

Aide-Mémoire

Update on Infectious and Congenital Syphilis

Date due to MO:	15 March 2024	Action required by:	N/A
Security level:	IN CONFIDENCE	Health Report number:	H2024036479
To:	Hon Dr Shane Reti, Minister of Health		
Copy to:	Hon Casey Costello, Associate Minister of Health		
Consulted:	Health New Zealand: <input checked="" type="checkbox"/> Māori Health Authority: <input type="checkbox"/>		

Contact for telephone discussion

Name	Position	Telephone
Dr Nicholas Jones	Director of Public Health, Public Health Agency Te Pou Hauora Tūmatanui	s 9(2)(a)

Update on Infectious and Congenital Syphilis

Purpose

1. This aide-mémoire responds to your request for further advice on syphilis, specifically a descriptive analysis of trends with a focus on the current magnitude of these issues in New Zealand. Attached as Appendix 1 is an epidemiological dashboard. Information is also provided on current activities to address syphilis, including the National Syphilis Action Plan.

Executive Summary

2. Rates of syphilis have increased in New Zealand in 2022 and 2023. Reported case numbers are likely an underestimate of the true burden of disease due to varying symptomology, reporting systems, and other factors that impact on the likelihood of seeking care.
3. The populations most affected are men who have sex with men (MSM), and, for heterosexually acquired infection, Māori and Pacific Peoples. The majority of infectious syphilis cases have been reported in the Northern Region followed by Te Manawa Taki.
4. Congenital syphilis is a preventable disease which has serious consequences for whānau including foetal and neonatal death. No or late antenatal care continues to be the most frequent missed opportunity for prevention, accounting for 61% of cases of congenital syphilis.
5. Congenital syphilis inequitably affects Māori (71% of cases in the past 6 years) and Pacific Peoples (19% of cases). Prevention of congenital syphilis requires accessible, culturally safe sexual health care, and antenatal care that includes syphilis screening.
6. Internationally, several countries have seen sharp increases in infectious syphilis and congenital syphilis in recent years, albeit with a transient decrease in most countries during the COVID-19 pandemic.
7. The National Syphilis Action Plan published in 2019 aims to stop the increase in cases, eliminate ethnic inequities, eliminate congenital syphilis (in the New Zealand context this means zero cases), improve testing and treatment, and ensure high quality surveillance. Limited resourcing has impeded implementation, but progress has been made on several prioritised actions.



Dr Nicholas Jones
Director of Public Health

Public Health Agency | Te Pou Hauora Tūmatanui

Date: 14/03/2024

Update on Infectious and Congenital Syphilis

Background

8. Syphilis is a serious bacterial infection which can be transmitted sexually, trans-placentally from mother to child during pregnancy, or rarely via blood products. Syphilis has multiple and often serious consequences throughout its stages, including meningitis and visual impairment. However, in approximately 50% of cases it is asymptomatic, so is often undetected.
9. Congenital syphilis can result in stillbirth, perinatal death, and severe perinatal illness. A case of congenital syphilis has traditionally been considered a failure of the system due to being preventable with antenatal screening and treatment.
10. Rates of syphilis were very low in high income countries in the 1990s, but there has been a rapid increase from the early 2000s in Western Europe and the United States of America (USA). Enhanced surveillance found most cases were in MSM, alongside a high proportion of concurrent HIV infection.
11. New Zealand saw an increase in infectious syphilis (that is the primary, secondary and early latent stages of infection) cases from the early 2000s. Reported cases increased from 14 in 2000 to 144 in 2009. In the years 2008 to 2012, annual reported cases of infectious syphilis varied between 80 and 144.
12. There was one known case of congenital syphilis, in 2012. However, there was no formal mechanism for reporting congenital cases until syphilis became notifiable in 2017.¹
13. The rates of infectious syphilis have risen dramatically, reaching 4 times the levels seen in 2012. The risk of congenital syphilis has also increased resulting in increasing cases. These trends are outlined below, and on the accompanying dashboard.

National Trends in Syphilis 2013 – 2024

14. The data presented here and on the dashboard are likely an underestimate of the true burden of disease because:
 - a. surveillance of syphilis is clinic-based rather than laboratory-based and, therefore, not all infectious syphilis cases are notified (a laboratory system integrated with clinical surveillance is currently in development)
 - b. approximately 50% of infectious syphilis is asymptomatic, therefore, only diagnosed on serology testing, meaning many people with syphilis are likely undiagnosed
 - c. non-infectious (late, latent, and tertiary) syphilis has never been notifiable or reported, therefore we have no data on this
 - d. culturally safe practices, the experience of stigma and other factors, likely impact on accessing care.

¹ Notifiable diseases are those listed in schedules 1 and 2 of the Health Act 1956, and diagnoses of which health practitioners and laboratories are required to notify Medical Officers of Health.

Trend overview

Refer to Figure 1 in the attached dashboard

15. In late 2022, there was a sharp rise in infectious syphilis cases which continued into 2023, following a decrease in reported cases from 2019 to early 2022 (likely influenced by COVID-19). The increase from 2022 has largely been amongst MSM. Compared with 2022, the number of infectious syphilis cases in 2023:
 - a. increased in MSM by 84% (228 to 420 cases)
 - b. remained stable for men who have sex with women (MSW) (144 cases)
 - c. remained stable among women who have sex with men (WSM) (106 to 94 cases).

Ethnicity comparisons

Refer to Figure 2 in the attached dashboard

16. There are marked ethnic inequities in rates of infectious syphilis. Despite a slight decrease in rates in Māori in 2023, rates among Māori and Pacific Peoples remain twice those in European/Other ethnicities. In 2023, infectious syphilis rates among Māori and Pacific Peoples were 18.4 per 100,000 and 20.7 per 100,000, respectively, compared with 10.3 among European/other and 14.7 per 100,000 among Asian people. Infectious syphilis rates among Asian people and European/Other increased between 2022 and 2023, while rates among Pacific Peoples remained elevated but stable.
17. Inequities in sexually transmitted infections (STIs) are likely to reflect differences in access to sexual health care and sexual network characteristics, rather than sexual behaviour alone. In communities where there is higher prevalence of a particular STI, with each sexual encounter there is a greater chance of contact with someone with an infection, than in lower prevalence communities.
18. Differences persist in communities because access to quality and culturally safe STI prevention and treatment has not been equitably available. Higher rates of STIs in ethnic groups known to have inequitable access to the determinants of health, including health care access, are observed around the world, including in African American communities and Aboriginal Australians.

Demographic Comparisons

Refer to Table 1 in the attached dashboard

19. Unlike chlamydia and gonorrhoea, relatively high rates of reported infectious syphilis are seen among older age groups, especially in those aged 30-39, primarily due to high proportion of MSM cases being in these age groups.
20. In 2022 and 2023, the highest rates of infectious syphilis cases were reported from the Northern Region, primarily Auckland, followed by Te Manawa Taki.

Congenital syphilis

21. Congenital syphilis can cause stillbirths, infant deaths, and long-term adverse outcomes for surviving infants including deafness, blindness, and skeletal abnormalities. Congenital syphilis is preventable if maternal infection is diagnosed during routine antenatal care and treated promptly.
22. For many years testing for syphilis has been included with the suite of first antenatal blood tests offered to everyone when they first present for care in pregnancy, typically in the first trimester.
23. Aside from the impact on infants and their families, congenital syphilis results in significant and preventable lifetime economic impacts to the health and disability sectors.

Refer to Figure 3 in the attached dashboard

24. The number of infectious syphilis notifications among women of reproductive age (15-44 years) and pregnant women has increased in recent years. In 2022 and 2023, there were 39 cases of infectious syphilis, and 32 cases of infectious syphilis among pregnant women, respectively.

Refer to Figures 4, 5 and 6 in the attached dashboard

25. While there was no formal mechanism for reporting congenital syphilis in New Zealand prior to 2017, the Institute of Environmental Science and Research (ESR) was informed of 1 case in 2012, and 1 case in 2016. Four cases were reported in 2017.
26. Cases of congenital syphilis since 2018 have fluctuated between 2 and 8 per year. Three cases (a rate of 5 per 100,000 live births) of congenital syphilis were reported in 2023.
27. These data are likely an underestimate of the true burden of congenital syphilis because:
 - a. as with infectious syphilis, notification currently relies on clinicians; and
 - b. pregnancy loss is not always investigated, therefore, there may be additional stillbirths attributable to syphilis which have not been reported.
28. There are marked ethnic inequities in congenital syphilis. Most congenital syphilis cases have been among infants of Māori ethnicity (22/31 (71%) cases between 2018-2023), followed by Pacific ethnicity (6/31 (19%)). In 2022, 7 congenital syphilis cases were Māori, and 1 was Pacific, while in 2023 all 3 cases reported were Māori.
29. No or late antenatal care continues to be the most frequent missed opportunity for prevention of congenital syphilis (refer to Figure 6), accounting for 19/31 cases (61%) of congenital syphilis between 2018-2024. This was followed by new infections in pregnancy (6/31 cases (19%)) between 2018-2024. In 2022, 5 cases had no or late antenatal care, 1 case was a new infection in pregnancy, 1 had incomplete treatment, and 1 experienced treatment failure. In 2023, all 3 cases were a result of no or late antenatal care.

30. Timely access to antenatal care including early testing for syphilis is crucial to prevent congenital syphilis. The high proportion of cases in which there was no or late antenatal care highlights inequitable access to appropriate antenatal care for Māori in particular. Due to the risk of newly acquired infection after the first trimester, there is also a role for additional screening in the third trimester.
31. Most congenital syphilis cases to date have been liveborn with symptoms (16/31 cases between 2018-2023). Nine cases between 2018-2023 resulted in death; 6 of which were stillbirths.
32. Geographically, almost all cases have been reported in the North Island in the past 6 years. Of cases in 2022/2023, 8 cases were from Auckland, 2 from Northland and one from Waikato.

International comparisons

33. Internationally, surveillance systems used to monitor syphilis differ, complicating direct comparisons between countries. Australia, the United Kingdom (UK), the USA, and Canada have seen sharp increases in infectious syphilis in recent years, with a transient decrease in most countries during the COVID-19 pandemic. Congenital syphilis rates have also increased; rates in New Zealand have been lower than those seen in the USA, but higher than those seen in the UK and Australia.
34. Many of these countries have implemented strategies/initiatives that are broadly similar to that adopted in New Zealand, but with varying implementation and funding. In addition, some innovative testing and treatment options are being considered or implemented in some countries. Two innovations of note are:
 - a. *Point of care testing (POCT)*: diagnosis of syphilis is traditionally by a combination of serology, PCR of lesions, history, and clinical assessment. POCT is designed to reduce time to treatment initiation and contact tracing, minimise loss to follow-up, and provide an alternative to blood test. However, there are still several unknowns including the accuracy of POCTs for syphilis, as well as acceptability and feasibility particularly in high-risk populations. In the New Zealand context, it is worth noting that POCT may affect the laboratory notification process for positive syphilis cases used to compile surveillance data, potentially introducing under-reporting.
 - b. *Doxy-PEP*: the use of doxycycline post-exposure prophylaxis (“Doxy-PEP”) is a novel prevention method for bacterial STIs; this involves taking a 200mg dose of doxycycline within 72 hours of a sexual act. There is some evidence this reduces the risk of chlamydia, gonorrhoea, and syphilis infections. However, draw backs include an unknown impact on development of antimicrobial resistance, and lack of evidence on reduction on infection risk for partners.
35. s 6(a)
[Redacted text]
36. Details for Australia, Europe, and North America’s syphilis rates and related strategies or actions can be found in Appendix 1.

National strategies and plans to positively affect trends and support communities

Sexually Transmitted and Blood Borne Infections Strategy

37. The Aotearoa New Zealand Sexually Transmitted and Blood Borne Infections (STBBI) Strategy was published in March 2023.
38. The purpose of the STBBI Strategy is to improve collaboration, support collective action, and set a unified strategic direction across the health sector in response to STBBIs, including syphilis. This strategy sets the direction for current and future STBBI focused action plans, including the National HIV Action Plan, National Hepatitis C Action Plan, and National Syphilis Action Plan.
39. Health New Zealand – Te Whatu Ora leads the implementation of the STBBI Programme in collaboration with Te Aka Whai Ora – the Māori Health Authority, and the Ministry of Health - Manatū Hauora (the Ministry).

National Syphilis Action Plan

40. Published in 2019, the National Syphilis Action Plan (the Action Plan) aims to guide a coordinated and systematic response to interrupt ongoing transmission of infectious syphilis and to prevent congenital syphilis. The implementation of the Action Plan was impacted by the reprioritisation of resources to respond to the COVID-19 pandemic.
41. The goals of the Action Plan are to stop the increase in cases, eliminate ethnic inequities, eliminate congenital syphilis, improve testing and treatment, and ensure high quality surveillance. The key action areas are prevention and health promotion, testing and management, antenatal care, and surveillance and monitoring.
42. In November 2021, a working group supporting the development of the STBBI Strategy prioritised actions within the Action Plan for implementation. Prioritisation was based on the available evidence at the time, and our obligations to uphold Te Tiriti o Waitangi and commitment to equity.
43. With dedicated funding allocated in Budget 2022 towards implementation of the HIV Action Plan, activities have been focussed in this area. The following 4 areas of syphilis focused work are currently underway.

Development of a teaching package for midwives on syphilis and congenital syphilis

44. This training will include information on having sensitive conversations with whānau about syphilis and other sexually transmitted infections. Work will involve the New Zealand College of Midwives, Ngā Maia Māori Midwives Aotearoa, and Pasifika Midwives Aotearoa. The teaching package will be in place later this year.

Implementation of a second routine antenatal screen for syphilis across all regions

45. In 2023, all districts in the Northern Region, along with the Waikato district in the Te Manawa Taki Region, implemented an opt-out second screen for syphilis. These were regionally led initiatives rather than a national approach. This second screen for syphilis is included with the routine subsequent antenatal blood screen usually undertaken around 28 weeks gestation.
46. Preliminary data from the Northern Region shows a significant increase in syphilis testing once the opt-out second screen was included. This contrasts with the low uptake seen in Midcentral when they implemented an opt-in second screen a few years ago.
47. There is high-level support in Health New Zealand, Te Aka Whai Ora, and STBBI Steering Group for a second antenatal syphilis screen to be implemented across all regions.
48. Health New Zealand has pre-implementation planning work underway for implementing a second screen for syphilis across all regions, such as confirming the laboratory costs, however, this is still subject to confirmation of the funding required and there is no date for roll out at this stage.

An audit of antenatal screening for HIV which includes syphilis

49. This work is a prioritised action in the HIV Action Plan, and involves analysis of planned and existing datasets to determine uptake of communicable disease screening as part of standard antenatal screening in the first trimester of pregnancy. The purpose of this work is to gain a better understanding of gaps in screening for HIV and syphilis and how this relates to broader gaps in antenatal healthcare services in New Zealand. The antenatal audit will be completed by the end of 2024.

Implementation of an enhanced surveillance system for STIs including syphilis

50. ESR is developing an automated syphilis and gonorrhoea notification system which will enable laboratory test results to be automatically sent to ESR at the point test results are released to clinicians.
51. Results suggestive of infectious or congenital syphilis, and positive for gonorrhoea, will also trigger a case report form to be sent to the ordering clinician to collect clinical and risk factor information. This will result in reduced reporting burden on clinicians and enable near real-time, complete syphilis surveillance. The gonorrhoea system has been successfully piloted, and a syphilis pilot will launch in April 2024. ESR expects to roll the system out nationally in 2024 and early 2025.

Other actions completed

52. Additionally, a number of actions have been completed through the Action Plan:
 - a. a digital video series and website for Māori and Pacific youth (general sexual and reproductive health)
 - b. development of National Antenatal and Congenital Syphilis Guidelines by The New Zealand Sexual Health Society Incorporated
 - c. syphilis webinars for midwives delivered by the New Zealand College of Midwives
 - d. 2021 revision of the New Zealand STI Management Guidelines for primary care use.

Current challenges

53. While there are epidemiological and strategic parallels between New Zealand and other countries, in syphilis monitoring, there are also unique challenges in the New Zealand setting. Any effective response domestically needs to address the needs of high-risk groups in New Zealand, including Māori and Pacific Peoples.
54. Specialist services for sexually transmissible diseases are limited and unevenly distributed across the country. Global workforce pressures probably apply to the Sexual Health workforce although detailed analysis of workforce issues has not been completed in preparation for this aide-mémoire.
55. There are important evidence and reporting gaps for STBBIs, as noted in the Aotearoa New Zealand Sexually Transmitted and Blood Borne Infection Strategy 2023-2030. Given the level of confidentiality required,² timeliness of reporting, stability, and data quality are problematic and consideration to data sovereignty is also paramount. There are evidence gaps concerning behavioural information, data on key populations including sex workers, transgender and nonbinary people, and prisoners, and evidence for prevention, testing and treatment strategies.
56. Establishing equitable access to culturally safe, quality health care for testing and case management is hampered by fragmented and potentially unaffordable care. Resourcing is limited for rural sexual health services, and STBBI services are not necessarily equipped to provide culturally safe services, particularly for Māori.
57. Contact tracing for STIs is patient-led, with support from sexual health services, and it is a resource-intensive activity. Because notification of syphilis is required without identifying information, public health services do not currently have a routine role in patient investigation, management and contact tracing, and pathways for support and escalation of complex situations are unclear and vary widely across the country.
58. As part of implementation of the HIV Action Plan, work is underway to increase contact tracing capacity and capability for people newly diagnosed with HIV. These roles consist of 7 full-time-equivalent (FTE) across the country that will be based in sexual health services in regions where there is low access to sexual health care and high rates of HIV infection and likely co-infections, such as other STBBIs including syphilis.
59. Work is also underway to establish 2 FTE sexual health clinical roles. These roles are to provide clinical leadership in the HIV sector and to offer specialist guidance, training and implementation support including reviewing and promoting guidelines for STIs including syphilis. The roles will be based in sexual health services (community based or hospital based) to be able to focus on this setting/workforce as the lead for elimination efforts.
60. Issues remain with strategic coordination, leadership and integration, particularly amongst prevention services, primary care, Māori health, maternity and secondary services such as sexual health clinics, infectious diseases, and hospital-based services.

² Syphilis (and HIV and gonorrhoea) are notified under Schedule 1 Part 1 Section C of the Health Act 1956, without identifiable information, defined as name, address and place of work. This requirement creates some barriers to collection of information and public health management of these infections.

Funding has also been inconsistent for sexual health services and Department of Corrections services. There is also limited workforce planning in the STBBI sector.

61. Currently, health promotion and comprehensive prevention activities are limited. Relationships and Sexuality Education (RSE) is a key element of health promotion. Due to the requirements of schools to consult with their communities every 2 years, schools vary in RSE delivery, and RSE teaching is fragmented. It is also largely unavailable outside school settings. Stigma and discrimination associated with sexuality and sexual behaviour are also impediments to accessing and engaging with health services that need to be addressed. Distrust amongst vulnerable communities also appear to be a serious impediment to accessing services.

Equity

62. The Ministry recognises and affirms the right of Māori to equitable health outcomes as underpinned by Te Tiriti o Waitangi. Of particular concern is the disproportionate burden of illness suffered by Māori women, who make up the majority of infectious syphilis cases in women. The Aotearoa New Zealand Sexually Transmitted and Blood Borne Infection Strategy 2023-2030 places the need to address these inequities in the context of system-level change, at structural, organisational and service delivery levels.
63. A broad response will be required to eliminate inequities for Māori and Pacific Peoples, such as partnering with Māori to deliver co-designed kaupapa Māori and whānau centred services (including antenatal services), alongside culturally safe health services, building the Māori and Pacific health workforce, eliminating systemic cultural bias or racism, and ensuring ongoing efforts to improve both surveillance of health outcomes and system performance. Ethnicity comparisons, and ongoing work to address Māori and Pacific Peoples health needs, have been considered in this aide-mémoire and accompanying dashboard.

Next steps

64. The Ministry will keep you informed of progress on both the Syphilis Action Plan and the broader STBBI Strategy. Reports will update you on efforts to address inequities, reduce rates of STBBI, and eliminate congenital syphilis, transmission of HIV and hepatitis C.
65. Officials can provide further advice at your request.

Appendix 1

Australia

66. In Australia, syphilis rates have more than tripled over the past 10 years, with an almost six-fold increase in the number of females diagnosed over this period. The Australian STI management guidelines recommend syphilis serology as part of asymptomatic STI screening; however, these guidelines were updated in late 2022, and so would not have substantially impacted reporting in 2022.
67. There were 69 cases of congenital syphilis in Australia notified between 2016 and 2022, 18 of which resulted in the death of the infant. Congenital syphilis rates in Indigenous Australians are substantially higher than in non-indigenous Australians (34 compared with 2.4 per 100,000, respectively, in 2022).
68. The latest Australian Blood Borne Viruses and Sexually Transmitted Infections Strategy (released in July 2021) continues calls for education, increased testing, early treatment and management, ensuring that people have access to prevention and care, increased workforce capability, addressing stigma and discrimination, and improved data protection.
 - a. POCT are available in some areas; the use of POCT and a 'test and treat' model was developed in response to increasing rates of syphilis in younger Aboriginal and Torres Strait Islanders.
 - b. In September 2023, the Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM) released new guidelines for the use of Doxy-PEP, recommending this primarily to prevent syphilis in MSM, and recommending against Doxy-PreP (i.e., pre-exposure prophylaxis prior to sex), also noting that guidelines for use need to be developed as do clinical and education resources.

Europe

69. In the UK, infectious syphilis diagnoses increased in 2022, up 15% compared with 2021, (and 8% compared with 2019). This is the largest annual number of cases reported in the UK since 1948. In England, the number of syphilis cases rose from 7,541 in 2018 to 8,692 in 2022. This represents a rate increase from 13 per 100,000 in 2018 to 15 per 100,000 in 2022.
70. In 2019, the UK Health Security Agency published their Syphilis Action Plan, bringing together existing recommendations to address the continued increase in syphilis diagnoses in England. Actions include increase testing frequency of high-risk MSM, improve partner notification, maintain high antenatal screening coverage and vigilance for syphilis throughout antenatal care, and sustain targeted health promotion.
71. In European Union (EU) member states in 2022, there were 35,391 confirmed syphilis cases, equivalent to a crude notification rate of 8.5 cases per 100 000 population, representing a 34% increase in the crude notification rate compared with 2021, and a 41% increase compared with 2018. Overall, the increasing trend in syphilis notifications (ongoing since 2013) was mainly due to an increase in the number of cases among MSM. During the same period, there were very small fluctuations in syphilis notifications

among heterosexuals, however 2022 marks the first year in the last 10 with noticeable increases in syphilis among heterosexual men and women.

72. Increases in congenital syphilis in 2022 paralleled the increases in the notification rates of syphilis among women and heterosexual men in several EU countries in 2022; there were 51 cases reported across the EU in 2021 and 65 cases (a rate of 2.4 per 100,000 live births) reported in 2022.
73. The European Centre for Disease Prevention and Control have emphasised the need for testing, prevention and treatment, enhanced sexual health, expanded testing and treatment services, and the need to address stigma, an important impediment to testing and treatment.

Northern America

74. The USA reported a 79% increase of syphilis cases from 2018 to 2022. The number of cases in the USA rose from 113,739 in 2018 to 203,500 in 2022 (equivalent to 34 and 61 cases per 100,000 of population, respectively); congenital cases rose from 1,306 to 3,761 over the same period (equivalent to 34.9 to 102.5 cases per 100,000 live births, respectively).
75. The United States STI Federal Implementation Plan 2021-2025 addresses the need to increase awareness of STIs, supporting a non-stigmatising, comprehensive approach to sexual health education, integrate STI messaging into public health campaigns, and ensure that prevention programmes are accessible.
 - a. To reduce systems and financial barriers to testing, the Federal Implementation Plan also calls for POCT and other methods.
 - b. In late 2023, the Centers for Disease Control and Prevention (CDC) released their proposed guidelines for the use of Doxy-PEP.
76. Canada reported a 109% increase of syphilis cases over the same period as the USA. The Syphilis Response Steering Committee is developing a coordinated response to the current crisis, with recommendations including improving data linkages with populations at risk and leading laboratory collaboration on innovative testing methodology such as POCT. The Government of Canada also emphasises the need to raise awareness around syphilis in particular, stressing the need for early testing, diagnosis, and treatment.



Trends in infectious syphilis from enhanced surveillance: An Overview from 2013–2023; with detailed breakdowns for 2018–2023¹

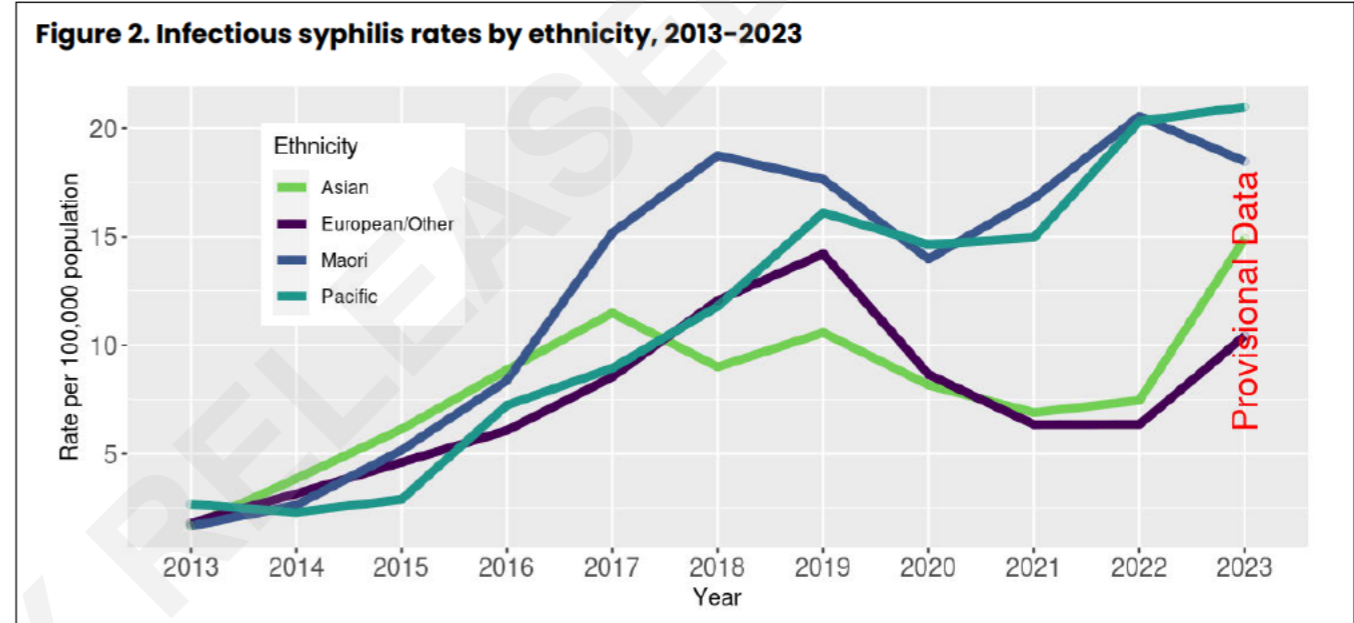
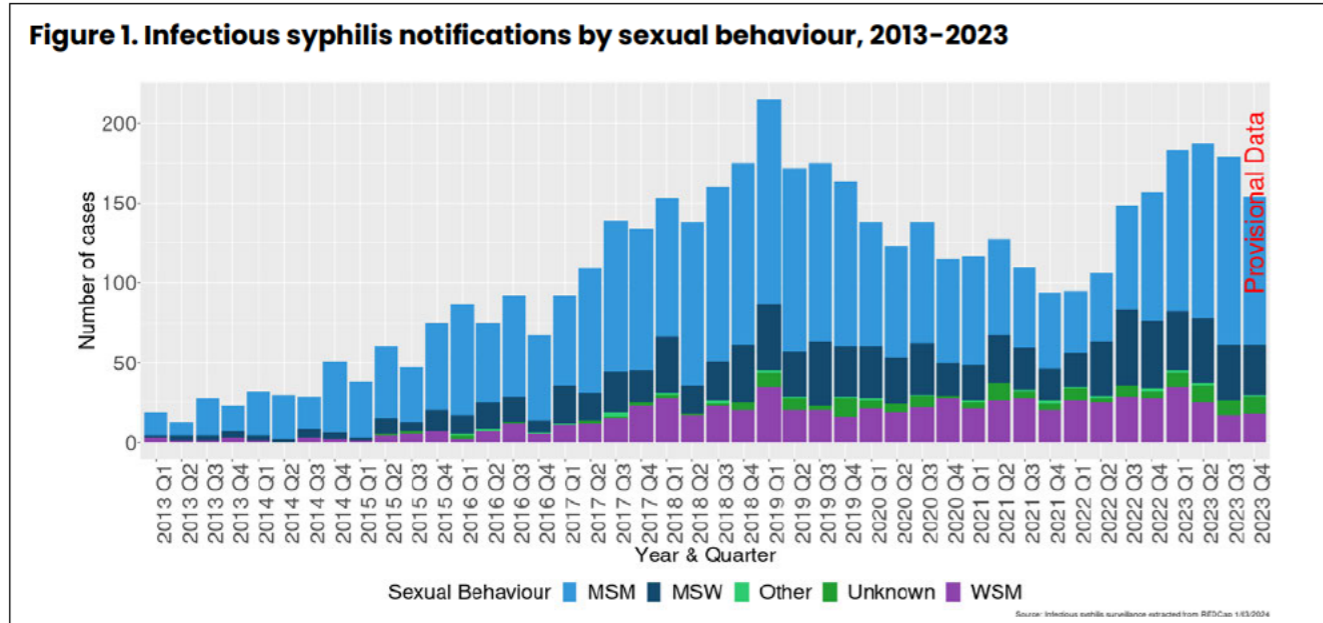


Table 1. Syphilis rates per 100,000 population by age group and region, 2018–2023

Age-group	2018, N = 626 ¹	2019, N = 725 ¹	2020, N = 514 ¹	2021, N = 448 ¹	2022, N = 506 ¹	2023, N = 703 ¹
0–14	N/A	N/A	N/A	N/A	0.1	N/A
15–19	4.1	4.7	6	4.1	7.9	4.3
20–24	27.3	35.3	23.2	22.0	30.7	28.8
25–29	32.9	41.0	28.9	22.5	23.5	36.7
30–39	26.8	33.8	22.9	20.3	19.4	30.4
40+	9.8	9.0	6.0	5.5	6.4	9.5
Region						
Central North Island	10.1	15.0	10.5	9.2	7.3	7.5
Northern North Island*	17.7	15.5	11.5	12.2	17.1	20.8
Te Manawa Taki	13.3	13.7	9.7	7.2	8.1	13.2
Te Waipounamu South Island	6.5	13.5	7.8	4.2	2.0	7.1

¹Total case count for the year

*>95% of cases in Auckland region

Figure 3. Syphilis cases among women of reproductive age (15–44 years) and pregnant women, 2018–2023



Figure 4. Cases of congenital syphilis by prioritised ethnicity, 2018–2023

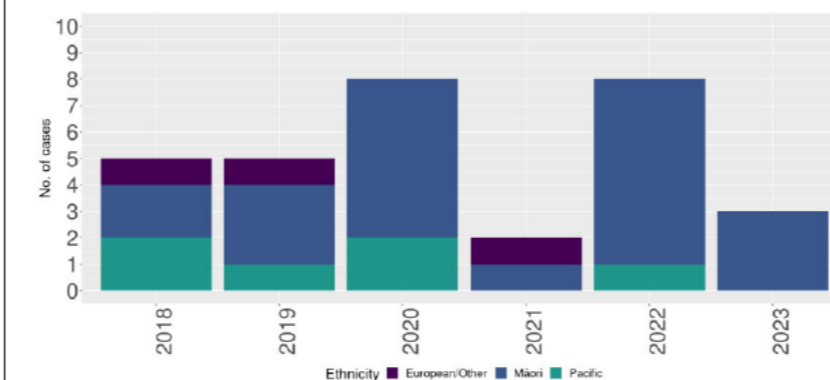


Figure 5. Congenital rates per 100,000 syphilis, 2018–2023

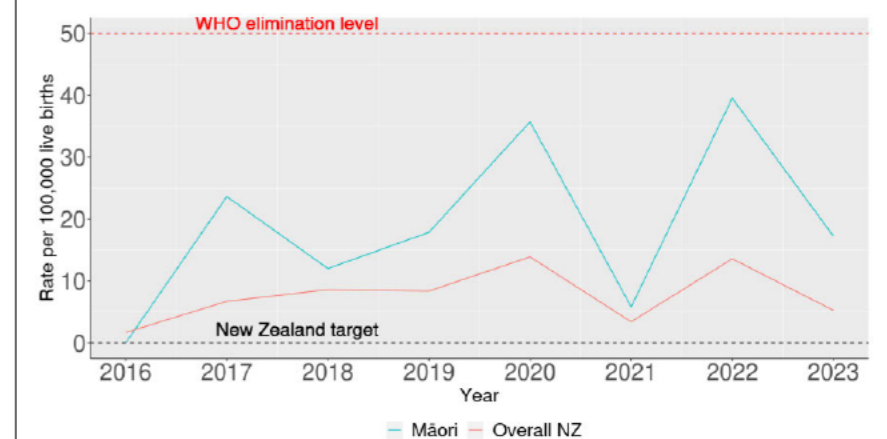
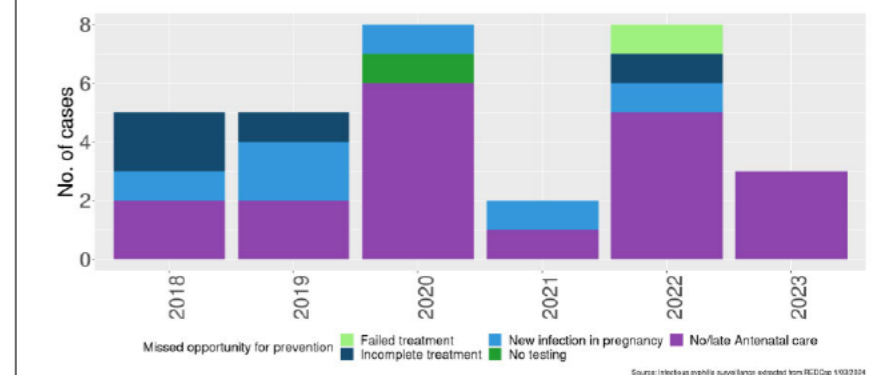


Figure 6. Missed opportunities for congenital syphilis prevention, 2018–2023



¹ Infectious syphilis enhanced surveillance extracted from REDCap on 01/03/2024