

SEXUALLY
TRANSMITTED
DISEASES

Among Arizona Youth

2012



Division of Public Health Services

*Office of the Assistant Director
Public Health Preparedness Services*

150 N. 18th Avenue, Suite 140
Phoenix, Arizona 85007
(602) 364-4666
(602) 364-2119 FAX
Internet: www.azdhs.gov

JANICE K. BREWER, GOVERNOR
WILL HUMBLE, DIRECTOR

January 2014

Dear Arizonans:

The Arizona Department of Health Services (ADHS), Sexually Transmitted Disease Control Program (STDPCP) is pleased to provide the Sexually Transmitted Disease Among Youth - 2012 Report. This report highlights the impact of sexually transmitted diseases (STDs) among the youth of Arizona by focusing primarily on syphilis, gonorrhea, and chlamydia, the most commonly reported STDs. The following information, as depicted in the narrative, graphs, and tables, details the increasing number of STDs affecting our state. All 2012 data are from the ADHS STDPCP Surveillance system.

STDs affect people of all ages, races, ethnicities, educational levels, and economic status. However, in 2012, young adults ages 15-29 bear a disproportionate burden of STDs in Arizona. The ADHS STDPCP is addressing these health disparities by collaborating across ADHS Agency programs and reaching out to county and tribal health departments, community based organizations, the Indian Health Service, the Centers for Disease Control and Prevention, and countless Arizona medical providers to promote STD prevention and intervention statewide.

In pursuit of the mission of the ADHS STDPCP, through this report, our goal is to disseminate useful and pertinent data to the Arizona public and community leaders to promote dialogue about disease prevention, promote medical treatment and services, and improve the sexual health of all Arizonans. Sexual health is everyone's responsibility.

Please contact us with any further questions regarding STD education, prevention, and screening opportunities.

Sincerely,

Roxanne Ereth, MPH
STD Control Program Manager

Arizona Department of Health Services

Office of Disease Integration and Services

STD Control Program

SEXUALLY TRANSMITTED DISEASES AMONG ARIZONA YOUTH - 2012

Office Chief

Carla Chee, MHS

STDCP Manager

Roxanne Ereth, MPH

Surveillance:

Anita Betancourt, Chlamydia Surveillance Epidemiologist

Joe Mireles, MS, Syphilis Surveillance Epidemiologist

Lauren Young, MPH, Gonorrhea Surveillance Epidemiologist

Contributors:

Arshad Aziz, MD, Data Manager Epidemiologist

Linda Ripley, Data Entry Specialist

Olivia Kitcheyan

Rebecca Ramos

Centers for Disease Control and Prevention Consultants

Melanie Taylor, MD, MPH

CDC Medical Epidemiologist

Kerry Kenney, CDC Senior PHA

Katherine Browne, CDC PHA

Geri Toyekoyah, CDC PHA

Arizona Department of Health Services

Office of Disease Integration and Services

STD Control Program

SEXUALLY TRANSMITTED DISEASES AMONG ARIZONA YOUTH - 2012

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MISSION STATEMENT

The Mission of the Arizona STD Control Program (ADHS STDCP) is to:

Improve the sexual health of all Arizonans by strengthening the prevention and control of Sexually Transmitted Disease in Arizona through education surveillance, collaboration, and program development.

Program

The Sexually Transmitted Disease Control Program (STDCP) has been a part of Arizona Department Health Services (ADHS) since 1919. The STDCP is under the ADHS Public Health Services Division, Bureau of Epidemiology and Disease Control, Office of Disease Integration Services (ODIS) under Ms. Carla Chee, MHS. ODIS is comprised of the HIV Surveillance Program, Tuberculosis Control Program, Refugee Health, HIV/AIDS Care and Services Program, and the STDCP.

Staff

The STDCP Central Office is located in downtown Phoenix with field staff located in Maricopa and Pima Counties and is staffed by:

Roxanne Ereth, MPH, BS, STDCP Manager

Anita Betancourt, BS, Chlamydia Surveillance Epidemiologist

Jose Mireles, MPH, Syphilis Surveillance Epidemiologist

Lauren Young, MPH, Gonorrhea Surveillance Epidemiologist

Linda Ripley, Data Entry Specialist

The Centers for Disease Control and Prevention has been generous in its support of the ADHS STDCP by providing assistance from the following on-site staff.

Melanie Taylor, MD, MPH, is a CDC Medical Epidemiologist

Kerry Kenney, BA is a CDC Senior Public Health Advisor

Katherine Browne, BA is a CDC Public Health Advisor

Purpose

This report highlights the impact of sexually transmitted diseases (STDs) among the youth of Arizona. The information depicted in the narrative, graphs, and tables herein include the most

commonly reported STDs affecting our state and the youth of Arizona during 2012. Data are from the ADHS STD Surveillance system, 2012 CDC Surveillance Report, and the CDC website, cdc.gov.

EPIDEMIOLOGIC PROFILE

The STD burden among all Arizona residents is high and disproportionately affects certain high risk groups. In 2012, 36,631 total reportable STD infections (excluding HIV, HSV and stages of syphilis other than primary and secondary), were reported in Arizona:

- 30,571 cases of chlamydia were reported in 2012: a 4.5% increase from 2011
- 204 cases of primary and secondary syphilis were reported in 2012: a 28% decrease from 2011
- 5,856 cases of gonorrhea were reported in 2012: a 28.3% increase from 2011.

Chlamydia

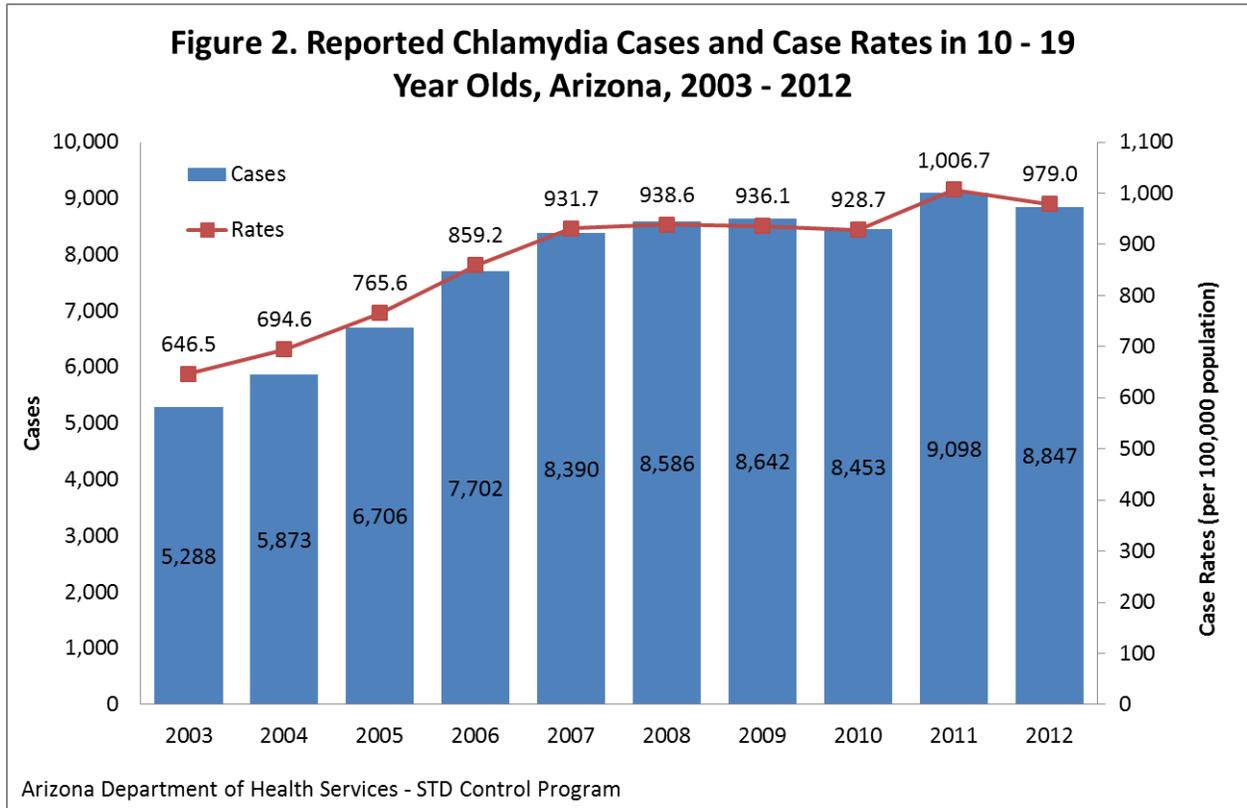
Chlamydia is a common bacterial STD that can infect both men and women and can cause serious, permanent damage to a woman's reproductive organs. In 2012, 1,422,976 cases of chlamydia were reported and the CDC estimates that 2.86 million infections occur annually. A large number of cases are not reported because most people with chlamydia are asymptomatic and do not seek testing. It is estimated that 1 in 15 sexually active females aged 14 - 19 years has chlamydia¹.

Chlamydia is known as a "silent" infection as most infected people have no symptoms. If symptoms do occur, they may not appear until several weeks after exposure. Symptoms for men and women may include an abnormal discharge or a burning sensation when urinating. Untreated infections in women can spread, causing severe abdominal and pelvic pain called pelvic inflammatory disease (PID). Complications are rare in men; however, infection can spread and may prevent a man from being able to father children¹.

The CDC recommends annual screening of all sexually active persons, all persons with genital symptoms, anyone with a partner who has recently been diagnosed with an STD, pregnant women, and yearly testing for all women 25 and under. Men who have sex with men (MSM) should be tested for chlamydia each year. MSM who have multiple and/or anonymous sex partners should be tested more frequently. All HIV-infected patients should be tested for chlamydia at their first HIV care visit and then at least annually. Anyone sexually active should

¹<http://www.cdc.gov/std/chlamydia/chlam-fact-sheet-dec-2012.pdf>

discuss their risks for acquiring chlamydia with a health care provider who can determine if more frequent testing is necessary².



All data are preliminary and subject to change

Statewide cases and case rates, 10 - 19 year olds, 2012

- In 2012, 8,847 chlamydial infections were reported among 10 - 19 year olds.
- The case rate for chlamydial infections among 10 - 19 year olds is 979.0 per 100,000.
- Among adolescents ages 10 - 19, the number of reported chlamydia cases has increased nearly 67% from 2003 to 2012. This increase in reported cases has resulted in a 51.4% increase in the rate (per 100,000 population) of chlamydia among 10 - 19 year olds in the same time frame.
- Chlamydia cases reported among 10 - 19 year olds accounted for nearly 29% of all cases reported in 2012
- The case count from 2011 (9,098) decreased 2.7% in 2012 (8,847), a decrease of 251 cases.
- The case rate also decreased 2.7% from 2011 to 2012. The last decrease across case rates and case counts was seen in 2010, although that decrease was not as prominent as this current decrease.

² <http://www.cdc.gov/std/chlamydia/chlam-fact-sheet-dec-2012.pdf>

Age Group	Apache	Cochise & Santa Cruz	Coconino	Gila, Graham & Greenlee	La Paz & Mohave	Maricopa	Navajo	Pima	Pinal	Yavapai	Yuma	Unknown	Arizona
10 - 14	1	0	3	1	0	11	2	6	2	0	0	0	26
15 - 19	29	35	37	16	23	1,125	43	277	89	25	38	0	1,737
20 - 24	44	70	83	24	40	2,024	63	491	141	30	104	0	3,114
25 - 29	17	24	41	14	17	1,119	34	260	53	14	45	0	1,638
30 - 34	15	10	20	4	4	543	13	135	39	8	14	0	805
35 - 39	8	6	9	1	5	315	9	60	18	2	8	0	441
40 - 44	5	3	7	0	4	226	5	31	8	3	2	0	294
45 - 49	0	1	3	0	2	145	1	20	4	2	0	0	178
50 - 54	2	0	0	1	2	61	1	12	3	0	0	0	82
55 - 59	1	0	0	0	0	30	0	5	1	0	0	0	37
60 - 64	0	1	0	0	0	12	0	2	1	0	0	0	16
65 and Older	0	0	0	0	1	11	0	1	1	0	0	0	14
Total	122	152	203	61	98	5,624	171	1,300	360	84	212	0	8,387

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Age Group	Apache	Cochise & Santa Cruz	Coconino	Gila, Graham & Greenlee	La Paz & Mohave	Maricopa	Navajo	Pima	Pinal	Yavapai	Yuma	Unknown	Arizona
10 - 14	30.8	0.0	68.7	29.7	0.0	7.7	43.9	18.8	14.5	0.0	0.0	N/A	11.3
15 - 19	866.4	487.5	593.7	444.1	364.6	803.3	959.0	806.4	736.0	405.2	438.0	N/A	747.1
20 - 24	1,689.7	1,114.5	981.9	725.1	739.1	1,412.9	1,658.3	1,217.1	1,133.0	537.7	1,144.9	N/A	1,294.5
25 - 29	806.5	394.5	820.3	431.8	311.7	784.7	1,067.2	756.4	354.4	289.4	621.5	N/A	715.0
30 - 34	732.4	188.7	478.8	133.5	76.9	396.7	425.8	434.7	242.4	169.5	220.3	N/A	369.5
35 - 39	417.5	119.1	235.0	37.2	99.7	242.5	309.6	208.4	118.8	43.8	144.4	N/A	214.8
40 - 44	241.4	59.6	183.2	0.0	69.0	168.5	169.5	107.3	59.8	58.6	34.4	N/A	140.0
45 - 49	0.0	18.3	75.7	0.0	29.1	112.5	29.3	64.8	32.7	32.4	0.0	N/A	85.1
50 - 54	87.2	0.0	0.0	29.5	24.8	49.9	28.7	36.8	26.1	0.0	0.0	N/A	39.6
55 - 59	49.7	0.0	0.0	0.0	0.0	29.1	0.0	16.2	9.5	0.0	0.0	N/A	20.1
60 - 64	0.0	17.8	0.0	0.0	0.0	12.7	0.0	6.8	9.0	0.0	0.0	N/A	9.1
65 and Older	0.0	0.0	0.0	0.0	3.6	5.1	0.0	1.4	3.6	0.0	0.0	N/A	3.3
Total	354.2	167.5	305.3	120.1	87.7	292.8	317.1	266.9	179.4	80.9	208.4	N/A	260.2

Arizona Department of Health Services - STD Control Program

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Age Group	Apache	Cochise & Santa Cruz	Coconino	Gila, Graham & Greenlee	La Paz & Mohave	Maricopa	Navajo	Pima	Pinal	Yavapai	Yuma	Unknown	Arizona
10 - 14	2	2	6	8	4	122	19	23	5	4	2	0	197
15 - 19	127	161	183	117	155	4,104	250	1,092	345	121	232	0	6,887
20 - 24	208	191	282	129	125	5,294	256	1,378	339	105	286	0	8,593
25 - 29	96	86	100	48	53	2,079	116	553	140	36	140	0	3,447
30 - 34	58	32	50	21	17	973	37	222	67	15	51	0	1,543
35 - 39	29	20	21	6	6	505	39	109	34	12	26	0	807
40 - 44	19	8	6	2	9	223	10	47	18	1	15	0	358
45 - 49	9	4	7	3	6	114	8	24	6	2	6	0	189
50 - 54	8	0	5	1	2	39	3	12	1	1	3	0	75
55 - 59	1	3	0	0	1	28	2	4	3	0	1	0	43
60 - 64	0	0	0	0	0	11	0	4	0	0	0	0	15
65 and Older	2	0	0	0	0	12	0	4	0	0	0	0	18
Total	559	508	661	335	378	13,508	740	3,476	958	297	762	0	22,182

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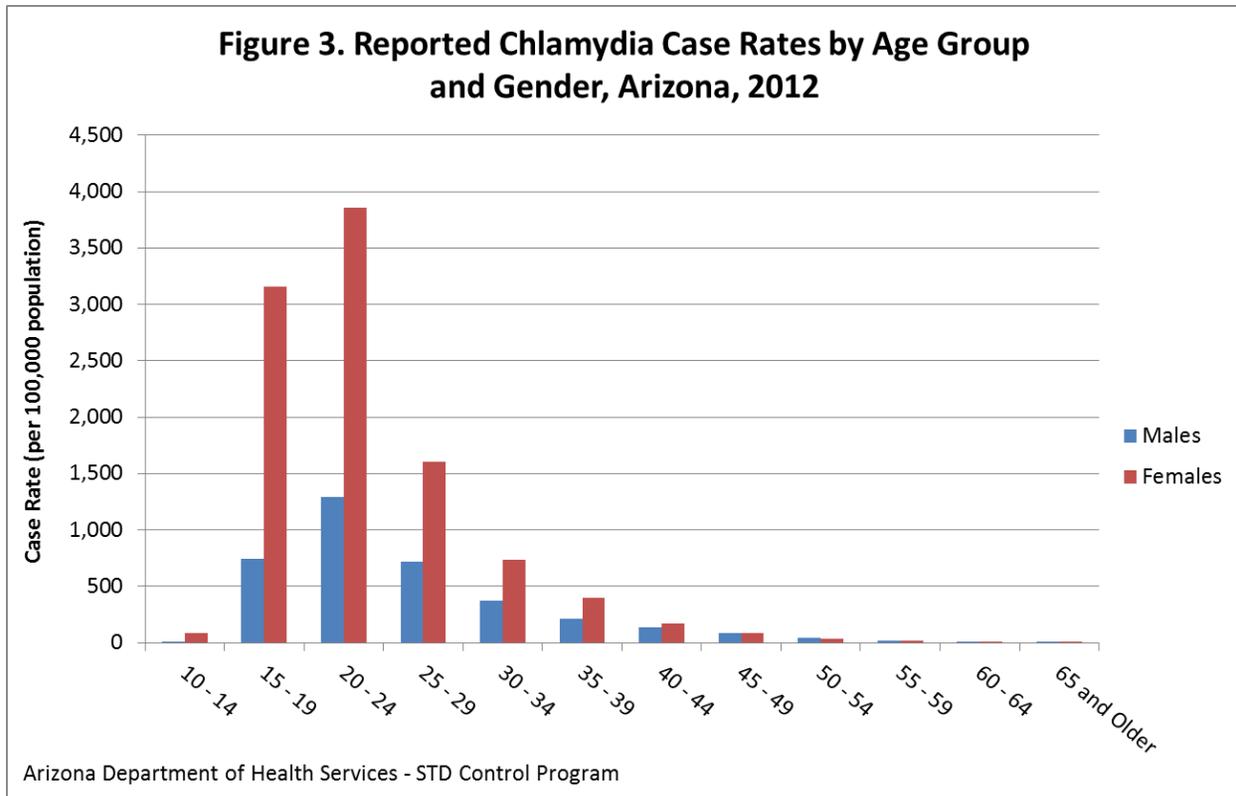
Age Group	Apache	Cochise & Santa Cruz	Coconino	Gila, Graham & Greenlee	La Paz & Mohave	Maricopa	Navajo	Pima	Pinal	Yavapai	Yuma	Unknown	Arizona
10 - 14	62.8	32.9	145.4	244.0	63.4	88.8	439.4	74.8	37.3	72.0	26.6	N/A	88.7
15 - 19	3,928.2	2,549.1	2,643.0	3,667.7	2,620.5	3,130.0	5,953.8	3,304.6	3,152.4	2,188.1	2,974.7	N/A	3,156.1
20 - 24	8,791.2	3,697.3	3,164.6	4,244.8	2,390.1	3,914.8	7,547.2	3,570.3	3,748.3	2,199.4	4,045.8	N/A	3,856.5
25 - 29	4,814.4	1,612.0	2,183.9	1,945.7	1,084.1	1,511.4	4,097.5	1,690.5	1,213.6	793.3	2,265.7	N/A	1,606.2
30 - 34	3,076.9	629.7	1,232.1	870.6	351.3	722.7	1,336.2	729.8	518.8	336.7	900.9	N/A	737.8
35 - 39	1,532.0	414.9	585.4	270.0	126.1	387.8	1,423.4	382.7	288.1	253.7	457.3	N/A	401.6
40 - 44	938.7	156.0	160.2	78.5	157.7	168.5	335.3	161.6	170.7	18.3	254.1	N/A	174.2
45 - 49	390.1	70.3	167.1	107.3	85.3	87.6	235.0	76.4	58.6	30.2	100.3	N/A	90.1
50 - 54	320.6	0.0	106.3	29.9	24.2	30.5	81.3	34.4	9.1	11.9	52.7	N/A	34.6
55 - 59	44.6	46.9	0.0	0.0	11.4	24.7	57.0	11.8	26.5	0.0	19.3	N/A	21.3
60 - 64	0.0	0.0	0.0	0.0	0.0	10.3	0.0	12.4	0.0	0.0	0.0	N/A	7.7
65 and Older	42.7	0.0	0.0	0.0	0.0	4.5	0.0	4.6	0.0	0.0	0.0	N/A	3.6
Total	1,539.2	563.0	971.8	696.3	340.6	689.4	1,384.1	691.6	525.4	275.0	768.6	N/A	680.7

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All data are preliminary and subject to change

County cases and rates, 10 - 19 year olds, 2012

- The highest numbers of cases for 2012 were reported by Maricopa and Pima Counties for both men and women (Tables 1 and 3).
- Maricopa County accounts for nearly 60% of chlamydia cases among Arizona’s 10 - 19 year olds
- Among female adolescents, Maricopa accounts for nearly 61% of chlamydia cases.

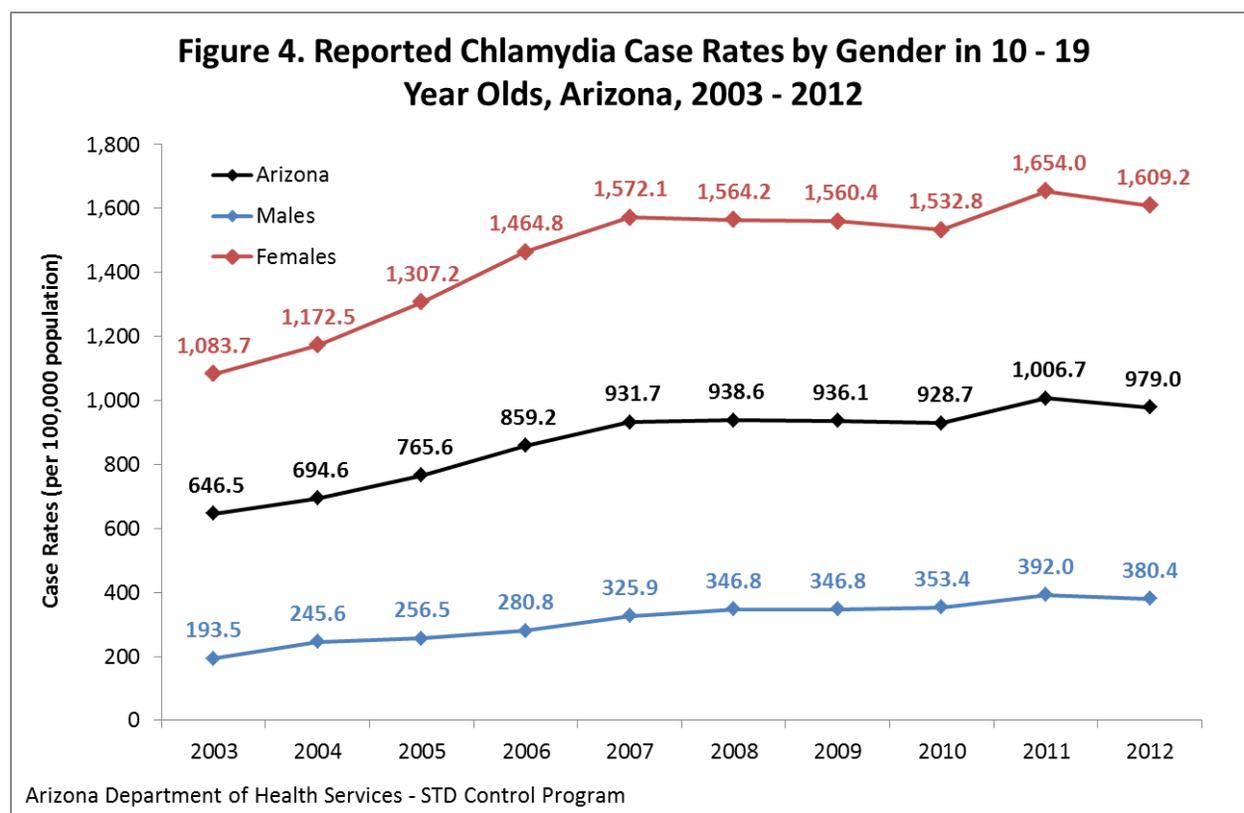


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Chlamydia Case Rates by Age Group and Gender, 2012

- The three age groups with the highest number of reported cases and case rates are 20-24 year olds (3,114 cases, 1,294.5 per 100,000), followed by 15-19 year olds (1,737 cases, 747.1 per 100,000), and 25-29 year olds (1,638 cases, 715.0 per 100,000). See Table 1.
- The rate for 15-19 year old females (3,156.08 per 100,000) is 4.2 times higher than the rate for males, (747.1 per 100,000) in this same age group.
- The case count of chlamydia for 15-19 year olds accounts for 28% of cases in Arizona.

Although the rates of chlamydia in the 10-14 year old age group are smaller in comparison to the 15-19 year olds, the rate for 10-14 year old females (88.74 per 100,000) is 7.8 times higher than the rate for males (11.26 per 100,000) in the same age group.

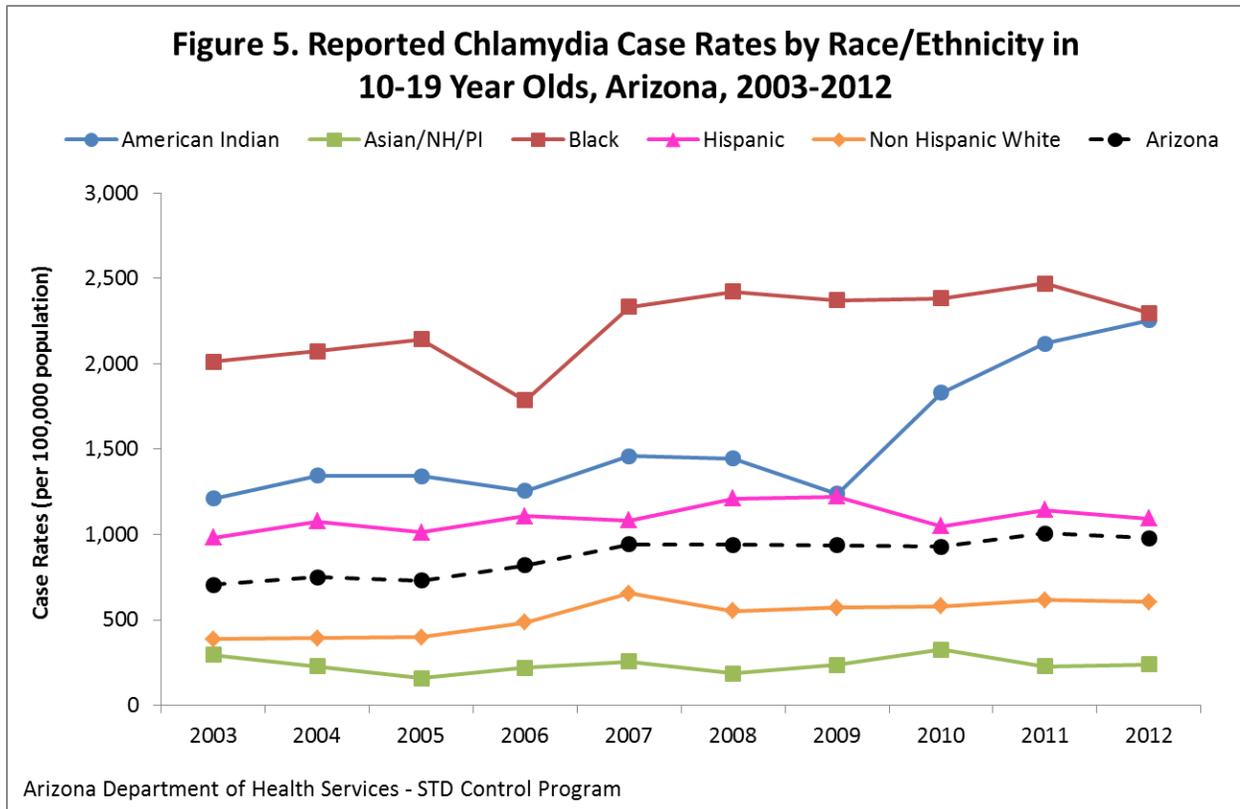


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Chlamydia cases and case rates by Gender, 10 - 19 year olds, 2012

- In 2012, the rate of chlamydia among females 10 - 19 years old was 1.2 times higher than the rate for the state. This is a rate increase of 39%.

- Also in 2012, the rate of chlamydia among young men 10 - 19 years old was 2.5 times lower than the rate of the state. This is a 61% decrease in rate.



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Chlamydia cases and case rates by Race, 10 - 19 year olds, 2012

- A large disparity in the rate of chlamydia has existed among 10 - 19 year olds of difference races in Arizona.
- Arizona 10 - 19 year olds that self-report as Black and Native American have disproportionately higher rates than the rate of the state as whole.
- For nearly a decade, the rate of 10 - 19 year olds who self-report as Black have experienced the highest rates, not only in this age group, but in all age groups and genders in Arizona.
- The Black case rate decreased by 7% from 2,471.4 to 2,297.4 per 100,000 in 2012. Simultaneously, the AI/AN rate increase by 6.5% from 2,117.6 to 2,254.0 per 100,000. These changes appear to have equalized the rates of the two races.
- Chlamydia cases among Black adolescents (10 - 19 year olds) have decreased by 6% from 2010 to 2012, while the population among this group has increased only 3.3% from 2010. The decrease in cases and slight increase in population can help to explain the overall rate decrease.

- The chlamydia case rate among AI/AN adolescents (10 - 19 year olds) more than doubled by a 55% increase from 2009 at 1,237.9 per 100,000 to 2012 at 2,254.0 per 100,000. Part of this increase can be explained by the fact that the population estimates for AI/AN, 10 - 19 years of age have decreased each year from 2009 to 2011, a decrease of nearly 6% in population.
- Cases among AI/AN adolescents have increased by 29% from 2009 to 2012.

Gonorrhea

Gonorrhea is a very common sexually transmitted disease that can infect both men and women. In 2012, 334,826 cases of gonorrhea were reported nationally and CDC estimates that more than 820,000 persons are infected with gonorrhea annually. CDC estimates that less than half are detected and reported because many persons are asymptomatic and do not seek testing. CDC estimates that 570,000 new gonorrhea infections were among young people 15-24 years of age³.

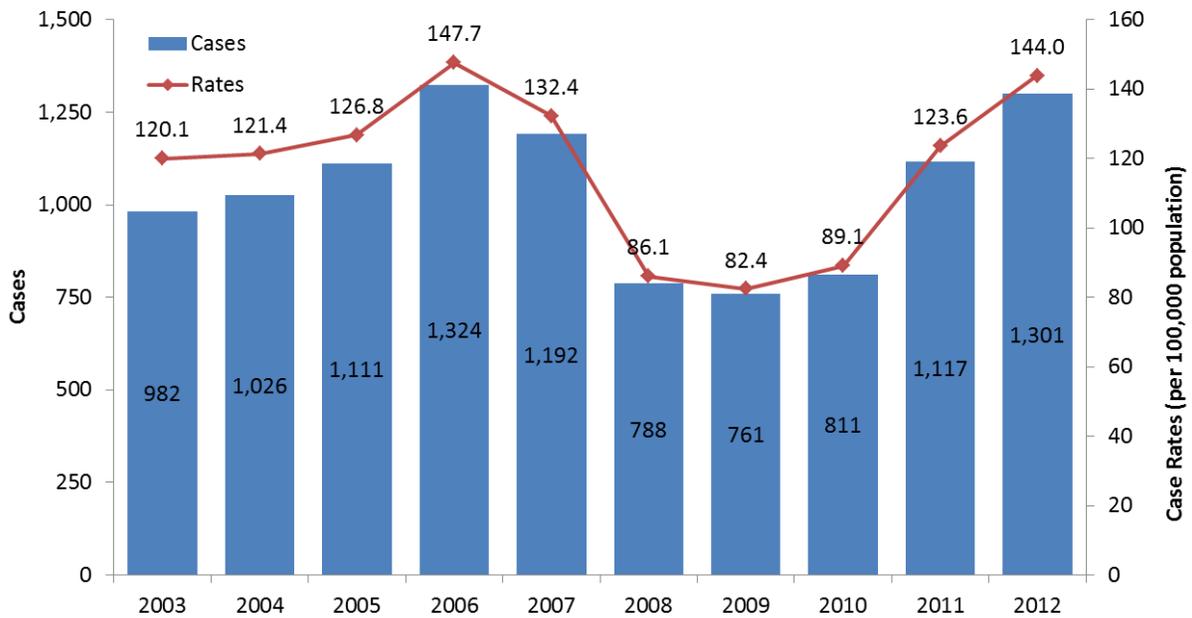
Most persons infected with gonorrhea show no signs or symptoms. For both men and women when symptoms do present, they may include painful urination and/or an abnormal discharge (white, yellow or green in color) within 1 to 14 days of exposure. For women, symptoms may be mild or mistaken for bladder or vaginal infections and may lead to PID. A pregnant woman may pass the infection to her baby through delivery, causing blindness, joint infection or blood infection. Untreated gonorrhea may affect fertility in both males and females, increase the risk of HIV infection and transmission, and spread through the blood to joints and internal organs causing other serious health problems and even death.

The CDC recommends annual screening of all sexually active persons, all persons with genital symptoms, anyone with a partner who has recently been diagnosed with an STD, pregnant women, and yearly testing for all women 25 and under. Men who have sex with men (MSM) should be tested for gonorrhea each year. MSM who have multiple and/or anonymous sex partners should be tested more frequently. All HIV-infected patients should be tested for gonorrhea at their first HIV care visit and then at least annually. Anyone sexually active should discuss their risks for acquiring gonorrhea with a health care provider who can determine if more frequent testing is necessary⁴.

³ <http://www.cdc.gov/std/gonorrhea/STDFACT-gonorrhea-detailed.htm>

⁴ www.cdc.gov/std/gonorrhea

Figure 6. Reported Gonorrhea Cases and Case Rates in 10 - 19 Year Olds, Arizona, 2003 - 2012



Arizona Department of Health Services - STD Control Program

All data are preliminary and subject to change

Statewide cases and case rates, 10 - 19 year olds, 2012

- There were 1,301 gonorrhea cases were reported among 10 - 19 year olds.
- The case count shows an increase of 184 cases (16.4%) from 2011, and an increase of 490 cases (60.4%) from 2010.
- The highest recorded number of cases in the last decade for this age group occurred in 2006, when there were 1,324 cases among 10 - 19 year olds.

Table 5. Reported Male Gonorrhea Cases by Age Group and County, Arizona, 2012

Age Group	Apache	Cochise & Santa Cruz	Coconino	Gila, Graham & Greenlee	La Paz & Mohave	Maricopa	Navajo	Pima	Pinal	Yavapai	Yuma	Unknown	Arizona
10 - 14	0	0	0	0	0	5	1	0	0	0	0	0	6
15 - 19	6	2	9	1	3	339	17	52	23	1	9	0	462
20 - 24	9	12	20	5	3	689	18	116	36	5	15	0	928
25 - 29	2	1	6	2	3	449	10	65	13	3	7	0	561
30 - 34	3	3	3	1	1	323	13	48	12	2	7	0	416
35 - 39	2	1	2	1	0	180	3	23	8	2	3	0	225
40 - 44	2	0	1	0	1	144	1	14	2	1	1	0	167
45 - 49	0	0	1	0	2	109	1	8	2	1	1	0	125
50 - 54	0	0	1	1	0	51	1	5	1	0	0	0	60
55 - 59	2	0	0	0	0	27	0	4	1	1	0	0	35
60 - 64	0	1	1	0	0	9	0	4	0	0	0	0	15
65 and Older	0	0	0	0	1	7	0	2	0	0	0	0	10
Total	26	20	44	11	14	2,332	65	341	98	16	43	0	3,010

Arizona Department of Health Services - STD Control Program

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Age Group	Apache	Cochise & Santa Cruz	Coconino	Gila, Graham & Greenlee	La Paz & Mohave	Maricopa	Navajo	Pima	Pinal	Yavapai	Yuma	Unknown	Arizona
10 - 14	0.0	0.0	0.0	0.0	0.0	3.5	22.0	0.0	0.0	0.0	0.0	N/A	2.6
15 - 19	179.3	27.9	144.4	27.8	47.6	242.0	379.1	151.4	190.2	16.2	103.7	N/A	198.7
20 - 24	345.6	191.1	236.6	151.1	55.4	481.0	473.8	287.5	289.3	89.6	165.1	N/A	385.8
25 - 29	94.9	16.4	120.0	61.7	55.0	314.9	313.9	189.1	86.9	62.0	96.7	N/A	244.9
30 - 34	146.5	56.6	71.8	33.4	19.2	235.9	425.8	154.6	74.6	42.4	110.1	N/A	190.9
35 - 39	104.4	19.9	52.2	37.2	0.0	138.6	103.2	79.9	52.8	43.8	54.2	N/A	109.6
40 - 44	96.6	0.0	26.2	0.0	17.2	107.4	33.9	48.5	15.0	19.5	17.2	N/A	79.5
45 - 49	0.0	0.0	25.2	0.0	29.1	84.6	29.3	25.9	16.4	16.2	17.4	N/A	59.8
50 - 54	0.0	0.0	23.3	29.5	0.0	41.7	28.7	15.3	8.7	0.0	0.0	N/A	29.0
55 - 59	99.3	0.0	0.0	0.0	0.0	26.2	0.0	13.0	9.5	12.2	0.0	N/A	19.0
60 - 64	0.0	17.8	28.1	0.0	0.0	9.5	0.0	13.7	0.0	0.0	0.0	N/A	8.5
65 and Older	0.0	0.0	0.0	0.0	3.6	3.2	0.0	2.8	0.0	0.0	0.0	N/A	2.4
Total	75.5	22.0	66.2	21.7	12.5	121.4	120.5	70.0	48.8	15.4	42.3	N/A	93.4

Arizona Department of Health Services - STD Control Program

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Age Group	Apache	Cochise & Santa Cruz	Coconino	Gila, Graham & Greenlee	La Paz & Mohave	Maricopa	Navajo	Pima	Pinal	Yavapai	Yuma	Unknown	Arizona
10 - 14	0	0	1	0	0	12	4	3	1	0	0	0	21
15 - 19	7	12	25	3	3	579	40	81	37	12	14	0	813
20 - 24	16	9	26	7	9	733	32	101	30	10	22	0	995
25 - 29	10	3	4	4	4	352	24	60	21	3	11	0	496
30 - 34	5	1	2	0	6	170	9	37	8	2	6	0	246
35 - 39	3	0	5	2	2	75	6	20	2	3	5	0	123
40 - 44	1	0	1	0	3	61	3	4	3	0	1	0	77
45 - 49	0	0	0	0	0	24	4	6	1	0	0	0	35
50 - 54	2	0	1	0	1	12	0	0	0	0	0	0	16
55 - 59	2	1	0	0	0	8	1	0	0	0	1	0	13
60 - 64	0	0	0	0	0	3	0	0	0	0	0	0	3
65 and Older	3	0	0	0	0	1	0	0	1	0	0	0	5
Total	49	26	65	16	28	2,032	124	312	104	30	60	0	2,846

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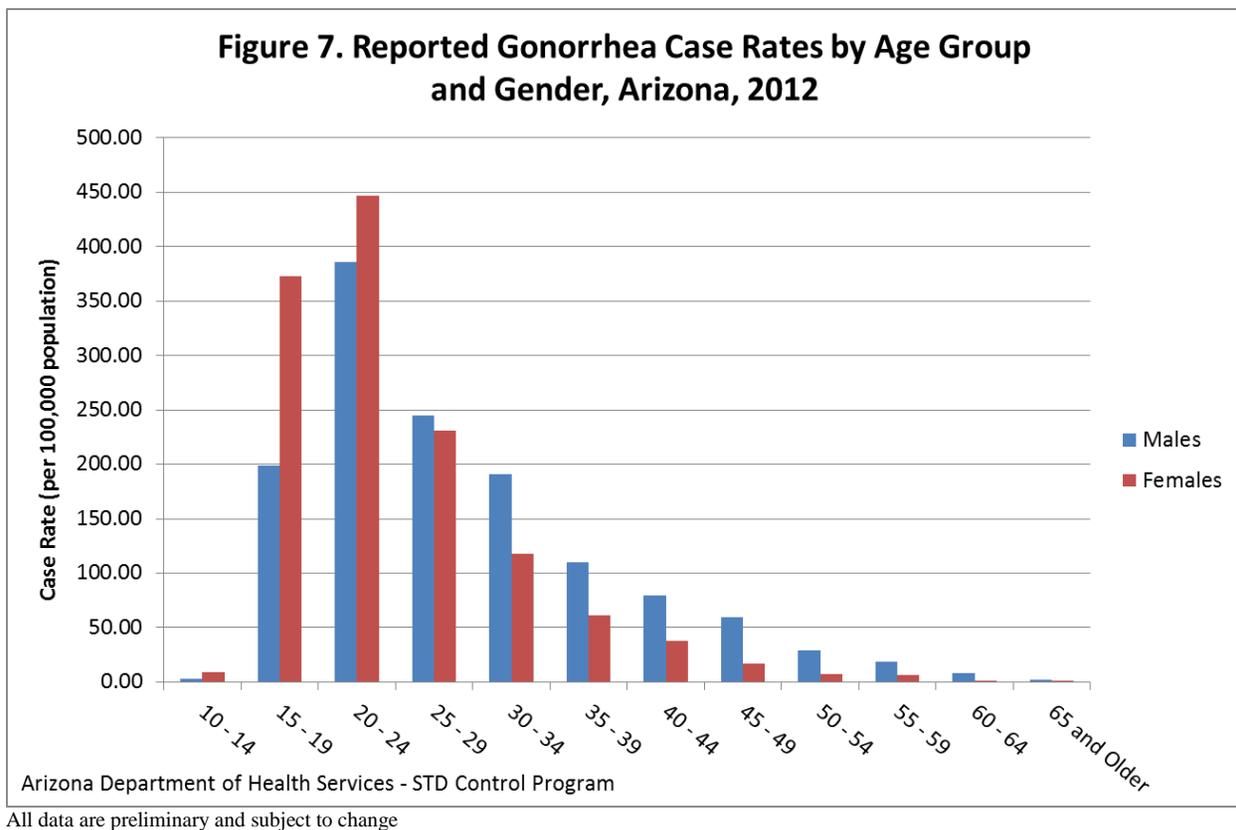
Age Group	Apache	Cochise & Santa Cruz	Coconino	Gila, Graham & Greenlee	La Paz & Mohave	Maricopa	Navajo	Pima	Pinal	Yavapai	Yuma	Unknown	Arizona
10 - 14	0.0	0.0	24.2	0.0	0.0	8.7	92.5	9.8	7.5	0.0	0.0	N/A	9.5
15 - 19	216.5	190.0	361.1	94.0	50.7	441.6	952.6	245.1	338.1	217.0	179.5	N/A	372.6
20 - 24	676.2	174.2	291.8	230.3	172.1	542.0	943.4	261.7	331.7	209.5	311.2	N/A	446.6
25 - 29	501.5	56.2	87.4	162.1	81.8	255.9	847.8	183.4	182.0	66.1	178.0	N/A	231.1
30 - 34	265.3	19.7	49.3	0.0	124.0	126.3	325.0	121.6	61.9	44.9	106.0	N/A	117.6
35 - 39	158.5	0.0	139.4	90.0	42.0	57.6	219.0	70.2	16.9	63.4	88.0	N/A	61.2
40 - 44	49.4	0.0	26.7	0.0	52.6	46.1	100.6	13.8	28.5	0.0	16.9	N/A	37.5
45 - 49	0.0	0.0	0.0	0.0	0.0	18.4	117.5	19.1	9.8	0.0	0.0	N/A	16.7
50 - 54	80.2	0.0	21.3	0.0	12.1	9.4	0.0	0.0	0.0	0.0	0.0	N/A	7.4
55 - 59	89.1	15.6	0.0	0.0	0.0	7.1	28.5	0.0	0.0	0.0	19.3	N/A	6.4
60 - 64	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	N/A	1.5
65 and Older	64.1	0.0	0.0	0.0	0.0	0.4	0.0	0.0	3.5	0.0	0.0	N/A	1.0
Total	134.9	28.8	95.6	33.3	25.2	103.7	231.9	62.1	57.0	27.8	60.5	N/A	87.3

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Gonorrhea cases and rates by county, 10 - 19 year olds, 2012

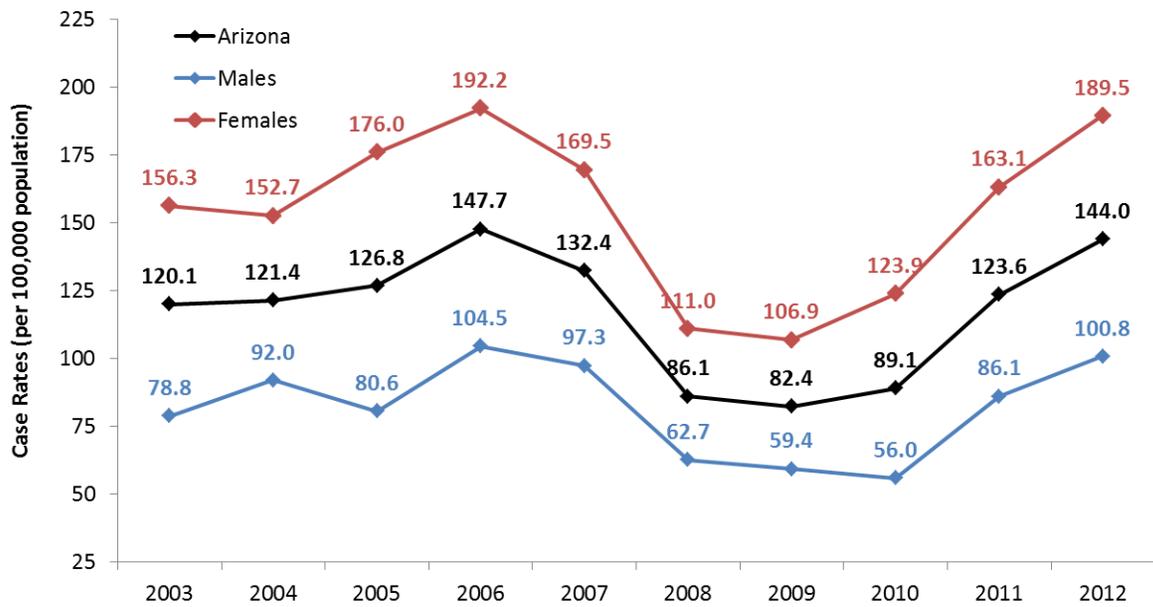
- The 15-19 year old age group has the highest disease burden (Tables 5-8).
- Across Arizona, county counts were very low for 10-14 year olds. Disease rates can be considered negligible for this age group (Tables 5-8).
- Gonorrhea counts and rates were higher among females than males (Tables 5 and 7).
- Maricopa and Pima Counties had the highest case counts with 71.8% and 10.5% of all cases, followed by Navajo and Pinal Counties (Tables 6 and 8).
- The highest reported case rates, for both males and females in the 15-19 year age group, is in Navajo County (Tables 6 and 8).



Gonorrhea Case Rates by Age and Gender, 2012

- Adolescents and young women (10-24 years old) have both higher counts and rates of infection than young men of the same age.
- Among 10 - 19 year olds, the gender disparity is the highest among adolescents aged 15-19, where the rate for females is 1.88 times that of males (Figure 7).

Figure 8. Reported Gonorrhea Case Rates by Gender in 10 - 19 Year Olds, Arizona, 2003 - 2012



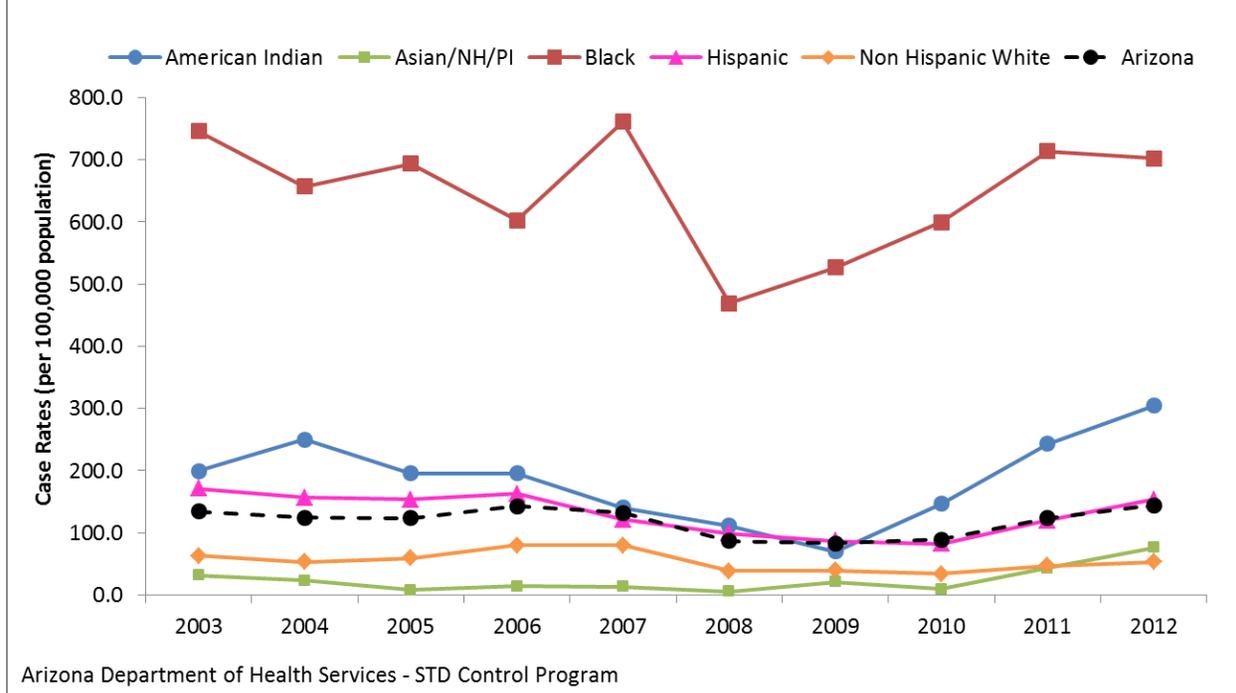
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Case Rates by Gender, 10 - 19 year olds, 2003-2012

- Over the last decade, infection rates among females aged 10 - 19 have averaged 1.89 times that of males in this age group.
- The highest disparity occurred in 2010 when the female rate was 2.21 times that of the male rate (123.9 per 100,000 persons vs 56.0 per 100,000 persons).
- From 2004-2005 and 2009-2010, the gap in rates increased in part due to initial decreases in the male infection rates while those of females increased.

Figure 9. Reported Gonorrhea Case Rates by Race/Ethnicity in 10-19 Year Olds, Arizona, 2003-2012



All data are preliminary and subject to change

Gonorrhea case rates by race/ethnicity, 2003-2012

- Racial/ethnic distributions of case rates among 10 - 19 years demonstrated infection rates are highest among Black and AI/AN adolescents, though both groups represent roughly 5.3% of total Arizona adolescents.
- Black adolescents experienced the highest rates of infection over the last decade.
- All racial/ethnic groups experienced gradually increasing case rates since 2008.
- Black adolescents have seen a decline in case rate between 2011 and 2012.
- AI/AN have also experienced higher infection rates than Hispanics, non-Hispanic Whites and Asians. Like the Black population, this group has experienced a very wide range of infection rates over the last decade. However, the decade high was observed in 2012 (304.1 per 100,000 persons).

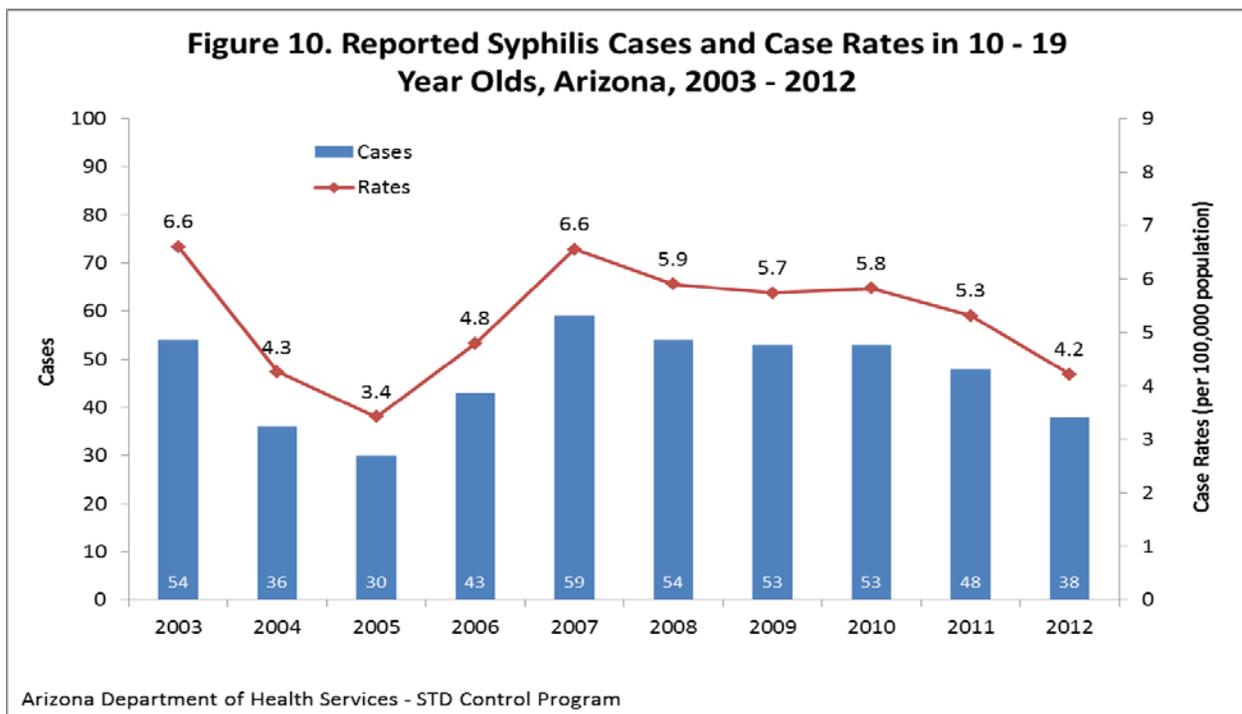
Syphilis

Syphilis is an STD caused by bacteria which, if left untreated, may result in long-term complications or possibly death. CDC estimates that 55,400 persons in the United States are infected annually. In 2012, 49,903 cases of syphilis were reported to CDC. 15,667 cases were

primary and secondary (P&S) syphilis, the earliest and most infectious stages of syphilis. There were also 322 congenital syphilis cases reported to CDC in 2011⁵.

Symptoms of primary syphilis are characterized by lesions (a sore, an ulcer or chancre) at the site of infection. If left untreated, this sore will be followed by secondary stage symptoms (rashes, mucous membrane lesions, alopecia). Syphilis is often known as the great imitator as the rashes may appear similar to other skin infections including allergic reactions and chicken pox. Failure to treat after the secondary stage of syphilis can lead to late manifestations including blindness, dementia, damage to internal organs and may result in death. A pregnant woman can pass the infection to her unborn baby. The complications of congenital syphilis can include low birth weight, premature delivery and stillbirth.

CDC recommends that all persons with symptoms be examined and all pregnant women be routinely tested. Arizona statutes require that pregnant women be tested at their first prenatal visit. The CDC recommends testing for any sexually active person with symptoms. Any sexually active person at risk for acquiring syphilis should discuss their risks with a health care provider who can determine if testing is recommended.



All data are preliminary and subject to change

⁵www.cdc.gov/std/syphilis

Statewide Syphilis cases and case rates 2003-2013

- The rate of syphilis (primary, secondary, early latent, latent-unknown duration, and late latent) among 10 – 19 year olds in Arizona decreased from a rate of 5.3 cases per 100,000 individuals in 2011 to a rate of 4.2 in 2012. This represents a 21% decrease in the rate. Figure 10.
- The rate of syphilis among this group has decreased from a rate of 6.6 cases per 100,000 in 2007 to a rate of 4.2 in 2012. This represents a 36% decrease in the rate. Figure 10.
- Over the previous decade, the highest rate of syphilis has been 6.6 in both 2003 and 2007. The lowest rate of syphilis was 3.4, recorded in 2005. Figure 10.

Table 9. Reported Male Syphilis Cases by Age Group and County, Arizona, 2011

Age Group	Apache	Cochise & Santa Cruz	Coconino	Gila, Graham & Greenlee	La Paz & Mohave	Maricopa	Navajo	Pima	Pinal	Yavapai	Yuma	Unknown	Arizona
10 - 14	0	0	0	0	0	0	0	0	0	0	0	0	0
15 - 19	1	0	0	1	0	19	0	4	0	0	1	0	26
20 - 24	0	0	0	0	0	94	1	15	0	0	4	0	114
25 - 29	1	0	1	0	0	75	0	18	1	0	2	0	98
30 - 34	1	1	1	1	0	68	0	10	0	0	0	0	82
35 - 39	0	0	0	0	2	62	0	4	1	2	1	0	72
40 - 44	1	0	0	2	0	50	0	8	3	0	0	0	64
45 - 49	1	0	0	0	1	71	1	5	0	0	0	0	79
50 - 54	1	0	0	0	0	43	0	5	1	0	1	0	51
55 - 59	0	1	0	0	0	21	0	5	0	0	1	0	28
60 - 64	0	0	0	0	0	8	0	3	0	0	1	0	12
65 and Older	0	1	0	0	0	6	0	0	0	0	3	0	10
Total	6	3	2	4	3	517	2	77	6	2	14	0	636

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Table 10. Reported Male Syphilis Case Rates by Age Group and County, Arizona, 2012

Age Group	Apache	Cochise & Santa Cruz	Coconino	Gila, Graham & Greenlee	La Paz & Mohave	Maricopa	Navajo	Pima	Pinal	Yavapai	Yuma	Unknown	Arizona
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	0.0
15 - 19	30.5	0.0	0.0	28.7	0.0	13.6	0.0	12.0	0.0	0.0	11.8		11.3
20 - 24	0.0	0.0	0.0	0.0	0.0	64.4	26.0	37.1	0.0	0.0	39.6		46.3
25 - 29	47.3	0.0	19.7	0.0	0.0	52.5	0.0	52.0	6.7	0.0	28.2		42.7
30 - 34	48.4	18.0	23.5	31.9	0.0	48.8	0.0	31.5	0.0	0.0	0.0		37.0
35 - 39	0.0	0.0	0.0	0.0	39.5	47.7	0.0	13.9	6.5	45.7	18.6		35.1
40 - 44	47.7	0.0	0.0	67.4	0.0	36.7	0.0	27.6	21.5	0.0	0.0		30.2
45 - 49	44.6	0.0	0.0	0.0	15.1	55.4	30.7	16.8	0.0	0.0	0.0		38.4
50 - 54	42.4	0.0	0.0	0.0	0.0	34.3	0.0	15.5	8.5	0.0	18.3		24.4
55 - 59	0.0	17.5	0.0	0.0	0.0	19.5	0.0	16.0	0.0	0.0	20.7		14.8
60 - 64	0.0	0.0	0.0	0.0	0.0	8.5	0.0	10.4	0.0	0.0	23.3		6.9
65 and Older	0.0	6.8	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	18.9		2.2
Total	17.4	3.3	3.0	7.8	2.7	26.5	3.7	15.8	3.0	1.9	13.8		19.5

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Age Group	Apache	Cochise & Santa Cruz	Coconino	Gila, Graham & Greenlee	La Paz & Mohave	Maricopa	Navajo	Pima	Pinal	Yavapai	Yuma	Unknown	Arizona
10 - 14	0	0	0	0	0	0	0	0	0	0	0	0	0
15 - 19	0	0	0	1	1	8	0	1	2	0	1	0	12
20 - 24	0	1	0	0	0	11	0	8	4	0	2	0	30
25 - 29	0	0	0	0	0	27	0	5	1	0	3	0	18
30 - 34	0	1	0	0	0	19	0	3	0	0	0	0	20
35 - 39	0	0	0	1	0	8	1	6	0	0	1	0	18
40 - 44	0	1	0	0	0	9	0	6	0	0	0	0	21
45 - 49	0	0	1	0	0	10	0	1	1	0	1	0	12
50 - 54	0	0	0	0	0	3	0	3	0	0	0	0	5
55 - 59	0	0	0	0	0	2	0	1	1	0	0	0	2
60 - 64	0	0	1	0	0	3	0	1	0	0	0	0	1
65 and Older	0	0	0	0	0	2	0	1	1	0	0	0	5
Total	0	3	2	2	1	102	1	36	10	0	8	0	144

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Age Group	Apache	Cochise & Santa Cruz	Coconino	Gila, Graham & Greenlee	La Paz & Mohave	Maricopa	Navajo	Pima	Pinal	Yavapai	Yuma	Unknown	Arizona
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	0.0	0.0	0.0	31.9	17.4	6.1	0.0	3.1	17.9	0.0	13.1		5.5
20 - 24	0.0	18.7	0.0	0.0	0.0	7.9	0.0	20.7	43.8	0.0	27.6		13.1
25 - 29	0.0	0.0	0.0	0.0	0.0	19.6	0.0	15.3	9.1	0.0	49.2		8.4
30 - 34	0.0	19.9	0.0	0.0	0.0	13.9	0.0	9.7	0.0	0.0	0.0		9.4
35 - 39	0.0	0.0	0.0	44.2	0.0	6.1	37.2	21.3	0.0	0.0	18.2		9.0
40 - 44	0.0	20.1	0.0	0.0	0.0	6.7	0.0	20.4	0.0	0.0	0.0		10.1
45 - 49	0.0	0.0	25.4	0.0	0.0	7.7	0.0	3.3	9.9	0.0	17.6		5.8
50 - 54	0.0	0.0	0.0	0.0	0.0	2.3	0.0	8.8	0.0	0.0	0.0		2.3
55 - 59	0.0	0.0	0.0	0.0	0.0	1.7	0.0	2.9	8.7	0.0	0.0		1.0
60 - 64	0.0	0.0	28.9	0.0	0.0	2.8	0.0	3.1	0.0	0.0	0.0		0.5
65 and Older	0.0	0.0	0.0	0.0	0.0	0.7	0.0	1.1	3.2	0.0	0.0		1.0
Total	0.0	3.4	2.9	4.1	0.9	5.1	1.9	7.1	5.4	0.0	8.1		4.4

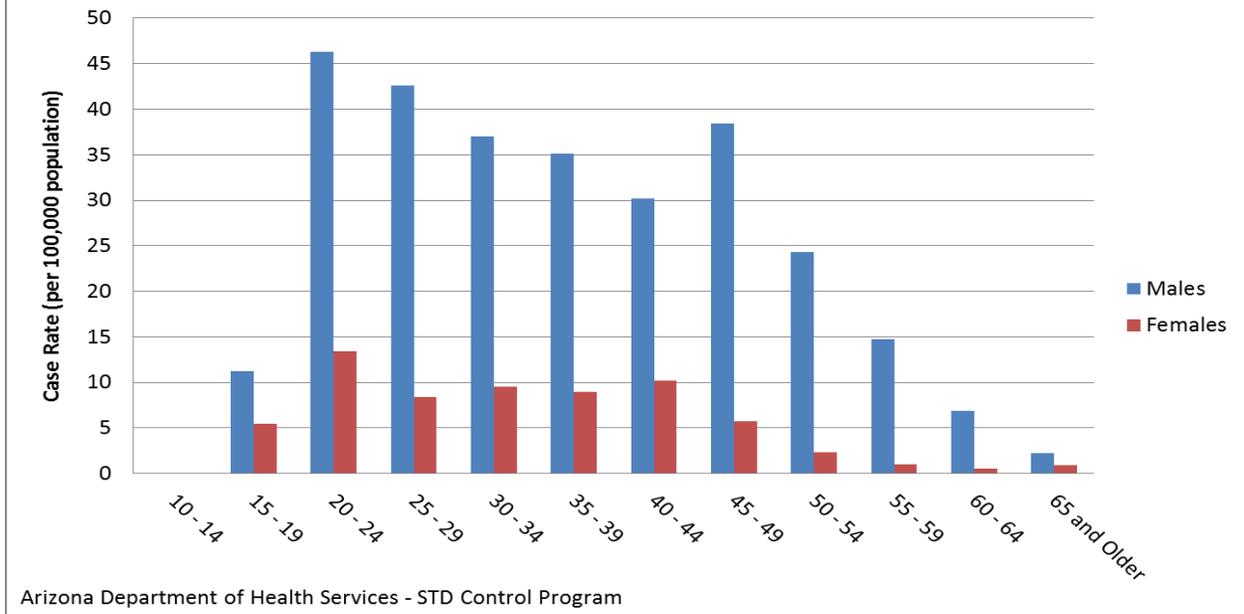
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Syphilis case and case rates by Gender, Age, and County, 2012

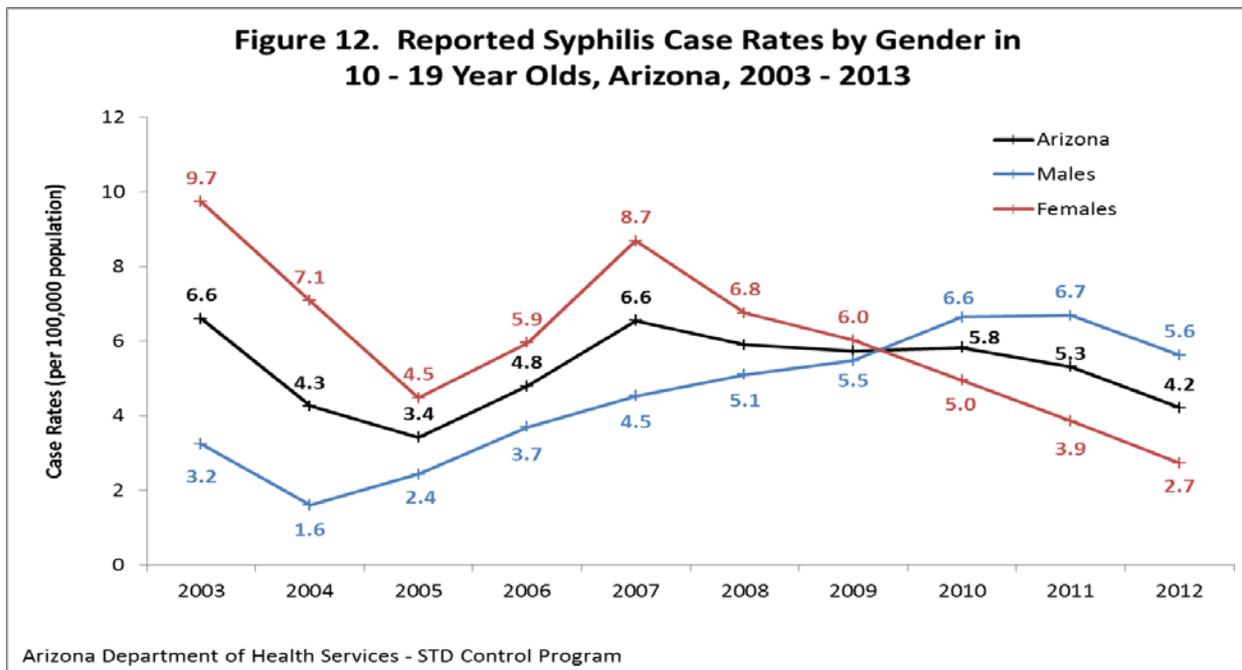
- 84% of syphilis cases among 10 - 19 year olds in Arizona are reported from Maricopa and Pima Counties.
- Syphilis cases among 10 - 19 year olds accounted for only 4.4% of all reported syphilis cases in 2012.
- The highest rates of syphilis are seen among the age groups 25-29 and 30-34.
- The rate of syphilis was higher for males in Arizona compared to females for every age group.

Figure 11. Reported Syphilis Case Rates by Age Group and Gender, Arizona, 2012



Syphilis case rates by Age and Gender, 2012

- In 2012, 20 – 24 year old males had the highest rate of syphilis (46.3 cases per 100,000 population), followed by 25 – 29 year old males (rate of 42.7) and 45 – 49 year old males (rate of 38.4) (Figure 11.)
- In 2012, 20 – 24 year old females had the highest rate of syphilis (13.5 cases per 100,000 population), followed by 40 – 44 year old females (rate of 10.2) and 30 – 34 year old females (rate of 9.6) (Figure 11.)

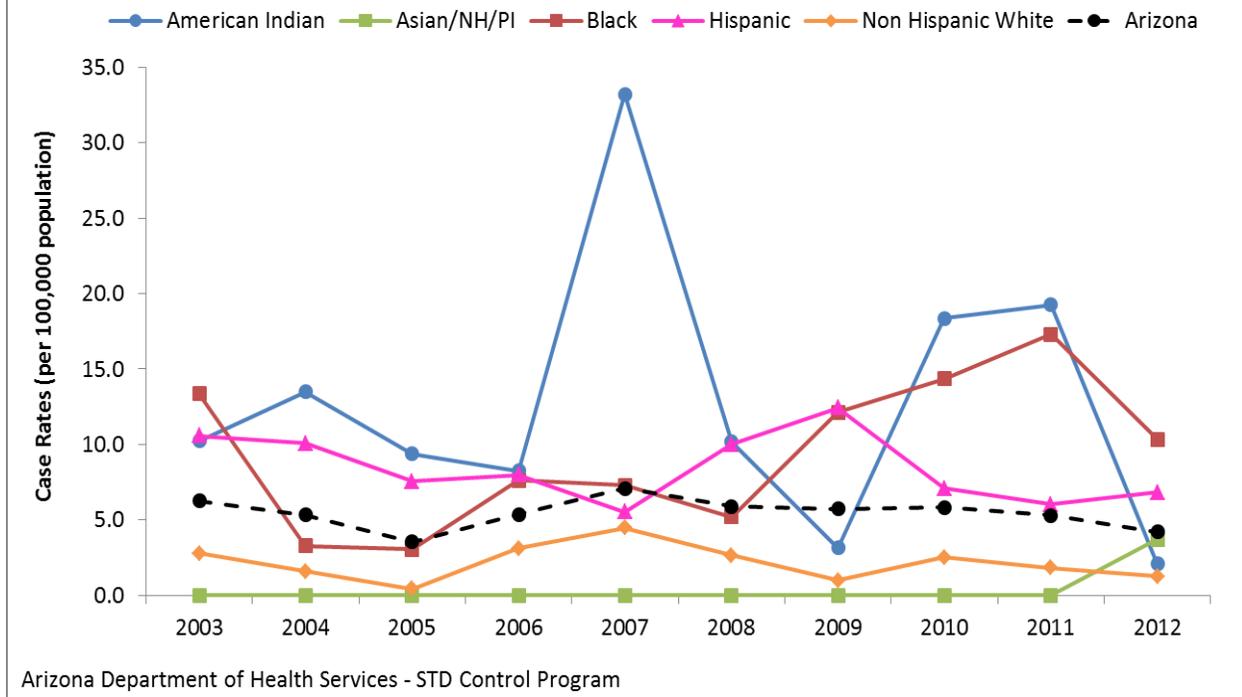


All data are preliminary and subject to change

Syphilis Rates by Gender, 2003-2012

- From 2003 – 2009 the case rate of syphilis was higher among 10 – 19 year old females than 10 – 19 year old males in Arizona.
- Since 2010 the rate difference has continued to increase. In 2010 the rate difference was 1.3 times greater in males than females. The rate increased to 1.7 times greater in 2011 and to 2.0 times greater in 2012.

Figure 13. Reported Syphilis Case Rates by Race/Ethnicity in 10-19 Year Olds, Arizona, 2003-2012



All data are preliminary and subject to change

Syphilis Case Rates by Race/Ethnicity

- The rate of syphilis among the 10 - 19 year olds of various race/ethnicity categories in Arizona has varied from 2003-2012.
- Non-Hispanic Whites have experienced an overall decrease in the rate of syphilis from 2007 to 2012.
- Hispanic 10 - 19 year olds experienced an increase in rate from 2011 (6.0 cases per 100,000 population) to 2012 (rate of 6.8). Unlike Non-Hispanic Whites, the 2012 rate is higher than it was in 2007.
- Among 10 - 19 Black Arizonans the rate of syphilis fell from 17.3 cases per 100,000 population in 2011 down to a rate of 10.2 in 2012. Unlike Non-Hispanic Whites the rate in 2012 is higher than it was in 2007.
- Rates of syphilis among 10 - 19 year old AI/AN reached a 10 year high in 2007 as a Southwest Arizona Indian Nation experienced an outbreak of syphilis.
- The rate among AI/AN has varied widely over the previous decade but reached a 10 year low of 2.1 cases per 100,000 population in 2012.
- The rate among Asian 10 - 19 years old in Arizona increased to 3.7 cases per 100,000 population in 2012. However, this represents an increase from zero cases in 2012, to 1 case in 2012.