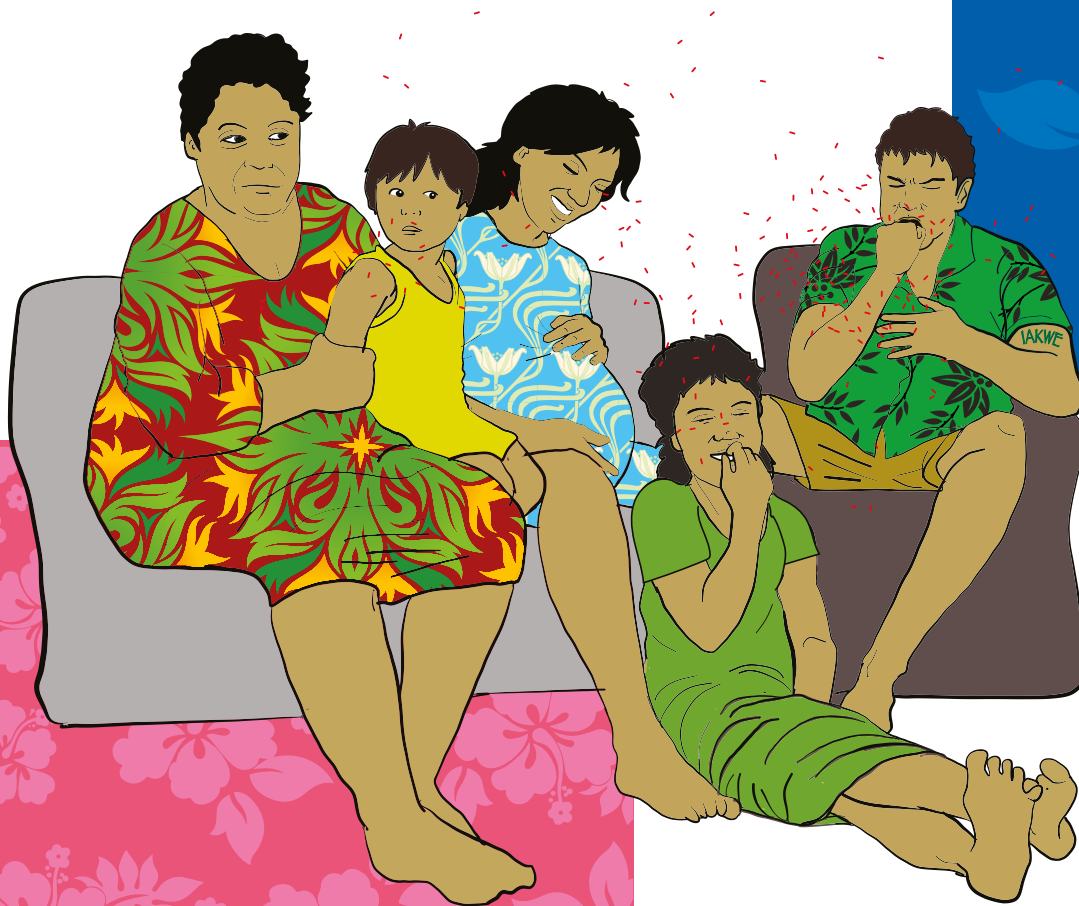


Let's Talk About Active Tuberculosis



HEARTLAND
NATIONAL TB CENTER
THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT TYLER

USING THIS FLIPCHART

Health assistants, community health outreach workers and others can use this flipchart to provide basic information and education on active TB while working with patients, families, and communities. Using the flipchart can help raise understanding and awareness of TB in the community and help people with active TB understand the disease and the importance of seeking care and completing treatment.

Topics covered include:

- The difference between latent TB infection and active TB
- Signs and symptoms of active TB in adults and children
- How TB is spread
- How TB is diagnosed and treated
- Directly observed therapy (DOT) and monitoring for side effects
- The importance of completing treatment for active TB
- Preventing the spread of TB and keeping communities safe

How to use the flipchart

Sit across from, or next to the patient and their family or community members. Show the patient the colored panel, while you are looking at the black and white panels (like this one). Read the information on the black and white panel to the patient, while they are looking at the corresponding colored panel. You can adjust or emphasize certain information, based on the specific situation.

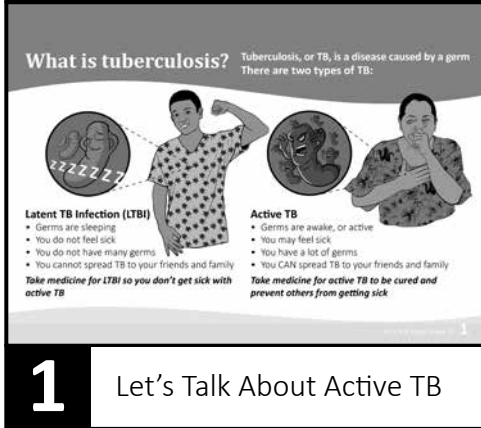
Tips for using the flipchart

- Read the Health Care Worker panels carefully before using the flipbook. If you have any questions about the information, ask a doctor or nurse. Consider practicing with the flipbook, before using it with patients or community members.
- Ask patients and family members what they know about the different topics on each panel to start the discussion about that topic. Ask them questions about what you have discussed at various points to check that they understand the messages.
- Use the black and white panels to provide accurate information and be sure to use clear and simple language when talking about TB.
- Pause frequently to ask patients and families if they have any questions. If you do not know the answer, tell them you will speak to the TB coordinator or doctor and get back to them.
- Be positive and encouraging, emphasise that it is important to find and treat TB AND that TB is preventable and curable.

Let's Talk About Active Tuberculosis



What is tuberculosis?



TB is a short name for tuberculosis. TB is a disease caused by bacteria. Bacteria are very small germs. They are too small to see, but can make you very sick.

There are two kinds of TB, latent TB infection, which is sometimes called LTBI and active TB, sometimes called TB disease.

If you have latent TB infection, the germs are alive but sleeping or inactive, and are not making you sick.

- You cannot spread TB germs to others when you have latent TB infection.
- The germs are in your body and can wake up and multiply if you don't take treatment for latent TB infection. If this happens, you will become sick with active TB.
- Taking medicine for latent TB infection will kill the TB germs and stop you from getting active TB.

If you have active TB, the germs are awake and multiplying. They are hurting your body and usually make you feel sick.

- There are many germs in your body and you can spread the disease to others.
- If you have active TB you can become very sick and even die unless you take the right medicine.
- This medicine is the only way to kill the TB germs in your body.
- Taking medicine for active TB will help you get better and prevent your family and friends from getting sick with TB.

What is tuberculosis?

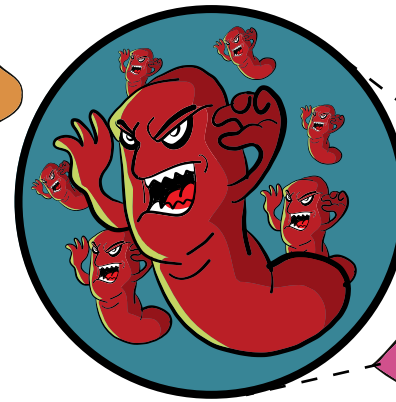
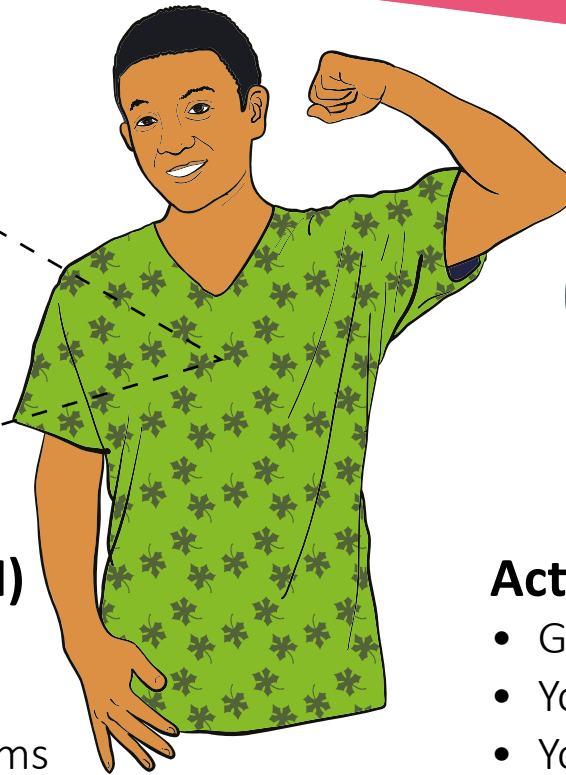
Tuberculosis, or TB, is a disease caused by a germ
There are two types of TB:



Latent TB Infection (LTBI)

- Germs are sleeping
- You do not feel sick
- You do not have many germs
- You cannot spread TB to your friends and family

Take medicine for LTBI so you don't get sick with active TB



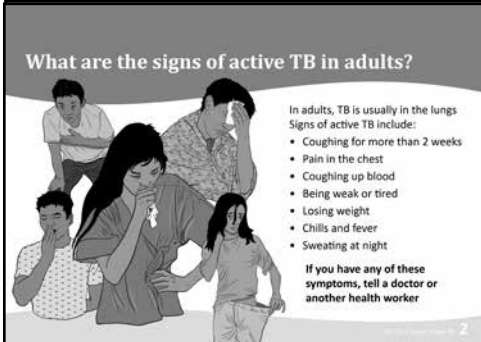
Active TB

- Germs are awake, or active
- You may feel sick
- You have a lot of germs
- You CAN spread TB to your friends and family

Take medicine for active TB to be cured and prevent others from getting sick



What are the signs of active TB in adults?



2

Let's Talk About Active TB

In adults, TB is usually in the lungs, but it can also be in other parts of the body, like the stomach or abdomen, brain, or spinal cord.

Some of the signs of active TB in the lungs are:

- A bad cough that lasts 2 weeks or longer
- Pain in the chest
- Coughing up blood or phlegm from deep inside your chest
- Feeling weak or very tired all the time
- Having no appetite or losing a lot of weight quickly without trying
- Chills and fever
- Sweating at night or when you are sleeping

Some people with active TB have all of these symptoms. Others have very few symptoms. If you or someone in your family has any of these symptoms, especially if you have been around someone with TB, it is important to see a doctor or another health worker.

What are the signs of active TB in adults?

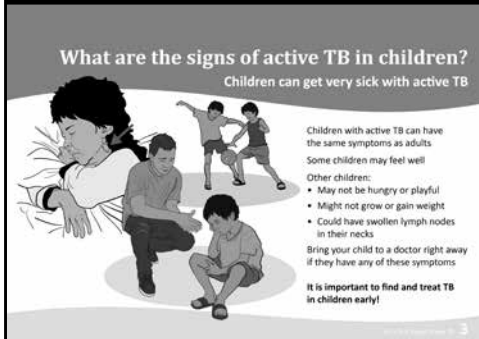


In adults, TB is usually in the lungs
Signs of active TB include:

- Coughing for more than 2 weeks
- Pain in the chest
- Coughing up blood
- Being weak or tired
- Losing weight
- Chills and fever
- Sweating at night

If you have any of these symptoms, tell a doctor or another health worker

What are the signs of active TB in children?



3

Let's Talk About Active TB

Children develop active TB in their lungs but are more likely than adults to get TB in other parts of the body. The lymph nodes of the neck are commonly involved when children have active TB. Children with active TB can get very sick very quickly. It is important to find children with active TB as soon as possible so they can be treated.

Children with active TB sometimes have the same symptoms as adults. Babies and small children with active TB may also have different symptoms. Early in the disease they could be well and not have any symptoms. Other signs of active TB in children are:

- Having less energy and being weak, sleepy, or less playful than usual
- Eating less and not growing or gaining weight
- Having swollen lymph nodes in their neck
- Learning or developing more slowly than other children

If your child has any of these symptoms, bring your child to see a doctor or health care worker right away! Be sure to tell the doctor if your child has been around someone with TB.

Teenagers may have the same symptoms as adults; cough, chest pain, fever, and sweating at night.

TB can be very serious in children. Bring your child to a doctor or health center if you have active TB, or if your child has been around someone else with TB or who is coughing a lot, even if your child is not sick. They could have latent TB infection and will need to take medicine so they don't get active TB. If you have active TB, be sure to tell the health workers about children you spend time with.

What are the signs of active TB in children?

Children can get very sick with active TB



Children with active TB can have the same symptoms as adults

Some children may feel well

Other children:

- May not be hungry or playful
- Might not grow or gain weight
- Could have swollen lymph nodes in their necks

Bring your child to a doctor right away if they have any of these symptoms

It is important to find and treat TB in children early!

How is TB spread?

How is TB spread?

TB germs are spread through the air when someone with active TB in the lungs coughs, sneezes, shouts, laughs, or sings



Other people can breathe in the germs and get TB

4

Let's Talk About Active TB

TB germs are spread through the air.

When someone with active TB in the lungs coughs, sneezes, shouts, laughs or sings, the germs get into the air. If you breathe in air with TB germs, you may get active TB or latent TB infection. If latent TB infection is not treated, the sleeping germs can wake up and you can become sick with active TB.

Small children cannot spread TB germs into the air, so they do not spread the disease to others.

Adults and children get TB germs in their body by breathing them in.

Once someone with active TB is being treated with proper medicines, they will quickly stop being able to spread TB to others. This is why it is important to find people with active TB and start treatment quickly!

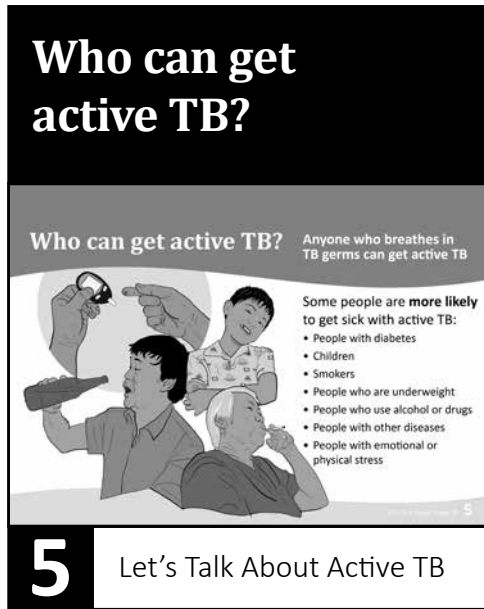
Pregnant women with active TB, especially those who are not treated, can sometimes have babies who are born with TB germs. These babies can be sick with active TB. Babies usually show signs of being sick 2 to 4 weeks after birth. If mothers are sick with active TB, their babies can also breathe in TB germs and get latent TB infection or become sick with active TB.

How is TB spread?

TB germs are spread through the air when someone with active TB in the lungs coughs, sneezes, shouts, laughs, or sings



Other people can breathe in the germs and get TB

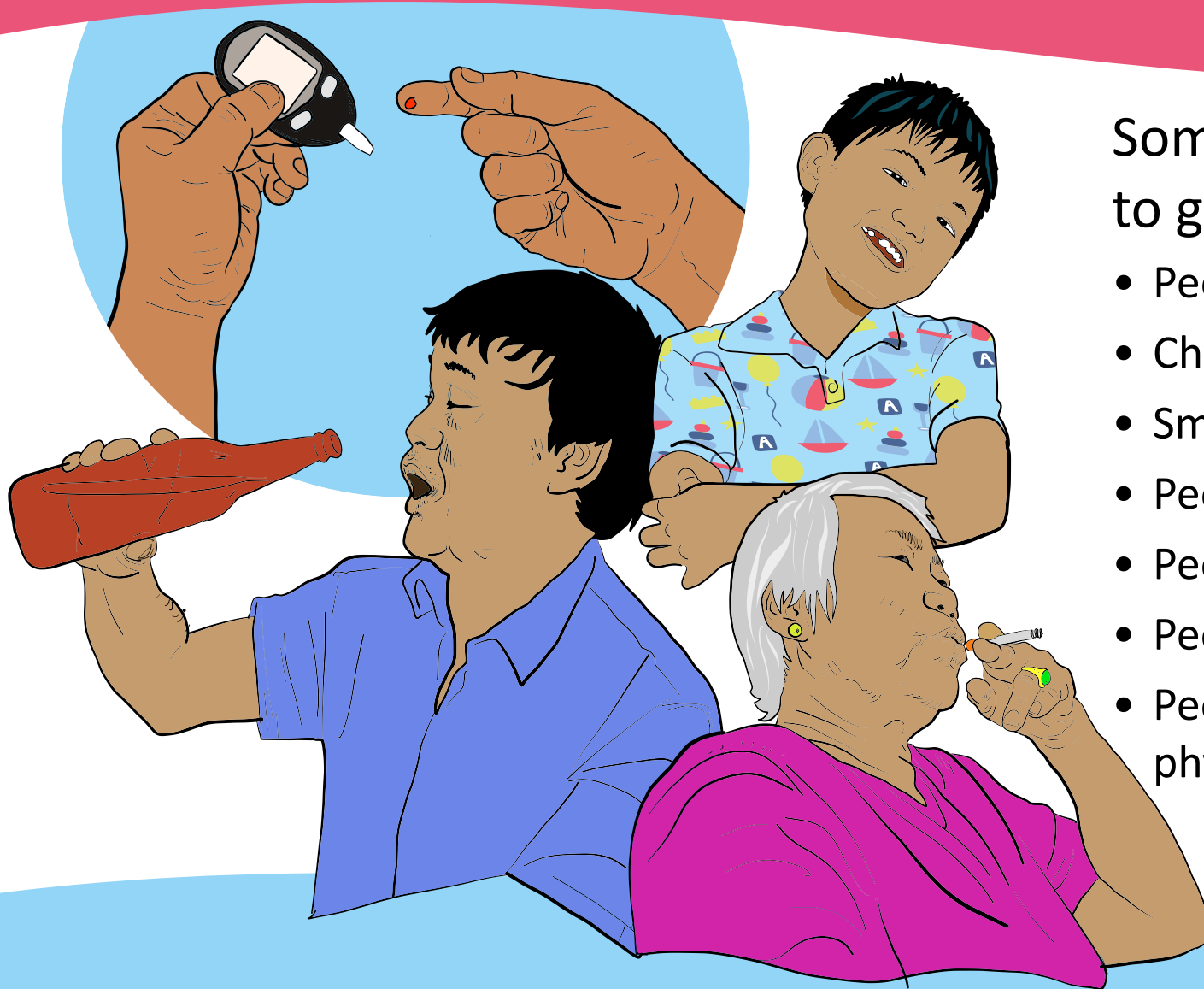


Anyone who breathes in TB germs can get active TB. But some people are at higher risk for getting active TB if they breathe in the TB germs. This includes:

- People with diabetes, especially if it is not well-controlled
- Children, especially very young children
- Smokers
- People who are underweight or malnourished
- People who use alcohol or drugs
- People who are sick with other diseases like cancer or HIV
- People who have a lot of emotional or physical stress

Who can get active TB?

Anyone who breathes in TB germs can get active TB



Some people are **more likely** to get sick with active TB:

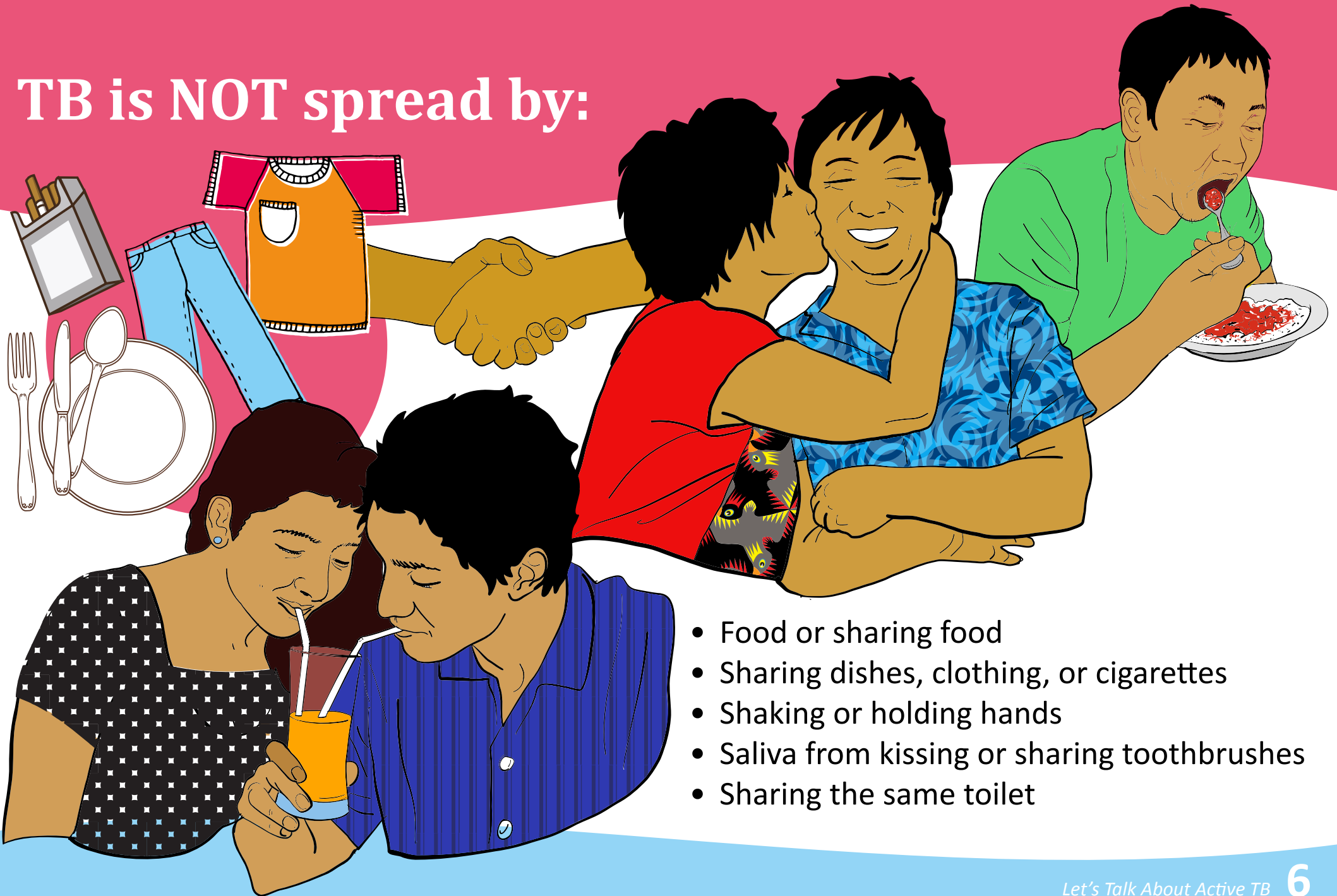
- People with diabetes
- Children
- Smokers
- People who are underweight
- People who use alcohol or drugs
- People with other diseases
- People with emotional or physical stress



- You do NOT get TB from food or from sharing food, dishes, clothing, or cigarettes.
- TB is not spread to others by holding or shaking hands.
- TB is not spread by saliva from kissing or sharing toothbrushes.
- You cannot get TB from sharing the same toilet.
- You do not need to have separate dishes or sheets for people with TB.

Adults and children get TB by breathing in TB germs that are in the air.

TB is NOT spread by:



- Food or sharing food
- Sharing dishes, clothing, or cigarettes
- Shaking or holding hands
- Saliva from kissing or sharing toothbrushes
- Sharing the same toilet

How will a health worker know if I have active TB

How will a health worker know if I have active TB?



7

Let's Talk About Active TB

Go to a doctor, or to the hospital or health center, if you have any of the symptoms of TB and think you may have active TB. This is especially important if you have been around someone sick with active TB. Remember, if you do have active TB, it can be cured with the right treatment!

There are a few different steps needed to find out if you have active TB. These are simple and safe. A doctor or nurse will examine you. They may take your temperature and listen to you breathe.

You might get a TB skin test. A very small needle will be used to put fluid under the skin of your arm. You will feel only a small pinch. A health worker will look at your arm 2-3 days later.

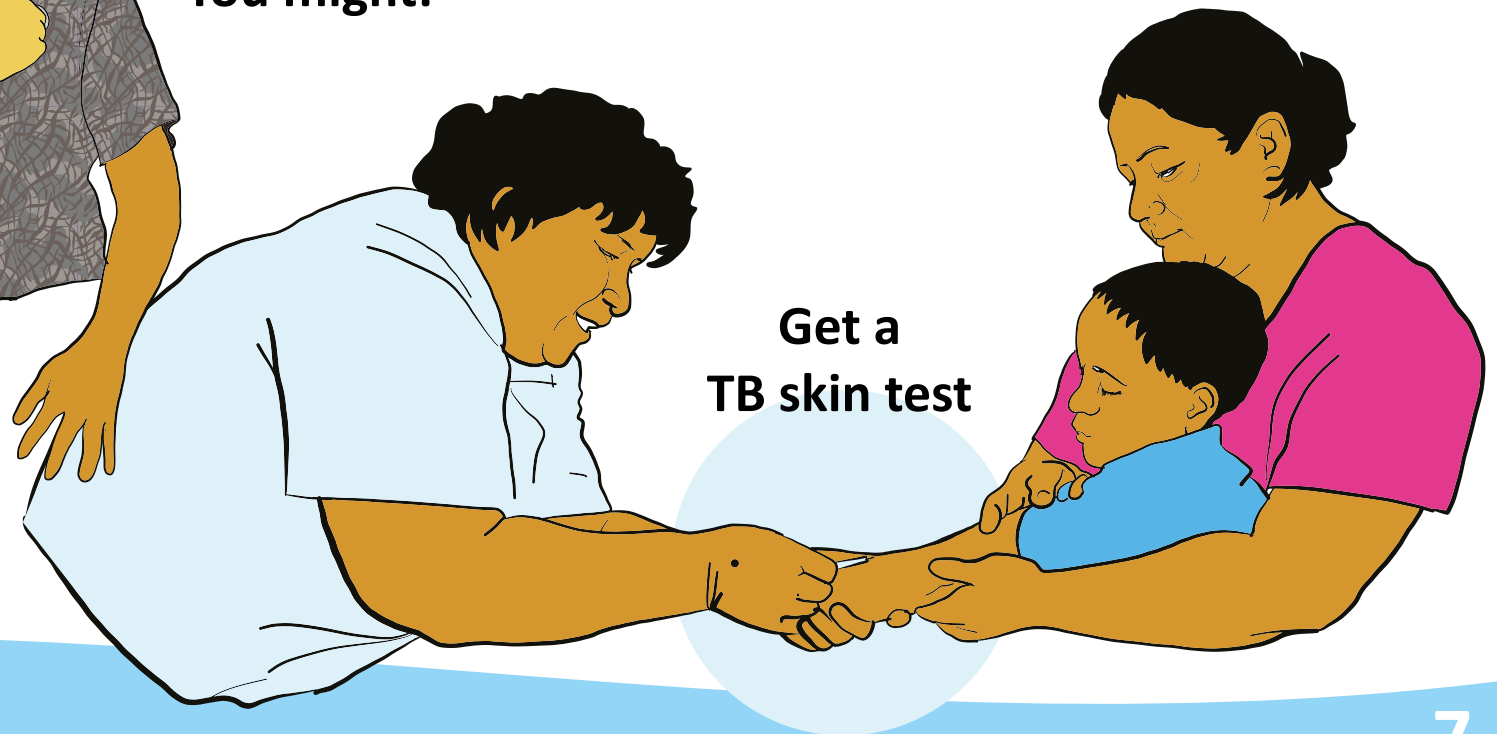
How will a health worker know if I have **active TB**?



**Be checked by a
doctor or nurse**

There are a few steps to finding out if you have active TB
Go to a doctor or to the hospital or health center if you
have TB symptoms

You might:



**Get a
TB skin test**

What other tests will I need for active TB?

What other tests will I need for active TB?

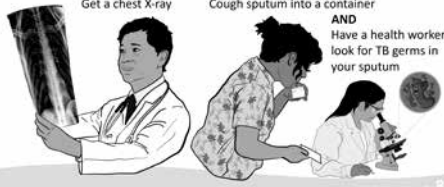
Your doctor may decide that you need to:

Get a chest X-ray

Cough sputum into a container

AND

Have a health worker
look for TB germs in
your sputum



8

Let's Talk About Active TB

The doctor may decide that you need an X-ray of your chest.

You might also be asked to cough up a sample of sputum into a container.

The sputum will be brought to a lab, and a lab worker will look at it using a microscope to see whether you have TB germs.

Your doctor will use the results of these tests to find out if you have active TB.

Children will have some of the same tests. The doctor or nurse will also check to see if the child's weight is low for their age.

What other tests will I need for **active TB**?

Your doctor may decide that you need to:

Get a chest X-ray

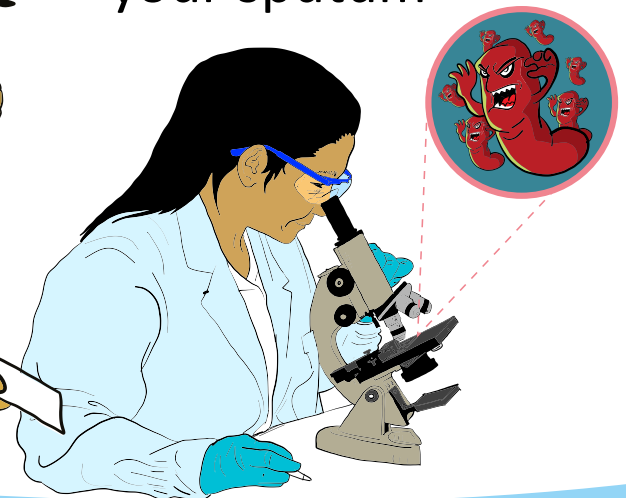


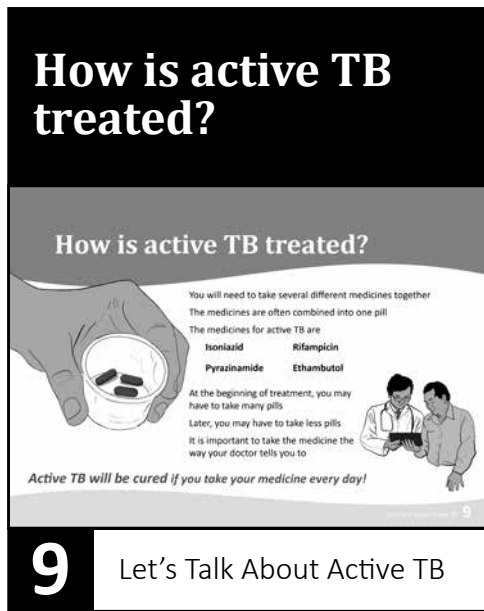
Cough sputum into a container



AND

Have a health worker
look for TB germs in
your sputum





You will need to take several medicines together. Often the medicines are combined into one pill. The most common medicines for active TB are isoniazid, rifampicin, pyrazinamide, and ethambutol. Taking these medicines is the only way to kill the TB germs and cure active TB.

Each medicine attacks the TB germ differently, so it is important to take them all, as your doctor tells you. Active TB will be cured if you take your medicine every day. Remember, the treatment for active TB is different than the treatment for LTBI.

It can take a long time to kill all the TB germs in your body. A doctor will decide how much medicine you should take each day, based on your weight.

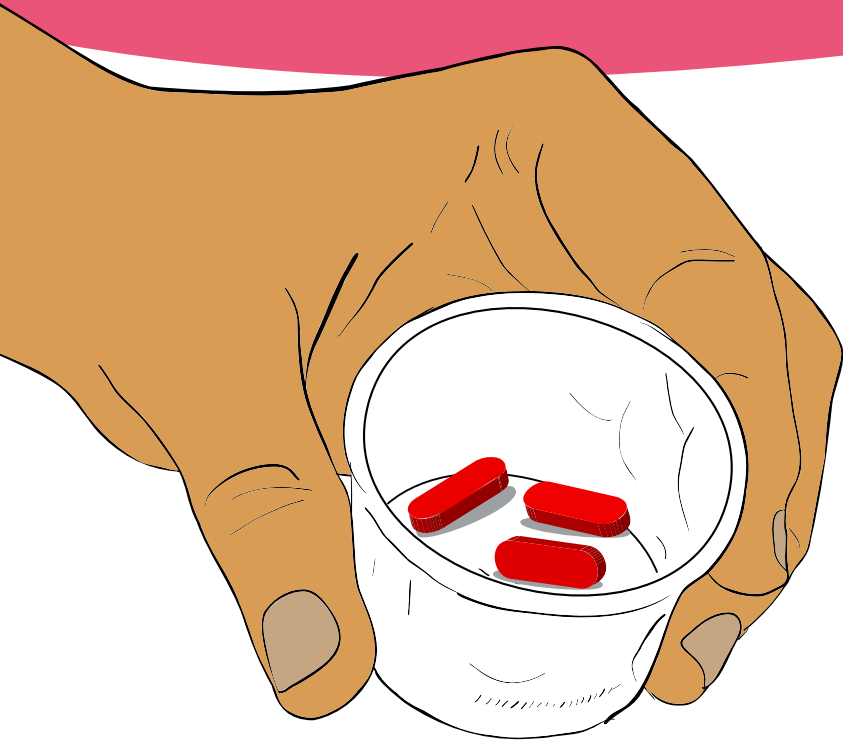
You will need to take these medicines for at least 6 months. For the first 2 months you may have to take many pills. This is sometimes called the intensive phase of treatment. After the first 2 months you will usually have to take fewer pills each day. This is called the continuation phase.

If you have diabetes, or certain types of TB, treatment will take at least 9 months.

Your doctor will talk with you about your treatment plan.

Follow the plan and complete your treatment to be sure that you are cured!

How is active TB treated?



You will need to take several different medicines together

The medicines are often combined into one pill

The medicines for active TB are

Isoniazid

Rifampicin

Pyrazinamide

Ethambutol

At the beginning of treatment, you may have to take many pills

Later, you may have to take less pills

It is important to take the medicine the way your doctor tells you to



Active TB will be cured if you take your medicine every day!

What happens during treatment for active TB?

What happens during treatment for active TB?



TB medicine is provided by Directly Observed Therapy, or DOT

A health worker will be with you when you take your medicine

The health worker will also ask how you are feeling each day

Tell your health worker if you will be away during your treatment

10

Let's Talk About Active TB

If you have active TB, your treatment will be given by Directly Observed Therapy, or DOT. DOT helps you to stay with your treatment plan.

A health worker will bring your pills every day. You can talk to them about where you want to meet for DOT. The health worker will stay with you while you take your pills and will provide support and encouragement during treatment.

They will ask how you are feeling and ask about side effects from the medicine.

Tell your doctor or health worker if you plan on being away during your treatment. They will help find a way for you to get your medicines.

You will need some tests during treatment to see if you are getting better. Your health worker will remind you when you should get these tests.

What happens during treatment for active TB?



TB medicine is provided by
Directly Observed Therapy, or DOT

A health worker will be with you
when you take your medicine

The health worker will also ask
how you are feeling each day

Tell your health worker if you will
be away during your treatment

While you are taking medicine for active TB

While you are taking medicine for active TB

Try to stop or cut back on alcohol and cigarettes



11

Let's Talk About Active TB

Drinking alcohol when you are taking medicine for active TB can make you sick. It is best to stop drinking alcohol when you are taking TB medicine. If you do not stop drinking, try to cut back to less than one drink a day.

Stop or cut back on smoking. This will help your body work with the medicine to kill the TB germs faster.

While you are taking medicine for active TB

Try to stop or cut back on alcohol and cigarettes



You may have minor side effects from the medicines for active TB



12

Let's Talk About Active TB

Like all medicines, TB medicines can have side effects. Most people can continue taking their medicine without problems. Many minor side effects can be treated. It is important to complete treatment for active TB so you can be cured. A doctor or nurse will decide what to do about any side effects.

Tell your health worker if you have these minor side effects:

- Aching joints
- An upset stomach
- Less appetite or no appetite for food
- Dark urine
- Minor rash
- Numbness or tingling in your fingers or toes

Some common side effects are expected, but are not usually serious:

- Your urine, sweat, or tears may turn red or orange. This is normal and will go away after you finish your treatment.
- Birth control pills or contraceptive medicine will not work as well when you are taking medicine for TB. Talk to your doctor or nurse about other ways to prevent pregnancy.

You may have **minor side effects** from the medicines for active TB



Tell your health worker if you have any of these minor side effects:

- Aching joints
- An upset stomach
- Less appetite or no appetite for food
- Dark urine
- Minor rash
- Numbness or tingling in your fingers or toes

Some common side effects are expected

- Your urine, sweat, or tears may turn red or orange
- TB medicines can interfere with birth control pills or other contraceptive medications

Many minor side effects can be treated

If you have any of these major side effects, tell a health worker right away



13

Let's Talk About Active TB

Some side effects are more serious. Tell your health worker right away if you have any of these symptoms, which are a sign of major side effects.

- A fever or chills
- A bad rash or itching, especially if it is also hard to breathe
- Nausea or stomach cramps with vomiting
- Yellow skin or eyes
- Light colored stools
- Fainting
- Dizziness
- Bruising
- A small cut or scratch causes you to bleed or your gums are bleeding
- Changes in your eyesight, such as blurred vision
- Changes in your hearing, such as ringing in your ears

TB medicines can affect your liver. If you have certain side effects, your doctor may decide that you need more tests to check your liver. A doctor or nurse will decide what to do if you have these side effects.

If you have **ANY** of these major side effects,
tell a health worker right away



- Light colored stools
- Bruising
- A small cut or scratch causes you to bleed or your gums are bleeding
- Changes in your eyesight
- Changes in your hearing

A doctor or nurse will decide what to do if you have these side effects

Why is it important to take all your medicine for active TB?



14 Let's Talk About Active TB

Take all your medicine every day, the way your doctor tells you. If you do not take all your medicine every day, you might not get better, or you could get sick again.

It takes a long time to kill all the TB germs in your body. If you don't finish your treatment, or if you miss some doses or pills the TB germs can become stronger and harder to kill. You may become sicker or it may take you longer to get well. When you are sick, you can pass TB germs on to others, who may get sick. You may also have to take more medicines that have more side effects.

Do not stop taking your pills early, even if you feel better. Take all your medicine until your doctor says that your treatment is complete.

If you take your medicine every day, your active TB will be cured!

Why is it important to take all your medicine for active TB?



If you do not take all your medicine every day, you might not get better, or you could get sick again

Do not stop taking your pills early, even if you feel better

If you take your medicine every day, your TB will be cured!



Taking TB medicine kills the TB germs. At the start of your treatment, you may still be able to pass TB germs to others. Your doctor will tell you when you can no longer spread TB germs. You will be asked to provide sputum samples, so lab workers can look for TB germs. This is usually after you have been taking medicine for a few weeks.

To protect the health of those around you, your doctor may tell you to wear a mask for the first few weeks of your treatment. This will help stop TB germs from getting into the air, where others can breathe them in. Until the doctor tells you that you can no longer spread TB, health workers and others around you may wear a special mask, called a respirator, so that they don't breathe in TB germs.

If you are not wearing a mask, cover your mouth and nose with a tissue or your clothing when you cough or sneeze.

Until your doctor says you can no longer spread TB germs, try not to spend time in closed spaces with others. Spend time outside, or keep the doors and windows open. This will keep the air moving and make it harder for TB germs in the air to stay alive. Sunlight and fresh air will help to kill the TB germs.

Take your medicine until your doctor says you are cured. Taking your medicine every day cures your TB **and** protects others around you.

Stop TB from spreading to others




If you have active TB your doctor will tell you when you can no longer spread TB germs:

- Take your medicine to kill the TB germs
- Wear a mask if your doctor tells you to
- Cover your mouth and nose with a tissue or your clothing when you cough or sneeze
- Spend time outside
- Keep windows or doors open if you are inside

Sunlight and fresh air help to kill TB germs

Keep your community safe from TB!

Keep your community safe from TB!



- Know the signs of active TB in adults and children
- If you or someone in your family has signs of active TB, go to a doctor!
- If you have been around someone who has active TB, get tested!
- If you have latent TB infection, also called sleeping TB, take TB treatment so you don't get sick with active TB
- If you have active TB, take all your medicine until you are cured!

TB can be prevented, treated, and cured!

16 Let's Talk About Active TB

TB can be prevented, treated, and cured. Do your part to protect your family, friends and community from TB! Treating everyone in the family who has LTBI or active TB is the best way to stop TB from spreading in a family.

Know the signs and symptoms of active TB in adults and children, which we talked about earlier. ***[Health Worker Note: Can go back to Panels 2 or 3 to review symptoms in adults and children.]***

If you or someone in your family has any signs of active TB, go to a doctor, hospital, or health center to be tested. Tell the doctor if you have been around someone with active TB or who has been coughing a lot.

Remember, children can get very sick with TB very quickly. Bring children to the doctor right away if they have signs of active TB, especially if they have been around someone with active TB.

If you or your children have been around someone who had active TB, or was coughing for a long time, ask a doctor to test you for latent TB infection.

If you have latent TB infection, also called sleeping TB, you need to take medicine so you don't get sick with active TB.

Active TB can be cured! If you have active TB, take all your medicine every day until your doctor says you are cured. Follow your health worker's directions to protect others from breathing in TB germs.

Taking these steps can help keep your community safe and healthy!

Keep your community safe from TB!



- Know the signs of active TB in adults and children
- **If you or someone in your family has signs of active TB, go to a doctor!**
- If you have been around someone who has active TB, get tested!
- **If you have latent TB infection, also called sleeping TB, take LTBI treatment so you don't get sick with active TB**
- **If you have active TB, take all your medicine until you are cured!**

TB can be prevented, treated, and cured!



Let's Talk About Active Tuberculosis

heartlandntbc.org

This publication was supported by the Cooperative Agreement Number NU52PS910161-03 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.
