



# TALKING TUBERCULOSIS (TB)

An educational resource



Health  
Canada

Santé  
Canada

Canada

# Talking Tuberculosis (TB): An Educational Resource

This flipchart was developed as a resource to assist health care providers and health educators in teaching and discussing tuberculosis (TB) with community members in Inuit communities. This resource is intended for nurses, doctors, community health representatives/workers, and other health educators.

There are many important topics relating to tuberculosis covered in the flipchart. On one side of each flipchart page are key messages and visuals for the **CLIENT(S)**, and on the opposite side is detailed information for the **HEALTH EDUCATOR**. On the educator's side, a copy of the visual displayed to the client is provided for reference. The resource is meant to be held by the health educator, shown to the client(s) and used as a teaching tool.



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## TABLE OF CONTENTS

	HEALTH EDUCATOR	CLIENT
Introduction	i	ii
1. What have you heard about TB?	1	2
2. History of TB in Canada	3	4
3. What is tuberculosis (TB)?	5	6
4. How is TB spread?	7	8

## Section on Latent TB Infection

	HEALTH EDUCATOR	CLIENT
5. What is latent TB infection?	9	10
6. Latent TB infection—screening tests	11	12
7. Who is at risk for developing active TB disease?	13	14
8. Treatment for latent TB infection	15	16
9. Staying healthy with latent TB infection	17	18
10. Living with someone with latent TB infection	19	20

## Section on Active TB Disease

	HEALTH EDUCATOR	CLIENT
11. What is active TB disease?	21	22
12. Signs and symptoms of active TB disease	23	24
13. Testing for active TB disease	25	26
14. Treatment for active TB disease	27	28

## Section on Directly Observed Therapy (DOT)

	HEALTH EDUCATOR	CLIENT
15. What is Directly Observed Therapy (DOT)?	29	30
16. Medications	31	32
17. Possible side effects	33	34

Let's stop TB!	35	36
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References	37	–
------------	----	---

Questions	–	38
-----------	---	----

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	HEALTH EDUCATOR	CLIENT
Introduction	i	ii
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References	37	–
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Questions	–	38
-----------	---	----

# 1

## What have you heard about TB?

### BACKGROUND

- By asking the client “What have you heard about TB?” or “What can you tell me about your experience with TB?” you can begin a discussion about their personal experience, stories they have heard, or their perspectives on tuberculosis.
- In addition, you are assessing the client’s knowledge and you will be able to base your teaching on their needs.
- You can then flip to the appropriate area in the flipchart to begin education with the client.

### IMPORTANT NOTES

It is important to take the time to hear the client’s story in order to help address any concerns or false information about TB. This can help to reduce fears and increase knowledge. Many community members may have memories of the time when people were removed from their communities and sent to sanatoria for treatment.

# 1

## What have you heard about TB?

### DID YOU KNOW?

TB is found all over the world. One third (1/3) of the world’s population is infected with the TB germ.

Every year, over 8.7 million people get active TB disease worldwide. In Canada, about 1600 people get active TB disease.



2 CLIENT

### KEY MESSAGES

- It is important to learn about TB and then to share what you have learned with family and friends in your community.
- Community knowledge and awareness of TB is important—everyone can work together to stop the spread of tuberculosis!

# 1

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# 2

## History of TB in Canada

### IMPORTANT NOTES

- The discovery of antibiotics in the 1950s and 1960s made TB curable.
- Now, hospitalization is usually only needed at the beginning of treatment, until the person is no longer contagious (i.e., no longer able to transmit/spread the disease).
- The remainder of treatment is usually taken in the community.
- Under some circumstances in some areas, all treatment may be taken in the community.

# 2

## History of TB in Canada

In the past, people with tuberculosis were treated in an institution called a sanatorium. People with active TB disease were removed from their communities to protect the community from the spread of the disease.

Many people spent years in hospital and lost their language, culture, family and community life. Some people died in the sanatoria far away from their communities and families.

Painful memories may be the only knowledge of TB that older community members have.

Treatment for TB is very different today as we now have antibiotics to treat tuberculosis.



4 CLIENT

### KEY MESSAGES

- In the past, patients with TB were treated in sanatoria (TB hospitals).
- With the discovery of antibiotic medications, sanatoria were no longer needed.
- Treatment for TB is very different today than it was decades ago.

# 2

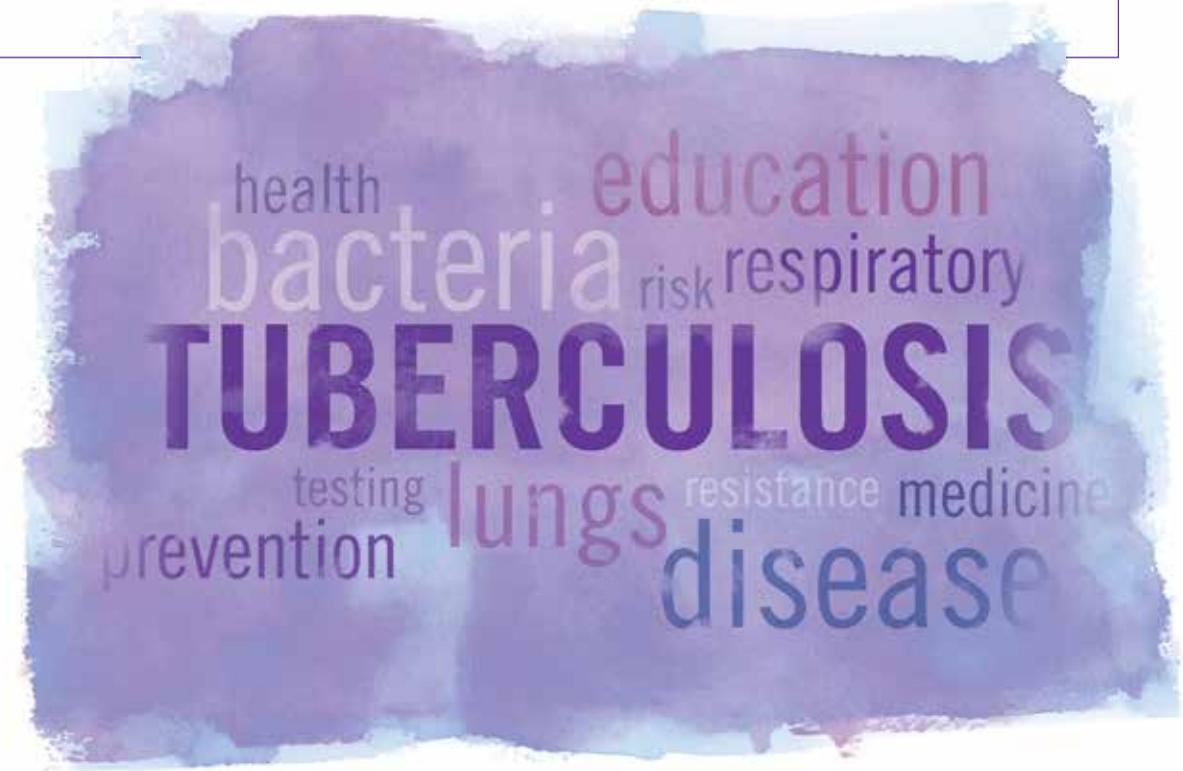
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Treatment for TB is very different today as we now have antibiotics to treat tuberculosis.



# 3

## What is tuberculosis (TB)?

### BACKGROUND

- Tuberculosis is caused by infection with a bacterium called *Mycobacterium tuberculosis*.
- TB germs always enter the body through the lungs.
- Only active TB disease of the lungs, airway and larynx (voice box) is contagious to others.
- TB germs can remain suspended in the air for several hours after a person with active TB disease coughs or sneezes.
- TB cannot be spread from objects or surfaces, i.e., eating utensils, bedding, counter tops or floors. The germs die fairly quickly when exposed to drying, heat and sunlight.

# 3

## What is tuberculosis (TB)?

Tuberculosis, also known as "TB," is caused by tiny germs.

These germs are too small for the eye to see.

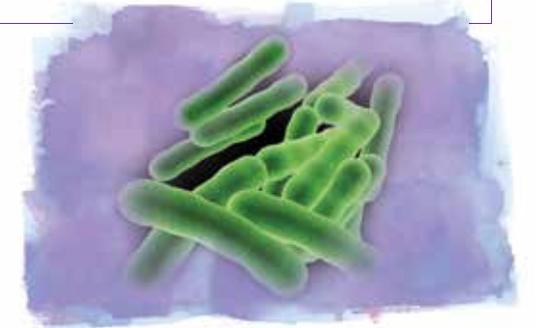
They can be seen in the laboratory using a microscope.

TB germs can live in the body in one of two states: latent ("sleeping") TB infection or active TB disease.

TB germs enter the body when air containing the germ is breathed into the lungs.

TB germs usually stay in the lungs but can also move to other parts of the body.

Without treatment, active TB disease can cause severe illness, permanent damage, and even death.



### DID YOU KNOW?

TB can be prevented and CURED!

6 CLIENT

## KEY MESSAGES

- TB is caused by tiny germs.
- TB germs can live in the body in one of two states: latent TB infection or active TB disease.
- Without treatment, active TB disease can cause severe illness, permanent damage, and even death.
- Good news! TB can be prevented and cured!

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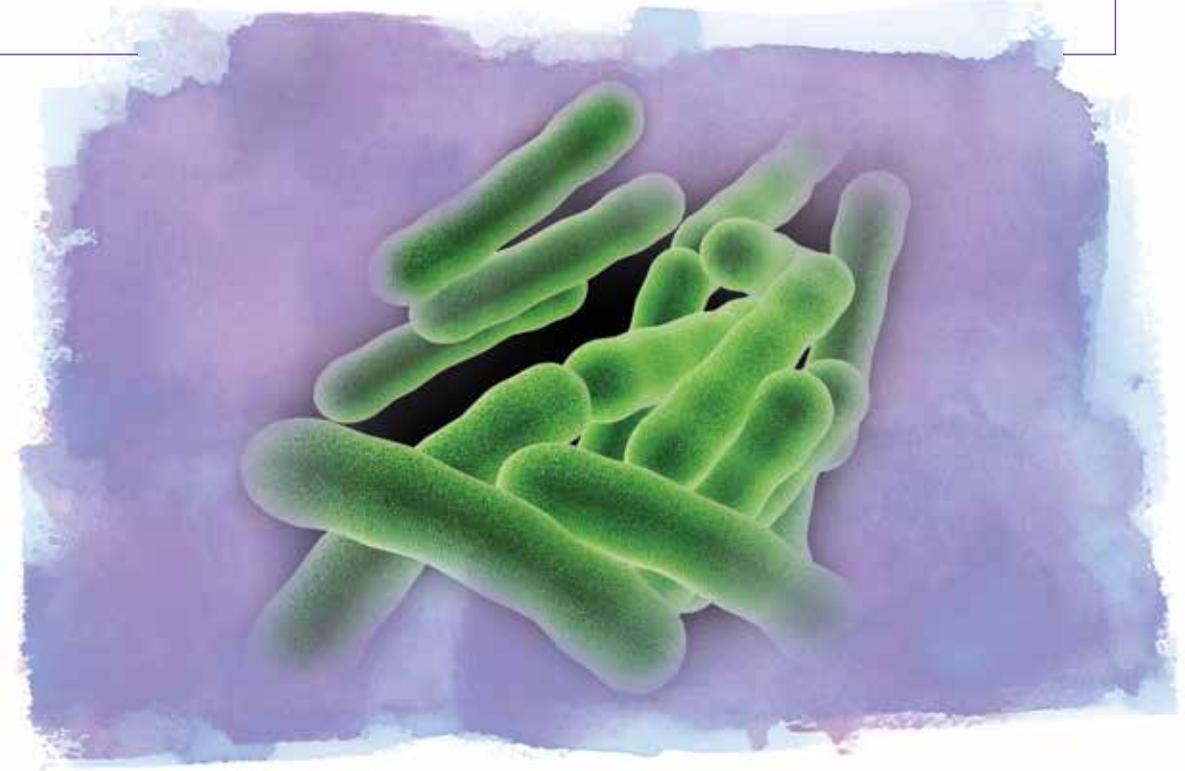
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### DID YOU KNOW?

**TB can be prevented and CURED!**

# 4

## How is TB spread?

### BACKGROUND

**Not all active TB disease is contagious. Only active TB in the lungs, airway and larynx (voice box) is contagious to others.**

TB germs are more likely to spread to others when:

- Long periods of time are spent with a person that has contagious active TB disease (usually hours, not minutes).
- The person with contagious active TB disease lives or hangs out with others in small, crowded or poorly ventilated spaces.
- The person who is sick with contagious active TB disease is coughing a lot, has been sick with TB for some time, and has lots of TB germs in their lungs.

Transmission rarely occurs outdoors. However, indoor environments that are poorly ventilated, dark and damp can lead to increased concentration and survival of the TB germs.

Ask the client to provide examples of indoor activities where TB can be spread.

- TB germs are coughed into the air by a person who has active TB disease growing in their lungs or airway. Sneezing, talking and singing can also spread the germs in the air.
- If the TB germs are breathed in, one of three things can happen:
  1. The immune system kills the germs and prevents TB infection; or

# 4

## How is TB spread?

TB germs are coughed into the air by a person who has active TB disease in their lungs or airway. Sneezing, talking and singing can also spread the germs in the air.

TB germs can stay in the air for hours. If the germs that cause TB are breathed in, one of three things can happen:

1. The immune system (the body's defence system against disease) kills the TB germs and prevents infection.  
OR
2. The immune system is unable to kill the germs, but can put them to "sleep" or make them inactive for a while (latent TB infection).  
OR
3. The immune system is unable to kill the germs or put them to "sleep" so they stay "awake" or active. They multiply and cause illness (active TB disease).

Only active TB disease in the lungs, airway and larynx (voice box) can be spread to others. TB disease in other parts of the body (like the kidney or lymph nodes) can be damaging to the body but cannot be spread to others.



### IMPORTANT

Younger children with active TB disease do not usually spread the germs to others. This is because they have fewer TB germs in their lungs and are usually unable to cough them out. However, if a child is exposed to TB germs, they can get sick very quickly with serious TB disease.

### DID YOU KNOW?

TB germs are more easily spread indoors, particularly in small, crowded areas with little fresh air.

8 CLIENT

## KEY MESSAGES

2. The immune system puts the germs to "sleep" or makes them inactive (latent TB infection); or
3. The immune system is unable to kill the germs or put them to "sleep" so they stay "awake" or active. They multiply and cause illness (active TB disease).

# 4

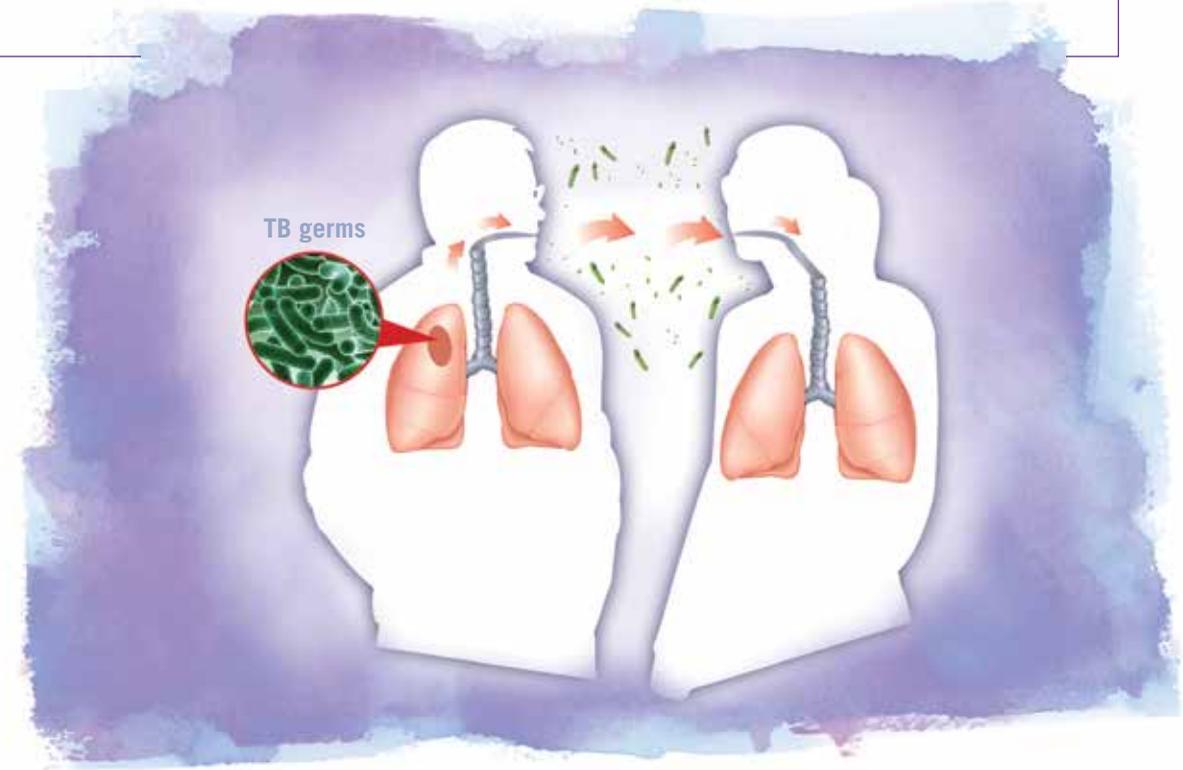
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### DID YOU KNOW?

TB germs are more easily spread indoors, particularly in small, crowded areas with little fresh air.

# 5

## What is latent TB infection?

### BACKGROUND

Latent (“sleeping”) TB infection:

- The germs remain in the body but do not grow or cause damage.
- The TB germ CANNOT be transmitted to another person.
- 10% of people with latent TB infection will develop active TB disease. This risk is much higher in children and in adults with medical conditions such as HIV/AIDS, renal failure and diabetes, or in those taking medications for arthritis or transplantation.
- The greatest risk for progression from TB infection to TB disease is in the first two years following infection.

# 5

## What is latent TB infection?

Latent TB infection can also be described as “sleeping TB.” In this state, TB germs are inactive (“sleeping”) and not causing illness. If someone has latent TB infection, they cannot spread the TB germs to others.

However, latent TB infection can develop into active TB disease weeks, months or years later.

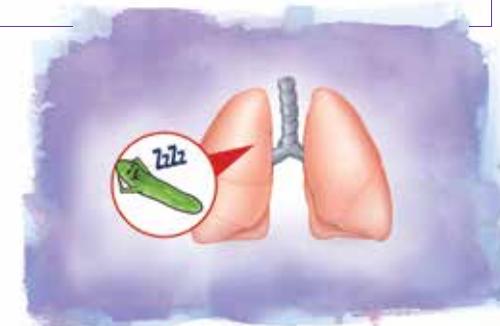
### HOW DOES SOMEONE KNOW THAT THEY HAVE LATENT TB INFECTION?

The only way to know is to be tested for latent TB infection. Latent TB germs do not do any damage to the body and do not cause symptoms.

### WHY GET TESTED?

Results of the testing will tell if someone has TB germs in their body. If there are TB germs in the body, further testing will check to see if there is latent TB infection or active TB disease. Anyone with active TB disease will need urgent follow-up with a health care provider.

A person is at higher risk for developing active TB disease if they have recently been in contact with someone with contagious active TB disease, they have certain medical conditions or they take certain medications. It is important for these individuals to be tested for tuberculosis.



### DID YOU KNOW?

Only 10% of people who have latent TB infection will develop active TB disease at some point in their lives.

## KEY MESSAGES

- With latent TB infection, the TB germs are in the body but they are not causing illness and cannot be spread to others.
- However, the infection can develop into active TB disease in weeks, months or years. It is important to know the symptoms of active TB disease in order to get treated right away and prevent spreading the germ.
- Sometimes treatment for latent TB infection is recommended.

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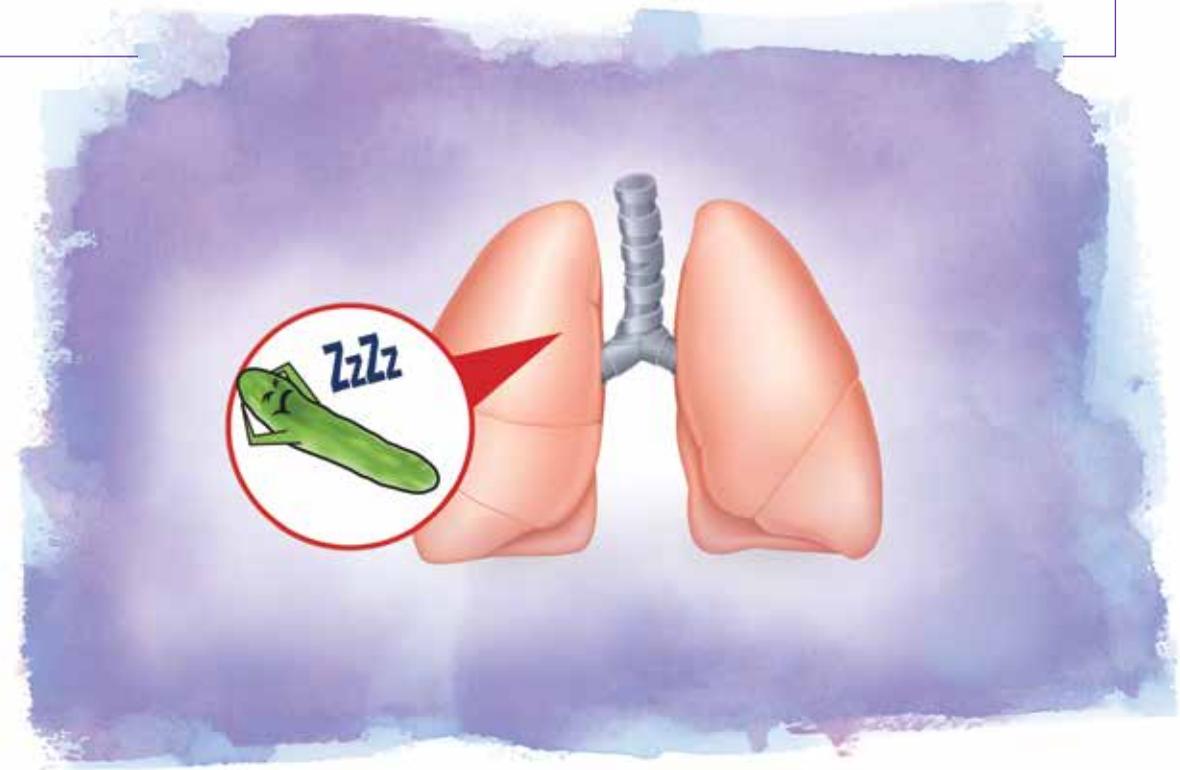
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### DID YOU KNOW?

**Only 10% of people who have latent TB infection will develop active TB disease at some point in their lives.**

# 6

## Latent TB infection: screening tests

### BACKGROUND

What could the results of the tests show?

#### Tuberculin Skin Test (TST or Mantoux test):

- If the tuberculin skin test causes swelling and induration (hardening) of the skin at the injection site, then it is positive.
- The health care provider measures the “induration” or lump NOT the redness. They may feel the injection site as the induration might not always be apparent.

#### IGRA blood test:

- The lab result from the blood test can tell the health care provider if someone has been infected with the tuberculosis germ.

This special blood test is not available in all regions, especially in remote communities where shipping the blood in a timely manner for testing can be difficult.

### IMPORTANT NOTE

Once a TST is considered positive, the client should be referred for medical evaluation. This will include assessment of symptoms suggestive of possible active TB disease, risk factors for TB, such as contact history or other medical illnesses, as well as chest radiography (X-ray) and sputum testing.

# 6

## Latent TB infection: screening tests

The following tests are used to check for TB germs in the body:

1. **Tuberculin Skin Test (TST or Mantoux test):** A small amount of a substance called tuberculin is injected into the skin of the forearm.  
The arm needs to be checked 48–72 hours later by a health care provider to look for a reaction to the test. They will inspect and touch the site to look for swelling and measure the size of the swelling. If not checked, the test will need to be repeated.
2. **Interferon Gamma Release Assay (IGRA) test:** A blood sample is taken and sent to the lab for testing. Results from this test will come back to the clinic from the lab. This special blood test is currently not available in all regions.

If either of these tests show that there are TB germs in the body, further testing will need to be done to find out whether the germs are a latent (“sleeping”) infection or active disease.



#### IMPORTANT

Your health care provider might request other testing to be certain you do not have active TB disease, like taking a chest X-ray or collecting some sputum (coughed up mucus).

#### DID YOU KNOW?

If you have been tested before and had a positive TST test, you should not be tested again. Please tell your health care provider if you have had a positive skin test before.

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# 7

## Who is at risk for developing active TB disease?

### BACKGROUND

About 10% of people who have latent TB infection and no other risk factors will develop active TB disease at some point in their lives.

HIV co-infection is the greatest risk for progression from latent TB infection to active TB disease.

If someone tests positive for HIV, they should also be tested for latent TB infection.

Food insecurity and decreased traditional food intake may lead to nutritional deficiencies that can increase the risk of TB. For example, vitamin D deficiency, which is prevalent in First Nations and Inuit populations, has been associated with an increased risk of TB disease.

# 7

## Who is at risk for developing active TB disease?

Latent TB infection can become active TB disease if the immune system cannot stop the TB germs from growing. This sometimes happens soon after infection (weeks or months) or a long time after infection (years).

Anyone with latent TB infection is at risk for developing active TB disease.

Persons at higher risk include:

- People known to be recently infected with TB germs (within the last two years)
- Children under the age of 5 years
- Anyone who had active TB disease in the past, and were not properly treated or were treated before the 1970s (before the best TB medications became available)
- Anyone taking medications that weaken the immune system
- People with certain medical conditions such as:
  - HIV/AIDS
  - organ transplants
  - kidney failure
  - some cancers and cancer treatments
  - diabetes
- People who are underweight
- People who misuse alcohol or drugs
- People who smoke cigarettes



### DID YOU KNOW?

People with latent TB infection who also have HIV are at the highest risk of developing active TB disease. If you have HIV, talk to your health care provider about your risks.

14 CLIENT • Section on Latent TB Infection

### KEY MESSAGE

Certain medical conditions and some lifestyle choices increase the risk for progression from latent TB infection to active TB disease.

# 7

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# 8

## Treatment for latent TB infection

### BACKGROUND

Treatment can be given by Directly Observed Therapy (DOT), a process where a health care provider monitors for side effects, ensures clients take their medications and documents each dose. See the “DOT” tab for additional information.

Not all clients with latent TB infection need preventative treatment. The decision to offer clients preventative treatment is made by a TB doctor. Decisions are based upon many factors including:

- Age and health status of client
- Likelihood of progressing to TB disease
- Likelihood of side effects from medications
- Likelihood of completing treatment

**Accepting treatment for latent TB is the client's choice. Treatment for latent TB infection is voluntary and the risks and benefits of taking the medications should be clearly outlined to the client so that they are able to make an informed decision.**

The benefits of taking preventative treatment for latent TB include:

- Prevention of the development of active TB disease in the future
- Prevention of active disease protects against possible future spread of TB in the community

The risks of taking preventative treatment for latent TB include:

- Possible side effects of the medications, particularly hepatotoxicity (injury to the liver)

It is important that clients know the possible side effects and review any changes in their health with their health care provider immediately. Health care providers/DOT workers should check with clients about possible side effects at every visit.

# 8

## Treatment for latent TB infection

Persons with latent (“sleeping”) TB infection may be offered medications to kill the germs in the body and prevent the development of active TB disease. This protects the person from becoming sick with active TB disease and, by doing so, does not allow the germ to be spread to their friends, family and community in the future.

Those who are most at risk for developing active TB are the most likely to be offered treatment.

Special TB antibiotics are used to treat latent TB infection. Depending on the TB medications used, treatment will last from a few to many months. It is very important to take all of the medications as prescribed to ensure the TB germs are killed and to prevent the infection from developing into active disease.



### DID YOU KNOW?

Even if you finish treatment for latent TB infection and all the TB germs have been killed, it is possible to get infected with TB germs again if you are exposed to contagious active TB disease again.

## KEY MESSAGES

- Treating latent TB infection with medication kills the germs and significantly decreases the chance that active TB will develop in the future. This protects clients, families and communities.
- Some side effects can be managed while still taking the medications. Some side effects may require a change or discontinuation of the TB medications.
- Most people do not experience side effects from the TB medications.
- When someone is being treated for latent TB infection, it is important that they take all medications as prescribed to prevent the germs from becoming resistant and harder to treat.

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# 9

## Staying healthy with latent TB infection

### BACKGROUND

Healthy individuals and healthy communities can help to reduce some of the factors that increase TB risk and TB transmission.

It's important to take the time to discuss healthy lifestyles with clients. Include in the discussion the topics of diet, exercise, safer sexual practices and avoidance or reduction of smoking, alcohol and drug use.

Emphasize that being healthy may help prevent the development of active TB disease and prevent transmission to loved ones.

### IMPORTANT NOTES

Not everyone with latent TB infection needs preventative medications. If the client does not finish a course of preventative treatment (either because it was not recommended, they chose not to, or they experienced side effects), the following information should be reviewed with the client:

- Future risk of progression to active TB disease
- The symptoms of active TB
- What to do if any of these symptoms occur

Educate the client on symptoms to look for and what they should do if a symptom should arise.

# 9

## Staying healthy with latent TB infection

Healthy lifestyles help to keep the body's defence system (immune system) strong.

While people with healthy lifestyles may still get latent TB infection, they are less likely to develop active TB disease.

Healthy lifestyles include:

- Having a healthy, well-balanced diet
- Maintaining an active lifestyle
- Keeping their diabetes well controlled
- Avoiding or reducing their use of alcohol
- Quitting or reducing cigarette smoking
- Avoiding the misuse of drugs
- Avoiding exposure to HIV

However, even with a healthy lifestyle it is still possible to develop active TB disease.

### DID YOU KNOW?

If you need help with alcohol, smoking or drug use, speak to your health care provider about supports available to you.



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# 10

## Living with someone with latent TB infection

### BACKGROUND

It is important to know the symptoms of active TB disease in case a person with latent TB infection develops active TB disease.

Symptoms of active TB disease are:

- A cough lasting at least two weeks
- Fever
- Loss of appetite (don't feel like eating)
- Weight loss (without trying)
- Feeling weak or very tired
- Sweating at night
- Sometimes coughing up phlegm
- Sometimes coughing up blood
- Sometimes pain in chest

A person may have one or more symptoms.

# 10

## Living with someone with latent TB infection

A person who has latent TB infection cannot spread the germs by coughing or sneezing.

A person with untreated latent TB infection can develop active TB disease, so it is important to know the symptoms of active TB disease. If these symptoms occur, they will be recognized and the person can be encouraged to speak with their health care provider.

Not every person with latent TB infection will develop active TB disease. Only 10% of people with latent TB infection will develop active TB disease.

It is important that a person who is being treated for latent TB infection takes all of their medications and takes them as prescribed to make sure that all the germs are killed.

Taking medication can be difficult for some people when they do not feel sick. A person taking TB medications may need support and encouragement.



Be TB aware!  
Know the symptoms!

20 CLIENT • Section on Latent TB Infection

### KEY MESSAGES

- A person with latent TB infection is not contagious.
- A person with latent TB infection can develop active TB disease, so it is important to know the symptoms so you can recognize them if they occur.
- If someone with latent TB infection is taking TB medication, it is important to support and encourage them as it can be challenging to take medication when they do not feel ill.

# 10

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**Be TB aware!**  
Know the symptoms!



# 11

## What is active TB disease?

### BACKGROUND

- It is important to find active TB disease early!
- The longer a person is sick with active TB disease, the sicker they may become.
- The longer a person is contagious, the more likely they are to pass TB germs on to family and friends.
- Social networks and social gathering places are an important part of contact tracing to find out who was exposed to the TB germs.
- Community members with the most contact and the most at risk of becoming sick with TB will be checked first. Decisions on who needs to be tested will be made by the health care provider(s).

### TB in children:

- Children (especially those under 5 years of age) can get very sick with active TB disease quickly after infection with TB germs.
- The best way to protect children from TB is to identify adult cases of TB early so they do not spread the germs to children.

# 11

## What is active TB disease?

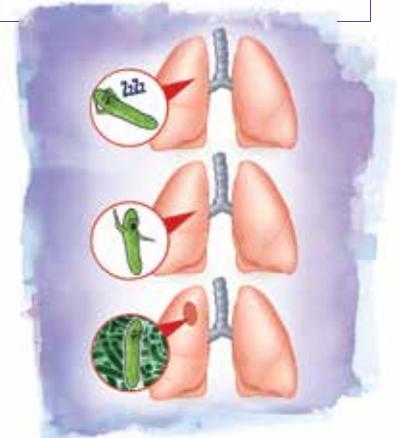
The immune system is unable to kill the germs or put them to "sleep" so they stay "awake" and active.

If the germs have been asleep (latent TB infection), they wake up and become active.

When they are active, the germs multiply, damaging the body and causing illness. The TB germs can be spread to family and friends if the active TB disease is in the lungs, airway or larynx (voice box).

When TB germs enter the body, they usually stay in the lungs and cause illness, but they can also move to other parts of the body through the lymph nodes and blood stream.

When a case of active TB disease is found in the community, the community health staff will check family, friends and other community members for latent TB infection and active TB disease. This process is called contact tracing.



### DID YOU KNOW?

Children under the age of five are at highest risk of severe active TB disease. It is very important to let health care workers know about children who may have been exposed to TB so that they can be checked.

22 CLIENT • Section on Active TB Disease

## KEY MESSAGES

- Active TB disease may develop weeks, months or years after infection.
- The TB germs can cause illness and can be spread to others if the TB is in the lungs, airway or larynx (voice box).
- Advanced TB disease can cause severe illness and sometimes death.
- Adults with very weak immune systems (like those with HIV/AIDS) and young children are more at risk for severe illness and death from active TB disease.

# 11

## What is active TB disease?

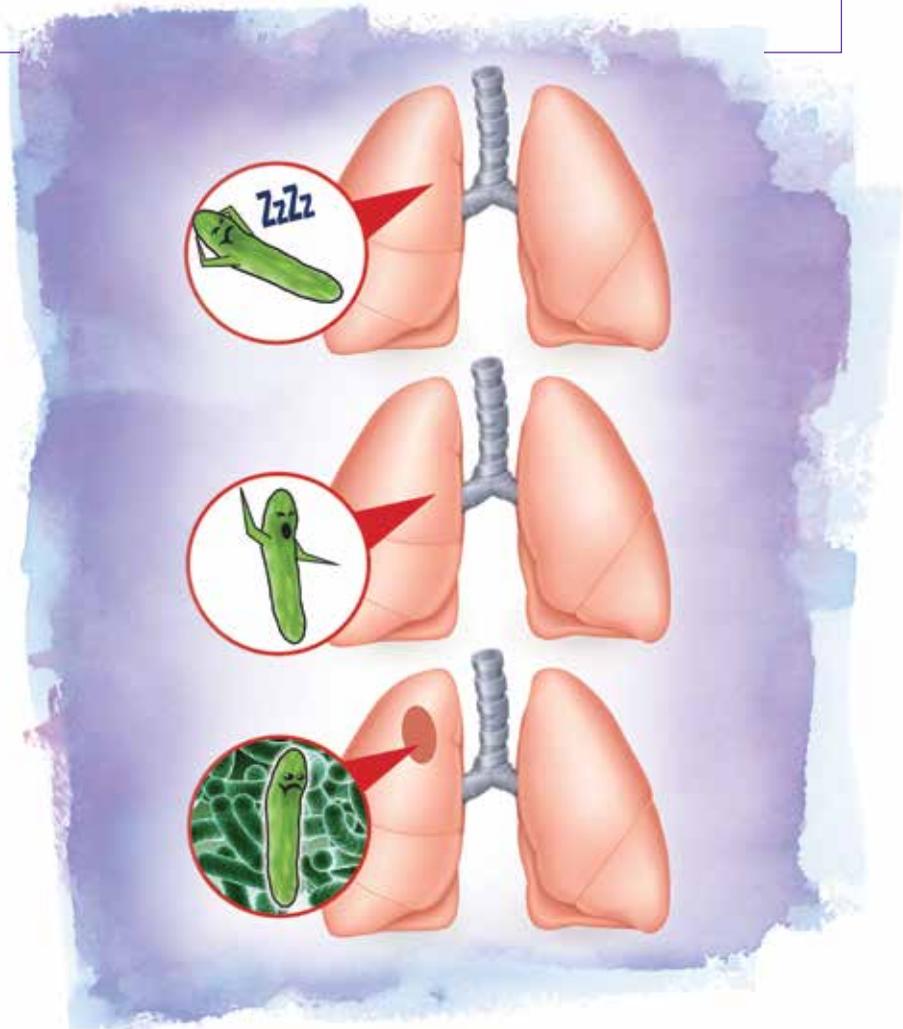
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### DID YOU KNOW?

**Children under the age of five are at highest risk of severe active TB disease. It is very important to let health care workers know about children who may have been exposed to TB so that they can be checked.**

# 12

## Signs and symptoms of active TB disease

### IMPORTANT NOTES

- Encourage the client to talk to their health care provider as soon as possible if they have **ANY** symptoms of active TB disease. If a smoker has a cough, they may have a smoker's cough, OR they may have active TB disease and may spread the germ to others. If they are at risk for TB, they should get tested. Clients may have only one symptom or may have several that occur together; review the client's symptoms over the last few months.
- Many children with active TB disease are asymptomatic at presentation, but will have an abnormal chest X-ray. However some will present with symptoms or signs suggestive of disease. In young infants, these may be very non-specific: failure to gain weight, hepatosplenomegaly (enlargement of the liver and spleen), respiratory distress, fever, lymphadenopathy (swollen lymph nodes), abdominal distension, lethargy (lack of energy), or irritability.

Ask the client if they can name some of the symptoms of active TB disease.

# 12

## Signs and symptoms of active TB disease

If you have **ANY** of these symptoms (especially if you have more than one), talk to your health care provider as soon as possible:

- A cough lasting at least two weeks **1**
- Fever **2**
- Loss of appetite (don't feel like eating) **3**
- Weight loss (without trying) **4**
- Feeling weak or very tired **5**
- Sweating at night
- Sometimes coughing up phlegm
- Sometimes coughing up blood
- Sometimes pain in chest

In children, symptoms may be very different than in adults. Many children do not have symptoms and do not show TB germs in the sputum. Sometimes, they only show an abnormal X-ray.

- Irritability
- Swollen lymph nodes
- Fever
- Failure to gain weight
- Respiratory distress (changes in breathing)
- Lethargic (lack of energy)
- Enlargement of liver and spleen

If your child has **ANY** of these symptoms, talk to your health care provider.

### DID YOU KNOW?

Be TB aware!  
Know the symptoms!



### KEY MESSAGES

- Think TB? Be TB aware! Know the symptoms!
- A child with active TB disease may have no symptoms or may have different symptoms from adults. If the child has swollen lymph nodes under their arms, in their neck, in their groin area, consult a health care provider.

# 12

## Signs and symptoms of active TB disease

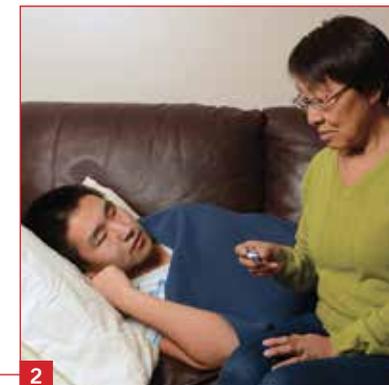
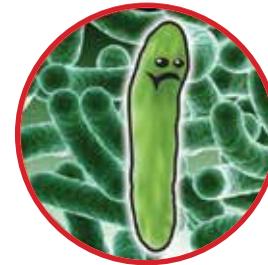
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**DID YOU KNOW?**

**Be TB aware!**  
Know the symptoms!

# 13

## Testing for active TB disease

### BACKGROUND

- 1. Chest X-ray:** A chest X-ray is an important part of the diagnosis but is not used on its own to diagnose active TB disease. Sputum samples are also required.
- 2. Sputum samples:** When the samples go to the lab, they undergo two different tests:  
**Smear test:** The sample is put under a microscope to see if TB germs are there. The result is graded from 1+ to 4+ to indicate the number of TB germs seen. Typically, the higher the number, the more contagious the client is likely to be. The result should be available in a couple of days.

**Culture test:** A sputum sample is taken and sent to a lab where technicians will culture the sample in a machine to analyze TB germ growth. The results can take up to eight weeks.

A smear-positive test is more contagious than a smear-negative test.

The client may require repeat testing throughout their treatment and care.

# 13

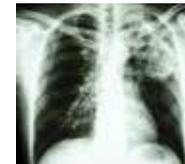
## Testing for active TB disease

The doctor or nurse might use some or all of these tests when checking for active TB disease:

1. A person will be asked questions about TB symptoms and about their **health history**.
2. **Physical exam:** This includes checking the lungs and lymph nodes.



3. **Chest X-ray:** A machine takes a picture of the lungs.



4. **Sputum samples:** A person is asked to cough up phlegm (mucus) into containers. The samples will be sent to a lab and looked at under a microscope. The lab is looking to see if there are TB germs in the phlegm. They will also try to grow TB germs from the phlegm.



5. **Blood sample:** A blood sample may be taken to be sent to a lab for testing.



26 CLIENT • Section on Active TB Disease

### IMPORTANT NOTES

For non-respiratory TB, other tests may be necessary for a diagnosis. Symptoms may be non-specific (e.g., fever, night sweats, and weight loss) or symptoms might reflect the infected area.

For example:

- If TB is in the lymph node, the client might have a lump in the neck, underarm, or groin area.
- If TB is in the kidneys, the client might have blood in the urine.
- If TB is in the abdomen, the client might have abdominal pain or bloody stools.

### KEY MESSAGES

Find TB early; TB can be treated and cured. The longer a person is ill with active TB disease, the sicker they may become and the more likely they are to pass the germs on to family and friends.

# 13

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# 14

## Treatment for active TB disease

### BACKGROUND

- Clients are monitored closely throughout the course of treatment. If at any time the health care provider determines that the treatment is no longer effective or the client is not tolerating the treatment, it will be adjusted.
- Often, patients will start to feel much better within a few weeks of treatment. It is essential to reinforce the importance of taking all the medicines and doses given throughout the entire course of treatment.
- Treatment is usually given by Directly Observed Therapy (DOT), a process where a health care provider monitors for side effects, ensures clients take their medications, and documents each dose.
- See the “DOT” tab for additional information.

# 14

## Treatment for active TB disease

Treatment time for active TB disease varies, usually lasting from 6 to 12 months:

- Active TB germs are very tough. Multiple TB antibiotics are needed over many months to completely cure active TB disease.
- Patients may need to be in hospital during the first part of treatment until they are no longer contagious but can then take the rest of the treatment in their community.
- Under certain circumstances in some areas, all treatment may be taken in their home community.
- Treatment is most often given by Directly Observed Therapy (DOT).

Health care providers monitor clients for side effects while taking TB medications by asking questions at each visit and by doing routine blood work and other tests.



### IMPORTANT

It is very important for a person to continue taking TB medications even if they are feeling better. The doctor or nurse will tell the person when it is time to stop taking the medications. If the person does not take enough TB medicine, the TB germs may start multiplying again and the antibiotics used to treat it might not work on the germs anymore. This is called drug-resistant TB. Drug-resistant TB is more difficult to treat.

### DID YOU KNOW?

After a person takes their medicine for a while, they will not be contagious anymore. A health care provider will tell the person when they are no longer contagious to others.

28 CLIENT • Section on Active TB Disease

## KEY MESSAGES

- It is important to take ALL doses of TB medication.
- If a person does not take their medication as prescribed, the TB will not be cured and they can spread TB to others, especially the people that they spend a lot of time with like family and friends.
- Missing doses of medication can give the TB germs an opportunity to get stronger. The germs may become drug-resistant and more difficult to treat! Treatment of drug-resistant TB often requires longer courses of treatment using drugs which can have more side effects.

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### DID YOU KNOW?

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# 15

## What is Directly Observed Therapy (DOT)?

### BACKGROUND

Directly Observed Therapy (DOT) is the World Health Organization (WHO) standard of tuberculosis care.

### IMPORTANT NOTES

If a client becomes discouraged, provide additional support or refer to counselling services if appropriate. Taking an anti-TB regimen can be challenging at times.

Talk with your client about the different incentives available in your region to encourage your client to continue taking the medication.

# 15

## What is Directly Observed Therapy (DOT)?

Directly Observed Therapy (DOT) is the process for taking TB treatment where a trained health care worker delivers, monitors, and documents each dose of TB medication.

This means that the DOT worker:

- Ensures that doses are not missed by viewing each dose being swallowed
- Checks with the client to see if there are any side effects before each medication dose
- Supports the client throughout their treatment
- Reports the client's progress back to the TB doctor or nurse



#### TAKING TB MEDICATIONS?

You are NOT alone. Talk to your health care provider or DOT worker about your concerns. They are there to help you!

30 CLIENT • Section on Directly Observed Therapy

### KEY MESSAGES

DOT is the best standard of TB care. The advantages of DOT include:

- Monitors for and supports the client through any side effects
- Supports the client to complete the full course of medicine
- Prevents antibiotic resistance

# 15

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# 16

## Medications

### IMPORTANT NOTES

- There are several second line drugs used for drug-resistant active TB disease (when the first line drugs cannot kill the TB germs) or when a person cannot take first line drugs because of allergies or side effects.
- Treatment for active TB disease often requires longer treatment with more medication than treatment for latent TB infection.
- For children and adults with difficulty swallowing, some medications can be administered in alternative forms. Speak with a healthcare provider for more information.
- Some medications such as isoniazid and rifampin are available in liquid form.
- Some medications are recommended to be taken on an empty stomach (isoniazid, rifampin) to increase absorption, others are recommended to be taken with food (ethambutol) to decrease side effects.

## 16 Medications

Commonly used antibiotics for tuberculosis treatment:

- Isoniazid (INH) is a white tablet
- Pyrazinamide (PZA) is a white tablet
- Rifampin (RMP) is a red capsule
- Ethambutol (EMB) is a white, blue or green tablet
- Pyridoxine (B6) is a vitamin to prevent side effects from the isoniazid.



#### NOTE

Medication shape, colour and imprint on the tablet/capsule may be changed over time. If you have any questions or concerns, please check with your pharmacist or nurse.

32 CLIENT • Section on Directly Observed Therapy

### KEY MESSAGES

- It is important to take ALL doses of TB medications to be cured.
- TB medications can have interactions with other medications (prescription, over the counter, herbal and traditional). Let your health care provider know if you are taking any medications in addition to the tuberculosis medications.

# 16

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# 17

## Possible side effects

### IMPORTANT NOTES

- Encourage the client to inform their DOT worker or health care provider about any unusual symptoms or side effects.
- Possible side effects are specific to the TB medication being taken. Specific side effects should be discussed by the doctor, pharmacist or nurse when medication is prescribed.
- Some may experience side effects when first starting the medicine. These symptoms often do not last long and usually go away over time.
- Side effects can be addressed in a number of ways and should be brought to the attention of the nurse, pharmacist or doctor as soon as possible so that other options can be considered to enable clients to complete all of their medication.

# 17

## Possible side effects

Most people tolerate TB medications very well.

The following symptoms may be side effects of TB medications:

- Loss of appetite
- Rash
- Nausea
- Vomiting
- Abdominal discomfort
- Sore joints
- Unexplained tiredness
- Dark-coloured urine
- Yellow skin or yellow eyes



### TAKING TB MEDICATIONS?

Tell your DOT worker or health care provider **immediately** if you have any of the symptoms listed or any other symptoms that you are worried about.

### TAKING TB MEDICATIONS?

You should tell any other health care providers you are seeing that you are taking medications for TB. They need to know this in order to prevent interactions with other medications that they may prescribe.

34 CLIENT • Section on Directly Observed Therapy

## KEY MESSAGES

- Most people tolerate the medicine very well.
- Alcohol and some other medications (prescription, over the counter, herbal and traditional) can affect TB medications. Reducing or eliminating the use of alcohol and other medications while taking TB medications will reduce the work the liver has to do. Talk to your health care provider about the use of other medications.
- If a person would like help to reduce alcohol use, smoking and other substance use, speak with a health care provider about where to get support.

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# Let's stop TB!

## IMPORTANT NOTES

As a health care provider, health educator or community member, there are many other things that a person can do to reduce TB in their community. Here are just a few ideas:

- Decrease the stigma of TB through regular awareness campaigns.
- Support community members taking TB medication.
- Encourage clients who have been treated for TB to share their experience with the community.
- Engage family and community groups for patient support.
- Advocate for healthy housing.
- Engage in activities to help decrease mould in homes which can improve indoor air quality.
- Promote the reduction of second-hand smoke in homes and common places.
- Promote healthy lifestyle choices.
- Advocate for the reduction of poverty in their community.

## Let's stop TB!

### TB can be prevented and CURED!

What can I do?

- Be TB aware—know the symptoms of the disease and be aware of them in yourself and others.
- Share what you have learned about TB with family and friends in your community.
- Those affected by TB need the support of their family, friends and the entire community.
- We all share the air. With the proper medications and support, TB can be cured and we can all work together to stop the spread.

Together,  
let's stop TB!

36 CLIENT



## KEY MESSAGES

- TB can be prevented and cured!
- Together, let's stop TB!

# Let's stop TB!

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# QUESTIONS



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