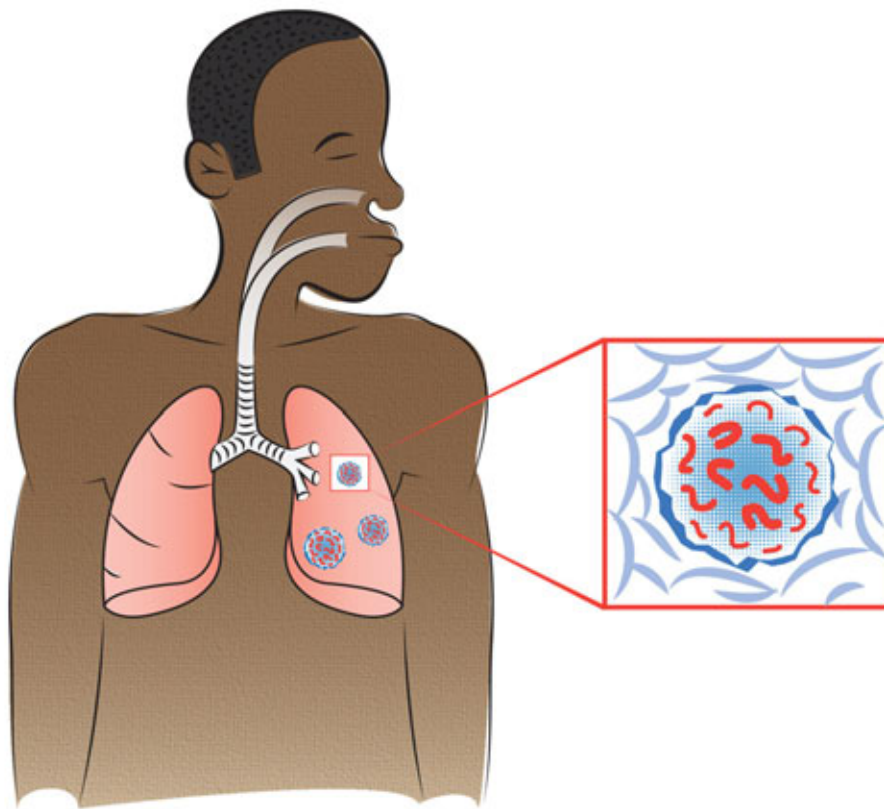
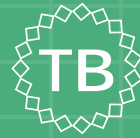


TB SCREENING FLIPCHART



TB SCREENING FLIPCHART



The TB screening flipchart is designed for training health workers who manage TB suspects and patients, to ensure that TB suspects are correctly identified, the correct testing is performed and that follow up testing is also done. The flipchart may also be used by trained health workers to inform patients and communities about TB.

The flipcharts are written in English. You may choose to make your presentation in English or your local language, depending on your audience. Simple messages are presented along with eye-catching images which can be shown to the audience during your presentation. The more detailed notes on the reverse page can be used to aid your memory during the discussion, and to assist in facilitating the discussion.

You may choose to use all or only part of the training flipchart during your presentation, depending on the audience. For example, if you are training health workers as TB screeners you may use all the flipchart, whilst if you are a health worker informing TB suspects about TB, you may only want to use charts 1-6. Refresher training of health workers may focus on particular aspects.

CHARTS INCLUDE:

1. What is TB?
2. What are the warning signs of TB?
3. How is TB spread?
4. TB and HIV
5. How do you test for TB?
6. How to collect sputum for TB testing
7. Recording TB Suspect and patient information
8. Transport and testing of specimens
9. Follow up testing for TB patients
10. HIV testing for TB patients
11. What is MDR-TB?
12. Who is at risk for MDR-TB?
13. How to test for MDR-TB



MINISTRY OF HEALTH &
SOCIAL WELFARE, LESOTHO

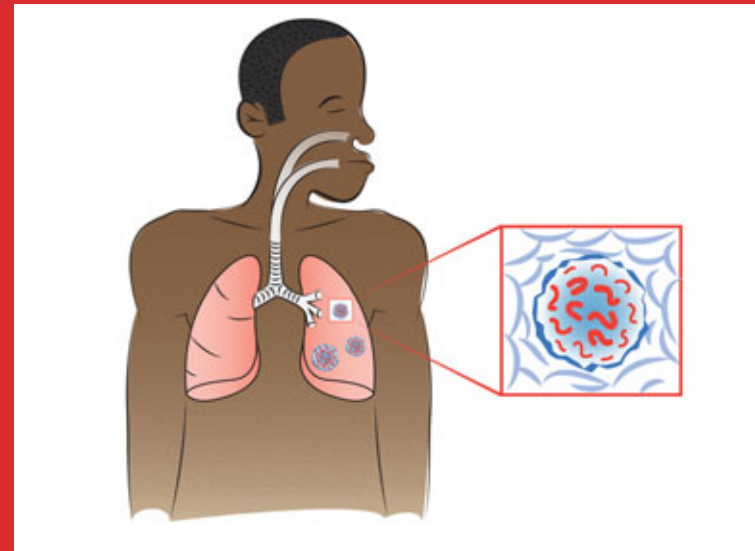


WHAT IS TB?

TB

- **TB IS SHORT FOR TUBERCULOSIS**
- **TB IS A SICKNESS CAUSED BY BACTERIA (MYCOBACTERIUM TUBERCULOSIS)**

- TB usually **occurs in the lungs** (but can also occur in **other parts of the body**)
- **TB is spread** from one person to another **through the air** (coughing and sneezing)
- You can have TB in your body without any warning signs and feel well. This is known as **“silent” TB**. When the TB becomes “active”, you will develop **warning signs**, most commonly cough for more than 2 weeks or symptoms in other parts of your body.



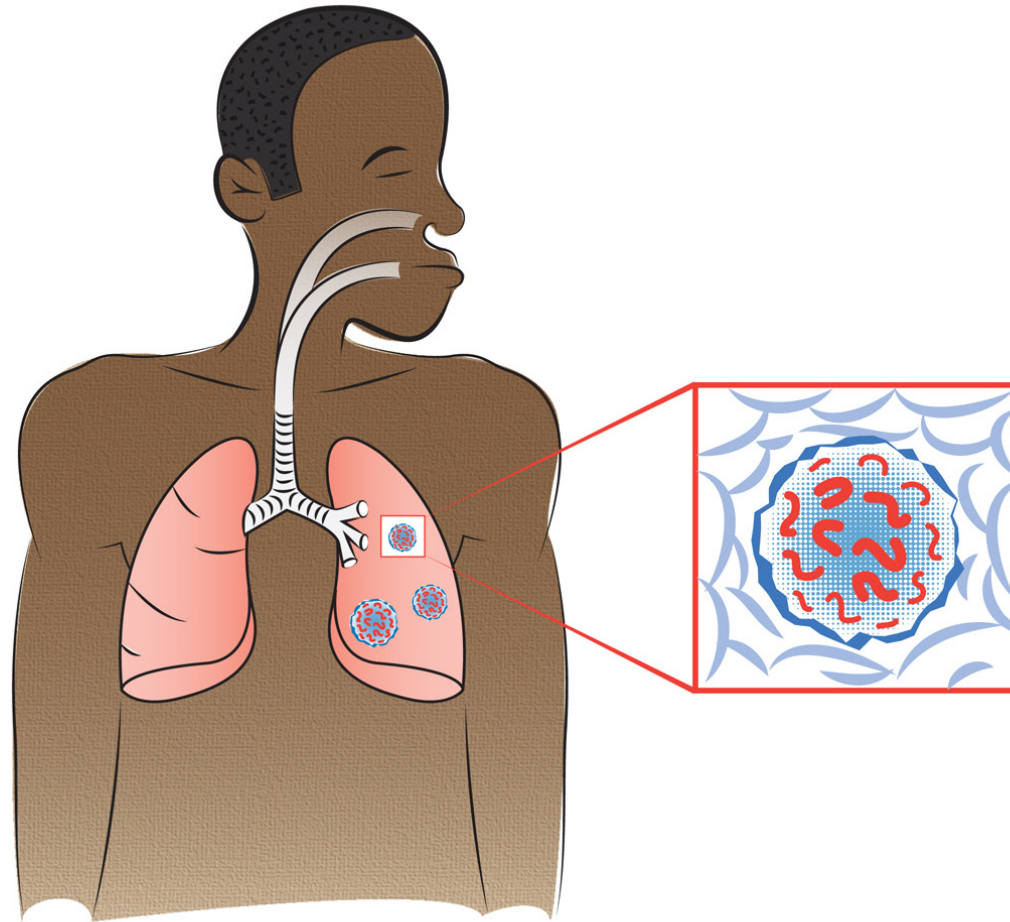
ANYONE CAN GET TB: TB CAN BE CURED IF TREATED PROPERLY



Notes: Encourage your audience to share their own experiences about TB.
Confirm correct information, and correct any wrong information

TB

WHAT IS TB?



ANYONE CAN GET TB: TB CAN BE CURED IF TREATED PROPERLY

WHAT ARE THE WARNING SIGNS OF TB?

TB

People who have TB have certain signs and symptoms, also called warning signs.

THESE INCLUDE THE FOLLOWING:

- **Cough for 2 weeks or more**
- **Fever**
- **Night sweats**
- **Loss of appetite**
- **Loss of weight**
- **Chest pain**



IF YOU HAVE THESE WARNING SIGNS, GO TO YOUR HEALTH CENTRE FOR TESTING



NOTES: Ask your audience to identify some warning signs of TB.
Have they or their family members got any warning signs of TB?

WHAT ARE THE WARNING SIGNS OF TB?

**COUGH
FOR 2
WEEKS OR
MORE**

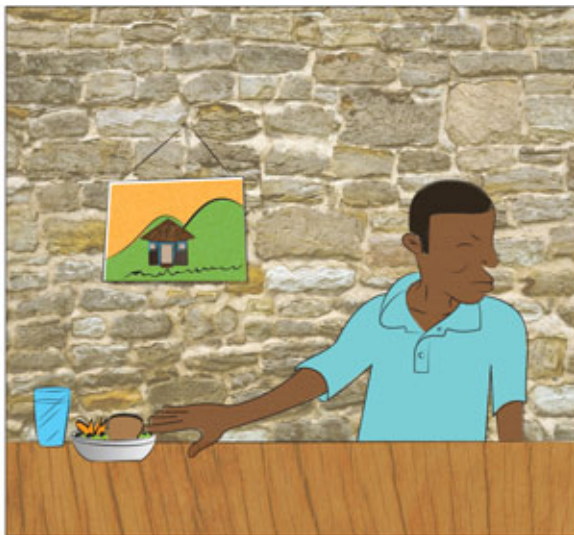


**FEVER &
NIGHT SWEATS**



**LOSS OF
APPETITE**

**LOSS OF
WEIGHT**



CHEST PAIN



IF YOU HAVE THESE WARNING SIGNS, GO TO YOUR HEALTH CENTRE FOR TESTING

HOW IS TB SPREAD?

TB is spread from one person to another through the air. When someone who has TB coughs or sneezes, TB bacteria can be released into the air.

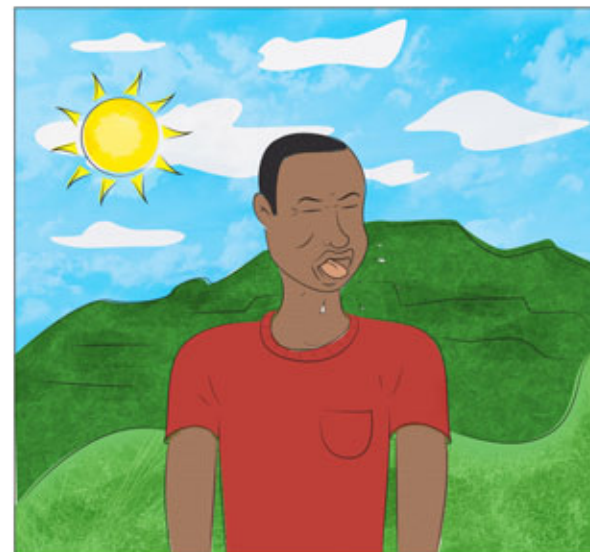
If a person breathes in these bacteria they can enter their lungs and start to grow. The bacteria can also enter the bloodstream and move to other parts of the body, including spine, brain, bones.

THE MOST COMMON WAYS OF SPREADING TB ARE:

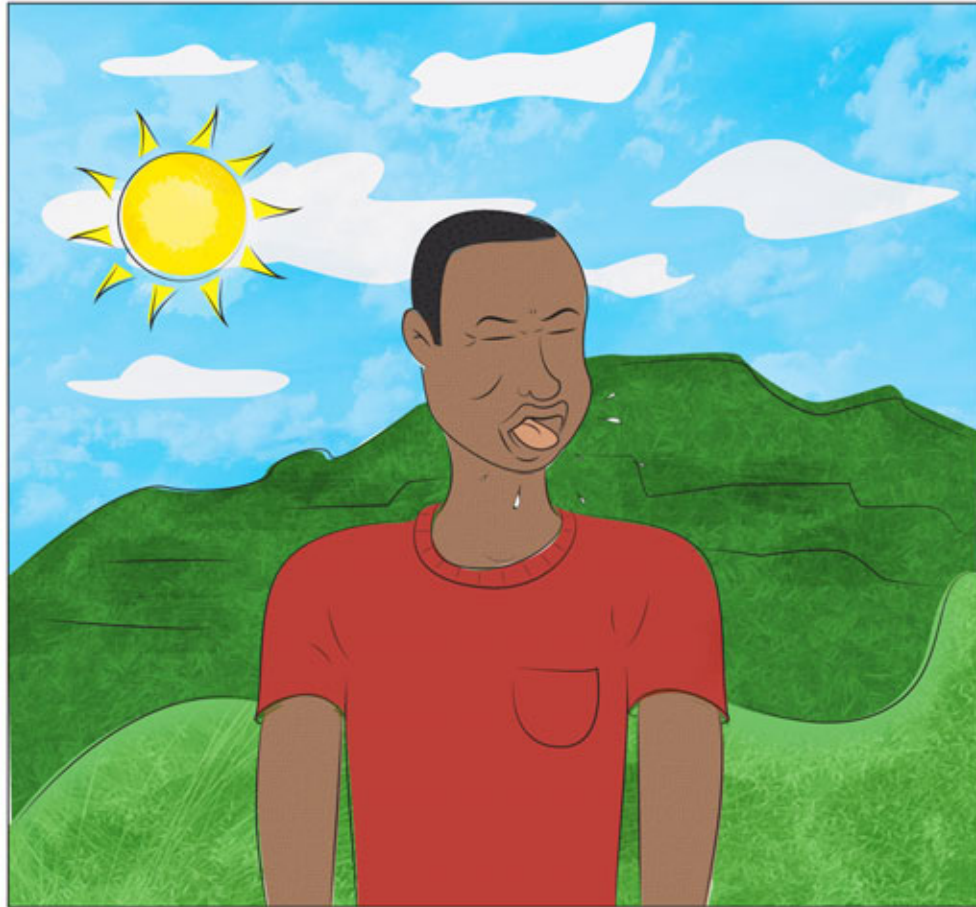
- Coughing and sneezing without covering the mouth
- Crowded places without proper ventilation
- Spitting

HOW TO PREVENT THE SPREAD OF TB?

- Cover your mouth when coughing
- Do not spit
- Open windows in crowded places, e.g. on buses, in waiting rooms
- Bring family members with a persistent cough to the health centre to be tested
- For TB patients – take your full course of TB treatment and being cured



HOW IS TB SPREAD?



**COUGHING &
SNEEZING WITHOUT
COVERING THE MOUTH**



**CROWDED
PLACES
WITH POOR
VENTILATION**

SPITTING

TB AND HIV



It is common for people who have one disease to have the other, but this is not always the case.

- YOU CAN HAVE TB ONLY.
- YOU CAN HAVE HIV ONLY.
- YOU CAN HAVE BOTH TB AND HIV.

Many patients who have TB also have HIV, because TB can easily attack people whose bodies' immune systems are weakened by HIV.

People who have TB should be tested for HIV, so that they can be started on ARVs.

People who have HIV should be regularly screened for TB – be started on TB treatment if TB is confirmed, and start IPT if they do not have active TB.

If they have TB, they must take their full course of TB treatment so they can be cured.

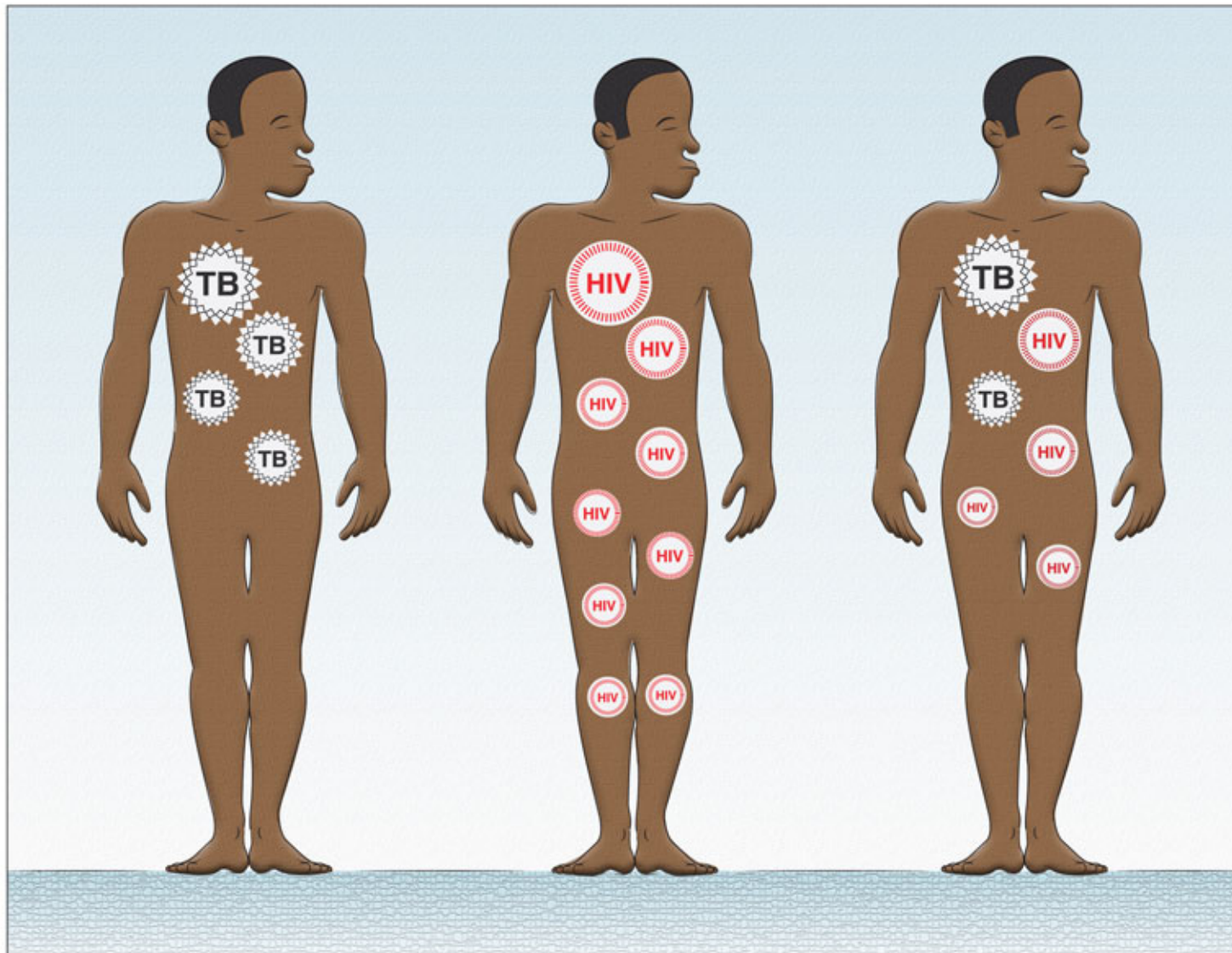
Many people with HIV die from TB, often due to delays in diagnosis and treatment.

**IF YOU HAVE TB, YOU SHOULD TEST FOR HIV.
IF YOU HAVE HIV, YOU SHOULD TEST FOR TB**

• Knowing that you have TB or HIV will help you to get treated and also help prevent spreading TB or HIV to other people.

• TB can be cured in people living with HIV if patients are diagnosed quickly and the full course of TB treatment is taken.

TB AND HIV



**IF YOU HAVE
TB, YOU
SHOULD TEST
FOR HIV.**

**IF YOU HAVE
HIV, YOU
SHOULD TEST
FOR TB**

HOW DO YOU TEST FOR TB?

If a patient has had a cough for more than 2 weeks, or other warning signs of TB, you must collect sputum and test for TB.

◇◇◇◇◇ Sputum is a mucus-like material found in the lungs, which is brought up when you cough.

◇◇◇◇◇ Three sputum samples should be collected as follows, also referred to as “SPOT - MORNING-SPOT” method:



SPOT



MORNING



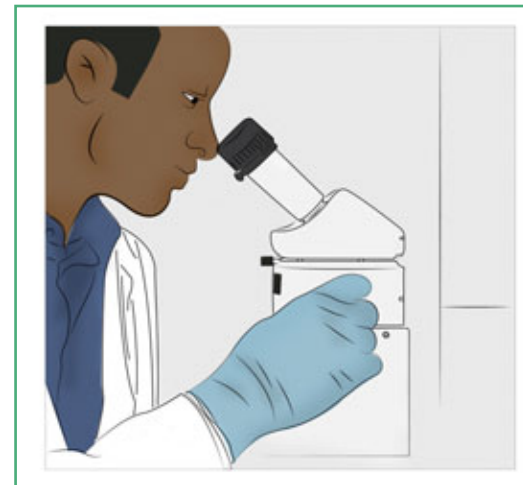
SPOT



NOTES: Giving 3 samples will improve the chance of finding TB

1. Today now at the health centre (“**SPOT**”)
2. Tomorrow morning before eating breakfast (“**MORNING**”)
3. Tomorrow at the health centre when they come back with the second sputum (“**SPOT**”)

◇◇◇◇◇ This TB test is known as “**sputum smear microscopy**” or “**AFB (acid-fast bacilli) smear microscopy**”



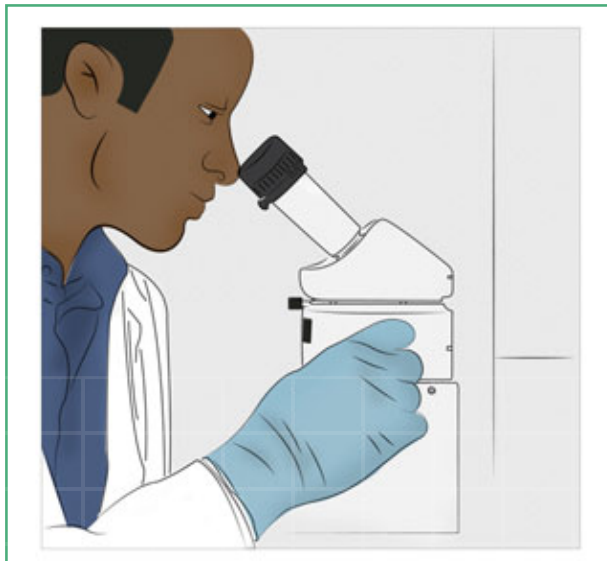
• **COLLECT 3 SPUTUM SPECIMENS FOR TB DIAGNOSIS**

• **GOOD QUALITY SPUTUM HELPS WITH AN ACCURATE DIAGNOSIS**

HOW DO YOU TEST FOR TB?

If your patient has had a cough for more than 2 weeks or other warning signs, you must collect sputum and test for TB

1. Today now at the health centre ("Spot")
2. Tomorrow morning before eating breakfast ("Morning")
3. Tomorrow at the health centre ("Spot")
4. The laboratory will test the sputum (by looking under a microscope) to see if there are any TB germs present.



SPOT



MORNING



SPOT

• **COLLECT 3 SPUTUM SPECIMENS FOR TB DIAGNOSIS**

• **GOOD QUALITY SPUTUM HELPS WITH AN ACCURATE DIAGNOSIS**

HOW TO COLLECT SPUTUM FOR TB TESTING

- 1.** Label container and fill out the Request for Sputum Examination Form (always label on the body of the container, not the lid).
- 2.** Go outside or to a well-ventilated place without other people watching
- 3.** Instruct the patient to wash mouth with water if they have recently eaten or have dentures (remove dentures first)
- 4.** Explain slowly and carefully to the patient how to produce a deep cough
 - Breathe in deeply 2-3 times, and breathe out hard each time
 - Cough deeply from the chest
 - Hold the container close to the mouth to collect the sputum: be careful not to contaminate the outside of the container
- 5.** Supervise the patient as they produce the sputum, but do not stand in front of them
- 6.** Take off the lid of the container and hand to patient without the lid
- 7.** Hold the lid yourself, ready to replace it immediately
- 8.** After the patient has produced the sputum, replace the lid.
- 9.** Check that the patient has produced a good quality specimen, not just saliva. If not, ask the patient to try again for a better specimen
- 10.** Make sure the lid is tightly closed
- 11.** Place the container immediately into the Ziplock bag and seal.
- 12.** Wash hands.
 - **Specimen must be from the lungs, not the nose and mouth**
 - **Remember to tell your patient when to return for their results**

HOW TO COLLECT SPUTUM FOR TB TESTING



- Breathe in deeply 2-3 times, and breathe out hard each time
- Cough deeply from the chest
- From the lungs
- Not the nose or mouth
- Hold the container close to the mouth
- Screw the lid on tightly

**GOOD QUALITY
SPUTUM HELPS
WITH AN ACCURATE
DIAGNOSIS**

Go outside or to a well-ventilated place

RECORDING TB SUSPECT AND PATIENT INFORMATION

Every TB suspect must be entered in the **TB Suspect Register** at your health centre.

If sputum is collected from TB suspects in the community, the TB suspect details should be recorded in the TB Suspect Register at the nearest health centre.

- Suspects will be allocated a **TB Suspect Number**, which you must always write on the request for sputum examination form and on the Sputum container.
- This number will be used for identifying specimens sent for TB testing.
- TB patients will be given a **Patient District Number** by the district TB coordinator. Record the patient district number in the **TB Register** at your health centre.

- Use the Patient District Number when sending follow up sputum for testing (and blood for CD4 testing)
- Fill out a **TB Treatment Card** for every TB patient when they start TB treatment which will be used to record their treatment.



RECORDING TB SUSPECT AND PATIENT INFORMATION



- Enter every TB suspect in the TB Suspect
- Register at your health centre
- Always write TB Suspect Number on the request form and specimen container
- TB Patients will be given a Patient District Number, which you must record in the TB Register
- Use Patient District Number when requesting follow up sputum testing and CD4 testing for TB patients
- Fill out a TB Treatment Card for every patient when they start TB treatment

COMPLETE AND ACCURATE INFORMATION HELPS WITH EFFICIENT TB DIAGNOSIS AND FOLLOW UP OF PATIENTS

TRANSPORT & TESTING OF SPECIMENS

If your facility does not have a laboratory, or when specimens are collected in the community, they must be transported to the nearest laboratory for TB testing.

Specimens may be transported by motorbike, horse rider, or by a health worker.

Place the Ziploc bag containing the specimen container into the specimen transport box, along with the request form (Check the form is completed and the specimen container is properly labeled).

Complete the Specimen Transport log book.

When specimens are received at the laboratory, the details are recorded in the Laboratory TB Register and the specimen is then examined under a microscope to see whether TB bacteria are present

Results will be sent back to the health centre.



VILLAGE HEALTH WORKER, RIDER AND HORSEMAN CARRYING SAMPLES TO LABORATORY

TRANSPORT AND TESTING OF SPECIMENS



- Check specimen container is correctly labelled and request form has been completed
- Place bag containing specimen container and request form into the Specimen Transport box
- Complete the Specimen Transport Log book.



**COMMUNITY HEALTH
WORKER, RIDER
AND HORSEMAN
CARRYING SAMPLES TO
LABORATORY**

FOLLOW UP TESTING FOR TB PATIENTS

All patients on TB treatment must have 2 sputum specimens collected at the end of intensive phase, during continuation phase and at the end of treatment.

For new TB patients (on Category 1 treatment), sputum should be collected at the end of month 2, month 5, and during the last month of treatment (month 6).

Patients whose sputum smears are still positive at the end of month 2 will be given an additional 1 month of intensive phase treatment, and 2 more sputum specimens should be collected at the end of month 3.

Patients whose sputum remains positive at the end of month 3 are at increased risk of MDR-TB and should have sputum sent to the laboratory for specialised testing. Start the patient on continuation phase while waiting for laboratory results.

For previously treated TB patients (on Category 2 treatment) sputum should be collected at the end of month 3, month 5 and during the last month of treatment (month 8).

Patients whose sputum smears are still positive after 3 months of treatment will be given an additional 1 month of intensive phase treatment, and 2 more sputum specimens should be collected at the end of the 4th month.

Patients whose sputum remains positive at the end of 4 months are at increased risk of MDR-TB and should have sputum sent to the laboratory for specialized testing. Start the patient on continuation phase while waiting for laboratory results.

WHY IS FOLLOW-UP TB TESTING IMPORTANT?

Follow up testing of sputum during TB treatment is done to determine whether patients are responding to the treatment.

Patients who are not responding to TB treatment (despite taking their TB drugs) are at increased risk of drug resistance

Patients should have sputum collected and tested at the end of the intensive phase of treatment. If the treatment is working, TB will not be visible when examined under the microscope.

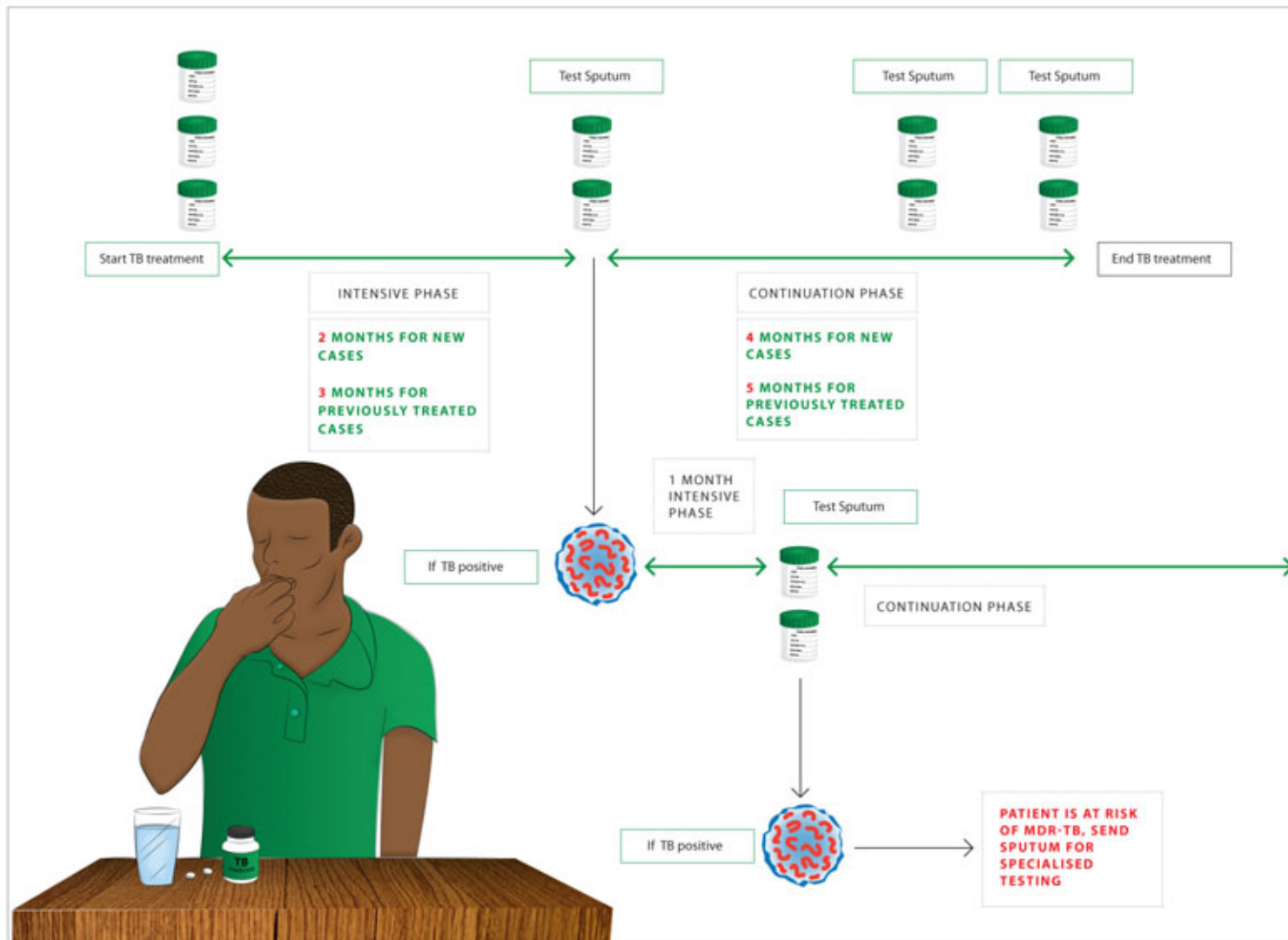
If TB are still visible under the microscope, this may signal that the patient has not been taking their treatment regularly, or that their TB is resistant to the usual drugs.

Sputum samples must also be taken during the last month of treatment to confirm that the patient has been cured.

Patients who are not responding to TB treatment will continue to spread TB to their family and community



FOLLOW UP TESTING FOR TB PATIENTS



- All patients on TB treatment must have 2 sputum specimens collected at the end of intensive phase, during continuation phase and at the end of treatment.

- Patients whose smears are still positive at the end of intensive phase should get another 1 month of intensive phase treatment and then have their sputum tested again

- Patients whose sputum still remains positive are at increased risk of multidrug-resistant TB (MDR-TB) and must have sputum sent for specialised testing

COLLECT 2 SPUTUM SPECIMENS FOR FOLLOW UP TESTING

HIV TESTING FOR TB PATIENTS

- All patients with warning signs of TB should be offered HIV testing and counseling (HTC)
- HTC can be provided before, during or after the TB registration process
- HIV test results of TB patients must be entered in the TB register and reported on a quarterly basis to National Tuberculosis Programme

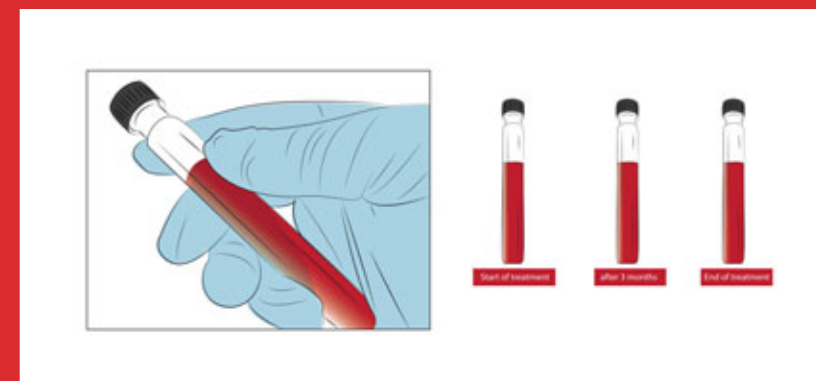
All HIV positive TB patients should have a sample of blood taken and sent for **CD4 testing**

- At the start of TB treatment
- After 3 months
- At the end of TB treatment

• The body's immune system contains different types of cells that help protect the body from infection. One type of these cells are called the CD4 or T-cells

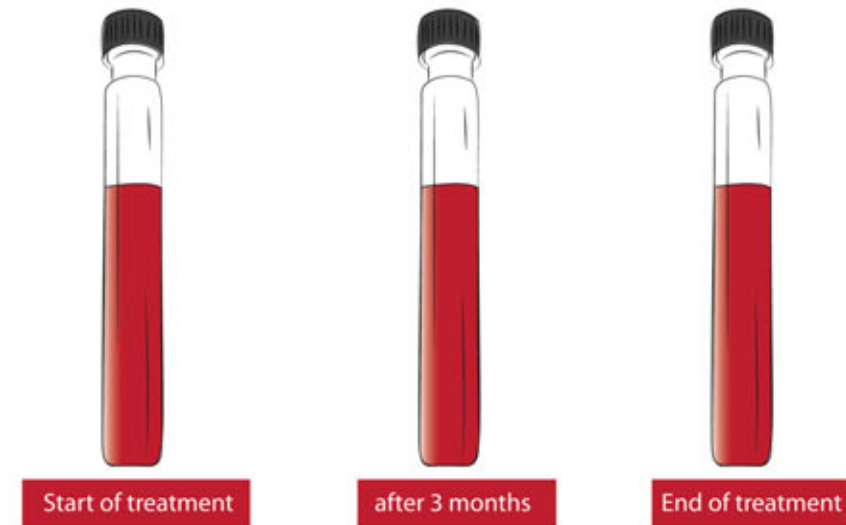
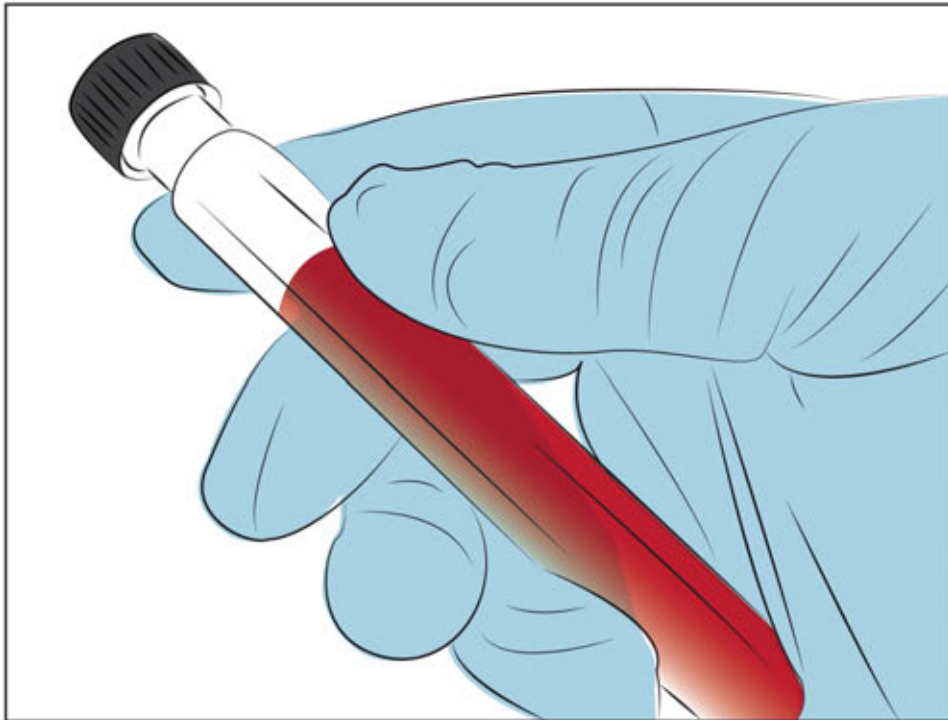
• HIV attacks these CD4 cells and weakens the immune system

• CD4 testing measures the number of CD4 cells, and the strength of the body's immune system



TB CAN BE CURED IN PEOPLE LIVING WITH HIV IF PATIENTS ARE DIAGNOSED QUICKLY AND THE FULL COURSE OF TB TREATMENT IS TAKEN.

HIV TESTING FOR TB PATIENTS



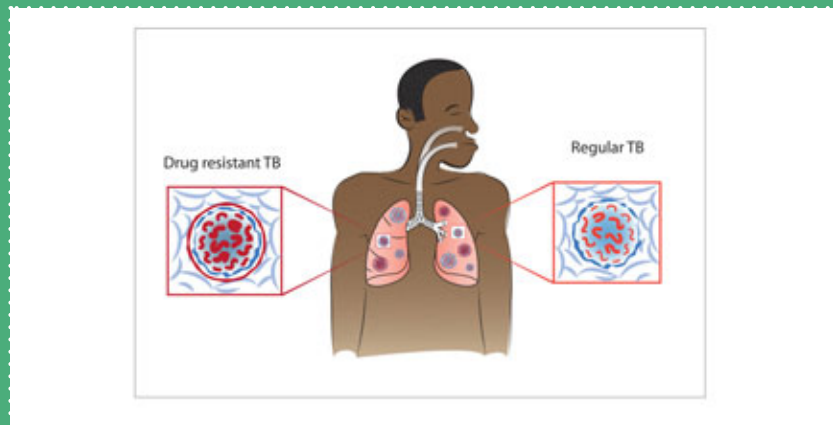
- All patients with warning signs of TB should be tested for HIV
- All HIV positive TB patients should have a sample of blood taken and sent for CD4 testing:
 - At the start of TB treatment
 - After 3 months
 - At the end of TB treatment
- Enter HIV results for TB patients in the TB register

WHAT IS MDR-TB?



Drug resistant TB is TB where the usual TB drugs no longer work (the TB bacteria are **resistant** to those drugs)

Multi drug resistant TB (or MDR-TB) is a particular type of drug resistant TB in which the TB bacteria are resistant to the two strongest TB drugs (rifampicin and isoniazid)



Patients who have drug resistant TB, and especially MDR-TB, do not respond as well to the usual TB treatment and need longer treatment with special drugs to cure them

Drug resistance most often develops during the course of TB treatment, when patients feel better and fail to complete their full course of treatment, or forget to take their treatment from time to time.

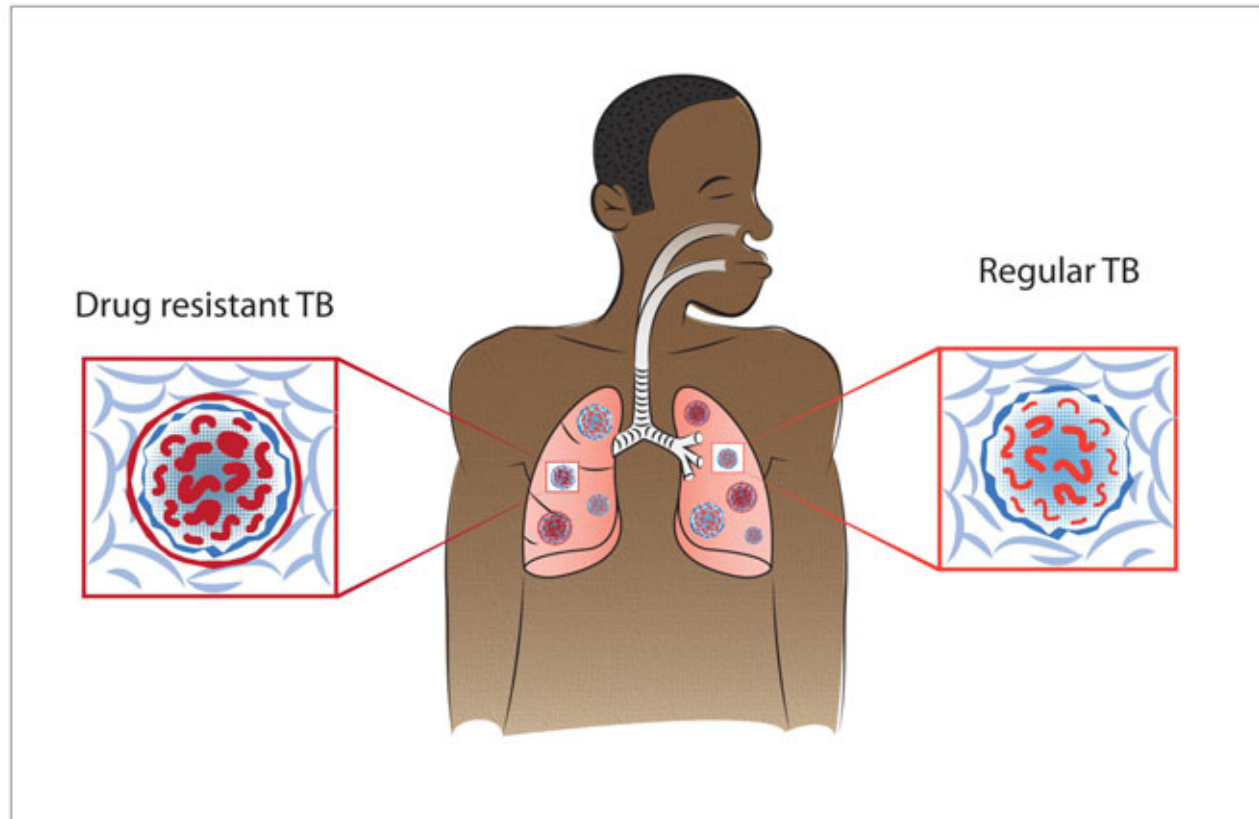
MDR-TB is spread from person to person in the air in the same way as drug sensitive TB



NOTES: The best way to prevent MDR-TB is to ensure that patients take their full course of TB treatment

RAPID DIAGNOSIS OF MDR-TB IS CRITICAL TO SUCCESSFUL TREATMENT AND PREVENTING SPREAD OF THE DISEASE

WHAT IS MDR-TB?



- Drug resistant TB is TB where the usual TB drugs no longer work (the TB germs are resistant to those drugs)
- Multi drug resistant TB (or MDR-TB) is a particular type of drug resistant TB in which the TB germs are resistant to the two strongest TB drugs (rifampicin and isoniazid)
- Patients who have drug resistant TB, and especially MDR-TB, do not respond as well to the usual TB treatment and need longer treatment with special drugs to cure them

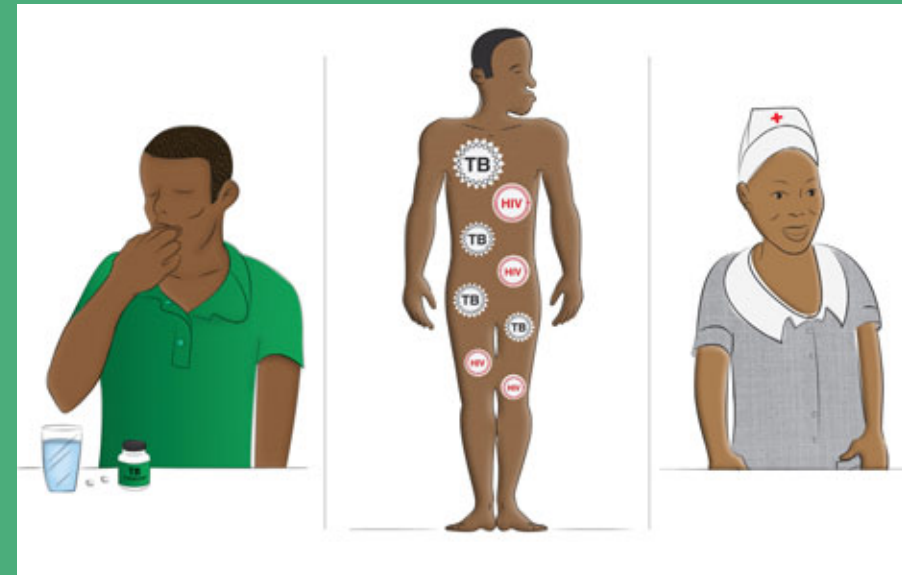
RAPID DIAGNOSIS OF MDR-TB IS CRITICAL TO SUCCESSFUL TREATMENT AND PREVENTING SPREAD OF THE DISEASE

WHO IS AT RISK OF MDR-TB?

TB

THE FOLLOWING PEOPLE ARE AT INCREASED RISK OF HAVING MDR-TB:

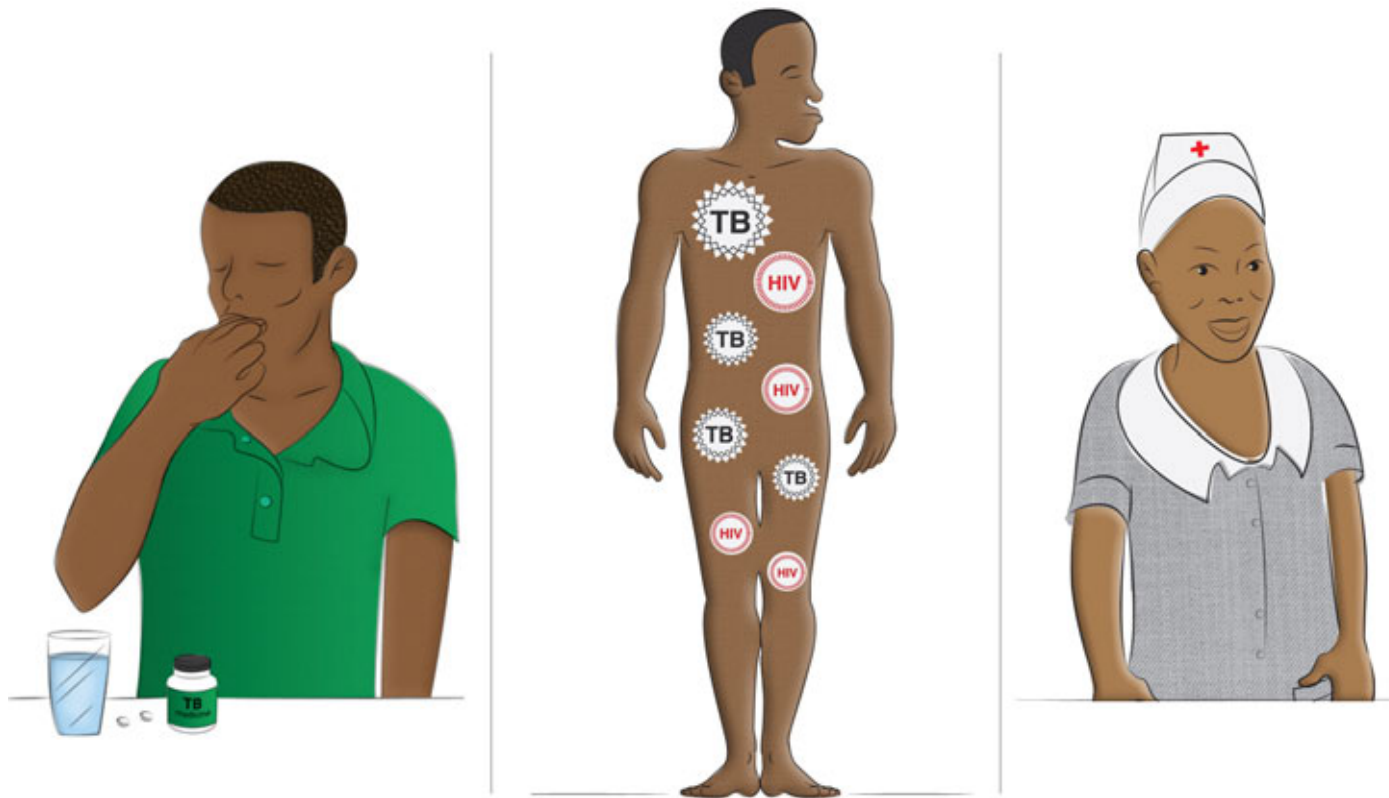
- Patients who remain or turn positive after 3 months of TB treatment
- Patients previously treated for TB
- Patients who have had contact with a known MDR TB case
- Patients who have had contact with someone that died while on TB treatment
- Hospital and health care workers who develop warning signs of TB
- TB patients with HIV infection
- Prisoners from facilities with high MDR TB rates



RAPID DIAGNOSIS OF MDR-TB IS CRITICAL TO SUCCESSFUL TREATMENT AND PREVENTING SPREAD OF THE DISEASE

TB

WHO IS AT RISK OF MDR-TB?



- Patients who remain or turn positive after 3 months of TB treatment
- Patients previously treated for TB
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- TB patients with HIV infection
- Prisoners from facilities with high MDR TB rates

RAPID DIAGNOSIS OF MDR-TB IS CRITICAL TO SUCCESSFUL TREATMENT AND PREVENTING SPREAD OF THE DISEASE

HOW TO TEST FOR MDR-TB

Patients who are at risk for MDR-TB will have 3 sputum specimens collected and tested as usual for TB diagnosis

Two more sputum specimens must also be collected and sent for specialized **Drug Susceptibility Testing (DST)** at the Reference Laboratory.

- On the Request for Sputum Examination Form, you must tick the “Culture and DST” box to ensure that the correct tests are performed.
- Results of these tests will be sent back to the health centre.



NOTES: Remember to tell your patient when to return to get their results.

Refer to your District TB coordinator or District TB Officer for further information on management of patients suspected of having MDR-TB

LESOTHO NATIONAL TB CONTROL PROGRAMME
REQUEST FOR SPUTUM EXAMINATION

Name: _____ Surname: _____

Collection Date: _____

Specimen type Other

Sputum **CULTURE and DST**

Purpose of request

Date of reception: _____

PATIENTS STRONGLY SUSPECTED OF HAVING MDR-TB SHOULD HAVE 2 SPUTUM SPECIMENS COLLECTED AND SENT FOR SPECIALISED TESTING

HOW TO TEST FOR MDR-TB

LESOTHO NATIONAL TB CONTROL PROGRAMME
REQUEST FOR SPUTUM EXAMINATION

Name: _____ Surname: _____

Collection Date: _____

Specimen type Other

Sputum **CULTURE and DST**

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Date of reception: _____

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Two more sputum specimens must also be collected and sent for specialized **Drug Susceptibility Testing (DST)** at the Reference Laboratory.

Tick the “Culture and DST” box on the Request Form

PATIENTS STRONGLY SUSPECTED OF HAVING MDR-TB SHOULD HAVE 2 SPUTUM SPECIMENS COLLECTED AND SENT FOR SPECIALISED TESTING



IF YOU HAVE TB, YOU SHOULD TEST FOR HIV.

IF YOU HAVE HIV, YOU SHOULD TEST FOR TB

• **ANYONE** CAN GET **TB: TB CAN BE CURED** IF TREATED PROPERLY

