

# **Sexually Transmitted Diseases (STD) Among Arizona Youth**

## **The Impact of Chlamydia, Gonorrhea, Syphilis, and Genital Herpes on Arizona Adolescents, 2008**

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*Leadership for a Healthy Arizona*



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JANICE K. BREWER, GOVERNOR  
WILL HUMBLE, INTERIM DIRECTOR

July 5, 2009

Dear Community Stakeholder:

The Arizona Department of Health Services STD Control Program is pleased to provide this updated report on the impact of sexually transmitted diseases (STDs) among Arizona youth. The subsequent information, as depicted in the 2008 graphs and tables herein, highlights the continuing STD epidemic affecting our state's young adult population. In particular, it examines certain populations such as young adults in juvenile detention facilities. These data demonstrate the need for targeted education and prevention resources that will enable all Arizona youth to make healthy decisions regarding sexual activity.

Untreated STDs can cause significant health problems among those who become infected. For instance, untreated chlamydia and gonorrhea can lead to pelvic inflammatory disease (PID). Other young women may suffer ectopic pregnancies and chronic pelvic pain. Worse still, sexually transmitted diseases can lead to infertility or can be transmitted to unborn infants during pregnancy and/or delivery. Arizona law permits minors to seek treatment for STDs without parental or guardian consent (*ARS § 44-132.01*). Chlamydia and gonorrhea testing is now widely available as a urine test. Syphilis, herpes, and HIV testing require a blood specimen.

As demonstrated in this report, chlamydia, gonorrhea, and herpes are more frequently diagnosed in young females than in young males. There are several reasons for this disparity. First, women seek healthcare with more regularity than men. Second, national chlamydia screening guidelines recommend annual testing (that includes a test for gonorrhea) among sexually active women aged 25 years and younger. Similar screening guidelines do not exist for men. Finally, chlamydia, gonorrhea, and herpes infections are frequently asymptomatic in men (and sometimes in women) and thus may go undetected.

In April 2008, Gov. Napolitano signed Senate Bill 1078 (Expedited Therapy) into law. New statutory language makes legal the practice of Expedited Partner Therapy (EPT) for STDs. Specifically, medical providers can dispense an extra dose(s) of an antimicrobial medication, or write a separate prescription, to their patient to deliver to their partner(s). This practice is currently supported for the treatment of partners of patients with chlamydia and/or gonorrhea. Implementation of this new public health tool has demonstrated promise in providing treatment to asymptomatic partners and preventing re-infection.

We recommend continued vigilance among providers, clinics, schools, and community/government agencies serving young adult populations as it relates to STD testing and comprehensive sex education. We hope this information can be used to further efforts to increase awareness of this important health issue facing Arizona youth. Please do not hesitate to contact us with further questions regarding STD education, prevention, and screening opportunities.

Sincerely,  
Roxanne Ereth, MPH  
STD Control Program Manager

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## Overview of STD Prevalence and Trends Among 10-19 Year Olds in Arizona

Surveillance of sexually transmitted diseases is an important public health activity of the Arizona Department of Health Services. In 2008, Arizona had the second fastest growing population of all U.S. states (U.S. Census, 2008). Coincident with this population growth has been an increase in sexually transmitted diseases (STDs). Bacterial (chlamydia, gonorrhea, syphilis) and viral (genital herpes) STDs disproportionately affect youth ages 10-19. In 2008 alone, 30% of all STDs reported in Arizona were reported in the 10-19 year old age group.

Chlamydia, gonorrhea, and herpes are more frequently diagnosed in young females than in young males. There are several reasons for this disparity. First, women seek out healthcare with more regularity than men. Second, national chlamydia screening guidelines recommend annual testing (that includes a test for gonorrhea) among sexually active women aged 25 years and younger. Similar screening guidelines do not exist for men. Finally, chlamydia, gonorrhea, and herpes infections are frequently asymptomatic in men (and sometimes in women) and thus may go undetected.

The following is a summary of each of these reportable STDs. All data presented in this report were derived from the ADHS STD surveillance database. The population denominators used in this report were obtained from the Arizona Department of Health Services Vital Statistics Division (<http://www.azdhs.gov/plan/>).

### **Chlamydia**

#### Overview

- In 2008, there were 8,586 reported cases of chlamydia among 10-19 year olds, corresponding to 938.6 cases per 100,000 population (Figures 1, 4).
- During 2003-2008, the rate of chlamydia increased 45% among 10-19 year olds (Figure 4).

#### Infertility Prevention Project (IPP)

- The CDC-funded Infertility Prevention Project (IPP) supports STD screening in certain family planning clinics, STD clinics, and juvenile correctional health facilities.
- STD screening focuses on sexually active women aged 25 years or younger.
- Chlamydia positivity remains high in juvenile detention facilities among males and females (Figures 2, 3).

#### Race/Ethnicity

- In 2008, African American and Native American adolescents continued to have the highest rates of chlamydia morbidity (2,421.9 and 1,445.2 per 100,000 population, respectively) (Figure 5).
- The overall Arizona rate for chlamydia among 10-19 year olds was 938.8 per 100,000 population in 2008 (Figure 5).

#### County

- Graham County had the highest rate of chlamydia (1,215.3 per 100,000) among 10-19 year olds (Figure 6).
- Maricopa and Pima Counties, the two most populous counties, had the greatest numbers of chlamydia cases among 10-19 year olds in 2008: 4,562 and 1,304, respectively (ADHS STD surveillance database).

#### Gender

- From 2001 to 2008, adolescent females had a 4.5 – 5.9-fold higher rate of chlamydia compared to males (Figure 7).

## Gonorrhea

### Overview

- In 2008, there were 778 reported cases of gonorrhea among 10-19 year olds, corresponding to 86.1 cases per 100,000 population (Figures 1, 24).
- During 2006-2008, the rate of gonorrhea decreased 42% among 10-19 year olds (Figure 21).

### Race/Ethnicity

- In 2008, African American adolescents continued to have the highest rates of gonorrhea morbidity (469.0 per 100,000 population) (Figure 22).
- The highest rate for African Americans, aged 10-19 years old, occurred in 2007 with 761.2 cases per 100,000 (Figure 22).
- The overall Arizona rate for gonorrhea among 10-19 year olds was 86.4 cases per 100,000 population in 2008 (Figure 22).
- In 2008, the rate of diagnosed gonorrhea among adolescent African Americans decreased by 38% (Figure 22).

### County

- Navajo County had the highest rate of gonorrhea (119.5 per 100,000) among 10-19 year olds (Figure 23).
- Maricopa and Pima Counties had the greatest numbers of gonorrhea cases among 10-19 year olds in 2008 (477 and 130 cases, respectively) (ADHS STD surveillance database).

### Gender

- During 2001-2008, adolescent females had a 1.7 – 2.2-fold higher rate of gonorrhea compared to males (Figure 24).

## Syphilis

### Overview

- In 2008, there were 54 reported cases of syphilis among 10-19 year olds, corresponding to 5.9 cases per 100,000 population (Figures 1, 29).
- During 2001-2005, the rate of syphilis decreased 64% among 10-19 year olds (Figure 26).
- During 2005-2007, the rate of syphilis increased 94% among 10-19 year olds (Figure 26).
- The large increase from 2005 to 2007 was attributed to three significant syphilis outbreaks among Native Americans in Arizona and a rise in the number of cases in rural Arizona counties.

### Race/Ethnicity

- In 2008, Native American and Hispanic adolescents continued to have high rates of syphilis morbidity (10.2 and 10.0 per 100,000, respectively) (Figure 27).
- The overall Arizona rate for syphilis among 10-19 year olds was 5.9 per 100,000 population in 2008 (Figure 27).
- In 2008, the rate of syphilis decreased by 69% from the previous year among Native Americans (Figure 27).

### County

- Apache County had the highest rate of syphilis (12.8 per 100,000) among 10-19 year olds (Figure 28).
- Maricopa and Pima Counties had the greatest numbers of syphilis cases among 10-19 year olds in 2008 (25 and 13 cases, respectively) (ADHS STD surveillance database).

### Gender

- During 2001-2008, adolescent females had a 1.3 – 4.4-fold higher rate of syphilis compared to males (Figure 29).

## Genital Herpes\*

### Overview

- In 2008, there were 189 reported cases of genital herpes among 10-19 year olds, corresponding to 20.7 cases per 100,000 population (Figures 1, 34).
- During 2003-2007, the rate of gonorrhea increased 33% among 10-19 year olds (Figure 31).

### Race/Ethnicity

- In 2008, African American and Native American adolescents continued to have high rates of genital herpes (36.8 and 23.9 per 100,000, respectively) (Figure 32).
- The overall Arizona rate for genital herpes among 10-19 year olds was 20.7 cases per 100,000 population in 2008 (Figure 32).

### County

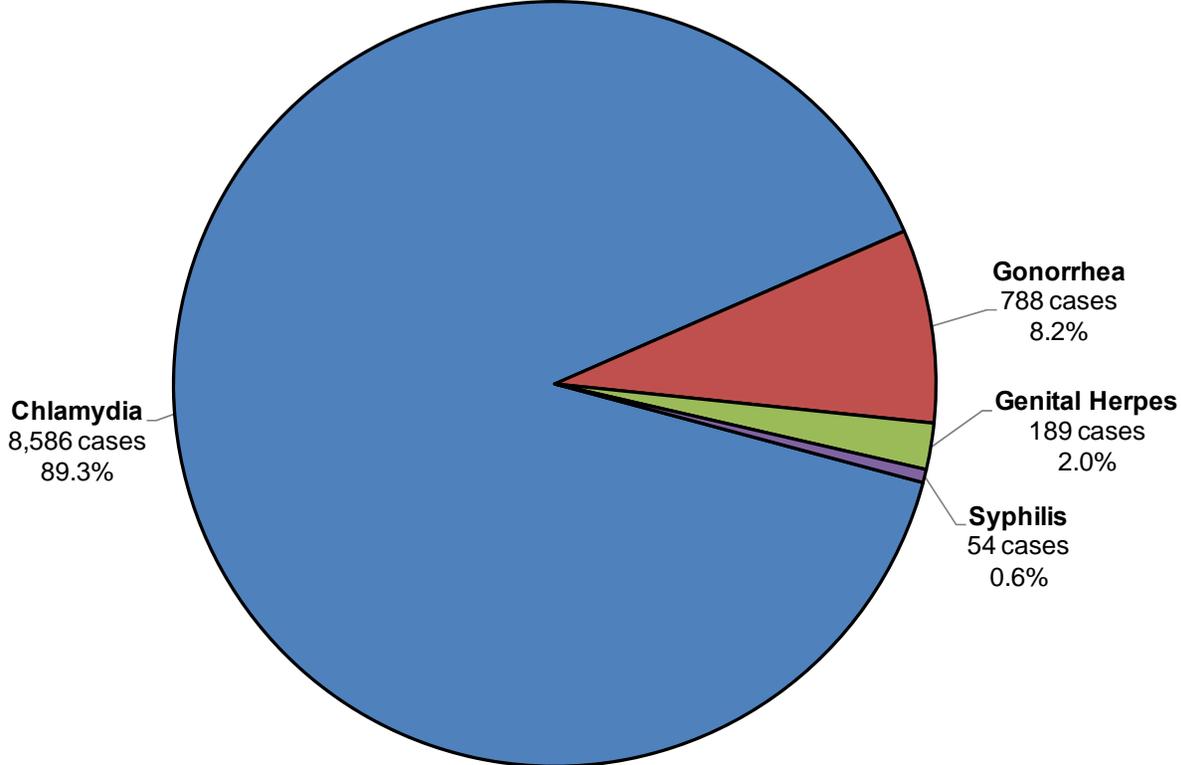
- Pinal County had the highest rate of genital herpes (32.2 per 100,000) among 10-19 year olds (Figure 33).
- Maricopa and Pima Counties had the greatest numbers of genital herpes cases among 10-19 year olds in 2008: (97 and 19 cases, respectively) (ADHS STD surveillance database).

### Gender

- During 2001-2008, adolescent females had a 2.8 – 7.4-fold higher rate of genital herpes compared to males (Figure 34).

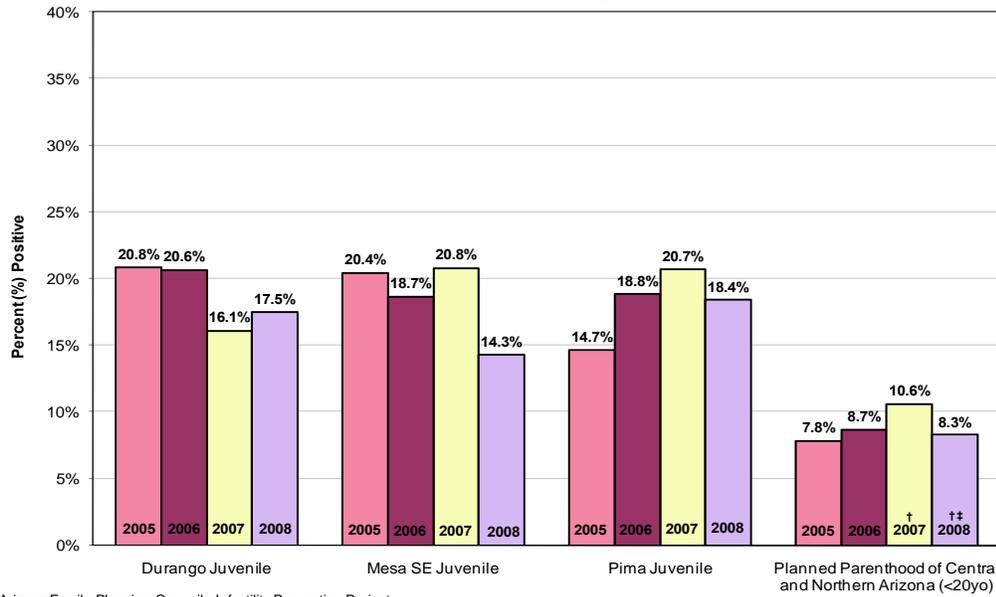
\* All newly reported cases

**Figure 1. Reportable Sexually Transmitted Diseases in 10-19 Year Olds, Arizona, 2008**



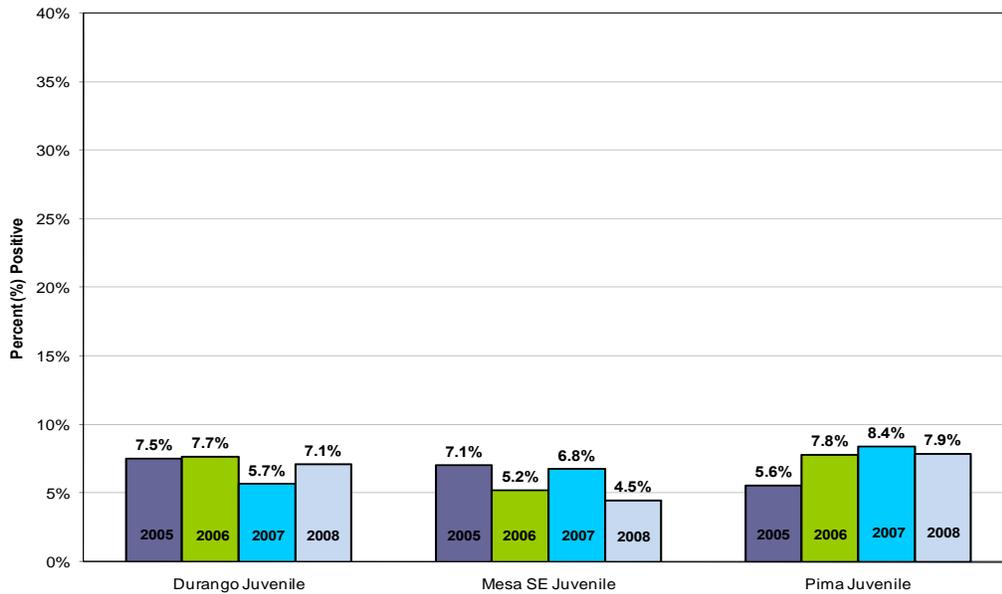
Arizona Department of Health Services - STD Control Program  
\* There were 0 reported cases of chancroid

**Figure 2. Percent (%) Positivity in Females Tested for Chlamydia in Infertility Prevention Program (IPP) Juvenile Facilities and Family Planning Clinics, 2005-2008**



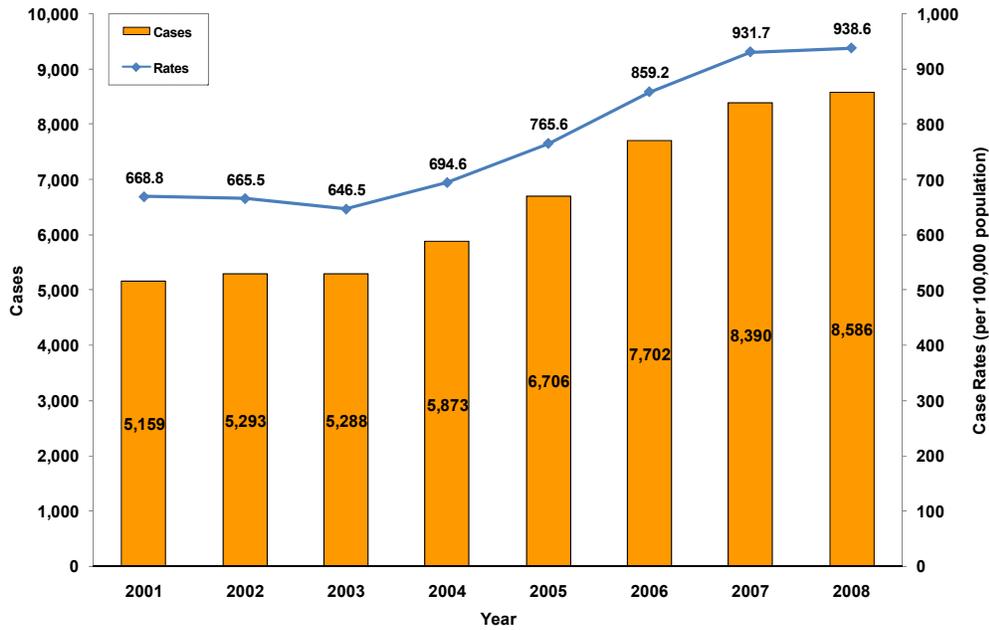
Arizona Family Planning Council - Infertility Prevention Project  
<sup>†</sup> PPCNA year includes all AZ Planned Parenthood clinics  
<sup>‡</sup> PPCNA year includes females <25 yo

**Figure 3. Percent (%) Positivity in Males Tested for Chlamydia in Infertility Prevention Program (IPP) Juvenile Facilities, 2005-2008**



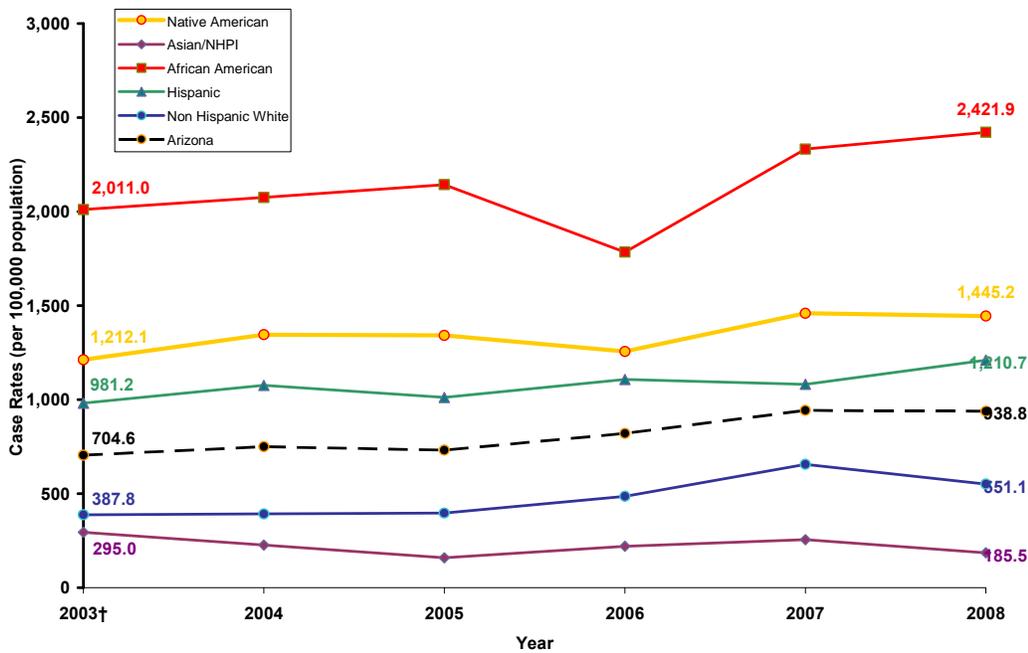
Arizona Family Planning Council - Infertility Prevention Project

**Figure 4. Reported Chlamydia Cases and Case Rates per 100,000 Population in 10-19 Year Olds, Arizona, 2001-2008**

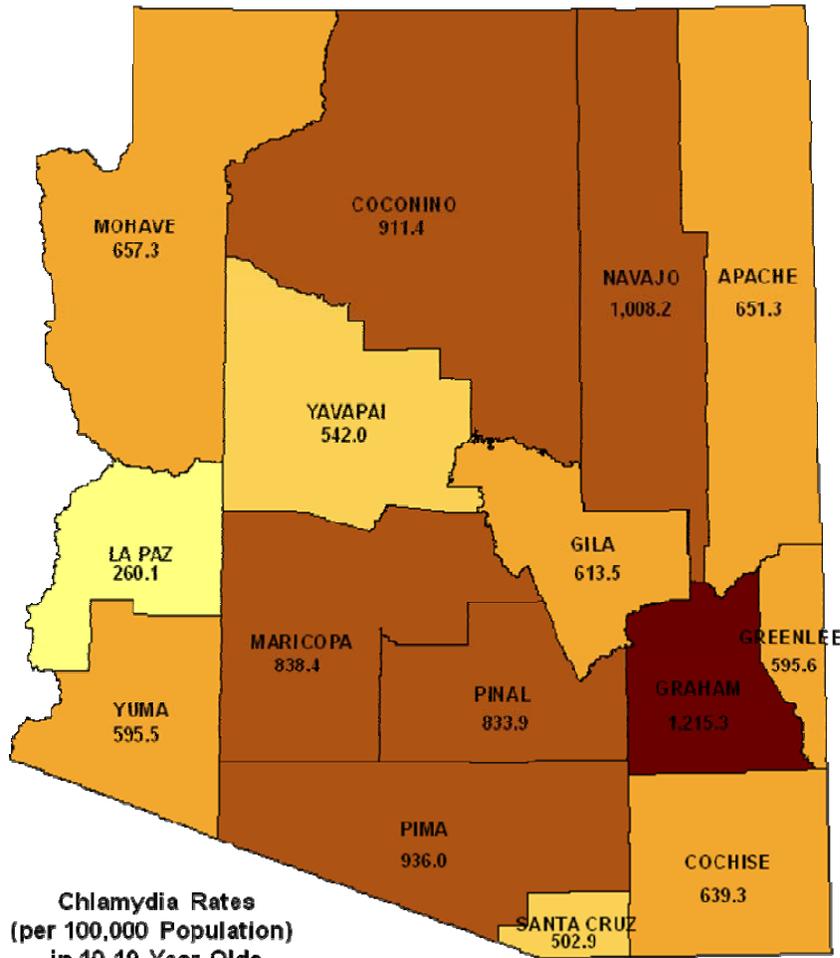


Arizona Department of Health Services - STD Control Program

**Figure 5. Reported Chlamydia Case Rates per 100,000 Population by Race/Ethnicity in 10-19 Year Olds, Arizona, 2003-2008**



**Figure 6. Reported Chlamydia Case Rates per 100,000 Population by County in 10-19 Year Olds, Arizona, 2008**

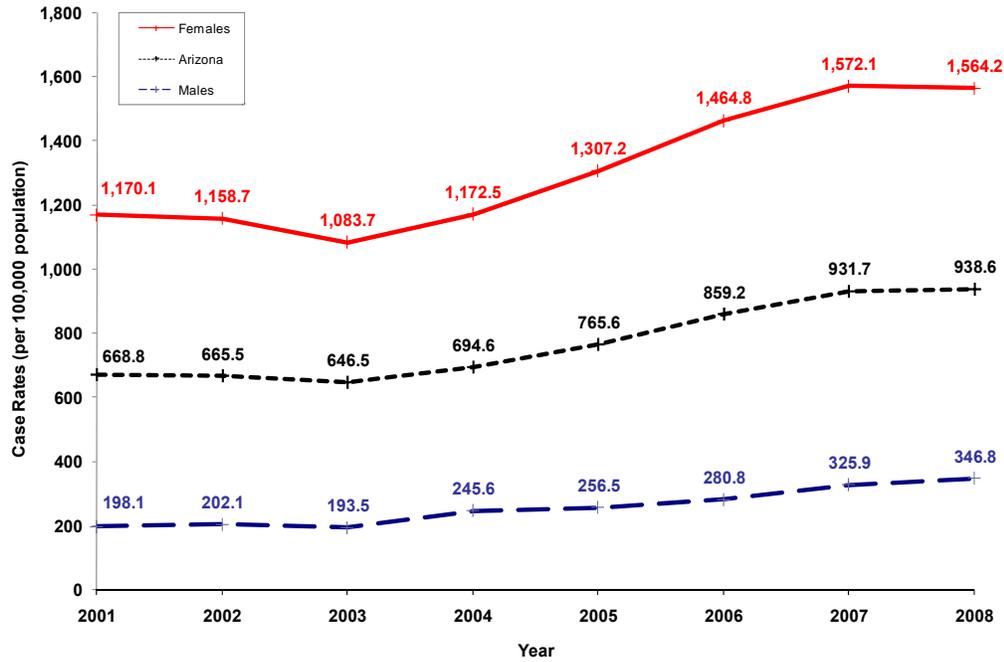


**Chlamydia Rates (per 100,000 Population) in 10-19 Year Olds**

- 260.0
- 260.1 - 642.0
- 542.1 - 667.0
- 657.1 - 1008.0
- 1008.1 - 1215.0

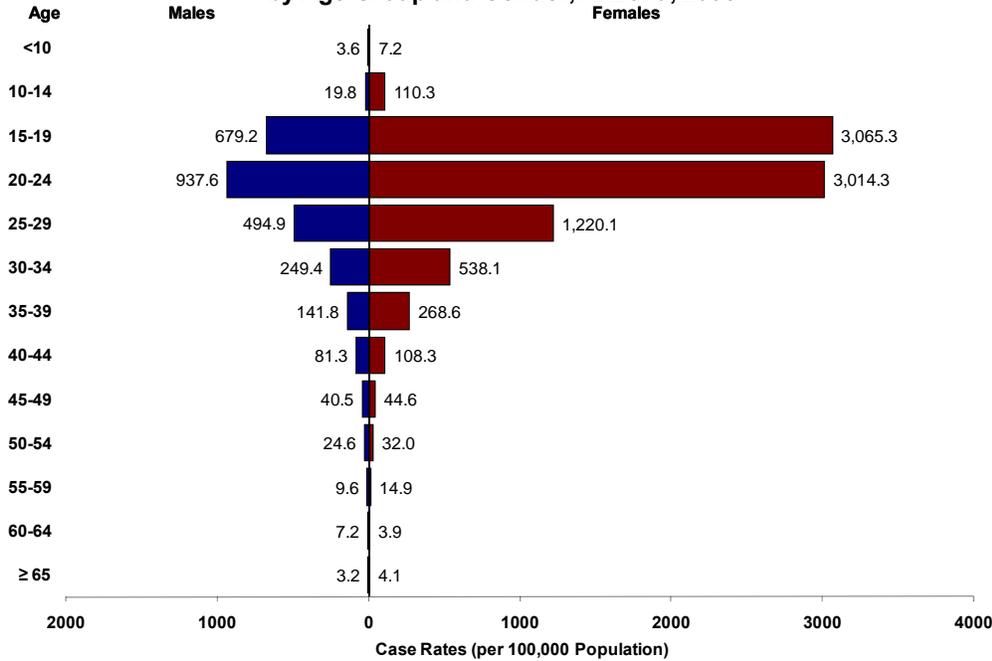
Arizona Department of Health Services – STD Control Program

**Figure 7. Reported Chlamydia Case Rates per 100,000 Population by Gender in 10-19 Year Olds, Arizona, 2001-2008**



Arizona Department of Health Services - STD Control Program

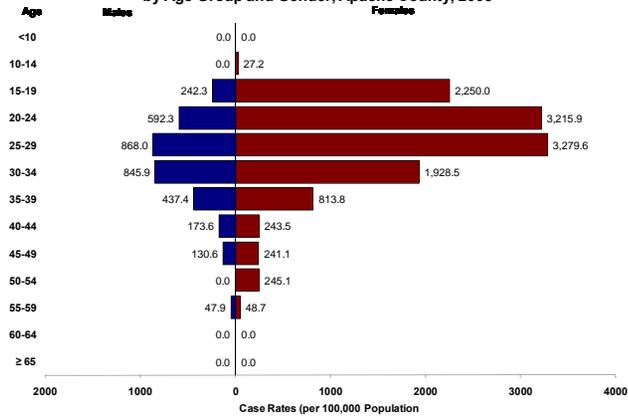
**Figure 8. Reported Chlamydia Case Rates per 100,000 Population by Age Group and Gender, Arizona, 2008**



Arizona Department of Health Services - STD Control Program

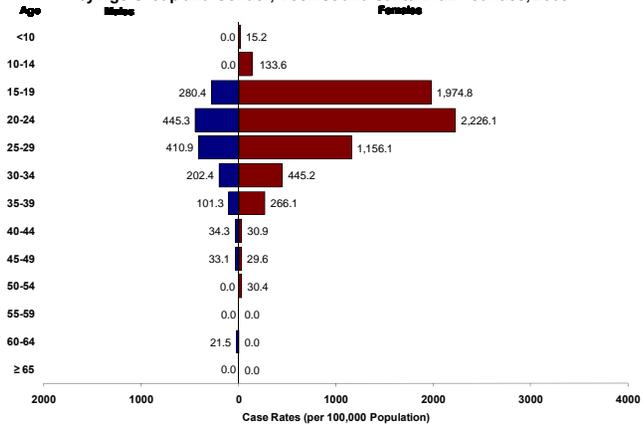
Arizona Case Rate = 381.9 per 100,000 Population  
 \*Does not include transgendered persons or unknown gender

**Figure 9. Reported Chlamydia Case Rates per 100,000 Population by Age Group and Gender, Apache County, 2008**



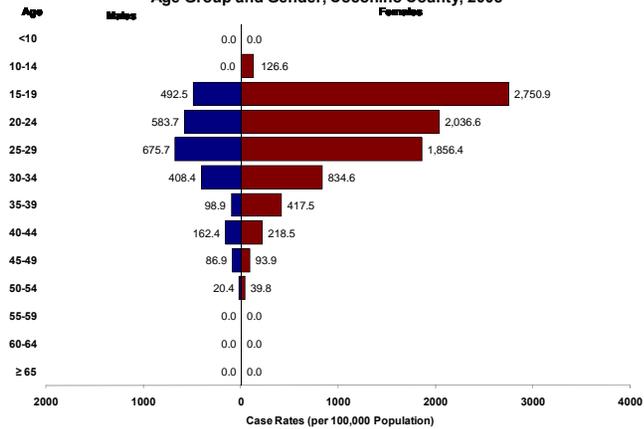
Arizona Department of Health Services - STD Control Program Apache County Case Rate = 529.2 per 100,000 Population \*Does not include unknown gender

**Figure 10. Reported Chlamydia Case Rates per 100,000 Population by Age Group and Gender, Cochise and Santa Cruz Counties, 2008**



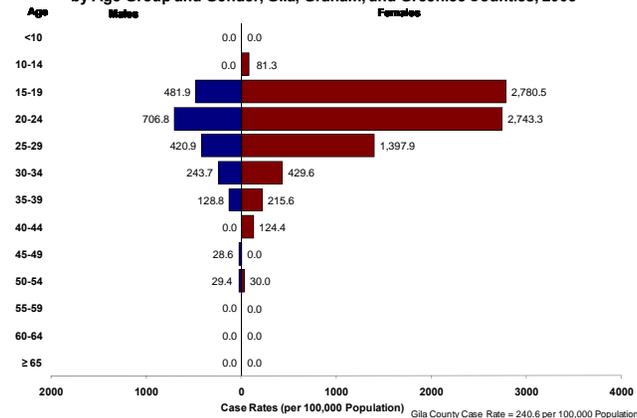
Arizona Department of Health Services - STD Control Program Cochise County Case Rate = 263.2 per 100,000 Population Santa Cruz County Case Rate = 253.8 per 100,000 Population

**Figure 11. Reported Chlamydia Case Rates per 100,000 Population by Age Group and Gender, Coconino County, 2008**



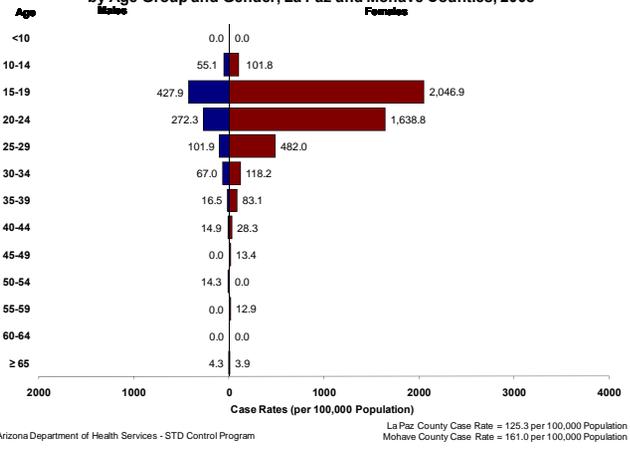
Arizona Department of Health Services - STD Control Program Coconino County Case Rate = 452.8 per 100,000 Population

**Figure 12. Reported Chlamydia Case Rates per 100,000 Population by Age Group and Gender, Gila, Graham, and Greenlee Counties, 2008**

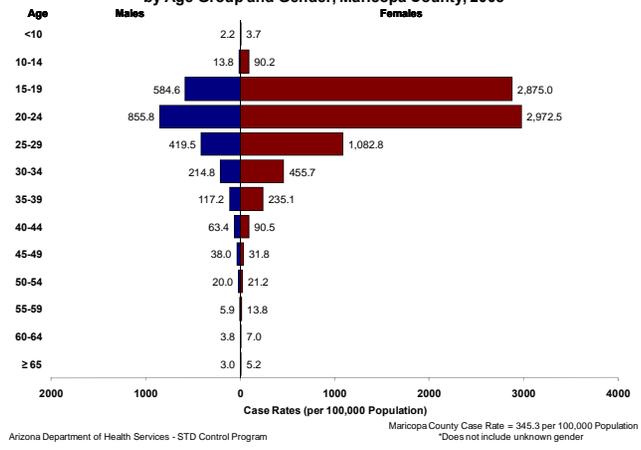


Arizona Department of Health Services - STD Control Program Gila County Case Rate = 240.6 per 100,000 Population Graham County Case Rate = 478.9 per 100,000 Population Greenlee County Case Rate = 290.5 per 100,000 Population

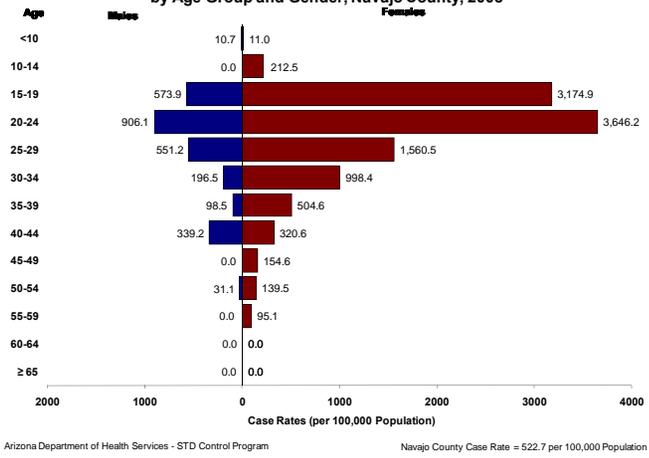
**Figure 13. Reported Chlamydia Case Rates per 100,000 Population by Age Group and Gender, La Paz and Mohave Counties, 2008**



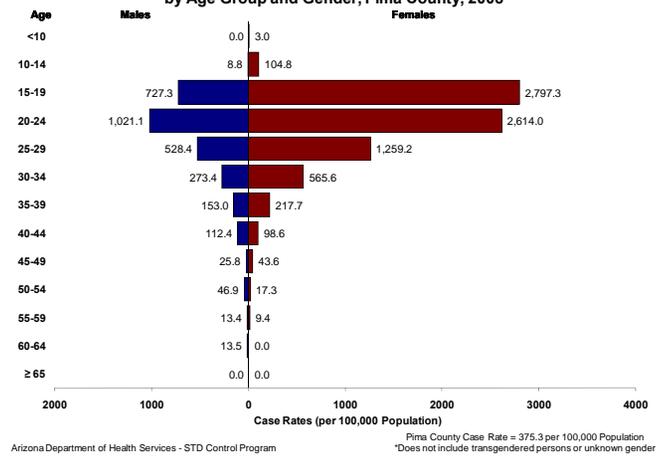
**Figure 14. Reported Chlamydia Case Rates per 100,000 Population by Age Group and Gender, Maricopa County, 2008**



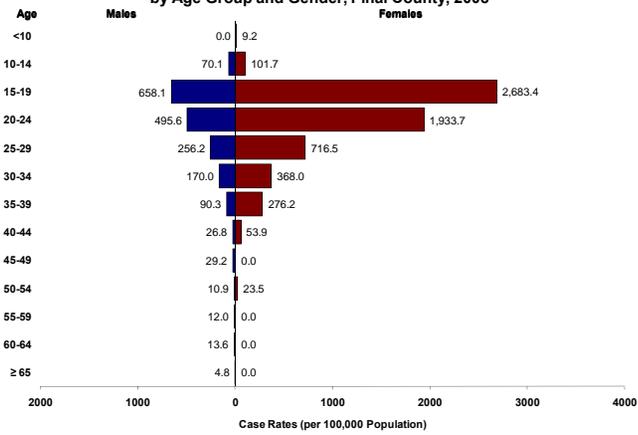
**Figure 15. Reported Chlamydia Case Rates per 100,000 Population by Age Group and Gender, Navajo County, 2008**



**Figure 16. Reported Chlamydia Case Rates per 100,000 Population by Age Group and Gender, Pima County, 2008**

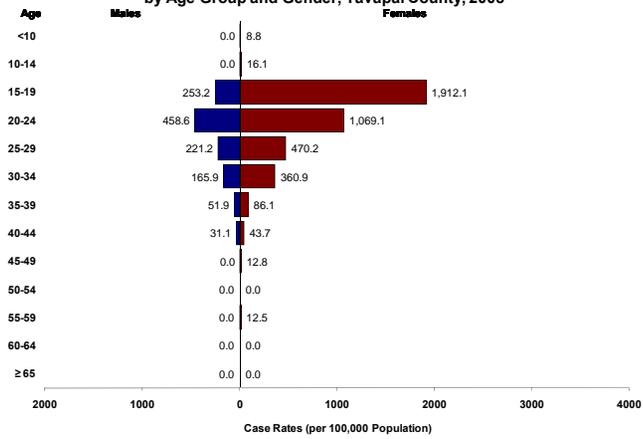


**Figure 17. Reported Chlamydia Case Rates per 100,000 Population by Age Group and Gender, Pinal County, 2008**



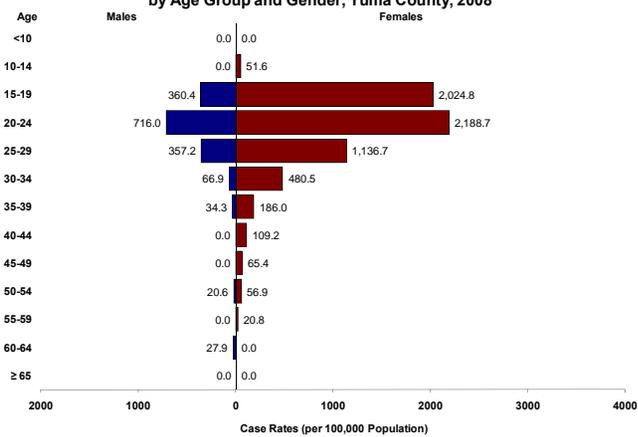
Arizona Department of Health Services - STD Control Program Pinal County Case Rate = 280.2 per 100,000 Population

**Figure 18. Reported Chlamydia Case Rates per 100,000 Population by Age Group and Gender, Yavapai County, 2008**



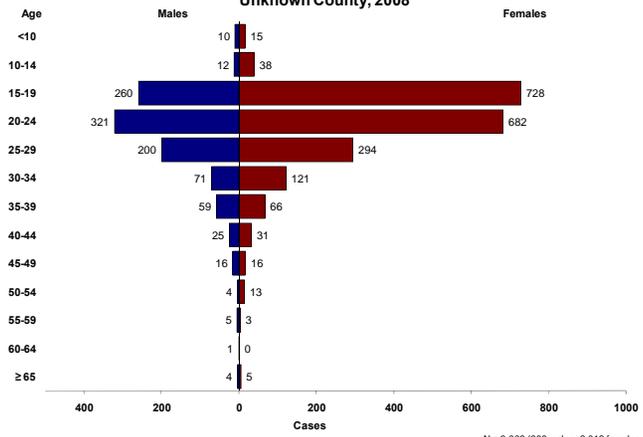
Arizona Department of Health Services - STD Control Program Yavapai County Case Rate = 154.5 per 100,000 Population

**Figure 19. Reported Chlamydia Case Rates per 100,000 Population by Age Group and Gender, Yuma County, 2008**



Arizona Department of Health Services - STD Control Program Yuma County Case Rate = 266.0 per 100,000 Population

**Figure 20. Reported Chlamydia Cases by Age Group and Gender, Unknown County, 2008**



Arizona Department of Health Services - STD Control Program N = 3,002 (988 males, 2,012 females, and 2 unknown gender)

**Table 1. Reported Female Chlamydia Case Rates per 100,000 Population by Age and County, Arizona, 2008**

Age Group	Gila, Cochise & Santa Cruz, Coconino, Graham, & Greenlee, La Paz & Mohave, Maricopa†, Navajo, Pima ▫, Pinal, Yavapai, Yuma											Arizona
	Apache‡	Santa Cruz	Coconino	Greenlee	Mohave	Maricopa†	Navajo	Pima ▫	Pinal	Yavapai	Yuma	
<10	0.0	15.2	0.0	0.0	0.0	3.7	11.0	3.0	9.2	8.8	0.0	7.2
10-14	27.2	133.6	126.6	81.3	101.8	90.2	212.5	104.8	101.7	16.1	51.6	110.3
15-19	2,250.0	1,974.8	2,750.9	2,780.5	2,046.9	2,875.0	3,174.9	2,797.3	2,683.4	1,912.1	2,024.8	3,065.3
20-24	3,215.9	2,226.1	2,036.6	2,743.3	1,638.8	2,972.5	3,646.2	2,614.0	1,933.7	1,069.1	2,188.7	3,014.3
25-29	3,279.6	1,156.1	1,856.4	1,397.9	482.0	1,082.8	1,560.5	1,259.2	716.5	470.2	1,136.7	1,220.1
30-34	1,928.5	445.2	834.6	429.6	118.2	455.7	998.4	565.6	368.0	360.9	480.5	538.1
35-39	813.8	266.1	417.5	215.6	83.1	235.1	504.6	217.7	276.2	86.1	186.0	268.6
40-44	243.5	30.9	218.5	124.4	28.3	90.5	320.6	98.6	53.9	43.7	109.2	108.3
45-49	241.1	29.6	93.9	0.0	13.4	31.8	154.6	43.6	0.0	12.8	65.4	44.6
50-54	245.1	30.4	39.8	30.0	0.0	21.2	139.5	17.3	23.5	0.0	56.9	32.0
55-59	48.7	0.0	0.0	0.0	12.9	13.8	95.1	9.4	0.0	12.5	20.8	14.9
60-64	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	3.9
≥ 65	0.0	0.0	0.0	0.0	3.9	5.2	0.0	0.0	0.0	0.0	0.0	4.1
<b>Total</b>	<b>841.9</b>	<b>413.1</b>	<b>694.6</b>	<b>525.3</b>	<b>253.5</b>	<b>522.5</b>	<b>821.7</b>	<b>530.4</b>	<b>433.1</b>	<b>229.5</b>	<b>414.6</b>	<b>567.6</b>

\* 2,012 cases from unknown counties (not shown) are included in total Arizona case rates

**Table 2. Reported Male Chlamydia Cases per 100,000 Population by Age and County, Arizona, 2008**

Age Group	Gila, Cochise & Santa Cruz, Coconino, Graham, & Greenlee, La Paz & Mohave, Maricopa†, Navajo, Pima ▫, Pinal, Yavapai, Yuma											Arizona
	Apache‡	Santa Cruz	Coconino	Greenlee	Mohave	Maricopa†	Navajo	Pima ▫	Pinal	Yavapai	Yuma	
<10	0.0	0.0	0.0	0.0	0.0	2.2	10.7	0.0	0.0	0.0	0.0	3.6
10-14	0.0	0.0	0.0	0.0	55.1	13.8	0.0	8.8	70.1	0.0	0.0	19.8
15-19	242.3	280.4	492.5	481.9	427.9	584.6	573.9	727.3	658.1	253.2	360.4	679.2
20-24	592.3	445.3	583.7	706.8	272.3	855.8	906.1	1,021.1	495.6	458.6	716.0	937.6
25-29	868.0	410.9	675.7	420.9	101.9	419.5	551.2	528.4	256.2	221.2	357.2	494.9
30-34	845.9	202.4	408.4	243.7	67.0	214.8	196.5	273.4	170.0	165.9	66.9	249.4
35-39	437.4	101.3	98.9	128.8	16.5	117.2	98.5	153.0	90.3	51.9	34.3	141.8
40-44	173.6	34.3	162.4	0.0	14.9	63.4	339.2	112.4	26.8	31.1	0.0	81.3
45-49	130.6	33.1	86.9	28.6	0.0	38.0	0.0	25.8	29.2	0.0	0.0	40.5
50-54	0.0	0.0	20.4	29.4	14.3	20.0	31.1	46.9	10.9	0.0	20.6	24.6
55-59	47.9	0.0	0.0	0.0	0.0	5.9	0.0	13.4	12.0	0.0	0.0	9.6
60-64	0.0	21.5	0.0	0.0	0.0	3.8	0.0	13.5	13.6	0.0	27.9	7.2
≥ 65	0.0	0.0	0.0	0.0	4.3	3.0	0.0	0.0	4.8	0.0	0.0	3.2
<b>Total</b>	<b>207.7</b>	<b>101.8</b>	<b>209.9</b>	<b>143.5</b>	<b>59.1</b>	<b>171.0</b>	<b>214.2</b>	<b>213.4</b>	<b>141.0</b>	<b>76.8</b>	<b>115.5</b>	<b>196.9</b>

‡ Apache County has 1 unknown gender case not included in the tables

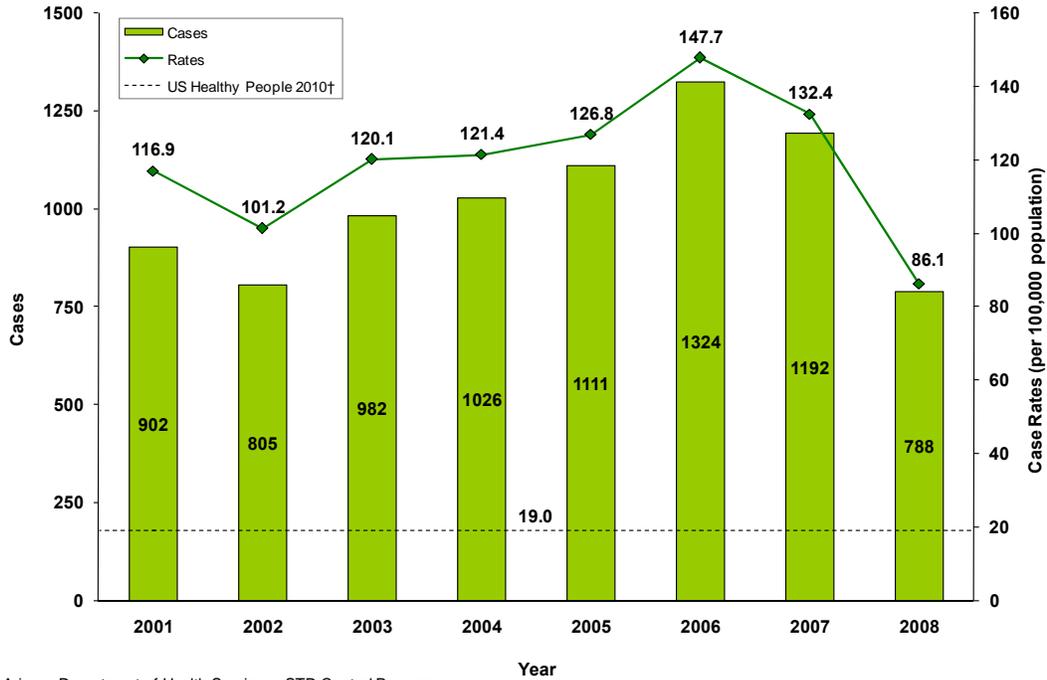
† Maricopa County has 3 unknown gender cases not included in the tables

▫ Pima County has 1 transgendered and 3 unknown gender cases not included in the tables

\* 988 cases from unknown counties (not shown) are included in total Arizona case rates

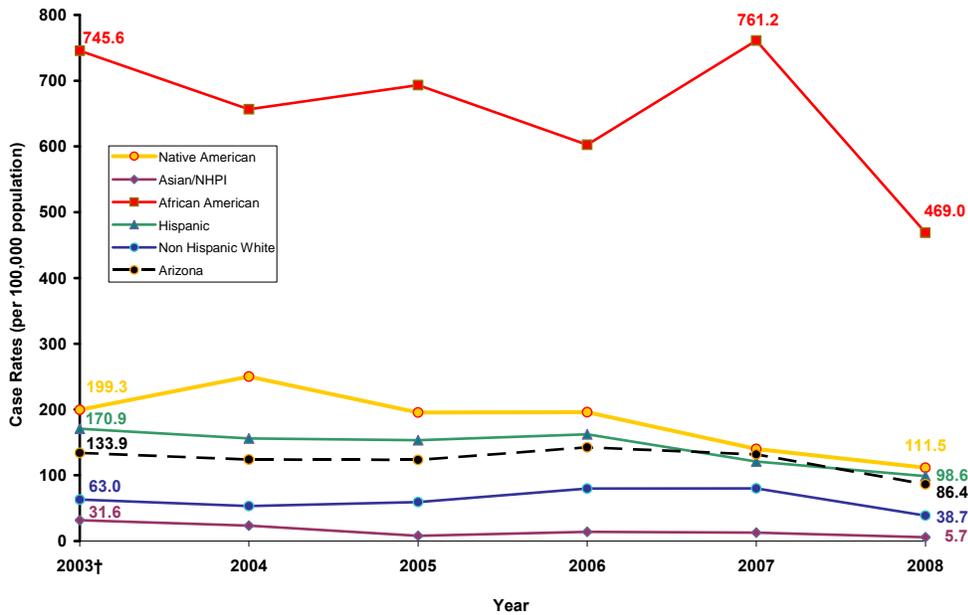
\* 2 unknown gender cases not included in the tables

**Figure 21. Reported Gonorrhea Cases and Case Rates per 100,000 Population in 10-19 Year Olds, Arizona, 2001-2008**

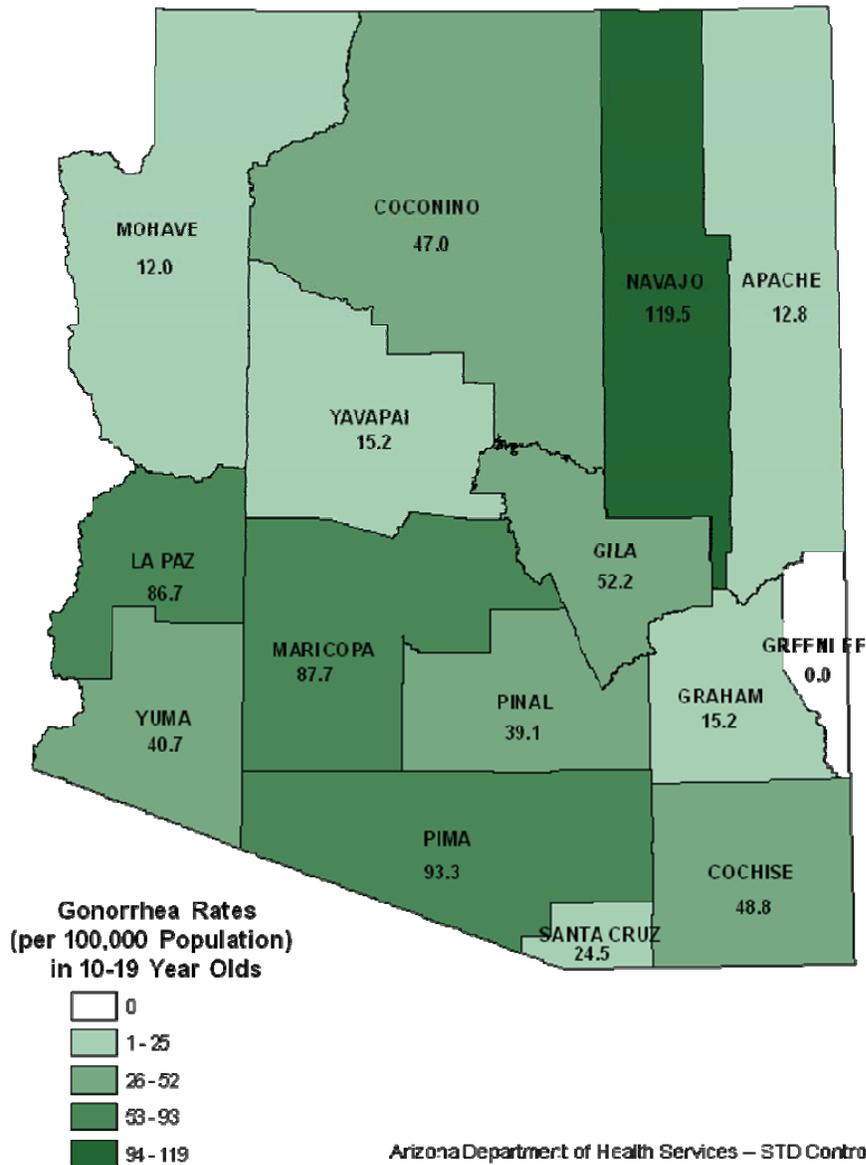


Arizona Department of Health Services - STD Control Program  
 † Target rate of US Healthy People 2010 is 19.0 cases per 100,000 population (STD Surveillance Program, CDC, NCHSTP)

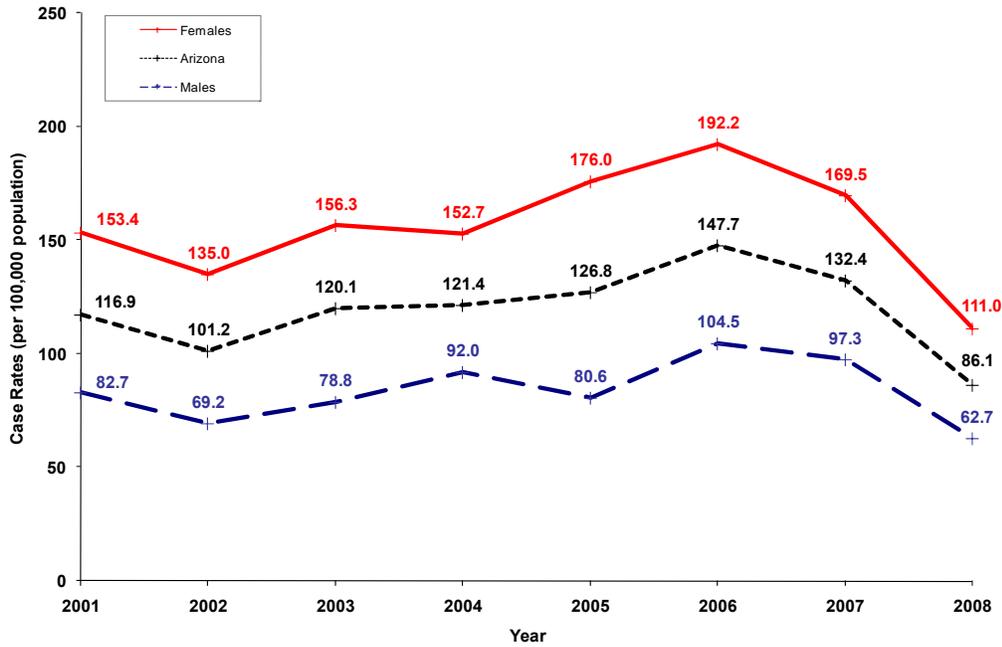
**Figure 22. Reported Gonorrhea Case Rates per 100,000 Population by Race/Ethnicity in 10-19 Year Olds, Arizona, 2003-2008**



**Figure 23. Reported Gonorrhea Case Rates per 100,000 Population by County in 10-19 Year Olds, Arizona, 2008**

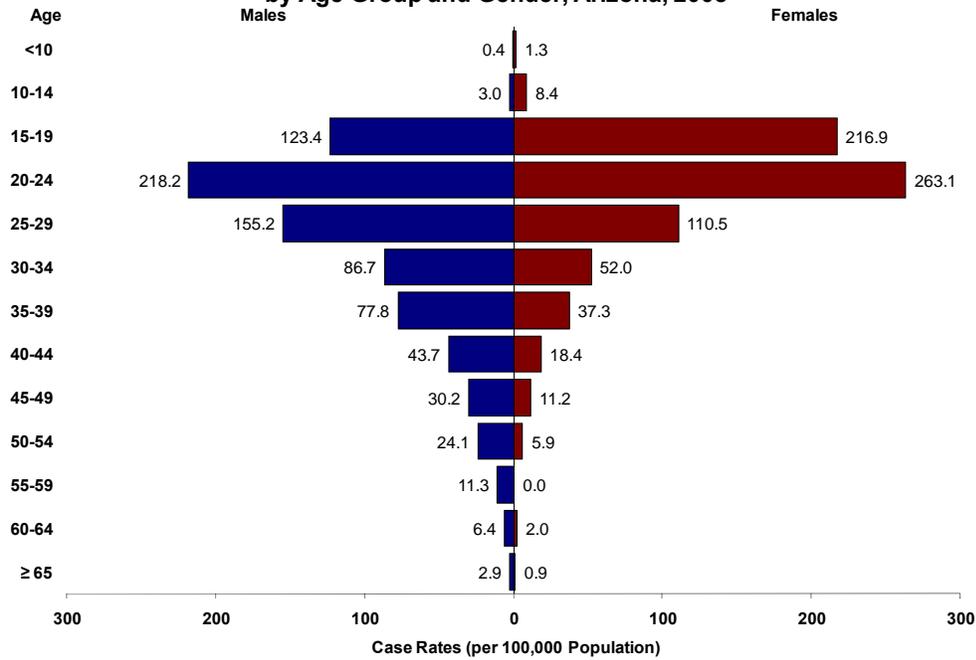


**Figure 24. Reported Gonorrhea Case Rates per 100,000 Population by Gender in 10-19 Year Olds, Arizona, 2001-2008**



Arizona Department of Health Services - STD Control Program

**Figure 25. Reported Gonorrhea Case Rates per 100,000 Population by Age Group and Gender, Arizona, 2008**



Arizona Department of Health Services - STD Control Program

Arizona Case Rate = 52.9 per 100,000 Population  
 \*Does not include unknown gender

**Table 3. Reported Female Gonorrhea Case Rates per 100,000 Population by Age and County, Arizona, 2008**

Age Group	Gila, Graham, & La Paz & Cochise & Santa Cruz											Arizona
	Apache	Santa Cruz	Coconino	Greenlee	Mohave	Maricopa†	Navajo	Pima	Pinal	Yavapai	Yuma	
<10	0.0	0.0	0.0	0.0	0.0	1.0	11.0	0.0	0.0	0.0	0.0	1.3
10-14	0.0	0.0	0.0	27.1	0.0	6.5	58.0	9.2	0.0	0.0	0.0	8.4
15-19	0.0	140.1	138.4	73.8	47.2	219.8	281.8	247.7	89.4	30.8	116.1	216.9
20-24	61.3	174.9	143.6	86.6	33.4	293.6	180.1	244.8	133.7	60.2	222.0	263.1
25-29	0.0	96.3	67.1	68.2	24.7	107.7	100.7	99.0	67.9	40.3	227.3	110.5
30-34	56.7	60.7	24.5	43.0	0.0	44.8	62.4	84.8	19.4	0.0	16.0	52.0
35-39	47.9	0.0	24.6	0.0	0.0	35.0	94.6	36.8	10.6	0.0	33.8	37.3
40-44	121.8	0.0	0.0	0.0	0.0	20.3	0.0	8.7	0.0	0.0	15.6	18.4
45-49	80.4	14.8	0.0	0.0	0.0	8.1	51.5	8.2	0.0	0.0	0.0	11.2
50-54	81.7	15.2	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0	19.0	5.9
55-59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60-64	0.0	0.0	0.0	0.0	0.0	1.2	0.0	4.0	0.0	0.0	0.0	2.0
≥ 65	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.9
<b>Total</b>	<b>28.5</b>	<b>32.5</b>	<b>35.3</b>	<b>19.2</b>	<b>6.1</b>	<b>49.7</b>	<b>65.2</b>	<b>50.6</b>	<b>23.4</b>	<b>7.9</b>	<b>41.0</b>	<b>49.1</b>

\* 164 cases from unknown counties (not shown) are included in total Arizona case rates

**Table 4. Reported Male Gonorrhea Case Rates per 100,000 Population by Age and County, Arizona, 2008**

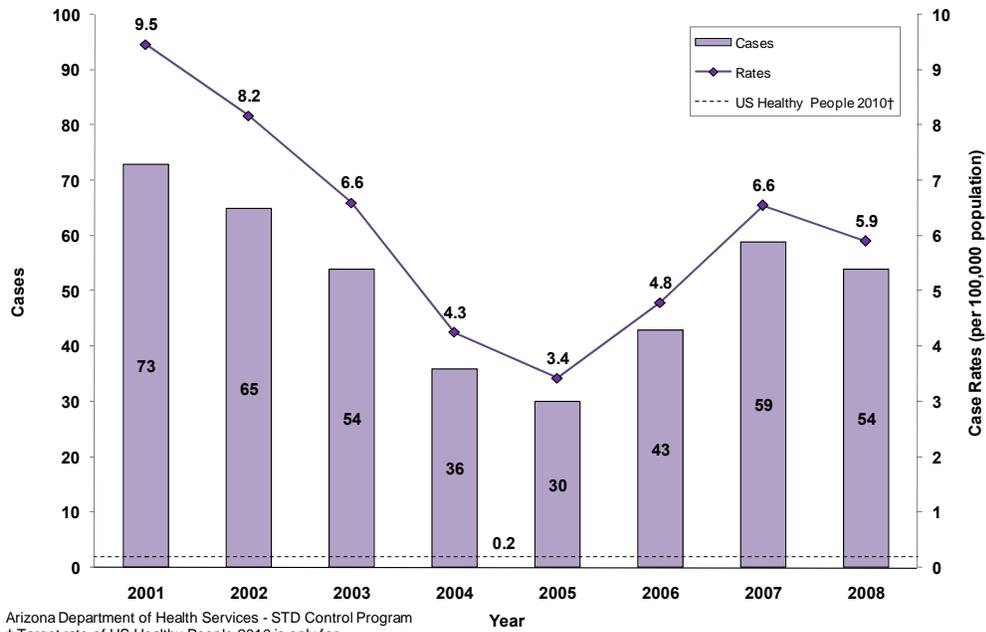
Age Group	Gila, Graham, & La Paz & Cochise & Santa Cruz											Arizona
	Apache	Santa Cruz	Coconino	Greenlee	Mohave	Maricopa†	Navajo	Pima	Pinal	Yavapai	Yuma	
<10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	0.4
10-14	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	8.8	0.0	0.0	3.0
15-19	48.5	25.5	34.0	24.1	29.5	137.9	129.6	105.0	62.2	28.1	49.7	123.4
20-24	93.5	167.0	81.4	73.1	16.0	242.1	144.2	196.4	71.8	13.5	109.2	218.2
25-29	182.7	82.2	35.6	0.0	38.2	149.3	95.9	155.4	65.6	49.2	187.1	155.2
30-34	60.4	112.5	51.0	0.0	16.7	88.4	32.7	82.0	22.2	16.6	16.7	86.7
35-39	109.3	40.5	74.2	0.0	0.0	69.5	32.8	106.1	32.8	17.3	68.7	77.8
40-44	0.0	17.1	23.2	0.0	0.0	43.4	28.3	56.2	8.9	31.1	32.1	43.7
45-49	0.0	0.0	21.7	0.0	0.0	28.5	0.0	14.3	58.4	13.7	0.0	30.2
50-54	96.0	0.0	20.4	0.0	14.3	26.0	0.0	21.9	10.9	0.0	0.0	24.1
55-59	0.0	0.0	0.0	0.0	0.0	13.7	0.0	16.8	0.0	0.0	0.0	11.3
60-64	0.0	0.0	0.0	0.0	0.0	8.8	0.0	0.0	13.6	0.0	0.0	6.4
≥ 65	28.1	0.0	0.0	0.0	0.0	4.1	0.0	1.6	0.0	0.0	0.0	2.9
<b>Total</b>	<b>39.9</b>	<b>28.5</b>	<b>26.6</b>	<b>7.6</b>	<b>7.2</b>	<b>59.3</b>	<b>37.2</b>	<b>53.9</b>	<b>26.7</b>	<b>10.8</b>	<b>31.6</b>	<b>56.7</b>

\* 235 cases from unknown counties (not shown) are included in total Arizona case rates

\* 2 unknown gender cases from unknown counties not included in the tables

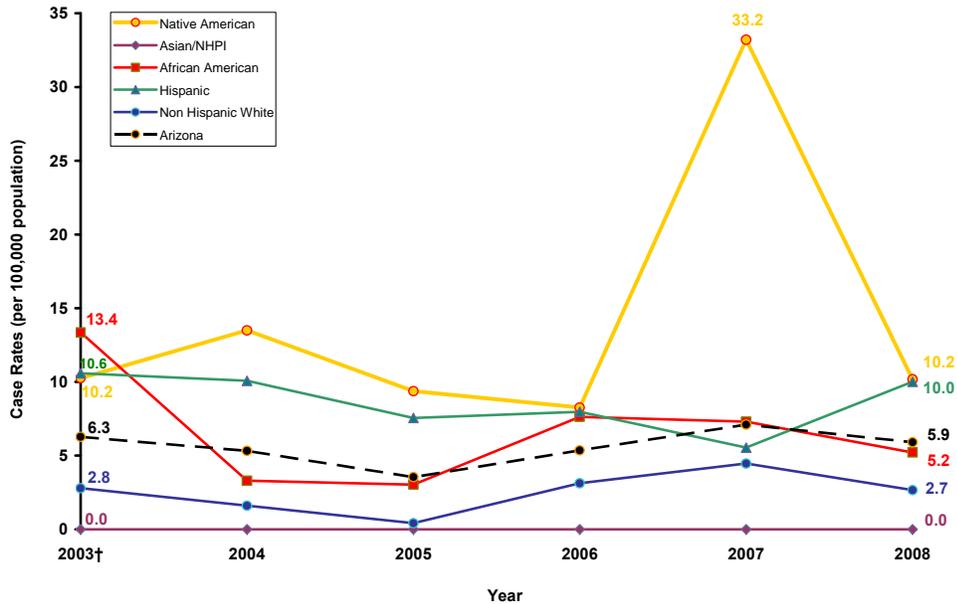
† Maricopa County has 1 unknown gender case not included in the tables

**Figure 26. Reported Syphilis Cases and Case Rates per 100,000 Population in 10-19 Year Olds, Arizona, 2001-2008**

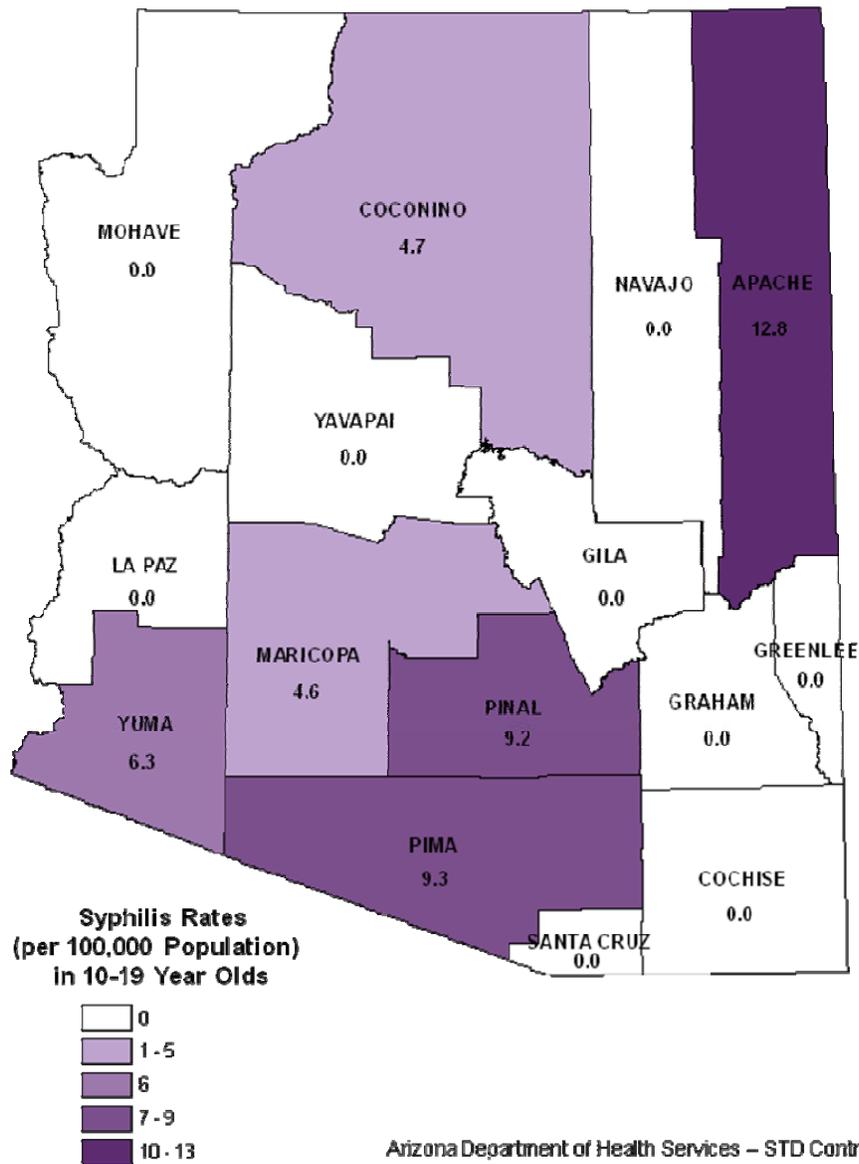


Arizona Department of Health Services - STD Control Program  
 † Target rate of US Healthy People 2010 is only for primary and secondary syphilis: 0.2 cases per 100,000 population (STD Surveillance Program, CDC, NCHSTP)

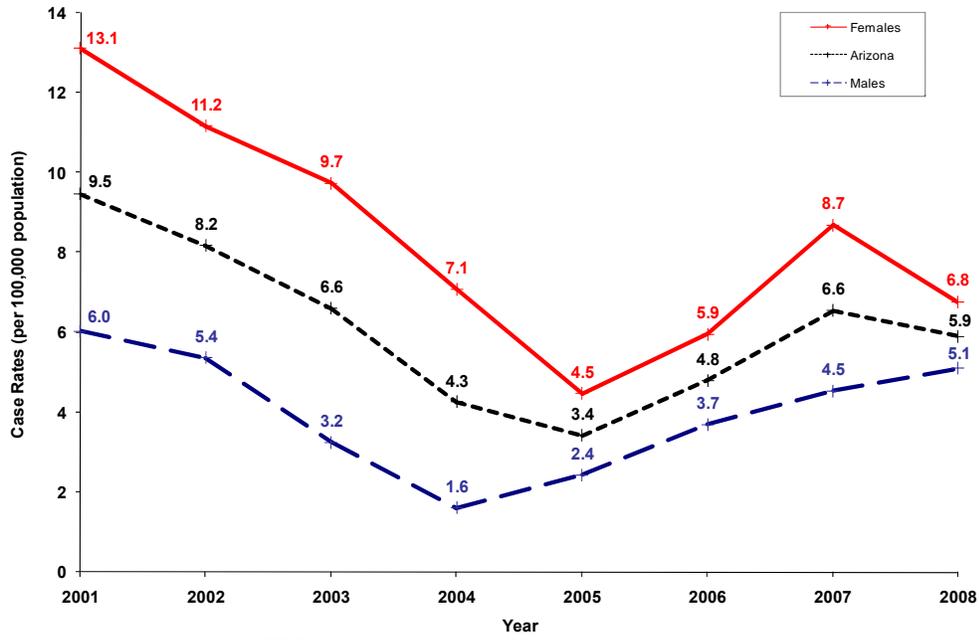
**Figure 27. Reported Syphilis Case Rates per 100,000 Population by Race/Ethnicity in 10-19 Year Olds, Arizona, 2003-2008**



**Figure 28. Reported Syphilis Case Rates per 100,000 Population by County in 10-19 Year Olds, Arizona, 2008**

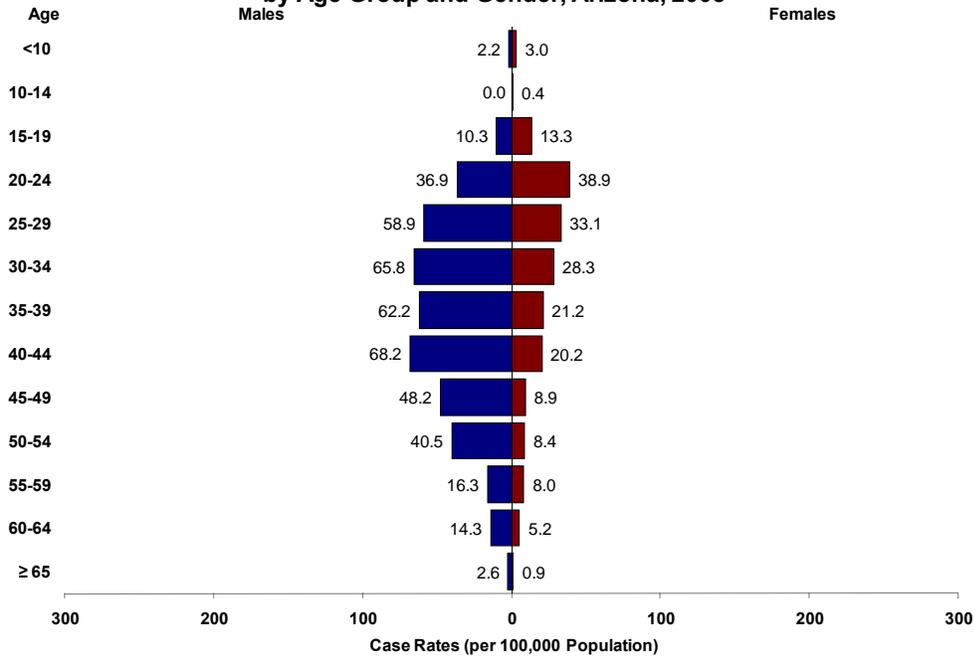


**Figure 29. Reported Syphilis Case Rates per 100,000 Population by Gender in 10-19 Year Olds, Arizona, 2001-2008**



Arizona Department of Health Services - STD Control Program

**Figure 30. Reported Syphilis Case Rates per 100,000 Population by Age Group and Gender, Arizona, 2008**



Arizona Department of Health Services - STD Control Program

Arizona Case Rate = 21.4 per 100,000 Population  
 \*Does not include transgendered persons or unknown gender

**Table 5. Reported Female Syphilis Case Rates per 100,000 Population by Age and County, Arizona, 2008**

Age Group	Gila, Graham, & La Paz & Maricopa†											Arizona
	Apache	Cochise & Santa Cruz	Coconino	Greenlee	Mohave	Maricopa†	Navajo	Pima	Pinal	Yavapai	Yuma	
<10	0.0	0.0	0.0	0.0	0.0	2.4	0.0	9.1	0.0	0.0	6.1	3.0
10-14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.4
15-19	0.0	14.0	17.3	0.0	0.0	8.7	0.0	33.8	29.8	0.0	12.9	13.3
20-24	91.9	15.9	0.0	0.0	0.0	25.5	45.0	89.8	71.3	0.0	79.3	38.9
25-29	0.0	0.0	0.0	34.1	0.0	24.5	0.0	104.7	15.1	0.0	32.5	33.1
30-34	0.0	0.0	0.0	85.9	0.0	21.7	0.0	81.7	29.1	0.0	0.0	28.3
35-39	0.0	0.0	0.0	35.9	0.0	20.0	0.0	42.9	21.2	0.0	16.9	21.2
40-44	0.0	0.0	0.0	0.0	0.0	19.6	53.4	34.8	32.4	0.0	15.6	20.2
45-49	0.0	0.0	0.0	0.0	0.0	11.8	0.0	8.2	11.0	0.0	0.0	8.9
50-54	0.0	0.0	0.0	0.0	13.7	7.6	0.0	14.4	11.8	12.2	0.0	8.4
55-59	48.7	0.0	0.0	0.0	12.9	6.5	0.0	12.6	22.8	0.0	0.0	8.0
60-64	54.0	0.0	0.0	0.0	0.0	7.0	0.0	4.0	0.0	0.0	0.0	5.2
≥ 65	0.0	0.0	0.0	0.0	0.0	1.2	0.0	1.2	0.0	0.0	0.0	0.9
<b>Total</b>	<b>13.0</b>	<b>2.1</b>	<b>1.5</b>	<b>7.7</b>	<b>1.7</b>	<b>10.9</b>	<b>6.9</b>	<b>29.9</b>	<b>16.3</b>	<b>0.9</b>	<b>10.7</b>	<b>12.9</b>

\* 51 cases from unknown counties were distributed based on provider county

**Table 6. Reported Male Syphilis Case Rates per 100,000 Population by Age and County, Arizona, 2008**

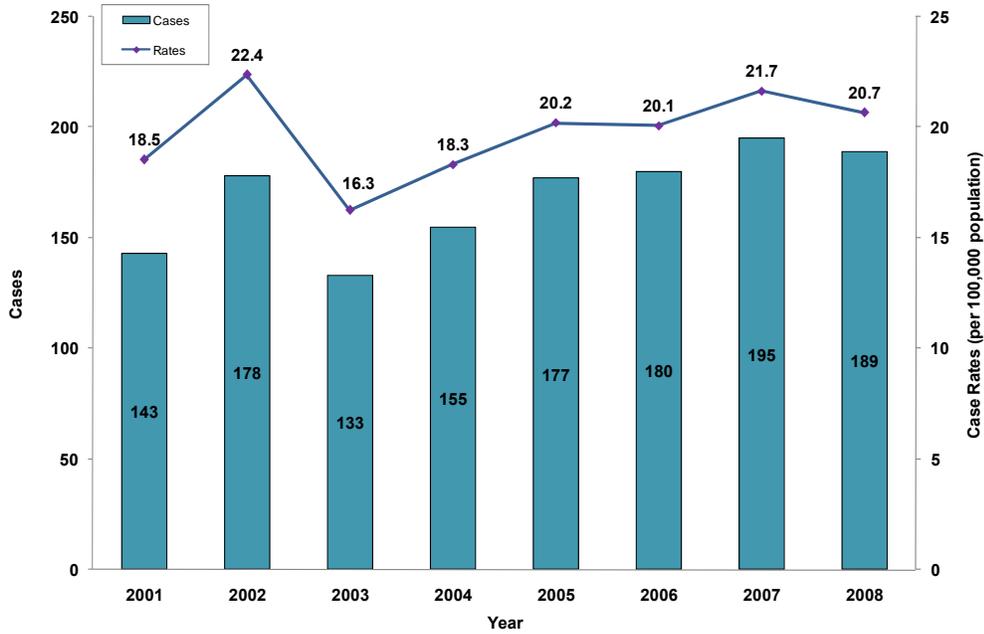
Age Group	Gila, Graham, & La Paz & Maricopa†											Arizona
	Apache	Cochise & Santa Cruz	Coconino	Greenlee	Mohave	Maricopa†	Navajo	Pima	Pinal	Yavapai	Yuma	
<10	0.0	0.0	0.0	0.0	0.0	2.9	0.0	2.9	0.0	0.0	0.0	2.2
10-14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15-19	48.5	0.0	0.0	0.0	0.0	12.5	0.0	8.1	8.9	0.0	12.4	10.3
20-24	0.0	0.0	0.0	24.4	0.0	45.1	0.0	31.4	79.0	13.5	12.1	36.9
25-29	0.0	19.3	0.0	60.1	12.7	59.2	24.0	87.6	101.3	0.0	34.0	58.9
30-34	60.4	0.0	51.0	34.8	16.7	65.8	0.0	85.1	140.5	0.0	16.7	65.8
35-39	109.3	38.0	0.0	0.0	32.9	60.9	0.0	65.6	164.2	17.3	51.5	62.2
40-44	0.0	15.5	46.4	30.7	29.7	82.0	28.3	59.2	62.6	15.5	32.1	68.2
45-49	0.0	14.8	43.5	28.6	0.0	60.7	0.0	28.7	87.6	0.0	17.2	48.2
50-54	0.0	0.0	0.0	0.0	28.6	42.5	0.0	65.7	65.5	0.0	0.0	40.5
55-59	0.0	32.0	0.0	0.0	0.0	16.7	33.8	20.1	12.0	13.1	23.0	16.3
60-64	0.0	0.0	0.0	0.0	0.0	17.6	0.0	26.9	0.0	0.0	0.0	14.3
≥ 65	0.0	0.0	0.0	0.0	0.0	3.6	0.0	3.1	4.8	0.0	0.0	2.6
<b>Total</b>	<b>13.3</b>	<b>7.3</b>	<b>8.9</b>	<b>11.3</b>	<b>7.2</b>	<b>33.8</b>	<b>5.3</b>	<b>32.7</b>	<b>54.5</b>	<b>3.6</b>	<b>11.8</b>	<b>29.8</b>

\* 160 cases from unknown counties were distributed based on provider county

\* 1 male case from unidentified county and 1 transgendered person not included in the tables

† Maricopa County has 3 transgendered persons and 3 unknown gender cases not included in the table

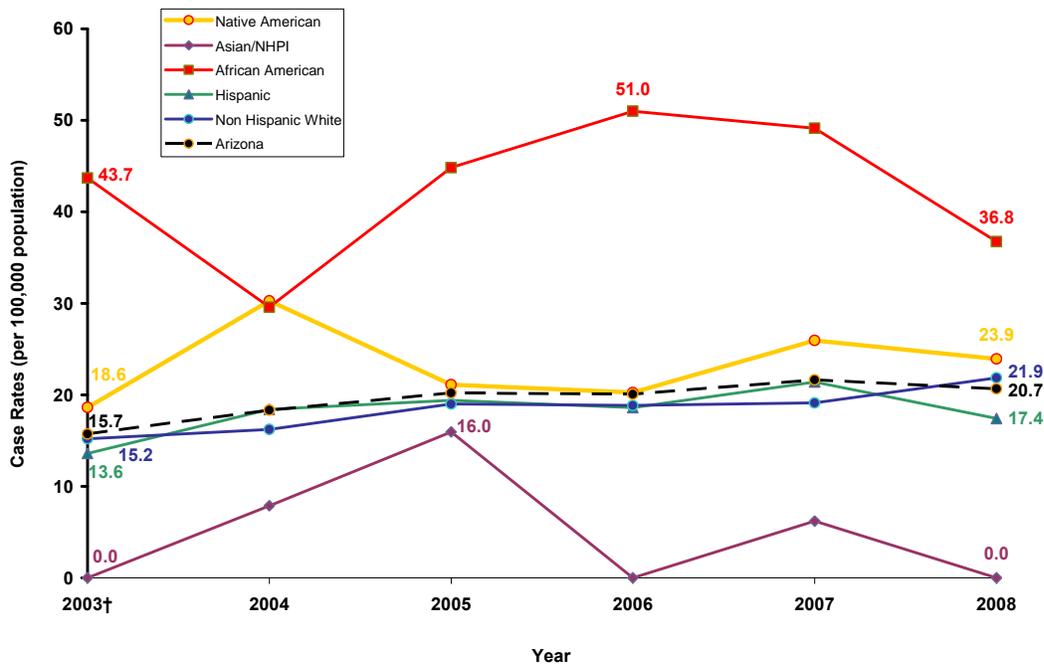
**Figure 31. Reported Genital Herpes\* Cases and Case Rates per 100,000 Population in 10-19 Year Olds, Arizona, 2001-2008**



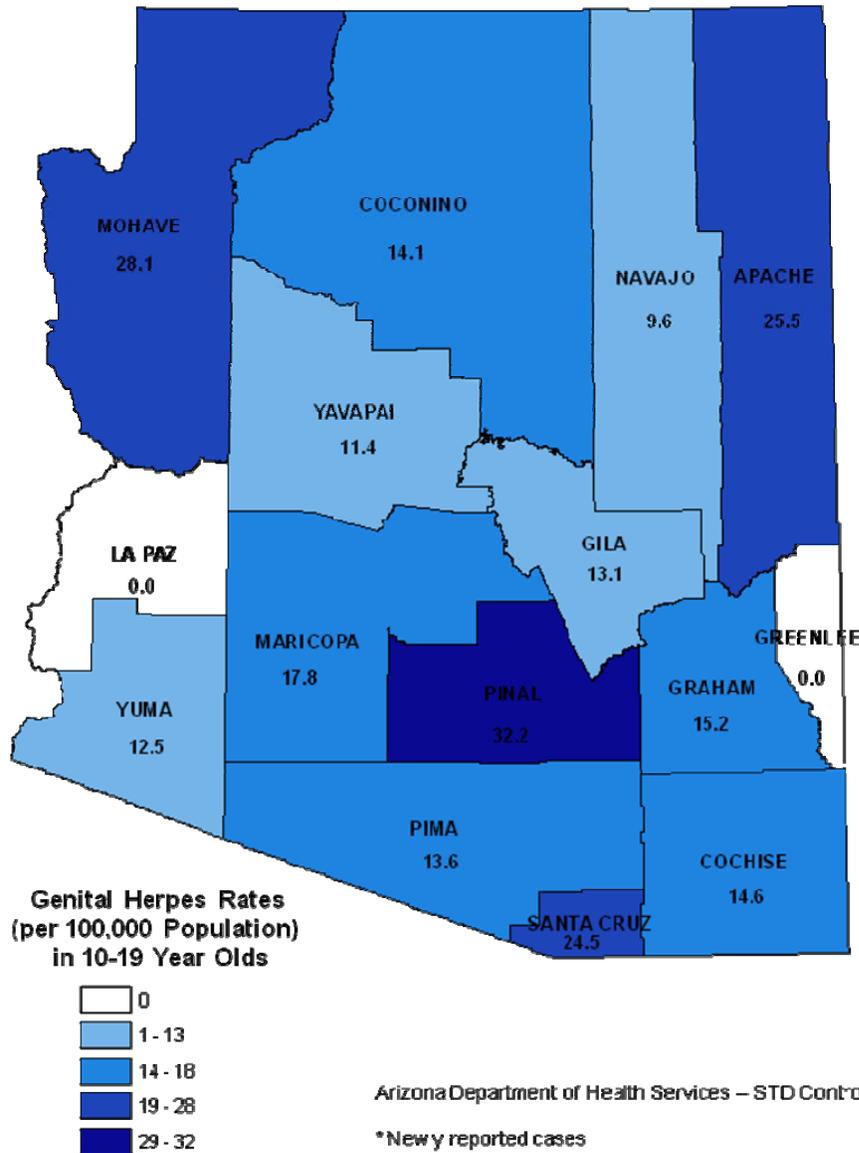
Arizona Department of Health Services - STD Control Program

\* Newly reported cases

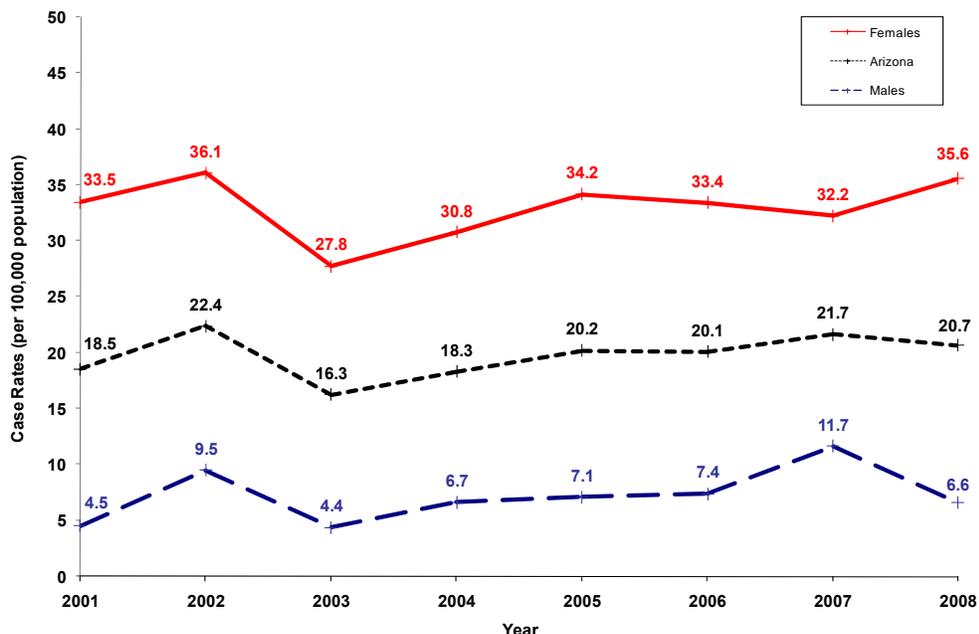
**Figure 32. Reported Genital Herpes Case Rates per 100,000 Population by Race/Ethnicity in 10-19 Year Olds, Arizona 2003-2008**



**Figure 33. Reported Genital Herpes Case Rates per 100,000 Population by County in 10-19 Year Olds, Arizona, 2008**



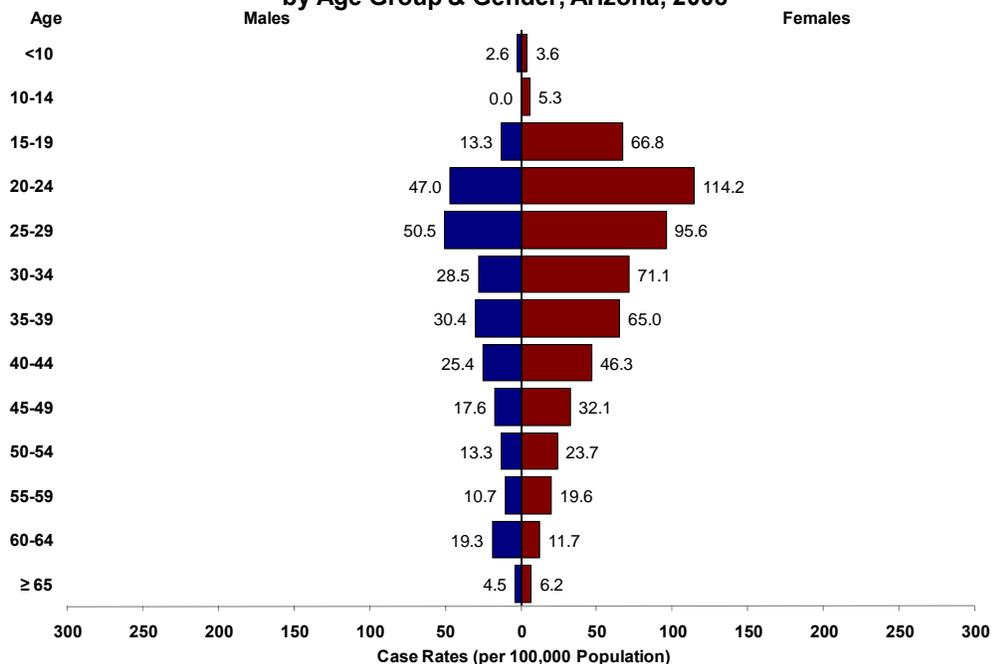
**Figure 34. Reported Genital Herpes\* Case Rates per 100,000 Population by Gender in 10-19 Year Olds, Arizona, 2001-2008**



Arizona Department of Health Services - STD Control Program

\* Newly reported cases

**Figure 35. Reported Genital Herpes\* Case Rates per 100,000 Population by Age Group & Gender, Arizona, 2008**



Arizona Department of Health Services - STD Control Program

Arizona Case Rate = 28.4 per 100,000 Population  
\*Newly reported cases do not include unknown gender

**Table 7. Reported Female Genital Herpes\* Case Rates per 100,000 Population by Age and County, Arizona, 2008**

Age Group	Gila, Graham, & La Paz & Maricopa†											Arizona
	Apache	Cochise & Santa Cruz	Coconino	Greenlee	Mohave	Maricopa†	Navajo	Pima	Pinal	Yavapai	Yuma	
<10	0.0	0.0	0.0	0.0	0.0	3.0	0.0	7.6	13.8	0.0	0.0	3.6
10-14	27.2	0.0	0.0	27.1	0.0	2.9	0.0	9.2	27.7	0.0	0.0	5.3
15-19	50.0	56.0	34.6	24.6	94.5	77.7	37.6	39.4	99.4	61.7	38.7	66.8
20-24	61.3	111.3	117.5	57.8	133.8	135.7	45.0	65.3	124.8	60.2	95.2	113.8
25-29	166.8	77.1	111.8	34.1	37.1	103.6	0.0	99.0	90.5	40.3	97.4	95.2
30-34	56.7	40.5	49.1	0.0	50.7	74.9	124.8	69.1	106.5	0.0	64.1	71.1
35-39	191.5	19.0	49.1	0.0	83.1	68.6	63.1	42.9	159.4	0.0	33.8	65.0
40-44	121.8	30.9	43.7	31.1	56.6	53.6	26.7	34.8	43.2	0.0	0.0	46.3
45-49	160.7	14.8	112.7	30.3	26.8	31.1	51.5	16.3	87.9	0.0	0.0	32.1
50-54	0.0	15.2	39.8	30.0	0.0	26.3	27.9	20.1	0.0	24.3	75.8	24.2
55-59	0.0	16.0	74.9	29.3	38.7	20.3	0.0	15.7	22.8	0.0	0.0	19.6
60-64	54.0	0.0	0.0	0.0	26.6	12.8	0.0	7.9	12.4	0.0	0.0	11.1
≥ 65	0.0	0.0	0.0	10.3	11.8	7.2	0.0	4.8	0.0	0.0	15.9	6.2
<b>Total</b>	<b>54.4</b>	<b>24.1</b>	<b>48.6</b>	<b>19.2</b>	<b>34.0</b>	<b>42.6</b>	<b>24.0</b>	<b>29.5</b>	<b>54.0</b>	<b>11.3</b>	<b>27.3</b>	<b>38.2</b>

\* 224 cases from unknown counties were distributed based on provider county

\* 2 out-of-state cases not included in the table

\* Newly reported cases

**Table 8. Reported Male Genital Herpes\* Cases per 100,000 Population by Age and County, Arizona, 2008**

Age Group	Gila, Graham, & La Paz & Maricopa†											Arizona
	Apache	Cochise & Santa Cruz	Coconino	Greenlee	Mohave	Maricopa†	Navajo	Pima	Pinal	Yavapai	Yuma	
<10	0.0	0.0	0.0	0.0	0.0	3.5	21.3	0.0	0.0	0.0	0.0	2.6
10-14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15-19	24.2	12.7	17.0	0.0	14.8	15.5	0.0	10.8	8.9	0.0	12.4	13.3
20-24	31.2	27.8	27.1	0.0	32.0	51.6	82.4	57.6	14.4	13.5	60.7	47.0
25-29	0.0	41.1	17.8	30.1	0.0	59.8	24.0	56.5	11.9	0.0	85.0	50.5
30-34	0.0	0.0	25.5	34.8	50.2	31.6	0.0	18.2	14.8	0.0	66.9	28.0
35-39	54.7	0.0	24.7	0.0	0.0	33.1	32.8	15.6	65.7	0.0	68.7	30.4
40-44	43.4	0.0	23.2	0.0	14.9	30.3	56.5	8.9	35.8	15.5	16.0	25.4
45-49	43.5	0.0	0.0	28.6	27.6	19.0	0.0	14.3	0.0	27.4	34.5	17.6
50-54	0.0	17.2	20.4	29.4	0.0	11.3	31.1	12.5	32.7	13.5	20.6	13.3
55-59	0.0	0.0	0.0	0.0	0.0	11.8	33.8	10.1	12.0	26.2	0.0	10.7
60-64	58.7	0.0	0.0	0.0	15.2	23.9	0.0	17.9	0.0	15.7	27.9	19.3
≥ 65	0.0	0.0	0.0	12.2	0.0	7.6	0.0	1.6	0.0	0.0	0.0	4.5
<b>Total</b>	<b>16.0</b>	<b>6.6</b>	<b>11.8</b>	<b>9.4</b>	<b>9.0</b>	<b>21.7</b>	<b>21.2</b>	<b>15.5</b>	<b>13.6</b>	<b>7.2</b>	<b>23.7</b>	<b>18.6</b>

\* 103 cases from unknown counties were distributed based on provider county

\* 1 male case from unidentified county and 1 unknown gender not included in the tables

† Maricopa County has 3 unknown gender cases not included in the table

\* Newly reported cases