# STATE OF IOWA DEPARTMENT OF Health and Human services

### STATE OF IOWA HIV DISEASE END-OF-YEAR 2022 SURVEILLANCE REPORT

SEPTEMBER 2023

AUTHORSHIP-BUREAU OF HIV, STI, AND HEPATITIS

### Acknowledgements

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### 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 I describes **data sources**; Section 2 is a **narrative summary** with key highlights and **charts and graphs** to illustrate data trends; Section 3 employs **tables** to give an overview of the data; 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 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** reflect people who were exposed to HIV before or during birth, or as an infant. 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 I: 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 Health and Human Services (Iowa HHS) 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 Iowa HHS, 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.* MMVVR 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 Iowa HHS 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 13.3% of people living with HIV in United States remain undiagnosed. (HIV Surveillance Supplemental Report 2021; 26(No. 1). At the same time, CDC cautions that this national estimate may not apply to individual states.

CDC-developed computer programs run on Iowa HHS data suggest that a delay in reporting diagnoses among Iowa residents is extremely unlikely. Nevertheless, to eliminate possible reporting delays, case reports received through March 2021 have been used. This report includes only those people diagnosed through December 31, 2022. 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/PWID) 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.
- "People who injects drugs" (PWID) 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" (MMVVR 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 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 2021 population estimates from the U.S. Census Bureau (<u>http://www.census.gov</u>) to calculate prevalence rates.

### Section 2: NARRATIVE SUMMARY

#### IOWANS DIAGNOSED WITH HIV

#### One hundred and twenty (120) Iowans were diagnosed with HIV in 2022

At the end of 2022, the number of new diagnoses reported to the Iowa Department of Health and Human Services totaled one hundred and twenty (Figure 3.1), which is 7% higher than the five-year average of 113 diagnoses between 2017 to 2021. In 2022, notable increases in diagnoses were observed among males, men who have sex with men (MSM), and people of Hispanic/Latino origin, for the third year in a row.

New diagnoses among males increased overall by 4% from 98 males diagnosed in 2021 to 102 males diagnosed in 2022, with increases primarily among U.S.-born males (new diagnoses among non-U.S.-born males declined by 11% in 2022).

HIV diagnoses among men who have sex with men (MSM) have increased by 60% since 2019. In 2022, diagnoses among MSM made up the largest proportion of new diagnoses in Iowa, with 73% of diagnoses in 2022 occurring among this population. Diagnoses among MSM increased by 20% from 60 in 2021 to 72 in 2022. Among men who have sex with men and who inject drugs (MSM/PWID), diagnoses increased by 78% (although the absolute number remained relatively low from 9 in 2021 to 16 in 2022). Diagnoses among U.S.-born MSM Iowans increased by 20%, and diagnoses among non-U.S.-born MSM Iowans went up by 11% in 2022.

There was an overall increase in diagnoses among U.S.-born lowans by more than 5% between 2021 and 2022, and by more than 39% since 2019. When assessed by race and ethnicity, diagnoses among U.S.-born lowans increased significantly among U.S.-born Black/African Americans (41%) and U.S.-born Hispanic/Latino (11%).

Historically, heterosexual contact is the most commonly reported route of exposure among non-U.S.born lowans. However, for the first time since HIV was reportable to the lowa Department of Health and Human Services (and formerly the lowa Department of Public Health), heterosexual contact was not the predominant mode of exposure among non-U.S.-born lowans. In 2022, more than 52% of new diagnoses among non-U.S.-born lowans were among men who have sex with men, compared to 38% among those exposed through heterosexual contact.

The overall increases in total annual diagnoses of HIV in Iowa in 2021 and 2022 were likely due in part to the effects of the COVID-19 pandemic. Widespread clinic closures throughout the state in 2020 led to subsequent spikes in other symptomatic sexually transmitted infections, including gonorrhea and syphilis in 2020 and 2021. Diagnoses of infections that tend to be asymptomatic in a majority of people, like chlamydia, decreased in 2020, but began to increase again in 2021 and 2022 when access to routine testing increased. While those who experienced symptoms may still have been able to find testing during the pandemic, a decrease in the availability of routine testing in the state may have had an impact on increased transmission of STIs, including HIV.

Additionally, 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 2022, there were 3.7 HIV diagnoses per 100,000 people. This was slightly higher than in 2019 and 2020, with 3.1 HIV diagnoses per 100,000 people, and slightly lower than in 2021, with 3.9 HIV diagnoses per 100,000 population.

In 2022, 47 people were diagnosed with AIDS (stage 3 HIV disease), down from 54 in 2021, and less than the average of 50 for the last five years (2017 through 2021).

It is estimated that there were 464 lowans living with HIV who had 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 Iowa and slow transmission of HIV in the state.

#### FIGURE 3.1 IOWANS DIAGNOSED WITH HIV: 2012 THROUGH 2022

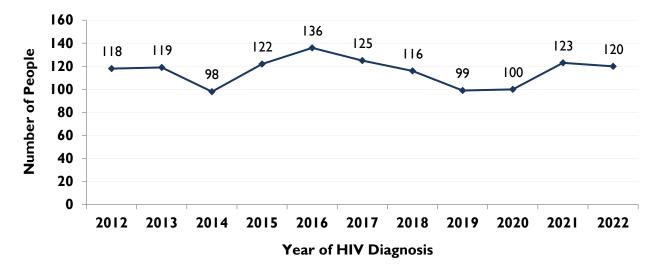
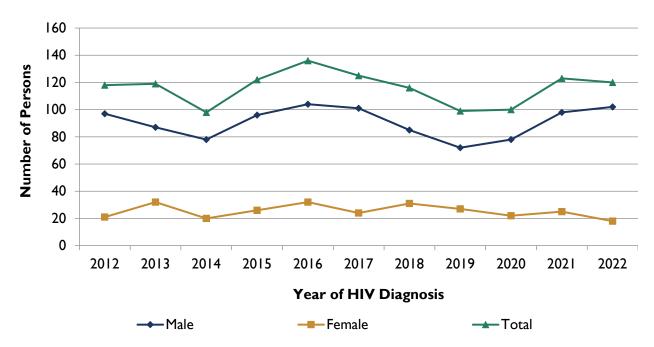


Figure 3.1: After peaking at 136 diagnoses in 2016, Iowa experienced four consecutive years of steady decrease in new diagnoses. HIV diagnoses increased 25% from 2020 to 2021, then slightly decreased by 2% from 2021 to 2022.

**Sex:** In 2022, diagnoses among males increased by 4%, and decreased significantly among females by 28%. However, what is most notable is that diagnoses among males have increased for the last three years and have erased the gains made from steady declines in diagnoses from 2016 to 2019. When assessed by country of birth, diagnoses among U.S.-born males increased by 8% in 2022, while diagnoses among non-U.S.-born males decreased by 11%. Diagnoses among females declined by 28% in 2022, from 25 diagnoses in 2021 to 18 diagnoses in 2022. Diagnoses among U.S.-born females declined to 7%, and by 55% among non-U.S.-born females, from 11 in 2021 to 5 in 2022. Overall, the proportion of HIV diagnoses that are among males continued to outnumber those among females by a ratio of more than four to one in 2022.

#### FIGURE 3.2 IOWANS DIAGNOSED WITH HIV BY SEX: 2012 THROUGH 2022

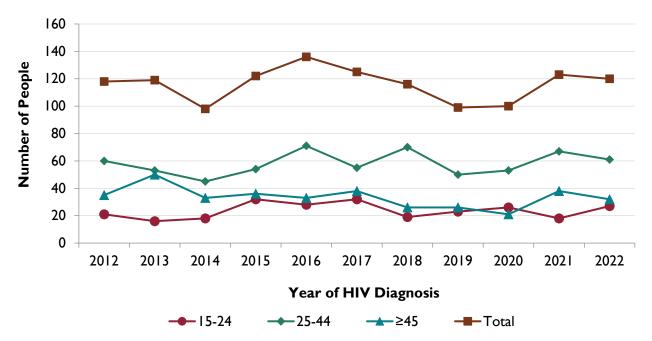


**Figure 3.2:** From 2012 through 2022, there were, on average, four males for every female diagnosed with HIV. Men experienced a 4% increase in diagnoses in 2022, with the percentage increase exclusively among US-born males (8%) compared to a decrease among non-U.S.-born males (11%). Women experienced a 28% decrease in diagnoses in 2022, with the highest percentage decrease among non-U.S.-born females (55%).

**Age:** People aged 25 through 44 years continued to account for the largest proportion (51%) and number (61) of people diagnosed with HIV in 2022. Youth and young adults 15 through 24 years experienced a significant increase in new HIV diagnoses from 2021 to 2022 (50%), which was the largest single year increase since 2015, but still remained the age cohort with the fewest diagnoses. Youth and young adults accounted for 27 (23%) of all people newly diagnosed with HIV in 2022, an increase from 18 in 2021 (15% of all people diagnosed with HIV). The number of people diagnosed in the 15-24-year-old age cohort in 2022 (27) was higher than the five-year (2017-2021) average of 24 diagnoses within that age group.

lowans aged 45 years and older experienced a 16% decrease in diagnoses in 2022, with 32 people being newly diagnosed with HIV. This comes after the largest increase in diagnoses within this age cohort being observed in 2021, where diagnoses increased by 81% from 21 in 2020 (21% of all people diagnosed) to 38 in 2021 (31% of all people diagnosed). There were no pediatric HIV diagnoses in 2021.

For people 13 years of age and older (adults and adolescents), the median age at diagnosis in 2022 was 33, similar to the previous five-year average median age of 33. In 2022, the median age of diagnosis for adult/adolescent males was 33, lower than that for adult/adolescent females, which was 35.



### FIGURE 3.3 IOWANS DIAGNOSED WITH HIV BY AGE AT DIAGNOSIS: 2012 THROUGH 2022

**Figure 3.3:** 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 an increase in diagnoses in 2022 (50%), after experiencing a decrease in diagnoses in this age group in 2021. Those who reported their ages as 45 years or above showed a decrease in diagnoses in 2022 (16%) after experiencing a significant increase in diagnoses (90%) in 2021. The majority of new diagnoses (51%) was among those 25 to 44 years of age in 2022, and the proportion of diagnoses among those 45 years as older was 27% compared to 23% for those 15 to 24 years of age.

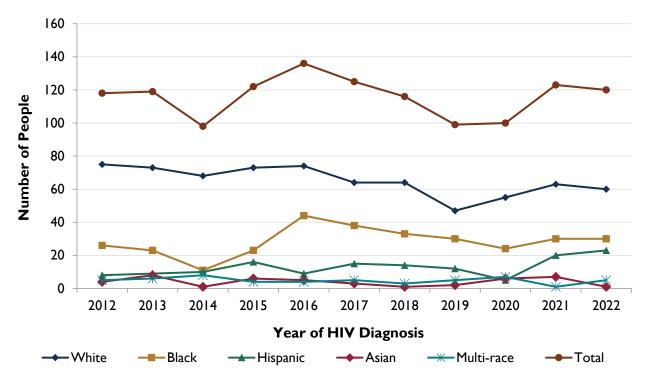
**Race and ethnicity:** In 2022, the proportion of total new diagnoses among non-Hispanic Black/African American lowans remained disproportionately higher than among other racial or ethnic groups. At 30 new diagnoses in 2022, Black/African American lowans represented 25% of all new diagnoses while representing only 4% of lowa's population. They accounted for 50% of all diagnoses among minority populations.

U.S.-born Black/African American people experienced a 41% increase in diagnoses in 2022, whereas diagnoses among non-U.S.-born Black/African American people decreased 54% from 13 diagnoses in 2021 to 6 diagnoses in 2022. Diagnoses among U.S.-born Black/African Americans accounted for 80% of all diagnoses among non-Hispanic Black Iowans, increasing from 57% in 2021. The six non-U.S.-born Black/African Americans diagnosed accounted for 20% of diagnoses, which was lower than in 2021 at 43%.

Diagnoses among Hispanic/Latino people increased by 15% in 2022 from 20 diagnoses in 2021 to 23 diagnoses in 2022. This was after a sharp increase from 5 diagnoses in 2020 to 20 in 2021. Hispanic/Latino people represent 7% of Iowa's population, yet represented 19% of people diagnosed with HIV in 2022. Of the 23 Hispanic/Latino people diagnosed, 13 (57%) were non-U.S born.

Non-Hispanic White people experienced a 5% decrease in diagnoses in 2022, after two continuous years of increases in diagnoses. Non-Hispanic White people represent 84% of Iowa's population, but experienced only 50% of HIV diagnoses in 2022.

### FIGURE 3.4 IOWANS DIAGNOSED WITH HIV BY RACE AND ETHNICITY: 2012 THROUGH 2022



**Figure 3.4:** Non-Hispanic White people make up the largest proportion of people diagnosed with HIV in Iowa, but this proportion decreased from a high of 64% of all diagnoses in 2012 to 50% of all diagnoses in 2022. Non-Hispanic White Iowans also experienced a small percentage decrease in diagnoses in 2022 (5%) compared to a 15% increase in diagnoses among Hispanic/Latino people.

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 (including stigma, stress, lack of access to health care, homelessness, and incarceration) that may lead to chronic health conditions, which in turn may make them more susceptible to HIV.

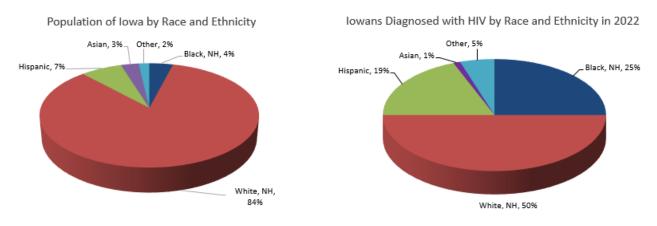
#### Racial and ethnic minorities are over-represented

Males accounted for 20 (83%) of the 24 U.S-born non-Hispanic Black/African American people diagnosed in 2022, and among these, 19 (95%) identified as men who have sex with men (MSM) or men who have sex with men and who inject drugs (MSM/PWID). The exposure category for two U.S-born non-Hispanic Black/African American people is yet to be determined. Among non-U.S.-born Black/African American lowans, 5 (83%) of the 6 diagnosed in 2022 identified heterosexual mode of exposure, and of these, three are females. The 30 non-Hispanic Black/African American people diagnoses per 100,000 non-Hispanic Black/African American people Black/African American People diagnosed per 100,000 population, non-Hispanic Black/African Americans were more than 10 times more likely to have been diagnosed with HIV in 2022 than non-Hispanic White Iowans.

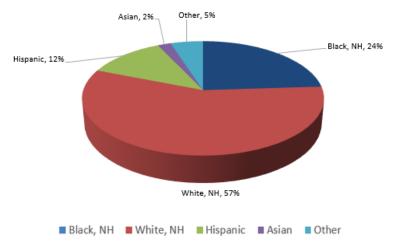
The number of Hispanic/Latino people diagnosed with HIV increased from 20 (16% of all people diagnosed) in 2021 to 23 (19% of all people diagnosed) in 2022. The 23 Hispanic/Latino people diagnosed in 2022 is the highest number of Hispanic/Latino people diagnosed in a single year in Iowa since the beginning of the HIV epidemic. Of the 23 Hispanic/Latino people diagnoses in 2022, 21 (91%) were males. According to the 2018 U.S Census, 7% of Iowa's population identified as being of Hispanic/Latino heritage, yet they experienced 19% of HIV diagnoses in 2022 and 12% of new HIV diagnoses, on average, from 2017 to 2021. Of the 23 Hispanic/Latino persons diagnosed in 2022, 13 (57%) were among non-U.S.-born Hispanic/Latino people. Diagnoses among U.S.-born Hispanic/Latino people increased from 1 in 2020 to 9 in 2021 and to 10 diagnoses in 2022. All of the 10 U.S-born Hispanic/Latino people diagnosed in 2022 were males, with eight being exposed as MSM and one as MSM/PWID. Diagnoses among non-U.S.-born Hispanic/Latino people increased from 4 in 2020 to 11 in 2021 and to 13 diagnoses in 2022. Of the 13 non-U.S.-born Hispanic/Latino people diagnosed in 2022, 11 (85%) were males and of these, 8 (73%) were MSM and one was MSM/PWID. The 23 Hispanic/Latino people diagnosed with HIV in 2022 equate to 11 per 100,000 Hispanic/Latino people, which means that Hispanic/Latino people were more than 4 times likely to have been diagnosed with HIV in 2022 as those who are White and non-Hispanic.

The number of non-Hispanic Asian people in Iowa who are diagnosed with HIV is Iow and primarily influenced by immigration. Of all non-Hispanic Asian people diagnosed with HIV since 2011, 82% were born outside the US. In 2021, 5 (71%) of the seven non-Hispanic Asian people diagnosed were non-US-born. Non-Hispanic Asian diagnoses decreased from the peak of 7 (6% of all people diagnosed) in 2021 to one diagnosis in 2022. Non-Hispanic Asian persons make up about 3% of Iowa's population, but experienced 1% of HIV diagnoses in 2022, lower than the 3% of total HIV diagnoses on average from 2017 to 2021. The one non-Hispanic Asian person diagnosed with HIV in 2022 equates to 1.2 diagnoses per 100,000 non-Hispanic Asian people, almost two times lower than for White, non-Hispanic Iowans.

#### FIGURE 3.5 IOWA POPULATION PERCENTAGE BY ETHNICITY AND RACE COMPARED TO PROPORTION OF HIV DIAGNOSES AND PERCENT LIVING WITH HIV BY RACE AND ETHNICITY AS OF DECEMBER 31, 2022



Iowans Living with HIV by Race and Ethnicity as of December 31, 2022



**Figure 3.5:** About 84% of Iowa's population is White and non-Hispanic. However, Hispanic/Latino, Non-Hispanic Black/African Americans, and non-Hispanic Asian Iowans are over-represented among people diagnosed with HIV in comparison to the sizes of their respective populations in Iowa. Non-Hispanic Black/African American people represent 4% of Iowa's population but experienced 25% of HIV diagnoses reported in 2022. Hispanic/Latino people were over four times more likely to be diagnosed with HIV than non-Hispanic White people. Non-Hispanic Black/African American people were over ten times more likely to be diagnosed with HIV than non-Hispanic White people.

There were no American Indian/Alaska Native Iowans diagnosed with HIV in 2022, although one person who identified as American Indian/Alaska Native was diagnosed with AIDS (after previously being diagnosed with HIV). There are 11 American Indian/Alaska Native Iowans reported to be living with HIV in Iowa, but this is likely to be an underestimate related to misclassification of race and ethnicity.

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 120 people diagnosed with HIV in 2022, 60 (50%) were non-Hispanic White people, which was comparable to the five-year average (2017 through 2021) of 59 (52%). Since the beginning of the epidemic in 1982, non-Hispanic White people made up 68% of all people diagnosed with HIV in Iowa. The 60 non-Hispanic, White people diagnosed in 2022 equate to 2.2 diagnoses per 100,000 non-Hispanic, White people, the second lowest of any racial or ethnic group in Iowa.

Comparing trends in diagnoses among non-Hispanic White people to all other racial and ethnic groups shows that minority groups are being increasingly disproportionately impacted. The proportion of non-Hispanic White people diagnosed from the beginning of the epidemic in 1982 to 1997 was 85% of the total diagnosed annually, on average. The proportion of non-Hispanic White people diagnosed in 1998 was 74% and decreased steadily to 47% in 2019, while diagnoses among minority groups combined continue to increase. In 2022, the proportion of diagnoses among minority populations continued to climb steadily to 50% of all diagnoses, from 49% in 2021, and 45% in 2020.

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 encountering a sexual or needle-sharing partner with transmissible levels of HIV.

### Social Determinants of Health

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>

I. Centers for Disease Control and Prevention (2018). Social Determinants of Health: Know What Affects Health. Retrieved from 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 www.health.gov/healthypeople/objectives-and-data/social-determinants-health last accessed 06/11/2021

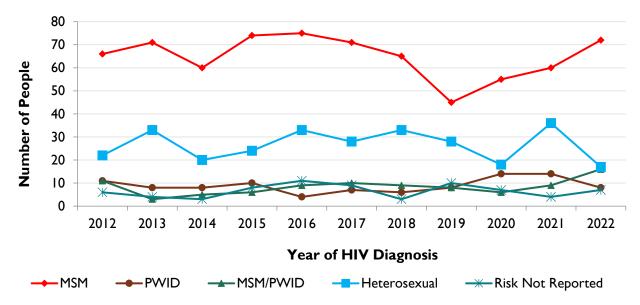
4. Z. Gant, M. Lomotey, H.I. Hall, X. Hu, X. Guo and R. Song, A County-Level Examination of the Relationship Between HIV and Social Determinants of Health: 40 States, 2006-2008, The Open AIDS Journal, 2012 (6)

**Mode of Exposure:** HIV diagnoses increased overall in two key populations: men who have sex with men (MSM) and males who have sex with men and who inject drugs (MSM/PWID). MSM have experienced a 60% increase in diagnoses since 2019. New diagnoses among MSM increased from 60 diagnoses in 2021 to 72 diagnoses in 2022, a 20% increase in diagnoses. Among MSM/PWID, diagnoses increased from nine diagnoses in 2021 to 16 diagnoses in 2022, a 78% increase over the two years. MSM continued to make up the largest proportion of new diagnoses in lowa, with 73% (88) of all diagnoses in 2022 occurring among MSM. Overall, MSM have experienced more than half of all diagnoses since the beginning of the epidemic in lowa, and account for 54% of lowans living with HIV.

The increase in diagnoses among MSM in 2022 was primarily among non-Hispanic Black/African American men, and non-Hispanic men who identify as multi-race. Of the 23 non-Hispanic Black/African American males diagnosed in 2022, 18 (72%) were MSM, and of these, 17 are U.S.-born. Of the five non-Hispanic multi-race males diagnosed in 2022, all were MSM, and four were U.S.-born. Similarly, of the 21 Latino males diagnosed in 2022, 16 (76%) were MSM, and of these, eight were U.S.-born. Of the 51 non-Hispanic White males diagnosed in 2022, 31 (61%) were MSM and US-born.

MSM represented the largest proportion of people diagnosed among the three largest racial and ethnic groups diagnosed in Iowa, although this was smallest among Black/African-American people. Of the 60 non-Hispanic White people diagnosed in 2022, 72% were MSM (84% of non-Hispanic White males). This compared to 67% of the 30 non-Hispanic Black/African-American people diagnosed (87% of non-Hispanic Black/African American males) and 78% of the 23 Hispanic people diagnosed (86% of Hispanic males diagnosed).

### FIGURE 3.6 IOWA ADULTS DIAGNOSED WITH HIV BY EXPOSURE CATEGORY: 2012 THROUGH 2022



**Figure 3.6:** Men who have sex with men (MSM) experienced a 60% increase in HIV diagnoses since 2019. People who reported exposure to HIV through heterosexual contact experienced a 53% decrease in diagnoses in 2022. The 75% increase in people whose exposure route was not reported reflects their recency of diagnoses. Over time, modes of exposure will be investigated and updated. Until this occurs, interpretation of trends related to modes of exposure should be made with caution.

Diagnoses among MSM/PWID increased 78% from nine (7% of new diagnoses) in 2021, to 16 (13% of new diagnoses) in 2022. This increase was primarily among non-Hispanic White males (from seven diagnoses in 2021 to 12 diagnoses in 2022), although diagnoses among Hispanic males increased from zero in 2021 to 2 in 2022.

There were significant decreases in diagnoses among people who inject drugs (PWID) and among heterosexuals in 2022. Diagnoses among PWID decreased by 43% from 14 in 2021 to 8 in 2022. Historically, this number has remained low in Iowa at around 7% of all diagnoses, as in 2022. Considering all PWID (PWID plus MSM/PWID), there were 24 people diagnosed (20% of new diagnoses) in 2022 among this group. People who reported exposure to HIV through heterosexual contact experienced a 53% decrease in diagnoses in 2022. This decrease continued the previous trend of slowly decreasing diagnoses among this population since 2018, with the increase in 2021 being short-lived.

The 75% increase in people whose exposure route was not reported in 2022 reflects their recency of diagnoses. Experience has shown that while newly diagnosed people may initially be reluctant to disclose their likely 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 2023, exposure category will be ascertained for many of the remaining people diagnosed in 2022. There have been no pediatric HIV diagnoses in Iowa since 2017.

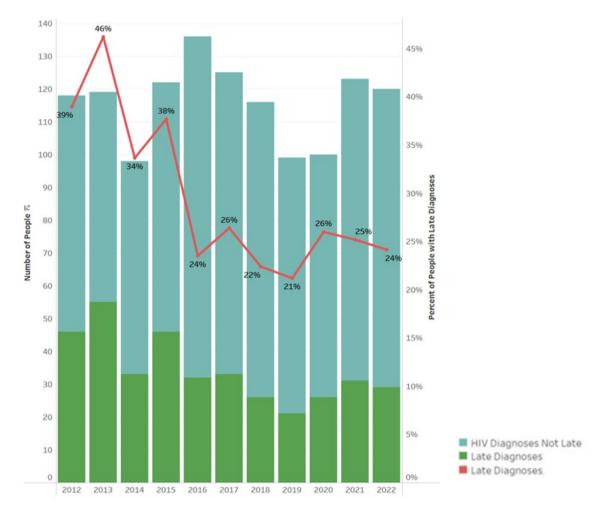
**Transgender Diagnoses:** There have been a total of 30 transgender people diagnosed with HIV in lowa since the beginning of the HIV epidemic. The highest number of diagnoses among transgender people was in 2022 when five transgender people were diagnosed with HIV. Of the 30 transgender people diagnosed, 26 (87%) were male-to-female transgender persons, and all 26 were transgender females who had sex with other men.

As of December 31, 2022, there were 47 transgender people with a current address in Iowa who were diagnosed and living with HIV. This means that people who were diagnosed outside of Iowa later moved to the state. Of the 47 transgender people living with HIV in Iowa, 43 (91%) were male-to-female transgender persons, and all 43 were transgender females who had sex with other men.

**Late testers:** The proportion of people diagnosed with AIDS within three months of their initial HIV diagnosis ("late testers") decreased from 25% in 2021 to 24% in 2022. Overall, late diagnoses have decreased significantly since 2013, when 46% of people diagnosed were considered to be late testers. In 2022, 24% of people diagnosed were late testers, the third lowest proportion ever reported. The proportion of people that are late testers in 2022 was similar to the five-year (2017-2021) average, and lower than the 10-year average of 30%. The lower number of "late testers" is further confirmation that people at risk for HIV are getting timelier access to testing.

Of the 120 new HIV diagnoses in 2022, 7 (6%) were in an acute stage (i.e., very early) of HIV infection.

#### FIGURE 3.7 NUMBER AND PERCENTAGE OF IOWANS DIAGNOSED LATE WITH HIV ("LATE TESTERS"):1998 THROUGH 2022



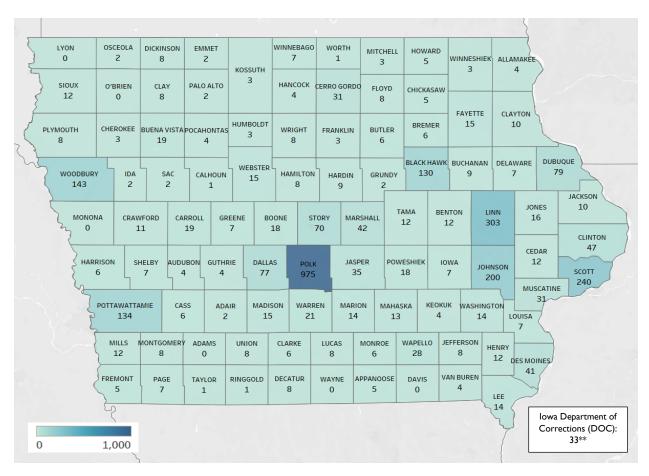
**Figure 3.7:** "Late testers" are people who receive AIDS diagnoses within three months of their HIV diagnoses. The proportion of late testers has been decreasing and reached its lowest level ever reported at 21% in 2019. Although the proportion of late testers increased to 26% in 2020, it dropped to 24% in 2022. It has remained consistently below 30% since 2015. Over 90% of "late testers" in Iowa were diagnosed with AIDS concurrently, meaning within one month of their HIV diagnoses.

**HIV prevalence:** As of December 31, 2022, there were 3,228 people with a current address in Iowa diagnosed and living with HIV, a prevalence of 101 per 100,000 persons. This number includes all people whose current addresses were in Iowa at the end of 2022. It includes people diagnosed in Iowa plus people who were initially diagnosed while living in another state, but who now reside in Iowa. When the number of 3,228 is adjusted for our estimated percentage of undiagnosed persons in Iowa (13%), there may have been as many as 3,710 Iowans living with HIV or AIDS at the end of 2022, with an estimated 482 people undiagnosed.

As of December 31, 2022, 94 of Iowa's 99 counties had at least one resident living with HIV. Prevalence in ten counties was at least 100 per 100,000 population (0.1%). Polk County, with 195 per 100,000, has the highest prevalence, followed by Pottawattamie County (144 per 100,000), and Scott County (138 per 100,000).

For perspective, national and regional prevalence data at the end of 2021, the most recent year available, are as follows: United States, 324.5 per 100,000; Midwest, 187.6 per 100,000; West, 272.6 per 100,000; South, 387.9 per 100,000; and Northeast, 411.4 per 100,000. (*Centers for Disease Control and Prevention. HIV Surveillance Report, 2021; vol. 34. <u>www.cdc.gov/hiv/library/reports/hiv-surveillance/vol-34/content/tables.html</u> Published May 2023)* 

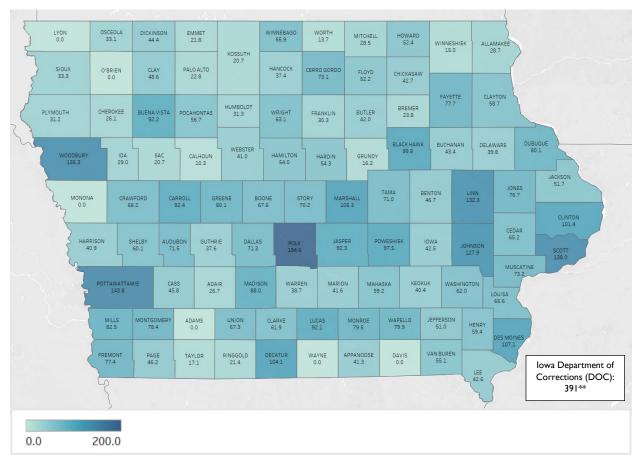
#### FIGURE 3.8 NUMBERS OF IOWANS LIVING WITH DIAGNOSED HIV DISEASE AS OF DECEMBER 31, 2022, BY COUNTY OF CURRENT RESIDENCE



**Figure 3.8:** This map shows the number of people living with HIV disease (3,228) as of December 31, 2022, in each lowa county. Six lowa counties have no people living with HIV. Not all deaths may have been reported.

\*\*Thirty-three people were living with HIV in Iowa Department of Corrections (DOC) facilities in the following counties: Calhoun (1), Henry (2), Jasper (3), Polk (1), Johnson (16), Jones (4), Lee (2), and Page (4). These numbers are excluded from county totals shown on the map.

#### FIGURE 3.9 PREVALENCE OF HIV DISEASE AT THE END OF 2022 BY COUNTY OF CURRENT RESIDENCE, NUMBER PER 100,000



**Figure 3.9:** This map shows the rates per 100,000 of people living with HIV disease as of December 31, 2022, in each lowa county. Not all deaths may have been reported.

\*\*There were 8,434 inmates in the lowa prisons at the end of 2022. The DOC rate was calculated based on this total prison population of lowa Department of Corrections (DOC) facilities in 2022.

Darker blue indicates a higher prevalence.

FIGURE 3.10 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, 2022

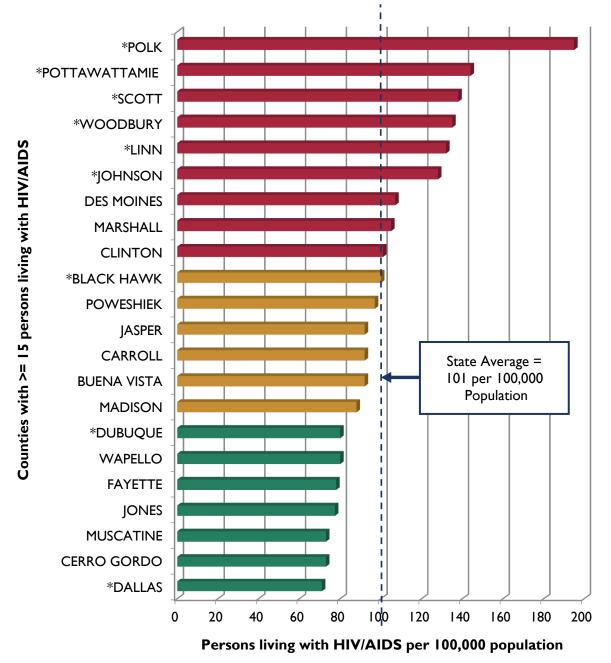


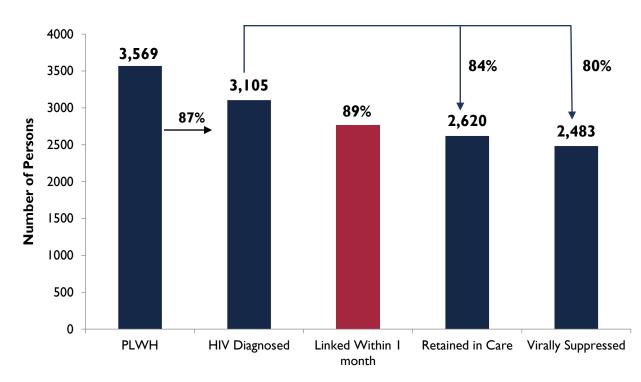
Figure 3.10 Counties with >= 15 persons living with HIV/AIDS

\*Indicates one of the 10 most populous counties

- County rates do not include people living with HIV in the Iowa Department of Corrections system
- County populations are based on the 2021 U.S. Census estimates

**HIV Continuum of Care:** The HIV continuum of care includes people living with HIV in Iowa who were diagnosed before January 1, 2022. People newly diagnosed with HIV during the course of 2022 are not included in the continuum of care analysis. Of the 3,105 people diagnosed with HIV disease on or before December 31, 2021, and living in Iowa as of December 31, 2022, 2,620 (84%) were retained in HIV care. People who were retained in care had at least 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. Of these 2,620, 2,483 (80%) were virally suppressed.

lowa's viral suppression rates are historically among the highest in the country, with the state having the highest rate of viral suppression nationally at 82% in 2021. The most recent estimate from Centers for Disease Control and Prevention (CDC) is that 66% of people in the U.S. who are diagnosed with HIV were virally suppressed in 2021. Among lowans who were retained in care in 2022, viral suppression is 95%.



### FIGURE 3.11 IOWA HIV CARE CONTINUUM FOR 2022

#### People Living with HIV (PLWH):

Estimated total number of lowans with HIV, of which 480 are undiagnosed.

#### **Diagnosed:**

People diagnosed with HIV disease as of December 31, 2021 and living in Iowa as of December 31, 2022.

• An estimated 3,569 lowans were living with HIV disease as of December 31, 2022. Of these, 3,105 had been diagnosed by the end of 2021 and were living in lowa as of December 31,2022.

#### 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 2022 <u>or</u> who had only one viral load lab result but it demonstrated viral suppression during 2022.

#### Viral Suppression:

People retained in care and whose most recent viral load in 2021 was less than 200 copies/mL.

- 2,620 (84%) of the 3,105 diagnosed lowans had been retained in care at the end of 2022. Of those retained in care, 2,483 (95%) were virally suppressed.
- Viral suppression for all diagnosed people living in Iowa (in care and out of care) was 80%.

#### 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 101 deaths in 1995. As of December 31, 2022, 1,450 deaths had been reported among people diagnosed with HIV or AIDS in Iowa. Of those deaths, 56% were caused in some part by the underlying HIV disease, 38% of deaths were not HIV-related, and the causes of death of 6% were unknown. Additional death information may be obtained after the National Death Index data linkage is completed later in 2023.

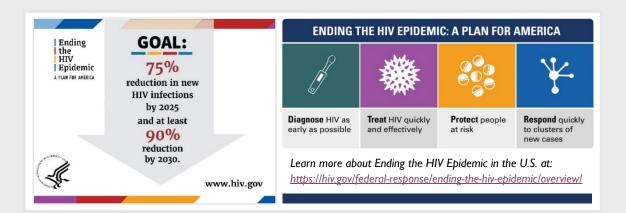
#### **HIV Partner Services**

All of the 120 persons newly diagnosed with HIV disease in 2022 were assigned for partner services and all were interviewed by a disease intervention specialist (DIS) from the state or one of four counties (Black Hawk, Linn, Polk, and Scott). The goal of partner services is to have a DIS contact the patient to provide education about HIV care and services, to link the patient to care, and to offer assistance in notifying and testing sex and needle-sharing partners. The 120 persons assigned for partner services named 441 partners. Of these, 357 were located in Iowa and were of unknown HIV statuses. Of the remaining 84, 40 lived out of state and 41 were already known to be diagnosed with HIV. Of the 357 contacts with unknown HIV statuses, 224 (63%) were subsequently tested, and 20 were found to be HIV positive (9% positivity).

### Ending the HIV Epidemic

### ENDING THE HIV EPIDEMIC IN THE U.S.

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.



#### STOP HIV IOWA PLANNING

#### Visions and Goals

The vision of the Stop HIV Iowa Plan is to make Iowa a place where transmission of HIV is prevented, where everyone knows their HIV status, and where everyone living with HIV is valued and respected, has high-quality care and treatment, and lives free from stigma and discrimination.

To achieve this vision, the Stop HIV Iowa Plan outlines a strategic plan with four overarching goals:

- Preventing new HIV infections
- Improving health-related outcomes for people living with HIV
- Reducing HIV-related disparities and health inequities
- Achieving integrated, coordinated efforts that address the HIV epidemic among all interested parties.

The third goal deserves special emphasis. Black and Latino gay, bisexual, and other men who have sex with men are experiencing stark health disparities related to HIV that will require a concerted focus to reverse. To do this, we must remove systemic barriers that affect the most affected communities in Iowa, including Black, Latino, and Indigenous people, people who use drugs, people born outside of the US, and youth.

Read the full Stop HIV Iowa Plan at https://www.stophiviowaplan.org/read-the-plan.

### Section 3: TABLES

#### TABLE 3.1 IOWANS DIAGNOSED WITH HIV OR AIDS IN 2022, DYING WITH HIV IN 2022, AND IOWANS LIVING WITH HIV DISEASE AS OF DECEMBER 31, 2022

Characteristics	HIV Di Diagn		AIDS Dia	agnoses <sup>2</sup>	Deat	ths <sup>3</sup>	People Li HIV D	ving with isease <sup>4</sup>
	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Sex at Birth								
Male	102	(85)	41	(87)	25	(78)	2,523	(78)
Female	18	(15)	6	(13)	7	(22)	705	(22)
Age at Diagnosis								
Under 13	0		0		0		54	(2)
13-14	0		0		0		3	
15-24	27	(23)	4	(9)	3	(6)	613	(19)
25-34	39	(33)	10	(21)	4	(13)	1,147	(36)
35-44	22	(18)	7	(15)	9	(28)	819	(25)
45-54	22	(18)	16	(34)	8	(25)	420	(13)
55-64	6	(5)	8	(17)	6	(19)	144	(4)
65 or older	4	(3)	2	(4)	3	(9)	28	(1)
Ethnicity/Race								
Hispanic/Latino, All Races	23	(19)	12	(26)	0		368	(11)
White, Not Hispanic	60	(50)	20	(43)	25	(78)	1,851	(57)
Black/African American, Not Hispanic	30	(25)	12	(26)	7	(22)	770	(24)
Asian, Not Hispanic	I	(1)	I	(2)	0		74	(2)
Native Hawaiian/Pacific Islander, Not Hispanic	I	(1)	0		0		7	
American Indian/Alaska Native, Not Hispanic	0		I	(2)	0		11	
Multi-race, Not Hispanic	5	(4)	I	(2)	0		147	(5)
Country of Birth								
United States or Dependency	99	(83)	33	(70)	30	(94)	2,567	(80)
Other Countries	21	(18)	14	(30)	2	(6)	661	(20)
Mode of Exposure <sup>5</sup>								
Men who have sex with men (MSM)	72	(60)	27	(57)	15	(47)	1,746	(54)
People who inject drugs (PWID)	8	(7)	3	(6)	4	(13)	230	(7)
MSM and Injection Drug Use (MSM/PWID)	16	(13)	2	(4)	4	(13)	236	(7)
Heterosexual Contact	17	(14)	8	(17)	5	(16)	627	(19)
Hemophilia/Coagulation disorder	0		0		0		6	
Receipt of blood or tissue	0		0		0		3	
Risk not reported/Other (NIR)	7	(6)	6	(13)	4	(13)	330	(10)
Pediatric/Other	0		1	(2)	0		50	(2)
TOTALS	120	(100)	47	(100)	32	(100)	3,228	(100)

<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 lowa at time of diagnosis. Some people 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>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 Iowa HHS. Age is age at time of first diagnosis of AIDS.

<sup>3</sup>Deaths reflect deaths in 2022 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>4</sup>People living with HIV disease reflect HIV-diagnosed people (HIV or AIDS) living in the state of Iowa and alive as of December 31, 2022. All deaths may not have been reported.

<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. Other modes of exposure such as needle stick are so rare that they are combined with pediatric infections.

#### TABLE 3.2 IOWANS DIAGNOSED WITH HIV BY SEX, AGE, RACE AND ETHINICITY, COUNTRY OF BIRTH, AND MODE OF EXPOSURE TO HIV: 2013 THROUGH 2022

Characteristics	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Sex at Birth										
Male	102	98	78	72	85	101	104	96	78	97
Female	18	25	22	27	31	24	32	26	20	21
Age in Years at Diagnosis										
Under 13	0	0	0	0	0	0	4	0	2	0
13-14	0	0	0	0	I	0	0	0	0	0
15-24	27	18	26	23	19	32	28	32	18	16
25-34	39	40	31	24	45	40	43	28	27	29
35-44	22	27	22	26	25	15	28	26	18	24
45-54	22	21	14	8	15	21	20	22	17	28
55-64	6	11	2	13	8	15	12	13	14	17
65 or older	4	6	5	5	3	2	I	I	2	5
Ethnicity/Race										
Hispanic/Latino, All Races	23	20	5	12	14	15	9	16	10	9
White, Not Hispanic	60	63	55	47	64	64	74	73	68	73
Black/African American, Not Hispanic	30	30	24	30	33	38	44	23	11	23
Asian, Not Hispanic	I	7	6	2	I	3	5	6	I	8
Native Hawaiian/Pacific Islander, Not Hispanic	I	0	2	2	0	0	0	0	0	0
American Indian/Alaska Native, Not Hispanic	0	I	I	I	I	0	0	0	0	0
Multi-race, Not Hispanic	5	2	7	5	3	5	4	4	8	6
Country of Birth										
United States or Dependency	99	94	84	71	94	102	97	94	84	95
Other Countries	21	29	16	28	22	23	39	28	14	24
Mode of Exposure – Adult/Adolescent <sup>2</sup>										
Men who have sex with men (MSM)	72	60	55	45	65	71	75	74	60	71
People who inject drugs (PWID)	8	14	14	8	6	7	4	10	8	8
MSM and Injection Drug Use (MSM/PWID)	16	9	6	8	9	10	9	6	5	3
Heterosexual Contact	17	36	18	28	33	28	33	24	20	33
Hemophilia/Coagulation disorder	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
Risk not reported/Other (NIR)	7	4	7	10	3	9	11	8	3	4
Pediatric/Other	0	0	0	0	0	0	4	0	2	0
TOTALS	120	123	100	99	116	125	136	122	98	119

<sup>1</sup>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.

<sup>2</sup>People diagnosed as adolescents or adults may have had pediatric exposures. If so, they will be classified as adult/adolescent at time of diagnosis, but listed under pediatric exposures.

### TABLE 3.3 IOWA MALES 13 YEARS OF AGE AND OLDER DIAGNOSED WITH HIV: 2008 THROUGH 2022

	Year of HIV Diagnosis												
Characteristics	2022		2021		2020		2019		2018		2008 through 2017		
	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	
Age at Diagnosis													
13-14	0		0		0		0		0		0		
15-24	23	(23)	15	(15)	18	(23)	19	(26)	14	(16)	188	(20)	
25-34	34	(33)	34	(35)	29	(37)	17	(24)	37	(44)	259	(28)	
35-44	19	(19)	19	(19)	19	(24)	17	(24)	15	(18)	205	(22)	
45-54	17	(17)	17	(17)	7	(9)	3	(4)	10	(12)	179	(19)	
55-64	6	(6)	9	(9)	I	(1)	12	(17)	7	(8)	90	(10)	
65 or older	3	(3)	4	(4)	4	(5)	4	(6)	2	(2)	14	(1)	
Ethnicity/Race													
Hispanic/Latino, All Races	21	(21)	18	(18)	5	(6)	8	(11)	11	(13)	91	(10)	
White, Not Hispanic	51	(50)	54	(55)	45	(58)	40	(56)	52	(61)	633	(68)	
Black/African American, Not Hispanic	23	(23)	21	(21)	15	(19)	17	(24)	20	(24)	140	(15)	
Asian, Not Hispanic	Ι	(1)	3	(3)	6	(8)	2	(3)	I	(1)	27	(3)	
Multi-race, Not Hispanic	5	(5)	I	(1)	5	(5)	3	(4)	I	(1)	43	(5)	
Other, Not Hispanic	Ι	(1)	I	(1)	2	(3)	2	(2)	0				
Country of Birth													
United States or Dependency	86	(84)	80	(82)	67	(86)	56	(78)	72	(85)	802	(86)	
Other Countries	16	(16)	18	(18)	11	(14)	16	(22)	13	(15)	133	(14)	
Mode of Exposure													
Men who have sex with men (MSM)	72	(71)	60	(61)	55	(71)	45	(63)	65	(76)	678	(73)	
People who injects drugs (PWID)	6	(6)	10	(10)	9	(12)	4	(6)	2	(2)	53	(6)	
MSM and Injection Drug Use (MSM/PWID)	16	(16)	9	(9)	6	(8)	8	(11)	9	(11)	73	(8)	
Heterosexual Contact	4	(4)	15	(15)	6	(8)	9	(13)	8	(9)	79	(8)	
Blood, blood products, tissue	0		0		0		0		0		0		
Risk not reported(NIR)/Other	4	(4)	4	(4)	2	(3)	6	(8)	I	(1)	52	(6)	
All MSM (MSM + MSM/PWID)	88	(86)	69	(70)	61	(79)	53	(74)	74	(87)	751	(80)	
All PWID (PWID + MSM/PWID)	22	(22)	19	(19)	15	(20)	12	(17)	11	(13)	123	(13)	
TOTALS	102	(100)	<b>98</b>	(100)	78	(100)	72	(100)	85	(100)	935	(100)	

As shown in the Table 3.3, diagnoses among adult and adolescent males increased three years in a row since 2019. Diagnoses increased in 2022 among US-born males, but decreased among non-US-born males. Males aged 25 to 44 years experienced more than half (51%) of all adult/adolescent ( $\geq$  13 years of age at time of diagnosis) diagnoses among males from 2008 through 2022. Diagnoses among non-US-born males in 2022 accounted for 16% of all diagnoses among males in 2022, down from 18% in 2021.

### TABLE 3.4 IOWA FEMALES I3 YEARS OF AGE AND OLDER DIAGNOSED WITH HIV: 2008 THROUGH 2022

	Year of HIV Diagnosis												
Characteristics	2	2022		2021		2020		2019		2018		2008 through 2017	
	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	#	(%)	
Age at Diagnosis													
13-14	0		0		0		0		I	(3)	0		
15-24	4	(22)	3	(12)	8	(36)	4	(15)	5	(16)	44	(19)	
25-34	5	(28)	6	(24)	2	(9)	7	(26)	8	(26)	72	(32)	
35-44	3	(17)	8	(32)	3	(14)	9	(33)	10	(32)	45	(20)	
45-54	5	(28)	4	(16)	7	(32)	5	(19)	5	(16)	39	(17)	
55-64	0		2	(8)	I	(5)	I	(4)	I	(3)	24	(11)	
65 or older	I	(6)	2	(8)	I	(5)	I	(4)	I	(3)	4	(2)	
Ethnicity/Race													
Hispanic, All Races	2	(11)	2	(8)	0		4	(15)	3	(10)	17	(7)	
Not Hispanic, White	9	(50)	9	(36)	10	(45)	7	(26)	12	(39)	87	(38)	
Not Hispanic, Black/African American	7	(39)	9	(36)	9	(41)	13	(48)	13	(42)	99	(43)	
Not Hispanic, Asian	0		4	(16)	0		0		0		15	(7)	
Not Hispanic, Multi-race	0		0		2	(9)	2	(7)	2	(6)	10	(4)	
Other	0		I	(4)	I	(5)	I	(4)	I	(3)	0		
Country of Birth													
United States or Dependency	13	(72)	14	(56)	17	(77)	15	(56)	22	(71)	142	(62)	
Other Countries	5	(28)	11	(44)	5	(23)	12	(44)	9	(29)	86	(38)	
Mode of Exposure													
People who inject drugs (PWID)	2	(11)	4	(16)	5	(23)	4	(15)	4	(13)	25	(11)	
Heterosexual Contact	13	(72)	21	(84)	12	(55)	19	(70)	25	(81)	180	(79)	
Risk not reported/Other (NIR)	3	(17)	0		5	(23)	4	(15)	2	(6)	23	(10)	
TOTALS	18	(100)	25	(100)	22	(100)	27	(100)	31	(100)	228	(100)	

Diagnoses among females remained below 30, on average, from 2008 through 2022, 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 2008 through 2022. Diagnoses among non-US-born females in 2022 accounted for 28% of all diagnoses among females, and decreased by 55% from 2021 to 2022. Heterosexual contact is the most common mode of exposure for women in Iowa.

# TABLE 3.5 IOWANS DIAGNOSED WITH HIV IN 1982 THROUGH 2022 BY DIAGNOSTIC STATUS AT DEATH (HIV OR AIDS) AND UNDERLYING CAUSE OF DEATH (UCD)

Year	HIV <sup>1</sup> Diagnoses	HIV (not AIDS) Deaths <sup>2</sup>	AIDS Deaths <sup>3</sup>	Total Deaths	UCD <sup>4</sup> (HIV)	UCD (Other)	UCD (Unknown)
1982			I	I	0	I	0
1983	I		I	-	0	I	0
1984	25		3	3	0	2	Ι
1985	55		6	6	0	5	I
1986	61		15	15	0	14	L I
1987	63		19	19	14	3	2
1988	69		8	8	6	2	0
1989	81		13	13	10	2	-
1990	111		23	23	13	9	Ι
1991	134		57	57	44	10	3
1992	125		63	63	51		Ι
1993	98	I	75	76	61	13	2
1994	101		83	84	62	18	4
1995	87	2	99	101	76	22	3
1996	104	2	64	66	52	9	5
1997	104		29	30	19	9	2
۱998 <sup>5</sup>	98	2	17	19	10	8	Ι
1999	85	2	23	25	15	8	2
2000	89	2	28	30	20	8	2
2001	96	4	32	36	20	14	2
2002	102	2	33	35	27	8	0
2004	85	5	30	35	16	18	I
2004	104	3	30	33	25	7	I
2005	112	6	22	28	18	10	0
2006	109	2	23	25	11	13	I
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	I
2012	118	7	30	37	20	15	2
2013	119	П	35	46	20	24	2
2014	98	5	42	47	22	20	5
2015	122	9	22	31	14	16	I
2016	136	5	29	34	12	21	
2017	125		26	37	17	19	
2018	116	9	39	48	11	33	4
2019	99	15	37	52	13	38	
2020	100	12	43	55	12	39	4
2021	123	9	36	45	7	35	3
2022 <sup>6</sup>	120	10	22	32	6	10	16

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

<sup>2</sup>Data include people whose diagnosis statuses at time of death were HIV (not-AIDS). Fewer than 11% of deaths occur in people whose diagnostic statuses at the time of death are HIV (not-AIDS). People may have been diagnosed in any year up to and including the year of death. <sup>3</sup>Data include people who have AIDS diagnoses at time of death. Greater than 89% of deaths occur in people who have AIDS diagnoses at the time of death. People may have been diagnosed in any year up to and including the year of death.

<sup>4</sup>The underlying HIV infection is listed on the death certificate as a cause of death in 56% of people diagnosed with HIV in Iowa.

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

<sup>6</sup>Death data for 2022 are incomplete. Matching data to the National Death Index files in 2023 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 (Unknown) – Cause of death is unknown.

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### 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, details 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.

**II.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 and ethnicity, marital status, and telephone 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 persons who experience a reportable event while receiving services in the state, regardless of state of residence, shall be reported.

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