



REPUBLIC OF KENYA
MINISTRY OF HEALTH



What is **Drug-Resistant Tuberculosis (DRTB)**?

Patient Information Package



**NATIONAL TUBERCULOSIS, LEPROSY
AND LUNG DISEASE PROGRAM**

March 2021

What is Tuberculosis (TB)

Tuberculosis (TB) is a disease caused by germs (bacteria) that mostly affects the lungs but can also affect any other part of the body except the hair, nails and teeth.

TB is spread from an infected person who has TB disease to a healthy person who breathes in the germs.

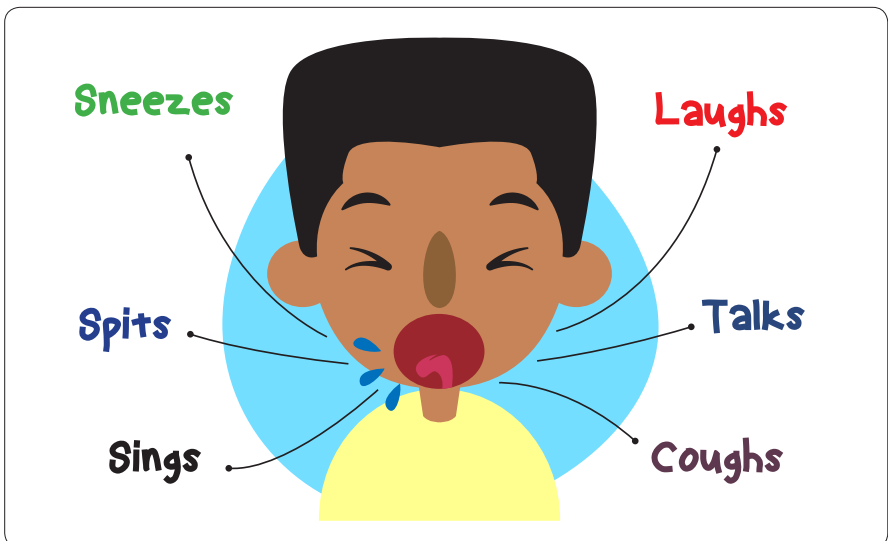
The infected person spreads the germs through the air when he/she coughs, laughs, sneezes, sings or spits openly.

TB is not transmitted by shaking hands, sharing food, toothbrushes or touching bed linen or toilet seats used infected persons.

What is Drug Resistant Tuberculosis (DRTB)?

Drug Resistant TB (DRTB) is caused by a TB germ (bacteria) that has undergone changes (become resistant) and does not respond to one or more of the usual TB medicines.

The infected person spreads the germs through the air when he/she coughs, laughs, sneezes, sings or spits openly.



Is DRTB preventable and curable?

YES. DRTB is preventable and curable.



How do i know if i have DRTB?

When you have any of the following symptoms, visit your nearest health facility as soon as possible:

Adult



- Cough
- Fever (hotness of the body)
- Night sweats
- Weight loss
- General body weakness
- Chest pain
- Coughing up blood
- Previous interaction/contact with a person who had DRTB disease

Children



- Cough
- Fever (hotness of the body)
- Night sweats in older children
- Poor weight gain/weight loss in older children
- General body weakness
- Chest pain
- Previous interaction/contact with a person who had DRTB disease

How is DRTB tested?

DRTB is diagnosed after a sample is taken to the laboratory for testing. These tests are available in our health facilities.

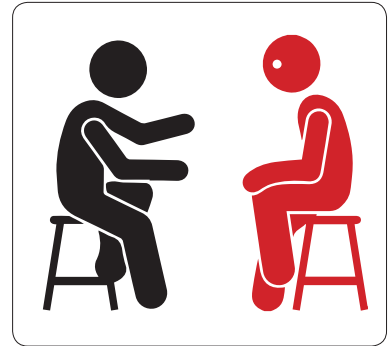


NOTE:

People who interact with DRTB patients (contacts) require screening and testing to confirm or rule out whether they are infected with TB (Contact tracing and screening).

After confirming DRTB, what next?

- ③ The healthcare provider will educate and counsel you on DRTB
- ③ You will be required to identify a treatment supporter from your family or friends
- ③ You and your treatment supporter will be required to sign consent forms after understanding and accepting the following;
 - i) The disease you are suffering from
 - ii) The importance of getting treated
 - iii) How long the treatment will take
 - iv) What is expected of you throughout the treatment period, and;
 - v) The consequences of not taking the treatment as per instructions.
- ③ During treatment, you are required to report any abnormal reactions like skin rash, yellowness of the eyes etc. which are further explained in detailed in the next pages
- ③ For those who cannot consent either due to age or mental status, a guardian will consent on their behalf
- ③ You will be facilitated to register for NHIF and receive monthly social support

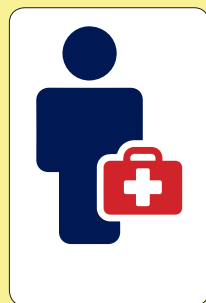




NOTE:

- A patient with other diseases such as HIV, Diabetes, Cancer, OR any other disease will still be treated for DRTB but may need more reviews.
- Women of child-bearing age are advised not to get pregnant during the treatment period. However, if you are already pregnant, you will still be treated.

- ⑤ Before treatment for DRTB is started, the following must be done;
 - i) Full medical examination to ascertain initial clinical and mental status of the patient before starting treatment
 - ii) Pregnancy test
 - iii) The initial tests which are done before starting treatment include the following; Blood tests including HIV test, Chest X-ray, ECG (Heart function), Visual acuity (eye test), mental assessment.
- ⑤ Healthcare providers will visit your home and do the following;
 - i) Assess the house and environment where you live and be advised accordingly,
 - ii) Educate the people you live with on DRTB prevention
 - iii) Screen and/or test people (contacts) who interact with you regularly.
- ⑤ A team of healthcare providers will start you on DRTB medication and follow you up on a regular basis at the healthcare facility or at home during the treatment period.
- ⑤ After starting your DRTB medication, follow up is mandatory.



The following will be monitored:

- i) Your progress during the treatment period
- ii) Your sputum to check how well the medicines are working towards killing the germs
- iii) Your nutritional status (Weight and height)
- iv) Check how well your heart is working
- v) Drug side effects
- vi) Laboratory tests to check the functioning of various body organs
- vii) You will be informed of any other tests your healthcare provider may find necessary during your treatment.

- Follow up on social support like monthly stipends and NHIF status.
Note: if you do not get your monthly stipend, report to healthcare provider immediately.



How is DRTB treated?

- DRTB medicines should be taken for a period of 6-24 months depending on the laboratory results.
- It involves the use of a combination of TB medicines taken by mouth.
- It is important to take your medicines as recommended by the healthcare providers without missing even a single daily dose. Medicines will be administered **every day by a health care worker** for the entire treatment period either at hospital or at home.

What are the side effects of DRTB Drugs?

DRTB drugs are safe to most of the patients. However, should you experience any of the following side effects while on treatment, report to the healthcare providers immediately;

- Nausea and vomiting
- Abdominal pains
- Skin itch and rash
- Yellowness of the eyes
- Pain or burning sensation of the hands and feet
- Swelling of the lower legs
- Vision problems
- Reduced hearing
- Feeling unhappy, sad and not your normal self
- Extreme sensitivity to cold
- Loss of appetite
- Feeling irritable, unusual and unexpected behaviours, seeing and hearing unreal things, reduced concentration and anxiety
- Or any other problem.



NB: All these side effects are preventable and manageable.

What food should I take while on DRTB medication?

Good nutrition is important during DRTB treatment.

You are encouraged to take three balanced meals (Breakfast, Lunch & Supper) and two healthy snacks in between per day.

Good nutrition includes proteins, carbohydrates, vegetables, fruits from locally available sources, and at least eight (8) glasses of water per day.

Food Pyramid

Least Important

Fats, Oils and Sweets
(use sparingly)

+ Calcium, Vitamin D,
Vitamin B-12
Supplements

PROTEINS

Are the building blocks of life and are important for growth, development and repair of tissues.

E.g. meat, milk, peas, beans, soya, eggs, fish, insects.

VITAMINS:

Are substances that the body needs to be able to protect and/or fight infections

All fruits and all types of veges, e.g. sukumawiki, managu, chinsaga; cowpeas

CARBOHYDRATES: Provide the body with energy and heat.

E.g. arrow root, raw bananas (matoke), yam, maize, rice, sweet potato, cassava, millet, sorghum, wheat

Most Important

Water - (2 litres / 6-8 glasses of fluid per day). This includes water, juices or soup taken.



NOTE:

You are encouraged to continue with your daily activities during the course of treatment.

What should I avoid when taking DRTB medicines?

- Alcohol
- Tobacco
- Miraa/Khat
- Hard drugs e.g. cocaine, heroin, and other abusable drugs
- Any other drug not prescribed by your healthcare providers
- Herbal and traditional medicines.

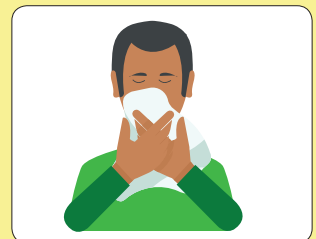


NOTE:

- All the above substances can damage your kidneys and liver.
- They can accelerate diseases of the liver and kidney.
- These drugs fuel transmission of DRTB.
- People who take them are less likely to heal from DRTB

How can I protect my family and friends from contracting DRTB?

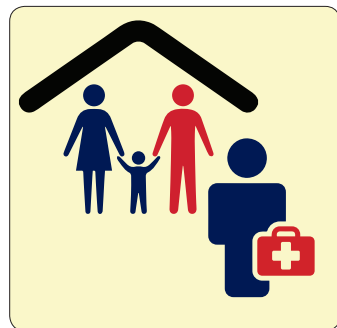
- ③ Take all your medication as advised by the healthcare providers
- ③ Advise family members and friends to go for DRTB screening and testing
- ③ Equip yourself with knowledge on DRTB
- ③ Practice cough hygiene and protection;
 - Cover your mouth and nose with elbow while coughing
 - Use handkerchief/tissue paper to cover mouth and nose when coughing and carefully dispose used tissues
 - Use surgical masks when around family members and friends.



- ② Ensure proper air circulation and adequate natural lighting;
- Leave windows open whenever possible to keep rooms and other closed spaces well ventilated and lit
 - If possible, in the initial period of treatment, it is advised that you have your own well-lit and ventilated room to sleep in
 - Spend most of your time outdoors during the day, when the weather is conducive
 - Keep your environment clean.

Who can I involve while on DRTB treatment?

- Family and friends
- Healthcare providers
- Spiritual/Religious leaders
- Counsellors
- TB Champions (TB Survivors)
- DRTB support groups in your area for motivation and personal support.



What do I do next after I finish my medication?

- ② Visit the health facility every six months for follow up for a period of two years
- ② Should you develop any TB signs, visit your health facility immediately

You can be requested to be a DRTB champion to share experiences and motivate others.

What are the possible complications of DRTB disease?

- ② DRTB disease may lead to several complications that may affect the lungs and any other part of the body. However, early treatment can prevent or limit the severity of these complications.

NB: Contact a healthcare provider in case of any complications

Myths and Facts about DRTB:

MYTHS	FACTS
If I have DRTB, do I have HIV?	NO. HIV increases one's chance of getting TB. However, one can have TB without having HIV and you can have HIV without TB.
Can DRTB be inherited?	NO, it is not inherited. TB can only be spread through the air when an infected person coughs, laughs, sneezes, sings or spits openly.
Is DRTB a result of witchcraft?	NO, it is not. It is caused by a germ (bacteria) which is treatable and curable. Visit a health facility for screening, testing and treatment.
Is DRTB a curse?	NO, it is not. It is a disease caused by a bacteria that has undergone changes, and is treatable and curable.

DRTB AND COVID-19

DRTB remains a major public health disease in Kenya. This has further been compounded by the ongoing Covid-19 pandemic as the two diseases mostly affect the lungs and present with similar symptoms.

Similarities and differences between DRTB and covid-19

	DRTB	Covid-19 (corona virus disease)
Causes	Bacteria (mycobacterium tuberculosis)	Virus (SARS-CoV-2)
Transmission	Airborne	Airborne Contact with infected persons, objects or surfaces
Onset	Weeks to Months	Within a few days
Signs and symptoms	Common symptoms of active lung TB are: <ul style="list-style-type: none">• cough• Cough with sputum and at times with blood stain• chest pains	Common symptoms include: <ul style="list-style-type: none">• hotness of the body• dry cough• tiredness

Signs and symptoms	<ul style="list-style-type: none"> • body weakness • unintended weight loss • hotness of the body • night sweats 	<p>Less common symptoms:</p> <ul style="list-style-type: none"> • aches and pains • sore throat • diarrhea • pain and redness of the eyes with or without discharge • headache • loss of taste or smell • a rash on the skin, or discoloration of fingers or toes <p>Serious symptoms:</p> <ul style="list-style-type: none"> • difficulty breathing or shortness of breath • chest pain or tightness • loss of speech or movement
Testing	Sputum sample	Sample from the nose and throat

Treatment	Combination of antibiotics (anti-TB medicines) for 6-24 months	<ul style="list-style-type: none"> • Currently no known treatment • Supportive management (management of symptoms)
Prevention	<ul style="list-style-type: none"> • Early detection and treatment • Screening and testing of contacts • Practice cough hygiene – cover mouth and nose while coughing • Use of face masks • Avoiding overcrowded public places and dwellings • Ensuring proper air circulation and adequate natural lighting 	<ul style="list-style-type: none"> • Frequent hand washing with soap and running water • Keeping social distance • Correct wearing of face masks • Self-isolation for people with symptoms • Prompt testing of symptomatic individuals and contacts
vaccination	<ul style="list-style-type: none"> • No vaccine for DRTB. However, BCG vaccine against TB in general is given at birth 	<ul style="list-style-type: none"> • New vaccines in use



**NATIONAL TUBERCULOSIS, LEPROSY
AND LUNG DISEASE PROGRAM**

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