

# **TRAINING MODULE FOR ICTC COUNSELORS ON TB/HIV COORDINATION**



**Central TB Division & National AIDS Control Organization**

**New Delhi**

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## FOREWORD

It is estimated that 2.31 million people are infected with HIV in India. Considering the fact that 40% of the Indian population is infected with TB, about 0.9 million are co-infected with both HIV and TB. Tuberculosis (TB) continues to be a public health challenge in India and HIV is further fuelling the burden as it increases the risk of TB disease. The consequences of TB infection amongst HIV infected patients are well documented. The dual burden of HIV and tuberculosis greatly amplifies the harmful effects of each disease alone and thus continues to gain importance because of its significant impact on the National HIV and TB control programmes.

Training of staff under NACP and RNTCP is very crucial to the strengthening of TB/HIV activities. To streamline the training, both the programmes envisage, that uniform, standardised modular training be imparted to all the programme and general health staff throughout the country. This training module will help in making the counselors aware of the delicate inter-relation between both the diseases and the devastating impact of their individual or combined effects. The module also sensitizes the programme staff about the available diagnosis and treatment facilities for HIV and TB under the national programmes.

It is hoped that this module, for the counselors, would act as a useful tool for further strengthening the implementation of TB/HIV Coordination activities in the country.



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# 1. Objectives and methodology of this training module

## LEARNING OBJECTIVES

At the end of the training the counselor should

- Provide correct information on modes of transmission and available diagnosis & treatment for TB.
- Explain the effect of TB disease on HIV status and effect of HIV on TB infection
- Clarify the myths and misconceptions related to TB
- Identify patients with symptoms suggestive of TB amongst clients attending ICTC
- Refer the TB suspects at the ICTC to RNTCP Unit for TB Investigations and further management.
- Be able to keep a record of patients referred from ICTC to RNTCP Unit.
- Motivate patients with symptoms suggestive of TB to undergo sputum examinations and any necessary examinations.
- Provide adherence counseling for TB treatment, and explain the importance of ART evaluation and treatment.
- Maintain the standard records and reports (as provided by the national programme) on TB-HIV collaborative activities at the ICTC.

## METHODOLOGY

- Modular Training
- Role plays -
- Exercise for reporting & recording

## MATERIALS REQUIRED

- Course material
- Blackboard/chalk or White writing board with marker pens or Flip Charts
- Sputum Examination Referral form, Counseling Register, PID Register, Line List of Persons Referred from ICTC to RNTCP & Monthly Report of TB/HIV activities at ICTC

## DURATION

- 1 day

## **Training of Counselors under NACP on TB/HIV activities**

**Facilitators:** HIV/TB focal person at SACS (and JD/AD-ICTC) and State TB Cell

**Participants:** Counselors at ICTC, District Supervisors etc.

**Duration:** One day

<b>Time</b>	<b>Session</b>	<b>Facilitator</b>
09.00-9.30 am	Registration	
09.30- 09.45 am	Objectives & methodology of training	
09.45 – 10.15 am	Introduction/Overview to HIV/TB collaborative activities	Presentation by HIV/TB focal person at SACS
10.15 – 11.15 am	Overview of RNTCP & Intensified TB case finding at ICTCs (Modular Reading)	Divide the batch into small groups of 6-7 participants. Each group should be facilitated by the nodal person for HIV/TB at SACS or STC.
11.15 – 11.30 am	Tea Break	
11.30- 1.00 pm	Diagnosis & treatment of TB under RNTCP (Modular Reading)	
1.00- 1.45 pm	Lunch Break	
1.45-2.15 pm	Role play on Intensified TB case finding	
2.15- 3.30 pm	Psychosocial aspects of TB  Counseling of TB patients for HIV  Counseling of ICTC clients for TB (Modular Reading)	
3.30- 3.45 pm	Tea Break	
3.45 – 4.45 pm	Group exercise on reporting & recording	HIV/TB focal person at SACS and STC
4.45 – 5.15 pm	Wrap Up	HIV/TB focal person at STC

## **2. Introduction**

India is the highest TB burden country in the world, with over 1.9 million estimated TB cases per year. India also has the world's third-highest total HIV burden; the prevalence of HIV infection is estimated to be 0.34% of the population, which translates to 2.31 million people living with HIV/AIDS (PLHIV).

The interaction between HIV infection and tuberculosis (TB) is well documented. Although 40% of the population is infected with TB, only a small proportion develops active TB disease. HIV-infection compromises the immunity of the person and increases the risk of progression of TB infection to active TB disease and if untreated may lead to death.

### **Impact of HIV on TB**

HIV infection makes persons much more susceptible to developing TB disease, more likely to die from TB, and even more likely to develop TB again. An HIV infected person who is newly infected with TB bacilli is more likely to develop the TB disease as compared to an HIV non-infected person. The risk of developing TB in HIV infected person is many times higher as compared to the risk in HIV non-infected person. There are higher chances for death of HIV infected TB patients than HIV non infected TB patients during or after treatment for TB. The risk of recurrence of TB even after successful TB treatment is much higher in HIV-infected persons.

The following consequences are likely to be seen wherever HIV and TB are both very common:

- Increased load of people with TB disease and burden on health services;
- Increased death and suffering in TB patients, from both TB and from HIV-associated opportunistic infections;
- Frequent adverse drug reactions;
- Delay of access to health services by TB suspects due to the stigma of HIV-AIDS;
- Spread of TB in health facilities that serve HIV-infected persons;
- Increased rates of TB recurrence.

### **Impact of TB on HIV**

Amongst the AIDS cases, TB is the most common opportunistic disease. The mortality due to TB in AIDS cases is also high. In a HIV-infected TB patient, the immune response to TB bacilli increases HIV replication. As a result of the increase in viral load in the body, there may be more rapid progression of HIV infection and patient starts developing symptoms of various opportunistic infections. Thus the health of the patient who has both diseases may deteriorate more rapidly than with HIV infection alone. In addition, TB treatment complicates ongoing HIV treatment because of pill burden, additional side effects, and drug-drug interactions. As the most common opportunistic infection, TB is a major cause of morbidity and mortality in PLWHA.

Thus, the interaction of both the diseases results in:

- Increased load of active TB cases among PLWHA
- Difficulties in diagnosing TB among PLHIVs due to atypical clinical presentation of TB disease
- Increased morbidity and mortality from TB among PLWHA
- High risk of TB transmission in HIV care settings, due to high TB load and concentrated

presence of many vulnerable patients.

### Snapshot of TB in INDIA

TB is caused by a bacterium called as "Mycobacterium Tuberculosis". Mycobacterium tuberculosis can affect almost any part of the body. Almost 80% of the cases have tuberculosis of the lungs.

Tubercle bacilli are generally present in the sputum of the pulmonary cases. When such patients cough or sneeze, the TB bacilli are released into the air in the form of tiny particles (droplets). A person who inhales these bacteria becomes infected with TB (TB infected) and may subsequently develop the disease.

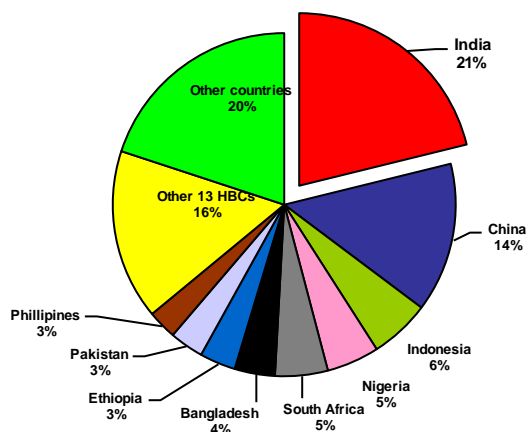
As mentioned previously a patient whose sputum shows presence of TB bacilli can infect others, if untreated. Thus it is of paramount importance to detect all cases of TB, especially sputum-positive cases, in the early stages and treat them effectively.

### Magnitude of the Tuberculosis Problem (India)

- 40% of adults are infected with the tubercle bacilli
- 19 lakh new cases occur every year, of which about 8 lakh are sputum-positive TB accounting for one-fifth of global incidence
- Deaths ~320,000 deaths due to TB each year; about 2 deaths every 3 minutes
- One untreated sputum-positive TB case can infect another 10-15 individuals each year;
- Multi Drug Resistant-TB in new TB cases ~3% and 12-17% in Re-treatment cases

**Global annual incidence=9.23 million**  
**India annual incidence = 1.96 million**

**Global Rank:**  
**Number of TB cases - 1<sup>st</sup>**  
**Incidence Rate - 17<sup>th</sup> rank**





### 3. Overview of the Revised National TB Control programme

The Government of India provides free diagnostic and treatment services to all TB patients. Under the Revised National Tuberculosis Control Programme (RNTCP), for every one lakh population (0.5 lakh in tribal/hilly areas) there is one RNTCP Designated Microscopy Center (DMC), which is a health center or hospital where quality-assured microscopy is available. While a DMC is important for diagnosis, the DMC only provides microscopy service. Actual TB diagnosis, assignment of treatment, and treatment initiation can be done by a doctor at any health center, no matter how large or small.

Five DMCs constitute one Tuberculosis Unit. Each TB Unit is staffed by a Medical Officer (designated from the health facility), a Senior Treatment Supervisor and a Senior TB laboratory Supervisor. The overall responsibility of the TB control programme in the district is with District TB Officer or City TB Officer in case of a Corporation. There are five components of the RNTCP programme which is based on WHO recommended DOTS (Directly Observed Treatment, Short Course) strategy.



#### a. Political Commitment

There is a political will to implement the RNTCP. TB is the leading infectious cause of death among adults. It kills more women than all causes associated with childbirth combined and leaves more orphans than any other infectious disease. The Government of India has accorded topmost priority to TB.



#### b. Quality Sputum Microscopy

The diagnostic test for TB is sputum microscopy. Designated sputum Microscopy Centres have been established for every one lakh population. These centres are located within the existing health infrastructure. The laboratory technician is intensively trained in sputum examination. Sputum examination is done free of cost at all the Government RNTCP Designated Microscopy Centres.

#### c. Uninterrupted supply of good quality drugs

Good quality anti-tuberculosis drugs are provided in patient-wise boxes for the entire duration of treatment for each individual patient. The availability of the full course of treatment to a patient is ensured the moment he/she is registered for treatment. Hence in DOTS, the treatment once initiated will never fail for lack of medicine.

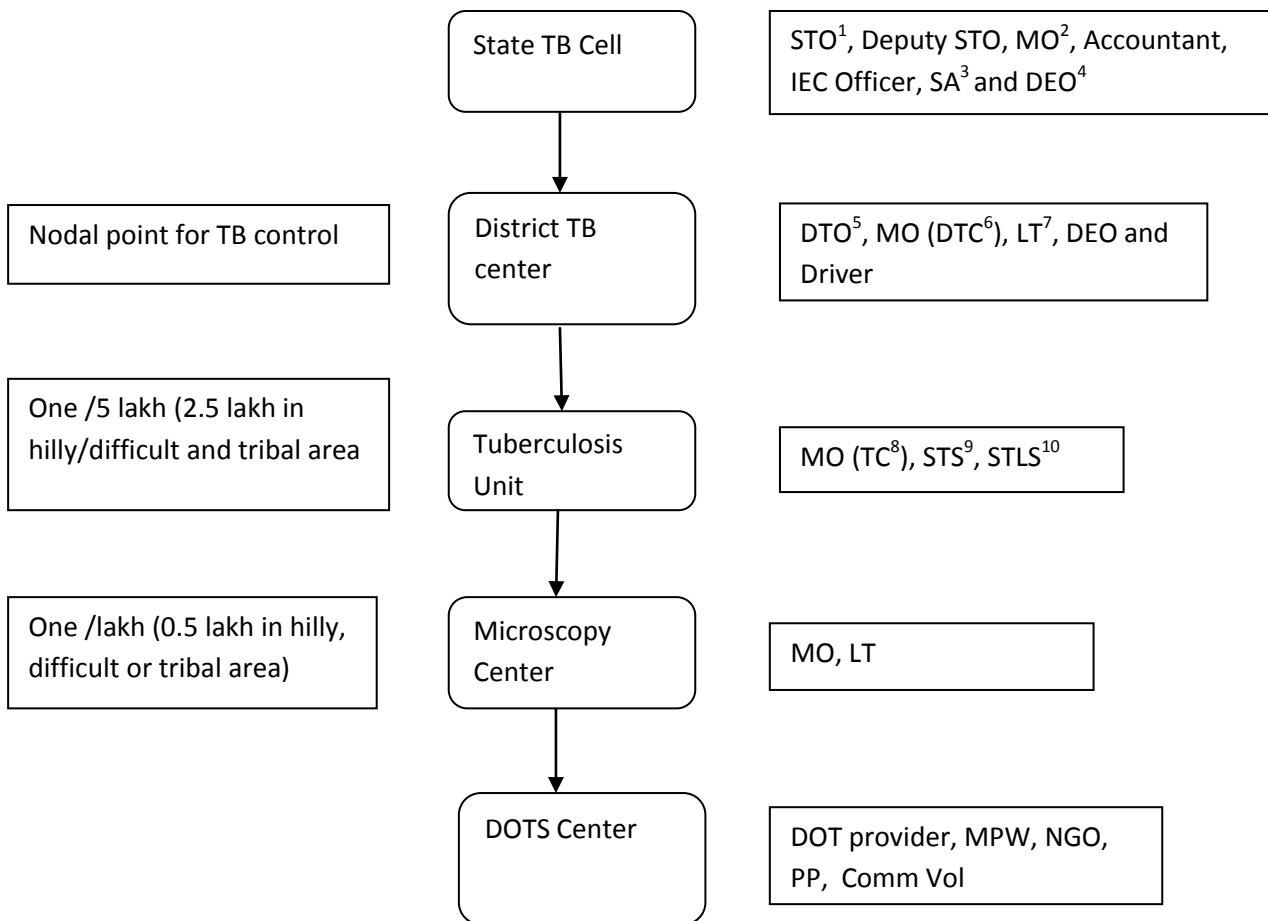
#### d. Directly Observed Treatment (DOT)

The RNTCP uses the best anti-TB medications available. But unless patients receive maximum support and encouragement throughout their treatment, they frequently will not complete treatment. Failure to complete treatment may lead to TB recurrence, drug resistance, or death. This is why at the heart of the DOTS programme is "directly observed treatment" in which a health worker, or another trained person who is not a family member, provides each dose directly during the initial period of treatment. DOT is not just "supervised swallowing" of medicines, but a support mechanism, which assists patients to complete their treatment. DOT has to be easily accessible and convenient for patients, acceptable, and accountable to the public health system.

### e. Accountability

Under RNTCP, the entire responsibility of cure is shifted from the patient to the health care system. The health care system is accountable for each and every patient that has been put on treatment. All efforts are made to ensure that all patients are put on DOTS and all complete their treatment

### Structure of RNTCP at State Level

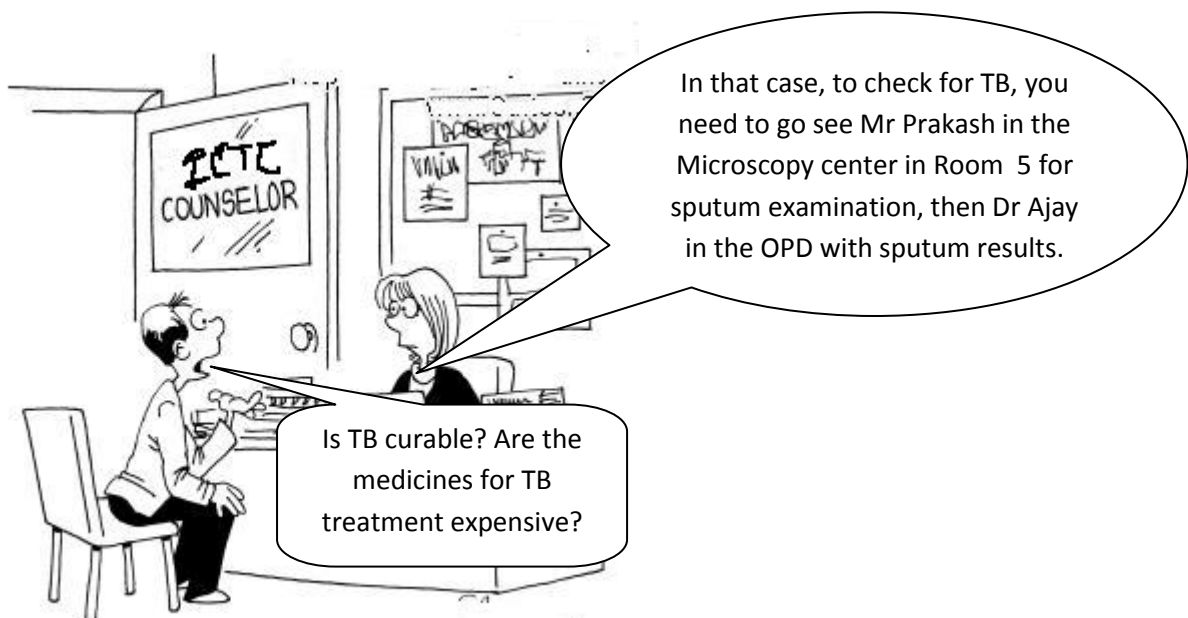
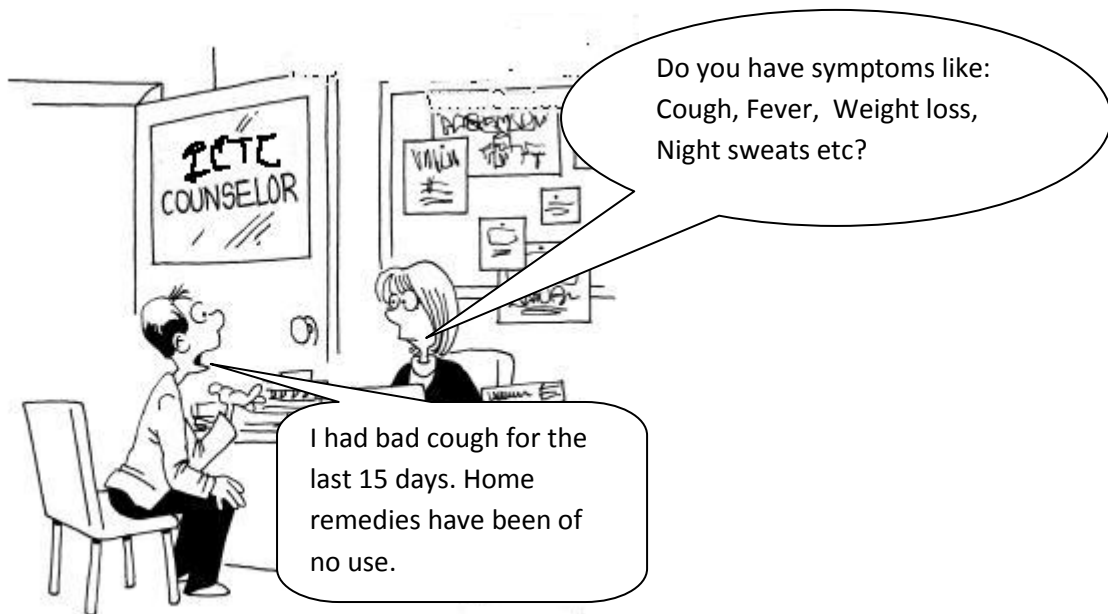


1. State TB Officer
2. Medical Officer
3. Secretarial Assistant
4. Data Entry Operator
5. District TB Officer
6. District TB center
7. Lab Technician
8. Tuberculosis Control
9. Senior Treatment Supervisor
10. Senior TB Lab Supervisor

## 4. When to Suspect Tuberculosis

The most common symptom of Pulmonary Tuberculosis is persistent cough, usually with sputum. When cough persists more than 2 weeks, the chance of TB is greater. Other symptoms that can occur with TB are:

- ✓ Fever
- ✓ Weight loss
- ✓ Night sweats
- ✓ Chest pain on breathing
- ✓ Breathlessness
- ✓ Tiredness
- ✓ Loss of appetite
- ✓ Coughing of blood.



Amongst Extra-pulmonary TB, TB lymphadenitis (lymph node swelling), pleural effusion (collection of fluid between lung and its outer covering), abdominal TB, bone and joint TB, , miliary TB (numerous TB lesions in the lungs and throughout the body) and meningeal TB (Brain TB) are commonest.

In case of Extra-pulmonary Tuberculosis, depending on the organ affected, the patient will have specific symptoms. Example, Tuberculosis of the lymph nodes presents with swelling of the lymph node. When TB affects the pleura (an outer lining of the lungs), there is fluid collection between the lung and pleura. Such patients present with breathlessness and the severity varies depending on the amount of fluid present. Tuberculosis of the joints presents with swelling and pain of the affected joints, meningeal tuberculosis (TB affecting the brain) presents with headache, fever, neck stiffness and mental confusion.

Features commonly associated with different forms of extra-pulmonary TB include:

- ✓ Lymph node swelling
- ✓ Ongoing pain in back or joint
- ✓ Breathlessness
- ✓ Headache, neck stiffness, confusion
- ✓ Swelling in abdomen from fluid
- ✓ Weight loss
- ✓ Any unexplained fever

## 5. Intensified TB case finding amongst ICTC Clients

Clients visiting ICTC may be concerned about HIV, but their symptoms may very well be due to TB disease, irrespective of their HIV status. The early identification and referral of these persons will ensure early detection and prompt initiation of treatment.

### **Intensified TB case finding means the routine screening of all clients at ICTC for signs or symptoms of TB.**

Most tuberculosis patients present with chest symptoms. Invariably these patients seek medical care. That means the majority of TB patients can be easily detected by asking whether they have symptoms of TB.

If any person has symptoms suggestive of TB, especially cough of more than two weeks, they should be referred for further evaluation.

*The Clients who attend the ICTC may have symptoms suggestive of TB disease. As the purpose of the visit to ICTC is HIV testing, the client may not think it is important to tell about any symptoms that he may be suffering from. It is therefore necessary that the counselors ask directly whether the patient has any symptoms suggestive of TB during pre test counseling or any follow up visit.*

All ICTC clients should be assessed by the ICTC Counselors for the presence of the symptoms of TB disease during the pre test counseling session and the same is to be reiterated during post test counseling. This symptom assessment should be further done at every follow up visit, if the client is HIV positive. All clients who have symptoms or signs of TB disease, irrespective of their HIV status, should be referred to the nearest facility providing RNTCP diagnostic and treatment services. (It is to be noted all it is not necessary to refer asymptomatic persons for sputum microscopy; only those with symptoms (especially cough) need to be referred for TB evaluation). The ICTC client may refuse to go to the DMC owing to the following reasons:

- Lack of self perceived risk
- No information about whom to go to for a check up for TB
- Inappropriate referral (no information about whom to meet for the check up)

### **COMMUNICATION WITH Clients**

Use good communication principles when counselling all clients. Clients may choose to ignore their persistent cough and may refuse to get tested for TB. The counselor needs to inform the ICTC client about the significance of getting tested for TB

- Explain the details about TB- what it is, how it spreads, consequences and symptoms
- Inform them that TB diagnosis and treatment services are available at all the government health facilities free of cost and that TB can be cured completely
- Convince those who present with symptoms for doing the TB test and about the need for treatment

### **In case of clients diagnosed with HIV:**

- Explain to the client about the chance of getting opportunistic infections esp. TB and how it may deteriorate the health of the patient in spite of taking ART regularly.

The counselor also needs to reiterate the importance of infection control practices to prevent the spread of infection to other household members and other patients at the ART center/CCC. Cover the nose and mouth when coughing/sneezing either by using tissue/handkerchief or putting nose/mouth in the hollow of their elbow.

- Use tissues to contain respiratory secretions and dispose of them in the nearest garbage bin after use. Advise the patient to wash hands with soap and water after having contact with respiratory secretions or contaminated
- When space and chair availability permit, encourage coughing persons to sit at least 3 feet away from others in common waiting areas
- Use a face mask when moving from one part of the hospital to other

### **Steps for implementation**

- RNTCP Laboratory Forms of sputum examination for referral of patients to be made available at ICTC
- Ensure posters on TB are displayed at the NACP service delivery centers and provide any other IEC material on TB that is available for distribution to clients
- Confidentiality/Shared Confidentiality of HIV status must be ensured at all levels by all staff.
- The NACP staff should attend the RNTCP monthly meeting to follow-up on referred cases between the two programmes
- National and State Programme Managers of RNTCP and NACP to review TB/HIV co-ordination activities during their periodic field visits.

**At the ICTC:** ICTC Counselors will identify persons with symptoms suggestive of TB disease amongst the clients. These patients depending on their symptoms will be referred for appropriate investigation. All clients having cough of more than 2 weeks duration, irrespective of their HIV serostatus, will be referred to a DMC for sputum examinations. In case of symptoms of Extra-pulmonary TB, the patient should be referred to the appropriate doctor. The RNTCP sputum examination form will be filled in by the Counselor. On the sputum examination form, the Counselor should fill in all the required details including the name of ICTC, and take special care in obtaining and recording correct residential address. The counselor will not mention the HIV status of patient on the form or elsewhere, but shall encourage the patient to disclose his HIV status to the treating physician, in the interest of better case management. The sputum examination form is given to the patient with specific instructions on the location and timings of the DMC. The Counselor should make a detailed note of the referral in the Counseling Register.

The counselor should impart information / counseling on TB to all ICTC clients, irrespective of whether they have signs or symptoms of TB or not. During Counseling, encourage voluntary disclosure of HIV status by the client to the treating physician in those referred.

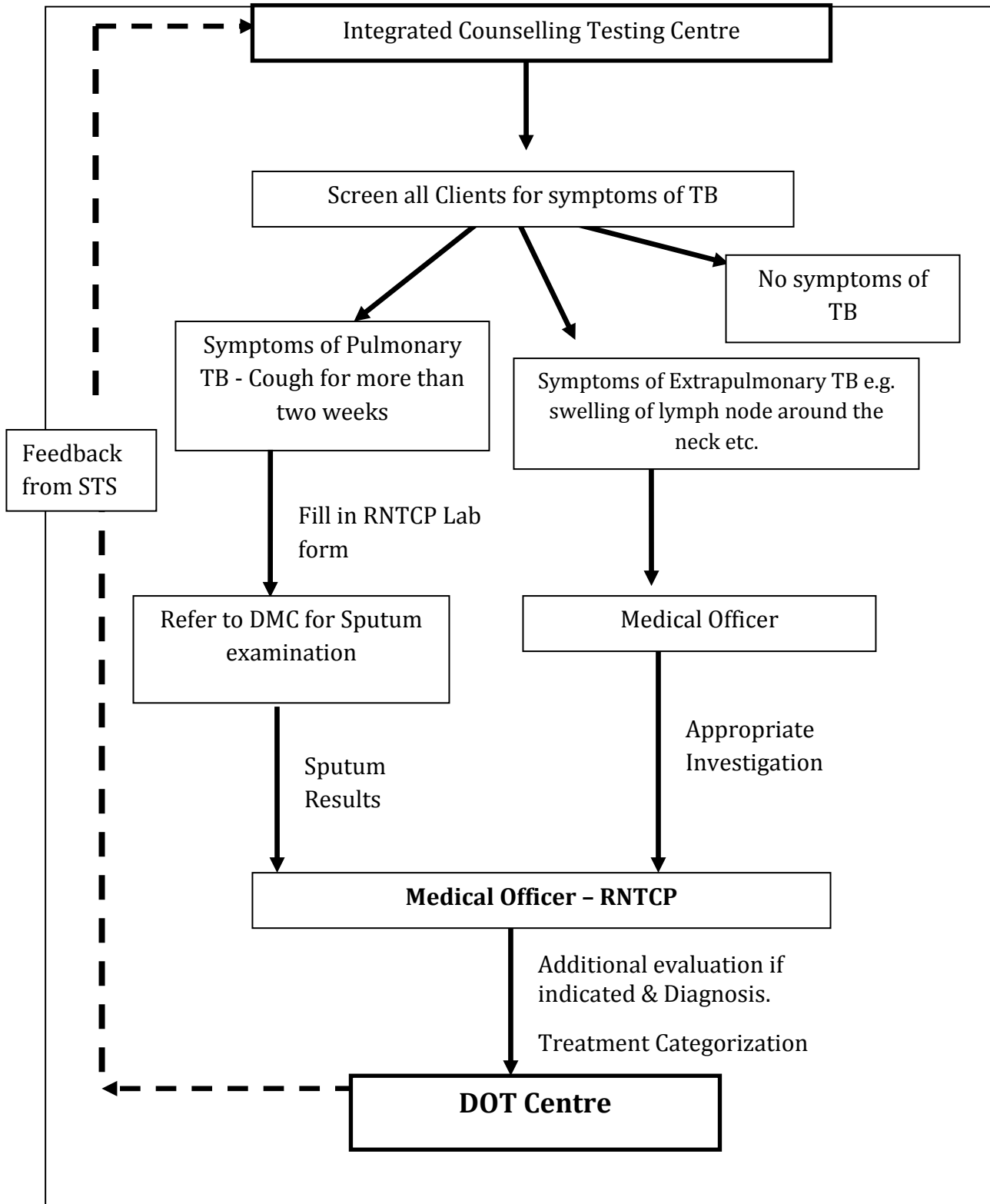
### **At the Designated Microscopy Centre (DMC)**

**Referral of clients suspected of TB to DMC:** Once the patient reaches the Designated

Microscopy Centre, the patient will undergo the same process as any other TB suspect, i.e. the diagnostic algorithm of RNTCP will be followed. The Laboratory Technician will enter the details of the patient, including correct residential address, in the TB Laboratory Register and clearly mention the name of ICTC as the referring unit in TB laboratory register. After all the two sputum examinations are done, the results of the test are given to the patient. Patient will go to the Medical Officer, who will decide on further management.

In case of Extra-pulmonary TB, the ICTC will refer the patient to the Medical Officer, who will further refer the patient for necessary investigations. After obtaining the test results, the Medical Officer will decide further course of management.

Diagram 1: Referrals from ICTCs to RNTCP diagnostic and DOT Centres





## 6. Diagnosis of TB

### Types of TB

Tuberculosis can affect any organ of the body. The most common organ affected is the lung. When lung is affected, it is called "**Pulmonary TB**". Pulmonary TB can be of two types – Sputum-positive TB and Sputum-negative TB depending on whether the organisms may be demonstrated to be present in the patient's sputum or not. Other organs of the body like the pleura, lymph nodes, bone, meninges, intestine, reproductive system, skin etc can also be affected. When TB occurs in any of the organs other than the lungs, it is called "**Extra-pulmonary TB**". Sometimes patients may have both Pulmonary and Extra pulmonary tuberculosis – such patients are classified as having pulmonary TB under RNTCP.

### A) Investigations for patients with suspected pulmonary TB

#### i. Sputum Examination

The first step for diagnosing TB is sputum examination. It is essential to examine two sputum specimens of a single patient. Two sputum samples should be tested for diagnosis of sputum-positive TB.

A sputum specimen taken during visit to the laboratory, called a "spot" specimen" is collected on the patient's first visit. The patient is also given a sputum container to bring the early morning sputum sample the next day. Result of sputum examination is given to the patient at the earliest.

Those persons whose sputum shows the presence of TB bacilli are called as sputum-positive pulmonary TB. Patients with sputum-positive pulmonary TB are the most infectious to others, and priority is given to their care for this reason. Thus the counselor, should ensure that information on cough hygiene is strongly reinforced. The counselor should also inform the patient that if he/she is diagnosed with sputum positive TB, they should get their contacts tested for TB at the nearest health facility. Any child in the family aged less than 6 years should also be provided with chemoprophylaxis for TB from the nearest DOTS center.

The sputum test detects only those patients with serious infectious pulmonary TB. Many patients with negative sputum smear results still can have TB, and can be quite ill. These patients require completion of diagnosis based on clinical findings and x-ray results.

Counselors have to inform clients while referring to DMC that, even if the sputum result is negative they have to see the medical officer. They may need to undergo other procedures to rule out TB.

If the sputum does not show TB bacilli the patient is given a course of antibiotics for 5-7 days. If patient's symptoms do not fully subside the smear examination is repeated. If the smear is negative the patient is further examined by doing a Chest X-ray. If X-ray shows TB lesions, the patient is called as sputum-negative pulmonary TB. Many patients will have their symptoms caused by other conditions, such as other pulmonary infections or non-infectious pulmonary conditions. All patients should have their conditions properly diagnosed and treated; this is particularly important for HIV-infected patients, who frequently also suffer from serious non-TB chest infections.

The clients need to be informed about X ray examination, in case of sputum negative results. It is important to clearly tell clients without pulmonary TB, but present with cough to consult doctors for ruling out other possibilities. Counselors can encourage such clients who are diagnosed with HIV to disclose their HIV status to the treating physician for better management.

Please note that all patients with negative sputum smears should not be labeled as 'Sputum-

negative Pulmonary TB'. They need to be labeled Sputum-negative Pulmonary TB only after they have been diagnosed by a doctor after examinations are complete.

**Thus Pulmonary TB can be of two types: Sputum-positive pulmonary TB and sputum-negative pulmonary TB.**

Under RNTCP sputum examination is done with strong preference for RNTCP DMC. These microscopy centres are located with existing laboratories in government hospitals, Medical colleges, and PHCs; they may also be in certain NGO Clinics or Private laboratories. DMCs have a skilled laboratory technician, trained intensively for a sputum examination with External Quality Assurance system (EQAS) in place. Sputum examination is done free of cost at all the government health centres. All referrals from ICTC for sputum microscopy should ONLY be to an RNTCP DMC

### **ii. X-Ray Chest**

X-rays are useful in smear-negative patients but are difficult to interpret. There is high chance of wrongly diagnosing a patient as tuberculosis if X-ray alone is used for diagnosis. Most patients with an abnormal X-ray suggestive of tuberculosis do not actually have the disease. Nevertheless Chest X-ray is an important tool for diagnosis in certain cases of TB. When a sputum-negative patient does not respond to treatment with 10-14 days of general antibiotics, an Chest X-ray may be required. In some cases of Extra-pulmonary TB, , chest X-ray is required for diagnosis.

### **iii. Other tests**

Certain tests commonly used in the private sector, such as TB-ELISA or PCR, are *not* recommended in national or international guidelines for TB diagnosis. Such tests burden the patient with unnecessary expense, are frequently inaccurate, and are not required to diagnose TB. In some special circumstances, sputum specimens may be sent to a specialized laboratory for culture and testing for drug resistance.

Counselors should tell the clients that the TB tests available under RNTCP are adequate to diagnose TB and are accurate. If they do undergo testing at the government facilities, they can avoid unnecessary expenses also.

## **B) Investigations for Extra-Pulmonary TB**

The investigation of Extra-pulmonary TB depends on the organ affected. It may not be easy for the ICTC counselor to suspect Extra-pulmonary TB. However, the counselor may check for complaints like swelling around neck, swelling and pain in joints, breathlessness, headache, fever and neck stiffness.

In case of suspicion of extra-pulmonary TB, or any unexplained illness, the patient should be referred to a medical officer for further evaluation. The counselor should explain to the patient that they should be evaluated by a doctor for their symptoms, with the possibility of TB in mind.

## **C) Follow up Sputum Examination**

During the course of treatment, follow up sputum examination is done every two months till the end of treatment to monitor their response to treatment. Thus sputum examination both helps with the diagnosis, and is used to monitor response to treatment. Patients who remain sputum positive are provided additional treatment or are referred for evaluation for drug-resistant TB.

## **D) Examination of Contacts of Sputum-positive TB Patients**

TB is transmitted by sharing air between TB patients and others. Patients with sputum-positive TB are the most infectious, and their household contacts need to be considered for TB. Any household contact of sputum-positive person who has a productive cough should have two sputum examinations done, irrespective of the duration of his symptoms.

### **E) TB prevention in children**

All children below six years of age who are household contacts of sputum-positive cases should be examined for TB disease, and if the child has TB disease, then anti-tuberculosis treatment is given. If the child does not have TB, preventive treatment with Isoniazid is given for 6 months, to reduce the risk of TB.

## 7. Treatment of TB

A Tuberculosis patient will receive treatment for six to nine months depending on the type of tuberculosis, sputum status, and severity of illness and history of previous treatment.

There are two treatment categories for TB patients, for new and re-treatment patients. Patients are classified into one of these categories based on history of previous anti-TB treatment. The drugs are provided free of cost to patients in a single box for each patient, containing the full course of treatment for the individual patient. Each box contains two pouches - one for the intensive phase and the other for the continuation phase. The drugs in the two pouches are packed in blister packs. The boxes for each of the two categories have different colored labels.



**Intensive Phase:** The duration of this phase is two months for Category I and three months for Category II. The drugs in intensive phase are to be taken on alternate days. One blister pack in the intensive phase contains all the drugs for a single day. The patient consumes all the doses of Intensive phase under supervision. The phase is prolonged by one month if the patient is still sputum smear positive at the end of the phase.

**Continuation Phase:** The duration of this phase is four months for category I and five months for Category II. The blister pack for the continuation phase contains drugs for a week. The anti-tuberculosis drugs are to be taken on three days a week and on other days a single tablet of Vitamin B is taken. The patient visits the DOT centre/ DOT provider once a week, consumes the first dose under supervision while rest of the doses are consumed at home. The patient brings back the empty blister pack when he/she returns to collect the next week's drugs.

### Treatment of TB is available free at all the government health facilities:

Category of treatment	Type of Patient
<b>Category I (New) – Red coloured Box</b>	New sputum smear-positive New sputum smear-negative New extra-pulmonary
<b>Category II (Previously-treated) – Blue coloured Box</b>	Sputum smear-positive Relapse, Failure, Treatment After Default, Others

## 8. Directly observed treatment

Directly Observed Treatment is the heart of the strategy which ensures cure by confirming that the medicines are consumed by the patient. A health worker or a trained observer (DOT provider) who is acceptable and accessible to the patient and accountable to the health system, watches and helps the patient to swallow the tablets. By direct observation, it is ensured that the TB patient receives the right drugs, in the right doses and at the right intervals.

Direct observation is necessary because patients benefit from support to take their treatment on-time and for the full duration, even after they have improved. Treatment for the full duration is required to ensure that the patient is fully cured from TB. As is the case with any type of treatment, many patients discontinue their medication once they start feeling better. Even with excellent health education, at least one-third of the patients are likely to stop taking their drugs as prescribed. This happens because of the following reasons:

- Patient starts feeling better after taking medications for TB for one month
- Minor perceived drug intolerance
- Lack of understanding of hazards of incomplete TB treatment
- Expenses incurred in completing the TB treatment
- Conflicting medical advice from other providers
- Inconvenience of care

The DOT Provider watches the patient take his/her medicines, for each dose of Intensive Phase. For intensive phase, the patient has to make a total of 24 visits for category I and 36 visits for category II. If a patient does not come on the expected day, a home visit is done the next day to immediately retrieve the patient. In the continuation phase, the patient comes every week and collects the weekly blister pack from the DOT provider. On the day of his/her visit, the patient in the presence of the DOT provider swallows the first dose for that week. The consumption of the medicines in the continuation phase is checked by the return of empty blister packs, when the patients come subsequently in the next week.

### Side-Effects to Anti-Tuberculosis Drugs

In most TB patients, Anti Tuberculosis Treatment (ATT) is well tolerated. However, some patients may experience some side-effects to these anti-tuberculosis drugs. These side-effects may be classified as minor or severe.

**Minor Side-Effects** include mild gastrointestinal upset, mild itching, joint aches, and drowsiness. Most of these will go away within a short time. **Serious Side-Effects** are rare but also occur. These include burning sensation in the hands and feet, impaired vision, ringing in the ears, loss of hearing, dizziness, loss of balance, ongoing nausea, or jaundice requires to be immediately reported to the medical officer for evaluation.

Counselors should encourage the clients to promptly seek medical opinion in case of side-effects and not stop medicines on their own.

## 9. Psychosocial Aspects of TB

Like HIV, TB is also a disease with much stigma, but to a different extent. It is the role of the counselor to combat stigmatization and discrimination against TB. The first step is to help spread awareness of TB, and to correct common mistaken beliefs about what causes TB, how it is transmitted, whether it can be cured. In spite of awareness about TB, patients are afraid to seek medical opinion for fear of being diagnosed as TB. Thereby many persons prolong their sufferings and many unwilling to accept the diagnosis of TB shop around for another doctor in the hope of a more acceptable diagnosis.

TB can occur to any person. In the early stages, patients tend to ignore their symptoms and used to go to physician only when they are seriously ill. Patients with cough or other symptoms frequently seek private treatment first, but are unable to afford expensive diagnostic testing or complete treatment from the private facility. Many patients and their families incur huge debts, are forced to sell off their assets and are pushed further into poverty. If the sole bread earner of the family is suffering from TB, the situation may be further complicated by loss of daily wages if he is unable to attend to his work. Counselors should check with the client whether they have taken any medicine before, while screening for TB. While telling clients about treatment from RNTCP, it is to be specified that DOTs is free of cost

Patients frequently discontinue their treatment as their health improves, within few months of treatment. The motivation to take regular medication for a long period is lacking even when medicines are provided free of cost. Patient starts forgetting to take medicines. Alternatively, takes less than the prescribed medicines or decides that he does not require any more treatment. Very often, in spite of knowing the consequences, patient stops the treatment before completing the full course of treatment.

Clients need to understand that TB is curable; not a hereditary disease; and after a short period of treatment, no longer infectious. This can reduce the stigma attached to TB; increase acceptance of people with TB; and create a supportive environment to encourage diagnosis, treatment and effective cure.

## 10. EXERCISE: ROLE PLAY

**Instructions to Trainer:** Ask two trainees to volunteer to play a counsellor and a client. Give one trainee the Profile of the Client and just inform the other trainee that they have to do appropriate counselling. Let the role play unfold. Ask the audience for suggestions after the role play. If there is a second volunteer, let them try playing the counsellor. At the end of the role play, use the Role Play Key to make sure that trainees know what are the points to be addressed in the counselling. Next run the second role play using the same format. Remember to tell trainees that counselling is NOT only information giving. It includes assessment and support as well.

### ROLE PLAY 1

**Profile:** I am Pavani. I am 28 years old. I am married and living with my in laws, husband and kids in the village. My health was good till 6 months ago and I used to do all the household works myself. I had diarrhea before 6 months ago. I consulted a nearby doctor and he gave me medicines. But my condition was not getting better. I started losing my weight. My mother in law has told me that I have become pale also. My husband is not able to go for his daily labour in the village as he wanted to take care of me and assist my mother- in -law in house hold works. Since my condition got deteriorated the doctor sent me to this District Hospital. It was very difficult for me to reach here as it is too far away from my village. I was also having cough for last 10 days. I think it may be because the dust and will go away its own.

Now the doctor here has asked me to undergo an HIV test. I haven't done such tests before. I remember there were some blood tests conducted while I gave birth to my younger one. I really don't know why the doctor has asked me to do the test. If I do the test, what my husband and family will think? I do not know what the counsellor will ask me. I haven't met such people before. If the counsellors ask something, how will I answer?

### Role Play Key for Trainer.

Pavani needs to be counselled for HIV and TB. She should be assessed for risk of TB.

Explain TB and then probe for symptoms.

Some questions to help:

- You told me that you are having diarrhea for last 6 months. Apart from this have you been experiencing any other problems? Can you tell me what problems?
- Were you suffering from cough? For how long?
- Can you tell me whether you have any other symptoms which I am going to tell you: Fever, weight loss, night sweats, chest pain on breathing, blood in cough, breathlessness, loss of appetite, tiredness?
- Do you have anybody at your home diagnosed with TB or having cough persistent for more than two weeks?

## **Profile 2: Nidhi**

I am Nidhi, I am 28 year old, married and having one child. I am living in a small town with my husband and child. I have been referred to ICTC for HIV testing by a doctor when I had gone to the doctor for continued fever and weight loss. The counsellor has explained me about HIV, importance of HIV testing and treatment options. He has also told me about TB. They drew my blood for testing in the morning. Now the counsellor has called me in and has told me that my result says that I am HIV infected. I feel I am going to die.

The counsellor has told me that I have higher chance for getting TB. I have been suffering from cough for last one week and I am sure it is because of the change in the weather. I cannot have TB, no one in my family ever had TB. Then how should I have? I am not that much unfortunate to have both these diseases together.

I am not able to think that I am HIV infected. If my husband knows about it, he will hate me. If I die now who will I look after my child? The counsellor is asking me to go and do the TB test. Even if I do the TB test, I do not know whether i would be able to go for treatment and it will help me.

**Role Play Key for Trainer:** Nidhi is in a shocked situation. She is thinking that she is going to die and is worried about her child. She is also feeling that her husband will hate her. She is not accepting that she may have TB. The counsellor has to counsel Nidhi on why it is important to get tested for TB. Counsellor also need to tell the implications of HIV on her TB, and what she needs to do now with regards to her TB treatment, and any additional HIV-related care and support.

Sample questions for initiating discussion

- “I understand that you are concerned about your child and relation with your husband. I also understand that you do feel that you may die soon. Let me tell you the fact. You can live healthy and look after your child. For that you have to take some steps like taking ARV drugs if required, getting your illnesses treated etc.” Explain her ART, need of nutrition etc
- I heard from you that you are having cough for last one week. Hope you remember what I told you about TB. Let me once again brief you what TB is and how important this information for you. Then you can tell me whether there is any chance of you having TB?



## 11. Counseling of ICTC clients on TB

All the clients attending ICTC irrespective of whether they have symptoms of TB or not, should be given information on basic facts of TB. This should include:

- Information on common symptoms of TB
- Need for early recognition and care seeking by the patient
- Availability of free quality assured diagnosis and treatment services at Govt health facilities
- Fact that TB is completely curable if diagnosed early and complete treatment is taken as prescribed.

Better equipped with information on TB, the client will promptly seek medical opinion, in case of symptoms. Symptom screening of the ICTC clients for TB is to be done as detailed in the earlier sections of the module.

In case the patient is a TB suspect, then the following information may additionally be provided to the client:

<b>Ask the patient questions such as:</b>	<b>Then give the relevant messages on TB:</b>
<p>What do you understand tuberculosis to be?</p> <p>What do you think may have caused your illness?</p>	<p><b>What is TB?</b> Tuberculosis or TB, is an illness caused by germs that are breathed into the lungs. TB germs can settle anywhere in the body, but we most often hear about TB in the lungs. When the lungs are damaged by TB, the person coughs up sputum (mucus from lungs) and cannot breathe easily. Without correct treatment, a person can die from TB</p>
<p>Have you ever known anyone with TB? What happened to that person?</p> <p>Do you know that TB can be completely cured?</p>	<p><b>TB can be cured:</b> TB can be cured with the correct drug treatment. The patient must take all of the recommended drugs for the entire treatment time in order to be cured.</p> <p>Drugs for treatment of TB are provided free of cost. Treatment can be done without interrupting normal life and work</p>
<p>How do you think TB spreads?</p>	<p><b>How TB spreads:</b> TB spreads when an infected person coughs or sneezes, spraying TB germs into the air. Others may breathe in these germs and become infected.</p> <p>It is easy to pass germs to family members when many people live closely together. Anyone can get TB. However, not everyone who is infected with TB will become sick.</p>
<p>How can you avoid spreading TB?</p>	<p><b>How to prevent TB from spreading?</b></p> <ul style="list-style-type: none"> <li>▪ Take regular treatment to become cured</li> <li>▪ Cover mouth and nose when coughing or sneezing</li> <li>▪ Open windows and doors to allow fresh air through the house, use a fan</li> </ul>

The ICTC counselor may also receive a TB patient who has been referred for HIV testing from RNTCP. For such cases, the counselor may reinforce adherence to TB treatment, benefits of TB treatment under RNTCP, side effects of TB drugs etc. The following information may be then shared with the TB patient at ICTC:

<p>How many people live with you? What ages?</p> <p>Does anyone else in your household have cough? Who has cough?</p> <p>Who else should be examined or tested for TB?</p>	<p>All children aged under 6 years living in the household should be examined for TB symptoms. This is especially important because children under 6 years are at risk of severe forms of TB. Young children may need preventive medicines and need to be examined by the doctor.</p> <p>Other household members should be screened and tested for TB if they have cough.</p>
<p>Can you explain why it is important that somebody else observes you taking your pill?</p>	<p>A health worker must watch you swallow all the drugs according to schedule. This will ensure that you take the correct drugs regularly for the required time. If injections are needed, they will be given properly. By seeing you regularly, the health worker will notice if you have side effects or other problems.</p> <p>You may also involve your close family member/friend to ensure that you do not forget to take your daily dosage. You may also use a calendar or an alarm which reminds you regularly for medicines. If you do not take all of the drugs, you will continue to spread TB to others in your family or community, and the TB will not be cured. It is dangerous to stop or interrupt treatment, because then the disease may become incurable. With Directly Observed Treatment (DOTS), the health worker /trained person will know if you miss a dose and will quickly investigate the problem.</p> <p>If you must travel, or if you plan to move, tell the health worker so that arrangements can be made to continue treatment without interruption</p>
<p>How long should you take the drugs for?</p> <p>How frequent and where are your visits?</p>	<p>Explain for the specific patient:</p> <ul style="list-style-type: none"> <li>- duration of treatment</li> <li>- frequency of visits for taking treatment</li> <li>- where to go for treatment</li> </ul>
<p>What should you expect when taking the drugs? What should you do next</p>	<p>Urine may turn orange/red as a result of the drug (rifampicin). This is not harmful. If you feel nausea from the drugs, bring a bit of food to eat when taking the next dose.</p> <p>Treatment should not interfere with normal life and work</p> <p>Make sure that the patient knows exactly where and when to go for the next treatment.</p> <p>Remind patient to bring family and other close contacts for TB tested as needed.</p>

## 12. Counseling of TB patients for HIV testing

Although most patients with TB do not have HIV, there are a large number of TB patients who may be suffering from undiagnosed HIV infection. Hence all providers are asked to evaluate all TB patients for HIV. If HIV status is not known, then those patients are likely to be referred to the ICTC for HIV testing. These patients should be offered routine HIV counseling and testing. Confidentiality of the patient should be ensured at all-times and post-test counseling should be undertaken irrespective of the HIV status.

### Process at point of TB diagnosis or care

Designated Microscopy Centres/ OPD/ wards may refer TB patients for counseling and diagnosis of HIV infection. Diagnosed TB patients who have symptoms/signs suggestive of HIV infection will be referred by the medical officer to the ICTC. Thus, these diagnosed TB patients may be referred from DMC, DOT Centre, Out-patient clinics, TB ward, TB Clinic etc. Sometimes the patient may simultaneously be investigated for TB and HIV. The doctor should first complete the investigations for TB and then refer for HIV investigations. While referring to the ICTC, the doctor should write a referral note to ICTC in which the TB status of the person is mentioned.

### Process at ICTC

**Once the referred TB patient reaches ICTC, counseling of TB patients should take priority to keep these patients from spending time in the waiting area and potentially exposing other clients awaiting services to TB.** The same counseling and testing procedure will be followed as that for any other client attending ICTC. In practice, patients may not always be aware or understand that they have been referred to the ICTC for HIV testing. At the ICTC, the patient/client will undergo pre-test Counseling. HIV testing is to be done after obtaining informed consent. The details of the patient/client are to be entered into the PID register and Counseling Register. HIV testing done and the test results are to be handed over by the Laboratory Technician to the Counselor. The counselor should explain the HIV test result to the patient/client with appropriate post-test Counseling. The patient should be counseled and encouraged to share his HIV test result with the TB treating physician.

Use good communication principles when counselling all patients. However, some of them may refuse HIV testing. Here are common reasons:

- Patients may feel they cannot accept the fact if their HIV test results are positive; they therefore avoid the reality.
- Patients may think that they do not have any risks related to HIV infection in the past; they therefore see no need for HIV testing (especially among older persons).
- Patients may have already had an HIV test and they believe that the result from the previous test is still valid.

For each reason, you may use the tips below to counsel the patients for HIV testing:

***If the patients refuse HIV testing on the grounds that their previous HIV tests were negative;***

- Ask them why they have had HIV tests in the past, when they had them, and try to obtain a record of the test result.
- Explain the need for a test result that is current and issued by the ICTC
- Review the benefits of HIV testing on treatment of TB and on the patients' own health in the longer term.

***If the patients refuse HIV testing on the condition that they cannot accept the fact if their HIV test results are positive;***

- Review basic knowledge of HIV transmission.
- Assure them that “*knowing their HIV*” status can be life-saving, as proper treatment can be provided.
- Use a media that portrays well-known persons who are infected with HIV or other TB patients with HIV co-infection who accepted HIV testing, and still have a good quality life despite HIV infection.
- Explain that the patient can get counselling and HIV testing whenever the patient is ready to get the test for HIV

***If the patients refuse HIV testing on the grounds that they did not have HIV-risk behaviors in the past;***

- Review basic knowledge of HIV transmission.
- Explain the need for current test results and information for valid diagnosis
  - Studies have showed that some people who said they had not had any HIV-related risks and therefore did not need the HIV test, when they were tested – the HIV tests were positive. Therefore, taking blood for HIV testing is the only reliable way to determine whether or not one has HIV.

***If the patients refuse HIV testing on the condition that they are old;***

- Explain that studies have shown that HIV exists also in older people. Even though TB patients older than 50 years who were also infected with HIV account for only 1% in some areas, in the world, almost half of the TB patients in this age group in other areas were also infected with HIV.
- The stereotypical belief that older persons do not have risks related to HIV infection does not hold true.
- Explain to them that, in some people, HIV infection may stay asymptomatic for up to ten years. Individuals who do not have recent risk factors related to HIV infection might have had the risks and been infected with HIV many years ago.

## **12. Recording and reporting of TB/HIV activities**

### **a. Laboratory form for sputum examination**

The laboratory form comprises of three parts. The first part contains details on general information like name of the referring health facility, name of the patient, complete address, age & gender of the patient and date of referral. The type of suspect or disease in terms of pulmonary and extra pulmonary has to be indicated. The upper half of this form is generally completed by the MO/ health care worker who requests a sputum examination.

The middle portion has to be filled up by the staff of the centre collecting and transporting the sputum specimens to DMCs. This also provides information on date of sputum collection and, specimen identification number and signature of the person collecting the specimens.

The results section, located on the lower half / reverse of the lab form, is completed by the DMC after the sputum examinations. Sputum examination results of both the sputum samples can be recorded in this form

### **The detailed description of completing the form is as follows:**

#### **Name of Referring Health Facility**

The name of the referring facility (any health sector) from where the patient is being referred for sputum examination is written in the space provided. In this case the name of the ICTC is written.

#### **Date**

The date (day/month/year) on which the patient is examined and the form is filled up, is written in the space provided.

#### **Name of patient**

The patient's full name (also nickname, if any) is written in the space provided.

#### **Age**

The age of the patient is written in the space provided.

#### **Sex**

The letter M is ticked if the patient is a male. The letter F is ticked if the patient is a female.

#### **Complete address**

Complete address of the patient with landmarks is written in the space provided. It is very important to write the complete address of the patients so that they can be easily traced when they do not return to the laboratory or the outpatient department of the hospital for their results. The contact telephone number (landline or mobile) has to be obtained and recorded in the form.

**Only ONE Laboratory Form for Sputum Examination is filled out for two sputum specimens collected from an individual patient**

### **Type of suspect / Disease**

Pulmonary box is ticked ✓ if patient is having cough and the specimen is sputum.

Extra-pulmonary (EP) box is ticked ✓ if sputum specimen is collected from a suspected EP TB with cough of any duration.

### **Reason for examination**

The diagnosis box is ticked ✓ if the sputum specimen is collected from a person suspected of tuberculosis. A patient who had all two sputum samples negative for AFB and was given 5-7 days of broad spectrum antibiotics but did not improve again will have to undergo repeat sputum examination. "Repeat diagnosis" box is to be ✓ in such cases. In follow-up cases, follow-up of anti-TB treatment box is ticked ✓ and TB number of the patient is also recorded.

Follow up examination : This is to be filled up by the MO / Health Care Worker while referring the patient for follow up examination for new, previously treated cases or MDR-TB cases. The Month of follow up examination may be indicated in the space provided.

Treatment Regimens: Treatment regimen given viz., regimen for new cases, regimen for previously treated and MDR DOTS Plus treatment being administered to the patient may be indicated by ✓ in appropriate box provided.

### **Patient's TB No.**

This is to be filled up only for patients who are undergoing follow-up sputum examination. This is not available for patients undergoing the process of diagnosis. The TB number for the patients diagnosed will be available after the process of registration in the TB register is completed.

### **Name and signature of the referring person/official**

The name and signature of the referring person/official who referred the TB suspect or follow-up patient is recorded in the space provided.

**Results** The lower portion of the form deals with the information regarding results to be completed by the Laboratory Technician of the DMC.

Results declared are to be entered in the column as either positive or negative and if positive, the appropriate grading is to be entered. This portion of the form should be duly signed by the **Laboratory** Technician of the DMC with date before dispatching the same to the Medical officer.

### **b. Line-List of Persons Referred From ICTC TO RNTCP**

The Line-List (Annex-II) is prepared for each ICTC in the district separately. On the Line-List, the name of the ICTC, the district and the reporting month/year is to be filled in by the ICTC counselor. The Line List has two parts. Part A, i.e. columns 1 to 7 contains information on the persons referred by ICTC to RNTCP. Part A is to be completed by the ICTC Counselors and signed by the ICTC Counselors and the In-charge of ICTC. Below the signature, date of completion of Part 'A' is to be mentioned. Note that only those persons who have been sent from ICTC to RNTCP are included here.

## PART A of LINE-LIST

COLUMN NO.	COLUMN TITLE	WHAT SHOULD BE WRITTEN
1	Sr. No.	This is the serial number that you will write as you are making the line-list
2	PID No.	PID No. (Person Identification Digit No) is the number that the ICTC Counsellor has given to the client.
3	Complete Name and Complete Address	It is important to have the complete name and address of the person, otherwise it is difficult to trace out whether these persons have reached RNTCP Unit, whether they have been investigated and put on treatment. Therefore the ICTC Counsellor should write the complete name of the person. The telephone number of the client may be mentioned if available
4	Age	Age of the person should be mentioned
5	Sex	Male, Female or Transgender should be mentioned
6	Date of Referral	The date when the client is referred to the RNTCP Unit
7	Name of RNTCP Unit referred to	RNTCP Unit includes DTC, DMC, TB OPD, TB Clinic etc i.e. any health facility where the facility for sputum investigation for TB under RNTCP is available. In case the patient is referred to a doctor/OPD, the name of the OPD should be mentioned. For sputum examination, the counsellor should identify the Microscopy Centre that is convenient for the patient. The Counsellor should record the name of the centre the person has been referred to.

The Counsellor will meet the STS with the line list on the 1<sup>st</sup> or 2<sup>nd</sup> of the next month, i.e. the Line List for patients referred in the month of January, will be completed (Columns 1-7) in the first week of February by the Counsellors and handed over to the STS.

The STS/STLS will scan through the TB laboratory register to find out whether these patients have undergone the sputum microscopic examination. If the patient is sputum-positive, then the TB number as mentioned in TB laboratory register will tell whether the patient has been started on DOTS and the treatment category. If the patient is sputum-negative, then look for the patient in the TB register of the concerned Tuberculosis Unit. If patient was suspected of having Extrapulmonary TB, referring to the TB register would be helpful. For diagnosed TB patients referred out for DOTS treatment to another TU, the STS of the corresponding TU should be consulted, and for referrals for treatment outside the District the 'referral for treatment' register at the DMC should be scrutinized.

Once the Line-List is completed (Columns 8-13), the STS will sign the list and write the date of completion of Line-List. The STS will then take the signature of the concerned DTO/CTO or MO-TC. This Line List is handed over to the ICTC Counsellor by the fifth of the month.

### Part B of LINE-LIST

COLUMN NO.	COLUMN TITLE	WHAT SHOULD BE WRITTEN
8	Is patient diagnosed as TB – Yes or No	If the patient is diagnosed as TB mention 'YES' and if non-TB mention 'NO'. For getting this information, the STS will need to check the TB Laboratory Register, Treatment Referral Register and the TB Registers
9	If diagnosed as TB, specify whether patient is sputum-positive TB, sputum-negative TB or Extra pulmonary TB	If the patient is diagnosed as TB, the STS should mention whether the patient is sputum-positive TB, sputum-negative TB or extra pulmonary TB.
10	Is patient initiated on DOTS –Yes/No	Once diagnosed, the patient should be started on treatment. From the TB register, find out whether the patient is receiving RNTCP DOTS. Mention Yes if patient is being treated under RNTCP DOTS regimen and No if under any other regimen
11	Date of Starting Treatment	The date of starting treatment as mentioned in the TB register should be recorded in the Line-List.
12	TB No.	From the TB register, write the TB no.
13	Remarks	<p>The following information can be entered in the remarks column.</p> <ul style="list-style-type: none"> <li>- Name of the DOT centre to which Patient has been referred to;- Name of the district, if the patient is from another district</li> <li>- If the patient has not reached DMC, it may be mentioned here</li> <li>- If patient has died, date when expired</li> <li>- Reason for placing the patient on Non-DOTS regimen</li> <li>- If patient is from the district and has not been started on treatment, mention the reason.</li> <li>- any other</li> </ul>



### c. Monthly TB/HIV Report, integrated into MIS

ICTC-RNTCP co-ordination is monitored with the help of the monthly report on TB/HIV activities. In order to prepare the monthly report, the first step will be to make the Line-List. Preparing the Line-List will be the joint responsibility of the ICTC and RNTCP. Patients who are referred by MO-PHI to ICTC and DMC simultaneously are not to be included in the line list and the monthly report. The Line List for patients referred in the month of January, will be completed in the first week of March (5th of the month) by the Counselors and STS. Once the Line-List is completed, the monthly report will be prepared by the ICTC. The completed Line List and the Monthly Report will be compiled and submitted by the ICTC to all the concerned Officials (State AIDS Control Society, DTO, DAPCU Officer /DNO (HIV/AIDS)). The time taken for diagnosis and initiation of TB treatment may take up to 7 days and registering the patient in the TB register may take another few days and a maximum up to 1 month. Therefore, there will be a delay of one month in reporting of TB/HIV cross-referral. It means that the report of January will be submitted in March, that of February in April and so on.

#### Section I: TOTAL NUMBER OF CLIENTS ATTENDING ICTC:

INDICATOR	WHAT SHOULD BE WRITTEN
a) Total no. of clients who attended ICTC in the month (excluding PPTCT Clients)	Refer to the Counselling Register and count the number of clients who have received pre-test counselling for the month. The reporting period is from day one of the month to the last day of the month. Don't include the PPTCT clients.

#### Section II: REFERRAL OF SUSPECTED TUBERCULOSIS CASES FROM ICTC TO RNTCP

INDICATOR	WHAT SHOULD BE WRITTEN
a) No. of persons suspected to have TB referred to RNTCP Unit	From the Line-List count the total number of persons suspected to have TB who were referred to RNTCP Unit. Referring to the Counselling register, count how many of these persons are HIV sero-positive and how many are HIV sero-negative. Mention accordingly under the appropriate columns in the monthly report. In case the person has not undergone HIV test, but still has been referred to RNTCP he will not be included in this indicator even though his name is there in the line-list. Similarly in case of indeterminate HIV test results, the person will not be counted.
b) of the referred TB suspects, No. diagnosed as having:  (i) Sputum-positive TB	Out of the HIV sero-positive TB patients count the number of sputum-positive TB.  Out of the HIV sero-negative TB patients count the number of sputum-positive TB.  The information on whether the person is diagnosed as sputum-positive TB is available from column no. 9 of the Line-List.

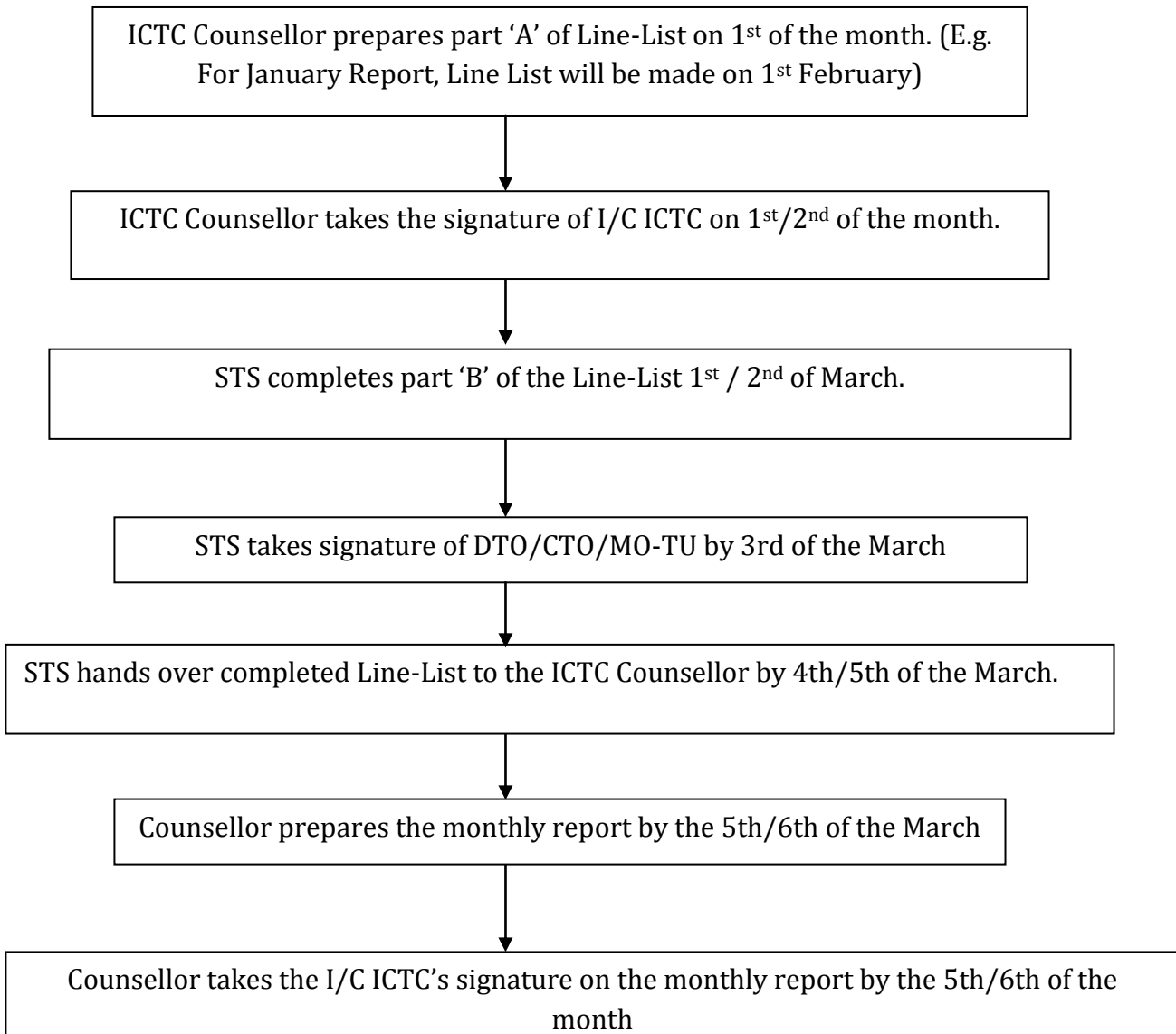
(ii) Sputum-negative TB	<p>Out of the HIV sero-positive TB patients count the number of sputum-negative TB.</p> <p>Out of the HIV sero-negative TB patients count the number of sputum-negative TB.</p> <p>The information on whether the person is diagnosed as sputum-negative TB is available from column no. 9 of the Line-List.</p>
(iii) Extra-Pulmonary TB	<p>Out of the HIV sero-positive TB patients count the number of extrapulmonary TB.</p> <p>Out of the HIV sero-negative TB patients count the number of extrapulmonary TB.</p> <p>The information on whether the person is diagnosed as Extrapulmonary TB is available from column no. 9 of the Line-List.</p>
c) Out of above (b), diagnosed TB patients, number receiving DOTS	<p>Out of the HIV sero-positive TB patients count the number of persons receiving DOTS.</p> <p>Out of the HIV sero-negative TB patients count the number of persons receiving DOTS</p> <p>Include only those persons who are being treated with DOTS Referring to column no. 10 of the Line-List will give this information.</p>

### Section III: REFERRAL OF DIAGNOSED TB PATIENTS FROM RNTCP TO ICTC

INDICATOR	WHAT SHOULD BE WRITTEN
a) No. of RNTCP registered TB patients tested for HIV	Referring to the Counselling register, count the number of persons who have been referred from RNTCP Unit. Among such persons, count how many were tested for HIV
b) Out of above (a), No. detected to be HIV Positive	Among the RNTCP diagnosed TB patients (a), count the number of persons who were found to be HIV positive out of

## PROCESS OF PREPARING THE MONTHLY REPORT:

The monthly report signed by the In-charge ICTC along with the duly completed Line-list should be completed by the 5<sup>th</sup>/6<sup>th</sup> of the month and sent to District Nodal Officer for HIV/AIDS, District TB Officer and the SACS office so as to reach latest by 10<sup>th</sup> of the month. The District Nodal Officer for HIV/AIDS compiles the reports of all ICTC in the district reports monthly to SACS.



## Process of Sending Monthly Report

**At District Level:** The report will be sent by the ICTC to the District Nodal Officer for HIV/AIDS, District TB Officer and the State AIDS Control Society. A copy the TB/HIV report along with the line-list is given to the concerned District Tuberculosis Officer/City TB Officer. The District Nodal Officer for HIV/AIDS compiles the reports of all ICTC in the district reports monthly to SACS. The report should reach State AIDS Control Society by 10<sup>th</sup> of the month.

**At State Level:** At the state level, at the SACS the information on TB/HIV activities will be compiled and a centre-wise report along with the monthly report for the entire state will be sent to NACO and CTD by the 15<sup>th</sup> of every month. A copy of this report will also be sent by SACS to the State TB Office.

### **13. Common Pitfalls in Intensified TB case finding at ICTC and reporting & recording:**

- **Definition of Pulmonary TB suspect**
  - Anybody with cough for 2 weeks or more with or without other symptoms is considered as TB suspect; **In case of contacts of smear positive cases and suspected extra-pulmonary TB cases, cough of any duration** is considered to be suspicious of TB and needs to be referred.
- **ICTC clients, irrespective of HIV status should be screened for symptoms of TB disease, referred to RNTCP and included in the line-list**
  - It has been observed in the field that only HIV positive clients are screened for TB symptoms and referred for investigation. It is to be noted that all the ICTC clients should be screened for TB and those with symptoms suggestive of TB should be referred to RNTCP irrespective of HIV status.
  - All HIV positive clients are referred for sputum microscopy even if they do not have symptoms just to meet the targets. HIV positive client should be screened for TB symptoms and only TB suspects should be referred to DMC for sputum microscopy.
  - The clients who do not reach DMC are not included in the line-list at all! This should not be done. If a client has not reached DMC, it should be noted in the remarks column of the line-list and reviewed for reasons during the monthly meeting.
  - The clients who were referred to DMC but turn out to be HIV test indeterminate are not included in the line-list to avoid the discrepancy between the line-list and the report.
- **When clients are referred to RNTCP unit not attached to ICTC but to a facility outside TU or district, how to document it?**
  - If the client is referred to a RNTCP facility not attached to the ICTC for patient convenience, the same should be mentioned in the line-list (Name of the facility referred to). Just mentioning indiscriminately the same RNTCP unit attached to ICTC for all clients will lead to losing track of such clients.
  - STS in such cases should interact with the colleagues of the concerned TU/District to track the client and report accordingly.
- **All TB suspects whose sputum microscopy results are negative are not to be labeled as “Sputum Negative TB”**
- **Use of old formats of line-list and reporting format should be avoided**
  - Currently 13-column line-list and standard reporting formats are being used

- **The report for the month of January is submitted in the 1st week of March**
  - This is a common error. Just because the report is submitted in the month of March, it should not be labelled as that for March or February (as for other reports of ICTC)
- **Many TB patients referred for HIV testing to ICTC are re-identified as TB suspects by the ICTC counselor and are included in the line-list**
  - This is to be clarified by the counselor right at the beginning of counseling session. If the client is already diagnosed to be a TB patient and on treatment currently, he need not referred again for investigation.
  - This can be picked up easily by carefully examining the line-list – if the date of treatment initiation is before the date of referral, this should be suspected and clarified with the counselor during the monthly meeting.
  - In case the client is a previously treated case of TB (and currently not on treatment) and presents with symptoms suggestive of TB, he/she should be considered as TB suspect, referred for investigation and included in the line-list.
- **Non-submission of the line-list or submission of the line-list for the wrong month – In such cases, it will not be possible to validate the monthly report submitted. Hence it should be a standard practice to submit a copy of the completed line-list along with the monthly report.**
- **Errors in the STS’ part of the line-list**
  - Wrong understanding of the columns 8 and 9 due to the continuing influence of the old formats
  - **Mistake in column 8 (is patient diagnosed as TB?) – STS interprets it as “whether reached RNTCP or not?” as per previous format of the line-list and fills accordingly**
  - **Column9 – result of sputum examination is mentioned instead of type of TB**
  - Date of starting treatment/TB Number is not mentioned
  - Type of TB is wrongly mentioned EPTB is frequently mentioned as Smear negative TB - this may be verified from the TB register during the monthly meetings.
- **Name of the month is not mentioned in the monthly report!**
  - Check the date of referral in the corresponding line-list. This will help in correctly identifying the month of the report.
- **Possible reasons for the discrepancy between line-list and monthly report**

- If the HIV test results of the referred client are not available (Client refused testing, lack of kits, vacancy of LT etc.), then the client though is included in the line-list, cannot be included in the report. If this gap is more, it indicates that a review of functionality of ICTCs is required.
- If the HIV test results of the referred client are indeterminate, then the client though is included in the line-list, cannot be included in the report.
- **Possible reason for the discrepancy between the counseling register and line-list**
  - If the reporting cycle is not as per calendar month this is possible. If the practice in the state (as per NRHM guidelines) is to submit all the reports by 26th of the month, then the monthly cycle is from 26th of the previous month to 25th of current month. In this case, the clients who are referred in the month of January (after 26th) and shown as such in the counseling register will be shown in the line-list for the month of February. This needs to be understood for appropriate review. It may be suggested to the counselors to draw a line in the counseling register to demarcate the reporting cycle.
  - Note that the referral should be documented in the counseling register in the column 17 (Code 4 – Referral to RNTCP)
- **Documentation of TB patients referred for HIV testing**
  - Document the same in the counseling register in the column 4 (Code 4)
  - Report in the Section III of the monthly report
- **Where do we document if the client referred has not reached DMC?**
  - Document in the remarks column which may be reviewed in the monthly meetings.
- **Where do we document reason for not initiating the diagnosed TB patient on DOTS?**
  - Document in the remarks column. The common reasons for the same are
  - Patient died before the treatment initiation
  - Patient has provided wrong address and cannot be traced
  - Patient has been referred to outside the TU/district/state and feedback is not available
  - Patient initiated on Non-DOTS or Non-RNTCP regimen
  - Patient refusing to take treatment.
  - Patients who are registered in the local TU and transferred out should be documented as put on DOTS. This may be incorrectly shown as referred out and could be one of the reasons.

## **14. Role of ICTC and RNTCP Staff:**

### **Role of Counselor /Nurse (ICTC/ART center)**

1. Referral of suspected TB patients to microscopy centre
2. Impart information on TB to all the ICTC Clients.
3. Maintain confidentiality, follow-up of drop-outs partner Counseling and testing, creating community awareness
4. Know where to refer patient for sputum microscopy
5. Educate HIV positive persons about the symptoms and signs of TB and importance of reporting to the Counselor/ Designated microscopy centre at the earliest.
6. Encourage HIV positive clients with TB to reveal their HIV status to the treating physician
7. Provide VCT services to patients referred from RNTCP
8. Send the report of TB/HIV activities regularly to State AIDS Control Society, District Nodal Officer of AIDS and District TB Officer every month
9. Send a copy of Line-List to the State AIDS Control Society every month duly signed by all the concerned staff.

### **Role of STS/STLS**

1. Ensure that the Lab Tech of DMC, mentions name of ICTC in TB Lab Reg.
2. Ensure and maintain strict confidentiality in dealing with all cases of TB/HIV.
3. If asked by TB patients, provide information about HIV/AIDS and the facilities available for HIV Counseling and testing.
4. Ensure the availability of Sputum Laboratory forms and DOTS directory at the ICTC
5. Give feedback to the ICTC counselors regarding the TB status of persons referred from ICTC to Microscopy Centres.
6. Co-ordinate with the ICTC Counselors for preparing and completing the line-list.

### **Role of MO-ICTC**

1. Ensure Counselors screen ICTC clients for symptoms of TB
2. Ensure Counselors are attending the monthly review meetings of RNTCP
3. Check the counselors registers to verify if documentation is being done properly
4. Ensure that the Counselors coordinate with the RNTCP staff and prepare the linelist and monthly report
5. Ensure that the report is complete and correct and duly signed.
6. Ensure the timely submission of reports.

### **Role of MO-TU**

1. Ensure Lab Technician records referrals received from ICTC in TB Lab. register.
2. Ensure STS completes the line-list and hands over the completed Line-List to the Counselor on time.
3. Ensure confidentiality of HIV status is maintained.
4. Ensure the prevention of spread of HIV through safe injection practices
5. Refer TB patients suspected to have HIV to ICTC
6. Refer known HIV positive patients to ICTC for Counseling

## **Role of DTO**

1. Facilitate the Quarterly meetings of District TB/HIV Co-ordination Committee.
2. Ensure the availability of the logistics to all the ICTC's in the district
3. Ensure Lab Technician records referrals received from ICTC in TB Lab. register.
4. Ensure the STS coordinates with the Counselor for completing Line-List
5. Conduct regular monthly meetings between ICTC and RNTCP staff
6. Ensure confidentiality of HIV status is maintained.
7. Ensure ICTC and RNTCP staffs are trained in TB/HIV.
8. Ensure appropriate measures are taken to prevent spread of TB in facilities caring for HIV-AIDS
9. Ensure the prevention of spread of HIV through safe injection practices.
10. Timely submission of TB/HIV report to CTD and STO. DTO reports quarterly in the programme management reports. The reports are dispatched with a gap of one quarter i.e. *TB- HIV* report for the first quarter of 2010 will be reported in the RNTCP programme management report of the second quarter.



**RNTCP Laboratory Form for Sputum examination**

**REVISED NATIONAL TUBERCULOSIS CONTROL PROGRAMME  
Laboratory Form for Sputum Examination**

**Name of Referring Health Facility:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Name of patient:** \_\_\_\_\_ **Age:** \_\_\_\_ **Sex:** M  F

**Complete address:** \_\_\_\_\_  
\_\_\_\_\_

**Contact Phone number / Mobile No.:** \_\_\_\_\_

**Type of suspect / disease:**  Pulmonary  
 Extra-pulmonary **Site:** \_\_\_\_\_

**Reason for examination:**

- Diagnosis
- Repeat Examination for Diagnosis
- Follow-up examinations
- For new and previously treated cases - Month of follow-up .....
- For MDR-TB cases – Month of follow-up .....

**Treatment Regimens** (tick ✓ appropriate box):

New cases  previously treated  MDR-TB

**Patient's TB No.** \_\_\_\_\_

(Name and signature of referring person/ official)

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If sputum samples are being transported:

**Specimen identification No.:** \_\_\_\_\_ **Date of sputum collection:** \_\_\_\_\_

**Specimen Collector's name and signature** \_\_\_\_\_

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**RESULTS** (To be completed in the laboratory of DMC)

**Name of DMC:** \_\_\_\_\_

**Lab. Serial No.:** \_\_\_\_\_

Date of examination	Specimen	Visual appearance (M, B, S)*	Results (Neg or Pos)	Positive (grading)			
				3+	2+	1+	Scanty**
	a						
	b						

\* M = Mucopurulent, B = Blood stained, S = Saliva

\*\* Write actual count of AFB seen in 100 oil immersion fields

Signature of Lab. Technician

Date: \_\_\_\_\_

The completed form (with results) should be sent to the referring PHI within a day of the examination.

### LINE-LIST OF PERSONS REFERRED FROM ICTC TO RNTCP

REPORTING MONTH:

YEAR

NAME OF ICTC:

NAME OF DISTRICT:

<i>TO BE COMPLETED BY ICTC COUNSELLOR</i>							<i>TO BE COMPLETED BY the STS</i>						
1	2	3	4	5	6	7	8	9	10	11	12	13	
<i>Sr. No</i>	<i>PID NO.</i>	<i>Complete Name &amp; Complete Address</i>	<i>Age</i>	<i>Sex</i>	<i>Date of referral to RNTCP</i>	<i>Name of facility referred to</i>	<i>Is patient diagnosed as TB - Yes or No</i>	<i>If diagnosed as TB, specify whether patient is S+ TB, S- TB or EP TB</i>	<i>Is patient initiated on DOTS - Yes or No</i>	<i>Date of Starting Treatment</i>	<i>TB No.</i>	<i>Remarks</i>	
<i>Sign of Counsellor</i> <i>Date of completion:</i>							<i>Sign of MO- ICTC</i>		<i>Name of the TU:</i> <i>Signature of STS :</i> <i>Date of Completion:</i>		<i>Signature of DTO/CTO/MO-TU</i>		

## ICTC TB-HIV Report

REPORTING MONTH: \_\_\_\_\_ YEAR \_\_\_\_\_

NAME OF ICTC: \_\_\_\_\_ DISTRICT: \_\_\_\_\_

### I. TOTAL NUMBER OF GENERAL CLIENTS ATTENDING ICTC:

a) Total no. of clients who attended ICTC in the month (excluding PPTCT clients)	
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### II. REFERRAL OF SUSPECTED TUBERCULOSIS CASES FROM ICTC TO RNTCP

	HIV positive	HIV Negative
a) No. of persons suspected to have TB referred to RNTCP diagnostic services		
b) Of the referred TB suspects, No. diagnosed as having:		
(i) Sputum-positive TB		
(ii) Sputum-negative TB		
(iii) Extra-Pulmonary TB		
c) Out of above (b), diagnosed TB patients, number receiving DOTS		

### III. REFERRAL OF DIAGNOSED TB PATIENTS FROM RNTCP TO ICTC

a) No. of RNTCP registered TB patients tested for HIV	
b) Out of above (a), No. detected to be HIV Positive	

**Signature of Medical Officer - In charge ICTC**

**Name of Medical Officer In-charge ICTC**