

# *Syphilis: Clinical overview, screening and treatment*

**Date** Wednesday 13 February 2019: 12.30pm  
**Presenters** Dr Nathan Ryder  
Dr Christine Selvey  
Ms Annette Slater

*This education has been developed in partnership with Aboriginal Health & Medical Research Council of NSW and NSW Health*



Healthy Profession.  
Healthy Australia.

## *Acknowledgement of Country*

We recognise the traditional custodians of the land and sea on which we live and work.

We pay our respects to Elders past and present.



Healthy Profession.  
Healthy Australia.

## *Presenters*



**Dr Nathan Ryder**

Clinical Director, Sexual Health, Hunter New England LHD



**Dr Christine Selvey**

Medical Epidemiologist, Communicable Diseases Branch, Health Protection NSW, NSW Health



**Ms Annette Slater**

AHW Sexual Health & Blood Borne Viruses, HARP Unit, Population Health



Healthy Profession.  
Healthy Australia.

## *Learning Outcomes*

- Identify risk factors and appropriate people for testing
- Discuss some of the barriers to effective implementation of syphilis diagnosis and treatment
- Increase appropriate contact tracing for syphilis within a community setting
- Outline specific advice and referral services that can assist Aboriginal and Torres Strait Islander people



Healthy Profession.  
Healthy Australia.

## Case Study: Jane

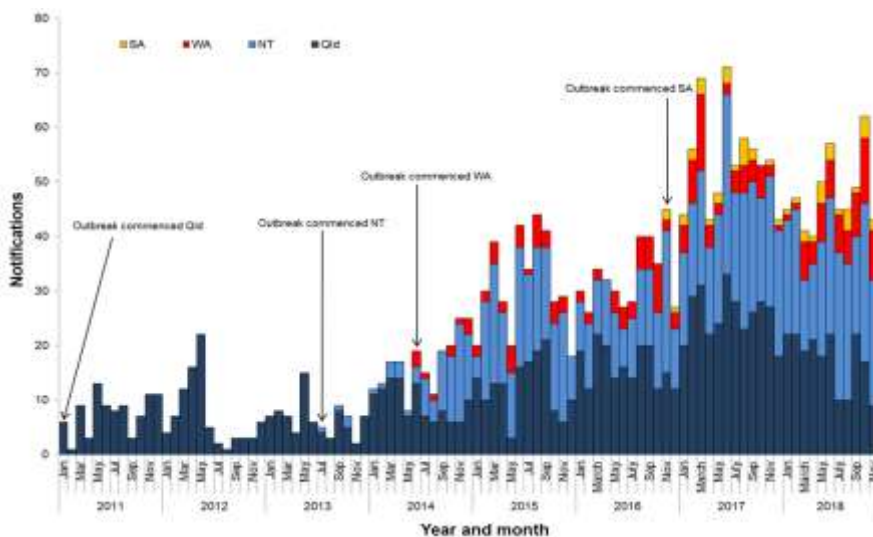
- Jane, 22 year old Aboriginal female from (insert your town)
- Presents for contraceptive pill
- Married for 1 year
- **Would you offer a syphilis test?**



Healthy Profession.  
Healthy Australia.

## National syphilis outbreak

Infectious syphilis outbreak cases in Aboriginal and Torres Strait Islander people in affected regions of QLD, NT, WA and SA to 30 November 2018



Healthy Profession.  
Healthy Australia.

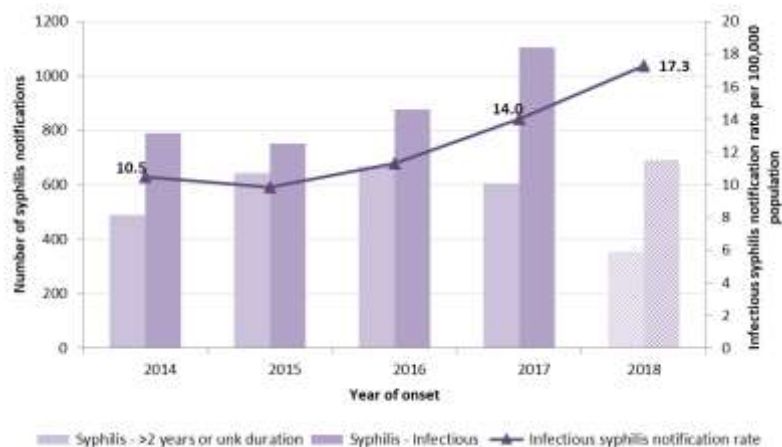
# National outbreak: NSW response plan

- Enhanced monitoring of syphilis notifications
  - Aboriginal and Torres Strait Islander status
  - 4 highest risk local health districts
- Alert clinicians, including maternity services
  - Two clinician alerts
  - AHMRC, Centre for Aboriginal Health, sexual health services
- Additional antenatal syphilis screen
- Add syphilis to STI screen
- Support for contact tracing
- Sexual health promotion targeting Aboriginal people



Healthy Profession.  
Healthy Australia.

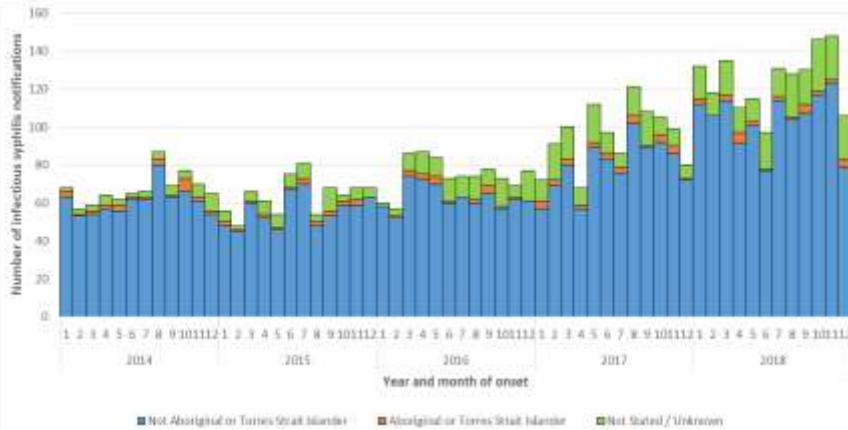
## NSW syphilis epidemiology: 2014-2018 overview



Healthy Profession.  
Healthy Australia.

# NSW infectious syphilis notifications by Aboriginality 2014-2018

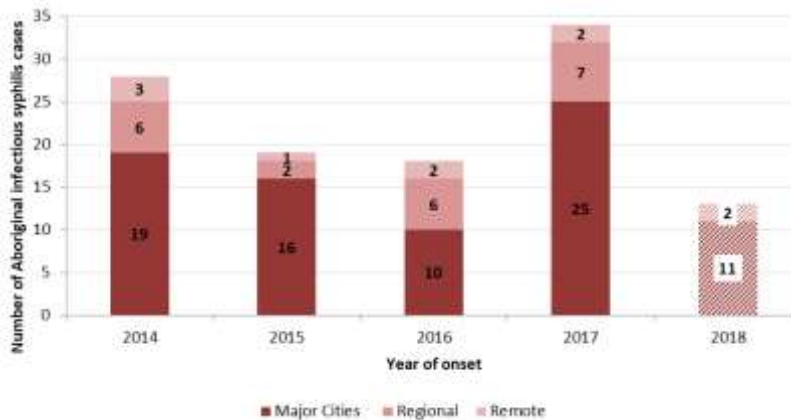
Number of infectious syphilis notifications by Aboriginality, NSW, 1 Jan 2014 – 31 Dec 2018



Healthy Profession.  
Healthy Australia.

# Infectious syphilis among Aboriginal people

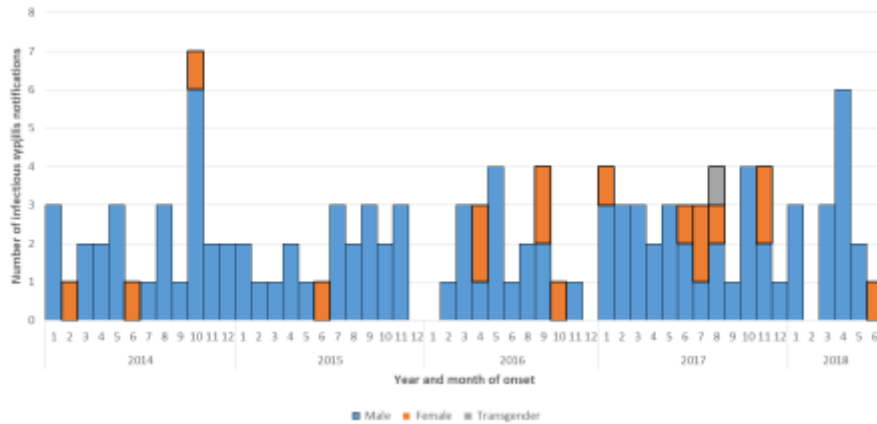
Number of infectious syphilis notifications in the Aboriginal population by remoteness, NSW, 1 Jan 2014 – 30 June 2018



Healthy Profession.  
Healthy Australia.

# Infectious syphilis notifications among Aboriginal people

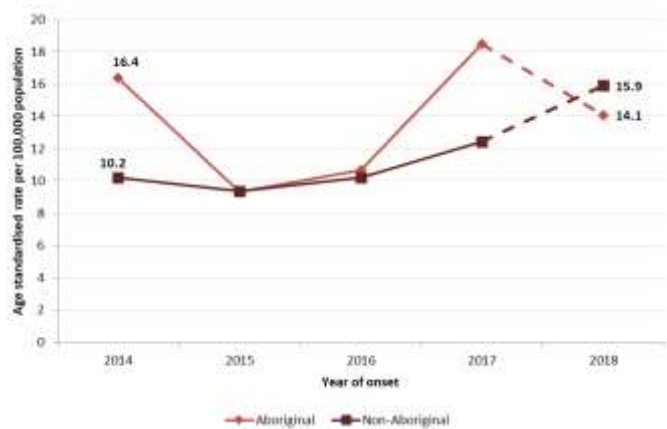
Number of infectious syphilis notifications among Aboriginal people by gender, NSW, Jan 2014 – June 2018



Healthy Profession.  
Healthy Australia.

# NSW infectious syphilis notifications by Aboriginality 2014-2018

Infectious syphilis notification rate by Aboriginality, NSW, 1 January 2014 – 30 June 2018



Healthy Profession.  
Healthy Australia.

# What is Syphilis?

- Transmission by direct contact oral/ genital or across placenta
- Highly infectious in early stages
- Primary stage: ulcer (chance)
- Secondary stage: viral-like illness (rash/fever/headache)
- Latent stage: No symptoms
- At any stage: destructive lesions of brain, heart soft-tissue, foetus



Healthy Profession.  
Healthy Australia.

# When do we test for Syphilis?

- Sexually active people under 30
- People with risk factors for an STI or BBV
- People with symptoms
- People diagnosed with an STI/BBV
- Sexual or injecting partners of someone with an STI/BBV



National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people

Third edition



Healthy Profession.  
Healthy Australia.

## Case Study: Jane

- Jane, 22 year old Aboriginal female from (insert your town)
- Presents for contraceptive pill
- Married for 1 year
- **Would you offer a syphilis test? Yes, she is under 30 and Aboriginal**

## Case Study: Jane

- Jane, 22 year old Aboriginal female from (insert your town)
- Presents for contraceptive pill
- Married for 1 year
- Would you offer a syphilis test? **Yes, she is under 30 and Aboriginal**
- Test results come back

**What does this mean?**

### Final Report

#### SYPHILIS SEROLOGY

Date	Spec.Id	Specimen Type	Test	Result
06/05/16		Serum	CLIA Total AB	<b>Reactive</b>
		RPR	R 256	
		TPPA	<b>Reactive</b>	



# Interpreting syphilis serology

- Syphilis antibody (CMIA, CLIA, TPPA, EIA)
  - Reactive result indicate current or past infection
- RPR
  - The titre (number) helps determine if treatment is needed
- Simple approach
  - Treatment is needed if Syphilis Antibody positive AND EITHER
  - RPR is positive and no past treatment OR
  - RPR has increased 4-fold since treatment

**Final Report**

SYPHILIS SEROLOGY				
Date	Spec.Id	Specimen Type	Test	Result
06/05/16		Serum	CLIA Total AB	Reactive
		RPR	R 256	
		TPPA	Reactive	



Healthy Profession.  
Healthy Australia.

## Case Study: Jane

- Jane, 22 year old Aboriginal female from (insert your town)
- Test results come back

**What does this mean?**

**Final Report**

SYPHILIS SEROLOGY				
Date	Spec.Id	Specimen Type	Test	Result
06/05/16		Serum	CLIA Total AB	Reactive
		RPR	R 256	
		TPPA	Reactive	

Jane reports testing negative last year and no symptoms now, i.e. early latent syphilis



Healthy Profession.  
Healthy Australia.

# *Syphilis treatment*

- Benzathine benzylpenicillin 1.8G IMI
  - =2 x 0.9G prefilled syringes
- Early latent, secondary or primary
  - x 1 stat dose only
- Late latent or unknown duration
  - x 3 weekly doses



## **Cautions**

- any neurosyphilis symptom refer to hospital (headaches, deafness, vertigo, visual changes)
- Penicillin allergic: seek advice
- Pregnant woman: urgent advice and referral



Healthy Profession.  
Healthy Australia.

# *Case Study: Jane*

- We treat Jane with a single dose of Benzathine Benzyl Penicillin
- Jane's partner is also tested and treated
- Jane is tested again 3 months later and her RPR is now non-reactive
  
- Jane returns 2 years later and is found to be pregnant
- **What syphilis testing will Jane need in her pregnancy?**



Healthy Profession.  
Healthy Australia.

# *Syphilis in pregnancy*

- Syphilis crosses placenta at all stages of pregnancy
- Early syphilis is almost 100% fatal to a foetus
- Syphilis in pregnancy must be treated urgently

## **Clinical features of congenital syphilis**

- In-utero death or still birth
- Major organ failure
- Skin lesions
- Inflammation or deformed bones/teeth
- Developmental delay

# *Syphilis in pregnancy*

## **Infectious Syphilis ALERT**

Information for Aboriginal medical services, sexual health clinicians, general practitioners and antenatal services



### **Key points:**

1. A large syphilis outbreak among Aboriginal people in Qld, NT, WA and SA could spread to NSW.
2. Screen Aboriginal clients regularly, particularly :
  - Those under 35 years of age
  - **Pregnant women early in gestation AND at 24-28 weeks**
  - As part of MBS item 715 health checks
3. Seek help with syphilis testing, treatment and contact tracing from your local sexual health clinic or Sexual Health Infolink on 1800 451 624

## *Case Study: Jane*

- Jane returns 2 years later and is found to be pregnant
- **What syphilis testing will Jane need in her pregnancy?**
  
- We test Jane today and again at her 24-28 week visit
- Jane will remain syphilis antibody reactive but we seek advice if her RPR become reactive again

## *Contact tracing*

- Important to test and treat partners for the recommended look back period of:
  - Primary syphilis – 3 months
  - Secondary syphilis – 6 months
  - Unknown stage – 12 months

# How to contact trace

**STI Contact Tracing Tool for General Practice**

**What is my role in Contact Tracing?**

When working on STI diagnosis, it is your responsibility to include a discussion about contact tracing. A lot of people think they are only able to encourage their sexual partners to undergo their own tests.

**How to Contact Trace**

- 1. Introduce the concept of contact tracing.**  
Who really introduced your sexually active partner to you (and the internet) again?  
Most people who get STI don't know their date of infection, they know the symptoms, but still could have contracted it prior to that point.
- 2. Make sexually active partners aware of the potential risk to their health or partner's health.** Use a non-judgemental approach to the partner's health. They may not want to do it, but it's your job to ensure they know the risks.
- 3. Provide the methods and other advice.** Offer methods of condom, gloves, GMS, dental dams, etc. Offer to provide a condom.
- 4. Support Patient Contact Tracing.**  
- Provide specific STI information - written or audio files  
- Encourage them to contact their partner and provide them with the address  
- Encourage them to contact their partner if they are not sure of the address  
- Encourage them to contact their partner if they are not sure of the address  
- Encourage them to contact their partner if they are not sure of the address
- 5. Encourage them to contact their partner.**

**Frequently Asked Questions**

- Why Contact Trace?**
- How can I fit it into the consultation?**
- Why does my patient need to contact their partners with whom they used condoms?**
- My patient is concerned about judgement if they return their partners, what should I do?**

**When to consider provider referral...**

- Highly specific and persistent STI symptoms
- Multiple partners in a partner they did not have contact with
- Partner's Address & Name (STI) information requested
- Partner's Address & Name (STI) information requested
- Partner's Address & Name (STI) information requested
- Partner's Address & Name (STI) information requested

Patient vs provider



Healthy Profession  
Healthy Australia.

<http://www.bettertoknow.org.au/notify/sms/>

**better to know**

Home | STI INFORMATION | The Bugs | Notify a partner by SMS or Email | Partner Mx | Been Told?

**Notify a partner by SMS**

Got an STI or recently had one? Want to tell your recent sex partners but not sure how to go about it?

Even though it can be difficult and uncomfortable it is important for their health - and the health of the people they may have sex with.

Remember if one partner is unwell, many STIs can be passed back and forth.

The SMS message is anonymous.

**STEP 1** Please enter the first name & email address of up to six partners from the past six months.

Required to send the SMS message

First Name  Mobile Number



Healthy Profession  
Healthy Australia.

## *Consideration for Aboriginal contact tracing*

- Phone Call ensure correct person is getting the communication / message
- Professional Loitering and Weekend Catch-Up / timing of home visits
- Knowing the Community /Safe Links with local SPs / Men's &Women's business
- 3 generations of same name living in same household who are all sexually active
- Frequent change of mobile phones & numbers
- Careful of written mail
- AHW use of SP & community networks for family, cultural obligations and seasonal work
- Working with local population health workers



Healthy Profession.  
Healthy Australia.

## *SH / BBV and the Whole Person*

- Contact Tracing general information to use & impart
  - Don't be 'text book' with your approach around cultural Men's / Women's business. Aboriginal Culture has diversity. Every person needs to be offered 'choice' in comfort level if available or through kinship or AHW support.
  - Individual people may have had past 'negative' experiences that still have impact



Healthy Profession.  
Healthy Australia.

## *SH / BBV and the Whole Person (cont.)*

### **Main message**

Once people become sexually active – need to see the importance of:

1. Annual SH / BBV health check or more frequent because of ‘at risk situations’
2. Health Screens
  - for different scenario's / stages of your life that are separate to SH / BBV screens e.g. Pap Smears, Antenatal, Men's checks. Just because a ‘check’ happens down there....they are specific and cannot pick up everything.
3. Sexual Behaviour and Sexuality
  - do not always match up (MSM)



Healthy Profession.  
Healthy Australia.

## *SH / BBV and the Whole Person (cont.)*

4. Engage Shared / Follow through Care
  - Client / Patient mobile for cultural or work obligations, also incarceration or residential movement.
5. Discretion
  - In test results, the concept of infidelity may be cause for DV / blame if an alternative thought can be offered e.g. if in a relatively new or re-engaged relationship the infection may have been there previously and not known due to being asymptomatic OR has come about from stopping the use of a safe barrier (condoms).
6. Cultural / Family support
  - advice should go hand in hand with Clinical advice & support e.g. Mother / Aunts / cousins / sisters. **Things look good on the outside but something serious might be happening on the inside.**



Healthy Profession.  
Healthy Australia.

## Practical tips

- Do STI testing for all 715 checks under 35 years
- Display material in waiting rooms/website/Facebook
- Make use of the specimens you already have
- Use your recall systems for repeat testing and testing partners



Healthy Profession.  
Healthy Australia.

## Summary – Q&A

For further support contact your:

- local sexual health clinic (<https://www.health.nsw.gov.au/sexualhealth/Pages/sexual-health-clinics.aspx>) or
- the sexual health infolink (<https://www.shil.nsw.gov.au>)

Useful Resources:

- <https://stipu.nsw.gov.au/>



Healthy Profession.  
Healthy Australia.