



2018 End of Year Report

HIV Surveillance



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Protecting and Improving the Health of Iowans



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

Report Contact Information:

Randy Mayer
Bureau of HIV, STD, and Hepatitis
randall.mayer@idph.iowa.gov
(515) 242-5150

Alagie Jatta
Bureau of HIV, STD, and Hepatitis
alagie.jatta@idph.iowa.gov
(515) 281-6918

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Key Points

Here are a few points drawn from our 2018 HIV data:

- **116 lowans Were Diagnosed with HIV:** In 2018, Iowa experienced the second lowest number of people diagnosed with HIV in the last five years. After peaking at 137 diagnoses in 2016, HIV diagnoses decreased to 125 in 2017, and then to 116 in 2018.
- **Sex:** Diagnoses among males decreased by 16% from 2017 to 2018, but diagnoses among females increased by 29% from 2017 to 2018. Overall, males diagnosed with HIV continued to outnumber females by a ratio of about 4 to 1.
- **Age:** People aged 25 through 44 years continued to make up the largest proportion (60%) and number (70) of people diagnosed with HIV in 2018. This was the only age group to experience an increase in diagnoses in 2018.
- **Race and ethnicity:**
 - Diagnoses among Non-Hispanic black/African-American people decreased for the second year in a row after peaking in 2016 at 46. In 2018, 33 black/African-American lowans were diagnosed with HIV. While Non-Hispanic black/African-American people represent 3% of Iowa's population, they experienced 28% of HIV diagnoses.
 - Hispanic/Latino people represent 6% of Iowa's population, but represented 12% of people diagnosed with HIV in 2018. Of the 14 Hispanic persons diagnosed, half were foreign-born.
 - It is important to note that the disproportionate impact of HIV on communities of color is not due to these populations being more likely to engage in behaviors at risk for HIV, but rather because of social determinants of health that create environments that lead to health inequities.
- **Late testers:** The proportion of people diagnosed with AIDS within three months of their initial HIV diagnosis ("late testers") decreased in 2018, with only 22% of diagnoses being among late testers. This is the lowest proportion ever reported, and is further confirmation that people at risk for HIV are getting timelier access to testing.
- **HIV prevalence:** As of December 31, 2018, there were 2,872 people with a current address in Iowa diagnosed and living with HIV, a prevalence of 90 per 100,000 persons. As of December 31, 2018, 95 of Iowa's 99 counties had at least one resident living with HIV.
- **Continuum of HIV Care:** Of 2,759 persons diagnosed with HIV disease on or before December 31, 2017, and living in Iowa as of December 31, 2018, 2,379 (86%) were retained in HIV care and 2,223 (81%) were virally suppressed. This is significantly higher than many parts of the country. National estimates vary with around 60% of people with suppressed virus. When lowans are retained in care (i.e., have two or more visits to an HIV primary care provider during a year), viral suppression rises to 93%.

Organization of this Data 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 Iowa 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 Iowa 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 Iowa Department of Public Health (IDPH) HIV Surveillance Program. All people with HIV disease who were first diagnosed while living in Iowa, or who have lived in Iowa at some point in time after diagnosis with HIV, or who have accessed care at an Iowa 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 12.8% of people living with HIV remain undiagnosed. 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 Iowa residents is extremely unlikely. Nonetheless, to eliminate possible reporting delays, case reports received through March 2018 have been used. This report includes only those people diagnosed through December 31, 2018. 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 (other than 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 Iowa 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 Iowa.

Population Data

The surveillance program has used the 2018 population estimates from the U.S. Census Bureau (<http://www.census.gov>) to calculate prevalence rates.

Section 2: NARRATIVE SUMMARY

Lowans Diagnosed with HIV

There were 116 lowans diagnosed with HIV in 2018, an 8% decrease from 2017. As seen in Figure 3.1, the number of people diagnosed with HIV since 2008 peaked in 2016 at 137, and has now decreased for two years in a row. The 137 people diagnosed with HIV in 2016 was the largest number ever recorded in a single year in Iowa since HIV reporting began in 1998.

Not all populations experienced a decrease in diagnoses in 2018. In particular, diagnoses increased among those 25 to 44 years of age, those with heterosexual exposures, and females.

Sex

Diagnoses among males decreased by 16% from 2017 to 2018, from 101 in 2017, to 85 in 2018. In contrast, there was a 29% increase in diagnoses among females from 2017 to 2018. The increase in diagnoses of HIV in females in 2018 was among both U.S.-born females and foreign-born females. Overall, males diagnosed with HIV continued to outnumber females by a ratio of about 4 to 1.

Age

The number of youth and young adults 15 through 24 years of age who were diagnosed with HIV decreased from 32 in 2017 (26% of all people diagnosed with HIV) to 19 (16% of all people diagnosed) in 2018. People aged 25 through 44 years continued to make up the largest proportion (60%) and number (70) of people diagnosed with HIV in 2018, and experienced a 27% increase in diagnoses in 2018. This was the only age group to experience an increase in diagnoses in 2018.

Racial and ethnic minorities are over-represented

Diagnoses among non-Hispanic black/African American people decreased from 39 (31% of all people diagnosed) in 2017 to 33 (28% of all people diagnosed) in 2018. The decrease in diagnoses among people who are black/African American was among U.S.-born black/African American people, who experienced a 26% decrease in diagnoses, whereas diagnoses among foreign-born black/African American people increased 8%. Non-Hispanic black/African Americans represent 3% of Iowa's general population, but experienced 28% of new HIV diagnoses in 2018. Males account for 15 (75%) of the 20 U.S.-born black/African American, non-Hispanic people diagnosed in 2018, and among these, 11 (73%) identified as men who have sex with men (MSM). Of the 33 black/African American, non-Hispanic persons diagnosed in 2018, 13 (39%) were foreign-born. Similarly, 38% of foreign-born black/African American who were diagnosed were males.

Hispanic/Latino people represent 6% of Iowa's population, but experienced 12% of HIV diagnoses in 2018. Of the 14 Hispanic persons diagnosed, half were foreign-born. Of the seven foreign-born Hispanic persons, six were male and MSM. Similarly, all the five U.S.-born Hispanic male persons diagnosed with HIV in 2018 were MSM.

As described, communities of color in Iowa 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, there are numerous systemic factors that impact the disproportionate rates of HIV in communities of color. Some of these factors include poverty, residential segregation, historical trauma, immigration status, racism, homophobia, disproportionate rates of incarceration, and stigma.

Late testers

The proportion of people diagnosed with AIDS within three months of their initial HIV diagnosis (“late testers”) decreased by 3% from 2017 to 2018. Overall, late diagnoses have decreased significantly since 2013, when 46% of people diagnosed were considered to be late testers. In 2018, only 22% of people diagnosed were late testers, the lowest proportion ever reported. This is further confirmation that people at risk for HIV are getting timelier access to testing.

HIV prevalence

As of December 31, 2018, there were 2,872 people with a current address in Iowa who were diagnosed and living with HIV. This is a prevalence of 90 per 100,000 persons. As of December 31, 2018, 95 of Iowa’s 99 counties had at least one resident living with HIV. Prevalence in eight counties was greater than 100 per 100,000 population (0.1%). Polk County, with 170 per 100,000, has the highest prevalence, followed by Pottawattamie County (138 per 100,000) and Scott County (137 per 100,000).

Continuum of HIV Care

Of 2,759 persons diagnosed with HIV disease on or before December 31, 2017, and living in Iowa as of December 31, 2018, 2,379 (86%) were retained in HIV care (i.e., at least two visits to an HIV primary medical care provider) and 2,223 (81%) were virally suppressed. This is significantly higher than many parts of the country. National estimates vary with around 60% of people with suppressed virus. Among Iowans who are retained in care, viral suppression is 93%.

HIV Partner Services

All of the 116 persons newly diagnosed with HIV disease in 2018 were assigned for partner services. The goal of partner services is to have a disease intervention specialist (DIS) contact the patient to provide education about HIV care and services, link the patient to care, and offer assistance in notifying sex and needle-sharing partners. The 116 persons assigned for partner services named 249 partners. Of these, 161 were located in Iowa and were of unknown HIV status. Of the remaining 88, 40 were out-of-state contacts and 48 were already known to be HIV positive. Of the 161 contacts with unknown HIV status, 121 (75%) were subsequently tested and 14 were found to be HIV positive (12% positivity).

Section 3: TABLES AND FIGURES

Table 3.1 Iowans Diagnosed with HIV or AIDS or Dying with HIV in 2018 Compared to Iowans Living with HIV Disease as of December 31, 2018

Characteristics	HIV Disease Diagnoses ¹		AIDS Diagnoses ²		Deaths ³		People Living with HIV Disease ⁴	
	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Sex at Birth								
Male	85	(73)	35	(80)	25	(89)	2,234	(78)
Female	31	(27)	9	(20)	3	(11)	628	(22)
Age at Diagnosis								
Under 13	0	--	0	--	0	--	45	(2)
13-14	1	(1)	0	--	0	--	2	--
15-24	19	(16)	1	(2)	2	(7)	517	(18)
25-34	45	(39)	14	(32)	2	(7)	1025	(36)
35-44	25	(22)	11	(25)	12	(43)	737	(26)
45-54	15	(13)	8	(18)	7	(25)	385	(13)
55-64	8	(7)	7	(16)	4	(14)	140	(5)
65 or older	3	(3)	3	(7)	1	(4)	21	(1)
Ethnicity/Race								
Hispanic, All Races	14	(12)	5	(11)	--	--	267	(9)
Not Hispanic, White	64	(55)	26	(59)	21	(75)	1,736	(60)
Not Hispanic, Black/African American	33	(28)	11	(25)	6	(21)	679	(24)
Not Hispanic, Asian	1	(1)	1	(2)	--	--	62	(2)
Not Hispanic, Native Hawaiian/Pacific Islander	0	--	0	--	0	--	3	--
Not Hispanic, American Indian/Alaska Native	1	(1)	0	--	0	--	7	--
Not Hispanic, Multi-race	3	(3)	1	(2)	1	(4)	118	(4)
Country of Birth								
United States or Dependency	94	(81)	37	(84)	26	(93)	2,325	(81)
Other Countries	22	(19)	7	(16)	2	(7)	547	(19)
Mode of Exposure⁵								
Men who have sex with men (MSM)	65	(56)	26	(59)	10	(36)	1,532	(53)
Injection Drug Use (IDU)	7	(6)	3	(7)	2	(7)	201	(7)
MSM and Injection Drug Use (MSM/IDU)	8	(7)	2	(5)	6	(21)	206	(7)
Heterosexual Contact	31	(27)	10	(23)	8	(29)	551	(19)
Hemophilia/Coagulation disorder	0	--	0	--	0	--	6	--
Receipt of blood or tissue	0	--	0	--	0	--	3	--
Risk not reported/Other (NIR)	5	(4)	3	(7)	2	(7)	330	(11)
Pediatric/Other	0	--	0	--	0	--	44	(1)
TOTALS	116	(100)	44	(100)	28	(100)	2,872	(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 2018 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 Iowa and alive as of December 31, 2018. 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 Iowans Diagnosed with HIV¹ 2008 through 2018
by Sex, Age, Ethnicity and Race, Country of Birth and Mode of Exposure to HIV: 2008
through 2018**

Characteristics	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Sex at Birth											
Male	85	101	105	97	78	87	97	98	95	105	81
Female	31	24	32	26	20	33	21	20	19	21	19
Age in Years at Diagnosis											
Under 13	0	0	4	0	2	0	2	1	1	3	1
13-14	1	0	0	0	0	0	0	0	0	0	0
15-24	19	32	27	32	18	16	21	27	21	23	14
25-34	45	40	44	28	27	29	33	33	30	37	30
35-44	25	15	28	27	17	25	27	27	28	35	22
45-54	15	21	21	22	18	28	24	21	27	15	23
55-64	8	15	12	13	14	17	9	7	7	10	10
65 or older	3	2	1	1	2	5	2	2	0	3	0
Ethnicity/Race											
Hispanic, All Races	14	15	9	16	10	9	8	15	8	7	11
Not Hispanic, White	64	64	74	74	68	73	75	70	71	84	71
Not Hispanic, Black/African American	33	39	45	23	12	25	26	22	26	18	12
Not Hispanic, Asian	1	3	5	6	1	8	4	6	4	6	1
Not Hispanic, Native Hawaiian/Pacific Islander	0	0	0	0	0	0	0	0	0	0	0
Not Hispanic, American Indian/Alaska Native	1	0	0	0	0	0	0	0	0	1	0
Not Hispanic, Multi-race	3	4	4	4	7	5	5	5	5	10	5
Country of Birth											
United States or Dependency	94	102	98	94	84	93	98	91	95	107	85
Other Countries	22	23	39	29	14	27	20	27	19	19	15
Mode of Exposure – Adult/Adolescent²											
Men who have sex with men (MSM)	65	70	78	76	61	71	66	66	63	67	64
Injection Drug Use (IDU)	7	6	4	10	8	8	11	3	6	12	9
MSM and Injection Drug Use (MSM/IDU)	8	10	6	5	4	3	11	12	10	4	1
Heterosexual Contact	31	24	34	24	20	34	22	29	25	27	17
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)	5	15	11	8	3	4	6	7	9	13	8
<i>Pediatric/other</i>	0	0	4	0	2	0	2	1	1	3	1
TOTALS	116	125	137	123	98	120	118	118	114	125	100

¹ HIV diagnoses reflect all people diagnosed with HIV disease for the first time, regardless of AIDS status, who were residing in Iowa at the time of diagnosis.

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

**Table 3.3 Iowa Males 13 Years of Age and Older Diagnosed with HIV:
2004 through 2018**

Characteristics	Year of HIV Diagnosis ¹													
	2018 ²		2017		2016		2015		2014		2004 through-2013 ⁴		2009 through 2013 ⁵	
	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)
Age at Diagnosis³														
13-14	0	--	0	--	0	--	0	--	0	--	0	--	0	--
15-24	14	(16)	26	(26)	21	(20)	25	(26)	15	(19)	140	(15)	89	(19)
25-34	37	(44)	36	(36)	34	(32)	22	(23)	21	(27)	231	(25)	124	(26)
35-44	15	(18)	10	(10)	23	(22)	22	(23)	14	(18)	261	(29)	120	(25)
45-54	10	(12)	17	(17)	18	(17)	17	(18)	15	(19)	185	(20)	93	(20)
55-64	7	(8)	10	(10)	8	(8)	10	(10)	12	(15)	78	(9)	41	(9)
65 or older	2	(2)	2	(2)	1	(1)	1	(1)	1	(1)	15	(2)	9	(2)
Ethnicity/Race														
Hispanic, All Races	11	(13)	13	(13)	9	(9)	13	(13)	9	(12)	81	(9)	38	(8)
Not Hispanic, White	52	(61)	56	(55)	66	(63)	61	(63)	59	(76)	648	(71)	331	(70)
Not Hispanic, Black/African American	20	(24)	25	(25)	25	(24)	516	(16)	5	(6)	126	(14)	66	(14)
Not Hispanic, Asian	1	(1)	3	(3)	2	(2)	4	(4)	1	(1)	21	(2)	17	(4)
Not Hispanic, Multi-race	1	(1)	4	(4)	3	(3)	3	(3)	4	(5)	32	(4)	23	(5)
Other	0	--	0	--	0	--	0	--	0	--	2	--	1	--
Country of Birth														
United States or Dependency	72	(85)	83	(82)	86	(82)	78	(80)	69	(88)	788	(87)	414	(87)
Other Countries	13	(15)	18	(18)	19	(18)	19	(20)	9	(12)	122	(13)	62	(13)
Mode of Exposure														
Men who have sex with men (MSM)	65	(76)	70	(69)	78	(74)	76	(78)	61	(78)	610	(67)	333	(70)
Injection Drug Use (IDU)	3	(4)	4	(4)	4	(4)	6	(6)	6	(8)	63	(7)	27	(6)
MSM and IDU	8	(9)	10	(10)	6	(6)	5	(5)	4	(5)	72	(8)	40	(8)
Heterosexual Contact	8	(9)	8	(8)	10	(10)	7	(7)	5	(6)	80	(9)	43	(9)
Blood, blood products, tissue	0	--	0	--	0	--	0	--	0	--	1	--	0	--
Risk not reported(NIR)/Other	1	(1)	9	(9)	7	(7)	3	(3)	2	(3)	84	(9)	33	(7)
<i>Any MSM (MSM + MSM/IDU)</i>	73	(86)	80	(79)	84	(80)	81	(84)	65	(83)	682	(75)	373	(78)
<i>Any IDU (IDU + MSM/IDU)</i>	11	(13)	14	(14)	10	(10)	11	(11)	10	(13)	135	(15)	67	(14)
TOTALS	85	(100)	101	(100)	105	(100)	97	(100)	78	(100)	910	(100)	476	(100)

¹ After increasing from 2014 to 2016, diagnoses among males decreased by 19% from 2016 to 2018.

² HIV exposure category for one males in 2018 has yet to be ascertained. More than 70% of annual diagnoses since 2013 are among males who have sex with other males.

³ Males age 25 to 44 years have experienced more than half (56%) of all adult/adolescent (≥ 13 years of age at time of diagnosis) male diagnoses from 2004 through 2018.

⁴ 910 males age 13 years or older were diagnosed from 2004 through 2013.

⁵ 476 males age 13 years or older were diagnosed from 2009 through 2013.

**Table 3.4 Iowa Females 13 Years of Age and Older Diagnosed with HIV:
2004 through 2018**

Characteristics	Year of HIV Diagnosis ¹													
	2018		2017		2016		2015		2014		2004 through 2013 ³		2009 through 2013 ⁴	
	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)
Age at Diagnosis²														
13-14	1	(3)	0	(0)	0	(0)	0	--	0	--	0	--	0	--
15-24	5	(16)	6	(25)	6	(21)	7	(27)	3	(17)	40	(18)	19	(17)
25-34	8	(26)	4	(17)	10	(36)	6	(23)	6	(33)	82	(36)	38	(34)
35-44	10	(32)	5	(21)	5	(18)	5	(19)	3	(17)	47	(21)	22	(19)
45-54	5	(16)	4	(17)	3	(11)	5	(19)	3	(17)	40	(18)	22	(19)
55-64	1	(3)	5	(21)	4	(14)	3	(12)	2	(11)	12	(5)	9	(8)
65 or older	1	(3)	0	--	0	--	0	--	1	(6)	5	(2)	3	(3)
Ethnicity/Race														
Hispanic, All Races	3	(10)	2	(8)	0	--	3	(12)	1	(6)	19	(8)	9	(8)
Not Hispanic, White	12	(39)	8	(33)	8	(29)	13	(50)	8	(44)	102	(45)	40	(35)
Not Hispanic, Black/African American	13	(42)	14	(58)	17	(61)	7	(27)	7	(39)	84	(37)	49	(43)
Not Hispanic, Asian	0	--	0	--	2	(7)	2	(8)	0	--	13	(6)	10	(9)
Not Hispanic, Multi-race	2	(6)	0	--	1	(4)	1	(4)	2	(11)	8	(4)	5	(4)
other	1	(3)	0	--	0	--	0	--	0	--	0	--	0	--
Country of Birth⁵														
United States or Dependency	22	(71)	19	(79)	12	(43)	16	(62)	14	(78)	154	(68)	68	(60)
Other Countries	9	(29)	5	(21)	16	(57)	10	(38)	4	(22)	72	(32)	45	(40)
Mode of Exposure														
Injection Drug Use (IDU)	4	(13)	2	(8)	0	--	4	(15)	2	(11)	26	(12)	13	(12)
Heterosexual Contact	23	(74)	16	(67)	24	(86)	17	(65)	15	(83)	167	(74)	94	(83)
other	0	--	0	--	0	--	0	--	0	--	0	--	0	--
Risk not reported/Other (NIR)	4	(13)	6	(25)	4	(14)	5	(19)	1	(6)	33	(15)	6	(5)
TOTALS	31	(100)	24	(100)	28	(100)	26	(100)	18	(100)	226	(100)	113	(100)

¹ Diagnoses among females increased from a low of 18 in 2014 (19%) to a high of 31 (27%) in 2018, and higher than the average of about 23 from 2009 through 2013.

² Females age 25 to 44 years have constituted more than half (54%) of all adult/adolescent (≥ 13 years of age at time of diagnosis) female diagnoses from 2004 through 2018.

³ 226 females age 13 years or older were diagnosed from 2004 through 2013.

⁴ 113 females age 13 years or older were diagnosed from 2009 through 2013.

⁵ Foreign-born females diagnoses in 2018 account for 29% of total female diagnoses compared foreign-born males which account for 15% of total male diagnoses in 2018.

**Table 3.5 Iowans Diagnosed with HIV in 1982 through 2018
by Diagnostic Status at Death, and Underlying Cause of Death (UCD)**

Year	HIV ¹ Diagnoses	HIV (not- AIDS) Deaths ²	AIDS Deaths ³	Total Deaths	UCD ⁴ (HIV)	UCD (Other)	UCD (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	17	5	2
1988	104		22	22	17	4	1
1989	116		35	35	30	4	1
1990	110		40	40	26	13	1
1991	134		77	77	60	12	5
1992	128		70	70	56	13	1
1993	99	1	80	81	64	14	3
1994	105	0	85	85	63	18	4
1995	89	1	102	103	78	23	2
1996	103	1	66	67	53	9	5
1997	105	0	30	30	19	9	2
1998 ⁵	98	1	18	19	10	8	1
1999	83	2	24	26	15	9	2
2000	91	2	28	30	20	8	2
2001	95	3	33	36	20	14	2
2002	104	2	34	36	28	8	0
2004	87	4	31	35	16	18	1
2004	105	1	32	33	26	6	1
2005	112	4	24	28	18	10	0
2006	109	2	23	25	11	13	1
2007	123	5	31	36	20	14	2
2008	100	3	21	24	16	8	0
2009	126	4	30	34	16	15	3
2010	114	4	23	27	16	8	3
2011	118	7	26	33	18	14	1
2012	118	7	30	37	20	15	2
2013	120	8	38	46	20	24	2
2014	98	5	42	47	22	20	5
2015	123	8	23	31	14	16	1
2016	137	4	31	35	12	21	2
2017	125	10	27	37	17	19	1
2018 ⁶	116	4	24	28	3	10	15

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

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 64% of all deaths of HIV-infected people diagnosed in Iowa.

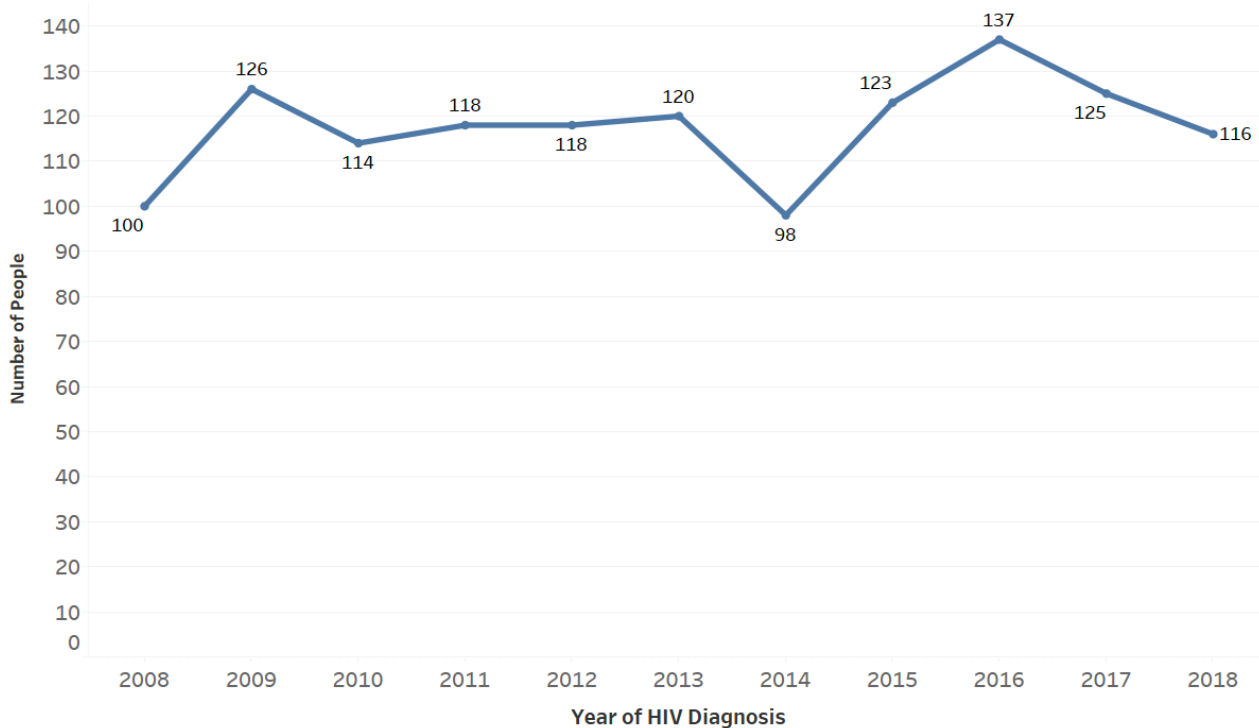
⁵ HIV infection became reportable by name in 1998.

⁶ Death data for 2018 are incomplete. Matching in 2019 to National Death Index files may provide more complete death data.

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

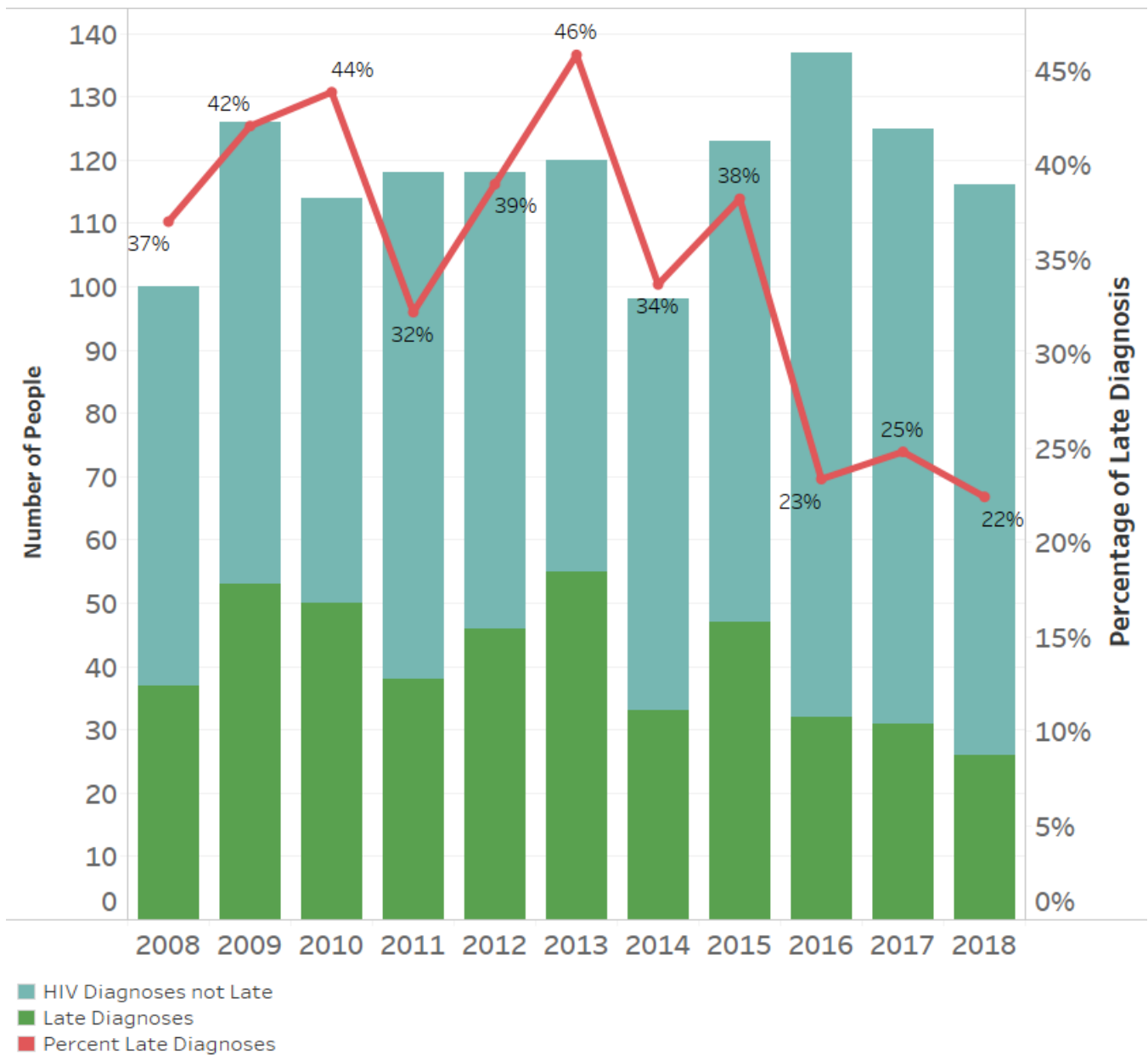
After peaking at 137 diagnoses in 2016, Iowa has experienced two consecutive years of decreases in diagnoses of HIV.

Figure 3.1 Iowans Diagnosed with HIV: 2008 through 2018



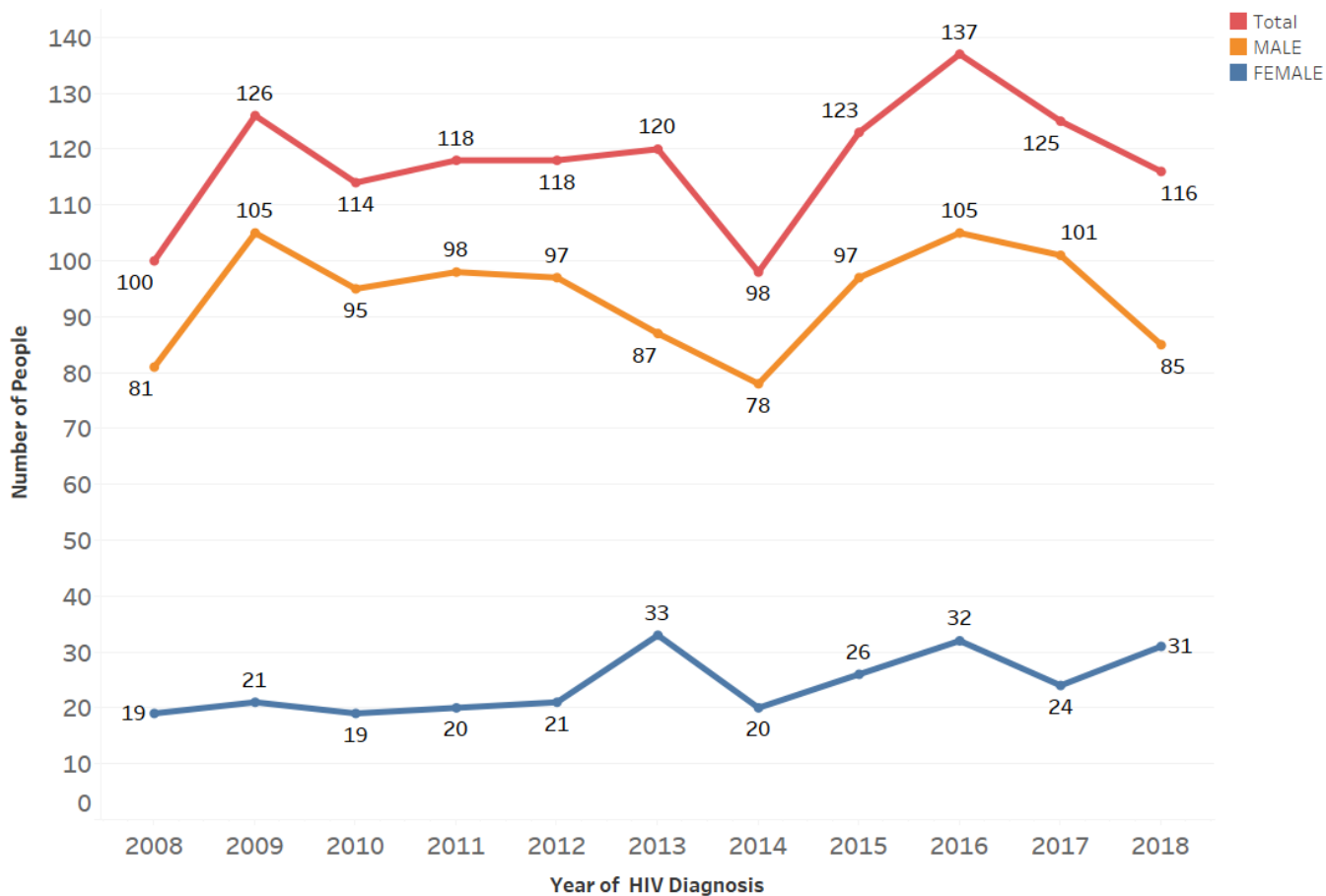
“Late testers” are people who receive AIDS diagnoses within three months of their HIV diagnoses. The proportion of late testers has been decreasing and reached its lowest level ever reported at 22% in 2018. Over 90% of “late testers” in Iowa were diagnosed with AIDS concurrently, meaning within one month of their HIV diagnoses.

Figure 3.2 Number and Percentage of Iowans Diagnosed Late with HIV ("Late Testers"): 2007 through 2018



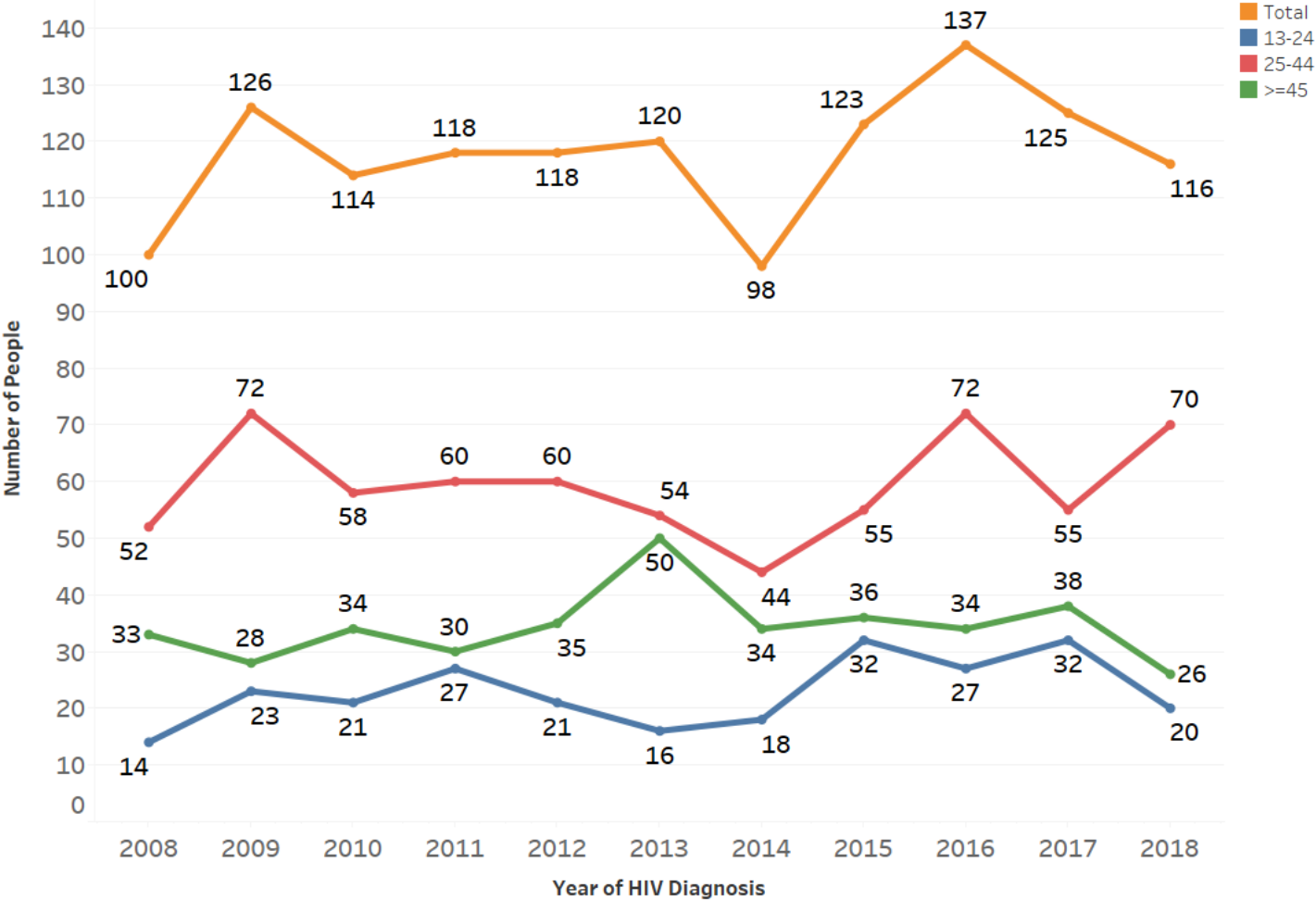
From 2008 through 2018, there were about four males diagnosed for every female diagnosed. Women experienced a 29% increase in diagnoses in 2018, but remained just below the peaks reported in 2013 and 2016. The increase in females diagnosed with HIV in 2018 was mostly among foreign-born women. Males experienced decreases in HIV diagnoses in 2017 and 2018.

Figure 3.3 Iowa's Diagnosed with HIV by Sex: 2008 through 2018



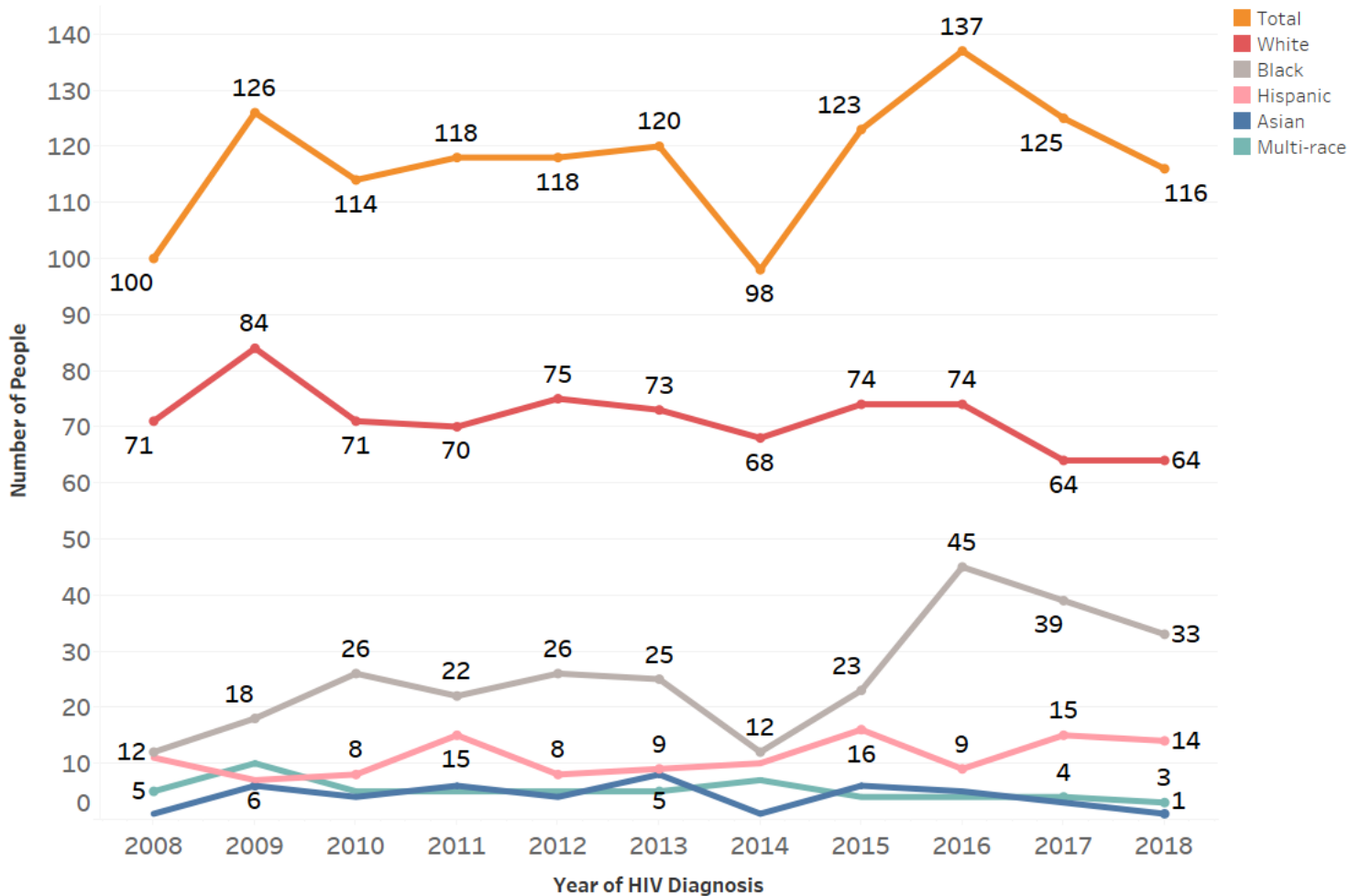
Over half of all people diagnosed with HIV annually, on average, are among people 25 to 44 years of age. This was the only age group that did not experience a decrease in diagnoses in 2018. In 2018, 60% of the people diagnosed with HIV were among those 25 to 44 years of age.

Figure 3.4 Age in Years at Diagnosis of Iowa HIV: 2008 through 2018



Diagnoses among non-Hispanic black/African-American people decreased from a high of 45 (33% of all people diagnosed with HIV) in 2016 to 33 (28% of all diagnoses) in 2018. Thirteen (39%) of the 33 non-Hispanic black/African American people diagnosed in 2018 were foreign born. Half of the Hispanic people diagnosed in 2018 were foreign born. Non-Hispanic white people make up the largest proportion of people diagnosed with HIV, 62%, on average, but this proportion has been decreasing recently, and was 55% in 2018.

Figure 3.5 Iowans Diagnosed with HIV by Ethnicity and Race: 2008 through 2018



About 87% of Iowa's population is white and non-Hispanic. Non-Hispanic black/African Americans, non-Hispanic Asians, and Hispanics are over-represented among people diagnosed with HIV in comparison to the sizes of their respective populations in Iowa. Non-Hispanic blacks/African Americans comprise 3% of Iowa's population but experienced 28% of HIV diagnoses reported in 2018. Non-Hispanic black/African American people were over 12 times more likely to be diagnosed than non-Hispanic white people, and Hispanic people over four times as likely to be diagnosed with HIV in Iowa than non-Hispanic white people in 2018.

Figure 3.6 Population of Iowa by Ethnicity and Race: 2018

Iowans Diagnosed with HIV by Race: 2018

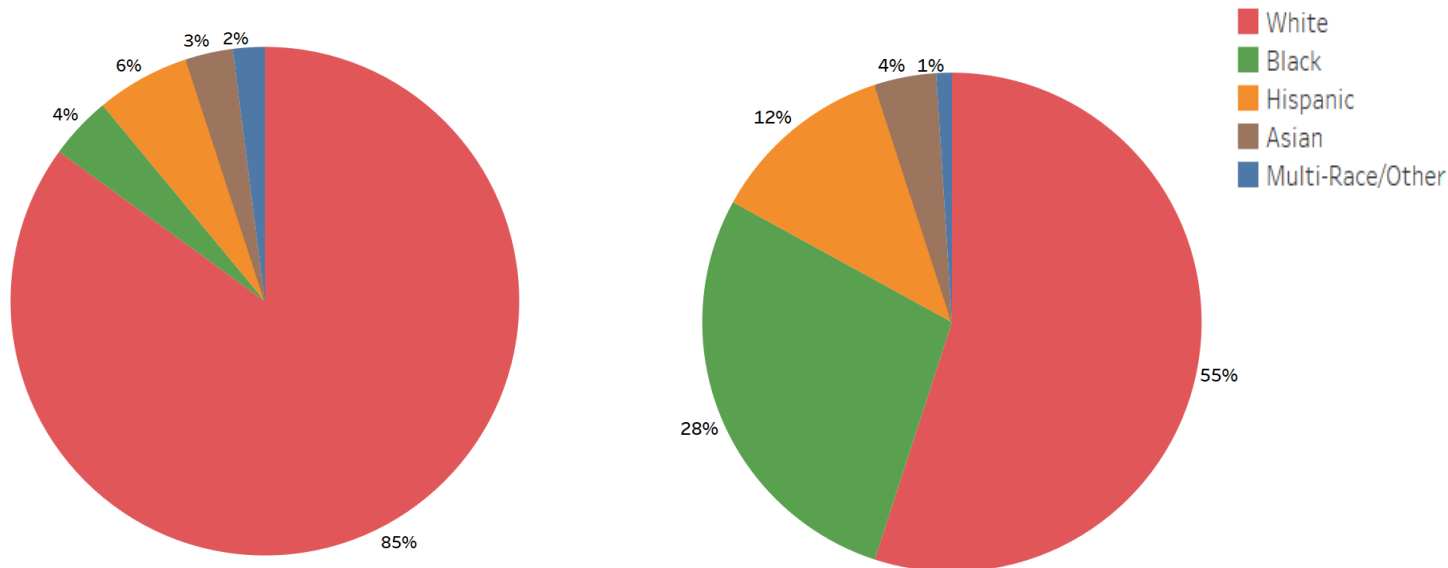
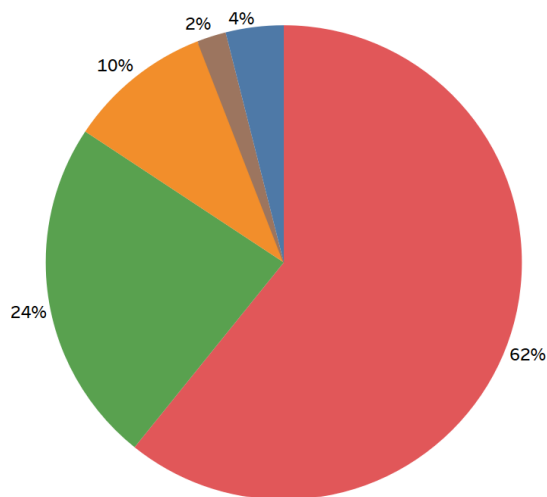


Figure 3.7 Iowans Living with HIV by Race as of December 31, 2018



Men who have sex with men (MSM) experienced a 7% decrease in diagnoses in 2018 and a 17% decrease over the last two years. People who identified as exposed through heterosexual contact experienced an increase in diagnoses in 2018 but remained below peak levels experienced in 2013 and 2016.

Figure 3.8 Iowa Adults Diagnosed with HIV by Exposure Category: 2008 through 2018

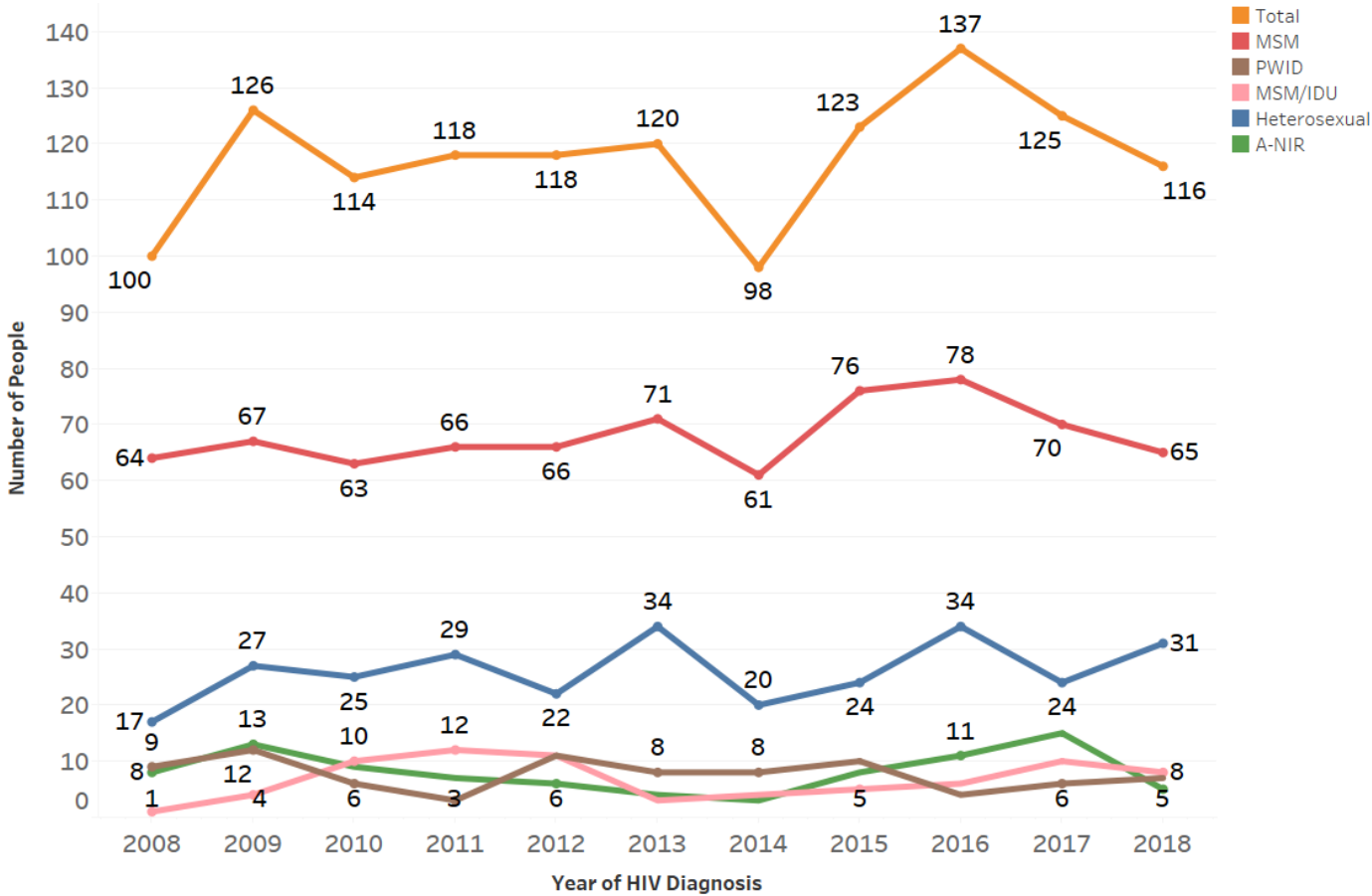
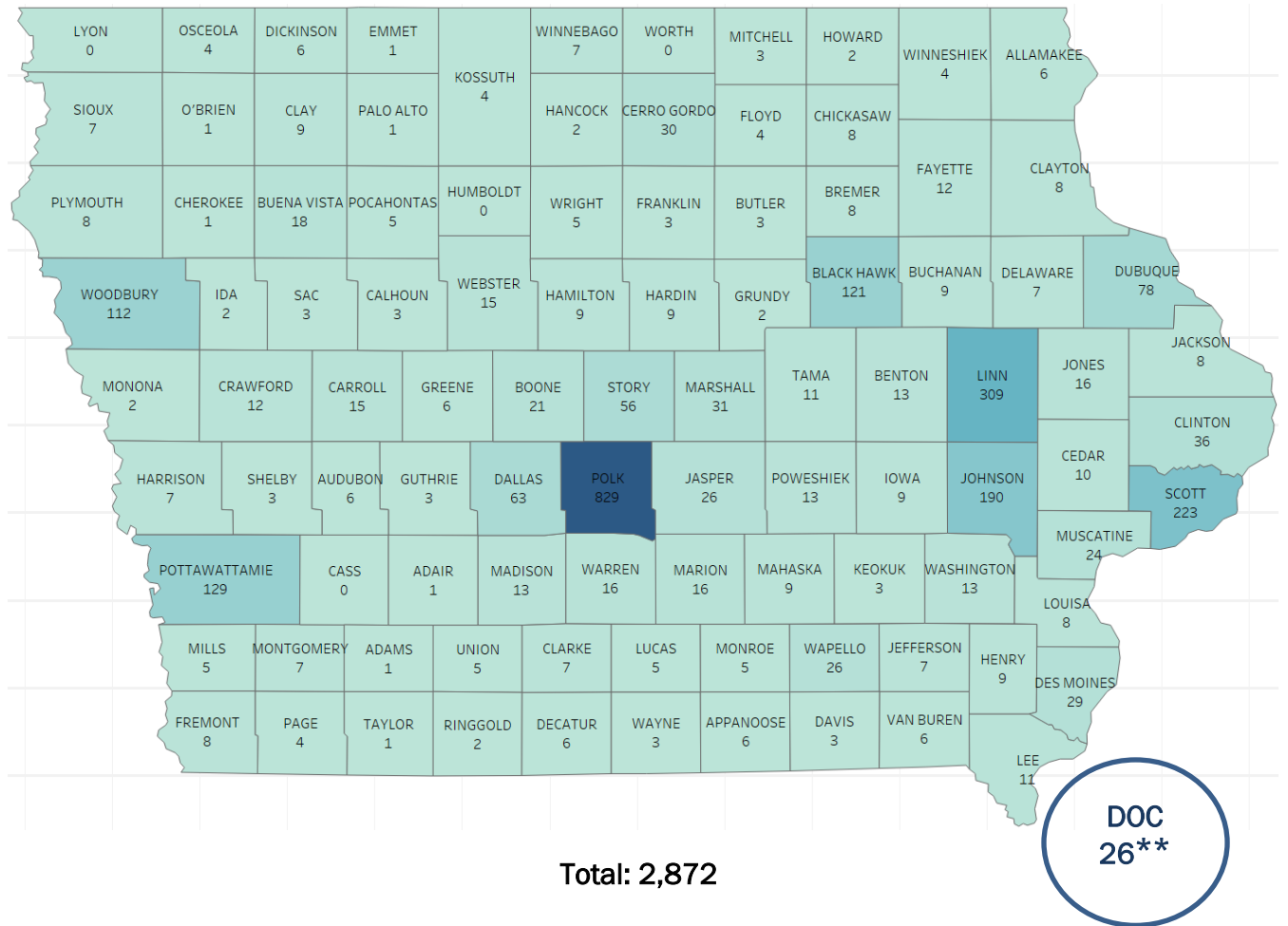
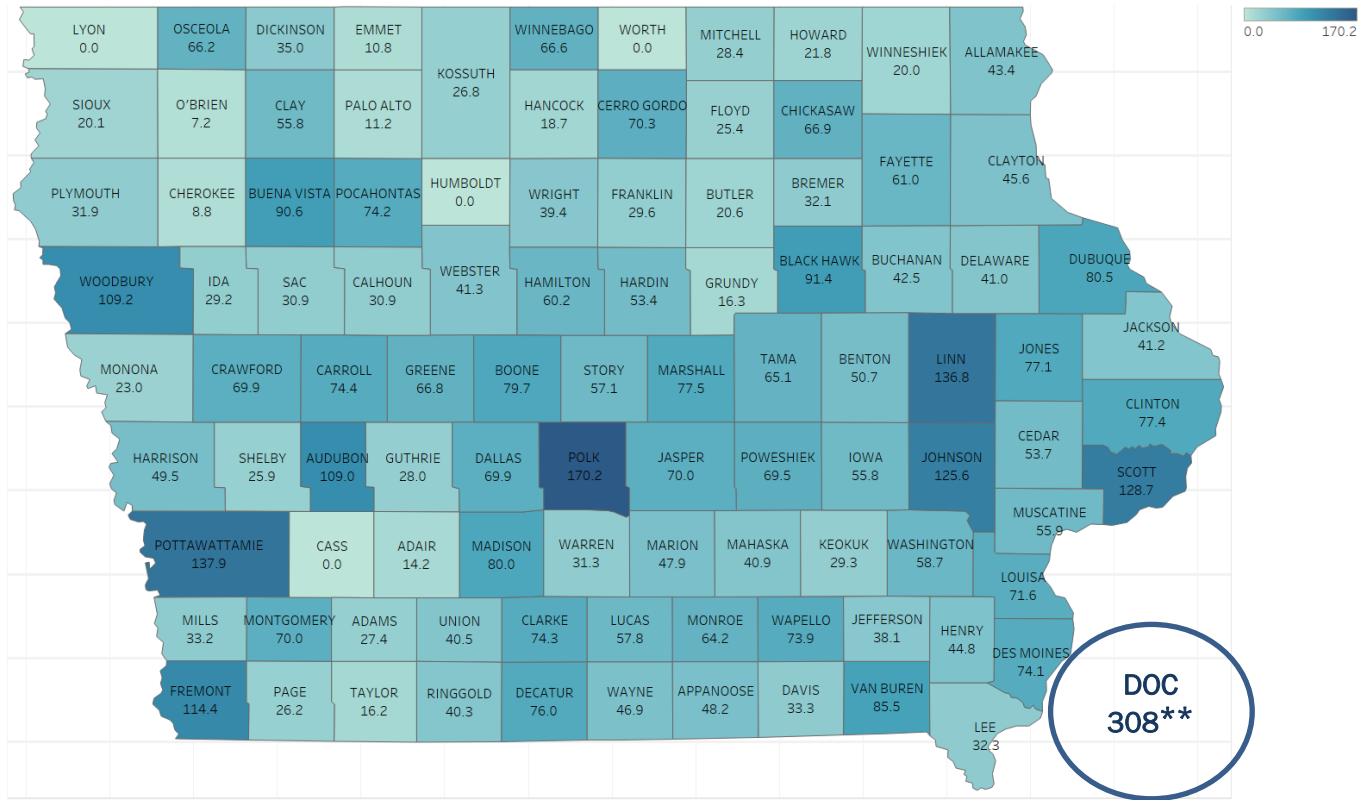


Figure 3.9 Number of Iowans Living with Diagnosed HIV Disease as of December 31, 2018 by County of Current Residence



This map shows the number of people (2,872) living with HIV disease as of December 31, 2018, in each Iowa county. Not all deaths may have been reported. **Twenty-six people were diagnosed while being held in Iowa Department of Corrections (DOC) facilities in the following counties: Henry (2), Jasper (3), Webster (2), Johnson (11), Jones (2), Lee (1), Page (2) and Polk (3). These numbers are excluded from county totals shown on the map.

Figure 3.10 Prevalence Rate of HIV Disease at the end of 2018 by County of Current Residence, Rates per 100,000

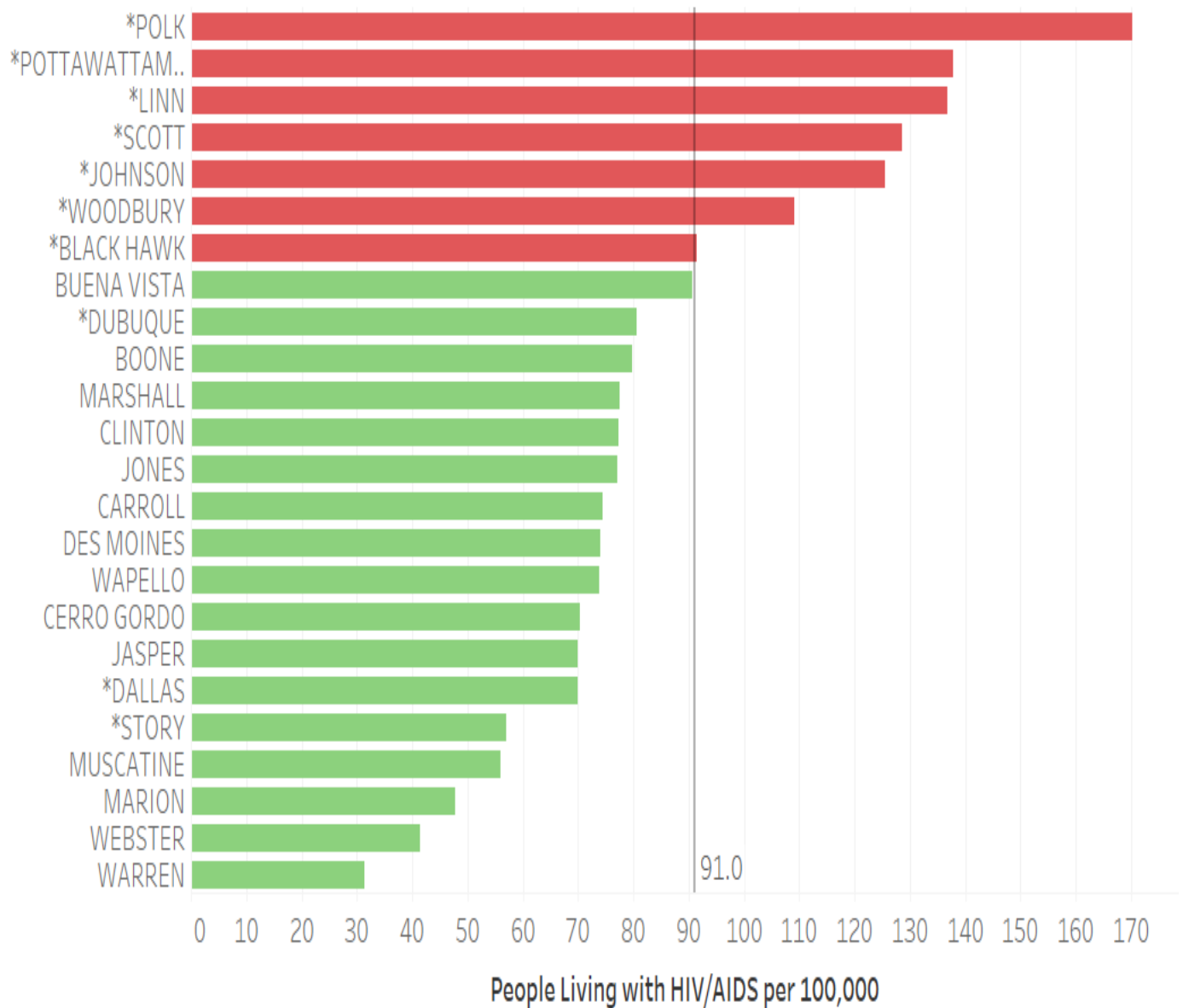


This map shows the rates per 100,000 of people living with HIV disease as of December 31, 2018, in each Iowa county. Not all deaths may have been reported.

**Rates were calculated based on total prison population of Iowa Department of Corrections (DOC) facilities in 2018.

Darker blue indicates a higher prevalence.

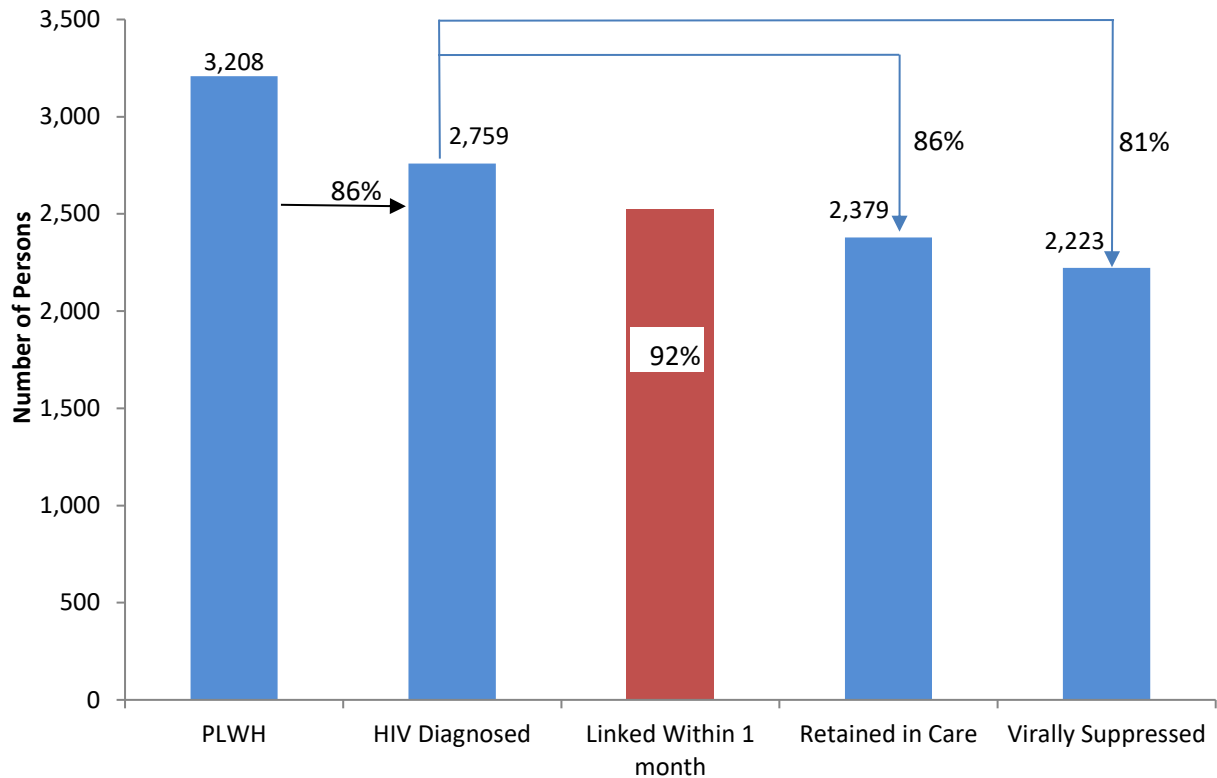
**Figure 3.11 Prevalence of HIV Disease by County of Current Residence:
Iowans Living with Diagnosed HIV Disease (HIV or AIDS) per 100,000 Population as of
December 31, 2018**



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 Iowa Department of Corrections system
- County populations are based on the 2018 U.S. Census estimates

Figure 3.12 Iowa HIV Care Continuum for 2018



People Living with HIV (PLWH): Estimated total number of lowans with HIV, of which 433 are undiagnosed. **Diagnosed:** People diagnosed with HIV disease as of December 31, 2017, and living in Iowa as of December 31, 2018.

- An estimated 3,208 lowans were living with HIV disease as of December 31, 2017. Of these, 2,759 had been diagnosed as of December 31, 2017, and were alive in Iowa as of December 31, 2018.

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 or viral load lab results at least three months apart in 2018 or who had only one viral load lab result but it demonstrated viral suppression during 2018.

Viral Suppression: People retained in care and whose most recent viral load in 2018 was less than 200 copies/mL.

- 2,379 (86%) of the 2,759 diagnosed lowans had been retained in care at the end of 2018. Of those retained in care, 2,223 (93%) were virally suppressed.
- Viral suppression for all diagnosed people living in Iowa (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.

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