

## 6. Sexually Transmitted Infections

### Ranked AL's Sixth Health Indicator

STIs are ranked sixth in priority for AL's health indicators. Reproductive health is the focal point for interventions involving sexual safety, maternal health, and child health. Many STIs have mandatory reporting requirements in AL, which allows ADPH to investigate areas within the state with high rates of chlamydia, gonorrhea, human immunodeficiency virus (HIV), and syphilis. STIs are spread through sexual contact and bodily fluids. Condom use and communication with partners about possible exposures are highly recommended to prevent the spread of STIs.<sup>1</sup>

The number of new HIV infections continues to outweigh the number of deaths among people diagnosed with HIV, largely due to the success and widespread utilization of highly active antiretroviral therapy in 1995. About 1.2 million people are living with HIV in the U.S. In 2019, 15.2 percent of new HIV diagnoses were in the south. There were 635 newly diagnosed HIV infections reported among AL residents in 2019. CDC estimated that 13 percent of persons infected with HIV in the U.S. were unaware of their status.<sup>2</sup> Applying this knowledge to the 2019 state prevalence, estimates suggest an additional 2,517 AL residents may be infected with HIV and are unaware of their status.

It is important for anyone engaging in sexual activity to get tested frequently to protect their own and their partners' health. Vaccinations for hepatitis B and human papillomavirus (HPV) are good primary preventions.

#### Vulnerable Populations

Pregnant women can become infected with STIs and should get a screening during their routine medical care. A positive screening can pose a serious risk to their pregnancy, and the baby may become infected while pregnant. Syphilis during pregnancy is increasing across the U.S., and can cause miscarriage, prematurity, low birth weight, and severe anemia. CDC recommends all expecting mothers to be tested for all STIs by the first prenatal visit. If positive, health practitioners can recommend a safe form of treatment for their patients.

Individuals who have multiple partners and people who identify as LGBTQ+ have an increased risk of having an STI, so CDC recommends getting screened once a year.<sup>2</sup>

#### Geographic Variation

STIs can occur anywhere there is bodily fluid exchange. Stigma and poor sexual education are the primary reasons

for high transmission post infection. Areas with high STI rates are near urban centers and within populations experiencing limited access to clinical treatments.

#### Topics Addressed for This Indicator are:

- Syphilis incidence.
- Gonorrhea incidence.
- Chlamydia incidence.
- HIV incidence.

#### Highlights

Data are retrieved from the ADPH Office of Sexually Transmitted Diseases (STDs) and the Office of HIV Prevention and Care:

- STI rates have been increasing every year, especially in person ages 15-24 years old.
- AA/black individuals were nearly three times more likely to be diagnosed with HIV than white individuals.

#### Risk Factors:

- Multiple sexual partners.
- Previous STIs.
- Commercial sex work.
- Intravenous drug use.
- Unprotected sex.
- Dating violence and sexual assault.

## Syphilis Incidence

Syphilis is caused by bacterium *Treponema pallidum* and is one of the most reported STIs in both AL and the U.S.:

- The Syphilis rate for males is three times higher than females in AL.
- The rates were highest in 1524 years old in 2019, increasing by 21.8 new cases per 100,000 persons since 2018.
- AA/black persons with syphilis have case rates nearly six times higher than white persons with syphilis in 2019 (75.2 new cases compared to 12.7 new cases per 100,000 persons).
- Hispanic persons with syphilis doubled by case and rate from 2018 to 2019.

	2018		2019	
	Count	Rate per 100,000	Count	Rate per 100,000
<b>AL</b>	<b>1,243</b>	<b>25.4</b>	<b>1,483</b>	<b>30.2</b>
<b>U.S.</b>	<b>115,062</b>	<b>35.2</b>	<b>129,813</b>	<b>39.7</b>
<b>Public Health Districts</b>				
Northern	214	19.6	288	26.4
Northeastern	83	10.3	108	13.3
West Central	87	20.1	143	33.0
Jefferson	293	44.5	257	39.0
East Central	270	38.1	343	48.4
Southeastern	106	28.0	98	25.9
Southwestern	45	10.9	46	11.2
Mobile	145	35.1	200	48.4
<b>Geographic Variation</b>				
N/A	-	-	-	-
<b>Sex</b>				
Female	290	11.4	392	15.5
Male	953	40.2	1,091	46.0
<b>Race</b>				
AA/black	830	64.0	976	75.2
Hispanic or Latino	26	11.6	53	23.7
White	339	10.6	405	12.7
<b>Household Income</b>				
N/A	-	-	-	-
<b>Age (in years)</b>				
15-24	369	58.0	507	79.8
25-34	476	73.5	483	74.6
35-44	196	33.0	269	45.3
45-54	123	19.9	112	18.2
55-64	61	9.3	75	11.4
65+	17	2.0	9	1.1
<b>Education</b>				
N/A	-	-	-	-

## Gonorrhea Incidence

Gonorrhea, caused by the bacterium *Neisseria gonorrhoeae*, is the second most reported STI in both AL and the U.S.:

- The Northeastern Public Health District had the lowest case rate, while Jefferson County had the highest rate in 2019.
- Gonorrhea rates are higher in males compared to females (304.4 new cases compared to 261.0 new cases per 100,000 persons).
- The highest rates of infection are between ages 15-24 years old in 2019 (1,143.8 cases per 100,000 persons).

	2018		2019 Count, Rate per 100,000	
	Count	Rate per 100,000	Count	Rate per 100,000
<b>AL</b>	<b>12,954</b>	<b>264.2</b>	<b>13,844</b>	<b>282.3</b>
<b>U.S.</b>	<b>583,405</b>	<b>179.1</b>	<b>616,392</b>	<b>188.4</b>
<b>Public Health Districts</b>				
Northern	2,329	217.7	2,270	259.0
Northeastern	1,343	166.7	1,548	191.2
West Central	1,081	248.9	1,082	249.4
Jefferson	2,819	427.6	2,428	368.7
East Central	2,459	347.9	2,461	347.5
Southeastern	1,097	290.0	1,252	330.4
Southwestern	651	160.1	792	192.4
Mobile	1,165	281.4	1,511	365.7
<b>Geographic Variation</b>				
N/A	-	-	-	-
<b>Sex</b>				
Female	6,262	247.2	6,613	261.0
Male	6,655	280.9	7,213	304.4
<b>Race</b>				
AA/black	6,222	479.4	6,386	492.1
Hispanic or Latino	133	59.6	117	52.4
White	1,820	56.9	2,007	62.7
<b>Household Income</b>				
N/A	-	-	-	-
<b>Age (in years)</b>				
15-24	7,082	1,114.0	7,271	1,143.8
25-34	3,909	604.0	4,375	676.0
35-44	1,242	209.3	1,415	238.5
45-54	408	66.2	472	76.5
55-64	150	22.8	185	28.1
65+	39	4.6	38	4.5
<b>Education</b>				
N/A	-	-	-	-

## Chlamydia Incidence

Chlamydia, caused by the bacterium *chlamydia trachomatis*, is the most reported STI in both AL and the U.S.:

- AL ranks eighth nationally in chlamydia transmission, which is an improvement from its previous rank of third in 2014. Within the state, chlamydia cases are still on the rise.
- AA/blacks have the higher rates of disease compared to white (908.6 new cases compared to 124.7 new cases per 100,000 persons).
- Females have higher rates of disease compared to males.

- Young adults aged 15-24 years old have the highest rates of disease compared to other age groups (3,255.6 new cases per 100,000 persons).

	2018		2019	
	Count	Rate per 100,000	Count	Rate per 100,000
<b>AL</b>	<b>29,396</b>	<b>599.5</b>	<b>30,042</b>	<b>612.7</b>
<b>U.S.</b>	<b>1.758M</b>	<b>537.5</b>	<b>1.809M</b>	<b>552.8</b>
<b>Public Health Districts</b>				
Northern	4,911	459.1	5,479	512.2
Northeastern	3,163	392.5	3,674	453.9
West Central	3,070	706.8	2,713	625.3
Jefferson	5,298	803.7	4,659	707.4
East Central	5,602	792.6	5,437	767.7
Southeastern	2,434	643.3	2,567	677.4
Southwestern	1,867	459.0	2,153	523.0
Mobile	3,029	731.7	3,359	812.9
<b>Geographic Variation</b>				
N/A	-	-	-	-
<b>Sex</b>				
Female	20,285	800.6	20,562	811.6
Male	9,013	380.4	9,418	397.5
<b>Race</b>				
AA/black	12,157	936.8	11,791	908.6
Hispanic or Latino	556	249.0	651	291.6
White	3,997	124.9	3,992	124.7
<b>Household Income</b>				
N/A	-	-	-	-
<b>Age (in years)</b>				
15-24	20,677	3,252.6	20,696	3,255.6
25-34	6,668	1,030.2	7,064	1,091.4
35-44	1,244	209.7	1,456	245.4
45-54	347	56.3	407	66.0
55-64	103	15.7	107	16.3
65+	30	3.5	24	2.8
<b>Education</b>				
N/A	-	-	-	-

## Human Immunodeficiency Virus Incidence

While male-to-male sexual activity continues to be the predominant mode of exposure for HIV infection, heterosexual contact is the second most common mode of exposure.

There are persons living with HIV in every county in AL, and the number continues to increase each year. In 2019, Jefferson County accounted for 20 percent of all new cases (128 cases).

AL is experiencing a downward shift in the age distribution of newly diagnosed HIV infections as young adults (ages 25-34 years old) emerged as the most affected age group:

- At the end of 2019, 14,345 AL residents were known to be living with HIV and 6,432 residents (44.8 percent) had progressed to acquired immunodeficiency syndrome (AIDS).
- Rural AL HIV incidence rate is 5.2 cases per 100,000 persons. Urban AL HIV incidence rate is 16.9 cases per 100,000 persons. Some cases could not be confirmed to an individual's county, but the case was confirmed within the district.
- AA/blacks continue to be disproportionately affected by HIV in AL. Nearly 72 percent of newly diagnosed HIV infections occurred in AA/blacks in 2019.
- AA/black individuals were nearly 3 times more likely to be diagnosed with HIV than white individuals (456 compared to 152 individuals, respectively).

	Count	Rate (per 100,000)
<b>AL</b>	<b>635</b>	<b>13.1</b>
<b>U.S.</b>	<b>36,801</b>	<b>12.6</b>
<b>Public Health Districts</b>		
Northern	80	7.5
Northeastern	39	4.8
West Central	55	12.7
Jefferson	128	19.4
East Central	159	22.5
Southeastern	45	11.9
Southwestern	23	5.7
Mobile	106	25.6
<b>Geographic Variation</b>		
Rural	110	5.2
Urban	472	16.9
<b>Sex</b>		
Female	136	5.4
Male	499	21.1
<b>Race</b>		
AA/black	456	35.1
White	152	4.7
Multi-racial	12	13.8
<b>Household Income</b>		
N/A	-	-
<b>Age (in years)</b>		
15-24	166	26.1
25-34	220	34.0
35-44	119	20.1

45-54	75	12.2
55-64	46	7.0
65+	12	1.4
<b>Education</b>		
N/A	-	-

## A Closer Look into Sexually Transmitted Infections

HIV affects over one million people in the U.S. per year. In AL, there were 13,723 current diagnosed cases of HIV and 635 newly diagnosed HIV infections in 2019. About 65 percent of individuals living with HIV were virally suppressed.<sup>2</sup> Early detection and follow-up of an HIV-positive result can reduce patient mortality and prevent future transmissions. The Office of HIV Prevention and Care partnered with a variety of community partners, including AIDS service organizations, community-based organizations, and faith-based organizations, to create the End HIV AL (EHA) committee.<sup>3</sup>

### End HIV Assessment

The purpose of the EHA committee is to identify community members and develop a plan to reduce new HIV infections in AL. Provider interviews, focus groups, surveys, and community meetings helped shape the EHA team’s work. Listening sessions with community members were critical to the process. The sessions prompted the workgroup to:

- Convene focus groups in rural areas throughout the state.
- Set up recruitment booths at health fairs and conferences.
- Gain access to college campuses and other public institutions.
- Establish an EHA planning group.

Through the EHA committee’s direction, the team expanded its reach to rural areas by providing a telephone interview survey and an online focus group. The finalized community needs survey tailored sensitive questions towards SDOHs and allowed for a deeper understanding of the impact of health issues for persons living with HIV. The prioritized population for this community health assessment included persons who identify as transgender; cisgender women, especially AA/black women; people who inject drugs; and gay and bisexual men (GBM) and other men who have sex with men, especially AA/black and Hispanic/Latinx GBM. Other vulnerable populations included clients with unstable housing or homelessness. The committee also wanted to include underrepresented

populations such as Hispanic/Latinx individuals; therefore, a translator was hired to attend program meetings and interpret documents, surveys, and emails.

Quantitative data responses were collected through an online survey between March and July 2020 to address the disparities in HIV incidence. Over 400 individuals participated in the process. Four overarching themes were identified as barriers to HIV care: stigma, education, lack of resources, and cultural considerations. These were further explained to include fear of discrimination, lack of insurance, lack of transportation to services, and inadequate income. The prioritized population identified six needs for HIV care listed below. This section provides further discussion on testing sites and partner services with supporting quantitative statistics and qualitative stakeholder feedback.

The identified needs in the priority population are:

- HIV testing.
- STI testing.
- Hepatitis C testing.
- Partner services.
- Health education.
- Prevention services.

### HIV and STI Testing Sites

Education about safe sexual health practices (including regular condom use, regular STI testing, and open communication with partners) is one preventative measure to spreading STIs. Provider interviews highlighted reoccurring themes about improving access to accurate, culturally appropriate, and timely sexual health information. Additionally, regular testing can also prevent unknowingly spreading disease. Since STIs can increase the risk of spreading HIV, surveillance data can inform the public about high-risk sexual behavior.<sup>2</sup> In the 2019 ADPH STI report:

- There were 319 chlamydia cases co-infected with HIV.<sup>4</sup>
- There were 331 gonorrhea cases co-infected with HIV.<sup>4</sup>
- There were 136 primary and secondary syphilis cases were co-infected with HIV.<sup>4</sup>
- Chlamydia was the most common STI in 2019. The most vulnerable populations were AA/black persons and individuals aged 15-24 years old.<sup>4</sup>

HIV and STI testing sites can be located at health departments and some medical offices. While most individuals living with HIV live in more urban counties,

rural counties often are medical care deserts without adequate access to standard medical care or specialized HIV care.<sup>3</sup> In 2010, ADPH increased the number of location sites for disproportionate populations affected by HIV, such as people who use injection drugs, AA/black GBM, and Hispanic/Latinx GBM. Survey participants reported that the community is still unsure where HIV and STI testing sites are located, noting that rural areas are underserved by testing sites.

### Partner Services

Of the 637 individuals living with HIV linked to care in 2019, 77 percent were linked within 30 days of care. The Northeastern Public Health District had the highest percent link to care (87 percent).<sup>3</sup> Community members reported that most individuals received an appointment or were directed to locations that suited their needs:

- An appointment with a health department or clinic was given to 45 individuals.
- Information on where to receive HIV care was given to 45 individuals.
- Clinical staff or peers went with 11 individuals to their appointment.

Cost of services was a significant barrier to care among survey respondents (59.8 percent), noting that almost 40 percent of individuals living with HIV had no insurance at the time of diagnosis. The insurance status of Spanish-speaking clients improved over the interval between diagnosis and survey completion (72.0 percent to 91.7 percent). Additionally, Spanish-speaking clients found that access was less accommodating than English-speaking clients, specifically for insurance assistance (64.4 percent and 36.8 percent) and emergency financial assistance (64.3 percent and 0.0 percent).<sup>3</sup>

## Data Sources

**Table 6.1 – Syphilis Cases, 2018–2019.** ADPH, Division of Sexually Transmitted Diseases (STD) Prevention and Control, 2019. Data requested July 2021.

**Table 6.2 – Gonorrhea Cases, 2018–2019.** ADPH, Division of STD Prevention and Control, 2019. Data requested July 2021.

**Table 6.3 – Chlamydia Cases, 2018–2019.** ADPH, Division of STD Prevention and Control, 2019. Data requested July 2021.

**Table 6.4 – HIV Incidence, 2019.** ADPH, Division of STD Prevention and Control, 2019. Data requested July 2021.

## Written Sources

1. ADPH, Division of STD Prevention and Control, 2019.
2. CDC, STIs and HIV Fact Sheet, 2020.
3. ADPH Office of HIV Prevention and Care, Ending the HIV Epidemic, 2020.
4. ADPH Division of STD Prevention and Control, STD Annual Report 2019, 2020.

## Community Resources

### 1917 Clinic

Location: Jefferson County, AL  
Type: Non-profit Organization

### Act Against AIDS

Location: Nationwide  
Type: CDC Program

### AL Health Education Center

Location: Statewide  
Type: Education Center

### AIDS AL

Location: Washington, DC  
Type: Non-profit Organization

### Birmingham AIDS Organization

Location: Jefferson County, AL  
Type: Non-profit Organization

### CDC

Location: Atlanta, GA  
Type: Federal Government Organization

### Choices Pregnancy Clinic

Location: Tuscaloosa County, AL  
Type: Health Clinic Facility

### Housing Opportunities for Persons with AIDS

Location: Statewide  
Type: Federally Funded Program

### Magic City Acceptance Center

Location: Jefferson County, AL  
Type: Non-profit Organization

### National HIV, STD, and Viral Hepatitis Testing Resources

Location: Nationwide  
Type: CDC Program

### Planned Parenthood

Location: Mobile County, AL  
Type: Non-profit Organization

### Thrive AL

Location: Madison County, AL  
Type: Health Clinic Facility