# Nevada

STD Epidemiologic Profile: 2019



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# **ABBREVIATIONS**

AI/AN American Indian/Alaska Native

AOC All Other Counties

API Asian/Hawaiian/Pacific Islander

CC Clark County

**CCHHS** Carson City Health and Human Services

**CDC** The Centers for Disease Control and Prevention

CDL Carson/Douglas/Lyon

**CSTE** Council of State and Territorial Epidemiologists

CT Chlamydia

**DIS** Disease Intervention Specialists

DHHS Department of Health and Human Services

DPBH Division of Public and Behavioral Health

EIA Enzyme Immunoassay
EP Ectopic Pregnancy
EPI Epidemiology

**ELSY** Early or Latent Syphilis

FTA-ABS Fluorescent Treponemal Antibody Absorbed

GC Gonorrhea

HIV Human Immunodeficiency Virus

LHD Local Health Department

MSM Males who have sex with males
NAC Nevada Administrative Code

NBS NEDSS-Based System

NEDSS National Electronic Disease Surveillance System

**NETSS** National Electronic Telecommunications System for Surveillance

NRS Nevada Revised Statute

OMB Office of Minority Health

**OPHIE** Office of Public Health Investigations and Epidemiology

PID Pelvic Inflammatory Disease
P&S Primary and Secondary Syphilis

**RSE** Relative Standard Error

SNHD Southern Nevada Health District
STD Sexually Transmitted Disease
STI Sexually Transmitted Infection

STD\*MIS Sexually Transmitted Diseases Management Information System

WC Washoe County

WCHD Washoe County Health District

Count under 12 used in the calculation. See RSE.

# **DEFINITIONS**

**All other counties:** The category *all other counties* include Churchill, Elko, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Mineral, Nye, Pershing, Storey, and White Pine Counties.

**Chlamydia:** Chlamydia is a curable bacterial sexually transmitted disease.

**Crude Rate:** A crude rate is the total number of new cases for a specific geographic area or race/ethnicity divided by the total number of people in the population for the same geographic area or race/ethnicity for a specified time.

**Early Latent Syphilis:** Early Latent Syphilis refers to a stage of bacterial infection of the bacterium Treponema pallidum. This stage comes immediately after the infectious stages.

**Epidemiologic profile:** A document that describes the distribution of STD in various populations and identifies demographic characteristics of people in defined geographic areas.

**Epidemiology:** The study of the distribution and determinants of health-related states or events in specified populations and the application of this study to the control of health problems.

**Estimate:** In situations in which precise data are not available, an estimate may be made based on available data and an understanding of how the data can be generalized to larger populations.

**Gonorrhea:** Gonorrhea is a curable bacterial sexually transmitted disease.

**Mean:** The sum of values for a variable, a group, or other category divided by the total number of values (e.g., in a dataset). The mean is what many people refer to as an average.

**Median**: The middle value in a dataset: approximately half the values will be higher, and half will be lower.

**Morbidity:** The occurrence of an illness, disease, or injury.

**Percentage:** A proportion of the whole, in which the whole is 100.

**Percent Change:** is the difference in cases between 2018 and 2019 data divided by the 2018 data.

**Prevalence:** The proportion of cases of a disease in a population at risk, measured at a given point in time (often referred to as point prevalence). Prevalence can also be measured over a period of time (e.g., a year; known as period prevalence).

**Primary Syphilis:** A stage of infection with the bacterium *Treponema Pallidum* categorized as infectious.

**Quantitative data:** Numeric information (e.g., numbers, rates, and percentages).

Race/ Ethnicity: The collection of race/ethnicity data in surveillance follows the guidelines set forth by the Office of Management and Budget (OMB) in 1997.

**Ethnicity:** There are two ethnicity categories: Hispanic/Latino and not Hispanic/Latino. All people who identified as Hispanic/Latino are classified as Hispanic/Latino regardless of their racial identification.

Race: There are four race categories: White, Black/African American, Asian/Native Hawaiian/Pacific Islander (API), and American Indian/Alaska Native (AI/AN). The categories Asian, Native Hawaiian, and Pacific Islander were combined into the single category API due to their small population size in Nevada.

**Range:** The smallest and the largest values in a series.

Rate: The rapidity at which a health event occurs as indicated by the number of cases per number of people during a specific time period. In this report, rates were calculated for the 12 months per 100,000 population using population estimates from the Nevada State Demographer's Office. For congenital syphilis rates were calculated for the 12 months per 100,000 live births.

**Rate Change:** is the difference in rates between 2018 and 2019 data divided by the 2018 data.

**Raw data:** Data are in their original form (i.e., not coded or analyzed).

**Reliability:** Refers to the consistency and dependability of a data-collection instrument or measure.

**Secondary Syphilis:** A stage of infection with the bacterium *Treponema pallidum* categorized as infectious.

**Sociodemographic Factors:** Background information about the population of interest.

Small Counts and Relative Standard Error (RSE): Reported numbers less than 12, as well as estimated numbers (and accompanying rates and trends) based on these numbers, should be interpreted with caution because the numbers have underlying relative standard errors greater than 30% and are considered unreliable. Denoted with a ~.

**STD\*MIS:** STD Data Management & Information Technology. A database application provided by the CDC

to the state for use in managing the data received for STD control.

**STD Surveillance:** The systematic collection, analysis, interpretation, dissemination, and evaluation of population-based information about people with a diagnosis of STDs.

**Syphilis:** Syphilis is a curable bacterial sexually transmitted disease.

**Trend:** A long-term movement or change in frequency, usually upward or downward; may be presented as a line graph.

# **PREFACE**

Nevada STD Epidemiology Profile 2019 presents an analysis for STDs reported in Nevada through 2019. This annual publication is intended as a reference document for policymakers, program managers, health planners, researchers, and others who are concerned with the public health implications of the diseases presented. The figures and tables in this edition supersede those in earlier publications.

Data for this profile were gathered in December 2020, from the surveillance system maintained by DPBH, National Electronic Disease Surveillance (NEDSS)-Based System (NBS), a database application provided by the CDC to the state for use in managing the data received for STD control. Data from NBS comes from medical labs, private and public health providers, clinics, and state and local disease intervention specialists (DIS). This epidemiologic profile is intended for the public, public health professionals, and researchers.

Per the Nevada Administrative Code (NAC) 441A.040, chlamydia, gonorrhea, and syphilis (including congenital syphilis) are reportable communicable diseases. A diagnosis of chlamydia, gonorrhea, or syphilis is reportable to the health authority by providers, medical facilities, and labs as prescribed by Nevada Revised Statute (NRS) 441A.150. These case reports are the data source for many of the figures and most of the statistical tables in this publication; however, it is important to note these case reports reflect only a portion of STDs occurring in the Nevada population. Other common STDs, such as human papillomavirus (HPV) and herpes simplex virus (HSV) are not nationally notifiable diseases. Additionally, STDs are often asymptomatic and may not be diagnosed; therefore, case report data may be limited.

# **METHODS**

The data used for this profile are between January 1, 2019, to December 31, 2019; from January 1, 2019, to May 31, 2019 data were obtained from STD\*MIS, From June 1, 2019, to December 31, 2019 data were obtained from the NEDSS-Based System (NBS). The STD\*MIS and

NBS are database applications provided by the Centers for Disease and Control and Prevention (CDC) and maintained by the Division of Public and Behavioral Health's (DPBH) STD Prevention and Control Program. The data are collected from medical laboratories, private and public health providers, clinics, and disease intervention specialist (DIS) investigations (state and local). The case definitions used for this report come from the 2019 CDC case definitions for all STDs presented. Per the CDC, a patient may be infected with multiple diseases at the same time. While a patient may contract an STD multiple times in the calendar year, only the first occurrence of the disease is counted within 30 days. Technical Notes

Unknown categories (including percentage and incidence calculations) within the report are due to missing data on gender, race/ethnicity, full address, and age; they have still required reporting according to the NAC. Local health authorities do conduct investigations to complete these cases, but due to limited staff and funding some cases are not complete.

**Crude rates** are calculated using 2019 population projections from the Nevada State Demographer. Rates are based on per 100,000 persons.

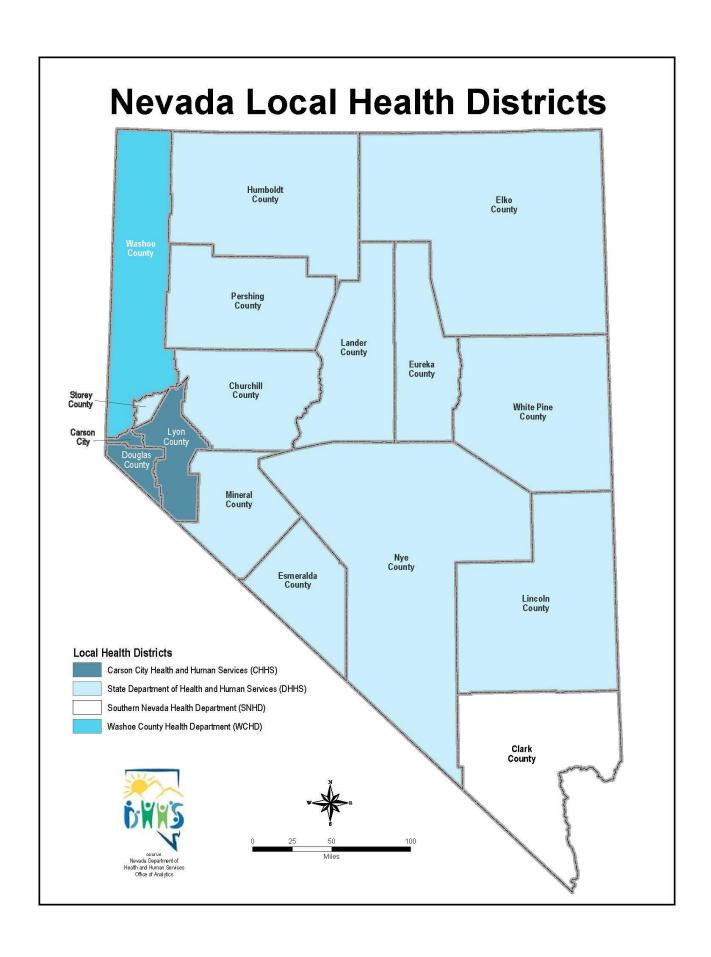
**n (used for birth sex stratification)** is the basic measure of disease and may not equal the total case count (N) due to unknown demographic information.

**N** (**Total case count**) is the total number of disease cases in the population.

**N/A (notation)** is used to represent cases where the data may not meet the criteria for reliability, data quality, or confidentiality due to small data counts or the inability to calculate data rates based on an equivalent population.

**Population** is based on the 2019 population projections from the Nevada State Demographer.

**RSE (Relative Standard Error)**: the publication contains counts under 12, please use caution when interpreting the data as the RSE is greater than 30%.



# **NEVADA OVERVIEW**

This overview summarizes Nevada's STD Program's 2019 Surveillance Data for the three notifiable diseases for which there are federally funded control programs: chlamydia, gonorrhea, and syphilis.

# Chlamydia

In 2019, a total of 17,828 cases of *Chlamydia trachomatis* infection were reported in Nevada, making it the most common notifiable STD in Nevada. This case count corresponds to a rate of 574.8 cases per 100,000 population, an increase of 0.4% compared with the rate in 2018. During 2018-2019, rates of reported chlamydia increased in all regions of Nevada.

Rates of chlamydia are highest among adolescent and young adult females, the population targeted for routine chlamydia screening. Females represent 62.9% of all chlamydia cases in Nevada, with 26.9% being 15-19 years old and 37.2% being 20-24 years old. Rates of reported cases among men are generally lower than rates of reported cases among women. This reflects the larger number of women screened for this infection; however, increased availability of urine testing and extragenital testing has resulted in an increased number of men, including gay, bisexual, and other men who have sex with men (collectively referred to as MSM) being tested and diagnosed with a chlamydial infection.

From 2015-2019, rates of reported chlamydia cases increased in White, non-Hispanic, Black, non-Hispanics, and Hispanics. Rates of reported chlamydia varied among different racial and ethnic minority populations. In 2019, rates were highest among Blacks, who accounted for 15.1% of all chlamydia cases despite being 10.3% of Nevada's population.

#### Gonorrhea

From 2015-2019, the rate of gonorrhea in Nevada increased sharply each year from 125.3 cases per 100,000 population in 2015 to 210.2 cases per 100,000 population in 2019, demonstrating a 67.8% increase over 5 years. From 2018-2019 this rate decreased slightly from 210.2 per 100,000 population to 211.8 per population, a 0.8% rate decrease.

From 2015-2019, the rate of reported gonorrhea increased 72.6% among men and 61.5% among women. The magnitude of the increase among men suggests either increased transmission or increased case ascertainment (e.g., through increased extra-genital screening) among MSM or both. The concurrent increases among cases

reported among women suggest parallel increases in heterosexual transmission, increased screening among women, or both.

In 2019, the rate of reported cases of gonorrhea remained highest among Blacks (673.0 cases per 100,000 population), and the rate among Blacks was 7.9 times the rate among Whites. From 2015-2019, rates increased among all racial and ethnic groups.

# **Syphilis**

In 2019, Nevada ranked 1<sup>st</sup> in the nation for its rates of Primary and Secondary (P&S) syphilis rates, and 4<sup>th</sup> in its congenital syphilis rate (1). P&S syphilis rates have increased every year since 2015. In 2019, 808 P&S syphilis cases were reported, representing a rate of 26.1 cases per 100,000 population and a 17.0% increase from 2018. From 2018-2019, the P&S syphilis rate increased among both men and women in most regions of Nevada; overall, the rate increased by 13.9% among men and 32.1% among women.

From 2015-2019, P&S syphilis rates were consistently highest among persons aged 25-34 years; however, rates increased in almost all five-year age group among those aged 15–64 years. In 2019, rates were highest among Blacks (79.8 per 100,000 population); however, rates increased among almost all racial and ethnic groups from 2015–2019.

During 2015-2019, the rise in the P&S syphilis rate was primarily attributable to increased cases among men and, specifically, among MSM. In 2019, men accounted for 80.3% of all cases of P&S syphilis. Reported cases of P&S syphilis continued to be characterized by a high rate of HIV co-infection, particularly among MSM.

Since 2015, the rate of congenital syphilis has increased each year. In 2019, there were a total of 41 reported cases of congenital syphilis. The rate of 117.2 cases per 100,000 live births represents a 22.5% increase from 2018 and a 422.5% increase from 2015. This increase in the congenital syphilis rate has paralleled increases in P&S syphilis among all women including reproductive-aged women during 2015-2019 (498.9%).

# **CHLAMYDIA**

# Background

Chlamydia is a bacterial STD caused by *Chlamydia trachomatis* and is the most common STD reported in the United States, per the CDC (2). While most people with chlamydia do not show symptoms, there can be serious health consequences if left untreated. In men, chlamydia can cause discharge from the penis, a burning sensation when urinating, and less commonly, pain and swelling in one or both testicles. In women, chlamydia can cause vaginal discharge, a burning sensation when urinating, and in rare cases pelvic inflammatory disease (PID).

# Interpreting Rates of Reported Cases of Chlamydia

Trends in rates of reported cases of chlamydia are influenced by changes in the incidence of infection, as well as changes in diagnostic, screening, and reporting practices. As chlamydial infections are usually asymptomatic, the number of infections identified and reported can increase as more people are screened even when incidence is flat or decreasing. The increased use of electronic laboratory reporting over the last decade likely increased the number of diagnosed cases reported. Consequently, an increasing chlamydia case rate over time may be reflected by increases in the incidence of infection, screening coverage, and the use of more sensitive tests, as well as more complete reporting. Likewise, decreases in chlamydia case rates may suggest decreases in the incidence of infection or screening coverage.

Figure 1 | Chlamydia - Rates of Reported Cases by Region, Nevada, 2015-2019

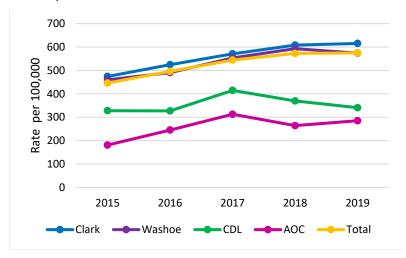
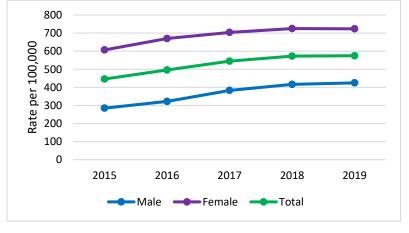


Figure 2 | Chlamydia - Rates of Reported Cases by Sex, Nevada, 2015-2019



# Chlamydia Overview

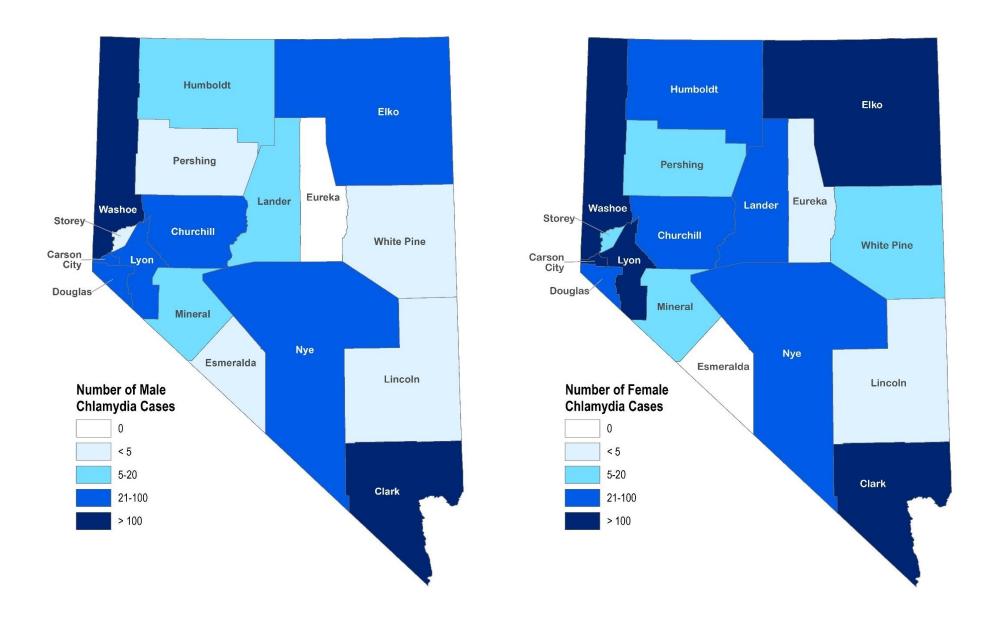
In 2019, a total of 17,828 chlamydial infections were reported in Nevada (Table 1). This case count corresponds to a rate of 574.8 cases per 100,000 population. From 2015-2019, the rate of reported chlamydia infections increased from 446.0 to 574.8 cases per 100,000 population (Figure 1, Table 2).

# Chlamydia by Region

In 2019, rates of reported cases of chlamydia were highest in Clark County (615.4 cases per 100,000 population, 1.2% increase from 2018), followed by Washoe County (573.9, 3.2% decrease from 2018), Carson, Douglas, Lyon (CDL) (340.8, 7.8% decrease from 2018), and All Other Counties (AOC) (285.1, 7.9% increase from 2018) (Table 2). From 2015-2019, rates of reported cases of chlamydia increased in all counties, with AOC having the largest rate increase of 57.3% (181.2 to 285.1 per 100,000) (Figure 1).

In 2019, 78.8% of all reported cases in Nevada were from Clark County, while 15.1% of all cases were in Washoe County, and 6.1% for CDL and AOC combined (Figure 3).

Figure 3 | Chlamydia - Reported Cases by County and Sex, Nevada, 2019



# Chlamydia by Sex

In 2019, 11,205 cases of chlamydia were reported among females for a rate of 723.6 cases per 100,000 females (Figure 2, Figure 3, Table 1). From 2015-2019, the rate of reported chlamydia cases among females increased from 606.8 to 723.6 per 100,000 population. The total rate increase from 2015-2019 among females was 19.2%.

Among males, 6,596 cases of chlamydia were reported in 2019 for a rate of 424.7 cases per 100,000 males (Figure 3, Table 1). The rate of reported cases among males increased each year during 2015-2019 (Figure 2). From 2018–2019 alone, the rate among men increased 2.0%; however, from 2015-2019, rates of reported cases among men increased 49.1% (compared with a 19.2% increase among women) (Table 1 and Table 2). This pronounced increase among men could be attributed to either increased transmission or improved case identification (e.g., through intensified extra-genital screening efforts among gay, bisexual, and other men who have sex with men (collectively referred to as MSM). This cannot be assessed due to most jurisdictions not routinely reporting the sex of sex partner or anatomic site of infection.

Despite this considerable increase in men, the rate of reported chlamydia cases among females was still nearly two times the rate among males in 2019, likely reflecting a larger number of women screened for this infection (Figure 2, Table 1, Table 2). The lower rate among men also suggests many of the sex partners of women with chlamydia are not receiving a diagnosis of chlamydia or being reported as having chlamydia.



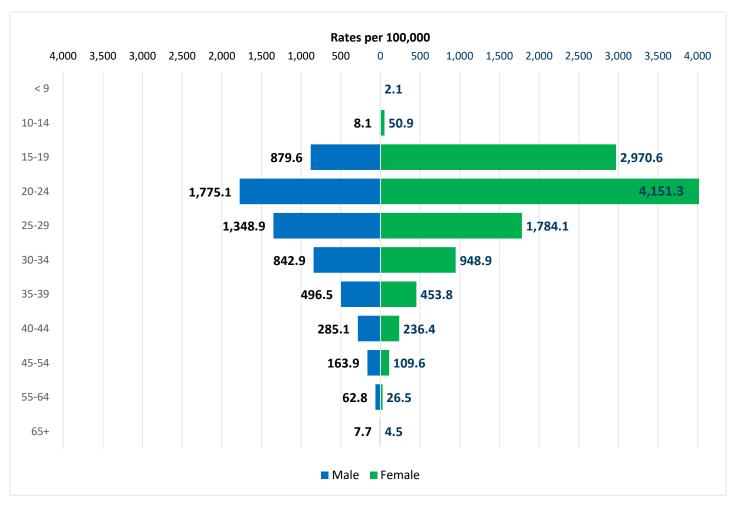


Figure 5 | Chlamydia – Rates of Reported Cases Among Women Aged 15-44 Years by Age Group, Nevada, 2015-2019

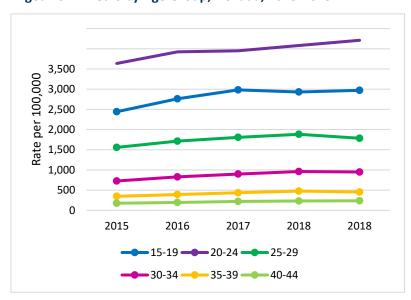
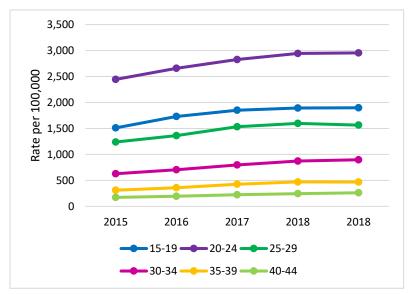


Figure 6 | Chlamydia – Rates of Reported Cases Among Men Aged 15-44 Years by Age Group, Nevada, 2015-2019



# Chlamydia by Age

The rates of reported cases of chlamydia were highest among adolescents and young adults aged 15-29 years during 2015-2019 (Table 2). In 2019, the age-specific rate of reported cases of chlamydia among 15–19-year-olds was 1,897.8 cases per 100,000 population; the rate among 20-24-year-olds was 2,954.6 cases per 100,000 population, and in 25-29-year-olds the rate was 1,564.5 per 100,000 population (Table 1).

In 2019, 97.0% of all reported chlamydia cases in women were among those aged 15-44 years. The highest age-specific rates of reported cases of chlamydia in 2019 were among those aged 15-19 years (2,970.6 cases per 100,000 females), 20-24 years (4,210.1 cases per 100,000 females), and 25-29 years (1,784.1 cases per 100,000 females) (Figure 4, Table 1).

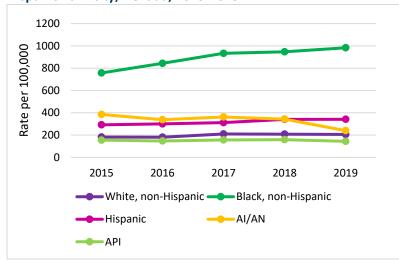
Slight increases have been observed in recent years in rates of reported cases of chlamydia among all age groups in females aged 15-44 years (Figure 5).

The rate among 15–19-year-olds increased by 1.4% during 2018-2019, with a total increase of 21.7% during 2015-2019 (2,441.5 to 2,970.6 cases per 100,000 females (Figure 5). The rate among 20-24-year-olds increased 3.2% from 2018-2019, with a total increase of 15.8% during 2015-2019 (3,636.10 to 4,210.10 per 100,000 females) (Figure 5). While those 25-29-years-old decreased -2.0% from 2018 to 2019, from 2015 to 2019 there was a 26.3% increase (Figure 5). The rate among those 30-34-years-old decreased slight from

2018-2019 but increased 30.7% from 2015-2019 (726.2 to 948.9 per 100,00 females) (Figure 5). Similarly, those 35-39-years-old had a slight decrease of 4.8% from 2018 to 2019, but increased 30.7% from 2015-2019, and those 40-44-years-old increased 1.9% from 2018-2019 and increased 34.2% from 2015-2019 (Figure 5).

In 2019, 92.8% of all reported chlamydia cases in men were among those aged 15-44 years. The age-specific rates of reported cases of chlamydia among men, although substantially lower than rates among women, were highest in those aged 20-24 years (1,7775.1 cases per 100,000 males) (Figure 6, Table 1). Like trends in women, increases have been observed in rates of reported cases of chlamydia among all age groups in males aged 15-44 years (Figure 6). Especially, the rate of reported cases among men aged 35-44 years increased over the last five years. The rate among 35–39-year-olds increased by 8.6% from 2018–2019, with a total increase of 80.9% from 2015-2019 (274.4 to 496.5 cases per 100,000 males). The rate among 40–44-year-olds increased by 11.8% from 2018-2019, with a total increase of 69.5% during 2015-2019 (168.2 to 285.1 cases per 100,000 males) (Table 2).

Figure 7 | Chlamydia - Rates of Reported Cases by Race and Hispanic Ethnicity, Nevada, 2015-2019



# Chlamydia by Race/Hispanic Ethnicity

Rates of reported cases of chlamydia were highest among Black, non-Hispanics at 15.1%, despite the group representing 10.3% of Nevada's total population (Figure 7, Table 1). Overall, the rate of reported cases of chlamydia among Blacks was 4.8 times the rate among Whites (983.0 and 205.4 cases per 100,000 population respectively). The rate among Al/AN (293.3 cases per 100,000 population) was 1.2 times the rate among Whites. The rate among Hispanics (341.3 cases per 100,000 population) was 1.7 times the rate among Whites.

From 2015-2019, rates of reported chlamydia cases increased in White, Black, and Hispanic Ethnicities. Whites increased by 12.9%, Blacks 29.8%, and

Hispanics 17.0%, (Figure 7, Table 2). In contrast, AI/AN decreased 37.8%, and API decreased 6.9%. From 2018–2019, rates increased among Black non-Hispanics (3.8%) and Hispanics (0.2%) but decreased in White non-Hispanics (1.1%) and AI/AN (30.2%), and API (9.3%), (Figure 7, Table 2).

# **GONORRHEA**

# Background

Gonorrhea is the second most common STD reported in the United States and is caused by *Neisseria gonorrhoeae*. Gonorrhea is curable but can have serious health implications if left untreated according to the CDC (3). In men, it can cause a burning sensation when urinating, discharge from the penis, and less commonly painful or swollen testicles. Women can also experience a painful or burning sensation when urinating, increased vaginal discharge, or vaginal bleeding between periods. Additionally, rectal infection in either men or women can result in discharge, anal itching, soreness, bleeding, and painful bowel movements.

# Interpreting Rates of Reported Cases of Gonorrhea

Although gonorrhea case reporting is useful for monitoring disease trends, the number of gonorrhea cases reported to CDC is affected by many factors in addition to the actual occurrence of the infection within the population. Changes in the burden of gonorrhea may be masked by changes in screening practices (e.g., screening for chlamydia with tests that also detect *N. gonorrhoeae* infections or increased screening at extra-genital anatomic sites), and the use of diagnostic tests with different test accuracy (e.g., the broader use of nucleic acid amplification tests [NAATs]).

Figure 8 | Gonorrhea - Rates of Reported Cases by Region, Nevada, 2015-2019

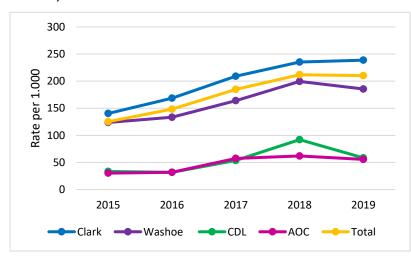
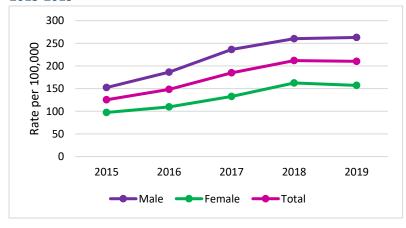


Figure 9 | Gonorrhea - Rates of Reported Cases by Sex, Nevada, 2015-2019



#### Gonorrhea Overview

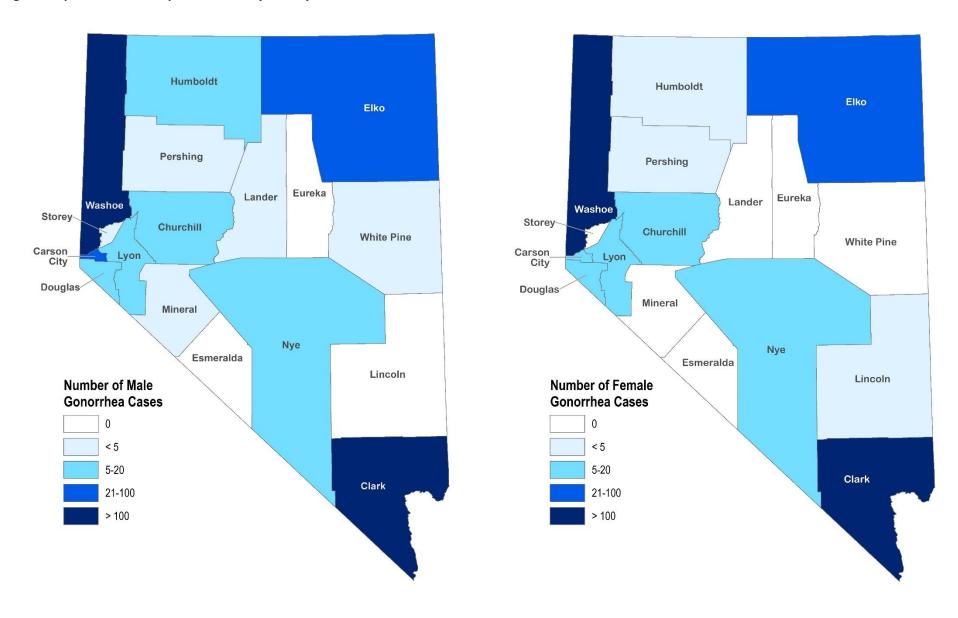
In 2019, a total of 6,519 cases of gonorrhea were reported in Nevada, yielding a rate of 210.2 cases per 100,000 population (Figure 8). From 2018-2019, the rate of reported gonorrhea cases decreased by 0.8%. However, rates have increased by 67.8% since 2015 (Table 4).

# Gonorrhea by Region

Clark County had the highest rate of reported gonorrhea cases (238.7 per 100,000 population) among the four local health jurisdictions in 2019, followed by Washoe County (185.5 per 100,000 population), CDL (58.4 per 100,00 population), and AOC (55.7 per 100,000 population) (Figure 8, Table 4). From 2018-2019, gonorrhea rates decreased in most regions: 7.0% in Washoe, 36.6% in CDL, and 10.2% in AOC, but increased slight in Clark County (1.5%) (Figure 8, Table 4). However, from 2015-2019, all regions increased in rates, with the largest rate being in AOC 83.8% (55.7 per 100,000 population), followed by CDL 74.9% (58.4 per 100,000 population), Clark 70.05 (238.7 per 100,000 population), and finally Washoe 49.8% (185.5 per 100,000 population).

In 2019, 83.6% of reported cases occurred in Clark and 13.4% of cases occurred in Washoe, and 3.1% in CDL and AOC combined (Figure 8, Table 3).

Figure 10 | Gonorrhea - Reported Cases by County and Sex, Nevada, 2019



# Gonorrhea by Sex

From 2015-2019 the rate of reported gonorrhea cases among males was higher than the rate in females (Figure 9, Table 4). From 2018-2019 the gonorrhea rates among males increased by 1.1% (260.1 to 262.9 cases per 100,000 males) and the rate among females decreased by 303% (162.4 to 157.1 per 100,000 females). From 2015-2019, the rate among males increased 72.6% (152.3 to 262.9 per 100,000 males), and 61.5% among females (97.3 to 157.1 per 100,000 females). The magnitude of the increase among males suggests either increased transmission and/or increased case ascertainment (e.g., through increased extra-genital screening among gay, bisexual, and other men who have sex with men (collectively referred to as MSM). This cannot be assessed due to most jurisdictions not routinely reporting the sex of sex partner or anatomic site of infection.

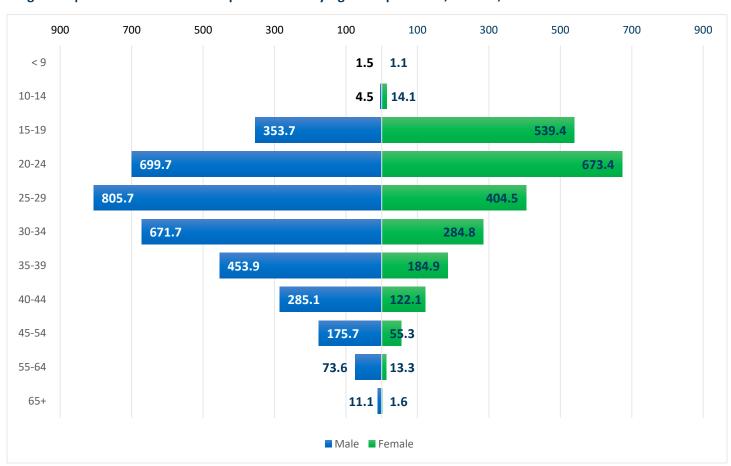


Figure 11 | Gonorrhea - Rates of Reported Cases by Age Group and Sex, Nevada, 2019

Figure 12 | Gonorrhea – Rates of Reported Cases Among Men Aged 15-44 Years by Age Group, Nevada, 2015-2019

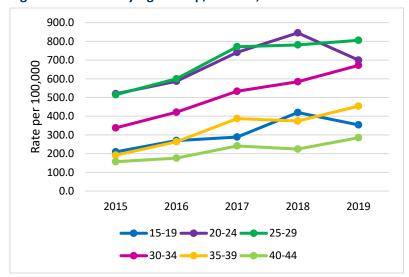


Figure 13 | Gonorrhea - Rates of Reported Cases Among Women Aged 15-44 Years by Age Group, Nevada, 2015-2019

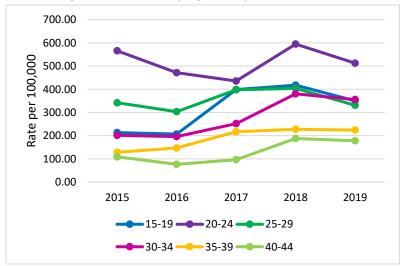
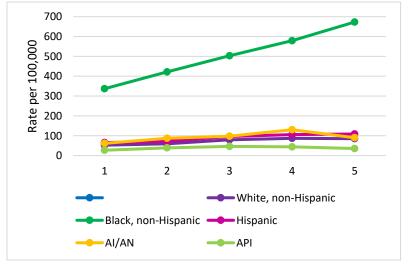


Figure 14 | Gonorrhea -Rates of Report Cases by Race and Hispanic Ethnicity, Nevada, 2015-2019



# Gonorrhea by Age

In 2019, rates of reported gonorrhea cases continued to be highest among adolescents and young adults (Figure 11, Table 3). In 2019, among males, the rate was highest among those aged 25-29 years (805.7 cases per 100,000 males) and 20-24 years (699.7 cases per 100,000 males). The highest rates among females were observed among those aged 20-24 years (673.4 cases per 100,000 females) and 15-19 years (539.4 cases per 100,000 females).

In 2019, persons aged 15-44 years accounted for 89.5% of reported gonorrhea cases. From 2018-2019 rates increased among 30-34-year-olds rates increased 9.6, 20.9% among 35-39-year-olds, and 27.0% among 40-44-year-olds (Table 4). From 2015-2019 all age groups for males had an increase in rates (Figure 12). Among persons aged 15-44 years, decreases were observed in all age groups for women from 2018-2019 (Figure 13). Unlike their male counterparts, various age groups for women saw decreases in rates of gonorrhea from 2015-2019: 20-24-year-olds (565.80 to 512.5 per 100,000 population), 25-29-year-olds (341.8 to 330.9 per 100,000 population) (Figure 13).

# Gonorrhea by Race/Hispanic Ethnicity

In 2019, the rate of reported gonorrhea cases remained highest among Blacks (673.0 cases per 100,000 population) (Table 3). The rate among Blacks was 7.9 times the rate among Whites (85.4 cases per 100,000 population). Black non-Hispanics accounted for 20.5% of all gonorrhea cases, despite being 10.3% of Nevada's total population. The gonorrhea rate among Hispanics (108.8 cases per 100,000 population) was 1.3 times higher than Whites; Al/AN (90.1 cases per 100,000 population) was approximately the same as Whites; the rate among API (35.9 cases per 100,000 population) was 0.4 times lower than Whites (Table 2).

From 2015-2019, for all five years, the gonorrhea rate increased among all race and Hispanic ethnicity groups: 62.7% among Whites, 99.8% among Blacks, 66.1% among Hispanics, 46.3% among AI/AN, and 31.4% among API (Figure 14).

# **SYPHILIS**

# Background

Syphilis is an STD caused by the bacterium *Treponema pallidum* (4). Additionally, syphilis can spread from mother to baby resulting in congenital syphilis. Syphilis is divided into three stages (primary, secondary, and late), and each stage has different symptoms. In the primary stage, the person generally has a painless round lesion. During the secondary stage, a person can have a skin rash, swollen lymph nodes, and fever. In many cases though, symptoms of primary and secondary (P&S) syphilis are so mild they go unnoticed. The late stage of syphilis can present as latent or tertiary forms. In the latent stages of the disease, there are no visible signs or symptoms of the disease, but the bacteria are still present in the body. During the tertiary stage of illness, syphilis will infect the various organ systems of the body and begin to cause damage and even affect the neurological and ocular functions of the body. It is always important to treat syphilis as soon as possible, if left untreated it can have serious long-term effects on one's health.

Congenital syphilis (CS) occurs when a mother with syphilis passes the infection to her baby during pregnancy. CS can cause miscarriage, stillbirth, prematurity, or death shortly after birth (5). Babies born with CS may experience deformed bones, severe anemia, enlarged liver and spleen, jaundice, brain and nerve problems (such as blindness or deafness), meningitis, and skin rashes.

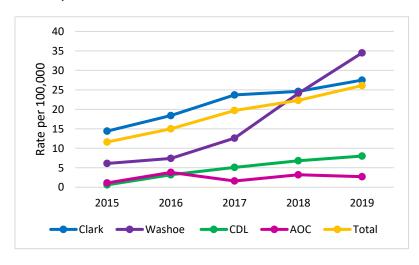
# **Interpreting Rates of Reported Cases**

Left untreated, infection with syphilis can span decades. P&S syphilis is the earliest stage of infection, resulting in more symptomatic disease, indicating incident infection (4). For these reasons, trend analyses of syphilis focus on reported cases and rates of reported cases of P&S syphilis. When referring to "P&S syphilis," case counts are the sum of both primary and secondary cases, and "rate of P&S syphilis" refers to this sum per unit population.

# Syphilis Overview

In 2019, a total of 808 cases of P&S syphilis cases were reported in Nevada, yielding a rate of 26.1 cases per 100,000 population (Table 5). This rate represents a 17.0% increase compared with 2018 (22.3 cases per 100,000 population), and a 125.0% increase compared with 2015 (11.6 cases per 100,000 population).

Figure 15 | P&S Syphilis - Rates of Reported Cases by Region, Nevada, 2015-2019



# P&S Syphilis by Region

In 2019, Washoe County had the highest rate of reported P&S syphilis cases (34.5 per 100,000 population), followed by Clark County (27.5 cases per 100,000 population), CDL (8.0 cases per 100,000 population), and AOC (2.7 per 100,000 population) (Table 5). From 2018-2019, the P&S syphilis rates decreased 15.6% in AOC, but increased 43.2% in Washoe County, 17.6% in CDL and 11.8% in Clark County (Figure 15, Table 6).

In 2019, 77.7% of reported P&S syphilis cases occurred in Clark County, 20.0% in Washoe County, 0.6% in CDL, and 1.3% in AOC (Figure 16, Table 5).

Figure 16 | P&S Syphilis - Reported Cases by County and Sex, Nevada, 2019

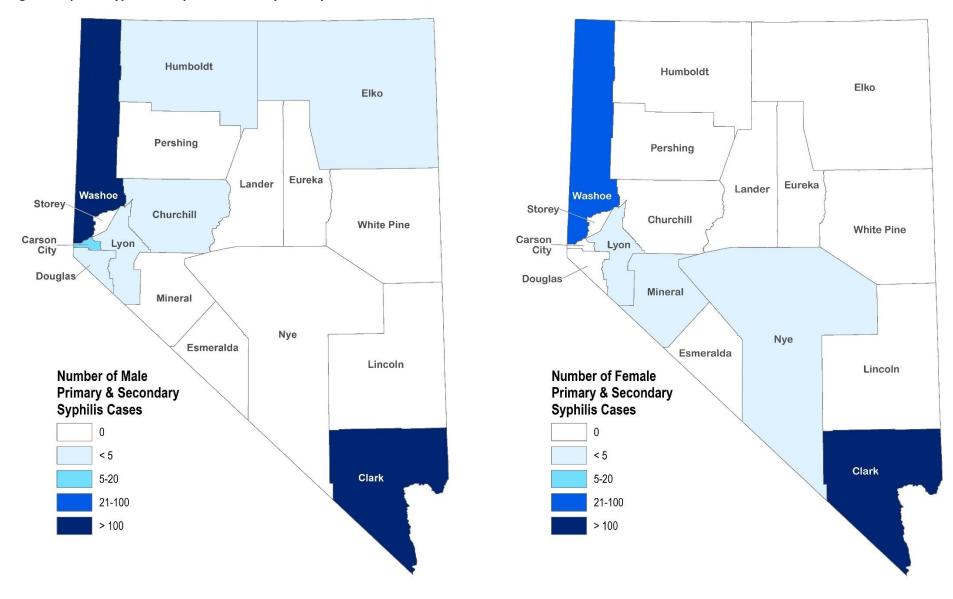
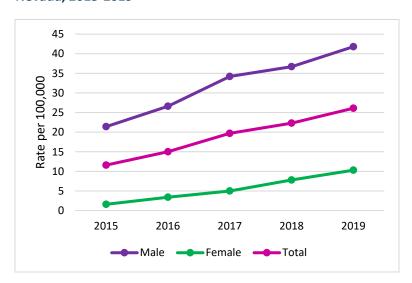


Figure 17 | P&S Syphilis - Rates of Reported Cases by Sex, Nevada, 2015-2019



# P&S Syphilis by Sex

As observed in previous years, in 2019 the rate of reported P&S syphilis cases among men (41.8 cases per 100,000 males) was much higher than the rate among women (10.3 cases per 100,000 females), and men accounted for the highest proportion (80.3%) of P&S syphilis cases (Figure 16, Table 5). Among men, the rate of P&S syphilis has increased every year since 2015 (95.3%), and from 2018–2019, the rate among men increased 13.9% (Figure 16, Table 6). Similarly, the P&S syphilis rate among women increased from 1.6 to 10.3 cases per 100,000 females from 2015–2019 (Figure 16, Table 6). From 2015–2019, the P&S syphilis rate among women increased by 543.8%. From 2018–2019, the P&S syphilis rate among women increased by 32.1%.

These increases in male P&S syphilis rates were observed in most regions from 2018–2019. Among men, the rate increased by 23.1% in Washoe, 19.0% in CDL, 12.0% in Clark, but remained stable in AOC (Table 7). Clark and Washoe County had an increase P&S syphilis rate among women, the largest increases were observed in Washoe (122.9%), followed by Clark (12.0%), while the rate in CDL remained stable and AOC decreased 33.3% (Table 8).

# P&S Syphilis by Age

Figure 18 | P&S Syphilis - Rates of Reported Cases by Age Group and Sex, Nevada, 2019

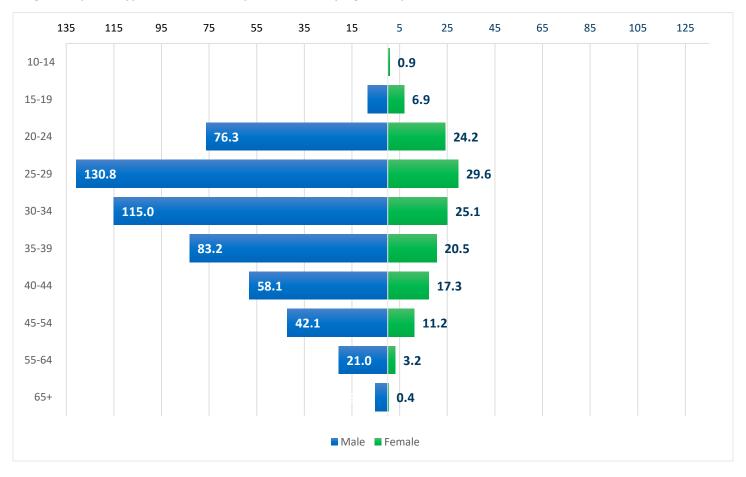


Figure 19 | P&S Syphilis – Rates of Reported Cases Among Men Aged 15-44 Years by Age Group, Nevada, 2015-2019

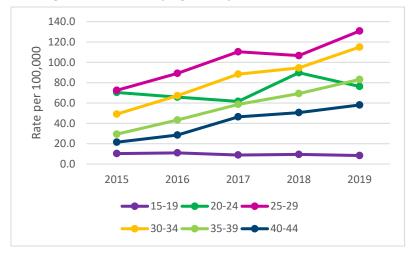


Figure 20 | P&S Syphilis - Rates of Reported Cases Among Women Aged 15-44 Years by Age Group, Nevada, 2015-2019

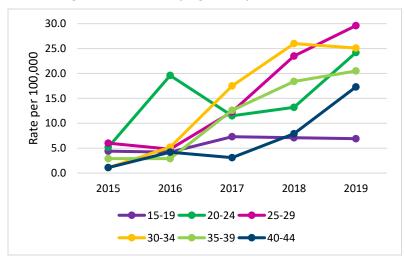
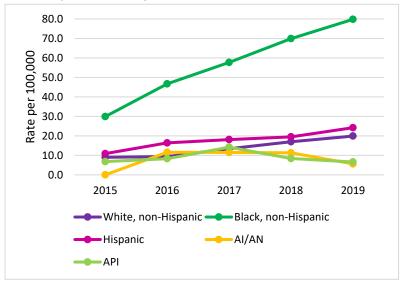


Figure 21 | P&S Syphilis -Rates of Reported Cases by Race and Hispanic Ethnicity, Nevada, 2015-2019



From 2018-2019, the overall rate of reported P&S syphilis cases increased in most age groups aged 15 years or older (Table 6). Rates increased 23.3% among those aged 25-29-years-old, 16.2% among those aged 30-34-years-old, 18.7% among those aged 35-39-years-old, 28.4% among those aged 40-44-years-old (Figure 19, Table 7). As in previous years, in 2019, rates of reported P&S syphilis cases were highest among persons aged 25-29 years (Figure 18, Table 5).

In 2019, the highest rates were observed among men aged 25-29 years (130.8 cases per 100,000 males), 30-34 years (115.0 cases per 100,000 males), and 35-39 years (83.2 cases per 100,000 males) (Figure 18, Table 6). The highest rates among women were among those aged 25-29 (29.6 cases per 100,000 females), 30-34 years (25.1 cases per 100,000 females), and those aged 20-24 years (24.2 cases per 100,000 females) (Figure 18, Table 6).

Among women from 2018-2019, the rate decreased among those aged 15-19-years-old and 30-34-years-old but increased in all other age groups. However, from 2015-2019 rates increased in all age groups from women (Figure 19, Figure 20, Table 8).

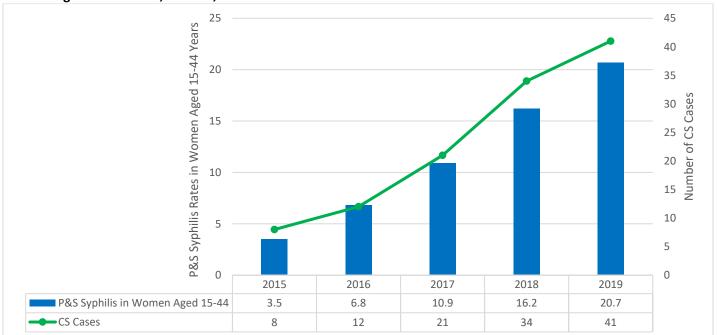
# P&S Syphilis by Race/Hispanic Ethnicity

In 2019, the rate of reported P&S syphilis cases was highest among Blacks, (79.8 cases per 100,000 population). Blacks also accounted for 27.1% of all P&S Syphilis cases in 2019 despite representing 10.3% of the population (Table 7). The P&S syphilis rate among Blacks was 4.0 times the rate among Whites (19.9 cases per 100,000 population), the rate among Hispanics (24.2 cases per 100,000 population) was 1.2 times the rate among Whites, the rate among Al/AN (5.6 cases per 100,000 population) was 0.3 times the rate among Whites, the rate among API (6.6 cases per 100,000 population) was 0.3 the rate among Whites (Figure 21, Table 7).

From 2015-2019, the P&S syphilis rate increased among most race/Hispanic ethnicity groups, the exception was API decreased 2.9% from 6.8 to 6.6 per 100,000 population (Figure 21). The greatest increases from 2018-2019 were observed among Hispanics (24.1%), Whites (17.1%), and Blacks (14.2%) (Figure 21, Table 7).

# Congenital Syphilis

Figure 22 | Congenital Syphilis – Reported Cases by Year of Birth and Rates of Reported Cases of P&S Syphilis Among Women Aged 15-44 Years, Nevada, 2015-2019



The rate of reported P&S syphilis in women aged 15-44 has subsequently increased each year since 2015 (Figure 22). In 2019, there were a total of 41 reported cases of congenital syphilis with a rate of 117.2 cases per 100,000 live births. This rate represents a 22.5% increase compared to 2018 (95.7 cases per 100,000 live births) and a 422.5 increase compared to 2015 (22.4cases per 100,000 live births). Historically, this increase in the congenital syphilis rate has paralleled increases in P&S syphilis among all women and reproductive-aged women from 2015-2019 (498.9%) (Figure 22).

From 2015-2019, the increase in reported congenital syphilis cases was primarily attributable to an increase in Clark County. During this time, the congenital syphilis rate increased 498.3% in Clark County and a 161.5% increase in Washoe County (Table 9). From 2018–2019, the congenital syphilis rate increased 32.0% in Clark and 3.2% Washoe, the highest congenital syphilis rates were reported from the Clark (133.5 cases per 100,000 live births) followed by Washoe (96.2 cases per 100,000 live births), and CDL (65.3 cases per 100,000 live births).

# **TABLES**

Table 1 | Chlamydia Cases in Nevada, 2019

		Total			Male			Female	
	N	<b>%</b> *	Rate	n	<b>%</b> *	Rate	n	<b>%</b> *	Rate
Resident County at Diagnosis									
Clark	14,045	78.8%	615.4	5,222	79.1%	457.8	8,804	78.6%	771.3
Washoe	2,697	15.1%	573.9	1,015	15.4%	429.7	1,676	15.0%	717.0
Carson/Douglas/Lyon	554	3.1%	340.8	177	2.7%	221.3	375	3.3%	454.1
All Other Counties**	532	3.0%	285.1	182	2.8%	189.6	350	3.1%	386.2
Unknown	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	17,828	100.0%	574.8	6,596	100.0%	424.7	11,205	100.0%	723.6
Race/Ethnicity									
White, non-Hispanic	3,207	18.0%	205.4	1,188	18.0%	150.7	2,019	18.0%	261.2
Black, non-Hispanic	2,698	15.1%	983.0	1,180	17.9%	853.5	1,517	13.5%	1,113.8
Hispanic	3,162	17.7%	341.3	1,185	18.0%	252.6	1,973	17.6%	431.4
American Indian/Alaska Native	85	0.5%	239.3	26	0.4%	149.4	59	0.5%	325.7
Asian/Hawaiian/Pacific Islander	436	2.4%	143.6	168	2.5%	120.2	268	2.4%	163.5
Unknown/Other	8,240	46.3%	N/A	2,849	43.2%	N/A	5,369	48.0%	N/A
Total	17,828	100.0%	574.8	6,596	100.0%	424.7	11,205	100.0%	723.6
Age Group									
< 9	4	0.0%	1.0	0	0.0%	0.0	4	0.0%	2.1
10-14	63	0.4%	29.1	9	0.1%	8.1	54	0.5%	50.9
15-19	3,967	22.3%	1,897.8	945	14.3%	879.6	3,018	26.9%	2,970.6
20-24	6,064	34.0%	2,954.6	1,885	28.6%	1,775.1	4,170	37.2%	4,210.1
25-29	3,550	19.9%	1,564.5	1,557	23.6%	1,348.9	1,989	17.7%	1,784.1
30-34	1,904	10.7%	897.0	916	13.9%	842.9	983	8.8%	948.9
35-39	980	5.5%	476.7	513	7.8%	496.5	464	4.1%	453.8
40-44	550	3.1%	261.1	304	4.6%	285.1	246	2.2%	236.4
45-54	552	3.1%	137.5	335	5.1%	163.9	216	1.9%	109.6
55-64	167	0.9%	44.8	116	1.8%	62.8	50	0.4%	26.5
65+	27	0.1%	5.9	16	0.2%	7.7	11	0.1%	4.5
Unknown	0	0.0%	N/A	0	0.0%	NA	0	0.0%	N/A
Total	17,828	100.0%	574.8	6,596	100.0%	424.7	11,205	100.0%	723.6

Source: Division of Public and Behavioral Health, NEDSS Based System (NBS), data as of December 2020.

 $<sup>\</sup>ensuremath{^*}$  Percent may not equal 100% due to rounding and unknown counts.

<sup>\*\*</sup> All other counties include Churchill, Elko, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Mineral, Nye, Pershing, Storey, and White Pine.

<sup>^</sup>Male and female column totals may not add up to total number of Chlamydia cases due to patients with unknown sex reported.

Table 2 | Chlamydia cases in Nevada, 2015-2019

		2015 Total			2016 Total			2017 Total			2018 Total			2019 Total	
	N	%	Rate*												
Resident County at Diagnosis															
Clark	10,048	77.7%	474.3	11,362	77.6%	524.5	12,529	77.1%	571.1	13,695	78.2%	608.3	14,045	78.8%	615.4
Washoe	2,033	15.7%	460.0	2,200	15.0%	490.7	2,502	15.4%	553.6	2,729	15.6%	593.0	2,697	15.1%	573.9
Carson City, Douglas, Lyon	511	4.0%	328.0	514	3.5%	327.2	657	4.0%	414.8	594	3.4%	369.7	554	3.1%	340.8
All Other Counties	329	2.5%	181.2	446	3.0%	245.3	571	3.5%	312.8	490	2.8%	264.2	532	3.0%	285.1
Unknown	11	0.1%	N/A	3	0.0%	N/A	1	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Sex															
Male	4,151	32.1%	284.9	4,778	32.6%	322.2	5,741	35.3%	383.1	6,381	36.4%	416.5	6,596	37.0%	424.7
Female	8,743	67.6%	606.8	9,848	67.2%	669.8	10,472	64.4%	703.7	11,057	63.2%	724.9	11,205	62.9%	723.6
Unknown	30	0.2%	N/A	23	0.2%	N/A	47	0.3%	N/A	70	0.4%	N/A	27	0.2%	N/A
Race/Ethnicity															
White, non-Hispanic	2,785	21.5%	181.9	2,779	19.0%	180.5	3,231	19.9%	209.6	3,229	18.4%	207.7	3,207	18.0%	205.4
Black, non-Hispanic	1,872	14.5%	757.2	2,150	14.7%	843.4	2,424	14.9%	933.1	2,546	14.5%	946.7	2,698	15.1%	983.0
Hispanic	2,390	18.5%	291.6	2,545	17.4%	300.2	2,704	16.6%	311.6	3,072	17.5%	340.5	3,162	17.7%	341.3
American Indian/Alaska Native	131	1.0%	384.5	116	0.8%	337.7	126	0.8%	362.2	121	0.7%	342.9	85	0.5%	239.3
Asian/Hawaiian/Pacific Islander	410	3.2%	154.2	406	2.8%	146.7	441	2.7%	156.0	469	2.7%	158.3	436	2.4%	143.6
Unknown/Other	5,336	41.3%	N/A	6,653	45.4%	N/A	7,334	45.1%	N/A	8,071	46.1%	N/A	8,240	46.2%	N/A
Age Group															
< 9	5	0.0%	1.3	3	0.0%	0.8	5	0.0%	1.3	2	0.0%	0.5	4	0.0%	1.0
10-14	92	0.7%	46.5	86	0.6%	41.9	101	0.6%	47.7	99	0.6%	45.7	63	0.4%	29.1
15-19	2,856	22.1%	1,510.9	3,368	23.0%	1,730.6	3,650	22.4%	1,850.7	3,860	22.0%	1,893.4	3,967	22.3%	1,897.8
20-24	4,844	37.5%	2,444.6	5,325	36.4%	2,658.4	5,604	34.5%	2,826.8	5,977	34.1%	2,943.8	6,064	34.0%	2,954.6
25-29	2,534	19.6%	1,238.7	2,886	19.7%	1,361.6	3,318	20.4%	1,532.9	3,594	20.5%	1,597.1	3,550	19.9%	1,564.5
30-34	1,206	9.3%	627.9	1,377	9.4%	705.0	1,594	9.8%	796.9	1,794	10.2%	872.1	1,904	10.7%	897.0
35-39	646	5.0%	310.3	754	5.1%	357.9	883	5.4%	425.8	975	5.6%	470.2	980	5.5%	476.7
40-44	328	2.5%	172.1	374	2.6%	194.1	443	2.7%	223.2	503	2.9%	244.1	550	3.1%	261.1
45-54	315	2.4%	81.3	365	2.5%	92.5	421	2.6%	106.2	482	2.8%	120.6	552	3.1%	137.5
55-64	77	0.6%	22.4	91	0.6%	25.9	112	0.7%	31.4	132	0.8%	36.1	167	0.9%	44.8
65+	19	0.1%	4.8	20	0.1%	4.9	20	0.1%	4.7	25	0.1%	5.7	27	0.2%	5.9
Unknown	2	0.0%	NA	0	0.0%	N/A	109	0.7%	N/A	65	0.4%	N/A	0	0.0%	N/A
Total	12,924	100.0%	446.0	14,649	100.0%	496.0	16,260	100.0%	544.4	17,508	100.0%	572.6	17,828	100.0%	574.8

Source: Division of Public and Behavioral Health, Sexually Transmitted Disease Management Information Systems (STD\*MIS) and NEDSS Based System (NBS), data as of December 2020.

<sup>\*</sup> Percent may not equal 100% due to rounding and unknown counts.

<sup>\*\*</sup> All other counties include Churchill, Elko, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Mineral, Nye, Pershing, Storey, and White Pine

Table 3 | Gonorrhea Cases in Nevada, 2019

		Total			Male			Female	
	N	<b>%</b> *	Rate	n	<b>%</b> *	Rate	n	<b>%</b> *	Rate
Resident County at Diagnosis									
Clark	5,448	83.6%	238.7	3,439	84.2%	301.5	2,006	82.5%	175.7
Washoe	872	13.4%	185.5	539	13.2%	228.2	332	13.7%	142.0
Carson/Douglas/Lyon	95	1.5%	58.4	49	1.2%	61.3	45	1.9%	54.5
All Other Counties**	104	1.6%	55.7	55	1.3%	57.3	49	2.0%	54.1
Unknown	0	0.0%	NA	0	0.0%	NA	0	0.0%	NA
Total	6,519	100.0%	210.2	4,082	100.0%	262.9	2,432	100.0%	157.1
Race/Ethnicity									
White, non-Hispanic	1,334	20.5%	85.4	829	20.3%	105.1	505	20.8%	65.3
Black, non-Hispanic	1,847	28.3%	673.0	1,202	29.4%	869.4	645	26.5%	473.6
Hispanic	1,008	15.5%	108.8	708	17.3%	150.9	300	12.3%	65.6
American Indian/Alaska Native	32	0.5%	90.1	13	0.3%	74.7	19	0.8%	104.9
Asian/Hawaiian/Pacific Islander	108	1.7%	35.6	70	1.7%	50.1	38	1.6%	23.2
Unknown/Other	2,190	33.6%	NA	1,260	30.9%	NA	925	38.0%	NA
Total	6,519	100.0%	210.2	4,082	100.0%	262.9	2,432	100.0%	157.1
Age Group									
< 9	5	0.1%	1.3	3	0.1%	1.5	2	0.1%	1.1
10-14	20	0.3%	9.2	5	0.1%	4.5	15	0.6%	14.1
15-19	928	14.2%	443.9	380	9.3%	353.7	548	22.5%	539.4
20-24	1,412	21.7%	688.0	743	18.2%	699.7	667	27.4%	673.4
25-29	1,381	21.2%	608.6	930	22.8%	805.7	451	18.5%	404.5
30-34	1,026	15.7%	483.4	730	17.9%	671.7	295	12.1%	284.8
35-39	659	10.1%	320.6	469	11.5%	453.9	189	7.8%	184.9
40-44	431	6.6%	204.6	304	7.4%	285.1	127	5.2%	122.1
45-54	469	7.2%	116.8	359	8.8%	175.7	109	4.5%	55.3
55-64	161	2.5%	43.1	136	3.3%	73.6	25	1.0%	13.3
65+	27	0.4%	5.9	23	0.6%	11.1	4	0.2%	1.6
Unknown	0	0.0%	NA	0	0.0%	NA	0	0.0%	NA
Total	6,519	100.0%	210.2	4,082	100.0%	262.9	2,432	100.0%	157.1

Source: Division of Public and Behavioral Health, Sexually Transmitted Disease Management Information Systems (STD\*MIS) and NEDSS Based System (NBS), data as of December 2020.

<sup>\*</sup> Percent may not equal 100% due to rounding and unknown counts.

<sup>\*\*</sup> All other counties include Churchill, Elko, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Mineral, Nye, Pershing, Storey, and White Pine.

Table 4 | Gonorrhea cases in Nevada, 2015-2019

		Total			Total			Total			Total			Total	
	N	%	Rate*	N		Rate*	N	%	Rate*	N	%	Rate*	N	%	Rate*
Resident County at Diagnosis															
Clark	2,975	82.0%	140.4	3,653	83.4%	168.6	4,588	83.1%	209.1	5,294	81.8%	235.2	5,448	83.6%	238.7
Washoe	547	15.1%	123.8	598	13.7%	133.4	741	13.4%	164.0	918	14.2%	199.5	872	13.4%	185.5
Carson City, Douglas, Lyon	52	1.4%	33.4	50	1.1%	31.8	85	1.5%	53.7	148	2.3%	92.1	95	1.5%	58.4
All Other Counties	55	1.5%	30.3	58	1.3%	31.9	105	1.9%	57.5	115	1.8%	62.0	104	1.6%	55.7
Unknown	1	0.0%	NA	21	0.5%	NA	1	0.0%	NA	0	0.0%	NA	0	0.0%	NΑ
Sex															
Male	2,218	61.1%	152.3	2,763	63.1%	186.3	3,539	64.1%	236.2	3,985	61.5%	260.1	4,082	62.6%	262.9
Female	1,402	38.6%	97.3	1,611	36.8%	109.6	1,972	35.7%	132.5	2,477	38.3%	162.4	2,432	37.3%	157.1
Unknown	10	0.3%	NA	6	0.1%	NA	9	0.2%	NA	13	0.2%	NA	5	0.1%	NΑ
Race/Ethnicity															
White, non-Hispanic	803	22.1%	52.5	917	20.9%	59.6	1,226	22.2%	79.5	1,352	20.9%	86.9	1,334	20.5%	85.4
Black, non-Hispanic	833	22.9%	336.9	1,075	24.5%	421.7	1,307	23.7%	503.1	1,557	24.0%	578.9	1,847	28.3%	673.0
Hispanic	537	14.8%	65.5	610	13.9%	72.0	833	15.1%	96.0	955	14.7%	105.9	1,008	15.5%	108.8
American Indian/Alaska Native	21	0.6%	61.6	30	0.7%	87.3	34	0.6%	97.7	46	0.7%	130.3	32	0.5%	90.1
Asian/Hawaiian/Pacific Islander	72	2.0%	27.1	108	2.5%	39.0	131	2.4%	46.3	130	2.0%	43.9	108	1.7%	35.6
Unknown/Other	1,364	37.6%	NA	1,640	37.4%	NA	1,989	36.0%	NA	2,435	37.6%	NA	2,190	33.6%	NA
Age Group															
< 9	0	0.0%	0.0	6	0.1%	1.6	5	0.1%	1.3	3	0.0%	0.8	5	0.1%	1.3
10-14	13	0.4%	6.6	15	0.3%	7.3	25	0.5%	11.8	38	0.6%	17.6	20	0.3%	9.2
15-19	484	13.3%	256.0	634	14.5%	325.8	717	13.0%	363.5	1,037	16.0%	508.7	928	14.2%	443.9
20-24	953	26.3%	480.9	1,093	25.0%	545.6	1,294	23.4%	652.7	1,556	24.0%	766.4	1,412	21.7%	688.0
25-29	841	23.2%	411.1	995	22.7%	469.4	1,250	22.6%	577.5	1,377	21.3%	611.9	1,381	21.2%	608.6
30-34	479	13.2%	249.4	600	13.7%	307.2	787	14.3%	393.4	907	14.0%	440.9	1,026	15.7%	483.4
35-39	321	8.8%	154.2	391	8.9%	185.6	560	10.1%	270.0	550	8.5%	265.2	659	10.1%	320.6
40-44	210	5.8%	110.2	226	5.2%	117.3	324	5.9%	163.2	332	5.1%	161.1	431	6.6%	204.6
45-54	231	6.4%	59.6	304	6.9%	77.0	390	7.1%	98.4	485	7.5%	121.4	469	7.2%	116.8
55-64	84	2.3%	24.4	89	2.0%	25.3	127	2.3%	35.6	143	2.2%	39.1	161	2.5%	43.1
65+	13	0.4%	3.3	26	0.6%	6.3	20	0.4%	4.7	25	0.4%	5.7	27	0.4%	5.9
Unknown	1	0.0%	NA	1	0.0%	NA	21	0.4%	NA	22	0.3%	NA	0	0.0%	NA
Total	3,630	100.0%	125.3	4,380	100.0%	148.3	5,520	100.0%	184.8	6,475	100.0%	211.8	6,519	100.0%	210.2

Source: Division of Public and Behavioral Health, Sexually Transmitted Disease Management Information Systems (STD\*MIS) and NEDSS Based System (NBS), data as of July 2019.

<sup>\*</sup> Percent may not equal 100% due to rounding and unknown counts.

Table 5 | Primary & Secondary Syphilis Cases in Nevada, 2019

		Total			Male			Female	
	N	<b>%</b> *	Rate	n	<b>%</b> *	Rate	n	<b>%</b> *	Rate
Resident County at Diagnosis									
Clark	628	77.7%	27.5	522	80.4%	45.8	106	66.7%	9.3
Washoe	162	20.0%	34.5	112	17.3%	47.4	50	31.4%	21.4
Carson/Douglas/Lyon	13	1.6%	8.0	12	1.8%	15.0	1	0.6%	1.2
All Other Counties**	5	0.6%	2.7	3	0.5%	3.1	2	1.3%	2.2
Total	808	100.0%	26.1	649	100.0%	41.8	159	100.0%	10.3
Race/Ethnicity									
White, non-Hispanic	311	38.5%	19.9	236	36.4%	29.9	75	47.2%	9.7
Black, non-Hispanic	219	27.1%	79.8	175	27.0%	126.6	44	27.7%	32.3
Hispanic	224	27.7%	24.2	195	30.0%	41.6	29	18.2%	6.3
American Indian/Alaska Native	2	0.2%	5.6	0	0.0%	0.0	2	1.3%	11.0
Asian/Hawaiian/Pacific Islander	20	2.5%	6.6	18	2.8%	12.9	2	1.3%	1.2
Unknown/Other	32	4.0%	NA	25	3.9%	NA	7	4.4%	NA
Total	808	100.0%	26.1	649	100.0%	41.8	159	100.0%	10.3
Age Group									
< 9	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
10-14	1	0.1%	0.5	0	0.0%	0.0	1	0.6%	0.9
15-19	16	2.0%	7.7	9	1.4%	8.4	7	4.4%	6.9
20-24	105	13.0%	51.2	81	12.5%	76.3	24	15.1%	24.2
25-29	184	22.8%	81.1	151	23.3%	130.8	33	20.8%	29.6
30-34	151	18.7%	71.1	125	19.3%	115.0	26	16.4%	25.1
35-39	107	13.2%	52.1	86	13.3%	83.2	21	13.2%	20.5
40-44	80	9.9%	38.0	62	9.6%	58.1	18	11.3%	17.3
45-54	108	13.4%	26.9	86	13.3%	42.1	22	13.8%	11.2
55-64	44	5.4%	11.8	38	5.9%	20.6	6	3.8%	3.2
65+	12	1.5%	2.6	11	1.7%	5.3	1	0.6%	0.4
Unknown	0	0.0%	NA	0	0.0%	NA	0	0.0%	NA
Total	808	100.0%	26.1	649	100.0%	41.8	159	100.0%	10.3

Source: Division of Public and Behavioral Health, Sexually Transmitted Disease Management Information Systems (STD\*MIS) and NEDSS Based System (NBS), data as of December 2020.

<sup>\*</sup> Percent may not equal 100% due to rounding and unknown counts.

<sup>\*\*</sup> All other counties include Churchill, Elko, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Mineral, Nye, Pershing, Storey, and White Pine.

Table 6 | Primary and Secondary (P&S) Syphilis cases in Nevada, 2015-2019

		Total	*		Total			Total			Total	,		Total	<b>.</b> . *
Resident County at Diagnosis	N	%	Rate*												
Clark	305	91.0%	14.4	398	89.6%	18.4	519	88.4%	23.7	554	81.2%	24.6	628	77.7%	27.5
Washoe	27	8.1%	6.1	33	7.4%	7.4	57	9.7%	12.6	111	16.3%		162	20.0%	34.5
Carson City, Douglas, Lyon	1	0.3%	0.6	5	1.1%	3.2	8	1.4%	5.1	11	1.6%		13	1.6%	8.0
All Other Counties	2	0.6%	1.1	7	1.6%	3.8	3	0.5%	1.6	6	0.9%		5	0.6%	2.7
Unknown	0	0.0%	NA	1	0.2%	NA	0	0.0%	NA	0	0.0%		0	0.0%	NA
Sex															
Male	312	93.1%	21.4	394	88.7%	26.6	512	87.2%	34.2	563	82.6%	36.7	649	80.3%	41.8
Female	23	6.9%	1.6	50	11.3%	3.4	75	12.8%	5.0	119	17.4%	7.8	159	19.7%	10.3
Race/Ethnicity															
White, non-Hispanic	138	41.2%	9.0	144	32.4%	9.4	206	35.1%	13.4	265	38.9%	17.0	311	38.5%	19.9
Black, non-Hispanic	74	22.1%	29.9	119	26.8%	46.7	150	25.6%	57.7	188	27.6%	69.9	219	27.1%	79.8
Hispanic	89	26.6%	10.9	139	31.3%	16.4	157	26.7%	18.1	176	25.8%	19.5	224	27.7%	24.2
American Indian/Alaska Native	0	0.0%	0.0	4	0.9%	11.6	4	0.7%	11.5	4	0.6%	11.3	2	0.2%	5.6
Asian/Hawaiian/Pacific Islander	18	5.4%	6.8	23	5.2%	8.3	40	6.8%	14.2	25	3.7%	8.4	20	2.5%	6.6
Unknown/Other	16	4.8%	NA	15	3.4%	NA	30	5.1%	NA	24	3.5%	NA	32	4.0%	NA
Age Group															
< 9	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
10-14	1	0.3%	0.5	0	0.0%	0.0	0	0.0%	0.0	1	0.1%	0.5	1	0.1%	0.5
15-19	14	4.2%	7.4	15	3.4%	7.7	16	2.7%	8.1	17	2.5%	8.3	16	2.0%	7.7
20-24	77	23.0%	38.9	87	19.6%	43.4	74	12.6%	37.3	107	15.7%	52.7	105	13.0%	51.2
25-29	82	24.5%	40.1	102	23.0%	48.1	135	23.0%	62.4	148	21.7%	65.8	184	22.8%	81.1
30-34	49	14.6%	25.5	72	16.2%	36.9	108	18.4%	54.0	126	18.5%		151	18.7%	71.1
35-39	34	10.1%	16.3	49	11.0%	23.3	74	12.6%	35.7	91	13.3%		107	13.2%	52.1
40-44	22	6.6%	11.5	32	7.2%	16.6	50	8.5%	25.2	61	8.9%		80	9.9%	38.0
45-54	43	12.8%	11.1	62	14.0%	15.7	94	16.0%	23.7	92	13.5%	23.0	108	13.4%	26.9
55-64	8	2.4%	2.3	20	4.5%	5.7	30	5.1%	8.4	31	4.5%		44	5.4%	11.8
65+	5	1.5%	1.3	5	1.1%	1.2	5	0.9%	1.2	8	1.2%		12	1.5%	2.6
Unknown	0	0.0%	NA	0	0.0%	NA	1	0.2%	NA	0	0.0%		0	0.0%	NA
Total	335	100.0%	11.6	444	100.0%	15.0	587	100.0%	19.7	682	100.0%	22.3	808	100.0%	26.1

Source: Division of Public and Behavioral Health, Sexually Transmitted Disease Management Information Systems (STD\*MIS) and NEDSS Based System (NBS), data as of December 2020.

<sup>\*</sup> Percent may not equal 100% due to rounding and unknown counts.

Table 7 | P&S Syphilis – Cases and Crude Rates of Reported Cases by County, Males, 2015-2019

	Clark		Washoe		Carsor Douglas		All Other	Counties	Nevada		
	n Rate		n	Rate	n	Rate	n	Rate	n	Rate	
Year											
2015	288	27.1	22	9.9	1	1.3	1	1.1	312	21.4	
2016	358	33.0	28	12.4	3	3.8	4	4.3	394	26.6	
2017	464	42.2	41	18.0	5	6.4	2	2.1	512	34.2	
2018	461	40.9	89	38.5	10	12.6	3	3.1	563	36.7	
2019	522	45.8	112	47.4	12	15.0	3	3.1	649	41.8	

Table 8 | P&S Syphilis - Cases and Crude Rates of Reported Cases by County, Females, 2015-2019

	Clark		Washoe		Carsor Douglas		All Other	Counties	Nevada		
	n Rate		n	Rate	n	Rate	n	Rate	n	Rate	
Year											
2015	17	1.6	5	2.3	0	0.0	1	1.1	23	1.6	
2016	40	3.7	5	2.2	2	2.5	3	3.4	50	3.4	
2017	55	5.0	16	7.1	3	3.8	1	1.1	75	5.0	
2018	93	8.3	22	9.6	1	1.2	3	3.3	119	7.8	
2019	106	9.3	50	21.4	1	1.2	2	2.2	159	10.3	

Table 9 | Congenital Syphilis - Cases and Rates of Reported Cases by County, 2015-2019

	Clark		Washoe		Carson Douglas		All Other	Counties	Nevada		
	n Rate		n	Rate	n	Rate	n	Rate	n	Rate	
Year											
2015	6	22.3	2	36.8	0	0.0	0	0.0	8	22.4	
2016	11	40.4	1	18.7	0	0.0	0	0.0	12	33.3	
2017	18	67.1	2	38.5	0	0.0	1	46.5	21	58.9	
2018	27	101.2	5	93.2	0	0.0	2	97.8	34	95.7	
2019	35	133.5	5	96.2	1	65.3	0	0.0	41	117.2	

<sup>\*</sup>Birth rates per 100,000 live births were calculated using 2019 vital records.

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#### Web Site

The online version of this report is available at

http://dpbh.nv.gov/Programs/STD/dta/Publications/Sexually Transmitted Disease (STD) Prevention and Control Program-Publications/

#### Selected References and Web Sites

STD Publications from 2000-2019

http://dpbh.nv.gov/Programs/STD/dta/Publications/Sexually Transmitted Disease (STD) Prevention and Control Program- Publications/

STD Treatment Guidelines

https://www.cdc.gov/STD/treatment/

STD Program Operation Guidelines

https://www.cdc.gov/std/program/GL-2001.htm

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