Key messages

- Syphilis rates are at epidemic levels in Aboriginal communities in regional WA, and in NT, SA and Qld.
- Syphilis continues to increase in men who have sex with men (MSM).
- Syphilis is an emerging epidemic in heterosexual men and women throughout WA and many parts of Australia.
- All pregnant women are to be tested for syphilis at the first antenatal visit, at 28 weeks and and 36 weeks or at the time of any preterm birth
- Most syphilis is asymptomatic. Don't wait for symptoms to test!
- Include syphilis as part of all STI and BBV screens
- People presenting with symptoms consistent with infectious syphilis (genital ulcer or symptoms/signs of secondary syphilis) and contacts of infectious syphilis should be treated at time of first presentation.
- Be aware of non-genital presentations of infectious syphilis, e.g. rash, hair loss, cranial nerve palsy.
- Offer a pregnancy test (for women of reproductive age who are not using long-acting reversible contraception or who are currently pregnant).

What specimens are required?

- Venous blood for syphilis.
- PCR swab of any genital lesion

If syphilis is suspected consider testing for other STIs and BBVs:

- FVU (male) or SOLVS (female) for chlamydia and gonorrhoea.
- Venous blood for HIV and hep B serology. Consider hep C if at-risk.

Note:

✔ People who are diagnosed with STIs or HIV should be tested for syphilis at the time of, or within 4 weeks of, diagnosis (baseline) and 3 months later (after the window period).

✔ If the patient has clinical evidence of syphilis and their serology is negative, repeat testing after 2 weeks.

✔ Syphilis point-of-care testing (PoCT) is available in some health services. ALL patients with REACTIVE syphilis PoCT require venous blood for syphilis serology to be taken at the same time so rapid plasma reagin (RPR) can be measured before and after treatment.

Treatment guidance

✔ Empirically treat any person presenting with signs/symptoms of syphilis or who is a contact of syphilis at time of syphilis testing.

✔ Patients being treated for syphilis or as a contact of syphilis MUST have venous blood taken on the day treatment is commenced to provide an accurate baseline RPR for monitoring response to treatment.

✔ Repeat syphilis serology should be taken 3 and 6 months post-treatment to monitor the response to treatment. Serology may be repeated more frequently in patients at high risk of reinfection. If the RPR has not reduced at least 4-fold (i.e. by 2 titres) at 6 months post-treatment, repeat serology at 12 months post-treatment.

✔ Immediate treatment should be performed after a reactive PoCT where the patient has a known previous negative syphilis result or no known history of past syphilis infection.

✔ Pregnant women should be treated with penicillin as per the schedule above, according to stage of infection, and referred for specialist advice. Pregnant women with penicillin allergy should be desensitised and subsequently treated.

Refer to Silver book (ww2.health.wa.gov.au/silver-book/notifiable-infections/syphilis) for further guidance on syphilis treatment and testing.

Produced by the Sexual Health and Blood-borne Virus Program © Department of Health 2023

SHP-013684 NOV23

Government of **Western Australia**
Department of **Health**

Quick guide for **testing and treatment of syphilis infection in WA**

November 2023

health.wa.gov.au

Testing

All syphilis testing requires venous blood to be sent for syphilis serology to monitor response to therapy and identify reinfections.

Who should I test?	Why should I test?	When should I test?
Any person who has symptoms consistent with syphilis infection, e.g. genital ulcer, rash, hair loss, moist warty genital lesions (condylomata lata), cranial nerve palsy	High level of clinical suspicion due to presence of symptoms	Immediately
Any asymptomatic person of any age requesting 'an STI check-up'	The patient has requested it, so is likely to be at risk	Immediately
A sexually active Aboriginal young person under 40 years or a person of any age who has changed sexual partners in the last 12 months	These populations are at higher risk for syphilis, especially in regional or outbreak communities	Six monthly*^
Pregnant women	To prevent vertical transmission (congenital syphilis) and adverse outcomes	• At first antenatal visit • 28 weeks** • 36 weeks or at time of any preterm birth
Pregnant and post-partum women living in regions affected by ongoing outbreak in Aboriginal communities, i.e. Kimberley, Pilbara and Goldfields See: www.health.gov.au/resources/pregnancy-care-guidelines/part-f-routine-maternal-health-tests/syphilis	To prevent vertical transmission (congenital syphilis) and adverse outcomes	• At first antenatal visit • 28 weeks** • 36 weeks • at delivery • 6-weeks postpartum
A man who has sex with other men (MSM)	This population is at higher risk of syphilis	At least annually, or up to 4 times per year based on patient request or assessment as high risk (high-risk behaviour)
A contact of a known case of infectious syphilis	Contact of infectious syphilis	Immediately and 3 months after most recent sexual contact with known case
People who use methamphetamine and/or inject drugs, are experiencing homelessness or are from a culturally or linguistically diverse background	These groups are at higher risk of acquiring syphilis.	Six monthly*
Returned overseas travellers from high prevalence countries (e.g. South-East Asia, Africa, New Zealand)	Travellers and fly-in-fly-out workers may be at higher risk of acquiring syphilis in high prevalence countries	Based on patient request or assessment as high risk (high-risk behaviour)

* Opportunistic testing is important in this priority population. Consider offering testing when they present for other health issues or for general health checks.
^ Can be conducted as part of the annual Aboriginal and Torres Strait Islander Health Check MBS item 715.
** The mental health assessment (including screening for drug and alcohol use and domestic violence) conducted at 28 weeks as part of MBS items 16590 and 16590 can be used to identify at-risk women who need more frequent testing.

Treatment

Clinical presentation/diagnosis	Recommended treatment for pregnant and non-pregnant patients who do NOT have true penicillin allergy[3]
People with clinical and/or laboratory evidence of primary, secondary[1] and early latent (without neurosyphilis[2])	Benzathine penicillin 1.8g (= 2,400,000 units/2 prefilled syringes) intramuscularly, stat[4]
Named contact of infectious syphilis	Benzathine penicillin 1.8g (= 2,400,000 units/2 prefilled syringes) intramuscularly, stat
Late latent	Benzathine penicillin 1.8g (= 2,400,000 units) intramuscularly, weekly for 3 weeks[3]. If the 2nd or 3rd dose is delayed by more than 3 days, it is recommended to restart the 3-week course.
Tertiary	Seek specialist advice

For a video on how to give a benzathine penicillin injection refer to ww2.health.wa.gov.au/Articles/U_Z/WA-Syphilis-outbreak-response under New resources.

1. Jarisch-Herxheimer reaction is a common reaction to treatment in patients with primary and secondary syphilis. It occurs six to 12 hours after commencing treatment, and is an unpleasant reaction of varying severity with fever, headache, malaise, rigors and joint pains, and lasts for several hours. Symptoms are controlled with analgesics and rest. Patients should be alerted to the possibility of this reaction and reassured accordingly.
2. Neither benzathine penicillin, at the doses recommended, achieve treponemicidal levels in CSF, and should not be used in treating neurosyphilis. Consult specialist for advice regarding treatment of neurosyphilis.
3. An appropriately experienced specialist should be consulted for patients with a true penicllin allergy because the alternative treatment, doxycycline, is a sub-optimal treatment and is contra-indicated pregnancy, breastfeeding, and children <9 years.
4. Benzathine benzlypenicillin (Bicillin L-A) is the treatment of choice and is available on the Emergency Drug Supply Schedule (Prescribers Bag) www.pbs.gov.au/medicine/item/11755Q