

# Rise in Syphilis and Congenital Syphilis (CS) Cases in Ohio

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# Presentation Outline

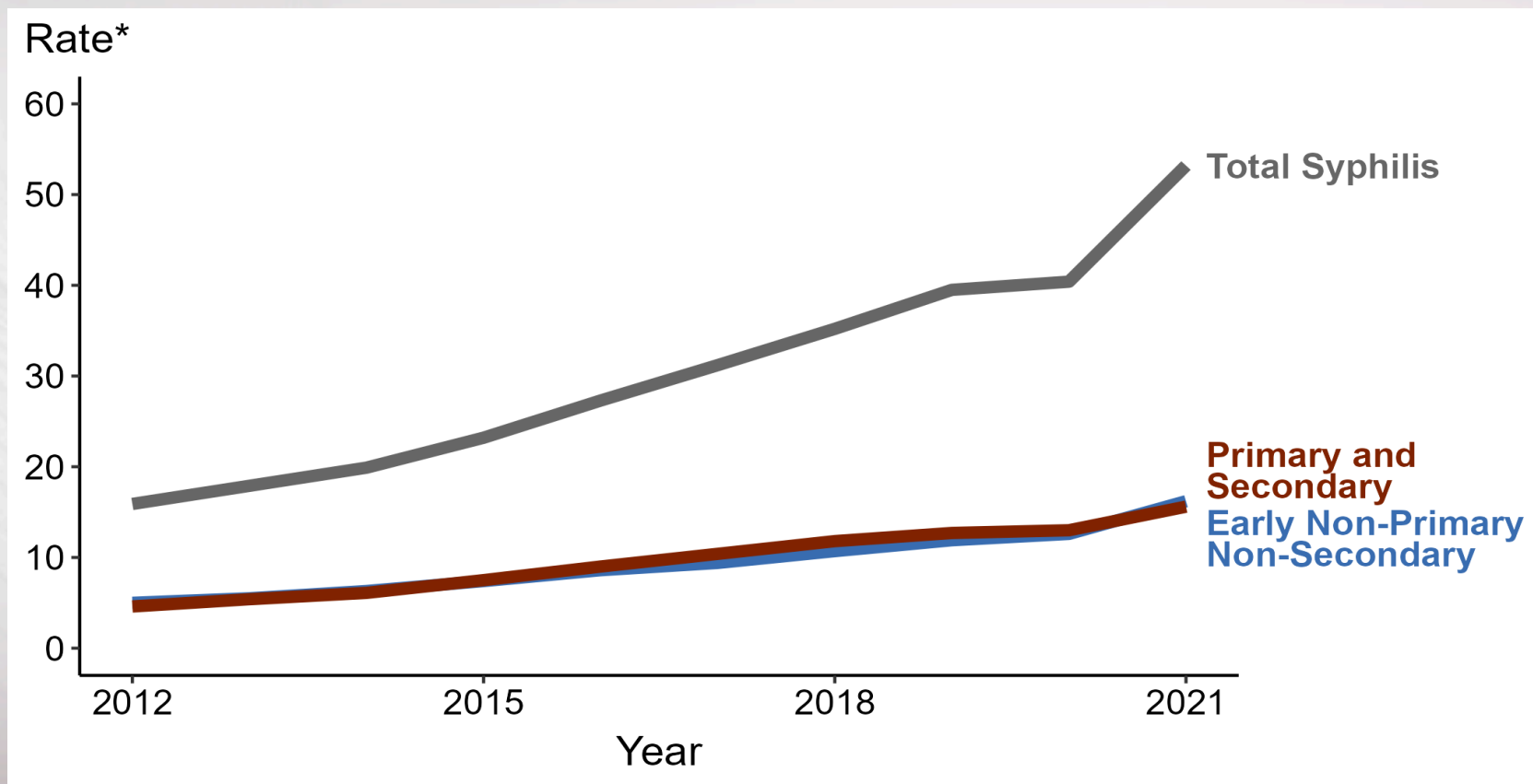
- Syphilis cases increasing in United States.
  - CDC notes on impact of COVID-19 pandemic on Sexually Transmitted Infections (STI).
- Total syphilis cases and rates in Ohio.
  - Demographic characteristics.
  - HIV co-infection.
  - Indications of substance use.
- Focus Populations:
  - Women of reproductive age [Ages: 14-44].
  - Congenital Syphilis (CS).

# COVID-19 Impact on STI's

Per CDC's Division of STD Prevention:

- "The impact of the COVID-19 pandemic on STD surveillance data was most acute in March and April 2020, when the number of reported STDs rapidly fell during initial shelter-in-place orders. Although case counts for gonorrhea and primary and secondary (P&S) syphilis dropped below 2019 levels during March and April 2020, cases of both STDs surged the rest of the year."
- "The impact of these disruptions likely continued in 2021 and, as a result, STD surveillance data collected during 2020 and 2021 and presented in Sexually Transmitted Disease Surveillance, 2021, should be interpreted cautiously."

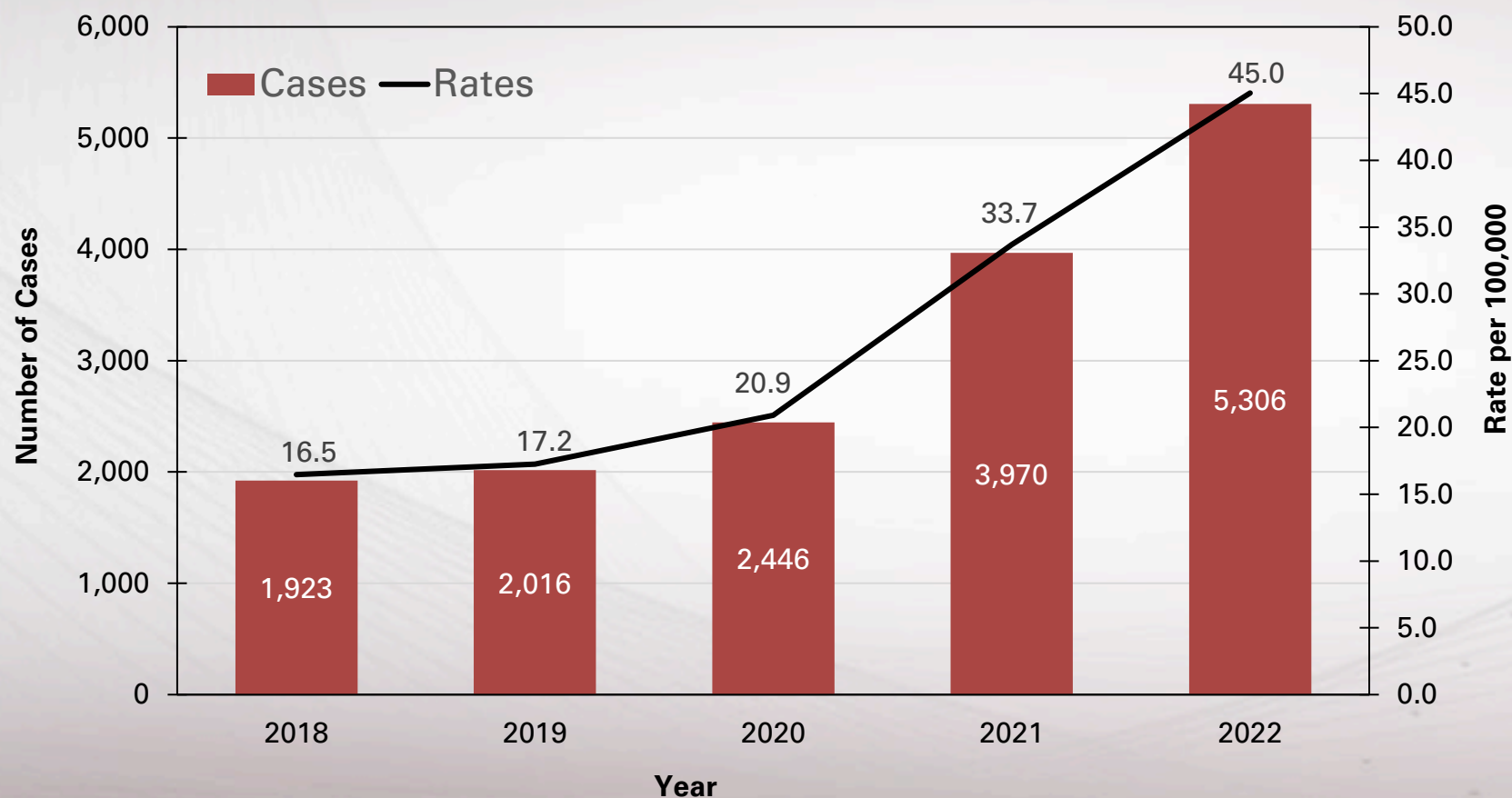
# Syphilis — Rates of Reported Cases by Stage of Infection, United States, 2012–2021



\* Rates are per 100,000 population.

Graph Source: CDC, National Center for HIV, STD, Viral Hepatitis and TB.  
Accessed 8-2-2023.

# Trends in Total Syphilis Cases Reported and Rates, Ohio, 2018-2022

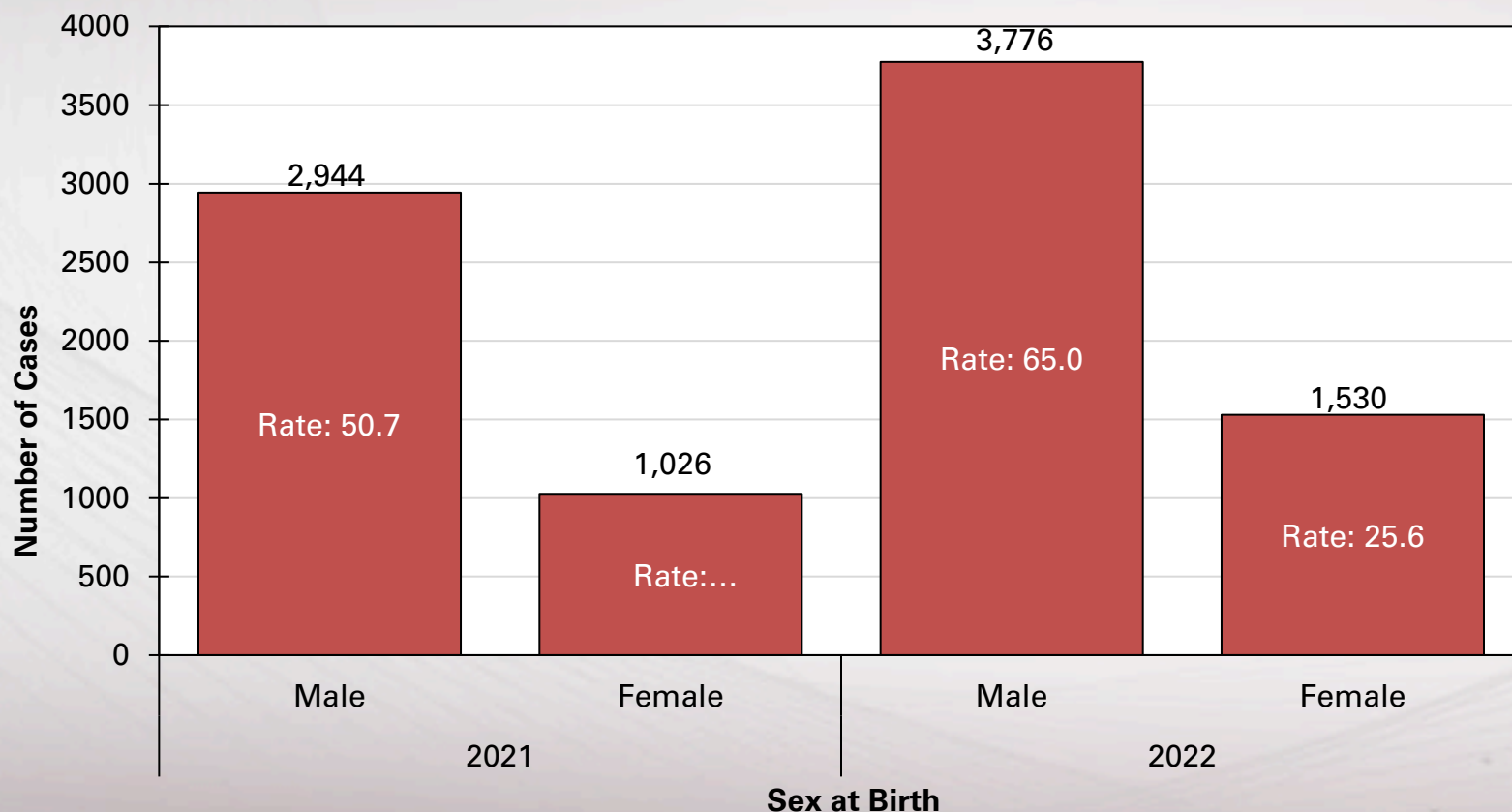


Data Source: Ohio Department of Health, Ohio Disease Reporting System (ODRS), STI Surveillance Program. Data reported through August 4, 2023.



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# Total Syphilis Cases Reported and Rates by Sex, Ohio, 2021-2022



Rates are per 100,000 population.

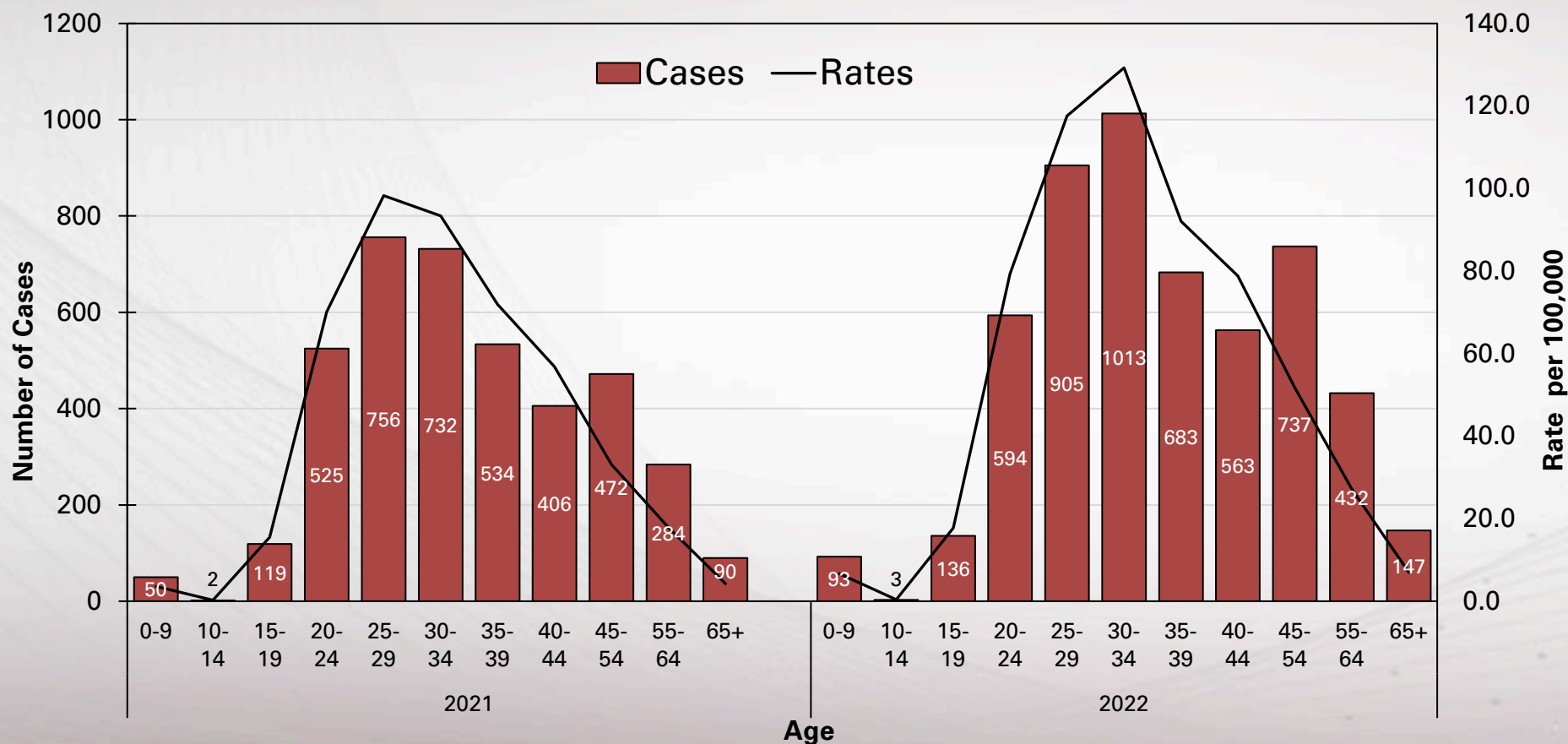
Data Source: Ohio Department of Health, Ohio Disease Reporting System (ODRS), STI Surveillance Program. Data reported through August 4, 2023.



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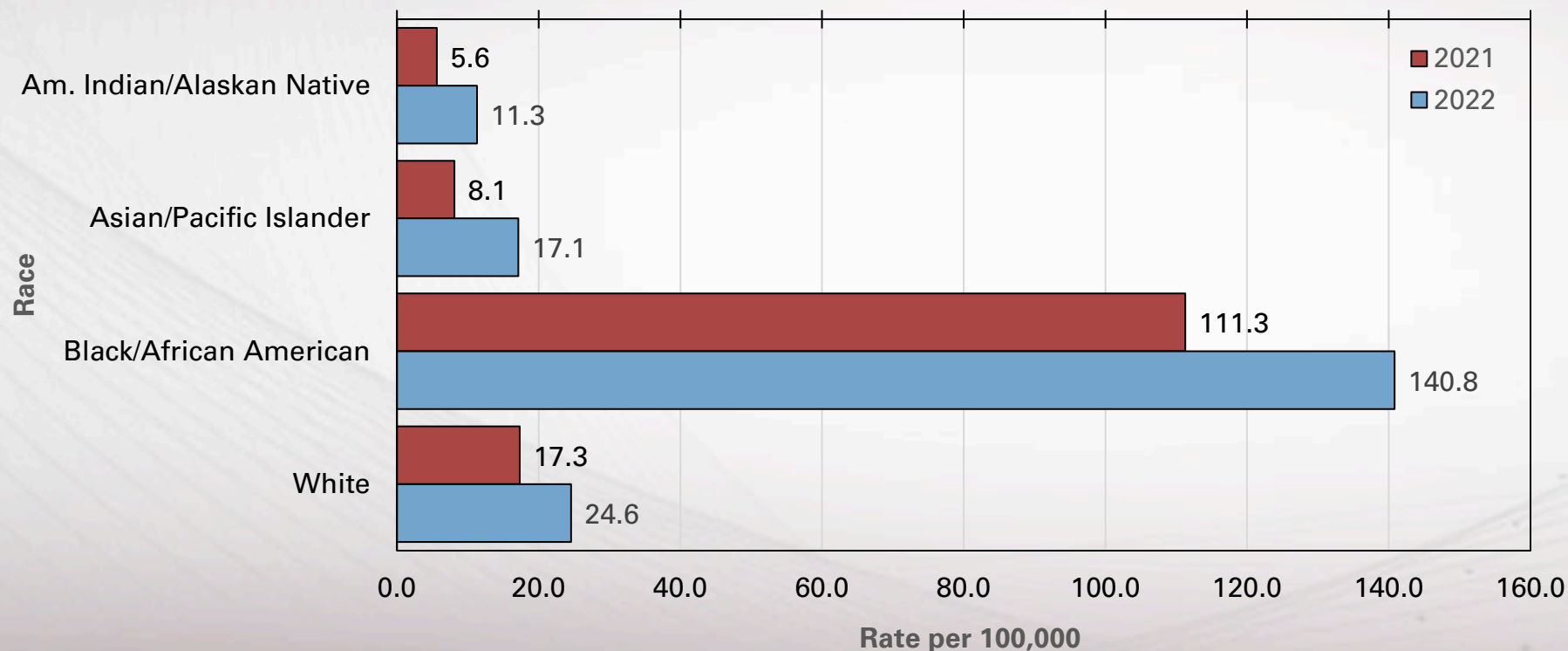


# Total Syphilis Cases Reported and Rates by Age Group, Ohio, 2021-2022



Data Source: Ohio Department of Health, Ohio Disease Reporting System (ODRS), STI Surveillance Program. Data reported through August 4, 2023.

# Total Syphilis Rates by Race, Ohio, 2021-2022



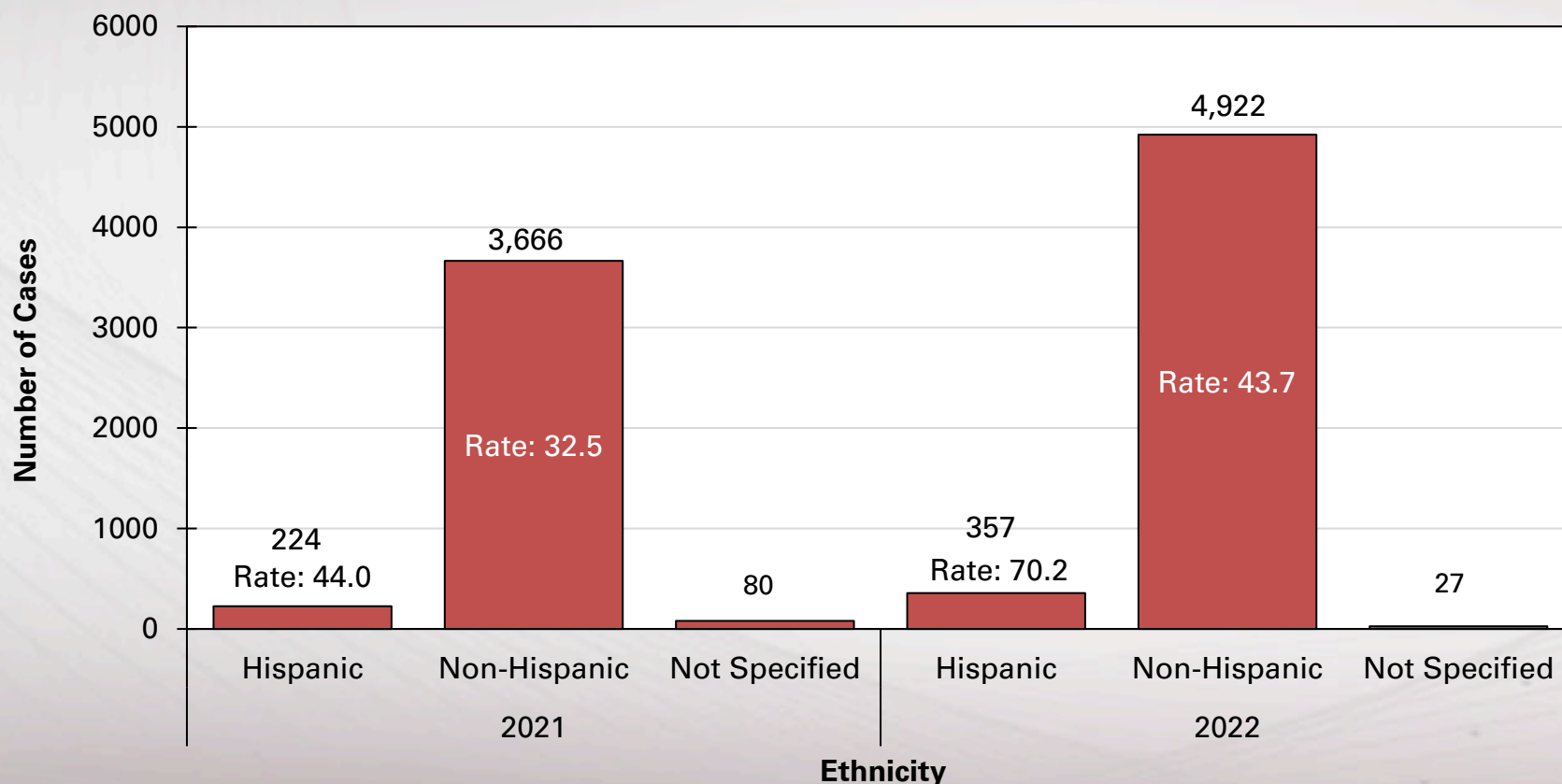
Data Source: Ohio Department of Health, Ohio Disease Reporting System (ODRS), STI Surveillance Program. Data reported through August 4, 2023.



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# Total Syphilis Cases Reported and Rates by Ethnicity, Ohio, 2021-2022



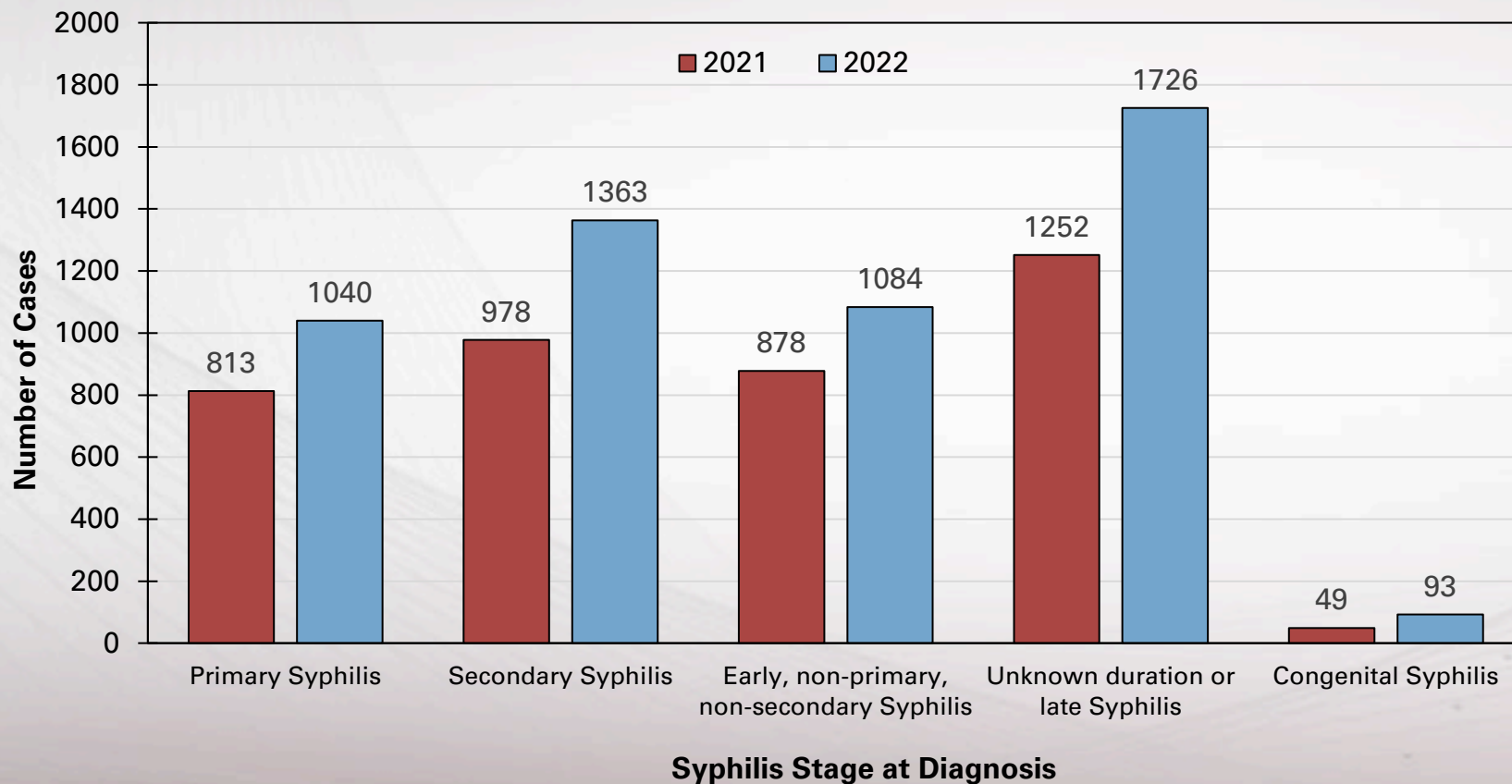
Rates are per 100,000 population.

Data Source: Ohio Department of Health, Ohio Disease Reporting System (ODRS), STI Surveillance Program. Data reported through August 4, 2023.



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# Syphilis Stage at Diagnosis, Ohio, 2021-2022

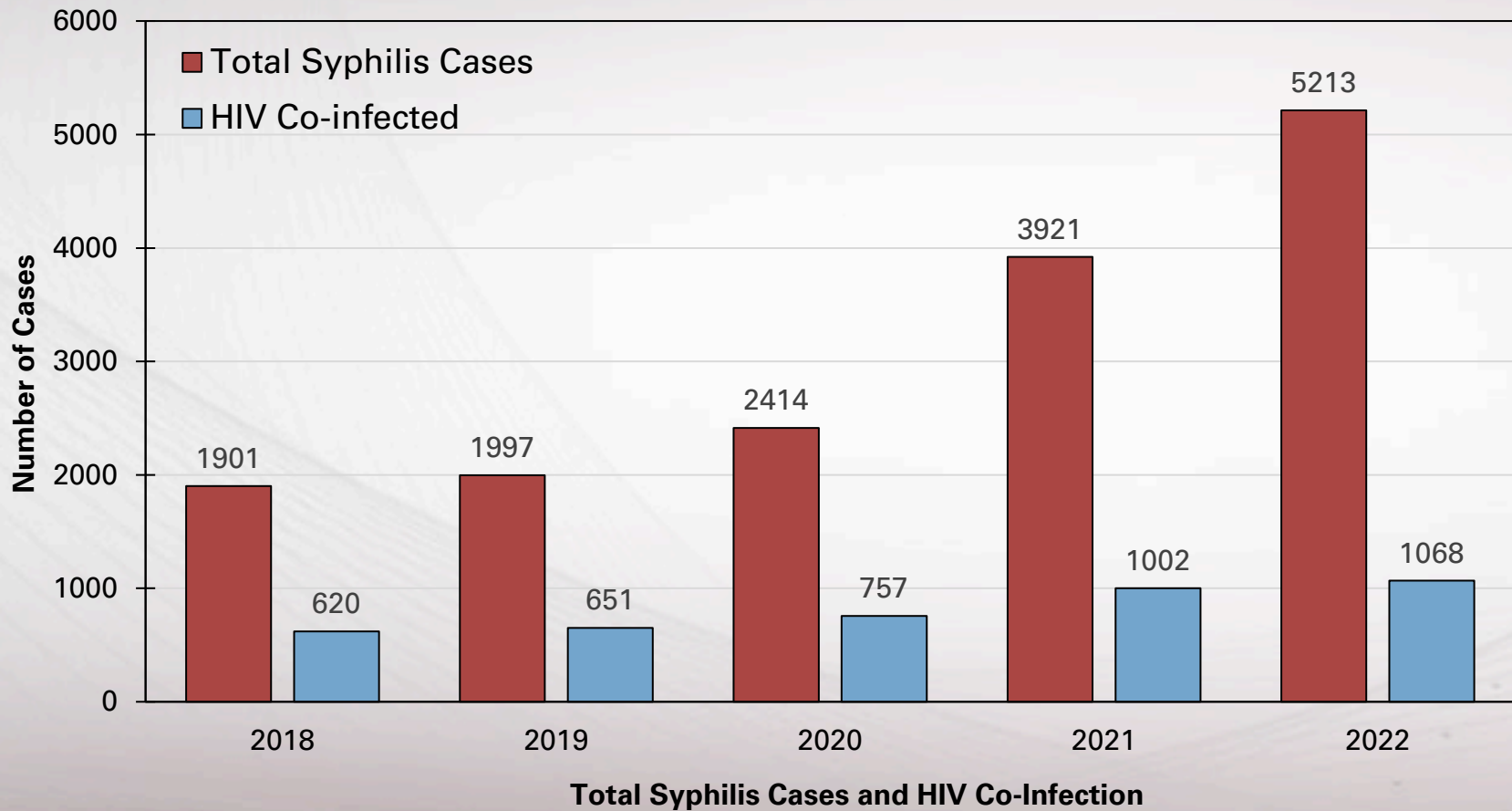


Data Source: Ohio Department of Health, Ohio Disease Reporting System (ODRS), STI Surveillance Program. Data reported through August 4, 2023.

# Total Syphilis and Co-occurring Conditions

- HIV co-infection.
- Substance use.

# Total Syphilis Cases and Co-infection with HIV, Ohio, 2018-2022



Excludes Congenital Syphilis (CS) cases.

HIV Co-infection obtained from local Disease Intervention Specialists (DIS) partner services interviews.

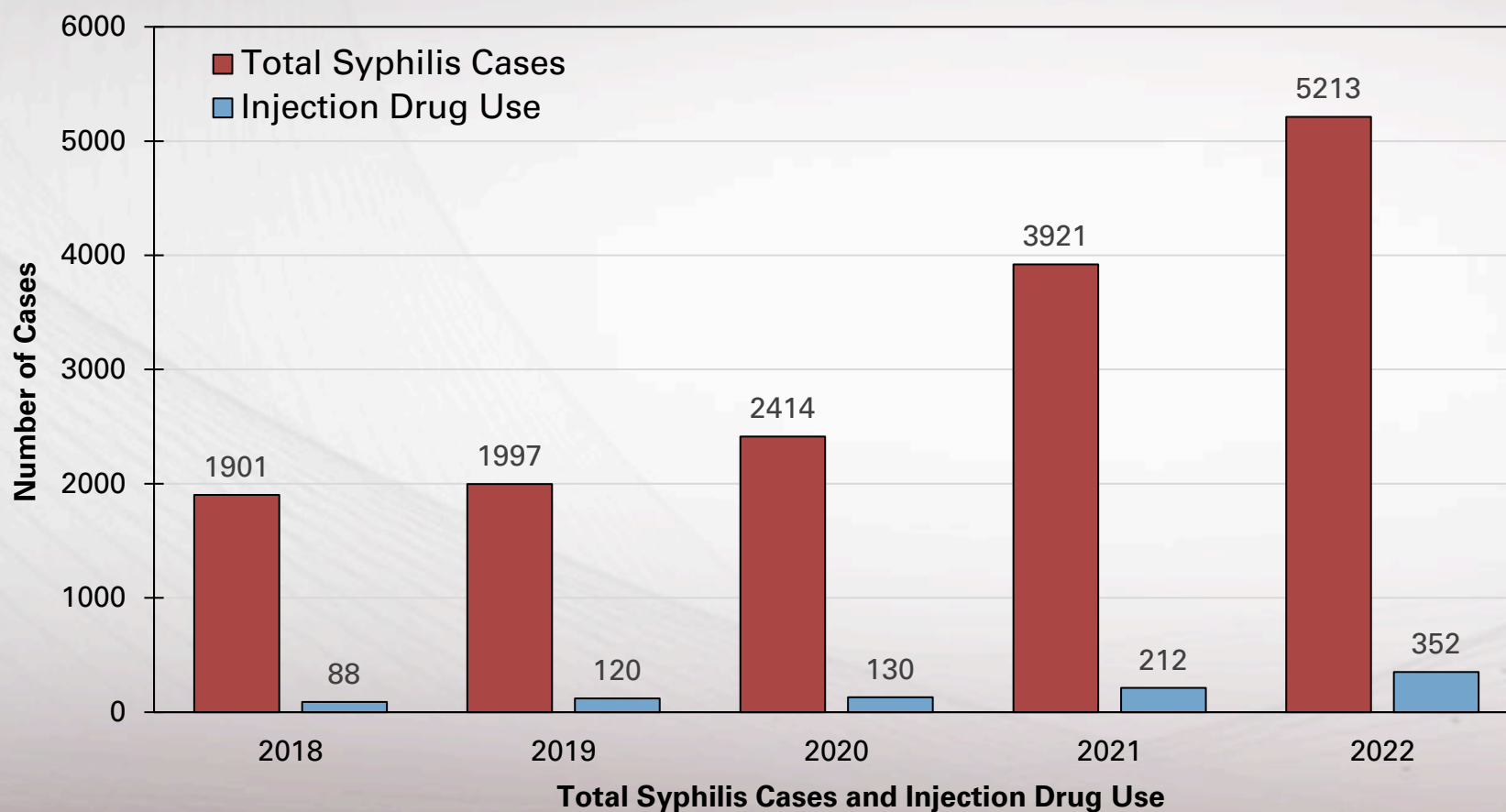
Data Source: Ohio Department of Health, Ohio Disease Reporting System (ODRS),  
STI Surveillance Program.

Data reported through August 4, 2023.



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# Total Syphilis Cases and Injection Drug Use (IDU), Ohio, 2018-2022



Excludes Congenital Syphilis (CS) cases.

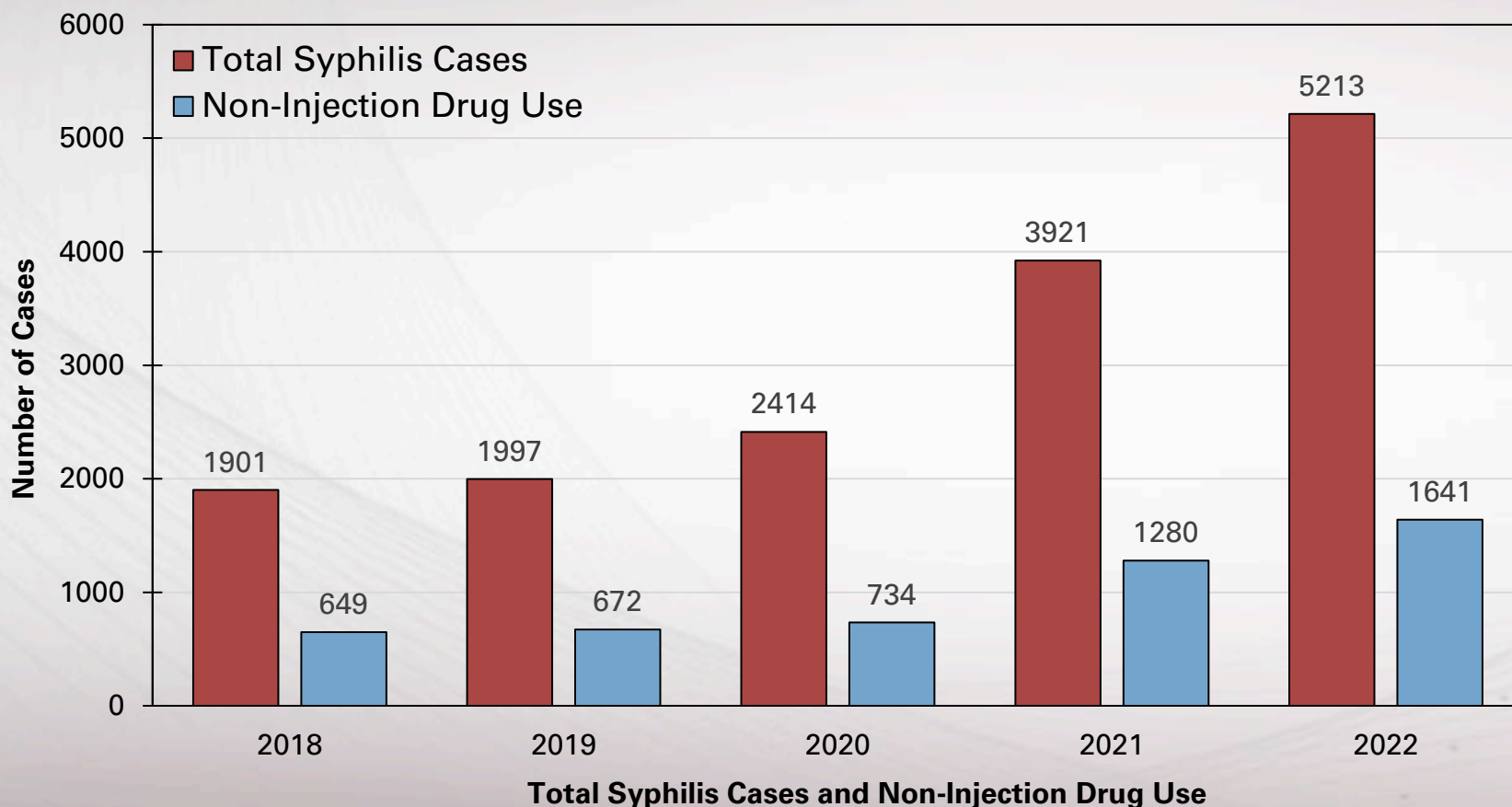
HIV Co-infection obtained from local Disease Intervention Specialists (DIS) partner services interviews.

Data Source: Ohio Department of Health, Ohio Disease Reporting System (ODRS),

STI Surveillance Program.

Data reported through August 4, 2023.

# Total Syphilis Cases and Non-Injection Drug Use (non-IDU), Ohio, 2018-2022



Excludes Congenital Syphilis Cases.

Non-Injection Drug Use obtained from local Disease Intervention Specialists (DIS) partner services interviews.

Data Source: Ohio Department of Health, Ohio Disease Reporting System (ODRS), STI Surveillance Program.

Data reported through August 4, 2023

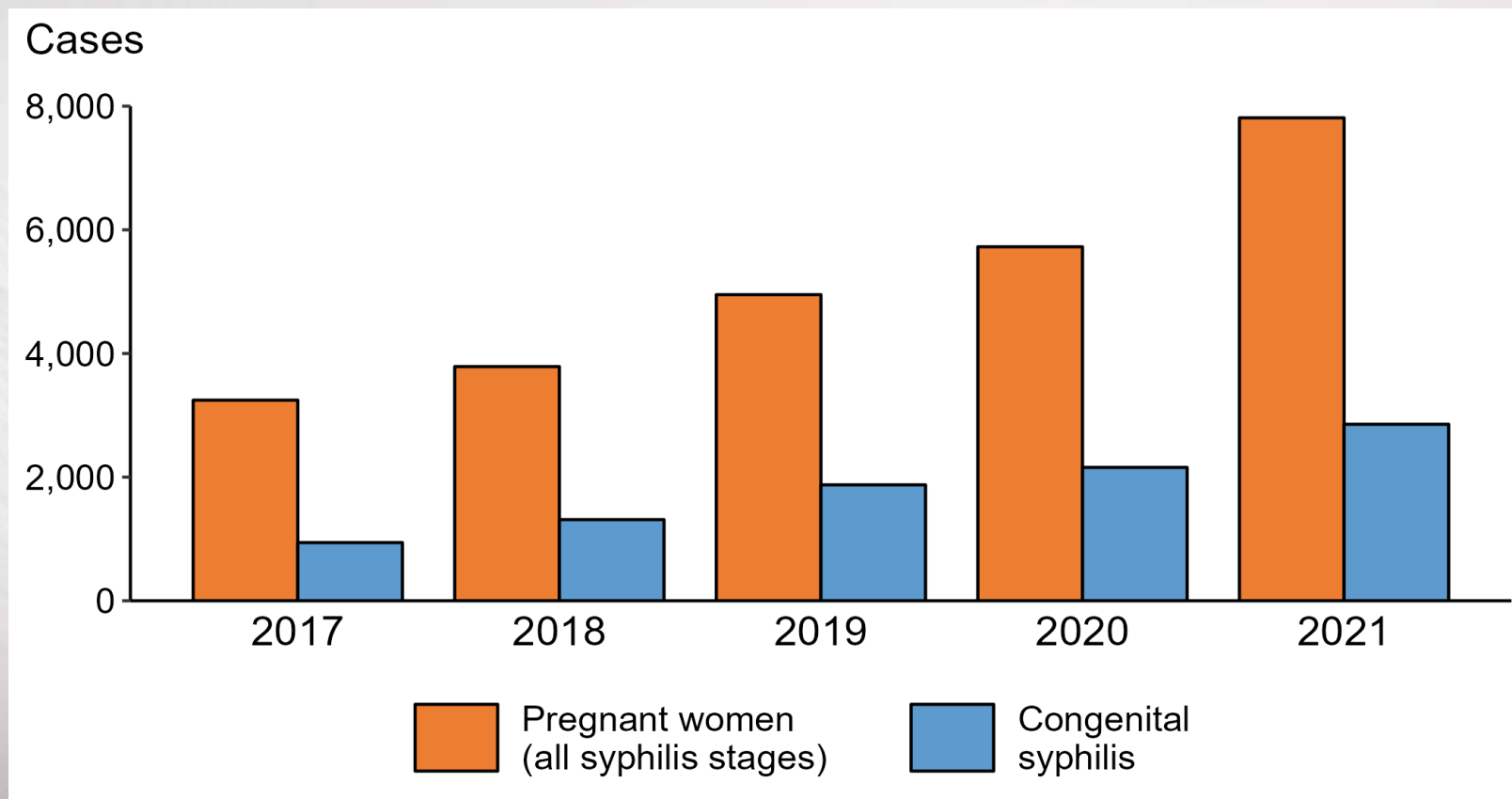


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# **Syphilis in Women of Reproductive Age (WRA) [Ages 14-44]**

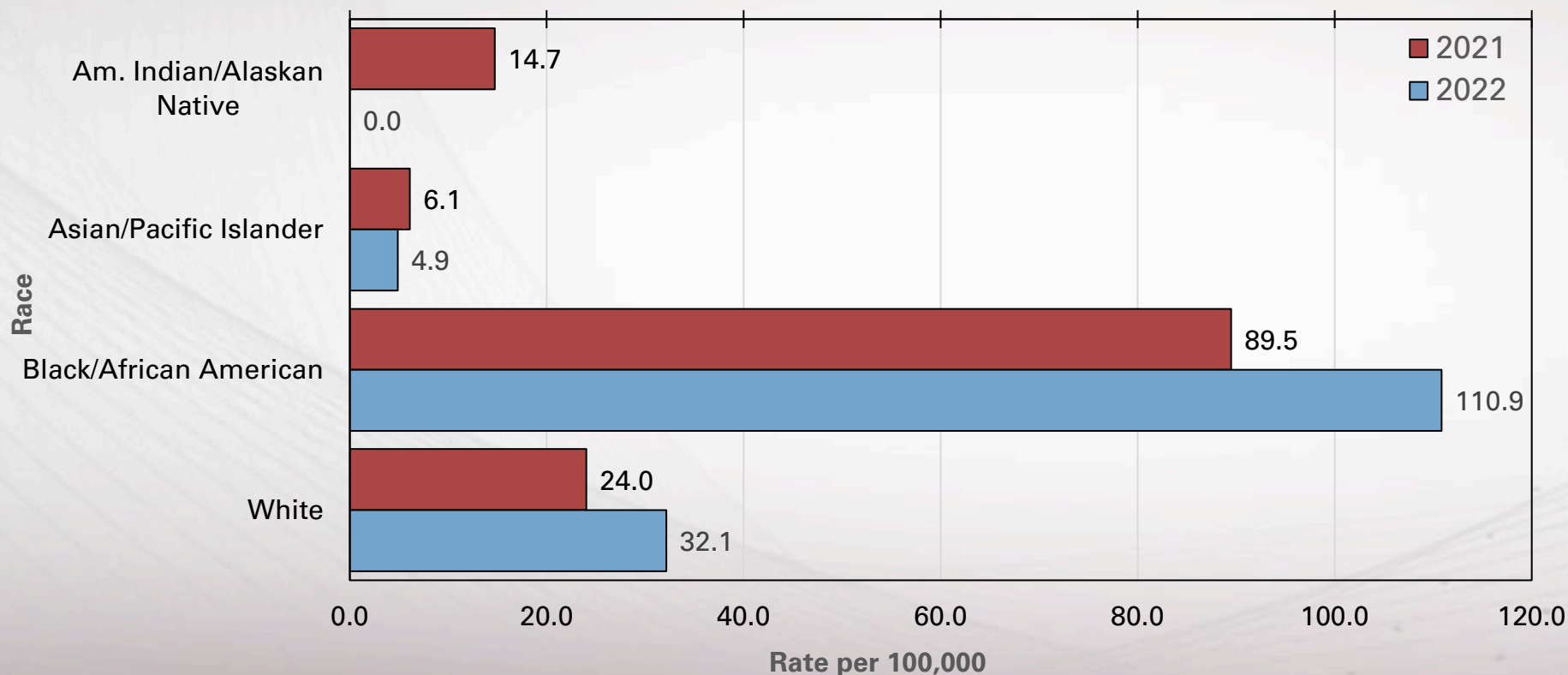
# Reported Cases of Syphilis (All Stages) among Pregnant Women and Reported Cases of Congenital Syphilis by Year of Birth, United States, 2017–2021



Note: The percentage of U.S. cases missing information on pregnancy status decreased from 14% in 2017 to 9.3% in 2021.

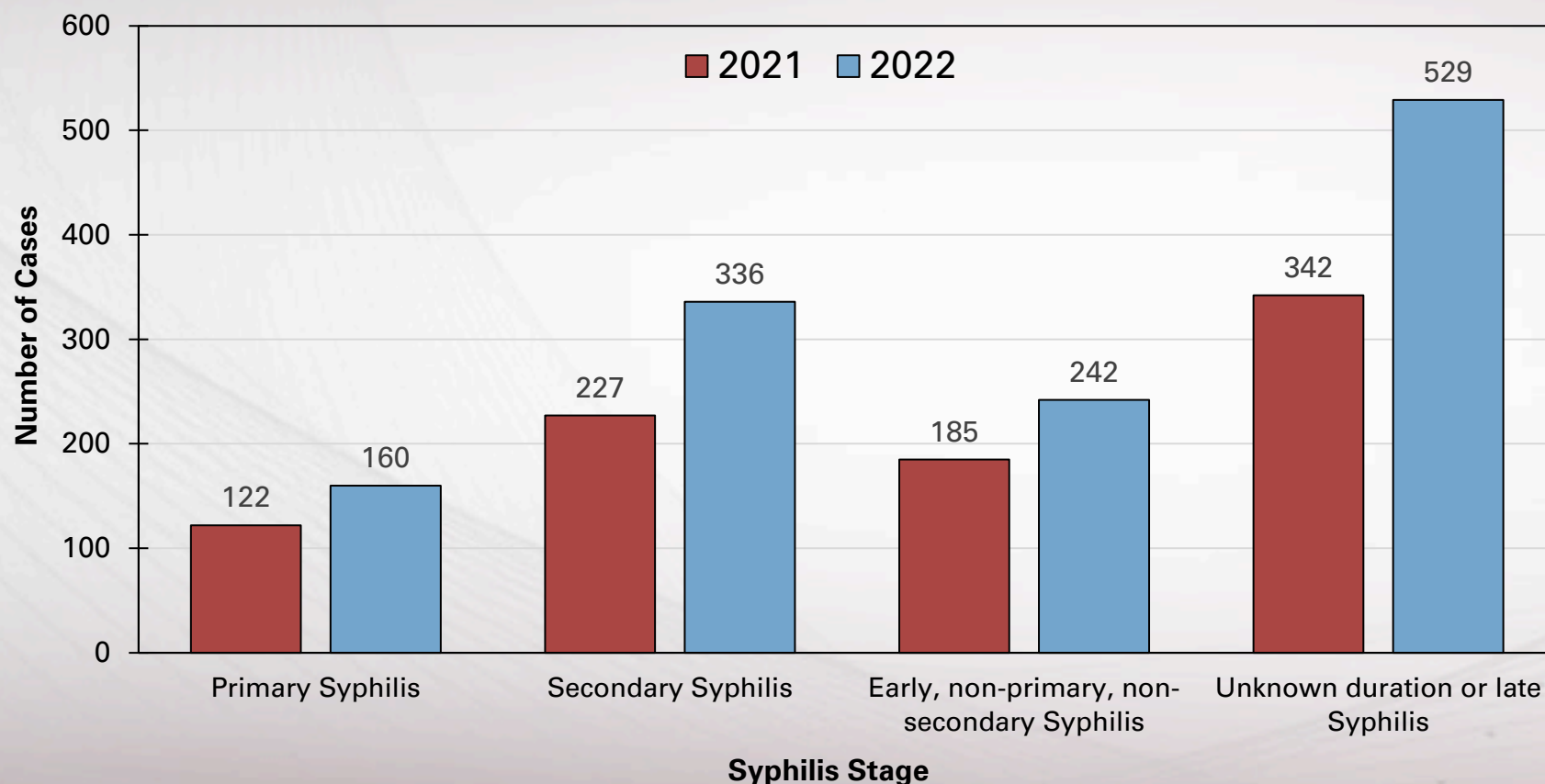
Graph Source: CDC, National Center for HIV, STD, Viral Hepatitis and TB. Accessed 8-2-2023.

# Total Syphilis Rates for Women of Reproductive Age [14-44] by Race, Ohio, 2021-2022



Data Source: Ohio Department of Health, Ohio Disease Reporting System (ODRS), STI Surveillance Program. Data reported through August 4, 2023.

# Syphilis Stage at Diagnosis for Women of Reproductive Age [14-44], Ohio, 2021-2022



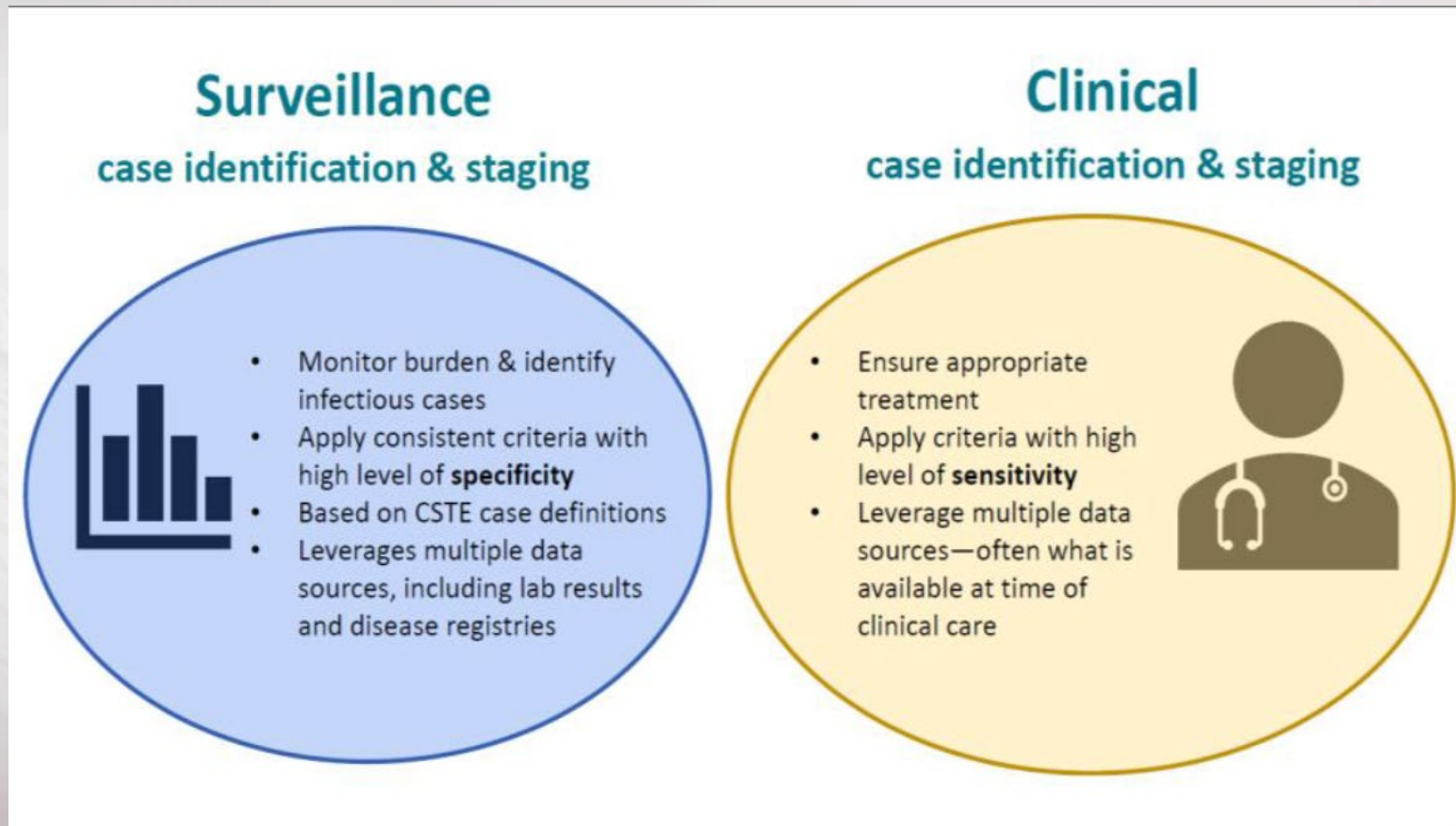
Data Source: Ohio Department of Health, Ohio Disease Reporting System (ODRS), STI Surveillance Program. Data reported through August 4, 2023.



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# **Congenital Syphilis (CS)**

# Congenital Syphilis (CS) Case Definition





# Congenital Syphilis (CS) Public Health Surveillance Case Definitions

## Probable:

- A condition affecting an infant whose mother had untreated or inadequately treated\* syphilis at delivery, regardless of signs in the infant, OR an infant or child who has a reactive non-treponemal test for syphilis (VDRL, RPR, or equivalent serologic methods) AND any one of the following:
  - Any evidence of congenital syphilis on physical examination.
  - Any evidence of congenital syphilis on radiographs of long bones.
  - A reactive CSF VDRL test.
  - In a non-traumatic lumbar puncture, an elevated CSF leukocyte (white blood cell [WBC]) count or protein (without other cause).

# Congenital Syphilis (CS) Public Health Surveillance Case Definitions

## **Probable** continued :

- Suggested parameters for abnormal CSF WBC and protein values:
  - During the first 30 days of life, a CSF WBC count of  $>15$  WBC/mm<sup>3</sup> or a CSF protein  $>120$  mg/dL is abnormal.
  - After the first 30 days of life, a CSF WBC count of  $>5$  WBC mm<sup>3</sup> or a CSF protein  $>40$  mg/dL, regardless of CSF serology.

*\*Adequate treatment is defined as completion of a penicillin-based regimen, in accordance with CDC treatment guidelines, appropriate for stage of infection, initiated 30 or more days before delivery.*

**Confirmed:** A case that is laboratory confirmed.

# 2012

**Rate\***

- 0
- 1-7
- 8-15
- 16-30
- 31-232
- Unavailable

Alaska

Hawaii

American Samoa

Commonwealth of the Northern Mariana Islands

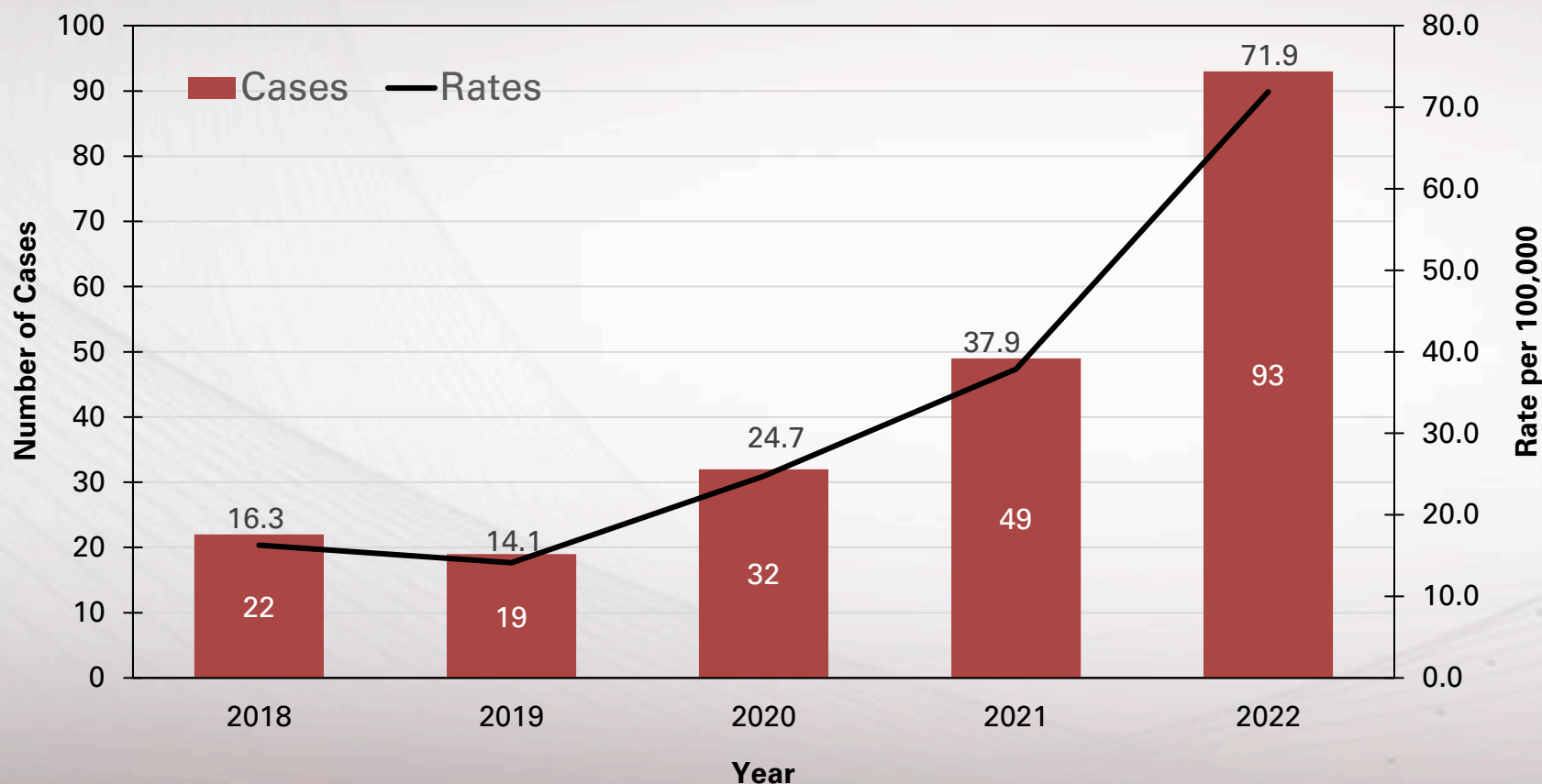
Guam

Puerto Rico

US Virgin Islands

Map Source: CDC, National Center for HIV, STD, Viral Hepatitis and TB. Accessed 8-2-2023.

# Trends in Congenital Syphilis Cases Reported and Rates, Ohio, 2018-2022



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# Maternal Syphilis & Medical Visits, Ohio, 2021-2022

	2021		2022	
Prenatal Care	N	% Total	N	% Total
No	25	51.0%	34	37.0%
Yes	23	47.0%	59	63.0%
Unknown	1	2.0%	0	0.0%
<b>Total</b>	<b>49</b>		<b>93</b>	

	2021		2022	
Tested at 28-32 Weeks	N	% Total	N	% Total
No	33	67.0%	<b>72</b>	<b>77.0%</b>
Yes	16	33.0%	21	23.0%
<b>Total</b>	<b>49</b>		<b>93</b>	

Data Source: Ohio Department of Health, Ohio Disease Reporting System (ODRS), STI Surveillance Program. Data reported through August 4, 2023.



# Questions?





# Contact Information

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