INTEGRATED HIV/AIDS PLANNING IHAP TA CENTER

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Epidemiologic Overview

Iowa Comprehensive HIV Plan 2017-2021

REGION	Midwest
PLAN TYPE	Integrated state-only prevention and care plan
JURISDICTIONS	State of Iowa
HIV PREVALENCE	Low

Iowa's epidemiologic profile is provided as an appendix and broken into three sections, each providing a significant amount of data covering three core epidemiological topics. These include the sociodemographic characteristics of Iowa's population, the epidemiology and geographic distribution of HIV/AIDS, and the most serious risk factors of HIV infection in the state. The section also includes data on testing and prevention efforts of the Iowa Department of Public Health. Data on the sociodemographic characteristics of the state are particularly robust, including county level population data, as well as information on the racial/ethnic breakdown of the state, poverty, employment and insurance status of residents, and age distribution. Per the document's introduction, the purpose of this data is to "provide a context for assessing the potential impact of HIV, AIDS, and other sexually transmitted diseases in Iowa".

Lastly, the plan is broken into sections with summary bullet points provided at the beginning which outline the most important 'take-aways' for readers. This provides an example of an alternative option to the standard format that many jurisdictions used (i.e. followed the outline provided by HRSA).

SELECTION CRITERIA: EPIDEMIOLOGIC OVERVIEW

Exemplary Epidemiologic Overview sections met the following criteria (based on the Integrated HIV Prevention and Care Plan Guidance):

- ☑ 5 year data trends used with most recent year between 2014 through 2016
- ☑ Use of clear and effective graphics
- ☑ Robust description of demographic data (race, age, sex, transmission category, gender identify) of persons newly diagnosed, PLWH, and persons at high risk for infection
- ☑ Description of SES (FPL, income, education, insurance status) of persons newly diagnosed, PLWH, and persons at high risk for infection
- ☑ Clear description of burden of HIV in service area
- ☑ Clear description of indicators of risk for HIV infection

Additional exemplary plan sections are available online:
www.targetHIV.org/exemplary-integrated-plans

Section I: Statewide Coordinated Statement of Need

Epidemiological Overview

The full epidemiological profile of HIV in Iowa is attached. Below is a brief summary of the main points.

There were 124 HIV diagnoses in 2015, the highest since 126 in 2009. This was up 26 (27%) from 98 diagnoses in 2014 and 10 (9%) above the 5-year (2010-2014) average of 114. Since 2006, males have accounted for over 80% of HIV diagnoses and sex with another male is the reported mode of exposure to HIV for over 75% of male diagnoses. By far the greatest numbers of diagnoses occur among persons 25 to 44 years of age. Diagnoses among persons 13 through 24 years of age increased to a new peak of 33 (27%) in 2015 after increasing from a low 12 (10%) in 2007. The ten year average diagnosis among persons 13 through 24 years of age remained steady with a ten year is about 20 diagnoses annually.

Black, non-Hispanic males, black, non-Hispanic females, and Hispanic males are over-represented among persons with HIV/AIDS when their population sizes are taken into account. Black, non-Hispanic males had HIV diagnosis rates more than six times that of white, non-Hispanic males in 2015. Hispanic males had rates over two times that of white, non-Hispanic males in 2015. Black, non-Hispanic females had the highest diagnosis rate among females at more than 14 times that of white, non-Hispanic females in 2015.

Diagnoses of AIDS peaked in 1992 at 157 diagnosed cases. This period coincided with the expansion of the Centers for Disease Control and Prevention (CDC) definition of AIDS to include CD4+ cell counts less than 200 cells per microliter or less than 14% of total lymphocytes. However, the introduction of highly active antiretroviral therapy (HAART) sparked a dramatic decline in AIDS diagnoses from 1995 through 1998. After reaching a low of 60 diagnosed cases in 1998, the number of Iowa AIDS diagnoses gradually increased to an annual average of 73.2 diagnoses from 2006 through 2015.

Iowa continues to struggle to get people tested and diagnosed soon after infection. The percentage of persons that received an AIDS diagnosis within three months of initial HIV diagnosis (“late testers”) reached a low of 32% among people diagnosed in 2011. However, the proportion of late testers remains high in Iowa with a 10-year (2006-2015) average of 39%. In 2015, it was 38%.

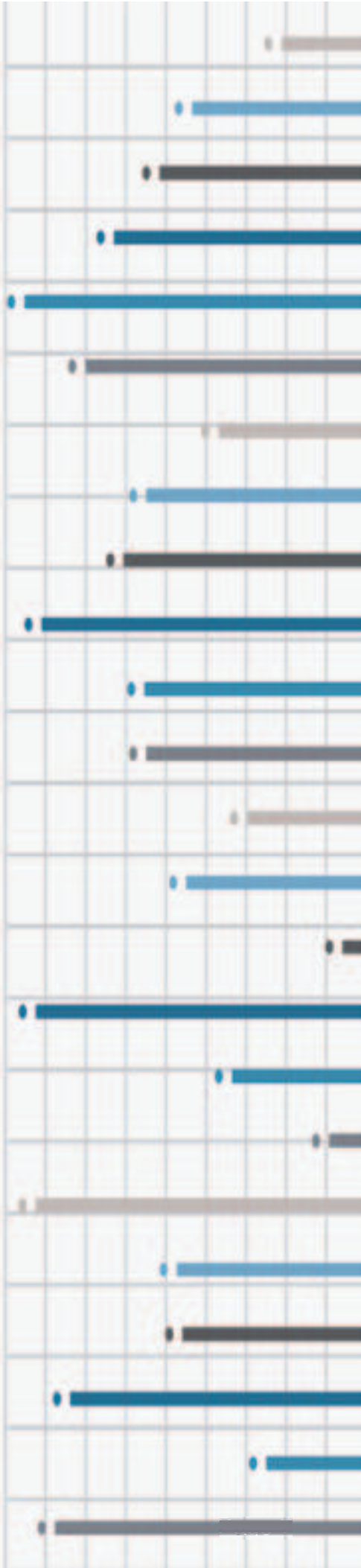
The number of deaths among HIV-infected persons diagnosed in Iowa continues to decrease after peaking at 103 deaths in 1995. From 2005 through 2014, death numbers have fluctuated from a low of 24 in 2008 to a high of 44 in 2014. Of the 44 deaths among Iowans with HIV disease in 2014, the last year for which death ascertainment is partially complete, 17 (39%) were caused in some part by the underlying HIV disease, 18 (41%) were determined to not be caused by underlying HIV disease,

and the cause of 9 (20%) is unknown.. The 44 deaths reported in 2014 are in line with the average of 31 for the 10 years, 2004 through 2013. Twenty deaths have been reported so far for 2015. Death ascertainment for 2015 is incomplete pending linkage to state and national death registries.

The most significant feature of HIV in Iowa is the continual increase in the number of persons living with HIV and AIDS. Steady diagnoses of HIV infection, combined with widespread use of highly active, antiretroviral therapies that have decreased the number of deaths among persons with HIV disease, have increased the number of persons living with HIV to unprecedented levels and have taxed limited resources for care and treatment. In previous prevalence calculations, IDPH included only persons who were residents of Iowa at first diagnosis of HIV or AIDS regardless of where they currently lived. Although consistent with CDC methodology, this did not take into account the fact some of the cohort had moved from the state or the fact some persons diagnosed in other states had moved to Iowa. Based on outcomes of two special projects and full implementation of the re-engagement project, IDPH decided to use "current address" rather than "Iowa residence at diagnosis" to calculate HIV prevalence for 2015.

Using current address, there were 2,496 persons diagnosed and living with HIV disease (PLWH) in Iowa as of December 31, 2015, a prevalence of 80 per 100,000 persons. Iowa's prevalence is lower than the Midwest prevalence of 162 per 100,000 and the U.S. prevalence of 291.5 per 100,000. While the ten most populous counties (Black Hawk, Dallas, Dubuque, Johnson, Linn, Polk, Pottawattamie, Scott, Story, and Woodbury) account for 51% of the total population of Iowa, 73% of persons living with HIV infection in 2015 were living in these counties and 69% of persons newly diagnosed with HIV disease in 2015 were diagnosed as residents of those counties. Among counties with at least 15 persons living with HIV disease, Polk, Scott, Johnson, Linn, Pottawattamie, and Buena Vista counties have prevalence rates greater than 100 per 100,000 or 0.1%. Woodbury and Black Hawk counties have prevalence rates above the state average but less than 100 per 100,000 persons.

Iowa's HIV Continuum of Care shows that there were 2,922 people living with HIV disease and residing in Iowa on December 31, 2015. Of these, 81% had been diagnosed, leaving 529 Iowans who have yet to be diagnosed with HIV. Of the 124 diagnosed cases in 2015, 88% of people diagnosed with HIV were linked to care within one month; and 97% were linked within three months. Black, non-Hispanic persons, Hispanic persons, those with heterosexual or unidentified modes of exposure, people under the age of 24, and foreign-born people take longer to link than other populations who are diagnosed with HIV in Iowa. Of the PLWH in Iowa at the end of 2015, 83% were retained in care according to Iowa's definition of retention in care. Among Iowans diagnosed and living with HIV, 76% were virally suppressed, but among those who were retained in



care, 91% had achieved viral suppression. The same groups that take longer to link are less likely to be retained in care or to achieve viral suppression. Based upon the continuum, testing, retention, and re-engagement in care should be focused on to improve health outcomes for Iowans living with HIV and to reduce transmission of HIV to others.

Other points of interest include:

• Iowa has an unusually disperse distribution of PLWH compared to other states. Polk County, which is the most populous county in Iowa and includes the Des Moines metropolitan area, contains only approximately 29% of all Iowans living with HIV. Despite this, there has been a gradual trend toward a more urban distribution of HIV infection and other STDs in Iowa. Over 74% of persons diagnosed with HIV between 2006 and 2015 were residents of one of Iowa's ten most populous counties at time of initial diagnosis. These counties house 51% of Iowa's general population, but account for two-thirds of new chlamydia infections and nearly 80% of new gonorrhea infections.

• The median age of adolescents and adults (13 years of age and older) diagnosed with HIV in 2015 was 35.0 years, slightly lower than the five-year (2010-2014) median of 37.2 years. In 2015, the median age at diagnosis for adult/adolescent males was 35.0 years, the same as for adult/adolescent females. In 2015, 42% of females and 45% of males were 25 to 44 years of age at time of diagnosis. This was lower than the five-year (2010-2014) averages of 50% for females and 49% for males.

• The general population of Iowa is 87.1% white, non-Hispanic; 3.3% black, non-Hispanic; 5.6% Hispanic, all races; and 4.1% other races and ethnicities. However, only 60% of HIV diagnoses in 2015 were among white, non-Hispanic persons, highlighting a substantial disparity in diagnoses among some racial and ethnic minorities. Nineteen percent of HIV diagnoses were among black, non-Hispanic persons, 13% were Hispanic, and 8% were other races. The HIV diagnosis rate in 2015 was 22.9 diagnoses per 100,000 persons for black, non-Hispanic persons, 9.0 for Hispanics, and 2.7 for white, non-Hispanic persons in Iowa.

• Fifty-four percent of persons living with HIV or AIDS as of December 31, 2015, reported male-to-male sexual contact (MSM) as their primary risk. Heterosexual contact was the primary risk for 18% of persons living with HIV or AIDS, while 8% were injection drug users (IDU), 7% reported both IDU and MSM and 11% had no risk identified.

• Chlamydia is the most frequently reported STD in Iowa, with 12,133 cases, the highest number ever, reported in 2015. Other than a slight decrease in 2013, the incidence of chlamydia has climbed steadily with a 64% increase in the number of diagnoses in the last ten years. Similarly, the incidence of gonorrhea has increased by 38% since 2005. In contrast, the incidence of syphilis has changed dramatically in recent years. There was a 450% increase in the number of infectious syphilis cases (primary, secondary, and early latent) between 2011 and 2013. Although incidence has decreased by 18% since 2013, numbers continue to remain relatively high. Men who have sex with men are disproportionately impacted by syphilis, and account for approximately 70% of the cases among men.

• The male-to-female ratios for chlamydia and gonorrhea differ between minority populations and the white, non-Hispanic population. White, non-Hispanic females with gonorrhea diagnoses outnumber white, non-Hispanic males by 1.2 to 1 (male-to-female ratio of 0.83), while black, non-Hispanic males outnumber black, non-Hispanic females 1.4 to 1 (male-to-female ratio of 1.4).

This may indicate that minority females are not being screened for asymptomatic infection at the same rate as other women in the state.

- As of March 31, 2016, the Iowa Department of Public Health had received 21,334 reports of hepatitis C infection among Iowans. Based upon this number of reports, there are likely to be 35,216 to 129,127 Iowans with hepatitis C infection, with 15,061 to 109,758 of these cases undiagnosed. Since 2000, approximately 9,000 hepatitis C tests were conducted at IDPH-supported counseling, testing, and referral sites, with an average annual positivity of 10%. HIV-HCV co-infection rates have not been determined.

Behavioral Surveillance Data

The 2013-2014 American Men's Internet Survey (AMIS), an online HIV behavioral survey of men who have sex with men (MSM) was conducted by Programs, Research, and Innovation in Sexual Minority (PRISM) Health at Emory University, Atlanta, Georgia.

Recruitment of Iowa MSM occurred through targeted Facebook ads, Google ads and MSM web sites. Eligibility criteria included that the survey respondent be male, over age 18, a U.S. resident, reported ever having oral or anal sex with a man and able to complete the survey in English. A total of 156 Iowa MSM provided complete survey responses. Race and ethnicity of the respondents was as follows: White, non-Hispanic (88%); Hispanic (5%); other or multiple races (8%). Over half the sample, 58% were below age 40. Almost half, 49%, of the respondents indicated having a college degree or postgraduate education.

Intermittent condom use was reported. For example, 63% of respondents reported anal sex without a condom in the past 12 months, with the highest rate, 72%, in the 15-24 age group. Unprotected anal sex without a condom with a male partner of discordant or unknown HIV status in the last 12 months was reported in 18% of participants. Again, with the highest rate, 34%, in the 15-24 age group.

Drug use was reported less frequently. Fifteen percent of respondents reported using illicit drugs other than marijuana in the past 12 months.

Having received free condoms was reported among 36% of the respondents, with the most common demographics being those age 25-29, college degree or post-graduate education and earning >$75,000/year (46%, 43%, 44%, respectively). This percentage did not vary by rural or urban residence.

Younger respondents indicated they had not regularly accessed HIV testing. In fact, 47% of MSM age 15-24 years old had never been tested for HIV compared to 29% or less for other age groups. Regardless of age group, most respondents were not testing for sexually transmitted diseases (STD) regularly; only 42% reported STD testing in the last 12 months. HIV testing occurred most frequently in private doctor's office and public health/community health clinic (50% and 28%, respectively). In addition, 43% had not received hepatitis A/B vaccinations.

Participants in the study were also asked about pre-exposure prophylaxis (PrEP). Forty-three percent of respondents said they had heard of PrEP and 38% said they would be willing to use PrEP. However, only 5.6% of respondents reported having ever used PrEP. Willingness to use PrEP appeared to be lower among respondents age 30 and older and individuals having a college degree or postgraduate education.