

# State of Iowa HIV Disease End-of-Year 2020 Surveillance Report

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#### **Key Points**

Here are a few points drawn from our 2020 HIV data:

- Ninety-eight lowans were diagnosed with HIV: In 2020, lowa recorded the same number of people diagnosed with HIV as in 2019. Despite this, there were substantial increases in diagnoses among white, US-born males in 2020 that could signal a concerning trend among gay and bisexual males in the state. There was also a significant increase in diagnoses among people who inject drugs, although the absolute number remains relatively low (an increase from 8 to 13 people). Since 2016, lowa has not experienced an increase in overall HIV diagnoses. After peaking at 136 diagnoses in 2016, HIV diagnoses have decreased or remained unchanged. HIV diagnoses decreased by 8.1% from 2016 to 2017, by 7.2% to from 2017 to 2018, and by 15.5% from 2018 to 2019.
- Sex: Despite level HIV diagnoses overall, diagnoses among U.S.-born females and males increased in 2020. These increases were offset by decreases in diagnoses among foreign-born females and males. Overall, the proportion of HIV diagnoses that are among males continued to outnumber those among females by a ratio of about four to one in 2020. From 2019 to 2020, diagnoses among males increased by 10% after decreasing by 17% from 2018 to 2019. Diagnoses among females decreased by 26% from 2019 to 2020 after decreasing by 13% from 2018 to 2019. Diagnoses among U.S-born females increased by 7% compared to a decrease of 67% among foreign-born females. Similarly, diagnoses among U.S-born males increased by 20% compared to a decrease of 27% among foreign-born males.
- Age: People aged 25 through 44 years continue to account for the largest proportion (53%) and number (52) of people diagnosed with HIV. Diagnoses in this age group increased by 2% from 2019 to 2020 after decreasing significantly (by 27%) from 2018 to 2019. Youth and young adults 15 through 24 years experienced a sustained increase in diagnoses for two years in a row; new HIV diagnoses increased in this age group by 18% from 2018 to 2019 and by 16% from 2019 to 2020. Youth and young adults accounted for 22 (22% of all people newly diagnosed with HIV) in 2019 and 26 (27% of all people newly diagnosed) in 2020.

#### Race and ethnicity:

- Diagnoses among non-Hispanic Black/African-American people decreased for the fourth year in a row after peaking in 2016 at 44 new diagnoses (32% of total diagnoses). In 2020, 23 Black/African-American lowans were diagnosed with HIV. While non-Hispanic Black/African-American people represent 4% of lowa's population, they experienced 23% of all HIV diagnoses in 2020. Diagnoses among foreign-born Black lowans accounted for 35% of all diagnoses among Black lowans, lower than in 2019 when foreign-born Black lowans accounted for 57% of all diagnoses among Black lowans. There was a 15% increase in diagnoses among U.S-born Black/African American persons, whereas diagnoses among foreign-born Blacks decreased by 53%
- Hispanic/Latinx people represent 6% of lowa's population, and represented 5% of people diagnosed with HIV in 2020. Of the 5 Hispanic people diagnosed, 4 (80%) were foreign born.
- Non-Hispanic white people represent 85% of lowa's population, but represented only 58% of people diagnosed with HIV in 2020. Since 2010, diagnoses among white lowans have decreased by 20%.
- 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 disease agents. It has also been shown that these populations experience higher levels of other factors (stigma, stress, lack of access to health care, homelessness) that may lead to chronic health conditions, which in turn may make them more susceptible to HIV.

- Mode of Exposure: Despite level HIV diagnoses overall, diagnoses increased in 2020 among males who have sex with other males (MSM), among people who inject drugs (PWID), and among people whose mode of exposure was not identified (NIR). Diagnoses increased 13% among MSM and by 63% among PWID. Equal numbers of Non-Hispanic white males who have sex with men were diagnosed in 2020 as in 2019. This compared to significant increases among MSM who were non-Hispanic Black/African-American (50%), non-Hispanic Asian (150%) and multi-race (100%). All of the Hispanic/Latinx people diagnosed in 2020 were MSM.
- Late testers: The proportion of people diagnosed with AIDS within three months of their initial HIV diagnosis ("late testers") increased from 21% in 2019 to 24% in 2020. The proportion of people that are "late testers" in 2020 is lower than the five year (2015-2019) average of 26% and 10-year average of 31%. The lower number of "late testers" is further confirmation that people at risk for HIV are getting timelier access to testing. Of the 98 new HIV diagnoses in 2020, 4 were in an acute stage (i.e., very early) of HIV infection.
- HIV prevalence: As of December 31, 2020, there were 3,012 people with a current address in Iowa diagnosed and living with HIV, a prevalence of 95 per 100,000 persons. As of December 31, 2020, 95 of Iowa's 99 counties had at least one resident living with HIV. Prevalence in seven counties was greater than 100 per 100,000 population (0.1%). Polk County, with 184 per 100,000, has the highest prevalence, followed by Pottawattamie County (148 per 100,000), and Scott County (146 per 100,000).
- HIV Continuum of Care: The HIV continuum of care includes people living with HIV in lowa who were diagnosed before January 1, 2020. Of the 2,910 people diagnosed with HIV disease on or before December 31, 2019, and living in lowa as of December 31, 2020, 2,426 (83%) were retained in HIV care and 2,291 (79%) were virally suppressed. These numbers are down from 2019 but significantly higher than in many parts of the country. The most recent estimate from Centers for Disease Control and Prevention (CDC) is that 63% of people in the US who are diagnosed with HIV were virally suppressed at their last test. When lowans are retained in care (i.e., have two or more CD4 or viral load tests, performed at least three months apart, or have at least one suppressed viral load test result), viral suppression rises to 94%.

#### Organization of this Data Report

This end-of-year report presents surveillance data on HIV disease in Iowa. It provides an overview of HIV disease in the state and within 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 people 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 14% of people living with HIV remain undiagnosed. (HIV Surveillance Supplemental Report 2020;25(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, 2020. 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 Mode of 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.

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- "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 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 followup. 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 (<a href="http://www.census.gov">http://www.census.gov</a>) to calculate prevalence rates.

#### Section 2: NARRATIVE SUMMARY

#### **lowans Diagnosed with HIV**

There were 98 lowans diagnosed with HIV in 2020, the same as the number diagnosed in 2019. In lowa, the number of people diagnosed with HIV since 1998 peaked at 136 in 2016, which was also the most HIV diagnoses ever recorded in a single year, and has steadily decreased since 2016 to 98 diagnoses in 2019 and 2020 (Figure 3.1). Not all populations experienced a decrease or flattening in diagnoses in 2020. In particular, diagnoses among US-born males and females, among those 15 to 24 years of age, among White, non-Hispanic lowans, and among Asian and multi-race lowans increased in 2020. New diagnoses among males increased by 10% from 71 males diagnosed in 2019 to 78 males diagnosed in 2020, while diagnoses among females decreased by 26% from 26 females diagnosed in 2019 to 20 females diagnosed in 2020. Similarly, among white, non-Hispanic lowans, diagnoses increased by 20% from 2019 to 2020 while diagnoses among minority racial/ethnic groups decreased by 21%. Additionally, diagnoses among lowans 15 to 24 years of age increased by 18%, and by 2% among lowans of 25 to 44 years of age, and while they decreased by 20% among those 45 years of age and above.

The flattening of diagnoses between 2019 and 2020 was influenced by a significant decrease in diagnoses among foreign-born people (decreased by 44%) and a comparatively mild increase in diagnoses among US-born people (increased by 17%). The decrease in diagnoses among foreign-born people from 2019 to 2020 was mostly among foreign-born Black, non-Hispanic lowans (decreased by 53%). Among US-born people, the increase in diagnoses from 2019 to 2020 was mostly among US-born white, non-Hispanic lowans (increased by 24%) and among US-born Black, non-Hispanic lowans (increased by 15%). Diagnoses among people who identified as Hispanic/Latinx decreased by more than half (58%) from 2019 to 2020, with the largest decrease being among US-born Hispanic people (decreased by 86%) compared to foreign-born Hispanic people (decreased by 20%). Changes in the number of diagnoses among foreign-born people are often influenced by immigration. The decreases in diagnoses among foreign-born Black, non-Hispanic people and foreign-born Hispanic people could be the result of restrictions in travel and immigration in 2020 related to SARS-CoV-2 (COVID-19). In addition, the impact of the SARS-CoV-2 pandemic on the essential workers that mostly include Hispanic and Black people may have affected opportunities for HIV testing among these groups.

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 healthful lifestyle.

In 2020, there were 3.1 HIV diagnoses per 100,000 people, similar to HIV diagnoses per 100,000 people in 2019. This compared to 3.7 HIV diagnoses per 100,000 people in 2018 and 4.0 HIV diagnoses per 100,000 population in 2017.

In 2020, 48 people were diagnosed with AIDS (stage 3 HIV disease), up from 43 in 2019, and less than the average of 55 for the last five years (2015 through 2019).

It is estimated that there are 474 lowans living 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 finding most of the undiagnosed people living in lowa and slow transmission of HIV in the state.

#### Sex

Diagnoses among males increased by 10% from 2019 to 2020, from 71 in 2019, to 78 in 2020, while diagnoses among females decreased by 26% from 27 in 2019 to 20 in 2020. Despite the increase in diagnoses among males, HIV diagnoses among foreign-born males decreased by 27% from 2019 to 2020 compared to a 20% increase among US-born males. Among females, the significant decrease in diagnoses among foreign-born females (67%) masked the relatively small increase in diagnoses among US-born females (7%) such that females experienced a 26% decrease overall. Year-to-year variations notwithstanding, the proportion of overall diagnoses among males in lowa continued to outnumber diagnoses among females by almost a ratio of about four to one.

#### Age

People aged 25 through 44 years continued to make up the largest proportion (53%) and number (52) of people diagnosed with HIV in 2020. This age cohort experienced a 2% increase in diagnoses from 2019 to 2020. The number of youth and young adults 15 through 24 years of age who were diagnosed with HIV increased from 22 in 2019 (22% of all people diagnosed with HIV) to 26 in 2020 (27% of all people diagnosed). This age cohort experienced the largest increase in diagnoses (18%) in 2020. Among lowans 15 through 24 years of age, the number of people diagnosed in 2020 (26) is similar to the five-year (2015-2019) average of 26 diagnoses in that age group. People aged 45 years and older experienced a decrease in HIV diagnoses in three consecutive years from 26 (22% of all people diagnosed) in 2018 to 25 (26% of all people diagnosed) in 2019, and finally dropping to 20 (20% of all people diagnosed) in 2020. There were no pediatric HIV diagnoses in 2020.

For people 13 years of age and older (adults and adolescents), the median age at diagnosis in 2020 was 32, lower than the previous five-year average median age of 33. In 2020, the median age of diagnosis for adult/adolescent males was 32, lower than that for adult/adolescent females, which was 36.

#### Racial and ethnic minorities are over-represented

Diagnoses among non-Hispanic Black/African American lowans decreased from 30 (31% of all people diagnosed) in 2019 to 23 in 2020 (23% of all people diagnosed), lower than the 5-year average of 34 (28% of all people diagnosed) from 2015 to 2019. The decrease in diagnoses among people who are Black/African American was among foreign-born Black/African American people, who experienced a 53% decrease in diagnoses, whereas diagnoses among US-born Black/African American people increased 15% from 13 diagnoses in 2019 to 15 diagnoses in 2020. Non-Hispanic Black/African Americans represent 4% of lowa's general population, but experienced 23% of new HIV diagnoses in 2020. Of the 23 non-Hispanic Black/African Americans diagnosed in 2020, 8 (35%) were foreign-born. Males account for 10 (67%) of the 15 U.S-born non-Hispanic Black/African American people diagnosed in 2020, and among these, 8 (80%) identified as men who have sex with men (MSM) while the exposure category of two are yet to be determined. Among foreign-born Black/African Americans, equal numbers of males and females were diagnosed in 2020. The 23 non-Hispanic Black/ African American people diagnosed with HIV in 2020 equates to 19 diagnoses per 100,000 non-Hispanic Black/African American population. When the numbers of people diagnosed per 100,000 population are compared, non-Hispanic Blacks/African Americans were more than 8 times more likely to have been diagnosed with HIV in 2020 than non-Hispanic white lowans.

The number of Hispanic people diagnosed with HIV decreased from 12 (12% of all people diagnosed) in 2019 to 5 (5%) in 2020. Hispanic/Latinx people represent 6% of lowa's population and experienced 5% of HIV diagnoses in 2020, less than half of the 11% of total HIV diagnoses on average from 2015 to 2019. Of the 5 Hispanic persons diagnosed in 2020, 4 (80%) were foreign born, and all were males with MSM as their mode of exposure. The 5 Hispanics diagnosed with HIV in 2020 equate to 2.5 per 100,000 Hispanic people, which means that Hispanic people were almost as likely to have been diagnosed with HIV in 2020 as those who are white and non-Hispanic.

The number of non-Hispanic Asian people in lowa who are diagnosed with HIV is low and primarily influenced by immigration. Of all non-Hispanic Asian people diagnosed with HIV since 2009, 85% are foreign-born. However, more US-born non-Hispanic Asian lowans have been diagnosed with HIV in recent years than have foreign-born non-Hispanic Asians. In 2019, an equal number of US-born and foreign-born non-Hispanic Asians were diagnosed, and in 2020 4 (67%) of the 6 non-Hispanic Asians diagnosed were US-born. The number of non-Hispanic Asians diagnosed reached a peak in 2013 at 7% of all people diagnosed. Non-Hispanic Asians make up about 3% of lowa's population, but experienced 6% of HIV diagnoses in 2020, lower than the 3% of total HIV diagnoses on average from 2015 to 2019. The six non-Hispanic Asians diagnosed with HIV in 2020 equates to 7.3 diagnoses per 100,000 non-Hispanic Asian people, more than three times higher than for white, non-Hispanic lowans.

The largest proportion of people diagnosed with HIV in Iowa continues to be white, non-Hispanic Iowans, even though the proportion experienced among this population has dropped significantly in recent years. Of the 98 people diagnosed with HIV in 2020, 57 (58%) were among non-Hispanic white people, compared to the five-year average (2015 through 2019) of 65 (54%). Since the beginning of the epidemic in 1982, non-Hispanic white people made up 70% of all people diagnosed with HIV in Iowa. The 57 non-Hispanic, white people diagnosed in 2020 equate to 2.1 diagnoses per 100,000 non-Hispanic, white people.

As described previously, 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, numerous systemic factors contribute to 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. These social determinants of health lead to higher probabilities of having a sexual or needle-sharing partner with transmissible levels of HIV.

#### HIV and COVID-19 co-infection

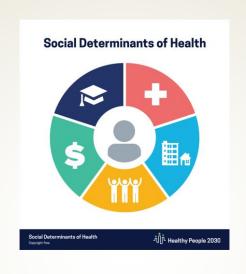
Of the 3,012 people living with HIV in lowa at the end of 2020, 1,658 (55%) had been tested for COVID-19. Of these, 291 were diagnosed with COVID-19, an 18% positivity rate. Black/African American people living with HIV made up a disproportionate number of people coinfected with COVID-19 at 32% of people with co-infections, compared to 24% of people with HIV. Hispanic lowans accounted for 12% of people with co-infections compared to 10% of people with HIV.

HIV testing at the state's 10 contracted Integrated HIV and Hepatitis Testing Sites declined by 54% from 2019 to 2020 due to clinic closures and restrictions on movement related to the SARS-CoV-2 global pandemic. Similarly, laboratory reports decreased by 9% from 2019 to 2020.

Despite this, HIV diagnoses at the 10 testing sites increased from 17 (0.13% positivity) in 2019 to 21 (0.35% positivity) in 2020.

#### Social Determinants of Health

# Social Determinants of Health (SDOH)



Social determinants of health (SDOH) are the conditions in the places where people are born, live, learn, work, play, and age, that affect a wide range of health, functioning, and quality-of-life outcomes and risks.<sup>1</sup> These conditions are in turn shaped by political, social, and economic forces.

The marked health inequities between communities and populations are undergirded by the unequal distribution of power, income, goods, and services, and the consequent unfairness in the immediate, visible circumstances of people's lives.<sup>2</sup> These circumstances influence their access to health care, schools, and education, the conditions of their work and leisure, their homes, communities, towns, or cities.

Healthy People 2030 has identified a place-based framework that identifies five main SDOH focus areas: Economic stability, healthcare access and quality, neighborhood and built environment, education access and quality, and social and community context.<sup>3</sup>

Studies assessing the relationship between HIV diagnosis rates and social determinants of health have found that HIV diagnosis rates among specific populations increased when the following factors increased: income inequality between the population and the general population, the proportion of a population that is unmarried, the number of uninsured people, the number of vacant housing units, the proportion of people 25 years and older without high school diploma, and the number of households under the federal poverty level.<sup>4</sup>

- 1. Centers for Disease Control and Prevention (2018). Social Determinants of Health: Know What Affects Health. Retrieved from https://www.cdc.gov/socialdeterminants/index.htm
- 2. Commission of Social Determinants of Health, Final Report, Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health (2008) World Health Organization, WHO Press
- 3. Healthy People 2030, Social Determinants of Health <a href="https://health.gov/healthypeople/objectives-and-data/social-determinants-health">https://health.gov/healthypeople/objectives-and-data/social-determinants-health</a> last accessed 06/11/2021
- 4. Z. Gant, M. Lomotey, H.I. Hall, X. Hu, X. Guo and R. Song, A County-Level Examination of the Relationship Between HIV and Social Determinants of Health: 40 States, 2006-2008, The Open AIDS Journal, 2012 (6)

#### HIV exposure category

Men who have sex with men (MSM) remained the leading exposure category for people with HIV in Iowa. Of the 98 people diagnosed with HIV in 2020, 51 (52%) of diagnoses were among MSM, less than the previous five-year average of 67 (56%). Overall, MSM have accounted for more than half of all diagnoses since the beginning of the epidemic in Iowa, and account for 53% of Iowans living with HIV.

The increase in diagnoses among MSM in 2020 was primarily experienced among non-Hispanic Black/African-American, non-Hispanic Asian, and multi-race individuals. Of the 14 non-Hispanic Black/African-American males diagnosed in 2020, 9 (64%) were MSM, and of these, 8 are US-born. Similarly, of the 47 non-Hispanic white males diagnosed in 2020, 27 (57%) were MSM and all were US-born. All of the 6 non-Hispanic Asians diagnosed in 2020 were males, 5 (83%) were MSM, and 4 of the 5 are US-born. All of the 5 Hispanic Iowans diagnosed in 2020 were males, all are MSM, and 4 of the 5 diagnosed are foreign-born.

There was also a significant increase in diagnoses among people who inject drugs in 2020. Diagnoses increased by 63% from 8 in 2019 to 13 in 2020. Historically, this number has remained low in lowa at around 7% of all diagnoses, but was 13% in 2020. This trend will be closely monitored.

The proportions of other HIV exposure categories of people diagnosed in 2020 were as follows: men who have sex with men and inject drugs (MSM/PWID), 4%; heterosexual contact, 13%; and no identified risk (NIR), 17%. Experience has shown that while newly diagnosed people may initially be reluctant to disclose their mode of HIV exposure to their health care provider or to health department staff, they become less reticent as time progresses. Some exposures will be ascertained over time through follow-up calls to care providers. By the end of 2021, exposure category will be ascertained for many of the remaining people diagnosed in 2020. There have been no pediatric HIV diagnoses in lowa since 2017.

#### Late testers

The proportion of people diagnosed with AIDS within three months of their initial HIV diagnosis ("late testers") increased by three percentage points from 2019 to 2020 (from 21 to 24%). Overall, late diagnoses have decreased significantly since 2013, when 46% of people diagnosed were considered to be late testers. In 2020, 24% of people diagnosed were late testers, the third 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, 2020, there were 3,012 people with a current address in lowa who were diagnosed and living with HIV, a prevalence of 95 per 100,000 people. This number includes all people whose current addresses were in lowa at the end of 2020. It includes 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 3,012 is adjusted for our estimated percentage of undiagnosed persons in lowa (14%), there may have been as many as 3,384 lowans living with HIV or AIDS at the end of 2020, with an estimated 474 people undiagnosed.

As of December 31, 2020, 95 of Iowa's 99 counties had at least one resident living with HIV. Prevalence in seven counties was greater than 100 per 100,000 people (0.1%). Polk County, with 184 per 100,000, has the highest prevalence, followed by Pottawattamie County (148 per 100,000), and Scott County (146 per 100,000). To add perspective, national and regional prevalence data at the end of 2018, the most recent year available, are as follows: United States, 427.5 per 100,000; Midwest, 250.0 per 100,000; West, 361.3 per 100,000; South, 517.4 per 100,000; and Northeast, 533.9 per 100,000. (Centers for Disease Control and Prevention. *HIV Surveillance Supplemental Report, 2019; vol. 25, Number 1.* 

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 102 deaths in 1995. As of December 31, 2020, 1,361 deaths had been reported among people diagnosed with HIV or AIDS in Iowa. Of those deaths, 58% were caused in some part by the underlying HIV disease, 36% of deaths were not HIV related, and the causes of death of 5% were unknown. Additional death information may be obtained after the National Death Index data linkage is completed later in 2021.

#### Continuum of HIV Care

A continuum of HIV care is assessed using 2020 HIV care data for people diagnosed with HIV on or before December 31, 2019. People newly diagnosed with HIV during the course of 2020 are not included in the continuum of care analysis. Therefore, as of December 31, 2019, there were 2,910 people diagnosed with HIV disease and living in Iowa. Of these, 2,426 (83%) were retained in HIV care (i.e., had at least two visits to an HIV primary medical care provider during year 2020) and 2,291 (79%) were virally suppressed. This is significantly higher than many parts of the country. National estimates vary with around 65% of people with suppressed virus. Among Iowans who are retained in care in 2020, viral suppression is 94%.

#### **HIV Partner Services**

All of the 98 persons newly diagnosed with HIV disease in 2020 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 98 persons assigned for partner services named 177 partners. Of these, 130 were located in lowa and were of unknown HIV statuses. Of the remaining 47, 26 lived out of state and 21 were already known to be diagnosed with HIV. Of the 130 contacts with unknown HIV statuses, 80 (62%) were subsequently tested, and 9 were found to be HIV positive (11% positivity).

#### **Ending the HIV epidemic**



The adverse health impacts of HIV, viral hepatitis, STIs, and TB continue to be an urgent public health priority. The national ending the HIV Epidemic (EHE) plan prioritizes increased testing and early diagnosis, rapid connection to treatment and medical care, utilization of prevention services to reduce the chances of transmission, and fast response to HIV clusters and outbreaks.

#### Section 3: TABLES AND FIGURES

Table 3.1 lowans Diagnosed with HIV or AIDS or Dying with HIV in 2020 Compared to lowans Living with HIV Disease as of December 31, 2020

Characteristics	HIV Dis Diagno		AIDS Dia	gnoses <sup>2</sup>	Deat	ths <sup>3</sup>	People Living with HIV Disease <sup>4</sup>	
	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Sex at Birth								
Male	78	(80)	34	(71)	33	(85)	2,329	(77)
Female	20	(20)	14	(29)	6	(15)	683	(23)
Age at Diagnosis								
Under 13	0		0		0		51	(2)
13-14	0	-	0		0	-	3	-
15-24	26	(27)	8	(17)	0	-	578	(19)
25-34	30	(31)	17	(35)	17	(44)	1055	(35)
35-44	22	(22)	7	(15)	7	(18)	771	(26)
45-54	14	(14)	9	(19)	5	(13)	389	(13)
55-64	1	(1)	3	(6)	7	(18)	139	(5)
65 or older	5	(5)	4	(8)	3	(8)	24	(1)
Ethnicity/Race								
Hispanic, All Races	5	(5)	4	(8)	-3	(8)	288	(10)
Not Hispanic, White	57	(58)	27	(56)	29	(74)	1,773	(59)
Not Hispanic, Black/African American	23	(23)	16	(33)	7	(18)	729	(24)
Not Hispanic, Asian	6	(6)	1	(2)	-2	-	70	(2)
Not Hispanic, Native Hawaiian/Pacific Islander	2	(2)	0		0		7	
Not Hispanic, American Indian/Alaska Native	0		0		0		7	-
Not Hispanic, Multi-race	5	(5)	0		_	_	138	(5)
Country of Birth								
United States or Dependency	83	(85)	34	(71)	33	(85)	2,411	(80)
Other Countries	15	(15)	14	(29)	6	(15)	601	(20)
Mode of Exposure <sup>5</sup>								
Men who have sex with men (MSM)	51	(52)	18	(38)	23	(59)	1,603	(53)
Injection Drug Use (IDU)	13	(13)	5	(10)	1	(3)	216	(7)
MSM and Injection Drug Use ( MSM/IDU)	4	(4)	4	(8)	5	(13)	205	(7)
Heterosexual Contact	13	(13)	8	(17)	7	(18)	572	(19)
Hemophilia/Coagulation disorder	0	-	0		0	-	6	-
Receipt of blood or tissue	0		0		0		3	I
Risk not reported/Other (NIR)	17	(17)	13	(27)	3	(8)	357	(12)
Pediatric/Other	0		0		0		50	(2)
TOTALS	98	(100)	48	(100)	39	(100)	3,012	(100)

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

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> **Deaths** reflect deaths in 2020 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.

<sup>&</sup>lt;sup>4</sup> **People living with HIV disease** reflect HIV-diagnosed people (HIV or AIDS) living in the state of lowa and alive as of December 31, 2020. All deaths may not have been reported.

<sup>&</sup>lt;sup>5</sup> **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  $\rm HIV^{1}$  by Sex, Age, Ethnicity and Race, Country of Birth and Mode of Exposure to HIV: 2010 through 2020

Characteristics	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Sex at Birth											
Male	78	71	85	101	104	97	78	87	97	98	95
Female	20	27	31	24	32	26	20	32	21	20	19
Age in Years at Diagnosis											
Under 13	0	0	0	0	4	0	2	0	2	1	1
13-14	0	0	1	0	0	0	0	0	0	0	0
15-24	26	22	19	32	27	32	18	16	21	27	21
25-34	30	24	45	40	43	28	27	29	33	33	30
35-44	22	27	25	15	28	27	18	24	27	27	28
45-54	14	8	15	21	21	22	17	28	24	21	27
55-64	1	13	8	15	12	13	14	17	9	7	7
65 or older	5	4	3	2	1	1	2	5	2	2	0
Ethnicity/Race											
Hispanic, All Races	5	12	14	15	9	16	10	9	8	15	8
Not Hispanic, White	57	47	64	64	74	74	68	73	75	70	71
Not Hispanic, Black/African American	23	30	33	39	44	23	11	23	26	22	26
Not Hispanic, Asian	6	2	1	3	5	6	1	8	4	6	4
Not Hispanic, Native Hawaiian/Pacific Islander	2	2	0	0	0	0	0	0	0	0	0
Not Hispanic, American Indian/Alaska Native	0	1	1	0	0	0	0	0	0	0	0
Not Hispanic, Multi-race	5	4	3	4	4	4	8	6	5	5	5
Country of Birth											
United States or Dependency	83	71	94	102	97	94	84	95	98	92	95
Other Countries	15	27	22	23	39	29	14	24	20	262	19
Mode of Exposure - Adult/Adolescent <sup>2</sup>											
Men who have sex with men (MSM)	51	45	65	71	78	75	60	71	66	66	63
Injection Drug Use (IDU)	13	8	6	7	4	10	8	8	11	3	6
MSM and Injection Drug Use ( MSM/IDU)	4	7	9	10	6	6	5	3	11	12	10
Heterosexual Contact	13	27	33	28	33	24	20	33	22	29	25
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)	17	11	3	9	11	8	3	4	6	7	9
Pediatric/other	0	0	0	0	4	0	2	0	2	1	1
TOTALS	98	98	116	125	136	123	98	119	118	118	114

 $<sup>^{</sup>m 1}$  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.

<sup>&</sup>lt;sup>2</sup> 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 lowa Males 13 Years of Age and Older Diagnosed with HIV: 2006 through 2020

	Year of HIV Diagnosis													
Characteristics	20	20	20	019	2	018	2	017	2	016	thro	006 ough- 015		through 015
Characteristics	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)
Age at Diagnosis														
13-14	0		0	-	0		0		0		0		0	
15-24	18	(23)	18	(25)	14	(16)	26	(26)	21	(20)	159	(17)	91	(20)
25-34	29	(37)	17	(24)	37	(44)	36	(36)	33	(32)	238	(26)	115	(25)
35-44	19	(24)	18	(25)	15	(18)	10	(10)	23	(22)	237	(26)	101	(22)
45-54	7	(9)	3	(4)	10	(12)	17	(17)	18	(17)	185	(20)	90	(20)
55-64	1	(1)	12	(17)	7	(8)	10	(10)	8	(8)	90	(10)	49	(11)
65 or older	4	(5)	3	(4)	2	(2)	2	(2)	1	(1)	14	(2)	9	(2)
Ethnicity/Race														
Hispanic, All Races	5	(6)	8	(11)	11	(13)	13	(13)	9	(9)	90	(10)	48	(11)
Not Hispanic, White	47	(60)	40	(56)	52	(61)	56	(55)	66	(63)	654	(71)	310	(68)
Not Hispanic, Black/African American	14	(18)	17	(24)	20	(24)	25	(25)	24	(23)	116	(13)	60	(13)
Not Hispanic, Asian	6	(8)	2	(3)	1	(1)	3	(3)	2	(2)	24	(3)	16	(4)
Not Hispanic, Multi-race	4	(5)	2	(3)	1	(1)	4	(4)	3	(3)	38	(4)	21	(5)
Other	2	(3)	2	(3)	0	-	0	-	0		1	-	0	-
Country of Birth														
United States or Dependency	67	(86)	56	(79)	72	(85)	83	(82)	85	(82)	802	(87)	388	(86)
Other Countries	11	(14)	15	(21)	13	(15)	18	(18)	19	(18)	121	(13)	67	(15)
Mode of Exposure														
Men who have sex with men (MSM)	51	(65)	45	(63)	65	(76)	71	(70)	78	(75)	658	(68)	338	(74)
Injection Drug Use (IDU)	9	(12)	4	(6)	2	(2)	5	(5)	4	(4)	60	(7)	24	(5)
MSM and IDU	4	(5)	7	(10)	9	(11)	10	(10)	6	(6)	61	(8)	37	(8)
Heterosexual Contact	5	(6)	8	(11)	8	(9)	9	(9)	9	(9)	77	(9)	36	(8)
Blood, blood products, tissue	0	-	0		0		0		0		0		0	
Risk not reported(NIR)/Other	9	(12)	7	(10)	1	(1)	6	(6)	7	(7)	67	(8)	20	(4)
Any MSM (MSM + MSM/IDU)	55	(71)	52	(73)	74	(87)	81	(80)	84	(81)	719	(78)	375	(82)
Any IDU (IDU + MSM/IDU)	13	(17)	11	(15)	11	(13)	15	(15)	10	(10)	121	(13)	61	(13)
TOTALS	78	(100)	71	(100)	85	(100)	101	(100)	104	(100)	923	(100)	455	(100)

As shown in the Table 3.3, diagnoses among males has decreased slightly in the last three years from a high of 104 diagnoses in 2016 to a low of 78 in 2020. Males aged 25 to 44 years experienced more than half (52%) of all adult/adolescent ( $\geq$  13 years of age at time of diagnosis) diagnoses among males from 2006 through 2020. More than 70% of males diagnosed annually since 2014 were likely exposed through sex with other men. Diagnoses among foreign-born males in 2020 accounted for 14% of all diagnoses among males in 2020, down from 21% in 2019.

Table 3.4 lowa Females 13 Years of Age and Older Diagnosed with HIV: 2006 through 2020

				inough			ear of	HIV Diagr	osis					
Characteristics	2020		2019		2018		2017		2016		2006 through 2015		2011 through 2015	
	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)
Age at Diagnosis														
13-14	0		0		1	(3)	0	(0)	0	(0)	0	-	0	
15-24	8	(40)	4	(15)	5	(16)	6	(25)	6	(21)	39	(18)	23	(20)
25-34	1	(5)	7	(26)	8	(26)	4	(17)	10	(36)	72	(33)	35	(30)
35-44	3	(15)	9	(33)	10	(32)	5	(21)	5	(18)	44	(20)	22	(19)
45-54	7	(35)	5	(19)	5	(16)	4	(17)	3	(11)	40	(19)	22	(19)
55-64	0		1	(4)	1	(3)	5	(21)	4	(14)	16	(7)	11	(9)
65 or older	1	(5)	1	(4)	1	(3)	0	-	0	-	5	(2)	3	(3)
Ethnicity/Race														
Hispanic, All Races	0	-	4	(15)	3	(10)	2	(8)	0	-	17	(8)	10	(9)
Not Hispanic, White	10	(50)	7	(26)	12	(39)	8	(33)	8	(29)	93	(43)	47	(41)
Not Hispanic, Black/African American	9	(45)	13	(48)	13	(42)	14	(58)	17	(61)	80	(37)	44	(38)
Not Hispanic, Asian	0		0		0		0		2	(7)	15	(7)	9	(8)
Not Hispanic, Multi-race	1	(5)	2	(7)	2	(6)	0		1	(4)	11	(5)	6	(5)
other	0		1	(4)	1	(3)	0	-	0	_	0	-	0	-
Country of Birth														
United States or Dependency	16	(80)	15	(56)	22	(71)	19	(79)	12	(43)	143	(66)	74	(64)
Other Countries	4	(20)	12	(44)	9	(29)	5	(21)	16	(57)	73	(34)	42	(36)
Mode of Exposure														
Injection Drug Use (IDU)	4	(20)	4	(15)	4	(13)	2	(8)	0	_	27	(13)	16	(14)
Heterosexual Contact	8	(40)	19	(70)	25	(81)	19	(79)	24	(86)	164	(76)	92	(79)
other	0		0	-	0	-	0	-	0	-	0	-	0	-
Risk not reported/Other (NIR)	8	(40)	4	(15)	2	(6)	3	(13)	4	(14)	25	(12)	8	(7)
TOTALS	20	(100)	27	(100)	31	(100)	24	(100)	28	(100)	216	(100)	116	(100)

Diagnoses among females remained below 30, on average, from 2006 through 2020, as shown in Table 3.4. Females aged 25 to 44 years experienced more than half of all adult/adolescent ( $\geq$  13 years of age at time of diagnosis) diagnoses among females from 2006 through 2020. Diagnoses among foreign-born females in 2020 account for 20% of all diagnoses among females. Heterosexual contact is the most common mode of exposure for women in lowa.

## Table 3.5 lowans Diagnosed with HIV in 1982 through 2020 by Diagnostic Status at Death, and Underlying Cause of Death (UCD)

V	HIV <sup>1</sup>	HIV (not- AIDS)	AIDS	Total	UCD <sup>4</sup>	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	25		3	3	0	2	1
1985	56		6	6	0	5	1
1986	62		15	15	0	14	1
1987	63		19	19	13	4	2
1988	68		8	8	6	2	0
1989	82		12	12	9	2	1
1990	110		23	23	13	9	1
1991	134		57	57	44	10	3
1992	127		63	63	51	11	1
1993	98	1	76	77	61	14	2
1994	102	1	83	84	62	18	4
1995	87	2	100	102	76	23	3
1996	104	2	65	67	53	9	5
1997	104	1	29	30	19	9	2
1998 <sup>5</sup>	98	2	17	19	10	8	1
1999	84	3	23	26	15	9	2
2000	90	2	28	30	20	8	2
2001	96	4	32	36	20	14	2
2002	102	2	33	35	27	8	0
2004	87	4	31	35	16	18	1
2004	104	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	127	6	28	34	16	15	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	123	11	35	46	20	24	2
2014	98	5	42	47	22	20	5
2015	119	9	22	31	14	16	1
2016	136	5	29	34	12	21	1
2017	125	11	26	37	17	19	1
2018	116	10	38	48	11	34	3
2019	98	15	38	53	13	39	1
20206	98	6	33	39	10	20	9

<sup>&</sup>lt;sup>1</sup> Diagnoses reflect all people diagnosed with HIV disease for the first time, regardless of AIDS statuses, 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

<sup>&</sup>lt;sup>2</sup> Data include people whose diagnosis statuses at time of death were HIV (not-AIDS). Less than 10% of deaths occur in people whose diagnostic statuses at the time of death are HIV (not-AIDS). Decedents may have been diagnosed in any year up to and including the year of death.

<sup>&</sup>lt;sup>3</sup> Data include people whose diagnoses at time of death were AIDS. More than 90% of deaths occur in people whose diagnostic statuses at the time of death are AIDS. Decedents may have been diagnosed in any year up to and including the year of death.

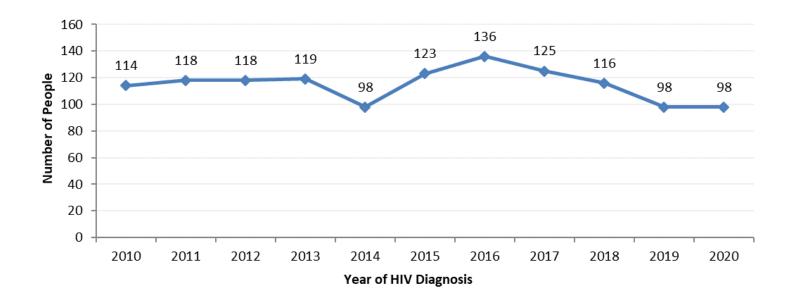
<sup>&</sup>lt;sup>4</sup> The underlying HIV infection is listed on the death certificate as a cause of 58% of all deaths of HIV-infected people diagnosed in Iowa.

<sup>&</sup>lt;sup>5</sup> HIV infection became reportable by name in 1998.

<sup>&</sup>lt;sup>6</sup> Death data for 2020 are incomplete. Matching in 2021 to National Death Index files may provide more complete death data.

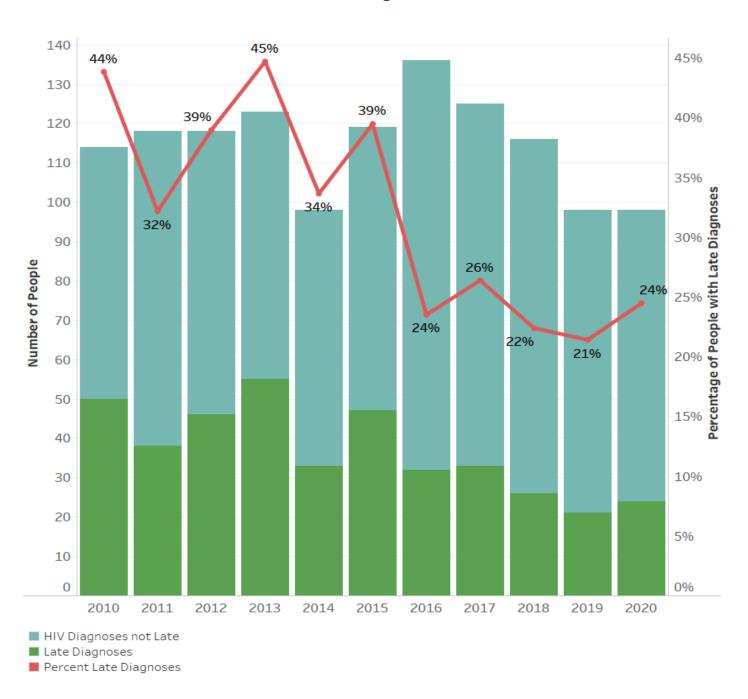
After peaking at 136 diagnoses in 2016, lowa has experienced four consecutive years without increases in diagnoses of HIV.





"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 21% in 2019. Although the proportion of late testers increased to 24% in 2020, it has remained consistently below 30% since 2015. Over 90% of "late testers" in lowa were diagnosed with AIDS concurrently, meaning within one month of their HIV diagnoses.





From 2010 through 2020, there were on average four males diagnosed for every female diagnosed with HIV. Men experienced a 10% increase in diagnoses in 2020, solely among US-born males. Conversely, women experienced a 26% decrease in diagnoses in 2020, with a significant decrease in diagnoses among foreign-born females and a small increase among US-born females. Generally, foreign-born persons showed a significant decrease in diagnoses in 2020 while US-born persons showed an increase in diagnoses in 2020.

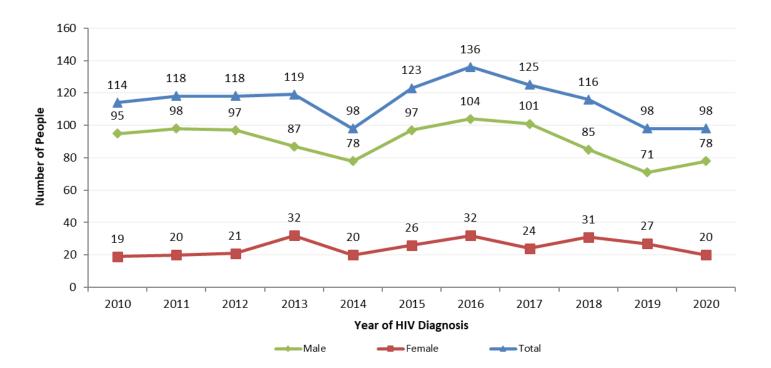


Figure 3.3 lowans Diagnosed with HIV by Sex: 2010 through 2020

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On average, over half of all people diagnosed with HIV annually are between 25 to 44 years of age. Individuals aged between 15 to 24 years experienced a higher percentage of increase in diagnoses in 2020 (18%) compared to those within the 25 to 44 age group (2% increase). Those who reported their ages as 45 years or above experienced a 20% decrease in diagnoses in 2020. The majority of new diagnoses (53%) was among those 25 to 44 years of age in 2020, with diagnoses in the younger age group (15-24 years) being higher than diagnoses in the older age groups (>=45 years) for the first time ever in 2020.

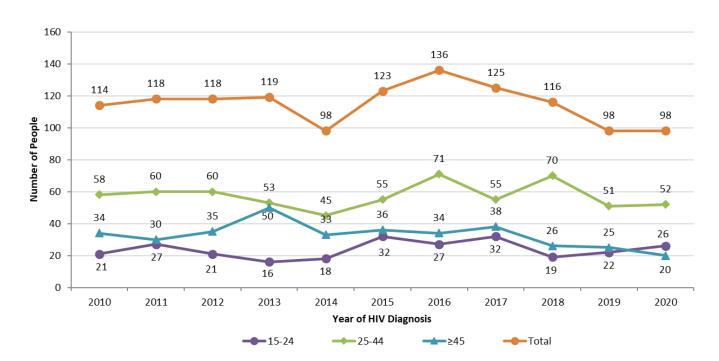


Figure 3.4 Age in Years at Diagnosis of HIV in Iowa: 2010 through 2020

Diagnoses among non-Hispanic Black/African-American people decreased for the fourth year in a row from a high of 44 (32% of all people diagnosed with HIV) in 2016 to 23 (23% of all diagnoses) in 2020. Eight (35%) of the 23 non-Hispanic Black/African American people diagnosed in 2020 were foreign born. Of the five Hispanic/Latinx people diagnosed in 2020, four were foreign born. Non-Hispanic white people make up the largest proportion of people diagnosed with HIV in Iowa, but this proportion decreased from a high of 71 (62% of all diagnoses) in 2010 to 57 (58% of all diagnoses) in 2020. Despite this, non-Hispanic white Iowans were the only population to experience a substantial increase (21%) in HIV diagnoses in 2020.

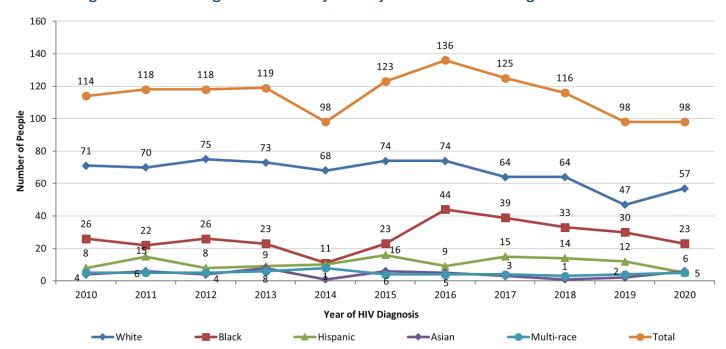


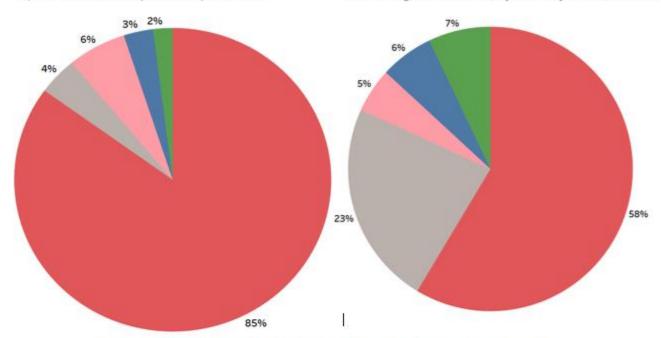
Figure 3.5 lowans Diagnosed with HIV by Ethnicity and Race: 2010 through 2020

About 85% of lowa's population is white and non-Hispanic. Non-Hispanic Black/African Americans, and non-Hispanic Asian lowans are over-represented among people diagnosed with HIV in comparison to the sizes of their respective populations in Iowa. Non-Hispanic Blacks/African Americans represent 4% of Iowa's population but experienced 23% of HIV diagnoses reported in 2020. Non-Hispanic Black/African American people were over eight times more likely to be diagnosed with HIV than non-Hispanic White people, and non-Hispanic Asian people are over three times more likely to be diagnosed than non-Hispanic White people. Hispanic people were almost equally likely to be diagnosed with HIV in Iowa as non-Hispanic White people in 2020.

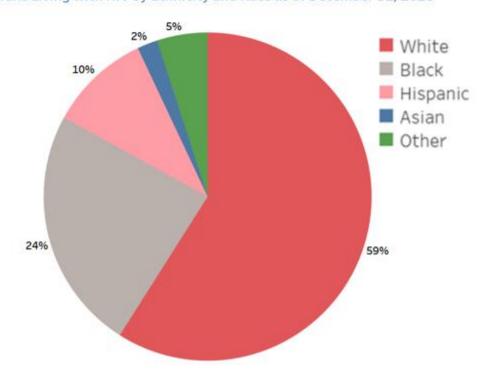
Figure 3.6 lowa Population Percentage by Ethnicity and Race compared to Proportion of HIV Diagnoses and Percent Living with HIV by Ethnicity and Race as of December 31, 2020

Population of Iowa by Ethnicity and Race

Iowans Diagnosed with HIV by Ethnicity and Race in 2020



Iowans Living with HIV by Ethnicity and Race as of December 31, 2020



Men who have sex with men (MSM) experienced a 13% increase in HIV diagnoses in 2020 but a 35% decrease since the peak of 78 diagnoses in 2016. People who identified as exposed through heterosexual contact experienced a 52% decrease in diagnoses in 2020. The 55% increase in people whose exposure route was not reported reflects the recency of diagnoses. Over time, modes of exposure will be investigated and reported. Still, until this occurs, interpretation of trends related to modes of exposure should be made with caution.

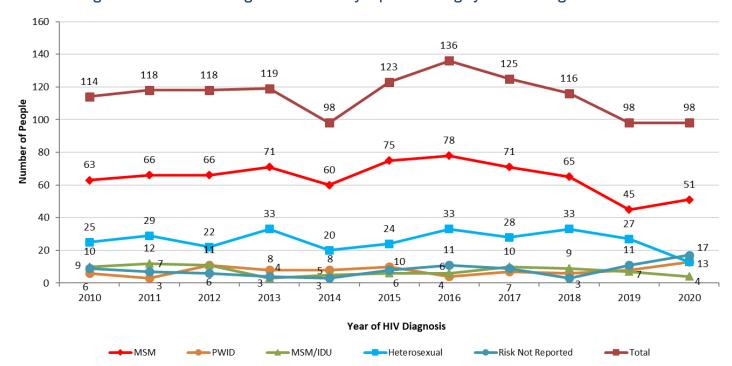
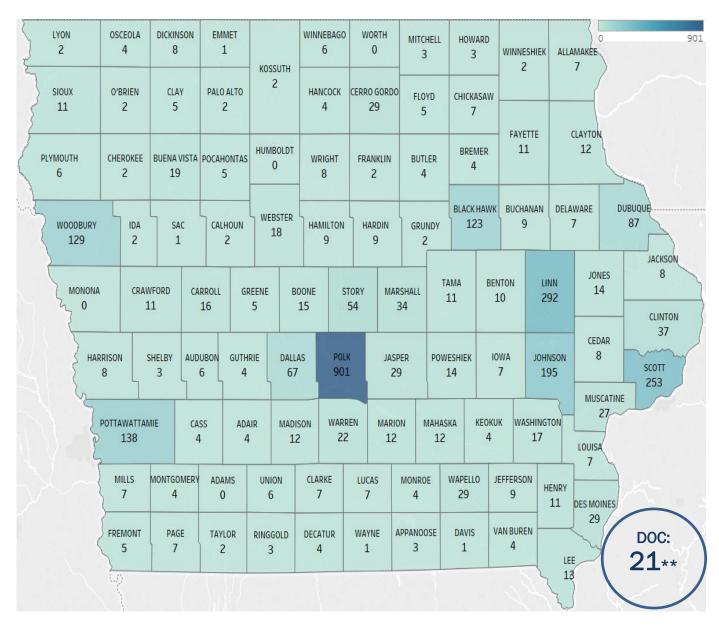


Figure 3.7 lowa Adults Diagnosed with HIV by Exposure Category: 2010 through 2020

Figure 3.8 Numbers of lowans Living with Diagnosed HIV Disease as of December 31, 2020, by County of Current Residence



Total: 2,991

This map shows the number of people (2,991) living with HIV disease as of December 31, 2020, in each lowa county. Four lowa counties have no people living with HIV. Not all deaths may have been reported.

\*\*Twenty-one people were living with HIV in lowa Department of Corrections (DOC) facilities in the following counties: Henry (2), Jasper (3), Webster (1), Johnson (8), Jones (3), Lee (1), Page (2), and Polk (1). These numbers are excluded from county totals shown on the map.

LYON **OSCEOLA** DICKINSON EMMET WINNEBAGO WORTH MITCHELL HOWARD ALLAMAKEE 0.0 183.8 17.0 67.1 46.4 10.9 57.9 0.0 WINNESHIEK 28.3 32.8 10.0 51.1 KOSSUTH 13.5 PALO ALTO SIOUX O'BRIEN CLAY HANCOCK CERRO GORDO FLOYD CHICKASAW 31.6 14.5 31.2 22.5 37.6 68.3 32.0 58.7 **FAYETTE** CLAYTON 56.0 68.4 HUMBOLDT BREMER PLYMOUTH CHEROKEE BUENA VISTA POCAHONTAS WRIGHT FRANKLIN BUTLER 0.0 16.0 23.8 17.8 96.8 75.5 63.7 19.9 27.7 **BUCHANAN** DELAWARE DUBUQUE BLACK HAWK WEBSTER 93.7 42.5 41.1 89.4 WOODBURY CALHOUN HAMILTON HARDIN IDA SAC GRUNDY 50.1 125.1 29.2 10.3 20.7 60.9 53.4 16.4 JACKSON 41.2 JONES TAMA BENTON LINN 67.7 MONONA CRAWFORD MARSHALL CARROLL **GREENE** STORY BOONE 65.3 39.0 128.8 65.4 0.0 79.3 56.3 57.2 55.6 86.4 CLINTON 79.7 CEDAR 42.9 POLK HARRISON SHELBY AUDUBON **GUTHRIE** DALLAS **JASPER POWESHIEK** IOWA JOHNSON SCOTT 183.8 56.9 26.2 109.2 37.4 71.7 78.0 75.7 43.3 129.0 146.3 MUSCATINE 63,3 POTTAWATTAMIE WARREN MARION MAHASKA KEOKUK WASHINGTON MADISON CASS ADAIR 148.1 42.7 54.3 39.0 77.4 36.1 31.2 55.9 73.4 LOUISA 63.4 MILLS MONTGOMERY **ADAMS** UNION CLARKE MONROE WAPELLO **JEFFERSON** LUCAS **HENRY** 46.3 40.3 74.5 82.9 49.2 0.0 49.0 81.4 51.9 55.1 DES MOINES 74.4 **APPANOOSE** DAVIS VAN BUREN FREMONT PAGE **TAYLOR** DECATUR WAYNE RINGGOLD DOC: 56.8 15.5 24.1 11.1 71.8 46.3 32.7 50.8 61.3 LEE 277\*\* 38,6

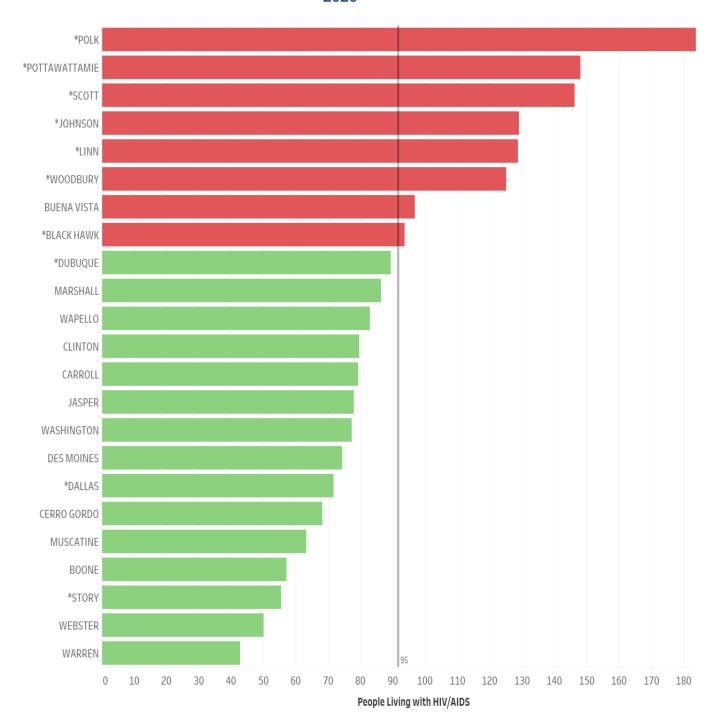
Figure 3.9 Prevalence of HIV Disease at the end of 2020 by County of Current Residence, Number per 100,000

This map shows the rates per 100,000 of people living with HIV disease as of December 31, 2020, 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 2020.

Darker blue indicates a higher prevalence.

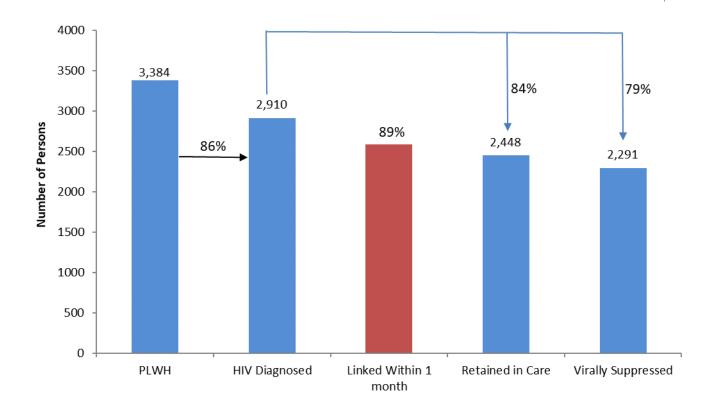
Figure 3.10 Prevalence of HIV Disease by County of Current Residence: lowans Living with Diagnosed HIV Disease (HIV or AIDS) per 100,000 Population as of December 31, 2020



#### Counties with >= 15 persons living with HIV/AIDS

- \* Indicates one of the 10 most populous counties
- County rates do not include people living with HIV in the lowa Department of Corrections system
- County populations are based on the 2019 U.S. Census estimates

Figure 3.11 Iowa HIV Care Continuum for 2020



**People Living with HIV (PLWH):** Estimated total number of lowans with HIV, of which 474 are undiagnosed.

**Diagnosed:** People diagnosed with HIV disease as of December 31, 2019, and living in Iowa as of December 31, 2020.

 An estimated 3,384 lowans were living with HIV disease as of December 31, 2020. Of these, 2,910 had been diagnosed by the end of 2019, and were living in lowa as of December 31,2020.

**Linked to Care:** Newly diagnosed people who had a viral load or CD4+ cell count reported within one 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 2020 or who had only one viral load lab result but it demonstrated viral suppression during 2020.

**Viral Suppression:** People retained in care and whose most recent viral load in 2020 was less than 200 copies/mL.

- 2,448 (84%) of the 2,910 diagnosed lowans had been retained in care at the end of 2020. Of those retained in care, 2,291 (94%) were virally suppressed.
- Viral suppression for all diagnosed people living in lowa (in care and out of care) was 79%.

#### 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 non-detectable 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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