

# HIV/AIDS Prevalence and Mortality Report, 2015

## **HIV/AIDS Surveillance System**

# 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 *Companion Text to the Minnesota HIV/AIDS Prevalence & Mortality Report, 2014* or *HIV/AIDS Prevalence & Mortality 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 2015 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 = 58).**
- **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 MN as of December 31, 2015=167 ), as well as, other refugees/immigrants reporting a positive test prior to their arrival in Minnesota (n=175).**
- **Some limitations of surveillance data:**
  - Data do not include HIV-infected persons who have not been tested for HIV
  - Data do not include persons whose positive test results have not been reported to the MDH
  - Data 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

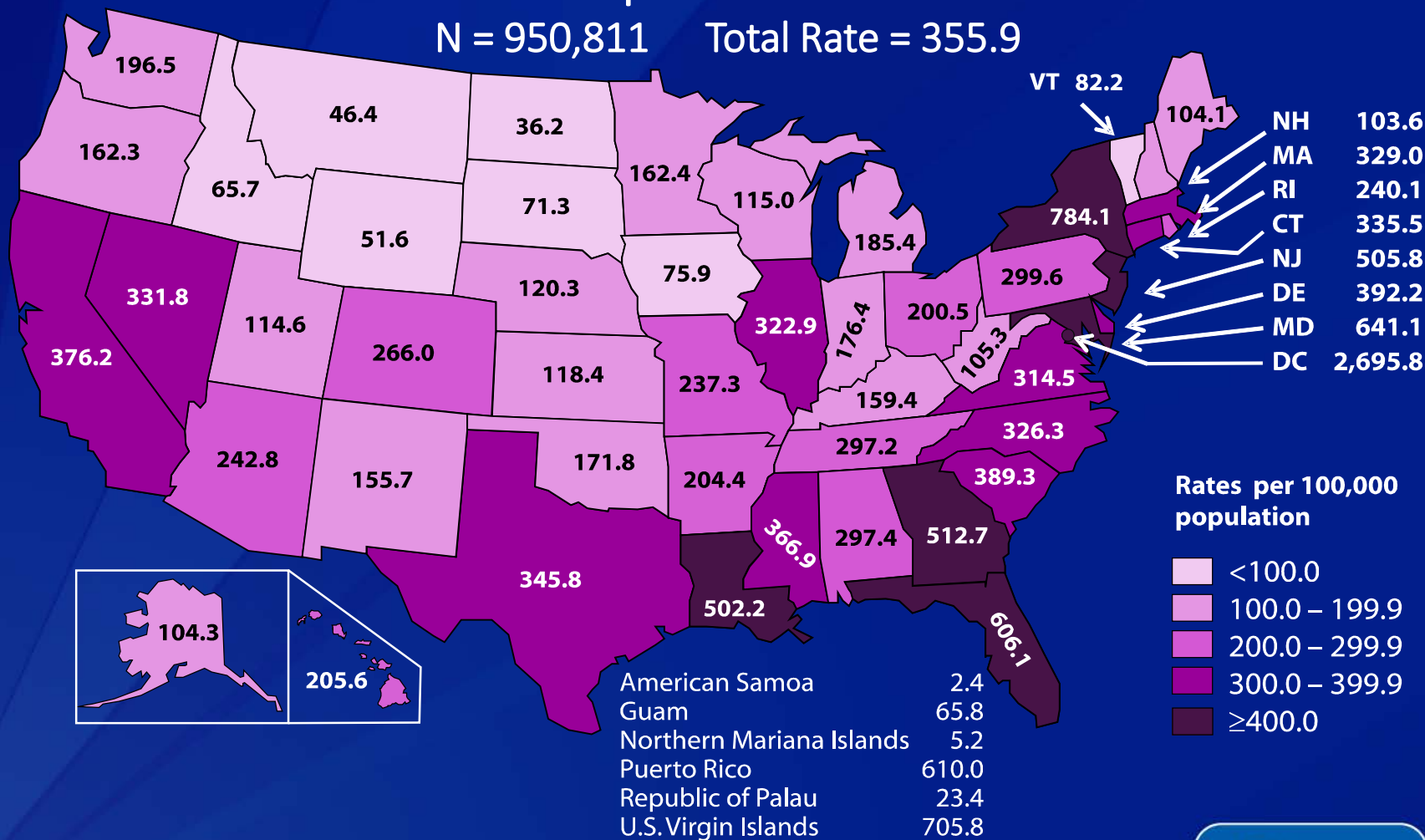
# Introduction (III)

- **Persons are assumed to be alive unless the 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 the 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 (monthly)
  - Death certificate reviews (annually)
  - Birth certificate reviews (annually, women only)

# National Context

# Rates of Adults and Adolescents Living with Diagnosed HIV Infection, Year-end 2013—United States and 6 Dependent Areas

N = 950,811 Total Rate = 355.9

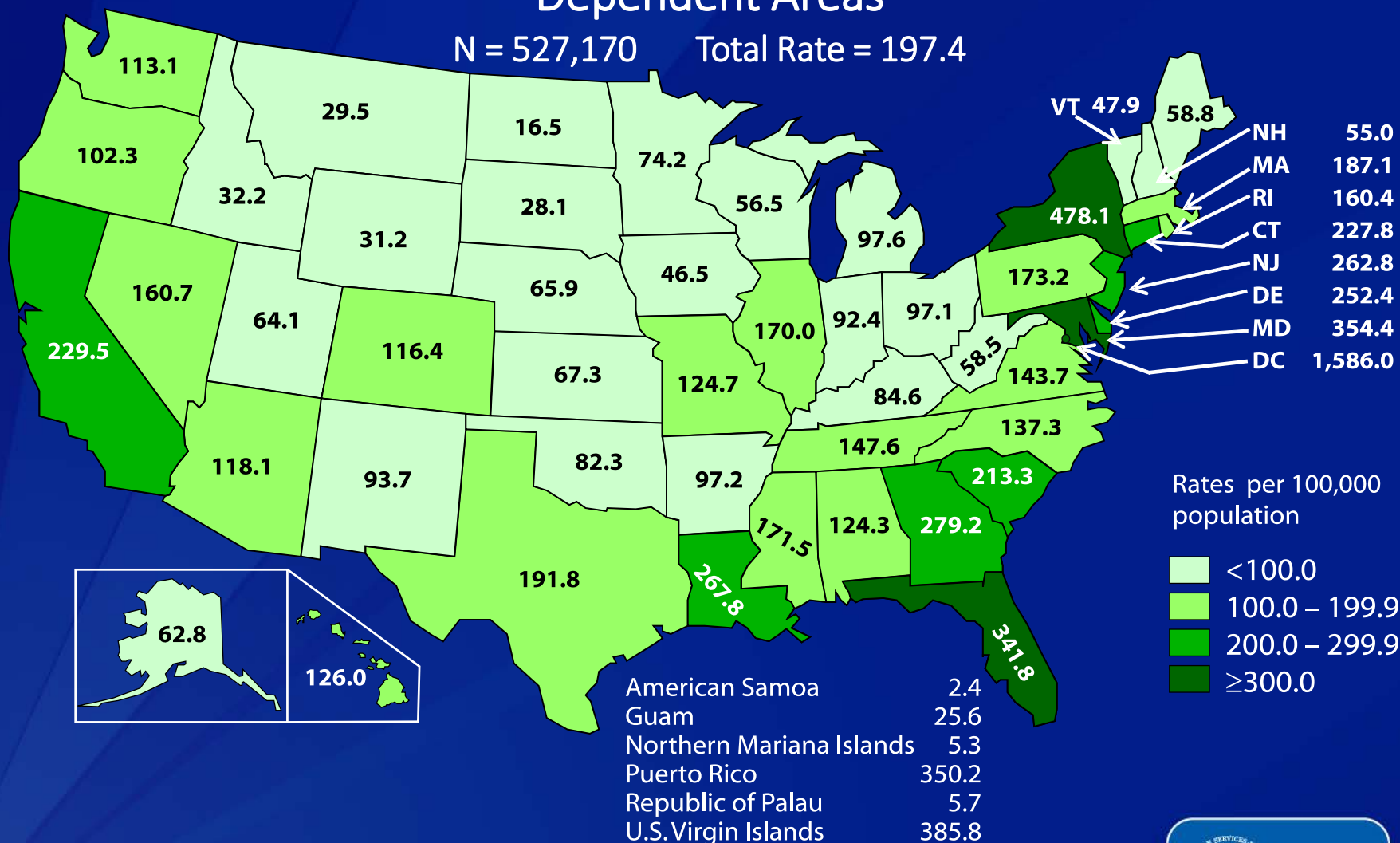


Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.



# Rates of Adults and Adolescents Living with Diagnosed HIV Infection Ever Classified as Stage 3 (AIDS), Year-end 2013—United States and 6 Dependent Areas

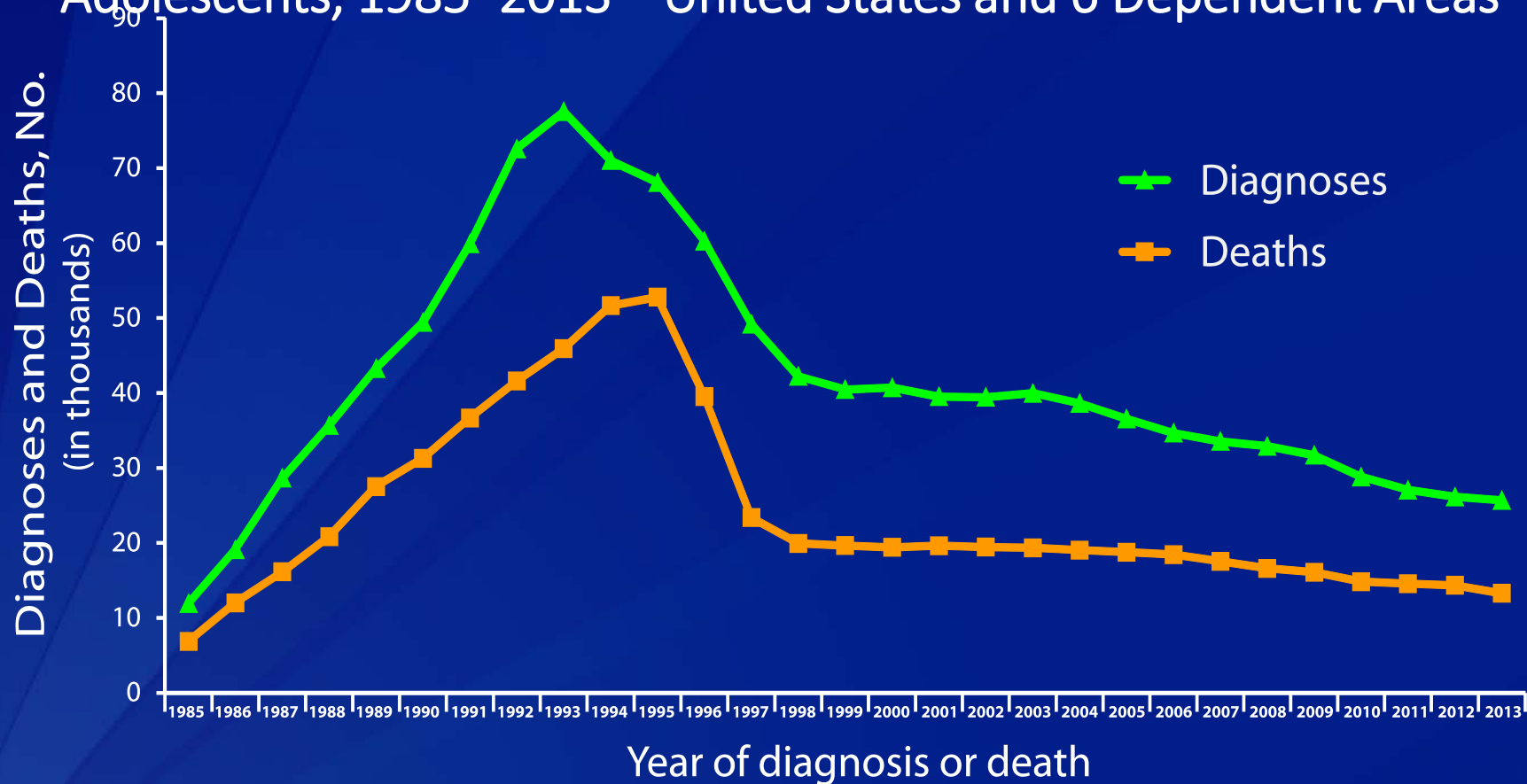
N = 527,170 Total Rate = 197.4



Note. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.



# Stage 3 (AIDS) Classifications and Deaths of Persons with HIV Infection Ever Classified as Stage 3 (AIDS), among Adults and Adolescents, 1985–2013—United States and 6 Dependent Areas



Note. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting. Deaths of persons with HIV infection, stage 3 (AIDS) may be due to any cause.

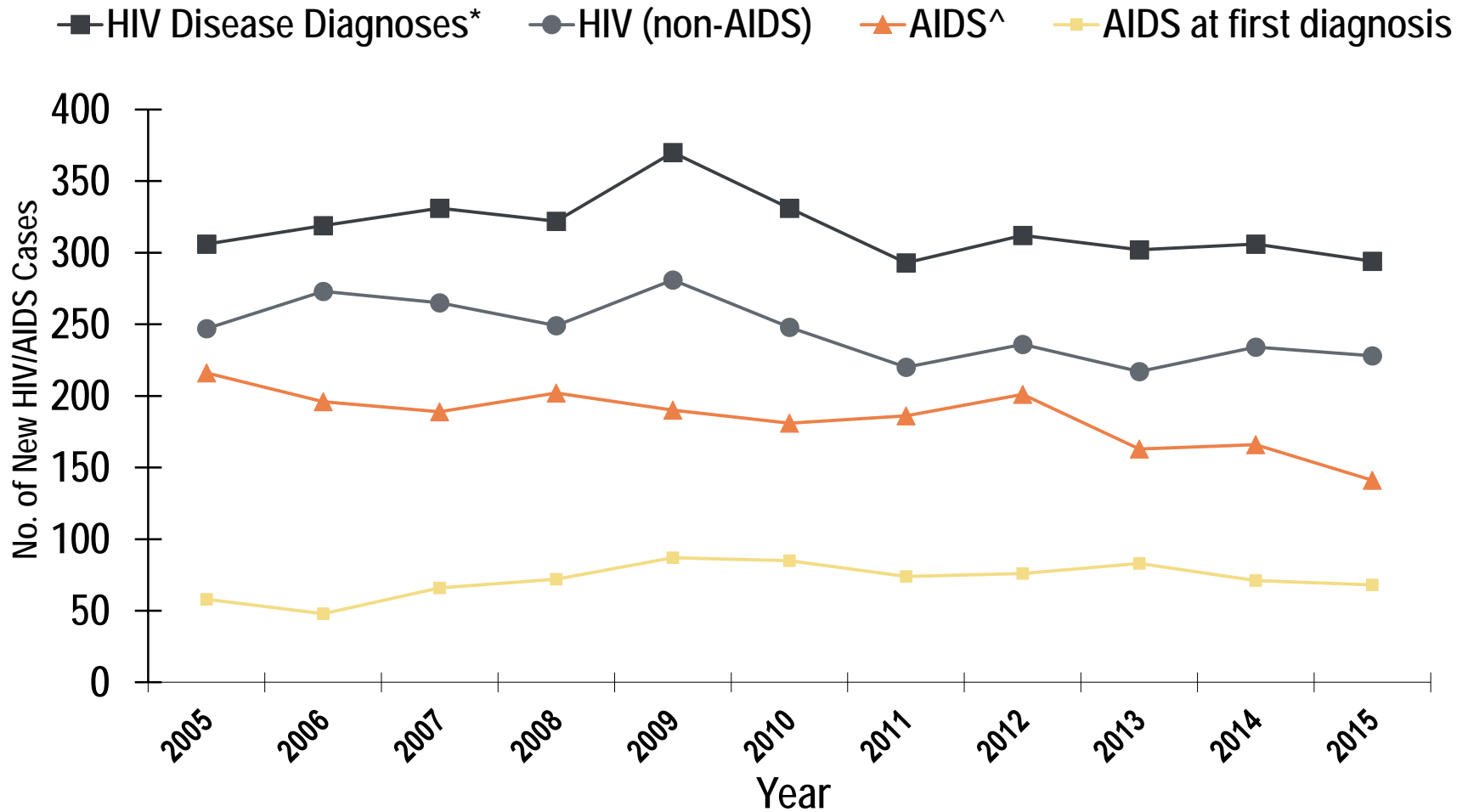






# HIV/AIDS in Minnesota

## New HIV Disease Diagnoses, HIV (non-AIDS) and AIDS Cases by Year, 2005-2015



\*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. 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

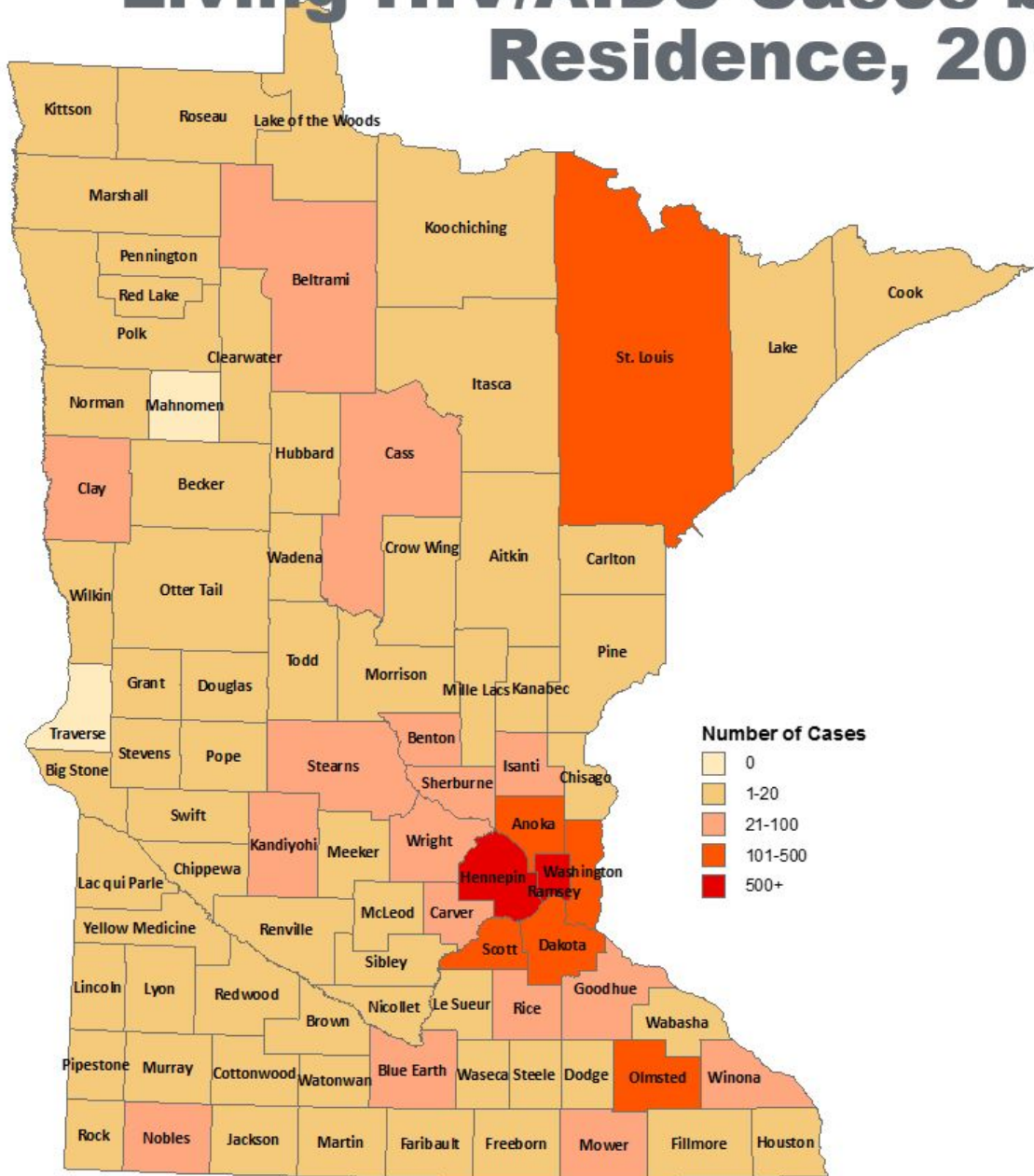
# Estimated Number of Persons *Living with HIV/AIDS in Minnesota*

- **As of December 31, 2015, 8,215\*** persons are assumed alive and living in Minnesota with HIV/AIDS
  - 4,349 living with HIV infection (non-AIDS)
  - 3,866 living with AIDS
- **This number includes 1,877** persons who were first reported with HIV or AIDS elsewhere and subsequently moved to Minnesota
- **This number excludes 1,274** 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. Includes state prisoners and refugees arriving through the HIV+ Refugee Resettlement Program, as well as HIV+ refugee/immigrants arriving through other programs.*

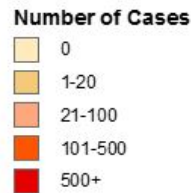
# Place

# Living HIV/AIDS Cases by County of Residence, 2015



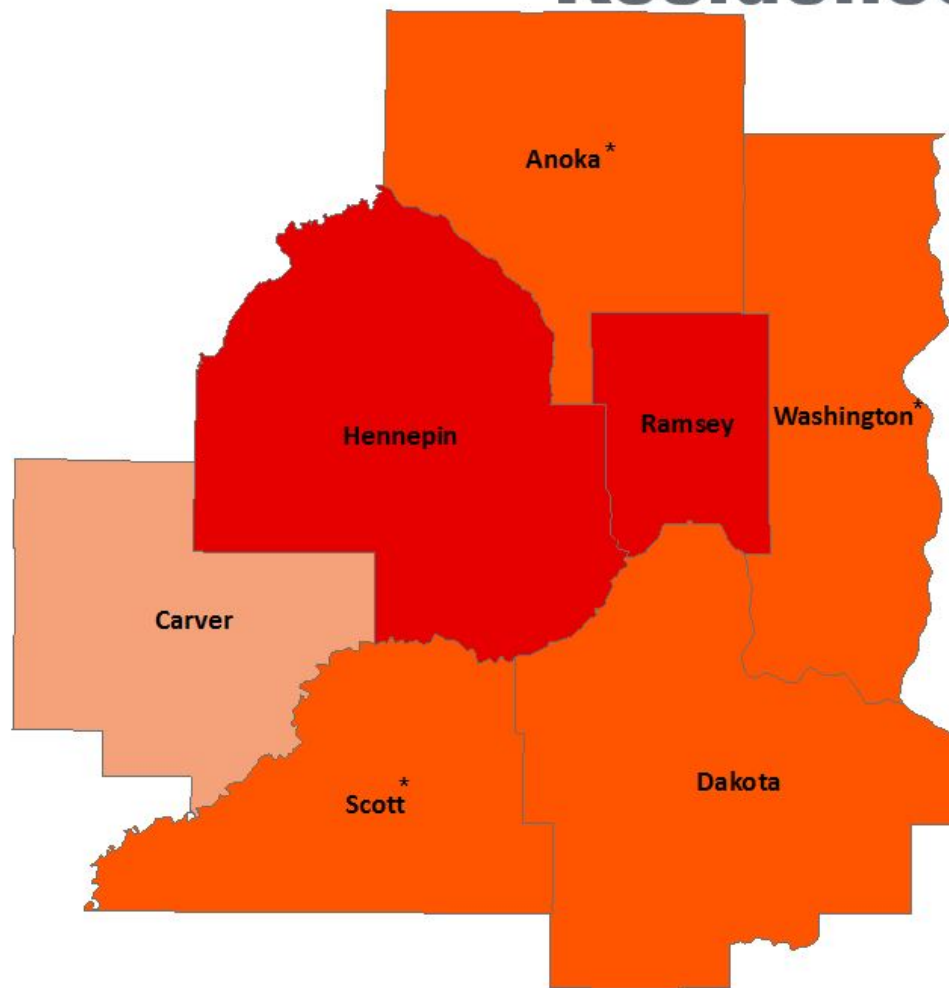
City of Minneapolis – 3,072  
 City of St. Paul – 1,079  
 Suburban# – 2,735  
 Greater Minnesota – 1,285

Total number = 8,215  
 (44 people missing residence information)

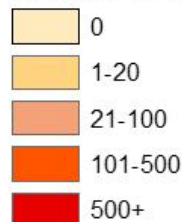


# 7-county metro area, excluding the cities of Minneapolis and St. Paul

# Map of Metro Area: Living HIV/AIDS Cases by County of Residence, 2015



## Number of Cases



City of Minneapolis – 3,072  
City of St. Paul – 1,079  
Suburban# – 2,735

Total number (Metro only) = 6,886

# 7-county metro area, excluding the  
cities of Minneapolis and St. Paul

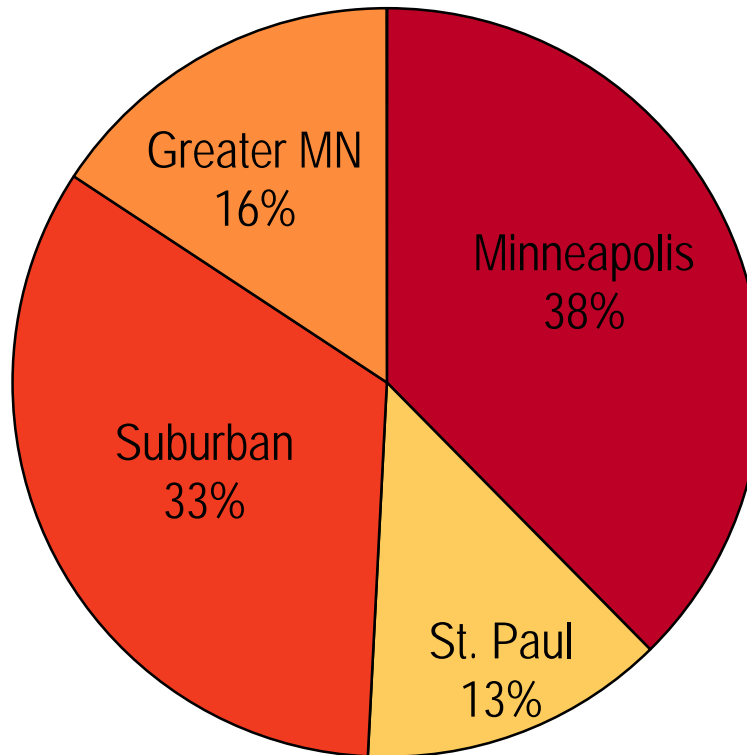
\* Counties in which a state correctional facility is located.



# Persons Living with HIV/AIDS in Minnesota by Current Residence, 2015

Total Number = 8,215

(44 persons missing residence information)



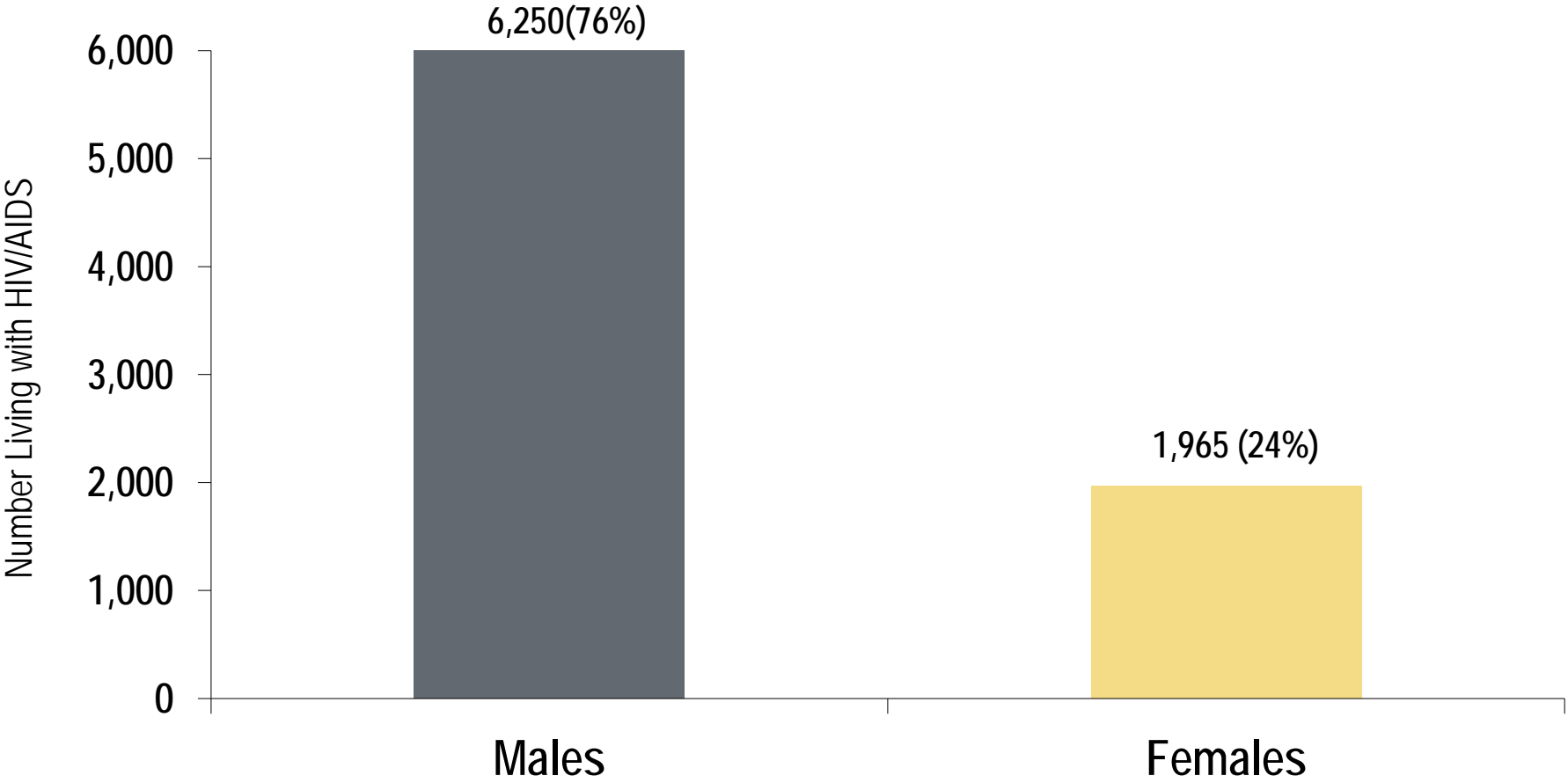
Suburban = Seven-county metro area including Anoka, Carver, Dakota, Hennepin (except Minneapolis), Ramsey (except St. Paul), Scott, and Washington counties. Greater MN = All other Minnesota counties, outside the seven-county metro area.

# Gender and Race/Ethnicity





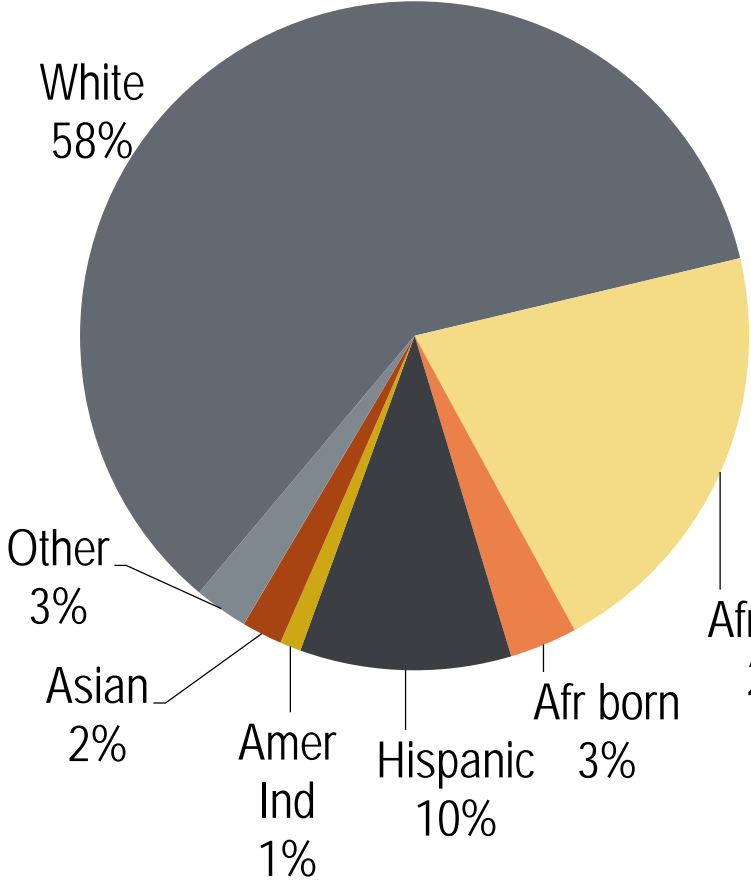
# Persons Living with HIV/AIDS in Minnesota by Gender, 2015



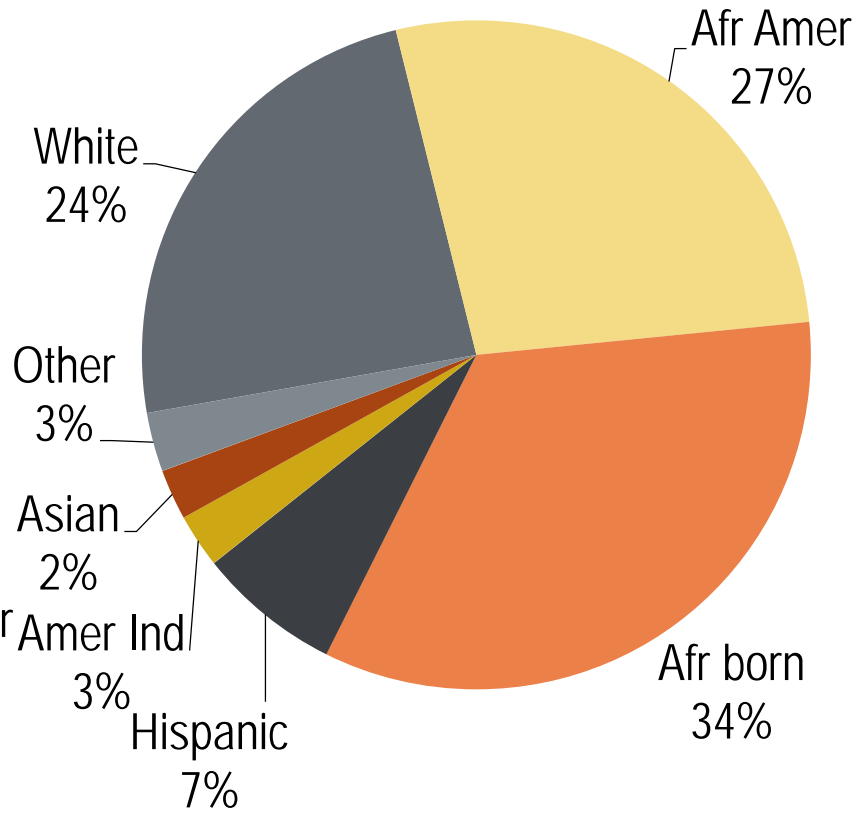


# Persons Living with HIV/AIDS in Minnesota by Gender and Race/Ethnicity, 2015

## Males (n = 6,238)



## Females (n = 1,963)



n = Number of persons    Afr Amer = African American (Black, not African-born persons)  
Afr born = African-born (Black, African-born persons)    Amer Ind = American Indian  
Other = Multi-racial persons or persons with unknown race



# Number of Cases and Rates (per 100,000 persons) of Persons Living with HIV/AIDS by Race/Ethnicity<sup>†</sup> – Minnesota, 2015

<i>Race/Ethnicity</i>	<i>Cases</i>	<i>%</i>	<i>Rate</i>
White, non-Hispanic	<b>4,041</b>	<b>49%</b>	<b>91.7</b>
Black, African-American	<b>1,772</b>	<b>22%</b>	<b>924.9</b>
Black, African-born	<b>1,160</b>	<b>14%</b>	<b>1495.7<sup>††</sup></b>
Hispanic	<b>742</b>	<b>9%</b>	<b>296.5</b>
American Indian	<b>112</b>	<b>1%</b>	<b>202.1</b>
Asian/Pacific Islander	<b>164</b>	<b>2%</b>	<b>76.3</b>
Other <sup>^</sup>	<b>210</b>	<b>3%</b>	<b>X</b>
<i>Total</i>	<b>8,201</b>	<b>100%</b>	<b>154.6</b>

<sup>††</sup> Estimate of 77,557 Source: 2010-2012 American Community Survey. Additional calculations by the State Demographic Center.

<sup>^</sup> Other = Multi-racial persons or persons with unknown race

Census Data used for rate calculations.

<sup>†</sup> "African-born" refers to Blacks who reported an African country of birth; "African American" refers to all other Blacks.



# Number of Cases and Rates (per 100,000 persons) of Adults and Adolescents\* Living with HIV/AIDS by Gender/Risk†, Minnesota, 2015

<i>Gender/Risk</i>	<i>Cases</i>	<i>%</i>	<i>Rate</i>
<b>Men (Total)</b>	<b>(6,250)</b>	<b>76%</b>	<b>237.5</b>
<i>MSM†</i>	<b>4,538</b>	73%	<b>4,891.8††</b>
<i>Non-MSM</i>	<b>1,712</b>	27%	<b>67.4</b>
<b>Women</b>	<b>1,965</b>	<b>24%</b>	<b>73.5</b>
<i>Total</i>	<b>8,215</b>	<b>100%</b>	<b>154.9</b>

†† Estimate of 92,788

\*HIV or AIDS at first diagnosis age 13 and older;

- 2010 U.S. Census Data for persons age 13 and over used for rate calculations.

† "MSM" refers to both MSM and MSM/IDU.



# Number of Cases of Adults and Adolescents\* Living with HIV/AIDS by Gender Identity and Risk†, Minnesota, 2015

<i>Gender/Risk</i>	<i>Cases</i>	<i>%</i>
<b>Men (Total)</b>	<b>(6,206)</b>	<b>76%</b>
<i>MSM†</i>	<b>4,504</b>	<b>73%</b>
<i>Non-MSM</i>	<b>1,702</b>	<b>27%</b>
<b>Women</b>	<b>1,957</b>	<b>24%</b>
<b>Transgender (Total)</b>	<b>52</b>	<b>0.6%</b>
<i>Male to Female</i>	<b>44</b>	<b>85%</b>
<i>Female to Male</i>	<b>8</b>	<b>15%</b>
<i>Total</i>	<b>8,215</b>	<b>100%</b>

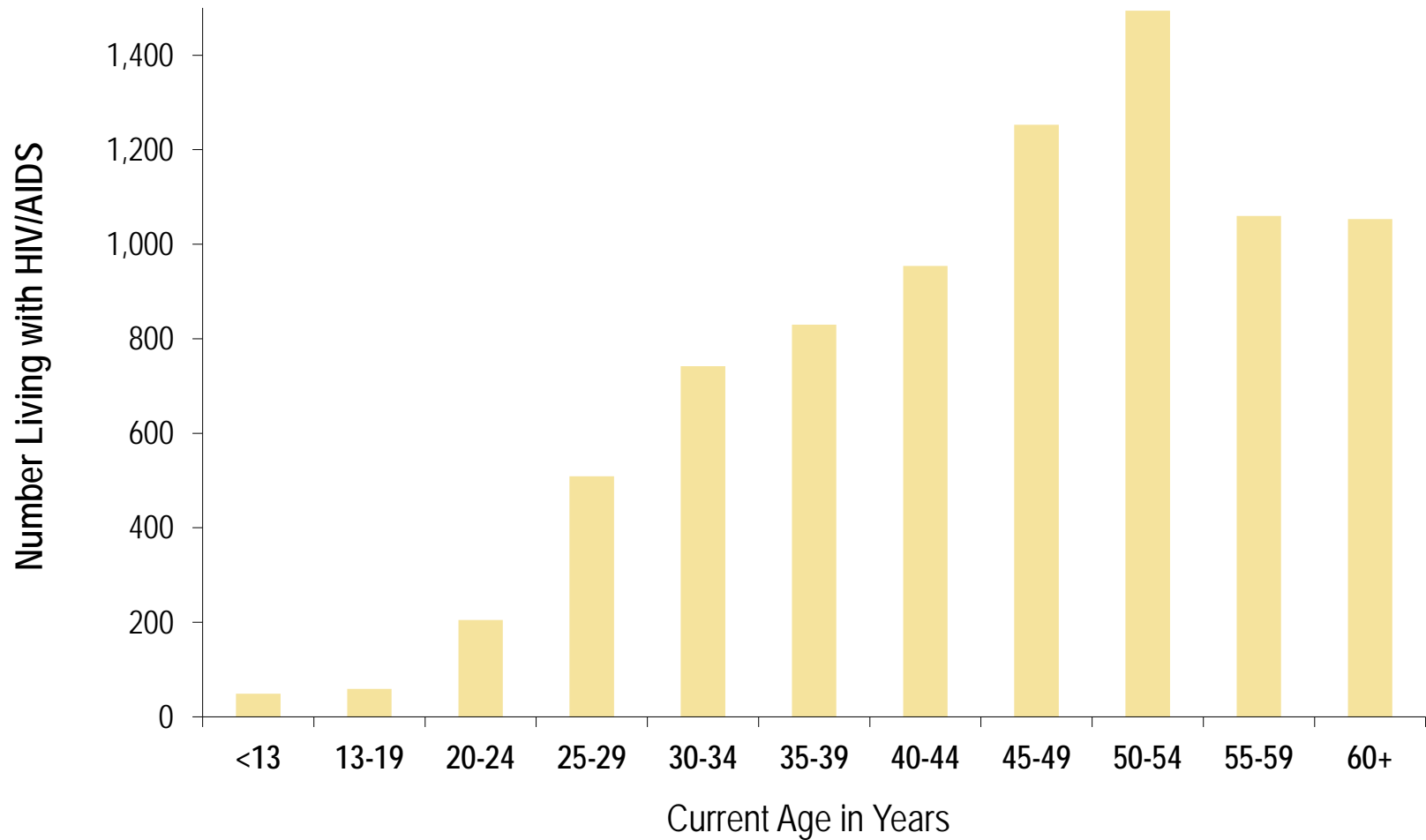
\*HIV or AIDS at first diagnosis age 13 and older;

† "MSM" refers to both MSM and MSM/IDU.

# Age



# Persons Living with HIV/AIDS in Minnesota by Age Group<sup>†</sup>, 2015

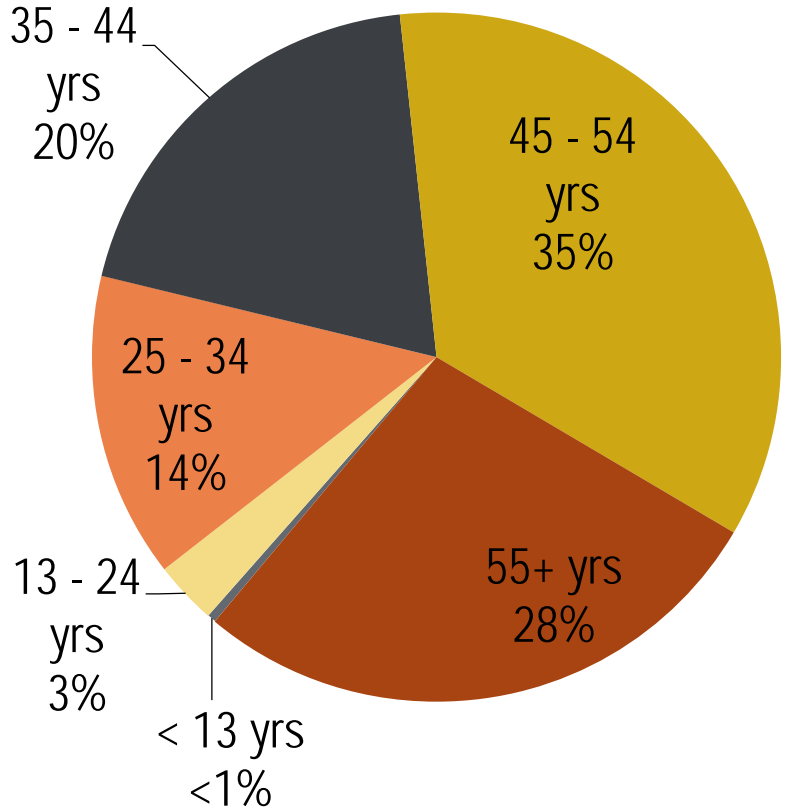


<sup>†</sup>Age missing for 5 persons living with HIV/AIDS

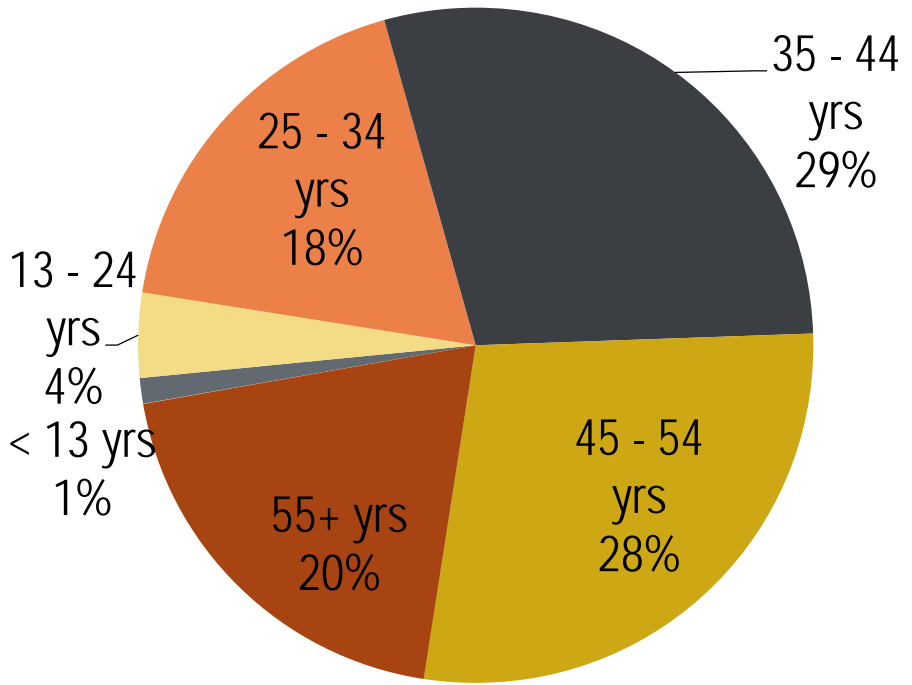


# Persons Living with HIV/AIDS in Minnesota by Age† and Gender, 2015

Males (n = 6,243)



Females (n = 1,965)



n = Number of persons  
† Age missing for 5 people.



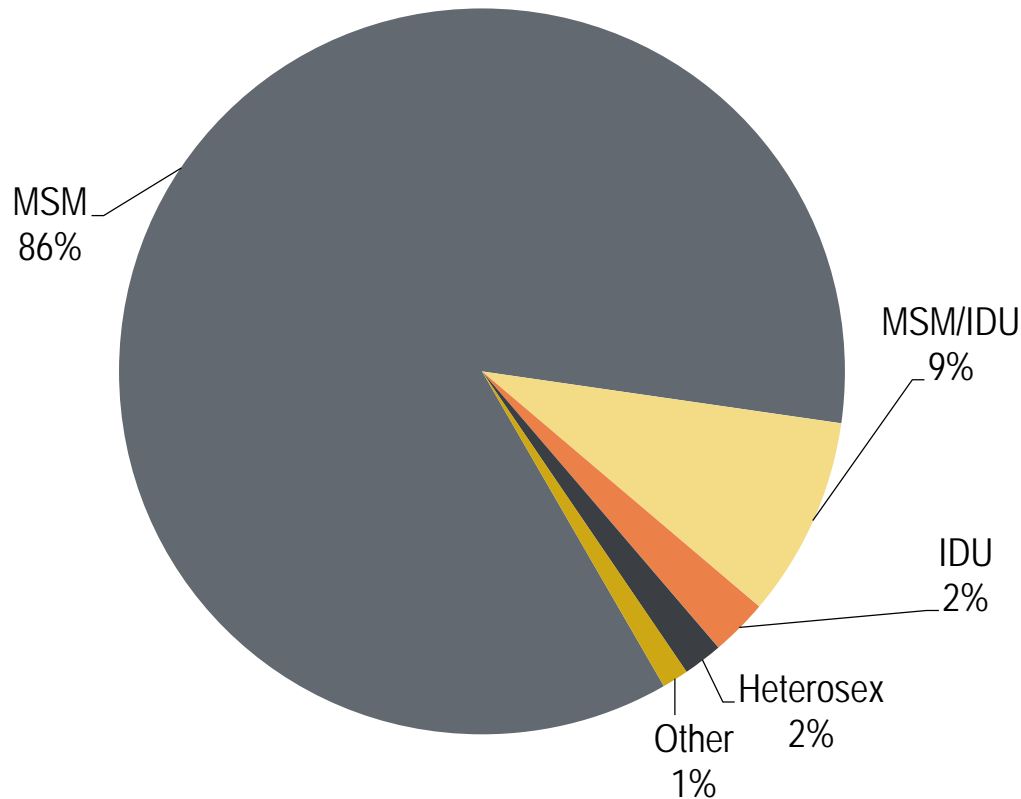


# Mode of Exposure



# Males Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure<sup>†</sup>, 2015

White Males (n = 3,572)



n = Number of persons

MSM = Men who have sex with men

Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

IDU = Injecting drug use

Heterosex = Heterosexual contact

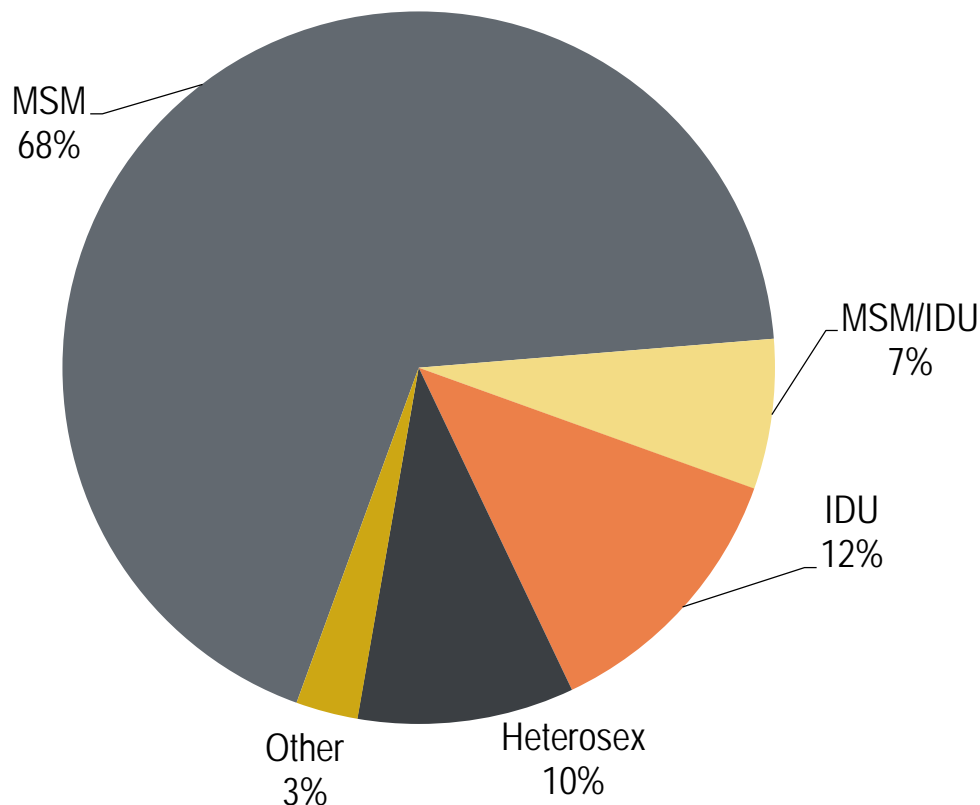
<sup>†</sup> Mode of Exposure has been estimated using prevalent cases with known risk. For additional detail see the HIV Prevalence & Mortality Technical Notes.

Data Source: Minnesota HIV/AIDS Surveillance System

*HIV/AIDS in Minnesota: Annual Review*

# Males Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure<sup>†</sup>, 2015

African American Males<sup>††</sup> (n = 1,236)



n = Number of persons  
IDU = Injecting drug use

MSM = Men who have sex with men  
Heterosex = Heterosexual contact

Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

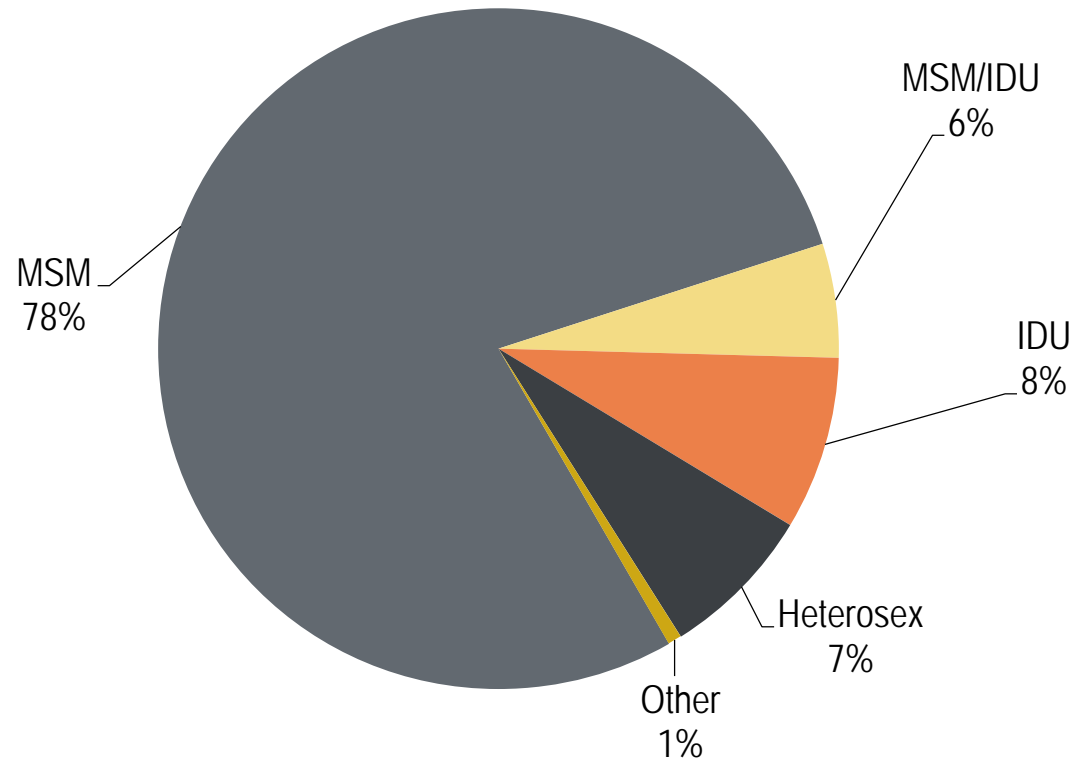
<sup>†</sup> Mode of Exposure has been estimated using prevalent cases with known risk. For additional detail see the HIV Prevalence & Mortality Technical Notes.

<sup>††</sup> Refers to Black, African American (not African-born) males.



# Males Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure<sup>†</sup>, 2015

Hispanic Males (n = 606)



n = Number of persons

MSM = Men who have sex with men

Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

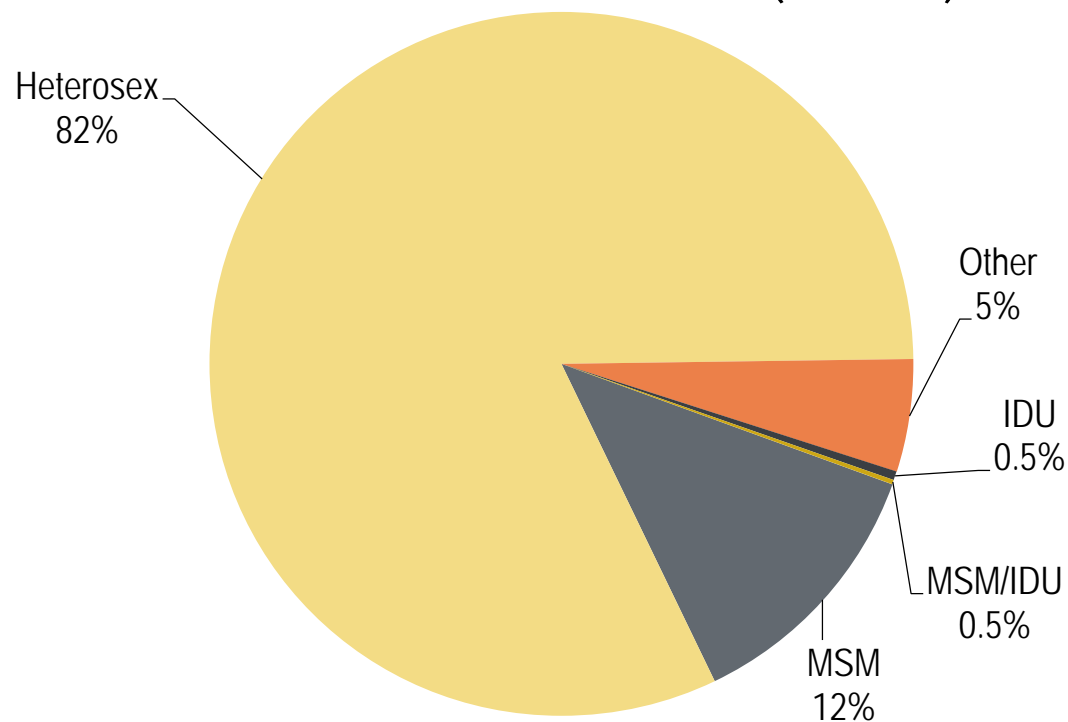
IDU = Injecting drug use

Heterosex = Heterosexual contact

<sup>†</sup> Mode of Exposure has been estimated using prevalent cases with known risk. For additional detail see the HIV Prevalence & Mortality Technical Notes.

# Males Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure<sup>†</sup>, 2015

African-born Males<sup>††</sup> (n = 493)



n = Number of persons

MSM = Men who have sex with men

Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

Heterosex = Heterosexual contact

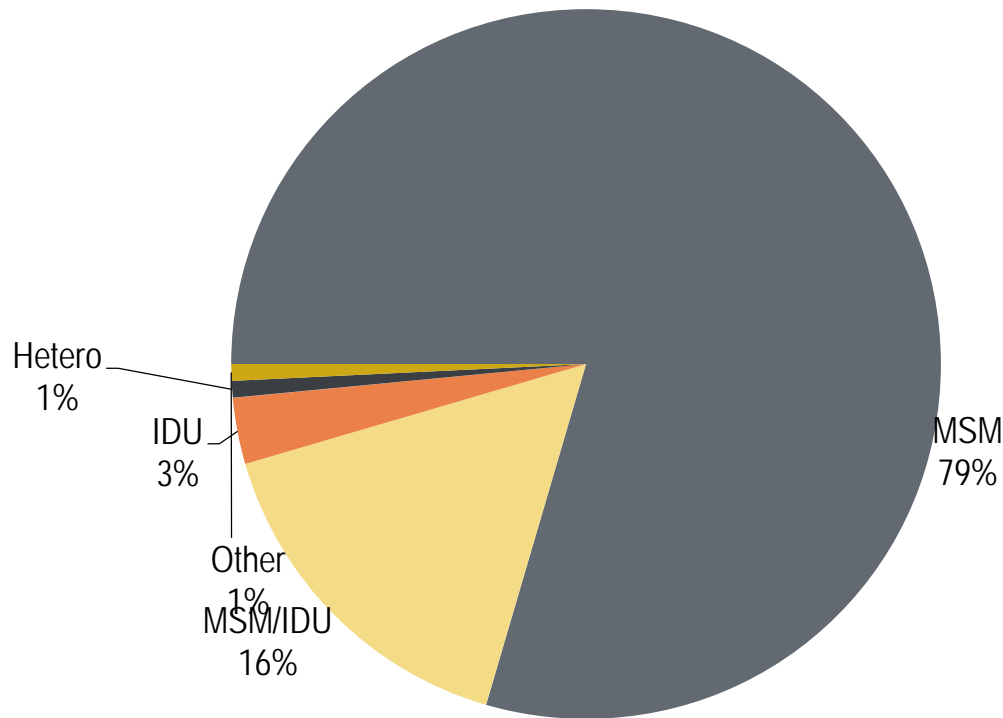
<sup>†</sup> Mode of Exposure has been estimated using the following breakdown: 5% - MSM, 90% - Heterosex, and 5% - Other.

For additional detail see the HIV Prevalence & Mortality Technical Notes.

<sup>††</sup> Refers to Black, African-born males.

# Males Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure<sup>†</sup>, 2015

Multi-racial Males (n = 145)



n = Number of persons

MSM = Men who have sex with men

Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

IDU = Injecting drug use

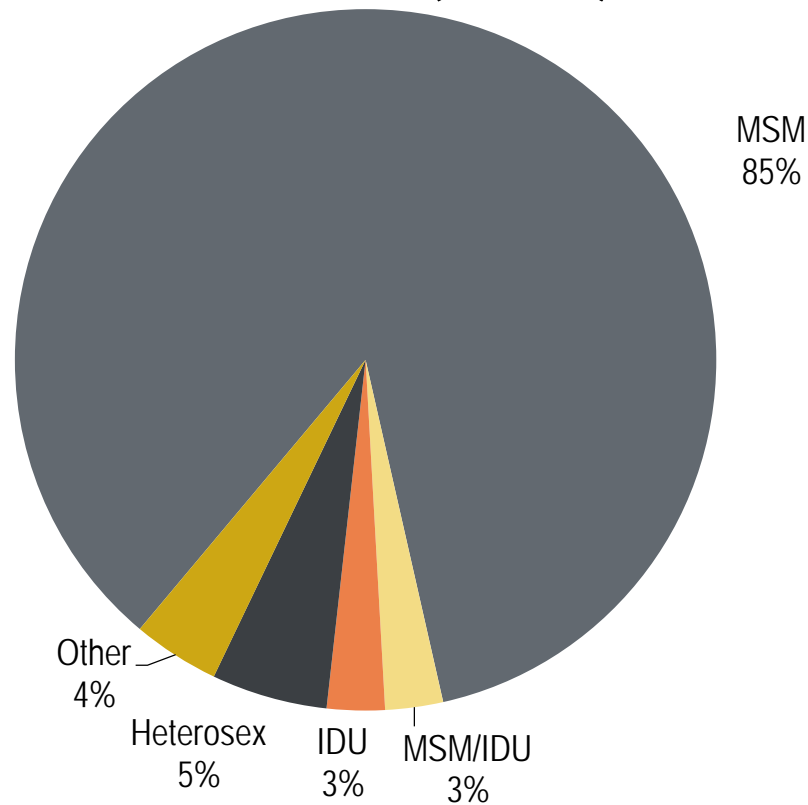
Heterosex = Heterosexual contact

<sup>†</sup> Mode of Exposure has been estimated using prevalent cases with known risk. For additional detail see the HIV Prevalence & Mortality Technical Notes.



# Males Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure<sup>†</sup>, 2015

Asian Males (n = 116)



n = Number of persons

MSM = Men who have sex with men

Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

IDU = Injecting drug use

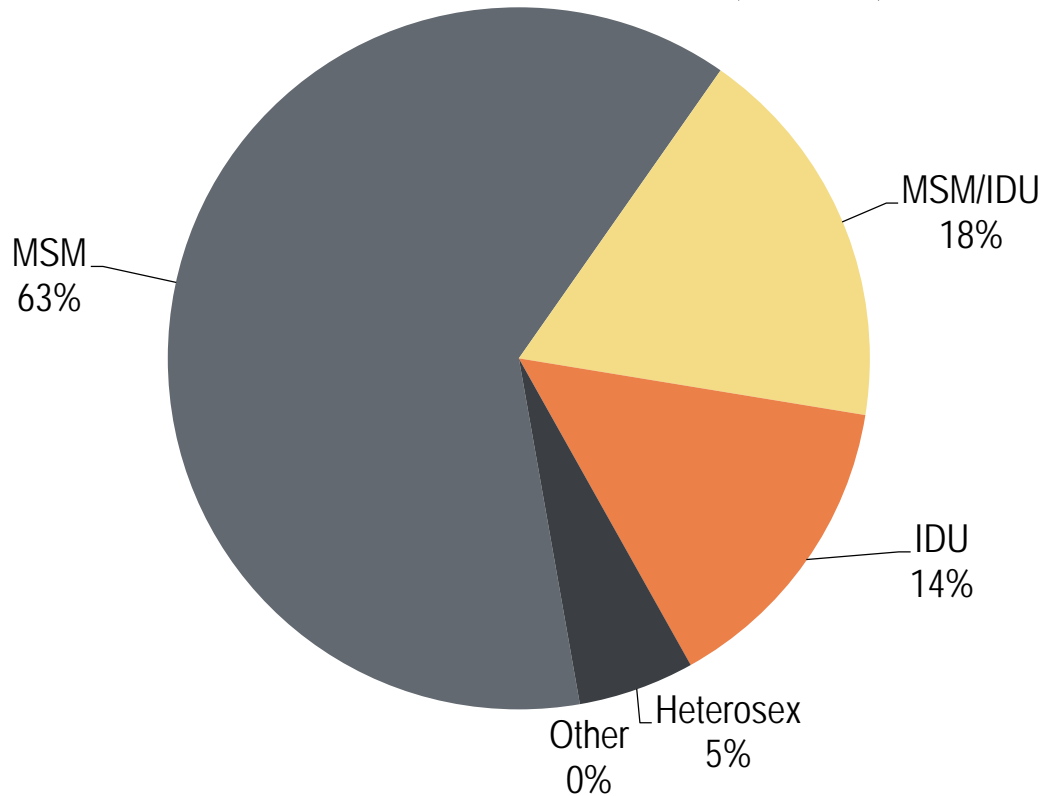
Heterosex = Heterosexual contact

<sup>†</sup> Mode of Exposure has been estimated using prevalent cases with known risk. For additional detail see the HIV Prevalence & Mortality Technical Notes.



# Males Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure<sup>†</sup>, 2015

American Indian Males (n = 61)



n = Number of persons

MSM = Men who have sex with men

Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

IDU = Injecting drug use

Heterosex = Heterosexual contact

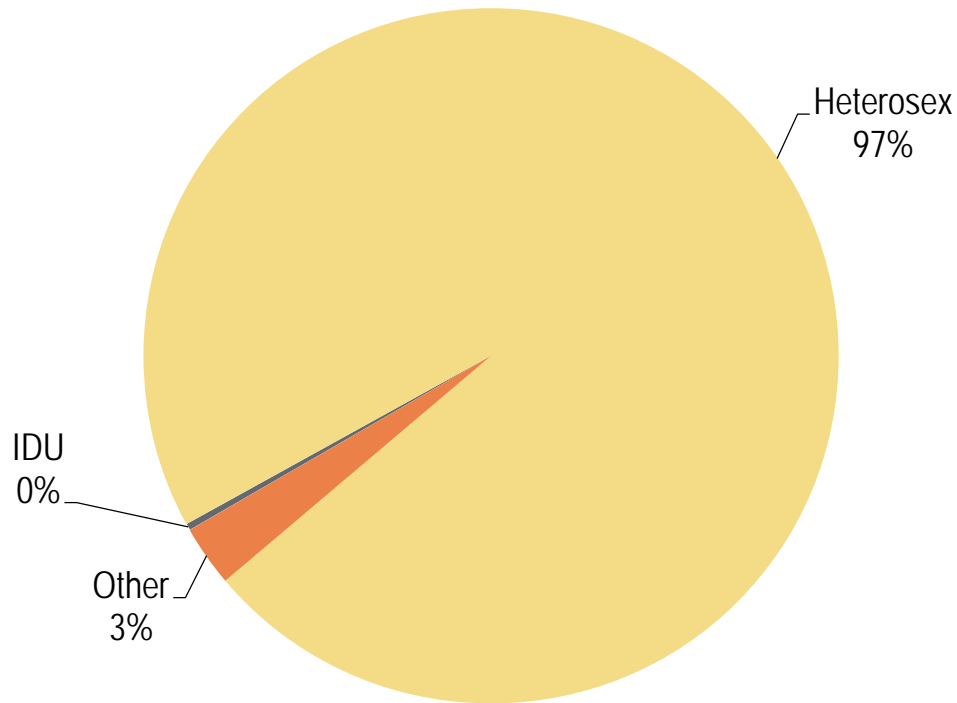
<sup>†</sup> Mode of Exposure has been estimated using prevalent cases with known risk. For additional detail see the HIV Prevalence & Mortality Technical Notes.





# Females Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure<sup>†</sup>, 2015

African-born Females<sup>††</sup> (n = 667)



n = Number of persons

Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

IDU = Injecting drug use

Heterosex = Heterosexual contact

<sup>†</sup> Mode of Exposure has been estimated using the following proportions: 95% - Heterosexual, 5% - Other.

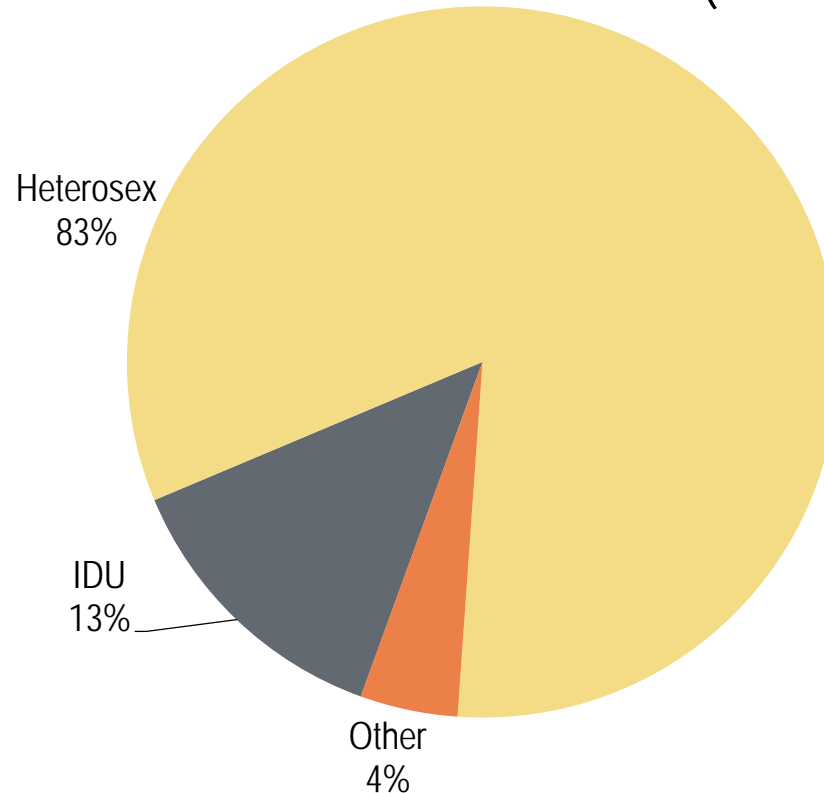
For additional detail see the HIV Prevalence & Mortality Technical Notes.

<sup>††</sup> Refers to Black, African-born females.



# Females Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure<sup>†</sup>, 2015

African American Females<sup>††</sup> (n = 536)



n = Number of persons

Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

IDU = Injecting drug use

Heterosex = Heterosexual contact

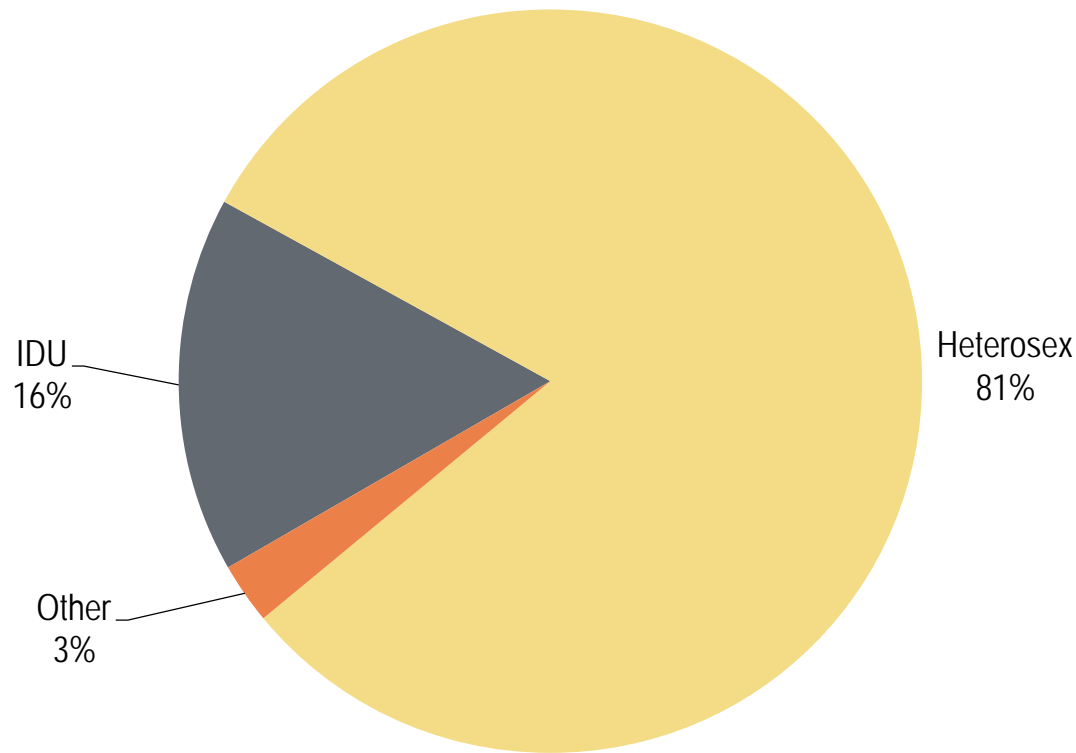
<sup>†</sup> Mode of Exposure has been estimated using prevalent cases with known risk. For additional detail see the HIV Prevalence & Mortality Technical Notes.

<sup>††</sup> Refers to Black, African American (not African-born) females.



# Females Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure<sup>†</sup>, 2015

White Females (n = 469)



n = Number of persons

IDU = Injecting drug use

Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

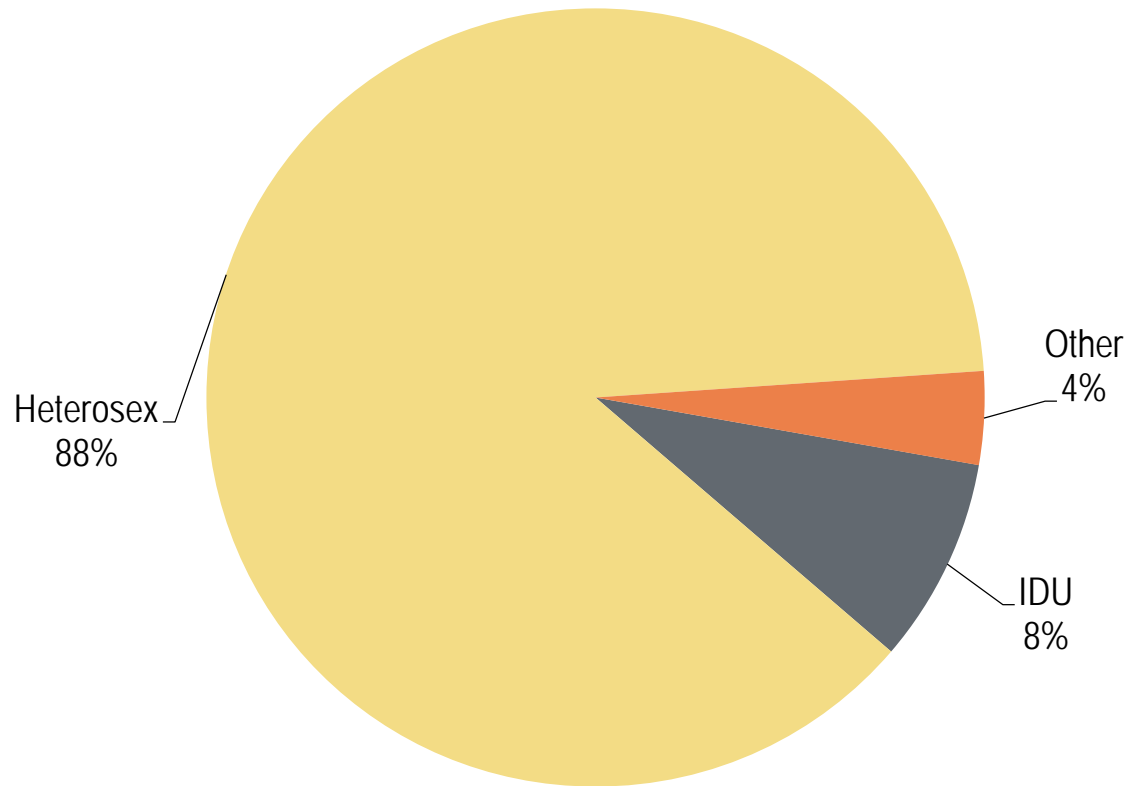
Heterosex = Heterosexual contact

<sup>†</sup> Mode of Exposure has been estimated using prevalent cases with known risk. For additional detail see the HIV Prevalence & Mortality Technical Notes.



# Females Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure<sup>†</sup>, 2015

Hispanic Females (n = 136)



n = Number of persons

Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

IDU = Injecting drug use

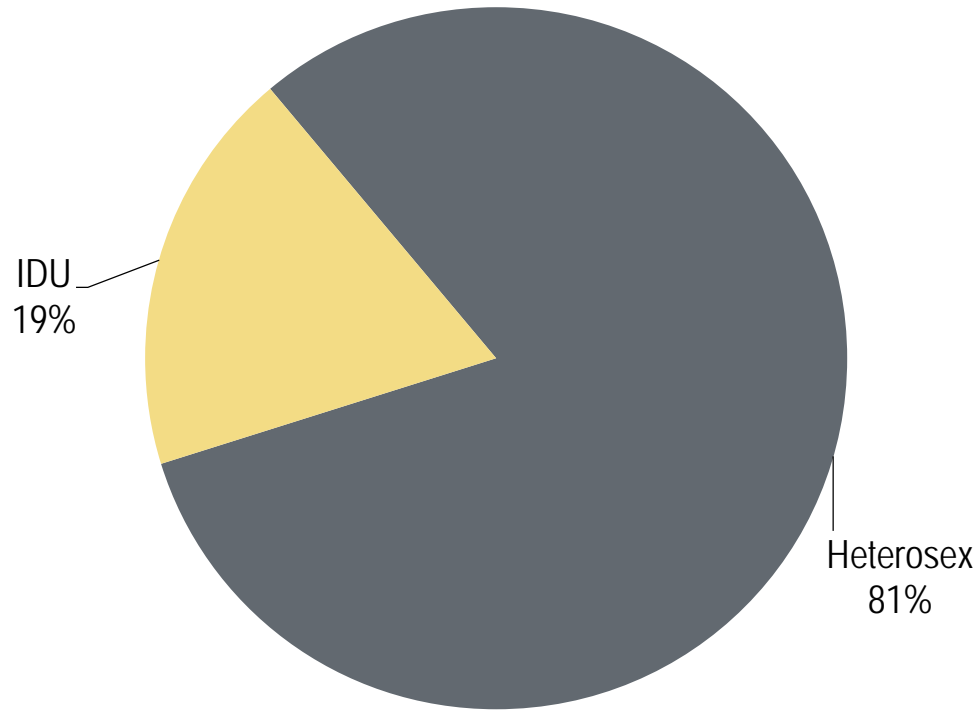
Heterosex = Heterosexual contact

<sup>†</sup> Mode of Exposure has been estimated using prevalent cases with known risk. For additional detail see the HIV Prevalence & Mortality Technical Notes.



# Females Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure<sup>†</sup>, 2015

American Indian Females (n = 51)



n = Number of persons

IDU = Injecting drug use

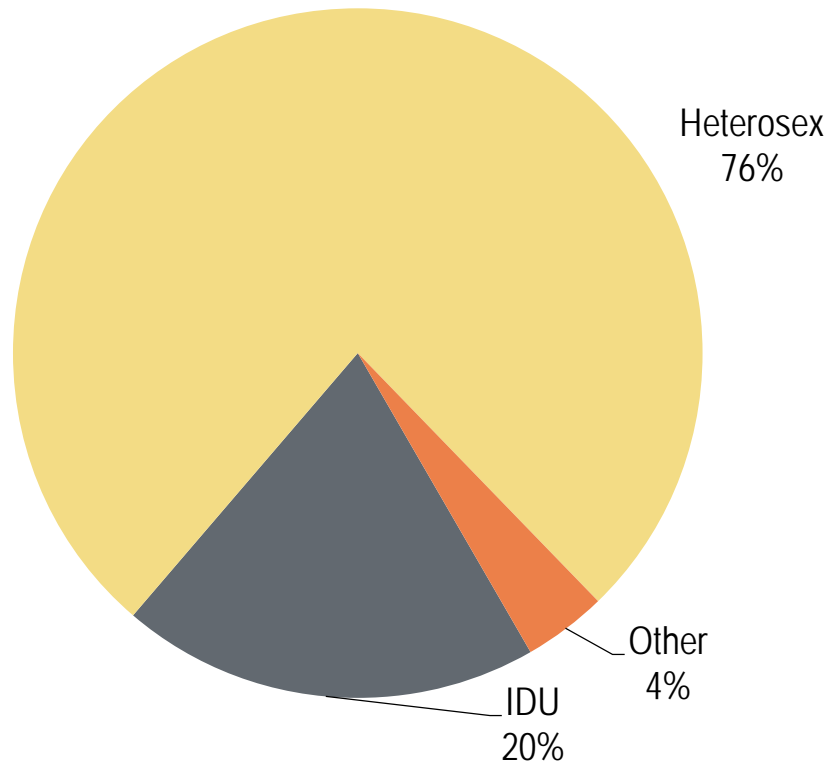
Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

Heterosex = Heterosexual contact

<sup>†</sup> Mode of Exposure has been estimated using prevalent cases with known risk. For additional detail see the HIV Prevalence & Mortality Technical Notes.

# Females Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure<sup>†</sup>, 2015

## Multi-racial Females (n = 52)



n = Number of persons

IDU = Injecting drug use

Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

Heterosex = Heterosexual contact

<sup>†</sup> Mode of Exposure has been estimated using the following proportions: 95% - Heterosexual, 5% - Other.

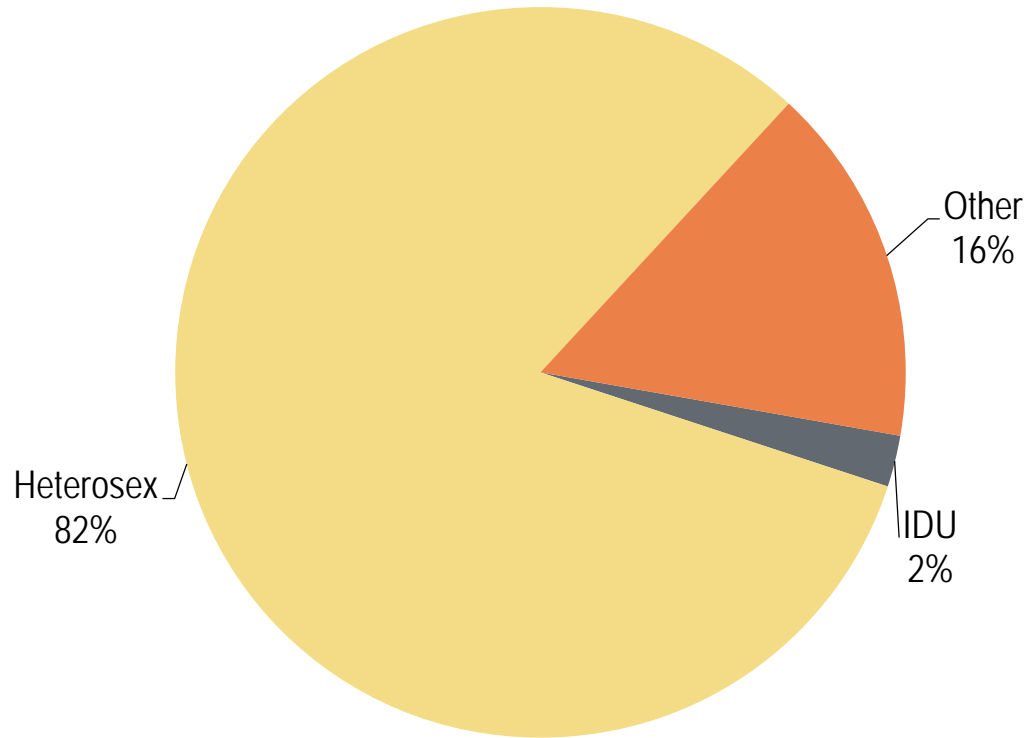
For additional detail see the HIV Prevalence & Mortality Technical Notes.



# Females Living with HIV/AIDS in Minnesota by Estimated Mode of Exposure<sup>†</sup>, 2015

Asian Females (n = 48)

CAUTION: Small number of cases – interpret carefully.



n = Number of persons

IDU = Injecting drug use

Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

Heterosex = Heterosexual contact

<sup>†</sup> Mode of Exposure has been estimated using the following proportions: 95% - Heterosexual, 5% - Other.

For additional detail see the HIV Prevalence & Mortality Technical Notes.

Data Source: Minnesota HIV/AIDS Surveillance System

# Populations of Interest



# HIV and Hepatitis B, C co-infection

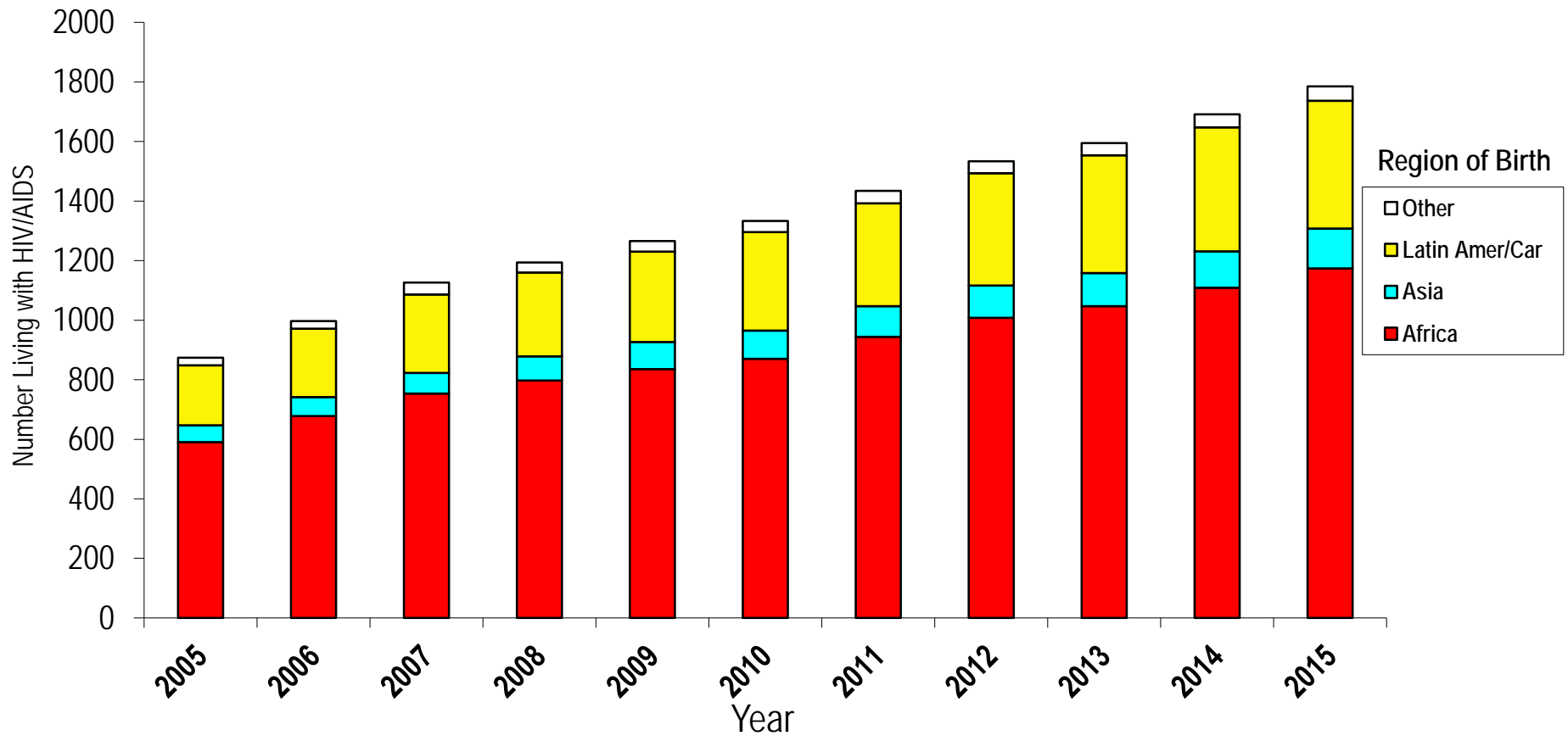
# HIV and Hepatitis B and C

- **As of December 31, 2015\* , 8,215 persons are assumed alive and living in Minnesota with HIV/AIDS**
  - Of these 8,215 persons, 932 (11%) are co-infected with either Hepatitis B or C
    - Of the 932, 340 (36%) are living with HIV and Hep B
    - Of the 932, 592 (64%) are living with HIV and Hep C

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



# Foreign-Born Persons Living with HIV/AIDS in Minnesota by Region of Birth, 2005-2015



Latin Amer/Car – Includes Mexico, Caribbean, and Central/South American countries

Data Source: Minnesota HIV/AIDS Surveillance System

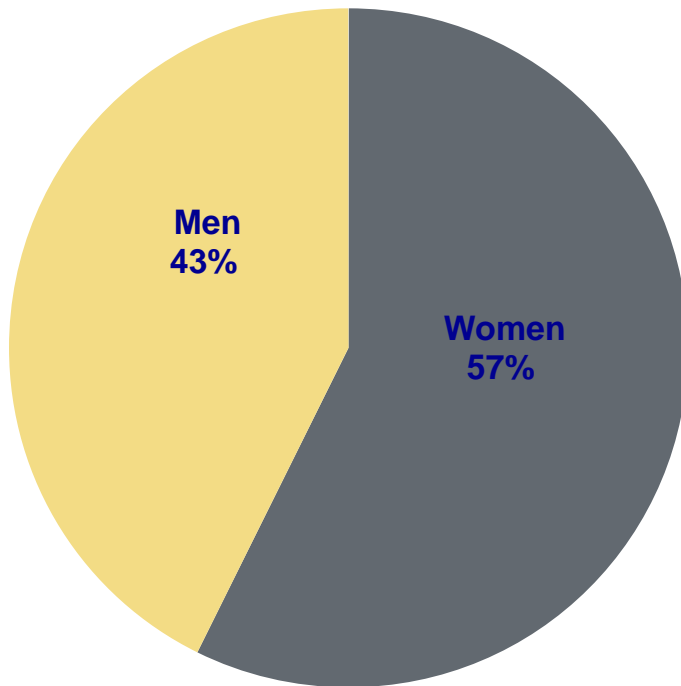
HIV/AIDS in Minnesota: Annual Review



# African-Born<sup>†</sup> Persons Living with HIV/AIDS Compared to Other Minnesota Cases by Gender, 2015

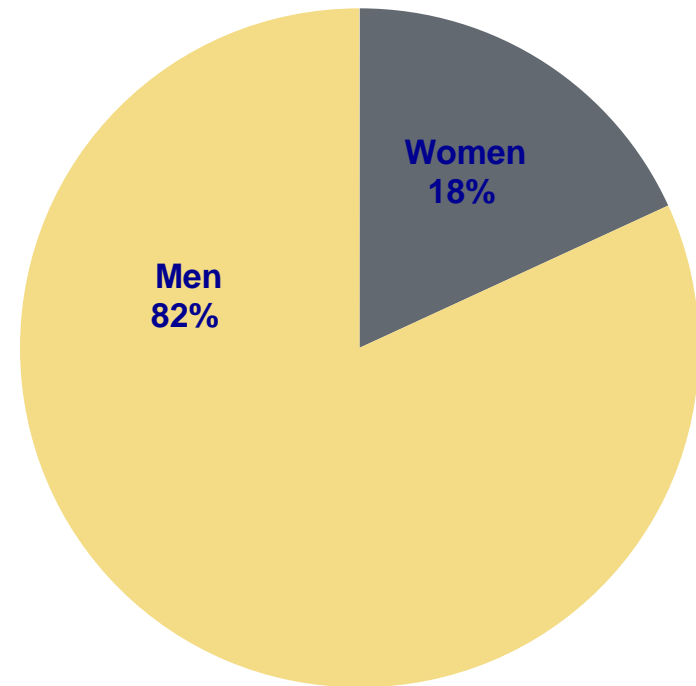
## African-born Persons

Total Number = 1,1174



## U.S.-born Cases

Total Number = 6,430



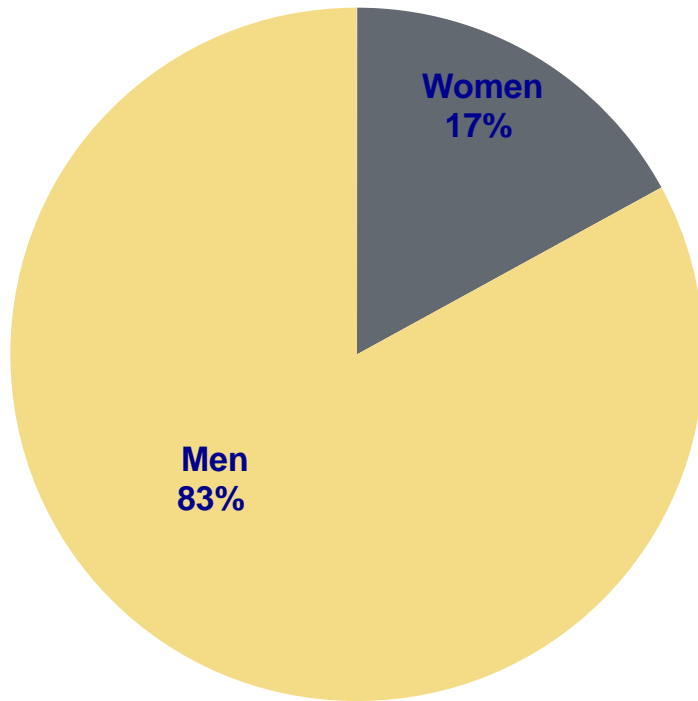
<sup>†</sup> Includes persons arriving to Minnesota through the HIV+ Refugee Resettlement Program and other refugee/immigrant programs. Also includes 1 White African-born persons and 2 multi-racial African-born person.



# Persons Living with HIV/AIDS born in Latin America/Caribbean<sup>†</sup> Countries Compared to Other Minnesota Cases by Gender, 2014

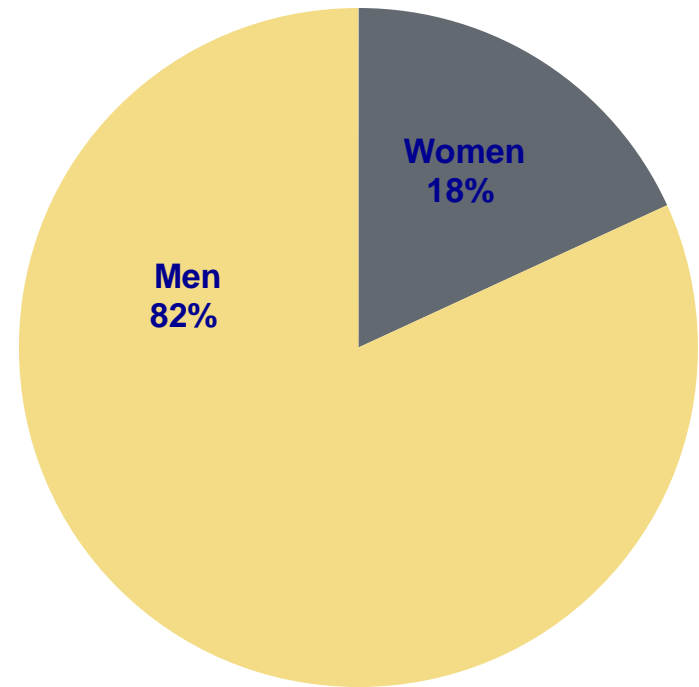
## Latin/Caribbean Persons

Total Number = 417



## U.S.-born Cases

Total Number = 6,297



<sup>†</sup> Includes Mexico and all Central/South American and Caribbean countries.



# Countries of Birth Among Foreign-Born Persons<sup>†</sup> Living with HIV/AIDS, Minnesota, 2015

- **Ethiopia/Oromia** (n=260)
- **Mexico** (n=251)
- **Liberia** (n=191)
- **Kenya** (n=154)
- **Somalia** (n=116)
- **Cameroon** (n=87)
- **Sudan** (n=67)
- **Other<sup>^</sup>** (n=622)

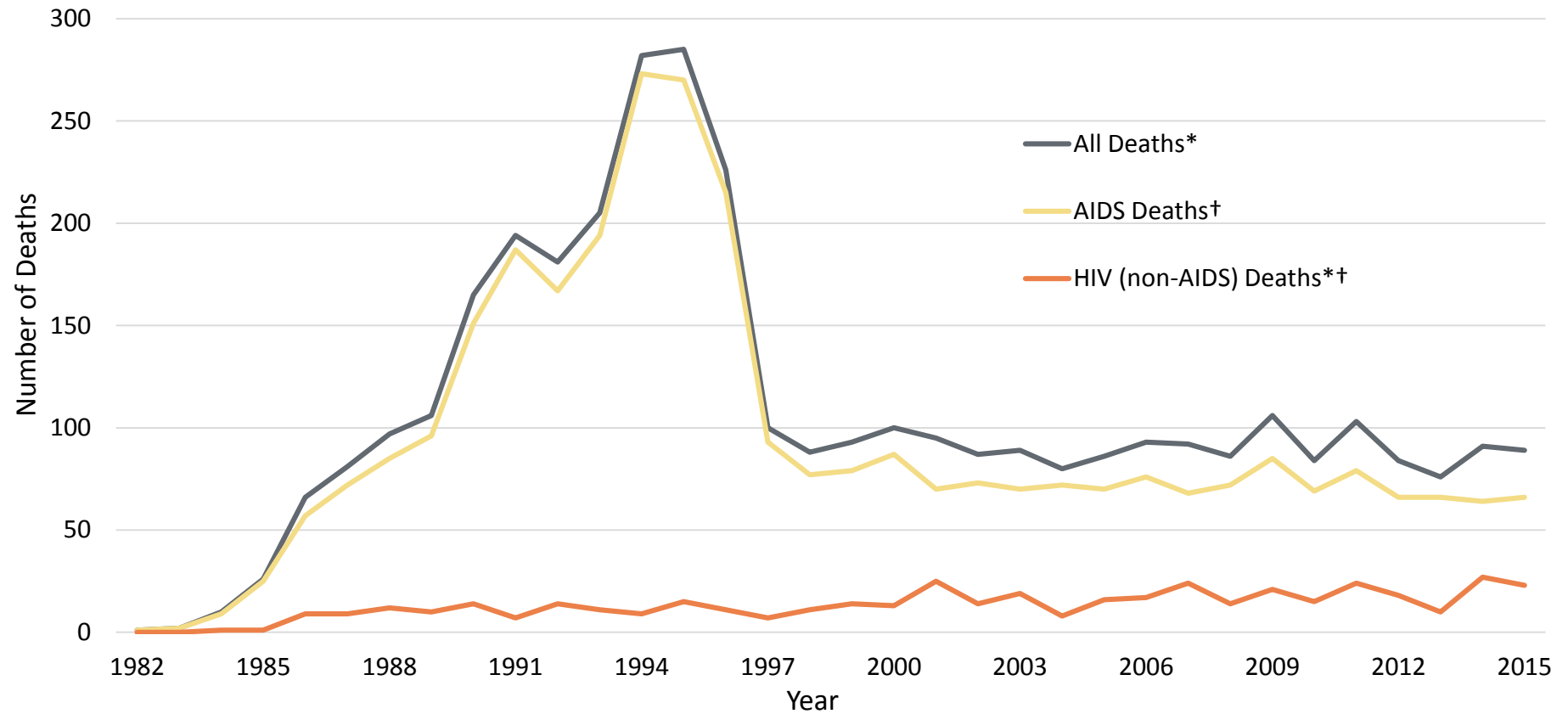
<sup>†</sup> Includes persons arriving to Minnesota through the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants with an HIV diagnosis prior to arrival in Minnesota.

<sup>^</sup> Includes 95 additional countries.

# Mortality



# Reported Deaths among persons with HIV in Minnesota , 1984-2015



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