

Nevada

STD Epidemiologic Profile: 2018

Nevada Division of Public and Behavioral Health

Office of Public Health Investigations and Epidemiology

Sexually Transmitted Disease (STD) Prevention and Control Program

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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
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
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
OPHIE	Office of Public Health Investigations and Epidemiology
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 which 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.

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-month period per 100,000 population using population estimates from the Nevada State Demographer's Office.

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 2018 presents an analysis for STDs reported in Nevada through 2018. This annual publication is intended as a reference document for policy makers, 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 July 2018, from the surveillance system maintained by DPBH, STD*MIS, a database application provided by the CDC to the state for use in managing the data received for STD control. Data from STD*MIS 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, 2018 to December 31, 2018; from January 1, 2018 to May 31, 2018 data were obtained from STD*MIS, From June 1, 2018 to December 31, 2018 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 2018 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 a 30-day period. 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 are 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.

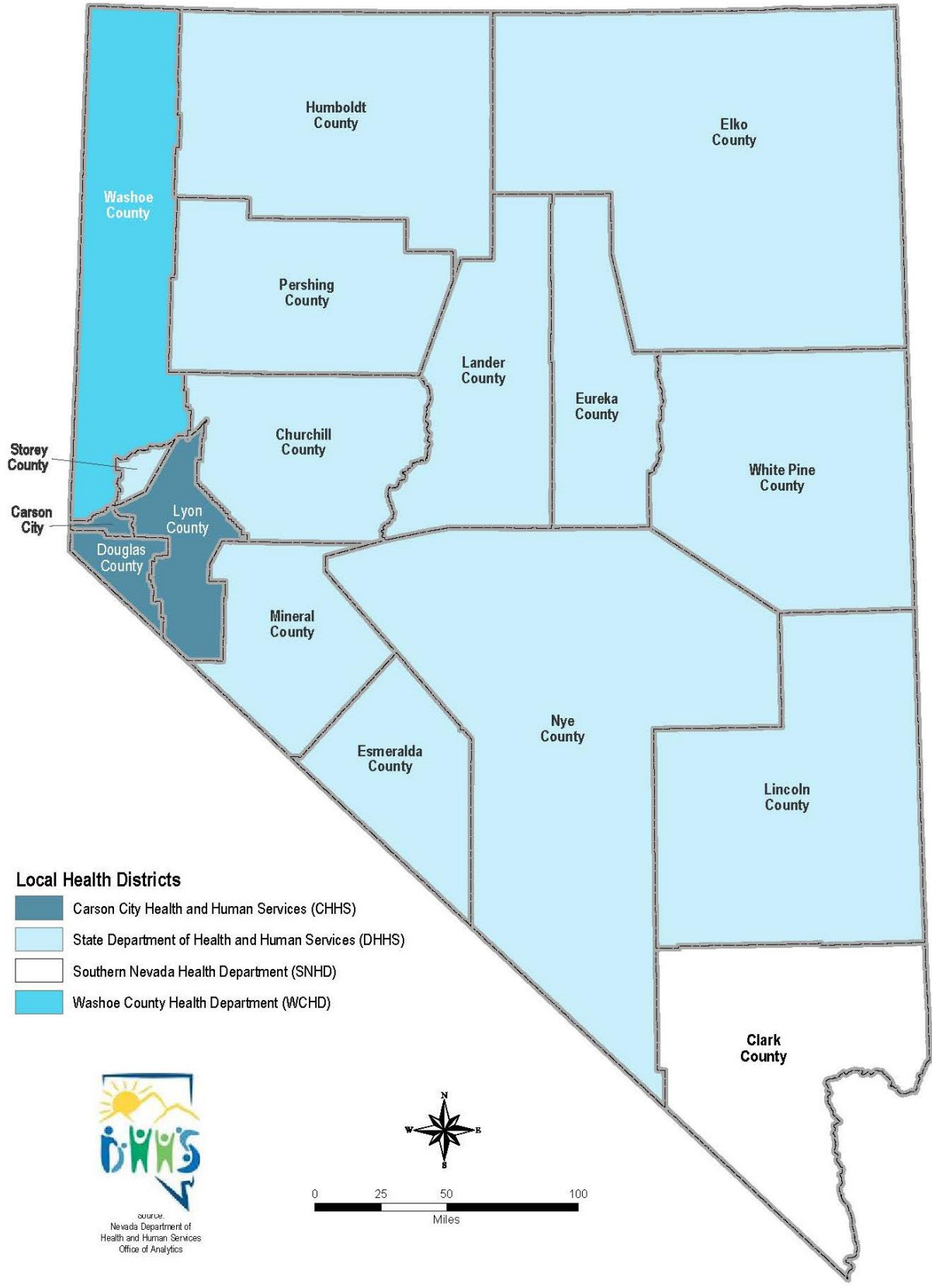
N (Total case count) is the total number of disease cases in the population.

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 Local Health Districts



NEVADA OVERVIEW

This overview summarizes Nevada's STD Program's 2018 Surveillance Data for the three notifiable diseases for which there are federally funded control programs: chlamydia, gonorrhea, and syphilis.

Chlamydia

In 2018, a total of 17,508 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 577.5 cases per 100,000 population, an increase of 6.1% compared with the rate in 2017. During 2017-2018, 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 63.2% of all chlamydia cases in Nevada, with 26.2% being 15-19 years old and 36.3% 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 2014-2018, rates of reported chlamydia cases increased in all racial and Hispanic ethnicity groups. Rates of reported chlamydia varied among different racial and ethnic minority populations. In 2018, rates were highest among Blacks, who accounted for 18.4% of all chlamydia cases despite being 10.3% of Nevada's population.

Gonorrhea

From 2014-2018, the rate of gonorrhea in Nevada increased sharply each year from 119.5 cases per 100,000 population in 2014 to 213.6 cases per 100,000 population in 2018, demonstrating a 78.7% increase over a 5-year period. From 2017-2018 this rate increased from 184.8 per 100,000 population to 213.6 per population, a 15.5% increase.

From 2017-2018, the rate of reported gonorrhea increased by 11.0% among men and 23.5% 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 2018, the rate of reported cases of gonorrhea remained highest among Blacks (585.1 cases per 100,000 population), and the rate among Blacks was 6.1 times the rate among Whites. From 2014-2018, rates increased among all racial and ethnic groups.

Syphilis

In 2018, Nevada ranked 1st in the nation for its rates of Primary and Secondary (P&S) syphilis rates, and 2nd in its congenital syphilis rate (1). P&S syphilis rates have increased every year since 2014. In 2018, 682 P&S syphilis cases were reported, representing a rate of 22.5 cases per 100,000 population and a 14.2% increase from 2017. From 2017-2018, the P&S syphilis rate increased among both men and women in every region of Nevada; overall, the rate increased by 8.5% among men and 58.0% among women.

From 2014-2018, P&S syphilis rates were consistently highest among persons aged 20-29 years; however, rates increased in every five-year age group among those aged 15-64 years. In 2018, rates were highest among Blacks (70.6 per 100,000 population); however, rates increased among all racial and ethnic groups from 2014-2018.

During 2014-2018, the rise in the P&S syphilis rate was primarily attributable to increased cases among men and, specifically, among MSM. In 2018, men accounted for 82.6% 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 2014, the rate of congenital syphilis has increased each year. In 2018, there were a total of 34 reported cases of congenital syphilis. The rate of 97.7 cases per 100,000 live births represents a 62.2% increase from 2017 and a 770.5% increase from 2014. This increase in the congenital syphilis rate has paralleled increases in P&S syphilis among all women including reproductive-aged women during 2014-2018 (169.9%).

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 (1). 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 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.

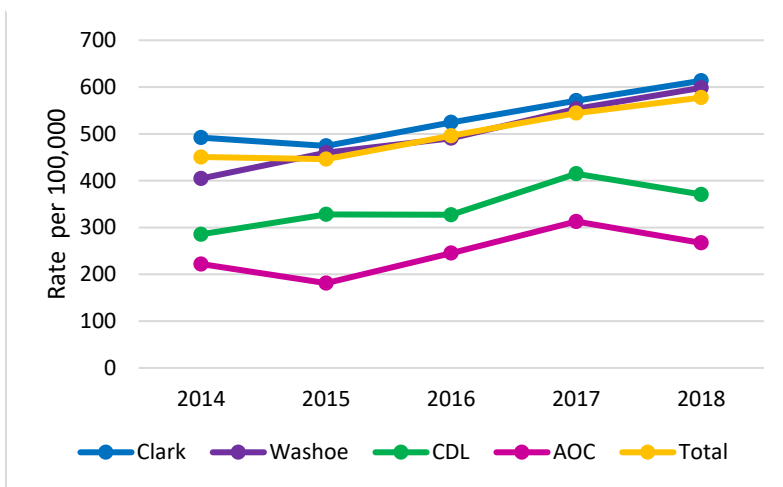
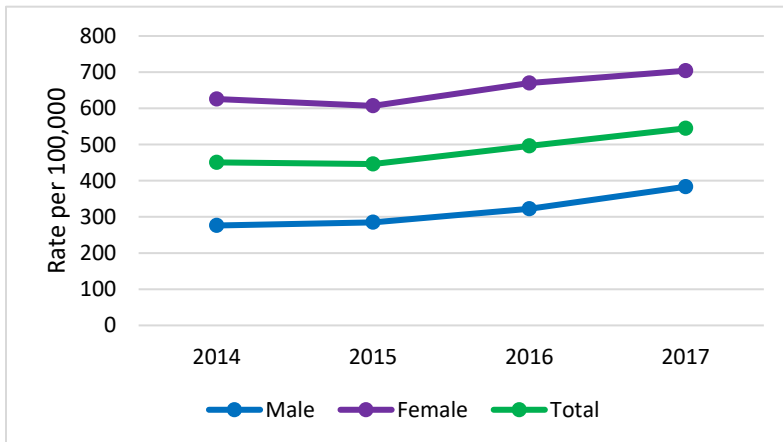


Figure 2 | Chlamydia - Rates of Reported Cases by Sex, Nevada, 2014-2018



Chlamydia Overview

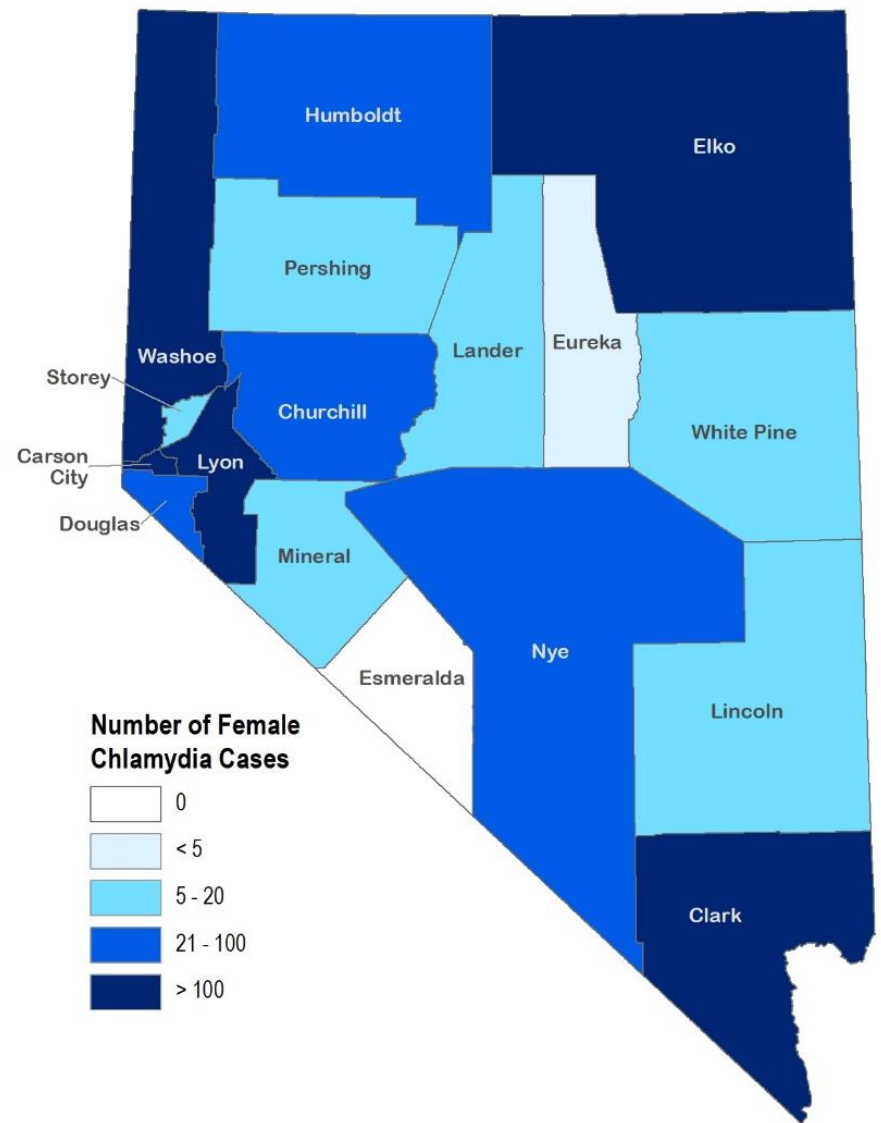
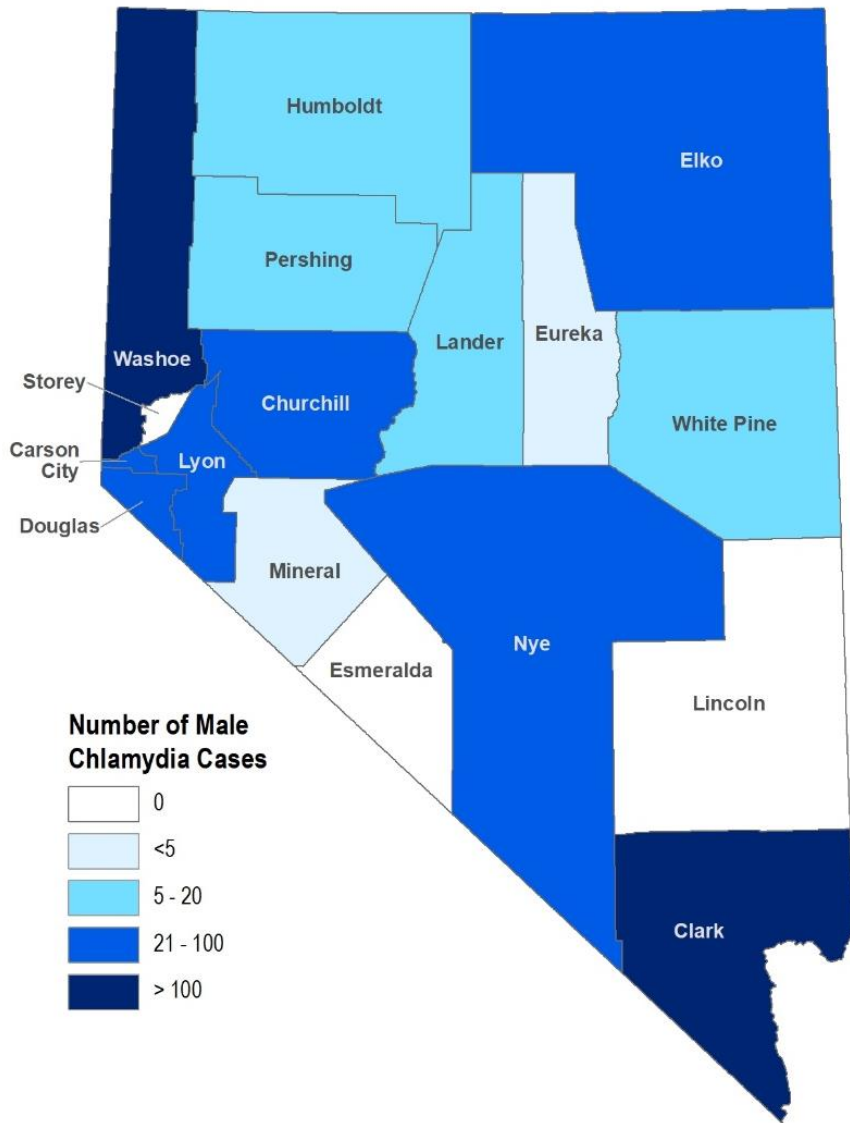
In 2018, a total of 17,508 chlamydial infections were reported in Nevada (Table 1). This case count corresponds to a rate of 577.5 cases per 100,000 population. From 2014-2018, the rate of reported chlamydial infections increased from 450.5 to 577.5 cases per 100,000 population (Figure 1, Table 2).

Chlamydia by Region

In 2018, rates of reported cases of chlamydia were highest in Clark County (613.5 cases per 100,000 population, 7.4% increase from 2017), followed by Washoe County (598.4, 9.1% increase from 2017), Carson, Douglas, Lyon (CDL) (370.6, 9.6% decrease from 2017), and All Other Counties (AOC) (267.1, 14.2% decrease from 2017) (Table 2). From 2014-2018, rates of reported cases of chlamydia increased in Clark and Washoe County. Rates in CDL have increased from 2014-2017 but decreased from 2017-2018 (Figure 1). The case rates for AOC from 2014-2018 fluctuated each year, seeing several increases (2015-2016, and 2016-2017) and decreases (2014-2015 and 2017-2018) (Figure 1).

In 2018, 78.2% of all reported cases in Nevada were from Clark County, while 15.6% of all cases were in Washoe County, and 6.2% for CDL and AOC combined (Figure 3).

Figure 3 | Chlamydia – Reported Cases by County and Sex, Nevada, 2018



Chlamydia by Sex

In 2018, 11,057 cases of chlamydia were reported among females for a rate of 730.9 cases per 100,000 females (Figure 2, Figure 3, Table 1). From 2014-2018, the rate of reported chlamydia cases among females increased from 625.6 to 730.9 per 100,000 population. The total rate increase from 2014-2018 among females was 16.8%.

Among males, 6,381 cases of chlamydia were reported in 2018 for a rate of 420.0 cases per 100,000 males (Figure 3, Table 1). The rate of reported cases among males increased each year during 2014-2018 (Figure 2). From 2017–2018 alone, the rate among men increased 9.6%; however, from 2014-2018, rates of reported cases among men increased 52.1% (compared with a 16.8% 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 2018, 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 4 | Chlamydia - Rates of Reported Cases by Age Group and Sex, Nevada, 2018

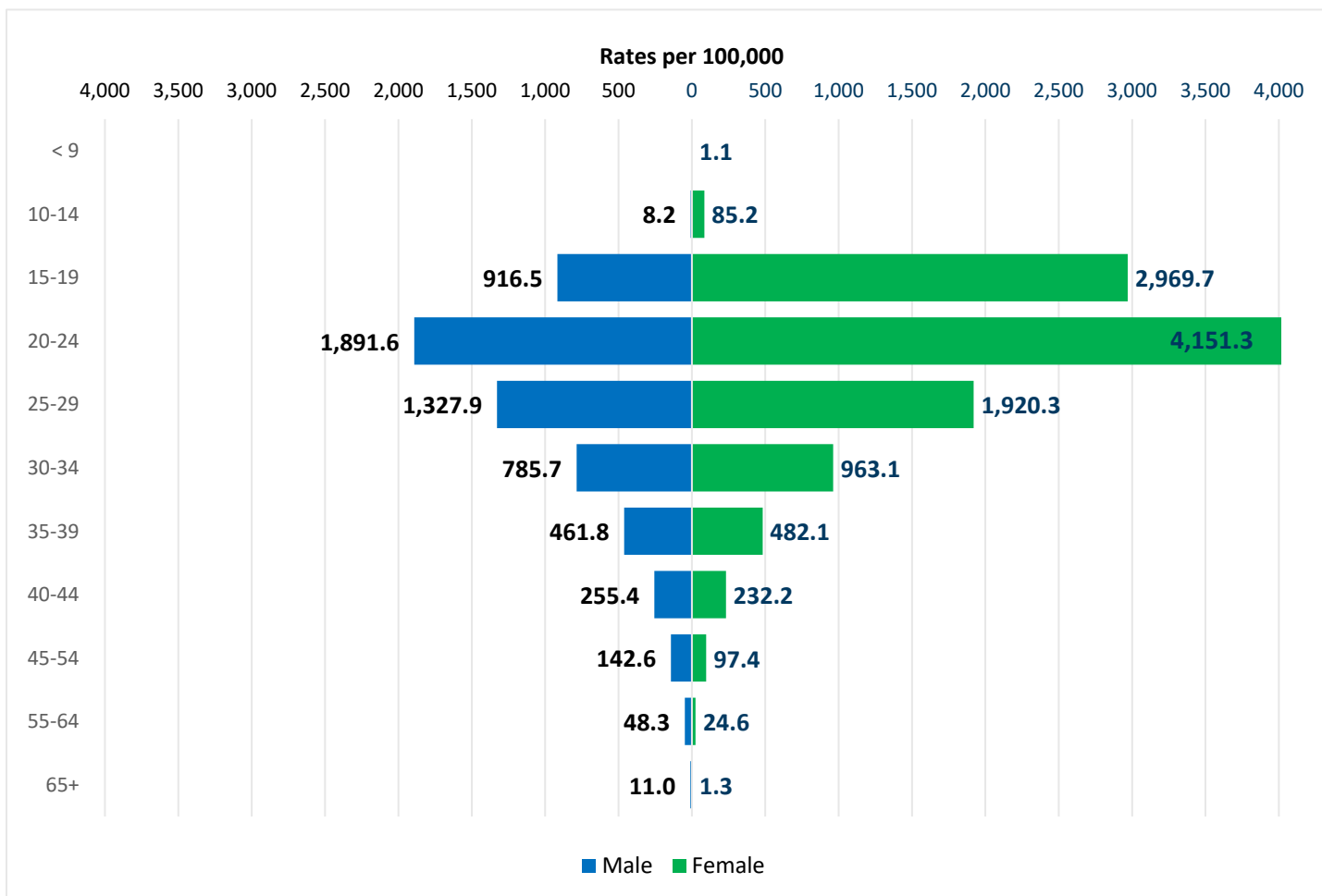


Figure 5 | Chlamydia – Rates of Reported Cases Among Men Aged 15-44 Years by Age Group, Nevada, 2014-2018

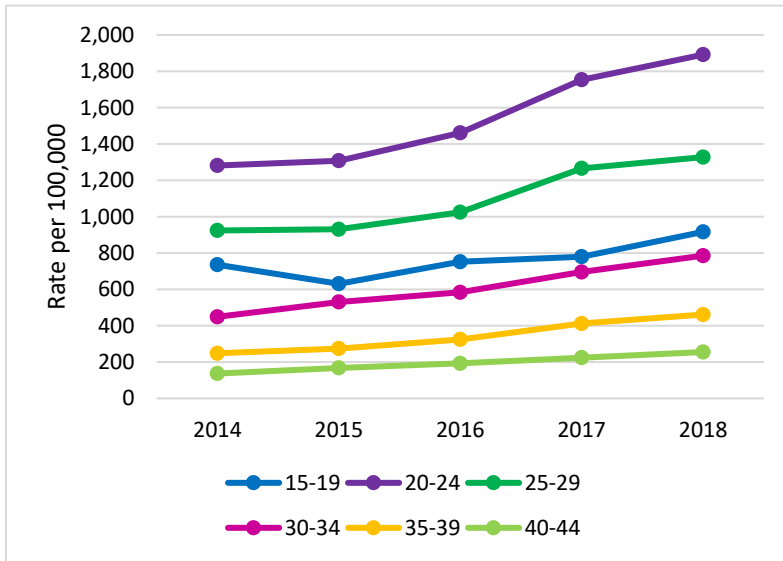
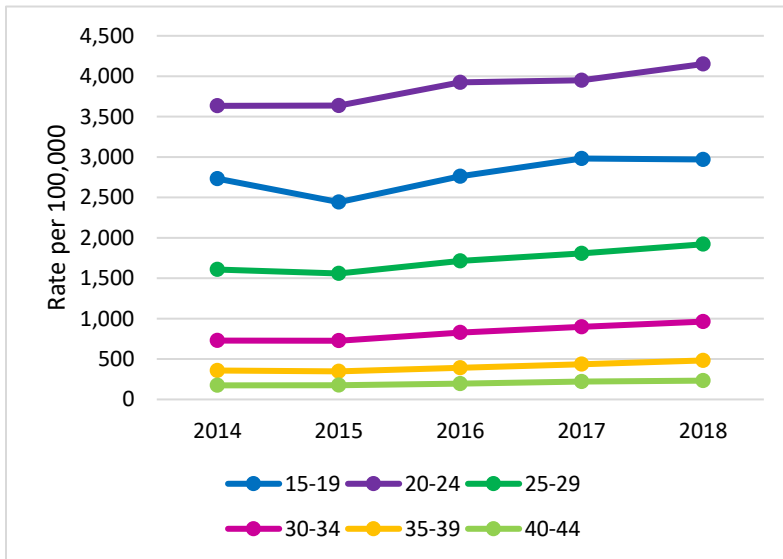


Figure 6 | Chlamydia – Rates of Reported Cases Among Women Aged 15-44 Years by Age Group, Nevada, 2014-2018



Chlamydia by Age

The rates of reported cases of chlamydia were highest among adolescents and young adults aged 15-29 years during 2014-2018 (Table 2). In 2018, the age-specific rate of reported cases of chlamydia among 15-19-year-olds was 1,917.0 cases per 100,000 population; the rate among 20-24-year-olds was 2,996.5 cases per 100,000 population; and in 25-29-year-olds the rate was 1,626.2 per 100,000 population (Table 1).

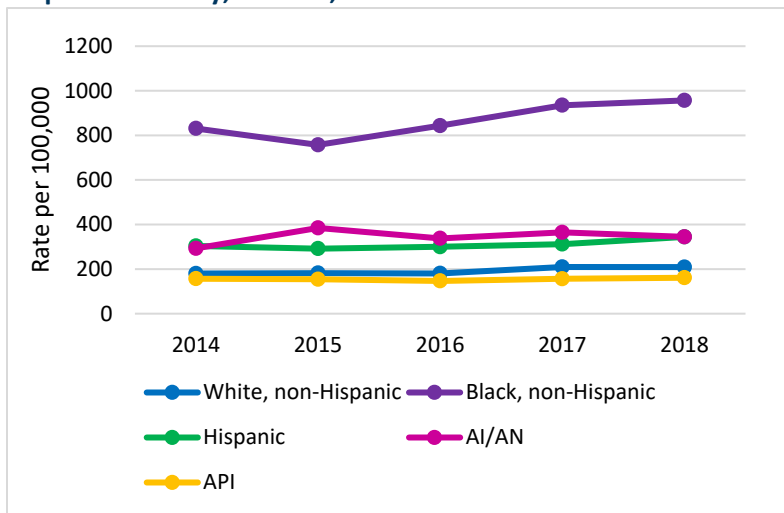
In 2018, 96.6% of all reported chlamydia cases in women were among those aged 15-44 years. The highest age-specific rates of reported cases of chlamydia in 2018 were among those aged 15-19 years (2,970.7 cases per 100,000 females) and 20-24 years (3,946.0 cases per 100,000 females) (Figure 4, Table 1).

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 6). Especially, the rate of reported cases among women aged 20-24 years increased over the past 5 years. Additionally, the rates among 15-19-year-olds had decreased from 2014-2015; those rose again from 2015-2018.

The rate among 15-19-year-olds decreased by 0.4% during 2017-2018, with a total increase of 8.7% during 2014-2018 (2,731.8 to 2,969.7 cases per 100,000 females) (Table 2). The rate among 35-39-year-olds increased by 10.8% during 2017-2018, with a total increase of 35.0% during 2014-2018 (357.0 to 482.1 cases per 100,000 females) (Table 2).

In 2018, 93.4% 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, was highest in those aged 20-24 years (1,891.6 cases per 100,000 males) (Figure 5, 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 5). 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 12.0% from 2017-2018, with a total increase of 85.6% from 2014-2018 (248.8 to 461.8 cases per 100,000 males). The rate among 40-44-year-olds increased by 13.1% from 2017-2018, with a total increase of 86.3% during 2014-2018 (137.1 to 255.4 cases per 100,000 males) (Table 2).

Figure 7 | Chlamydia - Rates of Reported Cases by Race and Hispanic Ethnicity, Nevada, 2014-2018



Chlamydia by Race/Hispanic Ethnicity

Rates of reported cases of chlamydia were highest among Black, non-Hispanics at 18.4%, 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 4.6 times the rate among Whites (956.7 and 208.7 cases per 100,000 population respectively). The rate among AI/AN (344.6 cases per 100,000 population) was 1.6 times the rate among Whites. The rate among Hispanics (344.3 cases per 100,000 population) was 1.6 times the rate among Whites.

From 2014-2018, rates of reported chlamydia cases increased in all racial and Hispanic ethnicity groups with Whites increasing by 15.8%, Blacks 15.1%,

Hispanics 13.4%, AI/AN 17.6%, and API 2.6% (Figure 7, Table 2). From 2017–2018, rates increased among Black non-Hispanics (0.3%), Hispanics (10.4%), and API (3.0%), but decreased in White non-Hispanics (10.3%) and AI/AN (5.5%) (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 (2). 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, 2014-2018

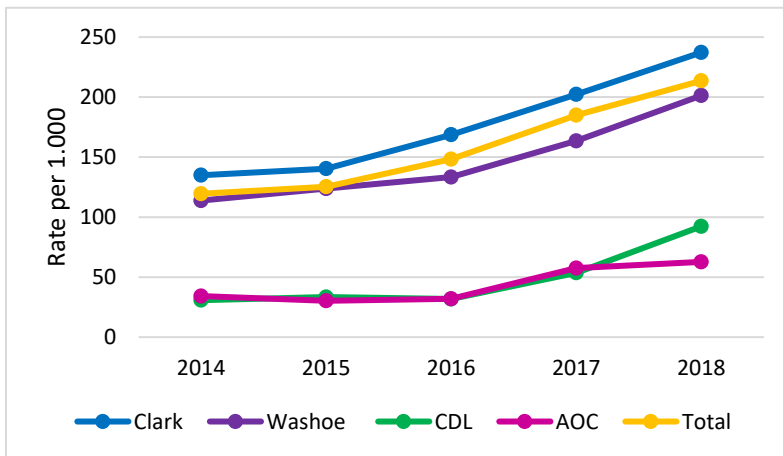
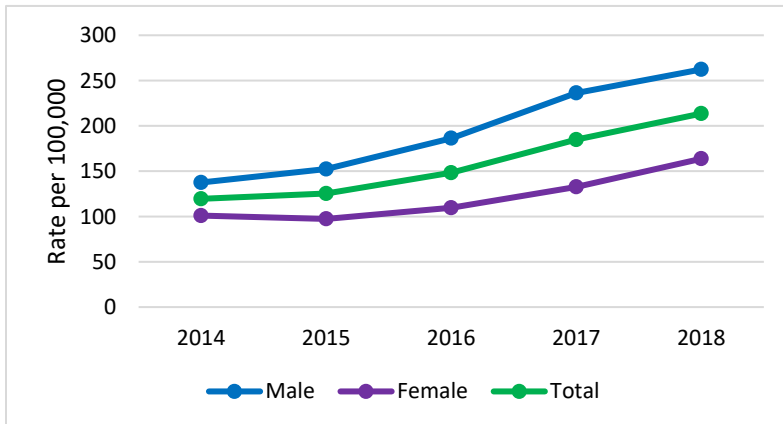


Figure 9 | Gonorrhea - Rates of Reported Cases by Sex, Nevada, 2014-2018



Gonorrhea Overview

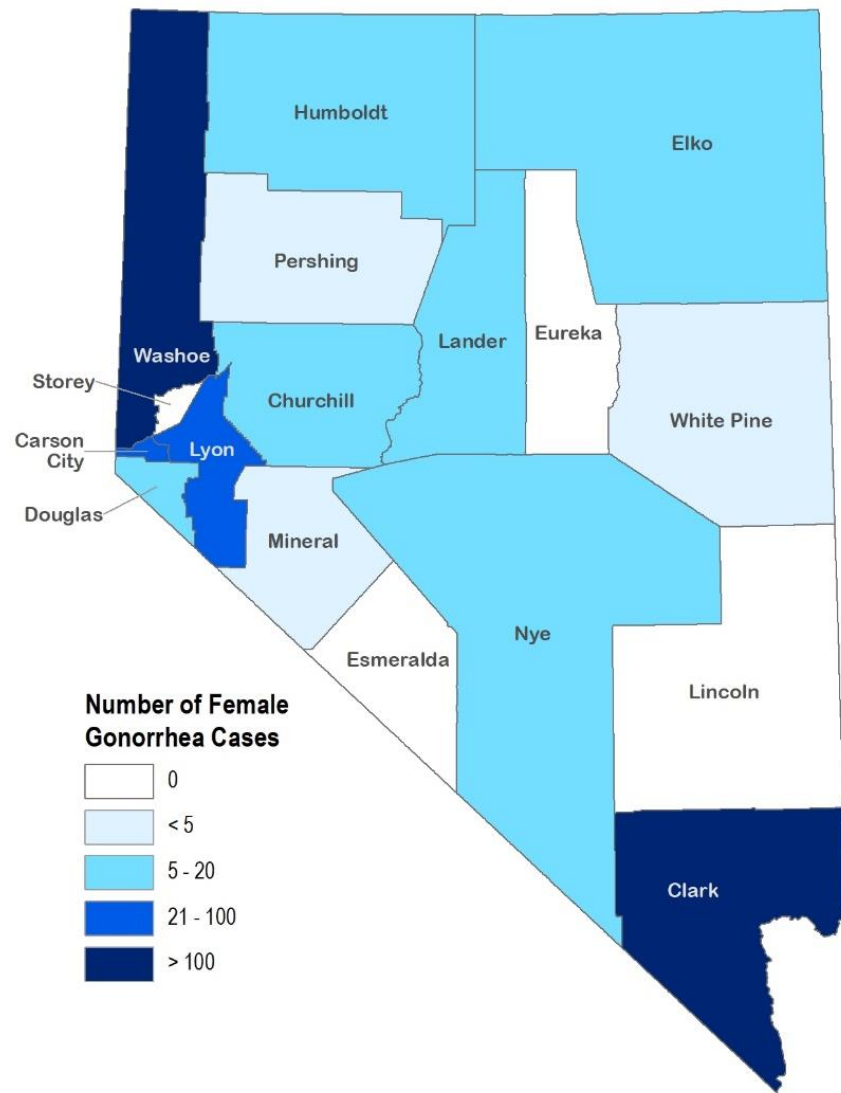
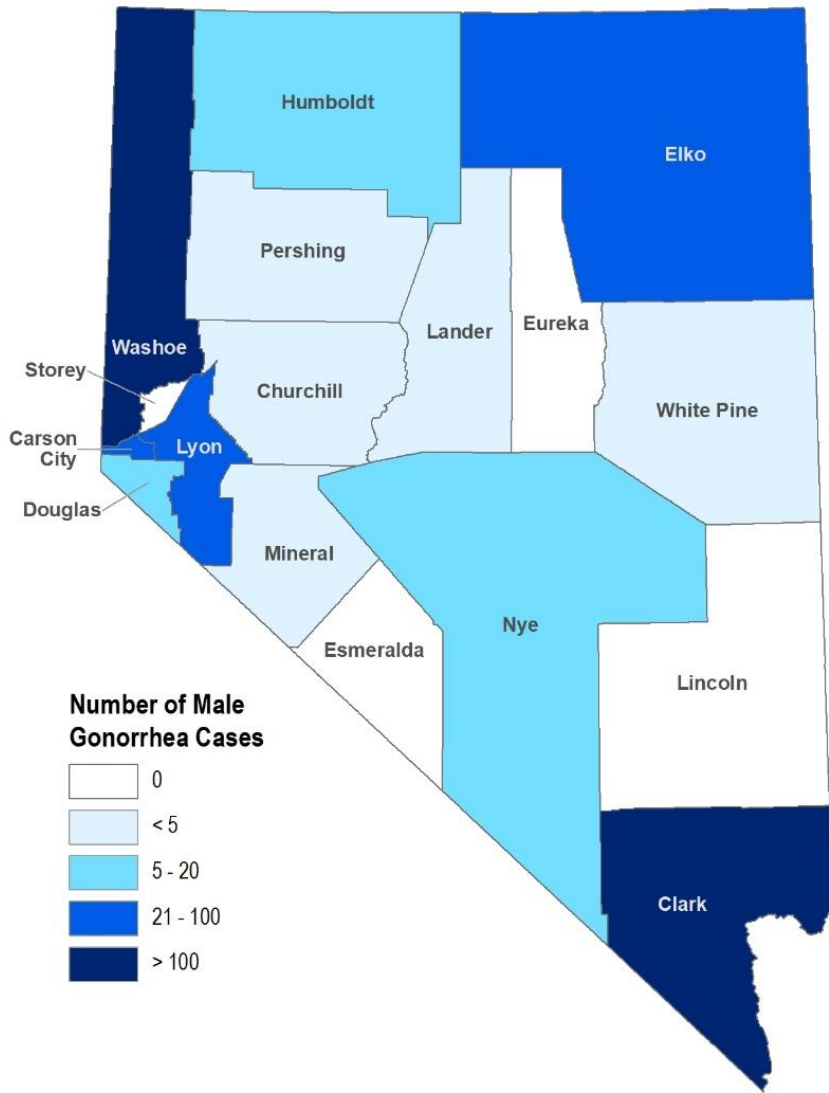
In 2018, a total of 6,475 cases of gonorrhea were reported in Nevada, yielding a rate of 213.6 cases per 100,000 population (Figure 8). From 2017-2018, the rate of reported gonorrhea cases increased by 15.5%. Rates have also increased by 78.7% since 2014 (Table 4).

Gonorrhea by Region

Clark County had the highest rate of reported gonorrhea cases (237.2 per 100,000 population) among the four local health jurisdictions in 2018, followed by Washoe County (201.3 per 100,000 population), CDL (92.3 per 100,000 population), and AOC (62.7 per 100,000 population) (Figure 8, Table 4). From 2017-2018, gonorrhea rates increased in all four regions: 17.3% in Clark, 23.1% in Washoe, 72.2% in CDL, and 9.0% in AOC (Figure 8, Table 4). From 2014-2018, CDL had the largest increase of 199.7% (30.8 to 92.3 per 100,000 population), followed by AOC 83.3% (34.2 to 62.7 per 100,000 population), Washoe 76.9% (113.8 to 201.3 per 100,000 population) and Clark 75.8% (134.9 to 237.2 per 100,000 population).

In 2018, 79.3% of reported cases occurred in Clark and 15.3% of cases occurred in Washoe, and 5.4% in CDL and AOC combined (Figure 8, Table 3).

Figure 10 | Gonorrhea – Reported Cases by County and Sex, Nevada, 2018



Gonorrhea by Sex

From 2014-2018 the rate of reported gonorrhea cases among males was higher than the rate in females (Figure 9, Table 4). From 2017-2018 the gonorrhea rates among males increased by 11.0% (236.3 to 262.3 cases per 100,000 males) and the rate among females increased by 23.5% (132.6 to 163.7 per 100,000 females). From 2014-2018, the rate among males increased 90.8% (137.5 to 262.3 per 100,000 males), and 62.2% among females (100.9 to 163.7 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, 2018

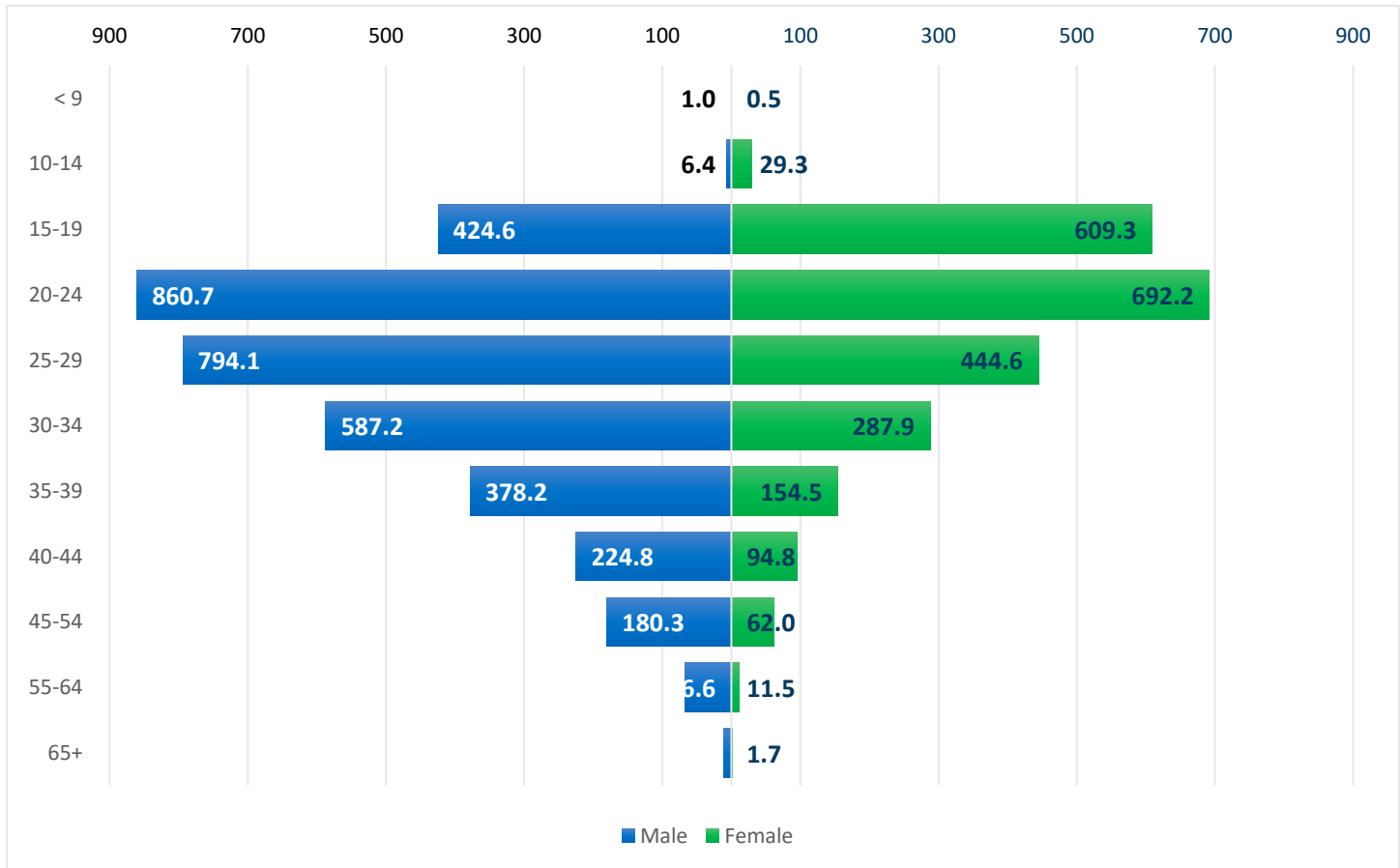


Figure 12 | Gonorrhea – Rates of Reported Cases Among Men Aged 15-44 Years by Age Group, Nevada, 2014-2018

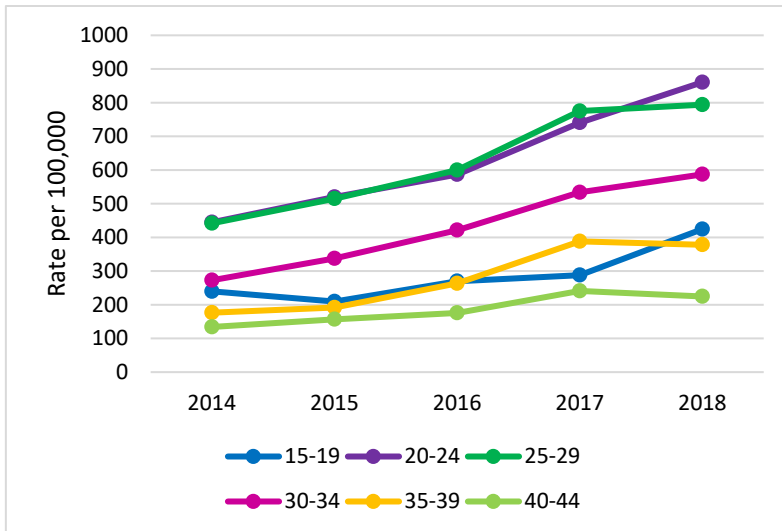


Figure 13 | Gonorrhea – Rates of Reported Cases Among Women Aged 15-44 Years by Age Group, Nevada, 2014-2018

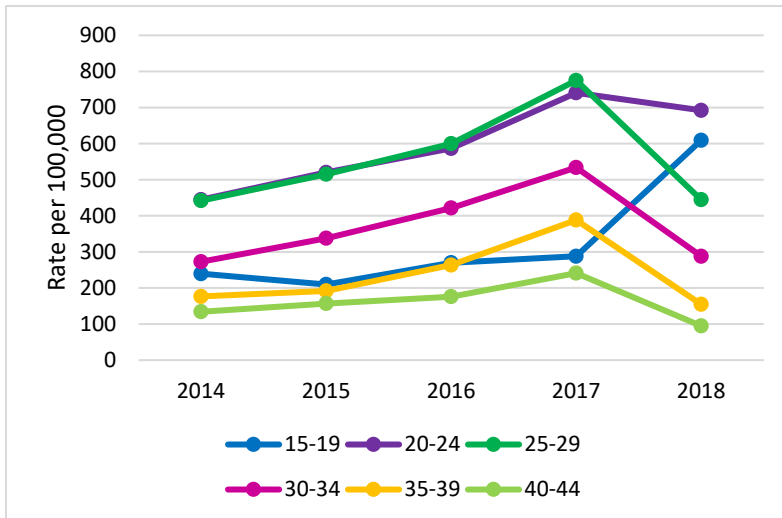
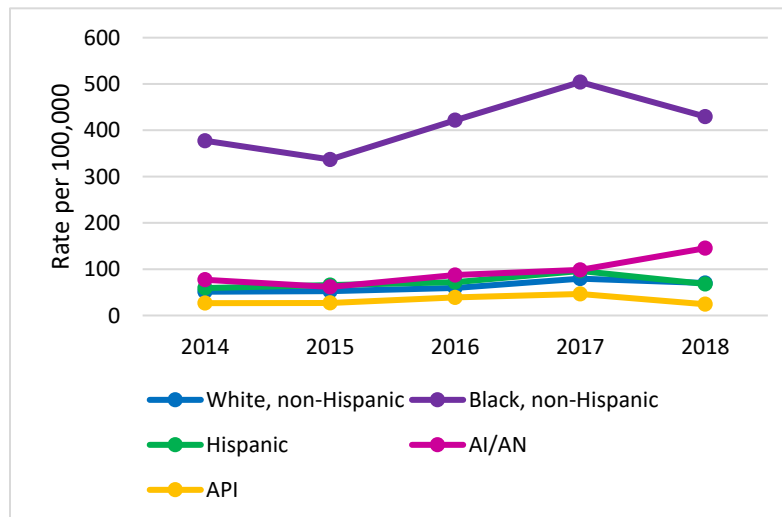


Figure 14 | Gonorrhea -Rates of Report Cases by Race and Hispanic Ethnicity, Nevada, 2014-2018



Gonorrhea by Age

In 2018, rates of reported gonorrhea cases continued to be highest among adolescents and young adults (Figure 11, Table 3). In 2018, the highest rates among females were observed among those aged 20-24 years (692.2 cases per 100,00 females) and 15-19 years (609.3 cases per 100,000 females). Among males, the rate was highest among those aged 20-24 years (860.7 cases per 100,000 males) and 25-29 years (794.1 cases per 100,000 males).

In 2018, persons aged 15-44 years accounted for 88.9% of reported gonorrhea cases with known age. Among 15-19 years, rates increased 42.1% from 2017-2018. The gonorrhea rate also increased among other age groups from 2017-2018: 19.6% among those aged 20-24 years, 7.5% among those aged 25-29 years, 12.4% among those aged 30-34 years (Table 4). Among persons aged 15-44 years, increases were observed in all age groups for both men and women from 2017-2018 (Figure 12, Figure 13).

Gonorrhea by Race/Hispanic Ethnicity

In 2018, the rate of reported gonorrhea cases remained highest among Blacks (585.1 cases per 100,000 population) (Table 3). The rate among Blacks was 6.1 times the rate among Whites (70.0 cases per 100,000 population). Black non-Hispanics accounted for 24.0% of all gonorrhea cases, despite being 10.3% of Nevada's total population. The gonorrhea rate among AI/AN (145.3 cases per 100,000 population) was 2.1 times higher than Whites; the rate among Hispanics (68.0 cases per 100,000 population) was approximately the same as Whites; the rate among API (24.2 cases per 100,000 population) was 2.9 times lower than Whites (Table 2).

From 2014-2018, for all five years the gonorrhea rate increased among all race and Hispanic ethnicity groups: 70.4% among Whites, 55.1% among Blacks, 80.7% among Hispanics, 69.9% among AI/AN, and 67.0% among API (Figure 14).

SYPHILIS

Background

Syphilis is an STD caused by the bacterium *Treponema pallidum* (3). 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 (4). 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.

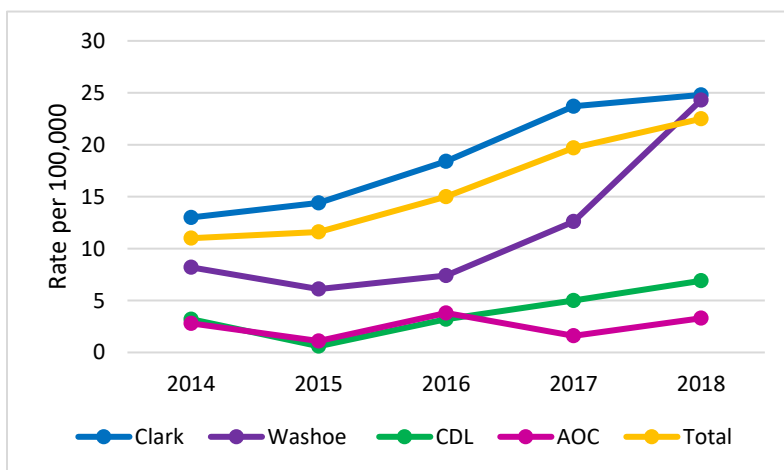
Interpreting Rates of Reported Cases

Left untreated, infection with syphilis can span decades. P&S syphilis is the earliest stages of infection, resulting in more symptomatic disease, indicating incident infection (3). 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 2018, a total of 682 cases of P&S syphilis cases were reported in Nevada, yielding a rate of 22.5 cases per 100,000 population (Table 5). This rate represents a 14.2% increase compared with 2017 (19.7 cases per 100,000 population), and a 51.1% increase compared with 2014 (11.0 cases per 100,000 population).

Figure 15| P&S Syphilis - Rates of Reported Cases by Region, Nevada, 2014-2018



P&S Syphilis by Region

In 2018, Clark County had the highest rate of reported P&S syphilis cases (24.8 per 100,000 population), followed by Washoe County (24.3 cases per 100,000 population), CDL (6.9 cases per 100,000 population), and AOC (3.3 per 100,000 population) (Table 5). From 2017-2018, the P&S syphilis rate increased 106.3% in AOC, 92.9% in Washoe County, 38.0% in CDL and 4.6% in Clark County (Figure 15, Table 6).

In 2018, 81.2% of reported P&S syphilis cases occurred in Clark County, 16.3% in Washoe County, 1.6% in CDL, and 0.9% in AOC (Figure 16, Table 5).

Figure 16 | P&S Syphilis – Reported Cases by County and Sex, Nevada, 2018

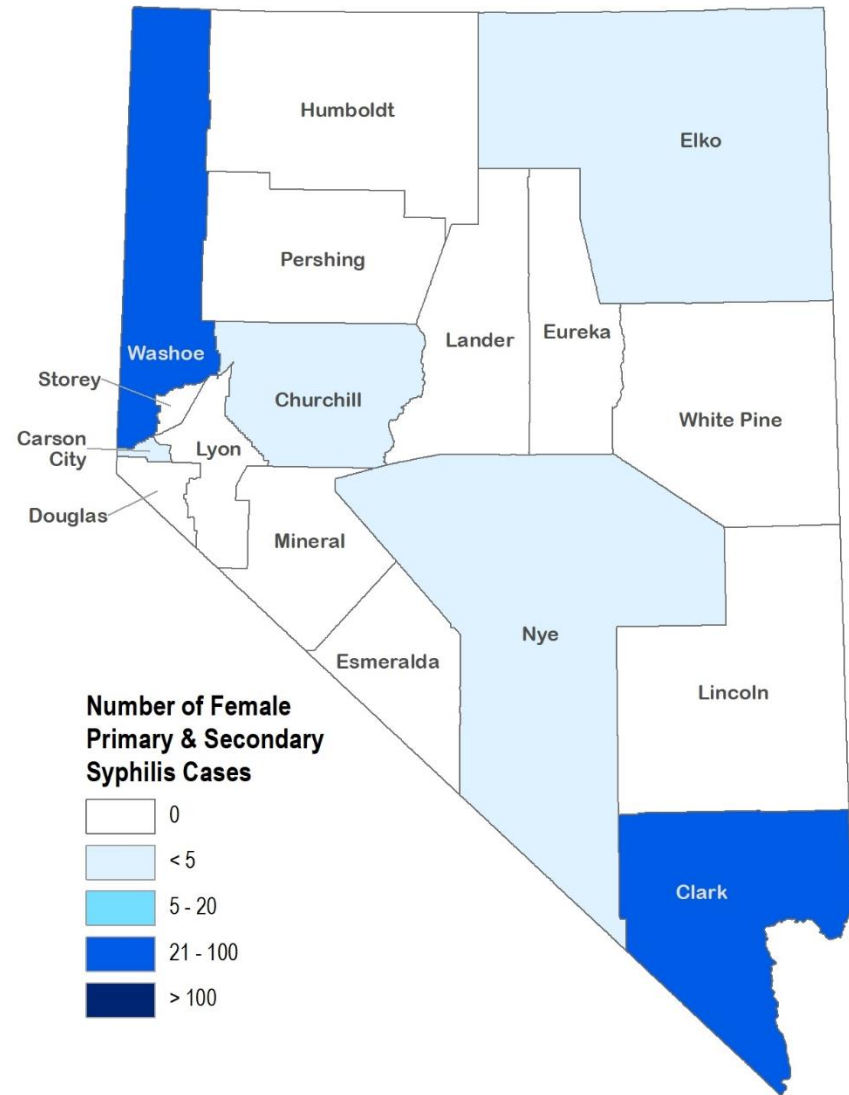
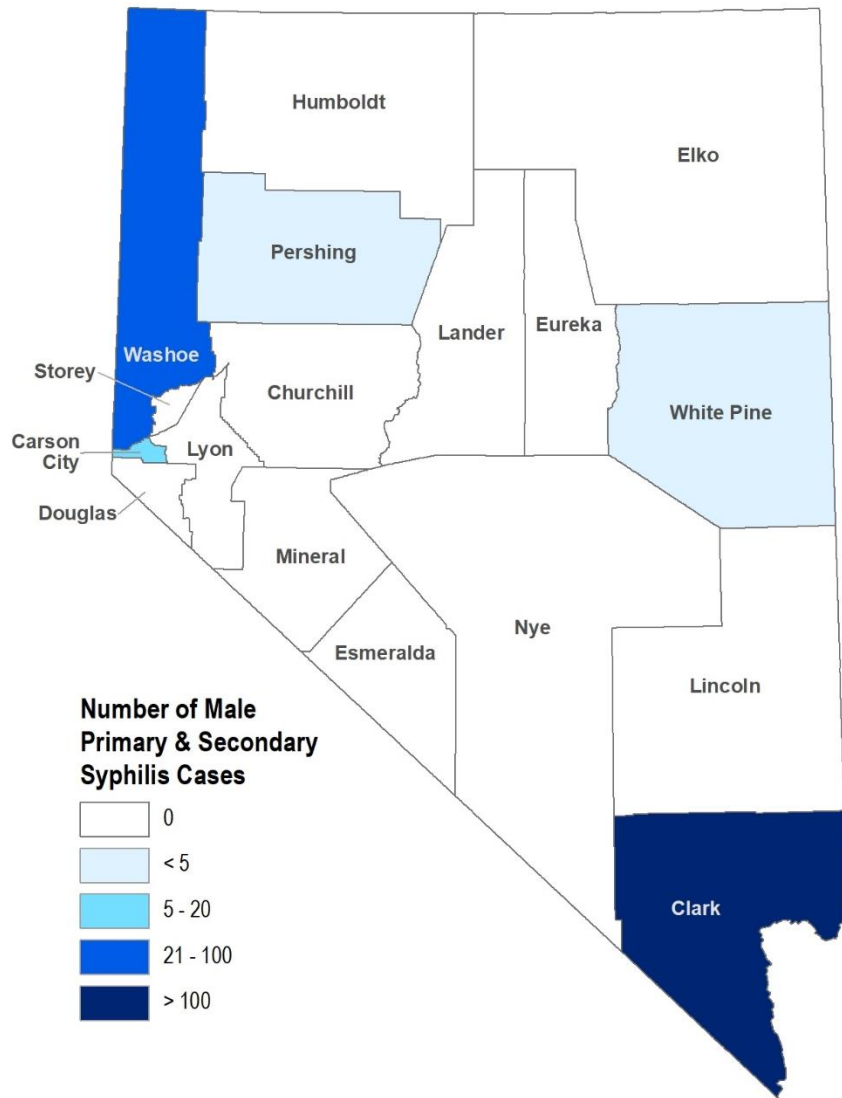
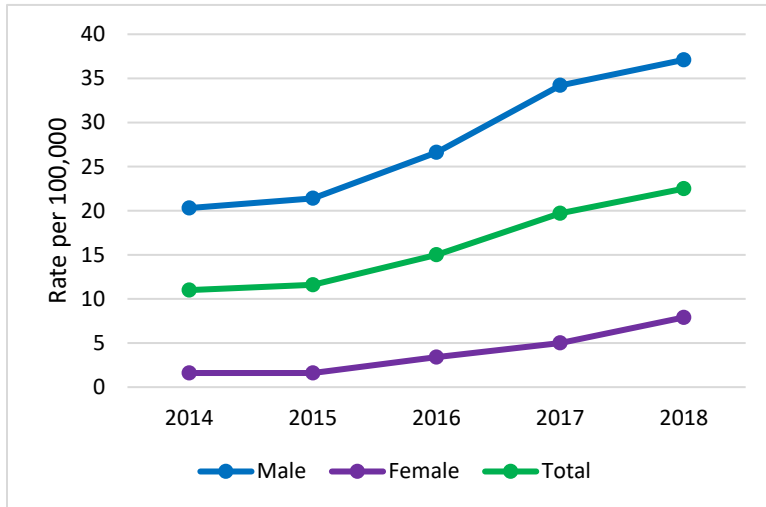


Figure 17| P&S Syphilis - Rates of Reported Cases by Sex, Nevada, 2014-2018



P&S Syphilis by Sex

As observed in previous years, in 2018 the rate of reported P&S syphilis cases among men (37.1 cases per 100,000 males) was much higher than the rate among women (7.9 cases per 100,000 females), and men accounted for the highest proportion (82.6%) of P&S syphilis cases (Figure 16, Table 5). Among men, the rate of P&S syphilis has increased every year since 2014 (45.3%), and from 2017–2018, the rate among men increased 8.5% (Figure 16, Table 6). Similarly, the P&S syphilis rate among women increased from 1.6 to 7.9 cases per 100,000 females from 2014–2018 (Figure 16, Table 6). From 2014–2018, the P&S syphilis rate among women nearly doubled (increasing by 79.7%). From 2017–2018, the P&S syphilis rate among women increased by 58.0%.

These increases in male P&S syphilis rates were observed in all regions except Clark County from 2017–2018. Among men, the rate increased by 115.6% in Washoe, 98.4% in CDL, and 52.4% in AOC, but decreased 2.1% in Clark (Table 7). Most regions saw an increase in P&S syphilis rates among women, the largest increases were observed in AOC (209.1%), followed by Clark (66.0%), then Washoe (36.6%). CDL saw a decrease in the rate of female syphilis cases on 68.4% from 2017-2018 (Table 8).

P&S Syphilis by Age

Figure 18| P&S Syphilis - Rates of Reported Cases by Age Group and Sex, Nevada, 2018

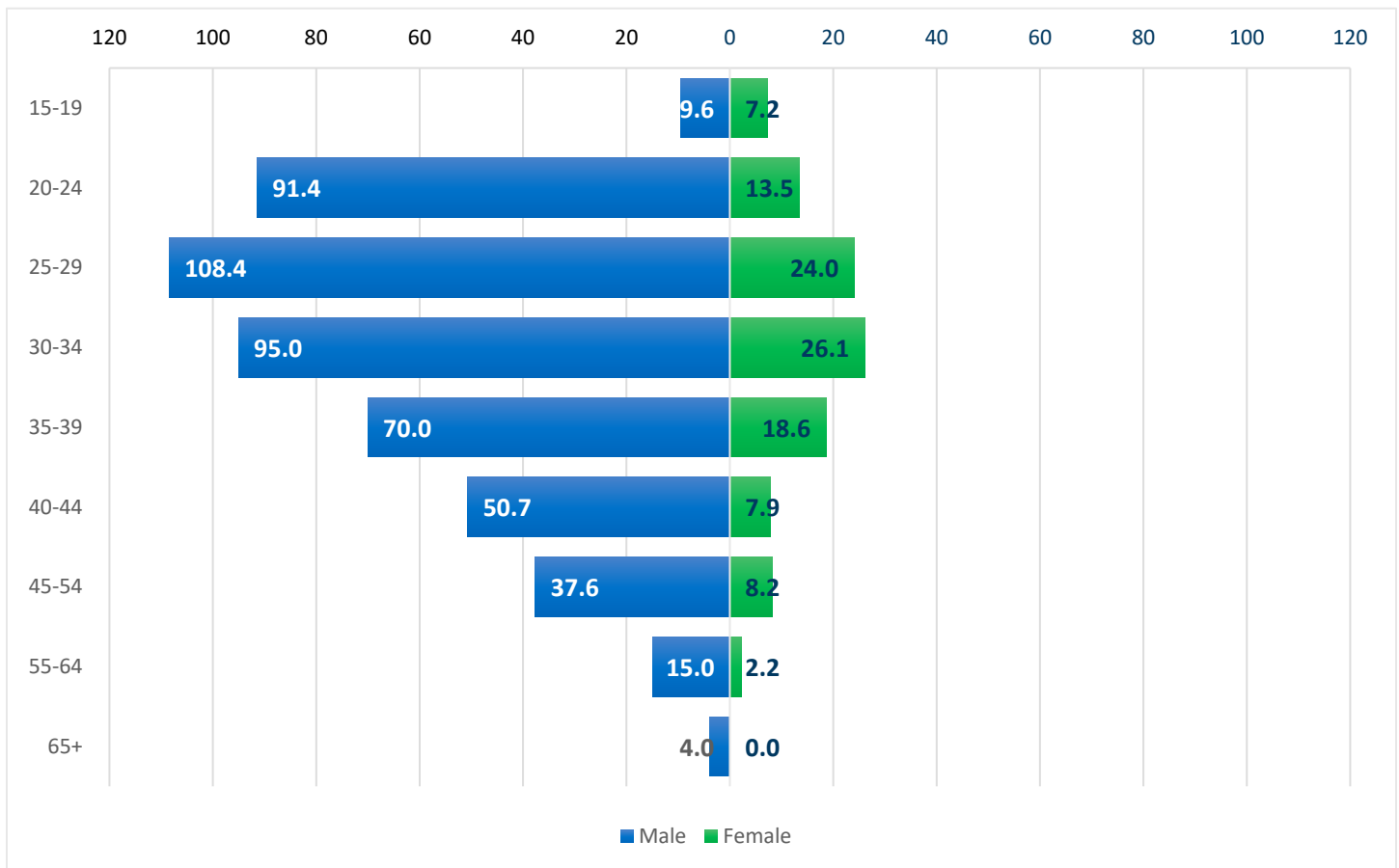


Figure 19 | P&S Syphilis – Rates of Reported Cases Among Men Aged 15-44 Years by Age Group, Nevada, 2014-2018

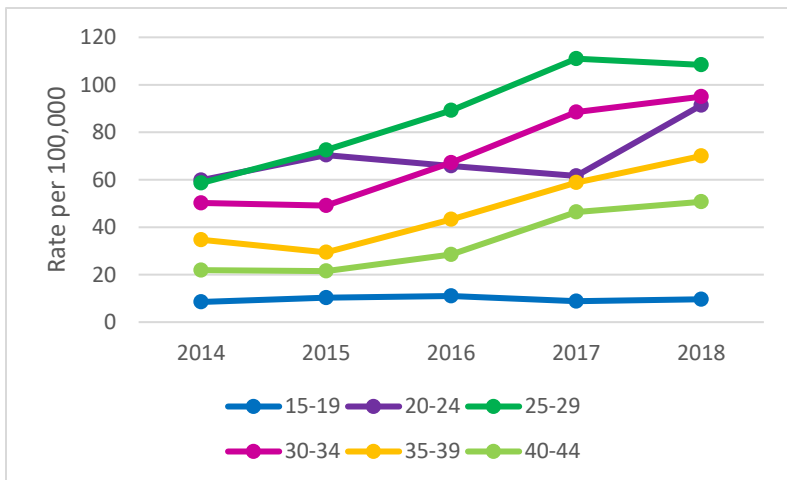


Figure 20 | P&S Syphilis – Rates of Reported Cases Among Women Aged 15-44 Years by Age Group, Nevada, 2014-2018

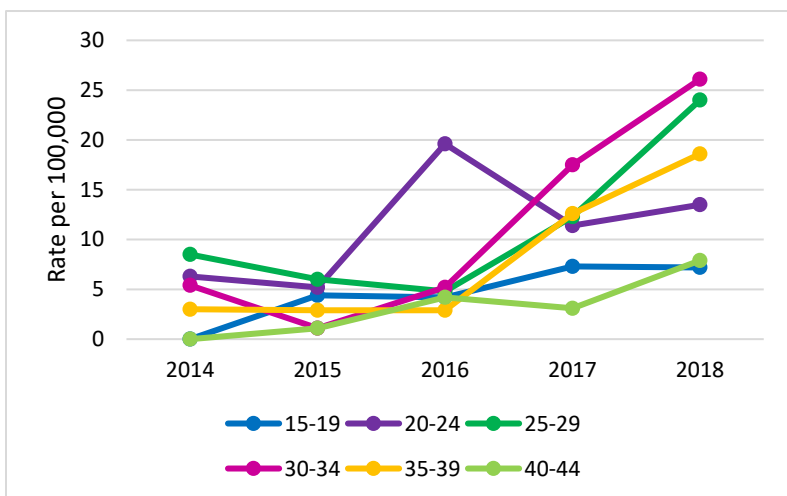
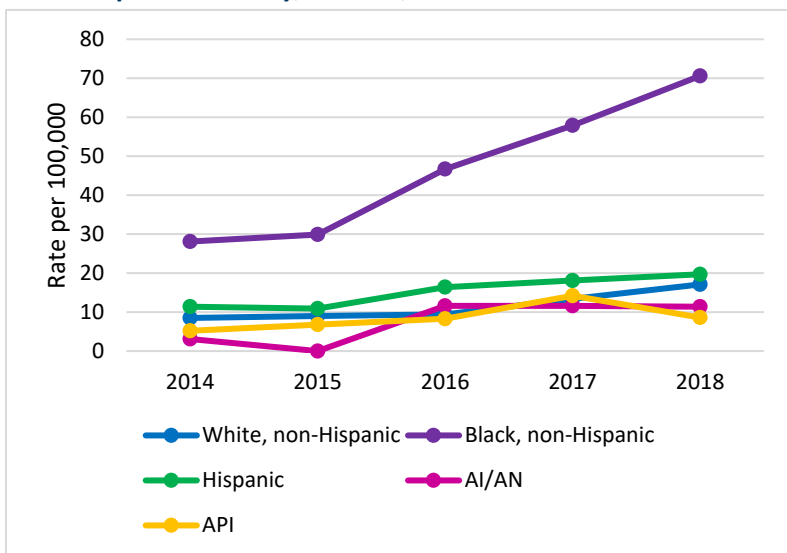


Figure 21 | P&S Syphilis -Rates of Reported Cases by Race and Hispanic Ethnicity, Nevada, 2014-2018



From 2017-2018, the overall rate of reported P&S syphilis cases increased in most age groups aged 15 years or older (Table 6). Rates increased 43.7% among those aged 20-24 years, 24.4% among those aged 35-39 years, 17.5% among those age 40-44. The exception was those aged 45-54 years old who saw a slight 2.1% decrease (Figure 19, Table 7). As in previous years, in 2018, rates of reported P&S syphilis cases were highest among persons aged 25-29 years (Figure 18, Table 5).

In 2018, the highest rates were observed among men aged 25-29 years (108.4 cases per 100,000 males), 30-34 years (95.0 cases per 100,000 males), and 20-24 years (91.4 cases per 100,000 males) (Figure 18, Table 6). The highest rates among women were among those aged 30-34 (26.1 cases per 100,000 females), 25-29 years (24.0 cases per 100,000 females) and those aged 35-39 years (18.6 cases per 100,000 females) (Figure 18, Table 6).

Among women, the rate decreased among those aged 20-24 years. However, rates increased in those aged 15-19 years, 25-39 years, 40-44 years, 45-54 year and 55-64 years (Figure 19, Figure 20, Table 8).

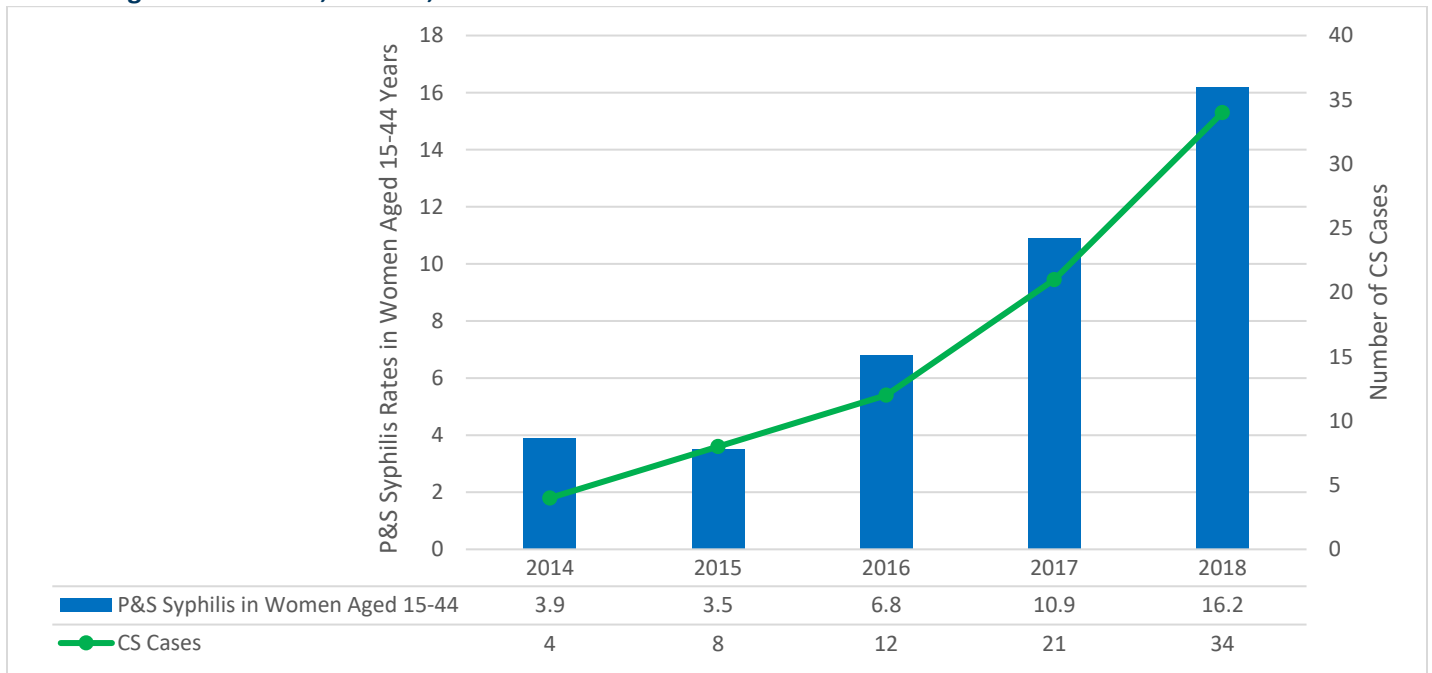
P&S Syphilis by Race/Hispanic Ethnicity

In 2018, the rate of reported P&S syphilis cases was highest among Blacks, (70.6 cases per 100,000 population). Blacks also accounted for 27.6% of all P&S Syphilis cases in 2018 despite representing 10.3% of the population (Table 7). The P&S syphilis rate among Blacks was 4.1 times the rate among Whites (17.1 cases per 100,000 population), the rate among Hispanics (19.7 cases per 100,000 population) was 1.2 times the rate among Whites, the rate among AI/AN (11.4 cases per 100,000 population) was 0.7 times the rate among Whites, the rate among API (8.6 cases per 100,000 population) was 0.5 the rate among Whites (Figure 21, Table 7).

From 2014-2018, the P&S syphilis rate increased among all race/Hispanic ethnicity groups (Figure 21). The greatest increases from 2017-2018 were observed among AI/AN (72.8%) and those who identified as Black (60.2%), followed by Whites (50.3%), Hispanics (42.1%), and API (39.5%) (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, 2014-2018



The rate of reported congenital syphilis has subsequently increased each year since 2014 (Figure 22). In 2018, there were a total of 34 reported cases of congenital syphilis with a rate of 97.7 cases per 100,000 live births. This rate represents a 62.2% increase compared to 2017 (34.5 cases per 100,000 live births) and a 770.5% increase compared to 2014 (11.2 cases 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 2014-2018 (315.4%) (Figure 22).

From 2014-2018, the increase in reported congenital syphilis cases was primarily attributable to an increase in Clark County. During this time, the congenital syphilis rate increased 1100.0% in Clark County, and a 100% increase in Washoe County which had previously reported no cases (Table 9). From 2017–2018, the congenital syphilis rate increased 50.0% in Clark, 175.0% Washoe, 120.0% in AOC, while CDL had no cases in 2017. In 2018, the highest congenital syphilis rates were reported from the Clark (1.2 cases per 100,000 live births) followed by Washoe and AOC (both having 1.1 cases per 100,000 live births).

TABLES

Table 1 | Chlamydia Cases in Nevada, 2018

	Total			Male			Female		
	N	%*	Rate	n	%*	Rate	n	%*	Rate
Resident County at Diagnosis									
Clark	13,695	78.2%	613.5	5,038	79.0%	451.2	8,619	78.0%	772.6
Washoe	2,729	15.6%	598.4	1,037	16.3%	452.3	1,671	15.1%	736.9
Carson/Douglas/Lyon	594	3.4%	370.6	167	2.6%	211.9	416	3.8%	510.5
All Other Counties**	490	2.8%	267.1	139	2.2%	147.0	351	3.2%	394.9
Unknown	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	17,508	100.0%	577.5	6,381	100.0%	420.0	11,057	100.0%	730.9
Race/Ethnicity									
White, non-Hispanic	3,229	18.4%	208.7	1,148	18.0%	146.9	2,069	18.7%	270.2
Black, non-Hispanic	2,546	14.5%	956.7	1,086	17.0%	810.0	1,459	13.2%	1,105.0
Hispanic	3,072	17.5%	344.3	1,140	17.9%	251.9	1,926	17.4%	438.0
American Indian/Alaska Native	121	0.7%	344.6	35	0.5%	203.2	86	0.8%	480.7
Asian/Hawaiian/Pacific Islander	469	2.7%	161.1	150	2.4%	111.9	319	2.9%	203.0
Unknown/Other	8,071	46.1%	N/A	2,822	44.2%	N/A	5,198	47.0%	N/A
Total	17,508	100.0%	577.5	6,381	100.0%	420.0	11,057	100.0%	730.9
Age Group									
< 9	2	0.0%	0.5	0	0.0%	0.0	2	0.0%	1.1
10-14	99	0.6%	46.0	9	0.1%	8.2	90	0.8%	85.2
15-19	3,860	22.0%	1,917.0	952	14.9%	916.5	2,895	26.2%	2,969.7
20-24	5,977	34.1%	2,996.5	1,945	30.5%	1,891.6	4,012	36.3%	4,151.3
25-29	3,594	20.5%	1,626.2	1,495	23.4%	1,327.9	2,082	18.8%	1,920.3
30-34	1,794	10.2%	875.4	827	13.0%	785.7	960	8.7%	963.1
35-39	975	5.6%	475.3	475	7.4%	461.8	493	4.5%	482.1
40-44	503	2.9%	244.5	267	4.2%	255.4	235	2.1%	232.2
45-54	482	2.8%	121.4	288	4.5%	142.6	190	1.7%	97.4
55-64	132	0.8%	36.4	87	1.4%	48.3	45	0.4%	24.6
65+	25	0.1%	5.7	22	0.3%	11.0	3	0.0%	1.3
Unknown	65	0.4%	N/A	14	0.2%	NA	50	0.5%	N/A
Total	17,508	100.0%	577.5	6,381	100.0%	420.0	11,057	100.0%	730.9

Source: Division of Public and Behavioral Health, Sexually Transmitted Disease Management Information Systems (STD*MIS) and NEDSS Based System (NBS), data as of July 2018.

* Percent may not equal 100% due to rounding and unknown counts.

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

Table 2 | Chlamydia cases in Nevada, 2014-2018

	2014			2015			2016			2017			2018		
	N	Total %	Rate*	N	Total %	Rate*	N	Total %	Rate*	N	Total %	Rate*	N	Total %	Rate*
Resident County at Diagnosis															
Clark	10,184	79.5%	492.1	10,048	77.7%	474.3	11,362	77.6%	524.5	12,529	77.1%	571.1	13,695	78.2%	613.5
Washoe	1,768	13.8%	404.8	2,033	15.7%	460.0	2,200	15.0%	490.7	2,502	15.4%	553.6	2,729	15.6%	598.4
Carson City, Douglas, Lyon	445	3.5%	285.5	511	4.0%	328.0	514	3.5%	327.2	657	4.0%	414.8	594	3.4%	370.6
All Other Counties	402	3.1%	221.9	329	2.5%	181.2	446	3.0%	245.3	571	3.5%	312.8	490	2.8%	267.1
Unknown	11	0.1%	N/A	3	0.0%	N/A	127	0.9%	N/A	1	0.0%	N/A	0	0.0%	N/A
Sex															
Male	3,956	30.9%	276.2	4,151	32.1%	284.9	4,778	32.6%	322.2	5,741	35.3%	383.1	6,381	36.4%	420.0
Female	8,827	68.9%	625.6	8,743	67.6%	606.8	9,848	67.2%	669.8	10,472	64.4%	703.7	11,057	63.2%	730.9
Unknown	27	0.2%	N/A	30	0.2%	N/A	23	0.2%	N/A	47	0.3%	N/A	70	0.4%	N/A
Race/Ethnicity															
White, non-Hispanic	2,755	21.5%	180.2	2,785	21.5%	181.9	2,779	19.0%	180.5	3,231	19.9%	209.6	3,229	18.4%	208.7
Black, non-Hispanic	1,984	15.5%	830.9	1,872	14.5%	757.2	2,150	14.7%	843.4	2,424	14.9%	933.1	2,546	14.5%	956.7
Hispanic	2,406	18.8%	303.6	2,390	18.5%	291.6	2,545	17.4%	300.2	2,704	16.6%	311.6	3,072	17.5%	344.3
American Indian/Alaska Native	95	0.7%	293.0	131	1.0%	384.5	116	0.8%	337.7	126	0.8%	362.2	121	0.7%	344.6
Asian/Hawaiian/Pacific Islander	394	3.1%	157.0	410	3.2%	154.2	406	2.8%	146.7	441	2.7%	156.0	469	2.7%	161.1
Unknown/Other	5,176	40.4%	N/A	5,336	41.3%	N/A	6,653	45.4%	N/A	7,334	45.1%	N/A	8,071	46.1%	N/A
Age Group															
< 9	9	0.1%	2.3	5	0.0%	1.3	3	0.0%	0.8	5	0.0%	1.3	2	0.0%	0.5
10-14	79	0.6%	42.2	92	0.7%	46.5	86	0.6%	41.9	101	0.6%	47.7	99	0.6%	46.0
15-19	3,104	24.2%	1,704.1	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%	1,917.0
20-24	4,792	37.4%	2,424.2	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%	2,996.5
25-29	2,435	19.0%	1,259.9	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%	1,626.2
30-34	1,106	8.6%	587.3	1,206	9.3%	627.9	1,377	9.4%	705.0	1,594	9.8%	796.9	1,794	10.2%	875.4
35-39	619	4.8%	304.3	646	5.0%	310.3	754	5.1%	357.9	883	5.4%	425.8	975	5.6%	475.3
40-44	307	2.4%	156.5	328	2.5%	172.1	374	2.6%	194.1	443	2.7%	223.2	503	2.9%	244.5
45-54	280	2.2%	72.6	315	2.4%	81.3	365	2.5%	92.5	421	2.6%	106.2	482	2.8%	121.4
55-64	55	0.4%	16.3	77	0.6%	22.4	91	0.6%	25.9	112	0.7%	31.4	132	0.8%	36.4
65+	17	0.1%	4.4	19	0.1%	4.8	20	0.1%	4.9	20	0.1%	4.7	25	0.1%	5.7
Unknown	7	0.1%	NA	2	0.0%	N/A	0	0.0%	N/A	109	0.7%	N/A	65	0.4%	N/A
Total	12,810	100.0%	450.5	12,924	100.0%	446.0	14,649	100.0%	496.0	16,260	100.0%	544.4	17,508	100.0%	577.5

Source: Division of Public and Behavioral Health, Sexually Transmitted Disease Management Information Systems (STD*MIS) and NEDSS Based System (NBS), data as of July 2018.

* Percent may not equal 100% due to rounding and unknown counts.

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

Table 3 | Gonorrhoea Cases in Nevada, 2018

	Total			Male			Female		
	N	%*	Rate	n	%*	Rate	n	%*	Rate
Resident County at Diagnosis									
Clark	5,294	81.8%	237.2	3,330	83.6%	298.2	1,958	79.0%	175.5
Washoe	918	14.2%	201.3	534	13.4%	232.9	379	15.3%	167.1
Carson/Douglas/Lyon	148	2.3%	92.3	69	1.7%	87.6	77	3.1%	94.5
All Other Counties**	115	1.8%	62.7	52	1.3%	55.0	63	2.5%	70.9
Unknown	0	0.0%	NA	0	0.0%	NA	0	0.0%	NA
Total	6,475	100.0%	213.6	3,985	100.0%	262.3	2,477	100.0%	163.7
Race/Ethnicity									
White, non-Hispanic	1,352	20.9%	87.4	814	20.4%	104.2	536	21.6%	70.0
Black, non-Hispanic	1,557	24.0%	585.1	988	24.8%	736.9	567	22.9%	429.4
Hispanic	955	14.7%	107.0	655	16.4%	144.7	299	12.1%	68.0
American Indian/Alaska Native	46	0.7%	131.0	20	0.5%	116.1	26	1.0%	145.3
Asian/Hawaiian/Pacific Islander	130	2.0%	44.6	92	2.3%	68.6	38	1.5%	24.2
Unknown/Other	2,435	37.6%	NA	1,416	35.5%	NA	1,011	40.8%	NA
Total	6,475	100.0%	213.6	3,985	100.0%	262.3	2,477	100.0%	163.7
Age Group									
< 9	3	0.0%	0.8	2	0.1%	1.0	1	0.0%	0.5
10-14	38	0.6%	17.6	7	0.2%	6.4	31	1.3%	29.3
15-19	1,037	16.0%	515.0	441	11.1%	424.6	594	24.0%	609.3
20-24	1,556	24.0%	780.1	885	22.2%	860.7	669	27.0%	692.2
25-29	1,377	21.3%	623.1	894	22.4%	794.1	482	19.5%	444.6
30-34	907	14.0%	442.6	618	15.5%	587.2	287	11.6%	287.9
35-39	550	8.5%	268.1	389	9.8%	378.2	158	6.4%	154.5
40-44	332	5.1%	161.4	235	5.9%	224.8	96	3.9%	94.8
45-54	485	7.5%	122.2	364	9.1%	180.3	121	4.9%	62.0
55-64	143	2.2%	39.4	120	3.0%	66.6	21	0.8%	11.5
65+	25	0.4%	5.7	21	0.5%	10.5	4	0.2%	1.7
Unknown	22	0.3%	NA	9	0.2%	NA	13	0.5%	NA
Total	6,475	100.0%	213.6	3,985	100.0%	262.3	2,477	100.0%	163.7

Source: Division of Public and Behavioral Health, Sexually Transmitted Disease Management Information Systems (STD*MIS) and NEDSS Based System (NBS), data as of July 2018.

* Percent may not equal 100% due to rounding and unknown counts.

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

Table 4 | Gonorrhea cases in Nevada, 2014-2018

	2014			2015			2016			2017			2018		
	N	Total %	Rate*	N	Total %	Rate*	N	Total %	Rate*	N	Total %	Rate*	N	Total %	Rate*
Resident County at Diagnosis															
Clark	2,791	82.1%	134.9	2,975	82.0%	140.4	3,653	83.4%	168.6	4,588	83.1%	209.1	5,294	81.8%	237.2
Washoe	497	14.6%	113.8	547	15.1%	123.8	598	13.7%	133.4	741	13.4%	164.0	918	14.2%	201.3
Carson City, Douglas, Lyon	48	1.4%	30.8	52	1.4%	33.4	50	1.1%	31.8	85	1.5%	53.7	148	2.3%	92.3
All Other Counties	62	1.8%	34.2	55	1.5%	30.3	58	1.3%	31.9	105	1.9%	57.5	115	1.8%	62.7
Unknown	1	0.0%	NA	1	0.0%	NA	21	0.5%	NA	1	0.0%	NA	0	0.0%	NA
Sex															
Male	1,970	58.0%	137.5	2,218	61.1%	152.3	2,763	63.1%	186.3	3,539	64.1%	236.2	3,985	61.5%	262.3
Female	1,424	41.9%	100.9	1,402	38.6%	97.3	1,611	36.8%	109.6	1,972	35.7%	132.5	2,477	38.3%	163.7
Unknown	5	0.1%	NA	10	0.3%	NA	6	0.1%	NA	9	0.2%	NA	13	0.2%	NA
Race/Ethnicity															
White, non-Hispanic	784	23.1%	51.3	803	22.1%	52.5	917	20.9%	59.6	1,226	22.2%	79.5	1,352	20.9%	87.4
Black, non-Hispanic	901	26.5%	377.3	833	22.9%	336.9	1,075	24.5%	421.7	1,307	23.7%	503.1	1,557	24.0%	585.1
Hispanic	469	13.8%	59.2	537	14.8%	65.5	610	13.9%	72.0	833	15.1%	96.0	955	14.7%	107.0
American Indian/Alaska Native	25	0.7%	77.1	21	0.6%	61.6	30	0.7%	87.3	34	0.6%	97.7	46	0.7%	131.0
Asian/Hawaiian/Pacific Islander	67	2.0%	26.7	72	2.0%	27.1	108	2.5%	39.0	131	2.4%	46.3	130	2.0%	44.6
Unknown/Other	1,153	33.9%	NA	1,364	37.6%	NA	1,640	37.4%	NA	1,989	36.0%	NA	2,435	37.6%	NA
Age Group															
< 9	2	0.1%	0.5	0	0.0%	0.0	6	0.1%	1.6	5	0.1%	1.3	3	0.0%	0.8
10-14	29	0.9%	15.5	13	0.4%	6.6	15	0.3%	7.3	25	0.5%	11.8	38	0.6%	17.6
15-19	552	16.2%	303.0	484	13.3%	256.0	634	14.5%	325.8	717	13.0%	363.5	1,037	16.0%	515.0
20-24	877	25.8%	443.7	953	26.3%	480.9	1,093	25.0%	545.6	1,294	23.4%	652.7	1,556	24.0%	780.1
25-29	722	21.2%	373.6	841	23.2%	411.1	995	22.7%	469.4	1,250	22.6%	577.5	1,377	21.3%	623.1
30-34	438	12.9%	232.6	479	13.2%	249.4	600	13.7%	307.2	787	14.3%	393.4	907	14.0%	442.6
35-39	275	8.1%	135.2	321	8.8%	154.2	391	8.9%	185.6	560	10.1%	270.0	550	8.5%	268.1
40-44	185	5.4%	94.3	210	5.8%	110.2	226	5.2%	117.3	324	5.9%	163.2	332	5.1%	161.4
45-54	223	6.6%	57.8	231	6.4%	59.6	304	6.9%	77.0	390	7.1%	98.4	485	7.5%	122.2
55-64	78	2.3%	23.1	84	2.3%	24.4	89	2.0%	25.3	127	2.3%	35.6	143	2.2%	39.4
65+	16	0.5%	4.1	13	0.4%	3.3	26	0.6%	6.3	20	0.4%	4.7	25	0.4%	5.7
Unknown	2	0.1%	NA	1	0.0%	NA	1	0.0%	NA	21	0.4%	NA	22	0.3%	NA
Total	3,399	100.0%	119.5	3,630	100.0%	125.3	4,380	100.0%	148.3	5,520	100.0%	184.8	6,475	100.0%	213.6

Source: Division of Public and Behavioral Health, Sexually Transmitted Disease Management Information Systems (STD*MIS) and NEDSS Based System (NBS), data as of July 2018.

* Percent may not equal 100% due to rounding and unknown counts.

Table 5 | Primary & Secondary Syphilis Cases in Nevada, 2018

	Total			Male			Female		
	N	%*	Rate	n	%*	Rate	n	%*	Rate
Resident County at Diagnosis									
Clark	554	81.2%	24.8	461	81.9%	41.3	93	78.2%	8.3
Washoe	111	16.3%	24.3	89	15.8%	38.8	22	18.5%	9.7
Carson/Douglas/Lyon	11	1.6%	6.9	10	1.8%	12.7	1	0.8%	1.2
All Other Counties**	6	0.9%	3.3	3	0.5%	3.2	3	2.5%	3.4
Total	682	100.0%	22.5	563	100.0%	37.1	119	100.0%	7.9
Race/Ethnicity									
White, non-Hispanic	265	38.9%	17.1	205	36.4%	26.2	60	50.4%	7.8
Black, non-Hispanic	188	27.6%	70.6	151	26.8%	112.6	37	31.1%	28.0
Hispanic	176	25.8%	19.7	161	28.6%	35.6	15	12.6%	3.4
American Indian/Alaska Native	4	0.6%	11.4	0	0.0%	0.0	4	3.4%	22.4
Asian/Hawaiian/Pacific Islander	25	3.7%	8.6	25	4.4%	18.6	0	0.0%	0.0
Unknown/Other	24	3.5%	NA	21	3.7%	NA	3	2.5%	NA
Total	682	100.0%	22.5	563	100.0%	37.1	119	100.0%	7.9
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	1	0.2%	0.9	0	0.0%	0.0
15-19	17	2.5%	8.4	10	1.8%	9.6	7	5.9%	7.2
20-24	107	15.7%	53.6	94	16.7%	91.4	13	10.9%	13.5
25-29	148	21.7%	67.0	122	21.7%	108.4	26	21.8%	24.0
30-34	126	18.5%	61.5	100	17.8%	95.0	26	21.8%	26.1
35-39	91	13.3%	44.4	72	12.8%	70.0	19	16.0%	18.6
40-44	61	8.9%	29.6	53	9.4%	50.7	8	6.7%	7.9
45-54	92	13.5%	23.2	76	13.5%	37.6	16	13.4%	8.2
55-64	31	4.5%	8.5	27	4.8%	15.0	4	3.4%	2.2
65+	8	1.2%	1.8	8	1.4%	4.0	0	0.0%	0.0
Unknown	0	0.0%	NA	0	0.0%	NA	0	0.0%	NA
Total	682	100.0%	22.5	563	100.0%	37.1	119	100.0%	7.9

Source: Division of Public and Behavioral Health, Sexually Transmitted Disease Management Information Systems (STD*MIS) and NEDSS Based System (NBS), data as of July 2018.

* Percent may not equal 100% due to rounding and unknown counts.

** 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, 2014-2018

	2014			2015			2016			2017			2018		
	N	Total %	Rate*	N	Total %	Rate*	N	Total %	Rate*	N	Total %	Rate*	N	Total %	Rate*
Resident County at Diagnosis															
Clark	268	85.4%	13.0	305	91.0%	14.4	398	89.6%	18.4	519	88.4%	23.7	554	81.2%	24.8
Washoe	36	11.5%	8.2	27	8.1%	6.1	33	7.4%	7.4	57	9.7%	12.6	111	16.3%	24.3
Carson City, Douglas, Lyon	5	1.6%	3.2	1	0.3%	0.6	5	1.1%	3.2	8	1.4%	5.1	11	1.6%	6.9
All Other Counties	5	1.6%	2.8	2	0.6%	1.1	7	1.6%	3.8	3	0.5%	1.6	6	0.9%	3.3
Unknown	0	0.0%	NA	0	0.0%	NA	1	0.2%	NA	0	0.0%	NA	0	0.0%	NA
Sex															
Male	291	92.7%	20.3	312	93.1%	21.4	394	88.7%	26.6	512	87.2%	34.2	563	82.6%	37.1
Female	23	7.3%	1.6	23	6.9%	1.6	50	11.3%	3.4	75	12.8%	5.0	119	17.4%	7.9
Race/Ethnicity															
White, non-Hispanic	130	41.4%	8.5	138	41.2%	9.0	144	32.4%	9.4	206	35.1%	13.4	265	38.9%	17.1
Black, non-Hispanic	67	21.3%	28.1	74	22.1%	29.9	119	26.8%	46.7	150	25.6%	57.7	188	27.6%	70.6
Hispanic	90	28.7%	11.4	89	26.6%	10.9	139	31.3%	16.4	157	26.7%	18.1	176	25.8%	19.7
American Indian/Alaska Native	1	0.3%	3.1	0	0.0%	0.0	4	0.9%	11.6	4	0.7%	11.5	4	0.6%	11.4
Asian/Hawaiian/Pacific Islander	13	4.1%	5.2	18	5.4%	6.8	23	5.2%	8.3	40	6.8%	14.2	25	3.7%	8.6
Unknown/Other	13	4.1%	NA	16	4.8%	NA	15	3.4%	NA	30	5.1%	NA	24	3.5%	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	0	0.0%	0.0	1	0.3%	0.5	0	0.0%	0.0	0	0.0%	0.0	1	0.1%	0.5
15-19	8	2.5%	4.4	14	4.2%	7.4	15	3.4%	7.7	16	2.7%	8.1	17	2.5%	8.4
20-24	67	21.3%	33.9	77	23.0%	38.9	87	19.6%	43.4	74	12.6%	37.3	107	15.7%	53.6
25-29	66	21.0%	34.1	82	24.5%	40.1	102	23.0%	48.1	135	23.0%	62.4	148	21.7%	67.0
30-34	53	16.9%	28.1	49	14.6%	25.5	72	16.2%	36.9	108	18.4%	54.0	126	18.5%	61.5
35-39	39	12.4%	19.2	34	10.1%	16.3	49	11.0%	23.3	74	12.6%	35.7	91	13.3%	44.4
40-44	22	7.0%	11.2	22	6.6%	11.5	32	7.2%	16.6	50	8.5%	25.2	61	8.9%	29.6
45-54	41	13.1%	10.6	43	12.8%	11.1	62	14.0%	15.7	94	16.0%	23.7	92	13.5%	23.2
55-64	16	5.1%	4.7	8	2.4%	2.3	20	4.5%	5.7	30	5.1%	8.4	31	4.5%	8.5
65+	2	0.6%	0.5	5	1.5%	1.3	5	1.1%	1.2	5	0.9%	1.2	8	1.2%	1.8
Unknown	0	0.0%	NA	0	0.0%	NA	0	0.0%	NA	1	0.2%	NA	0	0.0%	NA
Total	314	100.0%	11.0	335	100.0%	11.6	444	100.0%	15.0	587	100.0%	19.7	682	100.0%	22.5

Source: Division of Public and Behavioral Health, Sexually Transmitted Disease Management Information Systems (STD*MIS) and NEDSS Based System (NBS), data as of July 2018.

* 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, 2014-2018

Year	Clark		Washoe		Carson City, Douglas, Lyon		All Other Counties		Nevada	
	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate
2014	252	24.2	31	14.1	3	3.8	5	5.3	291	20.3
2014	288	27.1	22	9.9	1	1.3	1	1.1	312	21.4
2015	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	41.3	89	38.8	10	12.7	3	3.2	563	37.1

Table 8 | P&S Syphilis – Cases and Crude Rates of Reported Cases by County, Females, 2014-2018

Year	Clark		Washoe		Carson City, Douglas, Lyon		All Other Counties		Nevada	
	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate
2014	16	1.6	5	2.3	2	2.6	0	0.0	23	1.6
2014	17	1.6	5	2.3	0	0.0	1	1.1	23	1.6
2015	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	9.7	1	1.2	3	3.4	119	7.9

Table 9 | Congenital Syphilis – Cases and Rates of Reported Cases by County, 2014-2018

Year	Clark		Washoe		Carson City, Douglas, Lyon		All Other Counties		Nevada	
	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate
2014	3	0.1	1	0.2	0	0.0	0	0.0	4	0.1
2014	6	0.3	2	0.5	0	0.0	0	0.0	8	0.3
2015	11	0.5	1	0.2	0	0.0	0	0.0	12	0.4
2017	18	0.8	2	0.4	0	0.0	1	0.5	21	0.7
2018	27	1.2	5	1.1	0	0.0	2	1.1	34	1.1

*Birth rates per 100,000 live births were calculated using 2018 vital records.

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Suggested Citation

Office of Public Health Investigations and Epidemiology. Division of Public and Behavioral Health. *Nevada 2018 STD Epidemiologic Profile.* Carson City, Nevada. e1.0. February 2021.

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Selected References and Web Sites

STD Publications from 2000-2018

[http://dpbh.nv.gov/Programs/STD/dta/Publications/Sexually Transmitted Disease \(STD\) Prevention and Control Program- Publications/](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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This publication was supported by the Grant or Cooperative Agreement Number, 1 NH25PS005179-01, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.