

# Tuberculosis vs COVID-19

Information for the community

COVID-19 is caused by a *virus* and TB is caused by *bacteria*. Although viral and bacterial infections can cause similar symptoms, such as coughing, fever and fatigue – they are vastly different and are treated with different medications.

## What is it?

### COVID-19

COVID-19 is an infectious disease caused by the SARS-CoV-2 virus.

Most people with the virus will experience mild to moderate respiratory illness and recover without requiring special treatment. However, anyone can get sick with COVID-19 and become seriously ill or die at any age.

### TB

TB is an infectious disease caused by *Mycobacterium tuberculosis* bacteria.

TB generally affects the lungs but can affect other parts of the body. Most people show no symptoms as the bacteria can lay dormant or 'sleeping', which is known as latent TB. About 10% of latent TB infections become active and cause symptoms and can make people serious ill.

## How is it spread?

### COVID-19

COVID-19 is usually spread from person to person through close contact.

Fine respiratory droplets and aerosol particles from an infectious person's cough or sneeze can be:

- > breathed in
- > transferred when you touch an object or surface that has droplets from an infected person and then touch your mouth or face.

### TB

TB is spread when a person with active TB in their lungs talks, breaths, coughs or sneezes tiny particles containing infectious agents into the air. These particles are then breathed in by another person.

You can't catch TB from:

- surfaces or sharing utensils
- kissing or touching
- a person who has latent TB infection
- a person who has TB in other parts of their body (not the lungs)

# Tuberculosis vs COVID-19

Information for the community

## Signs and symptoms

### COVID-19

The main symptoms of COVID include:

- > fever
- > cough
- > sore throat
- > runny nose
- > congestion
- > headache
- > fatigue
- > shortness of breath.

### TB

The main symptoms of TB include:

- > cough for more than 3 weeks
- > tiredness
- > fever
- > night sweats
- > weight loss
- > blood-stained sputum (phlegm)
- > chest pain and
- > swollen lymph glands.

## Diagnosis of disease

### COVID-19

COVID-19 is diagnosed with a Polymerase Chain Reaction (PCR) test or rapid antigen test (RAT) using a nose swab. COVID-19 infections can also be found through y blood tests looking for specific antibodies the body creates to fight the infection.

### TB

Active TB disease is diagnosed by clinical presentation, chest x-ray and by growing the bacteria from sputum or other sites.

Latent TB infection is diagnosed by blood test or skin prick test, to show an immune reaction to something that looks like TB.

# Tuberculosis vs COVID-19

Information for the community

## Incubation period (time between exposure to the infection and the infection developing)

### COVID-19

On average the incubation period for COVID-19 is 5 days, with a range of 1 to 14 days.

### TB

TB signs and symptoms may not present for years. The risk of development of serious lung disease is greatest within the first two years of the initial infection, but some risk continues for life.

## Infectious period (time an infected person can infect others)

### COVID-19

People with COVID-19 are considered most infectious 48 hours before symptoms show and while they have acute respiratory symptoms.

### TB

Adults with TB are most infectious when they are coughing and have not started treatment yet. Young children with active TB rarely spread the disease. People with TB that is not located in their lungs and those with latent TB infection are not infectious.

## Treatment

### COVID-19

Antiviral treatments can treat mild to moderate COVID-19 infections for people who are eligible.

### TB

Anti-tuberculous drugs under the care of an experienced doctor is required to treat TB. Completing a full course of therapy (usually at least 6 months) is essential to prevent relapse and development of drug resistance.

## Prevention

### COVID-19

Preventative measures for COVID-19 include staying:

- > up to date with vaccines
- > home if you are unwell
- > staying away from people who have suspected or confirmed COVID-19.

### TB

People with TB should not attend work, school or childcare until cleared by a medical team. Household contacts and close contacts will be followed up with SA TB Services for screening to see if any infection has been passed on.

# Tuberculosis vs COVID-19

Information for the community

## Vaccinations

### COVID-19

There are vaccinations available for COVID-19. Everyone 5 years and over can now be vaccinated. Children 6 months to 5 years who meet the eligibility criteria can now also be vaccinated. Your GP can keep you updated about COVID vaccination.

### TB

A Bacillus Calmette-Guerin (BCG) vaccine can protect against severe forms of TB when given to young children. This is not part of the childhood immunisation program but is recommended for some children at a higher risk of coming into contact with the TB germ. SA TB Services will assess when the BCG vaccine should be used.

## Is this an emerging disease?

### COVID-19

COVID-19 is relatively new. Other novel coronaviruses, which are a large family of viruses, have been around for decades.

### TB

TB is one of the oldest diseases in the history of humankind, with evidence of tubercular decay found in some Egyptian mummies from 3000-2400 BC.

## Can my GP manage this disease?

### COVID-19

COVID-19 can be safely managed by your GP. GPs can prescribe antiviral medications for eligible people.

### TB

TB requires a dedicated team working with your GP to manage this disease. SA TB Services are located at the Royal Adelaide Hospital (RAH).

## Is this a common illness?

### COVID-19

COVID-19 has become one of the most common illnesses in the world. As of December 2023, there were 772,052,752 confirmed cases of COVID-19 worldwide.

### TB

TB is relatively prevalent worldwide with an estimated 10.6 million people falling ill in 2021. In Australia, TB is less common with approximately 1,300 cases reported per year or 5.5 cases per 100,000 population. Most of these cases are from people that have come from high prevalence countries.

# Tuberculosis vs COVID-19

Information for the community

## Who is most at risk?

### COVID-19

COVID-19 has more severe outcomes for people who are over 70 years old, unwell with conditions that increase their risk of severe illness or immunocompromised.

### TB

Close contacts who have spent extended periods of time with someone with active TB are most at risk of catching the disease. Children under 5 years of age and people with immunocompromising conditions are at higher risk of more severe outcomes. Other at-risk groups include homeless persons and persons in overcrowded housing, as there is increased risk of transmission. Aboriginal and Torres Strait Islander persons are disproportionately affected by TB.

## Various strains of the disease?

### COVID-19

Viruses naturally change or mutate. There are more than 10 named variants of SARS-CoV-2.

### TB

TB is a complex disease and there are several strains. Some of the more concerning strains of TB are drug resistant to standard treatments, which is why it is important to complete a full course of anti-tuberculosis treatment to stop this developing.

## Long term effects of the disease?

### COVID-19

While researchers are still learning about the long-term effects of COVID, there is emerging evidence to suggest that COVID-19 can lead to lasting lung and heart muscle damage, nervous system problems, and kidney failure.

### TB

If left untreated TB can lead to disability and death. With timely and appropriate treatment, TB can be cured.

## Isolation periods

### COVID-19

To reduce the risk to others, if you test positive to COVID-19 you should:

- > stay home until your acute symptoms have cleared (usually 5 to 7 days)
- > if you must leave the house, wear a mask when indoors or on public transport
- > avoid large gatherings and crowded indoor places. do not visit people at high risk of severe illness, or anyone in a hospital or aged or disability care facility for at least 7 days.



# Tuberculosis vs COVID-19

Information for the community

## TB

TB is not as transmissible as other respiratory illnesses but at times people may need to isolate. In some circumstances, people with TB need to be in hospital for the first few weeks of treatment. However, every person that is diagnosed with TB will have a specialist doctor talk to them about their situation and develop a tailored individual approach. TB that is not in the lungs is not infectious and does not require any isolation.

## Infection control and cleaning

### COVID-19

COVID-19 virus can spread in poorly ventilated and crowded settings. Due to the transmission risk a number of infection control measures are useful to minimise risk exposure. This includes:

- > physical distancing
- > wearing a mask
- > wiping down surfaces with disinfectant
- > washing hands regularly
- > avoiding touching your face. Adequate ventilation, for example by opening windows, is also useful.

## TB

TB mycobacteria are only transmitted via breathing in the bug and cannot live on surfaces. This may occur when someone with TB is infectious and coughs or sneezes, releasing the TB bug into the air. Generally, long periods of exposure are needed to become infected and most people who get infected will never get sick from the disease. Therefore, no additional cleaning measures need to be put in place. However, maintaining general hygiene, including cough hygiene, is always important.

## Nutrition and disease

### COVID-19

While the immune system requires a variety of healthy foods and a balanced diet to work most effectively and fight infections when we are sick, there is no clear evidence to suggest any specific diets, foods, or nutrients prevent COVID-19 infection nor act as a treatment.

## TB

Good nutrition helps to lower the risk of progression to active TB if you have been infected, TB relapse and death from TB. Undernourished children are at particular risk. The World Health Organisation states that nutrition screening, assessment and management are integral components of TB treatment and care.

### FOR MORE INFORMATION:

Royal Adelaide Hospital, SA TB Services  
Telephone: (08) 7074 1089 (business hours)

[www.sahealth.sa.gov.au](http://www.sahealth.sa.gov.au)

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