Tuberculosis and Syphilis in Clark County, NV

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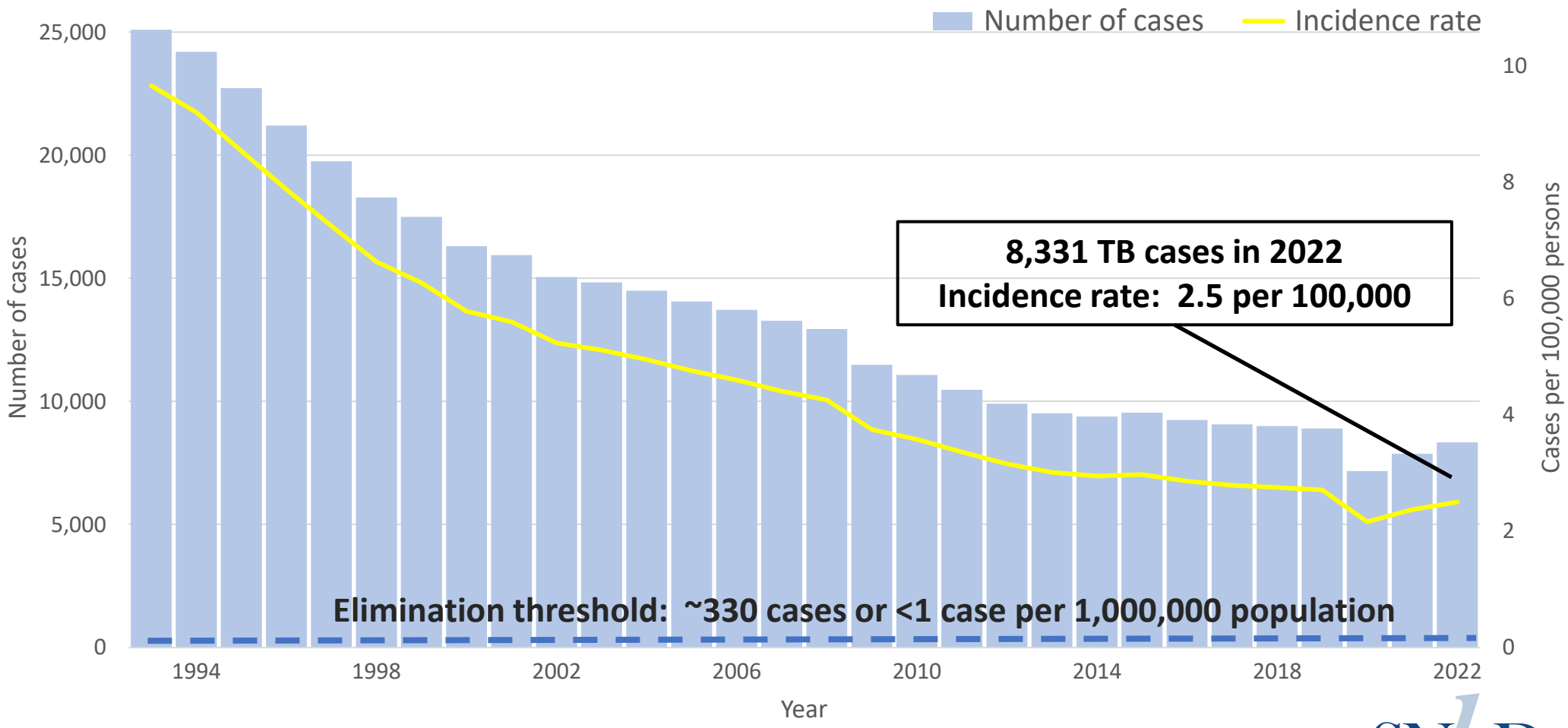
Southern Nevada Health District

TB Cases and Incidence Rates, United States, 1993–2022



*Source: Centers for Disease Control and Prevention. Tubeculosis (TB) in the United States 1993-2022 Slide Set. Atlanta: U.S. Department of Health and Human Services; July 2023. Available at https://www.cdc.gov/tb/statistics/surv/surv2022/default.htm

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Tuberculosis

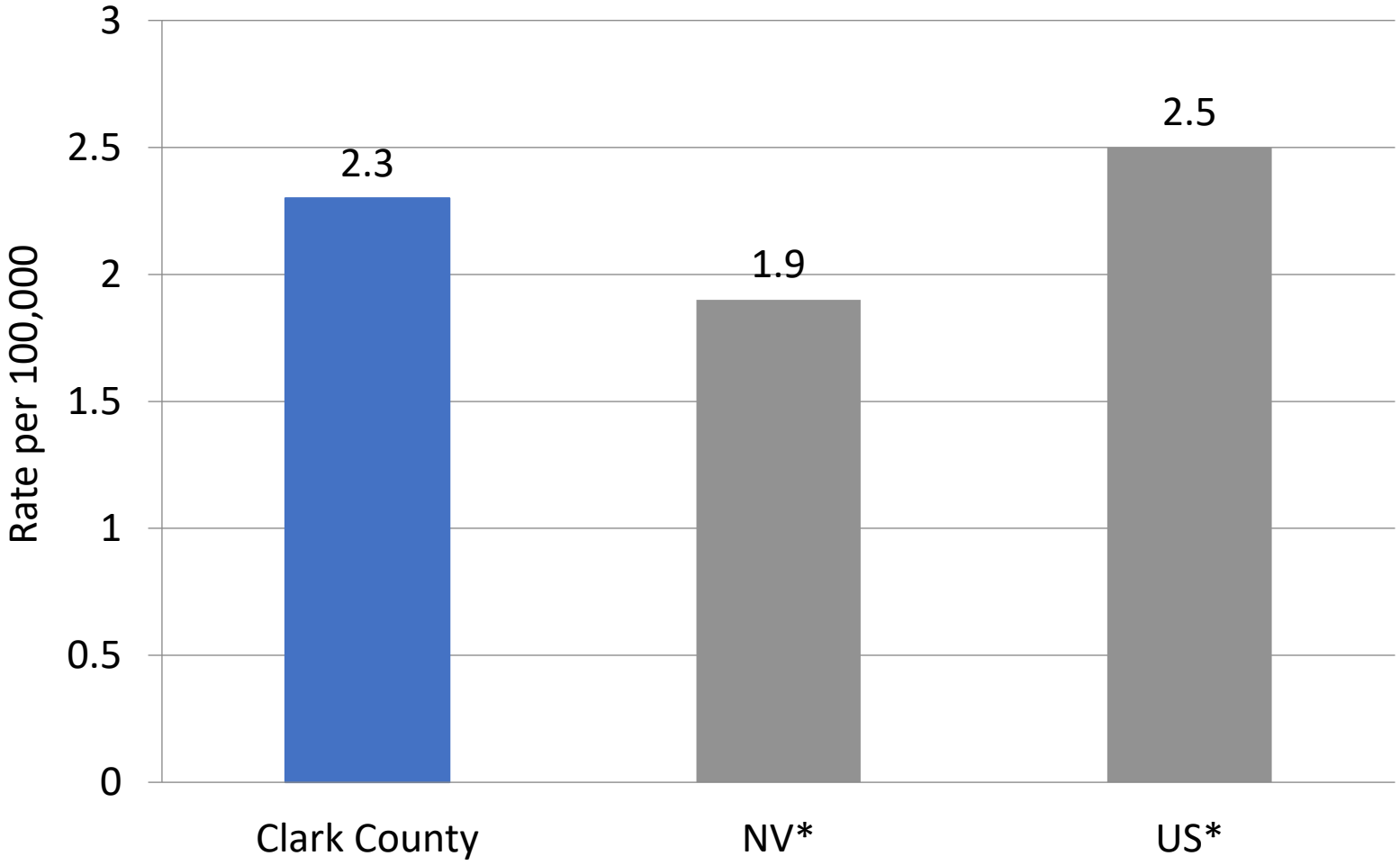
- Earliest Origins:
  - 15,000-20,000 years
- Prior names:
  - Consumption
  - White Plague
- Identified M. tuberculosis: 3/24/1882, Robert Koch
- First treatment: streptomycin 1944

Syphilis

- Earliest Origins:
  - ~ 3,000 BC
- Prior names:
  - lues venera
  - French/German/Polish disease
- Identified T. pallidum: 1905, Schaudin and Hoffman
- First treatment: arsphenamine 1908

HEALTHY PEOPLE IN A HEALTHY SOUTHERN NEVADA

Active Tuberculosis Rates per 100,000
Clark County vs Nevada and United States, 2022



*Source: Centers for Disease Control and Prevention. Reported Tuberculosis in the United States, 2022. Atlanta: U.S. Department of Health and Human Services; 2023. Available at https://www.cdc.gov/tb/statistics/reports/2022/default.htm.
Office of State Epidemiology. Division of Public and Behavioral Health. State of Nevada 2023 TB Fast Facts. Carson City, Nevada. Accessed June 2024

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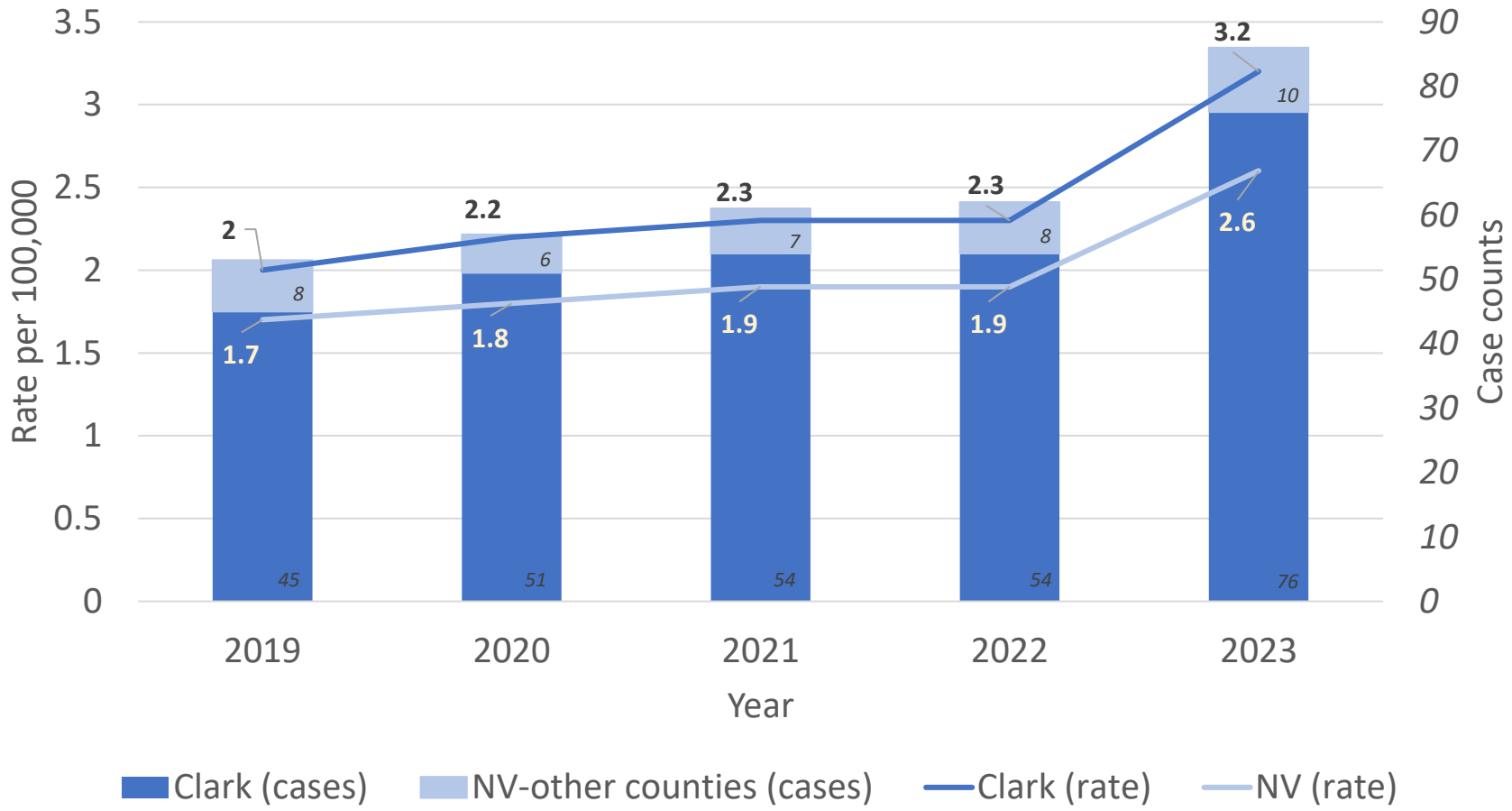
Active Tuberculosis Cases and Rates per 100,000 Clark County vs Nevada, 2019-2023



*Source: Office of State Epidemiology. Division of Public and Behavioral Health. State of Nevada 2023 TB Fast Facts. Carson City, Nevada. Accessed June 2024

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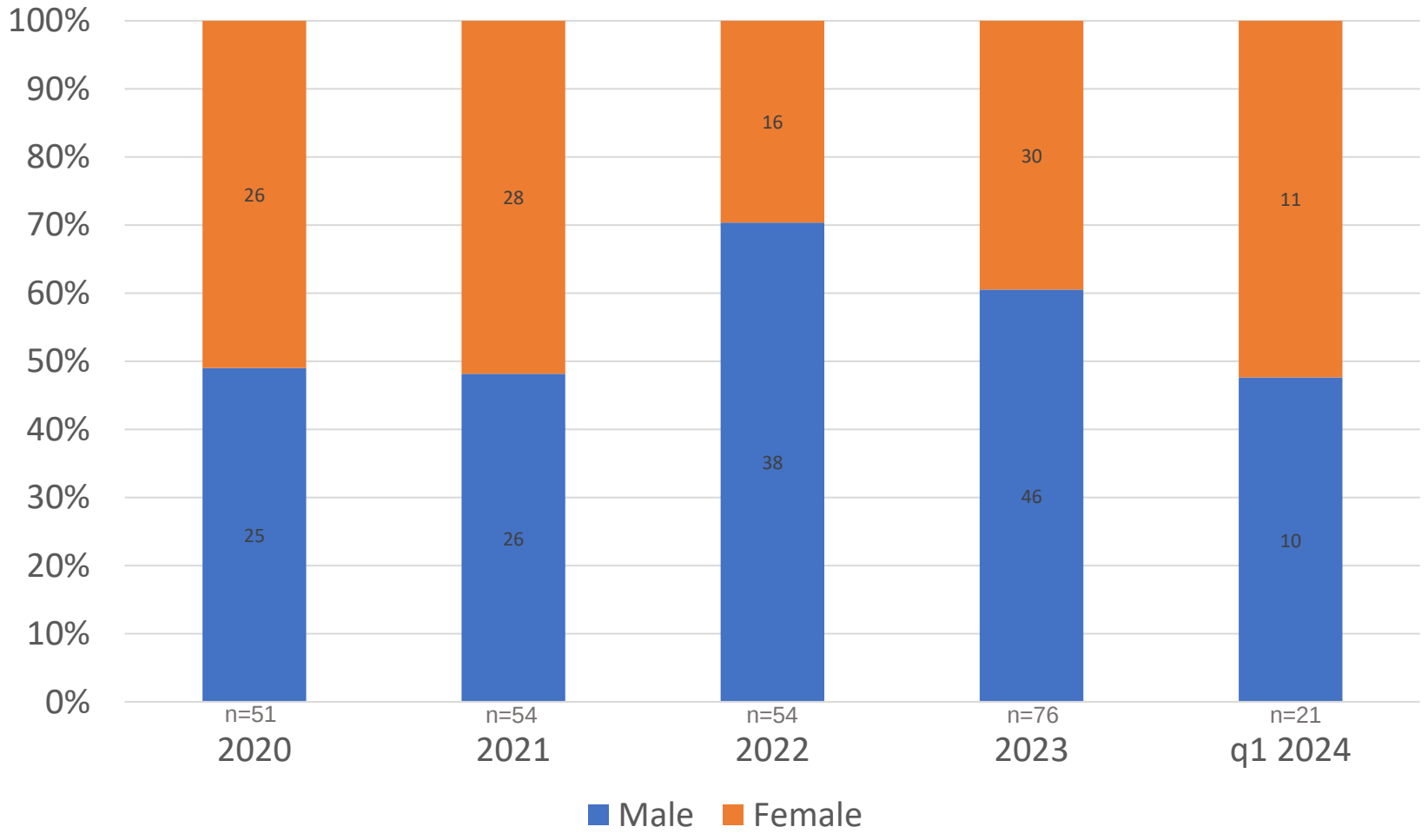
Active Tuberculosis Cases in Clark County, NV 2020 to March 31, 2024 by Sex at Birth (percentage)



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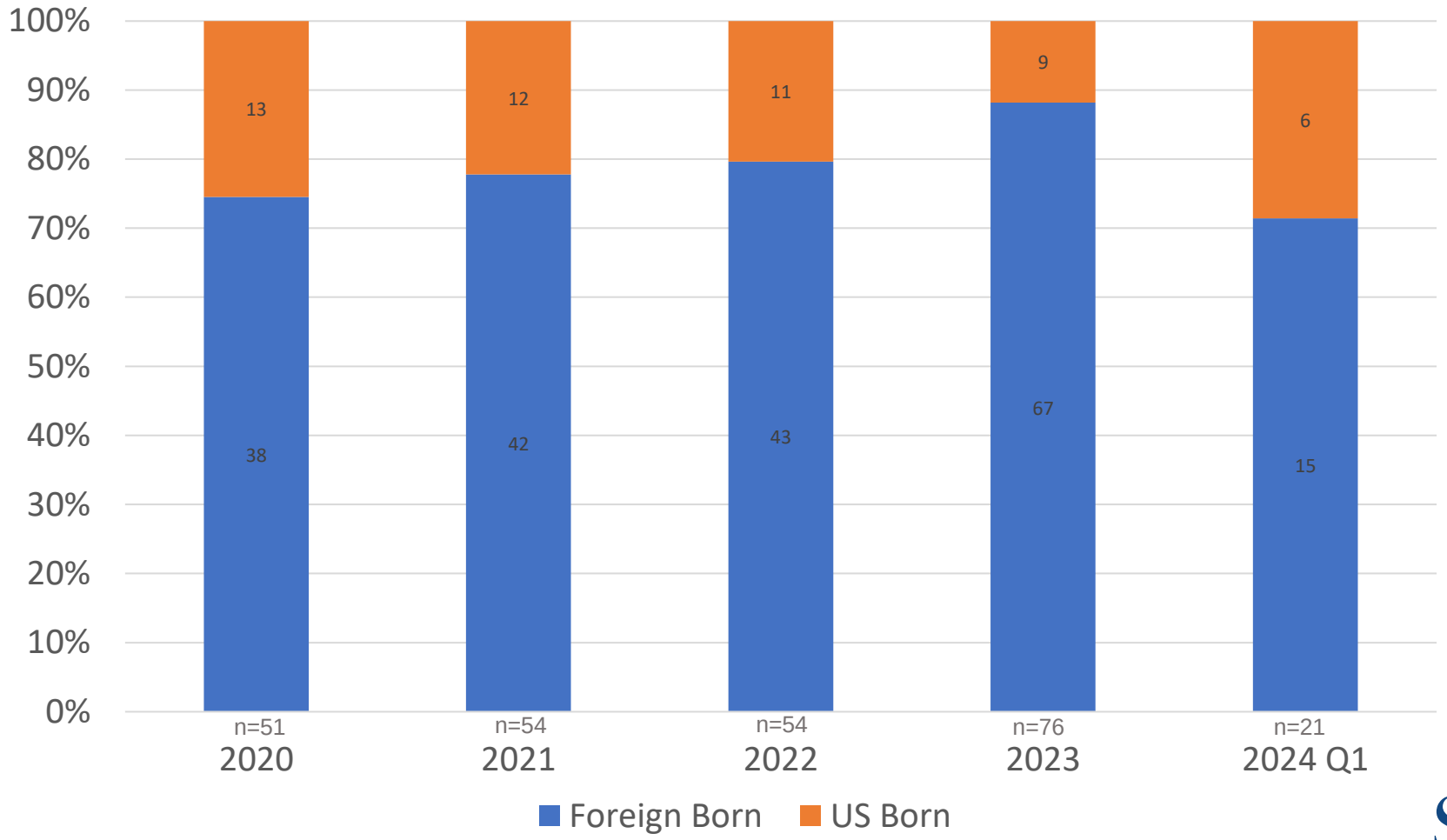
Active Tuberculosis Cases in Clark County, NV 2020 to March 31, 2024 by Birth Country (percentage)



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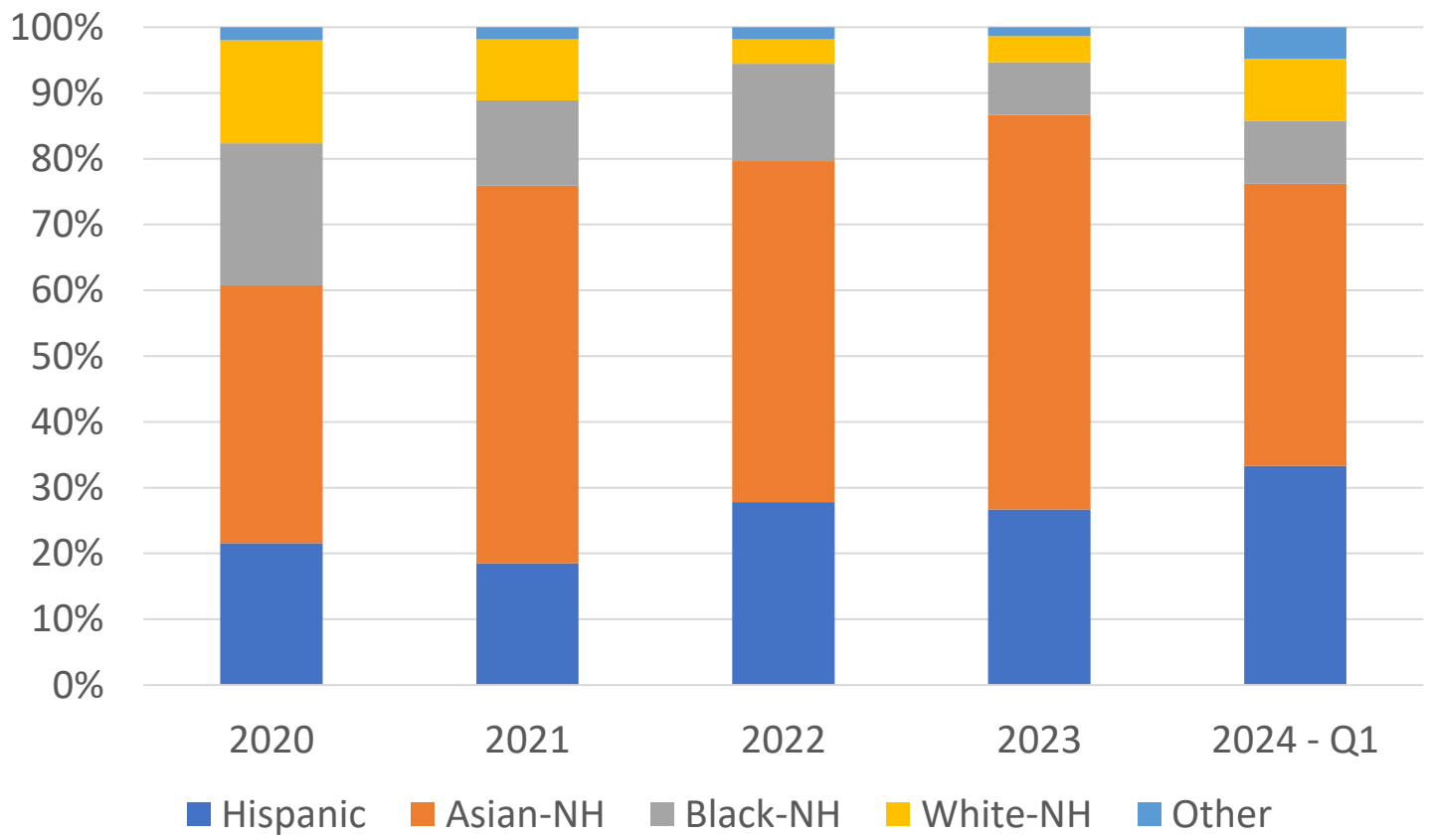
Active Tuberculosis Cases in Clark County, NV 2019 to March 31, 2024 by Race/Ethnicity (percentage)



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TB in Clark County, NV

Cases associated with educational and childcare settings

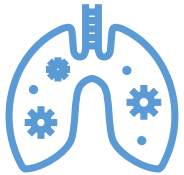
2022 – 1
2023 – 6
Q1 2024 – 2

Number of contact investigations performed

2022 – 745
2023 – 1655
Q1 2024 – 350

National TB Objectives

Provide education and training to community providers



Find and treat active TB

Investigate contacts

Prevent TB in high-risk populations

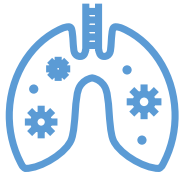
Monitor and evaluate interventions

SNHD Activities

Provide education and training to community providers

- Clinical support given to providers by sharing latest TB guidance
- Provider public health advisories distributed via health alert network
- Collaboration with the state on educational programs
  - In progress: On-demand video for clinicians on LTBI
  - In progress: Collaboration for a CME/CEU program on TB with Curry International TB Center

SNHD Activities



Find and treat active TB

Investigate contacts

- Strong collaboration between TB clinic and TB surveillance & control
- 2023
  - 76 active cases identified and appropriate clinical management ensured
  - 1655 contacts investigated
- Education provided for active cases and contacts evaluated
- Open forum offered for community during large-scale investigations

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SNHD Activities

Prevent TB in high-risk populations

- TB risk assessment screening tool
- Supporting the state effort to require a TB risk assessment screen during the hiring of new staff and at regular intervals of employment in educational settings
- Community referrals received are evaluated and clinical management is offered for pediatric cases and patients with high-risk comorbidities
- TB clinic evaluates persons from high TB incidence locations with a change in immigration status.

SNHD Activities

Monitor and evaluate interventions

- Bi-annual TB Cohort Review
  - Discuss NITP performance metrics
  - Clinical discussion of interesting / unusual cases
  - Forum to identify challenges, gaps, and missed opportunities
- New surveillance reporting requirement for Latent TB Infections

HEALTHY PEOPLE IN A HEALTHY SOUTHERN NEVADA

2021 and 2022 STD State Rankings by Rates per 100,000 population/live births*

Primary and Secondary Syphilis

2022
- Ranking #8
- Rate: 28.4

2021
- Ranking #5
- Rate:29.9

Congenital Syphilis

2022
- Ranking #8
- Rate:193

2021
- Ranking #9
- Rate: 133.6

Source: https://www.cdc.gov/std/statistics/2022/tables/2022-STI-Surveillance-State-Ranking-Tables.pdf
https://www.cdc.gov/std/statistics/2021/tables/2021-STD-Surveillance-State-Ranking-Tables.pdf

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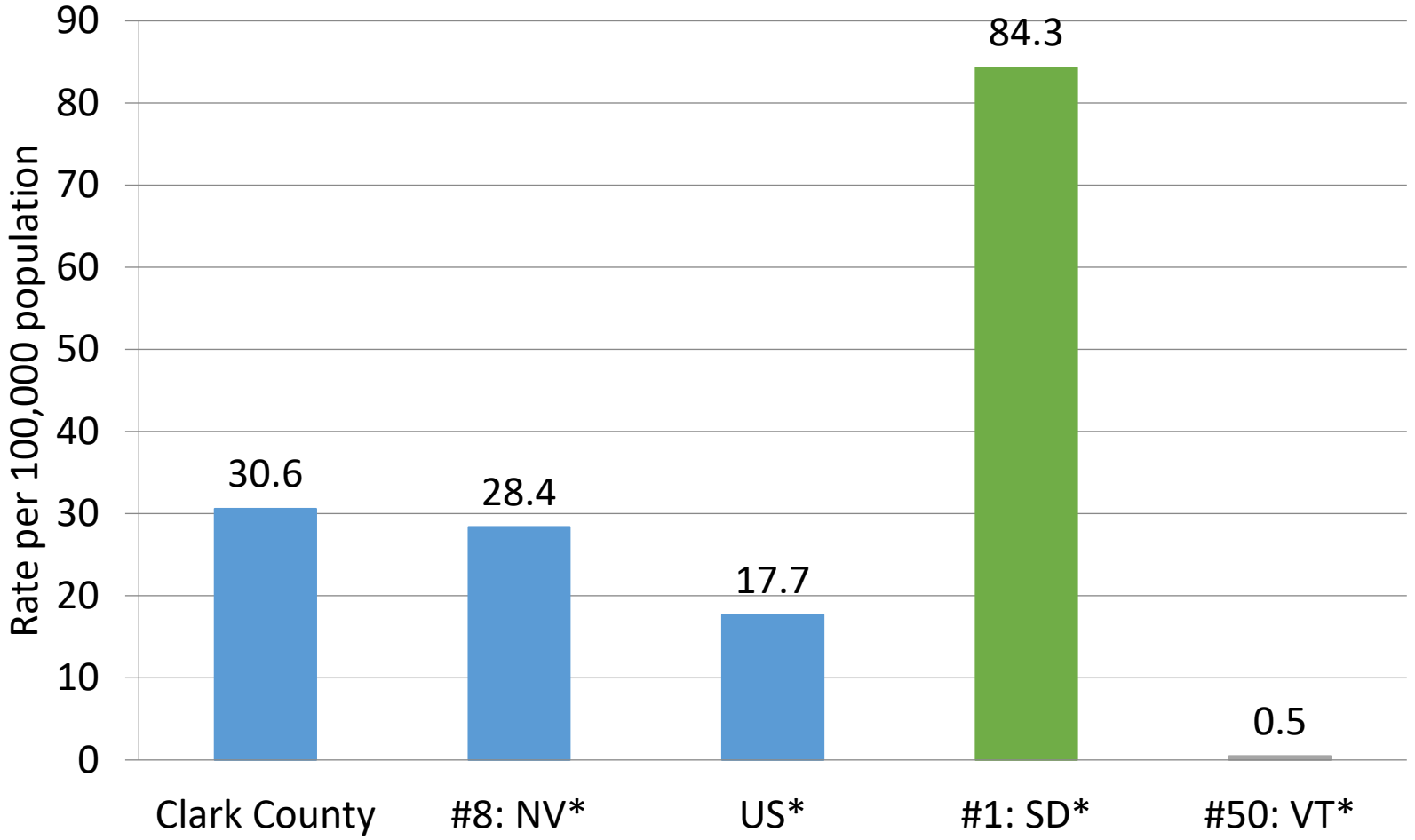
Primary and Secondary Syphilis Rates, 2022
Clark County vs. NV, US, SD (highest) and VT (lowest) states



*Source:Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2021. Atlanta: U.S. Department of Health and Human Services; 2023. Available at http://www.cdc.gov/std/stats.

Slide courtesy of Angel Stachnik, Office of Informatics and Epidemiology, Southern Nevada Health District

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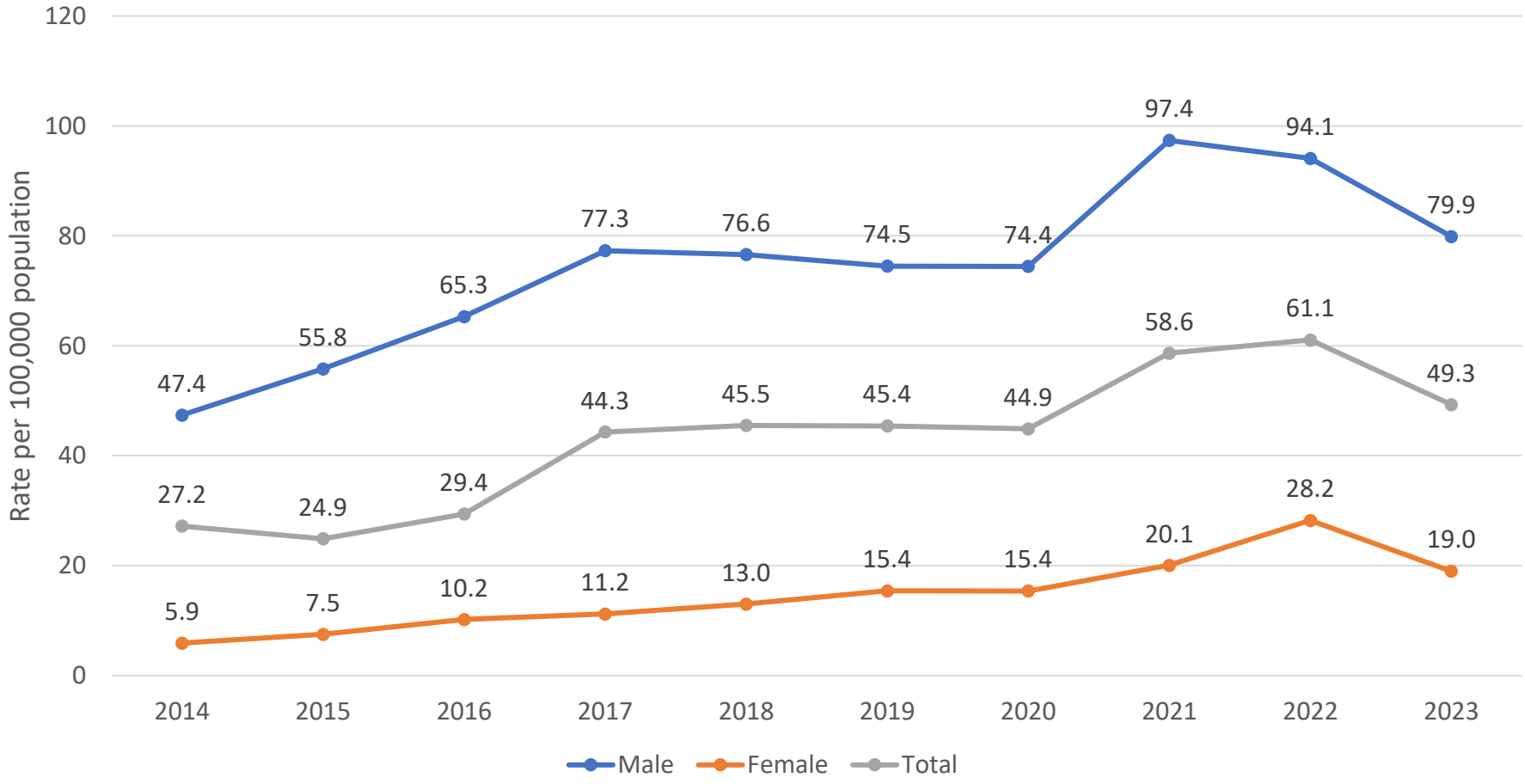
HEALTHY PEOPLE IN A HEALTHY SOUTHERN NEVADA

Infectious Syphilis Rates by Birth Sex, Clark County, 2014-2023



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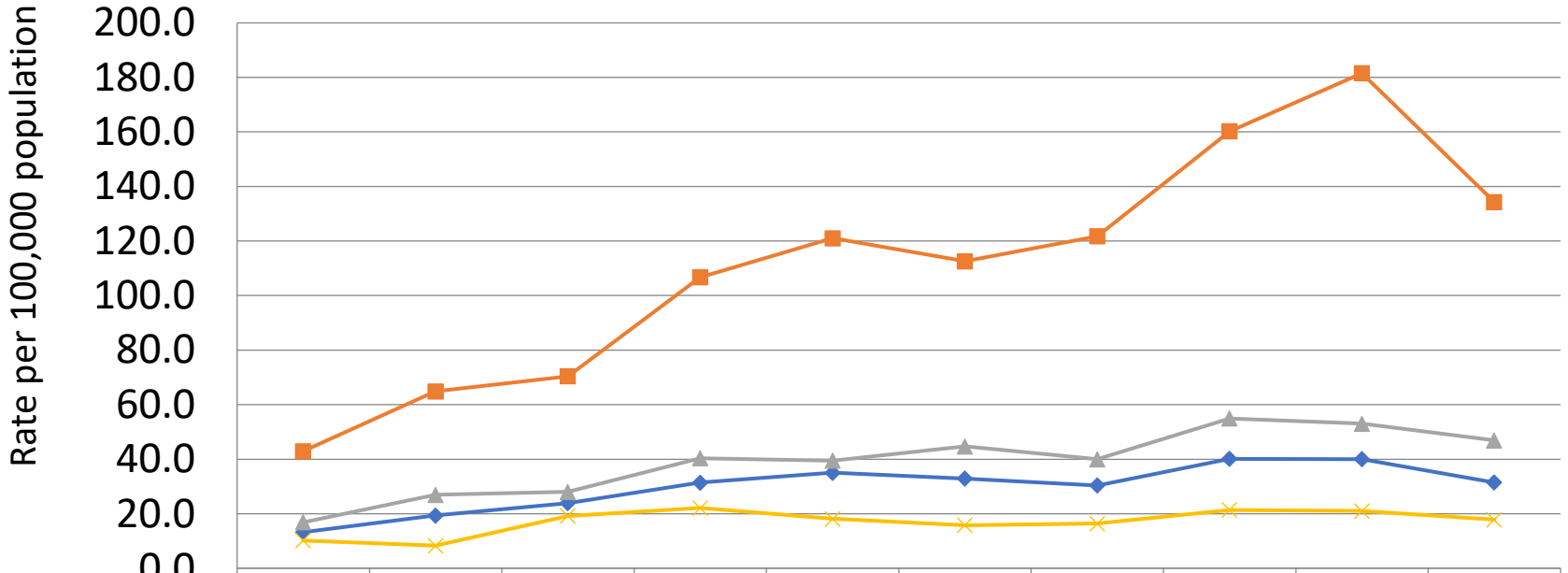
Infectious Syphilis Rates by Race, Clark County, 2014-2023



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
White	13.2	19.4	23.9	31.4	35.0	32.9	30.4	40.2	40.0	31.5
Black	42.9	64.9	70.4	106.7	121.0	112.6	121.7	160.2	181.5	134.3
Hispanic	16.9	26.9	28.0	40.4	39.5	44.7	40.0	54.9	53.0	46.9
API	10.2	8.3	19.2	22.1	18.2	15.8	16.4	21.4	21.0	17.8

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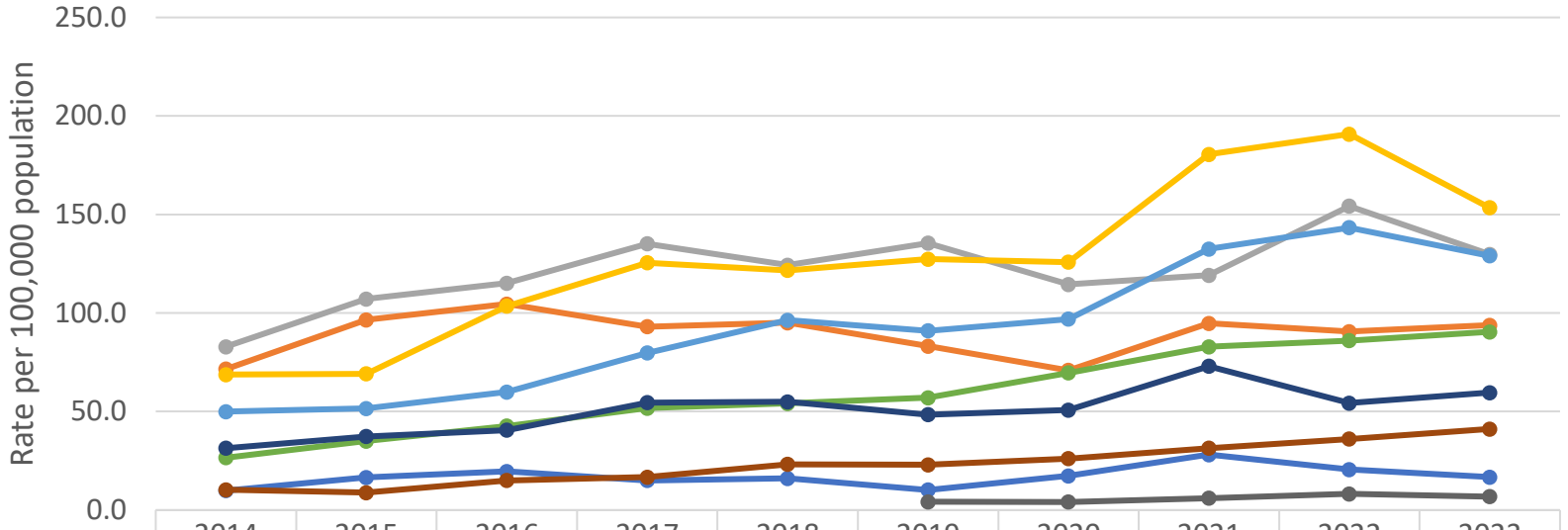
Infectious Syphilis Rates by Age, Clark County, 2014-2023



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
15-19	9.8	16.5	19.6	15.0	16.1	10.2	17.3	28.1	20.6	16.7
20-24	71.6	96.5	104.6	93.0	95.0	83.2	70.9	94.7	90.6	93.8
25-29	82.9	107.1	115.2	135.1	124.3	135.4	114.5	119.1	154.3	129.7
30-34	68.7	69.1	103.5	125.5	121.7	127.3	125.8	180.5	190.8	153.4
35-39	50.0	51.5	59.9	79.8	96.3	91.0	96.9	132.5	143.3	129.0
40-44	26.6	35.0	42.6	51.7	54.1	57.0	69.6	82.9	86.0	90.4
45-54	31.4	37.3	40.5	54.5	54.9	48.4	50.7	73.0	54.3	59.6
55-64	10.3	8.8	15.0	16.7	23.2	22.9	26.1	31.4	36.1	41.1
65+	NA*	NA*	NA*	NA*	NA*	4.2	4.1	6.0	8.2	6.8

*Rates are suppressed for counts < 12 due to high relative standard error

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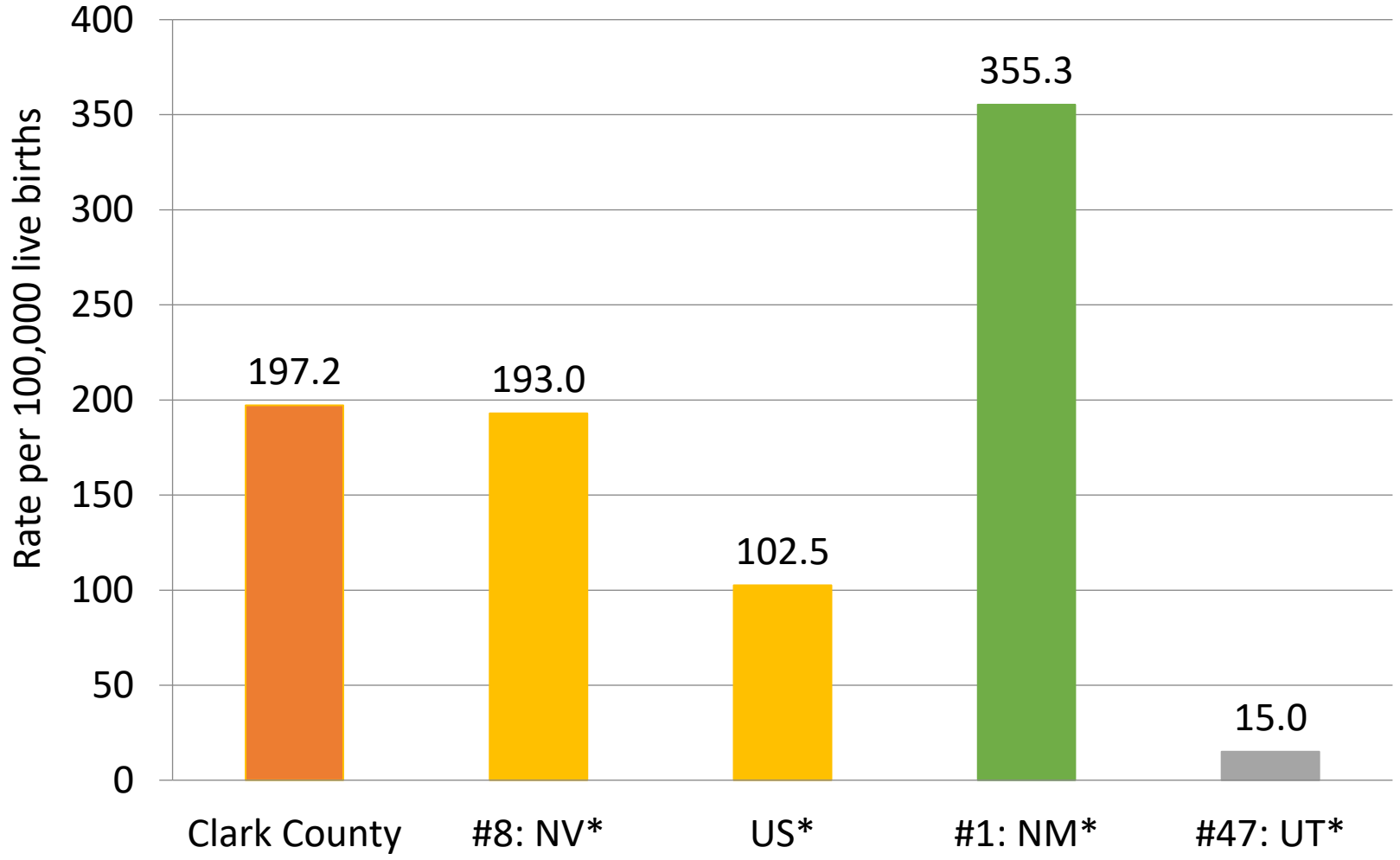
HEALTHY PEOPLE IN A HEALTHY SOUTHERN NEVADA

Congenital Syphilis Rates, 2022
Clark County vs. NV, US, NM (highest) and UT (lowest) states



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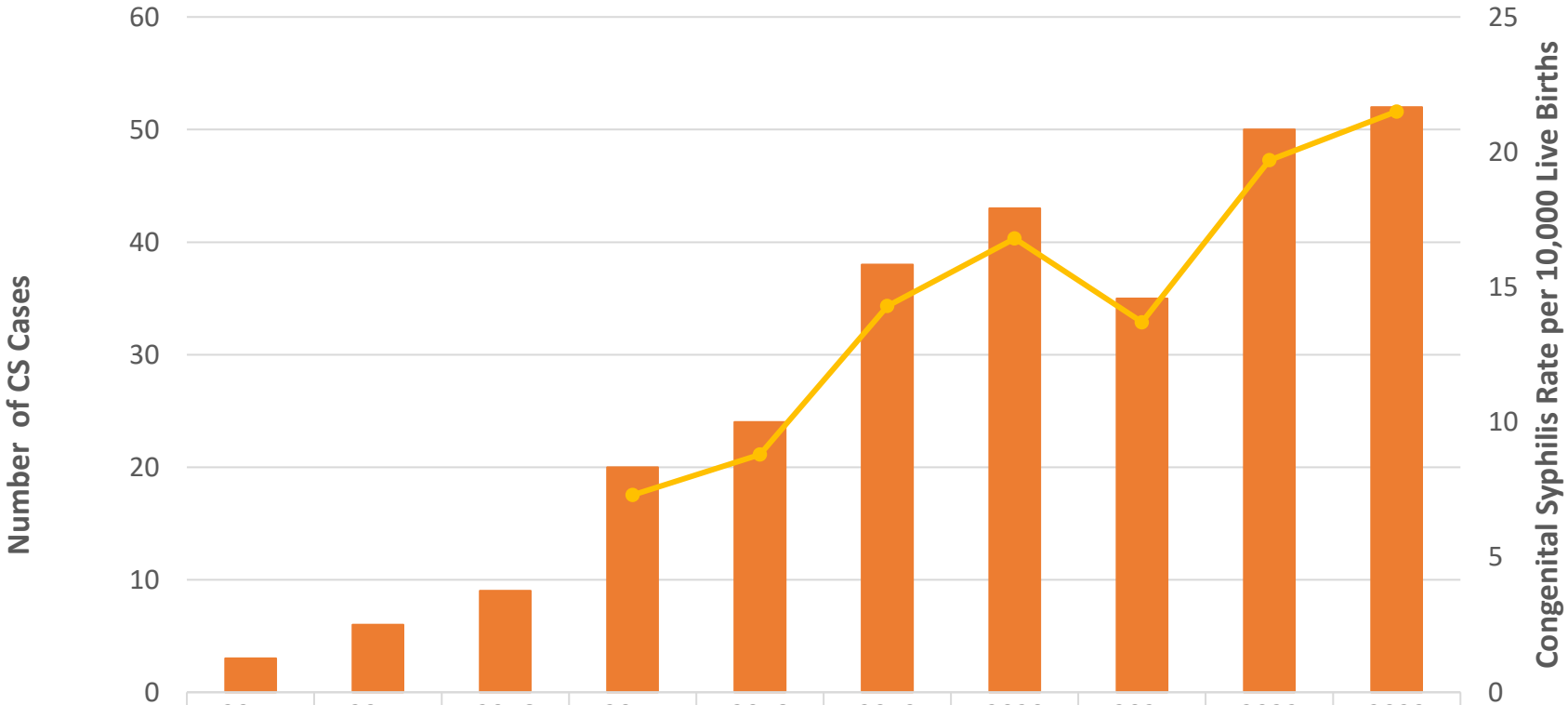
Congenital Syphilis Cases and Rates, Clark County, 2014-2023



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
CS Cases	3	6	9	20	24	38	43	35	50	52
CS Rate	NA*	NA*	NA*	7.3	8.8	14.3	16.8	13.7	19.7	21.5

*Rates are suppressed for counts < 12 due to high relative standard error

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Clark County CS Cases: Quick Stats 2023

CS cases increased 1,633% from 2014 to 2023

62% of CS cases were drop-in deliveries

89% of the CS cases born alive were asymptomatic

12% (n=6) of CS cases were syphilitic stillbirths

62% of mothers had no prenatal care

58% of mothers had positive toxicology screening

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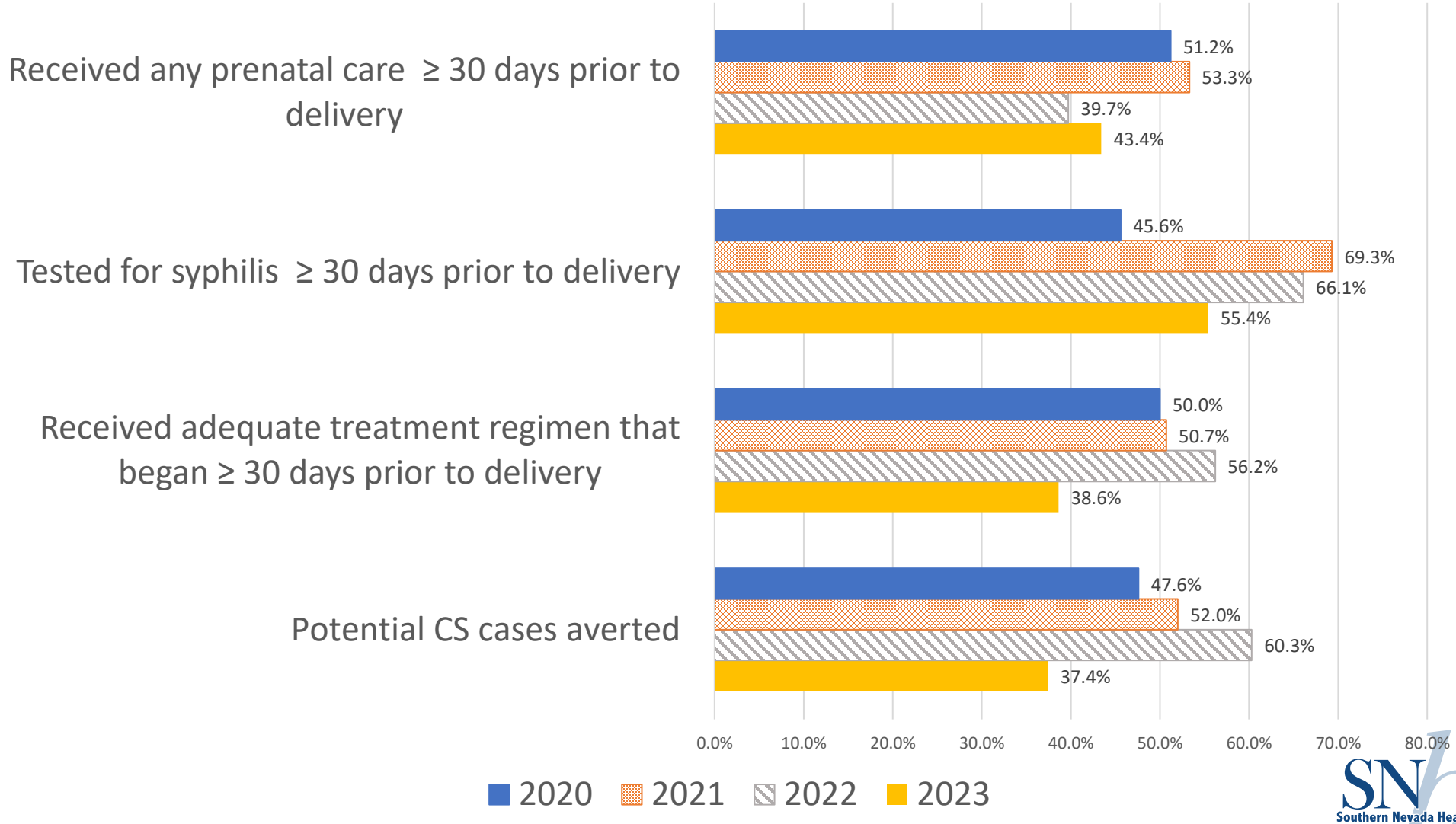
Congenital Syphilis Prevention Cascade, Clark County, NV, 2020-2022



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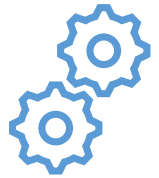
STI National Strategic Plan Goals, 2021-2025

Prevent New STIs

Reduce Adverse Outcomes

Accelerate Progress in STI Research, Technology, and Innovation

Reduce STI-Related Health Disparities and Health Inequities



Achieve Integrated, Coordinated Efforts That Address the STI Epidemic

SNHD Activities

Prevent New STIs

Reduce Adverse Outcomes

- All new cases of syphilis are investigated

- Provider and public education
  - Provider public health advisories distributed via health alert network
  - Academic detailing – 32 facilities
  - Hospital outreach and education
  - Syphilis media campaign

- Primary and Preventive Care nurse programs
  - Sexual Health Outreach and Prevention Program (SHOPP)
  - Home Administered Treatment for Syphilis (HATS)
  - Congenital syphilis nurse case management

SNHD Activities

Accelerate Progress in STI Science

- Share efforts locally, regionally, nationally
  - Congenital Syphilis Review Board (in collaboration with the state)
  - STI Update (biannual conference in collaboration with AETC)
  - Abstracts and presentations in various conferences /webinars
    - Council of State and Territorial Epidemiologists
    - United States Conference on HIV/AIDS
    - National Alliance of State and Territorial AIDS Directors
    - National Association of County and City Health Officials
    - Philippine Nurses Association of Nevada / Filipino-American APRN-Nevada / Asian American Pacific Islander Nurses Association-Nevada

SNHD Activities

Reduce STI-Related Health Disparities and Health Inequities

- Target outreach to disproportionate share populations
- Leveraging community partnerships for the Bicillin shortage

Achieve Integrated, Coordinated Efforts That Address the STI Epidemic

- Integration with other program activities for a syndemic approach
- Partnership for HIV/STI screening at urgent care settings

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Questions:

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