

# Congenital syphilis case review

A report on outcomes with  
recommendations for  
prevention and management  
of future cases

**REDACTED VERSION  
FOR PUBLIC DISTRIBUTION**

May 2021



**OFFICIAL: SENSITIVE**

**OFFICIAL: SENSITIVE**

## Contents

<b>Executive summary</b> .....	<b>4</b>
Scope and purpose of the review .....	4
Governance and accountability for the review .....	4
Recommendations .....	6
<b>Introduction</b> .....	<b>14</b>
<b>Background</b> .....	<b>14</b>
<b>Policy and program response to the Syphilis Outbreak</b> .....	<b>15</b>
<b>Case summaries</b> .....	<b>16</b>
Case summaries are not available in the public version of the report for confidentiality reasons .....	16
<b>Discussion</b> .....	<b>16</b>
Cultural safety for Aboriginal mothers and pregnant women .....	16
Identification of Aboriginal status .....	17
Review and resourcing of hospital processes .....	17
Review and development of guidelines .....	18
Social and environmental factors .....	18
Safety Learning System reporting .....	18
<b>References</b> .....	<b>19</b>
<b>Appendices</b> .....	<b>20</b>
Appendix A: Congenital Syphilis Case Review Group: Terms of reference and membership .....	20
Appendix B: SA epidemiological report, including graph of cases by region .....	23

## Executive summary

In April 2020, a case of congenital syphilis was reported to the Communicable Disease Control Branch (CDCB) of SA Health. It was the first such case in South Australia (SA) since 2017, and the second in relation to the multijurisdictional syphilis outbreak affecting Aboriginal and Torres Strait Islander populations (the Syphilis Outbreak). In October 2020, a third case was reported to CDCB.

Syphilis in pregnancy can result in premature delivery, congenital abnormalities, perinatal death or severe, permanent disability. Congenital syphilis is preventable; therefore its occurrence is considered a sentinel public health event, a failure of public health interventions and an indicator of gaps in the broader health system that require urgent attention.

Across Australia, cases of syphilis continue to be observed among both Aboriginal and non-Indigenous pregnant women and women of child bearing age. The threat of further cases of congenital syphilis continues as long as the Syphilis Outbreak continues. Further efforts to contain the Syphilis Outbreak must be prioritised.

A cultural lens has been applied to this report by several Congenital Syphilis Case Review Group members who identify as Aboriginal.

### Scope and purpose of the review

CDCB established a group to review the most recent congenital cases. The Congenital Syphilis Case Review Group was constituted by invitation from the Chief Public Health Officer (CPHO). Terms of Reference for the Group are at Appendix A and describe the purpose of the review as:

1. To review the clinical and public health management of a congenital syphilis case.
2. Identify areas for health service improvement.
3. Identify need, if any, to update relevant clinical and public health guidelines.
4. Raise awareness and educate health care staff about syphilis.

During the review process a number of other issues were highlighted for inclusion in the scope and purpose, namely to:

5. Identify and address gaps in awareness within Aboriginal communities of the Syphilis Outbreak.
6. Identify issues for inclusion in the SA Syphilis Outbreak Response Plan, which was endorsed by the Minister for Health and Wellbeing in July 2019 and is currently under review.

### Governance and accountability for the review

The South Australian Syphilis Outbreak Working Group (SA SOWG) was formed in May 2017 in response to a multi-jurisdictional syphilis outbreak affecting Aboriginal and Torres Strait Islander people (the Syphilis Outbreak). The role and function of the SA SOWG is discussed in detail later in this document.

The SA SOWG is an ongoing Working Group. The Congenital Syphilis Case Review Group is a time-limited sub-group of the SA SOWG. Both are convened by CDCB, have a Chairperson in common and share a number of members in common.

The CPHO directed the initial invitations for membership of the Review Group and the Minister for Health and Wellbeing has been provided with multiple written formal briefings on the Syphilis Outbreak by CDCB, on behalf of the SA SOWG, through the CPHO, including with every occurrence of congenital syphilis since the Syphilis Outbreak began in South Australia.

This review report is to be provided to the Minister for Health and Wellbeing, by CDCB, on behalf of the SA SOWG. The review report will also inform the ongoing work of the SA SOWG and will inform the next iteration of the SA Syphilis Outbreak Response Plan. As such, the SA SOWG will monitor the uptake,

implementation and progress of recommendations arising from this review, reporting on a regular basis back to the Minister for Health and Wellbeing.

Recommendations

Recommendations	Desired outcomes	Lead agency* & partners** for implementation	Time frame for implementation	Link to SA Syphilis Outbreak Response Plan	Hyperlinks to related policy, plans and frameworks
<b>BROAD SYSTEMS</b>					
1. Ensure the state government response to the ongoing Syphilis Outbreak is strengthened, appropriately resourced and sustained over the longer term, recognising the devastating and preventable impact of the occurrence of congenital syphilis, and that congenital syphilis will continue to occur until the Syphilis Outbreak ends.	End of the Syphilis Outbreak and therefore the occurrence of congenital syphilis.	<b>Department for Health and Wellbeing (DHW)</b> Aboriginal Community Health Organisations (ACCHOs) Aboriginal Health Council of SA (AHCSA) Commonwealth Department of Health (DoH) Local Health Networks (LHNs)	Immediate priority	<b>Priority Area 1:</b> Antenatal and postnatal care. <b>Priority Area 2:</b> Prevention, education and community engagement. <b>Priority Area 3:</b> Workforce development. <b>Priority Area 4:</b> Testing, treatment and partner notification. <b>Priority Area 5:</b> Surveillance and reporting.	<ul style="list-style-type: none"> <li>• The Fifth National Aboriginal and Torres Strait Islander Blood Borne Viruses and Sexually Transmitted Infections Strategy</li> <li>• South Australian Aboriginal Sexually Transmissible Infection and Blood Borne Virus Action Plan</li> <li>• National strategic approach for an enhanced response to the disproportionately high rates of STI and BBV in Aboriginal and Torres Strait Islander people</li> <li>• Enhanced response to addressing sexually transmissible infections (and blood borne viruses) in Indigenous populations</li> </ul>
2. Ensure government systems including health, education and child protection work with Aboriginal people to create welcoming, culturally safe services for Aboriginal women, their partners and families.	Aboriginal women and families feel confident that they will be welcomed and supported to access timely antenatal care, which addresses their needs in a holistic and culturally safe environment.	<b>DHW</b> <b>Department for Education (DE)</b> <b>Department for Child Protection (DCP)</b>	1-3 years	<b>Priority Area 1:</b> Antenatal and postnatal care. <b>Priority Area 2:</b> Prevention, education and community engagement.	<ul style="list-style-type: none"> <li>• National Aboriginal and Torres Strait Islander Health Plan 2013-2023</li> <li>• Health Performance Council - Institutional Racism Matrix Audit of South Australia's Ten Local Health Networks</li> </ul>
3. Ensure that the child protection system is following the legislated process of Aboriginal and Torres Strait Islander Child Placement Principles when considering child placement options.	Aboriginal children who are removed from birth mothers are placed within kinship care wherever possible.	<b>DCP</b>	Immediate priority		<ul style="list-style-type: none"> <li>• <i>Children and Young People (Safety) Act 2017</i> (Section 12(3))</li> <li>• The Aboriginal and Torres Strait Islander Child Placement Principle</li> <li>• Protecting Children is Everyone's Business National Framework for Protecting Australia's Children 2009–2020</li> <li>• Child and Family Focus SA – Kinship Care</li> </ul>

\* Lead agency in bold

\*\* Partners listed in alphabetical order.

Recommendations	Desired outcomes	Lead agency* & partners™ for implementation	Time frame for implementation	Link to SA Syphilis Outbreak Response Plan	Hyperlinks to related policy, plans and frameworks
<b>LOCAL SYSTEMS</b>					
4. Review the processes regarding ordering, testing and reporting of syphilis serology in pregnant women, with particular attention to the urgency of turnaround times at each stage.	Decrease time from taking of sample to receipt of results.	<b>SA Pathology</b> LHNs	Immediate priority	<b>Priority Area 4:</b> Testing, treatment and partner notification.	
5. Review internal hospital processes regarding mechanisms for timely follow-up of tests results, particularly for pregnant women.	Decrease time from receipt of results to management and treatment.	<b>Women's and Children's Health Network (WCHN)</b> LHNs SA Pathology	Immediate priority	<b>Priority Area 4:</b> Testing, treatment and partner notification. <b>Priority Area 5:</b> Surveillance and reporting.	
6. Undertake an internal review at WCHN to: a. develop and document a clear description and delineation of roles between Aboriginal Family Birthing Program (AFBP), Aboriginal Liaison Officers (ALOs) and other hospital teams b. explore opportunities to enhance communication between clinical teams and the AFBP c. further develop referral pathways and internal processes between Aboriginal health services and other services.	Aboriginal clients receive culturally safe coordinated care resulting in increased client/service provider satisfaction and increased cultural safety for Aboriginal clients and Aboriginal staff.	<b>WCHN</b>	<12 months	<b>Priority Area 1:</b> Antenatal and postnatal care.	
7. Develop a business case for increased resourcing at WCH so that the AFBP and ALOs are available after hours, on weekends and across appropriate services such as The Women's Assessment Service.	Ensure services for Aboriginal women are culturally safe and accessible.	<b>WCHN</b>	<12 months	<b>Priority Area 1:</b> Antenatal and postnatal care. <b>Priority Area 3:</b> Workforce development.	<ul style="list-style-type: none"> <li>• Australian Government Reconciliation Action Plan</li> <li>• SA Health Reconciliation Action Plan</li> <li>• SA Public Sector Diversity and Inclusion Strategy and Plan 2019-21</li> </ul>
8. Remove barriers at WCH that prevent the on-site screening and treatment of the adult partners of women with sexually transmissible infections (STIs).	Decrease time between identification of partners at risk and screening and treatment of those partners.	<b>WCHN</b>	Immediate priority	<b>Priority Area 4:</b> Testing, treatment and partner notification.	

Recommendations	Desired outcomes	Lead agency & partners for implementation	Time frame for implementation	Link to SA Syphilis Outbreak Response Plan	Hyperlinks to related policy, plans and frameworks
9. Develop health service protocols for active follow up and treatment of partners of women with STIs. Ensure training protocols for new staff in emergency departments (EDs) and antenatal care programs cover these health service protocols.	Decrease time between identification of partners at risk and screening and treatment of those partners.	<b>LHNs</b> Adelaide Sexual Health Centre (ASHC) SA Perinatal Practice Guidelines Workgroup (SA PPGW)	<12 months	<b>Priority Area 4:</b> Testing, treatment and partner notification. <b>Priority Area 3:</b> Workforce development.	
10. Strengthen systems to ensure that all patients presenting at any health service for any reason are actively asked if they identify as Aboriginal.	Increase accuracy of Indigenous identification data to enable resources to be more effectively targeted.	<b>LHNs</b> DHW	Immediate	<b>Priority Area 5:</b> Surveillance and reporting.	<ul style="list-style-type: none"> <li>National Safety and Quality Health Service Standards</li> <li>Action 5.8: Identifying people of Aboriginal and/or Torres Strait Islander origin</li> <li>National best practice guidelines for collecting Indigenous status in health data sets</li> </ul>
11. Develop a business case for the appropriate resourcing of a culturally safe Aboriginal maternal and infant care program at Southern Adelaide Health Network (SALHN).	Ensure culturally appropriate, safe care for Aboriginal women across their pregnancy journey.	<b>Southern Adelaide Local Health Network (SALHN)</b>	<12 months	<b>Priority Area 1:</b> Antenatal and postnatal care. <b>Priority Area 3:</b> Workforce development.	<ul style="list-style-type: none"> <li>SA Public Sector Diversity and Inclusion Strategy and Plan 2019-21</li> <li>CATSINaM Birthing on Country Position Statement</li> </ul>
12. Work in partnership with existing service providers to develop a business case for the appropriate resourcing of culturally safe Aboriginal maternal and infant care programs across other LHNs.	Ensure culturally appropriate, safe care for Aboriginal women across their pregnancy journey.	<b>LHNs</b>	<12 months	<b>Priority Area 1:</b> Antenatal and postnatal care. <b>Priority Area 3:</b> Workforce development.	<ul style="list-style-type: none"> <li>SA Public Sector Diversity and Inclusion Strategy and Plan 2019-21</li> <li>CATSINaM Birthing on Country Position Statement</li> </ul>
13. Develop systems in EDs to ensure that appropriate risk assessments are undertaken for all women to inform decisions about admission versus discharge. Assessments to include Family Safety Framework, potential for drug and alcohol and family violence impacts, availability of support, and plans for follow up.	Best practice, appropriate, safe care is available to all women and is not dependant on the workload in the ED.	<b>LHNs</b>	<12 months	<b>Priority Area 1:</b> Antenatal and postnatal care. <b>Priority Area 3:</b> Workforce development.	<ul style="list-style-type: none"> <li>Family Safety Framework</li> </ul>
14. Ensure systems are in place, particularly in EDs, for timely follow up in the community of women who require urgent treatment.	Women who are discharged receive timely follow-up and treatment and are aware of the	<b>LHNs</b>	Immediate priority	<b>Priority Area 4:</b> Testing, treatment and partner notification.	



Recommendations	Desired outcomes	Lead agency & partners for implementation	Time frame for implementation	Link to SA Syphilis Outbreak Response Plan	Hyperlinks to related policy, plans and frameworks
	plans for this to occur.				
<p>15. Explore models to support general practices to actively follow up pregnant vulnerable, high risk women.</p>	<p>Women seen in general practice are aware of support services, referrals, recalls and follow up plans.</p>	<p><b>Primary Health Networks (PHNs)</b> ASHM GPs HealthPathways Royal Australian College of General Practitioners (RACGP) SHINE SA</p>	<p>Immediate priority</p>	<p><b>Priority Area 1:</b> Antenatal and postnatal care. <b>Priority Area 4:</b> Testing, treatment and partner notification. <b>Priority Area 3:</b> Workforce development.</p>	
<b>CLINICAL PROTOCOLS</b>					
<p>16. Update the South Australian Perinatal Practice Guidelines (PPG) with a view to:</p> <ol style="list-style-type: none"> <li>reviewing and updating the guideline 'Syphilis in Pregnancy'</li> <li>developing an addendum of a birth plan for pregnant women with syphilis - from primary care to antenatal care to management of the baby</li> <li>reviewing and updating "Normal Antenatal Care" guideline to include screening recommendations for women at high risk of STI/BBV including adding reference to Minymaku Kutju Tjurkurpa CARPA Women's Business Manual</li> <li>proposing to the SA Perinatal Practice Guidelines Workgroup the development of a Guideline on STIs covering screening, diagnosis and management of STIs in pregnancy, birth and postnatal period, including partner notification</li> <li>reviewing the Aboriginal cultural</li> </ol>	<p>Up to date guidelines are available for perinatal screening, diagnosis and management of all STIs and blood borne viruses (BBVs) incorporating appropriate, culturally safe management of high risk groups.</p>	<p><b>SA PPGW</b> AHCSA ASHC Communicable Disease Control Branch (CDCB) SHINE SA WCHN</p>	<p>1-3 years</p>	<p><b>Priority Area 1:</b> Antenatal and postnatal care. <b>Priority Area 4:</b> Testing, treatment and partner notification.</p>	<ul style="list-style-type: none"> <li>South Australian Perinatal Practice Guidelines</li> <li>South Australian Perinatal Practice Guideline - Syphilis in Pregnancy</li> </ul>

<b>Recommendations</b>	<b>Desired outcomes</b>	<b>Lead agency* &amp; partners™ for implementation</b>	<b>Time frame for implementation</b>	<b>Link to SA Syphilis Outbreak Response Plan</b>	<b>Hyperlinks to related policy, plans and frameworks</b>
impact statements, and developing a process to include the statements in revised/new PPG.					
17. Update the SA GP Obstetric Shared Care Protocols to include Aboriginal cultural statements.	Ensure culturally appropriate, safe care for Aboriginal women across their pregnancy journey.	<b>GP Partners</b> <b>SA Maternal, Neonatal Gynaecology Community of Practice (MNGCOP)</b> AHCSA PHNs	1-3 years	<b>Priority Area 1:</b> Antenatal and postnatal care.	<ul style="list-style-type: none"> <li>The South Australian GP Obstetric Shared Care Protocols</li> </ul>
18. Develop protocols for use in EDs for: <ol style="list-style-type: none"> <li>the screening and detection of syphilis and other STIs</li> <li>the management of pregnant women already known to have syphilis and/or other STIs</li> <li>partner notification.</li> </ol>	Timely detection, treatment and management of STIs is available in EDs.	<b>LHNs</b> MNGCOP	Immediate priority	<b>Priority Area 1:</b> Antenatal and postnatal care.  <b>Priority Area 4:</b> Testing, treatment and partner notification.	
19. Update the current hand-held SA Pregnancy Record to clearly document additional syphilis screening, as recommended, for at risk women.	Increase syphilis screening in pregnancy as per recommendations, to reduce the risk of congenital syphilis.	<b>MNGCOP</b> DHW LHNs	1-3 years	<b>Priority Area 1:</b> Antenatal and postnatal care.	
<b>PREVENTION, EDUCATION AND COMMUNITY ENGAGEMENT</b>					
20. Ensure programs that deliver syphilis and other STI prevention and education messages to Aboriginal communities include implications of STIs in pregnancy.	Improvement of syphilis and other STI knowledge in Aboriginal communities and implications in pregnancy.	<b>DHW</b> AHCSA DoH SHINE SA	Immediate priority	<b>Priority Area 2:</b> Prevention, education and community engagement.  <b>Priority Area 3:</b> Workforce development.	
21. Ensure programs that deliver syphilis and other STI prevention and education messages to Aboriginal communities are appropriately resourced.	End the Syphilis Outbreak and therefore the occurrence of congenital syphilis.	<b>DHW</b> AHCSA DoH	Immediate priority	<b>Priority Area 2:</b> Prevention, education and community engagement.  <b>Priority Area 3:</b> Workforce development.	

Recommendations	Desired outcomes	Lead agency & partners <sup>1</sup> for implementation	Time frame for implementation	Link to SA Syphilis Outbreak Response Plan	Hyperlinks to related policy, plans and frameworks
22. Strengthen and embed the health promotion messages of the purpose and importance of antenatal care into targeted and general education, at all levels, for Aboriginal young people, women, their partners, and families.	Increased awareness in Aboriginal communities of the importance of timely antenatal care.	DE AHCSA DHW SHINE SA WCHN	1-3 years	<b>Priority Area 1:</b> Antenatal and postnatal care. <b>Priority Area 2:</b> Prevention, education and community engagement.	
<b>WORKFORCE DEVELOPMENT</b>					
23. Ensure systems are in place, including auditing of compliance, for all SA Health staff to complete mandatory SA Health Aboriginal cultural safety and respect training programs outlined in the SA Health Aboriginal Cultural Learning Framework, including additional Level Three training for all managers and executives.	Increased levels of cultural safety for Aboriginal clients accessing health systems and for Aboriginal staff working within them.	DHW LHNs	<12 months	Priority Area 3: Workforce development.	<ul style="list-style-type: none"> <li>SA Health Aboriginal Cultural Learning Framework</li> </ul>
24. Raise awareness of the importance of Aboriginal cultural safety and respect in all SA Health clinical training related to infectious syphilis.	Increased levels of cultural safety for Aboriginal clients accessing health systems and for Aboriginal staff working within them.	DHW	<12 months	<b>Priority Area 3:</b> Workforce development.	<ul style="list-style-type: none"> <li>SA Health Aboriginal Cultural Learning Framework</li> </ul>
25. Ensure that all clinical staff, with a particular focus on ED staff, are aware of testing and treatment guidelines in relation to the Syphilis Outbreak, specifically the testing for and treatment of syphilis in pregnant women, including the timely management of potential side effects of treatment.	Appropriate and timely testing and treatment of syphilis, particularly in pregnant women.	LHNs	Immediate priority	<b>Priority Area 1:</b> Antenatal and postnatal care. <b>Priority Area 3:</b> Workforce development. <b>Priority Area 4:</b> Testing, treatment and partner notification.	<ul style="list-style-type: none"> <li>South Australian Perinatal Practice Guideline - Syphilis in Pregnancy</li> </ul>

Recommendations	Desired outcomes	Lead agency* & partners™ for implementation	Time frame for implementation	Link to SA Syphilis Outbreak Response Plan	Hyperlinks to related policy, plans and frameworks
26. Ensure all SA Health staff have access to appropriate resources and training to assist them in “asking the question” in regard to collecting Indigenous status.	<ul style="list-style-type: none"> <li>&gt; Increase accuracy of Indigenous identification data.</li> <li>&gt; More effectively target resources for Indigenous health care.</li> <li>&gt; Meet SA’s reporting obligations regarding Indigenous identification.</li> </ul>	DHW LHNs	<12 months	<b>Priority Area 3:</b> Workforce development.  <b>Priority Area 5:</b> Surveillance and reporting	<ul style="list-style-type: none"> <li>• National best practice guidelines for collecting Indigenous status in health data sets</li> </ul>
<b>SAFETY LEARNING SYSTEM (SLS) REPORTING</b>					
27. Ensure all SA Health employees are aware of the importance of reporting incidents and near misses through the SLS system.	Timely investigation of incidents and near misses.	DHW LHNs	Immediate priority	<b>Priority Area 5:</b> Surveillance and reporting	<ul style="list-style-type: none"> <li>• SA Health Safety Learning System</li> </ul>
28. The non-identification of Aboriginal status is an SLS incident. SA Health employees should be encouraged to utilise the SLS reporting system for this purpose.	<ul style="list-style-type: none"> <li>&gt; Increase accuracy of Indigenous identification data.</li> <li>&gt; More effectively target resources for Indigenous health care.</li> <li>&gt; Meet SA’s reporting obligations regarding Indigenous identification.</li> </ul>	DHW LHNs	Immediate priority	<b>Priority Area 5:</b> Surveillance and reporting	<ul style="list-style-type: none"> <li>• SA Health Safety Learning System</li> </ul>
<b>MONITORING</b>					
29. Ensure the implementation of recommendations arising from this review are monitored and reported on.	Ongoing monitoring, review and reporting to ensure that recommendations of this review are implemented.	DHW CDCB	Ongoing		



## Introduction

In April 2020, an Aboriginal woman presented with back pain to an emergency department at 22 weeks of pregnancy and was subsequently diagnosed with infectious syphilis. One week later, she was recalled for treatment and admission. She went into preterm labour nine days into her admission and delivered a child with congenital syphilis.

In September 2020, another Aboriginal woman presented in labour at approximately 38 weeks and delivered a child who was diagnosed with congenital syphilis in October 2020, after the results of a range of tests became available. She had not received any antenatal care since her diagnosis of pregnancy seven months earlier.

The occurrence of a case of congenital syphilis is considered a sentinel public health event, reflecting potential missed opportunities for prevention in the public health, antenatal and primary health care systems.

This report provides an overview of the management of the women during their hospital presentations, outlines the health response to date, and provides a set of key recommendations for the future management of pregnant women with infectious syphilis, both for hospitals specifically and for the health and other systems more broadly, together with important prevention priorities.

## Background

Syphilis is a notifiable condition under the *South Australian Public Health Act 2011* with notifications reported to CDCB.

The Syphilis Outbreak affecting Aboriginal and Torres Strait Islander people was first identified in January 2011, in northwest Queensland, followed by the Northern Territory in July 2013, and the Kimberley region of Western Australia in June 2014. CDCB, SA Health declared an outbreak in March 2017 in the Far North and Eyre and Western regions (from November 2016) and in November 2018 declared the outbreak had extended to the Adelaide region (from February 2018).

The SA SOWG, established in 2017, is comprised of representatives from various government, non-government and community controlled health services. The SA SOWG's role is to monitor and coordinate the SA response to the Syphilis Outbreak, with the aim of concentrating immediate efforts to contain the Syphilis Outbreak, while simultaneously seeking to develop sustainable, long-term interventions to reduce the disproportionately high rates of most sexually transmissible infections (STI) and blood borne viruses (BBV) among Aboriginal and Torres Strait Islander populations.

Since November 2016, to the end of January 2021, 11 cases of infectious syphilis have been detected in pregnant Aboriginal women in SA. Three children have been born with congenital syphilis. The two most recent cases of congenital syphilis are the first in SA since March 2017.

Nationally, notifications of infectious syphilis are also increasing amongst non-Aboriginal women of child-bearing age.

As at 31 January 2021, a total of 135 outbreak cases (including four Category Two<sup>a</sup> and three congenital cases) have been notified in SA, with a median age of 28 years in females and 32 years in males, with 64 (47%) cases occurring in females. Compared to the national Syphilis Outbreak, the SA Syphilis Outbreak cases (male and female combined) tend to be older, with approximately 60% falling in the 30 years and over

<sup>a</sup> Multijurisdictional Syphilis Outbreak (MJSO) definitions - Category 1: Any person who is newly diagnosed with confirmed or probable infectious syphilis according to the Communicable Disease Network Australia (CDNA) national surveillance case definition for infectious syphilis, AND is an Aboriginal or Torres Strait Islander person who resides in any of the following outbreak declared regions at or after the dates indicated: Eyre and Western, and Far North regions (from 15 November 2016), Adelaide region (from 1 February 2018). Category 2: Aboriginal and Torres Strait Islander people who are sexual contacts of a confirmed outbreak case and reside outside an outbreak area declared region at the time of diagnosis. Non-Indigenous people who are sexual contacts of a confirmed outbreak case and reside in or out of an outbreak declared region at the time of diagnosis.

age bracket, compared with less than 40% in each of the other jurisdictions. Of all SA cases, 67 cases (49.6 percent) were from the Far North region, seven cases (5.1 percent) were from Eyre and Western region and 61 cases (45.1 percent) were from Adelaide. See Appendix B for a detailed epidemiological report, including a graph of cases by region.

The national syphilis guideline (Syphilis - CDNA National Guidelines for Public Health Units) states that “all cases of congenital syphilis must be consistently identified, reported and then investigated to identify factors for improvement at both clinical and system levels, with mechanisms made available to implement recommended changes to practice”.

## Policy and program response to the Syphilis Outbreak

The South Australian policy and program response to the Syphilis Outbreak has been led by CDCB in partnership with representatives of the Aboriginal Health Council of SA and its sector members, along with additional stakeholders in Aboriginal health, Local Health Networks, primary health and non-government organisations.

The SA SOWG formalised their response to the outbreak through the development of the SA Syphilis Outbreak Response Plan, which was endorsed by the Minister for Health and Wellbeing in July 2019. The Response Plan emphasises the importance of focusing on antenatal and postnatal care as a key priority in preventing and responding to cases of congenital syphilis, giving it first priority in the plan.

The priority actions listed against antenatal and postnatal care in the Response Plan include:

- > Increase access to antenatal and postnatal care.
- > Increase community education and awareness about syphilis, especially to families, young people and in pregnancy.
- > Increase early uptake of routine antenatal syphilis screening in line with clinical guidelines.
- > Increase access to comprehensive reproductive healthcare.

The South Australian policy and program response is also informed by The Fifth National Aboriginal and Torres Strait Islander Blood Borne Viruses and Sexually Transmitted Infections Strategy and the South Australian Aboriginal Sexually Transmissible Infection and Blood Borne Virus Action Plan.

## Case summaries

Case summaries are not available in the public version of the report for confidentiality reasons

## Discussion

Given that infectious syphilis, and subsequently congenital syphilis, are entirely preventable it is concerning that Australia continues to see disproportionately high rates of syphilis and other BBV and STI in regional and remote Indigenous communities<sup>1</sup> and in several urban centres, including Adelaide. It is vital, therefore that national and state governments provide a level of response commensurate with the gravity of the situation. These commitments need to encompass policy, program and ongoing financial resources to ensure sustainable outcomes.

Whilst funding, policy and program responses are practical and measurable responses, the need to address long term, embedded, institutionalised racism that contributes to health inequities and a lack of safety for Aboriginal people accessing health care is more challenging. Congenital syphilis is one of many adverse health outcomes for Aboriginal people and it must be recognised that racism is at the core of these inequities and affects all other drivers such as smoking and drug and alcohol use<sup>2,3</sup>. The Royal Australian College of General Practitioners provides a comprehensive discussion of the effects of racism in the healthcare system<sup>4</sup>, including references to a broad range of literature on the subject.

### Cultural safety for Aboriginal mothers and pregnant women

The SA Syphilis Outbreak Response Plan acknowledges the range of factors which combine to contribute to Aboriginal and Torres Strait Islander people being more frequently exposed to environments and situations where there is an increased risk of STI and BBV. These include a lack of access to culturally responsive services, complex social and medical factors, concerns around privacy, confidentiality, stigma and shame as well as over-representation in custodial settings<sup>5</sup>. It also acknowledges that experiences of racism and the ongoing impacts of colonisation contribute to an increased burden of infection and sexual health risk<sup>6</sup>.

While discussion and consultation on ways to promote health services and engagement in care with Aboriginal women have been ongoing, there continues to be limited action on how to change the healthcare system to be safe for Aboriginal mothers and pregnant women. A greater focus needs to be placed on addressing key barriers that limit engagement with healthcare, including those raised by historical events, rather than trying to make women 'fit the service'. The health sector needs to seriously consider the previous experiences and added transgenerational trauma inflicted upon Aboriginal people, in particular Aboriginal mothers and families, before expecting pregnant Aboriginal women to present as per services' requests. If these factors are not addressed systemically, mothers may continue to avoid appointments, resulting in late engagement in antenatal care and in some cases, presentation to hospital occurring during labour.

In addition, the impact on Aboriginal women of having children removed at birth, regardless of the rationale for this, potentially has detrimental effects on future perceptions of safety within the health care system for the woman, her family and communities.

From a health systems perspective, capacity must be built in our hospitals and amongst our mainstream work culture to initiate and implement cultural respect and safety within our workplaces and client interactions<sup>7</sup>. Moreover, there are opportunities to review and implement existing cultural safety strategies every time a woman does present to a health service. These opportunities must not be missed.

For example, the Congress of Aboriginal and Torres Strait Islander Nurses and Midwives (CATSINaM) describes the concept of Birthing on Country, regardless of where an Aboriginal and/or Torres Strait Islander baby is born, it is important that, his or her mother and family are encouraged, supported and enabled to incorporate relevant cultural aspects within that place or service. Just as importantly, they should have access to maternity services that address their cultural, spiritual, social, emotional and physical needs<sup>8</sup>.



In addition, the Australian Government's Pregnancy Care Guidelines<sup>9</sup> have a focus on improving the experience of antenatal care for Aboriginal and Torres Strait Islander women.

More work can and needs to be done with health services, especially our hospitals, in relation to the ongoing impact of institutionalised racism. The recent SA Government's Health Performance Council's audit of evidence of institutional racism in SA's Local Health Networks outlines deficiencies and opportunities for improvement<sup>10</sup>.

### Identification of Aboriginal status

One of the cases did not identify as Aboriginal when she presented to the hospital or the GP practice. Aboriginal and Torres Strait Islander people are more likely to identify as such if they are in a safe environment where they feel they will not experience discrimination and where some relationship exists with that service provider. Equally, an individual's right not to identify as Aboriginal or Torres Strait Islander must be respected as there are many personal, historical, family or cultural reasons that may influence an individual's decision to identify. These may vary over time and within individual health service presentations.

The identification of Aboriginal status when a person presents for health care has wide ranging implications, including allowing access to appropriately targeted services and resources for the individual<sup>11,12</sup>. On a national level, the identification contributes to future health policy directed to the Aboriginal and Torres Strait Islander population. Inaccurate recording of identification may lead to under-reporting of the prevalence of disease and of service utilisation, and underplay inequalities in health. Importantly, this lack of detail can potentially lead to biased analysis and reporting of information that informs policy and practice.

The removal of babies at or soon after birth is a devastating outcome for the mother, the child and the broader family. Where women have not self-identified their Aboriginal status, or where it has been not identified or mis-identified by others, there is the potential for further harm if babies are then placed outside of kinship care<sup>13,b</sup> environments. Where Aboriginal status is evident, Child Protection authorities need to make every effort to place babies according to the Aboriginal and Torres Strait Islander Child Placement Principle<sup>14</sup>, which are enshrined in South Australian legislation<sup>c</sup>.

All people, regardless of appearance and across all service areas, should be asked whether they identify as being of Aboriginal and/or Torres Strait Islander origin and this information should be recorded in information systems. Training and resourcing needs to be ensured so that all health service staff are aware of the impact of non-identification and are appropriately trained in how to "ask the question"<sup>15</sup>.

In cases where Aboriginal and/or Torres Strait Islander identification has not occurred, this oversight or omission constitutes a notification to the SLS system especially given that it may point to real or perceived levels of safety for the health consumer. These safety concerns in accessing healthcare underpin a number of recommendations in this report and are also SLS incidents in their own right.

### Review and resourcing of hospital processes

There may be benefit in reviewing internal hospital processes to ensure that appropriate communications occur during referral processes and that individual units are aware of the roles of other units they are referring to or accepting referrals from. In particular, it must be made clear that referring Aboriginal clients to Aboriginal programs within a hospital does not absolve the referring unit of all non-clinical responsibilities in regard to the patient. Rather, there may be opportunities for clearly documented delineation of roles and also for collaboration and cross fertilisation of skills and cultural competencies across units. This could include the development of a business case for increased staffing resources to allow for the out of hours provision of Aboriginal specific services and for additional Aboriginal personnel across a range of programs and units.

---

<sup>b</sup> "Kinship carers are people who care for children who are either related to them or who have a relationship with the child, their family or community. When a child is unable to live with their birth family, Families SA will try to find a relative or kinship carer, recognising the importance of the child maintaining a connection with their family and community. The kinship care program is managed directly by DECD/Families SA." Source: Child and Family Focus SA – Kinship Care.

<sup>c</sup> [Children and Young People \(Safety\) Act 2017](#) (see Section 12(3)).

Moreover, under-resourced hospital systems that allow vulnerable women to be discharged from ED rather than admitted for care should be reviewed and appropriately resourced.

Medical units, in consultation with pathology providers, could enhance the response times between ordering, processing, reporting and actioning pathology by reviewing current mechanisms and ensuring that these are not dependant on individuals being present on shift to action next steps.

Furthermore, it needs to be recognised that the systemic barriers that prevent male adult partners of women from being screened and treated for STI at WCH contributes to the rate of loss to follow-up and/or increases the time to treatment for these men, thus contributing to the ongoing outbreak.

### Review and development of guidelines

Guidelines such as the SA Perinatal Practice Guidelines that provide advice for clinicians to deliver routine care and manage a range of maternal and neonatal conditions and/or procedures require review to ensure that they comprehensively cover STI and BBV, that they specifically consider the addition of a birth plan for pregnant women with syphilis and that they are culturally sensitive in their content. In addition, protocols could be developed for EDs to ensure these guidelines are appropriately adapted and implemented in the emergency environment.

### Social and environmental factors

For both women, long term significant mental health, drug and alcohol and family violence issues figure prominently throughout their lives. Both have also experienced the removal of previous babies, either at or shortly after birth, due to safety concerns. Periods of either homelessness or itinerant lifestyle have also featured. The impact of these issues is complex and wide ranging and particularly affects the capacity of people to engage with health services.

Maternal infant care services should provide a holistic approach for the women and families presenting for care. However, staff within generic health services, particularly acute hospital services, may not be trained or resourced to take these factors into consideration when providing care. The Australian Government's Pregnancy Care Guidelines reference the importance of screening for family violence<sup>16</sup>, mental health issues<sup>17</sup> and drug and alcohol and other lifestyle<sup>18</sup> impacts during antenatal care presentations, thus enabling access to additional support services. In addition, exploring the use of the Family Safety Framework assessment and referrals processes in acute hospitals settings may assist staff in developing skills to encompass this holistic approach.

### Safety Learning System reporting

The [Safety Learning System](#) (SLS) is an application that enables all SA Health services to record, manage, investigate and analyse patient and worker incidents as well as consumer feedback. Congenital syphilis, as a sentinel public health event is something which should have been reported in SLS, by the hospital clinical team and by CDCB at the point of disease notification. Whilst the receipt of a notification of a pregnant woman with syphilis by CDCB does trigger an investigation into the occurrence; unless it is also reported to the SLS system there are a number of opportunities for improvement that may be missed. Likewise, it is important for the health service itself to report the incident to SLS.

## References

- <sup>1</sup> Department of Health, *Infectious syphilis outbreak*, webpage, Canberra: Australian Government Department of Health, 2020.
- <sup>2</sup> Markwick A, Ansari Z, Clinch D, McNeil J. 'Perceived racism may partially explain the gap in health between Aboriginal and non-Aboriginal Victorians: A cross-sectional population based study'. *SSM – Population Health*, 2018 Oct 29;7:010-10.
- <sup>3</sup> Commonwealth of Australia, *National Aboriginal and Torres Strait Islander Health Plan 2013-2023*, 2013.
- <sup>4</sup> The Royal Australian College of General Practitioners, *Racism in the healthcare system - Position Statement*, 2020.
- <sup>5</sup> Australian Institute of Health and Welfare, *The health of Australia's prisoners 2015*, AIHW, Canberra, 2015.
- <sup>6</sup> MacPhail, C. and McKay, K. (2018), 'Social determinants in the sexual health of adolescent Aboriginal Australians: a systematic review'. *Health Soc Care Community*, 26: 131-146.
- <sup>7</sup> SA Health, *Aboriginal Cultural Learning Framework*, Government of South Australia, 2017.
- <sup>8</sup> Congress of Aboriginal and Torres Strait Islander Nurses and Midwives (CATSINaM), *Birthing on Country – Position Statement*, 2016.
- <sup>9</sup> Department of Health, *Clinical Practice Guidelines: Pregnancy Care*, Canberra: Australian Government Department of Health, 2020.
- <sup>10</sup> Health Performance Council [South Australia], *Institutional racism — Audit of South Australia's Local Health Networks*, 2020.
- <sup>11</sup> Australian Commission on Safety and Quality in Health Care, *National Safety and Quality Health Service Standards*, 2<sup>nd</sup> edition, 2017.
- <sup>12</sup> Australian Commission on Safety and Quality in Health Care, 'Action 5.8: Identifying people of Aboriginal and/or Torres Strait Islander origin', *National Safety and Quality Health Service Standards: User Guide for Aboriginal and Torres Strait Islander Health*, 2<sup>nd</sup> edition, 2017.
- <sup>13</sup> Council of Australian Governments, *Protecting Children is Everyone's Business: National Framework for Protecting Australia's Children 2009–2020*, Commonwealth of Australia, 2009.
- <sup>14</sup> Arney, F., Iannos, M., Chong, A., McDougall, S., & Parkinson, S. *Enhancing the implementation of the Aboriginal and Torres Strait Islander Child Placement Principle: Policy and practice considerations* (CFCA Paper No. 34). Melbourne: Child Family Community Australia information exchange, 2015.
- <sup>15</sup> Australian Institute of Health and Welfare, *National best practice guidelines for collecting Indigenous status in health data sets*, Cat. no. IHW 29, Canberra: AIHW, 2010.
- <sup>16</sup> Department of Health, 'Chapter 29: Family Violence', *Clinical Practice Guidelines: Pregnancy Care*, Canberra: Australian Government Department of Health, 2020.
- <sup>17</sup> Department of Health, 'Chapter 28: Assessing psychosocial factors that affect mental health', *Clinical Practice Guidelines: Pregnancy Care*, Canberra: Australian Government Department of Health, 2020.
- <sup>18</sup> Department of Health, 'Part C: Lifestyle considerations', *Clinical Practice Guidelines: Pregnancy Care*, Canberra: Australian Government Department of Health, 2020.

## Appendices

### Appendix A: Congenital Syphilis Case Review Group: Terms of reference and membership



## Review of Congenital Syphilis Cases Terms of Reference

Updated: February 2021

The occurrence of a case of congenital syphilis is a sentinel event reflecting potential missed opportunities for prevention in the public health, antenatal and primary health care systems. Therefore, it is important to review each case of congenital syphilis for the purpose of health system improvement and preventing future avoidable cases.

### Purpose

1. To review the clinical and public health management of a congenital syphilis case.
2. Identify areas for health service improvement.
3. Identify need, if any, to update relevant clinical and public health guidelines.
4. Raise awareness and educate health care staff about syphilis.

During the review process a number of other issues were highlighted for inclusion in the scope and purpose, namely to:

5. Identify and address gaps in awareness within Aboriginal communities of the Syphilis Outbreak and
6. Identify issues for inclusion in the SA Syphilis Response Plan, which was endorsed by the Minister for Health and Wellbeing in July 2019 and is currently under review.

The Communicable Disease Control Branch (CDCB) should activate the review process upon receipt of a notification of congenital syphilis. The review should be conducted within six weeks of notification of a confirmed or probable case of congenital syphilis to ensure that the event is still fresh in people's memory.

### Review participants

Participants should be drawn from the following:

- > primary health care providers
- > obstetric care providers
- > paediatric care providers
- > clinical risk management and quality improvement staff in the health service/s
- > CDCB staff involved in contact tracing/partner notification.
- > heads of units involved in any aspect of the case's or the case's mother's clinical or public health management.
- > appropriate health practitioners and/or liaison officers if case from culturally and linguistically diverse background
- > specialist obstetric, paediatric, midwifery, public health laboratory and other relevant experts not involved in public or clinical management of the case or case's mother, as appropriate.

## 2020 review participants

\*denotes proxy attended if indicated

Title	Name	Contribution Timeframe
Chair August 2020 – ID Physician, CDCB	Dr Brendan Kennedy	July - August 2020
Chair November 2020 onwards – Director, CDCB	Dr Louise Flood	Ongoing
Secretariat & minutes - BBV Case Coordinator, CDCB	Dean Gloede	Ongoing
Consultant Sexual Health Physician, CDCB	Dr Charlotte Bell	September 2020 onwards
Manager, STI & BBV Section, CDCB	Daniel Gallant	Ongoing
Shared minute taker - Senior Project Officer, STI & BBV Section, CDCB	Holley Skene	Ongoing
Public Health Medicine Registrar	Dr Kate Murton	July - August 2020
Disease Surveillance & Investigation Section, CDCB	Ingrid Tribe* (or proxy Bernie Edmunds)	Ongoing
Aboriginal STI Education Coordinator and Partner Notification Officer, CDCB	Njirrah Rowe	July - August 2020
Sexual Health/BBV Program Coordinator, Aboriginal Health Council SA	Sarah Betts* (or proxy Catherine Carroll)	Ongoing
Sexual Health/BBV Support Program Officer, Aboriginal Health Council SA	Joshua Riessen	Ongoing
Public Health Medical Officer, Aboriginal Health Council of SA	Dr Julia Vnuk	November 2020 onwards
Director Aboriginal Health, Women's and Children's Health Network	Jacqueline Ah Kit	Ongoing
Manager, Strategic Development, Aboriginal Health Division, Women's and Children's Health Network –	Kaylene Kerdel	proxy for Jacqueline Ah Kit January 2021
A/Manager Strategic Operations (hospital), Aboriginal Health Division, Women's and Children's Health Network	Cathy Leane	Ongoing
Nurse/Midwife Unit Manager, Aboriginal Family Birthing Program, Women's and Children's Health Network	Toni-Marie Rowe	Ongoing
Director Safety & Quality Systems, Women's and Children's Health Network	Beth McErlean	Ongoing
Head of Unit, Infectious Diseases Unit, Royal Adelaide Hospital	A/Professor David Shaw	July - August 2020
Head of Unit, Adelaide Sexual Health Centre, Royal Adelaide Hospital	Dr Alison Ward	Ongoing
Consultant Sexual Health Physician, Adelaide Sexual Health Centre, Royal Adelaide Hospital	Dr Mahesh Ratnayake	Ongoing
Safety & Quality, SA Health	Anita Chambers	Ongoing
Medical Head of Unit, Watto Purrinna Aboriginal Health Service, CALHN	Dr Penny Silwood	July – August 2020
Head of Unit & Senior Consultant, Watto Purrinna Aboriginal Health Service, Northern Adelaide Local Health Network	Dr Md Moniruzzaman	November 2020 onwards
Nurse Unit Manager Hospital Avoidance Service, Intermediate Care, CALHN	Liana Granello	Attended August 2020 meeting
Manager, Aboriginal Health Services, Southern Adelaide Local Health Network	Nola Whyman	November 2020 onwards

Regional Manager Clinical Services, Aboriginal Family Clinic, Southern Adelaide Local Health Network	Maria Barredo	November 2020 onwards
Head of Obstetrics, Southern Adelaide Local Health Network	Dr Sue Kennedy-Andrews	November 2020 onwards
Clinical Director, Women's & Babies Division, Maternal Fetal Medicine Specialist, Women's and Children's Hospital	Professor Jodie Dodd	Member but unable to attend Review Group meetings
Consultant Paediatrician, Child Development Unit, Women's and Children's Health Network	David Baulderstone	Member but unable to attend Review Group meetings
Medical Unit Head, Paediatric Medicine, Women's and Children's Health Network	Dr David Thomas	Member but unable to attend Review Group meetings

### Questions to be asked

1. When and at which health services did the mother receive antenatal care?
2. If in a declared outbreak region, was the mother offered, and did she have, syphilis testing at booking, 28 weeks, 36 weeks and at delivery and 6 weeks post-partum as recommended in the Pregnancy Care Guidelines? If in another region, was routine syphilis testing undertaken at intervals recommended by the local guidelines?
3. At what gestation was the mother diagnosed with syphilis and what was the time interval between diagnosis and treatment?
4. What was the time interval between the mother being treated for syphilis and the baby's delivery? (considered adequate if at least 30 days)
5. Was contact tracing/partner notification undertaken in a timely manner? Were named contacts tested and treated for syphilis empirically at the time of presentation within 1 month of being named?
6. Following the syphilis diagnosis, was the mother's ante- and post- natal care and follow-up in relation to repeat syphilis testing in accordance with the CDNA syphilis SoNG
7. Has management of the baby been in accordance with current best practice guidelines for managing congenital syphilis? Aspects of management which should be discussed could include, but are not limited to, investigations, treatment and medical referral/transfer.
8. Were the health service's infection control guidelines followed during management of the case?
9. What aspects of the mother and baby's care were managed well?
10. What aspects could be improved?
11. How could this case of congenital syphilis have been prevented?
12. What actions need to be taken at the local, state and national levels to prevent future cases of congenital syphilis?
13. What actions need to be taken at the local, state and national levels to ensure best practice management of any future cases of congenital syphilis?
14. Does this case need to be reported as a SLS incident for further investigation?
15. Any other discussion points/recommendations.

Appendix B: SA epidemiological report, including graph of cases by region

Committee-in-confidence

Syphilis Outbreak Report, South Australia

Date	Time period reported on	Jurisdiction/Region	Author
12/03/2021	15 November 2016 to 31 January 2021	South Australia	I Tribe

**Multijurisdictional Syphilis Outbreak (MJSO) definition**

**Category 1:**  
Any person who is newly diagnosed with confirmed or probable infectious syphilis according to the CDNA national surveillance case definition (see text box below) for infectious syphilis,  
  
AND  
  
1. is an Aboriginal or Torres Strait Islander person who resides in any of the following outbreak declared regions at or after the dates indicated:  
Eyre and Western, and Far North regions (from 15 November 2016)  
Adelaide region (from 1 February 2018)

**Category 2:**  
Aboriginal and Torres Strait Islander people who are sexual contacts of a confirmed outbreak case and reside outside an outbreak area declared region at the time of diagnosis. Non-Indigenous people who are sexual contacts of a confirmed outbreak case and reside in or out of an outbreak declared region at the time of diagnosis.

**Infectious syphilis case definitions in use**

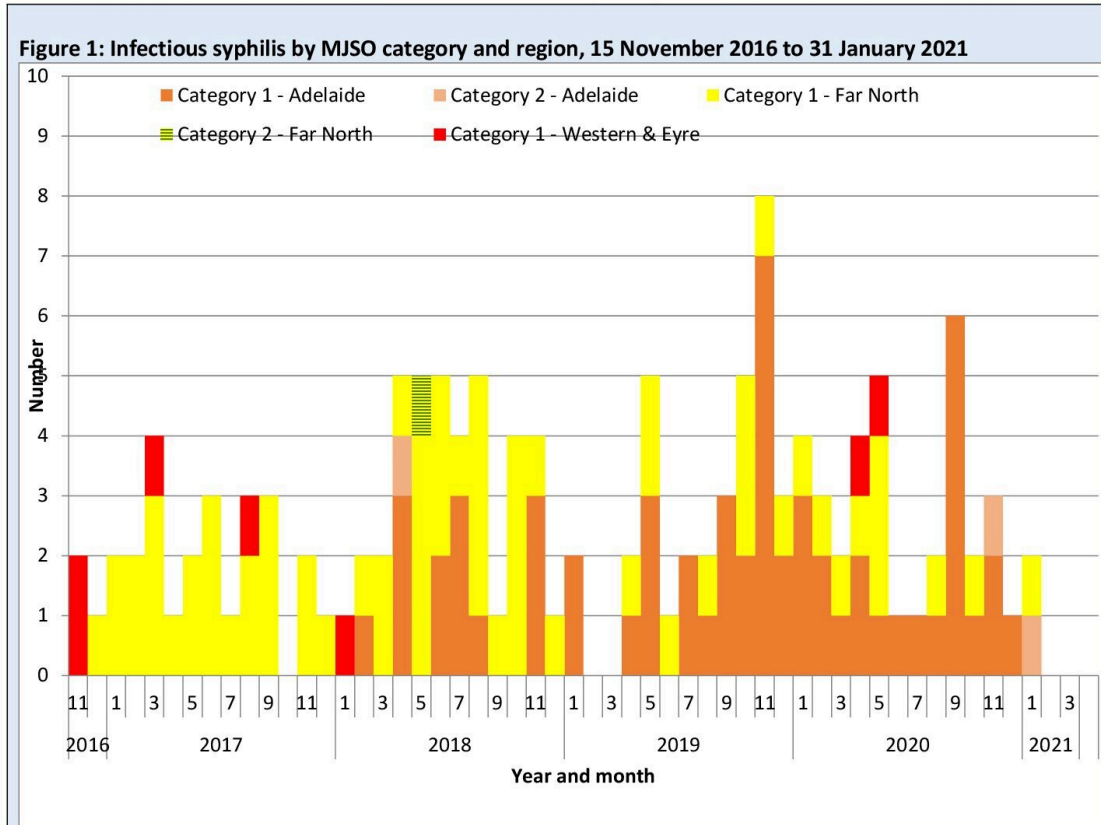
Cases are defined as per the CDNA case definitions for infectious syphilis (primary, secondary and early latent) and congenital syphilis. (<https://www1.health.gov.au/internet/main/publishing.nsf/Content/cdna-casedefinitions.htm>)

**MJSO Situation TO DATE: 15 Nov 2016 to 31 January 2021**

Outbreak cases of infectious syphilis – less than 2 years duration		Category 1 cases		Category 2 cases			Total cases in each group	
				Reside in an outbreak region (non-Indigenous)		Do not reside in an outbreak region		
		Female (F)	Males (M)	Female (F)	Males (M)	Female (F)	Males (M)	
	Confirmed	47	52		2			101
	Probable	17	15		2			34
	Total	64	67		4			135
	Age							
	<15	1	2		0			3
	15-19	3	3		0			6
	20-29	33	18		2			53
	30-39	21	29		0			50
	40+	6	15		2			23
	Median Age	28	32		35			
	<b>GEOGRAPHICAL DISTRIBUTION OF CASES (major areas)</b>							
Outbreak area	n(%) of cases		Comments					
Far North & Flinders Ranges	67(49.6%)		APY Lands, Port Augusta, Coober Pedy					
Eyre & Western	7(5.1%)		Whyalla, Ceduna, Yalata					
Adelaide	61(45.1%)							

Please note that all data are provisional and subject to change due to ongoing case investigations

Committee-in-confidence



Syphilis in pregnancy	15 Nov – 31 Dec 2019 (data collected opportunistically)		From Jan 2020 (data requested on notification form)	
	No. cases < 2 Years duration	6		5
No. cases > 2 Years/unspecified duration	1		1	

Congenital syphilis		
No. confirmed	3	1 case notified in 2017, Far North region 2 cases notified in 2020, Adelaide <i>(represented in the aforementioned tables and graphs)</i>
No. probable		None

Syphilis <2 years in people of Aboriginal or Torres Strait Islander origin that reside outside the Outbreak Regions (and with no epidemiological links to cases in Outbreak regions and therefore do not meet MJSO Outbreak case definition).		
Non-outbreak region	8 cases	2017: 5 cases (1 no fixed address, 1 lower South East Region, 3 Adelaide region) 2018: 2 cases (2 Riverland Region) 2019: 1 case to date (Fleurieu region)

Please note that all data are provisional and subject to change due to ongoing case investigations



---

## For more information

**Communicable Disease Control Branch**  
**Health Protection & Regulation**  
**Telephone: 1300 232 272**  
[www.sahealth.sa.gov.au](http://www.sahealth.sa.gov.au)



[www.ausgoal.gov.au/creative-commons](http://www.ausgoal.gov.au/creative-commons)

