

HIV Surveillance Report, 2015

HIV/AIDS Surveillance System



Minnesota
Department *of* Health

Sexually Transmitted Diseases, HIV and Tuberculosis Section, Epidemiology and Surveillance Unit

Introduction (I)

- **These two 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 Surveillance Report, 2015* or *HIV Surveillance Technical Notes*.**
- **This slide set describes new HIV diagnoses (including AIDS at first diagnosis) 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.**
- **The data are displayed by year of HIV diagnosis.**

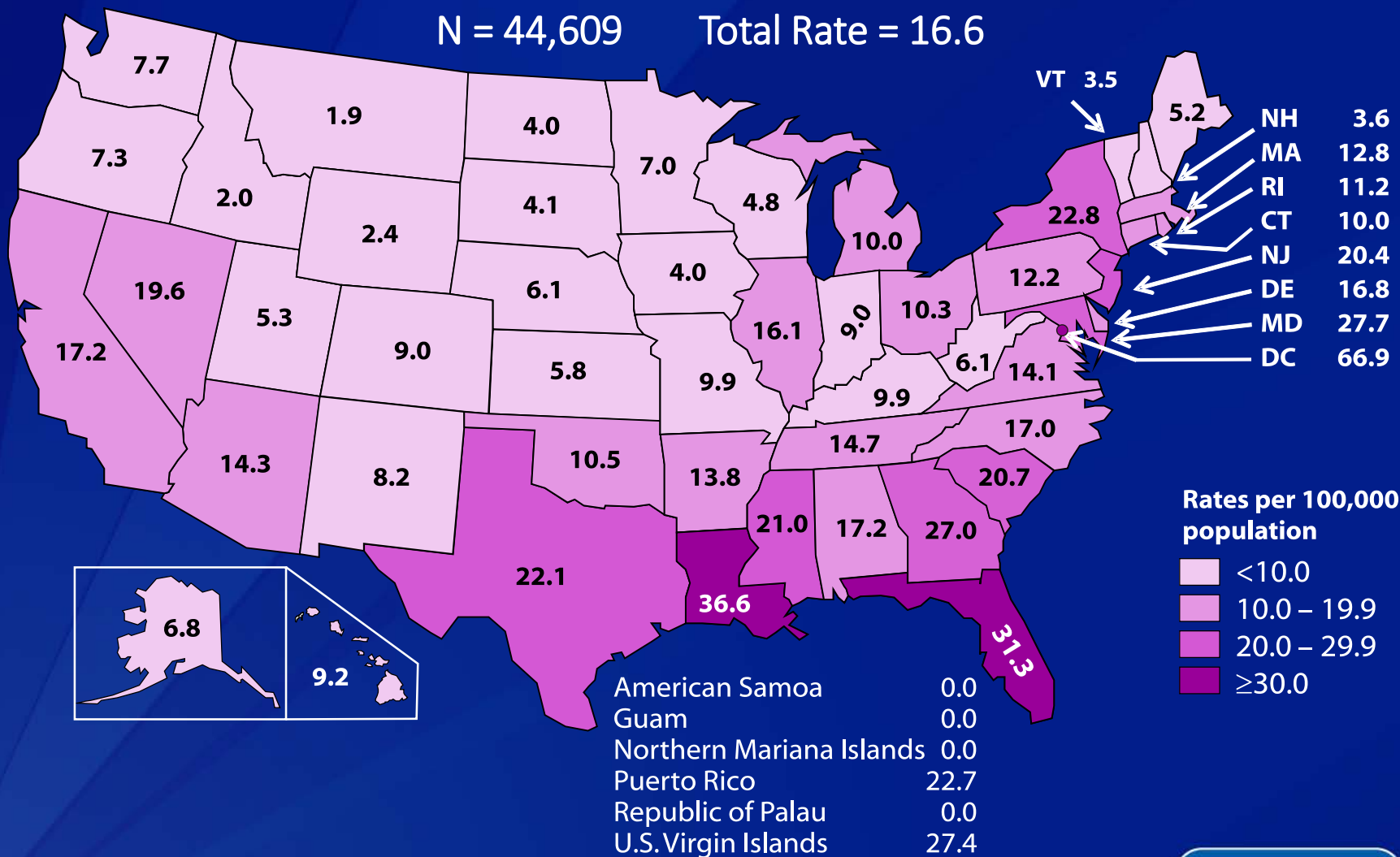
Introduction (II)

- **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 HIV diagnoses 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

National Context

Rates of Diagnoses of HIV Infection among Adults and Adolescents, 2014—United States and 6 Dependent Areas

N = 44,609 Total Rate = 16.6

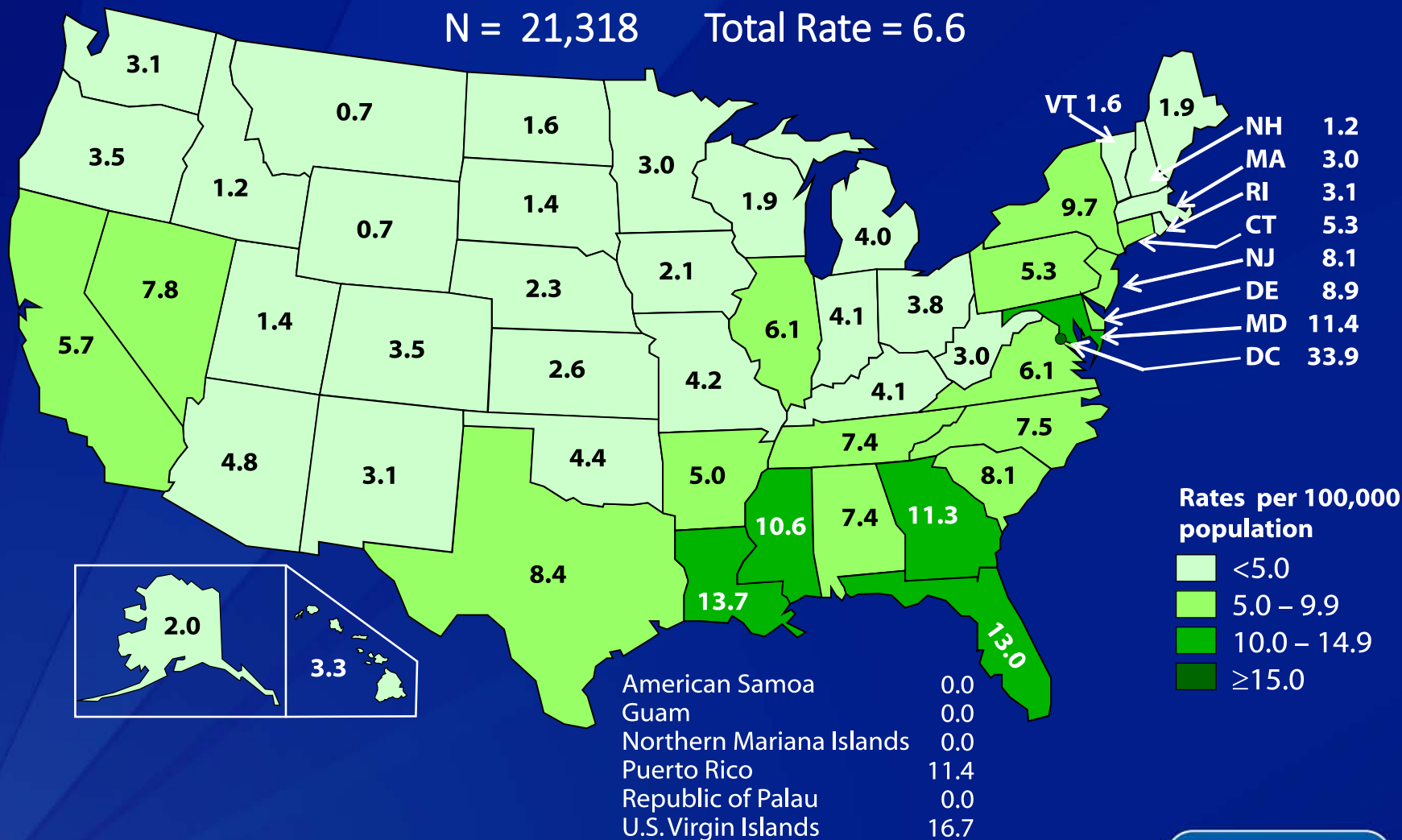


Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.



Rates of Stage 3 (AIDS) Classifications among Persons with HIV Infection, 2014—United States and 6 Dependent Areas

N = 21,318 Total Rate = 6.6



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

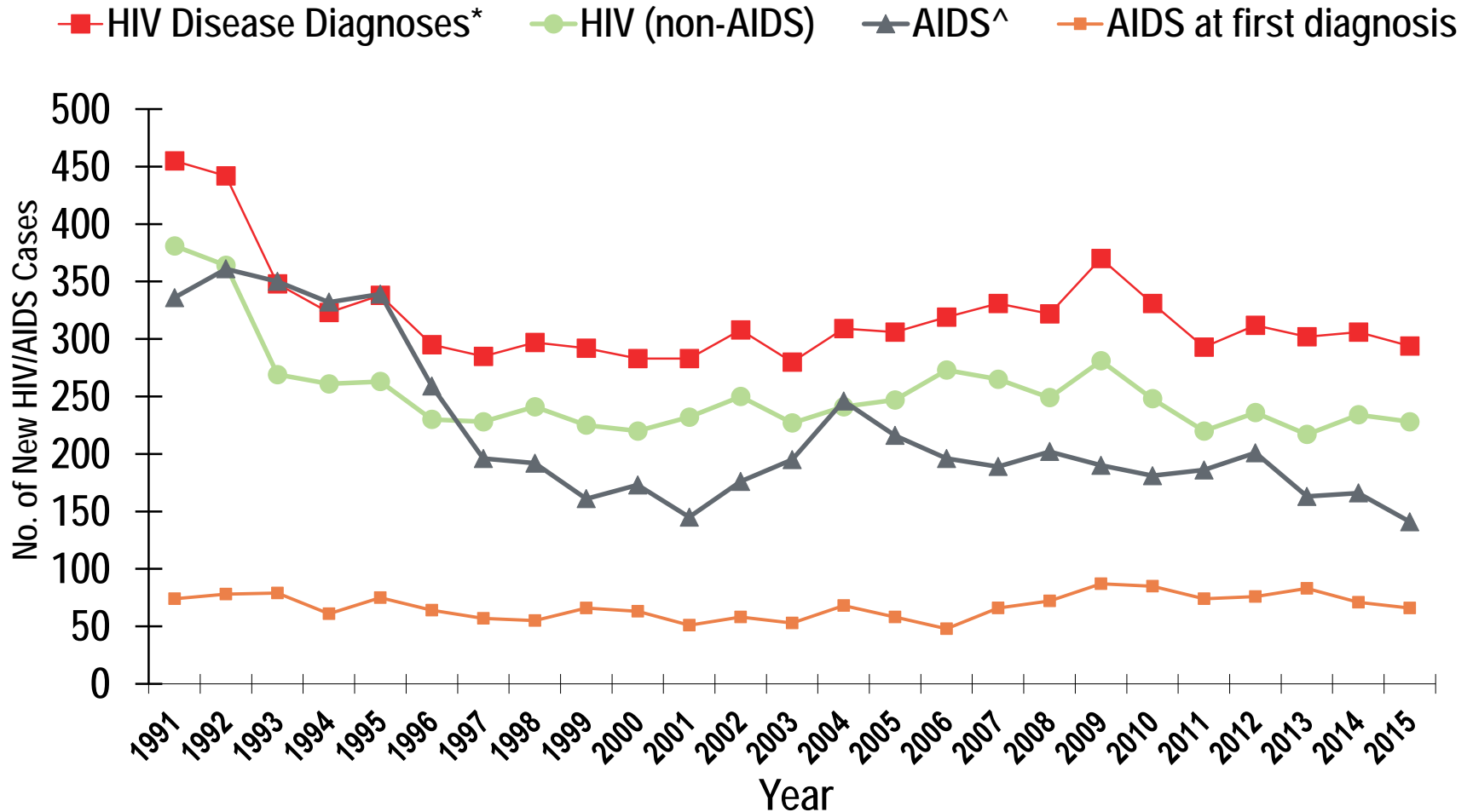


Overview of HIV/AIDS in Minnesota



HIV/AIDS in Minnesota

New HIV Disease Diagnoses, HIV (non-AIDS) and AIDS Cases by Year, 1990-2015



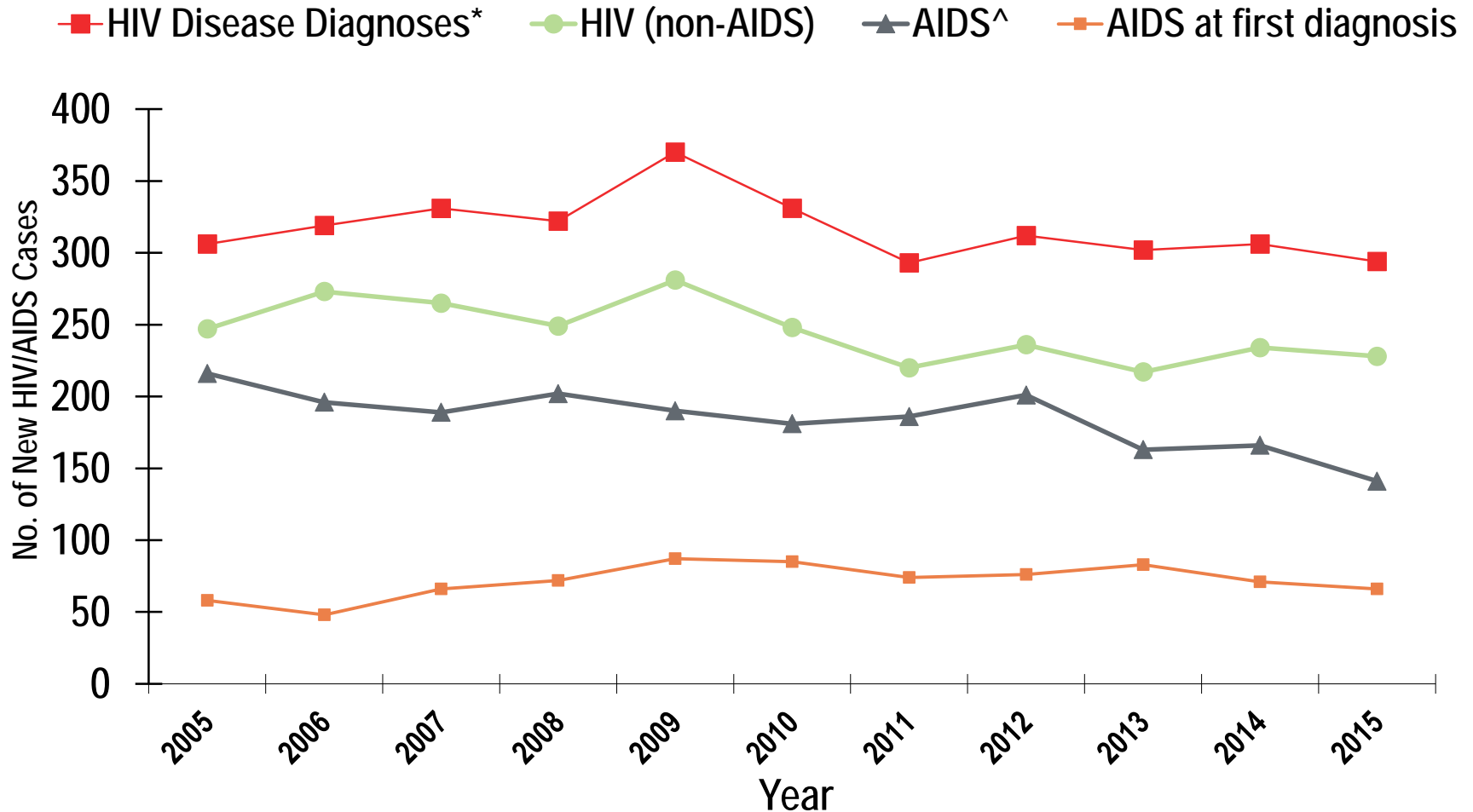
*Includes all new cases of HIV infection (both HIV (non-AIDS) and AIDS at first diagnosis) diagnosed within a given calendar year.

^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.



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.

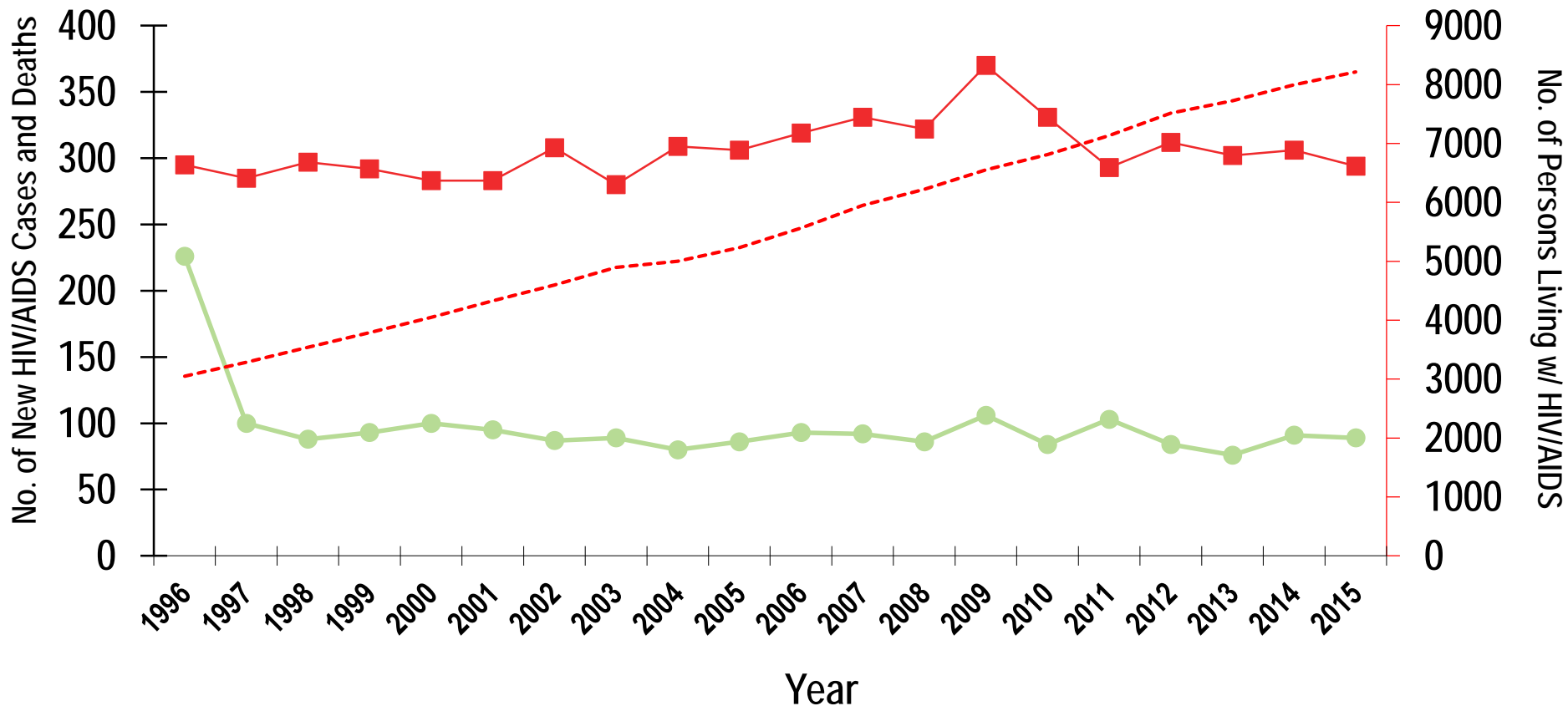
^Includes all new cases of AIDS diagnosed within a given calendar year, including AIDS at first diagnosis. This includes refugees in the HIV+ Resettlement Program, as well as, other refugee/immigrants diagnosed with AIDS subsequent to their arrival in the United States.



HIV/AIDS in Minnesota

New HIV Disease Diagnoses, Deaths and Prevalent Cases by Year, 1996-2015

■ HIV Disease Diagnoses* ● All Deaths^ - - - Living with HIV/AIDS



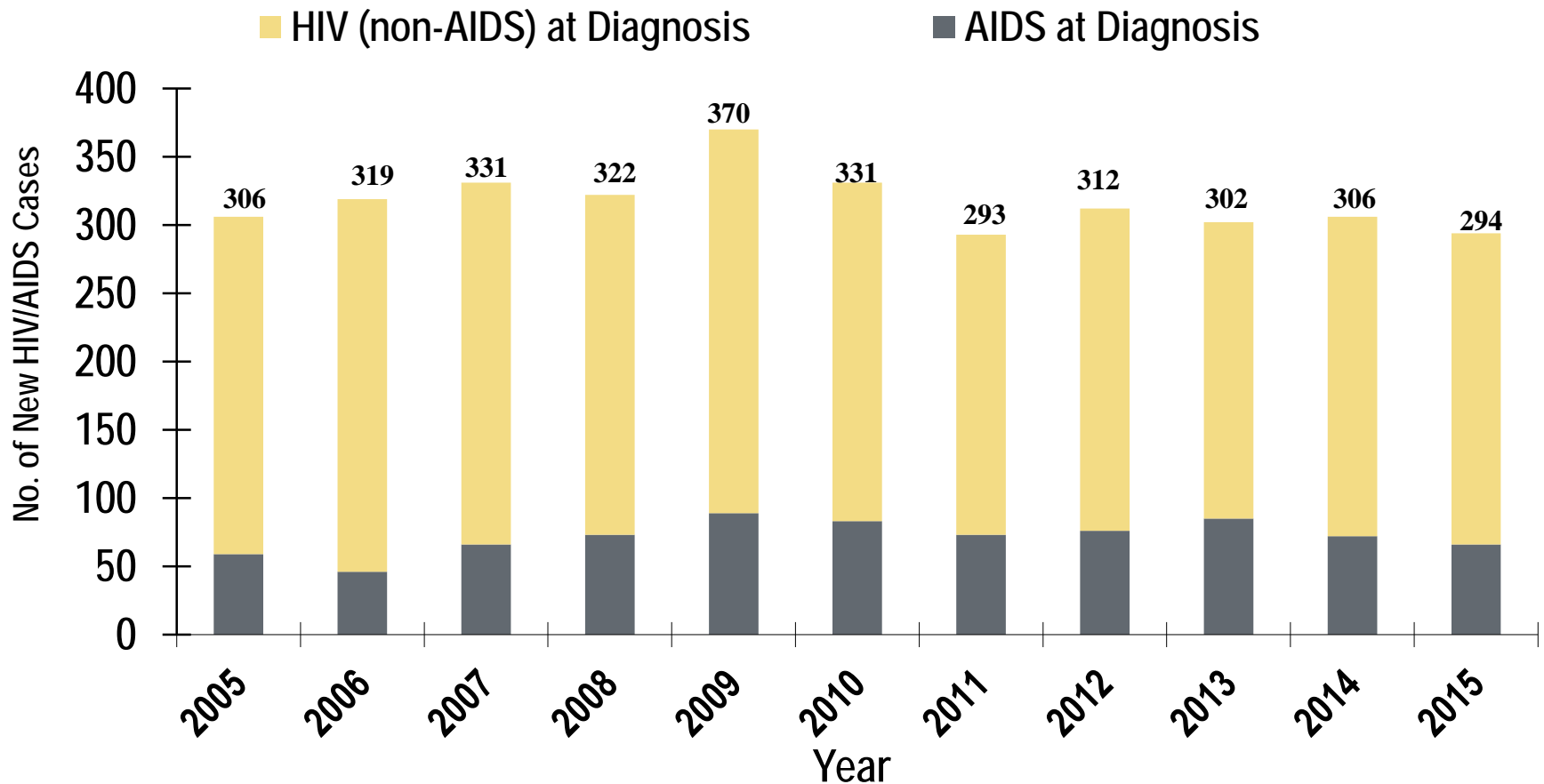
*Includes all new cases of HIV infection (both HIV (non-AIDS) and AIDS at first diagnosis) diagnosed within a given calendar year.

^Deaths in Minnesota among people with HIV/AIDS, regardless of location of diagnosis and cause.



HIV/AIDS in Minnesota

HIV (non-AIDS) and AIDS at Diagnosis 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.

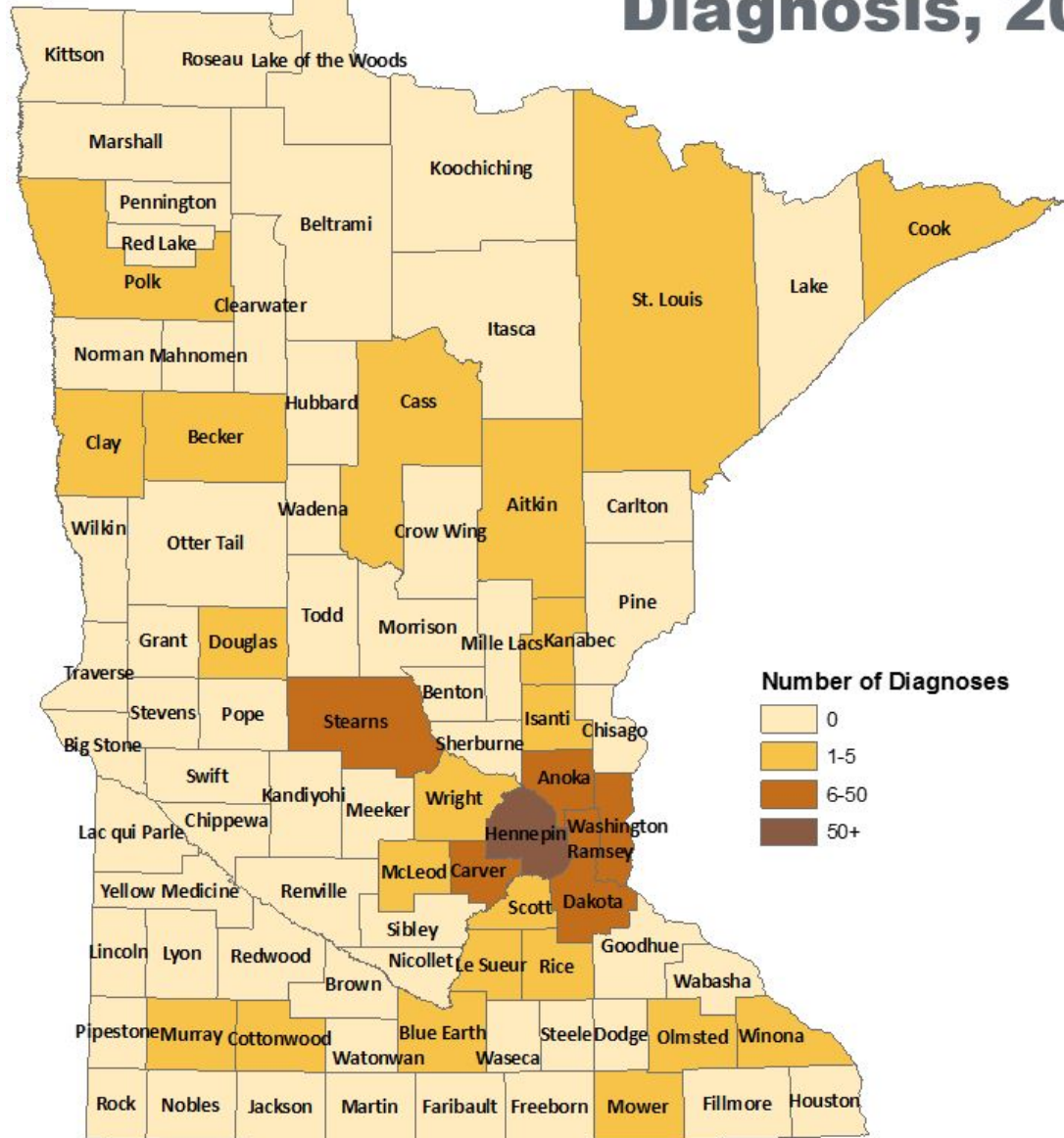
^Includes all new cases of AIDS diagnosed within a given calendar year, including AIDS at first diagnosis. This includes refugees in the HIV+ Resettlement Program, as well as, other refugee/immigrants diagnosed with AIDS subsequent to their arrival in the United States.

HIV Diagnoses* in Minnesota by Person, Place, and Time

* HIV or AIDS at first diagnosis

Place

HIV Diagnoses* by County of Residence at Diagnosis, 2015



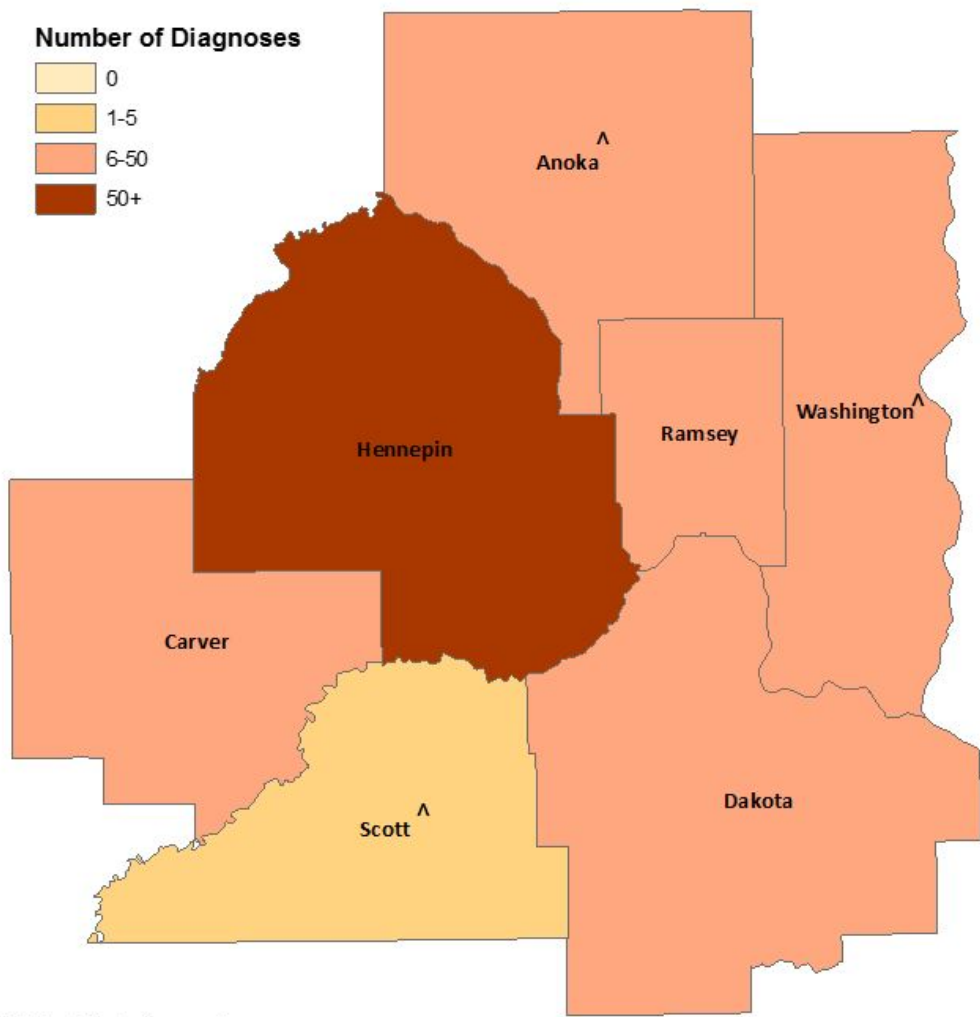
City of Minneapolis – 93
 City of St. Paul – 30
 Suburban# – 131
 Greater Minnesota – 37
 Total number = 294

*HIV or AIDS at first diagnosis

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



HIV Diagnoses* by County of Residence at Diagnosis, 2015: Seven-County Metro Area



City of Minneapolis –93
City of St. Paul – 30
Suburban# – 132

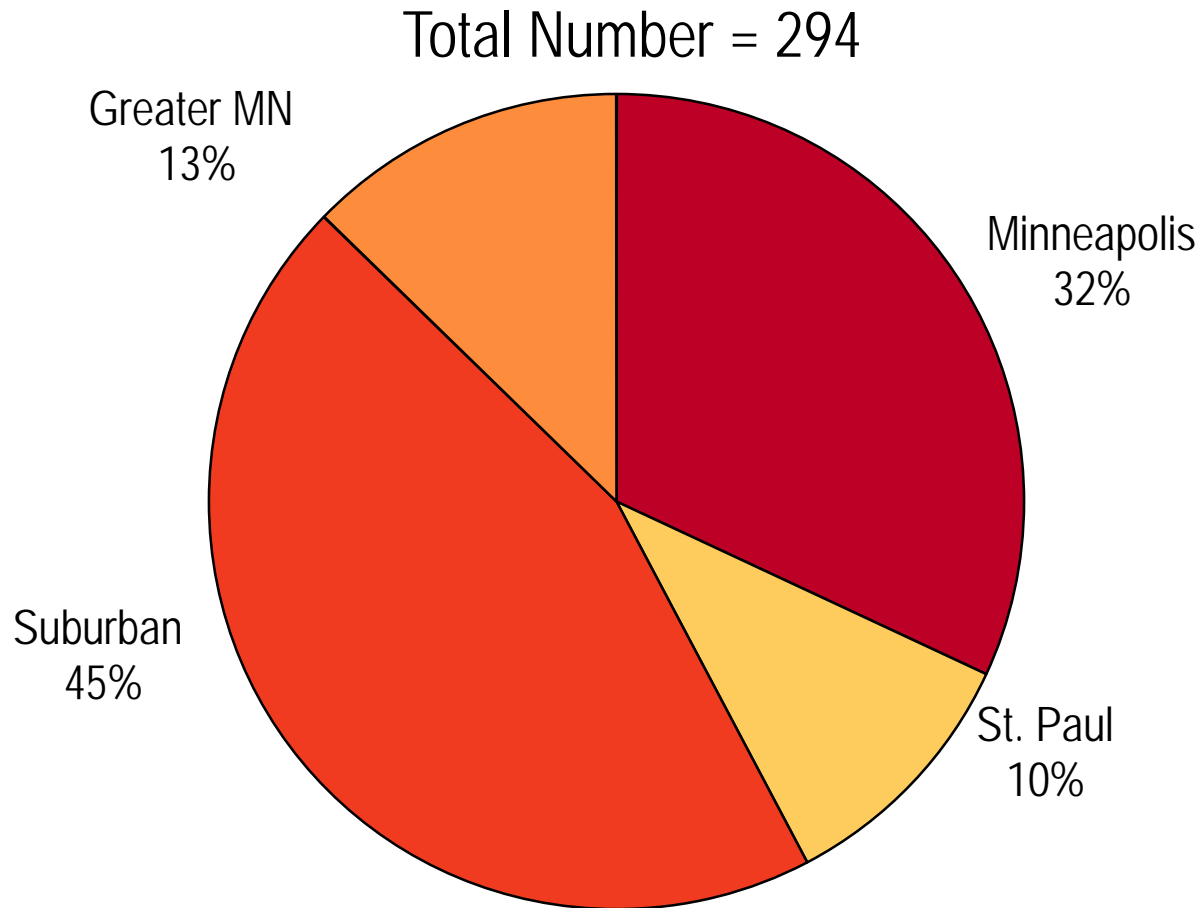
Total number (Metro only) = 255
7-county metro area, excluding the cities of Minneapolis and St. Paul

* HIV or AIDS at first diagnosis

^Counties in which a state correctional facility is located.



HIV Diagnoses* in Minnesota by Residence at Diagnosis, 2015

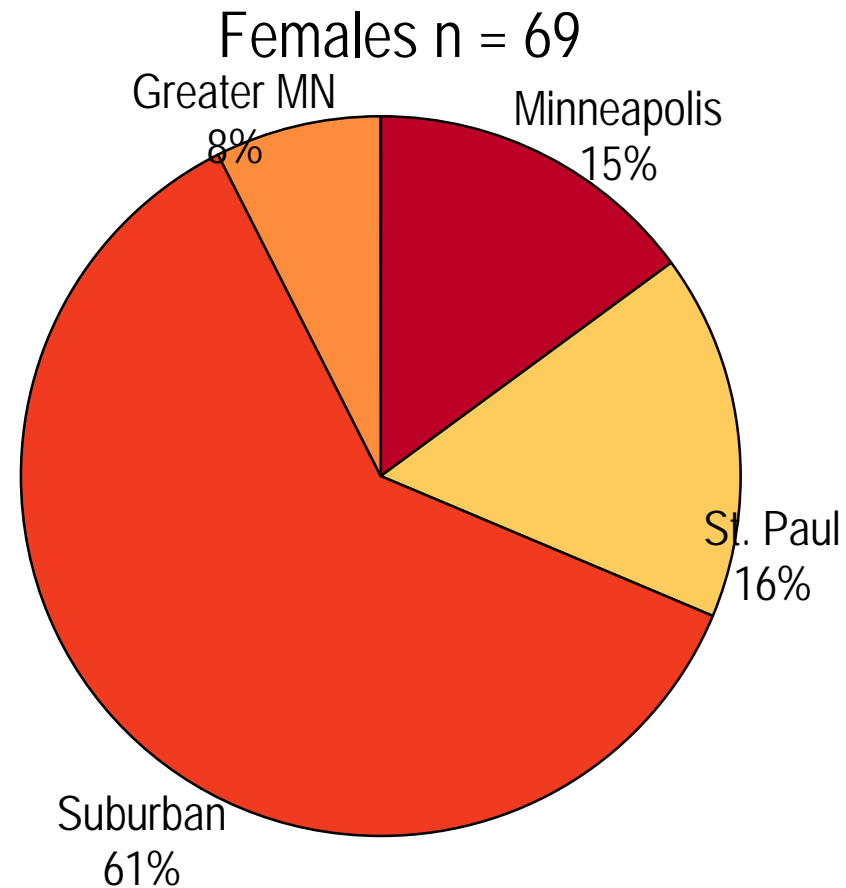
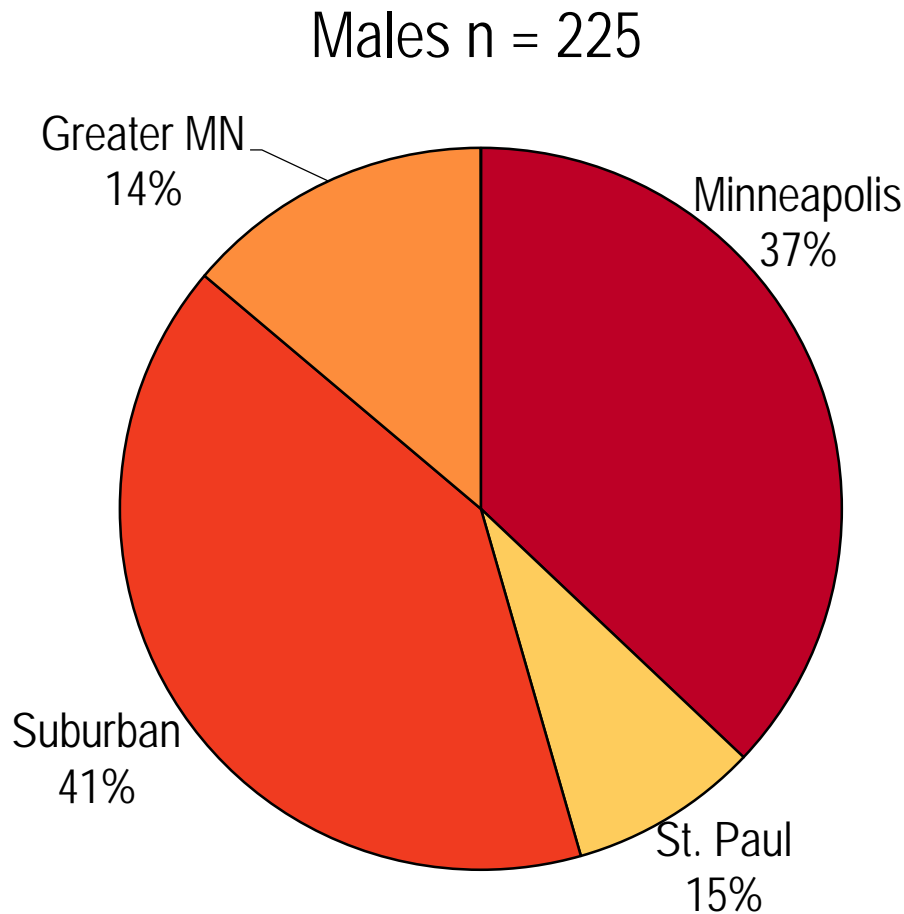


Suburban = Seven-county metro area including Anoka, Carver, Dakota, Hennepin (except Minneapolis), Ramsey (except St. Paul), Scott, and Washington counties. Greater MN = All other Minnesota counties, outside the seven-county metro area.

* HIV or AIDS at first diagnosis



HIV Diagnoses* in Minnesota by Gender and Residence at Diagnosis, 2015



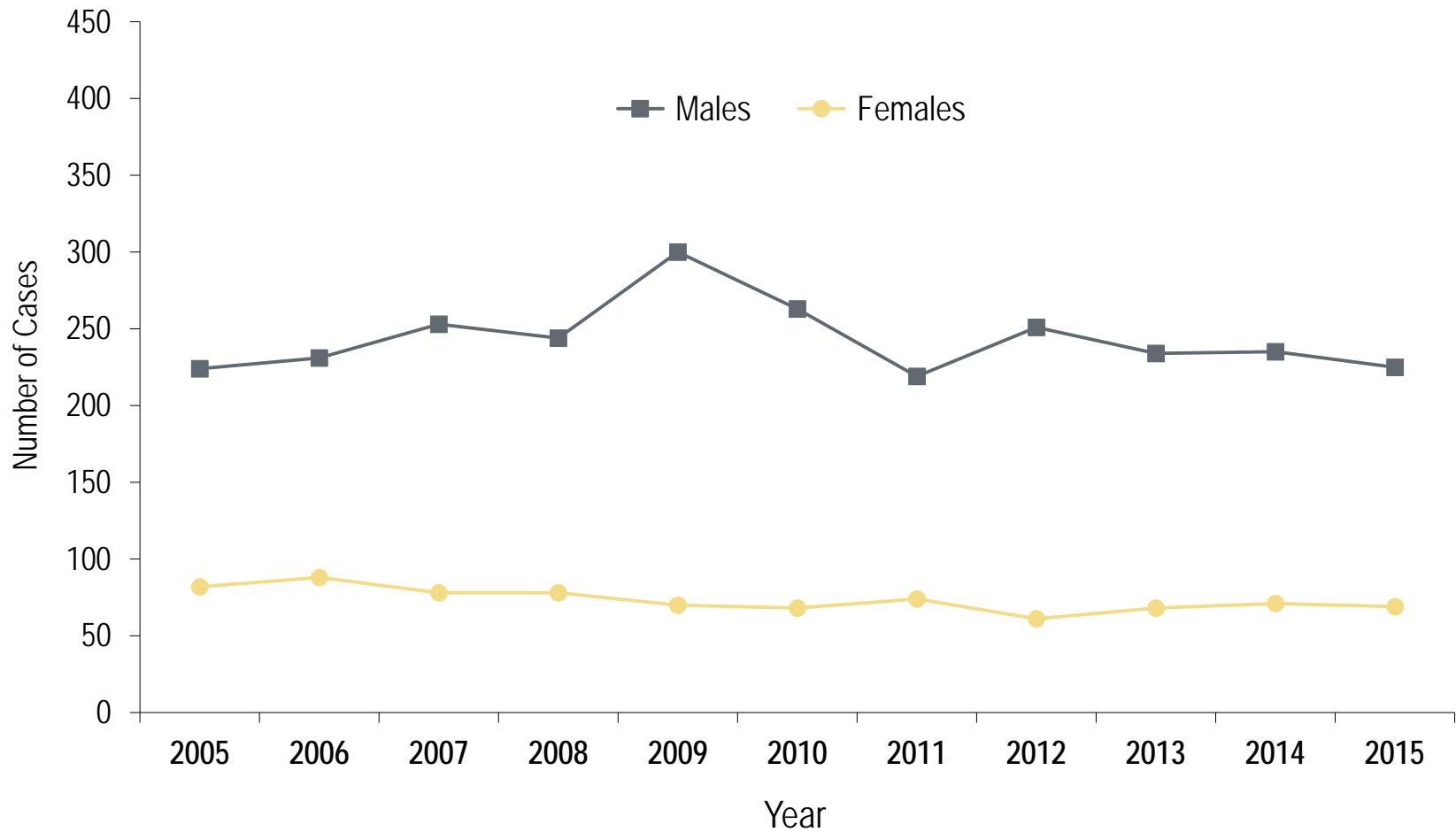
Suburban = Seven-county metro area including Anoka, Carver, Dakota, Hennepin (except Minneapolis), Ramsey (except St. Paul), Scott, and Washington counties. Greater MN = All other Minnesota counties, outside the seven-county metro area.

* HIV or AIDS at first diagnosis

Gender and Race/Ethnicity



HIV Diagnoses* by Gender and Year of Diagnosis, 2005 - 2015

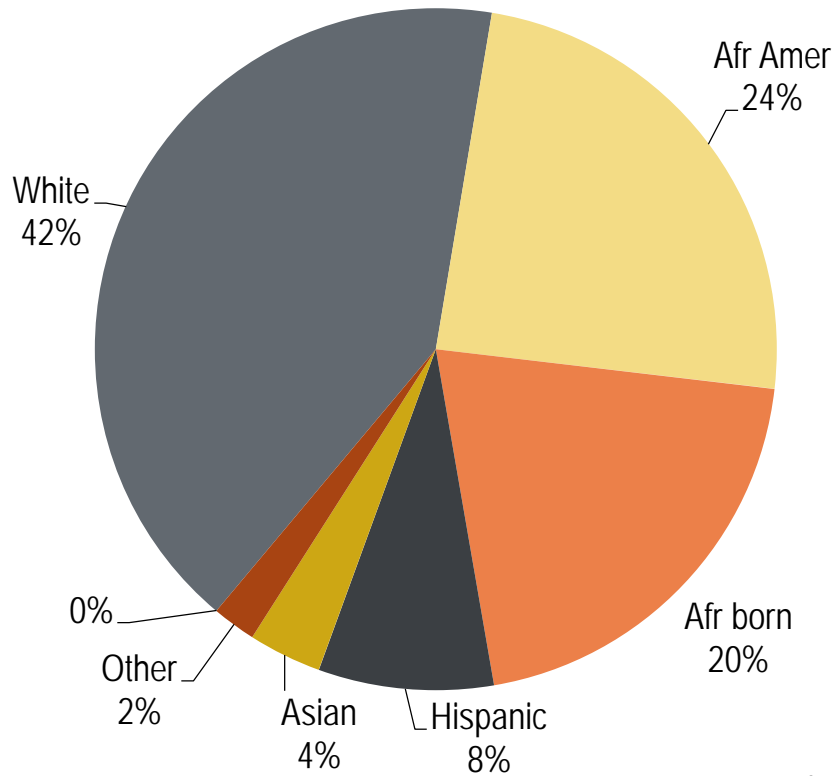


* HIV or AIDS at first diagnosis

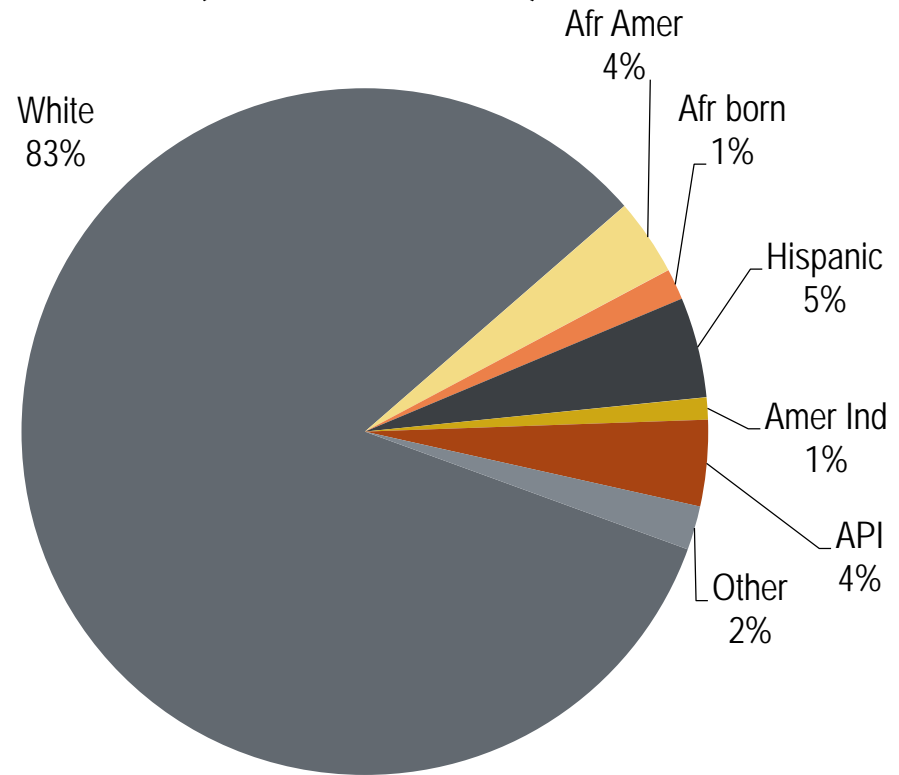


HIV Diagnoses* in Year 2015 and General Population in Minnesota by Race/Ethnicity

HIV Diagnoses
(n = 294)



Population†
(n = 5,303,925)



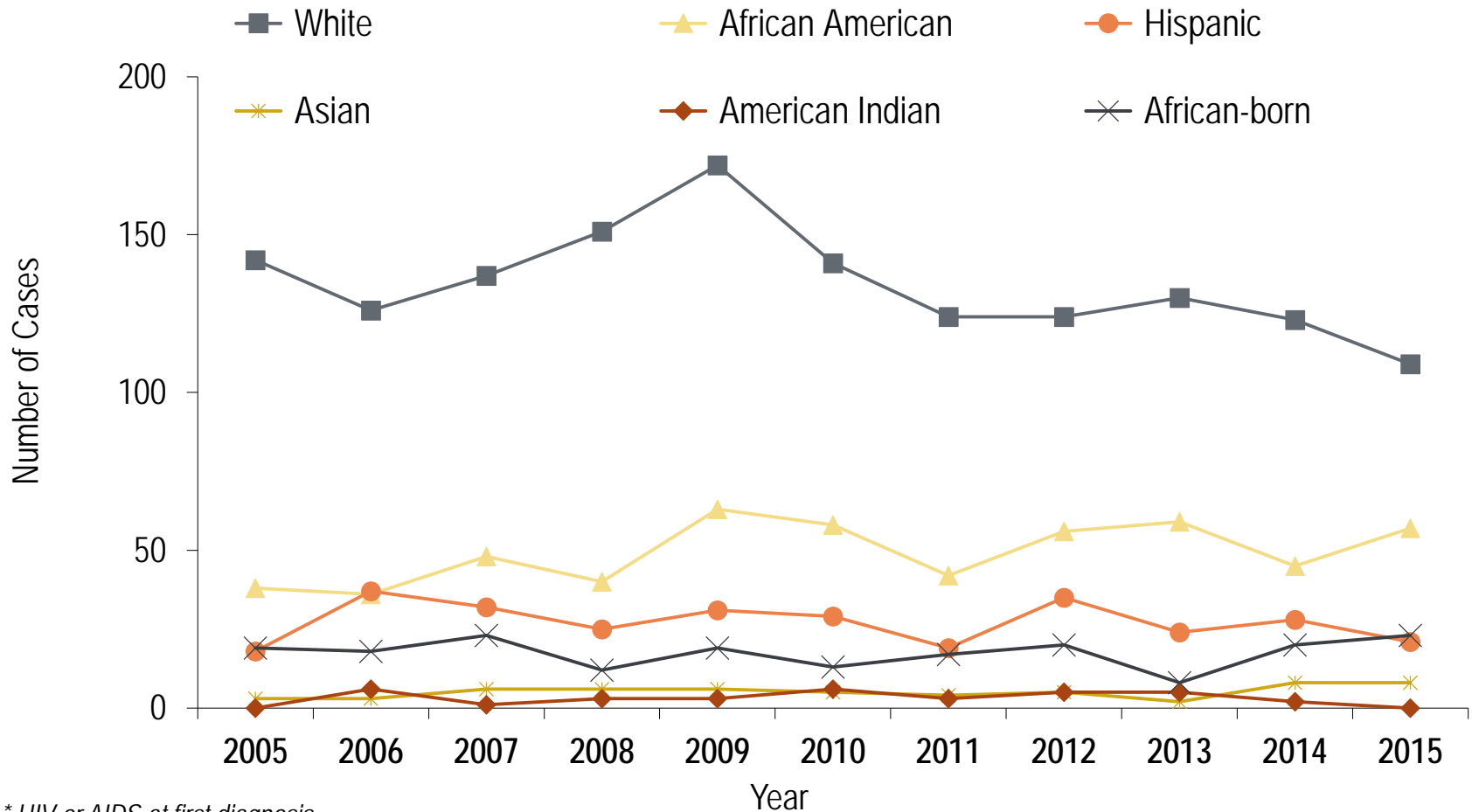
* HIV or AIDS at first diagnosis

† Population estimates based on 2010 U.S. Census data.

n = Number of persons Amer Ind = American Indian
 Afr Amer = African American (Black, not African-born persons)
 Afr born = African-born (Black, African-born persons)



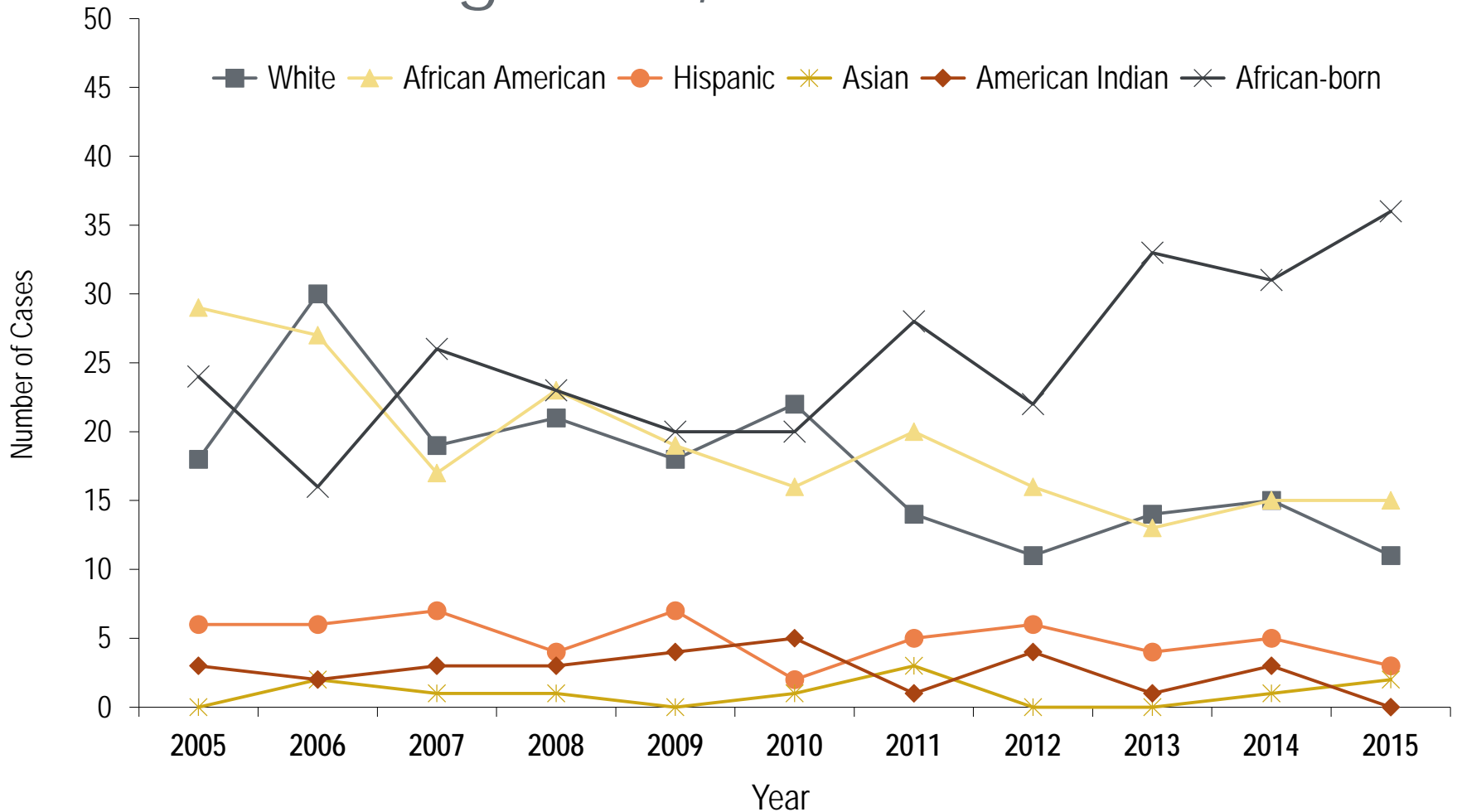
HIV Diagnoses* Among Males by Race/Ethnicity† and Year of Diagnosis, 2005 - 2015



* HIV or AIDS at first diagnosis

† "African-born" refers to Blacks who reported an African country of birth; "African American" refers to all other Blacks. Cases with unknown or multiple races are excluded.

HIV Diagnoses* Among Females by Race/Ethnicity† and Year of Diagnosis, 2005 – 2015



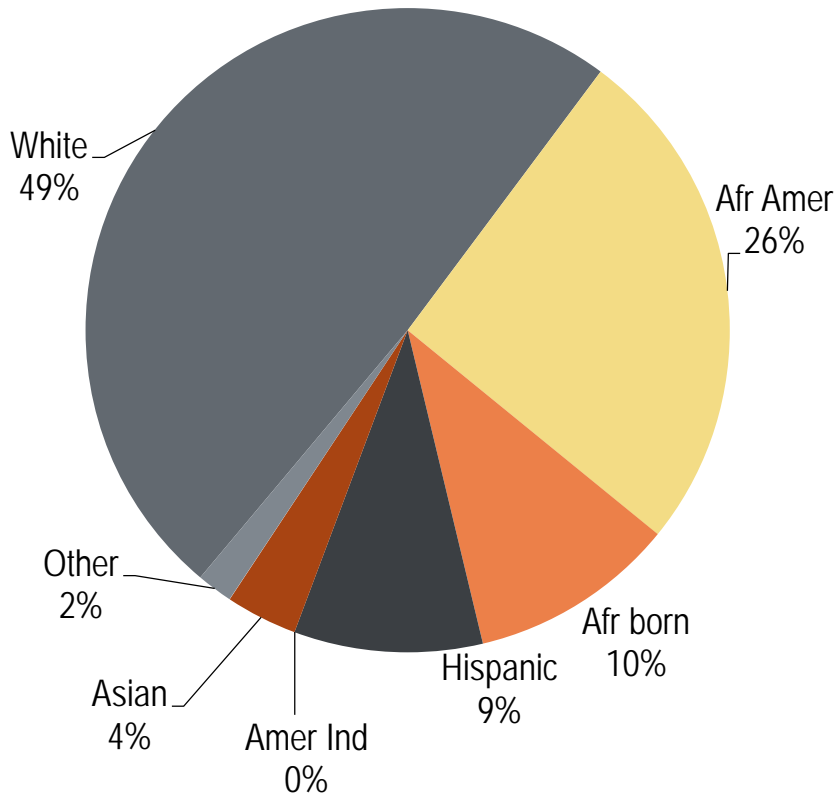
* HIV or AIDS at first diagnosis

† "African-born" refers to Blacks who reported an African country of birth; "African American" refers to all other Blacks. Cases with unknown race are excluded.

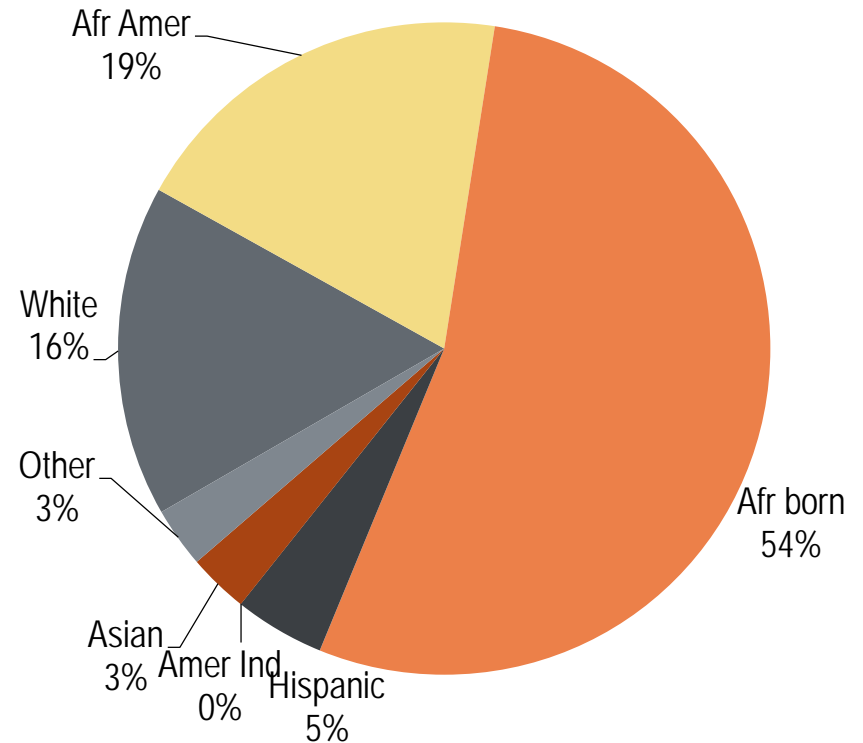


HIV Diagnoses* Diagnosed in Year 2015 by Gender and Race/Ethnicity

Males (n = 225)



Females (n = 68)



* HIV or AIDS at first diagnosis

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 HIV Diagnoses* by Race/Ethnicity[†]– Minnesota, 2015

<i>Race/Ethnicity</i>	<i>Cases</i>	<i>%</i>	<i>Rate</i>
White, non-Hispanic		42%	2.7
Black, African-American	70	24%	36.5
Black, African-born	59	20%	76.1^{††}
Hispanic	24	8%	9.6
American Indian	0	0%	0.0
Asian/Pacific Islander	10	3%	4.7
Other [^]	6	2%	#
<i>Total</i>	289	100%	5.4

* HIV or AIDS at first diagnosis; 2010 U.S. Census Data used for rate calculations.

[†] "African-born" refers to Blacks who reported an African country of birth; "African American" refers to all other Blacks.

^{††} Estimate of 77,557 Source: 2010-2012 American Community Survey. Additional calculations by the State Demographic Center.

[^] Other = Multi-racial persons or persons with unknown or missing race

#-Number of cases too small to calculate reliable rate



Number of Cases and Rates (per 100,000 persons) of Adult and Adolescent HIV Diagnoses** by Gender/Risk†, Minnesota, 2015

<i>Gender/Risk</i>	<i>Cases</i>	<i>%</i>	<i>Rate</i>
Men (Total)	(225)	76%	8.5
<i>MSM†</i>	156	69%	168.1^{††}
<i>Non-MSM</i>	69	31%	2.7
Women	68	23%	2.5
<i>Total</i>	294	100%	5.5

**HIV or AIDS at first diagnosis over the age of 13

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

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

†† Estimate of 92,788



Number of Cases of Adult and Adolescent HIV Diagnoses** by Gender Identity and Risk†, Minnesota, 2015

<i>Gender/Risk</i>	<i>Cases</i>	<i>%</i>
Men (Total)	(220)	75%
<i>MSM†</i>	152	69%
<i>Non-MSM</i>	68	31%
Women	68	23%
Transgender (Total)	5	2%
<i>Male to Female</i>	5	100%
<i>Female to Male</i>	0	0%
<i>Total</i>	294	100%

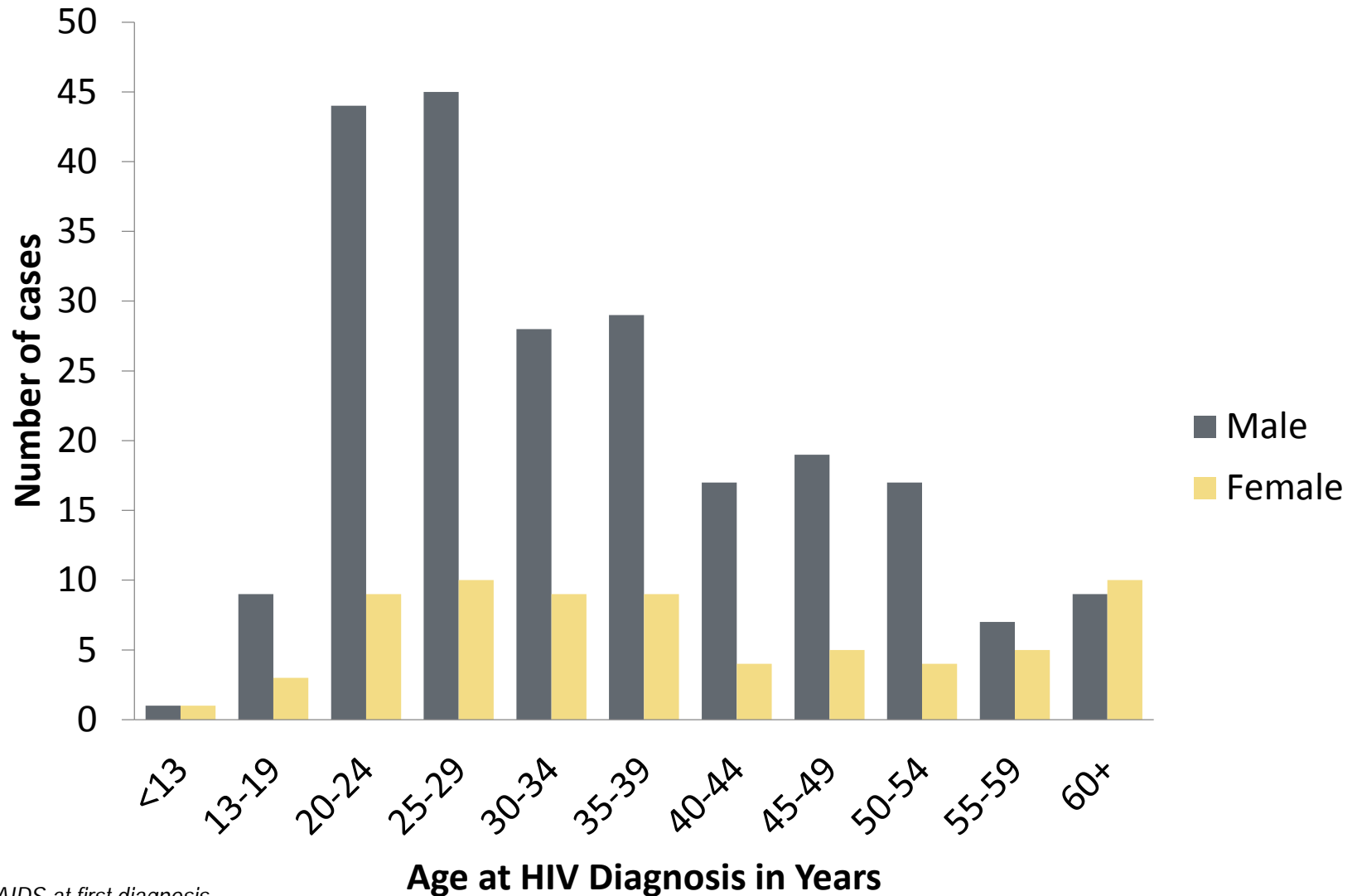
**HIV or AIDS at first diagnosis over the age of 13

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

Age



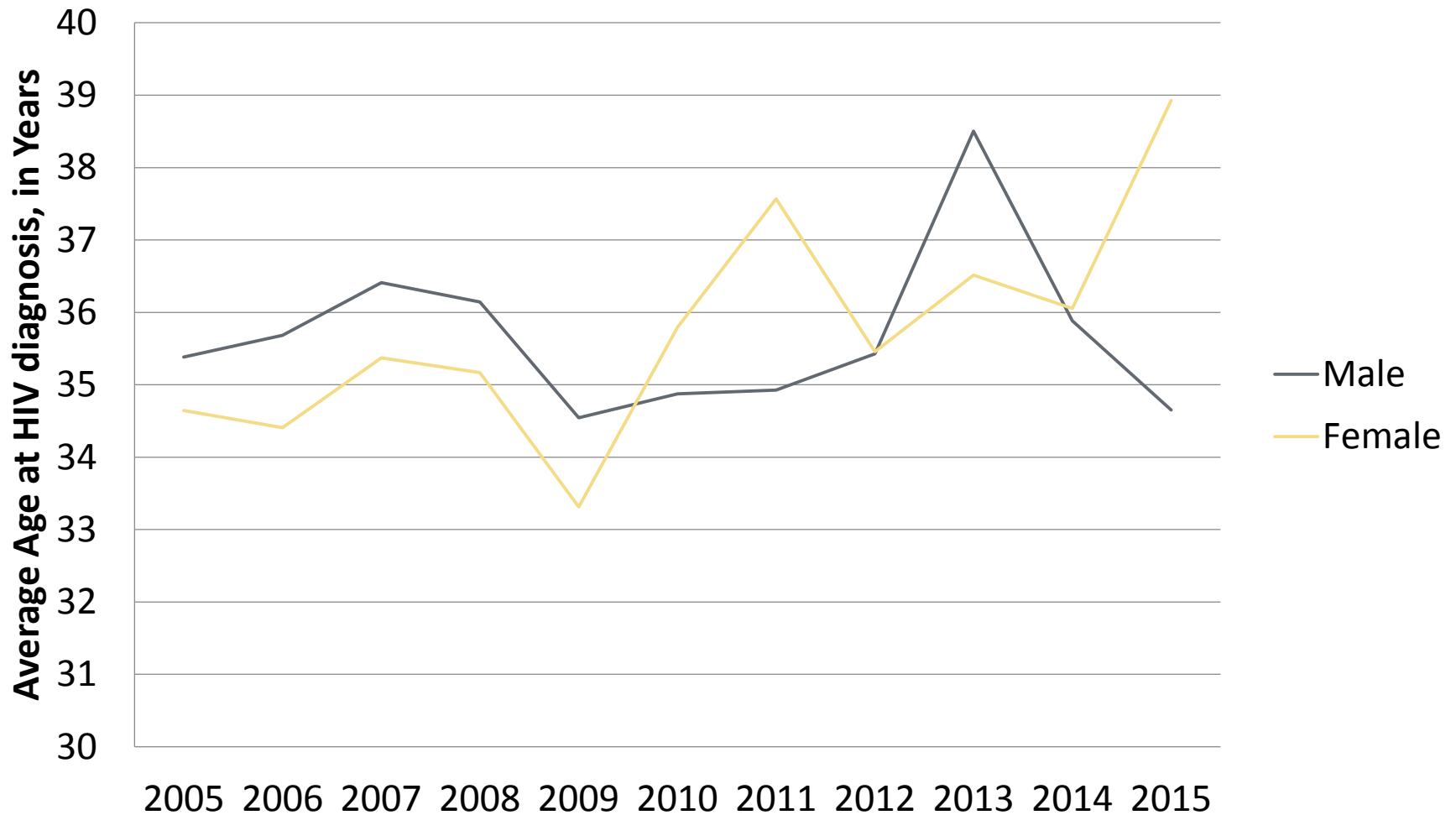
Age at HIV Diagnosis* by Sex at Birth, 2015



* HIV or AIDS at first diagnosis



Average Age at HIV Diagnosis* by Sex at Birth, 2005-2015



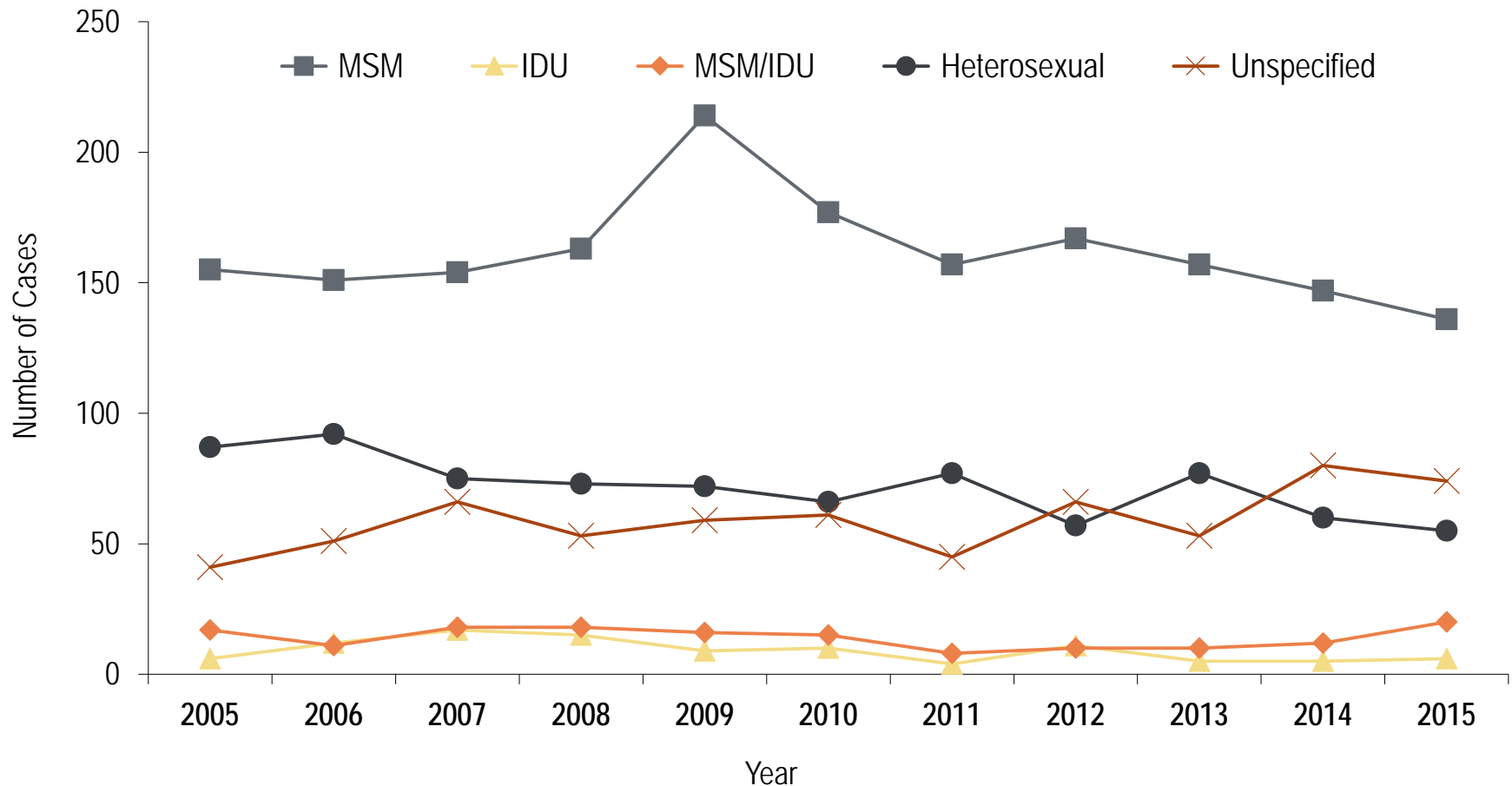
* HIV or AIDS at first diagnosis



Mode of Exposure



HIV Diagnoses* by Mode of Exposure and Year, 2005 - 2015



MSM = Men who have sex with men

IDU = Injecting drug use

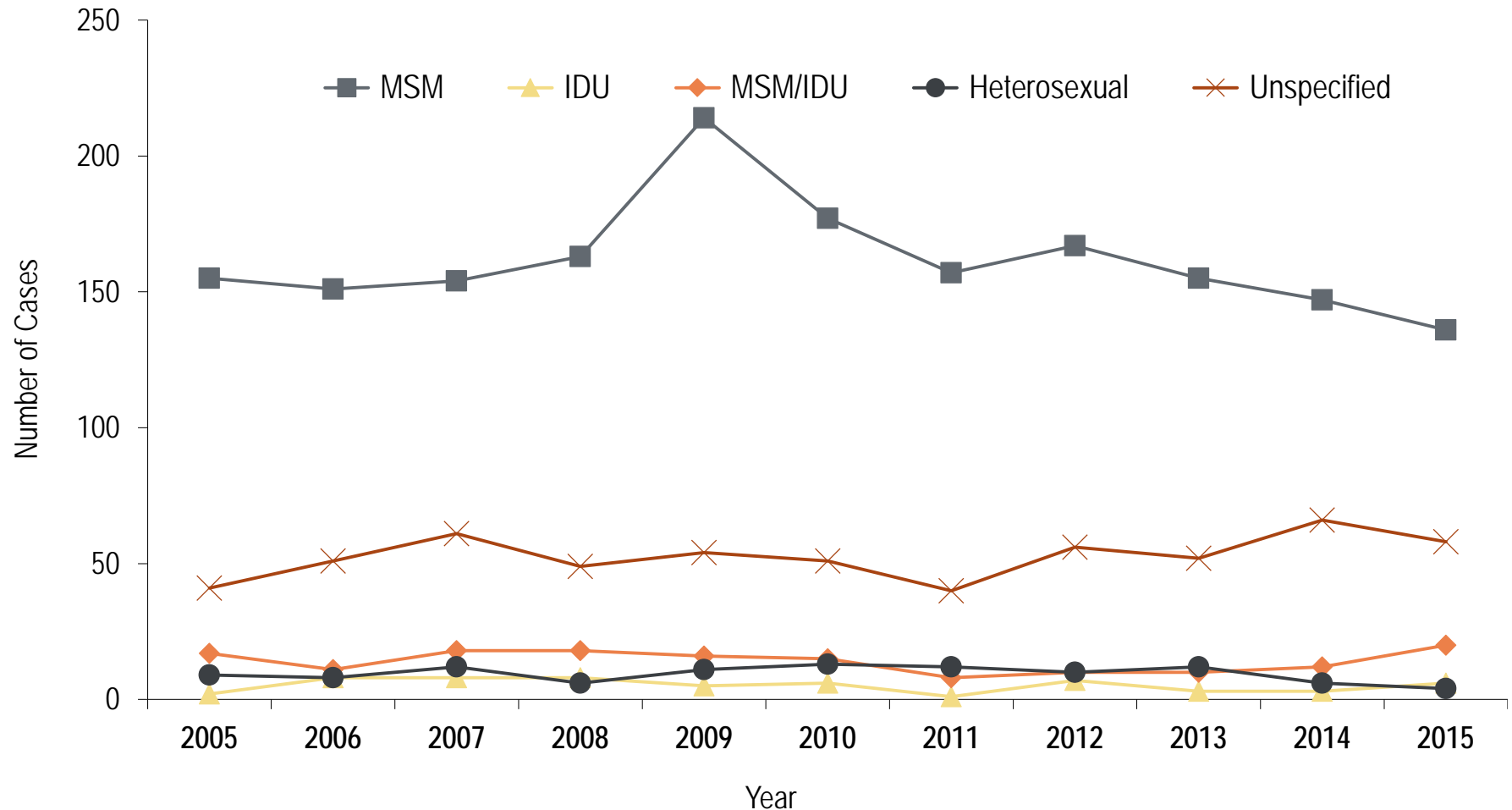
Heterosexual = Heterosexual contact

* HIV or AIDS at first diagnosis

Unspecified = No mode of exposure ascertained



HIV Diagnoses* Among Males by Mode of Exposure and Year, 2005 - 2015



MSM = Men who have sex with men

IDU = Injecting drug use

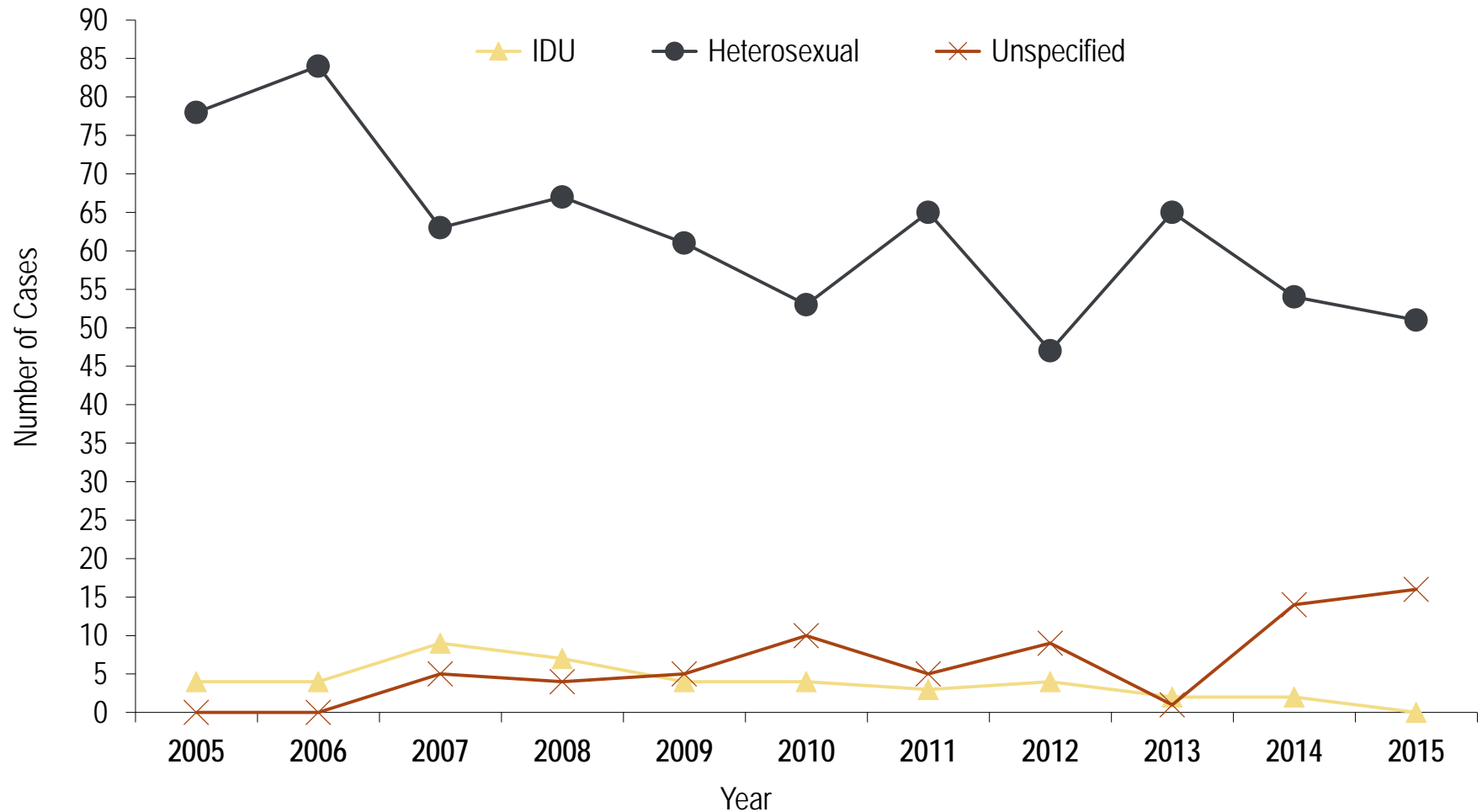
Heterosexual = Heterosexual contact

* HIV or AIDS at first diagnosis

Unspecified = No mode of exposure ascertained



HIV Diagnoses* Among Females by Mode of Exposure and Year of Diagnosis, 2005 - 2015



IDU = Injecting drug use Heterosexual = Heterosexual contact with HIV+ , bisexual, IDU, hemophiliac/blood project or organ transplant recipient, or with partner with unknown risk

Unspecified = No mode of exposure ascertained

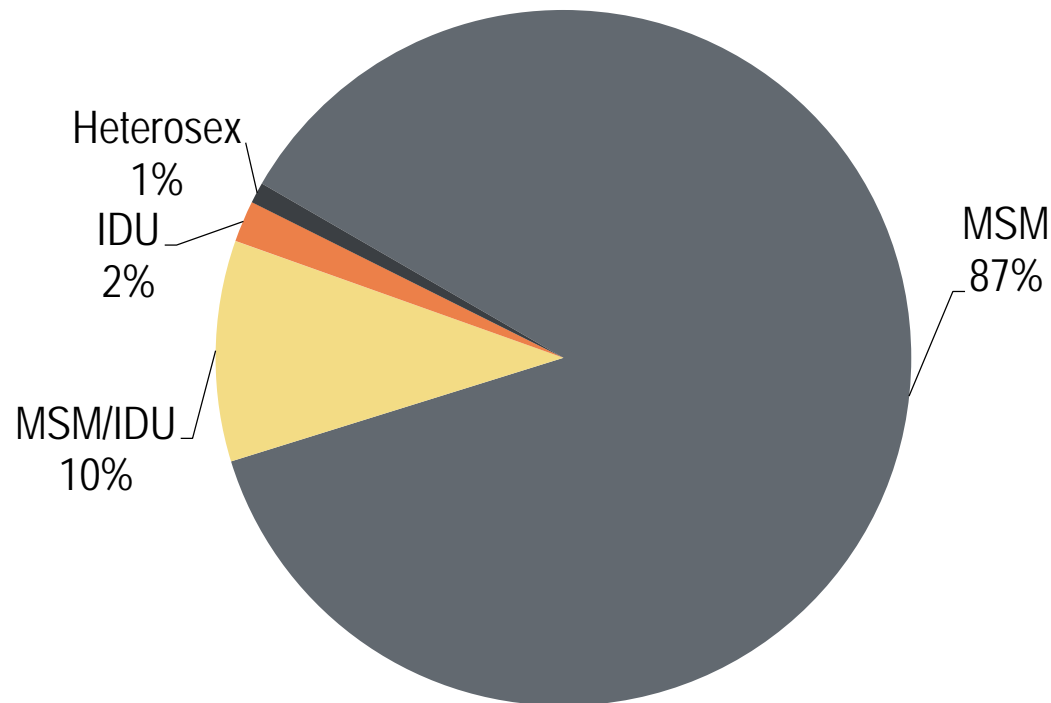
* HIV or AIDS at first diagnosis

HIV/AIDS in Minnesota: Annual Review



HIV Diagnoses* by Estimated Mode of Exposure† 2013–2015 combined

White Males (n = 362)



n = Number of persons MSM = Men who have sex with men IDU = Injecting drug use Heterosex = Heterosexual contact

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

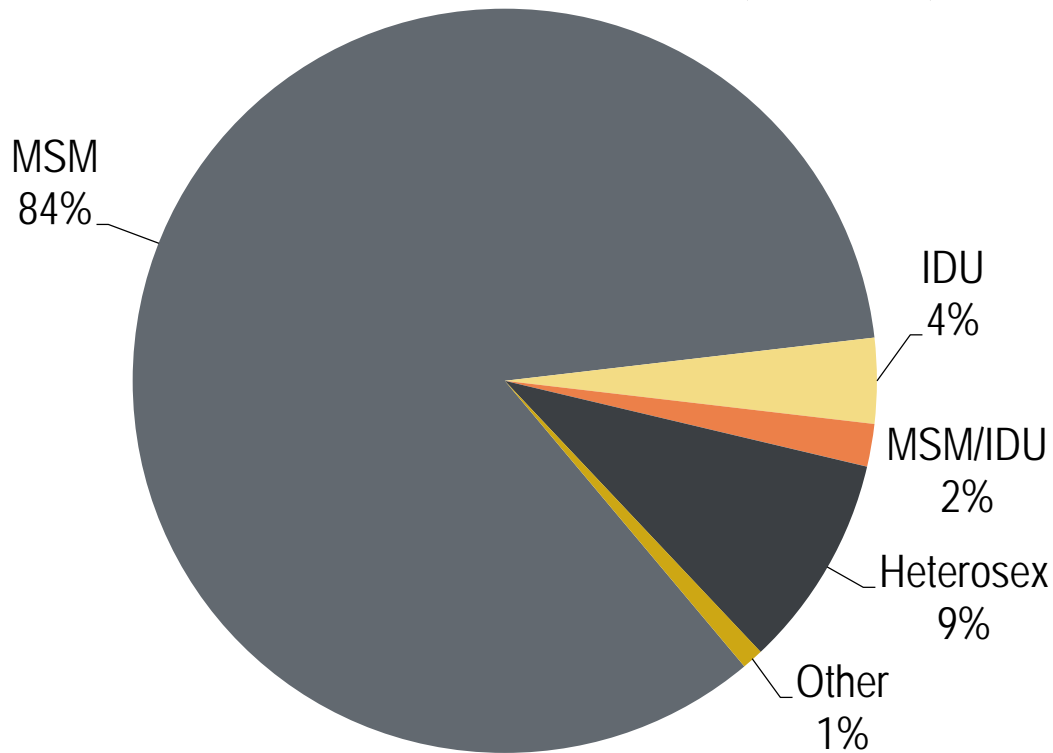
* HIV or AIDS at first diagnosis

† Mode of Exposure proportions have been estimated using cases for 2013-2015 with known risk. For more detail see the HIV Surveillance Technical notes.



HIV Diagnoses* by Estimated Mode of Exposure† 2013 - 2015 combined

African American Males†† (n = 161)



n = Number of persons MSM = Men who have sex with men IDU = Injecting drug use Heterosex = Heterosexual contact

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

* HIV or AIDS at first diagnosis

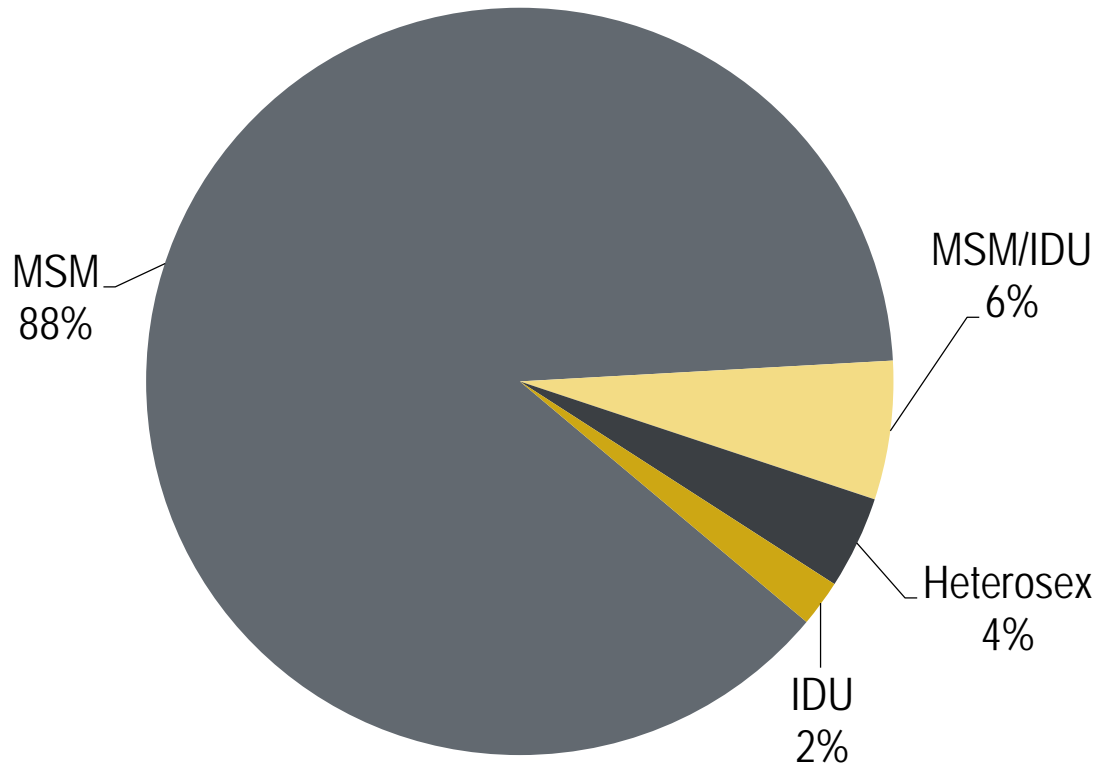
† Mode of Exposure proportions have been estimated using cases for 2013-2015 with known risk. For more detail see the HIV Surveillance Technical notes.

†† Refers to Black, African American (not African-born) males.



HIV Diagnoses* by Estimated Mode of Exposure† 2013 - 2015 combined

Hispanic Males (n =73)



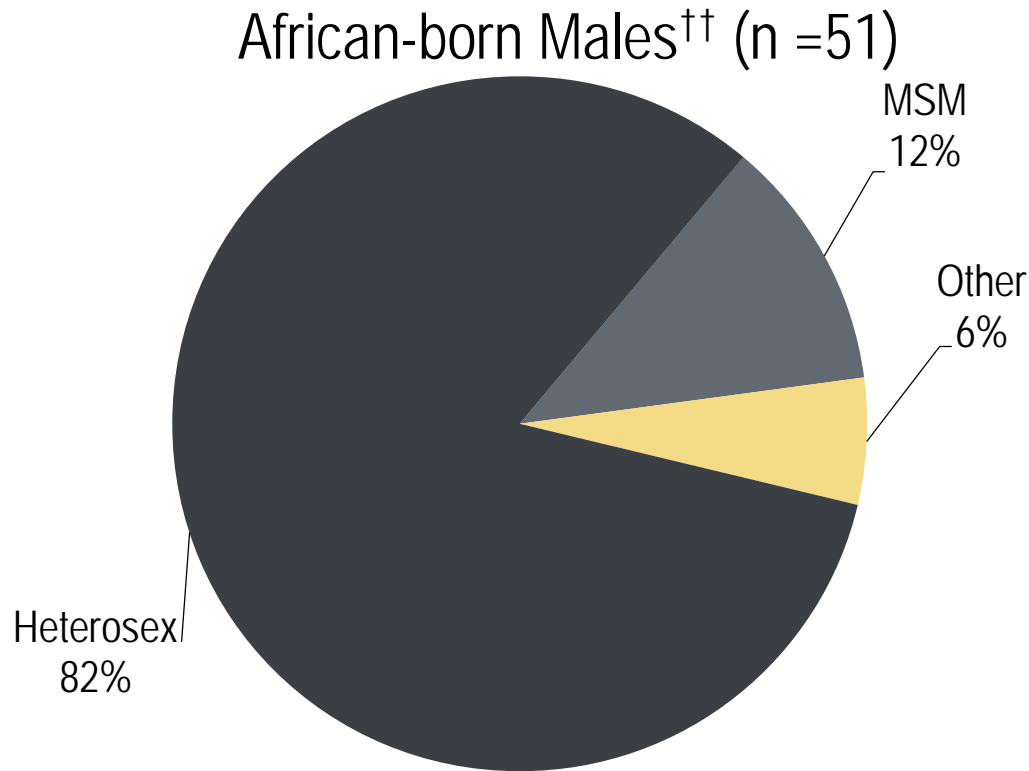
n = Number of persons MSM = Men who have sex with men IDU = Injecting drug use Heterosex = Heterosexual contact

* HIV or AIDS at first diagnosis

† Mode of Exposure proportions have been estimated using cases for 2013-2015 with known risk. For more detail see the HIV Surveillance Technical notes.



HIV Diagnoses* by Estimated Mode of Exposure† 2013 - 2015 combined



MSM = Men who have sex with men Heterosex = Heterosexual contact Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk
n = number of persons

* HIV or AIDS at first diagnosis

† Mode of Exposure has been estimated for cases with unknown risk using the following: 5% - MSM, 90% - Heterosexual, and 5%-Other.

For more detail see the HIV Surveillance Technical notes.

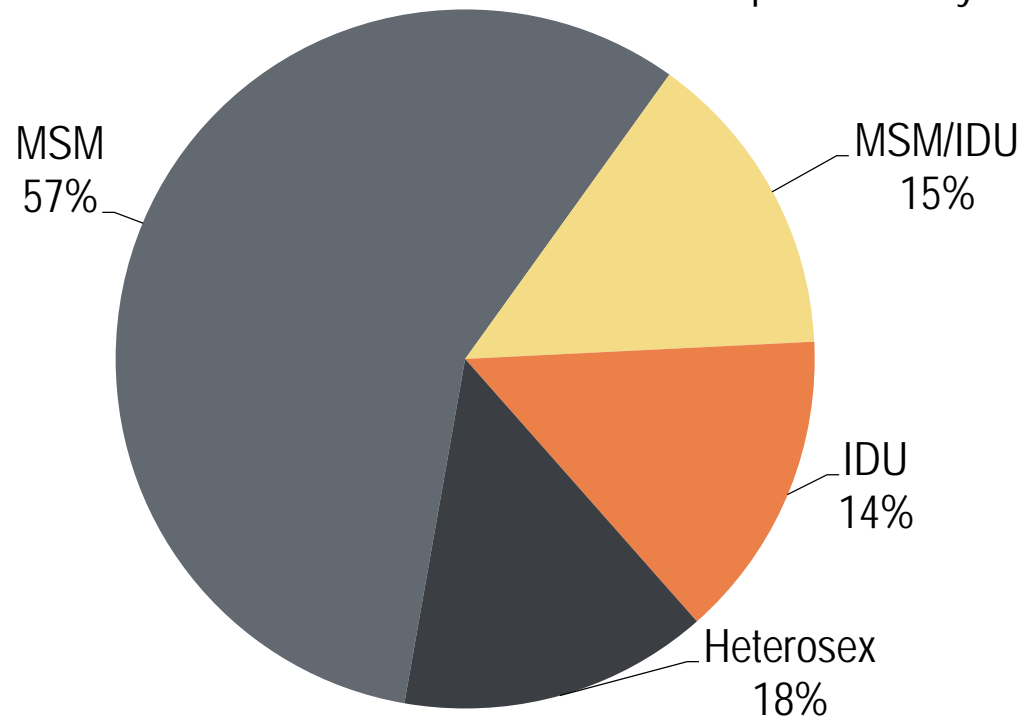
†† Refers to Black, African-born males.



HIV Diagnoses* by Estimated Mode of Exposure† 2013 - 2015 combined

American Indian Males (n = 7)

CAUTION: Small number of cases – interpret carefully.



n = Number of persons MSM = Men who have sex with men IDU = Injecting drug use Heterosex = Heterosexual contact

* HIV or AIDS at first diagnosis

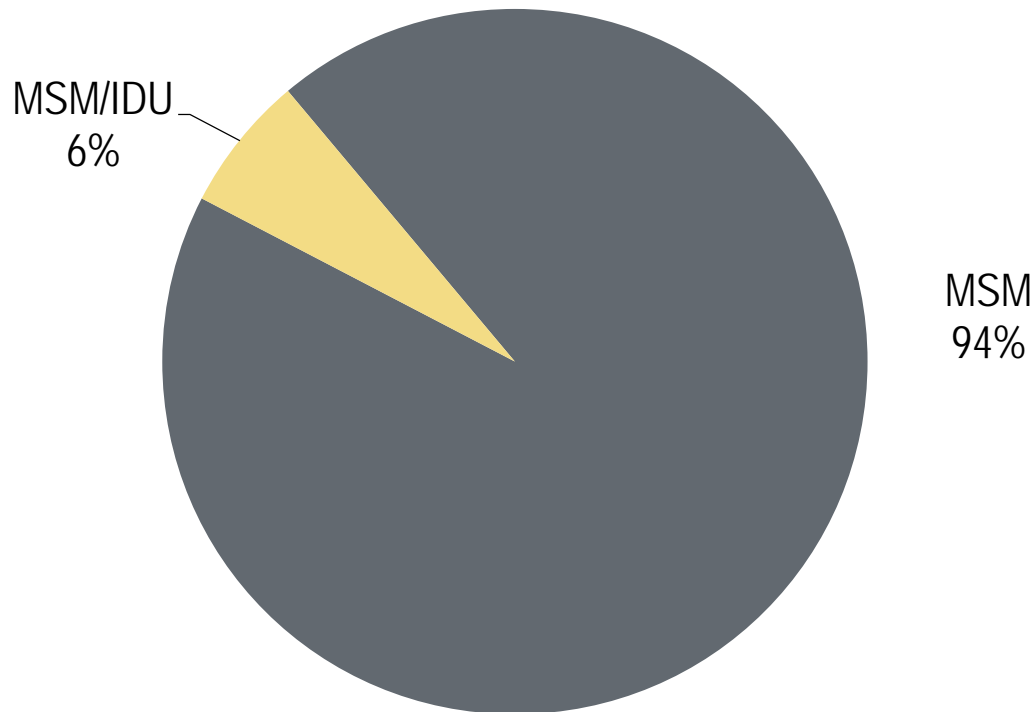
† Mode of Exposure proportions have been estimated using cases for 2013-2015 with known risk. For more detail see the HIV Surveillance Technical notes.



HIV Diagnoses* by Estimated Mode of Exposure† 2013 - 2015 combined

Asian Males (n = 18)

CAUTION: Small number of cases – interpret carefully.



n = Number of persons MSM = Men who have sex with men IDU = Injecting drug use Heterosex = Heterosexual contact

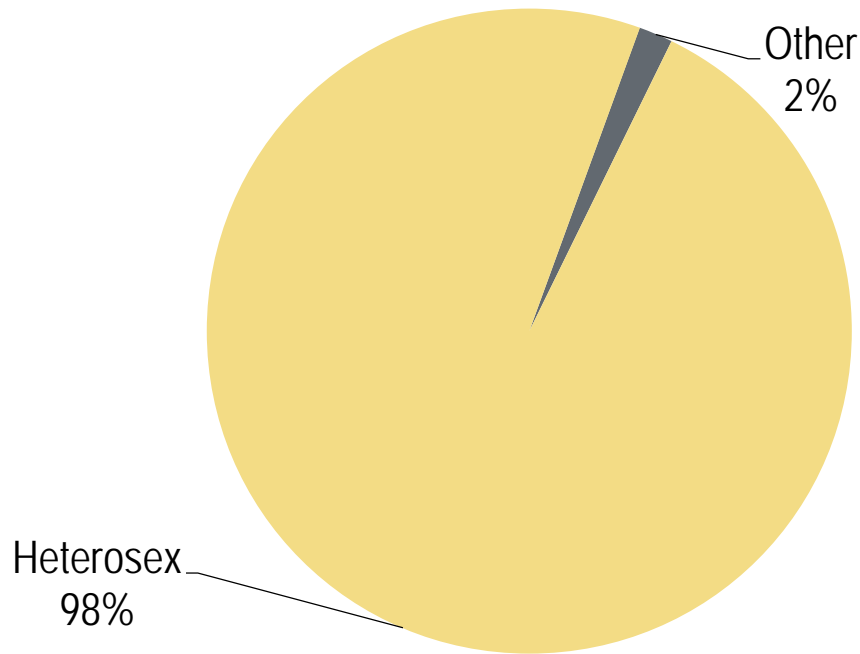
* HIV or AIDS at first diagnosis

† Mode of Exposure proportions have been estimated using cases for 2013-2015 with known risk. For more detail see the HIV Surveillance Technical notes.



HIV Diagnoses* by Estimated Mode of Exposure[†] 2013 - 2015 combined

African-born Females^{††} (n = 100)



n = Number of persons Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk Heterosex = Heterosexual contact

* HIV or AIDS at first diagnosis

[†] Mode of Exposure has been estimated for cases with unknown risk using the following: 95% - Heterosexual and 5%-Other.

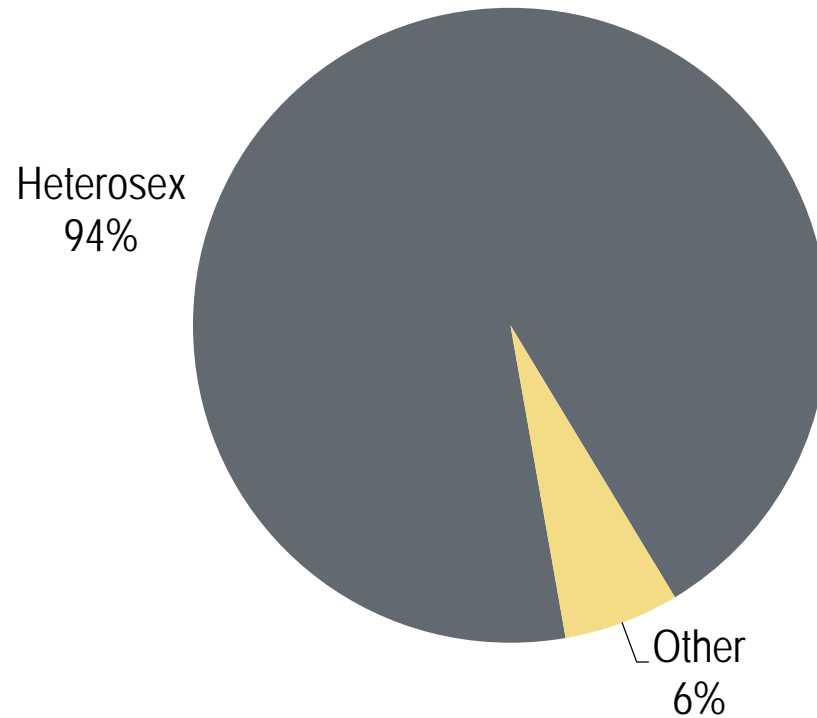
For more detail see the HIV Surveillance Technical notes.

^{††} Refers to Black, African-born females.



HIV Diagnoses* by Estimated Mode of Exposure† 2013 - 2015 combined

African American Females†† (n = 43)



IDU = Injecting drug use Heterosex = Heterosexual contact Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

n = Number of persons

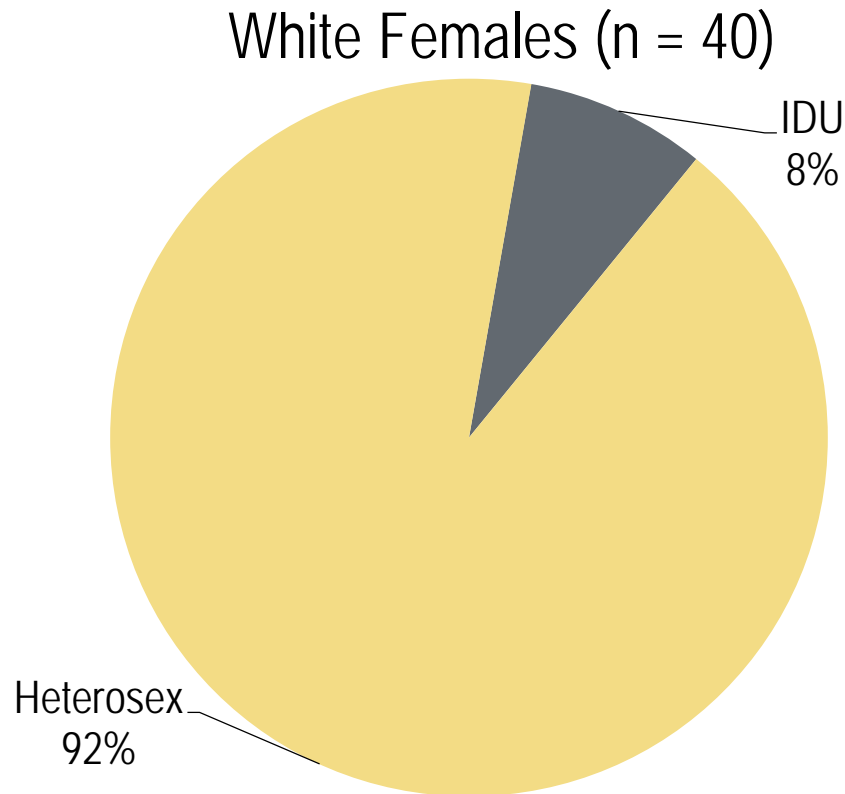
* HIV or AIDS at first diagnosis

† Mode of Exposure proportions have been estimated using cases for 2013-2015 with known risk. For more detail see the HIV Surveillance Technical notes.

†† Refers to Black, African American (not African-born) females.



HIV Diagnoses* by Estimated Mode of Exposure† 2013 - 2015 combined



n = Number of persons IDU = Injecting drug use Heterosex = Heterosexual contact Other = Other risk, including perinatal

* HIV or AIDS at first diagnosis

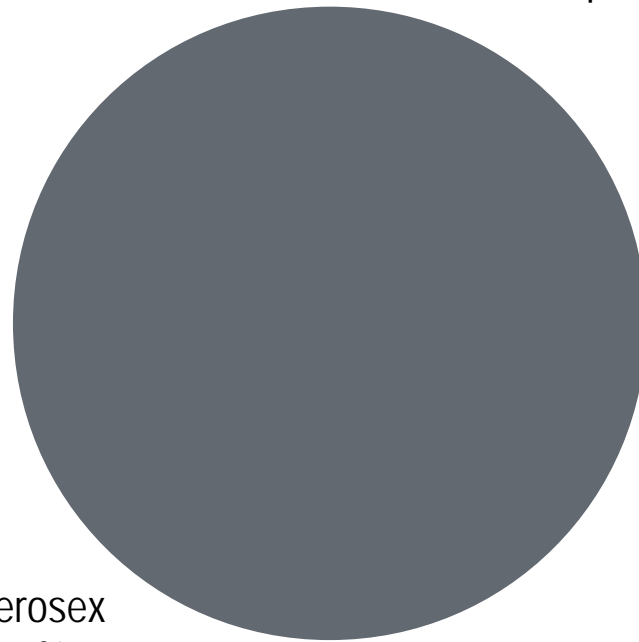
† Mode of Exposure proportions have been estimated using cases for 2013-2015 with known risk. For more detail see the HIV Surveillance Technical notes.



HIV Diagnoses* by Estimated Mode of Exposure† 2013 - 2015 combined

Hispanic Females (n = 12)

CAUTION: Small number of cases – interpret carefully.



Heterosex

100%

IDU = Injecting drug use Heterosex = Heterosexual contact Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

n = Number of persons

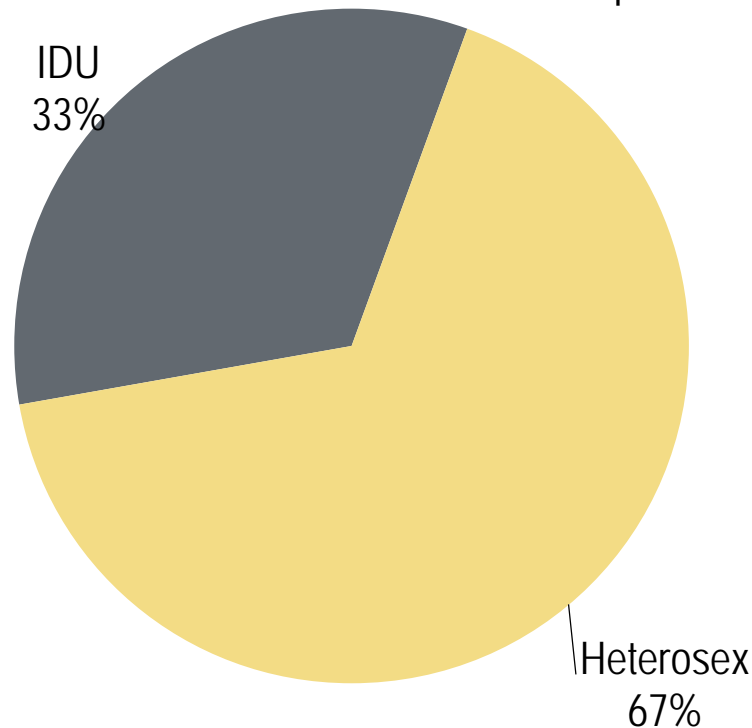
* HIV or AIDS at first diagnosis

† Mode of Exposure proportions have been estimated using cases for 2013-2015 with known risk. For more detail see the HIV Surveillance Technical notes.



HIV Diagnoses* by Estimated Mode of Exposure† 2013 - 2015 combined

American Indian Females (n = 3)
CAUTION: Small number of cases – interpret carefully.



IDU = Injecting drug use

Heterosex = Heterosexual contact

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

n = Number of persons

* HIV or AIDS at first diagnosis

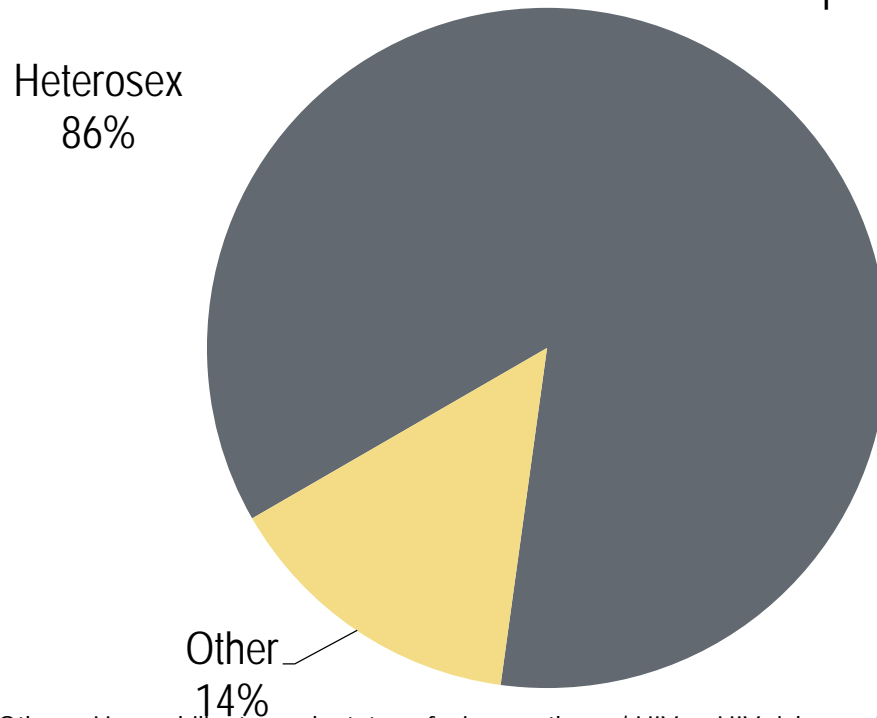
† Mode of Exposure proportions have been estimated using cases for 2013-2015 with known risk. For more detail see the HIV Surveillance Technical notes.



HIV Diagnoses* by Estimated Mode of Exposure† 2013 - 2015 combined

Asian Females (n = 3)

CAUTION: Small number of cases – interpret carefully.



n = Number of persons

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

Heterosex = Heterosexual contact

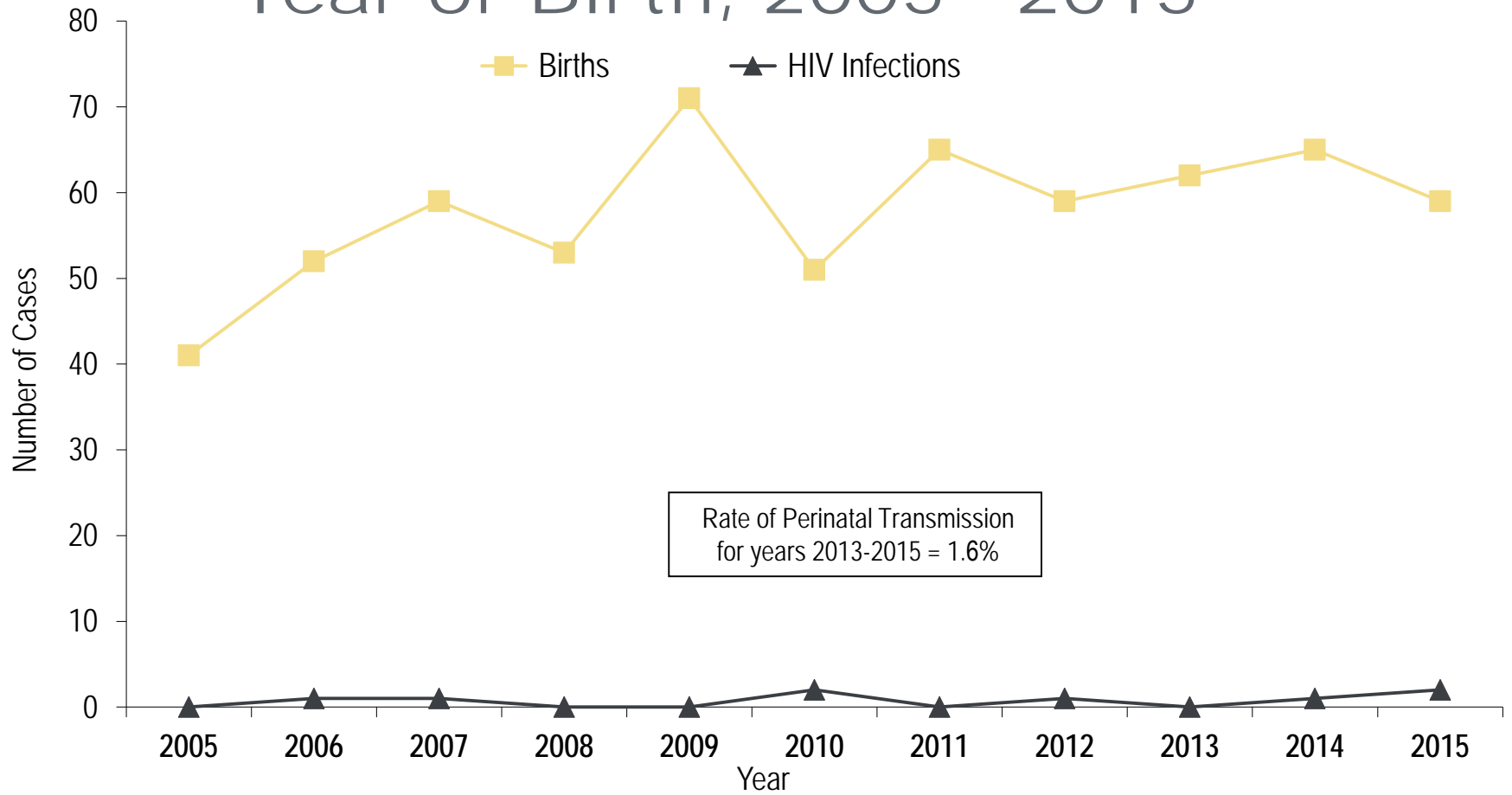
* HIV or AIDS at first diagnosis

† Mode of Exposure has been estimated for cases with unknown risk using the following: 95% - Heterosexual and 5%-Other.

For more detail see the HIV Surveillance Technical notes.



Births to HIV-Infected Women and Number of Perinately Acquired HIV Infections* by Year of Birth, 2005 - 2015



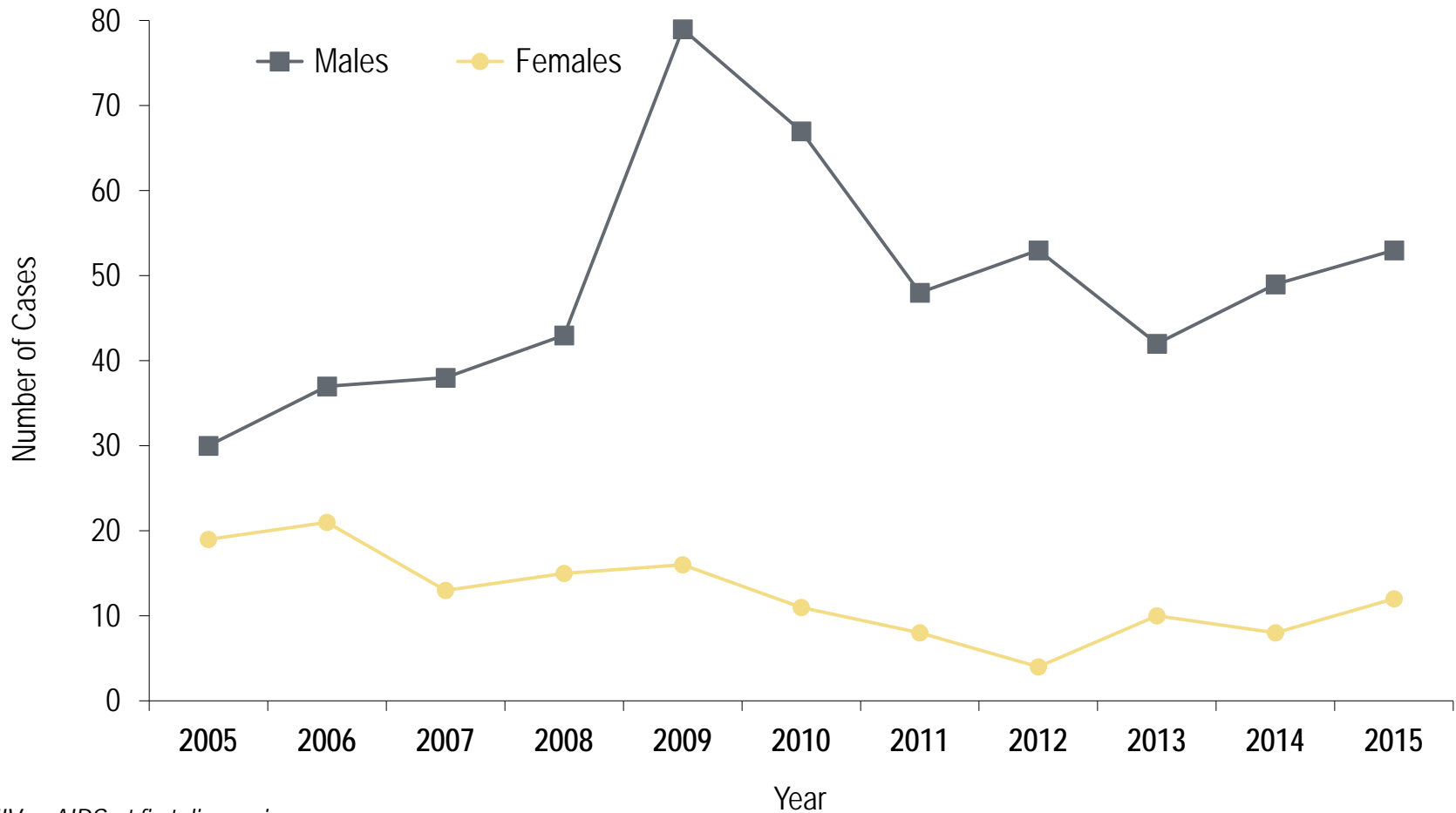
* HIV or AIDS at first diagnosis for a child exposed to HIV during mother's pregnancy, at birth, and/or during breastfeeding.

Adolescents & Young Adults (Ages 13-24)*

** Case numbers are too small to present meaningful data separately for adolescents and young adults.*



HIV Diagnoses* Among Adolescents and Young Adults† by Gender and Year, 2005 - 2015



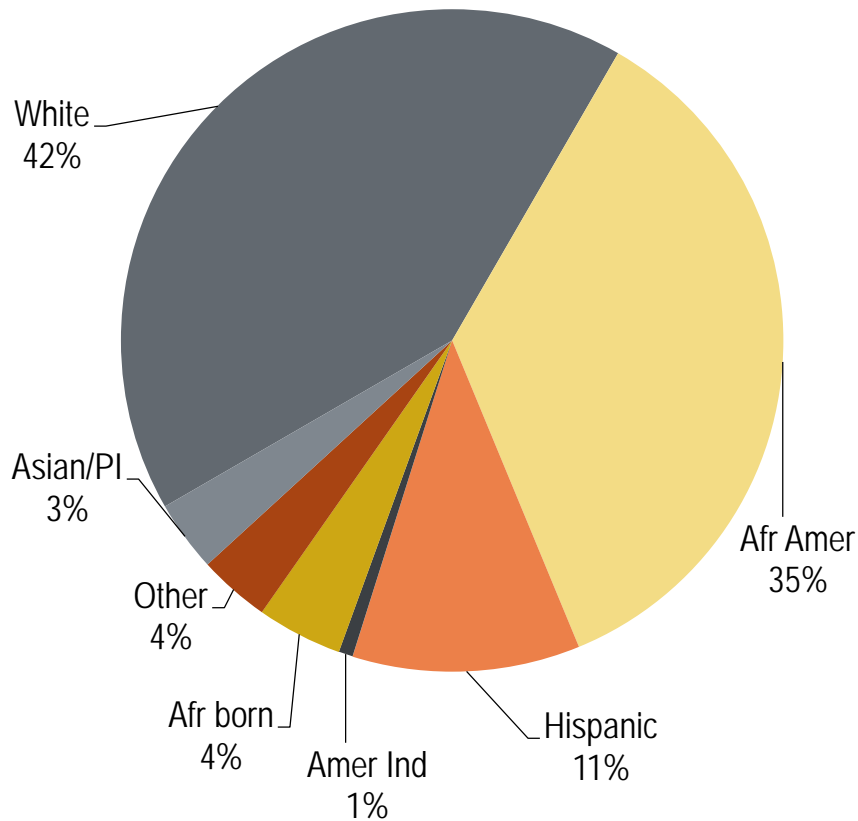
* HIV or AIDS at first diagnosis

† Adolescents defined as 13-19 year-olds; Young Adults defined as 20-24 year-olds.

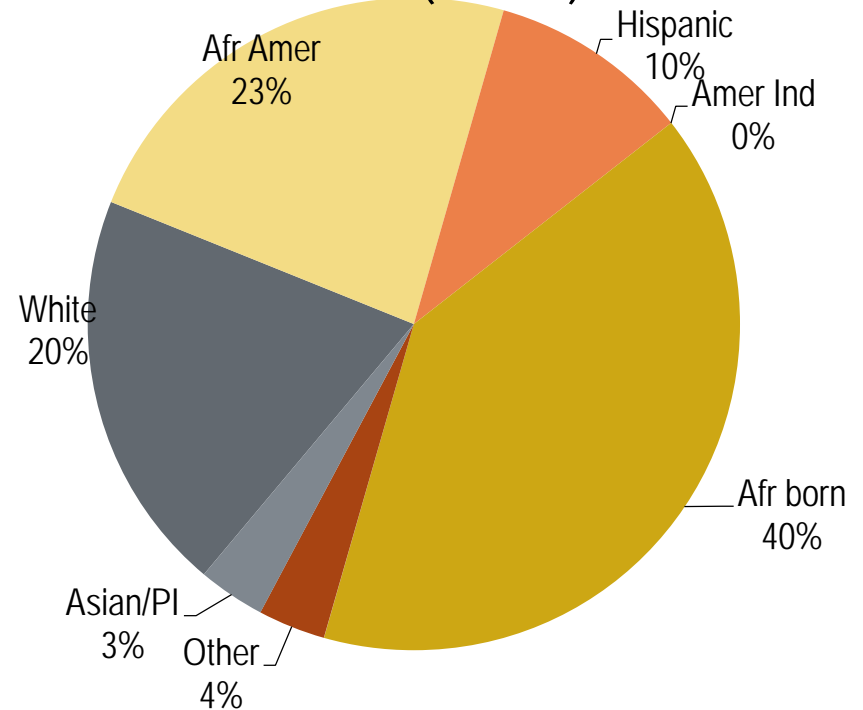


HIV Diagnoses* Among Adolescents and Young Adults† by Gender and Race/Ethnicity, 2013 - 2015 Combined

Males (n = 144)



Females (n = 22)



* HIV or AIDS at first diagnosis

† Adolescents defined as 13-19 year-olds;

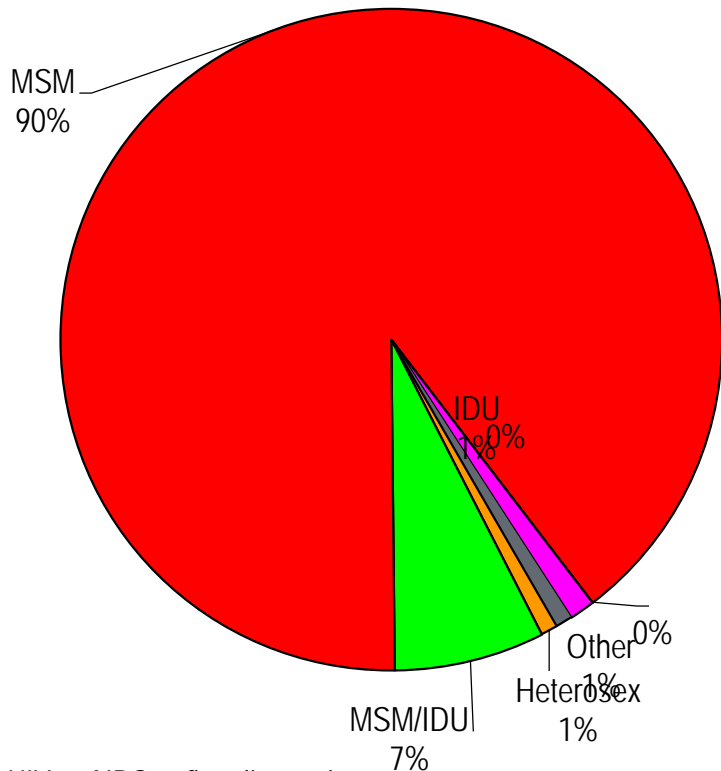
Young Adults defined as 20-24 year-olds.

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

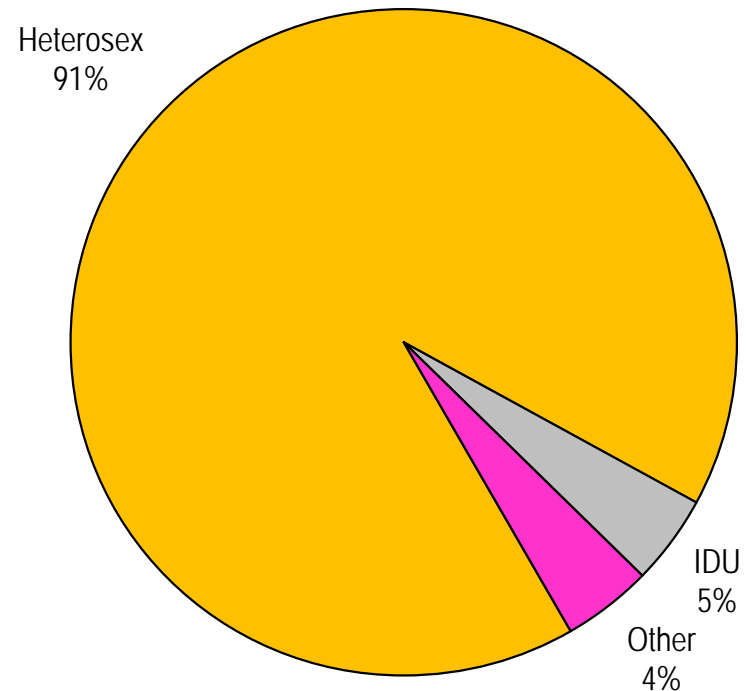


HIV Diagnoses* Among Adolescents and Young Adults† by Gender and Estimated Exposure Group‡, 2013 - 2015 Combined

Males (n = 144)



Females (n = 32)



* HIV or AIDS at first diagnosis

† Adolescents defined as 13-19 year-olds; Young Adults defined as 20-24 year-olds.

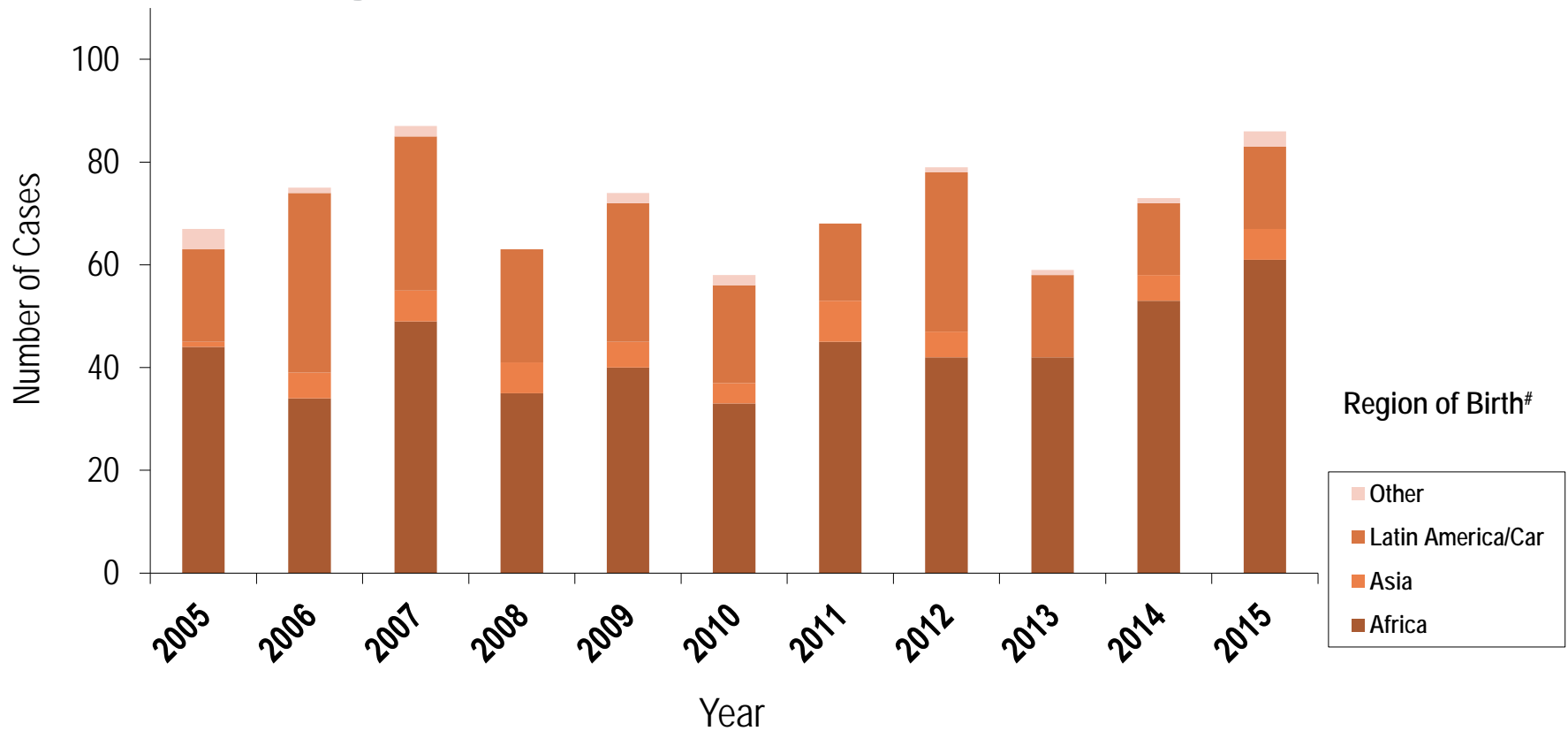
‡ Mode of Exposure proportions have been estimated using cases for 2013-2015 with known risk. For more detail see the HIV Surveillance Technical notes.

n = Number of persons
IDU = Injecting drug use
MSM = Men who have sex with men
Heterosex = Heterosexual contact

Foreign-born Cases



HIV Diagnoses* among Foreign-Born Persons† in Minnesota by Year and Region of Birth, 2005 - 2015



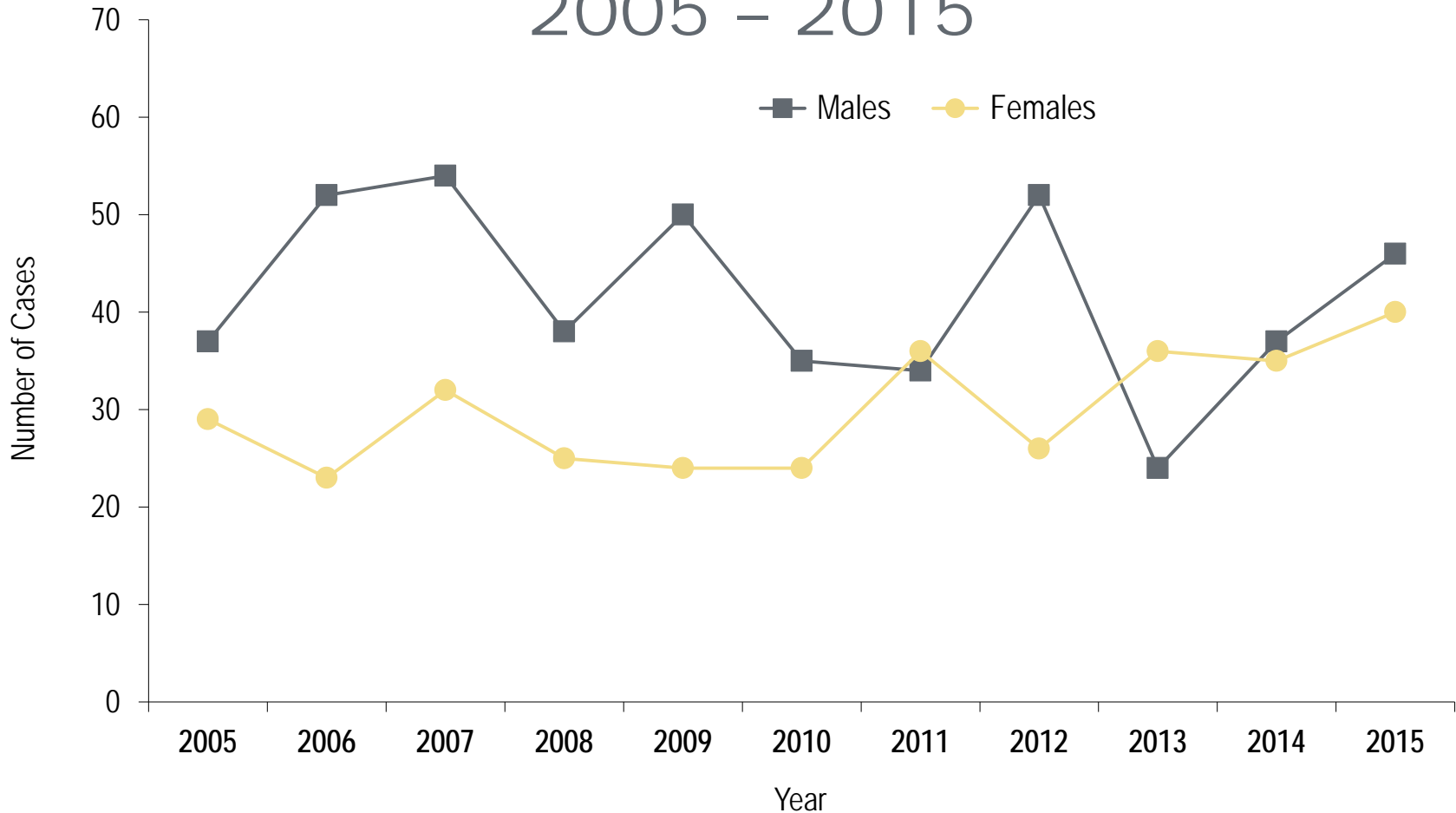
* HIV or AIDS at first diagnosis

† Excludes 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.

Latin America/Car includes Mexico and all Central, South American, and Caribbean countries.



HIV Diagnoses* Among Foreign-Born Persons† by Gender and Year, 2005 – 2015



•HIV or AIDS at first diagnosis

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



Countries of Birth Among Foreign-Born Persons[†] Diagnosed with HIV*, Minnesota, 2015

- Liberia (n=26)
- Ethiopia (n=11)
- Mexico (n=9)
- Cameroon (n=7)
- Nigeria (n=4)
- Somalia (n=4)
- Viet Nam (n=3)
- Guatemala (n=2)
- El Salvador (n=2)
- South Africa (n=2)
- Other[^] (n=19)

* HIV or AIDS at first diagnosis

[†] Excludes 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.

[^] Includes 18 additional countries.

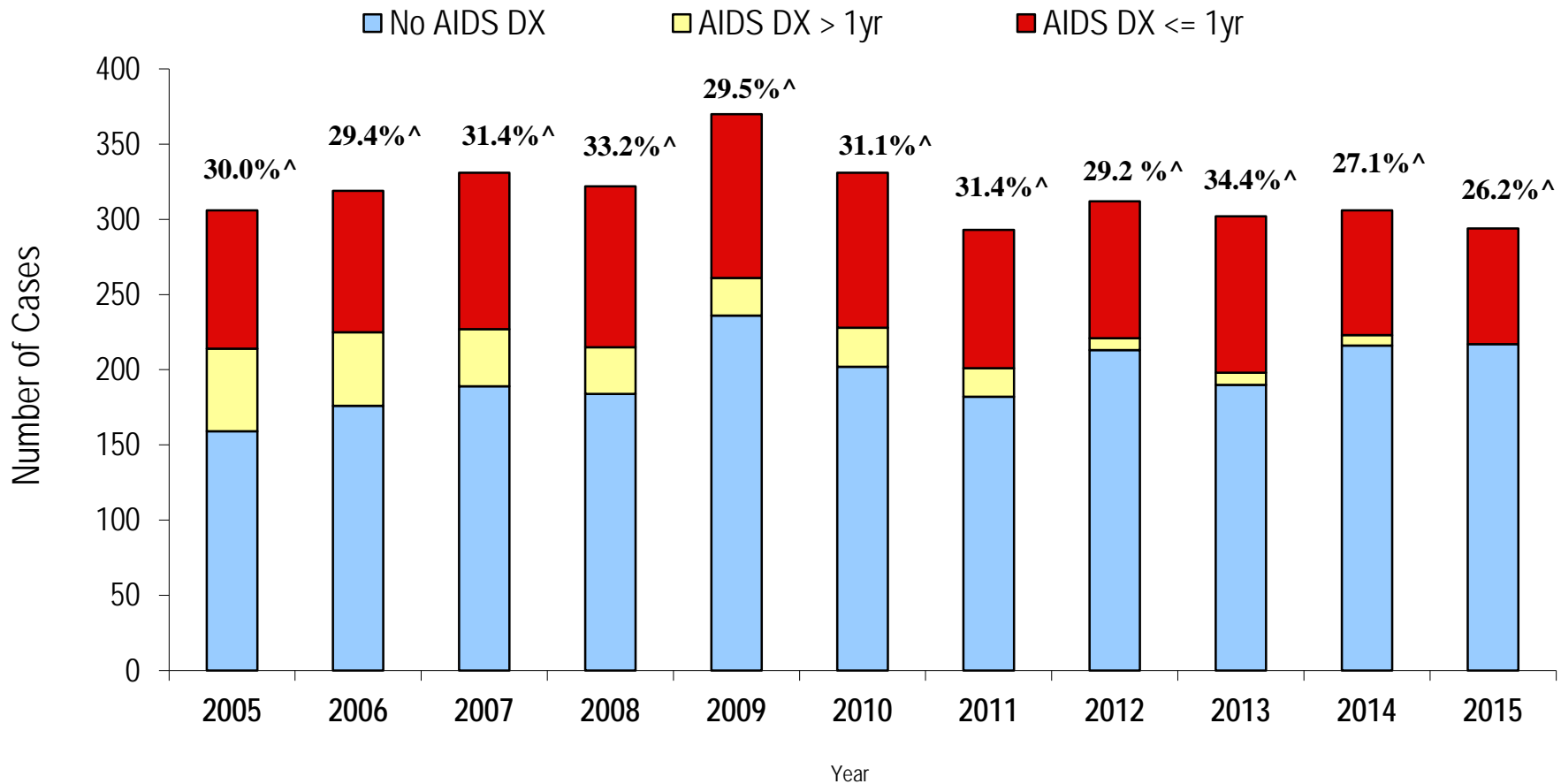


Late Testers

(AIDS Diagnosis within one year of initial HIV Diagnosis)



Time of Progression to AIDS for HIV Diagnoses in Minnesota*, 2005 - 2015†



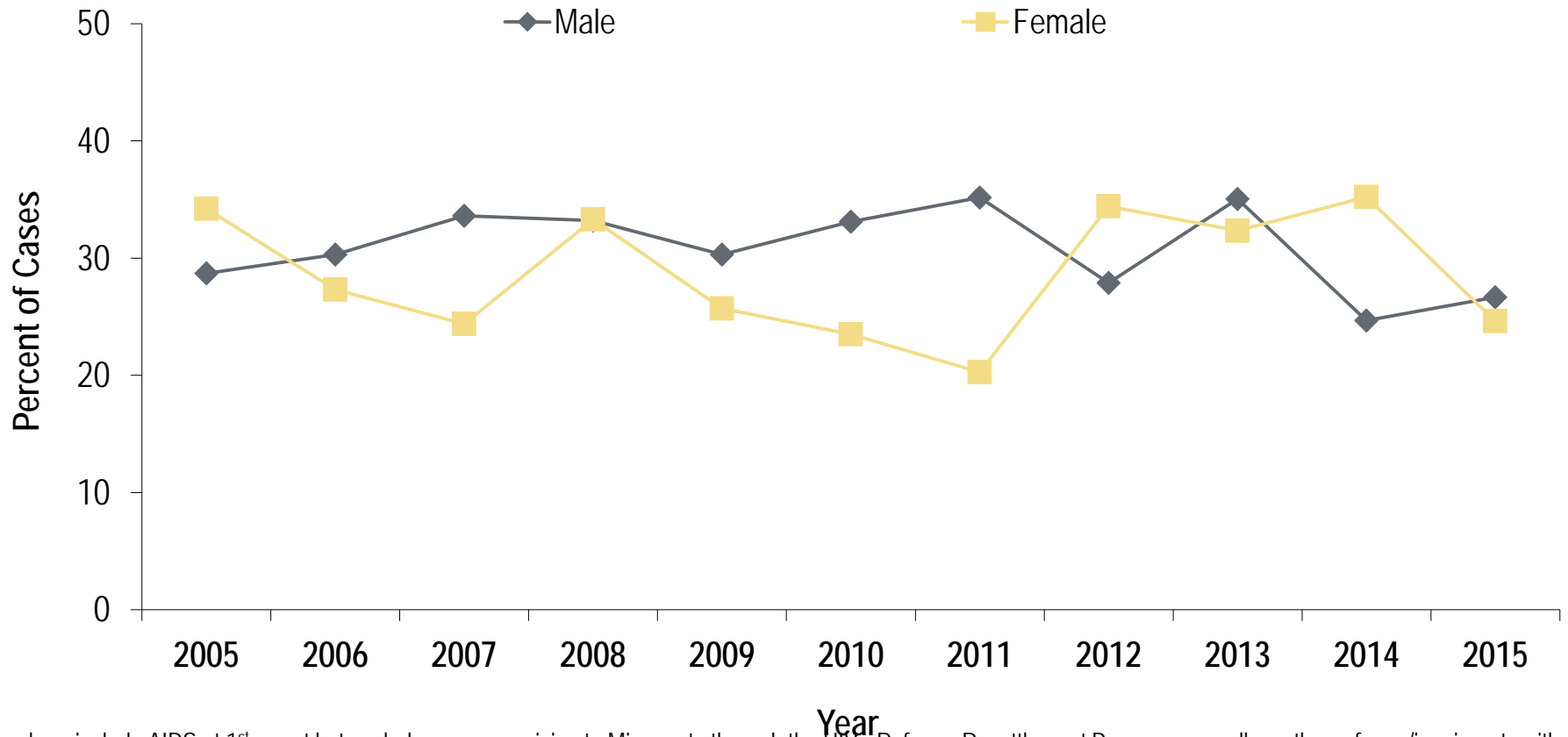
*Numbers include AIDS at 1st report but exclude persons arriving to Minnesota through the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants with an HIV diagnosis prior to arrival in Minnesota.

[^] Percent of cases progressing to AIDS within one year of initial diagnosis with HIV

† Numbers/Percent for cases diagnosed in 2015 only represents cases progressing to AIDS through April 6, 2016.



Progression to AIDS within 1 year of initial HIV Diagnosis* by Sex at Birth, 2005 - 2015[†]

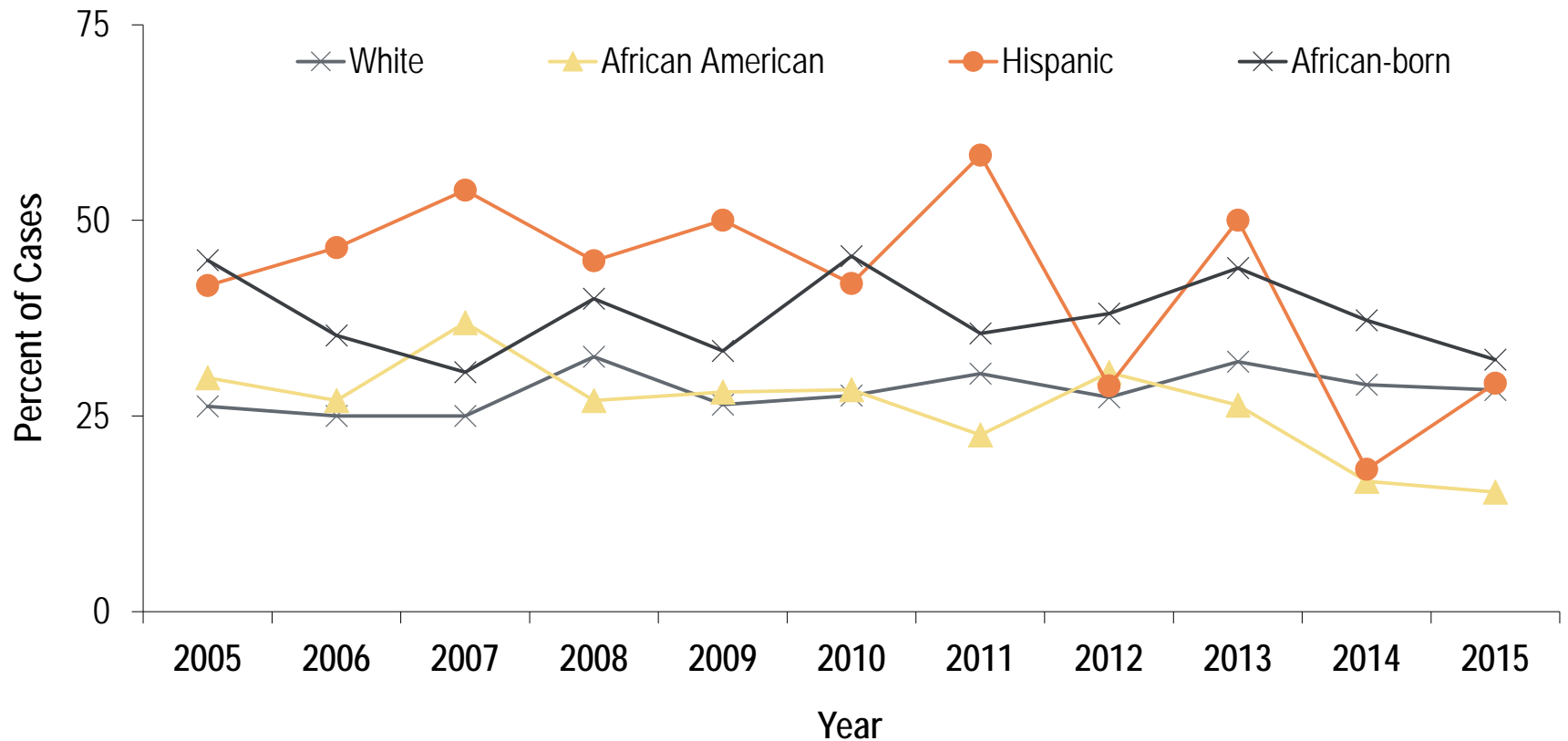


*Numbers include AIDS at 1st report but exclude persons arriving to Minnesota through the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants with an HIV diagnosis prior to arrival in Minnesota.

[†] Numbers/Percent for cases diagnosed in 2015 only represents cases progressing to AIDS through April 6, 2016.



Progression to AIDS within 1 year of initial HIV Diagnoses* by Race/Ethnicity[^], 2005 - 2015[†]



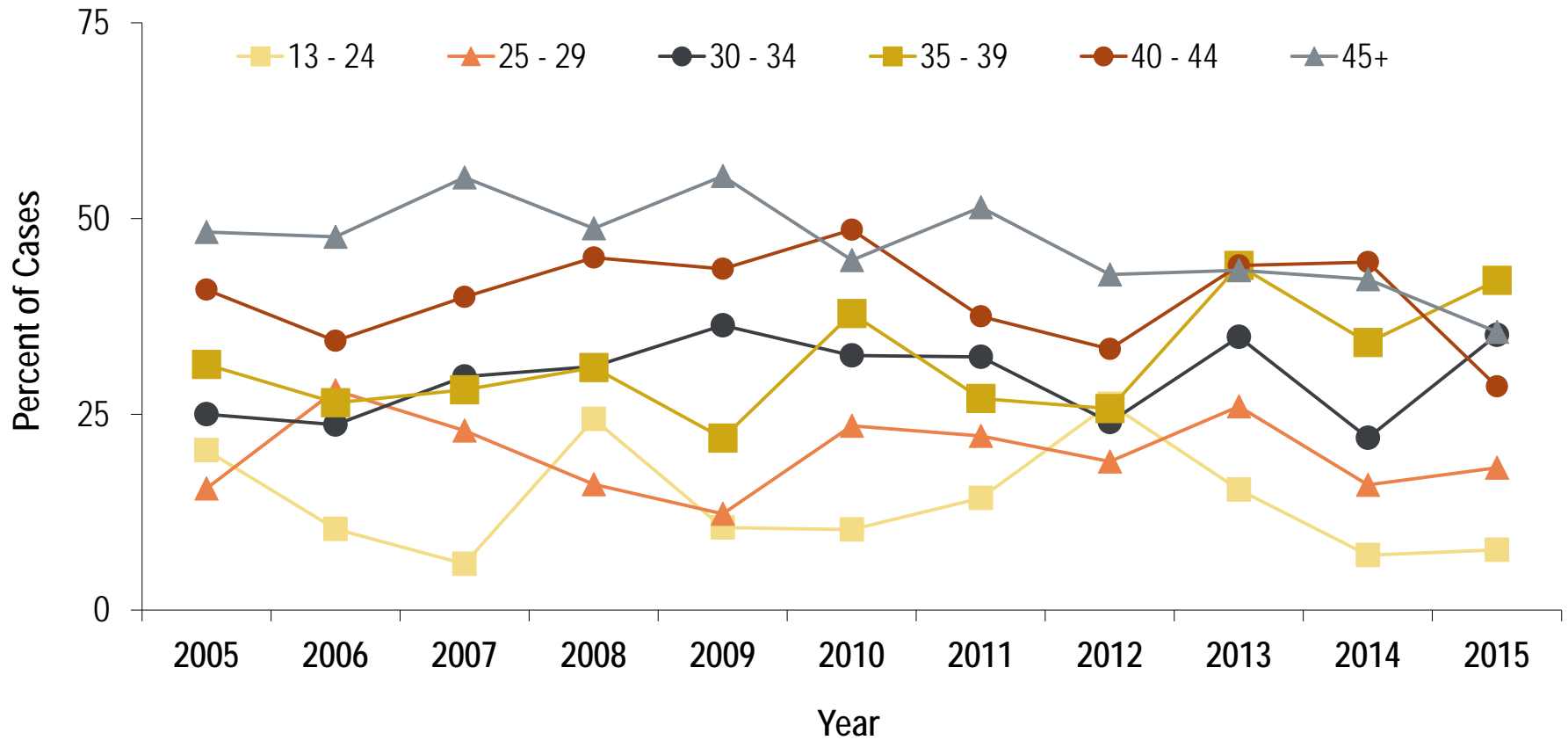
*Numbers include AIDS at 1st report but exclude persons arriving to Minnesota through the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants with an HIV diagnosis prior to arrival in Minnesota.

[†] Numbers/Percent for cases diagnosed in 2015 only represents cases progressing to AIDS through April 6, 2016.

[^]Percentage not calculated if less than 10 cases diagnosed per year



Progression to AIDS within 1 year of initial HIV Diagnosis* by Age, 2005 - 2015[†]

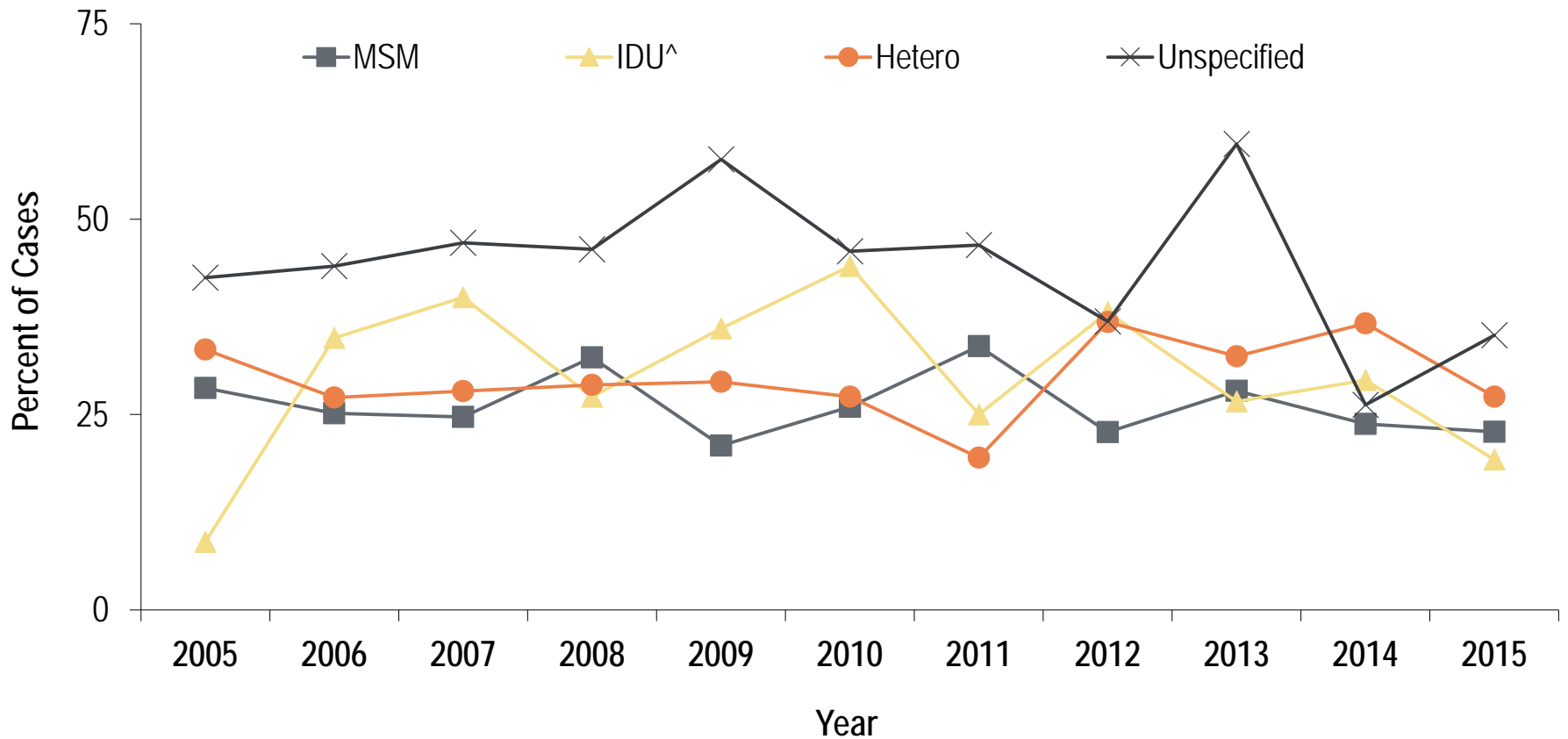


*Numbers include AIDS at 1st report but exclude persons arriving to Minnesota through the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants with an HIV diagnosis prior to arrival in Minnesota.

[†] Numbers/Percent for cases diagnosed in 2015 only represents cases progressing to AIDS through April 6, 2016.



Progression to AIDS within 1 year of initial HIV Diagnosis* by Mode of Transmission, 2005 - 2015[†]



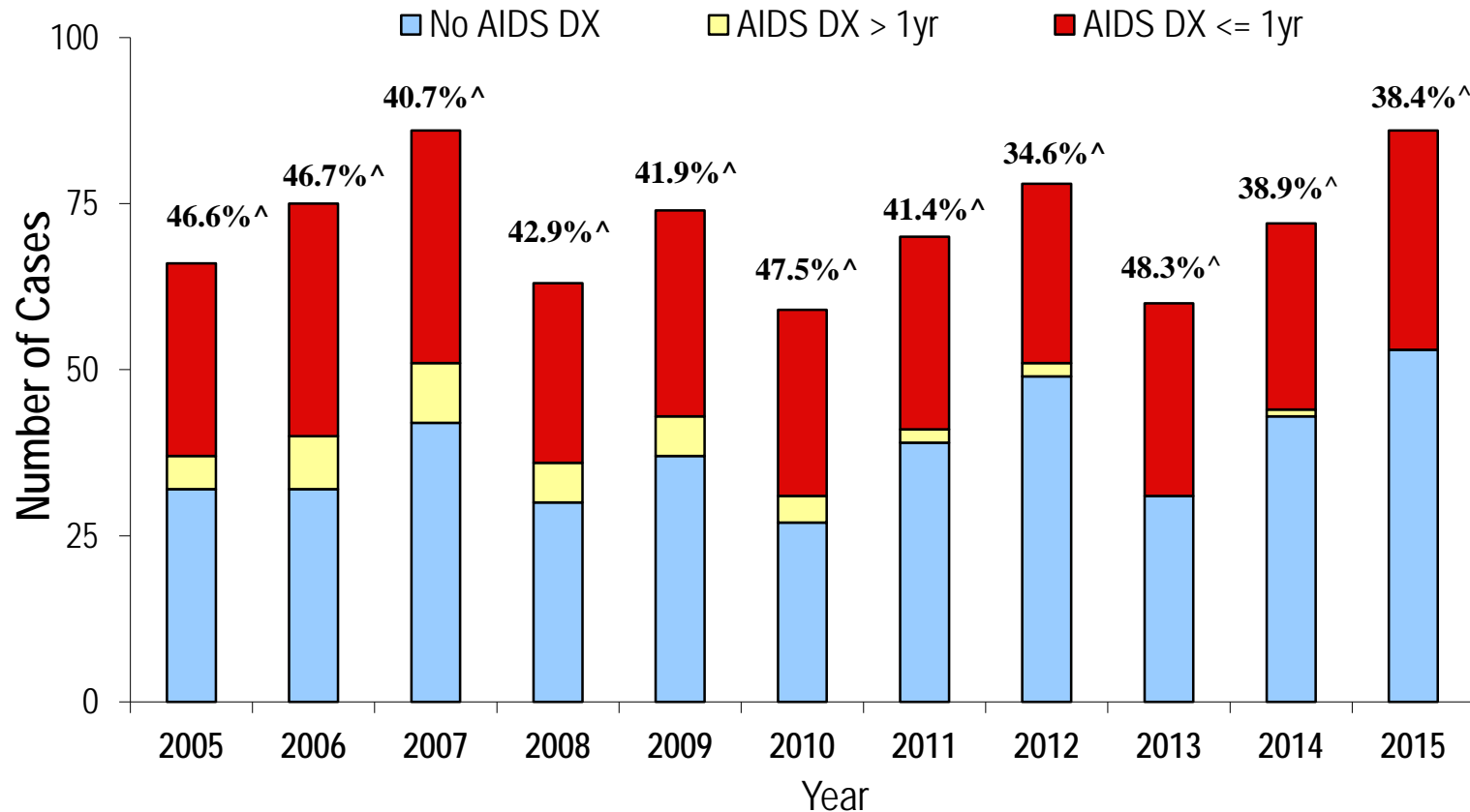
*Numbers include AIDS at 1st report but exclude persons arriving to Minnesota through the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants with an HIV diagnosis prior to arrival in Minnesota.

[†] Numbers/Percent for cases diagnosed in 2015 only represents cases progressing to AIDS through April 6, 2016.

[^]Includes MSM/IDU



Time of Progression to AIDS for HIV Diagnoses* Among Foreign-Born Persons, Minnesota 2005 - 2015[†]



*Numbers include AIDS at 1st report but exclude 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.

[^] Percent of cases progressing to AIDS within one year of initial diagnosis with HIV

[†] Numbers/Percent for cases diagnosed in 2015 only represents cases progressing to AIDS through April 6, 2016.