# SEXUALLY TRANSMITTED INFECTIONS

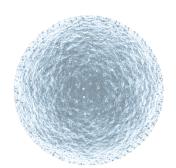
## 2020 Annual Report

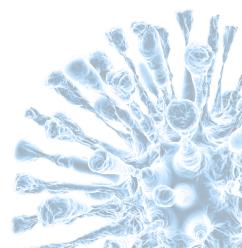
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ARIZONA DEPARTMENT OF HEALTH SERVICES





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### **Executive Summary**

Syphilis and gonorrhea rates continued to rise in 2020. However, chlamydia rates dropped for the first time in over a decade.

Caution should be taken when interpreting 2020 data due to the impact of COVID-19 on surveillance capacity and service delivery.

#### Why do we monitor STIs?

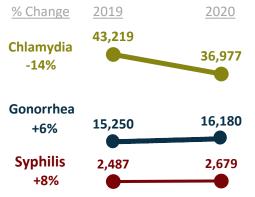
STIs are serious infections that can lead to severe outcomes if left untreated, including infertility.<sup>1</sup> People with an STI are also more likely to become infected with HIV.<sup>2</sup>

#### STIs on the decline?

The impact of COVID-19 led to a decrease in case counts from 61,065 in 2019 to 55,955 in 2020. **55,955** 



Although **chlamydia** decreased by 14% from 2019 to 2020, **gonorrhea** and **syphilis\*** continued to increase in 2020.



\*Includes primary, secondary, and early latent syphilis cases.

#### Chlamydia, gonorrhea, and syphilis are

widespread.



\*Darker shades indicate a higher rate.

#### Who is most impacted by STIs?

Certain populations are more likely to be impacted by STIs than others. In Arizona, **Youth** (ages 15-24) and gay, bisexual, and other men who have sex with men (**MSM**) have some of the highest rates of reported STIs. The difference in impacted populations is likely related to access to care and other contributing factors, such as sexual network characteristics, rather than differences in sexual behavior.<sup>3</sup>

Additionally, **women of childbearing age** may suffer some of the most severe outcomes when STIs go untreated, as women are less likely to have and/or notice symptoms. These severe outcomes can include pelvic inflammatory disease (PID), ectopic pregnancy, and cancer.<sup>1</sup>

#### References

1. Centers for Disease Control and Prevention. 10 Ways STDs Impact Women Differently from Men – CDC Fact Sheet. https://www.cdc.gov/std/health-disparities/STDs-Women-042011.pdf.

2. Centers for Disease Control and Prevention. STDs and HIV-CDC Detailed Fact Sheet.

https://www.cdc.gov/std/hiv/stdfact-std-hiv-detailed.htm.

3. Centers for Disease Control and Prevention. National Overview of STDs, 2020.

https://www.cdc.gov/std/statistics/2020/overview.htm#Disparities.

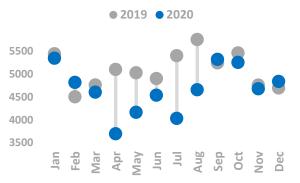
### **COVID-19 Impact on STIs**



COVID-19 impacted trends in STI surveillance as a result of social distancing measures, a reduction in screenings, and limited resouces.<sup>1</sup>

#### Impact of COVID-19 on STIs?

In early 2020, STI case counts were similar to 2019; however, COVID-19 changed the trajectory starting in April.



#### Social distancing measures

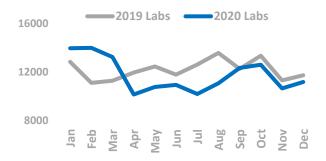
The fear of contracting COVID-19 as well as the mitigations measures, such as the stayat-home order in Arizona (March 31 - May 15, 2020), limited not only social, but may have impacted sexual interactions as well.<sup>1</sup>

Reported STIs fell dramatically during the stay-at-home order, and afterwards there was likely underreporting of infections and possibly an increase in transmission.<sup>1</sup> Despite the pandemic, case counts rebounded again towards the end of the year.

#### **Reduction in screening**

Limited health clinic capacity and supply shortages combined with a reduction in healthcare visits likely contributed to reduced STI screening during the pandemic.<sup>1</sup> Decreases in chlamydia case reports in 2020 were probably due to declines in healthcare-seeking behaviors, since approximately 75% of women and 50% of men do not have symptoms.<sup>2</sup>

Compared to 2019, the number of positive lab reports reported in Arizona plunged in March 2020 and remained lower than 2019 for the rest of the year. Overall, STI lab reports were 3% lower in 2020 than 2019.



#### **Limited resources**

The redirection and shift of STI program resources to combat COVID-19 decreased key STI prevention and reporting activities. Priorities pivoted as local STI investigation staff were deployed to the COVID-19 response and many clinics in Arizona had to reduce their screening capacity for STIs.

#### References

1. Centers for Disease Control and Prevention. Impact of COVID-19 on STDs.

https://www.cdc.gov/std/statistics/2020/impact.htm. 2. Centers for Disease Control and Prevention.

Chlamydia Trachomatis Infection 2022 Case Definition. https://ndc.services.cdc.gov/case-definitions/chlamydiatrachomatis-infection-2022/.

### **Prevention**



#### **STI prevention** saves lives.

Controlling the spread of STIs in Arizona requires a broad effort, including the **public**, **healthcare providers**, and **health departments**.

#### **Prevention saves lives**

Pregnant women infected with an STI can pass the infection to their child during gestation or at delivery, causing the baby to develop serious health problems if not treated. Untreated syphilis is particularly severe and can lead to miscarriage, stillbirth, and infant death.

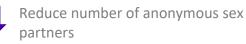


In Arizona, pregnant women should be screened 3 times during their pregnancy.<sup>1</sup>

#### How can you prevent STIs?



Use condoms or other prevention methods when having any type of sex





Get tested for STIs between partners

Evaluation, treatment, and counseling of sex partners of persons who are infected with an STI<sup>2</sup>



Condoms are effective in reducing risk for: HIV, syphilis, chlamydia, gonorrhea, hepatitis B, trichomoniasis, HPV, and herpes.<sup>3</sup>

#### **STI resources**

Visit this <u>CDC website</u> to find free/low-cost STI testing near you. If you live in Arizona and need condoms, visit <u>NicePackage.org</u> for a free delivery once every month.

2

## How can healthcare providers help prevent STIs?

For patients with chlamydia or gonorrhea, healthcare providers can offer additional medication to treat partners without performing a physical exam. Expedited partner therapy (EPT) allows for costeffective and timely treatment of partners and helps prevent re-infection. Providers can also help by adhering to current treatment guidelines, working closely with their local health department to treat and follow up with partners, and using the clinical consultation network.

#### **STIs control successes**

In 2020, the Arizona Department of Health Services (ADHS) provided funding to screen both uninsured and underinsured people, local health departments treated 1,184 partners, and 128 potential congenital cases were prevented.

#### References

1. Arizona Department of Health Services. Congenital Syphilis - Providers. https://www.azdhs.gov/preparedness/epidemiologydisease-control/disease-integration-services/std-control/congenital-syphilis/index.php#cs-providers.

3. Centers for Disease Control and Prevention. Primary Prevention Methods. https://www.cdc.gov/std/treatment-guidelines/clinical-primary.htm.

<sup>2.</sup> Centers for Disease Control and Prevention. Clinical Prevention Guidance. https://www.cdc.gov/std/treatment-guidelines/clinical.htm.

## **Chlamydia and Gonorrhea**



Chlamydia is the most commonly reported bacterial STI in Arizona and the US.<sup>1</sup>

Chlamydia is a bacterial STI that affects both men and women.<sup>1</sup> In Arizona, 36,977 new cases of chlamydia were reported in 2020, which accounted for the majority of all reported STIs.

Chlamydia	Other
66%	STIs

#### Symptoms and adverse outcomes

Most chlamydia infections are asymptomatic. However, for persons that develop symptoms, they may include: a burning sensation while urinating and abnormal vaginal, penile, or rectal discharge.<sup>1</sup>

An untreated chlamydia infection can lead to additional health problems. Women may develop pelvic inflammatory disease (PID), which can lead to infertility or ectopic pregnancy. If women do not respond to PID treatment, surgery may be required.<sup>2</sup> Men are at risk of developing inflammation of the tube that carries sperm, along with testicular pain and swelling.<sup>1</sup>

#### **Screening guidelines**

Screening guidelines vary by gender for chlamydia. Sexually active women are recommended to have routine screening, resulting in women being more likely to be tested in comparison to men.<sup>1</sup> Due to the difference in guidelines, nearly 65% of reported chlamydia cases in Arizona were in women.



Gonorrhea is the second most commonly reported bacterial STI in Arizona and the US.<sup>2</sup>

Gonorrhea is another common bacterial STI that can infect the genitalia, throat, and rectum.<sup>3</sup> In Arizona, there were 16,180 cases reported in 2020.

#### Symptoms and adverse outcomes

Similar to chlamydia, gonorrhea can infect both men and women, and most infections are asymptomatic. When symptoms do occur, men typically experience painful urination and urethral discharge, while women may develop painful urination, vaginal discharge, and vaginal bleeding.<sup>3</sup>

When a gonorrhea infection remains untreated, both men and women are at risk for further complications. Women are at risk of developing PID and men may develop inflammation of the tube which carries sperm, both of which can lead to infertility.<sup>3</sup>

#### Antibiotic resistance



Gonorrhea bacteria can quickly develop resistance to antibiotics, so adhering to treatment guidelines is key.<sup>4</sup>

Each month, specimens from Arizona are tested for antibiotic resistance to ensure recommended treatments remain effective. More than **500 specimens were submitted for testing**, and **NONE demonstrated resistance** to both ceftriaxone and azithromycin, the recommended gonorrhea treatment in 2020. In December 2020, the recommended treatment was updated to a single, increased dose of ceftriaxone.<sup>4</sup>

#### References

1. Centers for Disease Control and Prevention. Chlamydia – CDC Detailed Fact Sheet.

https://www.cdc.gov/std/chlamydia/stdfact-chlamydia-detailed.htm.

<sup>2.</sup> Centers for Disease Control and Prevention. Pelvic Inflammatory Disease (PID) – CDC Detailed Fact Sheet.

https://www.cdc.gov/std/pid/stdfact-pid-detailed.htm.

<sup>3.</sup> Centers for Disease Control and Prevention. Gonorrhea – CDC Detailed Fact Sheet.

https://www.cdc.gov/std/gonorrhea/stdfact-gonorrhea-detailed.htm.

<sup>4.</sup> Centers for Disease Control and Prevention. National Overview. https://www.cdc.gov/std/statistics/2020/overview.htm.

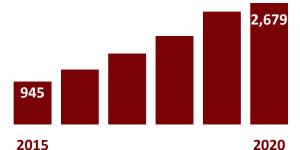
### Syphilis: It's Complicated but Curable



Syphilis can only be spread if the person is symptomatic or pregnant.

Syphilis infection can lead to severe outcomes in untreated people, including vision and hearing loss.

#### Syphilis\* is increasing in Arizona



\*Late latent and unknown duration cases are excluded from this graph.

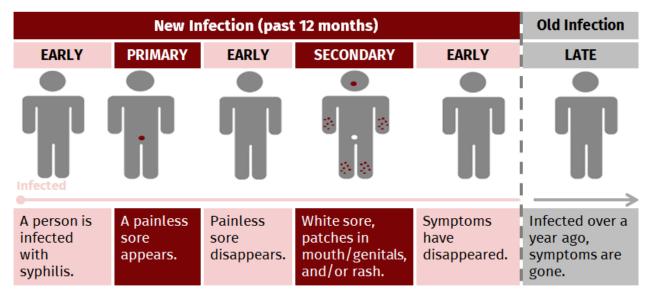
#### Syphilis can be severe

When left untreated, syphilis can travel through the body and cause problems in the bones, ears, eyes, heart, and brain.<sup>1</sup> These problems can occur at any time, even years after initial infection.



#### How do you know it's a new case?

In the first year of infection, a person with syphilis switches between having symptoms to not having symptoms. Infected people can only pass the infection to partners in the first year when symptoms are present. However, pregnant women can pass the infection to their developing baby at any time. Usually, a year after infection, syphilis symptoms disappear.



#### References

1. Centers for Disease Control and Prevention. Syphilis – CDC Fact Sheet. https://www.cdc.gov/std/syphilis/stdfact-syphilis.htm.

## **Congenital Syphilis**

In Arizona, there was a **9% increase in syphilis in babies** from 2019 to 2020.

Rates of syphilis are rapidly increasing in women.

In Arizona, congenital syphilis frequently occurred as a result of **late or no access** to prenatal care, or mom being infected late in her pregnancy.

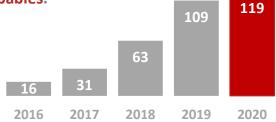
#### **Congenital syphilis**

.,,1

Pregnant women with untreated syphilis can pass the infection to their developing baby at any time, causing **bone disorders**, **deafness**, **other congenital defects**, **or even death**.<sup>1</sup>



In Arizona, syphilis is increasing in babies.



In 2020 in Arizona, eleven babies died of syphilis.

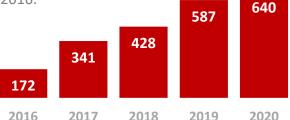
**Two in three** babies with syphilis were reported in **Maricopa County.** This is a significant increase from 2016.



#### Why is congenital syphilis increasing?

A lack of timely prenatal care and syphilis testing is a large contributor to the increase of congenital syphilis.<sup>2</sup> Additionally, instances in which pregnant women were diagnosed efficiently, lack of adequate treatment was also shown to be a factor.<sup>2</sup> Overall, the increase in babies is partially due to the **increase of syphilis in women**. In Arizona,

syphilis cases have risen in women starting in 2016.



#### Access to prenatal care is important

CDC recommends screening all pregnant women for syphilis in their first trimester.<sup>1</sup> In Arizona, it is recommended to screen all pregnant women at their **first prenatal visit**, **in the third trimester**, and **at delivery**.<sup>3</sup>

Actively screening pregnant women can lead to timely treatment and prevent complications for both mother and baby.<sup>1</sup> Despite providers screening many pregnant women, some women struggle to access prenatal care in time.

#### References

1. Centers for Disease Control and Prevention. Congenital Syphilis – CDC Fact Sheet. https://www.cdc.gov/std/syphilis/stdfact-congenital-syphilis.htm.

2. Kimball A, Torrone E, Miele K, et al. Missed Opportunities for Prevention of Congenital Syphilis - United States, 2018. *MMWR Morb Mortal Wkly Rep*. 2020;69(22):661-665. doi:10.15585/mmwr.mm6922a1. https://www.cdc.gov/mmwr/volumes/69/wr/mm6922a1.htm.

3. Arizona Department of Health Services. Congenital Syphilis - Providers.

https://www.azdhs.gov/preparedness/epidemiology-disease-control/disease-integration-services/std-control/congenital-syphilis/index.php#cs-providers.

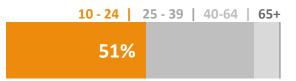
### **Adolescents and Young Adults**

**<25Y** 

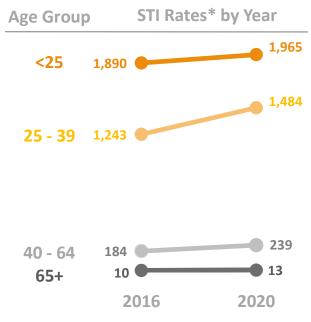
Youth 15 through 24 years old have the highest rates of STIs and should be offered **annual screening**.

## Youth are disproportionately burdened by STIs

About half of all STIs are reported in **persons under the age of 25.** 



As STIs rise, **youth continue to have the highest rates of STIs** when compared to other age groups.



\*Age adjusted rates are calculated per 100,000.

#### Why are youth at risk?

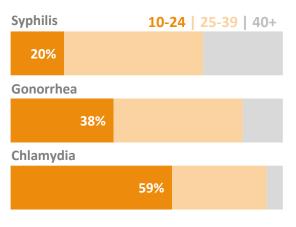
Adolescents and young adults are at increased risk because they have limited access to screening and treatment, have concerns about confidentiality, are biologically more susceptible to STIs, and may have multiple sex partners between screening and treatment.<sup>1</sup> CDC recommends annual screening for sexually active women under 25 years old.<sup>2</sup>



Less than 1% of STIs occur in persons 65 years and older.

#### Are there differences by infection?

Youth (<25) represent over half of all chlamydia cases, 38% of all gonorrhea cases, and 20% of syphilis cases.



#### References

1. Centers for Disease Control and Prevention. Sexually Transmitted Infections Among Young Americans. https://www.cdc.gov/std/products/youth-sti-infographic.pdf.

2. Centers for Disease Control and Prevention. STD & HIV Screening Recommendations.

https://www.cdc.gov/std/prevention/screeningreccs.htm.

## Sexual Orientation and Gender Identity (SO/GI)

**†**† ?

Men who have sex with men (MSM) are disproportionately impacted by STIs.

Information on sex of sex partners is severely limited for chlamydia and gonorrhea.

#### SO/GI

Sexual orientation represents which gender(s) a person is attracted to. Gender identity is different than sexual orientation and represents which gender an individual identifies as. For example, transgender persons identify with a gender that differs from their sex at birth.

Transgender and gender diverse individuals often experience stigma and barriers to healthcare, which can result in missed opportunities for treatment and prevention of STIs.<sup>1</sup>

MSM may also experience stigma and discrimination that can affect access to healthcare. This, in combination with a greater likelihood of MSM encountering partners with an STI, raises their risk of acquiring STIs.<sup>2</sup>

Culturally competent care is critical so that providers can appropriately collect SO/GI data from clients, which can facilitate appropriate screening, as screening recommendations vary by population. For example, the CDC recommends screening **gay, bisexual, and other MSM** for chlamydia, gonorrhea, syphilis, and HIV **at least annually**. For **transgender and gender diverse persons**, CDC screening recommendations are **based on anatomy**, as well as **reported sexual behaviors and exposures**.<sup>3</sup>

#### **STIs in MSM**

In Arizona, **50%** of syphilis cases were reported among **MSM** in 2020. Conversely, only **4%** of all chlamydia cases and **10%** of gonorrhea cases identified as MSM. MSM might be underrepresented in chlamydia and gonorrhea cases due to missing SO/GI data. We heavily rely on provider reporting to capture demographic information and often receive incomplete SO/GI data. STI case investigations can capture the missing SO/GI data, however, syphilis investigations are typically prioritized above chlamydia and gonorrhea.



#### STIs in transgender persons

Determining STI case counts and rates in transgender persons relies on having sufficient gender identity information for cases, which is often missing. Out of the 55,955 cases of STIs in 2020, less than 1% were reported as transgender persons. Recently, Arizona has focused on taking steps to try to improve completeness of SO/GI reporting.

#### References

1. Centers for Disease Control and Prevention. Transgender and Gender Diverse Persons.

https://www.cdc.gov/std/treatment-guidelines/trans.htm.

 Centers for Disease Control and Prevention. What Gay, Bisexual and Other Men Who Have Sex with Men Need to Know About Sexually Transmitted Diseases. https://www.cdc.gov/std/life-stages-populations/stdfact-msm.htm.
 Centers for Disease Control and Prevention. Sexually Transmitted Infections Treatment Guidelines, 2021. https://www.cdc.gov/std/treatment-guidelines/screening-recommendations.htm.

### **HIV Coinfections**

¢

Repeat infections can put people at risk for more severe health outcomes and make them vulnerable to getting infected with another STI or HIV.

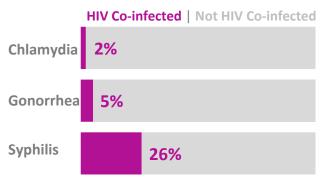
STI prevention is HIV prevention.

Among those infected with an STI, HIV coinfections are more common in men who have sex with men and older persons.

#### **STI/HIV coinfections**

STIs and HIV have similar factors that put one at risk of acquiring an infection, so **STI prevention is HIV prevention**. For example, using condoms regularly, reducing the number of anonymous sexual partners, and not drinking alcohol or using drugs before sex can help prevent both STIs and HIV.<sup>1</sup> Due to the similar risk factors, individuals can have an STI and HIV at the same time, known as a **coinfection\***.

## HIV coinfections are most common with syphilis



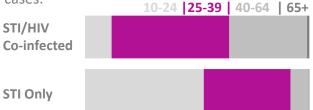
Although other STIs can be cured, HIV requires a lifetime of access to healthcare and treatment. However, HIV can also be prevented by taking PrEP (pre-exposure prophylaxis). PrEP is a medicine, available as a pill or injection, which can reduce the likelihood of getting HIV from an infected sex partner when taken as prescribed.<sup>2</sup>

#### **HIV coinfection disparities**

Most STI cases coinfected with HIV are among **men who have sex with men.** 



# STI/HIV coinfections were more commonly reported in **25-39-year-olds** than STI-only cases.



\*Note: New and previous HIV positive cases are included in the coinfection counts.

#### References

 Centers for Disease Control and Prevention. STDs and HIV-CDC Basic Fact Sheet. https://www.cdc.gov/std/hiv/stdfact-std-hiv.htm
 Centers for Disease Control and Prevention. About PrEP. https://www.cdc.gov/hiv/basics/prep/about-prep.html

### A message from the STI Control Program (STICP)

The ADHS STICP is committed to addressing this rise in STIs by collaborating with internal and external partners to promote prevention and control. ADHS partners include the Centers for Disease Control and Prevention, county and tribal health departments, community-based organizations, and Arizona medical providers. It is important that the Arizona public and leaders encourage dialogue about sexual health and infection prevention, particularly among communities that are most impacted by these infections. Promoting screening, treatment, and access to services can improve the sexual health and wellness of all Arizonans.

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## Arizona Department of Health Services Office of Disease Integration and Services

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### Mission

The Mission of the Arizona Department of Health Services STI Control Program (STICP) is to improve the sexual health of all Arizonans by strengthening the prevention and control of sexually transmitted infections in Arizona through education, surveillance, collaboration, and program development.

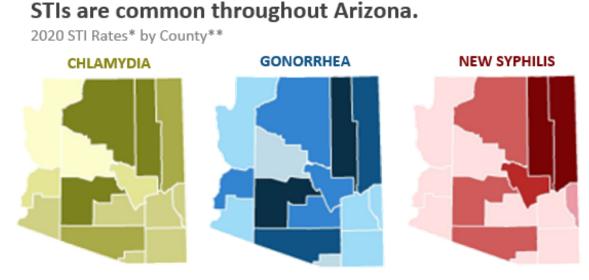
#### Appendix 1: Data Dashboards

2020 STIs in Arizona

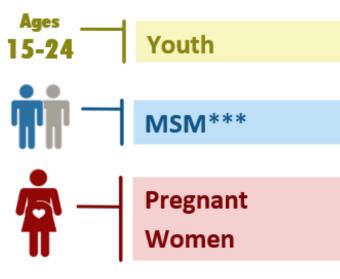
### STIs decreased in 2020.

However, STI cases have tripled since 2000!





### **Key Populations**



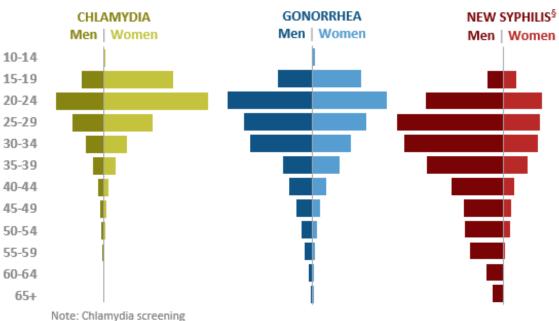
\*Rates calculated per 100,000.

\*\*Darker shades indicate higher rates.

\*\*\*MSM = Men who have sex with men.

§Includes primary, secondary, and early latent syphilis only.

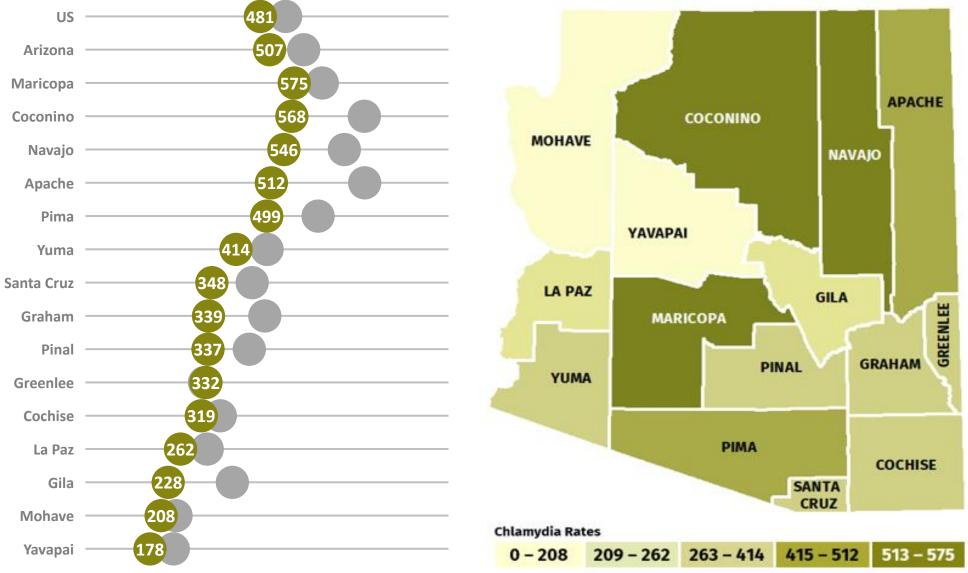
## STI rates\* also differ by gender and age.



recommendations differ by gender

Rates\* of chlamydia declined in every county between 2019 and 2020.

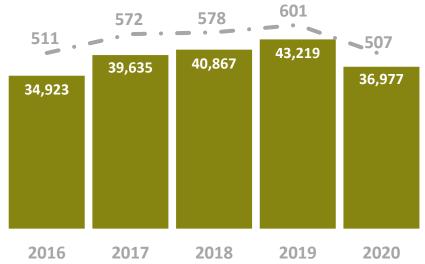
# The highest chlamydia rates\* are in both rural and urban counties.



\*Rates calculated per 100,000.

Note: Caution in interpreting 2020 chlamydia data. For details on the COVID-19 impact on chlamydia case rates, see page 2.

In Arizona, chlamydia cases and rates\* declined in 2020.

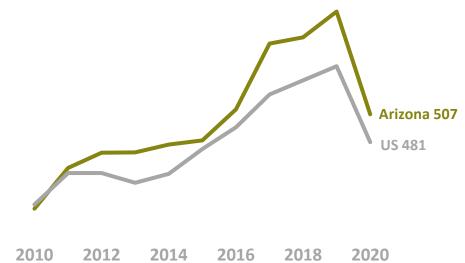


## Women consistently have higher rates\* of chlamydia than men.

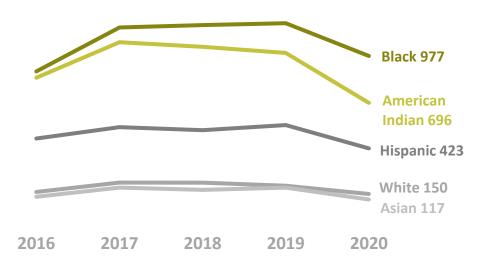
Women are recommended to have routine screening which likely contributes to the higher rates of infections detected.



Chlamydia rates\* declined in Arizona and the United States from 2019 to 2020.



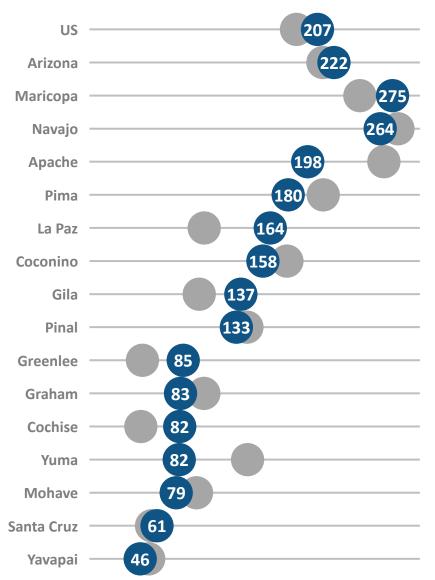
Chlamydia rates\* declined among all Arizona racial and ethnic populations\*\* in 2020.



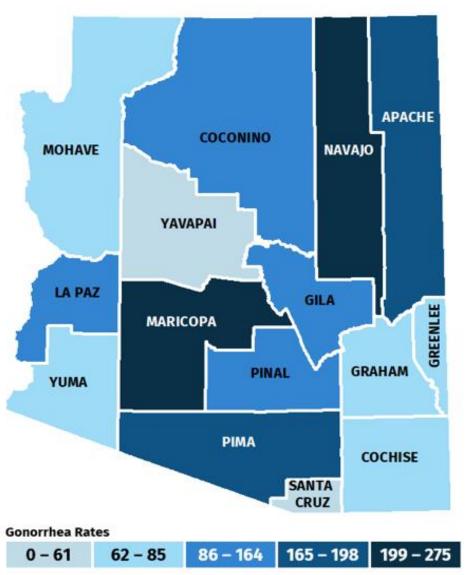
\*Rates calculated per 100,000.

\*\*Race and ethnicity are not frequently reported for chlamydia. In 2020, 38% of cases were missing race and ethnicity information. Note: Caution in interpreting 2020 chlamydia data. For details on the COVID-19 impact on chlamydia case rates, see page 2.

## Gonorrhea rates\* by county in 2019 and 2020.



# The Northeast corner and more populous areas of Arizona have the highest rates\* of gonorrhea.



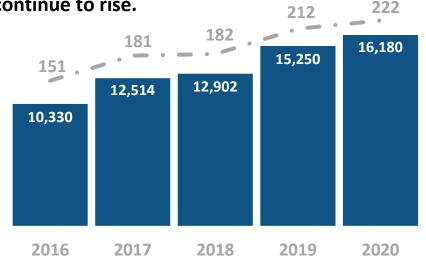
\*Rates calculated per 100,000.

2010

2012

2014

In Arizona, gonorrhea cases and rates\* continue to rise.



## Men consistently have higher rates\* of gonorrhea than women.

Men are more likely to notice symptoms and seek out testing in comparison to women. Men 259



## Gonorrhea rates\* continue to rise in Arizona and the United States. Arizona 222 US 207

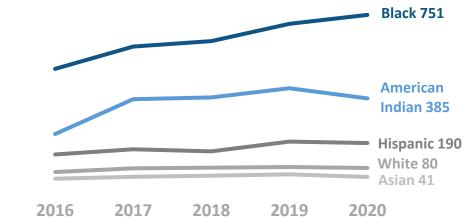
## Gonorrhea rates\* disproportionately impact persons who identify as Black/African American\*\*.

2018

2020

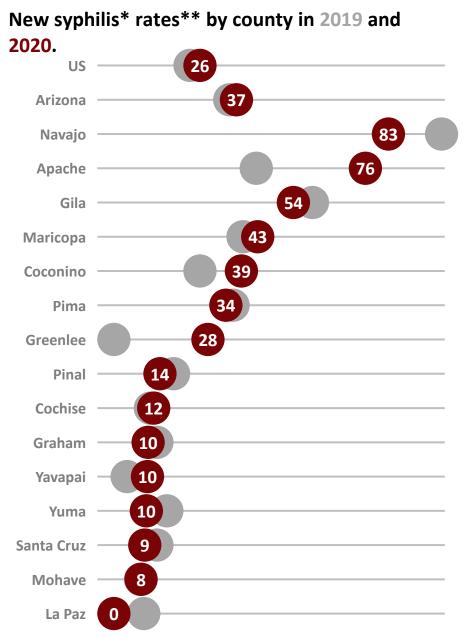
2016

Racial and ethnic minority groups face barriers to accessing quality health services. Learn more by vising <u>this CDC website</u>.

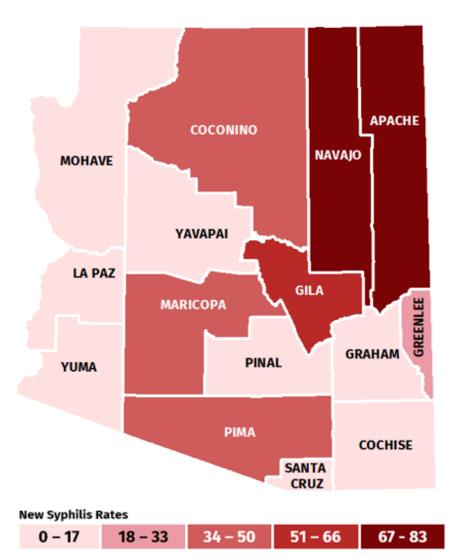


\*Rates calculated per 100,000.

\*\*Race and ethnicity are not frequently reported for gonorrhea. In 2020, 25% of cases were missing race and ethnicity information.



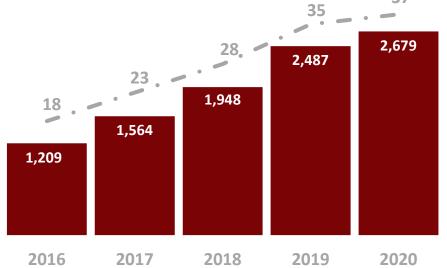
The Northeast corner of Arizona has the highest rates\* of new syphilis.



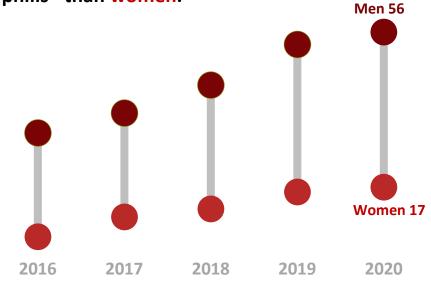
\*Includes primary, secondary, and early latent syphilis only.

\*\*Rates calculated per 100,000.

In Arizona, new syphilis\* cases and rates\*\* continue to rise. 37



## Men consistenly have higher rates\*\* of new syphilis\* than women.

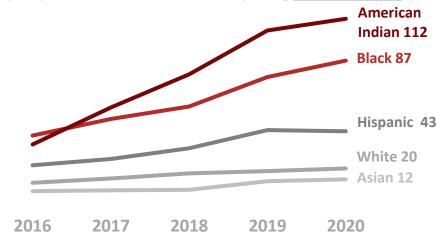


Arizona has a higher rate\*\* of new syphilis\* than the United States. Arizona 37

### 2010 2012 2014 2016 2018 2020

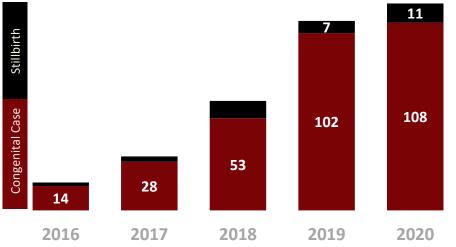
## New syphilis\* rates\*\* disproportionately impact persons who identify as American Indian.

Racial and ethnic minority groups face barriers to accessing quality health services. Learn more by vising this CDC website.



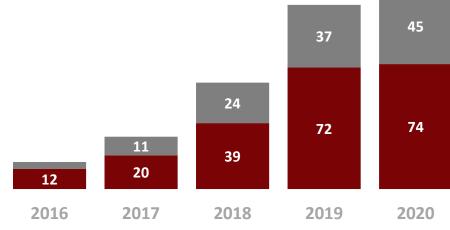
\*Includes primary, secondary, and early latent syphilis only. \*\*Rates calculated per 100,000. **US 26** 

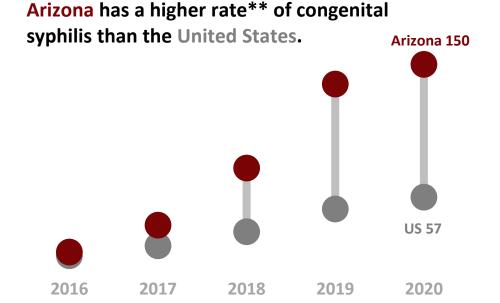
# The number of congenital syphilis cases has increased since 2016\*.



#### Cases are increasing statewide.

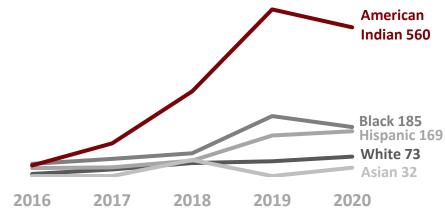
## 62% of cases occur in Maricopa County, Arizona's most populous county.





## Congenital syphilis rates\*\* disproportionately impact persons who identify as American Indian.

Racial and ethnic minority groups face barriers to accessing quality health services. Learn more by vising <u>this CDC website</u>.



\*Stillbirths are a subset of congenital syphilis.

\*\*Rates calculated per 100,000 live births. Congenital syphilis denominator based upon ADHS Vital Statistics Birth Population.

#### **Appendix 2: Tables**

#### Table 1

#### Sexually Transmitted Infections: Cases and Rates per 100,000 by County, Arizona, 2020\*

	Chlar	Chlamydia		Gonorrhea		New Syphilis**		Congenital Syphilis	
County	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	
Apache	372	512	144	198	55	76	*	*	
Cochise	420	319	108	82	16	12	*	*	
Coconino	826	568	229	158	56	39	*	*	
Gila	126	228	76	137	30	54	6	1,269	
Graham	131	339	32	83	*	*	0	0	
Greenlee	35	332	9	85	*	*	0	0	
La Paz	59	262	37	164	0	0	0	0	
Maricopa	25,519	575	12,216	275	1,930	43	74	145	
Mohave	457	208	173	79	18	8	*	*	
Navajo	619	546	299	264	94	83	12	886	
Pima	5,253	499	1,899	180	356	34	11	106	
Pinal	1,578	337	624	133	65	14	*	*	
Santa Cruz	187	348	33	61	*	*	*	*	
Yavapai	420	178	109	46	24	10	0	0	
Yuma	975	414	192	82	23	10	*	*	
Arizona	36,977	507	16,180	222	2,679	37	119	150	

\*Case counts under 6 and associated rates are excluded.

\*\*Includes Primary, Secondary, and Early Latent Syphilis.

Table 2
Table 2

Chlamvdia Cases and	Rates per 100,000 by Age Grou	p. Arizona 2018-2020
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	20	18	20	19	20	20
Age Group*	Ν	Rate	Ν	Rate	Ν	Rate
10-14	210	45	181	38	182	38
15-19	9,393	1,993	9,645	2,031	8,152	1,702
20-24	14,880	3,044	15,830	3,206	13 <i>,</i> 588	2,736
25-29	7,993	1,587	8,387	1,617	7,173	1,362
30-34	3,823	832	4,156	887	3,687	765
35-39	2,127	475	2,262	492	1,989	426
40-44	1,135	272	1,223	290	925	215
45-49	598	139	694	160	548	126
50-54	333	79	409	98	339	81
55-59	209	48	236	53	215	48
60-64	82	20	109	26	97	22
65+	68	6	76	6	69	5
Total	40,857	577	43,219	601	36,977	507
	Ν	%	Ν	%	Ν	%
Under 25	24,489	60	25,667	59	21,935	59
Under 30	32,482	80	34,054	79	29,108	79

\*Ages 0-9 not shown.

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Age Group**	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	Total
Apache	*	62	106	69	66	37	15	*	6	6	0	0	372
Cochise	*	148	124	74	32	25	*	*	*	*	0	*	420
Coconino	*	196	367	115	69	40	16	10	*	*	*	0	825
Gila	0	24	51	27	16	*	0	*	*	0	0	0	125
Graham	*	36	39	26	16	*	*	0	*	0	*	0	131
Greenlee	0	17	7	7	0	*	*	0	0	0	0	*	35
La Paz	0	10	21	9	11	*	0	*	*	0	0	0	59
Maricopa	123	5,472	9,325	5,075	2,538	1,379	661	407	255	157	63	53	25,508
Mohave	*	119	163	93	36	18	12	7	*	*	0	0	457
Navajo	6	125	182	133	91	44	22	8	6	*	0	0	620 <sup>+</sup>
Pima	26	1,210	2,007	913	517	285	125	73	33	34	20	10	5,253
Pinal	7	368	594	292	162	81	37	13	15	6	*	*	1,578
Santa Cruz	*	54	61	41	13	8	*	*	*	0	*	0	187
Yavapai	*	110	154	78	35	16	8	7	*	*	*	*	420
Yuma	*	201	387	221	85	42	16	9	6	*	*	*	975
Arizona	182	8,152	13,588	7,173	3,687	1,989	925	548	339	215	97	69	36,965 <sup>+</sup>

\*Denotes count <6.

\*\*Ages 0-9 not shown.

<sup>†</sup>Sum rounded to nearest tens unit due to non-zero addend less than 6.

#### Table 4

Gonorrhea Cases and Rates per 100,000 by Age Group, Arizona 2018-2020

	20	18	20:	19	202	20
Age Group*	Ν	Rate	Ν	Rate	Ν	Rate
10-14	37	8	39	8	53	11
15-19	1,664	353	1,826	374	2,090	421
20-24	3,353	686	3,827	760	3,970	754
25-29	2,849	566	3,434	748	3,438	714
30-34	1,958	426	2,361	527	2,535	542
35-39	1,220	272	1,511	363	1,707	398
40-44	681	163	836	194	936	216
45-49	498	116	578	137	611	146
50-54	318	75	395	90	385	86
55-59	179	41	255	62	258	59
60-64	67	16	106	9	113	9
65+	69	6	71	1	70	1
Total	12,896	182	15,250	216	16,180	222
	Ν	%	Ν	%	Ν	%
Under 25	5,057	39	5,703	37	6,127	38
Under 30	7,906	61	9,137	60	9,565	59

\*Ages 0-9 not shown.

Table	25
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Gonorrhea Cases b	y Age Group and County,	Arizona 2020

Age Group**	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	Total
Apache	*	7	24	36	29	23	12	7	*	*	0	0	144
Cochise	0	31	26	20	12	9	*	*	*	*	0	0	108
Coconino	*	24	65	35	35	26	22	7	7	*	*	*	229
Gila	0	10	15	19	15	13	*	*	*	0	0	0	76
Graham	0	*	*	6	11	*	*	*	0	0	0	0	32
Greenlee	0	*	*	*	0	*	0	0	0	0	0	0	9
La Paz	0	*	10	10	*	*	*	*	*	*	0	0	37
Maricopa	41	1,590	3,009	2,618	1,889	1,260	685	463	306	201	92	51	12,205
Mohave	0	23	38	34	26	17	10	11	6	7	0	*	170 <sup>+</sup>
Navajo	0	29	40	71	69	49	23	7	6	*	0	*	299
Pima	7	223	505	391	285	200	112	77	37	29	19	12	1,897
Pinal	*	97	141	136	109	64	42	20	10	*	0	0	623
Santa Cruz	0	10	8	*	6	*	*	*	0	*	0	0	33
Yavapai	0	16	26	18	15	12	12	*	*	*	0	*	109
Yuma	0	22	56	38	30	24	9	8	*	0	0	*	192
Arizona	53	2,090	3,970	3,483	2,540 <sup>+</sup>	1,707	936	611	385	258	110 <sup>+</sup>	70	16,170

\*Denotes count <6.

\*\*Ages 0-9 not shown.
<sup>†</sup>Sum rounded to nearest tens unit due to non-zero addend less than 6.

## Table 6New<sup>§</sup> Syphilis Cases and Rates per 100,000 by Age Group, Arizona 2018-2020

	20	18	20	19	20	20
Age Group**	Ν	Rate	Ν	Rate	Ν	Rate
10-14	*	*	*	*	0	0
15-19	96	20	104	21	104	21
20-24	314	64	404	78	422	80
25-29	383	76	520	111	518	108
30-34	316	69	432	94	485	104
35-39	265	59	319	76	366	85
40-44	167	40	213	49	227	52
45-49	147	34	168	40	170	41
50-54	121	29	130	29	163	36
55-59	78	18	109	26	126	29
60-64	40	10	49	4	62	5
65+	23	2	38	1	36	0
Total	1,950 <sup>+</sup>	30 <sup>+</sup>	2,490 <sup>+</sup>	35 <sup>+</sup>	2,679	37
	Ν	%	Ν	%	Ν	%
Under 25	411	21	509	20	526	20
Under 30	794	41	1,029	41	1,044	39

<sup>§</sup>Includes Primary, Secondary, and Early Latent Syphilis.

\*Denotes count <6.

\*\*Ages 0-9 not shown.

<sup>†</sup>Sum rounded to nearest tens unit due to non-zero addend less than 6.

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Age Group**	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+	Total
Apache	0	*	12	10	15	7	*	*	*	0	0	*	55
Cochise	0	0	*	*	*	*	0	0	*	*	0	0	16
Coconino	0	*	6	11	9	8	6	*	*	7	*	*	56
Gila	0	*	*	*	*	*	*	*	*	0	*	0	30
Graham	0	0	0	0	0	*	0	*	0	*	0	0	*
Greenlee	0	0	*	0	0	0	0	*	0	0	*	0	*
La Paz	0	0	0	0	0	0	0	0	0	0	0	0	0
Maricopa	0	72	315	388	337	261	165	126	123	89	34	20	1,930
Mohave	0	*	*	*	*	*	*	*	*	*	0	0	18
Navajo	0	9	15	16	26	12	6	*	*	*	*	0	94
Pima	0	6	45	59	64	48	30	24	25	19	23	13	356
Pinal	0	*	12	15	12	8	10	*	*	*	0	0	65
Santa Cruz	0	*	0	*	0	0	*	*	0	0	0	0	*
Yavapai	0	*	*	7	*	*	*	0	*	*	*	*	24
Yuma	0	0	*	*	10	*	*	*	*	0	0	0	23
Arizona	0	104	422	518	485	366	227	170	163	126	62	36	2,679

New<sup>§</sup> Syphilis Cases by Age Group and County, Arizona 2020

<sup>§</sup>Includes Primary, Secondary, and Early Latent Syphilis.

\*Denotes count <6.

\*\*Ages 0-9 not shown.

Table 8	. Change Aulineuro 2010 2020
Syphills Cases by	y Stage, Arizona 2018-2020

	201	L8	202	19	2020		
Stage*	Ν	%	Ν	%	Ν	%	
Primary	391	12	554	14	628	14	
Secondary	661	20	743	18	814	18	
Early Latent	896	27	1,190	29	1,237	28	
Late Latent/Unknown Duration	1,249	38	1,448	36	1,631	37	
Congenital	63	2	109	3	119	3	
Total	3,260		4,044		4,429		

\*Stage is an indication of where a case is at in their infection. Primary and secondary cases are symptomatic and infectious (they can spread the infection to others). Early latent cases were infected sometime within the past year and were symptomatic and infectious sometime within the last year. Late latent/unknown duration cases were infected over a year ago and can no longer spread the infection to others.