

Incidence of Primary and Secondary Syphilis among American Indian and Alaska Native Persons — Oregon, 2015–2021

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Indian Leadership for Indian Health

Disclosures

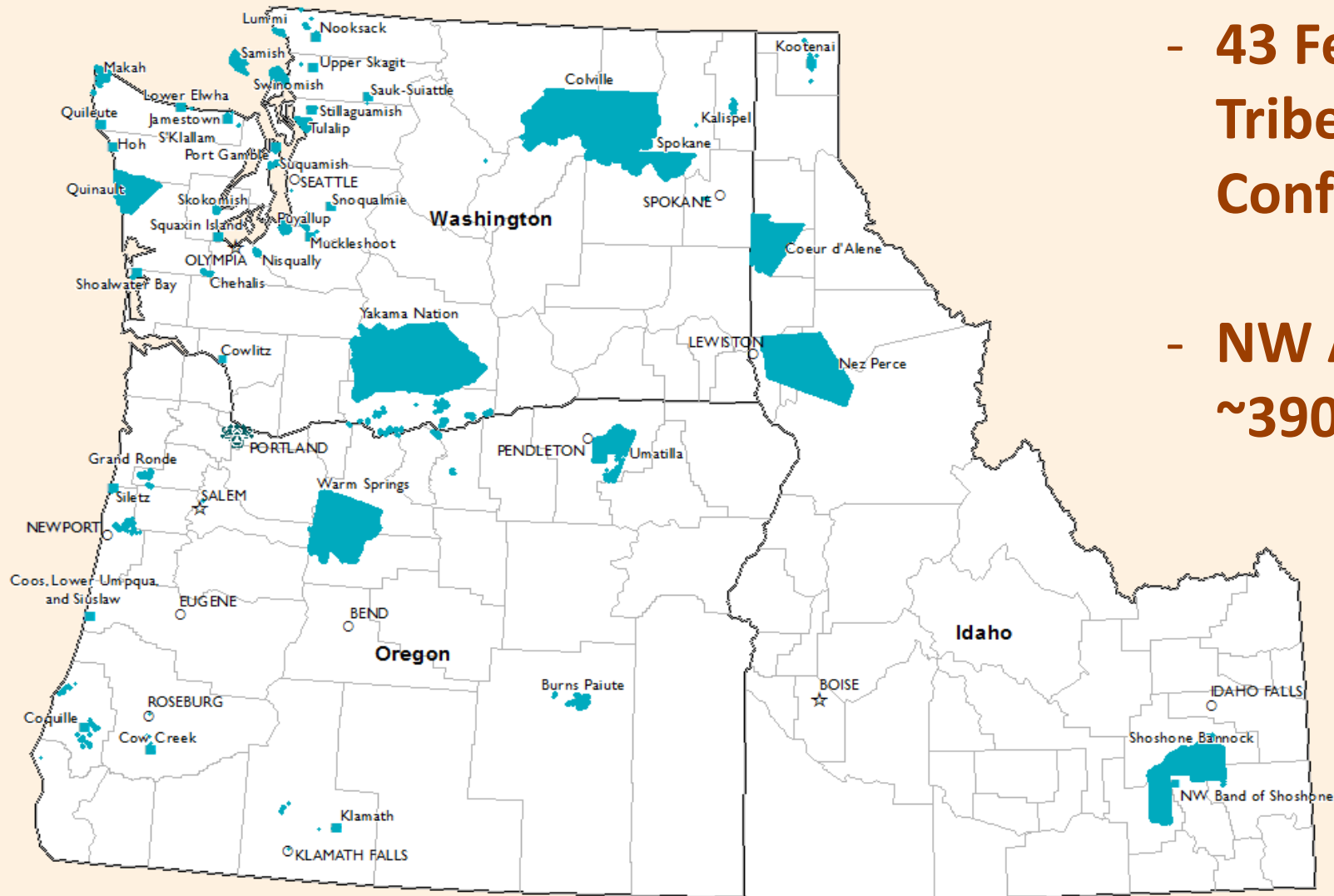
No conflicts of interest to disclose

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Northwest Portland Area Indian Health Board, the Oregon Health Authority, or the Centers for Disease Control and Prevention.



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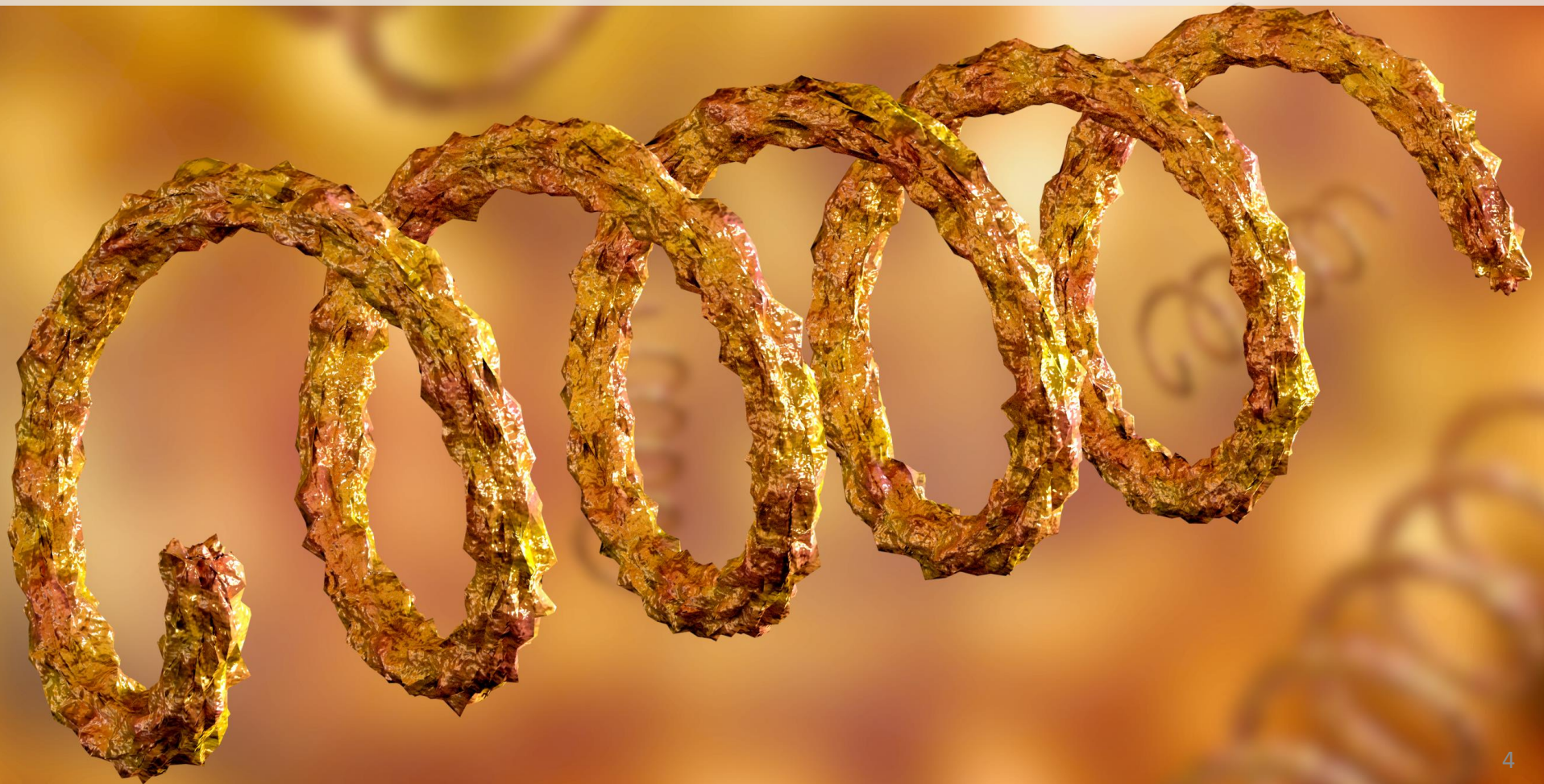
About NPAIHB and NWTEC



- 43 Federally Recognized Tribes/ Tribal Confederations

- NW AI/AN Population: ~390,000

Acquired primary and secondary (P&S) syphilis diagnoses are increasing in Oregon



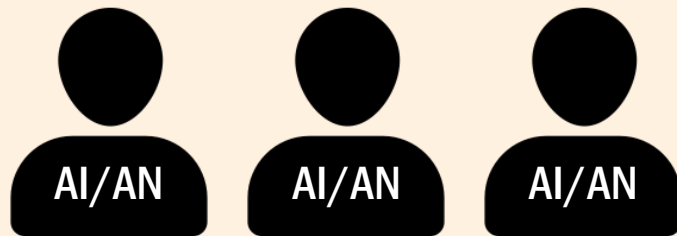
Acquired primary and secondary (P&S) syphilis diagnoses are increasing in Oregon



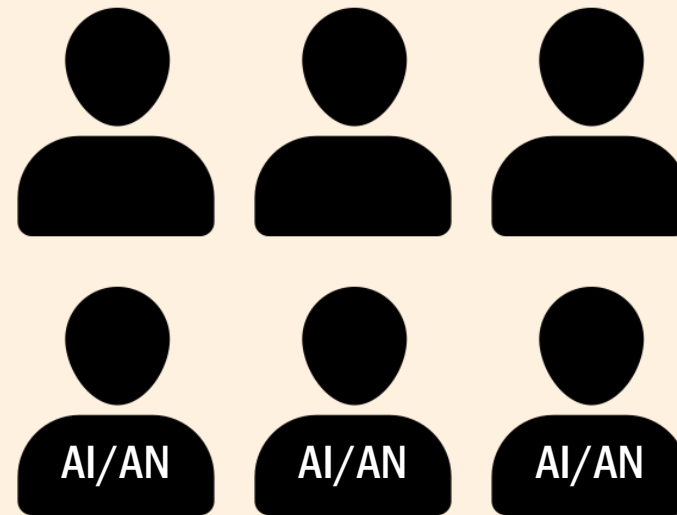
Disease burden among American Indian and Alaska Native (AI/AN) persons is frequently underestimated because of racial misclassification.

Racial misclassification for AI/AN persons can cause an underrepresentation of AI/AN people in health data

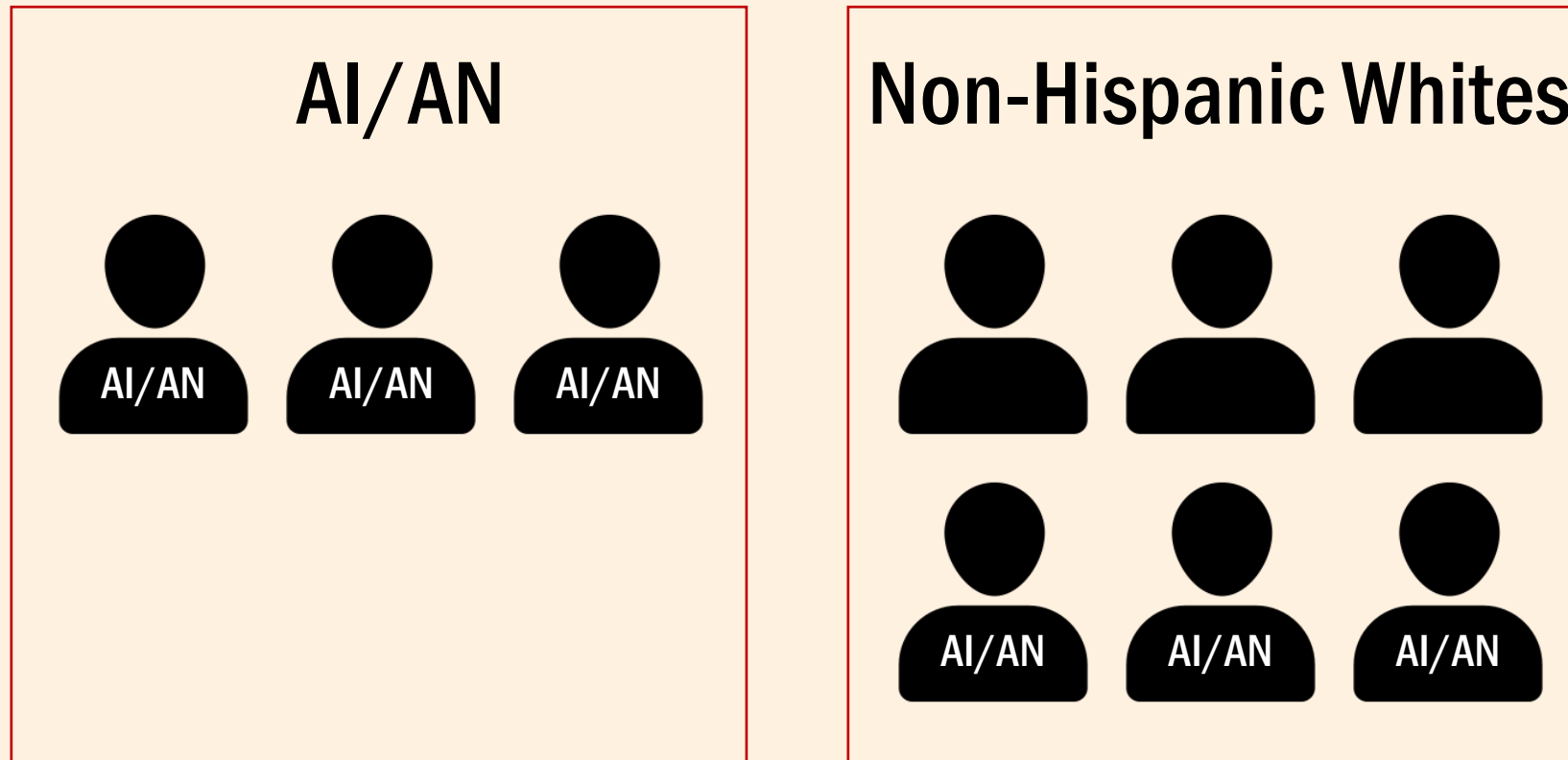
AI/AN



Non-Hispanic Whites



Racial Misclassification for AI/AN persons can cause an underrepresentation of AI/AN people in health data



Depending on the dataset, 7-65% of AI/AN persons misclassified



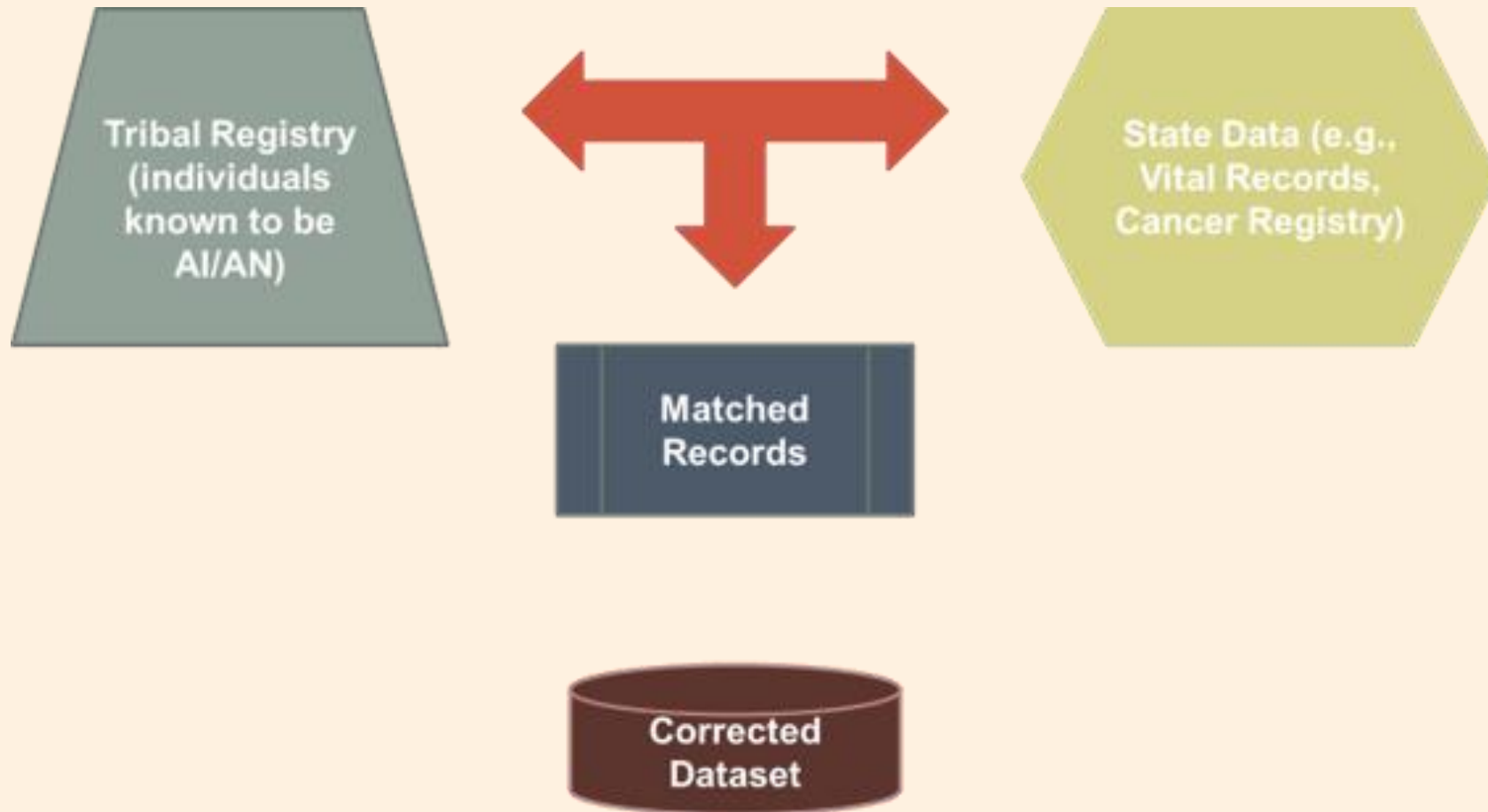
Methods

Using the Northwest Tribal Registry (NTR) to characterize syphilis incidence more accurately among AI/AN

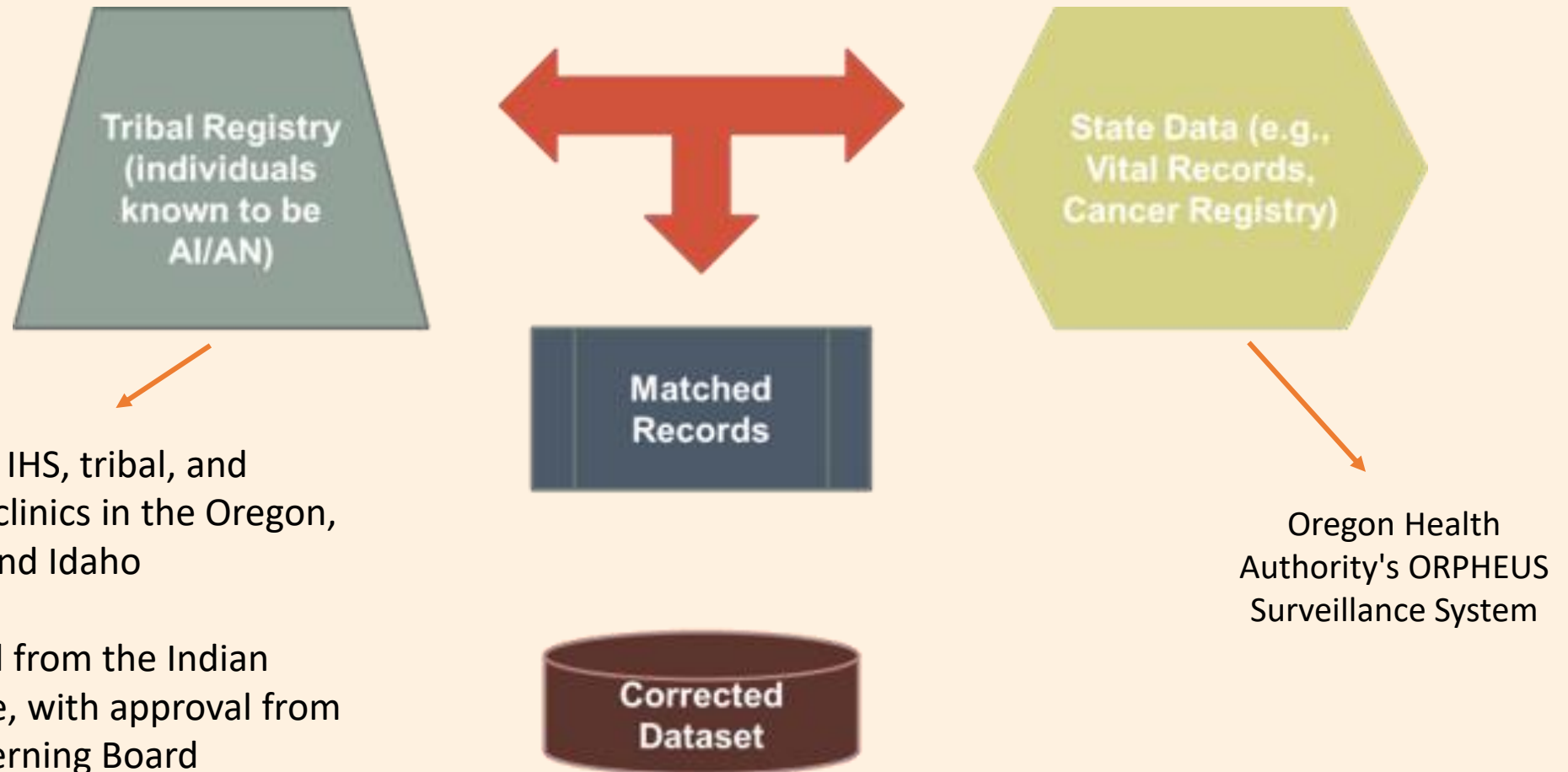


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Probabilistic record linkage



Probabilistic record linkage



NTR

- AI/AN seen at IHS, tribal, and urban health clinics in the Oregon, Washington and Idaho
- Data obtained from the Indian Health Service, with approval from NPAIHB's governing Board
- Does not include any health data, just identifiers like name, address, date of birth, etc.

Methods



Linked Dataset between
OHA ORPHEUS and NTR
used to complete analyses

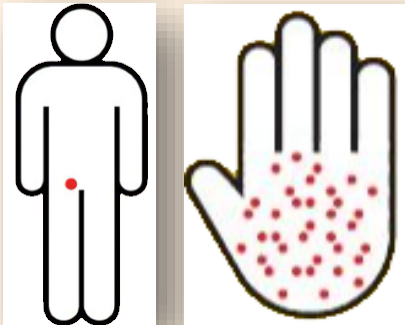


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Linked Dataset between
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P&S Diagnoses between
2015 and April 2021

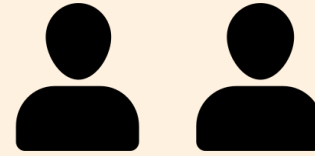


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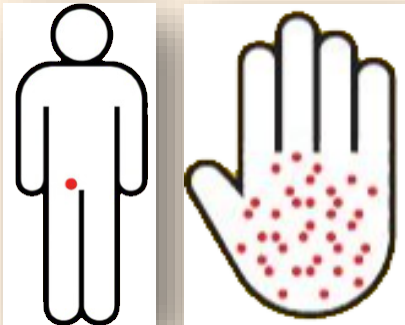
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Linked Dataset between
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Compared AI/AN to
non-AI/AN



P&S Diagnoses between
2015 and April 2021

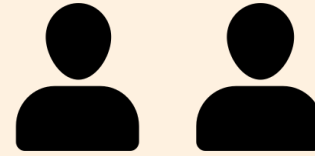


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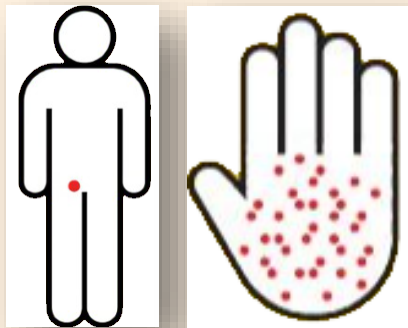
Methods



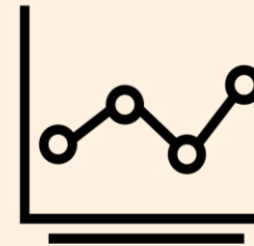
Linked Dataset between OHA ORPHEUS and NTR used to complete analyses



Compared AI/AN to non-AI/AN



P&S Diagnoses between 2015 and April 2021



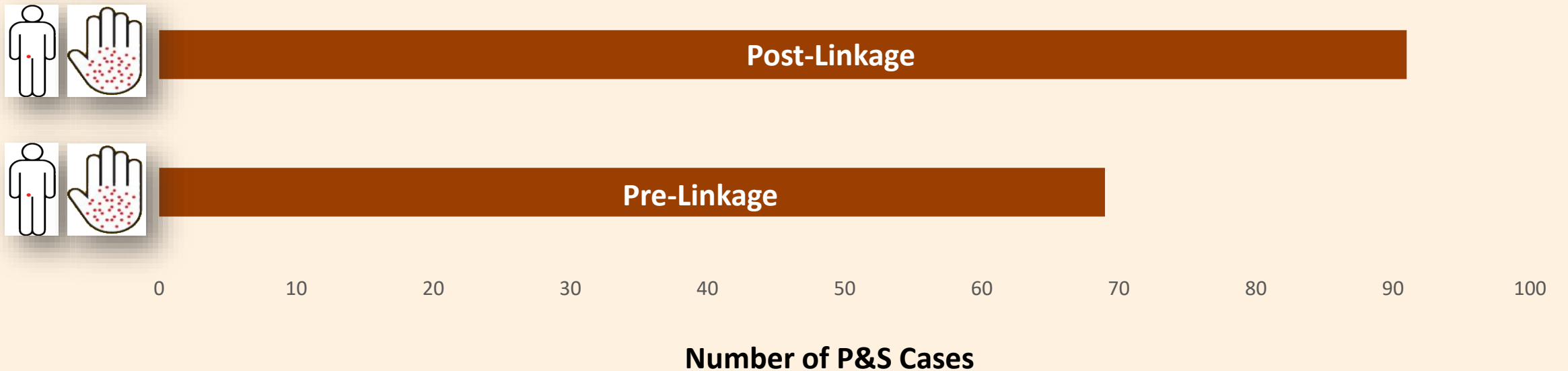
Cumulative incidence and 3-year rolling averages, total and by sex at birth



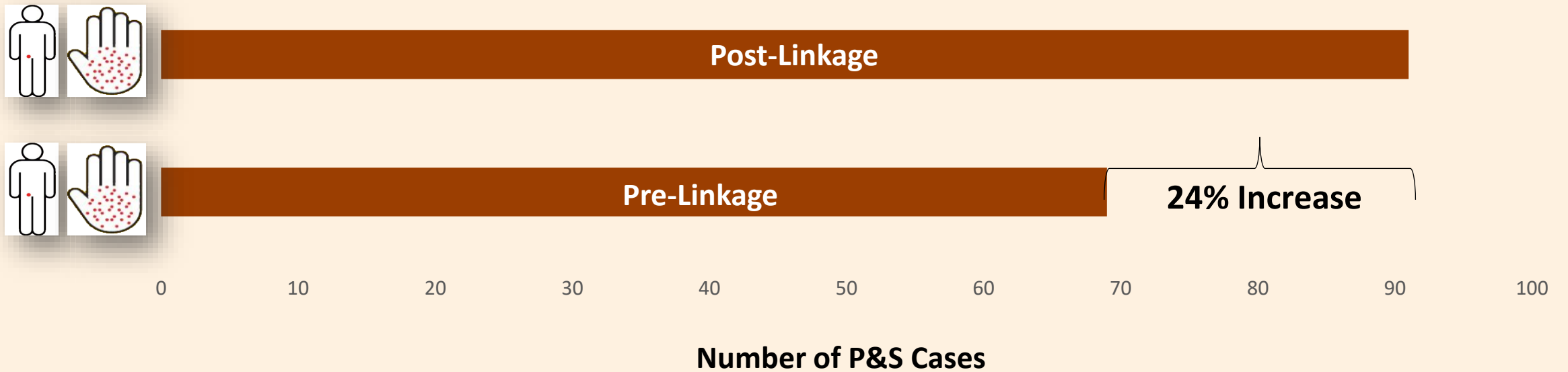
The image shows two canoes on a body of water. The canoe in the foreground is larger and has a red interior with a black hull and a white decorative stripe at the bow. The second canoe is smaller and positioned further back. A white rectangular box with the word 'Results' in orange text is centered over the image. A blue rope is visible in the lower-left corner.

Results

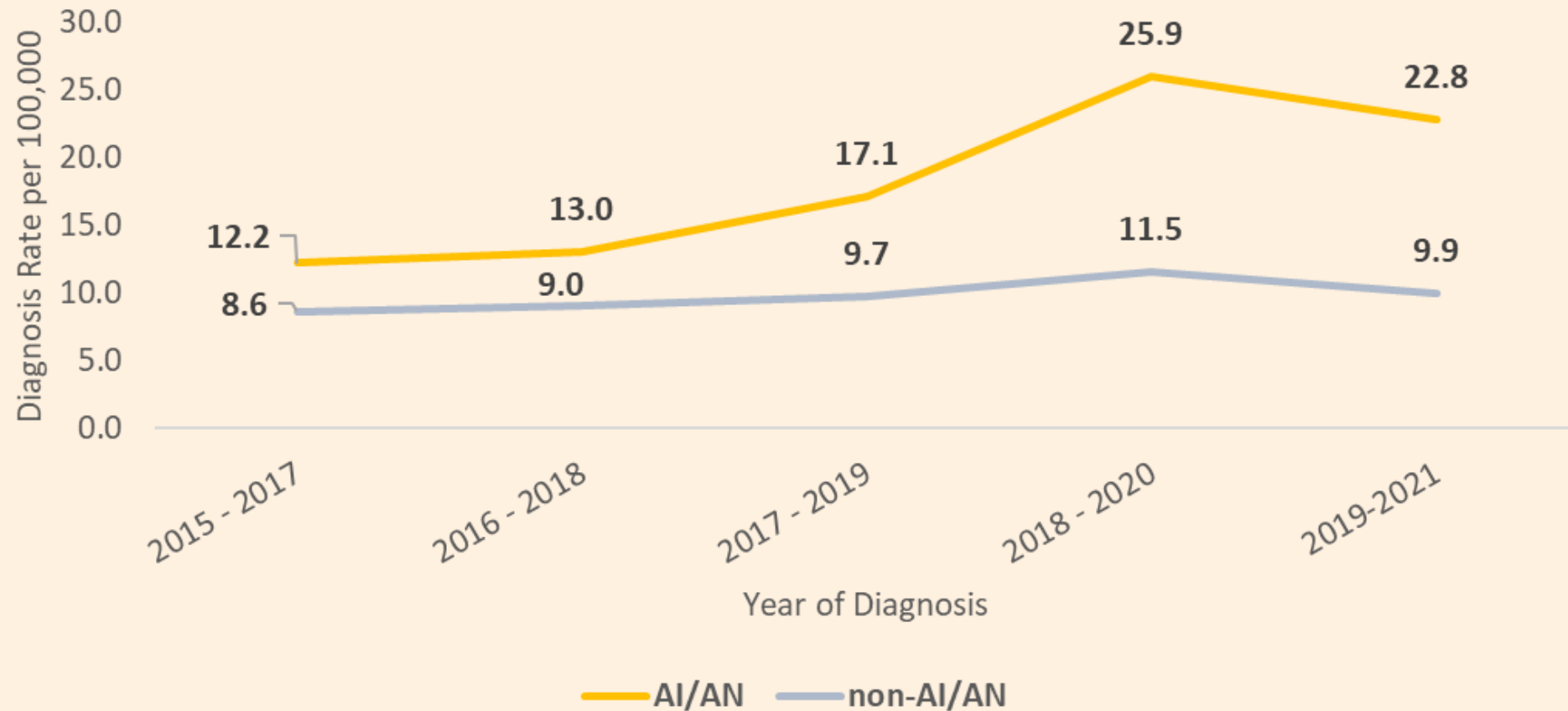
During 2015–2021, we identified a total of 91 P&S cases among AI/AN in Oregon



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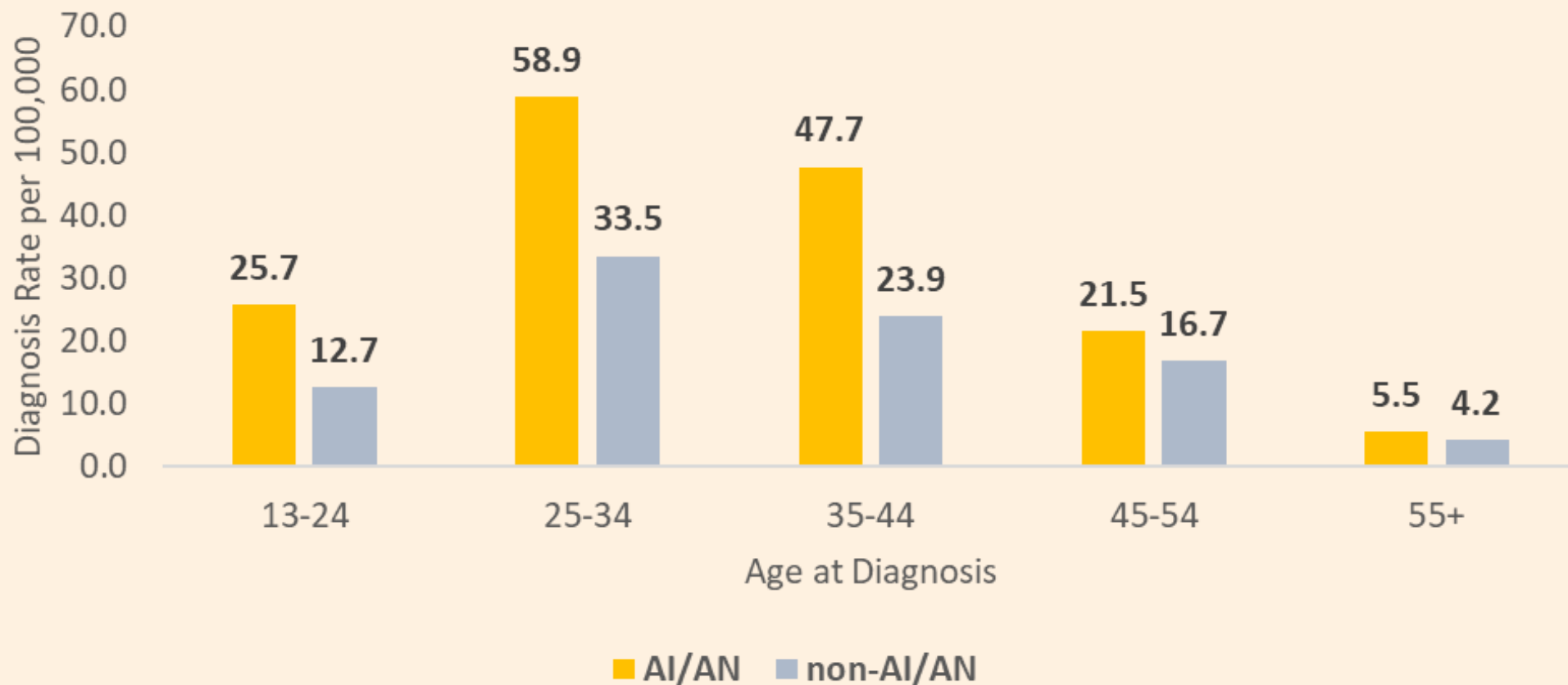


P&S Syphilis Diagnoses, 3-Year Rolling Average Oregon, 2015–2021*



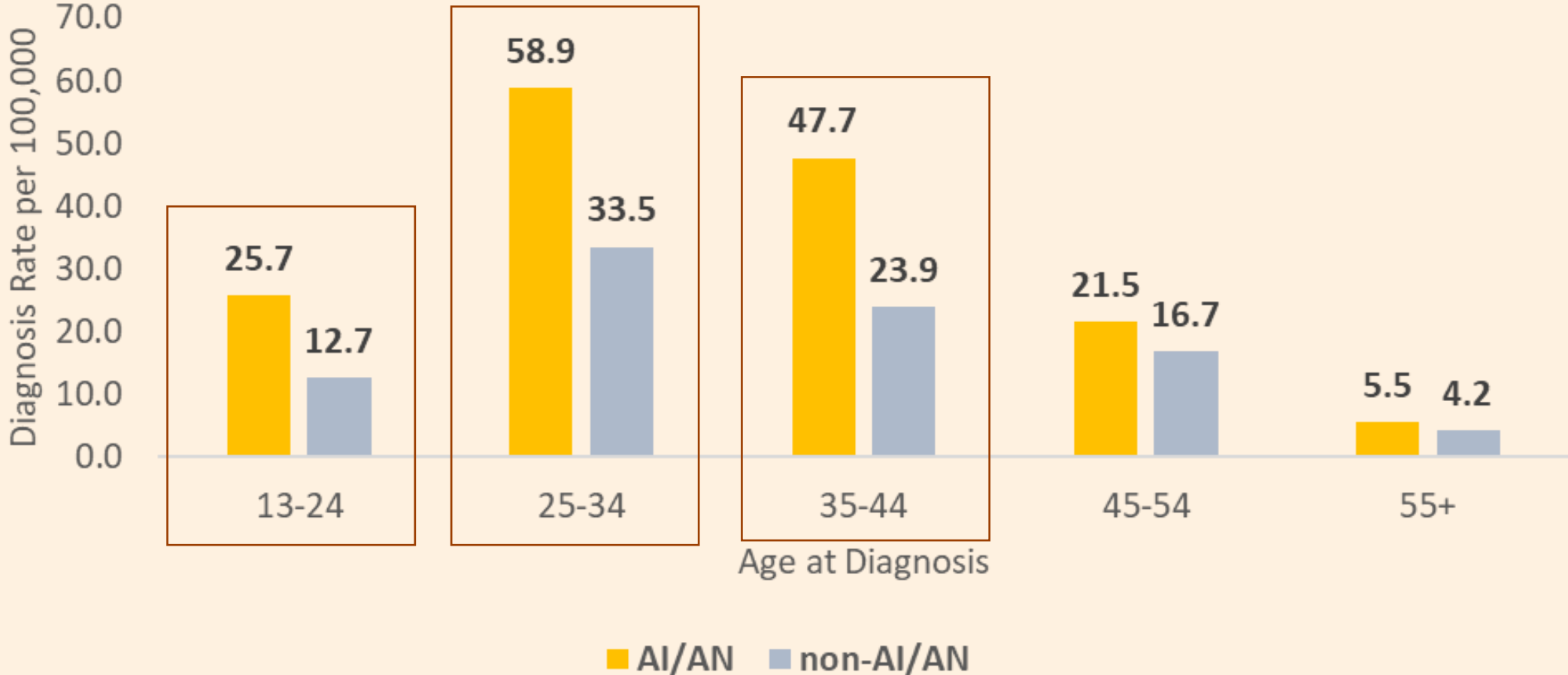
*2021 Data are through April 28th, 2021

P&S Syphilis Diagnoses by Age at Diagnosis Oregon, 2015–2021*



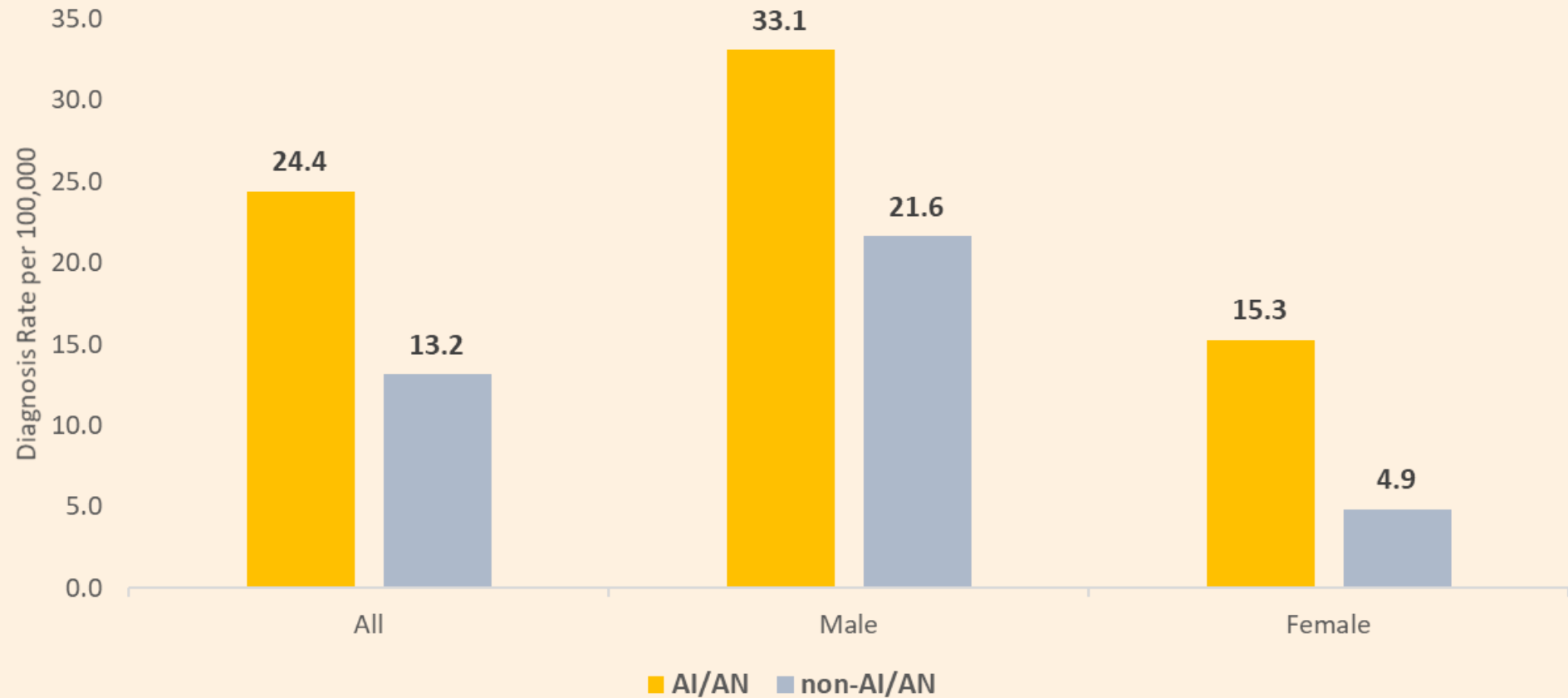
*2021 Data are through April 28th, 2021

The highest P&S syphilis incidences were among AI/AN aged 25–34 years and 35–44 years between 2015–2021*



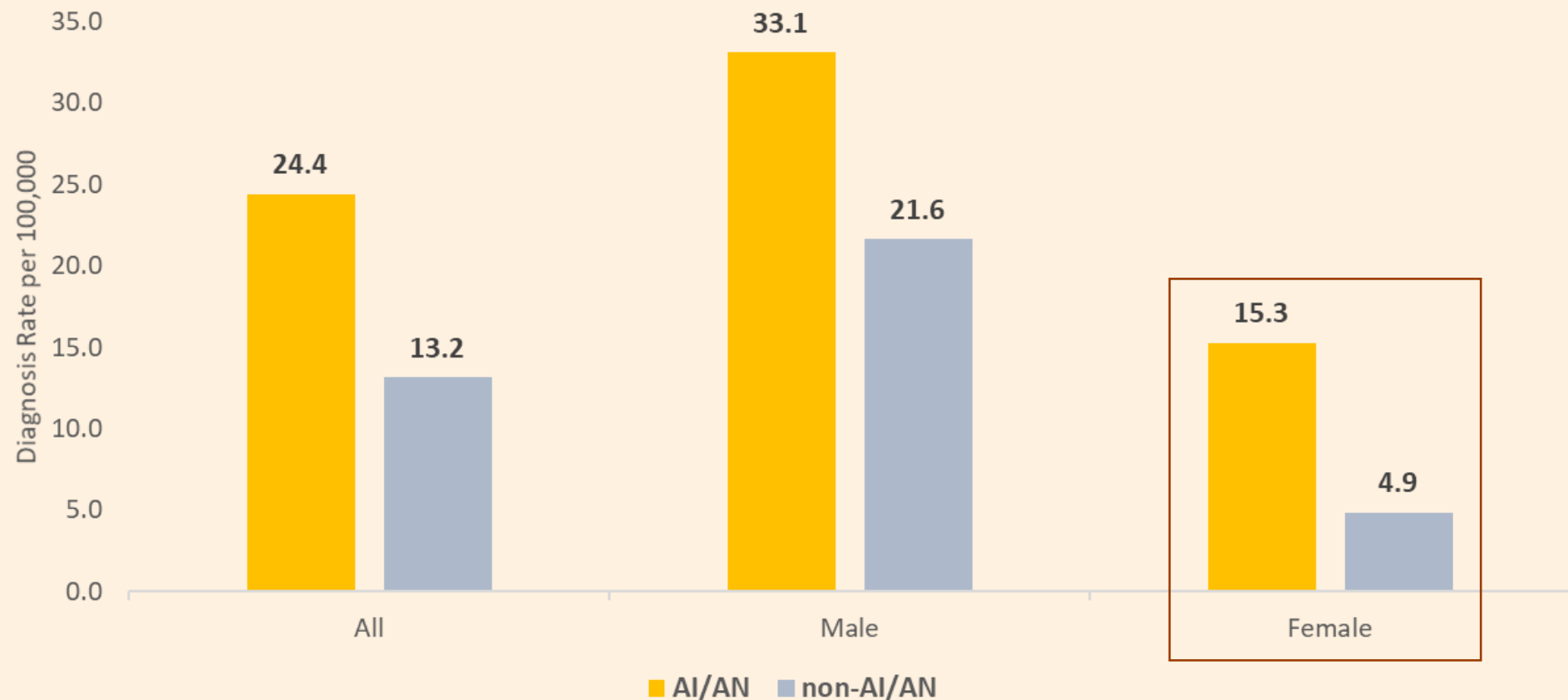
*2021 Data are through April 28th, 2021

P&S Syphilis Diagnoses by Sex at Birth Oregon, 2015–2021*



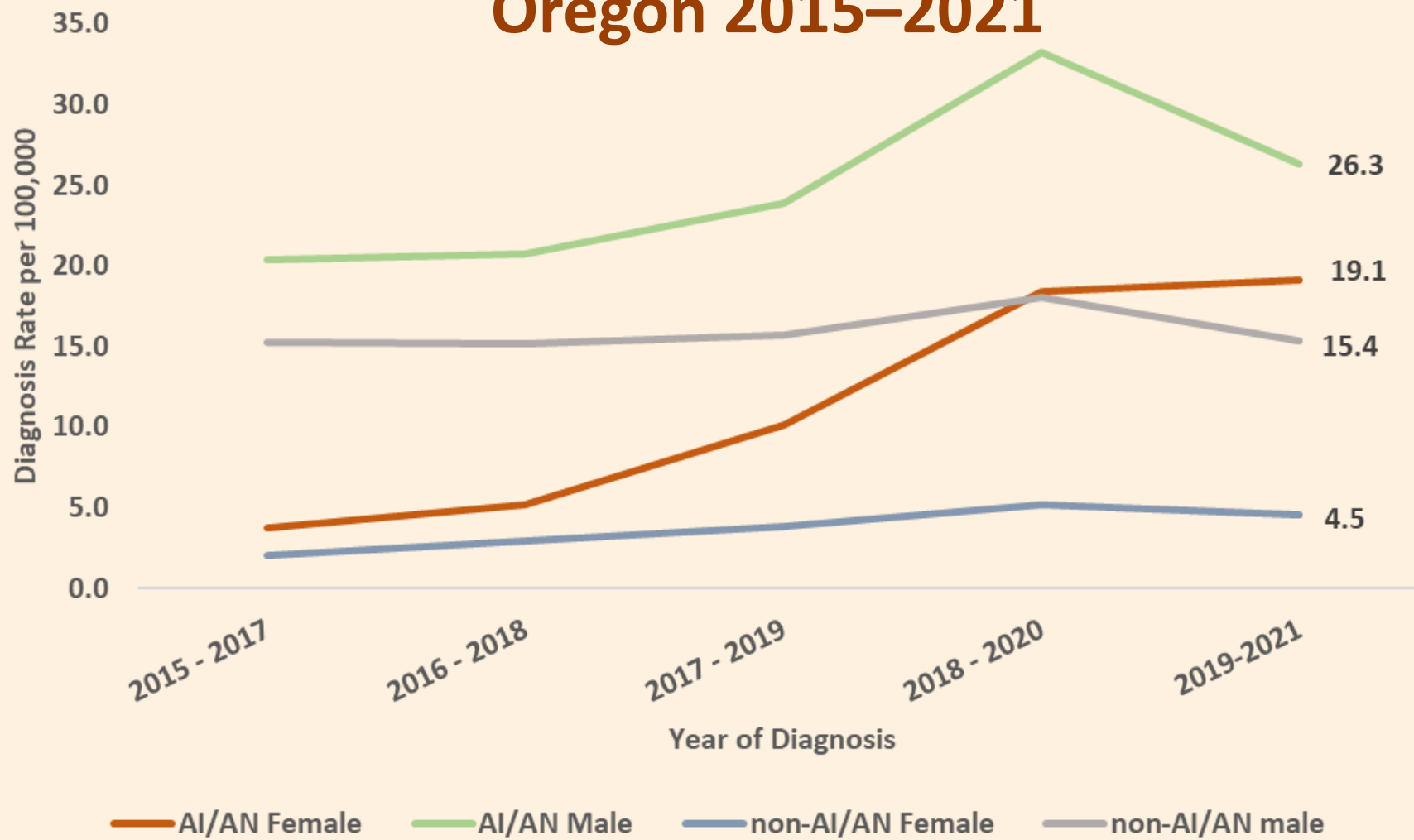
*2021 Data are through April 28th, 2021

P&S syphilis diagnosis rates among AI/AN females were >3x higher than non-AI/AN females during 2015–2021



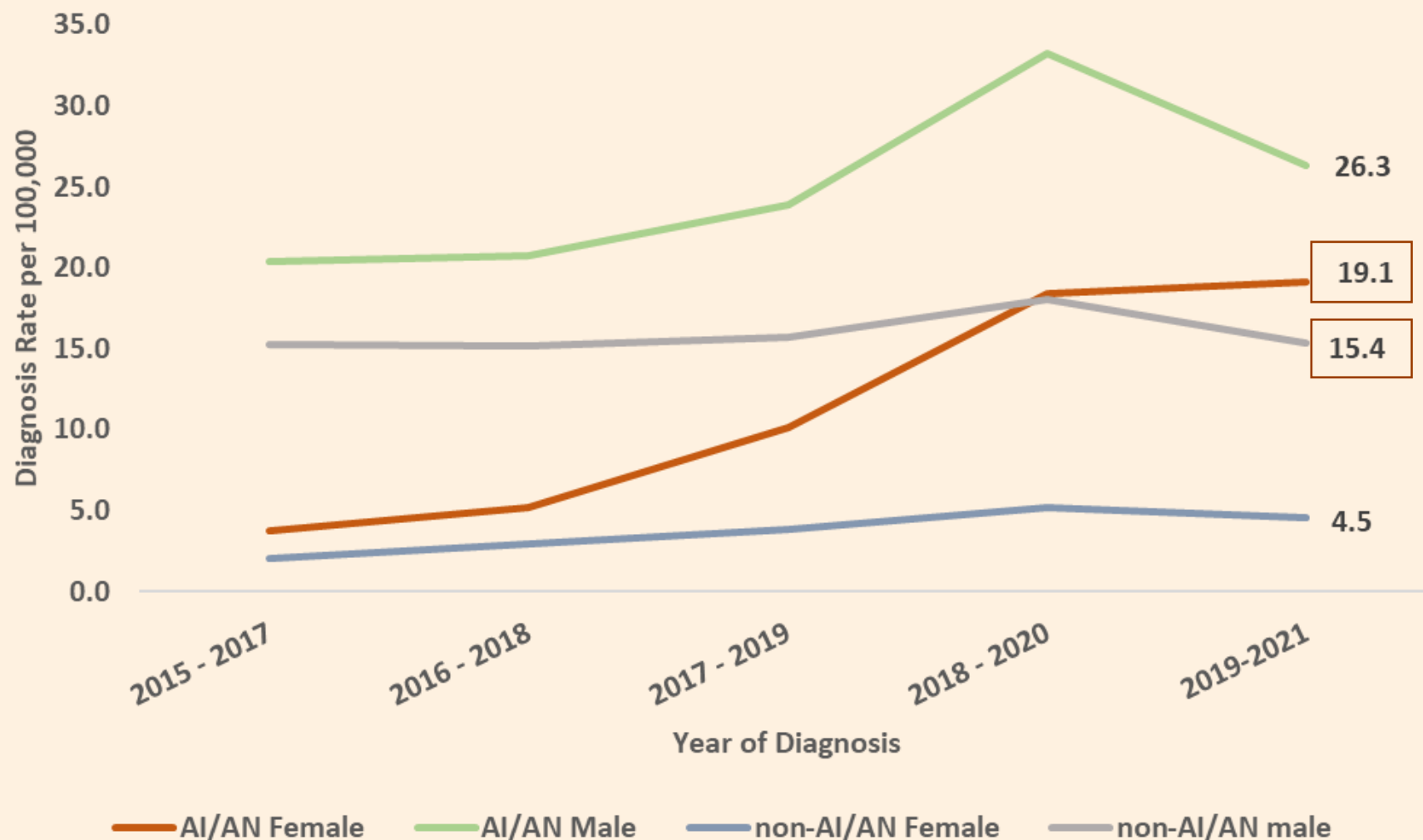
*2021 Data are through April 28th, 2021

P&S Syphilis Diagnoses by Sex at Birth, 3-Year Rolling Average Oregon 2015–2021



*2021 Data are through April 28th, 2021

P&S syphilis diagnosis rates among AI/AN females exceeded non-AI/AN males during 2019–2021*



*2021 Data are through April 28th, 2021



Limitations

Gaps and Limitations

Northwest AI/AN Population

Northwest Tribal Registry

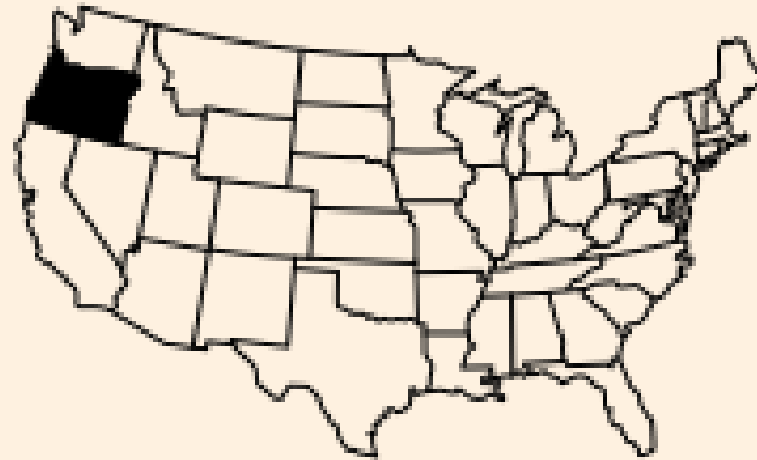
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Urban Indian Health
Indian Health Service

Gaps and Limitations

Northwest AI/AN Population

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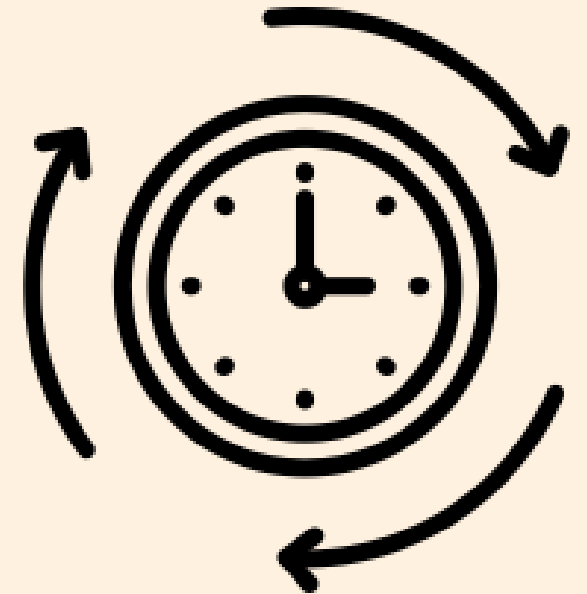
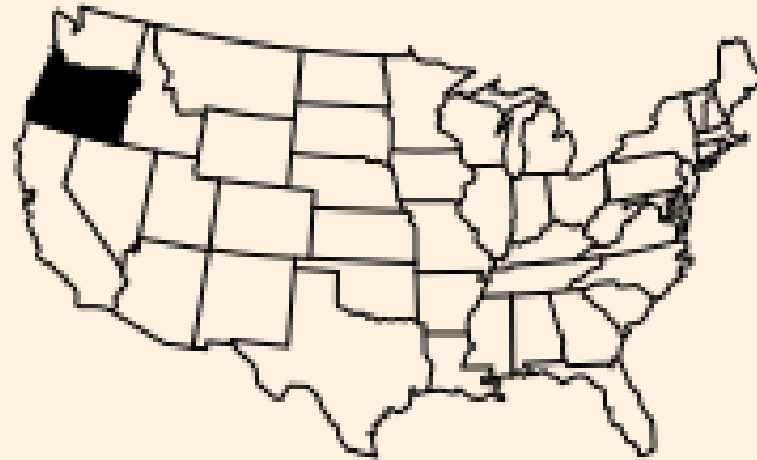


Gaps and Limitations

Northwest AI/AN Population


Northwest Tribal Registry

Tribal Health
Urban Indian Health
Indian Health Service





Summary



Wide disparities in incidence of P&S syphilis diagnoses among AI/AN persons, including females and persons of reproductive age

Prompt action needed to prevent transmission and morbidity



Prevention & control measures

Increased Screening, Diagnosis and Treatment

Culturally guided efforts, particularly for females of childbearing age

Action across Indian Country



You've got questions, we've got answers.

If you are a Native youth and have a 'mind, body or spirit' that a Relative can assist with good medicine...

Action across Indian Country



Questions, w
Answers.

have a 'mind, body or spi
can assist with good medic

Next Steps...

- **Ongoing partnership with Oregon Health Authority for development of tribal-specific early intervention and disease intervention programming**
- **Increased provider awareness and education on syphilis in Indian Country**
- **Facility assessments at IHS and tribal health clinics**





Acknowledgements

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Congenital syphilis (CS)



Vertical transmission is highest with early stages of maternal syphilis, specifically secondary syphilis.



Syphilis during pregnancy is associated with

- Miscarriage
- Stillbirth
- Preterm delivery
- Perinatal death
- Congenital infection





Timely diagnosis and treatment of maternal syphilis can **prevent** congenital syphilis.

**Timely = initiated at least 30 days before delivery*