

State of Iowa HIV Disease End-of-Year 2019 Surveillance Report

Authorship – Bureau of HIV, STD, and Hepatitis
June 2020



Acknowledgements

Suggested Citation:

Iowa Department of Public Health, Bureau of HIV, STD, and Hepatitis. State of Iowa HIV Disease End-of-Year 2019 Surveillance Report. Des Moines: Iowa Dept. of Public Health, 2020. Web. https://idph.iowa.gov/hivstdhep/hiv/data.

Gov. Kim Reynolds Lt. Gov. Adam Gregg IDPH Director Gerd W. Clabaugh

Report Contact Information:

Alagie Jatta, M.S. HIV/AIDS Surveillance Coordinator Phone: (515) 281-6918

Email: alagie.jatta@idph.iowa.gov

Samoane Don, M.P.H. HIV/AIDS Surveillance Epidemiologist

Phone: (515) 242-5141

Email: samoane.don@idph.iowa.gov

Randy Mayer, M.S., M.P.H. Chief, Bureau of HIV, STD, and Hepatitis

Phone: (515) 242-5150

Email: randy.mayer@idph.iowa.gov

Table of Contents

Key Points	3
Organization of the Surveillance Report	5
Definitions	
Section 1: SOURCES OF DATA	6
Core HIV Surveillance Data	6
Population Data	7
Section 2: NARRATIVE SUMMARY	8
Sex	8
Age	
Race and Ethnicity	
Late Testers	. 10
HIV Prevalence	. 10
Deaths of People with HIV/AIDS	. 11
Continuum of HIV Care	
HIV Partner Services	. 11
Section 3: TABLES AND FIGURES	. 12
Table 3.1 lowans Diagnosed with HIV or AIDS or Dying with HIV in 2019	. 12
Table 3.2 lowans Diagnosed with HIV $^{f 1}$ from 2009 through 2019	. 13
Table 3.3 lowa Males 13 Years of Age and Older Diagnosed with HIV: 2005 through 2019	
Table 3.4 Iowa Females 13 Years of Age and Older Diagnosed with HIV: 2005 through 2019.	
Table 3.5 lowans Diagnosed with HIV in 1982 through 2019	
Figure 3.1 lowans Diagnosed with HIV: 2009 through 2019	
Figure 3.2 Number and Percentage of Iowans Diagnosed Late with HIV ("Late Testers"):	
Figure 3.3 lowans Diagnosed with HIV by Sex: 2009 through 2019	
Figure 3.4 Age in Years at Diagnosis of Iowa HIV: 2009 through 2019	
Figure 3.5 lowans Diagnosed with HIV by Ethnicity and Race: 2009 through 2019	. 21
Population of Iowa by Ethnicity and Race:	
2019	. 22
lowans Diagnosed with HIV by Race:	. 22
2019	. 22
	. 22
Figure 3.8 lowa Adults Diagnosed with HIV by Exposure Category: 2009 through 2019	. 23
Figure 3.9 Number of Iowans Living with Diagnosed HIV Disease as of December 31, 2019	
Figure 3.10 Prevalence of HIV Disease at the end of 2019	
Figure 3.11 Prevalence of HIV Disease by County of Current Residence:	
Figure 3.12 Iowa HIV Care Continuum for 2019	. 27
Section 4: REPORTING OF HIV AND AIDS IN IOWA	

Key Points

Here are a few points drawn from our 2019 HIV data:

- 98 lowans were diagnosed with HIV: In 2019, lowa recorded the lowest number of people diagnosed with HIV in the last 5 years (2015 through 2019). Since 2016, lowa has experienced its first sustained decrease in HIV diagnoses. After peaking at 137 diagnoses in 2016, HIV diagnoses have decreased consistently each year thereafter. HIV diagnoses decreased by 9% from 2016 to 2017, by 7% from 2017 to 2018, and by 16% from 2018 to 2019.
- Sex: From 2018 to 2019, diagnoses among males decreased by 16% and by 13% among females. Overall, the proportion of HIV diagnoses that are among males continued to outnumber those among females by a ratio of about 4 to 1. Diagnoses among U.S-born females decreased by 32% compared to an increase of 33% among foreign-born females. Similarly, diagnoses among U.S-born males decreased by 22% compared to an increase of 15% among foreign-born males.
- Age: People aged 25 through 44 years continue to account for the largest proportion (52%) and number (51) of people diagnosed with HIV. However, diagnoses in this age group decreased significantly (by 27%) from 2018 to 2019. Youth and young adults 15 through 24 years of age were among the few populations that experienced an increase in diagnoses. Cases among youth and young adults increased by 16% from 19 (16% of all people newly diagnosed with HIV) in 2018 to 22 (22% of all people diagnosed) in 2019.

Race and ethnicity:

- Diagnoses among non-Hispanic, black/African-American people decreased for the third year in a row after peaking in 2016 at 45 new diagnoses (33% of total diagnoses). In 2019, 30 black/African-American lowans were diagnosed with HIV. While non-Hispanic, black/African-American people represent 4% of lowa's population, they experienced 31% of HIV diagnoses in 2019. However, diagnoses among foreign-born black lowans accounted for 57% of all diagnoses among black lowans. There was a 35% decrease in diagnoses among U.S-born black/African-American persons, whereas diagnoses among foreign-born black persons increased by 31%.
- Hispanic/Latino people represent 6% of lowa's population, but represented 11% of people diagnosed with HIV in 2019. Of the 11 Hispanic people diagnosed, five (45%) were foreign born.
- White, non-Hispanic people represent 85% of Iowa's population, but represented only 49% of people diagnosed with HIV in 2019. Since 2007, diagnoses among white, non-Hispanic Iowans have decreased by 46%.
- o It is important to note that the disproportionate impact of HIV on communities of color is related to social determinants of health. These determinants create environments in which some populations are more likely to experience higher rates of exposures to infectious diseases and other factors (stigma, stress, lack of access to health care) that lead to chronic health conditions, which may make them more susceptible to HIV.
- Late testers: The proportion of people diagnosed with AIDS within three months of their initial HIV diagnoses ("late testers") decreased in 2019, with only 20% of diagnoses being among late testers. This is the lowest proportion ever reported, and is evidence that people at risk for HIV are getting timelier access to testing.

- HIV prevalence: As of December 31, 2019, there were 2,938 people with a current address in lowa diagnosed and living with HIV, a prevalence of 93 per 100,000 persons. As of December 31, 2019, 95 of lowa's 99 counties had at least one resident living with HIV. Prevalence in nine counties was greater than 100 per 100,000 population (0.1%). Polk County, with 172 per 100,000, has the highest prevalence, followed by Pottawattamie County (159 per 100,000), and Scott County (137 per 100,000).
- Continuum of HIV Care: Of 2,839 persons diagnosed with HIV disease on or before December 31, 2018, and living in lowa as of December 31, 2019, 2,437 (86%) were retained in HIV care and 2,304 (81%) were virally suppressed. This is significantly higher than many parts of the country. The most recent estimate from CDC is that 65% of people in the U.S. who are diagnosed with HIV were virally suppressed in 2018. When lowans are retained in care (i.e., have two or more visits to an HIV primary care provider during a year), the proportion who are viral suppressed rises to 95%.

Organization of the Surveillance Report

This end-of-year report presents surveillance data on HIV disease in Iowa. It describes HIV disease for the state and of its population subgroups. It includes information on the HIV care continuum and partner services offered to people newly diagnosed with HIV while residing in Iowa. There are four sections to the report: Section 1 describes data sources; Section 2 is a narrative summary with key highlights; Section 3 employs charts, graphs, and tables to illustrate trends; and Section 4 outlines the reporting requirements for HIV in Iowa.

Definitions

HIV diagnoses reflect all people diagnosed with HIV for the first time, regardless of AIDS status, who were residents of lowa at time of diagnosis. Some may also have been counted among AIDS diagnoses if they received an AIDS diagnosis during the same calendar year. Age is the age at time of diagnosis of HIV.

AIDS diagnoses reflect all people who first met the criteria for AIDS while living in lowa during the specified time period, regardless of when the case was reported to the state. Age is age at time of diagnosis of AIDS.

People living with HIV disease reflect people diagnosed with HIV (regardless of AIDS status) who were alive as of December 31 of a given year.

Pediatric exposures: A person diagnosed at 13 years of age or older (adult/adolescent) may have had a pediatric exposure to HIV. In such an instance, the person would be classified as adult/adolescent at time of diagnosis, but would be listed under pediatric exposures in tables that display data by category of exposure. Pediatric exposure categories include mother with HIV; hemophilia or coagulation disorder with exposure to contaminated Factor VIII (Hemophilia A), Factor IX (Hemophilia B), or other clotting factors; or receipt of contaminated blood, blood components, or tissue.

Section 1: SOURCES OF DATA

Core HIV Surveillance Data

eHARS

The enhanced HIV and AIDS reporting system (eHARS) includes information on all people with HIV disease who have been reported to the lowa Department of Public Health (IDPH) HIV Surveillance Program. All people with HIV disease who were first diagnosed while living in lowa, or who have lived in lowa at some point in time after diagnosis with HIV, or who have accessed care at an lowa facility and have been reported to IDPH, are included in eHARS. eHARS is the primary source of data for this report.

Surveillance Case Definition of HIV Disease

The surveillance case definition of HIV infection (the cause of AIDS) was created by CDC in 1982 and has been modified several times to respond to advances in HIV disease diagnosis. The most recent revision occurred in April 2014. For inclusion in eHARS and for purposes of this report, people are considered to be HIV infected if they meet the current CDC surveillance case definition [Richard M. Selik, Eve D. Mokotoff, Bernard Branson, et al., *Revised Surveillance Case Definition for HIV Infection – United States*, 2014. MMWR 2014; 63(No. RR-3):1-10.]

Diagnosis Date and Completeness of Surveillance Data

Only people reported in Iowa and for whom last name, date of birth, race and ethnicity, sex, date of HIV diagnosis, and vital status (living or deceased at time of report) are known are included in this report.

Evaluations of the IDPH surveillance system indicate that at least 99% of newly diagnosed HIV cases are reported. While the data represent diagnosed HIV cases well, they do not include cases among people that are not yet diagnosed. Nationally, CDC estimates that 14% of people living with HIV remain undiagnosed. (CDC, *HIV Surveillance Supplemental Report 2019*; 24(1)). At the same time, CDC cautions that this national estimate may not apply to individual states.

CDC-developed computer programs run on IDPH data suggest that a delay in reporting diagnoses among lowa residents is extremely unlikely. Nonetheless, to eliminate possible reporting delays, case reports received through March 2020 have been used. This report includes only those people diagnosed through December 31, 2019. Data are presented by the year of HIV or AIDS diagnosis regardless of when the diagnosis was reported. All data are provisional and are subject to change as further information becomes available.

Surveillance HIV Exposure Categories

People diagnosed with HIV may indicate multiple routes of exposure to HIV, and are counted only once in a hierarchy of exposure categories. People with more than one reported mode of exposure to HIV are classified in the exposure category listed first in the hierarchy, except for men with both a history of sexual contact with other men and a history of injection drug use. They make up a separate category. The modes of exposure are categorized in this report according to the following hierarchy:

- "Men who have sex with men and inject drugs" (MSM/IDU) includes men who inject
 nonprescription drugs and report sexual contact with other men or who report sexual contact with
 both men and women.
- "Men who have sex with men" (MSM) includes men who report sexual contact with other men, and men who report sexual contact with both men and women.
- "Injection drug use" (IDU) includes people who inject nonprescription drugs.

- "Hemophilia/Coagulation disorder" includes people who received Factor VIII (Hemophilia A), Factor IX (Hemophilia B), or other clotting factors.
- "Heterosexual contact" includes people who report specific heterosexual contact with a person with documented HIV, or heterosexual contact with a person at increased risk for HIV, such as someone who reports injection drug use, a person with hemophilia, a transfusion recipient with documented HIV, or a bisexual male. A person who reports heterosexual contact with partners whose specific HIV exposures and HIV status are unknown is considered to have "no risk reported or identified" (NIR). Adults and adolescents born, or who had sex with someone born, in a country where heterosexual transmission was believed to be the predominant mode of HIV transmission (formerly classified as Pattern-II countries by the World Health Organization) are no longer classified as having heterosexually acquired HIV. Similar to case reports for other people who are reported without behavioral or transfusion exposures for HIV, these reports are now classified (in the absence of other information that would classify them in another exposure category) as "NIR" (MMWR 1994:43:155-60).
- "Transfusion" includes people who received blood or blood components (otherthan clotting factor).
- "Received transplant" includes people who received tissues, organs, or artificial insemination. The "received transplant" category has been combined with "transfusion" in this report because of the low number of people diagnosed in lowa in each category alone.
- "No risk reported or identified (NIR)/other" includes people with no identified history of exposure to HIV through any of the routes listed in the hierarchy of exposure categories. Further investigation over time can help to clarify exposure history. In addition, the category includes people whose exposure history is incomplete because they died, declined to be interviewed, or were lost to follow-up. It also includes people who had no exposure other than working in a health care or clinical laboratory setting. There has been one confirmed case of transmission in a health care or clinical setting in lowa.

Population Data

The surveillance program has used the 2019 population estimates from the U.S. Census Bureau (http://www.census.gov) to calculate prevalence rates.

7

Section 2: NARRATIVE SUMMARY

There were 98 lowans diagnosed with HIV in 2019, a 16% decrease from 2018. As seen in Figure 3.1, the number of people diagnosed with HIV since 2009 peaked in 2016 at 137, and has now decreased for three years in a row. This is the first sustained decrease in diagnoses since HIV reporting began. The 137 people diagnosed with HIV in 2016 was the most HIV diagnoses ever recorded in a single year in lowa. Not all populations experienced a decrease in diagnoses in 2019. In particular, diagnoses increased among those 15 to 24 years of age and among Asian lowans.

The decrease in diagnoses from 2018 to 2019 was experienced most by U.S.-born people (decreased by 24%). Diagnoses among foreign-born people increased by 23%. Changes in the number of diagnoses among foreign-born people are often influenced by immigration. The increases in diagnoses among foreign-born people from 2018 to 2019 were mostly among foreign-born black, non-Hispanic people (increased by 31%). Diagnoses among foreign-born Hispanic people decreased by 29%. It is important to note that while diagnoses among foreign-born black, non-Hispanic people increased by 31%, diagnoses among U.S.-born black, non-Hispanic people decreased by 35%. Similarly, diagnoses in U.S.-born white, non-Hispanic people and U.S.-born Hispanic people decreased by 25% and 14% respectively. Research indicates that racial disparities in people diagnosed with HIV involve complex social factors (i.e., social determinants of health), such as stigma, poverty, discrimination, lack of economic opportunity, inequitable treatment in the health care system, and disproportionate incarceration rates. These social circumstances may limit a person's access to health care and the opportunity to engage in a healthy lifestyle.

In 2019, there were 3.1 HIV diagnoses per 100,000 population in lowa, compared to 3.7 HIV diagnoses per 100,000 population in 2018 and 4.0 HIV diagnoses per 100,000 population in 2017.

In 2019, 43 people were diagnosed with AIDS (stage 3 HIV disease), up from 42 in 2018, but less than the average of 54 for the last five years (2014 through 2018).

It is estimated that there are 462 lowans with HIV who have yet to be diagnosed. The expansion of HIV testing coupled with pre-exposure prophylaxis (PrEP) programs and condom distribution services may help in reaching other undiagnosed people living in lowa and continuing to slow transmission of HIV in the state.

Sex

Diagnoses among males decreased by 16% from 2018 to 2019, from 85 in 2018, to 71 in 2019. Similarly, diagnoses among females decreased by 13% from 31 in 2018 to 27 in 2019. Despite overall decreases in diagnoses among males and females, diagnoses of HIV among foreign-born males and females increased from 2018 to 2019 by 15% and 33%, respectively. Diagnoses of HIV among U.S-born males and females decreased by 22% and 32%, respectively. Year-to-year variations notwithstanding, diagnoses among males in lowa continued to outnumber diagnoses among females by a ratio of almost 4 to 1.

Age

People aged 25 through 44 years continued to make up the largest proportion (52%) and number (51) of people diagnosed with HIV in 2019, although this age group experienced a 27% decrease in diagnoses from 2018 to 2019. The number of youth and young adults 15 through 24 years of age who were diagnosed with HIV increased from 19 in 2018 (16% of all people diagnosed with HIV) to 22 (22% of all people diagnosed) in 2019. This was the only age group to experience an increase in diagnoses in 2019. Over the previous five years, this group averaged 21% of all people diagnosed with HIV. People aged 45 years and older experienced a decrease in HIV diagnoses for two consecutive years from 38 (30% of all people diagnosed) in 2017 to 26 (22% of all people diagnosed) in 2018, and finally dropping to 25 (26% of all people diagnosed) in 2019. There were no pediatric HIV diagnoses in 2019.

For people 13 years of age and older (adults and adolescents), median age at diagnosis in 2019 was 35.5 years, higher than the previous five-year median age of 33.7 years. In 2019, the median age of diagnosis for adult/adolescent males was 35.0 years, lower than that for adult/adolescent females at 37.0 years.

Race and Ethnicity

Diagnoses among non-Hispanic black/African-American lowans decreased from 33 (28% of all people diagnosed) in 2018 to 30 (31% of all people diagnosed) in 2019, similar to the five-year average of 30 (25% of all people diagnosed) from 2014 to 2018. The decrease in diagnoses among people who are black/African American was among U.S.-born black/African-American people, who experienced a 35% decrease in diagnoses. In contrast, diagnoses among foreign-born black/African-American people increased 31% from 13 diagnoses in 2018 to 17 diagnoses in 2019. Non-Hispanic black/African-American lowans represent 4% of lowa's general population, but experienced 31% of new HIV diagnoses in 2019. Of the 30 black/African-American, non-Hispanic persons diagnosed in 2019, 17 (57%) were foreign born. Males account for 10 (77%) of the 13 U.S-born black/African-American, non-Hispanic people diagnosed in 2019. Among these, six (60%) identified as men who have sex with men (MSM), and the exposure category of three is yet to be determined. Males also experienced the majority (56%) of diagnoses among foreign-born black/African-American people.

The 30 non-Hispanic black/African-American people diagnosed with HIV in 2019 equates to 25.2 diagnoses per 100,000 non-Hispanic black/African-American persons. When the numbers of persons diagnosed per 100,000 population are compared, non-Hispanic black/African-American lowans were more than 14 times more likely to have been diagnosed with HIV in 2019 than non-Hispanic white people were. However, migration of people with HIV significantly impacts the disproportionate rate of diagnoses among black/African-American lowans.

The number of Hispanic people diagnosed with HIV decreased from 14 (12% of all people diagnosed) in 2018 to 11 (11%) in 2019. Hispanic/Latino people represent 6% of lowa's population, but experienced 11% of HIV diagnoses in 2019. This is in line with the five-year average from 2014 to 2018 of 11%. Of the 11 Hispanic persons diagnosed in 2019, five (45%) were foreign born, and eight (73%) were male. The 11 Hispanic people diagnosed with HIV in 2019 equate to 5.7 per 100,000 Hispanic persons, which means that Hispanic people were more than 3 times more likely to have been diagnosed with HIV in 2019 than those who are white and non-Hispanic.

The number of non-Hispanic Asian people in Iowa who are diagnosed with HIV is Iow, and is primarily influenced by immigration. Of all non-Hispanic Asian people diagnosed with HIV since 2009, 89% are foreign born. The number of non-Hispanic Asian people diagnosed with HIV reached a peak in 2013 at 7% of people diagnosed. There were three (3%) non-Hispanic Asian persons diagnosed with HIV in 2019. Non-Hispanic Asian people make up about 3% of Iowa's population, and averaged 3% of people diagnosed with HIV in the previous five years (2014 to 2018). The three non-Hispanic Asian persons diagnosed with HIV in 2019 equates to 3.6 diagnoses per 100,000 non-Hispanic Asian people, about 2 times higher than for white, non-Hispanic Iowans.

While white, non-Hispanic lowans make up the largest proportion of people diagnosed with HIV in lowa, in 2019, the proportion fell below 50% of all cases for the first time on record. That is, of the 98 people diagnosed with HIV in 2019, 48 (49%) were non-Hispanic and white. This compares to the five-year (2014 through 2018) average of 69 (57%). Since the beginning of the epidemic in 1982, non-Hispanic, white people have made up 71% of people diagnosed with HIV in lowa. The 48 non-Hispanic, white people diagnosed in 2019 equate to 1.8 diagnoses per 100,000 non-Hispanic, white lowans.

As described, communities of color in lowa bear a disproportionate burden of HIV. Numerous national research studies demonstrate that this is *not* because people of color engage in higher rates of behaviors that put them at risk for HIV acquisition. Rather, systemic factors affect the disproportionate rates of HIV in communities of color. Some of these factors include poverty, residential segregation, historical trauma, racism, homophobia, disproportionate rates of incarceration, and stigma. In addition, lowa is experiencing a growing proportion of foreign-born people being diagnosed in the state. These foreign-born people tend to be black (of African descent), Hispanic, or Asian.

Late Testers

The proportion of people diagnosed with AIDS within three months of their initial HIV diagnosis ("late testers") decreased 2% from 2018 to 2019. Overall, late diagnoses have decreased significantly since 2013, when 46% of people diagnosed were considered to be late testers. In 2019, only 20% of people diagnosed were late testers, the lowest proportion ever reported. This is evidence that people at risk for HIV in lowa are getting timelier access to testing.

HIV Prevalence

As of December 31, 2019, there were 2,938 people with a current address in lowa who were diagnosed and living with HIV, a prevalence of 93 per 100,000 people. This number includes all people whose current addresses were in lowa at the end of 2019. It may include people diagnosed in lowa plus people who were initially diagnosed while living in another state, but who now reside in lowa. When the number of 2,938 is adjusted for the estimated percentage of undiagnosed people in lowa (14%), there may have been as many as 3,301 lowans living with HIV or AIDS at the end of 2019, with an estimated 462 people undiagnosed.

As of December 31, 2019, 95 of lowa's 99 counties had at least one resident living with HIV. Prevalence in eight counties was greater than 100 per 100,000 people (0.1%). Polk County, with 172 per 100,000, has the highest prevalence, followed by Pottawattamie County (159 per 100,000), and Scott County (137 per 100,000).

National and regional HIV prevalence data at the end of 2016, the most recent year available, are as follows: United States, 308.3 per 100,000; Midwest, 174.5 per 100,000; West, 253.7 per 100,000; South, 361.3 per 100,000; and Northeast, 418.8 per 100,000. (Centers for Disease Control and Prevention. *HIV Surveillance Report, 2018*; vol. 29. https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html)

Deaths of People with HIV/AIDS

The number of deaths among people diagnosed with HIV or AIDS in Iowa continues to decrease since peaking at 104 deaths in 1995. As of December 31, 2019, 1,393 deaths had been reported among people diagnosed with HIV or AIDS in Iowa. Of those deaths, 61% were caused in some part by the underlying HIV disease, 33% of deaths were not HIV related, and the cause of death was unknown for 6%. Additional death information may be obtained after the National Death Index data linkage is completed later in 2020.

Continuum of HIV Care

Of 2,839 persons diagnosed with HIV disease on or before December 31, 2018, and living in lowa as of December 31, 2019, 2,437 (86%) were retained in HIV care (i.e., had at least two visits to an HIV primary medical care provider) and 2,304 (81%) were virally suppressed. This is significantly higher than many parts of the country. The most recent estimate from CDC is that 65% of people in the U.S. who are diagnosed with HIV were virally suppressed in 2018. Among lowans who are retained in care, viral suppression is 95%.

HIV Partner Services

All of the 98 persons newly diagnosed with HIV disease in 2019 were offered partner services. The goal of partner services is to have a disease intervention specialist (DIS) contact the person diagnosed with HIV to provide education about HIV care and services, link them to care, and offer assistance in notifying sex and needle-sharing partners so they could seek testing services. The 98 persons offered partner services named 135 partners. Of these, 98 were located in lowa and were of unknown HIV status. Of the remaining 37, 16 were out-of-state contacts, and 21 were already known to be living with HIV. Of the 98 contacts with unknown HIV statuses, 75 (77%) were subsequently tested, and four were found to be HIV positive (5% positivity).

Section 3: TABLES AND FIGURES

Table 3.1 lowans Diagnosed with HIV or AIDS or Dying with HIV in 2019 Compared to Iowans Living with HIV Disease as of December 31, 2019

Characteristics	HIV Dis Diagno		AIDS Dia	gnoses ²	Deat	ths ³	People Living with HIV Disease ⁴	
	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Sex at Birth								
Male	71	(72)	29	(67)	31	(86)	2,274	(77)
Female	27	(28)	14	(32)	5	(14)	664	(23)
Age at Diagnosis								
Under 13	0	-	2	(5)	1	(3)	51	(2)
13-14	0	_	0		0		3	
15-24	22	(22)	10	(23)	1	(3)	547	(19)
25-34	24	(24)	10	(23)	9	(25)	1042	(35)
35-44	27	(28)	11	(26)	9	(25)	750	(26)
45-54	8	(8)	3	(7)	9	(25)	377	(13)
55-64	13	(13)	4	(9)	6	(17)	145	(5)
65 or older	4	(4)	3	(7)	1	(3)	23	(1)
Ethnicity/Race								
Hispanic, All Races	11	(11)	2	(3)			274	(9)
Not Hispanic, White	48	(49)	21	(34)	28	(78)	1,756	(60)
Not Hispanic, Black/African American	30	(31)	18	(30)	6	(17)	706	(24)
Not Hispanic, Asian	3	(3)	2	(3)	2	(6)	67	(2)
Not Hispanic, Native Hawaiian/Pacific Islander	2	(2)	0		0		4	
Not Hispanic, American Indian/Alaska Native	1	(1)	0		0		8	
Not Hispanic, Multi-race	3	(3)	0	_	_	-	123	(4)
Country of Birth								
United States or Dependency	71	(72)	26	(43)	33	(92)	2,360	(80)
Other Countries	27	(28)	17	(28)	3	(8)	578	(20)
Mode of Exposure⁵		, ,						, ,
Men who have sex with men (MSM)	45	(46)	17	(27)	18	(50)	1,556	(53)
Injection Drug Use (IDU)	7	(7)	5	(8)	5	(14)	205	(7)
MSM and Injection Drug Use (MSM/IDU)	7	(7)	3	(5)	3	(8)	210	(7)
Heterosexual Contact	27	(28)	10	(16)	3	(8)	572	(19)
Hemophilia/Coagulation disorder	0		0		0		6	
Receipt of blood or tissue	0		0		0	-	3	
Risk not reported/Other (NIR)	12	(12)	6	(10)	6	(17)	338	(12)
Pediatric/Other	0		2	(3)	1	(3)	48	(2)
Totals	98	(100)	43	(100)	36	(100)	2,938	(100)

¹ HIV disease diagnoses reflect all people diagnosed with HIV disease for the first time, regardless of AIDS status, who were residing in Iowa at time of diagnosis. Some may also be counted in the AIDS diagnoses column if they received an AIDS diagnosis during the same period of time. Age is the age at time of first diagnosis of HIV.

² AIDS diagnoses reflect all people who first met the criteria for AIDS while residing in Iowa, regardless of where they were residing when first diagnosed with HIV disease or when the diagnosis was reported to IDPH. Age is age at time of first diagnosis of AIDS.

³ **Deaths** reflect deaths in 2019 of people diagnosed in Iowa with HIV disease. Includes both HIV- and non-HIV-related causes of death. All deaths may not have been reported.

⁴ **People living with HIV disease** reflect HIV-diagnosed people (HIV or AIDS) living in the state of lowa and alive as of December 31, 2019. All deaths may not have been reported.

⁵ **Exposure**: A person diagnosed at 13 years of age or older (adult/adolescent) may have had a pediatric exposure. In such an instance, the person would be classified as adult/adolescent at time of diagnosis, but would be listed under pediatric exposures.

Table 3.2 lowans Diagnosed with HIV¹ from 2009 through 2019 by Sex, Age, Ethnicity and Race, Country of Birth and Mode of Exposure to HIV

Characteristics	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Sex at Birth											
Male	71	85	101	105	97	78	87	97	98	95	105
Female	27	31	24	32	26	20	33	21	20	19	21
Age in Years at Diagnosis											
Under 13	0	0	0	4	0	2	0	2	1	1	3
13-14	0	1	0	0	0	0	0	0	0	0	0
15-24	22	19	32	27	32	18	16	21	27	21	23
25-34	24	45	40	44	28	27	29	33	33	30	37
35-44	27	25	15	28	27	17	25	27	27	28	35
45-54	8	15	21	21	22	18	28	24	21	27	15
55-64	13	8	15	12	13	14	17	9	7	7	10
65 or older	4	3	2	1	1	2	5	2	2	0	3
Ethnicity/Race											
Hispanic, All Races	11	14	15	9	16	10	9	8	15	8	7
Not Hispanic, White	48	64	64	74	74	68	73	75	70	71	84
Not Hispanic, Black/African American	30	33	39	45	23	11	24	26	22	26	18
Not Hispanic, Asian	3	1	3	5	6	1	8	4	6	4	6
Not Hispanic, Native Hawaiian/Pacific Islander	2	0	0	0	0	0	0	0	0	0	0
Not Hispanic, American Indian/Alaska Native	1	1	0	0	0	0	0	0	0	0	1
Not Hispanic, Multi-race	3	3	4	4	4	8	6	5	5	5	10
Country of Birth											
United States or Dependency	71	94	102	98	94	84	95	98	92	95	106
Other Countries	27	22	23	39	29	14	25	20	26	19	20
Mode of Exposure - Adult/Adolescent ²											
Men who have sex with men (MSM)	45	65	71	79	76	61	71	66	66	63	67
Injection Drug Use (IDU)	7	6	7	4	10	8	8	11	3	6	13
MSM and Injection Drug Use (MSM/IDU)	7	9	10	6	5	4	3	11	12	10	4
Heterosexual Contact	27	33	28	33	24	20	34	22	29	25	27
Hemophilia/Coagulation disorder	0	0	0	0	0	0	0	0	0	0	0
Receipt of blood or tissue	0	0	0	0	0	0	0	0	0	0	0
Risk not reported/Other (NIR)	12	3	9	11	8	3	4	6	7	9	12
Pediatric/other	0	0	0	4	0	2	0	2	1	1	3
Totals	98	116	125	137	123	98	120	118	118	114	126

 $^{1\,\}mathrm{HIV}$ diagnoses reflect all people diagnosed with HIV disease for the first time, regardless of AIDS status, who were residing in lowa at the time of diagnosis.

² People diagnosed as adolescents or adults may have had pediatric exposures. People will be classified as adults/adolescents at time of diagnosis, but are listed under pediatric exposures.

Table 3.3 lowa Males 13 Years of Age and Older Diagnosed with HIV: 2005 through 2019

	Year of HIV Diagnosis													
	20	2019		2018		2017		2016		2015		2005 through- 2014		through 014
Characteristics	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)
Age at Diagnosis														
13-14	0		0		0	-	0	_	0	-	0		0	_
15-24	18	(25)	14	(16)	26	(26)	21	(20)	25	(26)	146	(16)	85	(19)
25-34	17	(24)	37	(44)	36	(36)	34	(32)	22	(23)	234	(26)	117	(26)
35-44	18	(25)	15	(18)	10	(10)	23	(22)	22	(23)	244	(27)	103	(23)
45-54	3	(4)	10	(12)	17	(17)	18	(17)	17	(18)	188	(21)	95	(21)
55-64	12	(17)	7	(8)	10	(10)	8	(8)	10	(10)	85	(9)	44	(10)
65 or older	3	(4)	2	(2)	2	(2)	1	(1)	1	(1)	13	(1)	8	(2)
Ethnicity/Race														
Hispanic, All Races	8	(11)	11	(13)	13	(13)	9	(9)	13	(13)	82	(9)	41	(9)
Not Hispanic, White	40	(56)	52	(61)	56	(55)	66	(63)	61	(63)	654	(72)	316	(70)
Not Hispanic, Black/African American	17	(24)	20	(24)	25	(25)	25	(24)	16	(16)	115	(13)	59	(13)
Not Hispanic, Asian	3	(4)	1	(1)	3	(3)	2	(2)	4	(4)	21	(2)	15	(3)
Not Hispanic, Multi-race	1	(1)	1	(1)	4	(4)	3	(3)	3	(3)	36	(4)	21	(5)
Other	2	(2)	0		0		0	-	0	-	2		0	
Country of Birth														
United States or Dependency	56	(79)	72	(85)	83	(82)	86	(82)	78	(80)	791	(87)	391	(87)
Other Countries	15	(21)	13	(15)	18	(18)	19	(18)	19	(20)	119	(13)	61	(13)
Mode of Exposure														
Men who have sex with men (MSM)	45	(63)	65	(76)	71	(70)	78	(74)	76	(78)	623	(68)	327	(72)
Injection Drug Use (IDU)	3	(4)	3	(4)	5	(5)	4	(4)	6	(6)	62	(7)	23	(5)
MSM and IDU	7	(10)	8	(9)	10	(10)	6	(6)	5	(5)	69	(8)	40	(9)
Heterosexual Contact	8	(11)	8	(9)	9	(9)	10	(10)	7	(7)	78	(9)	38	(8)
Blood, blood products, tissue	0	-	0		0	-	0	-	0	-	1		0	_
Risk not reported(NIR)/Other	8	(11)	1	(1)	6	(6)	7	(7)	3	(3)	77	(8)	24	(5)
Any MSM (MSM + MSM/IDU)	52	(73)	73	(86)	81	(80)	84	(80)	81	(84)	692	(76)	367	(81)
Any IDU (IDU + MSM/IDU)	10	(14)	11	(13)	15	(15)	10	(10)	11	(11)	131	(14)	63	(14)
TOTALS	71	(100)	85	(100)	101	(100)	105	(100)	97	(100)	910	(100)	452	(100)

Table 3.4 lowa Females 13 Years of Age and Older Diagnosed with HIV: 2005 through 2019

	Year of HIV Diagnosis													
Characteristics	2019		2018		2017		2016		2015		2005 through 2014		2010 through 2014	
	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)
Age at Diagnosis														
13-14	0	_	1	(3)	0	(0)	0	(0)	0	-	0	-	0	-
15-24	4	(15)	5	(16)	6	(25)	6	(21)	7	(27)	39	(18)	18	(16)
25-34	7	(26)	8	(26)	4	(17)	10	(36)	6	(23)	77	(35)	35	(32)
35-44	9	(33)	10	(32)	5	(21)	5	(18)	5	(19)	42	(19)	21	(19)
45-54	5	(19)	5	(16)	4	(17)	3	(11)	5	(19)	40	(18)	23	(21)
55-64	1	(4)	1	(3)	5	(21)	4	(14)	3	(12)	13	(6)	10	(9)
65 or older	1	(4)	1	(3)	0		0		0	_	6	(3)	3	(3)
Ethnicity/Race														
Hispanic, All Races	3	(11)	3	(10)	2	(8)	0	-	3	(12)	16	(7)	9	(8)
Not Hispanic, White	8	(30)	12	(39)	8	(33)	8	(29)	13	(50)	95	(44)	38	(35)
Not Hispanic, Black/African American	13	(48)	13	(42)	14	(58)	17	(61)	7	(27)	83	(38)	49	(45)
Not Hispanic, Asian	0	-	0		0		2	(7)	2	(8)	13	(6)	8	(7)
Not Hispanic, Multi-race	2	(7)	2	(6)	0		1	(4)	1	(4)	10	(5)	6	(5)
other	1	(4)	1	(3)	0		0		0	-	0		0	-
Country of Birth														
United States or Dependency	15	(56)	22	(71)	19	(79)	12	(43)	16	(62)	146	(67)	68	(62)
Other Countries	12	(44)	9	(29)	5	(21)	16	(57)	10	(38)	71	(33)	42	(38)
Mode of Exposure														
Injection Drug Use (IDU)	4	(15)	4	(13)	2	(8)	0		4	(15)	24	(11)	13	(12)
Heterosexual Contact	19	(70)	25	(81)	19	(79)	24	(86)	17	(65)	167	(77)	92	(84)
other	0		0		0		0		0		0		0	_
Risk not reported/Other (NIR)	4	(15)	2	(6)	3	(13)	4	(14)	5	(19)	26	(12)	5	(5)
Totals	27	(100)	31	(100)	24	(100)	28	(100)	26	(100)	217	(100)	110	(100)

Table 3.5 lowans Diagnosed with HIV in 1982 through 2019 by Diagnostic Status at Death, and Underlying Cause of Death (UCD)

	HIV ¹	HIV (not- AIDS)	AIDS	Total	UCD4	UCD	UCD
Year	Diagnoses	Deaths 2	Deaths 3	Deaths	(HIV)	(Other)	(Unk)
1982	1		1	1	0	1	0
1983	1		1	1	0	1	0
1984	27		3	3	0	2	1
1985	57		8	8	0	6	2
1986	66		16	16	0	15	1
1987	84		24	24	16	6	2
1988	104		22	22	17	4	1
1989	115		35	35	30	4	1
1990	111		40	40	25	14	1
1991	134		77	77	60	12	5
1992	127		70	70	56	13	1
1993	97	1	80	81	64	14	3
1994	102	1	84	85	63	18	4
1995	88	2	102	104	78	23	3
1996	104	2	65	67	53	9	5
1997	104	1	29	30	19	9	2
19985	98	2	17	19	10	8	1
1999	83	3	23	26	15	9	2
2000	90	2	28	30	20	8	2
2001	96	4	32	36	20	14	2
2002	103	2	33	35	27	8	0
2004	87	4	31	35	16	18	1
2004	105	3	30	33	26	6	1
2005	112	6	22	28	18	10	0
2006	110	2	23	25	11	13	1
2007	122	7	29	36	20	14	2
2008	100	5	19	24	16	8	0
2009	126	6	28	34	16	14	3
2010	114	5	22	27	16	8	3
2011	118	8	25	33	18	14	1
2012	118	7	30	37	20	15	2
2013	120	11	35	46	20	24	2
2014	98	5	42	47	22	20	5
2015	123	9	22	31	14	16	1
2016	137	5	30	35	12	21	2
2017	125	11	26	37	17	19	1
2018	116	10	29	39	8	20	11
20196	98	10	26	36	8	18	10

¹ Diagnoses reflect all people diagnosed with HIV disease for the first time, regardless of AIDS status, who were residents of lowa at time of diagnosis.

Terms: UCD (HIV) – underlying HIV infection was listed on the death certificate as contributing to the death of the individual UCD (Other) – underlying HIV infection was not listed as contributing to death of the individual

UCD (Unk) - cause of death is unknown

² Data include people whose diagnosis status at time of death was HIV (not-AIDS). Less than 10% of deaths occur in people whose diagnostic status at the time of death is HIV (not-AIDS). Decedents may have been diagnosed in any year up to and including the year of death.

³ Data include people whose diagnosis at time of death was AIDS. More than 90% of deaths occur in people whose diagnostic status at the time of death is AIDS. Decedents may have been diagnosed in any year up to and including the year of death.

 $^{^4}$ The underlying HIV infection is listed on the death certificate as a cause of 61% of all deaths of HIV-infected people diagnosed in lowa.

⁵ HIV infection became reportable by name in 1998.

⁶ Death data for 2019 are incomplete. Matching in 2020 to National Death Index files may provide more complete death data.

After peaking at 137 diagnoses in 2016, lowa has experienced three consecutive years of decreases in diagnoses of HIV.

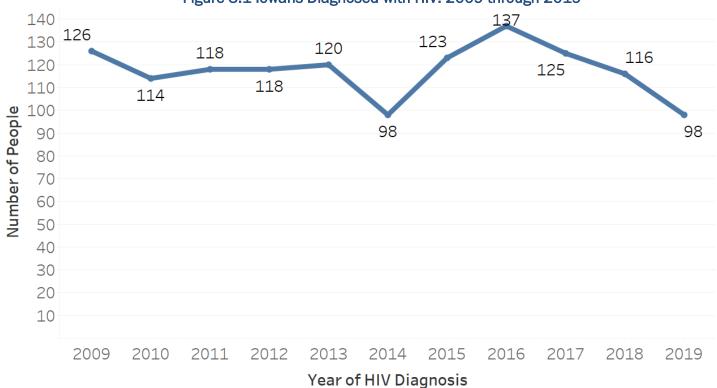
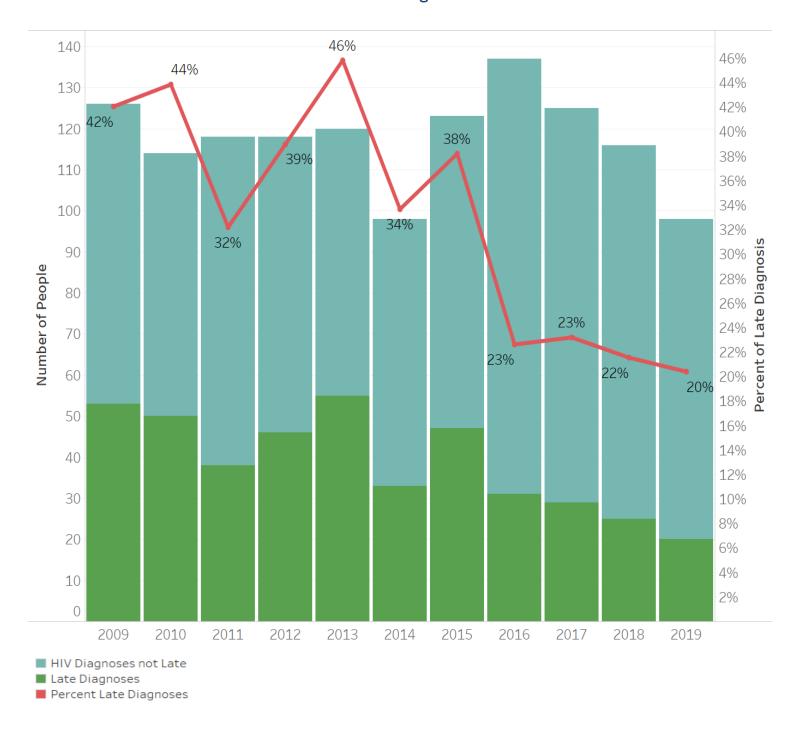


Figure 3.1 lowans Diagnosed with HIV: 2009 through 2019

"Late testers" are people who receive AIDS diagnoses within three months of their HIV diagnoses. The proportion of late testers has been decreasing and reached its lowest level ever reported at 20% in 2019. Over 90% of "late testers" in lowa were diagnosed with AIDS concurrently, meaning within one month of their HIV diagnoses.

Figure 3.2 Number and Percentage of Iowans Diagnosed Late with HIV ("Late Testers"): 2009 through 2019



From 2009 through 2019, there were, on average, about four males diagnosed in lowa for every female diagnosed. Males and females experienced 15% and 16% decreases in diagnoses in 2019, respectively. While overall diagnoses decreased among males and females in 2019, diagnoses of HIV among foreign-born males and females increased from 2018 to 2019 (not shown). Consequently, the proportion of diagnoses among foreign-born people is increasing in lowa.



Figure 3.3 lowans Diagnosed with HIV by Sex: 2009 through 2019

Over half of all people diagnosed with HIV annually, on average, are 25 to 44 years of age. In 2019, 52% of the people diagnosed with HIV were 25 to 44 years of age. People in all age categories except those who were 15 to 24 years of age experienced a decrease in diagnoses in 2019.

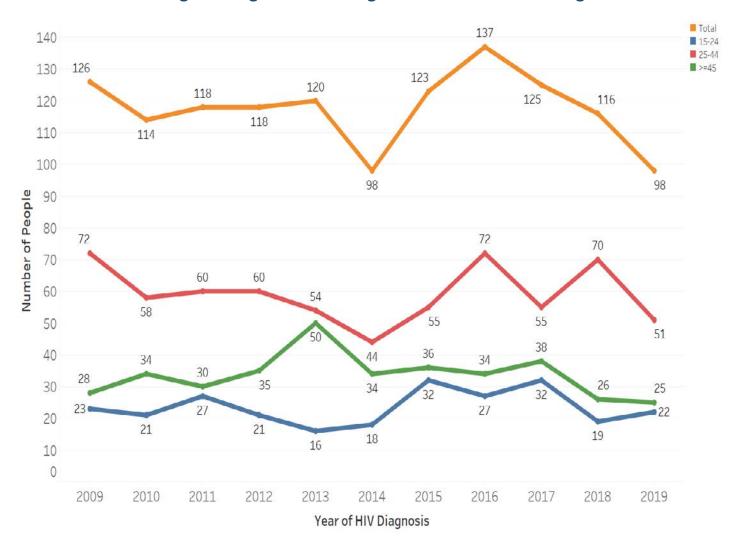


Figure 3.4 Age in Years at Diagnosis of Iowa HIV: 2009 through 2019

Diagnoses among non-Hlspanic, black/African-American lowans decreased from a high of 45 (33% of all people diagnosed with HIV) in 2016 to 30 (31% of all diagnoses) in 2019. Seventeen (57%) of the 30 non-Hlspanic, black/African-American people diagnosed in 2019 were foreign born. Of the 11 Hispanic people diagnosed in 2019, five (45%) were foreign born. Non-Hispanic, white people make up the largest proportion of people diagnosed with HIV diagnoses in lowa, but this proportion has decreased from a high of 84 (67% of all diagnoses) in 2009 to a low of 48 (49% of all diagnoses) in 2019. This population has seen the most consistent decrease in diagnoses since 2009.

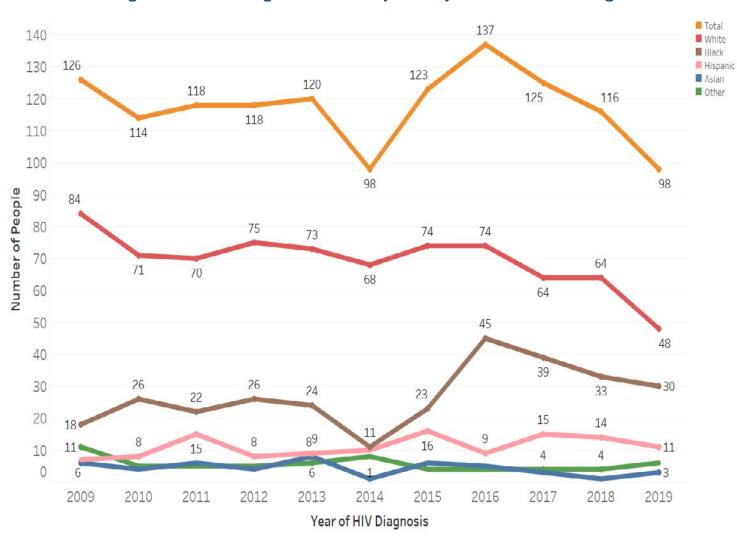


Figure 3.5 lowans Diagnosed with HIV by Ethnicity and Race: 2009 through 2019

About 85% of Iowa's population is white and non-Hispanic. Iowans who are non-Hispanic, black/African American; non-Hispanic, Asian; or Hispanic are over-represented among people diagnosed with HIV in comparison to the sizes of their respective populations in Iowa. All three populations include significant proportions of foreign-born Iowans with HIV. Non-Hispanic, black/African-American people comprise 4% of Iowa's population but experienced 31% of HIV diagnoses reported in 2019.Non-Hispanic, black/African-American people were over 14 times more likely to be diagnosed than non-Hispanic, white people; and Hispanic people were over 3 times as likely to be diagnosed with HIV in Iowa as non-Hispanic, white people in 2019.

Figure 3.6 Disparities in Race and Ethnicity among lowans Diagnosed with HIV

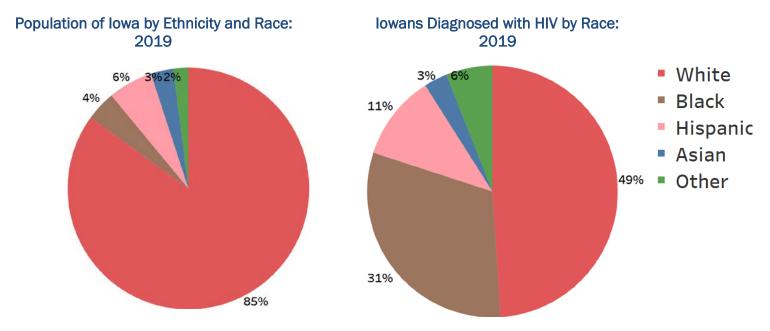
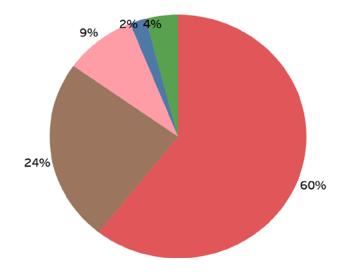


Figure 3.7 Iowans Living with HIV by Race as of December 31, 2019



Men who have sex with men (MSM) experienced a 31% decrease in diagnoses in 2019 and a 43% decrease since the peak of 79 diagnoses in 2016. People who identified as exposed through heterosexual contact experienced an 18% decrease in diagnoses in 2019.

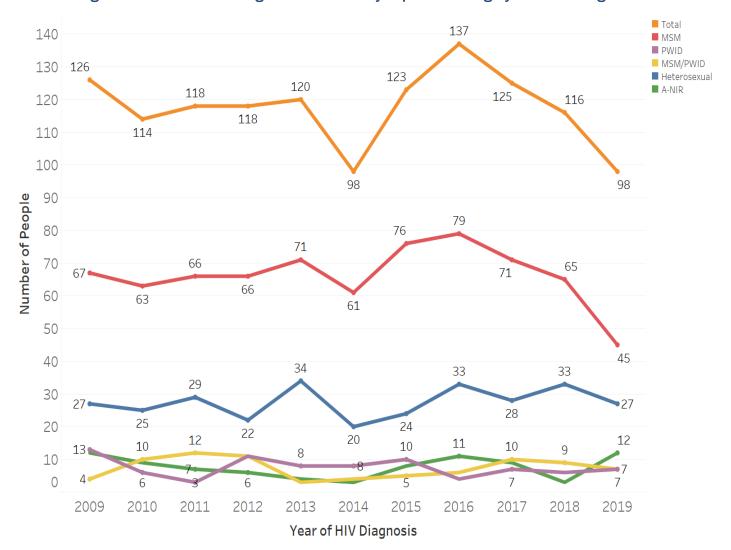
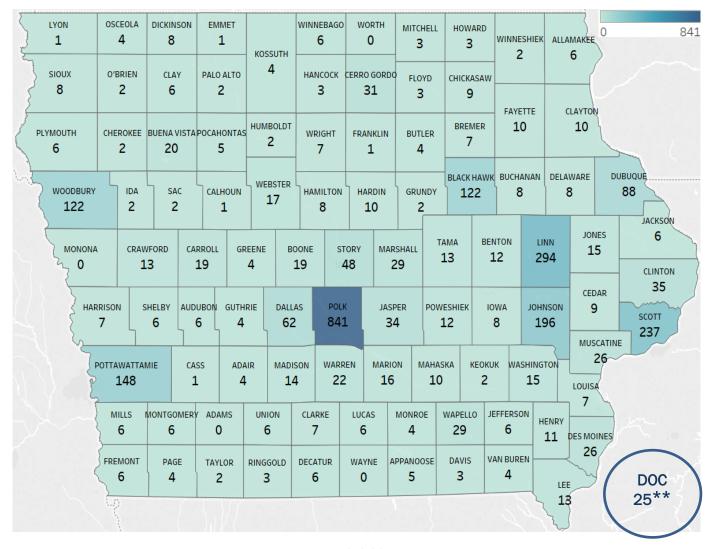


Figure 3.8 Iowa Adults Diagnosed with HIV by Exposure Category: 2009 through 2019

Figure 3.9 Number of Iowans Living with Diagnosed HIV Disease as of December 31, 2019 by County of Current Residence



Total: 2,913

This map shows the number of people (2,913) living with HIV disease as of December 31, 2019, in each lowa county. Not all deaths may have been reported.

**Twenty-five people were diagnosed while being held in Iowa Department of Corrections (DOC) facilities in the following counties: Henry (4), Jasper (3), Webster (1), Johnson (10), Jones (3), Lee (1), Page (1), and Polk (2). These numbers are excluded from county totals shown on the map.

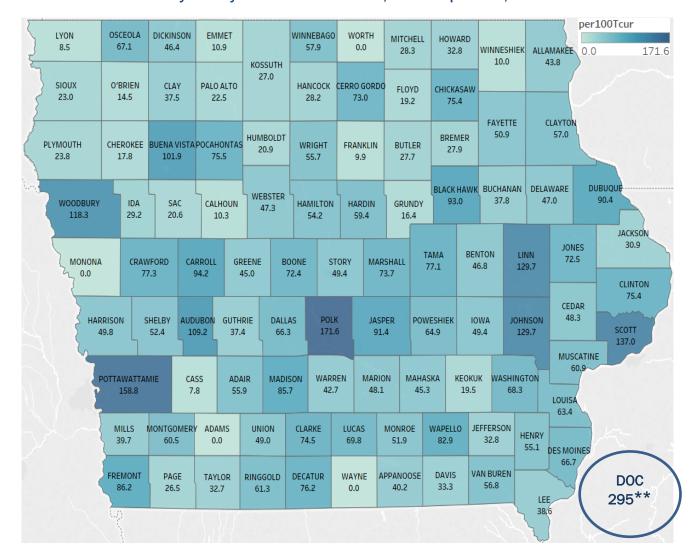


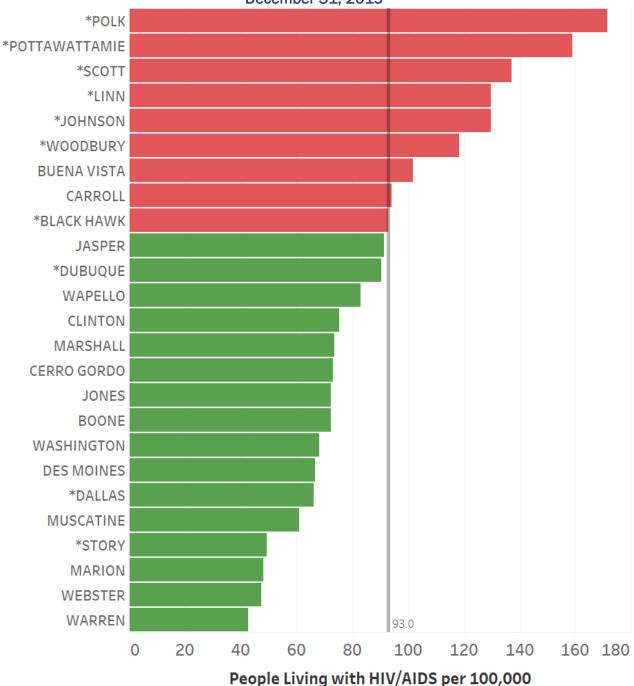
Figure 3.10 Prevalence of HIV Disease at the end of 2019 by County of Current Residence, Number per 100,000

This map shows the rates per 100,000 of people living with HIV disease as of December 31, 2019, in each lowa county. Not all deaths may have been reported.

**The DOC rate was calculated based on total prison population of lowa Department of Corrections (DOC) facilities in 2019.

Darker blue indicates a higher prevalence.

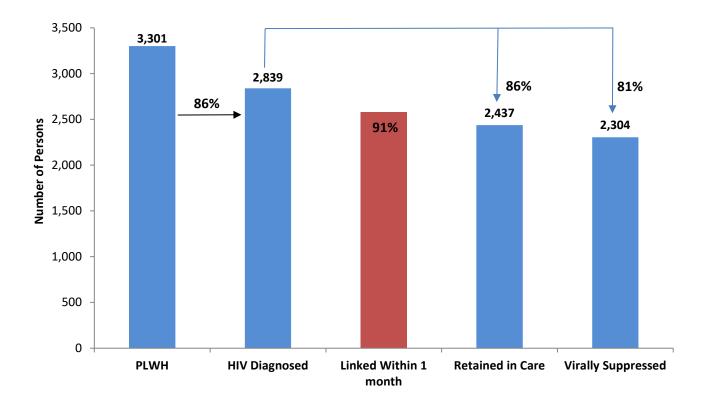
Figure 3.11 Prevalence of HIV Disease by County of Current Residence: lowans Living with Diagnosed HIV Disease (HIV or AIDS) per 100,000 Population as of December 31, 2019



Counties with >= 15 persons living with HIV/AIDS

- Indicates one of the 10 most populous counties
- County rates do not include people diagnosed in the lowa Department of Corrections system County populations are based on the 2018 U.S. Census estimates

Figure 3.12 Iowa HIV Care Continuum for 2019



People Living with HIV (PLWH): Estimated total number of lowans with HIV, of which 462 are undiagnosed.

Diagnosed: People diagnosed with HIV disease as of December 31, 2018, and living in Iowa as of December 31, 2019.

 An estimated 3,301 lowans were living with HIV disease as of December 31, 2019. Of these, 2,839 had been diagnosed as of December 31, 2018, and were alive in lowa as of December 31,2019.

Linked to Care: Newly diagnosed people who had a viral load or CD4 result reported within 1 month after diagnoses.

Retained in Care: Diagnosed people who had two or more CD4+ cell counts or viral load lab results at least three months apart in 2019 or who had only one viral load lab result but it demonstrated viral suppression during 2019.

Viral Suppression: People retained in care and whose most recent viral load in 2019 was less than 200 copies/mL.

- 2,437 (86%) of the 2,839 diagnosed lowans had been retained in care at the end of 2019. Of those retained in care, 2,304 (95%) were virally suppressed.
- Viral suppression for all diagnosed people living in lowa (in care and out of care) was 81%.

Section 4: REPORTING OF HIV AND AIDS IN IOWA

What's reportable: AIDS has been a reportable disease in Iowa since February 1983. HIV became reportable by name in Iowa on July 1, 1998. Iowa Administrative Code 641—11.6 below, establishes rules for reporting.

641—11.6(141A) Reporting of diagnoses and HIV-related tests, events, and conditions to the department.

- **11.6(1)** The following constitute reportable events related to HIV infection:
- a. A test result indicating HIV infection, including:
- (1) Confirmed positive results on any HIV-related test or combination of tests, including antibody tests, antigen tests, cultures, and nucleic acid amplification tests.
- (2) A positive result or report of a detectable quantity on any other HIV detection (non-antibody) tests, and results of all viral loads, including nondetectable levels.
 - b. AIDS and AIDS-related conditions, including all levels of CD4+ T-lymphocyte counts.
- c. Birth of an infant to an HIV-infected mother (perinatal exposure) or any (positive, negative, or undetectable) non-antibody detection test (antigen test, viral culture, viral load, or qualitative nucleic acid amplification test) on an infant 18 months of age or younger.
 - d. Death resulting from an AIDS-related condition, or death of a person with HIV infection.
- **11.6(2)** Within seven days of the receipt of a person's confirmed positive test result indicating HIV infection, the director of a plasma center, blood bank, clinical laboratory or public health laboratory that performed the test or that requested the confirmatory test shall make a report to the department on a form provided by the department.
- **11.6(3)** Within seven days of the receipt of a test result indicating HIV infection, which has been confirmed as positive according to prevailing medical technology, or immediately after the initial examination or treatment of a person infected with HIV, the physician or other health care provider at whose request the test was performed or who performed the initial examination or treatment shall make a report to the department on a form provided by the department.
- **11.6(4)** Within seven days of diagnosing a person as having AIDS or an AIDS-related condition, the diagnosing physician shall make a report to the department on a form provided by the department.
- **11.6(5)** Within seven days of the death of a person with HIV infection, the attending physician shall make a report to the department on a form provided by the department.
- **11.6(6)** Within seven days of the birth of an infant to an HIV-infected mother or a receipt of a laboratory result (positive, negative, or undetectable) of a non-antibody detection test (antigen test, viral culture, viral load, or qualitative nucleic acid amplification test) on an infant 18 months of age or younger, the attending physician shall make a report to the department on a form provided by the department.
 - **11.6**(7) The report shall include:
 - a. The person's name, address, date of birth, gender, race/ethnicity, marital status, and phone number.
- *b.* The name, address and telephone number of the plasma center, blood bank, clinical laboratory or public health laboratory that performed or requested the test, if a test was performed.
 - c. The address of the physician or other health care provider who requested the test.
 - d. If the person is female, whether the person is pregnant.
- **11.6(8)** All people who experience a reportable event while receiving services in the state, regardless of state of residence, shall be reported.

For free postpaid "03 CONFIDENTIAL" envelopes, call Alagie Jatta at 515-281-6918.

See http://idph.iowa.gov/hivstdhep/hiv/data for this report.