	1.1	2	2.2	0	0.0	89
Ampara	28	27	96.4	0	0.0	27	96.4	1	3.6	0	0.0	1	3.6	0	0.0	0	0.0	0	0.0	28
Kalmunai	67	59	88.1	0	0.0	59	88.1	3	4.5	3	4.5	6	9.0	0	0.0	1	1.5	1	1.5	67
Trincomalee	60	53	88.3	1	1.7	54	90.0	1	1.7	1	1.7	2	3.3	2	3.3	1	1.7	1	1.7	60
Kurunegala	218	173	79.4	5	2.3	178	81.7	10	4.6	6	2.8	16	7.3	3	1.4	10	4.6	11	5.0	218
Puttalam	89	71	79.8	2	2.2	73	82.0	0	0.0	7	7.9	7	7.9	5	5.6	4	4.5	0	0.0	89
Anuradhapura	142	132	93.0	0	0.0	132	93.0	0	0.0	5	3.5	5	3.5	4	2.8	1	0.7	0	0.0	142
Polonnaruwa	71	55	77.5	0	0.0	55	77.5	5	7.0	2	2.8	7	9.9	5	7.0	1	1.4	3	4.2	71
Badulla	114	85	74.6	5	4.4	90	78.9	2	1.8	10	8.8	12	10.5	6	5.3	2	1.8	4	3.5	114
Monaragala	49	45	91.8	0	0.0	45	91.8	0	0.0	3	6.1	3	6.1	0	0.0	0	0.0	1	2.0	49
Ratnapura	251	211	84.1	1	0.4	212	84.5	0	0.0	22	8.8	22	8.8	2	0.8	11	4.4	4	1.6	251
Kegalle	189	170	89.9	7	3.7	177	93.7	1	0.5	8	4.2	9	4.8	3	1.6	0	0.0	0	0.0	189
Mannar	14	11	78.6	0	0.0	11	78.6	3	21.4	0	0.0	3	21.4	0	0.0	0	0.0	0	0.0	14
Mullaitivu	18	13	72.2	2	11.1	15	83.3	1	5.6	0	0.0	1	5.6	0	0.0	1	5.6	1	5.6	18
Kilinochchi	28	23	82.1	1	3.6	24	85.7	0	0.0	0	0.0	0	0.0	1	3.6	2	7.1	1	3.6	28
Total	4293	3363	78.3	237	5.5	3600	83.9	76	1.8	240	5.6	316	7.4	79	1.8	215	5.0	83	1.9	4293

Table 22: Distribution of Treatment Outcome of New Sputum Negative PTB Cases by District in 2014

District	Total Number Registered	Treatment Completed		Confirmed as not due to TB		All Other Deaths		All Deaths		Failure		Lost to Follow up		Not Evaluated		Total
		No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
Colombo	355	285	80.3	0	0.0	15	4.2	15	4.2	0	0.0	34	9.6	21	5.9	355
Gampaha	170	140	82.4	8	4.7	7	4.1	15	8.8	1	0.6	13	7.6	1	0.6	170
Kalutara	100	78	78.0	4	4.0	9	9.0	13	13.0	0	0.0	5	5.0	4	4.0	100
Kandy	184	155	84.2	2	1.1	10	5.4	12	6.5	1	0.5	3	1.6	13	7.1	184
Matale	33	28	84.8	0	0.0	1	3.0	1	3.0	0	0.0	0	0.0	4	12.1	33
Nuwara Eliya	63	44	69.8	1	1.6	4	6.3	5	7.9	1	1.6	2	3.2	11	17.5	63
Galle	78	61	78.2	2	2.6	4	5.1	6	7.7	0	0.0	6	7.7	5	6.4	78
Matara	64	51	79.7	2	3.1	7	10.9	9	14.1	0	0.0	0	0.0	4	6.3	64
Hambantota	21	18	85.7	0	0.0	1	4.8	1	4.8	0	0.0	0	0.0	2	9.5	21
Jaffna	60	49	81.7	2	3.3	7	11.7	9	15.0	1	1.7	1	1.7	0	0.0	60
Vavuniya	10	9	90.0	0	0.0	1	10.0	1	10.0	0	0.0	0	0.0	0	0.0	10
Batticaloa	38	27	71.1	0	0.0	1	2.6	1	2.6	0	0.0	0	0.0	10	26.3	38
Ampara	20	16	80.0	4	20.0	0	0.0	4	20.0	0	0.0	0	0.0	0	0.0	20
Kalmunai	68	54	79.4	3	4.4	3	4.4	6	8.8	0	0.0	1	1.5	7	10.3	68
Trincomalee	27	23	85.2	2	7.4	0	0.0	2	7.4	0	0.0	0	0.0	2	7.4	27
Kurunegala	140	126	90.0	4	2.9	6	4.3	10	7.1	0	0.0	2	1.4	2	1.4	140
Puttalam	18	10	55.6	0	0.0	2	11.1	2	11.1	0	0.0	2	11.1	4	22.2	18
Anuradhapura	26	25	96.2	0	0.0	0	0.0	0	0.0	1	3.8	0	0.0	0	0.0	26
Polonnaruwa	33	30	90.9	0	0.0	1	3.0	1	3.0	0	0.0	0	0.0	2	6.1	33
Badulla	37	31	83.8	0	0.0	3	8.1	3	8.1	0	0.0	1	2.7	2	5.4	37
Monaragala	16	12	75.0	1	6.3	1	6.3	2	12.5	0	0.0	0	0.0	2	12.5	16
Ratnapura	81	69	85.2	0	0.0	6	7.4	6	7.4	0	0.0	4	4.9	2	2.5	81
Kegalle	76	59	77.6	4	5.3	6	7.9	10	13.2	0	0.0	1	1.3	6	7.9	76
Mannar	12	10	83.3	0	0.0	1	8.3	1	8.3	0	0.0	1	8.3	0	0.0	12
Mullaitivu	10	9	90.0	1	10.0	0	0.0	1	10.0	0	0.0	0	0.0	0	0.0	10
Kilinochchi	9	8	88.9	0	0.0	0	0.0	0	0.0	0	0.0	1	11.1	0	0.0	9
Total	1749	1427	81.6	40	2.3	96	5.5	136	7.8	5	0.3	77	4.4	104	5.9	1749

Table 23: Distribution of Treatment Outcome of EPTB Cases by District in 2014

District	Total Number Registered	Treatment Completed		Confirmed as not due to TB		All Other Deaths		All Deaths		Failure		Lost to Follow up		Not Evaluated		Total
		No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
Colombo	598	514	86.0	11	1.8	13	2.2	24	4.0	0	0.0	24	4.0	36	6.0	598
Gampaha	264	232	87.9	9	3.4	7	2.7	16	6.1	1	0.4	5	1.9	10	3.8	264
Kalutara	201	177	88.1	0	0.0	7	3.5	7	3.5	1	0.5	9	4.5	7	3.5	201
Kandy	208	167	80.3	3	1.4	10	4.8	13	6.3	1	0.5	5	2.4	22	10.6	208
Matale	58	55	94.8	0	0.0	1	1.7	1	1.7	0	0.0	0	0.0	2	3.4	58
Nuwara Eliya	70	41	58.6	2	2.9	1	1.4	3	4.3	5	7.1	3	4.3	18	25.7	70
Galle	123	110	89.4	1	0.8	2	1.6	3	2.4	0	0.0	2	1.6	8	6.5	123
Matara	84	70	83.3	4	4.8	4	4.8	8	9.5	0	0.0	0	0.0	6	7.1	84
Hambantota	51	47	92.2	0	0.0	2	3.9	2	3.9	0	0.0	0	0.0	2	3.9	51
Jaffna	83	75	90.4	2	2.4	4	4.8	6	7.2	0	0.0	0	0.0	2	2.4	83
Vavuniya	13	12	92.3	1	7.7	0	0.0	1	7.7	0	0.0	0	0.0	0	0.0	13
Batticaloa	50	42	84.0	0	0.0	4	8.0	4	8.0	0	0.0	2	4.0	2	4.0	50
Ampara	22	22	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	22
Kalmunai	29	25	86.2	2	6.9	1	3.4	3	10.3	0	0.0	1	3.4	0	0.0	29
Trincomalee	40	39	97.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.5	40
Kurunegala	120	106	88.3	3	2.5	6	5.0	9	7.5	0	0.0	4	3.3	1	0.8	120
Puttalam	65	54	83.1	0	0.0	6	9.2	6	9.2	0	0.0	3	4.6	2	3.1	65
Anuradhapura	58	57	98.3	0	0.0	1	1.7	1	1.7	0	0.0	0	0.0	0	0.0	58
Polonnaruwa	33	31	93.9	0	0.0	1	3.0	1	3.0	0	0.0	0	0.0	1	3.0	33
Badulla	64	57	89.1	2	3.1	1	1.6	3	4.7	0	0.0	1	1.6	3	4.7	64
Monaragala	24	20	83.3	0	0.0	2	8.3	2	8.3	0	0.0	0	0.0	2	8.3	24
Ratnapura	172	152	88.4	0	0.0	10	5.8	10	5.8	0	0.0	5	2.9	5	2.9	172
Kegalle	100	93	93.0	0	0.0	5	5.0	5	5.0	0	0.0	0	0.0	2	2.0	100
Mannar	18	17	94.4	0	0.0	1	5.6	1	5.6	0	0.0	0	0.0	0	0.0	18
Mullaitivu	6	4	66.7	2	33.3	0	0.0	2	33.3	0	0.0	0	0.0	0	0.0	6
Kilinochchi	14	13	92.9	0	0.0	0	0.0	0	0.0	0	0.0	1	7.1	0	0.0	14
Total	2568	2232	86.9	42	1.6	89	3.5	131	5.1	8	0.3	65	2.5	132	5.1	2568

Table 25: Distribution of Treatment Outcome of Other TB Cases by District in 2014

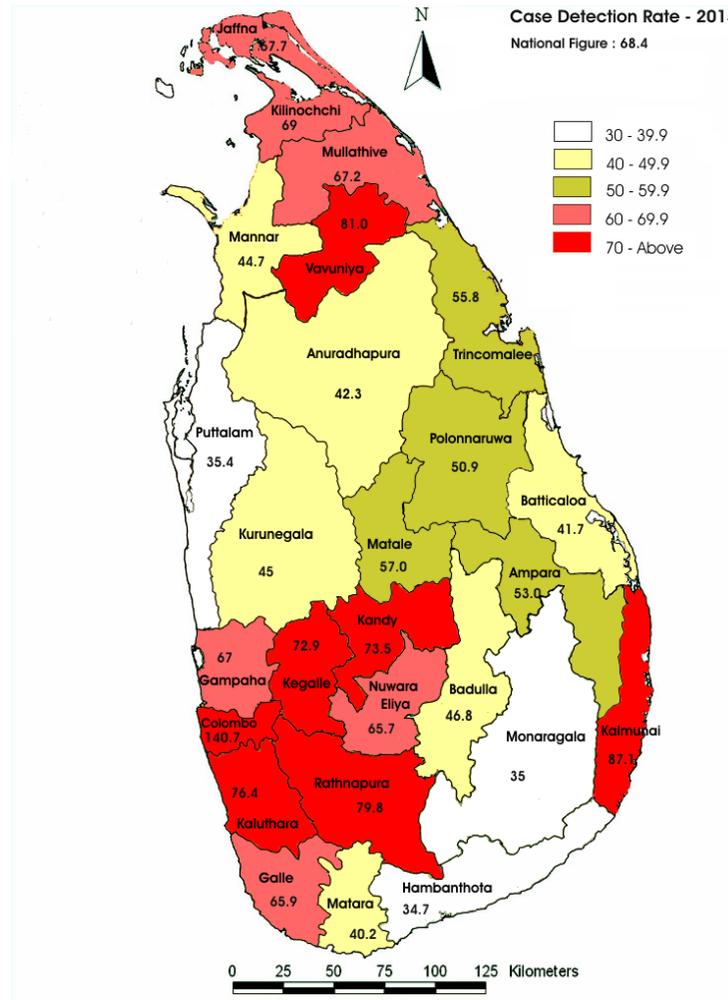
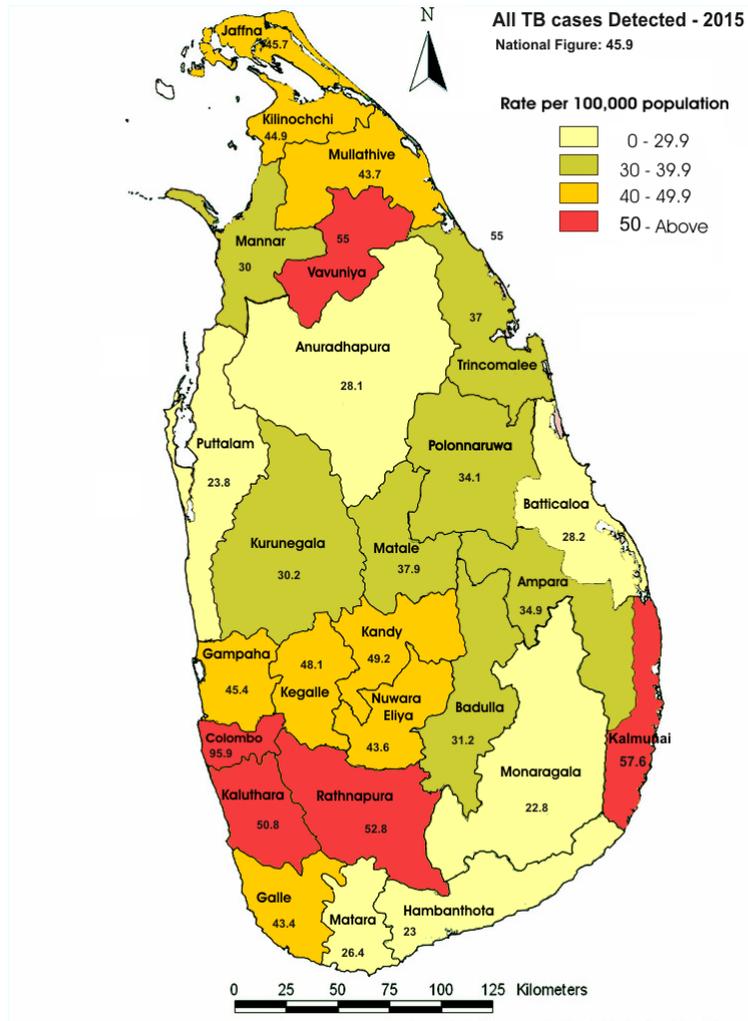
District	Total Number Registered	Cured		Treatment Completed		Treatment Success		Confirmed as not due to TB		All Other Deaths		All Deaths		Failure		Lost to Follow up		Not Evaluated		Total
		No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
Colombo	42	9	21.4	22	52.4	31	73.8	0	0.0	4	9.5	4.0	9.5	0	0.0	3	7.1	4	9.5	42
Gampaha	3	2	66.7	1	33.3	3	100.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	3
Kalutara	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0
Kandy	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0
Matale	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0
Nuwara Eliya	1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	1	100.0	1
Galle	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0
Matara	1	0	0.0	1	100.0	1	100.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	1
Hambantota	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0
Jaffna	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0
Vavuniya	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0
Batticaloa	2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	2	100.0	2
Ampara	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0
Kalmunai	2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	2	100.0	2
Trincomalee	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0
Kurunegala	62	19	30.6	35	56.5	54	87.1	0	0.0	3	4.8	3.0	4.8	0	0.0	0	0.0	5	8.1	62
Puttalam	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0
Anuradhapura	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0
Polonnaruwa	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0
Badulla	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0
Monaragala	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0
Ratnapura	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0
Kegalle	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0
Mannar	0	0	0.0	0	0.0	0	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	0.0	0	0.0	0	0.0	0
Kilinochchi	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0	0.0	0
Total	113	30	26.5	59	52.2	89	78.8	0	0.0	7	6.2	7.0	6.2	0	0.0	3	2.7	14	12.4	113

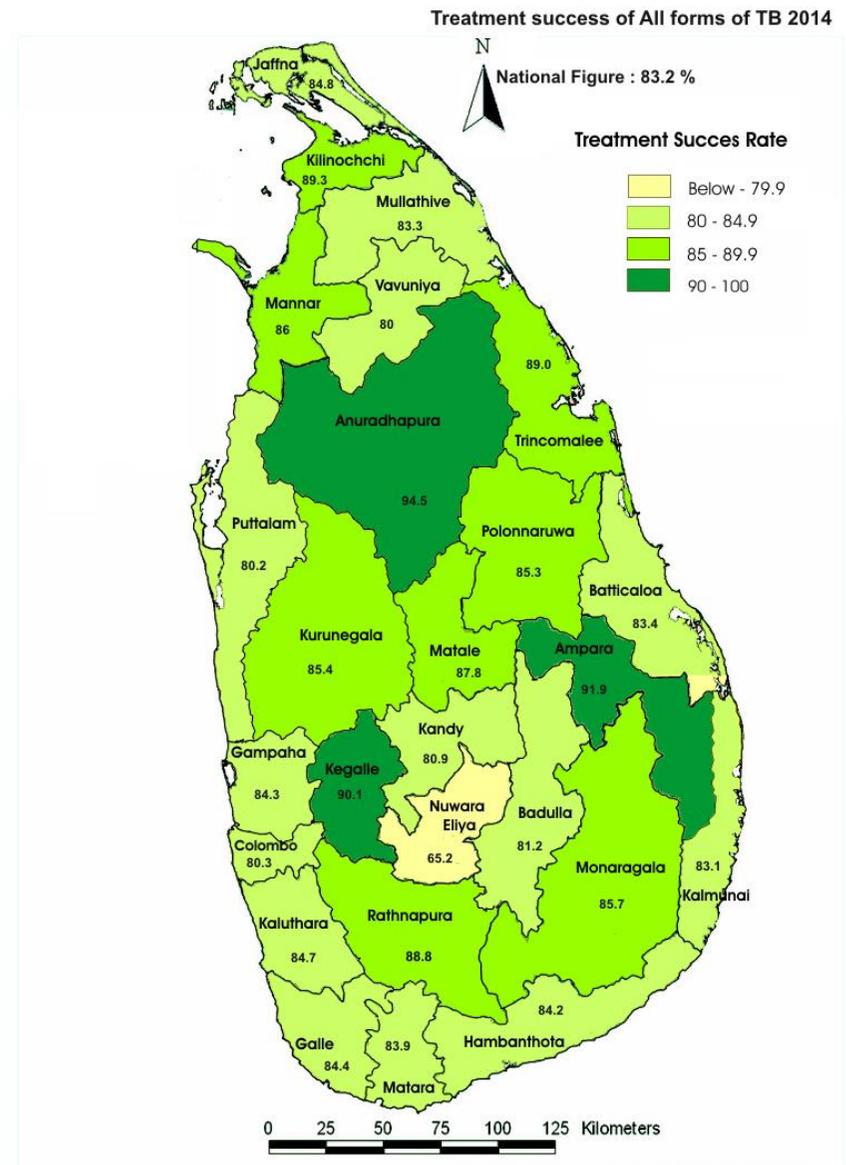
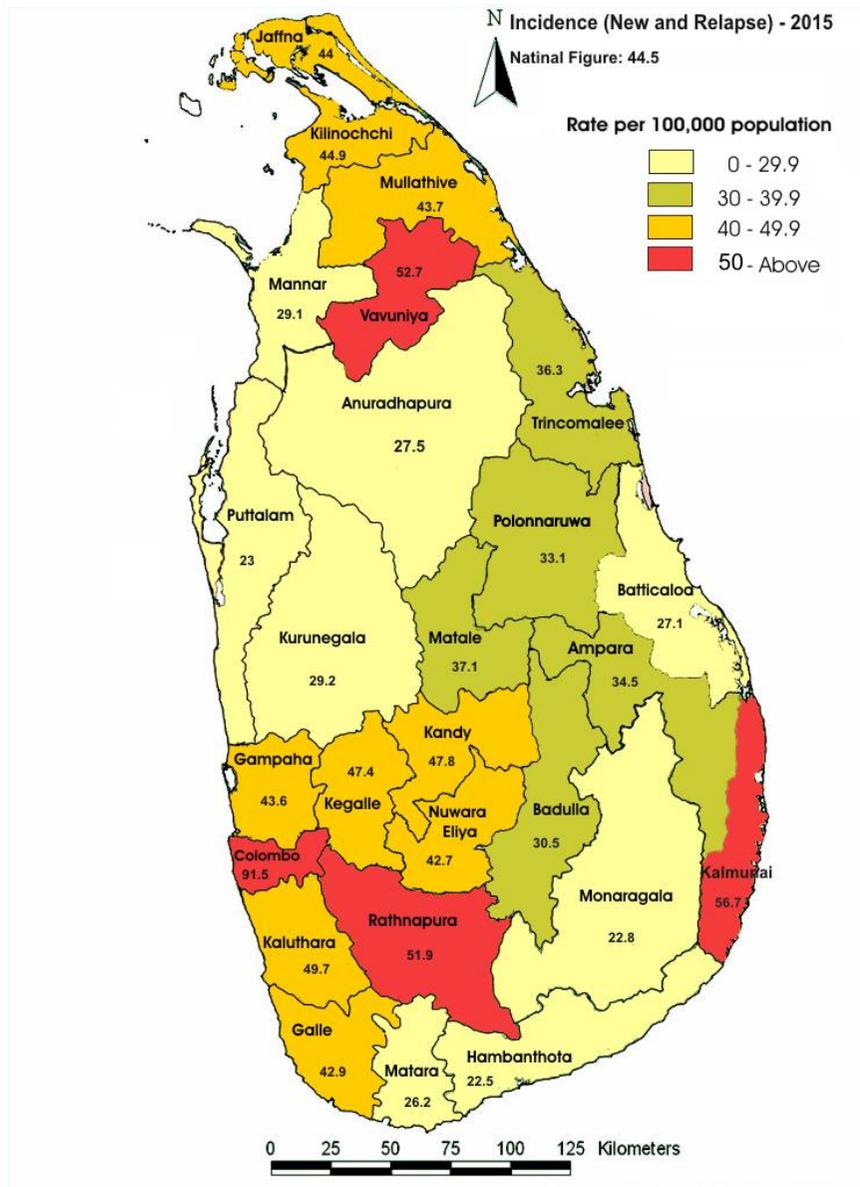
Table 26: Distribution of Sputum Conversion of New PTB Cases at the End of the Intensive Phase by District in 2015

DISTRICT	Total Number Registered	Negative		Positive		Died		Defaulted		Transferred out		No result		Total
		No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
COLOMBO	1061	902	85.0	31	2.9	43	4.1	6	0.6	0	0.0	79	7.4	1061
GAMPAHA	479	393	82.0	48	10.0	18	3.8	13	2.7	0	0.0	7	1.5	479
KALUTARA	331	293	88.5	6	1.8	13	3.9	9	2.7	0	0.0	10	3.0	331
KANDY	211	193	91.5	1	0.5	7	3.3	0	0.0	0	0.0	10	4.7	211
MATALE	73	57	78.1	8	11.0	5	6.8	2	2.7	0	0.0	1	1.4	73
NUWARAELIYA	154	127	82.5	4	2.6	1	0.6	1	0.6	0	0.0	21	13.6	154
GALLE	235	186	79.1	3	1.3	14	6.0	4	1.7	0	0.0	28	11.9	235
MATARA	97	84	86.6	2	2.1	10	10.3	1	1.0	0	0.0	0	0.0	97
HAMBANTOTA	50	47	94.0	0	0.0	1	2.0	2	4.0	0	0.0	0	0.0	50
JAFFNA	113	87	77.0	2	1.8	9	8.0	0	0.0	0	0.0	15	13.3	113
VAVUNIYA	44	32	72.7	2	4.5	7	15.9	2	4.5	0	0.0	1	2.3	44
BATALOIA	64	52	81.3	0	0.0	2	3.1	1	1.6	0	0.0	9	14.1	64
AMPARA	26	21	80.8	0	0.0	3	11.5	0	0.0	0	0.0	2	7.7	26
KALMUNAI	85	71	83.5	1	1.2	10	11.8	0	0.0	0	0.0	3	3.5	85
TRINCOMALEE	54	50	92.6	0	0.0	3	5.6	1	1.9	0	0.0	0	0.0	54
KURUNEGALA	217	186	85.7	10	4.6	7	3.2	2	0.9	0	0.0	12	5.5	217
PUTTALAM	76	67	88.2	1	1.3	3	3.9	3	3.9	0	0.0	2	2.6	76
ANURADAPURA	140	136	97.1	1	0.7	2	1.4	0	0.0	0	0.0	1	0.7	140
POLONNARUWA	72	56	77.8	8	11.1	4	5.6	0	0.0	0	0.0	4	5.6	72
BADULLA	118	89	75.4	1	0.8	5	4.2	0	0.0	0	0.0	23	19.5	118
MONARAGALA	65	49	75.4	0	0.0	1	1.5	0	0.0	0	0.0	15	23.1	65
RATNAPURA	289	274	94.8	2	0.7	6	2.1	3	1.0	0	0.0	4	1.4	289
KEGALLE	204	179	87.7	3	1.5	12	5.9	0	0.0	0	0.0	10	4.9	204
MANNAR	13	9	69.2	0	0.0	2	15.4	1	7.7	0	0.0	1	7.7	13
MULLAITIVU	12	2	16.7	0	0.0	0	0.0	0	0.0	0	0.0	10	83.3	12
KILINOCHCHI	16	13	81.3	1	6.3	0	0.0	0	0.0	0	0.0	2	12.5	16
TOTEL	4299	3655	85.0	135	3.1	188	4.4	51	1.2	0	0.0	270	6.3	4299

Table 27: Distribution of Sputum Conversion of Retreatment PTB Cases at the End of the Intensive Phase by District in 2015

DISTRICT	Total Number Registered	Negative		Positive		Died		Defaulted		Transferred out		No result		Total
		No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
COLOMBO	133	99	74.4	2	1.5	8	6.0	0	0.0	0	0.0	24	18.0	133
GAMPAHA	70	53	75.7	7	10.0	4	5.7	1	1.4	0	0.0	5	7.1	70
KALUTARA	29	22	75.9	1	3.4	2	6.9	3	10.3	0	0.0	1	3.4	29
KANDY	15	11	73.3	0	0.0	0	0.0	0	0.0	0	0.0	4	26.7	15
MATALE	5	5	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5
NUWARAELIYA	14	6	42.9	1	7.1	1	7.1	0	0.0	0	0.0	6	42.9	14
GALLE	15	13	86.7	0	0.0	0	0.0	0	0.0	0	0.0	2	13.3	15
MATARA	11	9	81.8	0	0.0	2	18.2	0	0.0	0	0.0	0	0.0	11
HAMBANTOTA	7	5	71.4	0	0.0	0	0.0	0	0.0	0	0.0	2	28.6	7
JAFFNA	9	8	88.9	0	0.0	1	11.1	0	0.0	0	0.0	0	0.0	9
VAVUNIYA	4	3	75.0	0	0.0	0	0.0	1	25.0	0	0.0	0	0.0	4
BATALOEA	10	3	30.0	0	0.0	0	0.0	0	0.0	0	0.0	7	70.0	10
AMPARA	4	2	50.0	0	0.0	0	0.0	0	0.0	0	0.0	2	50.0	4
KALMUNAI	8	6	75.0	0	0.0	1	12.5	0	0.0	0	0.0	1	12.5	8
TRINCOMALEE	7	5	71.4	0	0.0	0	0.0	0	0.0	0	0.0	2	28.6	7
KURUNEGALA	18	13	72.2	1	5.6	0	0.0	0	0.0	0	0.0	4	22.2	18
PUTTALAM	11	8	72.7	2	18.2	1	9.1	0	0.0	0	0.0	0	0.0	11
ANURADAPURA	7	7	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	7
POLONNARUWA	6	5	83.3	0	0.0	0	0.0	0	0.0	0	0.0	1	16.7	6
BADULLA	11	8	72.7	1	9.1	0	0.0	0	0.0	0	0.0	2	18.2	11
MONARAGALA	3	2	66.7	1	33.3	0	0.0	0	0.0	0	0.0	0	0.0	3
RATNAPURA	21	17	81.0	0	0.0	2	9.5	1	4.8	0	0.0	1	4.8	21
KEGALLE	17	15	88.2	0	0.0	2	11.8	0	0.0	0	0.0	0	0.0	17
MANNAR	4	2	50.0	0	0.0	0	0.0	0	0.0	0	0.0	2	50.0	4
MULLAITIVU	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
KILINOCHCHI	1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0	1
TOTEL	440	327	74.3	16	3.6	24	5.5	6	1.4	0	0.0	67	15.2	440





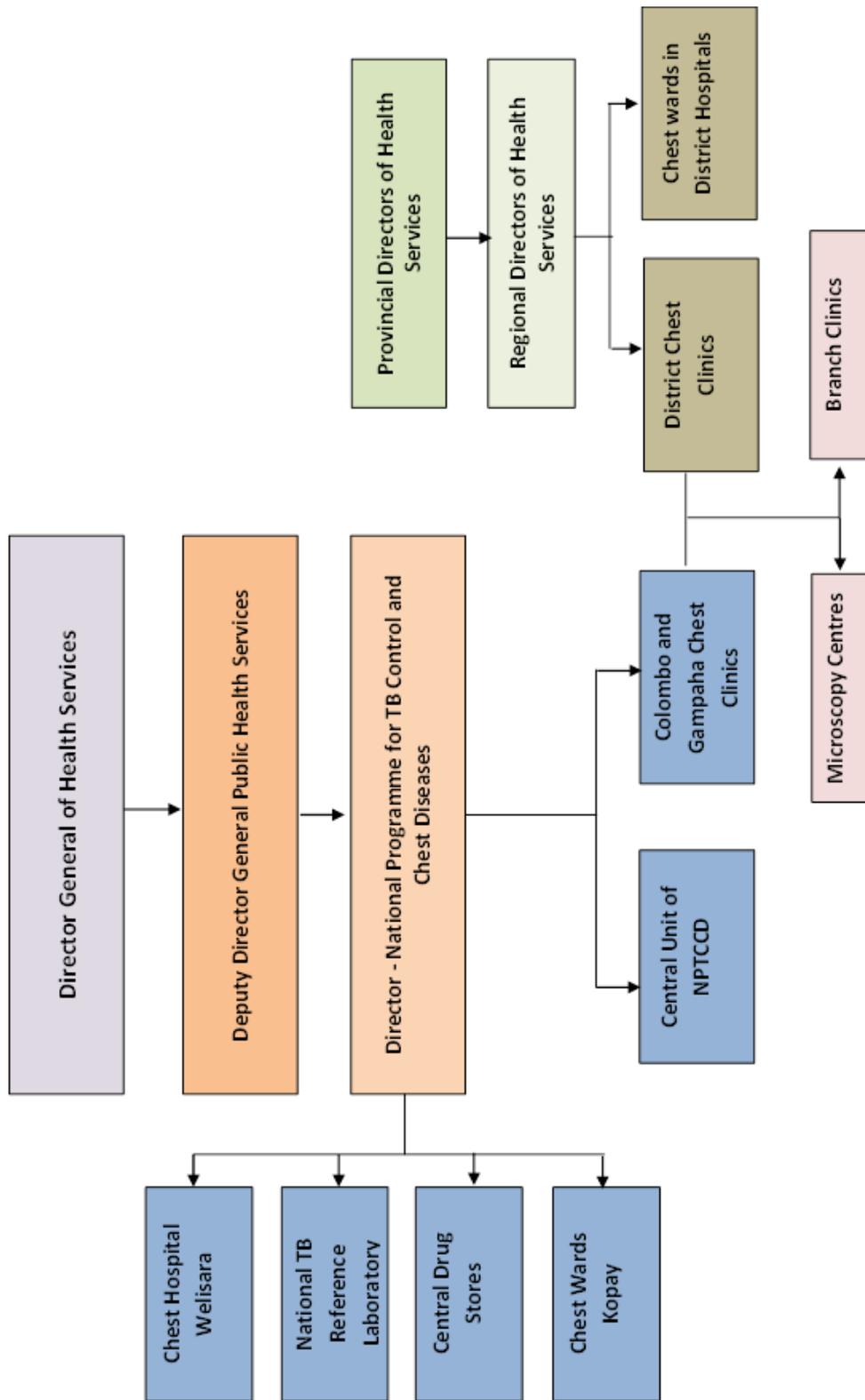


Figure 22: Organizational Structure of National TB Control Program (2015)

Detailed Tables

Programmatic Approach for Lung Health

Hospital	Category of staff	Number trained
Provincial General Hospital Rathnapura	Medical officers	
	Nurses	
General Hospital Kalutatra	Medical Officers	
	Nurses	
Base Hospital Kegalle	Medical officers	
	Nurses	
Base Hospital Homagama	Medical officers	
	Nurses	