

CHAPTER 3

REPORTABLE DISEASES, ARIZONA, 2013-2023

3A. NON-SEXUALLY TRANSMITTED DISEASES

3B. SEXUALLY TRANSMITTED DISEASES

**3C. HUMAN IMMUNODEFICIENCY VIRUS (HIV)
DISEASE AND ACQUIRED IMMUNODEFICIENCY
SYNDROME (AIDS)**



3A.

NON-SEXUALLY TRANSMITTED DISEASES

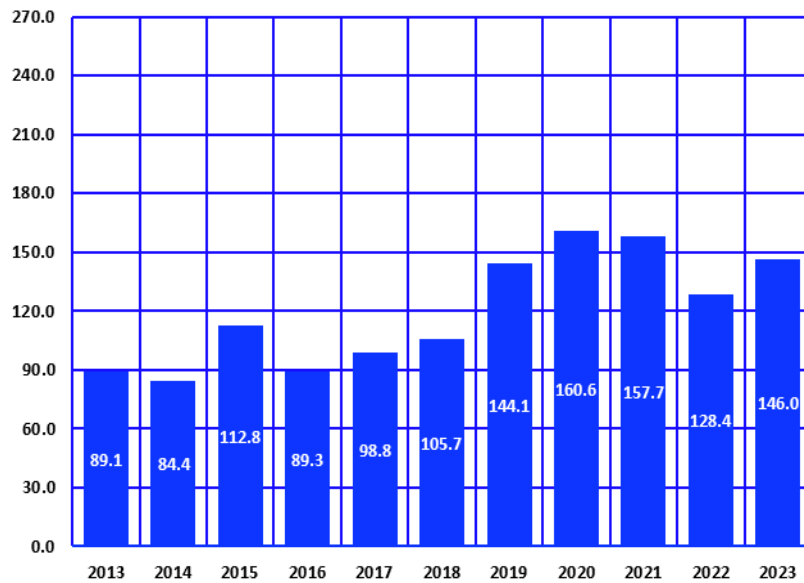
The infectious diseases designated as notifiable vary slightly by state. A notifiable disease is one for which regular, frequent, and timely information regarding individual cases is considered necessary for the prevention and control of the disease. All states generally report the internationally quarantinable diseases (i.e., cholera or plague) in compliance with the World Health Organization's International Health Regulations.

Data on morbidity, levels of disease, and disability in the Arizona population are obtained for certain infectious diseases that must be reported by law. The Bureau of Infectious Disease and Services conducts surveillance and monitoring of these reportable diseases and it provided data for the respective sections of this chapter and sections 5F, 6A, and 6B.

This section provides some illustrative findings from the tabulated data. It is not intended to be an exhaustive analysis of the incidence of infectious diseases in the State. There is more information available online on the website for Infectious Disease Services at: <http://azdhs.gov/phs/oids/index.htm>.

3A. NON-SEXUALLY TRANSMITTED DISEASES

Figure 3A-1
Trends in the Incidence Rates^a of Valley Fever (Coccidioidomycosis)
by Year, Arizona, 2013-2023

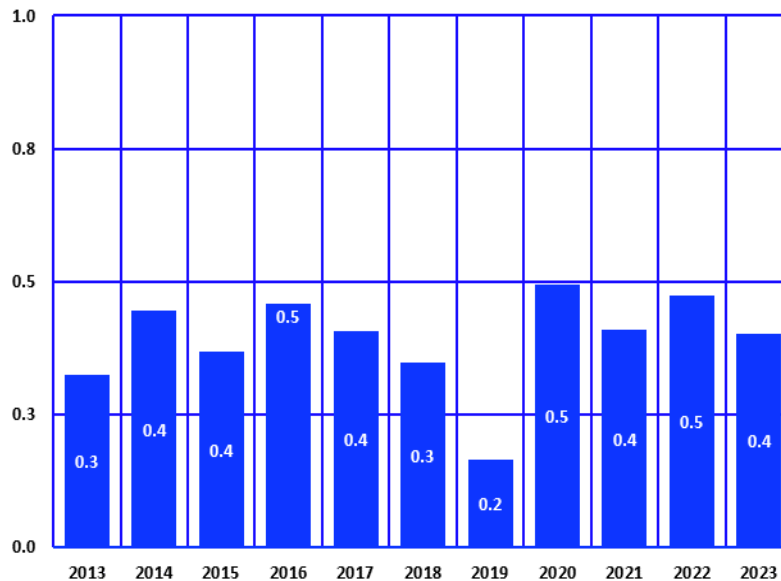


Note: ^a Number of cases per 100,000 population.

Coccidioidomycosis or *Valley Fever* is a fungal infection caused by inhalation of airborne spores that are present in the soil of southwestern United States, California, and parts of Central and South America. Most infections are asymptomatic or self-limited in patients with healthy immune systems. In rare instances, severe lung disease or disseminated infection can develop in patients.

Valley Fever imposed the greatest burden on morbidity among all non-sexually transmitted, notifiable diseases in Arizona in 2023. The reported incidence of Valley Fever increased 15.5 percent from 2022 (n=9,515) to (n=10,990) in 2023. The 2023 incidence rate of 146.0/100,000 (**Figure 3A-1, Table 5F-2**) was 13.7 percent higher than the incidence rate of 128.4/100,000 in 2022, but was 63.9 percent higher than the unprecedented incidence rate of 89.1/100,000 in 2013.

Figure 3A-2
Trends in Case Fatality Rates^a for Valley Fever (Coccidioidomycosis)
by Year, Arizona, 2013-2023



Note: ^a Number of deaths per 100 reported cases.

Forty-four of the 10,990 Arizonans who had *Valley Fever* in 2023 died from it (**Table 3A-2**) for a case fatality rate of 0.4 deaths per 100 cases (**Figure 3A-2**). The 2023 case fatality rate for *Coccidioidomycosis* was 23.5 percent higher than in 2013.

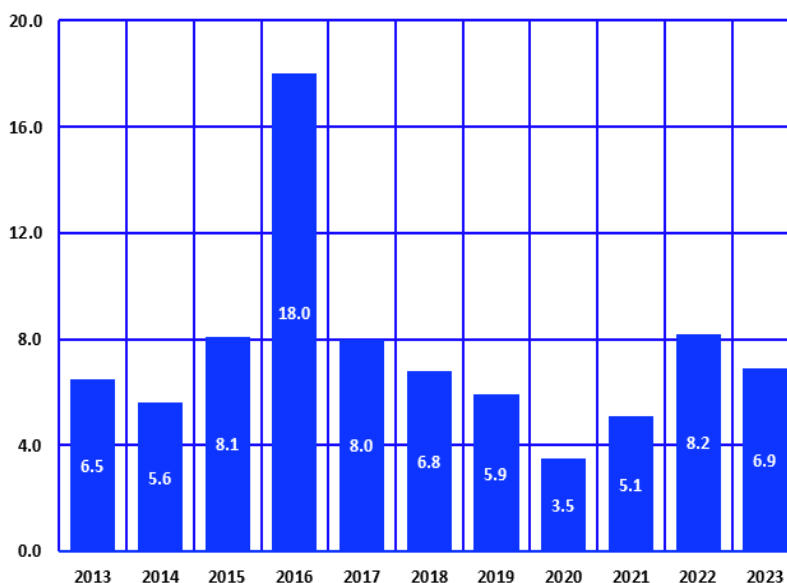
3A. NON-SEXUALLY TRANSMITTED DISEASES

Shigellosis is an infectious disease caused by a group of bacteria called *Shigella* that can cause diarrhea in humans. To spread from one person to another, *Shigellae* can be transmitted through contaminated foods, sexual contact, and water used for drinking or recreational purposes.

From 2013–2023, *shigellosis* was the third most common enteric disease to afflict Arizonans after *campylobacteriosis* and *salmonellosis* (**Table 3A-1**).

The number of reported cases of *shigellosis* has decreased by 88 cases from 604 in 2022 to 516 in 2023. Compared to 2022, the incidence rate of *shigellosis* was 15.9 percent lower at approximately 7 reported cases/100,000 population in 2023 (**Figure 3A-3**).

Figure 3A-3
Trends in the Incidence Rates^a of Shigellosis by Year,
Arizona, 2013-2023

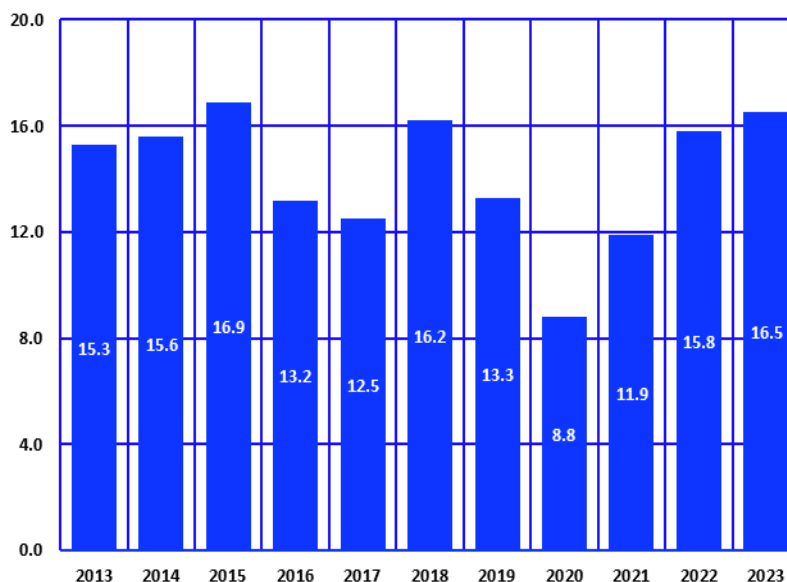


Note: ^a Number of reported cases per 100,000 population.

Salmonellosis is a bacterial infection. Most of those who are infected with *Salmonella* develop diarrhea, fever, and abdominal cramps.

The incidence rate of *salmonellosis* increased 4.4 percent from 15.8/100,000 in 2022 to 16.5/100,000 in 2023 (**Figure 3A-4**). The risk of *salmonellosis* was substantially higher in Graham (65.6/100,000), Santa Cruz (48.0/100,000), Navajo (40.1/100,000), Apache (29.9/100,000), and La Paz (29.6/100,000) than the remaining counties (**Table 5F-2**).

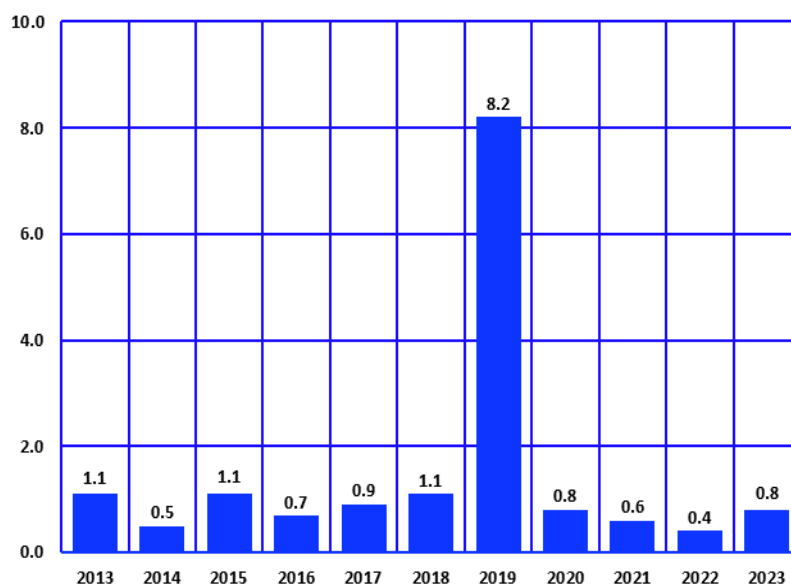
Figure 3A-4
Trends in the Incidence Rates^a of Salmonellosis^b by Year,
Arizona, 2013-2023



Notes: ^a Number of reported cases per 100,000 population; ^b Excluding *S. Typhi* and *S. Paratyphi*.

3A. NON-SEXUALLY TRANSMITTED DISEASES

Figure 3A-5
Trends in the Incidence Rates^a of Hepatitis A by Year,
Arizona, 2013-2023

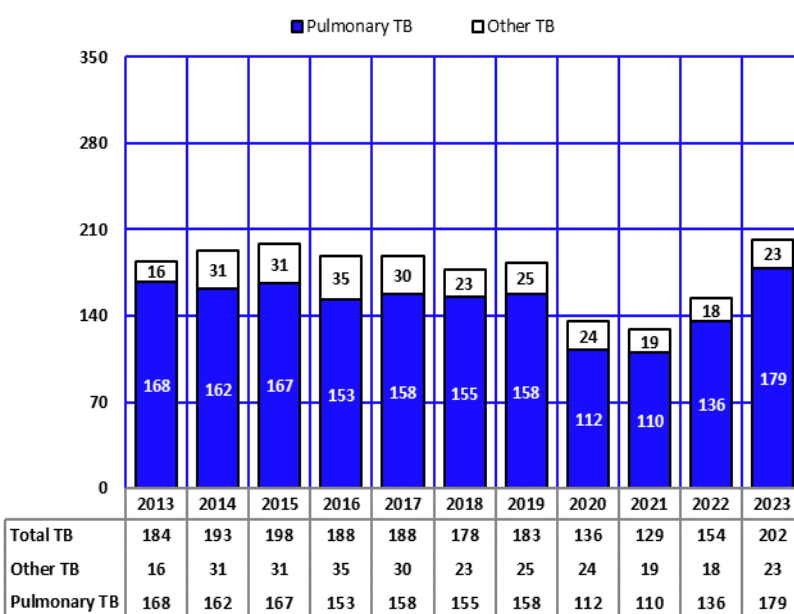


Note: ^a Number of reported cases per 100,000 population.

Hepatitis A is a liver disease caused by the *hepatitis A* virus. During 1995-1996, highly effective *hepatitis A* vaccines became available in the United States. Routine childhood vaccination for *hepatitis A* was recommended in 1999. The expansion of recommendations for routine *hepatitis A* vaccination to include all children in the United States aged 12-23 months is likely to reduce hepatitis rates further.

In Arizona, the incidence rate of *hepatitis A* was 0.8/100,000 in 2023. The highest rate recorded during the 2013-2023 period was 8.2 in 2019. The 2023 incidence rate was approximately 10 times lower than the 2019 rate (8.2/100,000; **Figure 3A-5**).

Figure 3A-6
Trends in the Incidence of Pulmonary Tuberculosis and Total Tuberculosis^a
by Year, Arizona, 2013-2023



Note: ^a Number of reported cases by year.

Tuberculosis (TB) is an infectious disease that usually attacks the lungs, but can attack almost any part of the body. Tuberculosis is spread from person to person through the air.

The number of reported cases of *pulmonary tuberculosis* increased from 136 cases in 2022 to 179 reported cases in 2023. The number of reported cases of tuberculosis other than pulmonary increased from 18 in 2022 to 23 in 2023 cases (**Figure 3A-6, Table 3A-1**). The incidence rate of *total* tuberculosis increased from 2022 2.1/100,000 to 2.4/100,000 in 2023 (**Table 5F-2**).

Pulmonary tuberculosis accounted for 88.6 percent of all tuberculosis infections in 2023 (**Table 3A-1**). Ten Arizonans who had *tuberculosis* died from it in 2023, a decrease from 16 in 2021 (**Table 3A-2**).

**TABLE 3A-1
NUMBER OF REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY CATEGORY, ARIZONA, 2013-2023**

Disease	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Vaccine Preventable											
Measles	*	*	7	31	0	0	*	0	0	*	0
Mumps	*	12	*	7	34	15	103	10	*	*	6
Pertussis	1,440	517	580	287	420	239	379	331	188	106	344
Pertussis confirmed cases	(1,068)	(287)	(341)	(154)	(262)	(135)	(207)	(189)	(82)	(17)	(176)
Rubella	0	0	0	0	*	0	0	*	0	0	0
Congenital Rubella Syndrome	0	0	0	0	0	0	0	0	0	0	0
<i>Haemophilus influenzae</i> type b (invasive, age < 5 years)	*	0	*	*	*	*	*	0	*	*	0
Tetanus	0	0	*	*	0	0	*	0	*	0	0
Varicella (chickenpox)	354	300	270	279	189	245	307	72	98	122	211
Central Nervous System											
Aseptic Meningitis	343	288	189	146	81	N/A	N/A	N/A	N/A	N/A	N/A
Meningococcal Disease	12	9	*	*	*	*	*	*	*	7	8
Viral Encephalitis	*	*	*	*	*	*	16	*	34	36	22
Enteritides											
Amebiasis	21	24	*	6	16	21	20	12	19	11	*
Campylobacteriosis	846	939	1,379	1,241	1,372	1,269	1,615	1,050	1,634	1,508	1,361
Cholera	0	0	0	0	0	*	0	0	0	0	0
Cryptosporidiosis	42	46	62	549	112	203	143	80	110	127	129
<i>E. coli</i> O157:H7	246	98	128	148	166	296	297	186	280	303	329
Giardiasis	115	119	143	125	145	149	143	84	91	113	160
Salmonellosis (exl. <i>S. Typhi</i> & <i>S. Paratyphi</i>)	1,007	1,040	1,143	899	874	1,149	954	631	868	1,173	1,242
<i>Salmonella</i> Paratyphi A	*	*	*	*	*	*	*	*	0	0	*
<i>Salmonella</i> Paratyphi B	*	*	16	0	0	0	0	0	0	0	*
<i>Salmonella</i> Paratyphi C	0	0	0	0	0	0	0	0	0	0	0
Shigellosis	428	376	549	1,231	555	478	426	253	375	604	516
Typhoid Fever	12	*	*	9	*	9	7	*	7	*	7
Mycosis											
Coccidioidomycosis (Valley Fever)	5,861	5,624	7,622	6,101	6,885	7,478	10,358	11,523	11,489	9,515	10,990
Hepatitides											
Hepatitis A	73	35	72	46	61	80	590	59	45	29	61
Hepatitis B (acute)	50	38	43	16	41	30	49	33	25	38	37
Hepatitis D	0	*	0	0	0	*	0	0	*	0	0
Hepatitis E	0	*	0	0	*	0	*	*	*	*	*
Tuberculosis											
Pulmonary TB	168	162	167	153	158	155	158	112	110	136	179
Total TB	184	193	198	188	188	178	183	136	129	154	202

TABLE 3A-1 (continued)
NUMBER OF REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY CATEGORY, ARIZONA, 2013-2023

Disease	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Zoonoses/Vector-borne											
Brucellosis	*	6	*	*	8	*	*	6	*	*	*
Colorado Tick Fever	0	*	*	0	0	0	0	0	0	*	0
Dengue	*	91	24	14	*	10	18	*	8	18	31
Ehrlichiosis	*	*	*	*	*	*	*	0	*	8	9
Hantavirus Pulmonary Syndrome	*	*	*	*	*	0	0	*	0	*	6
Human Rabies	0	0	0	0	0	0	0	0	0	0	0
Lyme Disease	32	21	12	13	28	7	10	*	*	9	16
Malaria	33	25	14	38	26	24	30	12	26	26	51
Plague	0	0	*	0	*	0	0	*	0	0	0
Relapsing Fever, Tick-borne	*	12	*	*	*	*	*	0	0	*	0
Rocky Mountain Spotted Fever	63	16	17	23	27	38	48	35	16	38	48
St. Louis Encephalitis	0	*	23	0	6	0	9	6	12	17	0
Tularemia	0	0	*	*	*	0	*	*	0	*	*
West Nile Virus	62	108	103	78	110	27	174	11	1,710	60	82
Other											
Botulism	*	*	*	*	*	12	*	7	*	*	*
Legionellosis	69	59	93	76	74	83	93	90	112	123	115
Listeriosis	*	14	*	6	8	6	13	7	9	8	9
Methicillin Resistant <i>S. aureus</i> (invasive)	1,066	1,178	1,155	1,265	1,355	1,529	1,467	1,681	1,498	1,462	1,539
Streptococcal-Group A (invasive)	231	250	351	555	614	758	790	805	966	1,231	1,337
Streptococcal-Group B (invasive, age <90 d)	35	41	61	60	63	40	44	37	28	34	32
<i>Streptococcus pneumoniae</i> (invasive)	786	724	678	716	707	862	740	668	798	1,228	1,133
Toxic Shock Syndrome	*	6	*	*	0	*	0	*	0	*	*
<i>Vibrio</i> spp. (except toxogenic <i>V.cholerae</i>)	19	36	33	19	25	54	52	34	51	78	61
Yersiniosis (except <i>Y. pestis</i>)	9	*	12	14	20	11	58	53	72	106	108

Notes: * Cell suppressed due to non-zero count less than 6; Non-resident cases have been excluded. Only incident cases are reported. Cases are counted by date reported to public health. Case counts include both probable and confirmed cases unless otherwise indicated. *E. coli* has included both *E. coli* O157:H7 and Shiga-toxin positive *E. coli* since October 2004. *Haemophilus influenzae* type B includes all invasive *H. influenzae* B, not just meningitis, as of 1995. Meningococcal disease includes all invasive disease caused by *Neisseria meningitidis*, not just meningitis. Animal rabies cases are not included. Reported coccidioidomycosis cases were elevated from June 2009 through December 2012 and then declined in 2013 due to changes in reporting practices and laboratory testing from a major commercial laboratory. A change in the criteria for counting Lyme disease in 2013 may account for the increase in cases in that year. Aseptic meningitis and Reyes syndrome ceased being reportable in January 2018. For additional statistics on these diseases, please see:

<https://azdhs.gov/preparedness/epidemiology-disease-control/index.php#data-stats>

Source: Arizona Department of Health Services, Bureau of Infectious Disease and Services.

TABLE 3A-2
NUMBER OF DEATHS FROM SELECTED NOTIFIABLE DISEASES BY CATEGORY AND YEAR,
ARIZONA, 2013-2023

ICD-9/ICD-10 codes	Disease	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
VACCINE PREVENTABLE												
055/B05	Measles	0	0	0	0	0	0	0	0	0	0	0
072/B26	Mumps	0	0	*	0	0	0	0	0	0	0	0
033/A37	Whooping cough (pertussis)	0	0	0	*	*	0	0	0	0	0	0
056/B06	Rubella	0	0	0	0	0	0	0	0	0	0	0
052/B01	Chickenpox	0	*	0	0	0	*	*	0	0	0	0
CENTRAL NERVOUS SYSTEM												
047.9/G03.0	Aseptic meningitis	0	0	*	0	*	*	0	*	*	*	*
036/A39	Meningococcal infections	*	*	0	0	0	0	*	0	0	*	0
049.9/A86	Viral encephalitis	*	*	*	*	*	*	*	*	6	*	*
ENTERITIDES (FOODBORNE)												
006/A06	Amebiasis	0	*	0	0	0	0	0	0	0	0	0
007.1/A07.1	Giardiasis	0	0	0	0	0	0	0	0	0	0	0
003/A02	Salmonellosis (except typhoid)	0	*	*	*	*	*	*	*	*	*	0
004/A03	Shigellosis	*	*	*	0	0	0	0	0	0	0	0
002/A01	Typhoid	0	0	0	0	0	0	0	0	0	0	0
MYCOSIS												
114/B38	Coccidioidomycosis (Valley Fever)	19	25	28	28	28	26	17	57	47	45	44
HEPATITIDES												
070.0-070.1/B15	Hepatitis A	*	*	0	0	0	0	6	0	*	0	0
070.2-070.3/B16	Hepatitis B	9	8	8	10	*	6	6	*	*	*	*
070.4-070.5/B17-B18	Other viral hepatitis	265	248	257	207	191	133	96	90	73	74	63
070.6-070.9/B19	Unspecified	*	*	*	0	*	*	*	*	*	*	*
TUBERCULOSIS												
010-011/A15-A16	Respiratory TB	11	6	9	6	7	*	*	11	8	7	6
010-018/A15-A19	Total TB	15	8	10	7	10	10	10	15	16	10	10
ZONOSSES/VECTOR-BORNE												
023.9/A23	Brucellosis	0	0	*	0	0	0	0	0	0	0	0
061/A90	Dengue	0	0	0	0	0	0	0	0	0	0	0
071/A82	Human Rabies	0	0	0	0	0	0	0	0	0	0	0
084/B50-B54	Malaria	*	0	0	0	0	0	0	0	0	0	0
020/A20	Plague	0	0	0	0	0	0	0	0	0	0	0
082/A77.0	Rocky Mountain Spotted Fever	*	0	0	*	*	0	0	0	*	0	0
021/A21	Tularemia	0	*	0	0	0	0	0	0	0	0	0
OTHER												
482.8/A48.1	Legionellosis	*	*	*	*	0	6	*	*	*	*	*
027.0/A32	Listeriosis	0	*	0	0	0	0	*	0	0	0	*
331.8/G93.7	Reyes Syndrome	0	0	0	0	0	0	0	0	0	0	0
995.0/A48.3	Toxic Shock Syndrome	0	0	0	*	0	0	*	0	*	*	0

Note: * Cell suppressed due to non-zero count less than 6.



3B.

SEXUALLY TRANSMITTED DISEASES

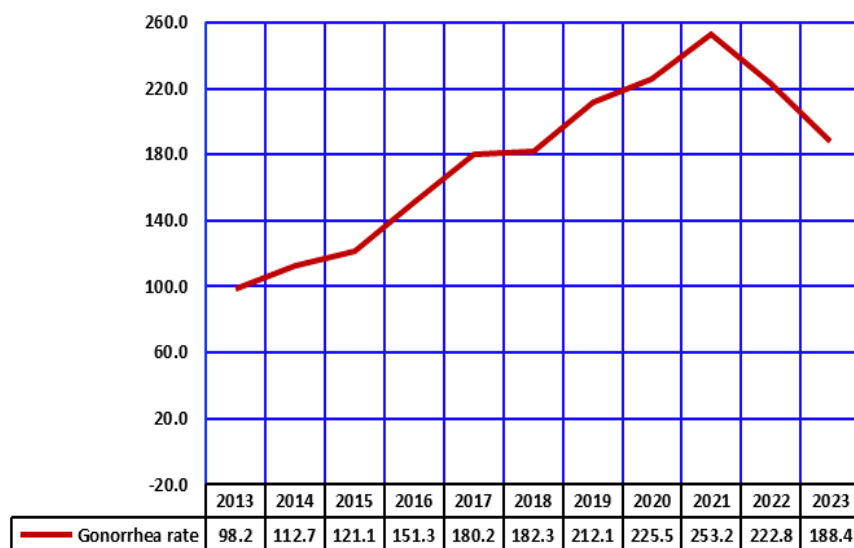
All states require that certain sexually transmitted diseases (STDs) be reported by physicians and other health care providers when they suspect that a case has occurred or they have laboratory confirmation.

It is important to note that disease reporting is likely incomplete and completeness may vary depending on the disease. Moreover, changes in methods for public health surveillance, or implementation of new diagnostic tests can cause changes in disease reporting that are independent of the true incidence of disease.* In this section, STD rates were calculated using denominators from the CDC for years prior to 2018. In the current report, the Arizona Department of Health Services denominators were used to compute the STD rates.

*Centers for Disease Control and Prevention. Summary of notifiable diseases – United States, 2008. Published June 25, 2010, for 2008; Vol. 57 (No. 54). Available online at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5754a1.htm>

3B. SEXUALLY TRANSMITTED DISEASES

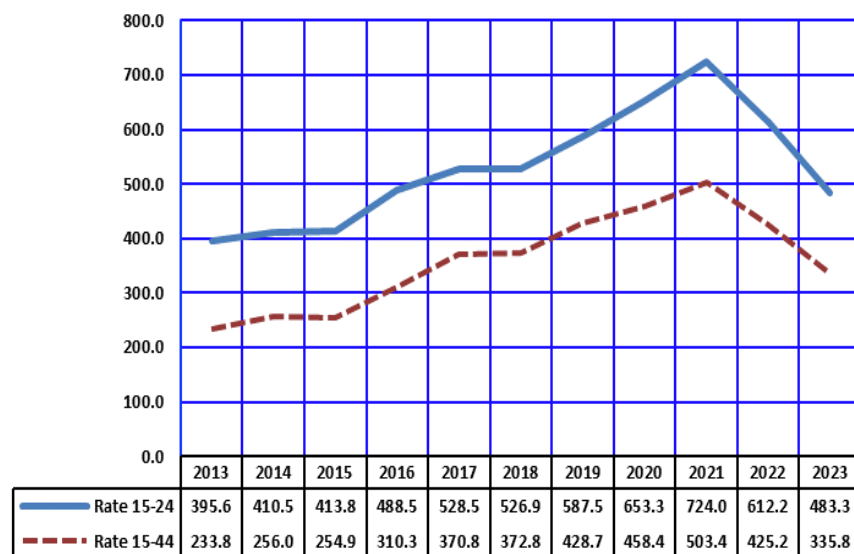
Figure 3B-1
Trends in the Incidence Rates^a of Gonorrhea by Year, Arizona, 2013-2023



Neisseria gonorrhoeae infection is the second most commonly reported notifiable disease in the United States. **(Figure 3B-1)**. Although there was a slight rate decrease in 2022 and 2023, the consistent steady increase in the incidence rate of gonorrhea since 2013 likely resulted from a combination of factors, such as changes in surveillance, increases in the number of tests performed, and actual increases in disease occurrence **(Figure 3B-1)**.

Note: ^a Number of reported cases per 100,000 population.

Figure 3B-2
Trends in the Incidence Rates^a of Gonorrhea among Females aged 15-24 and 15-44 Years, Arizona, 2013-2023



The 2023 incidence rate for gonorrhea was 335.8 per 100,000 for Arizona females aged 15-44 years. Additionally, in 2023 the gonorrhea incidence rate in Arizona females 15-44 years of age was less than incidence rate of females 15-24 years old, which was 483.3 per 100,000.

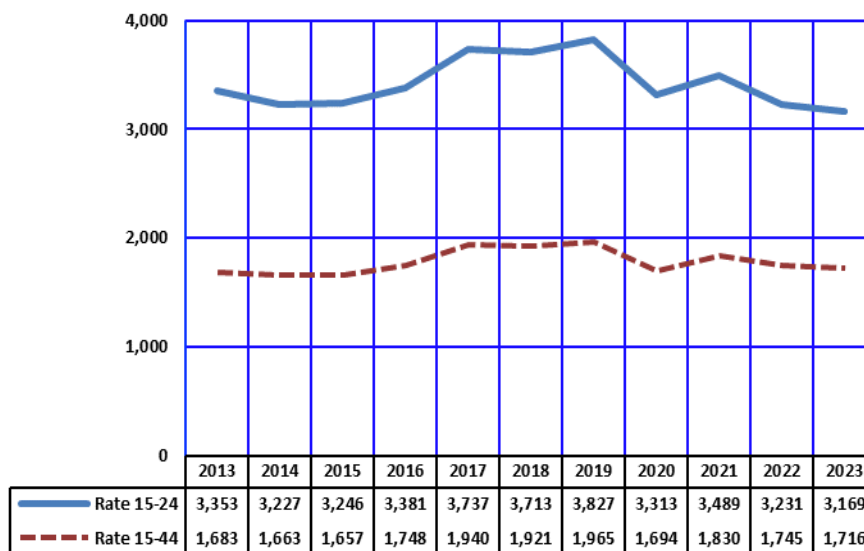
Notes: ^a Number of reported cases per 100,000 females

3B. SEXUALLY TRANSMITTED DISEASES

Figure 3B-3
Trends in the Incidence Rates^a of Chlamydia among Females 15-24 and 15-44 Years, Arizona, 2013-2023

Chlamydia trachomatis is the most prevalent bacterial sexually transmitted disease in the United States (1,648,568 cases in 2023*) with the highest rates reported among adolescents and young adults (**Table 3B-4**). Recent availability of sensitive tests for *chlamydia* using DNA amplification technology undoubtedly contributed to the increase in the number of reported cases in Arizona over the last decade (**Figure 3B-3**, **Table 3B-1**).

The incidence rate of chlamydia among females 15-44 has decreased in 2023 compared to 2022 from 1,745 per 100,000 females to 1,716 per 100,000 females within the age group.



*Most recent publication <https://www.cdc.gov/sti-statistics/annual/summary.html>

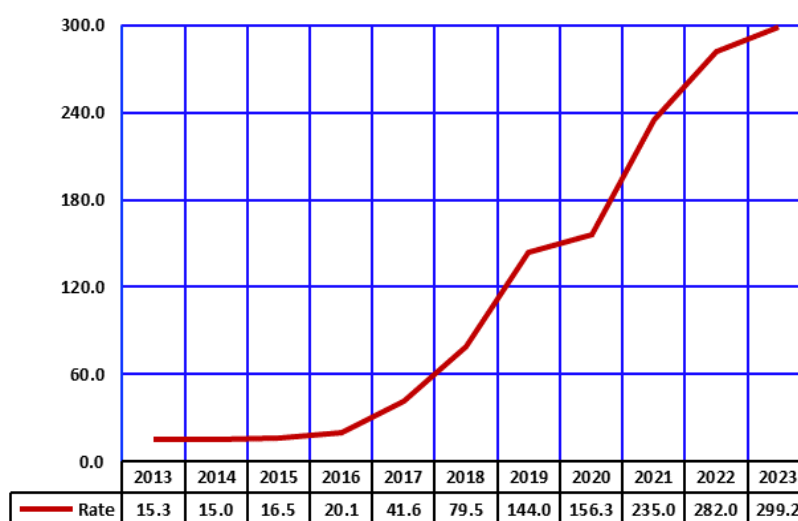
Notes: ^a Number of reported cases per 100,000 females

Congenital syphilis is an infection caused by the spirochete *Treponema pallidum*, which can be passed from the mother to child during fetal development or birth. Not all infants born to infected women will be infected.

In 1988, CDC implemented a new Congenital syphilis case definition. It no longer relies on documentation of infection in the infant; rather, it presumes that an infant is infected if it cannot be proven that an infected mother was adequately treated for syphilis before or during pregnancy.

The Arizona incidence rates of congenital syphilis were for the most part below 20 cases per 100,000 infants from 2013-2016. From 2013-2023, the incidence rate has been sharply increasing. In 2023, the rate was the highest recorded during the 11-year period at 299.2/100,000. (**Figure 3B-4**, **Table 6A-2**). The 2023 incident rate was 19.6 times more than 2013.

Figure 3B-4
Trends in the Incidence Rates^a of Congenital Syphilis by Year, Arizona, 2013-2023



Notes: ^a Number of reported cases per 100,000 births.

**TABLE 3B-1
NUMBER OF REPORTED CASES OF SEXUALLY TRANSMITTED DISEASES BY CATEGORY AND YEAR, ARIZONA, 2013-2023**

Disease	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gonorrhea	6,505	7,585	8,270	10,330	12,514	12,903	15,249	16,180	18,446	16,508	14,181
Gonococcal PID^a	0	0	0	0	*	17	18	27	14	13	12
Resistant Gonorrhea^b	0	*	0	0	0	0	0	0	0	0	0
Syphilis (P & S)^c	290	572	590	721	943	1,052	1,297	1,442	1,981	2,153	1,794
Syphilis-Total^d	966	1,450	1,482	1,907	2,427	3,261	4,049	4,430	6,330	7,500	7,692
Chlamydia	30,923	31,750	32,511	34,923	39,635	40,866	43,219	36,977	41,517	40,816	41,073

Notes: * Cell suppressed due to non-zero count less than 6; ^a PID is pelvic inflammatory disease; ^b Includes PPNG, penicillinase-producing *Neisseria gonorrhoeae*, a form of gonorrhea which is resistant to penicillin; ^c Primary and secondary syphilis only; ^d Early, late, congenital and other; since 2005, the table includes all positive laboratory results for chlamydia and gonorrhea with or without communicable disease report.

Source: Arizona Department of Health Services, Bureau of Epidemiology and Disease Control, Office of STI Control.

**TABLE 3B-2
NUMBER OF DEATHS ASSOCIATED WITH SPECIFIED SEXUALLY TRANSMITTED DISEASES BY CATEGORY AND YEAR,
ARIZONA, 2013-2023**

Disease	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gonococcal infections	0	0	0	0	0	0	0	0	*	0	0
Syphilis-Total	*	*	0	*	*	*	0	0	*	0	*

attributed to Gonorrhea or Syphilis based on ICD code. Note this method differs from Nationally Notifiable Disease Surveillance System criteria, and information from these two systems is not comparable.

TABLE 3B-3
FREQUENCY OF REPORTED CASES OF GONORRHEA, CHLAMYDIA, AND EARLY SYPHILIS
BY AGE AND GENDER, ARIZONA, 2023

Age group	GONORRHEA				CHLAMYDIA				EARLY SYPHILIS			
	Males	Females	Unknown or Transgender	Total	Males	Females	Unknown or Transgender	Total	Males	Females	Unknown or Transgender	Total
0-4	0	*	0	0†	*	*	0	10†	0	0	0	0
5-9	0	*	0	0†	0	*	0	0†	0	0	0	0
10-14	*	31	0	40†	26	151	0	177	*	*	0	0†
15-19	759	927	*	1,689	2,340	6,131	12	8,483	60	59	0	119
20-24	1,797	1,427	*	3,228	4,425	9,306	18	13,749	274	178	0	452
25-29	1,781	984	6	2,771	3,186	4,751	8	7,945	413	198	0	611
30-34	1,727	736	0	2,463	2,185	2,615	9	4,809	566	231	0	797
35-39	1,087	500	*	1,588	1,260	1,338	*	2,602	348	160	0	508
40-44	718	285	*	1,004	731	690	*	1,423	268	107	0	375
45-49	379	165	0	544	417	360	*	778	188	56	0	244
50-54	262	94	0	356	312	211	0	523	168	34	0	202
55-59	213	46	0	259	186	113	0	299	129	24	0	153
60-64	136	29	0	165	117	51	*	169	91	*	0	90†
65-over	65	9	*	77	84	19	*	106	59	*	0	60†
Total	8,930†	5,240†	20†	14,180†	15,270†	25,740†	60†	41,070†	2,570†	1,060†	0	3,620†

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; since 2005, the table includes all positive laboratory results for chlamydia and gonorrhea with or without communicable disease report.

Source: Arizona Department of Health Services, Bureau of Infectious Disease and Services, Office of STI Control.

TABLE 3B-4
RATES^a OF REPORTED CASES OF GONORRHEA, CHLAMYDIA, AND EARLY SYPHILIS
BY AGE AND GENDER, ARIZONA, 2023

Age group	GONORRHEA			CHLAMYDIA			EARLY SYPHILIS		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
0-4	0.0	**	**	**	**	2.1	0.0	0.0	0.0
5-9	0.0	**	**	0.0	**	**	0.0	0.0	0.0
10-14	**	13.0	7.2	10.5	63.5	36.5	**	**	**
15-19	303.7	388.0	345.5	936.2	2565.9	1735.2	24.0	24.7	24.3
20-24	680.8	575.1	630.4	1676.5	3750.7	2685.1	103.8	71.7	88.3
25-29	637.2	381.5	515.6	1139.9	1842.0	1478.4	147.8	76.8	113.7
30-34	656.8	300.2	484.8	831.0	1066.7	946.5	215.3	94.2	156.9
35-39	444.6	213.0	331.4	515.3	570.1	543.0	142.3	68.2	106.0
40-44	318.6	128.3	224.3	324.3	310.6	317.9	118.9	48.2	83.8
45-49	173.6	74.7	123.8	191.0	162.9	177.1	86.1	25.3	55.5
50-54	122.6	42.9	82.3	146.0	96.3	120.8	78.6	15.5	46.7
55-59	96.6	19.6	56.9	84.3	48.1	65.7	58.5	10.2	33.6
60-64	63.6	12.2	36.5	54.8	21.4	37.4	42.6	**	20.8
65-over	10.2	1.2	5.5	13.1	2.5	7.6	9.2	**	4.5
Total	238.9	138.2	188.4	408.7	679.5	545.8	68.6	27.9	48.1

Notes: ** Cell suppressed due to rate/ratio/percent based on non-zero count less than 6; ^a Number of cases per 100,000 population; table includes all positive laboratory results for chlamydia and gonorrhea with or without communicable disease report in 2023; denominators for unknown or transgender category are not available; rates per 100,000 population.

Source: Arizona Department of Health Services, Bureau of Infectious Disease and Services, Office of STI Control.

TABLE 3B-5
FREQUENCY OF REPORTED CASES, PERCENT DISTRIBUTION AND RATES OF EARLY AND LATE SYPHILIS, GONORRHEA, AND CHLAMYDIA BY RACE/ETHNICITY, ARIZONA, 2023

Race/ethnicity	SYPHILIS						GONORRHEA						CHLAMYDIA		
	Early			Late			Resistant			Total			Cases	%	Rate
	Cases	%	Rate	Cases	%	Rate	Cases	%	Rate	Cases	%	Rate			
White Non-Hispanic	925	25.5	22.4	705	19.9	17.0	0	0.0	0.0	2,963	20.9	71.6	6,573	16.1	158.9
Black or African American	404	11.2	103.9	391	11.0	100.5	0	0.0	0.0	2,186	15.4	562.0	3,706	9.1	952.8
Hispanic or Latino	1,486	41.0	61.9	1,440	40.6	60.0	0	0.0	0.0	4,442	31.3	185.1	11,683	28.6	486.9
Asian or Pacific Islander	53	1.5	17.6	35	1.0	11.6	0	0.0	0.0	158	1.1	52.3	411	1.0	136.2
American Indian or Alaska Native	515	14.2	173.1	624	17.6	209.7	0	0.0	0.0	1,012	7.1	340.1	2,341	5.7	786.8
Multi-racial	121	3.3	N/A	86	2.4	N/A	0	0.0	0.0	348	2.5	N/A	564	1.4	N/A
Not Specified	117	3.2	N/A	264	7.4	N/A	0	0.0	N/A	3,072	21.7	N/A	15,538	38.1	N/A
Total	3,621	100.0	48.1	3,545	100.0	47.1	0	N/A	N/A	14,181	100.0	188.4	40,816	100.0	542.4

Notes: ^a Number of cases per 100,000 population; table includes all positive laboratory results for chlamydia and gonorrhea with or without communicable disease report in 2023; rates per 100,000 population.

Source: Arizona Department of Health Services, Bureau of Infectious Disease and Services, Office of STI Control.



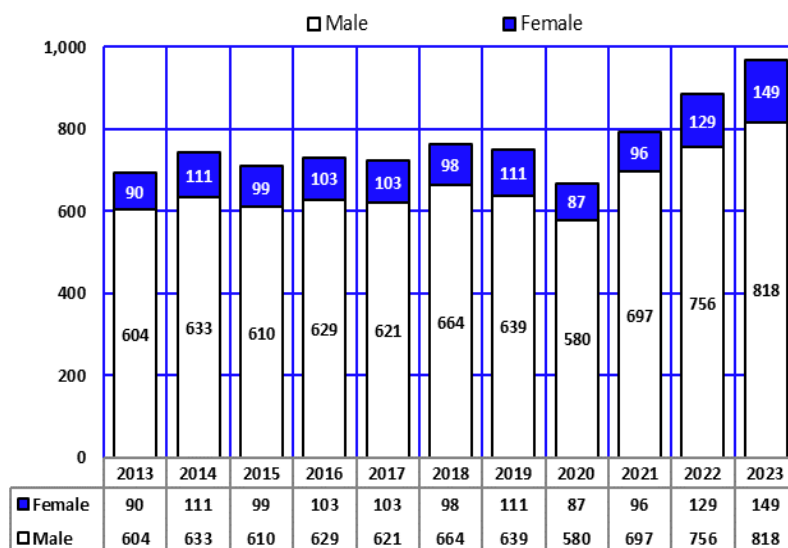
3C.

HUMAN IMMUNODEFICIENCY VIRUS (HIV) DISEASE AND ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS)

Statistics about the estimated incidence of Human Immunodeficiency Virus (HIV) disease and Acquired Immunodeficiency Syndrome (AIDS) for 1981-2023, as provided by the Bureau of Infectious Disease and Services, Office of HIV Care and Surveillance, are available in Tables 3C-1, 3C-2, 3C-3, 3C-4, and 5F-3 of this report. In the past, the cases of persons previously reported as HIV positive and subsequently diagnosed with AIDS were not properly counted since these were not new cases, only a new diagnosis reflecting a progression of the disease. The data presented in this report are based on a revised approach adopted by the Office of HIV Care and Surveillance. The estimated incidence of HIV/AIDS includes the sum of new HIV cases and new AIDS cases, which were not diagnosed as HIV positive in any prior calendar year. The cases of persons who were diagnosed with both HIV and AIDS in the same calendar year are counted only as AIDS to avoid double counting.

3C. HIV DISEASE AND AIDS

Figure 3C-1
Reported Cases of HIV/AIDS by Gender and Year of Diagnosis,
Arizona, 2013-2023

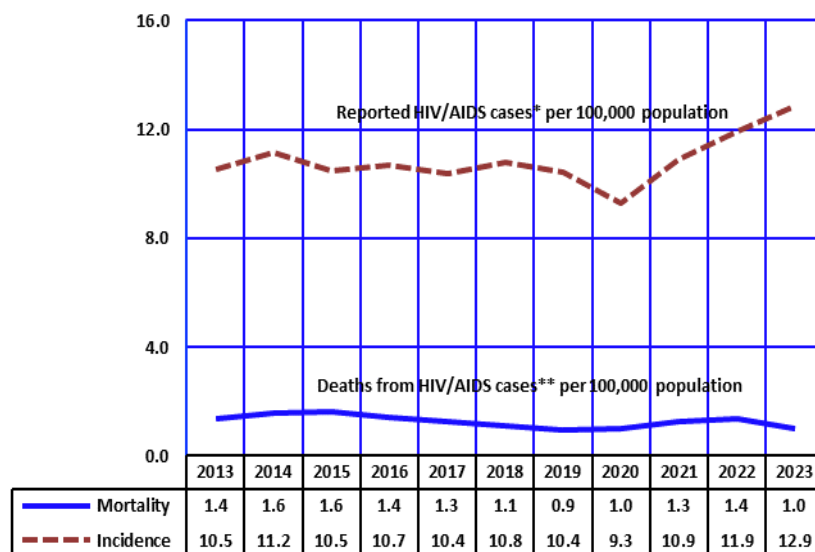


Since the first case of AIDS diagnosed in an Arizona resident in 1981, a total of 26,857 cases of HIV/AIDS had been diagnosed in the State by the end of 2023 and reported by December 13, 2024 (**Table 3C-1**).

In 2023, males accounted for 84.6 percent of all *HIV/AIDS* diagnoses. The male-to-female ratio of *HIV/AIDS* diagnoses in Arizona in 2023 was 5.5:1 (818/149; **Figure 3C-1**, **Table 3C-2**).

The proportion of risk behaviors attributed to emerging cases of *HIV/AIDS* in 2023 remained similar to previous years. Of the 967 *HIV/AIDS* cases diagnosed in 2023, 522 were among men who reported sexual contact with other men (**Table 3C-4**). Another 58 reported heterosexual contact. An additional 46 reported only injecting drugs. Adults without an indicated risk accounted for 300 of *HIV/AIDS* cases diagnosed in 2023.

Figure 3C-2
Trends in the Incidence Rates of HIV/AIDS and Mortality Rates for HIV Disease
by Year, Arizona, 2013-2023



The incidence rate measures the relative risk for *HIV/AIDS* in a population. The incidence rate of *HIV/AIDS* has increased in Arizona by 22.9 percent from 10.5 cases per 100,000 population in 2013 to 12.9/100,000 in 2023 (**Figure 3C-2**; the incidence rates for 2013 – 2023 have been re-computed based on the latest volume of the *HIV/AIDS* data as of 12/13/2024).

The rate of deaths from *HIV disease* remained unchanged from 2014 to 2015, then decreased slightly at 1.4 deaths per 100,000 population in 2016 to 0.9 in 2019, then increased to 1.0 in 2020, 1.3 in 2021, 1.4 in 2022, then decreased again to 1.0 in 2023 (**Figure 3C-2**).

Of the 967 *HIV/AIDS* cases diagnosed in 2023, 282 were White non-Hispanic, 416 were Hispanic, 167 were Black, 54 were American Indian, and 23 were Asian or Pacific Islander (**Table 3C-3**).

Notes: *By year of diagnosis; **By year of death.

**TABLE 3C-1
FREQUENCY DISTRIBUTION OF HIV/AIDS BY AGE AT DIAGNOSIS,
ARIZONA, 1981-2023**

Age Group (years)	HIV/AIDS cases
Under 5	128
5-12	48
13-19	723
20-29	8,442
30-39	9,879
40-49	4,606
50 or above	3,031
Missing	0
Total	26,857

**TABLE 3C-2
HIV/AIDS CASES AND DEATHS BY YEAR OF DIAGNOSIS AND GENDER,
ARIZONA, 1981-2012 and 2013-2023**

	1981-2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
# Males	16,095	604	633	610	629	621	664	639	580	697	756	818
# Females	2,335	90	111	99	103	103	98	111	87	96	129	149
# Total	18,430	694	744	709	732	724	762	750	667	793	885	967
# Presumed Living	10,330	603	652	619	653	653	706	713	618	741	828	933
# Known dead	8,098	91	92	90	79	71	56	37	49	52	57	34
% Mortality	43.9	13.1	12.4	12.7	10.8	9.8	7.3	4.9	7.3	6.6	6.4	3.5

Note: Due to reporting delays, all numbers are provisional (2023 volume as of 12/13/2024).

Source: Arizona Department of Health Services, Bureau of Infectious Disease and Services, Office of HIV Care and Surveillance.

TABLE 3C-3
DISTRIBUTION OF REPORTED HIV/AIDS CASES BY YEAR OF DIAGNOSIS AND RACE/ETHNICITY,
ARIZONA, 1981-2012 AND 2013-2023

Race/ethnicity	1981-2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
White non-Hispanic	10,619	273	264	243	243	245	245	241	234	244	262	282
Black or African American non-Hispanic	1,878	114	128	126	136	112	124	124	98	124	153	167
Hispanic or Latino all races	4,713	241	269	254	281	294	321	320	269	361	390	416
Asian or Pacific Islander non-Hispanic	173	9	17	23	15	22	20	15	18	12	28	23
American Indian or Alaska Native non-Hispanic	672	46	55	51	52	45	41	39	36	41	44	54
Two or more races/ other or unknown race	375	11	11	12	*	6	11	11	12	11	8	25
Total	18,430	694	744	709	730†	724	762	750	667	793	885	967

Note: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; Due to reporting delays, all numbers are provisional (2023 volume as of 12/13/2024).

TABLE 3C-4
DISTRIBUTION OF REPORTED HIV/AIDS CASES BY YEAR OF DIAGNOSIS AND TRANSMISSION CATEGORY,
ARIZONA, 1981-2012 AND 2013-2023

Transmission	1981-2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
MSM	10,819	426	468	419	448	446	485	446	384	456	498	522
IV Drug User (IDU)	2,307	52	53	52	53	36	47	49	41	26	34	46
MSM/IDU	1,950	37	45	52	34	40	36	44	48	47	51	34
Hemophilic (Adult)	71	0	0	0	0	0	0	0	0	0	0	0
Heterosexual Contact	1,747	71	74	78	63	62	52	64	42	63	35	58
Transfusion/transplant (Adult)	93	0	0	0	0	0	0	0	0	0	0	0
No indicated risk (Adult)	1,284	101	100	103	132	135	135	144	151	192	261	300
Pediatric Hemophilic	17	0	0	0	0	0	0	0	0	0	0	0
Pediatric transfusion/transplant	*	0	0	0	0	0	0	0	0	0	0	0
Mother HIV+	129	6	*	*	*	*	7	*	*	9	6	7
Pediatric (no indicated risk)	10	*	0	*	0	*	0	0	0	0	0	0
Child other risk	*	0	*	0	0	0	0	0	0	0	0	0
Total	18,430†	690†	740†	710†	730†	720†	762	750†	670†	793	885	967

Note: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; Due to reporting delays, all numbers are provisional (2023 volume as of 12/13/2024).

Source: Arizona Department of Health Services, Bureau of Infectious Disease and Services, Office of HIV Care and Surveillance.