



## NATIONAL PROGRAMME FOR TUBERCULOSIS CONTROL & CHEST DISEASES



### The role of Private Health Institutions/General Practitioners in detecting Tuberculosis patients and referral pathways

Tuberculosis (TB) is one of the leading infectious diseases in Sri Lanka. The highest number of deaths among infectious diseases is reported for TB patients in Sri Lanka which is around 500 – 600 annually.

According to World Health Organization (WHO) estimates, nearly 14,000 TB patients should be identified annually. However, currently around 7000 – 8000 patients are reported within the country.

This gap is usually around 5000 cases between the estimated number of patients and the number of patients detected with TB.

#### The Targets

To improve TB case detection, contribution from private health sector is identified as a priority by the national programme, which is included as an objective for the current National Strategic plan.



Currently around 7% of the identified TB patients are referred from private healthcare providers to the national programme. **The target is to improve this to 30% by the year 2025.**

#### Classification of TB

It is important to classify the cases of TB in order to determine the correct treatment regimen and the duration of treatment and for recording and reporting purposes.

<b>Site of TB disease</b>	<ul style="list-style-type: none"><li>○ Pulmonary TB (PTB)</li><li>○ Extra Pulmonary TB (EPTB)</li></ul>
<b>Type of diagnosis</b>	<ul style="list-style-type: none"><li>○ Bacteriologically confirmed.</li><li>○ Clinically diagnosed</li></ul>
<b>History of previous treatment</b>	<ul style="list-style-type: none"><li>○ New</li><li>○ Relapse</li><li>○ Treatment after failure</li><li>○ Treatment after loss to follow up</li><li>○ Other previously treated</li><li>○ Unknown previous treatment history</li></ul>

## Symptoms of TB

Respiratory symptoms:	Constitutional symptoms:
<ul style="list-style-type: none"> <li>• Cough - usually more than two weeks <i>However, in immunosuppressed and in the presence of any other risk factor/ contact history, cough of any duration should lead to screening for TB.</i></li> <li>• Shortness of breath</li> <li>• Chest pain</li> <li>• Haemoptysis (blood-stained sputum)</li> </ul> 	<ul style="list-style-type: none"> <li>• Fever and night sweats</li> <li>• Loss of appetite</li> <li>• Loss of weight or failure to gain weight in case of children</li> <li>• Tiredness (fatigue)</li> </ul> 

## High risk groups for TB

Certain groups are identified to have a higher risk of TB compared to general population in the community. Therefore, once such patients present to a medical practitioner, a higher attention should be paid to identify any symptoms which warrant screening for TB.

The high-risk groups include,

- Contacts of TB patients (Household & other close contacts)
- People Living with HIV (PLHIV)
- Elderly >60years
- Malnourished (poor weight gain/ weight loss in children)
- Patients with DM
- Other immunocompromised individuals (CKD patients, patients on steroids/immune - suppressive drugs, cancer patients on anti - cancer treatment, patients undergone transplant surgery)
- People living in risk environments – slums, estates, internally displaced, migrants etc.
- Prison inmates and those who are institutionalized (elders homes, rehabilitation centres etc.)
- PWUDs (People who use drugs)
- Health care workers
- People working in mines -Silica exposure



<b>Diagnosis of pulmonary TB</b>	
Any person who presents with symptoms or signs suggestive of TB, particularly, those who have cough for <b>more than two weeks duration</b> should be investigated for TB.	
<b>Investigations</b>	
<b>Gene Xpert (WRD)</b>	Sample of sputum or any other sample can be examined. Higher sensitivity and less time consuming. Drug resistant TB (rifampicin) can also be tested.
<b>Sputum Microscopy</b>	Sputum samples with good quality should be collected and examined by microscopy for Acid Fast Bacilli (AFB).
<b>Chest X-ray</b>	Chest x ray is the main screening tool for pulmonary TB.
<b>Sputum culture for AFB</b>	This is a more time-consuming method and needs at least 6-8 weeks to get the results.

<b>Directly Observed treatment (DOT)</b>
Directly Observed Treatment is one of the most important strategies in TB control.
This ensures the compliance of the patient to correct treatment regimen, that a TB patient takes the right anti-tuberculosis drugs, in the right doses at the right intervals without interruption and ensures that the patient completes the full course of treatment.
In DOTS strategy, patient swallows the tablets under the direct observation of a trained responsible person. General Practitioners can be effective DOT providers.
It helps to motivate the patient to continue treatment and provides opportunity for early detection of adverse effects.
<b>Who will receive DOT?</b>
All TB patients should be given daily DOT during the entire period of treatment, both in the intensive & continuation phases of the treatment.
DOT could be arranged through a health facility or for those who are unable to attend a health facility daily, this could be arranged through a community/religious leader. The decision on DOT provider should be made on patient's preference, affordability and feasibility.

## Role of General Practitioner in TB control activities

- The General Practitioners (GPs) are the first contacts for a majority of \*presumptive TB patients, therefore identification of such patients during these encounters are very important for increased case detection as well as to prevent complications due to late diagnosis.
- A symptomatic screening can be easily carried out by asking them the main symptoms in TB.

*(\*Presumptive TB patient is a person who presents with symptoms or signs suggestive of TB, particularly with cough lasting 2 weeks or more or a high-risk patient presenting with cough of any duration (High risk patients include contacts of TB patients, elderly, diabetics, patients with HIV, CKD and other immunosuppressive conditions)*

### The main roles of GP include:

#### **1. Identification of presumptive TB patients and refer them for diagnosis to the District Chest Clinic (DCC)/ nearest government hospital with screening facilities.**

- A small stock of sputum collection cups can be taken from the DCC to the health centre if a place to collect sputum can be arranged within the premises. The collected sputum samples should be sent to a microscopy centre within 3 days for testing.

#### **2. Be aware of TB patients who are already diagnosed and currently under treatment;**

- Check on compliance (can act as a DOT provider).
- Address side effects; for major side effects refer to DCC promptly.
- Guide them for follow up visits (usually at 2, 5 & 6-months during treatment)
- Inquire whether close contacts have been screened.
- If no clinical improvement is observed, refer the patient to a Consultant Respiratory Physician/ DCC (This could be Drug Resistant TB).
- Ensure TB patient referrals to relevant specialists in special situations (pregnancy, HIV infection, children etc.).

- Trace patients who default treatment even for a day, if unable to trace or patient continues to default, inform DCC.

- Provide continuous health education to the patient and to family members as required.

**3. Provide services as a DOT provider and ensure treatment sustainability**

**4. Maintain minimum records including presumptive TB patients, samples collected, TB patients etc.**

**5. If a patient is diagnosed through laboratories, refer the patient to DCC and notify (at-least over the phone) as soon as possible.**

**6. Assure confidentiality of the patients.**

**7. Identify and notify high- risk groups for TB in your area to the DCC.**

**8. Community awareness**

**9. Counselling patients and family members**

**10. Ensure screening of all close contacts of TB patient**



Patients with signs and symptoms suggestive of pulmonary TB should be referred immediately to the nearest District Chest Clinic or to a government institution with screening facilities. Patients can also refer following investigations (GeneXpert, Chest X-ray, sputum microscopy etc.) if facilities are available for the above mentioned investigations and facilities are according to NPTCCD guideline <https://www.nptccd.health.gov.lk>

### **National Programme for Tuberculosis Control and Chest Diseases and Services available for TB care**

The National Programme for Tuberculosis Control and Chest Diseases (NPTCCD) is the focal point in Sri Lanka to fight against TB with the collaboration of multiple health and non-health stakeholders to reach End TB targets by 2035.

- Services are provided through 26 District Chest Clinics, 164 microscopic centers and 108 branch clinics up to the grass roots level.
- TB diagnostic algorithms for adult and paediatric cases were developed by NPTCCD. Chest X-ray is the initial screening test for TB with the expansion of advanced diagnostic tests facilities (WHO Recommended Rapid molecular Diagnostic tests – XpertMTB/RIF) are available in all districts to improve diagnosis. This facility can be requested for patients in private sector free of charge through District TB Control Officer in the respective DCC.
- Active screening of high-risk populations including prisoners using mobile X-ray unit has been operationalized in an island wide manner.
- TB screening among immigrant workers who are applying visa for more than 6 months is carried out under the Inbound Health Assessment Scheme and diagnosed or suspected TB patients are referred to DCCs.
- Modern treatment strategy is based on standardized short course treatment regimens and proper case management to ensure completion of treatment and cure which are available through DCCs.

<b>National Programme for Tuberculosis Control and Chest Diseases (NPTCCD) Contact details of DTCOs and District chest clinics</b>				
<b>District chest clinic</b>	<b>Office number</b>	<b>Name of the DTCO</b>	<b>Tel. Number</b>	<b>Address</b>
Ampara	063 - 2224165	Dr. Devika Wijetunge	0777412092 0714496575	District Chest Clinic, Near General Hospital, Kalmunai Road, Ampara
Anuradhapura	025 2222272 071 7842155	Dr. Deepthini Waidyaratne	0715451760	District Chest Clinic, Near St. Joseph's College, Bulankulama Disawa Mawatha, Anuradhapura
Badulla	055 - 2222483	Dr Sagarika Galketiya	071439 9910	District Chest Clinic, PGH Badulla
Batticaloa	065 - 2222678	Dr Mehala Ravichandran	071486 6147	District Chest Clinic, Hospital Road, Batticaloa
Colombo	011 - 2675274	Dr Sarath Bandara	0772516197	Central Chest Clinic, Baseline Road, Colombo 08
Colombo East	011 - 2549390	Dr. Sithara Rohana	0718511601	Colombo East Base Hospital, Mulleriyawa New Town
Colombo South	011 - 2763261	Dr. Gihan Amarasinghe	0714423852	Chest Clinic, Colombo South Teaching Hospital, Kalubowila
Galle	0 91 - 2234196	Dr. Mudannayake	0777566901	District Thaseem Chest Clinic, Wakwella Road, Galle
Gampaha	011 - 2960155	Dr. Kaushalya Rajapaksha	0716850253	District Chest Clinic Gampaha, Chest Hospital Premises, Welisara
Hambantota	047 - 2220574	Dr. Sameera Ramanayake	077 3790795	District Chest Clinic, DGH Hambantota
Jaffna	021 - 2222494	Dr. R. Manivasakan	077 4933976	District Chest Clinic, No. 16, Clock Tower Road, Jaffna
Kalmunai	067 - 2260601	Dr Abdul Gafoor	0777380438	District Chest Clinic, BH Sammanturai
Kalutara	034 - 2222677	Dr.Erandi Hasitha	0774256542	District Chest Clinic, DGH Kalutara, Nagoda
Kandy	081 - 2222071	Dr. Kavinda Amarasinghe	0715601060	District Chest Clinic, Bogambara Rd, Kandu
Kegalle	035 - 2232431	Dr Sujee Bandara	0772096226	District Chest Clinic, Bulathkohupitiya Rd, Kegalle
Kilinochchi	021 - 2283709	Dr. K. Suseendiran	0777252136	District Chest Clinic, DGH Kilinochchi
Kurunegala	037 - 2224439	Dr Yasanath Dhammika Bandara	0718019720	District Chest Clinic, Suwamedura, Puwakgas Junction, Kurunegala
Mannar	023 - 2232916	Dr. H.P.Nilupulee Herath	0715243870	District Chest Clinic, DGH Mannar
Matale	066 - 2224888	Dr Megawarna Rathnayaka	0773610805	District Chest Clinic, DGH Matale
Matara	041 - 2222134	Dr. Samitha Kadahettige	0714336455	District Chest Clinic, No. 09, Rahula Cross Road, Matara
Monaragala	055 - 2276261	Dr. Susil Denagama	0772551204	District Chest Clinic, DGH Monaragala
Mullativu	024 - 3248131	Dr. Thayaseelan	0775025830	District Chest Clinic, DGH Mullativu
Nuwara Eliya	052 - 2051655	R. Senthuran	070 3773473	District Chest Clinic, DGH NuwaraEliya
Polonnaruwa	027 - 2225570	Dr. Nihal Jayaweera	0714421170	District Chest Clinic, DGH Polonnaruwa
Puttalam	032 - 2265361	Dr. Sunimal Jayakodi	0777322577	District Chest Clinic, Colombo Road, Puttalam
Ratnapura	045 - 2222268	Dr. Buddhika Ranasinghe	0714420802	District Chest Clinic, Hospital Road, Ratnapura
Trincomalee	026 - 2221026	Dr. T. Suresh Kumar	0776014732	District Chest Clinic, DGH Trincomalee
Vavuniya	024 - 2221421	Dr. Chandra Kumar	0777146765	District Chest Clinic, DGH Vavuniya

<b>Centers with GeneXpert test facilities</b>			
<b>Name of GeneXpert test center</b>	<b>Institute</b>	<b>District</b>	<b>Province</b>
Anuradhapura	Chest Clinic Anuradhapura	Anuradhapura	North Central
Badulla	Provincial General Hospital Badulla	Badulla	Uva
Batticaloa	Teaching Hospital Batticaloa	Batticaloa	Eastern
Karapitiya	Teaching Hospital Karapitiya	Galle	Southern
Kandy	Chest Clinic Kandy	Kandy	Central
Kurunegala	Teaching Hospital Kurunegala	Kurunegala	North Western
NHSL	NHSL	Colombo	Western
National TB Reference Laboratory (NTRL), Welisara	NTRL/NHRD	Gampaha	Western
Rathnapura	Provincial General Hospital Rathnapura	Rathnapura	Sabaragamuwa
Kegalle	General Hospital Kegalle	Kegalle	Sabaragamuwa
Kalutara NIHS	National Institute of Health Science	Kalutara	Western
Jaffna	Teaching Hospital Jaffna	Jaffna	Northern
LRH	LRH Colombo	Colombo	Western
Prison Hospital	Prison Hospital Welikada	Colombo	Western
Polonnaruwa	Chest Clinic Polonnaruwa	Polonnaruwa	North Central
Nuwara Eliya	General Hospital Nuwara Eliya	Nuwara Eliya	Central
Hambantota	General Hospital Hambantota	Hambantota	Southern
AMH	Ashraff Memorial Hospital Kalmunai	Ampara	Eastern
CCC Colombo	Central Chest Clinic Colombo	Colombo	Western
Vavuniya	General Hospital Vavuniya	Vavuniya	Northern
Ampara	General Hospital Ampara	Ampara	Eastern
Puttalam	Chest Clinic Puttalam	Puttalam	North Western
Trincomalee	General Hospital Trincomalee	Trincomalee	Eastern
Mannar	General Hospital Mannar	Mannar	Northern
Matale	General Hospital Matale	Matale	Central
Matara	General Hospital Matara	Matara	Southern
Monaragala	General Hospital Monaragala	Monaragala	Uva
Kalubowila	Colombo South Teaching Hospital	Colombo	Western
Faculty of Medicine Colombo	Faculty of Medicine Colombo	Colombo	Western