# Annual Report of the National Programme for Tuberculosis Control and Chest Diseases

## 2014



National Programme for Tuberculosis Control and Chest Diseases Ministry of Health Sri Lanka

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## 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
РТВ	Pulmonary Tuberculosis
SAARC	South Asian Association for Regional Cooperation
SEARO	Regional Office for South-East Asia (WHO)
STAC	SAARC Tuberculosis and AIDS Centre
ТВ	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 – 2014 which contains the important data on status of Tuberculosis in Sri Lanka in 2014.

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. K.N.Gamini Senevirathne

Director,

NPTCCD

### Preface

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

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

**Part I** of the report gives the performance of the National Tuberculosis Control Programme. Data collected during 2014 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 2014 at central and district level.

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

## PART I Progress Report

### Introduction

#### National Programme for Tuberculosis Control and Chest Diseases

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

NPTCCD provides its services through a network of chest clinics, chest wards and laboratories Inward facilities for TB patients are provided at the National Hospital for Respiratory Diseases situated in Welisara and 12 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 150 functioning microscopy centers.

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

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

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

In addition, NPTCCD is responsible for the formulation of policies and guidelines for control of TB and other respiratory diseases and for planning, implementation, monitoring and evaluation of the TB control activities carried out in the entire country. TB surveillance is another main activity carried out by the NPTCCD. It also acts as a coordinating body between the central ministry and provincial health sector and other governmental and 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 2014 approximately, 220 million rupees was allocated from the government funds and it was mainly used for payment of salaries and wages and for major constructions. In addition, TB control activities are supported by the Global Fund to Fight AIDS Tuberculosis and Malaria (GFATM). WHO provides technical assistance to the programme and Global Drug Facility (GDF) provides Fixed Dose Combination (FDC) of anti TB drugs. In 2014, World Bank also provided financial assistance to upgrade NTRL to Bio Safety Level 3 and to strengthen TB control Activities at provincial Level.

## Methods

#### Vision

Sri Lanka free of Tuberculosis and other respiratory diseases

#### Mission

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

#### **Objectives**

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

#### **Targets**

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

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

Indicator	1990 Estimates	2010 Targets	2015 Targets
Case Detection Rate under DOTS	N/A	N/A 86%	
Treatment Success Rate	nent Success Rate N/A		>85%
Incidence	60/ 100k	42/100K	30/100k
Mortality	10/100k	2.2/100k	2.0/100k

#### Table 1: MDG Targets for 2010 and 2015

#### Surveillance of TB

#### **Notification System**

#### > TB Case Notification

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

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

#### > TB Death Notification

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

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

#### Monthly and Quarterly Records and Returns

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

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

#### **Presentation of Data**

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

#### **Dissemination of Data**

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

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

#### Indices

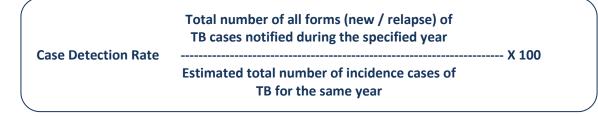
The main indices used to measure the progress in TB control are,

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

#### **Case Detection Rate**

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

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



#### 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 2013 WHO estimates (66.0 per 100,000 population).

#### **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").



#### **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.

	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	
Sputum Conversion Rate	Total number of smear-positive pulmonary TB cases registered for treatment in the same period	

#### 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.

Number of TB cases registered in a specified		)
period that interrupted treatment for more than		
two consecutive months		
Lost to follow up Rate	X 100	
Total number of TB cases registered in the same		
period		J

#### **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.

	Number of TB cases registered in a specified period that died from any reason during the course of the treatment	
Death Rate	Total number of TB cases registered in the same period	X 100

#### **DOTS Population Coverage**

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

## Results

#### **Surveillance of Tuberculosis**

#### **TB** Case Notifications (H 816 A)

During the year 2014, 8409 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 9473 (Table 9).

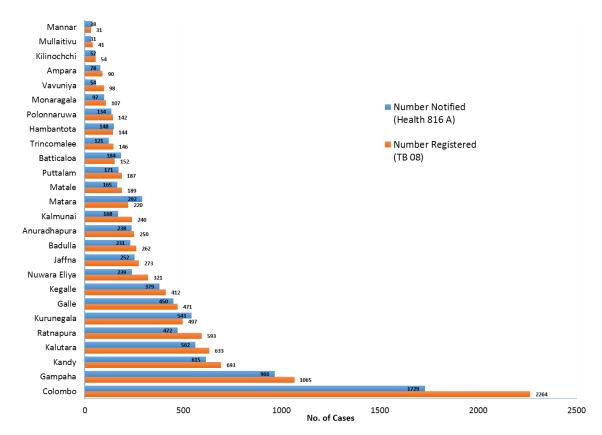


Figure 1: Case Detection and Notification of TB by District in 2014

#### **TB Death Notification (H 814)**

During the year 2014, 309 TB deaths were notified by H 814 (Table 7).

#### **Incidence of Tuberculosis**

The incidence (new and relapse) rate of TB in 2014, in Sri Lanka was 43.7 (8692 new and 288 relapse cases) per 100,000 population (Table 9).

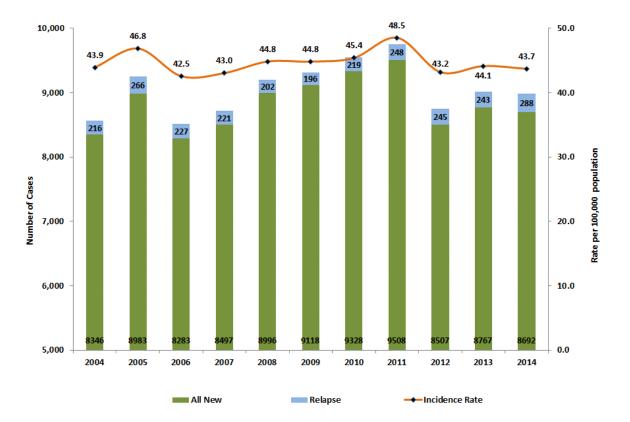
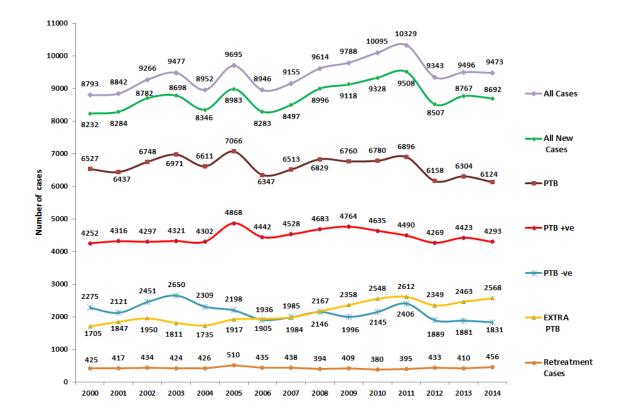


Figure 2: Incidence Rate of TB from 2004 – 2014

#### **Case Detection**

The total number of all forms of TB cases reported from DCCs was 9473. When compared to 2013, there was a slight decrease of all forms of TB in 2014 (Figure 3). Out of this 8692(91.7%) were new cases and 456 were retreatment cases. Out of all new cases, 4293 (49.4%) were smear-positive PTB, 1831 (21.1%) were smear negative PTB and 2568 (29.5%) were EPTB cases (Figure 3). A total of 6124 (64.6%) new pulmonary cases were reported.

A gradual decline of PTB + ve patients was observed during the period of 2009 to 2012. In 2013, there was an increase of PTB + ve cases but in year 2014 there was a slight decrease of PTB + ve cases again.



There is high disparity of detection of TB cases between districts (Figure 5). The highest number of TB cases was detected from Colombo 2342 (24.7%). High numbers of cases were reported from Gampaha (1066), Kandy (676), Kalutara (636), Kurunegala (568) and Ratnapura (551) districts respectively.

Colombo district also accounted for highest number of relapse cases, 76 (26.4%) of total relapse cases and 44.3% (47) of total lost to follow up cases (Table 9). Lowest number of TB cases (36) has been reported from Mullaitivu district.

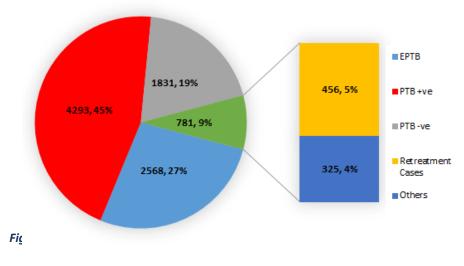


Figure 4: Case Detection of TB by Type in 2014

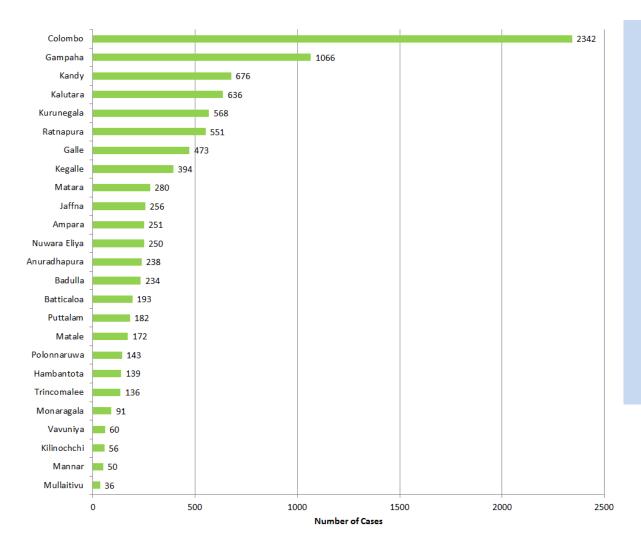


Figure 5: TB Case Detection by District of Registration in 2014

#### **New TB Cases**

There is disparity of distribution of new cases among districts (Figure 5). In Anuradhapura district, more than 60% of cases are sputum positive while in Jaffna, Kandy and Mannar, sputum positive cases account for less than 40% of total cases reported in respective districts. The number of smear negative cases detected was more than the smear positives in Kalmunai district only.

Anuradhapura		62.8					1.5			25.7	
Vavuniya	•		57.9				22.8				
Monaragala	_			55.1			18.0				27.0
Kilino chchi				54.9			17.6				27.5
Gampaha				54.7			18.4				26.9
Colombo				54.0			17.1				28.8
Mullaitivu			5	2.9			29.4				17.6
Badulla			5	2.1		1	8.7				29.2
Polonnaruwa			5	1.8		24	4.1				24.1
Puttalam			5	1.7		-10	).5				37.8
Batticaloa			50	.3		21.	5				28.2
Kegalle			50	.3		23.	1				26.6
National Figure			49.	4		21.1					29.5
Kalutara			49.	2		16.9					33.9
Galle		48.4 23.5			28.1						
Ratnapura	pura 47.4 20.0					32.5					
Trincomalee		47.2 21.3					31.5				
Hambantota			45.5		15.9				38.6		
Kurunegala			45.1			30.0					24.8
Matara			44.8			23.9					31.3
Matale	-		43.5			20.5					36.0
Nuwara Eliya			43.2			26.9					29.9
Kalmunai			40.6		41.	8					17.6
Ampara			40.0		28.6	5					31.4
Jaffna			38.9		25.6						35.5
Kandy			37.1		29.5						33.4
Mannar		3	1.8	2	7.3						40.9
0	1%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
		10/0	2070	3070	4070	5070	0070	/0/0	0070	5070	10070
		New	РТВ		New	PTB		Nev	V EPTB		
		sp+ve	e		sp-ve	2					

Figure 6: Percentage Distribution of New Cases of TB by Type and District in 2014

#### Sputum Smear Positive New Pulmonary TB

The highest number (1120) and rate (48.2 per 100,000 population) of sputum smear positive cases were reported from Colombo district and this accounts for 26% of national figure. Second highest number of smear positive pulmonary TB cases was reported from Gampaha (536) though rate was 22.9 per 100,000 population (Figure 7).

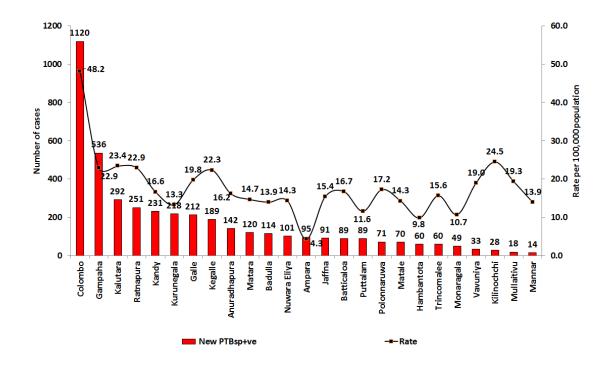


Figure 7: Distribution of Smear Positive New TB Cases Detection by Districts in 2014

High numbers of cases were reported from Kalutara (292), Ratnapura (251) and Kandy (231) districts respectively. However, higher sputum positive rates per 100,000 population were reported from Kilinochchi (24.5), Kalutara (23.4), Ratnapura (22.9) and Kegalle (22.3) districts (Figure 7).

#### Sputum Smear Negative New Pulmonary TB

The highest number and rate of sputum smear negative cases was reported from Colombo district 355(15.3 per 100,000 population). However, higher rates were reported from Ampara (13.5 per 100,000 population), Kandy (13.3 per 100,000 population) and Mannar (11.9 per 100,000) respectively. The number of smear negative cases detected was more than the smear positives in Kalmunai district (Figure 8).

13

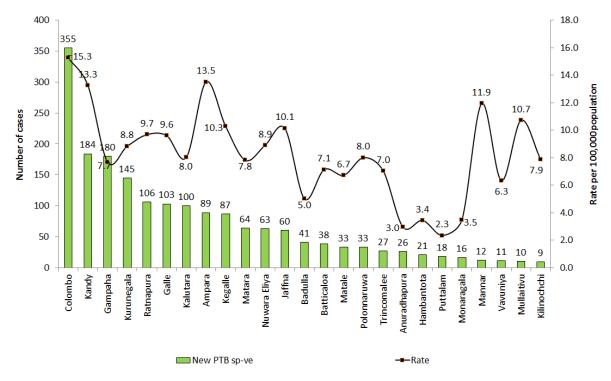


Figure 8: Distribution of Smear Negative New TB Cases Detection by Districts in 2014

#### Extra Pulmonary TB

#### **New EPTB Case Detection**

Total of 2568 cases of new extra pulmonary TB were reported in 2014. Colombo District accounted for highest number and rate of EPTB cases 598 (25.7 per 100,000 population). The second highest rate (17.9 per 100000 population) of EPTB was reported form Mannar though only 18 cases were reported (Figure 9).

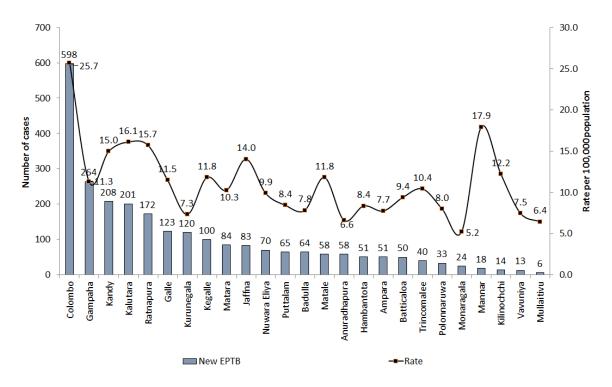


Figure 9: Distribution of New Extra Pulmonary TB Cases Detection by Districts in 2014

#### **Sites of EPTB Cases**

Out of all EPTB cases, TB adenitis accounted for 598 cases (22.5%), and 623 (23.5%) were cases of Tuberculous Pleural Effusion & pleurisy. In addition, 99 (3.7%) cases of Tuberculous Meningitis, 57 (2.1%) cases of Tuberculosis of nervous system-unspecified, 81 (3.1%) cases of Tuberculosis of Eye cases were reported in 2014 (Table 2).

Classification	Number	Percentage
MENINGITIS	99	3.7
TB ADENITIS	598	22.5
PLEURAL EFFUSION/ PLEURISY	623	23.5
EMPYEMA	10	0.4
SPINAL TB	97	3.7
PERICARDITIS	13	0.5
TB IN BONES & JOINTS	130	4.9
INTESTINAL TB	50	1.9
PERITONITIS	18	0.7
GENITO URINARY TB	77	2.9
TB in EYE	81	3.1
CNS	57	2.1
TB in Skin	66	2.5
Larynx	2	0.1
TB OF OTHER ORGANS	731	27.6
TOTAL	2652	100.0

#### Table2: Distribution of All Cases of EPTB Cases by Site in 2014

In 2014, 25 miliary TB cases and 33 patients with primary TB complex were reported.

#### Age and Sex Distribution of New TB Cases

The highest number (1778) of new TB cases was in 45-54 age group. The lowest number was in 0-14 age group (313 cases, 3.6 %) out of 8692 all new cases. 60.3% (5241) were in the productive age group of 15-54. More males (5656, 65%) were detected than the females (3036,35%). The highest number of new TB cases among males was found in the age group of 45-54 years (5656,22.2%), while that in the females was in the same age group 45-54 (3036,17.3%) (Table 13).

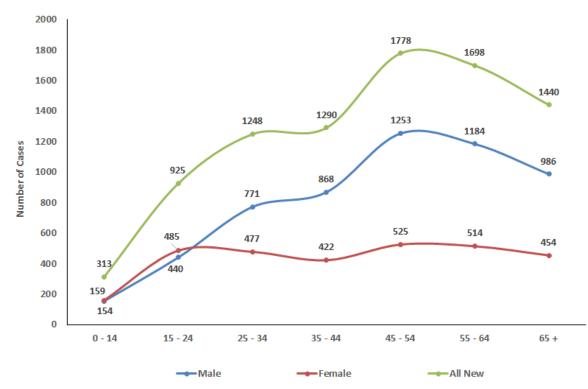


Figure 10: Distribution of All New Cases of TB by Age Group in 2014

#### **Re-Treatment TB Cases**

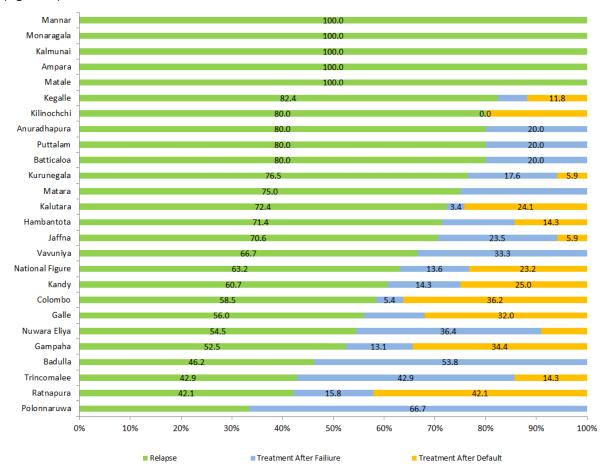
In 2014, 456(4.8%) re-treatment cases were reported. 288(3% out of all cases of TB) *Relapse*, 62 (0.65%) *Treatment after Failure* and 106 (1.1%) *Treatment after lost to follow up* accounted for the total of 456 cases (Table 9).

The highest number of re-treatment cases (130, 28.5%) was reported from Colombo district and the second highest number was from Gampaha district (61,13.4%). The total number of retreatment cases in 2014 was higher than in 2013 (410).

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

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

Colombo, Gampaha, Galle and Rathnapura were the districts which reported higher numbers of *Treatment after* lost to follow up cases. Colombo district contributed a significant number of cases for the national figure



In Mannar, Monaragala, Kalmunai, Ampara and Matale districts, all retreatment cases consisted of relapses. (Figure 11).

Figure 11: Proportion of Re-Treatment Categories by District in 2014

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 2014 and 11(85%) of them were enrolled in treatment.

#### Table 3: Enrollment of MDR TB cases in treatment 2010-214

#### **TB/HIV Co-Infection**

HIV testing of all TB patients was made mandatory since 2014. In 2014, 7409 (78.2%) TB patients were screened for HIV. Of these patients, 12 patients were found positive. In addition, patients were 25 known HIV

	2010	2011	2012	2013	2014
No of MDRTB patient's laboratory confirmed	8	12	5	4	13
No planned to enroll (estimated No)	14	14	14	10	15
No enrolled in the same year	4	5	4	4	11
No enrolled in the next year	1	4	1	-	-
Total No put on Treatment	5 (63%)	9 (75%)	5 (100%)	4 (100%)	11 (85%)

2014

patients at the time of diagnosis of TB contributing to the total of 37 patients with HIV/ TB co-infection in 2014.

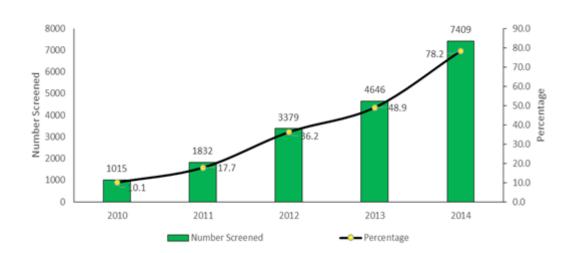


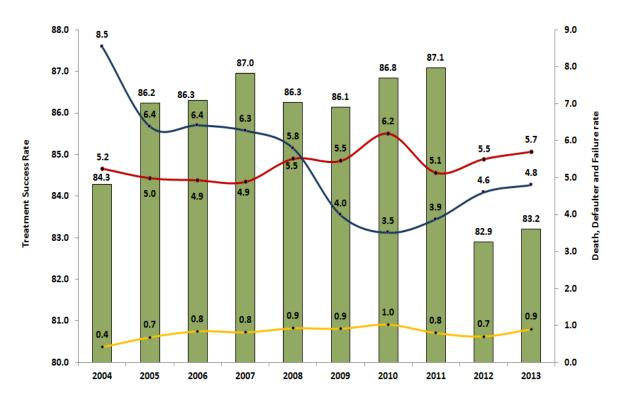
Figure 12: Number and Percentage of TB HIV Screening

#### **Treatment Outcome of Tuberculosis**

Outcome data presented below were based on the information provided for cohort of patients of 2013.

#### **Treatment Outcome of All Forms TB Cases**

Total number of cases registered for treatment in 2013 was 9496. Out of this, outcome of 309(3.3%) cases were not evaluated and in this report, outcome was presented for the rest of the cases (Table 18).





#### Treatment Success Rate

The cure rate among registered cases was 39.6% (3758 cases) and a further 43.6% (4144 cases) completed treatment, accounting for an overall treatment success rate of 83.2% (7902 cases). Though, this shows a slight increase in comparison to 2012 where the treatment success rate was 82.9 (7743 cases), this is well below the WHO target of more than 85% treatment success rate (Figure 11). There were 13 districts with treatment success rate below the global target of 85%. Out of them, Mullaitivu (69.2%), Nuwara-Eliya (70.5%), ,Puttalam(72.1%), Badulla(76.6%), Kurunegala (79.6%), Colombo(80.6%) Kandy(82.2%), Gampaha(82.5%), Jaffna(82.7) and Vauniya (83.1%) were below the national figure. Jaffna district showed the highest treatment completed rate (69.2%) and the lowest cure rate (13.5%) compared to the other districts (Figure 12).

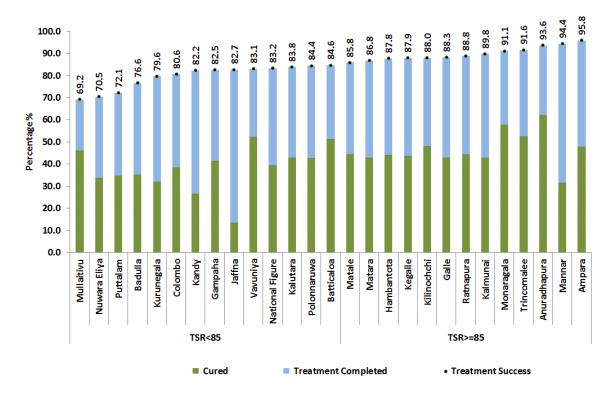


Figure 12: Treatment Success Rate of All Forms of TB According To Districts in 2013

#### Treatment Failure Rate

The treatment failure rate was 0.9% in 2013. An increase of treatment failure rate have been observed when compared to 2012 in contrast to the slightly decreasing trend observed since 2009. Ampara district accounted for the highest failure rate (4.2%).Nuwara-Eliya (3.4%) and Baticaloa (2.6%) also accounted for the high failure rates (Table 18).

#### Lost to Follow Up Rate

The Lost to Follow Up rate was 4.8% in Sri Lanka in 2013 and there was a slight increase (4.6%) when compared year 2012. The highest Lost to Follow Uprate was reported in Colombo (8.2%). Gampaha (8.1%), Mullathive (7.7%), Jaffna (6.0%), Kaluthara (5.4%) and Nuwara-Eliya (5.3%) also accounted for high Lost to Follow Up rates (Table 18).

#### Death Rate

There were 542(5.7%) deaths among the cohort of TB patients registered in year 2013. The highest number of deaths were reported from Colombo district (134,5.8%). More than forty deaths were reported in Kandy (42,5.8%), Kalutara (41,6%), Gampaha (41,4%) districts. Though number of deaths were very low, the highest death rate was reported from Mullathive District (4, 15.4%). Nineteen districts showed the death rate above the 5% (Table 18).

#### In depth analysis of deaths

158 deaths occurred among the above cohort were further analyzed and reported to the central unit of the NPTCCD by TB 17. Out of this, 62 deaths were confirmed as not due to TB and immediate or underline cause of death was established as TB for 69 cases. Cause of death was not mentioned in 16 cases.

#### **Treatment Outcome of New PTB Cases**

#### Treatment Success Rate

In 2013, 6304 new PTB cases were registered for treatment. Of these cases, 161(2.6%) were in the category of "not been evaluated". The cure rate among registered cases was 55.6% (3507 cases) and a further 1835(29.1%) completed treatment, giving an overall treatment success rate of 84.7% (5342). The lowest treatment success rate was shown in Nuwara-Eliya district (68.9%).Colombo, Gampaha, Kandy, Nuwara-Eliya, Mullathive, Badulla and Puttalam districts were below the global target 85% of TSR (Table 20).

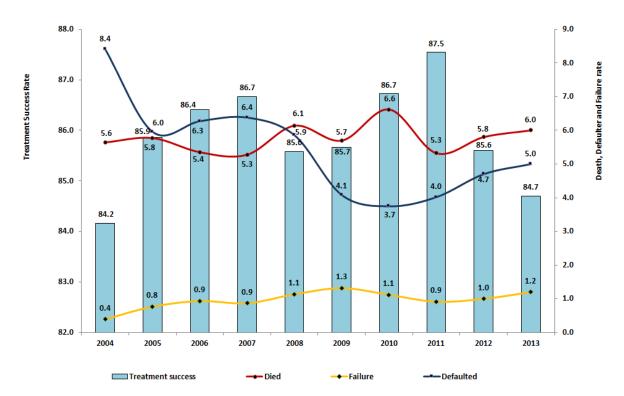


Figure 13: Treatment Outcome of New Pulmonary TB Cases from 2004-2013

#### Treatment Failure Rate

Treatment failure rate among all new cases was 1.2%. A gradual increasing trend of treatment failure rate have been observed since 2011. The highest rate (5.7% of all new PTB cases) was reported from Ampara District (Table 20).

2014

#### Lost to Follow Up Rate

The Lost to Follow Up rate was 5 % among all new cases. The highest Lost to Follow Up rate was reported in Colombo (9.4%). Gampaha (8.7%), Mullathive (6.3%), Jaffna (5.8%),Kandy (7.1%), Kaluthara (5.6%) and Nuwara-Eliya (5.6%) also accounted for high Lost to Follow Up rates which were above the global target of 5% (Table 20).

#### > Death Rate

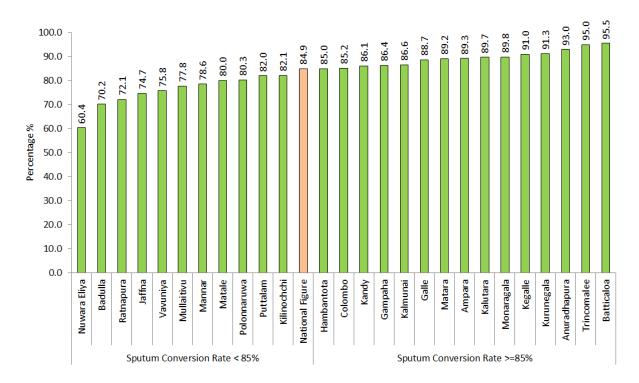
The death rate was 6% among all new PTB cases and the highest death rate was in Mullathive District 18.8% (13).

Puttalam (9.8%), Kilinochchi (9.4%), Kalmunai (9%) and Matale (8.7%) 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 84.9% in 2014 and varied from lowest of 60.4% (Nuwara-Eliya) to highest of 95.5% (Baticaloa) (Figure 14).



Treatment Success Rate

In 2013, 4423 new smear positive cases were registered for treatment. Of these cases, 85 (1.9 %) were in the category of not been evaluated. The cure rate among registered cases was 79.3 % (3507) and a further 5.9%(263) completed treatment, giving an overall treatment success rate of 85.2% (3770). The lowest treatment success rate(70.5%) was shown in Nuwara-Eliya district. Colombo, Gampaha, Kandy, Jaffna, Puttalam , Polonnaruwa and Badulla districts were below the global target (85% of TSR). Kilinochchi district (95.7%) showed the highest rate. Treatment success of more than 85% was observed in 18 districts (Figure 15).

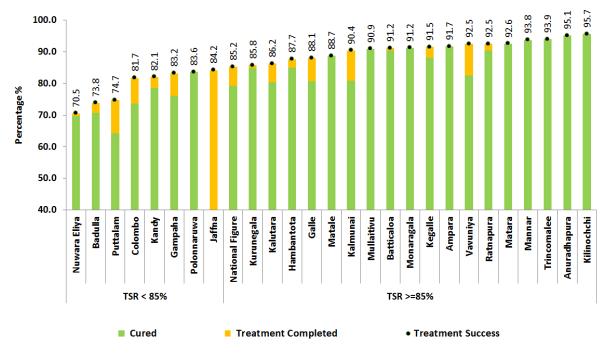


Figure 15: Treatment Success Rates of New Smear Positive Cases by Districts in 2013

#### Treatment Failure Rate

The failure rate among new sputum smear positive cases was 1.5% in 2013. Five districts had not reported any treatment failures in 2013. The highest failure rate was 8.3%(2) which was reported from Ampara district (Table 21).

#### Lost to Follow Up Rate

The Lost to Follow Up rate among new sputum smear positive cases was 5.4%(240) in 2013. The highest Lost to Follow Up rate was reported in Colombo district. Higher Lost to Follow Up rates were reported from Gampaha [8.9%] Colombo (8.3%), Jaffna [7.4%] and Puttalam [6.3%] while ten districts reported zero lost to follow up rates (Table 21).

#### > Death Rate

The death rate (5.3%,236 cases) in 2013 was almost the same when compared with 2012 (5.5%). The highest death rate was reported from Kalmunai (9.6%,7 cases). Mullathive

(9.1%,1case) Monaragala (8.8%,5 cases) and Matale (8.5%, 6 cases) also account for higher death rates (Table 21).

#### **Treatment Outcome of Re-Treatment Patients**

In 2013, of the 410 registered retreatment cases, only 247 cases were cured while another 33 cases had completed treatment giving a treatment success rate of 68.3%. The low treatment success rate in this group was mainly due to the high lost to follow up rate of 12.9% (53 cases) and high death rate of 8.5% (35 cases). In addition, there were 7(1.7%) treatment failures among retreatment cases in 2013. For another 31 (7.6%) cases out come was not evaluated (Table24).

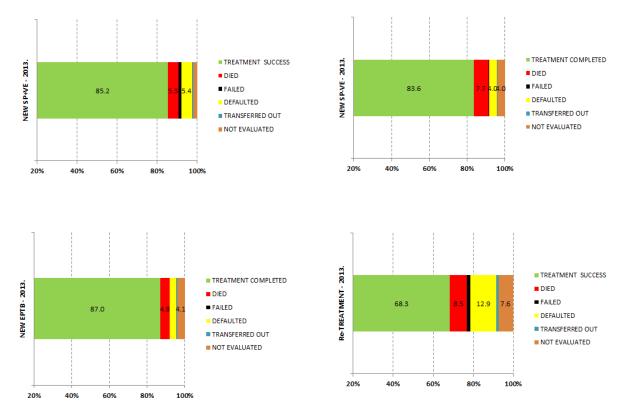


Figure 16: Treatment Outcome Summary of TB Patients (New Smear Positive, New Smear Negative New EPTB and Re-Treatment) in 2013

#### **DOTS Coverage**

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

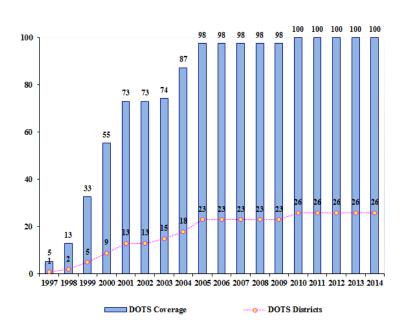




Figure 17: DOTS Coverage from 1997-2014 with Map of Year Achieved

## PART II Activity Report

Several important activities were carried out in 2014 in view of improving the quality of services provided by the NPTCCD

#### Epidemiological Review

Epidemiological Review which was started in December 2013 was completed in 2014. This review was conducted by a local consultant and the main aims of the review were to identify predetermining factors for sudden drop of cases of TB in 2012.

• Joint Monitoring Mission (JMM)

A joint monitoring mission (JMM) comprised of experts from World Health Organization, South East Asian Regional Office of WHO, The Union, Green Light Committee, Global Drug facility and GFATM was held in mid-2014 to evaluate the TB control programme of the country. The team visited Colombo, Kandy and Jaffna Districts and carried out a comprehensive review of all the aspects of TB Control.

• Revision of National Strategic Plan for 2015- 2020

The NPTCCD has revised the existing National Strategic Plan for TB Control for the period of 2015- 2020 with technical assistance of an external consultant in order to implement the recommendations of JMM and to be in par with WHO new post 2015 strategies for TB Control.

• Grant making activities for GFATM New Funding Model

The NPTCCD has successfully submitted the concept note to the GFATM which was a requirement for new funding model of the GFATM.

In addition, following activities were carried out during the year 2014.

- 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.
- The diagnostic facilities were further expanded by initiation of construction of culture laboratories in TH Karapitiya and in Jaffna.

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- > The main construction work on BSL laboratory was completed in 2014
- 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.
- ➤ Drug stores of 10 district chest clinics were refurbished.
- 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 monitor the activities carried out by district staff and 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.

• Word TB day was commemorated on 24<sup>th</sup> March 2014 in Colombo under the theme of "4000 undetected, A TB Test, Treatment and cure for all" with the participation of large number of different stakeholders.

• Word Asthma Day was celebrated in May 2014 with collaboration of College of Pulmonologists of Sri Lanka and a website "Asthma Podththo was Launched on the same day.

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## **Major Challenges**

#### The followings factors were identified as major challenges.

- 1. Maintaining adequate number of human resources in the face of high turnover of trained staff
- 2. Reaching the unreached population groups such as population groups with limited access to services i.e urban poor, prisoners, estate workers, drug addicts
- 3. Provision of services to migrants who come for temporary employment and returnees from India
- 4. Strengthening early detection of TB cases
- 5. Reduction of TB deaths
- 6. Overcoming the TB-related stigma
- 7. Provision of social benefits and nutritional support for TB patients and their families
- 8. Financial sustainability of the National Tuberculosis Programme

# PART III Administration Report

#### **OPD Attendance and Ward Admissions**

During the year 2014, 192,537 new patients were registered at District Chest Clinics. Out of these patients, 79,049(41.1%) were self-referrals. Others included referrals from general health institutions or private practitioners 43,854(22.8%), contacts of TB patients 10,075(5.2%) and persons came for medical examinations 59,559 (30.9%). Therteen chest wards situated in different types of hospitals in the country provide inward care for TB

Health Facility	Total OPD Attendance	No of	Inward patients	5				
	(First Visits)	beds	ТВ		Nor	n TB		
			Male	Female	Male	Female		
Chest Clinics	192,537							
Chest Wards								
PGH Badulla		37	135	33	738	387		
TH Batticaloa		15	113	85	45	31		
BH Udugama		22	43	5	0	0		
DH Корау		20	385	70	0	0		
DGH Kalutara		60	262	115	711	499		
DH Kandy		0	152	41	978	358		
DGH Matale		41	39	3	84	3		
BH Puttalam		28	92	37	0	0		
DH Eheliyagoda		65	0	0	0	0		
BH Cheddikkulam		153	38	18	2241	2226		
TH Anuradhapura		33	116	28	321	236		
Total		474	1375	435	5118	3740		

#### Table 3: Utilization of TB/Respiratory Curative Care Facilities in 2014

#### **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.

Institution	Sputum Microscopy	Spu <sup>.</sup> Culture S	tum pecimens	Culture of Other specimens		
	No. done	No. done	No. +ve	No. done	No. +ve	
Microscopy Centres	166,909					
DCC Laboratories	220,889					
Culture Lab Kandy	21,980	3033	207	1688	45	
Culture Lab Ratnapura	8,948	576	73	33	4	
NTRL						

#### Table 4: Utilization of Diagnostic Care Facilities in 2014

#### > Testing By WHO recommended Rapid Diagnostics (Xpert MTB/RIF)

At present Xpert MTB/RIF (gene Xpert) facilities are available only at NTRL Walisara and in 2014, Xpert test was performed on 1713 specimens.

#### 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 & Chest Hospital, Welisara to 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 2014, 18,299 slides were checked for EQA and 10(1.01%) false positives and 22(0.13%) false negatives were identified (Table 5).

Initial Reading	No. of slides checked	True	Low	High	Percentage of discordance
+ve slides	991	981	4	6	1.01
-ve slides	17308	17286	5	17	0.13

#### Table 5: EQA Results of Sputum Smear Microscopy in 2014

## **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 2014 at the Chest Clinics were as follows.

<ul> <li>Number of Micro Films</li> </ul>	: 182 ( + 50 Rolls)
✓ Number of Large Films	: 93,198
✓ Total	: 93,380 ( + 50 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 Milliary TB. (Disseminated TB).In 2014, 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 1834 revaccination carried out in chest clinics in 2014.

**Detailed Tables** 

	P	ТВ	EP	тв	То	tal	PTB P	ositive
Year	Νο	Rate	No	Rate	No	Rate	No	Rate
2004	7164	36.7	1525	7.8	8689	44.6	4629	23.7
2005	7927	40.1	1521	7.7	9448	47.9	5241	26.5
2006	6771	33.9	1831	9.2	8602	43.0	4892	24.5
2007	6845	33.8	1969	9.7	8814	43.5	4805	23.7
2008	7041	34.3	2173	10.6	9214	44.9	4941	24.1
2009	7271	35.0	2372	11.4	9643	46.4	5186	25.0
2010	7055	33.5	2430	11.6	9485	45.1	4925	23.4
2011	6789	33.5	2420	11.9	9209	45.4	4465	22.0
2012	6169	30.4	2353	11.6	8522	42.1	4276	21.1
2013	6062	29.7	2166	10.6	8228	40.3	4342	21.3
2014	5818	28.3	2525	12.3	8343	40.6	4108	20.0

#### Table 6: Notification of New TB Cases in Sri Lanka from 2004 – 2014

Source: Health 816 A

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

	Mort	tality				
Year	Number	Rate per 100,000 population				
2004	422	2.2				
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				

Source: Health 816 A

# Table 8: Distribution Rates of all TB cases by District of Residence in 2014

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	Estimated	No. of Cases	No. of Cases
District	Mid-Year	Detected	Per 100,000
	Population		Population
Colombo	2,326,006	2342	100.7
Gampaha	2,341,690	1066	45.5
Kalutara	1,247,389	636	51.0
Kandy	1,387,766	676	48.7
Matale	490,754	172	35.0
Nuwara Eliya	707,295	250	35.3
Galle	1,072,154	473	44.1
Matara	818,922	280	34.2
Hambantota	610,660	139	22.8
Jaffna	591,691	256	43.3
Kilinochchi	114,484	56	48.9
Mullaitivu	93,257	36	38.6
Vavuniya	173,955	60	34.5
Mannar	100,463	50	49.8
Batticaloa	532,625	193	36.2
Ampara	658,598	251	38.1
Trincomalee	383,571	136	35.5
Kurunegala	1,640,390	568	34.6
Puttalam	769,838	182	23.6
Anuradhapura	879,159	238	27.1
Polonnaruwa	412,339	143	34.7
Badulla	818,102	234	28.6
Monaragala	458,509	91	19.8
Ratnapura	1,095,086	551	50.3
Kegalle	846,841	394	46.5
Total	20,571,542	9473	46.0

## Table 9: All TB Case Detection by District of Registration in 2014

		New Cases					Oth	iers				
District	РТВ SS + ve	PTB SS - ve	ЕРТВ	Total	Relapse	SS +ve	SS -ve	ЕРТВ	Total	Treatment After Failure	Treatment After Default	Total
Colombo	1120	355	598	2073	76	40	37	62	139	7	47	2342
Gampaha	536	180	264	980	32	6	11	8	25	8	21	1066
Kalutara	292	100	201	593	21	0	3	11	14	1	7	636
Kandy	231	184	208	623	17	1	16	8	25	4	7	676
Matale	70	33	58	161	6	0	2	3	5	0	0	172
Nuwara Eliya	101	63	70	234	6	0	1	4	5	4	1	250
Galle	212	103	123	438	14	0	3	7	10	3	8	473
Matara	120	64	84	268	6	0	0	4	4	2	0	280
Hambantota	60	21	51	132	5	0	0	0	0	1	1	139
Jaffna	91	60	83	234	12	0	4	1	5	4	1	256
Kilinochchi	28	9	14	51	4	0	0	0	0	0	1	56
Mullaitivu	18	10	6	34	2	0	0	0	0	0	0	36
Vavuniya	33	11	13	57	2	0	0	0	0	1	0	60
Mannar	14	12	18	44	1	0	2	3	5	0	0	50
Batticaloa	89	38	50	177	8	1	3	2	6	2	0	193
Ampara	28	20	22	70	4	0	0	0	0	0	0	74
Kalmunai	67	69	29	165	8	1	2	1	4	0	0	177
Trincomalee	60	27	40	127	3	0	2	0	2	3	1	136
Kurunegala	218	145	120	483	13	2	41	25	68	3	1	568
Puttalam	89	18	65	172	8	0	0	0	0	2	0	182
Anuradhapura	142	26	58	226	8	0	1	1	2	2	0	238
Polonnaruwa	71	33	33	137	2	0	0	0	0	4	0	143
Badulla	114	41	64	219	6	0	1	1	2	7	0	234
Monaragala	49	16	24	89	2	0	0	0	0	0	0	91
Ratnapura	251	106	172	529	8	1	2	0	3	3	8	551
Kegalle	189	87	100	376	14	0	0	1	1	1	2	394
Total	4293	1831	2568	8692	288	52	131	142	325	62	106	9473

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				•	•	1	Number of I	Patients	•		•	
Province	Smear Positive	Rate	Smear Negative	Rate	ЕРТВ	Rate	All New	Rate	Re-treatment	Rate	All TB	Rate
Western	1948	32.9	635	10.7	1063	18.0	3646	61.6	220	3.7	4044	68.4
Central	402	15.5	280	10.8	336	13.0	1018	39.4	45	1.7	1098	42.5
Sorthern	392	15.7	188	7.5	258	10.3	838	33.5	40	1.6	892	35.7
Northern	184	17.1	102	9.5	134	12.5	420	39.1	28	2.6	458	42.7
Eastern	244	15.5	154	9.8	141	9.0	539	34.2	29	1.8	580	36.8
North Western	307	12.7	163	6.8	185	7.7	655	27.2	27	1.1	750	31.1
North Central	213	16.5	59	4.6	91	7.0	363	28.1	16	1.2	381	29.5
Uva	163	12.8	57	4.5	88	6.9	308	24.1	15	1.2	325	25.5
Sabaragamuwa	440	22.7	193	9.9	272	14.0	905	46.6	36	1.9	945	48.7
Total	4293	20.9	1831	8.9	2568	12.5	8692	42.3	456	2.2	9473	46.0

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Age Group	Smear Positive Rate		Smear Negative	Rate	ЕРТВ	Rate	All New	Rate
0 - 14	39	0.7	95	1.7	179	3.3	313	5.7
15 - 24	450	11.8	131	3.4	344	9.0	925	24.2
25 - 34	585	17.4	193	5.7	470	14.0	1248	37.1
35 - 44	687	25.8	175	6.6	428	16.1	1290	48.5
45 - 54	1007	61.6	346	21.2	425	26.0	1778	108.7
55 - 64	870	81.2	408	38.1	420	39.2	1698	158.4
65 +	655	25.7	483	18.9	302	11.8	1440	56.4
Total	4293	20.9	1831	8.9	2568	12.5	8692	42.3

## Table 11: Distribution of new cases of TB by Age and Type in 2014

Table 12: Distribution of New Cases of TB by Age and Sex in 2014

		Male			Female			Total	
Age Group	Estimated Mid-Year Population	No	Rate	Estimated Mid-Year Population	No	Rate	Estimated Mid-Year Population	No	Rate
0 - 14	2,799,787	154	5.5	2,653,729	159	6.0	5,453,516	313	5.7
15 - 24	1,689,373	440	26.0	2,139,440	485	22.7	3,828,813	925	24.2
25 - 34	1,690,981	771	45.6	1,676,581	477	28.5	3,367,562	1248	37.1
35 - 44	1,098,520	868	79.0	1,563,437	422	27.0	2,661,957	1290	48.5
45 - 54	833,148	1253	150.4	802,290	525	65.4	1,635,438	1778	108.7
55 - 64	569,832	1184	207.8	501,946	514	102.4	1,071,778	1698	158.4
65 +	1,300,121	986	75.8	1,252,357	454	36.3	2,552,478	1440	56.4
Total	9,981,762	5656	56.7	10,589,780	3036	28.7	20,571,542	8692	42.3

District	0	-5	5-:	L4	15	-24	25	-34	35	-44	45	-54	55	-64	65	-74	>	75	То	otal	Total
District	М	F	м	F	м	F	м	F	м	F	м	F	м	F	м	F	м	F	М	F	TOLAI
Colombo	25	32	21	20	110	127	179	113	206	99	334	123	276	116	143	74	49	26	1343	730	2073
Gampaha	2	4	8	7	40	50	95	54	105	42	165	57	132	55	94	28	31	11	672	308	980
Kalutara	3	2	5	6	27	30	44	35	63	28	76	31	85	40	56	38	14	10	373	220	593
Kandy	12	7	11	9	37	39	45	29	63	27	69	39	90	44	47	29	16	10	390	233	623
Matale	2	0	2	2	13	4	17	12	13	6	18	11	31	9	12	3	5	1	113	48	161
Nuwara Eliya	4	2	4	4	23	18	26	22	13	11	19	18	28	15	13	11	2	1	132	102	234
Galle	1	0	1	3	21	20	51	22	45	21	74	23	56	19	48	11	17	5	314	124	438
Matara	0	1	1	0	7	9	20	14	21	10	34	12	54	16	30	10	22	7	189	79	268
Hambantota	0	0	1	2	6	5	13	6	12	8	19	12	10	14	14	4	5	1	80	52	132
Jaffna	0	0	5	1	8	10	19	9	23	14	31	20	33	19	21	13	7	1	147	87	234
Kilinochchi	0	0	0	0	2	3	3	3	1	2	9	2	9	4	8	5	0	0	32	19	51
Mullaitivu	0	1	0	1	2	1	2	1	2	2	3	4	7	1	2	5	0	0	18	16	34
Vavuniya	0	0	1	0	3	7	6	4	6	1	7	5	9	1	5	0	2	0	39	18	57
Mannar	0	0	1	0	2	3	6	3	3	2	3	7	3	5	6	0	0	0	24	20	44
Batticaloa	0	0	5	6	13	16	16	2	14	12	18	9	23	7	14	12	7	3	110	67	177
Ampara	0	0	2	1	4	3	2	1	8	1	9	5	11	2	9	4	8	0	53	17	70
Kalmunai	1	0	1	3	10	4	12	5	17	13	27	12	24	7	15	8	6	0	113	52	165
Trincomalee	0	1	1	1	6	4	9	8	14	11	16	7	19	12	6	7	3	2	74	53	127
Kurunegala	0	1	4	9	23	12	38	16	62	21	75	27	60	43	38	29	16	9	316	167	483
Puttalam	1	0	5	1	8	8	17	13	14	5	32	12	24	5	13	6	6	2	120	52	172
Anuradhapura	1	3	4	6	11	14	20	13	22	4	50	14	32	9	15	6	1	1	156	70	226
Polonnaruwa	0	2	1	1	5	3	17	7	20	7	25	8	16	6	14	1	3	1	101	36	137
Badulla	2	1	1	2	14	18	21	18	22	11	33	11	34	11	11	4	4	1	142	77	219
Monaragala	1	0	1	2	3	9	17	5	8	4	8	5	13	2	7	0	4	0	62	27	89
Ratnapura	1	1	7	9	25	39	47	42	59	37	62	29	49	21	49	20	27	5	326	203	529
Kegalle	3	1	2	4	17	29	29	20	32	23	37	22	56	31	37	28	4	1	217	159	376
Total	59	59	95	100	440	485	771	477	868	422	1253	525	1184	514	727	356	259	98	5656	3036	8692

#### Table 13: Age and Sex Distribution of All New TB Cases by District in 2014

District	0	-5	5-	14	15	-24	25	-34	35	-44	45	-54	55	-64	65
District	М	F	М	F	М	F	М	F	М	F	М	F	М	F	М
Colombo	0	0	2	4	53	56	96	45	131	50	241	62	186	56	78
Gampaha	0	0	0	0	16	29	54	25	65	17	111	27	88	21	48
Kalutara	0	0	0	2	13	12	24	16	35	12	47	7	51	14	32
Kandy	0	0	1	0	18	18	18	9	32	5	38	11	43	13	17
Matale	0	0	1	0	4	1	6	3	10	1	11	6	13	3	7
Nuwara Eliya	0	0	0	2	13	11	10	13	8	4	6	7	12	3	4
Galle	0	0	0	1	9	12	25	11	25	8	45	6	24	9	22
Matara	0	0	1	0	3	6	11	3	10	7	18	6	24	6	11
Hambantota	0	0	0	0	2	3	8	1	7	1	8	5	5	4	9
Jaffna	0	0	0	0	4	1	8	1	13	5	14	9	17	6	6
Kilinochchi	0	0	0	0	1	0	1	2	1	1	5	2	6	2	5
Mullaitivu	0	1	0	1	1	1	1	0	2	1	1	1	5	0	2
Vavuniya	0	0	0	0	3	3	1	2	5	0	7	2	7	1	0
Mannar	0	0	0	0	1	0	4	1	2	1	2	0	0	1	2
Batticaloa	0	0	0	0	6	11	4	1	6	6	15	5	12	5	5
Ampara	0	0	0	0	3	1	0	1	5	0	4	2	4	1	4
Kalmunai	0	0	0	0	5	2	7	2	7	4	15	5	11	1	4
Trincomalee	0	0	0	0	2	1	3	2	5	4	12	2	13	5	3
Kurunegala	0	0	1	6	13	8	20	5	34	4	46	4	27	13	16
Puttalam	0	0	0	0	7	2	10	8	7	0	16	4	15	2	10
Anuradhapura	0	0	2	3	8	7	14	4	19	0	34	6	25	4	13
Polonnaruwa	0	0	1	0	3	2	8	3	13	1	15	5	8	2	6
Badulla	0	0	1	1	8	9	11	8	15	5	20	2	20	3	6
Monaragala	0	0	0	1	2	3	10	1	7	2	5	2	8	0	5
Ratnapura	0	0	0	5	9	16	23	17	37	12	40	7	22	12	24

65 - 74

> 75

м

Total

м

F

Total

#### Table 14: Age and Sex Distribution of Smear Positive New TB Cases by District in 2014

Kegalle

Total

## Table 15: Age and Sex Distribution of Smear Negative New TB Cases by District in 2014

	0	-5	5-	14	15	-24	25	-34	35	-44	45	-54	55	-64	65	-74	>	75	То	tal	
District	М	F	М	F	М	F	м	F	м	F	М	F	М	F	М	F	М	F	М	F	Total
Colombo	9	8	4	5	14	25	20	21	21	7	48	15	48	19	45	18	22	6	231	124	355
Gampaha	1	0	2	2	5	5	11	8	13	3	27	13	21	13	33	9	12	2	125	55	180
Kalutara	2	0	1	2	3	2	4	3	2	3	9	8	15	9	15	14	5	3	56	44	100
Kandy	9	7	5	7	7	6	8	6	11	5	17	11	23	12	20	15	10	5	110	74	184
Matale	0	0	0	0	4	2	4	0	1	1	2	1	8	3	3	1	2	1	24	9	33
Nuwara Eliya	4	0	4	0	3	1	6	4	1	2	7	7	8	6	5	5	0	0	38	25	63
Galle	0	0	0	0	2	5	8	5	6	2	17	9	17	5	15	4	7	1	72	31	103
Matara	0	0	0	0	1	0	2	3	6	1	6	1	13	5	12	4	9	1	49	15	64
Hambantota	0	0	0	0	0	1	0	0	2	0	2	3	2	4	5	1	1	0	12	9	21
Jaffna	0	0	3	0	0	4	2	4	2	6	7	4	11	4	4	5	4	0	33	27	60
Kilinochchi	0	0	0	0	0	1	0	1	0	0	1	0	1	0	3	2	0	0	5	4	9
Mullaitivu	0	0	0	0	0	0	0	1	0	1	2	0	2	1	0	3	0	0	4	6	10
Vavuniya	0	0	0	0	0	0	4	1	0	0	0	1	1	0	4	0	0	0	9	2	11
Mannar	0	0	0	0	0	0	0	0	1	0	0	3	2	3	3	0	0	0	6	6	12
Batticaloa	0	0	1	1	1	0	4	1	3	1	2	1	8	2	6	5	1	1	26	12	38
Ampara	0	0	0	0	0	0	1	0	1	0	1	0	6	1	5	2	3	0	17	3	20
Kalmunai	0	0	0	0	3	1	4	1	3	6	10	4	12	6	9	7	3	0	44	25	69
Trincomalee	0	1	0	0	1	0	2	2	4	0	3	3	5	3	2	0	1	0	18	9	27
Kurunegala	0	0	0	0	2	0	8	3	11	10	23	12	20	20	16	8	5	7	85	60	145
Puttalam	0	0	0	0	0	2	1	0	0	1	4	2	3	1	2	1	0	1	10	8	18
Anuradhapura	0	0	0	2	0	1	1	2	1	2	10	3	1	1	0	2	0	0	13	13	26
Polonnaruwa	0	0	0	1	0	1	3	0	3	4	5	0	6	2	7	0	1	0	25	8	33
Badulla	1	1	0	1	3	4	1	3	4	1	7	2	8	4	1	0	0	0	25	16	41
Monaragala	0	0	0	1	0	2	3	2	1	0	1	0	3	1	1	0	1	0	10	6	16
Ratnapura	0	0	2	2	5	6	8	7	9	8	11	9	15	4	7	5	7	1	64	42	106
Kegalle	2	1	1	2	4	4	5	5	4	1	6	6	12	8	15	10	0	1	49	38	87
Total	28	18	23	26	58	73	110	83	110	65	228	118	271	137	238	121	94	30	1160	671	1831

#### Table 16: Age and Sex Distribution of All New PTB Cases by District in 2014

	0	-5	5	-14	15	-24	25	-34	35	-44	45	-54	55	-64	65	-74	>	75	То	tal	
District	м	F	М	F	м	F	м	F	М	F	М	F	М	F	М	F	М	F	м	F	Total
Colombo	9	8	6	9	67	81	116	66	152	57	289	77	234	75	123	51	37	18	1033	442	1475
Gampaha	1	0	2	2	21	34	65	33	78	20	138	40	109	34	81	23	25	10	520	196	716
Kalutara	2	0	1	4	16	14	28	19	37	15	56	15	66	23	47	29	13	7	266	126	392
Kandy	9	7	6	7	25	24	26	15	43	10	55	22	66	25	37	18	14	6	281	134	415
Matale	0	0	1	0	8	3	10	3	11	2	13	7	21	6	10	2	5	1	79	24	103
Nuwara Eliya	4	0	4	2	16	12	16	17	9	6	13	14	20	9	9	10	2	1	93	71	164
Galle	0	0	0	1	11	17	33	16	31	10	62	15	41	14	37	9	14	4	229	86	315
Matara	0	0	1	0	4	6	13	6	16	8	24	7	37	11	23	9	14	5	132	52	184
Hambantota	0	0	0	0	2	4	8	1	9	1	10	8	7	8	14	3	5	1	55	26	81
Jaffna	0	0	3	0	4	5	10	5	15	11	21	13	28	10	10	9	6	1	97	54	151
Kilinochchi	0	0	0	0	1	1	1	3	1	1	6	2	7	2	8	4	0	0	24	13	37
Mullaitivu	0	1	0	1	1	1	1	1	2	2	3	1	7	1	2	4	0	0	16	12	28
Vavuniya	0	0	0	0	3	3	5	3	5	0	7	3	8	1	4	0	2	0	34	10	44
Mannar	0	0	0	0	1	0	4	1	3	1	2	3	2	4	5	0	0	0	17	9	26
Batticaloa	0	0	1	1	7	11	8	2	9	7	17	6	20	7	11	11	6	3	79	48	127
Ampara	0	0	0	0	3	1	1	1	6	0	5	2	10	2	9	3	5	0	39	9	48
Kalmunai	0	0	0	0	8	3	11	3	10	10	25	9	23	7	13	8	6	0	96	40	136
Trincomalee	0	1	0	0	3	1	5	4	9	4	15	5	18	8	5	6	2	1	57	30	87
Kurunegala	0	0	1	6	15	8	28	8	45	14	69	16	47	33	32	19	14	8	251	112	363
Puttalam	0	0	0	0	7	4	11	8	7	1	20	6	18	3	12	5	3	2	78	29	107
Anuradhapura	0	0	2	5	8	8	15	6	20	2	44	9	26	5	13	4	1	0	129	39	168
Polonnaruwa	0	0	1	1	3	3	11	3	16	5	20	5	14	4	13	1	3	1	81	23	104
Badulla	1	1	1	2	11	13	12	11	19	6	27	4	28	7	7	3	2	0	108	47	155
Monaragala	0	0	0	2	2	5	13	3	8	2	6	2	11	1	6	0	4	0	50	15	65
Ratnapura	0	0	2	7	14	22	31	24	46	20	51	16	37	16	31	17	21	2	233	124	357
Kegalle	2	1	1	4	12	24	20	14	26	14	33	15	39	18	29	20	3	1	165	111	276
Total	28	19	33	54	273	308	502	276	633	229	1031	322	944	334	591	268	207	72	4242	1882	6124

#### Table 17: Age and Sex Distribution of New EPTB Cases by District in 2014

District	0	-5	5-	14	15	-24	25	-34	35	-44	45	-54	55	-64	65	-74	>	75	То	tal	Tetel
District	м	F	м	F	м	F	М	F	М	F	М	F	м	F	М	F	М	F	М	F	Total
Colombo	16	24	15	11	43	46	63	47	54	42	45	46	42	41	20	23	12	8	310	288	598
Gampaha	1	4	6	5	19	16	30	21	27	22	27	17	23	21	13	5	6	1	152	112	264
Kalutara	1	2	4	2	11	16	16	16	26	13	20	16	19	17	9	9	1	3	107	94	201
Kandy	3	0	5	2	12	15	19	14	20	17	14	17	24	19	10	11	2	4	109	99	208
Matale	2	0	1	2	5	1	7	9	2	4	5	4	10	3	2	1	0	0	34	24	58
Nuwara Eliya	0	2	0	2	7	6	10	5	4	5	6	4	8	6	4	1	0	0	39	31	70
Galle	1	0	1	2	10	3	18	6	14	11	12	8	15	5	11	2	3	1	85	38	123
Matara	0	1	0	0	3	3	7	8	5	2	10	5	17	5	7	1	8	2	57	27	84
Hambantota	0	0	1	2	4	1	5	5	3	7	9	4	3	6	0	1	0	0	25	26	51
Jaffna	0	0	2	1	4	5	9	4	8	3	10	7	5	9	11	4	1	0	50	33	83
Kilinochchi	0	0	0	0	1	2	2	0	0	1	3	0	2	2	0	1	0	0	8	6	14
Mullaiti∨u	0	0	0	0	1	0	1	0	0	0	0	3	0	0	0	1	0	0	2	4	6
Vavuniya	0	0	1	0	0	4	1	1	1	1	0	2	1	0	1	0	0	0	5	8	13
Mannar	0	0	1	0	1	3	2	2	0	1	1	4	1	1	1	0	0	0	7	11	18
Batticaloa	0	0	4	5	6	5	8	0	5	5	1	3	3	0	3	1	1	0	31	19	50
Ampara	0	0	2	1	1	2	1	0	2	1	4	3	1	0	0	1	3	0	14	8	22
Kalmunai	1	0	1	3	2	1	1	2	7	3	2	3	1	0	2	0	0	0	17	12	29
Trincomalee	0	0	1	1	3	3	4	4	5	7	1	2	1	4	1	1	1	1	17	23	40
Kurunegala	0	1	3	3	8	4	10	8	17	7	6	11	13	10	6	10	2	1	65	55	120
Puttalam	1	0	5	1	1	4	6	5	7	4	12	6	6	2	1	1	3	0	42	23	65
Anuradhapura	1	3	2	1	3	6	5	7	2	2	6	5	6	4	2	2	0	1	27	31	58
Polonnaruwa	0	2	0	0	2	0	6	4	4	2	5	3	2	2	1	0	0	0	20	13	33
Badulla	1	0	0	0	3	5	9	7	3	5	6	7	6	4	4	1	2	1	34	30	64
Monaragala	1	0	1	0	1	4	4	2	0	2	2	3	2	1	1	0	0	0	12	12	24
Ratnapura	1	1	5	2	11	17	16	18	13	17	11	13	12	5	18	3	6	3	93	79	172
Kegalle	1	0	1	0	5	5	9	6	6	9	4	7	17	13	8	8	1	0	52	48	100
Total	31	40	62	46	167	177	269	201	235	193	222	203	240	180	136	88	52	26	1414	1154	2568

District	Cu	red		ment oleted	Treatmen	t Success	Di	ed	Fai	lure	Defa	ulted	Transfer	red Out	Not Ev	aluated	Total
	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
Colombo	886	38.5	968	42.1	1854	80.6	134	5.8	17	0.7	189	8.2	0	0.0	81	3.5	2300
Gampaha	422	41.5	417	41.0	839	82.5	41	4.0	12	1.2	82	8.1	17	1.7	19	1.9	1017
Kalutara	294	42.8	282	41.0	576	83.8	41	6.0	5	0.7	37	5.4	0	0.0	15	2.2	687
Kandy	191	26.5	401	55.7	592	82.2	42	5.8	5	0.7	19	2.6	2	0.3	45	6.3	720
Matale	69	44.5	64	41.3	133	85.8	14	9.0	1	0.6	1	0.6	0	0.0	5	3.2	155
Nuwara Eliya	89	33.7	97	36.7	186	70.5	14	5.3	9	3.4	14	5.3	0	0.0	41	15.5	264
Galle	216	42.9	228	45.3	444	88.3	18	3.6	4	0.8	20	4.0	10	2.0	1	0.2	503
Matara	94	42.9	96	43.8	190	86.8	12	5.5	2	0.9	0	0.0	0	0.0	4	1.8	219
Hambantota	65	44.2	64	43.5	129	87.8	8	5.4	1	0.7	4	2.7	0	0.0	5	3.4	147
Jaffna	36	13.5	184	69.2	220	82.7	18	6.8	2	0.8	16	6.0	0	0.0	1	0.4	266
Kilinochchi	24	48.0	20	40.0	44	88.0	4	8.0	0	0.0	1	2.0	0	0.0	1	2.0	50
Mullaitivu	12	46.2	6	23.1	18	69.2	4	15.4	0	0.0	2	7.7	0	0.0	1	3.8	26
Vavuniya	34	52.3	20	30.8	54	83.1	8	12.3	0	0.0	1	1.5	0	0.0	1	1.5	65
Mannar	17	31.5	34	63.0	51	94.4	2	3.7	1	1.9	0	0.0	0	0.0	0	0.0	54
Batticaloa	120	51.3	78	33.3	198	84.6	21	9.0	6	2.6	0	0.0	0	0.0	5	2.1	234
Ampara	23	47.9	23	47.9	46	95.8	0	0.0	2	4.2	0	0.0	0	0.0	0	0.0	48
Kalmunai	63	42.9	69	46.9	132	89.8	13	8.8	0	0.0	1	0.7	0	0.0	1	0.7	147
Trincomalee	69	52.7	51	38.9	120	91.6	9	6.9	1	0.8	1	0.8	0	0.0	0	0.0	131
Kurunegala	179	32.0	267	47.7	446	79.6	29	5.2	3	0.5	19	3.4	1	0.2	13	2.3	560
Puttalam	66	34.7	71	37.4	137	72.1	16	8.4	2	1.1	8	4.2	9	4.7	18	9.5	190
Anuradhapura	165	62.3	83	31.3	248	93.6	11	4.2	2	0.8	0	0.0	0	0.0	0	0.0	265
Polonnaruwa	60	42.6	59	41.8	119	84.4	9	6.4	2	1.4	2	1.4	3	2.1	4	2.8	141
Badulla	96	35.2	113	41.4	209	76.6	13	4.8	4	1.5	9	3.3	1	0.4	32	11.7	273
Monaragala	52	57.8	30	33.3	82	91.1	7	7.8	0	0.0	0	0.0	0	0.0	0	0.0	90
Ratnapura	257	44.4	257	44.4	514	88.8	24	4.1	2	0.3	21	3.6	7	1.2	10	1.7	579
Kegalle	159	43.6	162	44.4	321	87.9	30	8.2	2	0.5	6	1.6	0	0.0	6	1.6	365
Total	3758	39.6	4144	43.6	7902	83.2	542	5.7	85	0.9	453	4.8	50	0.5	309	3.3	9496

## Table 18: Distribution of Treatment Outcome of All forms of TB by Districts in 2013

District	Cui	red	Treat Comp			ment cess	Di	ed	Fail	ure	Defa	ulted	Transfei	rred Out	Not Eva	aluated	Total
	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
Colombo	811	38.4	935	44.3	1746	82.7	121	5.7	14	0.7	164	7.8	0	0.0	67	3.2	2112
Gampaha	395	41.8	402	42.5	797	84.2	38	4.0	12	1.3	70	7.4	15	1.6	14	1.5	946
Kalutara	274	43.0	275	43.2	549	86.2	38	6.0	4	0.6	31	4.9	0	0.0	15	2.4	637
Kandy	184	27.2	386	57.0	570	84.2	41	6.1	5	0.7	18	2.7	2	0.3	41	6.1	677
Matale	63	42.6	64	43.2	127	85.8	14	9.5	1	0.7	1	0.7	0	0.0	5	3.4	148
Nuwara Eliya	78	32.9	89	37.6	167	70.5	14	5.9	9	3.8	14	5.9	0	0.0	33	13.9	237
Galle	196	41.7	225	47.9	421	89.6	16	3.4	4	0.9	19	4.0	9	1.9	1	0.2	470
Matara	87	44.6	90	46.2	177	90.8	12	6.2	2	1.0	0	0.0	0	0.0	4	2.1	195
Hambantota	62	43.4	64	44.8	126	88.1	8	5.6	1	0.7	4	2.8	0	0.0	4	2.8	143
Jaffna	32	13.3	178	73.9	210	87.1	15	6.2	1	0.4	14	5.8	0	0.0	1	0.4	241
Kilinochchi	22	45.8	20	41.7	42	87.5	4	8.3	0	0.0	1	2.1	0	0.0	1	2.1	48
Mullaitivu	10	50.0	5	25.0	15	75.0	3	15.0	0	0.0	2	10.0	0	0.0	0	0.0	20
Vavuniya	33	53.2	20	32.3	53	85.5	7	11.3	0	0.0	1	1.6	0	0.0	1	1.6	62
Mannar	15	28.8	34	65.4	49	94.2	2	3.8	1	1.9	0	0.0	0	0.0	0	0.0	52
Batticaloa	113	51.6	77	35.2	190	86.8	19	8.7	6	2.7	0	0.0	0	0.0	4	1.8	219
Ampara	22	46.8	23	48.9	45	95.7	0	0.0	2	4.3	0	0.0	0	0.0	0	0.0	47
Kalmunai	59	43.4	64	47.1	123	90.4	11	8.1	0	0.0	1	0.7	0	0.0	1	0.7	136
Trincomalee	62	51.7	50	41.7	112	93.3	6	5.0	1	0.8	1	0.8	0	0.0	0	0.0	120
Kurunegala	167	38.0	214	48.6	381	86.6	25	5.7	3	0.7	17	3.9	1	0.2	13	3.0	440
Puttalam	61	33.7	71	39.2	132	72.9	15	8.3	2	1.1	6	3.3	9	5.0	17	9.4	181
Anuradhapura	156	62.4	83	33.2	239	95.6	10	4.0	1	0.4	0	0.0	0	0.0	0	0.0	250
Polonnaruwa	56	41.8	58	43.3	114	85.1	9	6.7	2	1.5	2	1.5	3	2.2	4	3.0	134
Badulla	89	35.6	109	43.6	198	79.2	13	5.2	3	1.2	7	2.8	1	0.4	28	11.2	250
Monaragala	52	58.4	30	33.7	82	92.1	7	7.9	0	0.0	0	0.0	0	0.0	0	0.0	89
Ratnapura	253	45.3	256	45.8	509	91.1	23	4.1	2	0.4	19	3.4	5	0.9	1	0.2	559
Kegalle	155	43.8	157	44.4	312	88.1	29	8.2	2	0.6	5	1.4	0	0.0	6	1.7	354

#### Table 19: Distribution of Treatment Outcome of All Forms of New (PTB and EPTB) Cases by District in 2013

Total

3507

40.0

3979

45.4

7486

85.4

500

5.7

78

0.9

397

4.5

45

0.5

261

3.0

8767

District	Cui	red	Treat Comp	ment	Treat	ment cess	Di		Fail	ure	Defa	ulted	Transfer	rred Out	Not Eva	aluated	Total
	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
Colombo	811	53.9	412	27.4	900	59.8	92	6.1	14	0.9	141	9.4	0	0.0	36	2.4	1506
Gampaha	395	57.2	180	26.0	432	62.5	29	4.2	10	1.4	60	8.7	9	1.3	8	1.2	691
Kalutara	274	61.2	109	24.3	294	65.6	29	6.5	4	0.9	25	5.6	0	0.0	7	1.6	448
Kandy	184	39.1	212	45.1	192	40.9	32	6.8	5	1.1	9	1.9	2	0.4	26	5.5	470
Matale	63	60.6	27	26.0	63	60.6	9	8.7	1	1.0	1	1.0	0	0.0	3	2.9	104
Nuwara Eliya	78	43.3	46	25.6	79	43.9	12	6.7	8	4.4	10	5.6	0	0.0	26	14.4	180
Galle	196	59.9	94	28.7	214	65.4	13	4.0	4	1.2	13	4.0	7	2.1	0	0.0	327
Matara	87	64.4	35	25.9	87	64.4	9	6.7	1	0.7	0	0.0	0	0.0	3	2.2	135
Hambantota	62	59.6	30	28.8	64	61.5	8	7.7	1	1.0	2	1.9	0	0.0	1	1.0	104
Jaffna	32	18.7	116	67.8	80	46.8	11	6.4	1	0.6	10	5.8	0	0.0	1	0.6	171
Kilinochchi	22	68.8	7	21.9	22	68.8	3	9.4	0	0.0	0	0.0	0	0.0	0	0.0	32
Mullaitivu	10	62.5	2	12.5	10	62.5	3	18.8	0	0.0	1	6.3	0	0.0	0	0.0	16
Vavuniya	33	80.5	4	9.8	37	90.2	3	7.3	0	0.0	0	0.0	0	0.0	1	2.4	41
Mannar	15	32.6	29	63.0	15	32.6	1	2.2	1	2.2	0	0.0	0	0.0	0	0.0	46
Batticaloa	113	72.0	24	15.3	114	72.6	12	7.6	5	3.2	0	0.0	0	0.0	3	1.9	157
Ampara	22	62.9	11	31.4	22	62.9	0	0.0	2	5.7	0	0.0	0	0.0	0	0.0	35
Kalmunai	59	53.2	42	37.8	66	59.5	10	9.0	0	0.0	0	0.0	0	0.0	0	0.0	111
Trincomalee	62	69.7	22	24.7	62	69.7	3	3.4	1	1.1	1	1.1	0	0.0	0	0.0	89
Kurunegala	167	51.4	116	35.7	169	52.0	18	5.5	3	0.9	13	4.0	0	0.0	8	2.5	325
Puttalam	61	49.6	25	20.3	71	57.7	12	9.8	2	1.6	6	4.9	6	4.9	11	8.9	123
Anuradhapura	156	79.6	30	15.3	156	79.6	9	4.6	1	0.5	0	0.0	0	0.0	0	0.0	196
Polonnaruwa	56	51.4	35	32.1	56	51.4	9	8.3	2	1.8	2	1.8	2	1.8	3	2.8	109
Badulla	89	50.6	44	25.0	93	52.8	13	7.4	3	1.7	6	3.4	1	0.6	20	11.4	176
Monaragala	52	75.4	11	15.9	52	75.4	6	8.7	0	0.0	0	0.0	0	0.0	0	0.0	69
Ratnapura	253	63.7	107	27.0	259	65.2	17	4.3	2	0.5	12	3.0	5	1.3	1	0.3	397
Kegalle	155	63.0	65	26.4	161	65.4	18	7.3	2	0.8	3	1.2	0	0.0	3	1.2	246
Total	3507	55.6	1835	29.1	5342	84.7	381	6.0	73	1.2	315	5.0	26	0.4	85	1.3	6304

## Table 20: Distribution of Treatment Outcome of All New PTB Cases by District in 2013

District	Cui	red	Treat Comp		Treat Suc	ment cess	Di	ed	Fail	ure	Defa	ulted	Transfei	rred Out	Not Eva	aluated	Total
	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
Colombo	811	73.7	89	8.1	900	81.7	56	5.1	12	1.1	113	10.3	0	0.0	20	1.8	1101
Gampaha	395	76.1	37	7.1	432	83.2	21	4.0	10	1.9	46	8.9	5	1.0	5	1.0	519
Kalutara	274	80.4	20	5.9	294	86.2	18	5.3	4	1.2	21	6.2	0	0.0	4	1.2	341
Kandy	184	78.6	8	3.4	192	82.1	19	8.1	5	2.1	6	2.6	2	0.9	10	4.3	234
Matale	63	88.7	0	0.0	63	88.7	6	8.5	1	1.4	1	1.4	0	0.0	0	0.0	71
Nuwara Eliya	78	69.6	1	0.9	79	70.5	6	5.4	6	5.4	4	3.6	0	0.0	17	15.2	112
Galle	196	80.7	18	7.4	214	88.1	11	4.5	3	1.2	9	3.7	6	2.5	0	0.0	243
Matara	87	92.6	0	0.0	87	92.6	6	6.4	1	1.1	0	0.0	0	0.0	0	0.0	94
Hambantota	62	84.9	2	2.7	64	87.7	6	8.2	1	1.4	2	2.7	0	0.0	0	0.0	73
Jaffna	32	33.7	48	50.5	80	84.2	7	7.4	1	1.1	7	7.4	0	0.0	0	0.0	95
Kilinochchi	22	95.7	0	0.0	22	95.7	1	4.3	0	0.0	0	0.0	0	0.0	0	0.0	23
Mullaitivu	10	90.9	0	0.0	10	90.9	1	9.1	0	0.0	0	0.0	0	0.0	0	0.0	11
Vavuniya	33	82.5	4	10.0	37	92.5	3	7.5	0	0.0	0	0.0	0	0.0	0	0.0	40
Mannar	15	93.8	0	0.0	15	93.8	0	0.0	1	6.3	0	0.0	0	0.0	0	0.0	16
Batticaloa	113	90.4	1	0.8	114	91.2	6	4.8	3	2.4	0	0.0	0	0.0	2	1.6	125
Ampara	22	91.7	0	0.0	22	91.7	0	0.0	2	8.3	0	0.0	0	0.0	0	0.0	24
Kalmunai	59	80.8	7	9.6	66	90.4	7	9.6	0	0.0	0	0.0	0	0.0	0	0.0	73
Trincomalee	62	93.9	0	0.0	62	93.9	2	3.0	1	1.5	1	1.5	0	0.0	0	0.0	66
Kurunegala	167	84.8	2	1.0	169	85.8	13	6.6	3	1.5	9	4.6	0	0.0	3	1.5	197
Puttalam	61	64.2	10	10.5	71	74.7	4	4.2	2	2.1	6	6.3	6	6.3	6	6.3	95
Anuradhapura	156	95.1	0	0.0	156	95.1	7	4.3	1	0.6	0	0.0	0	0.0	0	0.0	164
Polonnaruwa	56	83.6	0	0.0	56	83.6	4	6.0	2	3.0	2	3.0	2	3.0	1	1.5	67
Badulla	89	70.6	4	3.2	93	73.8	9	7.1	3	2.4	5	4.0	1	0.8	15	11.9	126
Monaragala	52	91.2	0	0.0	52	91.2	5	8.8	0	0.0	0	0.0	0	0.0	0	0.0	57
Ratnapura	253	90.4	6	2.1	259	92.5	9	3.2	2	0.7	6	2.1	4	1.4	0	0.0	280
Kegalle	155	88.1	6	3.4	161	91.5	9	5.1	2	1.1	2	1.1	0	0.0	2	1.1	176
Total	3507	79.3	263	5.9	3770	85.2	236	5.3	66	1.5	240	5.4	26	0.6	85	1.9	4423

## Table 22: Distribution of Treatment Outcome of New Sputum Negative PTB Cases by District in 2013

District	Treatment	Completed	Di	ed	Fail	ure	Defa	ulted	Transfer	red Out	Not Ev	aluated	Total
	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
Colombo	323	79.8	36	8.9	2	0.5	28	6.9	0	0.0	16	4.0	405
Gampaha	143	83.1	8	4.7	0	0.0	14	8.1	4	2.3	3	1.7	172
Kalutara	89	83.2	11	10.3	0	0.0	4	3.7	0	0.0	3	2.8	107
Kandy	204	86.4	13	5.5	0	0.0	3	1.3	0	0.0	16	6.8	236
Matale	27	81.8	3	9.1	0	0.0	0	0.0	0	0.0	3	9.1	33
Nuwara Eliya	45	66.2	6	8.8	2	2.9	6	8.8	0	0.0	9	13.2	68
Galle	76	90.5	2	2.4	1	1.2	4	4.8	1	1.2	0	0.0	84
Matara	35	85.4	3	7.3	0	0.0	0	0.0	0	0.0	3	7.3	41
Hambantota	28	90.3	2	6.5	0	0.0	0	0.0	0	0.0	1	3.2	31
Jaffna	68	89.5	4	5.3	0	0.0	3	3.9	0	0.0	1	1.3	76
Kilinochchi	7	77.8	2	22.2	0	0.0	0	0.0	0	0.0	0	0.0	9
Mullaitivu	2	40.0	2	40.0	0	0.0	1	20.0	0	0.0	0	0.0	5
Vavuniya	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0	1
Mannar	29	96.7	1	3.3	0	0.0	0	0.0	0	0.0	0	0.0	30
Batticaloa	23	71.9	6	18.8	2	6.3	0	0.0	0	0.0	1	3.1	32
Ampara	11	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	11
Kalmunai	35	92.1	3	7.9	0	0.0	0	0.0	0	0.0	0	0.0	38
Trincomalee	22	95.7	1	4.3	0	0.0	0	0.0	0	0.0	0	0.0	23
Kurunegala	114	89.1	5	3.9	0	0.0	4	3.1	0	0.0	5	3.9	128
Puttalam	15	53.6	8	28.6	0	0.0	0	0.0	0	0.0	5	17.9	28
Anuradhapura	30	93.8	2	6.3	0	0.0	0	0.0	0	0.0	0	0.0	32
Polonnaruwa	35	83.3	5	11.9	0	0.0	0	0.0	0	0.0	2	4.8	42
Badulla	40	80.0	4	8.0	0	0.0	1	2.0	0	0.0	5	10.0	50
Monaragala	11	91.7	1	8.3	0	0.0	0	0.0	0	0.0	0	0.0	12
Ratnapura	101	86.3	8	6.8	0	0.0	6	5.1	1	0.9	1	0.9	117
Kegalle	59	84.3	9	12.9	0	0.0	1	1.4	0	0.0	1	1.4	70
Total	1572	83.6	145	7.7	7	0.4	75	4.0	6	0.3	76	4.0	1881

## Table 23: Distribution of Treatment Outcome of EPTB Cases by District in 2013

District	Treat Comp	ment leted	Di	Died		lure	Defa	ulted	Transfer	red Out	Not Eva	aluated	Total
	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
Colombo	523	86.3	29	4.8	0	0.0	23	3.8	0	0.0	31	5.1	606
Gampaha	222	87.1	9	3.5	2	0.8	10	3.9	6	2.4	6	2.4	255
Kalutara	166	87.8	9	4.8	0	0.0	6	3.2	0	0.0	8	4.2	189
Kandy	174	84.1	9	4.3	0	0.0	9	4.3	0	0.0	15	7.2	207
Matale	37	84.1	5	11.4	0	0.0	0	0.0	0	0.0	2	4.5	44
Nuwara Eliya	43	75.4	2	3.5	1	1.8	4	7.0	0	0.0	7	12.3	57
Galle	131	91.6	3	2.1	0	0.0	6	4.2	2	1.4	1	0.7	143
Matara	55	91.7	3	5.0	1	1.7	0	0.0	0	0.0	1	1.7	60
Hambantota	34	87.2	0	0.0	0	0.0	2	5.1	0	0.0	3	7.7	39
Jaffna	62	88.6	4	5.7	0	0.0	4	5.7	0	0.0	0	0.0	70
Kilinochchi	13	81.3	1	6.3	0	0.0	1	6.3	0	0.0	1	6.3	16
Mullaitivu	3	75.0	0	0.0	0	0.0	1	25.0	0	0.0	0	0.0	4
Vavuniya	16	76.2	4	19.0	0	0.0	1	4.8	0	0.0	0	0.0	21
Mannar	5	83.3	1	16.7	0	0.0	0	0.0	0	0.0	0	0.0	6
Batticaloa	53	85.5	7	11.3	1	1.6	0	0.0	0	0.0	1	1.6	62
Ampara	12	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	12
Kalmunai	22	88.0	1	4.0	0	0.0	1	4.0	0	0.0	1	4.0	25
Trincomalee	28	90.3	3	9.7	0	0.0	0	0.0	0	0.0	0	0.0	31
Kurunegala	98	85.2	7	6.1	0	0.0	4	3.5	1	0.9	5	4.3	115
Puttalam	46	79.3	3	5.2	0	0.0	0	0.0	3	5.2	6	10.3	58
Anuradhapura	53	98.1	1	1.9	0	0.0	0	0.0	0	0.0	0	0.0	54
Polonnaruwa	23	92.0	0	0.0	0	0.0	0	0.0	1	4.0	1	4.0	25
Badulla	65	87.8	0	0.0	0	0.0	1	1.4	0	0.0	8	10.8	74
Monaragala	19	95.0	1	5.0	0	0.0	0	0.0	0	0.0	0	0.0	20
Ratnapura	149	92.0	6	3.7	0	0.0	7	4.3	0	0.0	0	0.0	162
Kegalle	92	85.2	11	10.2	0	0.0	2	1.9	0	0.0	3	2.8	108
Total	2144	87.0	119	4.8	5	0.2	82	3.3	13	0.5	100	4.1	2463

District	Cu	red	Treatment	Completed	Di	ed	Fail	ure	Defa	ulted	Transfei	red Out	Not Eva	aluated	Total	
District	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	lotui	
Colombo	71	57.7	5	4.1	10	8.1	3	2.4	24	19.5	0	0.0	10	8.1	123	
Gampaha	27	48.2	9	16.1	3	5.4	0	0.0	12	21.4	1	1.8	4	7.1	56	
Kalutara	20	64.5	1	3.2	3	9.7	1	3.2	6	19.4	0	0.0	0	0.0	31	
Kandy	7	63.6	0	0.0	1	9.1	0	0.0	0	0.0	0	0.0	3	27.3	11	
Matale	6	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	
Nuwara Eliya	11	91.7	1	8.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	12	
Galle	20	76.9	3	11.5	2	7.7	0	0.0	0	0.0	1	3.8	0	0.0	26	
Matara	7	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	7	
Hambantota	3	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	
Jaffna	4	26.7	5	33.3	3	20.0	1	6.7	2	13.3	0	0.0	0	0.0	15	
Kilinochchi	2	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	
Mullaitivu	2	50.0	1	25.0	1	25.0	0	0.0	0	0.0	0	0.0	0	0.0	4	
Vavuniya	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	
Mannar	2	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	
Batticaloa	7	70.0	0	0.0	2	20.0	0	0.0	0	0.0	0	0.0	1	10.0	10	
Ampara	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	
Kalmunai	4	66.7	0	0.0	2	33.3	0	0.0	0	0.0	0	0.0	0	0.0	6	
Trincomalee	7	70.0	0	0.0	3	30.0	0	0.0	0	0.0	0	0.0	0	0.0	10	
Kurunegala	12	63.2	4	21.1	1	5.3	0	0.0	2	10.5	0	0.0	0	0.0	19	
Puttalam	5	55.6	0	0.0	1	11.1	0	0.0	2	22.2	0	0.0	1	11.1	9	
Anuradhapura	9	81.8	0	0.0	1	9.1	1	9.1	0	0.0	0	0.0	0	0.0	11	
Polonnaruwa	4	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	
Badulla	7	46.7	2	13.3	0	0.0	1	6.7	2	13.3	0	0.0	3	20.0	15	
Monaragala	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	
Ratnapura	4	22.2	0	0.0	1	5.6	0	0.0	2	11.1	2	11.1	9	50.0	18	
Kegalle	4	50.0	2	25.0	1	12.5	0	0.0	1	12.5	0	0.0	0	0.0	8	
Total	247	60.2	33	8.0	35	8.5	7	1.7	53	12.9	4	1.0	31	7.6	410	

 Table 24: Distribution of Treatment Outcome of Retreatment TB Cases by District in 2013

#### Table 25: Distribution of Treatment Outcome of Other TB Cases by District in 2013

District	Cur	ed	Treat Comp		Di	ed	Fail	ure	Defa	ulted	Transfei	red Out	Not Eva	aluated	Total
	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
Colombo	4	6.2	28	43.1	3	4.6	0	0.0	1	1.5	0	0.0	4	6.2	65
Gampaha	0	0.0	6	40.0	0	0.0	0	0.0	0	0.0	1	6.7	1	6.7	15
Kalutara	0	0.0	6	31.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	19
Kandy	0	0.0	15	46.9	0	0.0	0	0.0	1	3.1	0	0.0	1	3.1	32
Matale	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1
Nuwara Eliya	0	0.0	7	46.7	0	0.0	0	0.0	0	0.0	0	0.0	8	53.3	15
Galle	0	0.0	0	0.0	0	0.0	0	0.0	1	14.3	0	0.0	0	0.0	7
Matara	0	0.0	6	35.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	17
Hambantota	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0	1
Jaffna	0	0.0	1	10.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10
Kilinochchi	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Mullaiti∨u	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	50.0	2
Vavuniya	0	0.0	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	0	0.0	2
Mannar	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Batticaloa	0	0.0	1	20.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5
Ampara	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Kalmunai	0	0.0	5	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5
Trincomalee	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1
Kurunegala	0	0.0	49	48.5	3	3.0	0	0.0	0	0.0	0	0.0	0	0.0	101
Puttalam	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	4
Polonnaruwa	0	0.0	1	33.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3
Badulla	0	0.0	2	25.0	0	0.0	0	0.0	0	0.0	0	0.0	1	12.5	8
Monaragala	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1
Ratnapura	0	0.0	1	50.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2
Kegalle	0	0.0	3	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3
Total	4	1.3	132	41.4	7	2.2	0	0.0	3	0.9	1	0.3	17	5.3	319

#### Table 26: Distribution of Sputum Conversion of New PTB Cases at the End of the Intensive Phase by District in 2014

DISTRICT	Total Number Registered	Nege	etive	Posi	tive	Di	ed	Defa	ulted	Transfe	rred out	No r	esult	Total
		No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
COLOMBO	1120	954	85.2	20	1.8	49	4.4	11	1.0	0	0.0	86	7.7	1120
GAMPAHA	536	463	86.4	25	4.7	26	4.9	15	2.8	3	0.6	4	0.7	536
KALUTARA	292	262	89.7	6	2.1	14	4.8	6	2.1	0	0.0	4	1.4	292
KANDY	231	199	86.1	4	1.7	9	3.9	3	1.3	0	0.0	16	6.9	231
MATALE	70	56	80.0	6	8.6	7	10.0	0	0.0	0	0.0	1	1.4	70
NUWARAELIYA	101	61	60.4	12	11.9	9	8.9	0	0.0	0	0.0	19	18.8	101
GALLE	212	188	88.7	3	1.4	15	7.1	0	0.0	0	0.0	6	2.8	212
MATARA	120	107	89.2	7	5.8	5	4.2	1	0.8	0	0.0	0	0.0	120
HAMBANTOTA	60	51	85.0	0	0.0	5	8.3	2	3.3	0	0.0	2	3.3	60
JAFFNA	91	68	74.7	2	2.2	6	6.6	2	2.2	0	0.0	13	14.3	91
VAVUNIYA	33	25	75.8	3	9.1	3	9.1	0	0.0	0	0.0	2	6.1	33
BATICALOA	89	85	95.5	0	0.0	3	3.4	0	0.0	0	0.0	1	1.1	89
AMPARA	28	25	89.3	1	3.6	1	3.6	0	0.0	0	0.0	1	3.6	28
KALMUNAI	67	58	86.6	0	0.0	7	10.4	1	1.5	0	0.0	1	1.5	67
TRINCOMALEE	60	57	95.0	1	1.7	2	3.3	0	0.0	0	0.0	0	0.0	60
KURUNEGALA	218	199	91.3	4	1.8	8	3.7	2	0.9	0	0.0	5	2.3	218
PUTTALAM	89	73	82.0	4	4.5	4	4.5	2	2.2	0	0.0	6	6.7	89
ANURADAPURA	142	132	93.0	4	2.8	5	3.5	0	0.0	0	0.0	1	0.7	142
POLONNARUWA	71	57	80.3	3	4.2	7	9.9	1	1.4	0	0.0	3	4.2	71
BADULLA	114	80	70.2	5	4.4	13	11.4	3	2.6	0	0.0	13	11.4	114
MONARAGALA	49	44	89.8	1	2.0	3	6.1	0	0.0	0	0.0	1	2.0	49
RATNAPURA	251	181	72.1	10	4.0	16	6.4	5	2.0	2	0.8	37	14.7	251
KEGALLE	189	172	91.0	4	2.1	8	4.2	0	0.0	0	0.0	5	2.6	189
MANNAR	14	11	78.6	0	0.0	2	14.3	0	0.0	0	0.0	1	7.1	14
MULLAITIVU	18	14	77.8	0	0.0	0	0.0	0	0.0	0	0.0	4	22.2	18
KILINOCHCHI	28	23	82.1	1	3.6	0	0.0	0	0.0	0	0.0	4	14.3	28
TOTEL	4293	3645	84.9	126	2.9	227	5.3	54	1.3	5	0.1	236	5.5	4293

DISTRICT	Total Number Registered	Neg	etive	Pos	itive	Di	ed	Defa	ulted	Transfe	rred out	ut No result		Total
	8	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	No	Rate	
COLOMBO	130	91	70.0	6	4.6	7	5.4	3	2.3	0	0.0	23	17.7	130
GAMPAHA	61	48	78.7	5	8.2	3	4.9	3	4.9	0	0.0	2	3.3	61
KALUTARA	29	20	69.0	4	13.8	2	6.9	2	6.9	0	0.0	1	3.4	29
KANDY	28	18	64.3	1	3.6	4	14.3	2	7.1	0	0.0	3	10.7	28
MATALE	6	5	83.3	1	16.7	0	0.0	0	0.0	0	0.0	0	0.0	6
NUWARAELIYA	11	5	45.5	3	27.3	1	9.1	0	0.0	0	0.0	2	18.2	11
GALLE	25	23	92.0	2	8.0	0	0.0	0	0.0	0	0.0	0	0.0	25
MATARA	8	8	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	8
HAMBANTOTA	7	5	71.4	0	0.0	1	14.3	0	0.0	0	0.0	1	14.3	7
JAFFNA	17	10	58.8	2	11.8	4	23.5	0	0.0	0	0.0	1	5.9	17
VAVUNIYA	3	2	66.7	1	33.3	0	0.0	0	0.0	0	0.0	0	0.0	3
BATICALOA	10	7	70.0	1	10.0	0	0.0	0	0.0	0	0.0	2	20.0	10
AMPARA	4	3	75.0	0	0.0	0	0.0	0	0.0	0	0.0	1	25.0	4
KALMUNAI	8	7	87.5	0	0.0	1	12.5	0	0.0	0	0.0	0	0.0	8
TRINCOMALEE	7	3	42.9	0	0.0	1	14.3	1	14.3	0	0.0	2	28.6	7
KURUNEGALA	17	16	94.1	1	5.9	0	0.0	0	0.0	0	0.0	0	0.0	17
PUTTALAM	10	8	80.0	0	0.0	0	0.0	0	0.0	0	0.0	2	20.0	10
ANURADAPURA	10	10	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10
POLONNARUWA	6	4	66.7	2	33.3	0	0.0	0	0.0	0	0.0	0	0.0	6
BADULLA	13	8	61.5	0	0.0	0	0.0	0	0.0	0	0.0	5	38.5	13
MONARAGALA	2	1	50.0	0	0.0	0	0.0	0	0.0	0	0.0	1	50.0	2
RATNAPURA	19	17	89.5	1	5.3	0	0.0	0	0.0	0	0.0	1	5.3	19
KEGALLE	17	10	58.8	2	11.8	1	5.9	0	0.0	0	0.0	4	23.5	17
MANNAR	1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0	1
MULLAITIVU	2	2	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2
KILINOCHCHI	5	4	80.0	0	0.0	0	0.0	0	0.0	0	0.0	1	20.0	5
TOTEL	456	335	73.5	32	7.0	25	5.5	11	2.4	0	0.0	53	11.6	456

#### Table 27: Distribution of Sputum Conversion of Retreatment PTB Cases at the End of the Intensive Phase by District in 2014

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Maps



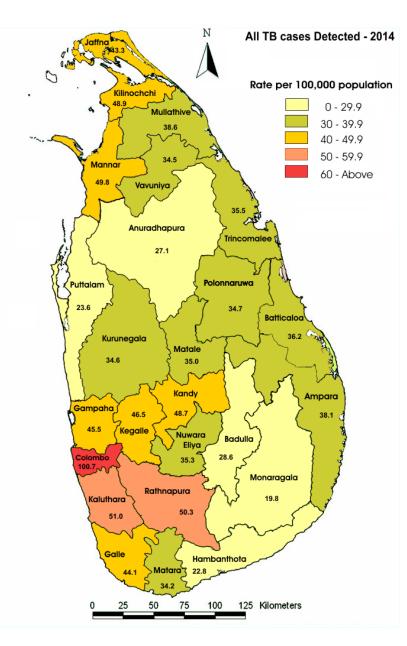


Figure 18: Map of Case Notification Distribution of TB in 2014

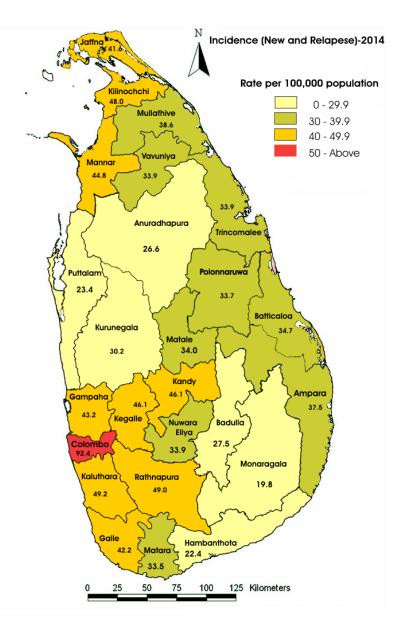
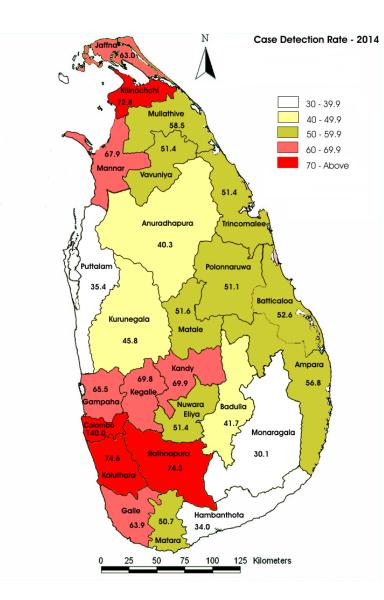
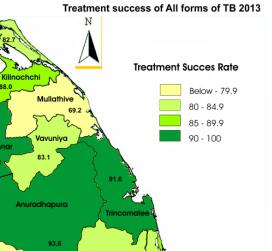


Figure 19: Map of Case Incidence Distribution of TB in 2014





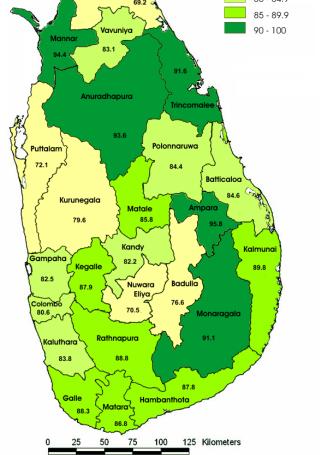


Figure 21: Map of Treatment Success Distribution of TB Cases in 2013

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National Programme for Tuberculosis Control and Chest Diseases

Figure 20: Map of Case Detection Distribution of TB in 2014

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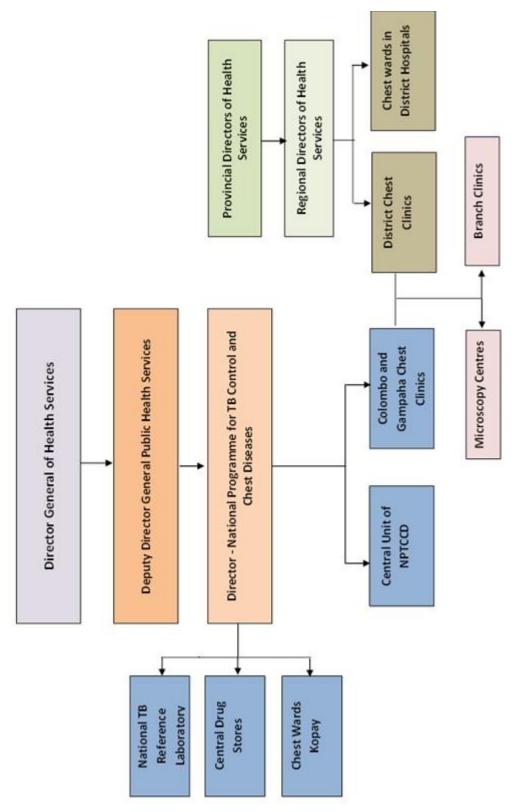


Figure 22: Organizational Structure of National TB Control Program (2014)

Table 29: Fu	unds received in 2014	
	Object Title	

Object Title	Amount (Rs.)
1. Personal Emoluments	USD 3454429
2. TB Programme costs	USD 759555
3. Anti TB Drugs (drug susceptible & drug resistant)	USD114986
4. Laboratory Infrastructure, equipment and supplies	USD352882
5. Research	USD 9545
6. Other Expenditure	USD12984
Total	USD 4734381

## Table 32: Training Programmes carried out at Central Level, Provincial and District Level in 2014

No	Name of the programme	Source of Funding	Place/ Venue
	1. Local		
01	01 Moduler Training for DTCD trainees & DTCO/MOO attached to the chest clinic & chest wards		
02	02 Training on GIS for MOO and other Staff		
03	Workshop on Bid Evaluation	GOSL	
04	Workshop on "Training needs Analysis" for Officers of NPTCCD & SDFL	GOSL	
05	Train the Trainer at SDFL	GOSL	
06	Skill Development of Office Staff (University Of Colombo)	GOSL	
07	Refresher Training on TB for Consultants NHSL	GOSL	
08	Infection Control Training for Nurses 02 Programmes for Nurses of NHSL and 01 Programme for Nurses of Gampaha District	GFATM	February, July and August
09	Modular training for DTCO/MOO attached to the chest clinic & Chest wards.	GFATM	Nov 2014
10	Modular training for Nurses and PHIs attached to the chest clinic & Chest wards.	GFATM	Dec 2014
11	Drug Management Training	GFATM	Dec 2014

No	Name of the programme	Country	Source of Funding
01	TB Modular training at National TB Training Centre,	Bangalore, India	WHO
02	WHO Meeting	Delhi,India,	WHO
03	Training on MDR TB	India, Delhi	WHO
04	Workshop on the Development of National TB Strategic Plans	Bains, France	WHO
05	Regional meeting of National TB Control Programme Managers and Partners.	New Delhi, India	WHO
06	SAARC Workshop on Best practices on TB/Diabetes and Paediatric TB	Colombo	SAARC
07	SAARC Regional Meeting of Programme Managers of TB and HIV/AIDS	Thimphu, Bhutan	SAARC
08	SAARC Governing Board of STAC		SAARC
09	SAARC Training on Leadership	Male	SAARC

#### Table 32: Foreign Training Programmes carried out at Central Level, Provincial and District Level in 2014