



# HIV/AIDS Prevalence and Mortality Report, 2017

HIV/AIDS Surveillance System

<http://www.health.state.mn.us/divs/idepc/diseases/hiv/stats/index.html>

# Introduction (I)

- These three introduction slides provide a general context for the data used to create this slide set. If you have questions about any of the slides, please refer to the *Surveillance Technical Notes*.
- This slide set displays estimates of the number of persons living with HIV/AIDS (prevalence) and mortality in Minnesota by person, place, and time.
- The slides rely on data from HIV/AIDS cases diagnosed through 2017 and reported to the Minnesota Department of Health (MDH) HIV/AIDS Surveillance System.

# Introduction (II)

- Data analyses exclude persons diagnosed in federal or private correctional facilities, but include state prisoners (number of state prisoners believed to be living with HIV/AIDS = 104).
- Data analyses for new infections exclude persons arriving to Minnesota through the HIV+ Refugee Resettlement Program (number of primary HIV+ refugees in this program living in Minnesota as of December 31, 2017 = 170), as well as other refugees/immigrants reporting a positive test prior to their arrival in Minnesota (n = 166).
- Some limitations of surveillance data:
  - Do not include HIV-infected persons who have not been tested for HIV
  - Do not include persons whose positive test results have not been reported to MDH
  - Do not include HIV-infected persons who have only tested anonymously
  - Case numbers for the most recent years may be undercounted due to delays in reporting
  - Reporting of living cases that were not initially diagnosed in Minnesota is known to be incomplete

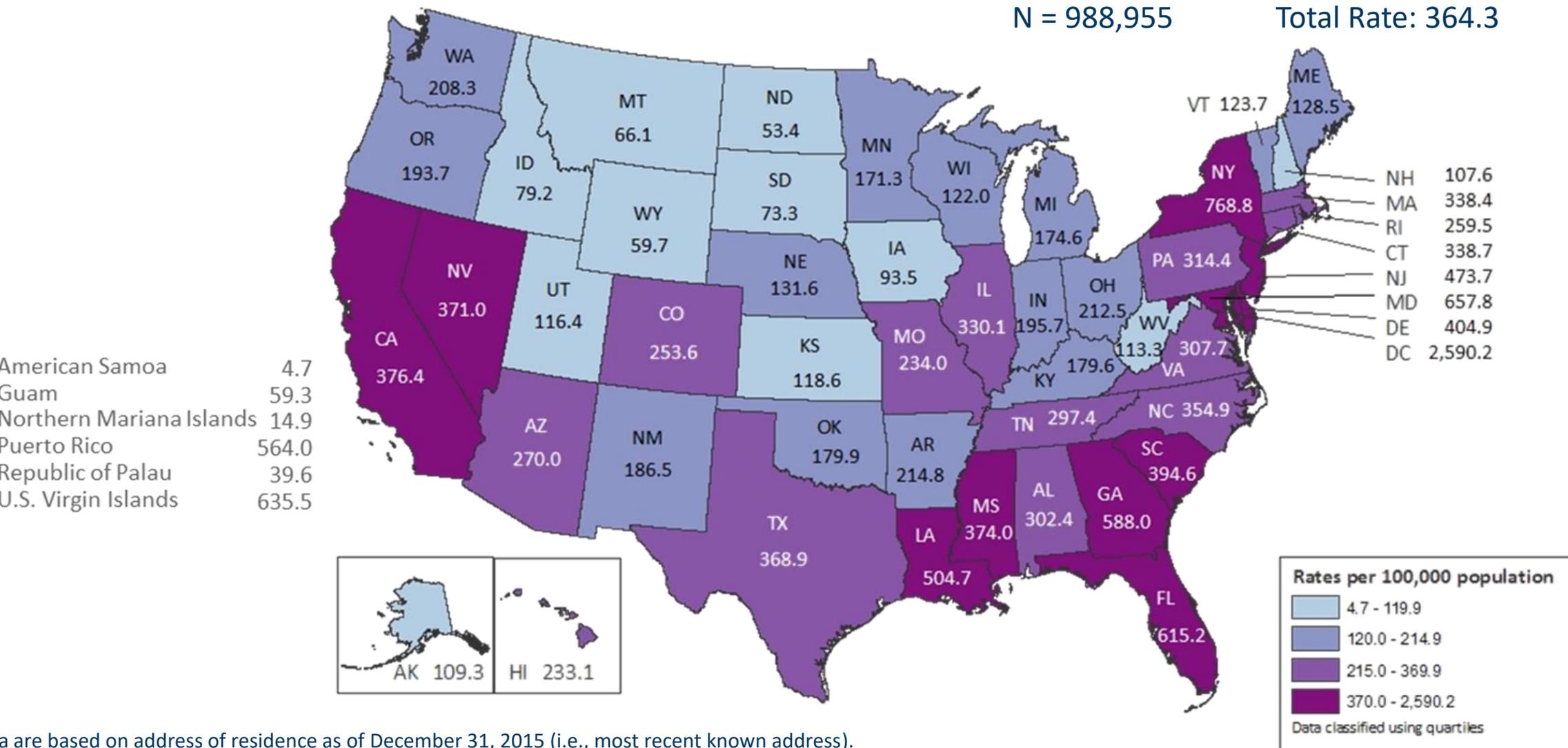
# Introduction (III)

- Persons are assumed to be alive unless MDH has knowledge of their death.
- Persons whose most recently reported state of residence was Minnesota are assumed to be currently residing in Minnesota unless MDH has knowledge of their relocation. Our ability to track changes of residence, including within the state, is limited.
- Vital status and current residence are updated through one or more of the following methods:
  - Standard case reporting
  - Correspondence with other health departments
  - Active surveillance
  - Death certificate reviews (annually)
  - Birth certificate reviews (annually, women only)

# National Context

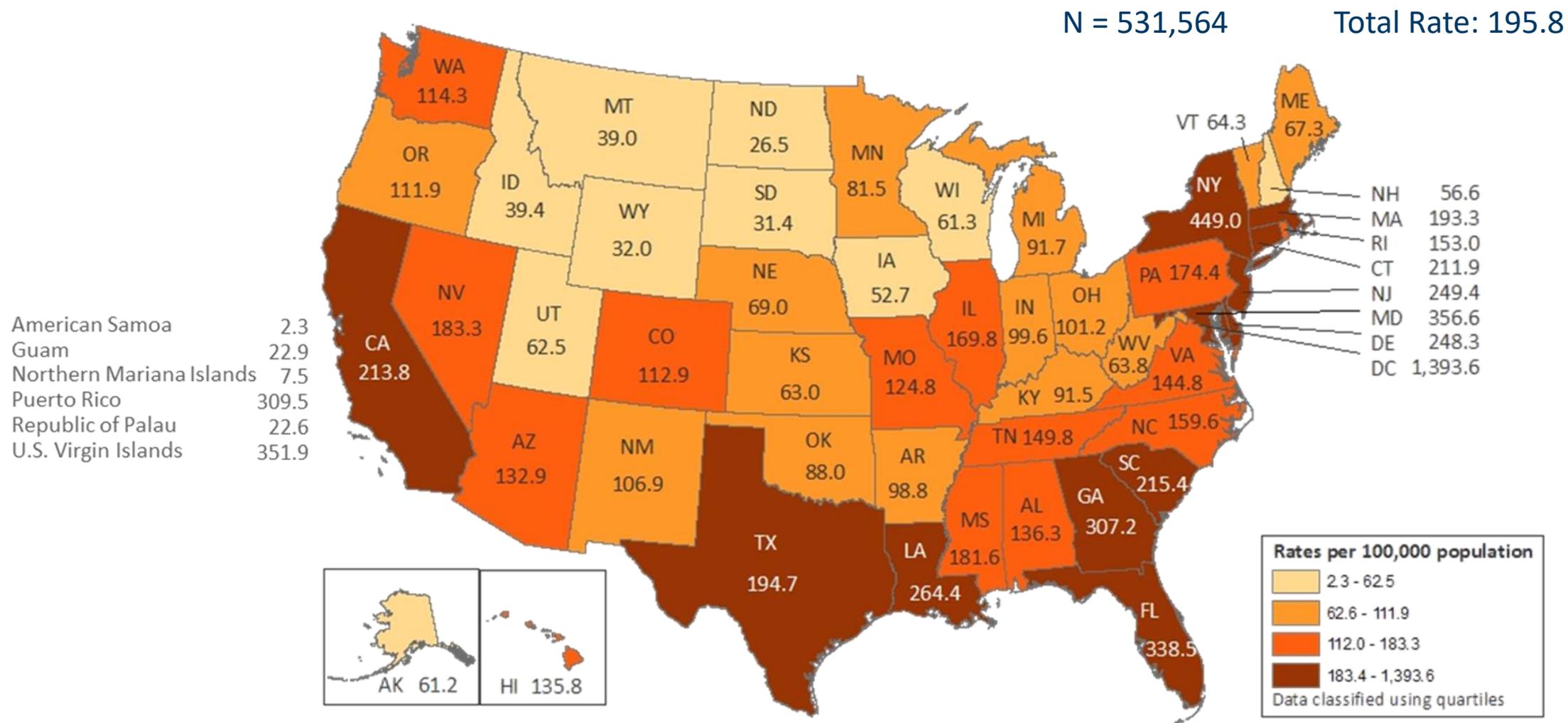
Data source: CDC Preliminary Data for 2016

# Rates of Adults and Adolescents Living with Diagnosed HIV Infection, by Area of Residence, Year-end 2015 — United States and 6 Dependent Areas

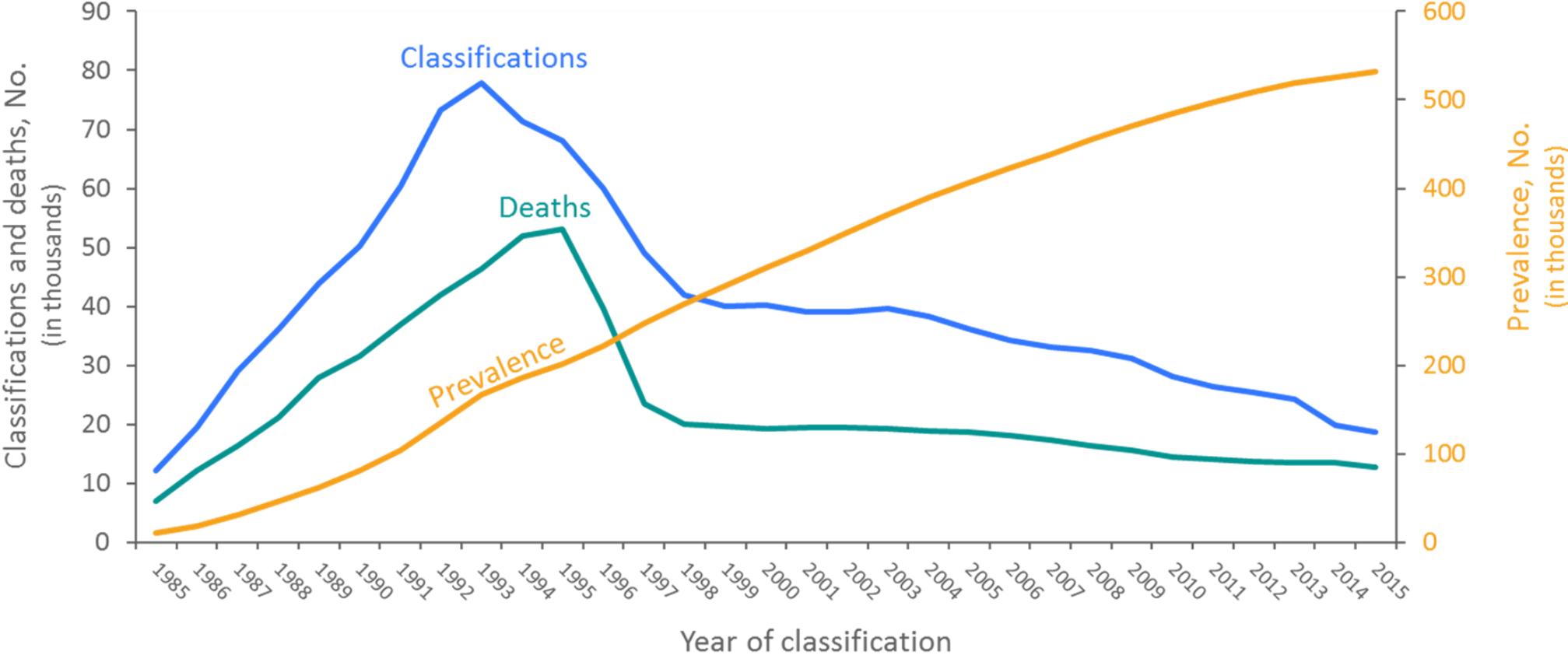


Data are based on address of residence as of December 31, 2015 (i.e., most recent known address).

# Rates of Adults and Adolescents Living with Diagnosed HIV Infection Ever Classified as Stage 3 (AIDS), by Area of Residence, Year-end 2015— United States and 6 Dependent Areas



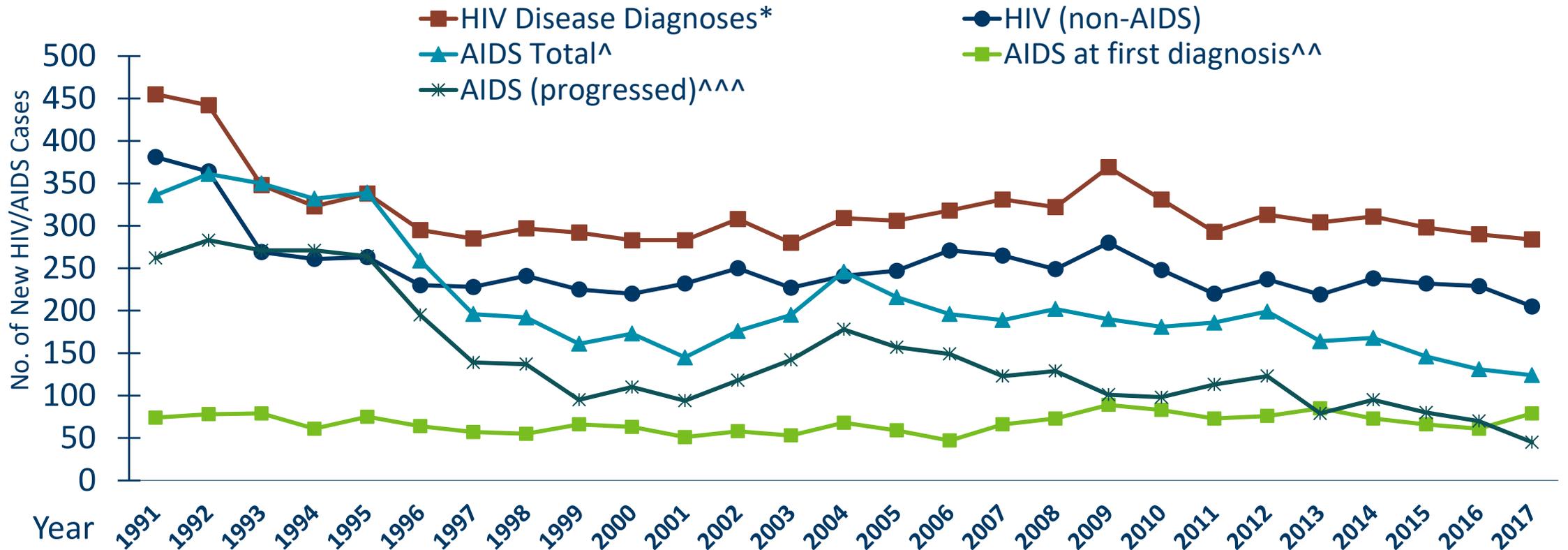
# Stage 3 (AIDS) Classifications, Deaths, and Persons Living with Diagnosed HIV Infection Ever Classified as Stage 3 (AIDS) 1985–2015—United States and 6 Dependent Areas



Deaths of persons with HIV infection, stage 3 (AIDS) may be due to any cause.

# Overview of HIV/AIDS in Minnesota

# New HIV Disease Diagnoses, HIV (non-AIDS) and AIDS Cases by Year, 1991-2017



\*Includes all new cases of HIV infection (both HIV (non-AIDS) and AIDS at first diagnosis) diagnosed within a given calendar year.

^Includes all new cases of AIDS diagnosed within a given calendar year, including AIDS at first diagnosis^^ and AIDS ((progressed)^^^ previous diagnosis of HIV).

This includes refugees in the HIV+ Resettlement Program, as well as, other refugee/immigrants diagnosed with AIDS subsequent to their arrival in the United States.

# Persons Living with HIV/AIDS in Minnesota

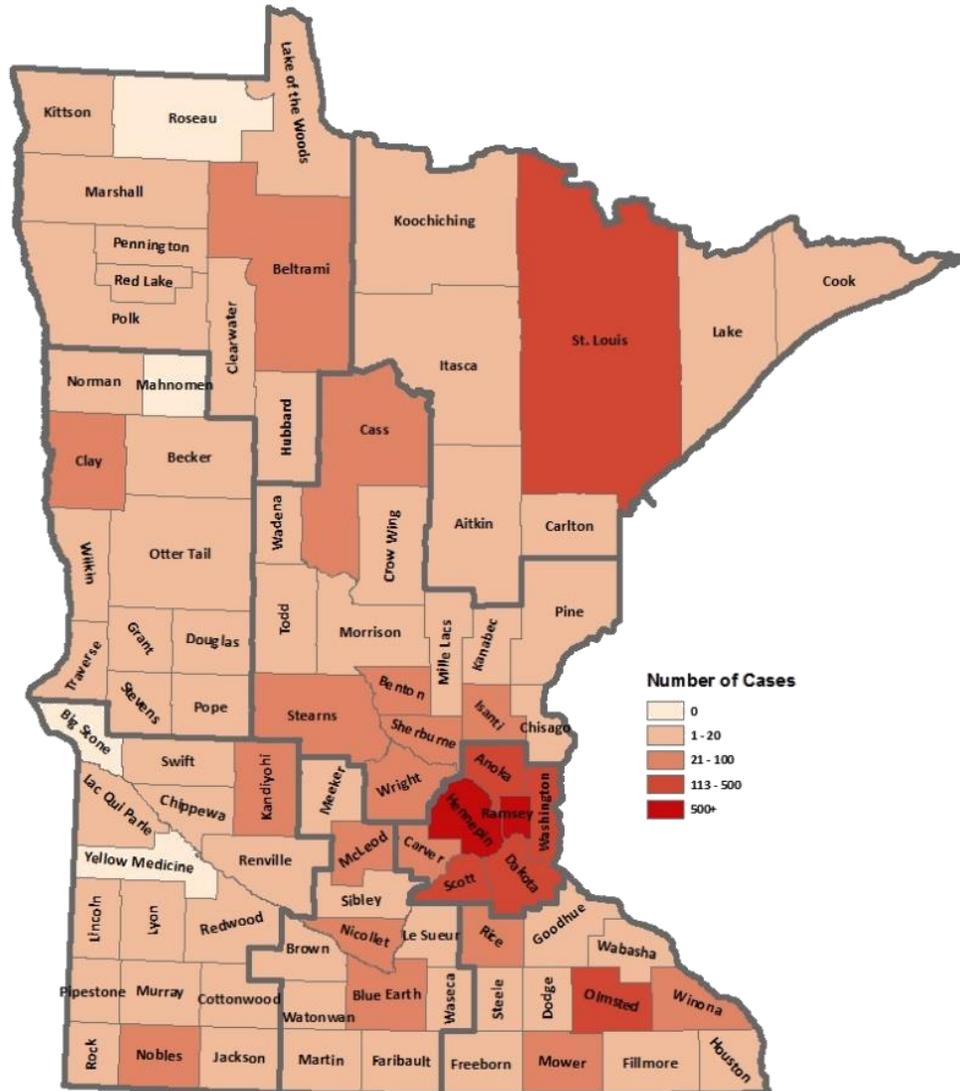
# Estimated Number of Persons Living with HIV/AIDS in Minnesota

- As of December 31, 2017 **8,789\*** persons are assumed alive and living in Minnesota with HIV/AIDS. This includes:
  - 4,751 (54%) living with HIV infection (non-AIDS)
  - 4,038 (46%) living with AIDS
- This number includes **2,219** persons who were first reported with HIV or AIDS elsewhere and subsequently moved to Minnesota
- This number excludes **1,449** persons who were first reported with HIV or AIDS in Minnesota and subsequently moved out of the state

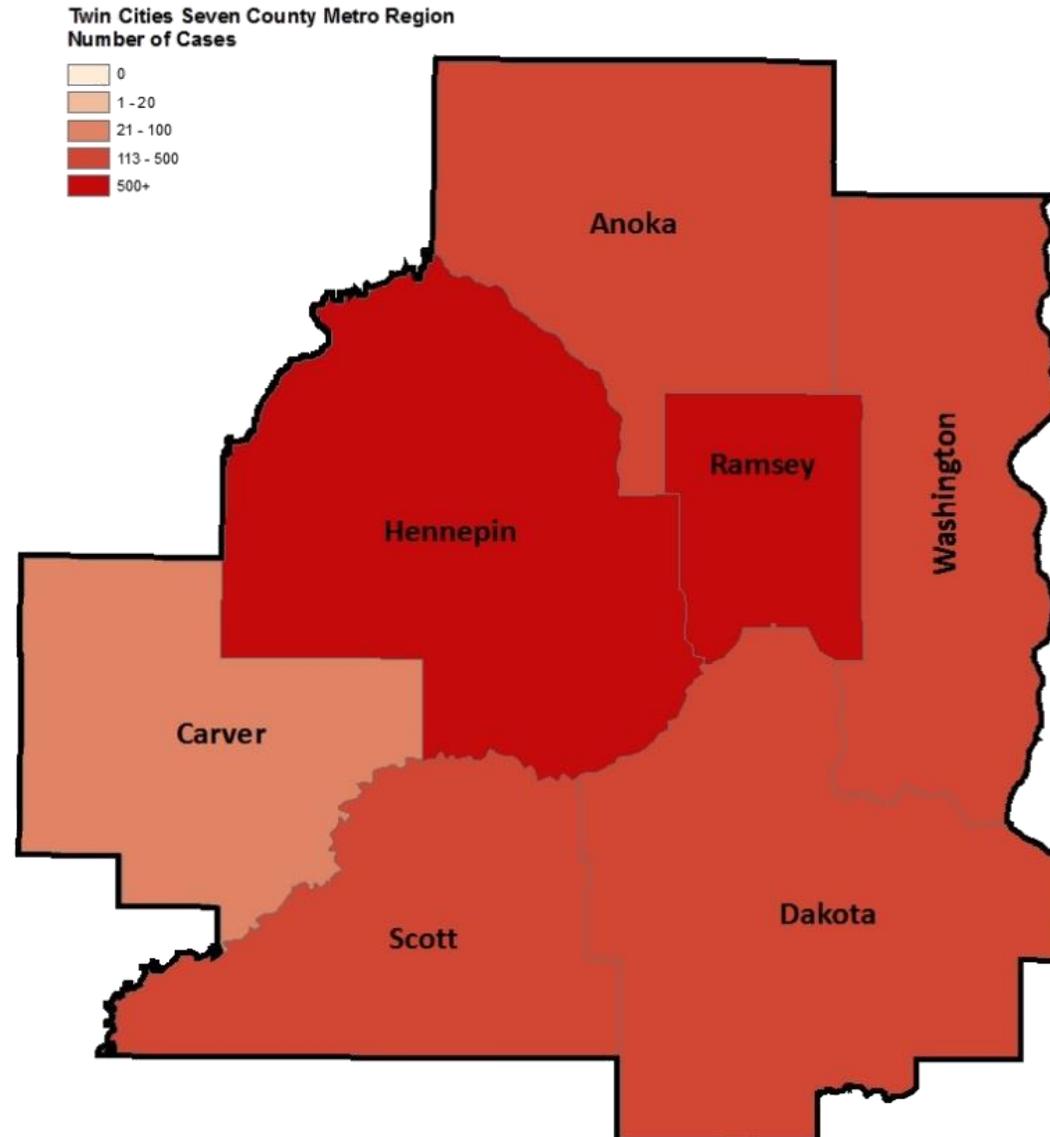
\*This number includes persons who reported Minnesota as their current state of residence, regardless of residence at time of diagnosis. It also includes state prisoners and refugees arriving through the HIV+ Refugee Resettlement Program, as well as HIV+ refugees/immigrants arriving through other programs.

# Place

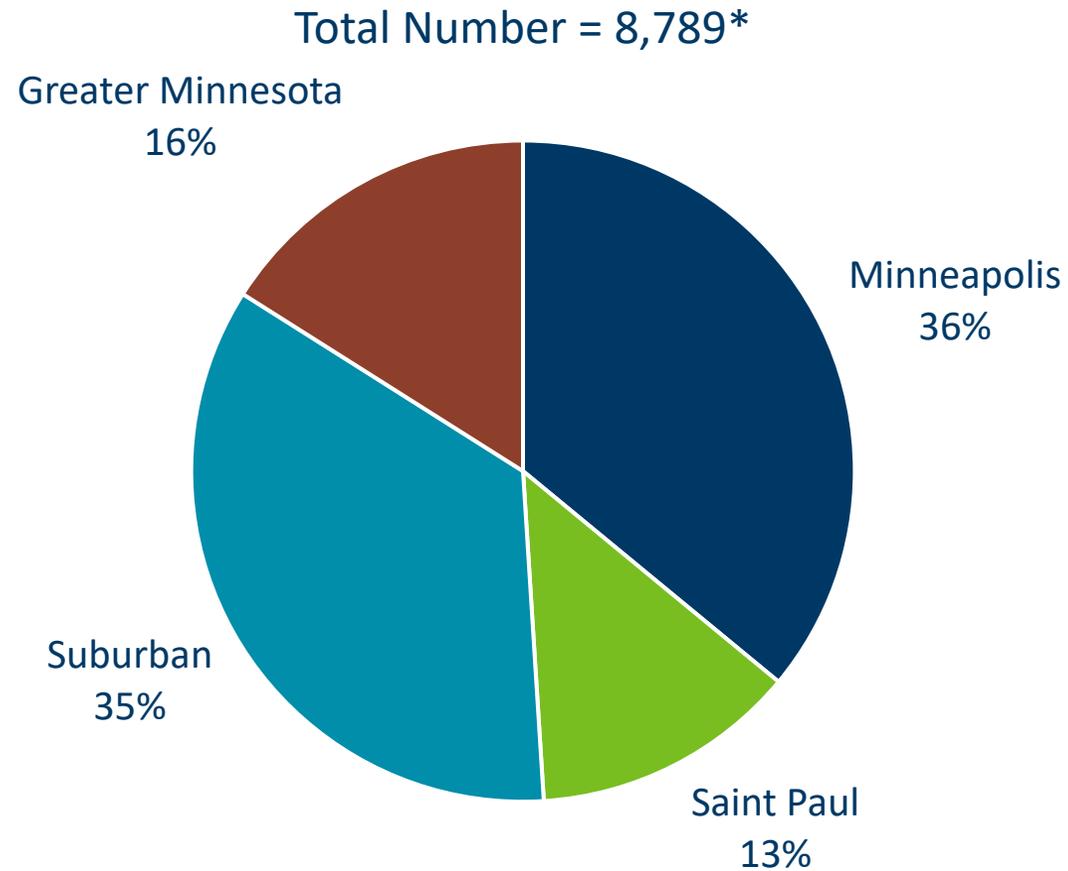
# Living HIV/AIDS Cases by County of Residence, 2017



# Map of Metro Area: Living HIV/AIDS Cases by County of Residence, 2017



# Persons Living with HIV/AIDS in Minnesota by Current Residence, 2017



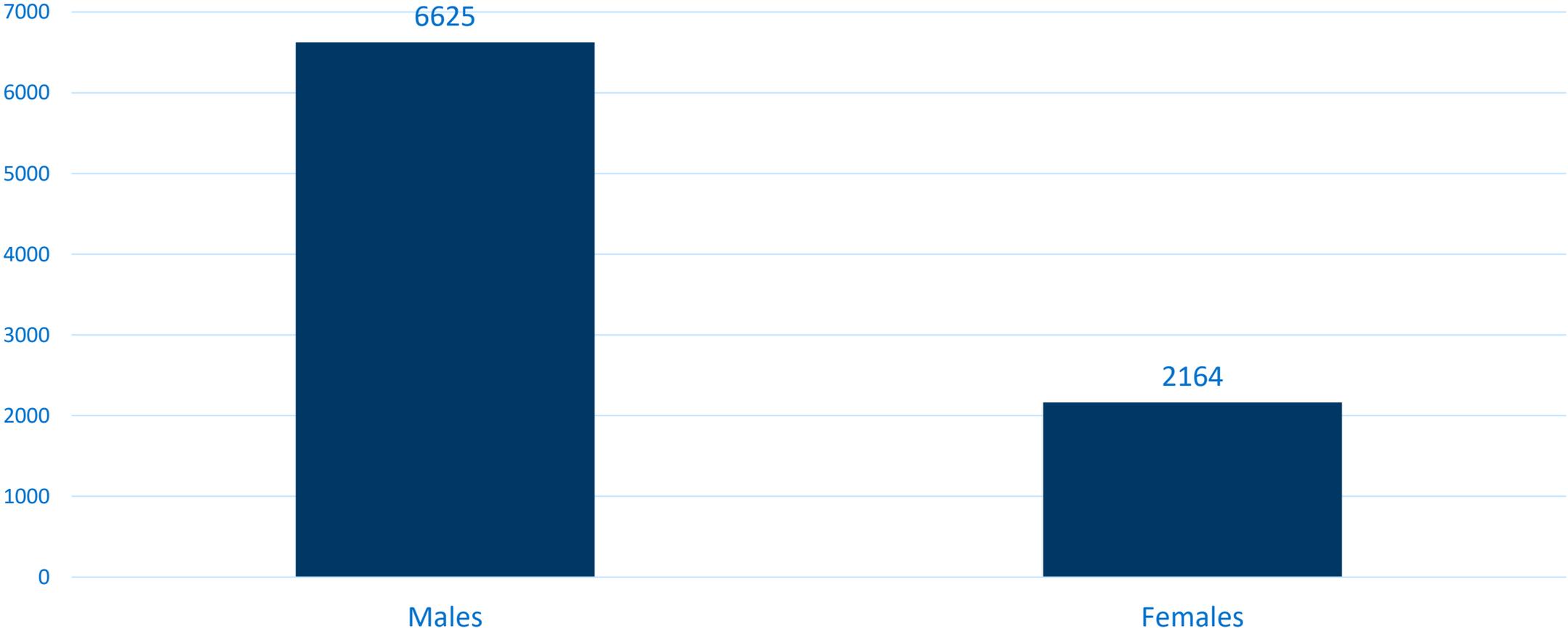
\*67 persons missing residence information

Suburban includes the seven-county metro area of Anoka, Carver, Dakota, Hennepin (except Minneapolis), Ramsey (except Saint Paul), Scott, and Washington counties.

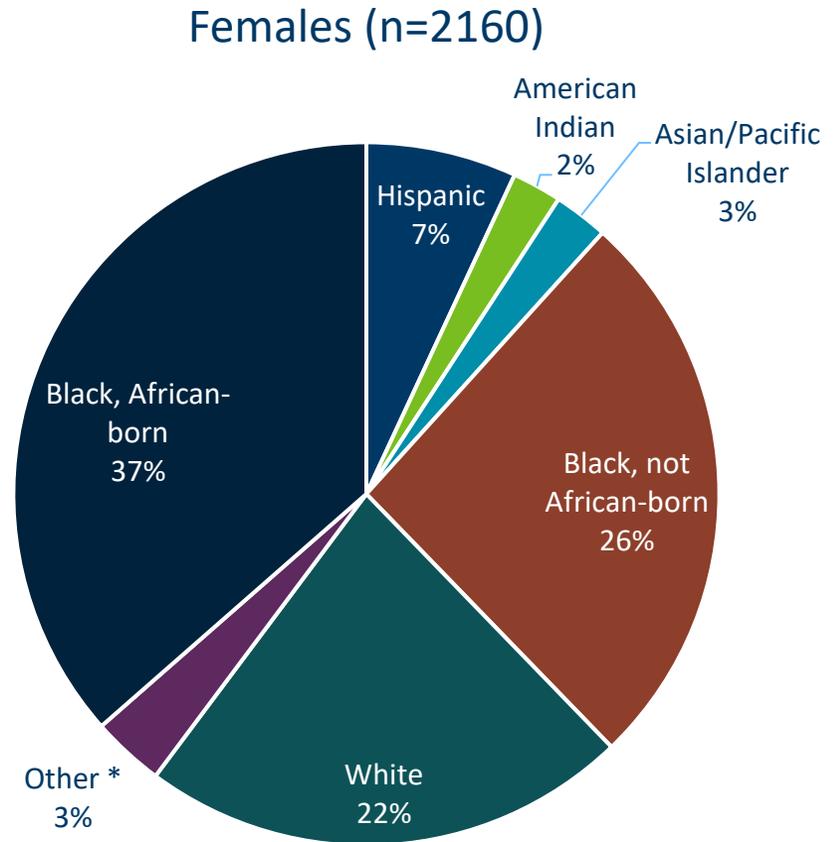
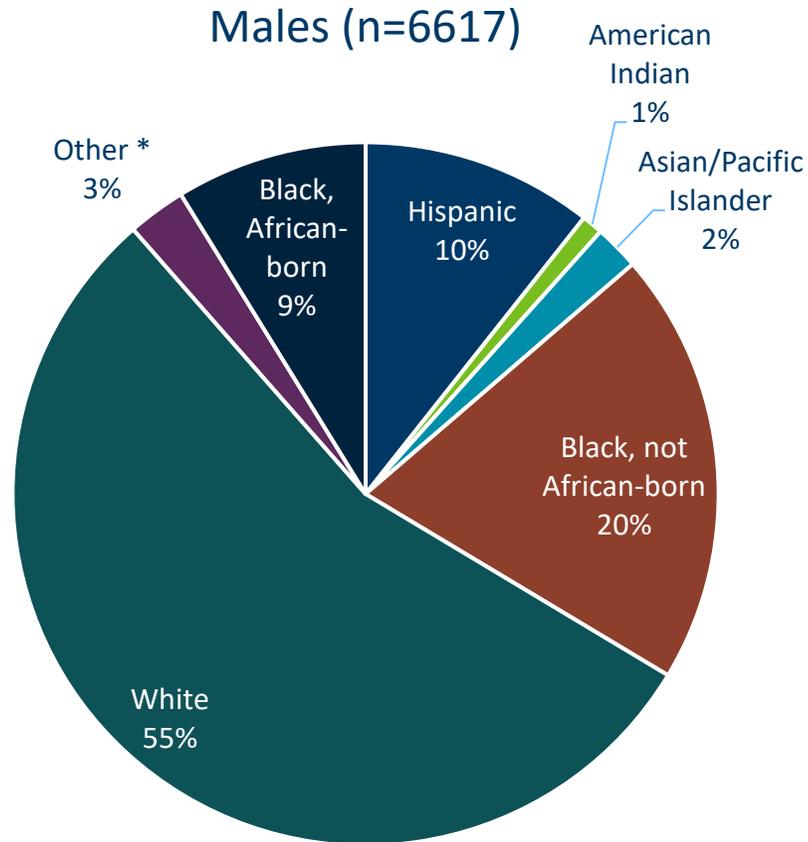
Greater Minnesota includes all other counties outside of the seven-county metro area.

# Sex Assigned at Birth and Race/Ethnicity

# Persons Living with HIV/AIDS in Minnesota by Sex Assigned at Birth, 2017



# Persons Living with HIV/AIDS in Minnesota by Sex Assigned at Birth and Race/Ethnicity, 2017



\*Other includes multi-racial persons and persons with unknown race

# Number of Cases and Rates (per 100,000 persons) of Persons Living with HIV/AIDS by Race/Ethnicity in Minnesota, 2017

Race/Ethnicity	Number of Cases	Percentage of Total	Rate per 100,000 <sup>^</sup>
White, non-Hispanic	4,119	47%	93.4
Black, non African-born	1,885	21%	1,155.5
Black, African-born*	1,368	16%	1,268.1 <sup>++</sup>
Hispanic	852	10%	340.4
American Indian	113	1%	203.2
Asian/Pacific Islander	191	2%	88.0
Other <sup>†</sup>	249	3%	X
<b>Total</b>	<b>8,777</b>	<b>100%</b>	<b>165.4</b>

<sup>^</sup>2010 United States Census Data used for rate calculations, except where otherwise specified.

\*African-born refers to Blacks who reported an African country of birth. Non African-born refers to all other Blacks. Rates for black, non African-born and black, African-born are not comparable to previous years due to an increase in the estimate for black, African-born population.

<sup>†</sup> Other includes multi-racial persons and persons with unknown race

<sup>++</sup>Estimate of 107,880 Source: 2014-2016 American Community Survey with additional calculations by the Minnesota State Demographic Center.

# Number of Cases and Rates (per 100,000 persons) of Adults and Adolescents\* Living with HIV/AIDS by Sex and Risk† in Minnesota, 2017

Sex/Risk	Number of Cases	Percent of Total	Rate per 100,000 <sup>^</sup>
<b>Men (Total)</b>	6,548	76%	248.8
<i>MSM<sup>†</sup></i>	4,770	55%	5,261.2 <sup>††</sup>
<i>Non-MSM</i>	1,778	21%	70.0
<b>Women</b>	2,082	24%	77.9
<b>Total</b>	<b>8,630</b>	<b>100%</b>	<b>162.7</b>

\*HIV or AIDS at first diagnosis ages 13 and older.

<sup>^</sup>2010 United States Census Data used for rate calculations, except where otherwise specified.

<sup>†</sup>MSM refers to both MSM and MSM/IDU risk identified at time of reported HIV diagnosis.

<sup>††</sup>Estimate of 90,663 Source: <http://www.emorycamp.org/item.php?i=92>

# Number of Cases of Adults and Adolescents\* Living with HIV/AIDS by Gender Identity and Risk† in Minnesota, 2017

Gender Identity/Risk	Number of Cases	Percent of Total
<b>Men (Total)</b>	<b>6,486</b>	<b>75%</b>
<i>MSM†</i>	<i>4,708</i>	<i>73%</i>
<i>Non-MSM</i>	<i>1,778</i>	<i>27%</i>
<b>Women</b>	<b>2,064</b>	<b>24%</b>
<b>Transgender<sup>††</sup> (Total)</b>	<b>80</b>	<b>1%</b>
<i>Male to Female</i>	<i>62</i>	<i>78%</i>
<i>Female to Male</i>	<i>18</i>	<i>22%</i>
<b>Total</b>	<b>8,630</b>	<b>100%</b>

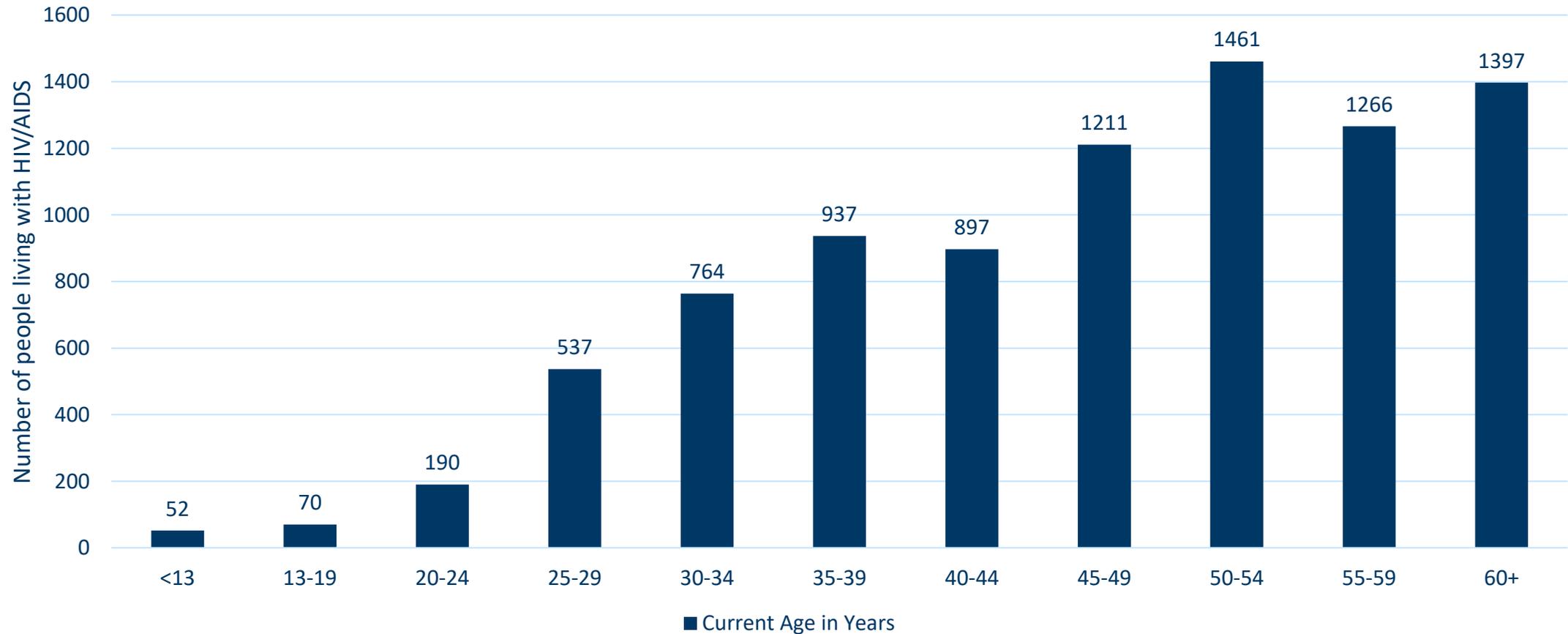
\*HIV or AIDS at first diagnosis ages 13 and older.

†MSM refers to both MSM and MSM/IDU risk identified at time of reported HIV diagnosis.

††Current gender was not reportable until 2009, so may be incomplete for HIV infections reported before that time.

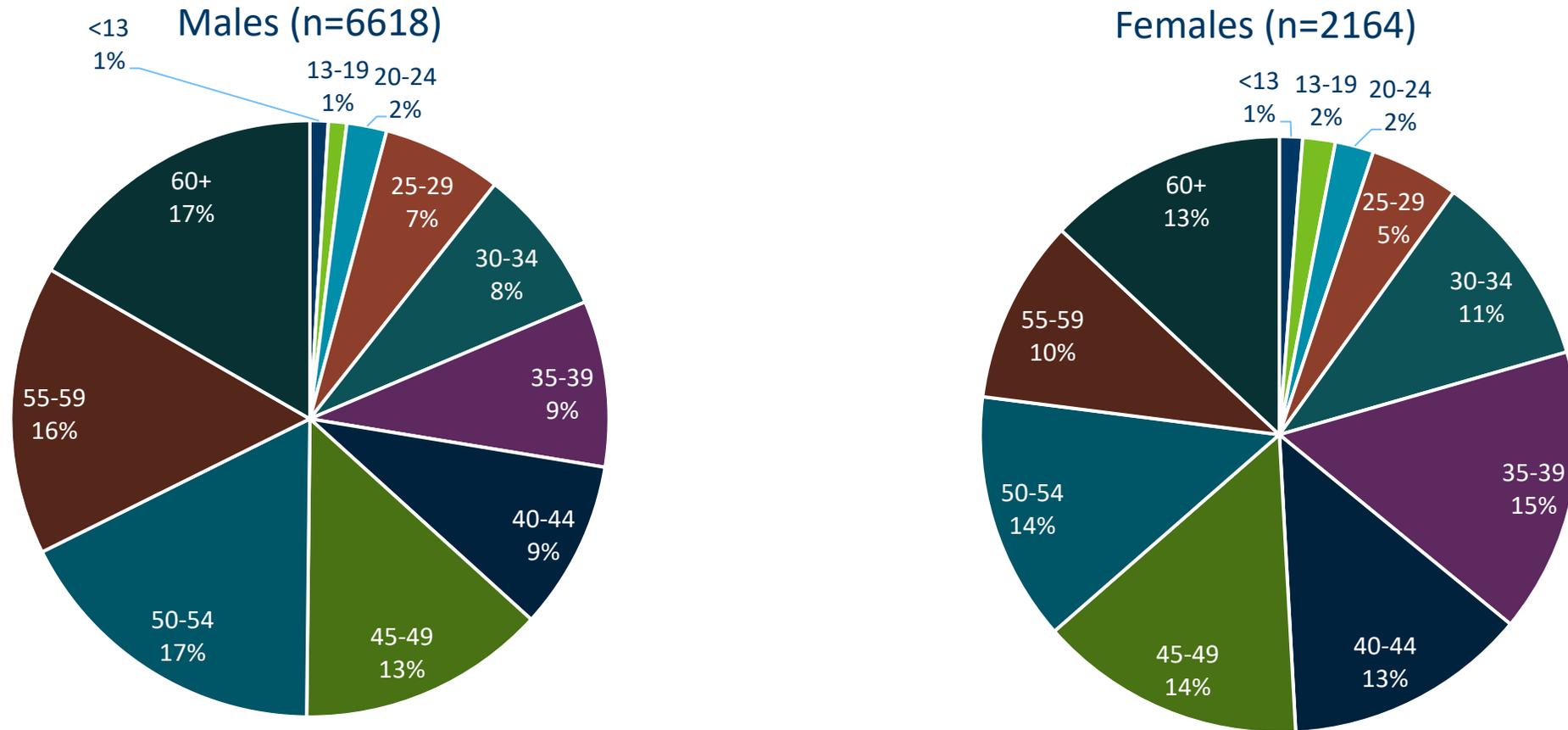
Age

# Persons Living with HIV/AIDS in Minnesota by Age Group\*, 2017



\*Age missing for 7 persons living with HIV/AIDS

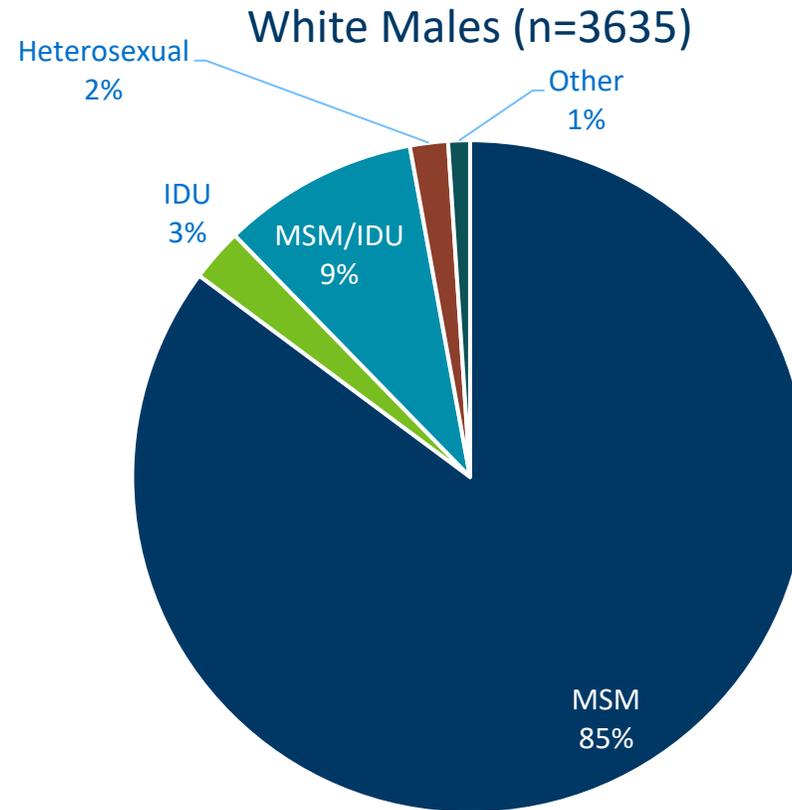
# Persons Living with HIV/AIDS in Minnesota by Age\* and Sex, 2017



\*Age missing for 7 persons living with HIV/AIDS

## Mode of Exposure at Time of Diagnosis

# White Males Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure\*, 2017

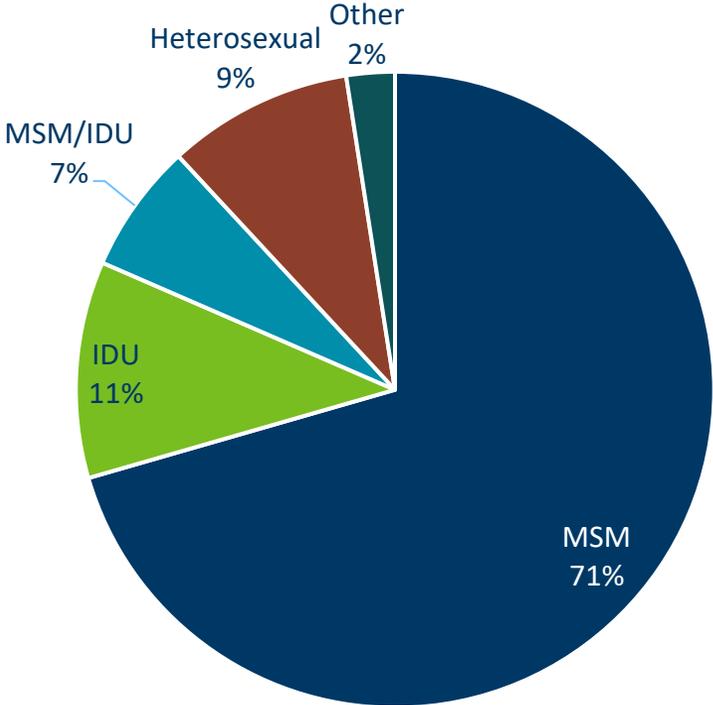


\*Mode of Exposure estimated using prevalent cases with known risk. For additional details, see the Technical Notes.

MSM = men who have sex with men, IDU = injection drug use, Other = hemophilia, transplant, transfusion, mother with HIV or HIV risk

# Black, non African-born Males Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure\*, 2017

Black, non African-born^ Males (n=1321)

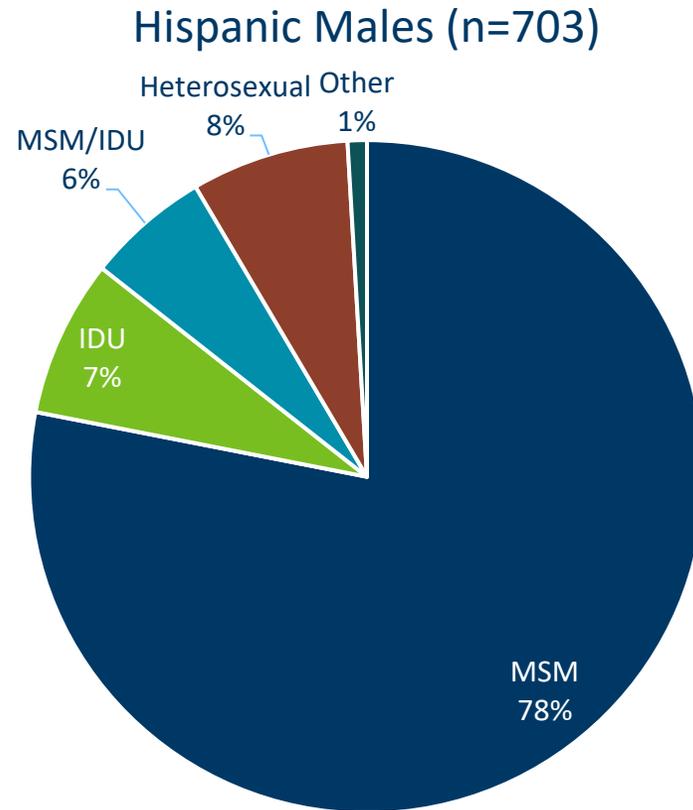


\*Mode of Exposure estimated using prevalent cases with known risk. For additional details, see the Technical Notes.

^Refers to Black Males not born in Africa

MSM = men who have sex with men, IDU = injection drug use, Other = hemophilia, transplant, transfusion, mother with HIV or HIV risk

# Hispanic Males Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure\*, 2017

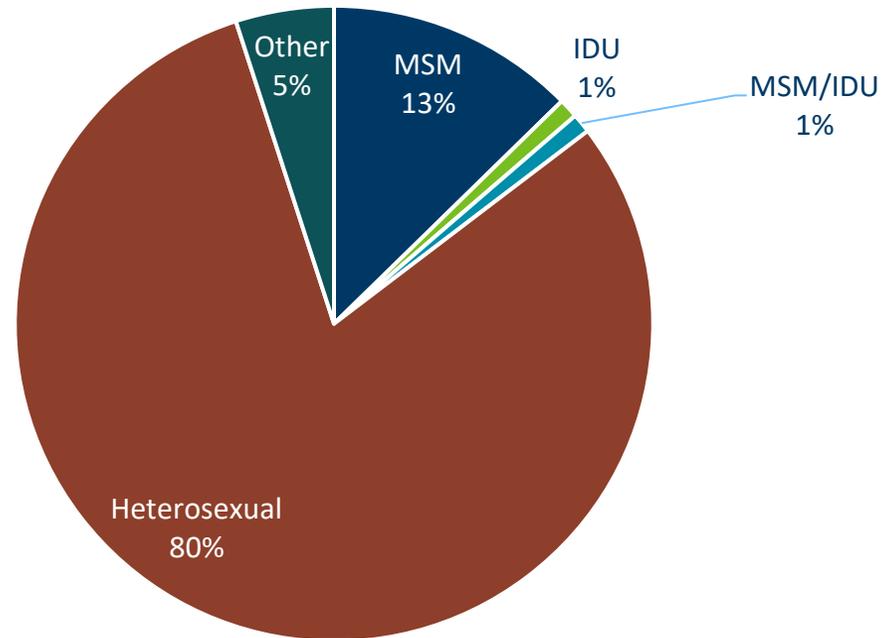


\*Mode of Exposure estimated using prevalent cases with known risk. For additional details, see the Technical Notes.

MSM = men who have sex with men, IDU = injection drug use, Other = hemophilia, transplant, transfusion, mother with HIV or HIV risk

# Black, African-born Males Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure\*, 2017

Black, African-born^ Males (n=579)

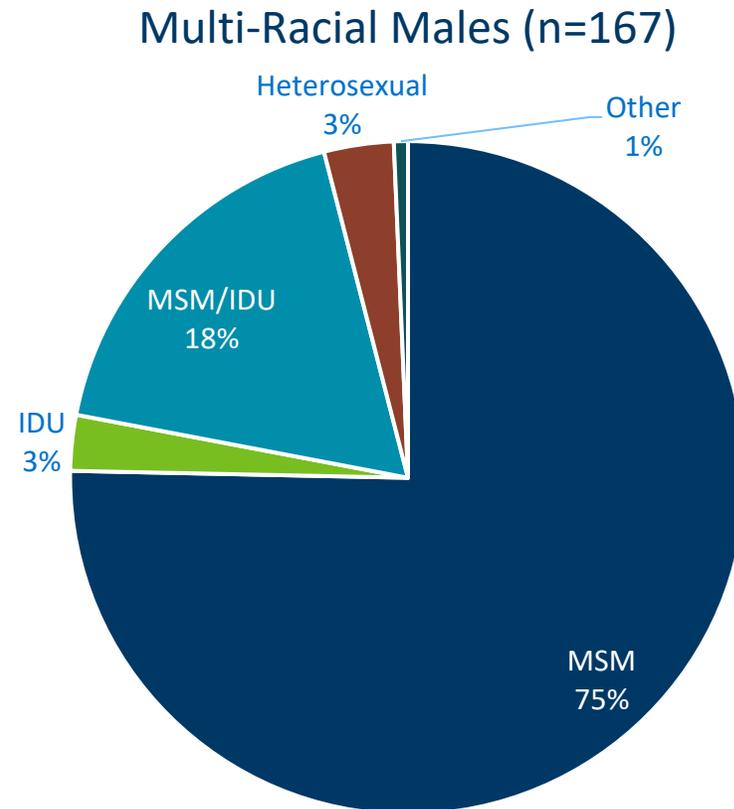


\*Mode of Exposure estimated using prevalent cases with known risk. For additional details, see the Technical Notes.

^Refers to Black Males born in Africa

MSM = men who have sex with men, IDU = injection drug use, Other = hemophilia, transplant, transfusion, mother with HIV or HIV risk

# Multi-Racial Males Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure\*, 2017

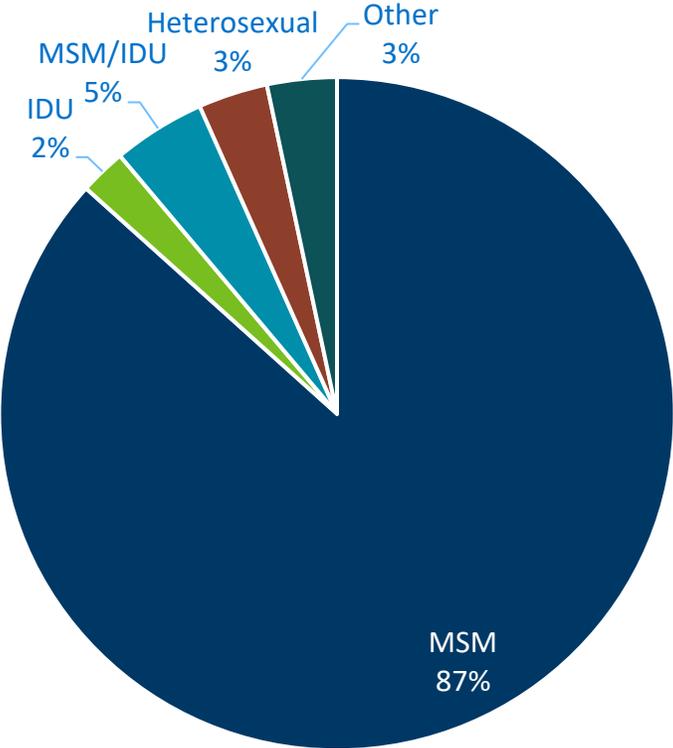


\*Mode of Exposure estimated using prevalent cases with known risk. For additional details, see the Technical Notes.

MSM = men who have sex with men, IDU = injection drug use, Other = hemophilia, transplant, transfusion, mother with HIV or HIV risk

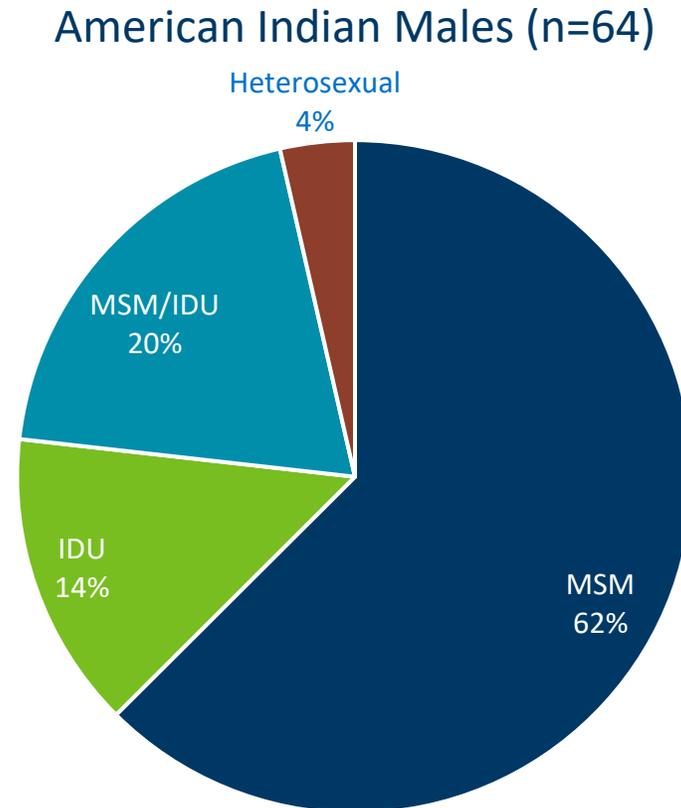
# Asian/Pacific Islander Males Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure\*, 2017

Asian/Pacific Islander Males (n=137)



\*Mode of Exposure estimated using prevalent cases with known risk. For additional details, see the Technical Notes.  
MSM = men who have sex with men, IDU = injection drug use, Other = hemophilia, transplant, transfusion, mother with HIV or HIV risk

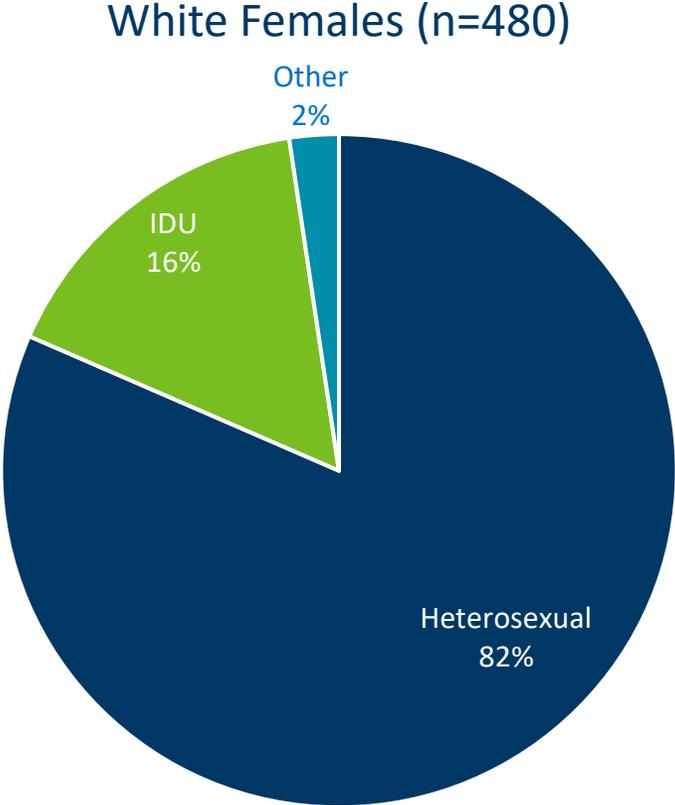
# American Indian Males Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure\*, 2017



\*Mode of Exposure estimated using prevalent cases with known risk. For additional details, see the Technical Notes.

MSM = men who have sex with men, IDU = injection drug use, Other = hemophilia, transplant, transfusion, mother with HIV or HIV risk

# White Females Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure\*, 2017

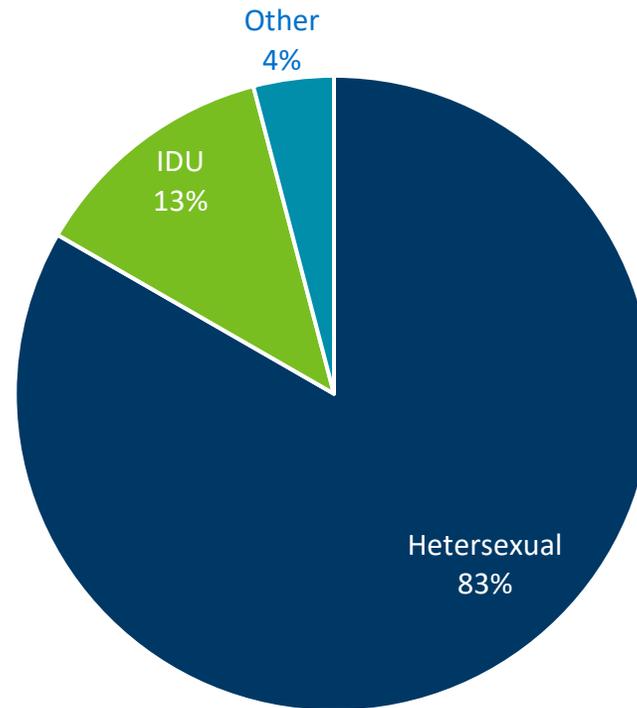


\*Mode of Exposure estimated using prevalent cases with known risk. For additional details, see the Technical Notes.

MSM = men who have sex with men, IDU = injection drug use, Other = hemophilia, transplant, transfusion, mother with HIV or HIV risk

# Black, non African-born Females Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure\*, 2017

Black, non African-born^ Females (n=564)

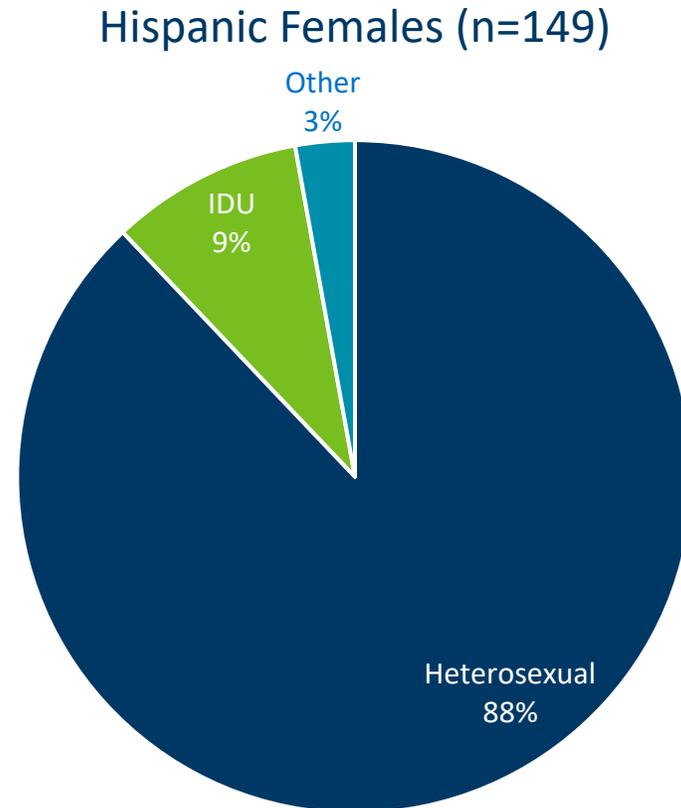


\*Mode of Exposure estimated using prevalent cases with known risk. For additional details, see the Technical Notes.

^Refers to Black Females not born in Africa

MSM = men who have sex with men, IDU = injection drug use, Other = hemophilia, transplant, transfusion, mother with HIV or HIV risk

# Hispanic Females Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure\*, 2017

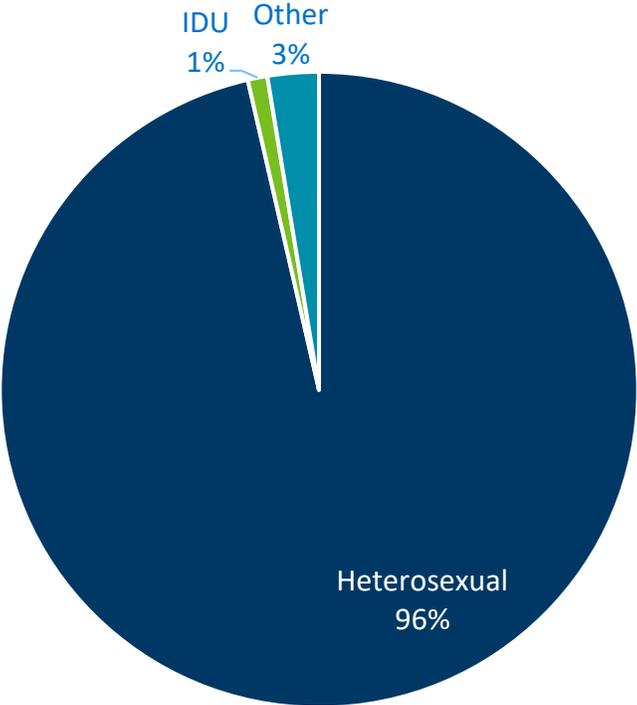


\*Mode of Exposure estimated using prevalent cases with known risk. For additional details, see the Technical Notes.

MSM = men who have sex with men, IDU = injection drug use, Other = hemophilia, transplant, transfusion, mother with HIV or HIV risk

# Black, African-born Females Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure\*, 2017

Black, African-born^ Females (n=788)



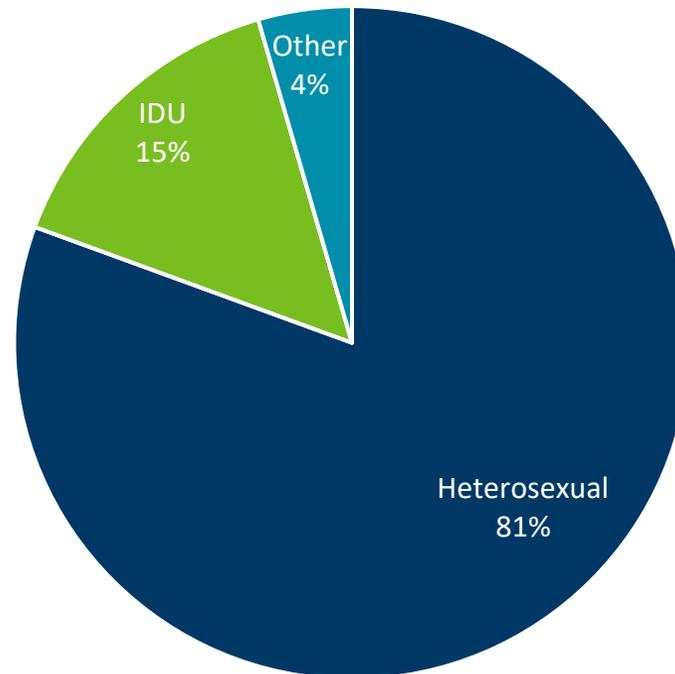
\*Mode of Exposure estimated using prevalent cases with known risk. For additional details, see the Technical Notes.

^Refers to Black Females born in Africa

MSM = men who have sex with men, IDU = injection drug use, Other = hemophilia, transplant, transfusion, mother with HIV or HIV risk

# Multi-Racial Females Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure\*, 2017

Multi-Racial Females (n=68)

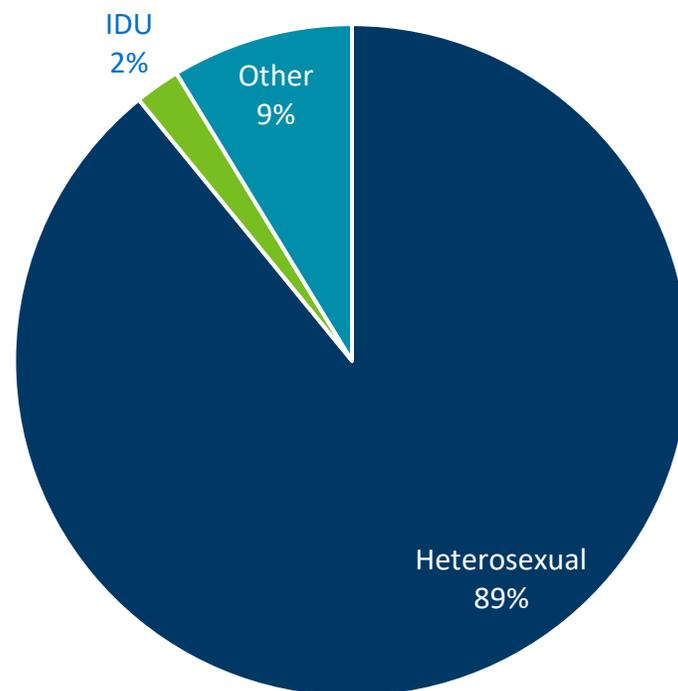


\*Mode of Exposure estimated using prevalent cases with known risk. For additional details, see the Technical Notes.

MSM = men who have sex with men, IDU = injection drug use, Other = hemophilia, transplant, transfusion, mother with HIV or HIV risk

# Asian/Pacific Islander Females Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure\*, 2017

Asian/Pacific Islander Females (n=54)

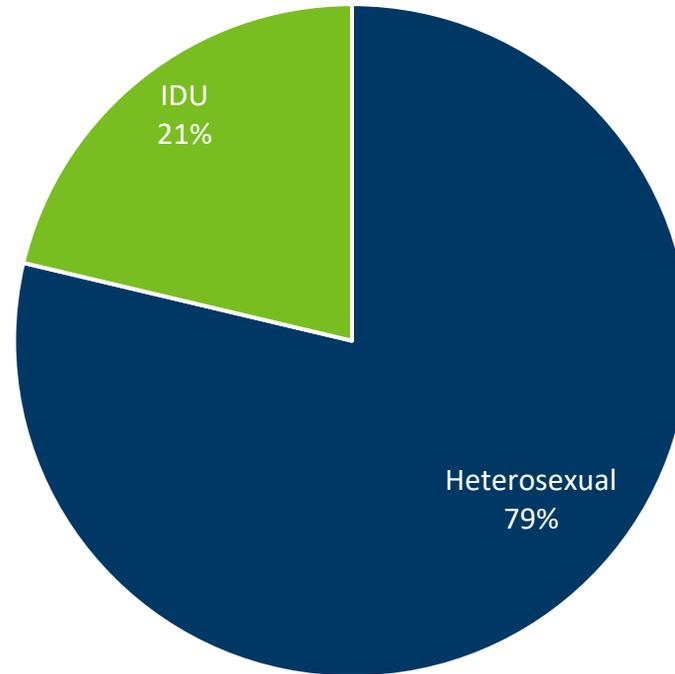


\*Mode of Exposure estimated using prevalent cases with known risk. For additional details, see the Technical Notes.

MSM = men who have sex with men, IDU = injection drug use, Other = hemophilia, transplant, transfusion, mother with HIV or HIV risk

# American Indian Females Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure\*, 2017

American Indian Females (n=49)



\*Mode of Exposure estimated using prevalent cases with known risk. For additional details, see the Technical Notes.

MSM = men who have sex with men, IDU = injection drug use, Other = hemophilia, transplant, transfusion, mother with HIV or HIV risk

# HIV and Hepatitis B/C Co-infection

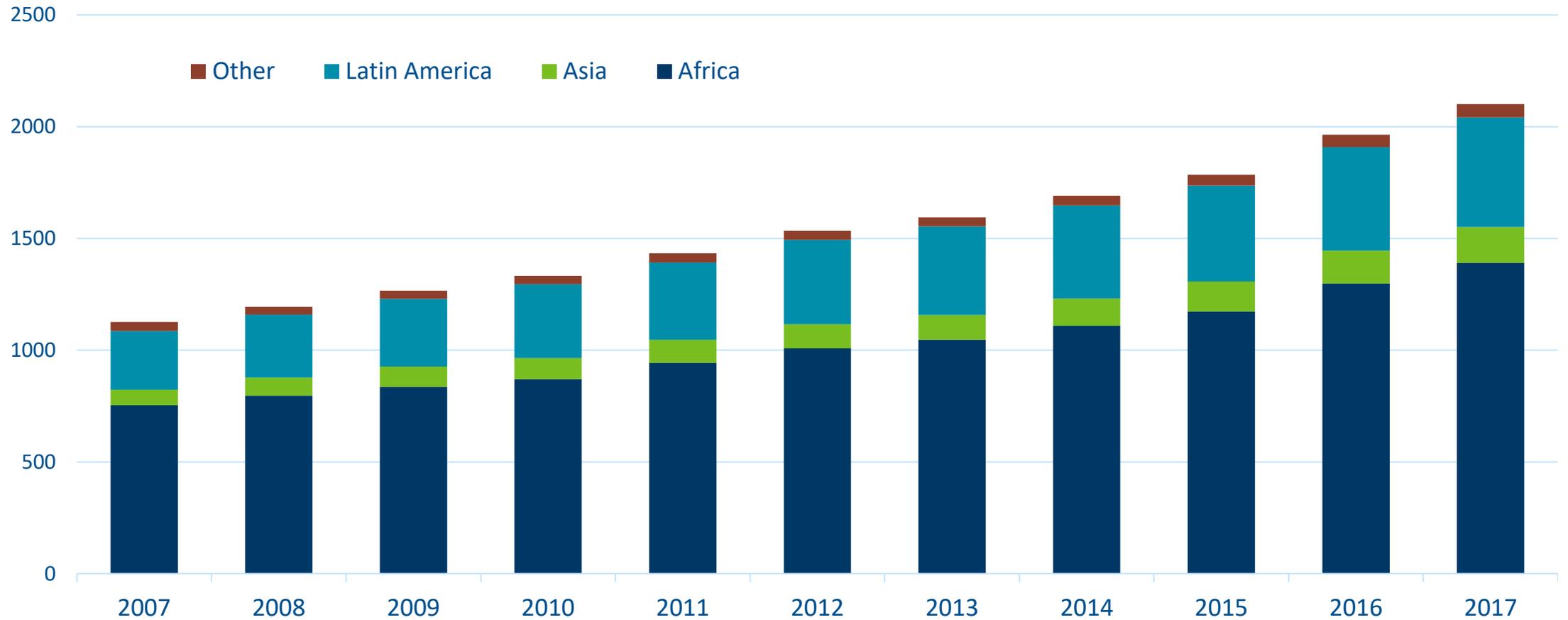
# HIV/AIDS and Hepatitis Co-infections in Minnesota

- As of December 31, 2017 **8,789\*** persons are assumed alive and living in Minnesota with HIV/AIDS. Of these 8,789 persons, 890 (10%) are co-infected with either Hepatitis B, C, or both:
  - 412 (46%) are living with HIV and Hepatitis B
  - 430 (48%) are living with HIV and Hepatitis C
  - 48 (5%) are living with HIV and both Hepatitis B/C

\*This number includes persons who reported Minnesota as their current state of residence, regardless of residence at time of diagnosis. It also includes state prisoners and refugees arriving through the HIV+ Refugee Resettlement Program, as well as HIV+ refugees/immigrants arriving through other programs.

# Foreign Born Populations

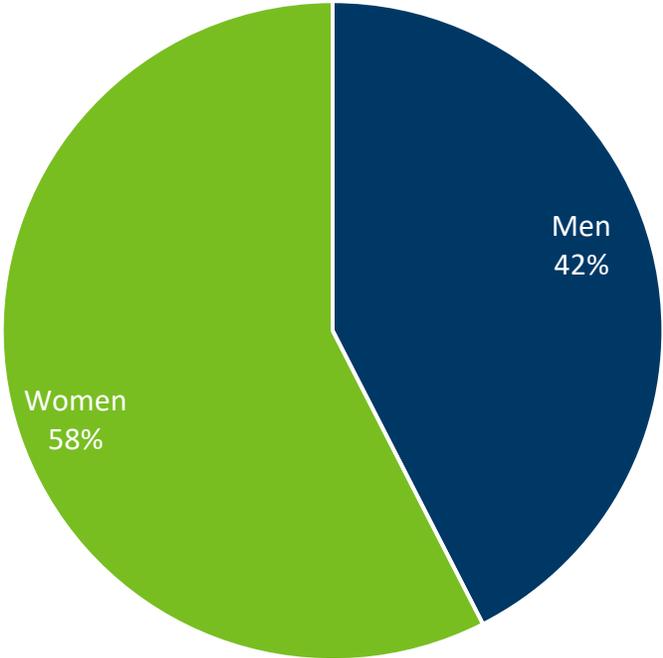
# Foreign Born Persons Living with HIV/AIDS in Minnesota by Region of Birth, 2007-2017



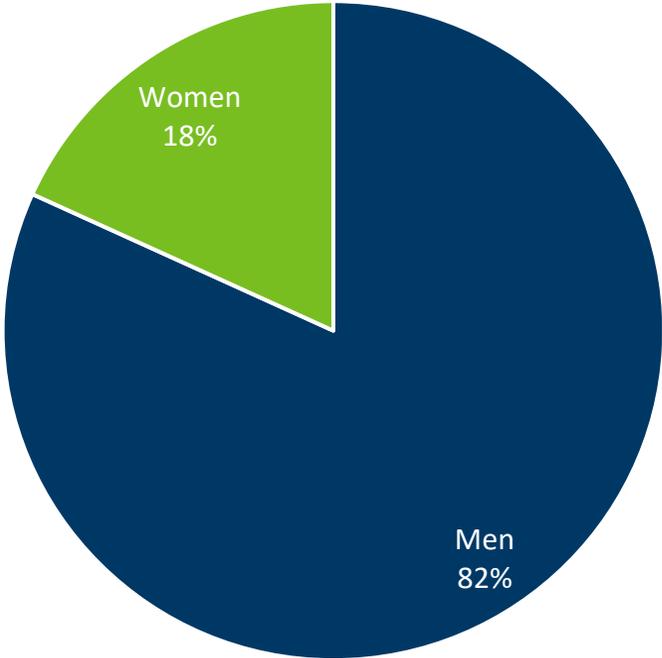
\*This number includes persons who reported Minnesota as their current state of residence, regardless of residence at time of diagnosis. It also includes state prisoners and refugees arriving through the HIV+ Refugee Resettlement Program, as well as HIV+ refugees/immigrants arriving through other programs.

# African-Born\* Persons Living with HIV/AIDS Compared to Other Minnesota Cases by Sex, 2017

African-born Cases (n=1391)



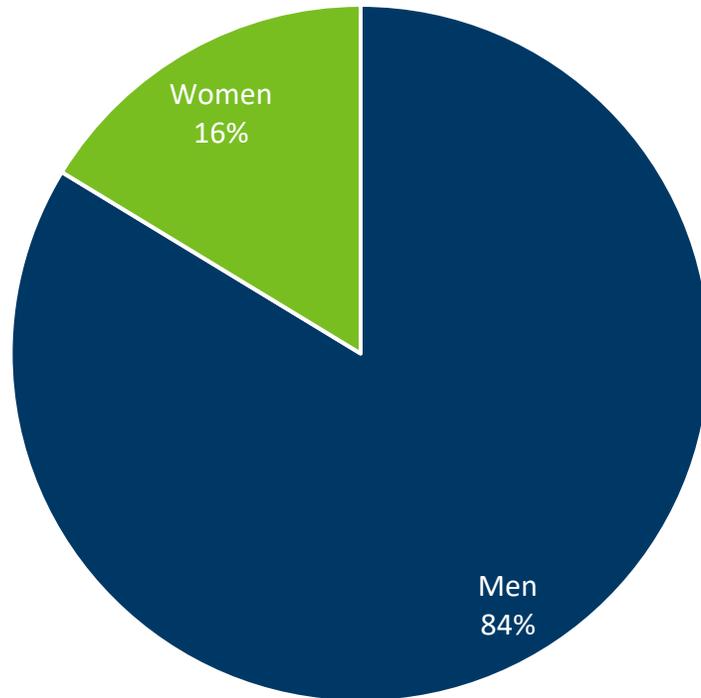
U.S.-born Cases (n=6688)



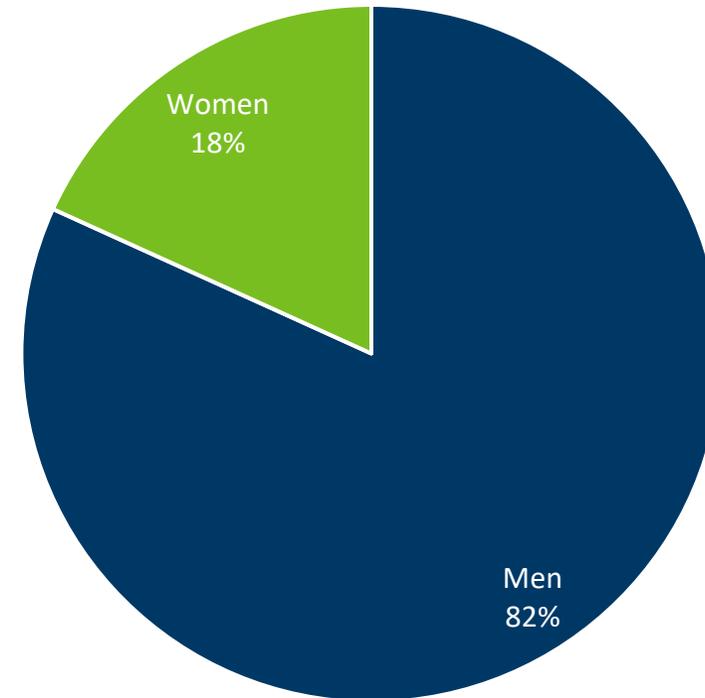
\*Includes persons arriving to Minnesota through the HIV+ Refugee Resettlement Program and other refugee/immigrant programs. Also includes 5 Hispanic, 4 White, and 13 Multi-Race identifying African-born persons. One African-born person had missing race information.

# Latin American/Caribbean\* Persons Living with HIV/AIDS Compared to Other Minnesota Cases by Sex, 2017

Latin American/Caribbean Cases (n=491)



U.S.-born Cases (n=6688)



\*Includes Mexico and all Central/South American and Caribbean countries.

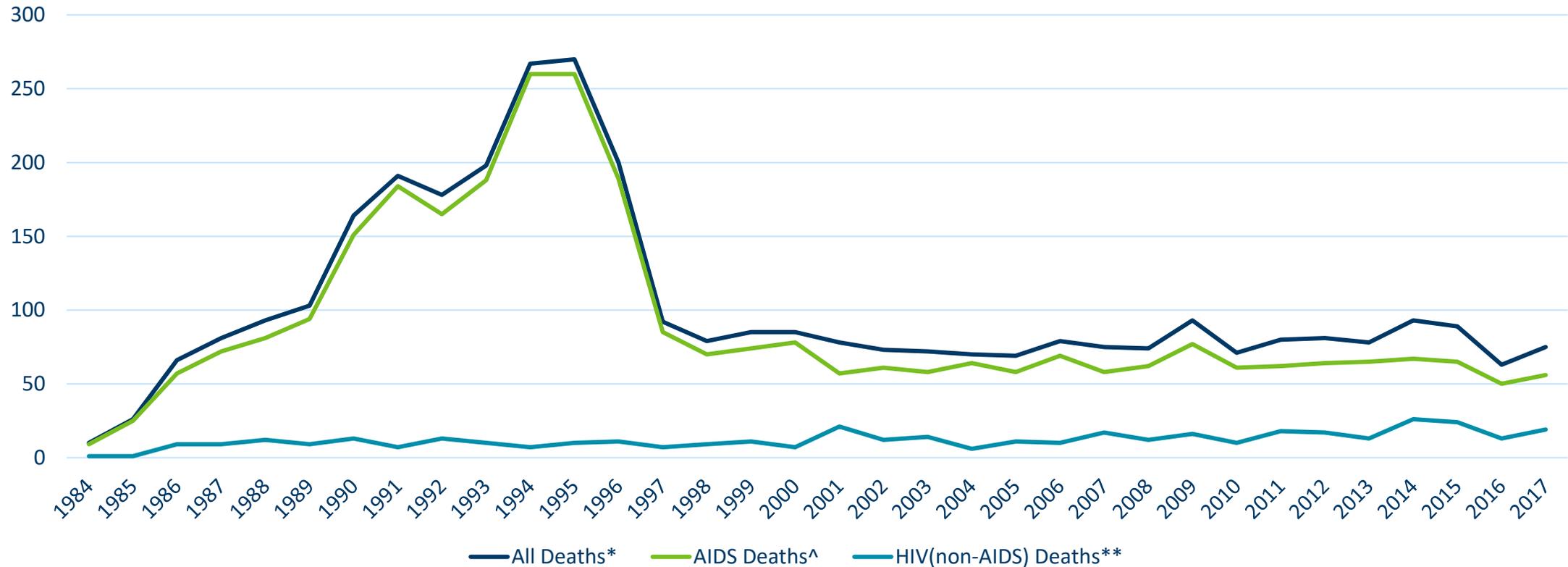
# Countries of Birth Among Foreign Born Persons\* Living with HIV/AIDS in Minnesota, 2017

Country of Birth	Number of Prevalent Cases	Percent of Total
Ethiopia	315	15%
Mexico	273	13%
Liberia	235	11%
Kenya	173	8%
Somalia	143	7%
Cameroon	113	5%
Sudan	70	3%
Nigeria	56	3%
Vietnam	31	1%
El Salvador	30	1%
Other* Countries	664	31%

\*Includes over 100 additional countries

# Mortality

# Reported Deaths Among Persons living with HIV/AIDS in Minnesota, 1984-2017



\*Number of deaths known to have occurred among all people living with HIV infection in Minnesota, regardless of location of diagnosis or cause of death

^Number of deaths known to have occurred among people living with AIDS in Minnesota in a given calendar year, regardless of location of diagnosis or cause of death

\*\*Number of deaths known to have occurred among people living with HIV (non-AIDS) in Minnesota in a given calendar year, regardless of location of diagnosis or cause of death