

What is Syphilis? It's a disease caused by the bacteria *Treponema pallidum*.

What are the statistics in Australia & Queensland? (pp 2 - 6)

What is the transmission route? (pp 7 - 10)

Stages of Syphilis. (pp 11-18)

Not all clinics are offering testing. Not all GPs or nurses are aware of the signs. There are three different tests. (pp 19 - 24)

Types of treatment. (pp 25 - 27)

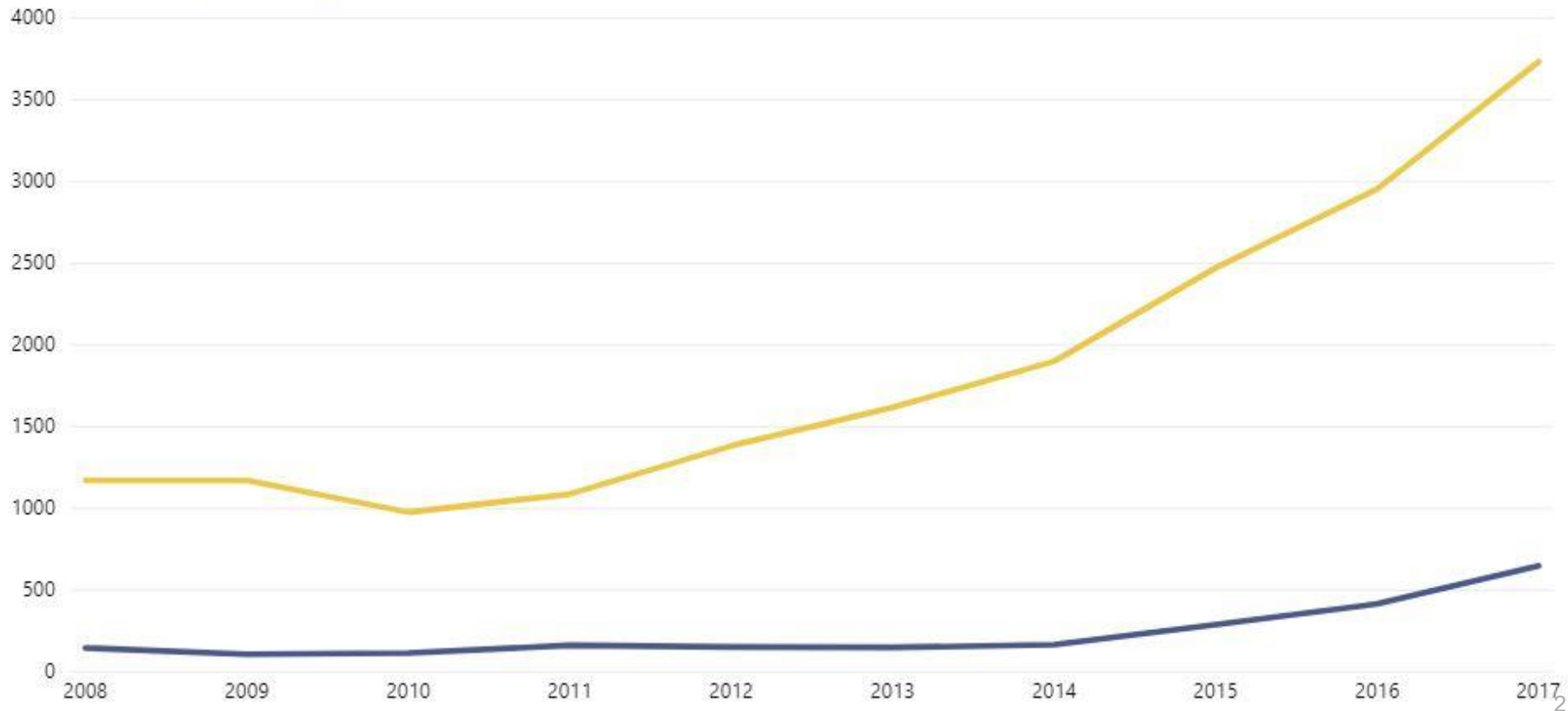
Yes, Syphilis can be caught twice! (p 28)

Syphilis and Pregnancy. (p 29)

The consultation will take about 90 minutes for you to complete.

Syphilis rates Australia, breakdown by gender

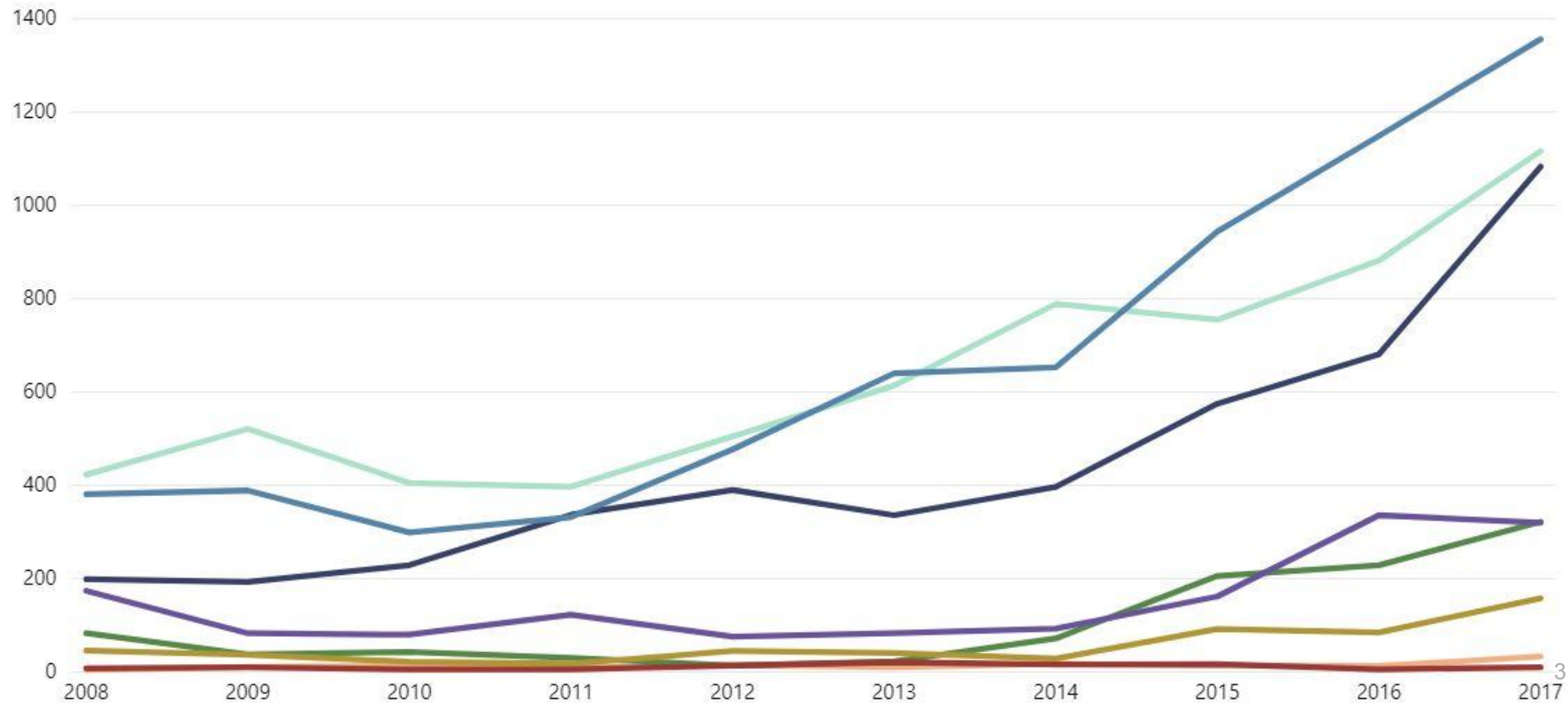
Characteristic ● Female ● Male



Syphilis rates Australia, breakdown by state

Number of infectious syphilis notifications by year and characteristic

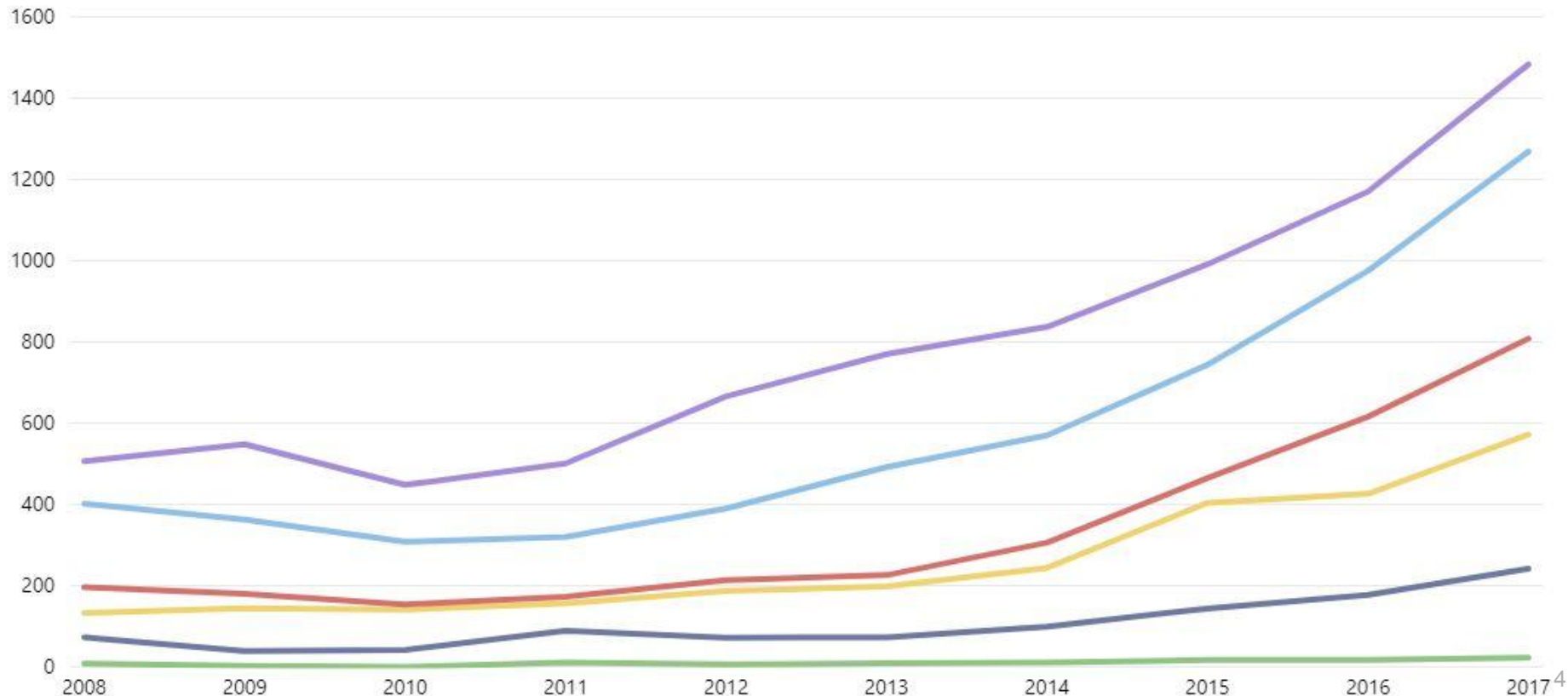
Characteristic ACT NSW NT QLD SA TAS VIC WA



Syphilis rates Australia, breakdown by age

Number of infectious syphilis notifications by year and characteristic

Characteristic ● 0-14 ● 15-19 ● 20-24 ● 25-29 ● 30-39 ● 40+





Cairns Sexual Health have noticed that the most common cases of Syphilis are occurring in these groups of people:

- FIFO workers
- Cis-men
- Heterosexual people

It's not high among sex workers. But we suggest, based on the available evidence, that our clients are the people more likely to be living with Syphilis and not realise.

That is why we are producing a Syphilis resource for sex workers and our clients.



The outbreak began in Qld in 2011.

Young people (20 and under) and middle aged (30 - 39) are highest categories in Queensland.

Queensland now has almost as many notifications as NSW.

NSW population 8.09 million people.

Qld population 5.11 million people.



Syphilis is transmitted when the genitals, anal area or mouth (ie mucous membranes) come into contact with a Syphilis sore.

Blood to Blood transmission is also possible, we explain that later.

Activity that does not transmit Syphilis:

- Touching a sore with the fingers.
- Touching something the sore has touched.
- Touching the body rash.
- Sharing saliva without direct contact with a sore. But we also know that genital or oral contact when a sore is present inside the mouth does transmit syphilis. The research on this is confusing.

Activity that does transmit Syphilis:



General sexual activity

- Rubbing and skin to skin contact that involved genitals, anal area and mouth
- Kissing
- Uncovered oral sex
- Covered oral sex, if the mouth touches an area that has a sore on it, or there is a sore inside the mouth that has contact with uncovered mucous membrane
- Genital contact

It's also passed on during pregnancy and birth to the baby.

Blood to Blood transmission



- **Blood to blood contact can transmit Syphilis.**
- **Touching a person's blood with the hands, or anywhere on the skin, does not transmit.**
- **For transmission to occur, the blood would have to come into contact with an open, bleeding wound.**
- **For example, blood having contact with an open mouth ulcer or actively bleeding gums.**
- **Sharing injecting equipment can transmit Syphilis.**

Note: Blood to blood transmission only occurs during Primary and Tertiary stages of Syphilis. See more on stages of Syphilis further in the resource.

Stages of Syphilis - Primary Syphilis (Stage One)

Stage One has any one or multiple of these symptoms, OR NONE.



- 1. Very small pimple or tear in skin, with no tenderness or pain.**
- 2. Painless spot on your tonsil.**
- 3. A feeling like you have bitten your cheek.**
- 4. A small tear in the skin (can be very small).**
- 5. A sore with raised edges, small or up to two centimetres wide.**
- 6. Spots on body that appear like a small sweat rash, not itchy.**
- 7. A shiny, glossy or mucousy patch on the skin that may resemble an ulcer.**
- 8. Something that looks like a wart, but goes away.**
- 9. Something that looks like a herpes sore, but goes away and could be painless.**

Primary Syphilis lasts for a few weeks. All sores can be painless or tender. The symptoms go away after a few weeks. At this point, Secondary Syphilis develops.

Secondary Syphilis (Stage Two)

Primary Syphilis resolves after a few weeks, and Secondary Syphilis develops. Secondary Syphilis can overlap with Primary Syphilis. Secondary Syphilis can last for many years before developing into Tertiary Syphilis.

Symptoms of Secondary Syphilis (note: for some people there are no symptoms during Secondary Syphilis)

Body Rash, comes and goes

- Reddish or brownish or blotchy
- Not itchy and not infectious
- Can be on soles of feet and hands, *or* anywhere
- The rash comes and goes, and can be small and not noticeable

Secondary Syphilis (Stage Two) continued....

More symptoms of Secondary Syphilis
(note: for some people there are no symptoms during Secondary Syphilis)



General feeling of being unwell, comes and goes

- Flu-like symptoms, but not infectious like a normal flu
- Sore throat
- Fatigue, generally feeling low energy
- Swollen lymph nodes
- Hair loss more than usual (not always noticeable)
- Symptoms come and go, appear to resolve on their own

Secondary Syphilis (Stage Two) continued...

During secondary Syphilis the person can also develop something called "Condylomata Lata".

This is when the Syphilis virus starts to live within skin folds in the genital, mouth and anal region.

There are no clear symptoms of this condition, however it comes with a lot of transmission risk, because the virus is in concentrated amounts.

During Secondary Syphilis, blood to blood contact is not a transmission risk. However during the early weeks, Secondary Syphilis can overlap with Primary Syphilis, during which time blood to blood contact can cause transmission.

Latent Syphilis (Possible Stage Three, not everyone will develop this)



Latent Syphilis

If left untreated, Secondary Syphilis may progress to the latent (hidden) phase. Not everyone who has Syphilis will go through this stage. For those who do, there won't be any symptoms, maybe for years. In some cases, symptoms will never return. But the infection isn't gone; the bacteria remain dormant in the body and will still show up in a test.

Some latent cases may progress to the tertiary stage of the disease.

Not all people with Latent Syphilis will develop Tertiary Syphilis (Stage Four).

Transmission risks during the latent phase are much lower than during other stages.

Tertiary Syphilis (Stage Four)



Tertiary Syphilis can overlap with Secondary Syphilis.

Some symptoms of Tertiary Syphilis. Note: Some people have no symptoms.

- Problems controlling muscle movements.
- Numbness.
- Vision problems (starting to go blind).
- Hearing problems (starting to go deaf).
- Dementia symptoms.

Tertiary Syphilis (Stage Four) continued...

More symptoms of Tertiary Syphilis.

Note: Some people have no symptoms.



- Seizures, hallucinations, stroke, mental disturbance.
- Incontinence.
- Meningitis.
- Non-cancerous lesions on the skin, mouth and internal tissues.
- Inflammation of the aorta in the heart. This can cause aortic aneurysm.
- Aortic aneurysm - thinning of the lining of the aorta in the heart. If this bursts the person will likely die.

Tertiary Syphilis (Stage Four) continued...



There are no sores associated with Tertiary Syphilis.

Transmission can occur from blood-to-blood contact at this time.

Tertiary Syphilis is curable with diagnosis and treatment.

But if it's already had an effect on the body or organs, the damage may be irreversible.

Even if treated, it may have permanently damaged the heart and brain.

Why do I have to ask for a test?



The doctor may not offer a test.

A Syphilis test is not always included in a standard STI screen.

In Qld, all testing is decided by your GP or clinic based on the symptoms you have. However, your usual doctor may not be familiar with Syphilis symptoms - which is why they might not offer you a test. A sexual health clinic also may not pick up the signs.

It is worth asking for a Syphilis test regularly, and/or make sure that the STI screen the person who is receiving includes a test for Syphilis. If they don't ask, they may not be tested for Syphilis.

How to know which Syphilis test to ask for?

A doctor or clinic may not understand the different tests for Syphilis. The person who is requesting a test can ask what type of Syphilis test the doctor or clinic are going to do.

If a person understands each of the different tests, they can request the test they require.

Three different tests - Antibody test

1. Antibody test

- Blood test.
- To see if the person has ever been exposed to Syphilis.
- This test will not detect what stage of Syphilis the person has.
- They test the blood sample twice in the lab to be sure of the result.

Note: If someone has ever had Syphilis before, even if it was treated and is now inactive, Syphilis will still show up on the antibody test. In this case, the antibody test does not indicate a current case of Syphilis that needs treatment. Only the PCR or RPR tests (explained next) can confirm this.



Three different tests - PCR test



2. Polymerase Chain Reaction test (PCR test)

- Swab of the sore
- This test will not detect what stage of Syphilis the person has
- This test detects if the person has an active case of Syphilis

Three different tests - RPR test

3. Rapid Plasma Reagin test (RPR test)



- Blood test.
- This test detects if someone has an active case, and what Stage of Syphilis they have.
- This test is done in a lab, by hand, under a microscope.
- Treatment decisions are sometimes based on the RPR test.

If a person has *ever* had Syphilis before, and been treated, the RPR test is a method to detect if the person has been re-infected.

This is why it is very important to tell the clinic about previous Syphilis infections and treatment.

Where can someone get a test?

- List of Queensland Sexual Health and HIV services:
<https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/sex-health/services/find-service>
- Regional STI Clinic opening hours 2020:
<https://respectqld.org.au/regional-clinics-2020-opening-hours/>
- Visit a GP or sexual health clinic.
- Or contact Respect Inc anytime for a reliable referral information and advice.

Treatment



Treatment for Syphilis is delivered by a needle or two in the butt cheek, by the doctor or a nurse at a clinic. The dose will depend on the test results and on reported sexual history. The clinic will decide, based on this information, how high the dose will be.

It is a painful procedure. It does not require admission to hospital, it is done in a clinic.

The treatment is a drug called Penicillin G benzathine. Penicillin G benzathine is proven to be effective at killing *Treponema pallidum*, the bacterium that causes Syphilis.

Treatment continued....



If the person is allergic to penicillin, or is unable to be injected, they will receive Doxycycline as an oral treatment for 14 or 28 days, depending on what stage of Syphilis they have. It is two pills per day.

Doxycycline is effective, but there is less evidence of success than with use of Penicillin G benzathine.

Treatment continued....

After the first treatment, the person will be tested again, and likely receive a second dose of the treatment. Then the person will be tested a third time, and potentially treated again. For some patients, the treatment may extend beyond this. There are specific time frames between each test and treatment cycle, depending on what stage of Syphilis the person is in. The doctor or clinic will advise and make the follow up appointments with the patient.

It is very important to attend within their suggested time frames in order for the infection to resolve 100%, and not risk it remaining active in the body.

Respect is still researching the cost of Syphilis treatment at a GP or private clinic. If the person is treated at a Sexual Health Clinic the treatment is free.

Yes, Syphilis can be caught twice!

- Being infected or treated does not equal immunity.
- Syphilis can be caught again during treatment.
- Syphilis can be caught again after treatment.
- Having it previously does not mean the person is at higher risk.
- Having it previously does mean an Antibody test (blood test) will always show up positive. This does not mean the person currently has an active case. The person would need to have a PCR or RPR test prior to determining if they have an active case and if treatment is required.



If a person has ever had Syphilis before, they need to tell the GP or clinic prior to getting tested.



Syphilis complications during pregnancy

Syphilis screening in Queensland is now standard for all pregnancies.

- **If untreated, Syphilis may lead to stillbirth.**
- **If untreated the child may be born with Syphilis.**
- **Syphilis usually kills the child very soon after birth (8 deaths of Queensland babies related to Syphilis so far).**

Treating the birthing parent during pregnancy can prevent complications and/or transmission to the unborn child.