

HIV Surveillance Report, 2009



Minnesota Department of Health
HIV/AIDS Surveillance System



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, 2009* or *HIV Surveillance Technical Notes*.
- This slide set describes new HIV infections (including AIDS at first diagnosis) in Minnesota by person, place, and time.
- The slides rely on data from HIV/AIDS cases diagnosed through 2009 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 = 133).
- Data analyses for new infections exclude persons arriving to Minnesota through the HIV+ Refugee Resettlement Program (total primary refugees in this program since its inception in August 2000 = 191), as well as, other refugees/immigrants reporting a positive test prior to their arrival in Minnesota (n=104).
- 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

Overview of HIV/AIDS in Minnesota

Minnesota HIV/AIDS Surveillance: *Cumulative Cases*

- As of December 31, 2009, a cumulative total of 9,163* persons have been diagnosed and reported with HIV infection in Minnesota. Of these:
 - ◆ 3,508 persons have been diagnosed with HIV infection (non-AIDS)
 - ◆ 5,655 have progressed to AIDS
- Of these 9,163 persons, 3,056 are known to be deceased

* This number includes only persons who reported Minnesota as their state of residence at the time of their HIV and/or AIDS diagnosis.

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

- As of December 31, 2009, 6,552* persons are assumed alive and living in Minnesota with HIV/AIDS
 - ◆ 3,469 living with HIV infection (non-AIDS)
 - ◆ 3,083 living with AIDS
- This number includes 1,274 persons who were first reported with HIV or AIDS elsewhere and subsequently moved to Minnesota
- This number excludes 1,084 persons who were first reported with HIV or AIDS in Minnesota and subsequently moved out of the state

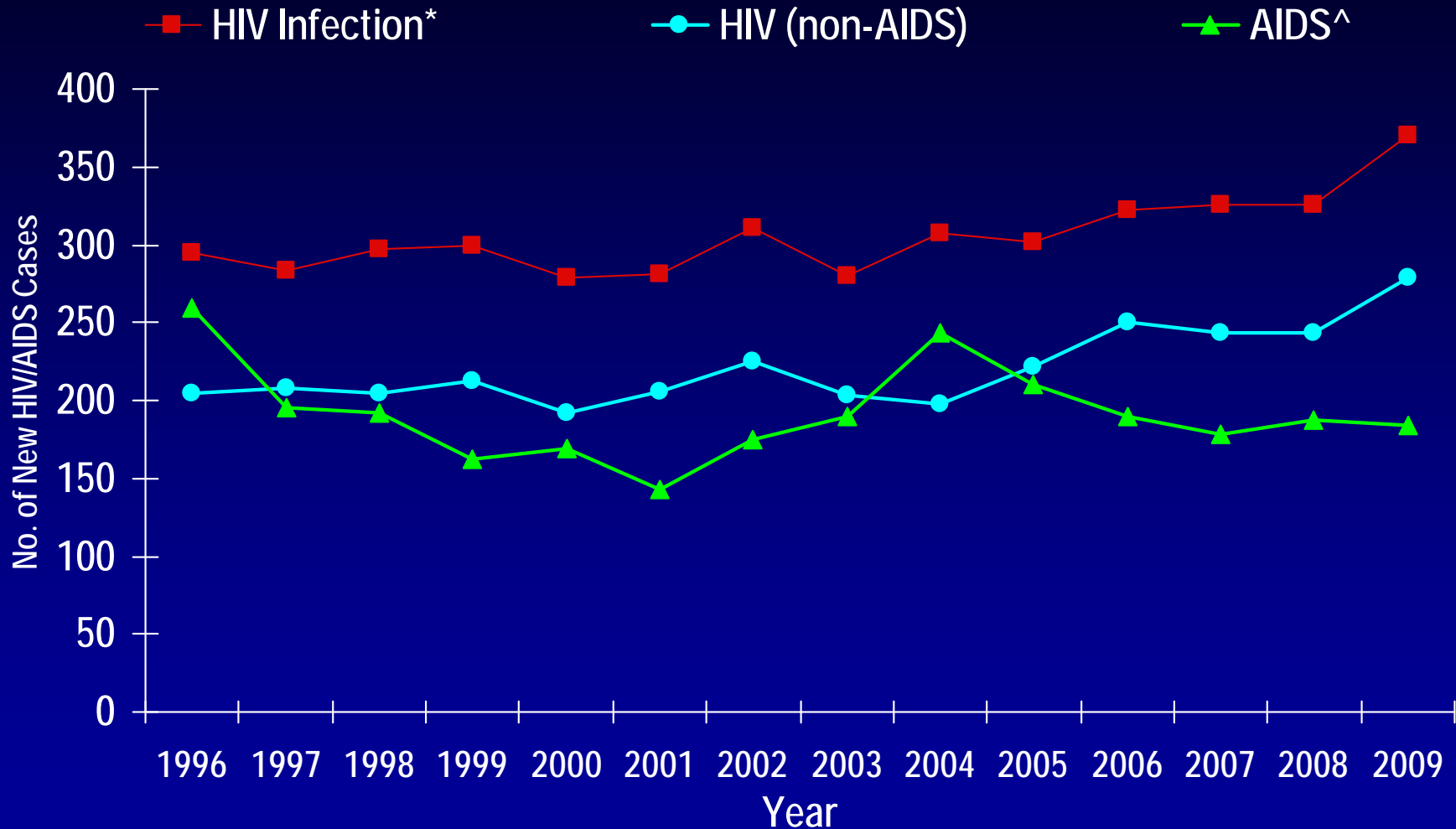
** This number includes persons who reported Minnesota as their current state of residence, regardless of residence at time of diagnosis. Includes state prisoners and refugees arriving through the HIV+ Refugee Resettlement Program, as well as, HIV+ refugee/immigrants arriving through other programs.*

Data Source: *Minnesota HIV/AIDS Surveillance System*

HIV/AIDS in Minnesota: Annual Review

HIV/AIDS in Minnesota:

New HIV Infection, HIV (non-AIDS) and AIDS Cases by Year, 1996 - 2009



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

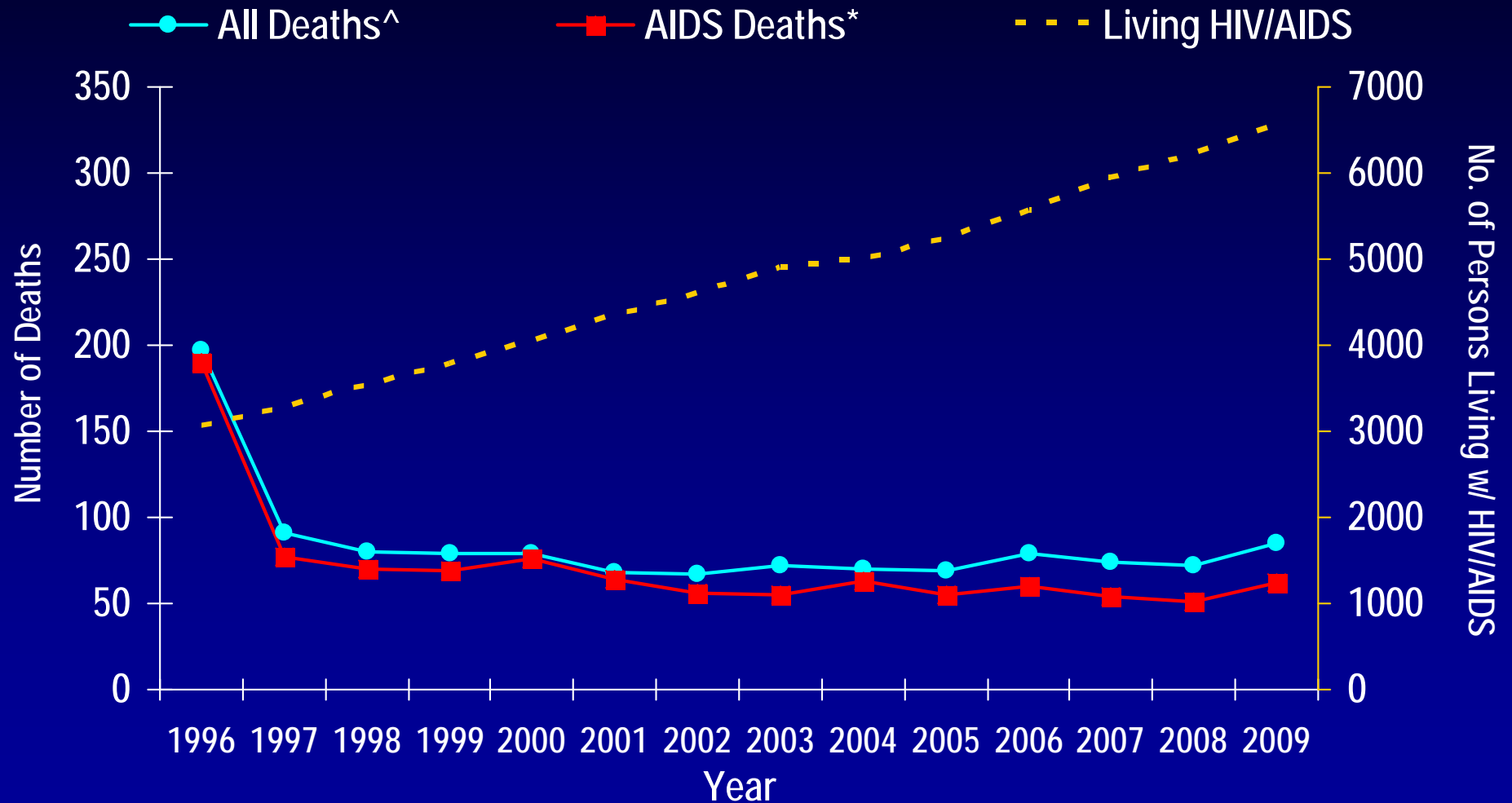
^Includes all new cases of AIDS diagnosed within a given calendar year, including AIDS at first diagnosis. This includes refugees in the HIV+ Resettlement Program, as well as, other refugee/immigrants diagnosed with AIDS subsequent to their arrival in the United States.

Data Source: Minnesota HIV/AIDS Surveillance System

HIV/AIDS in Minnesota: Annual Review

HIV/AIDS in Minnesota:

Number of Prevalent Cases, and Deaths by Year, 1996 - 2009



*Deaths among MN AIDS cases, regardless of location of death and cause.

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

Data Source: Minnesota HIV/AIDS Surveillance System

HIV/AIDS in Minnesota: Annual Review

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

* *HIV or AIDS at first diagnosis*

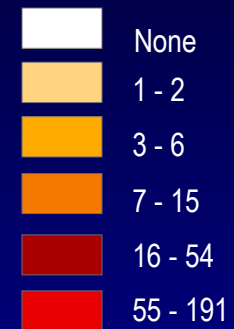
HIV/AIDS in Minnesota: Annual Review

Place

Map of Metro Area: HIV Infections[†] by County of Residence at Diagnosis, 2009



Number of Infections



City of Minneapolis – 119
City of St. Paul – 52
Suburban[#] – 148

* Counties in which a state correctional facility is located

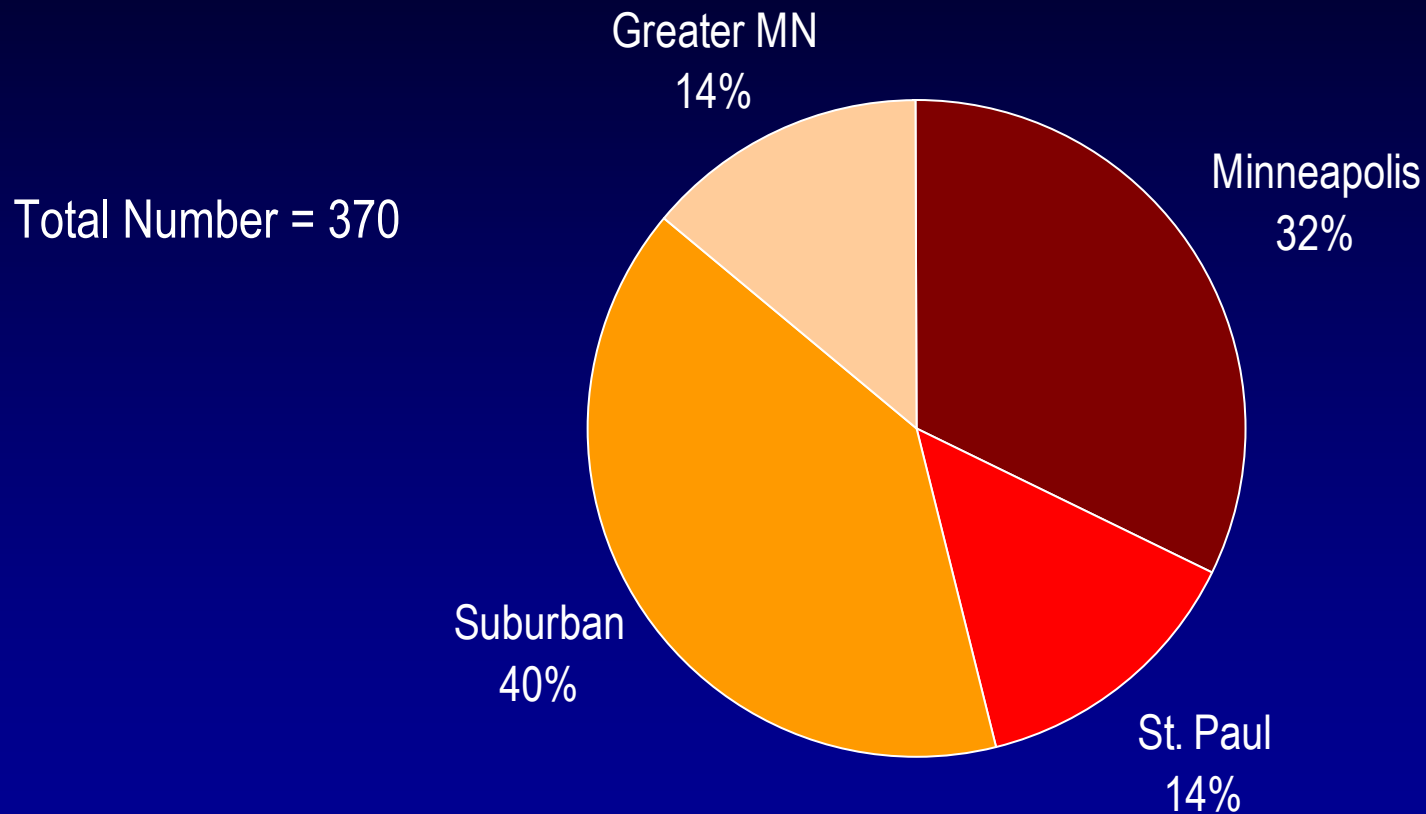
[#] 7-county metro area, excluding the cities of Minneapolis and St. Paul

[†] HIV or AIDS at first diagnosis

Data Source: Minnesota HIV/AIDS Surveillance System

HIV/AIDS in Minnesota: Annual Review

HIV Infections* in Minnesota by Residence at Diagnosis, 2009



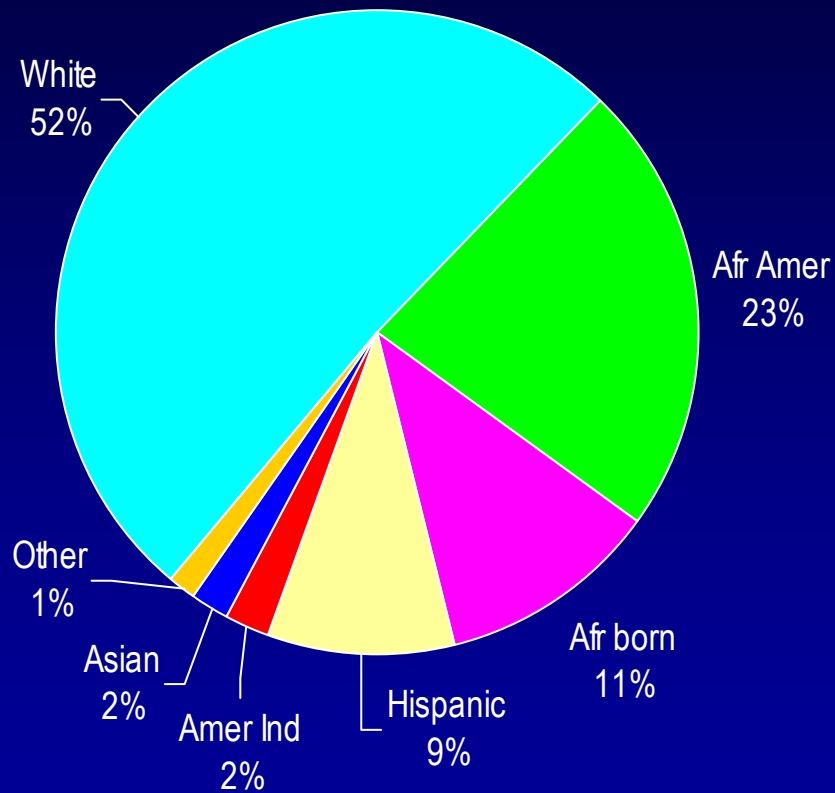
Suburban = Seven-county metro area including Anoka, Carver, Dakota, Hennepin (except Minneapolis), Ramsey (except St. Paul), Scott, and Washington counties. Greater MN = All other Minnesota counties, outside the seven-county metro area.

* HIV or AIDS at first diagnosis

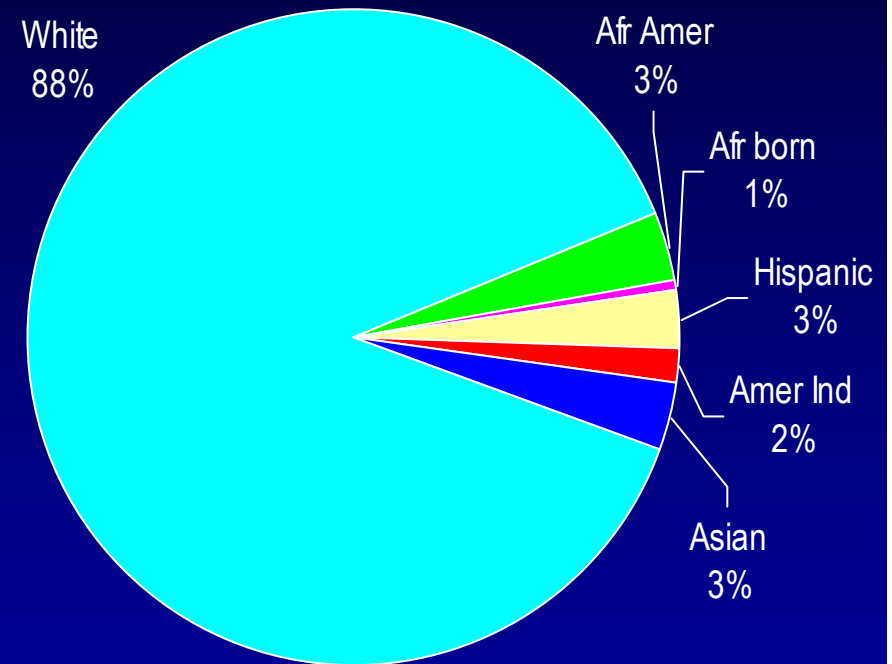
Gender and Race/Ethnicity

HIV Infections* Diagnosed in Year 2009 and General Population in Minnesota by Race/Ethnicity

HIV Diagnoses
(n = 370)



Population†
(n = 4,919,479)



* HIV or AIDS at first diagnosis

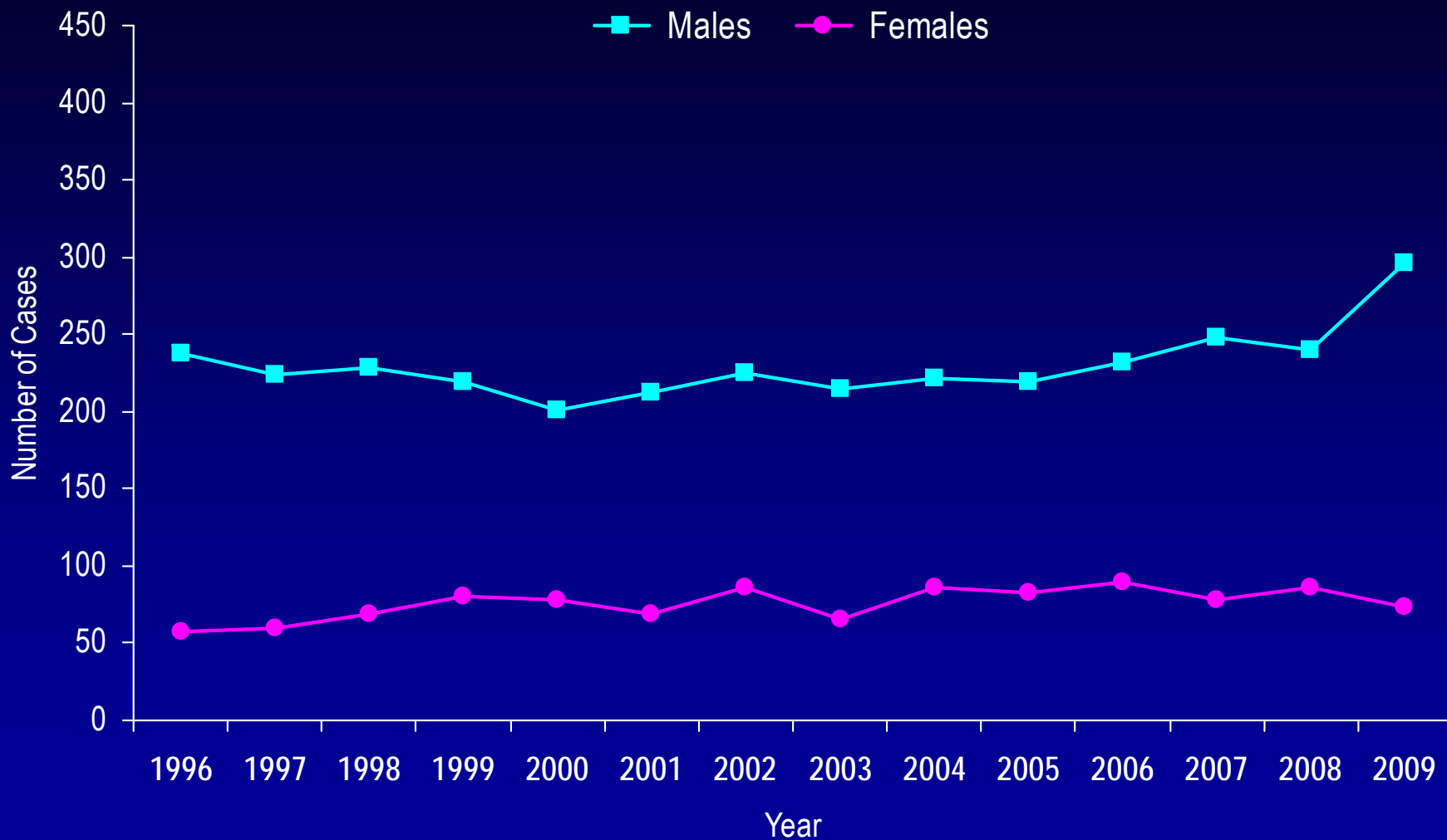
† Population estimates based on 2000 U.S. Census data.

Data Source: Minnesota HIV/AIDS Surveillance System

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/AIDS in Minnesota: Annual Review

HIV Infections* by Gender and Year of Diagnosis, 1996 - 2009

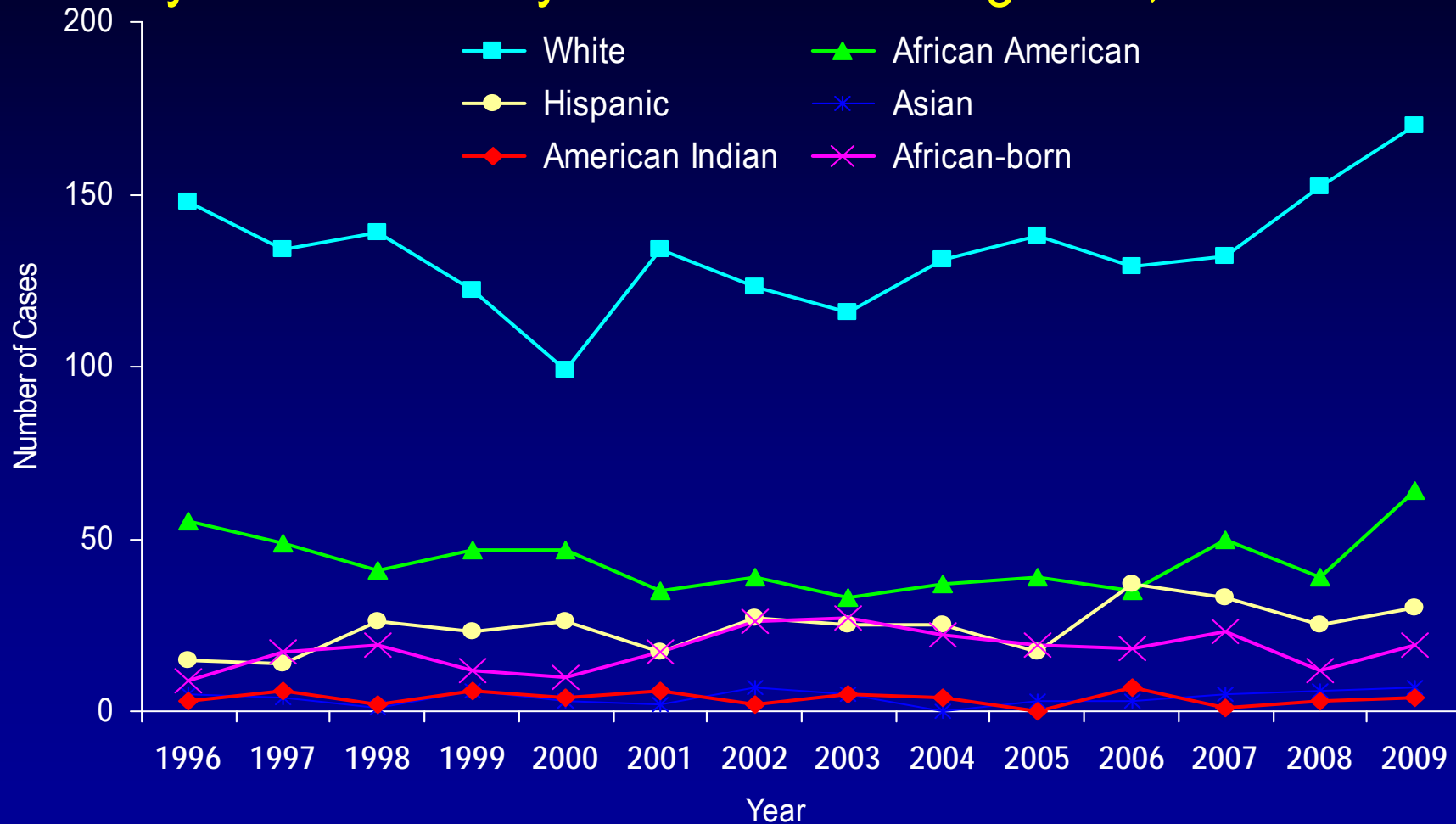


* HIV or AIDS at first diagnosis

Data Source: Minnesota HIV/AIDS Surveillance System

HIV/AIDS in Minnesota: Annual Review

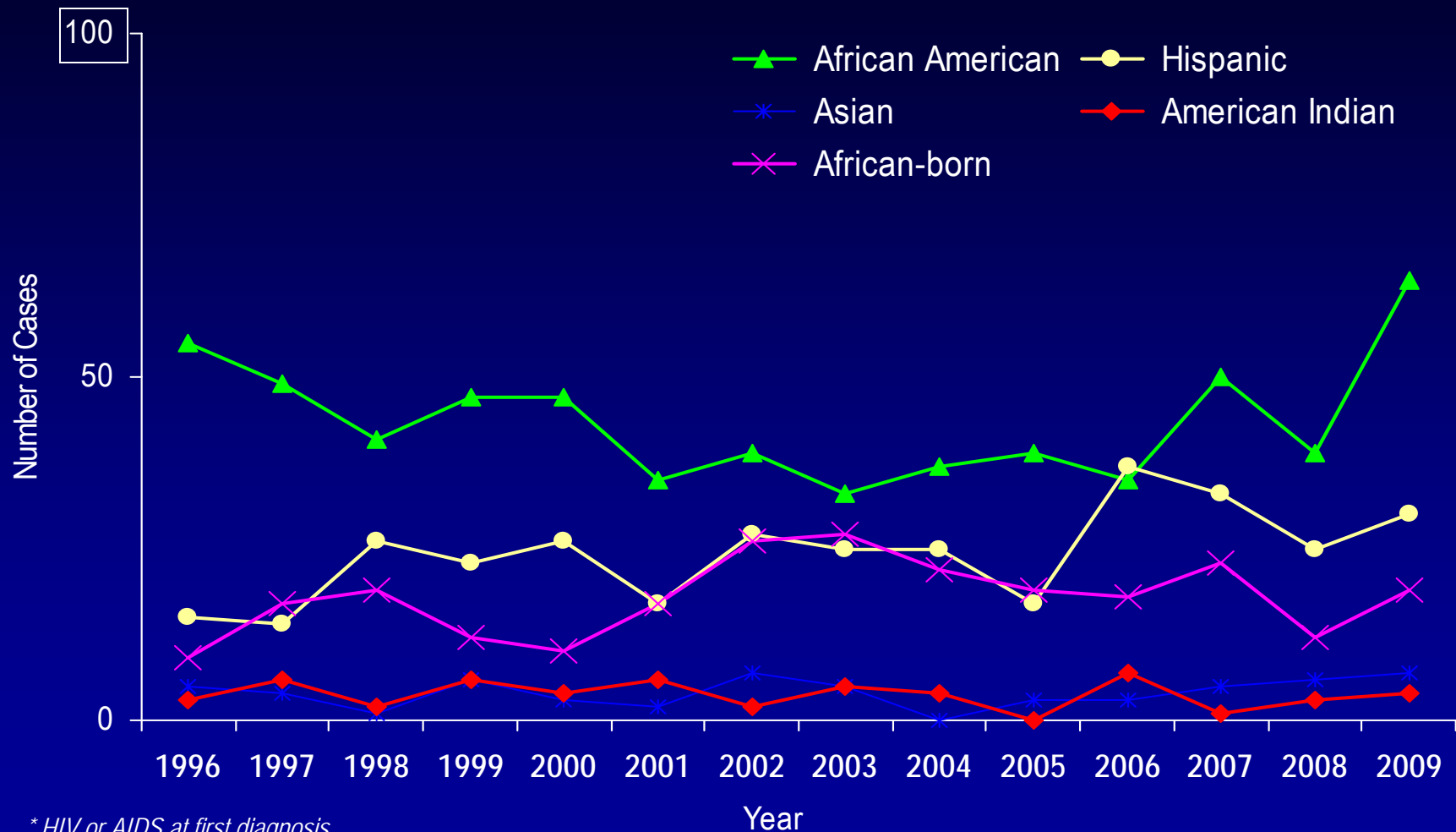
HIV Infections* Among Males by Race/Ethnicity† and Year of Diagnosis, 1996 - 2009



* 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.

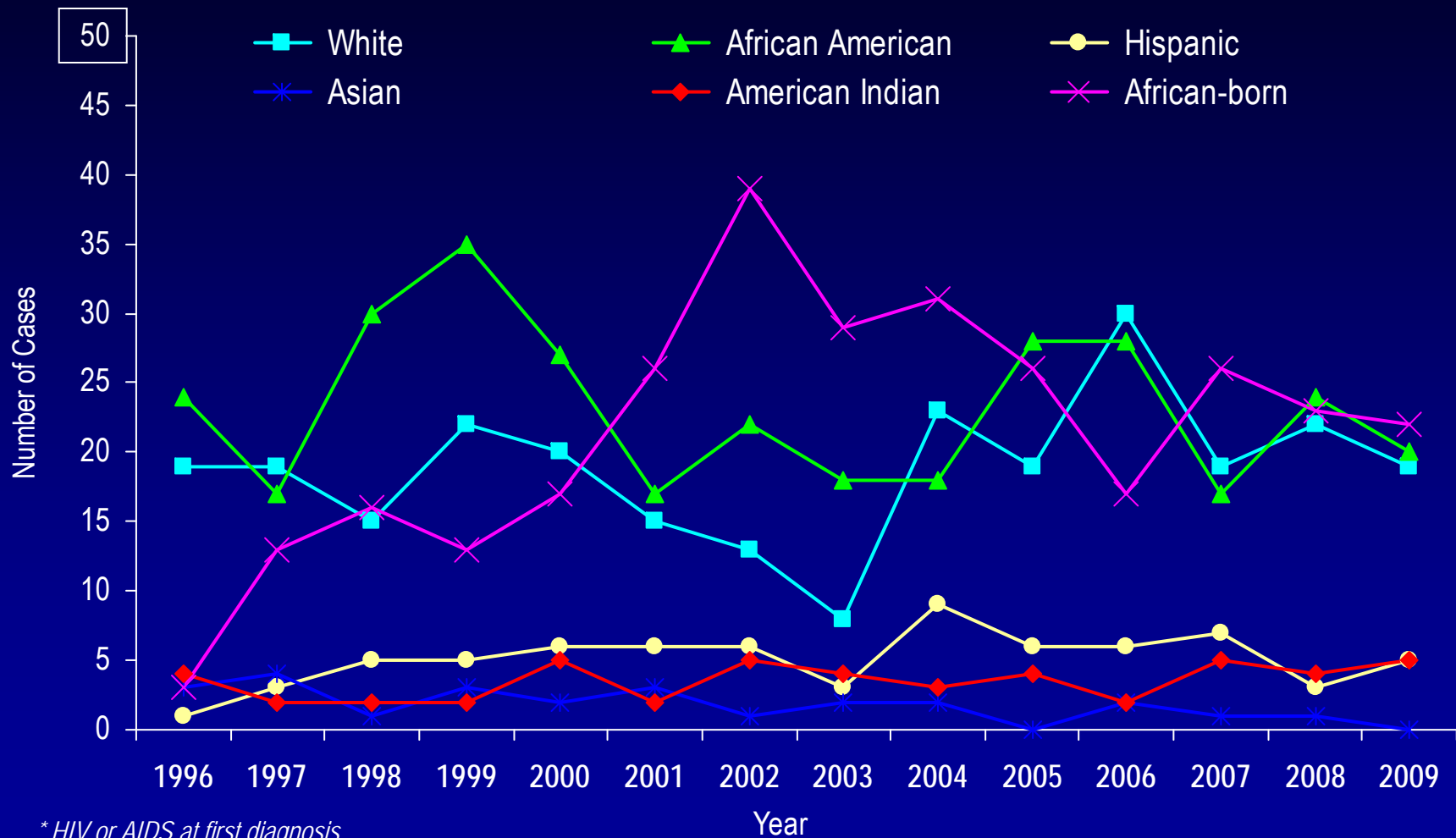
HIV Infections* Among Males by Race/Ethnicity† and Year of Diagnosis, 1996 - 2009 (excluding Whites)



* 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 Infections* Among Females by Race/Ethnicity† and Year of Diagnosis, 1996 - 2009

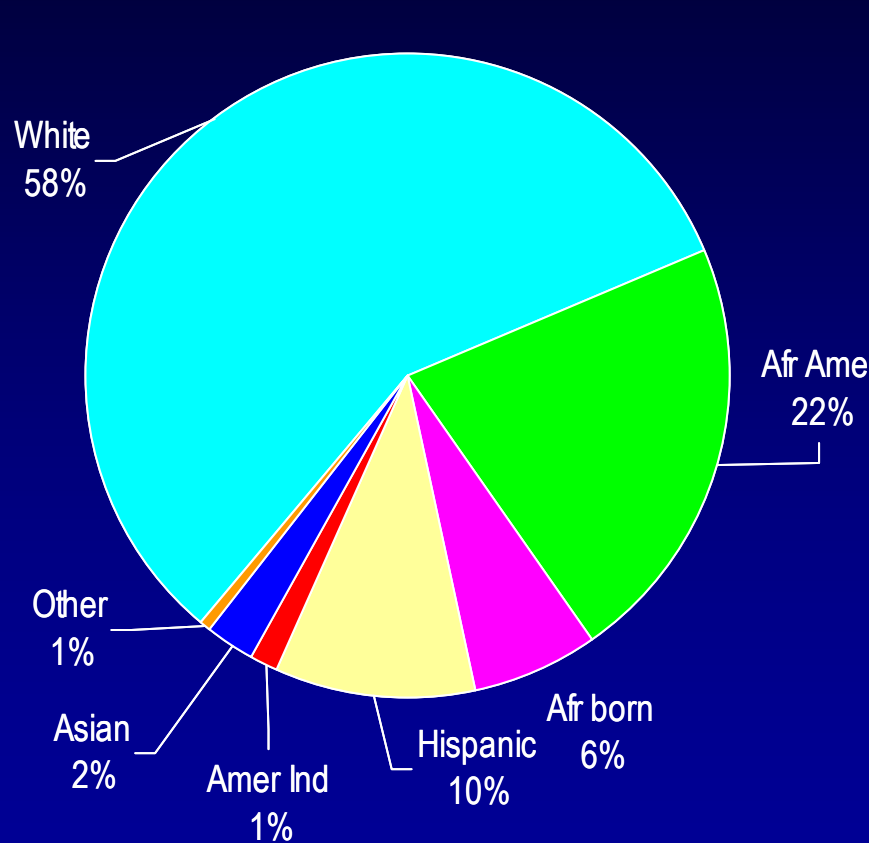


* HIV or AIDS at first diagnosis

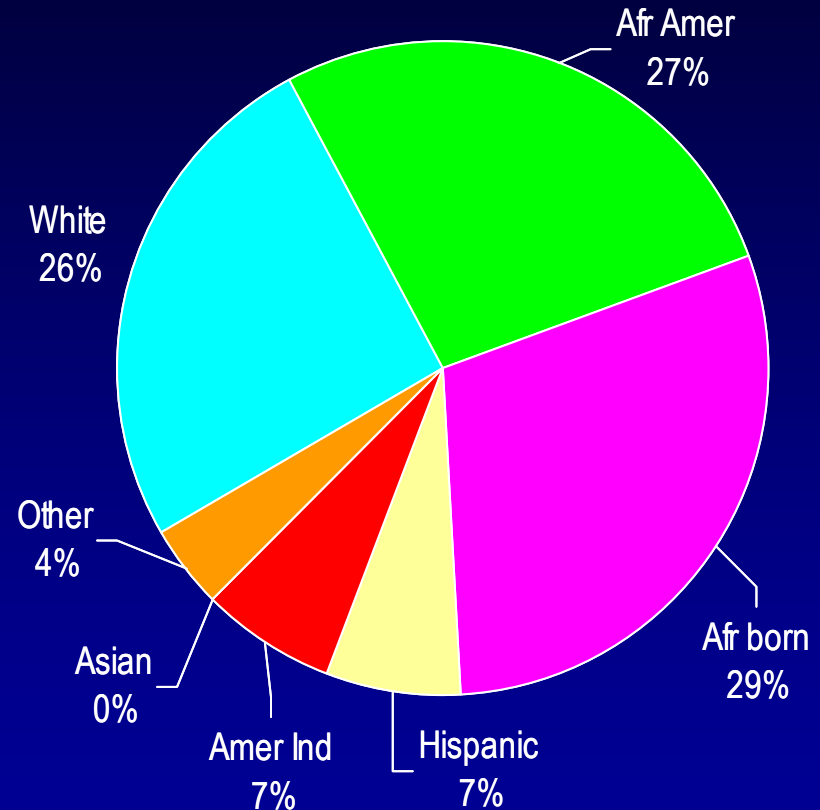
† "African-born" refers to Blacks who reported an African country of birth; "African American" refers to all other Blacks. Cases with unknown race are excluded.

HIV Infections* Diagnosed in Year 2009 by Gender and Race/Ethnicity

Males (n = 296)



Females (n = 74)



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

* HIV or AIDS at first diagnosis

Number of Cases and Rates (per 100,000 persons) of HIV Infection* by Race/Ethnicity† – Minnesota, 2009

<i>Race/Ethnicity</i>	<i>Cases</i>	<i>%</i>	<i>Rate</i>
White, non-Hispanic	189	51%	4.4
Black, African-American	84	23%	50.1
Black, African-born	41	11%	82-116.5 ^{††}
Hispanic	35	9%	24.4
American Indian	9	2%	11.1
Asian/Pacific Islander	7	2%	4.2
Other [^]	5	1%	X
<i>Total</i>	370	100%	7.5

* HIV or AIDS at first diagnosis; 2000 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. Cases with unknown race are excluded.

†† Accurate population estimates for African-born persons living in Minnesota are unavailable – anecdotal (50,000) and 2000 US Census data (35,188) were used to create the range of rates reported for African-born.

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

Age

Average Age at HIV Diagnosis Among Males by Race/Ethnicity†: Three-Year Averages

Race/Ethnicity	Average age in years (No. of cases)		
	1996-1998	2001-2003	2007-2009
White	36 (421)	38 (373)	37 (454)
Black			
African American	34 (145)	37 (107)	32 (153)
African-born	35 (45)	36 (70)	38 (54)
Hispanic	33 (55)	33 (69)	33 (88)
Asian	33 (10)	39 (14)	32 (18)
American Indian	35 (11)	37 (13)	34 (8)

Cases with unknown or multiple race or unknown age were excluded.

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

Average Age at HIV Diagnosis Among Females by Race/Ethnicity[†]: Three-Year Averages

Race/Ethnicity	Average age in years (No. of cases)		
	1996-1998	2001-2003	2007-2009
White	32 (53)	32 (36)	36 (60)
Black			
African American	32 (71)	32 (57)	34 (61)
African-born	33 (32)	33 (94)	34 (71)
Hispanic	29 (9)	29 (15)	38 (15)
Asian	23 (8)	40 (6)	----
American Indian	31 (8)	36 (11)	29 (14)

* Average age not displayed for subgroups with less than 5 cases.

Cases with unknown or multiple race or unknown age were excluded.

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

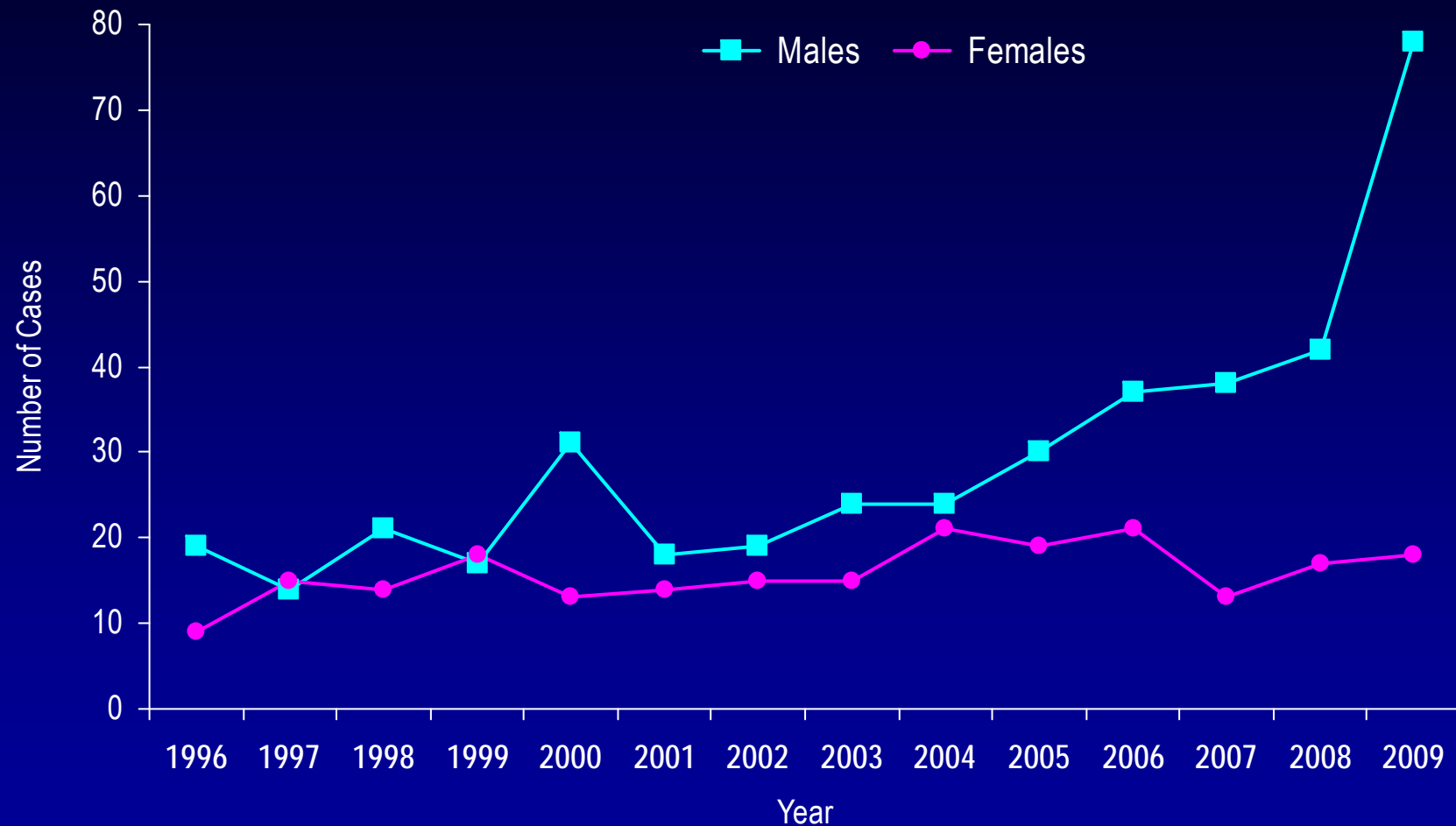
Data Source: Minnesota HIV/AIDS Surveillance System

HIV/AIDS in Minnesota: Annual Review

Adolescents & Young Adults (Ages 13-24)*

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

HIV Infections* Among Adolescents and Young Adults† by Gender and Year of Diagnosis, 1996 - 2009

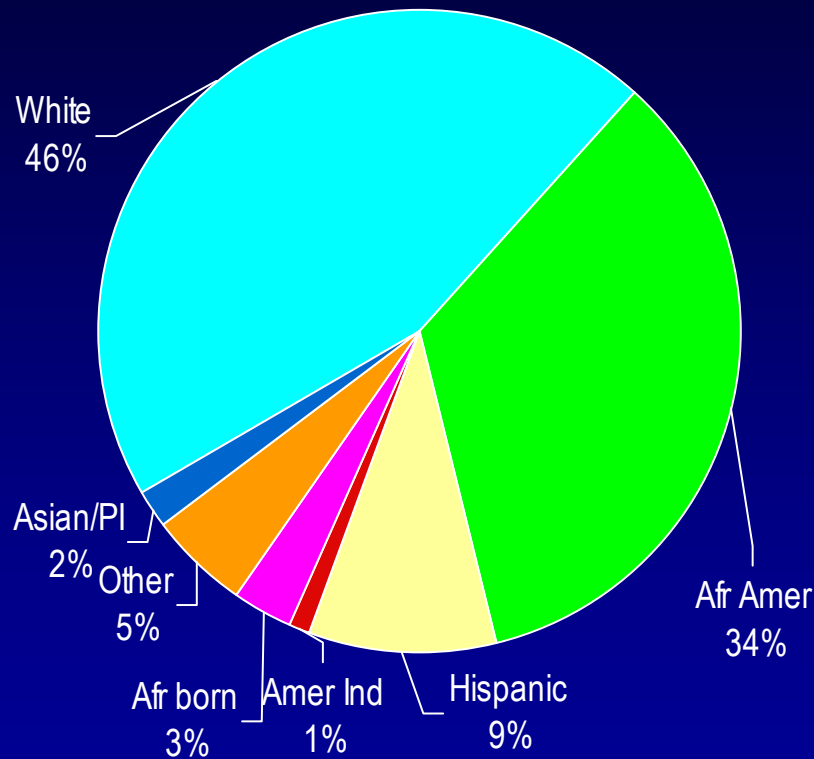


* HIV or AIDS at first diagnosis

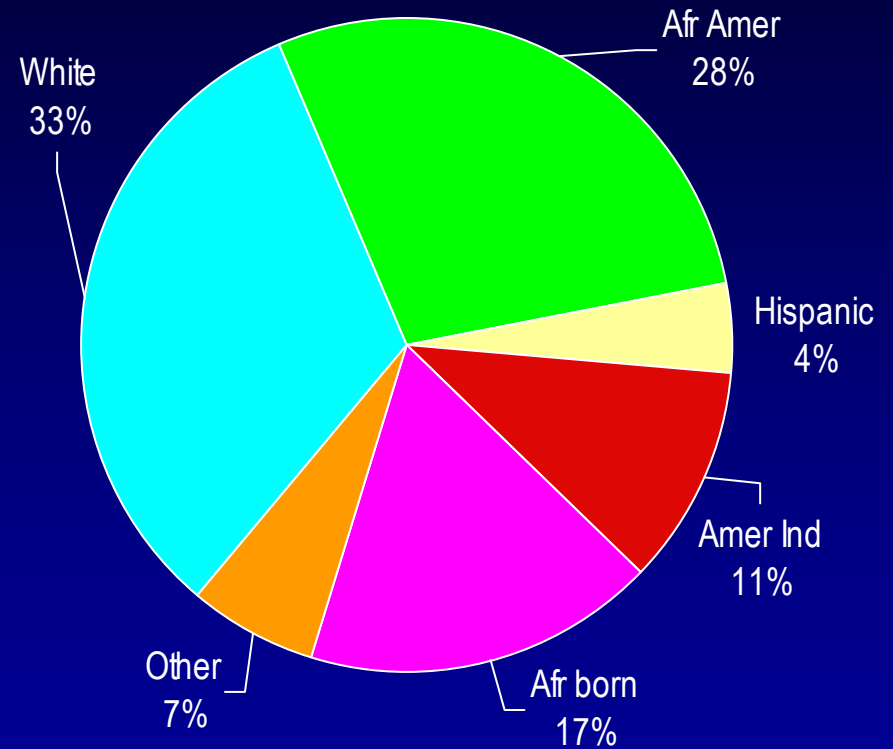
† Adolescents defined as 13-19 year-olds; Young Adults defined as 20-24 year-olds.

HIV Infections* Among Adolescents and Young Adults† by Gender and Race/Ethnicity, 2007 - 2009 Combined

Males (n = 160)



Females (n = 46)



* HIV or AIDS at first diagnosis

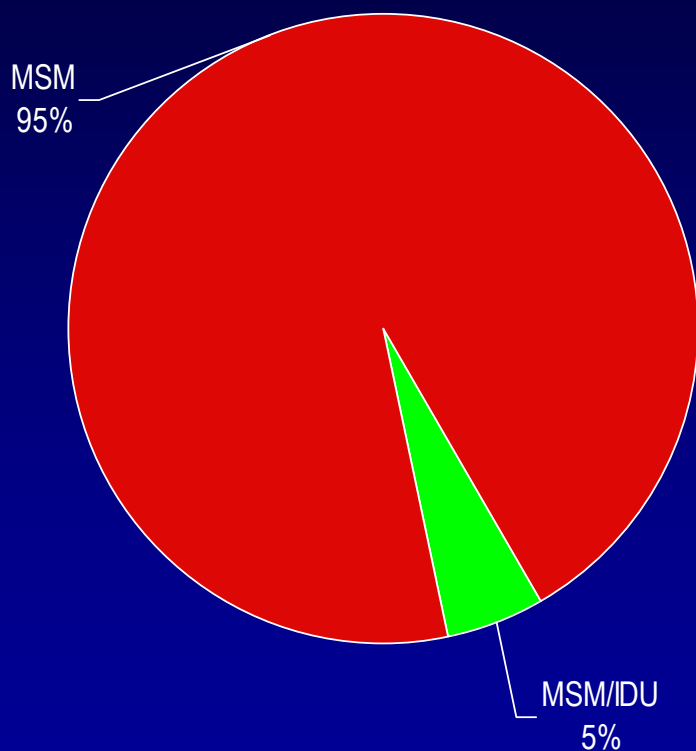
† Adolescents defined as 13-19 year-olds;

Young Adults defined as 20-24 year-olds.

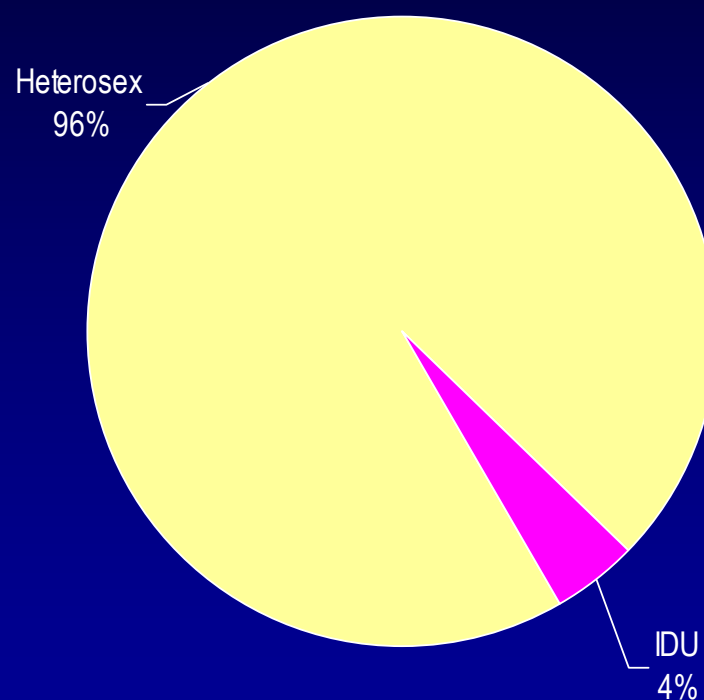
n = Number of persons Amer Ind = American Indian
 Afr Amer = African American (Black, not African-born persons)
 Afr born = African-born (Black, African-born persons)
 Other = Multi-racial persons or persons with unknown race

HIV Infections* Among Adolescents and Young Adults† by Gender and Estimated Exposure Group#, 2007 - 2009 Combined

Males (n = 160)



Females (n = 46)



* 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 2007-2009 with known risk. For more detail see the HIV Surveillance Technical notes.

n = Number of persons

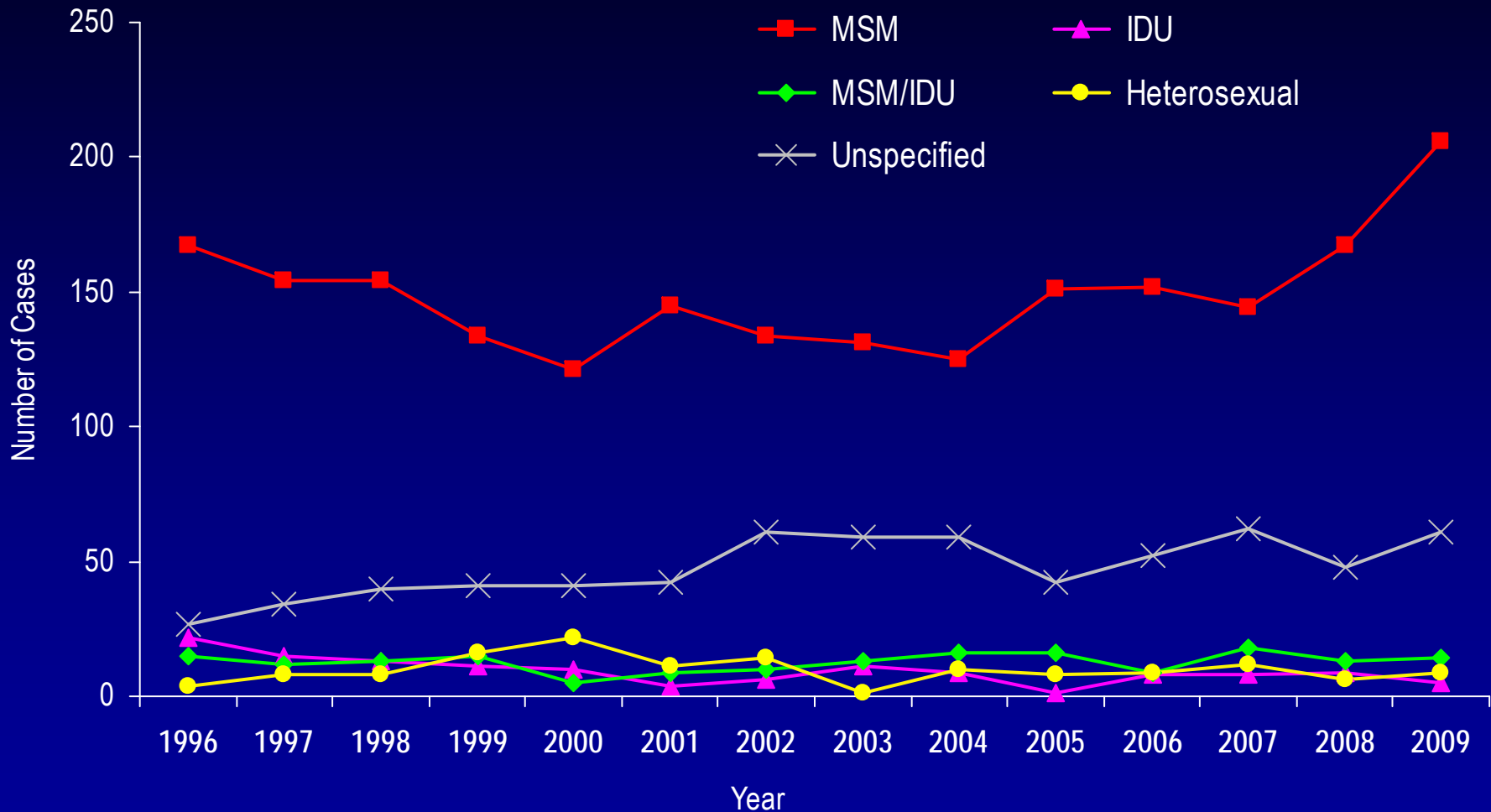
IDU = Injecting drug use

MSM = Men who have sex with men

Heterosex = Heterosexual contact

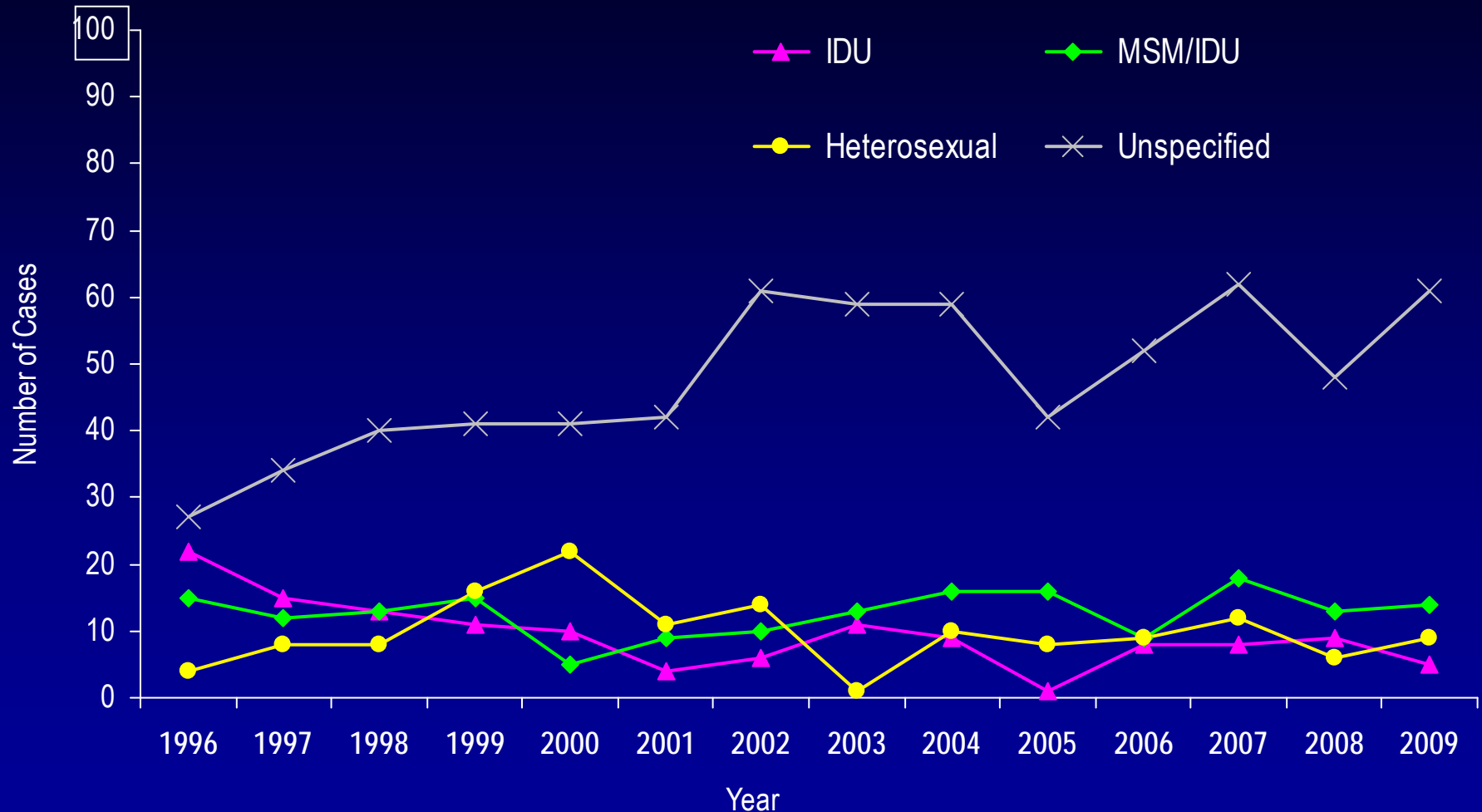
Mode of Exposure

HIV Infections* Among Males by Mode of Exposure and Year of Diagnosis, 1996 - 2009



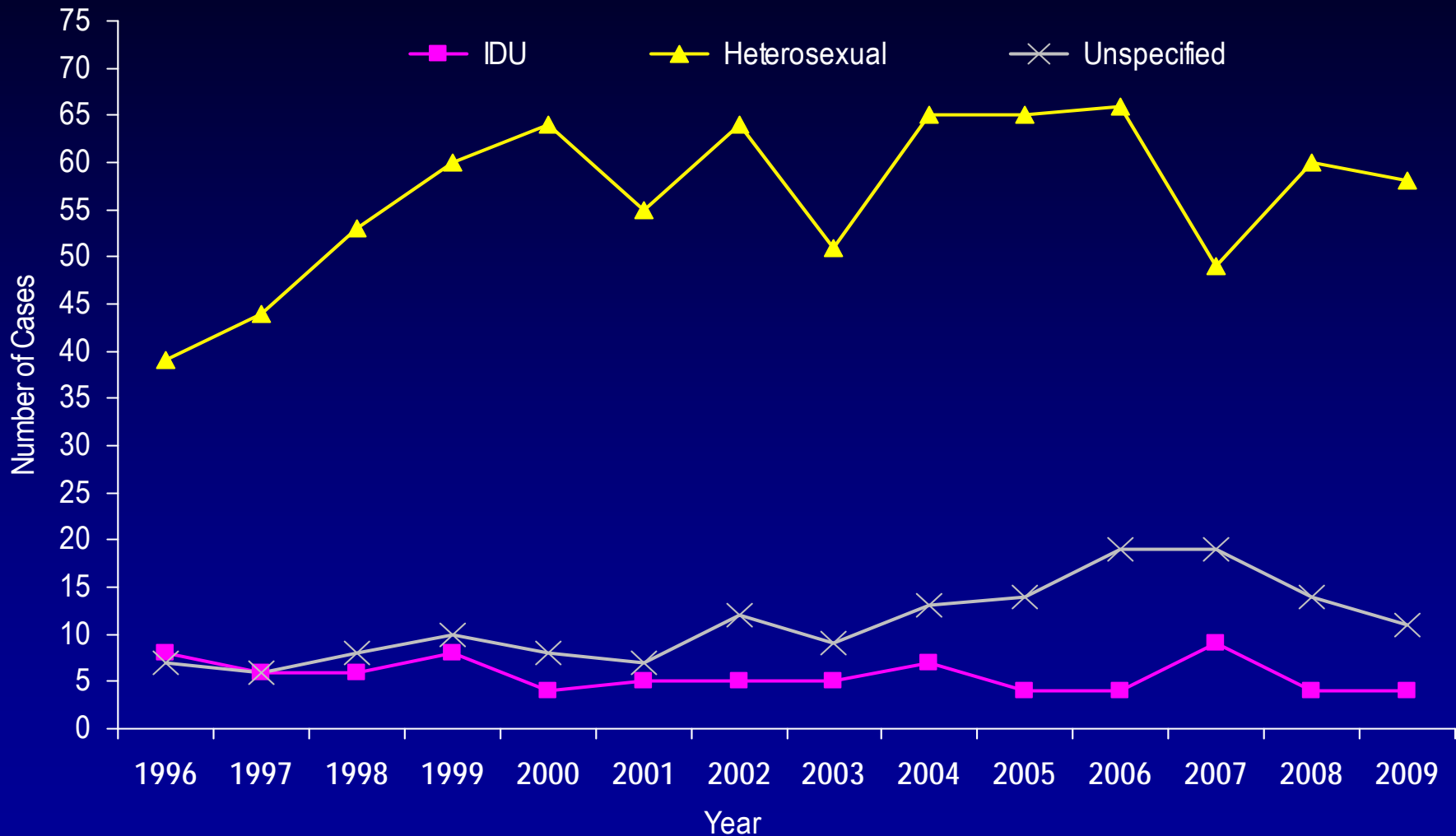
MSM = Men who have sex with men IDU = Injecting drug use Heterosexual = Heterosexual contact
 * HIV or AIDS at first diagnosis Unspecified = No mode of exposure ascertained

HIV Infections* Among Males by Mode of Exposure and Year of Diagnosis, 1996 - 2009 (excluding MSM)



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

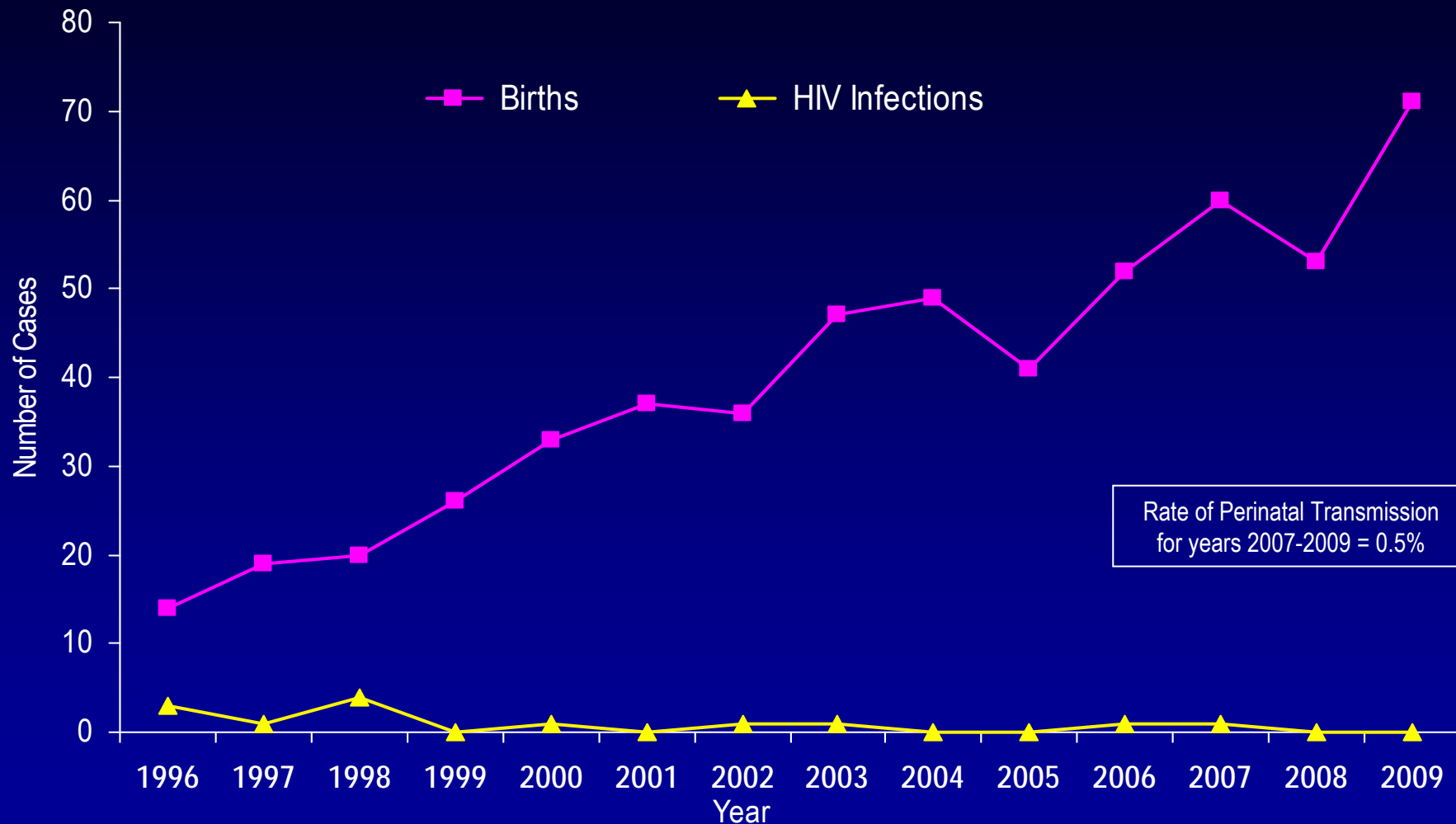
HIV Infections* Among Females by Mode of Exposure and Year of Diagnosis, 1996 - 2009



IDU = Injecting drug use Heterosexual = Heterosexual contact with HIV+ , with IDU, with partner with unknown risk
 Unspecified = No mode of exposure ascertained

* HIV or AIDS at first diagnosis

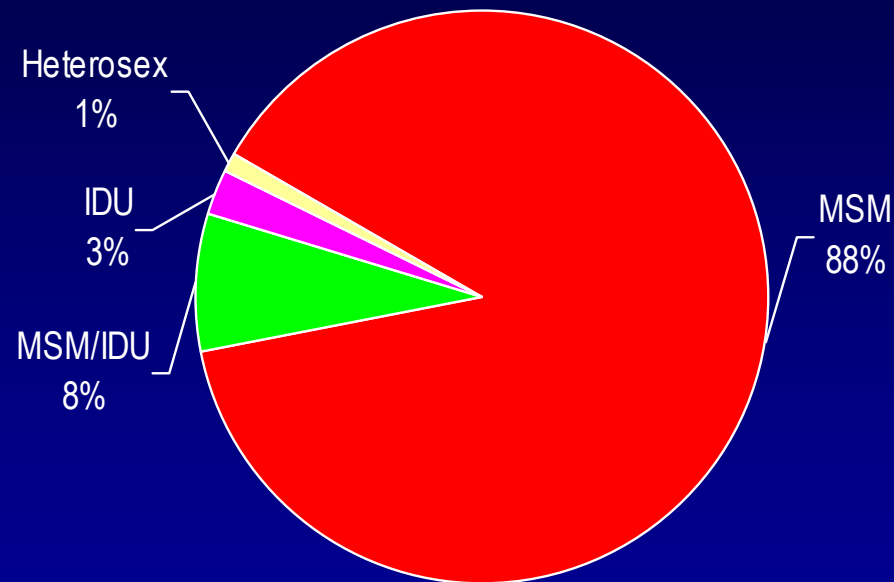
Births to HIV-Infected Women and Number of Perinatally Acquired HIV Infections* by Year of Birth, 1996 - 2009



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

HIV Infections* by Estimated Mode of Exposure† Diagnosis Years 2007 - 2009 combined

White Males (n = 454)



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

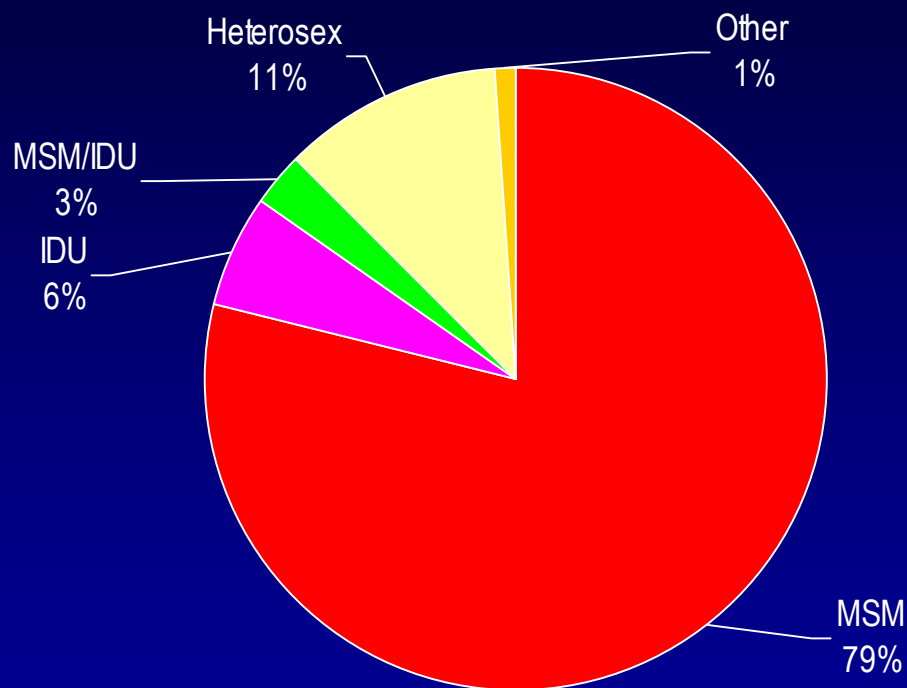
Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

* HIV or AIDS at first diagnosis

† Mode of Exposure proportions have been estimated using cases for 2007-2009 with known risk. For more detail see the HIV Surveillance Technical notes.

HIV Infections* by Estimated Mode of Exposure† Diagnosis Years 2007 - 2009 combined

African American Males†† (n = 153)



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 2007-2009 with known risk. For more detail see the HIV Surveillance Technical notes.

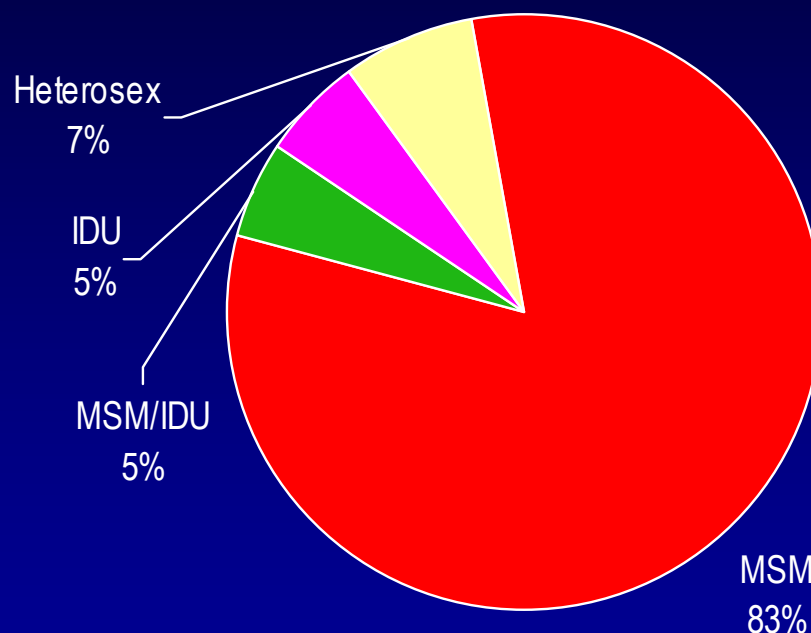
†† Refers to Black, African American (not African-born) males.

Data Source: Minnesota HIV/AIDS Surveillance System

HIV/AIDS in Minnesota: Annual Review

HIV Infections* by Estimated Mode of Exposure† Diagnosis Years 2007 - 2009 combined

Hispanic Males (n = 88)



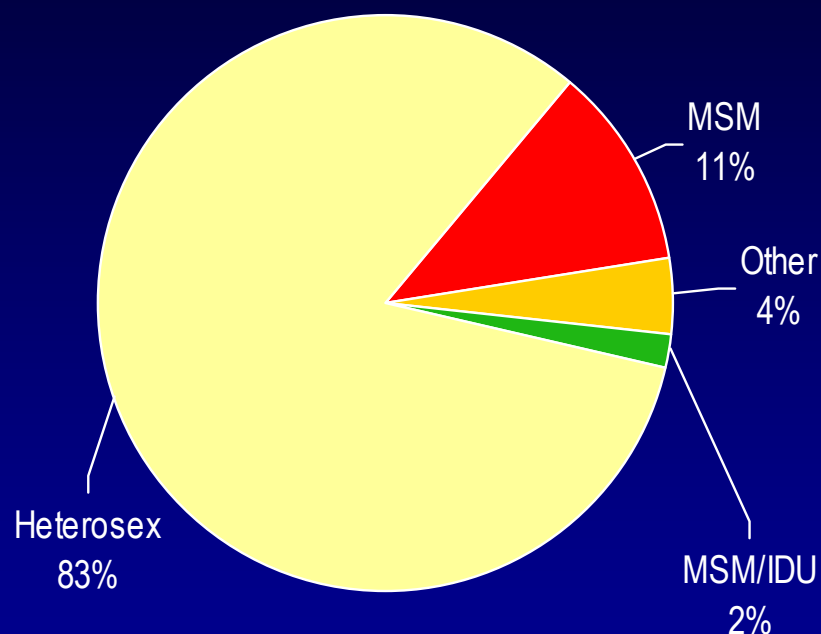
n = Number of persons MSM = Men who have sex with men IDU = Injecting drug use Heterosex = Heterosexual contact

* HIV or AIDS at first diagnosis

† Mode of Exposure proportions have been estimated using cases for 2007-2009 with known risk. For more detail see the HIV Surveillance Technical notes.

HIV Infections* by Estimated Mode of Exposure† Diagnosis Years 2007 - 2009 combined

African-born Males†† (n = 54)



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.

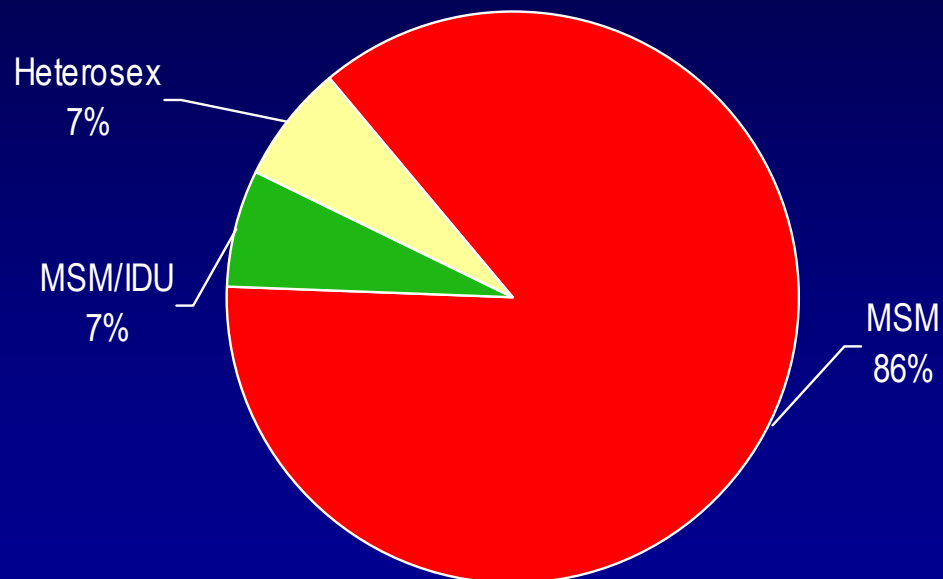
For more detail see the HIV Surveillance Technical notes.

†† Refers to Black, African-born males.

HIV Infections* by Estimated Mode of Exposure† Diagnosis Years 2007 - 2009 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

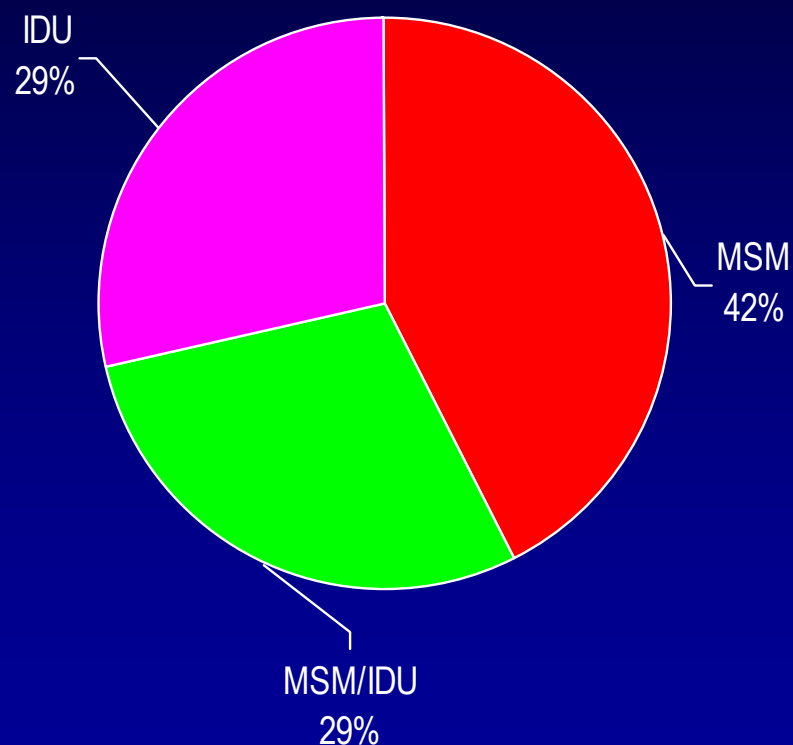
* HIV or AIDS at first diagnosis

† Mode of Exposure proportions have been estimated using cases for 2007-2009 with known risk. For more detail see the HIV Surveillance Technical notes.

HIV Infections* by Estimated Mode of Exposure† Diagnosis Years 2007 - 2009 combined

American Indian Males (n = 8)

CAUTION: Small number of cases – interpret carefully.



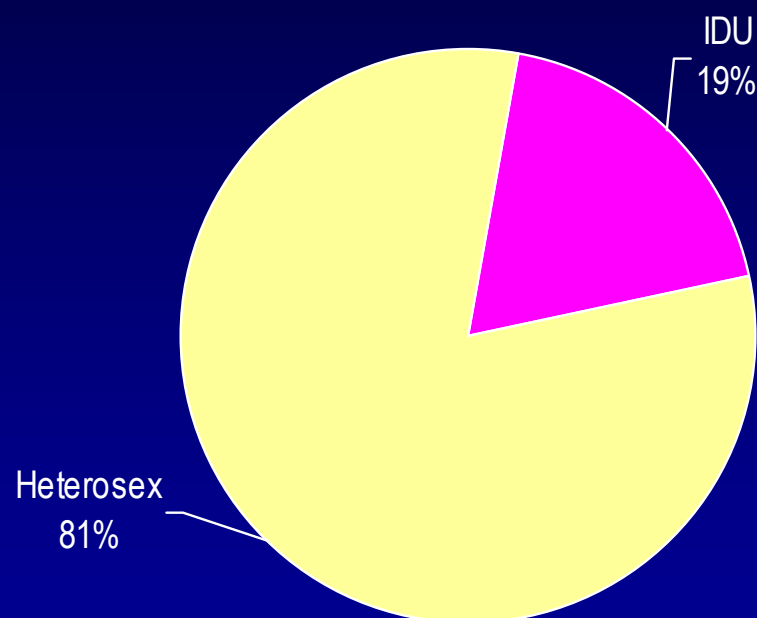
n = Number of persons MSM = Men who have sex with men IDU = Injecting drug use Heterosex = Heterosexual contact

* HIV or AIDS at first diagnosis

† Mode of Exposure proportions have been estimated using cases for 2007-2009 with known risk. For more detail see the HIV Surveillance Technical notes.

HIV Infections* by Estimated Mode of Exposure† Diagnosis Years 2007 - 2009 combined

White Females (n = 60)



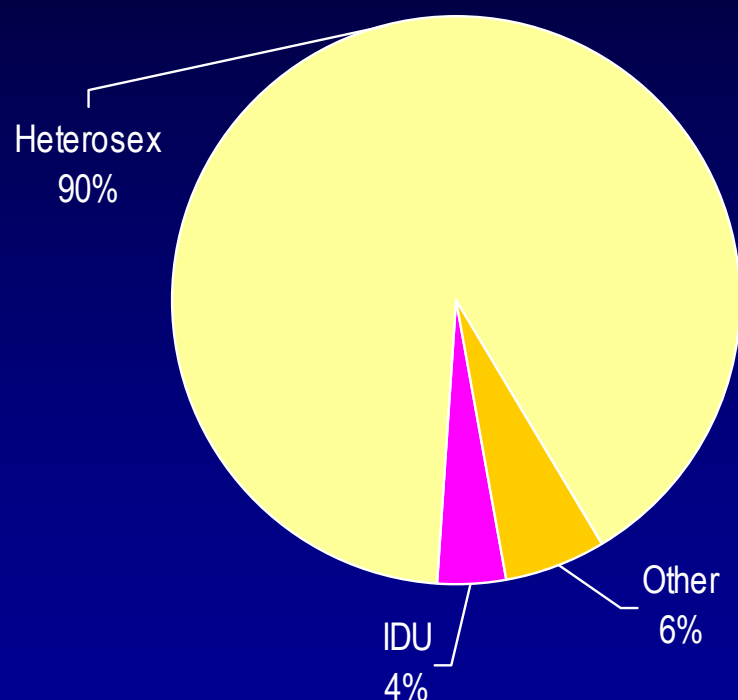
n = Number of persons IDU = Injecting drug use Heterosex = Heterosexual contact Other = Other risk, including perinatal

* HIV or AIDS at first diagnosis

† Mode of Exposure proportions have been estimated using cases for 2007-2009 with known risk. For more detail see the HIV Surveillance Technical notes.

HIV Infections* by Estimated Mode of Exposure† Diagnosis Years 2007 - 2009 combined

African American Females†† (n = 61)



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

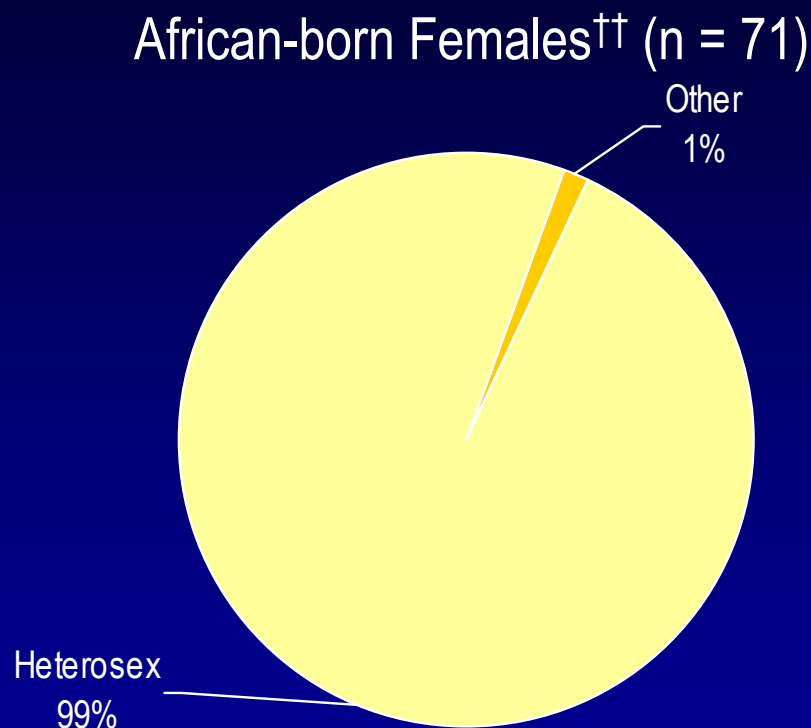
n = Number of persons

* HIV or AIDS at first diagnosis

† Mode of Exposure proportions have been estimated using cases for 2007-2009 with known risk. For more detail see the HIV Surveillance Technical notes.

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

HIV Infections* by Estimated Mode of Exposure† Diagnosis Years 2007 - 2009 combined



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.

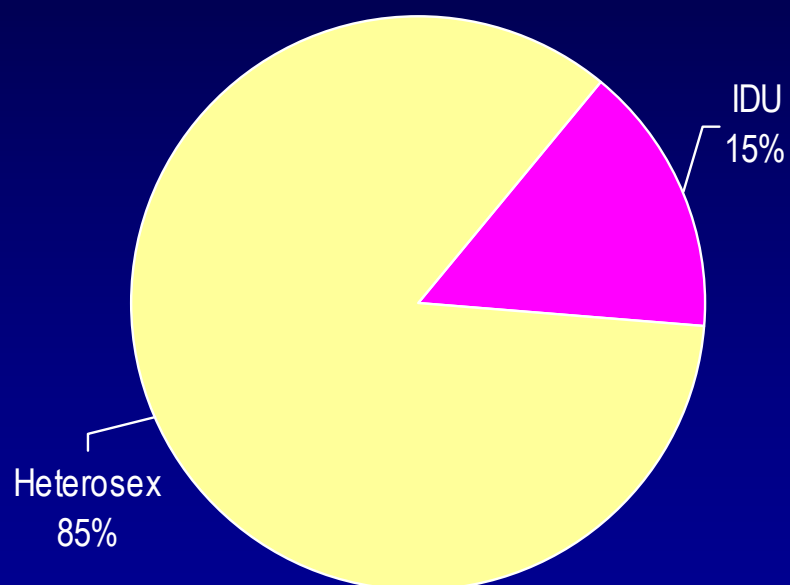
For more detail see the HIV Surveillance Technical notes.

†† Refers to Black, African-born females.

HIV Infections* by Estimated Mode of Exposure† Diagnosis Years 2007 - 2009 combined

Hispanic Females (n = 15)

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

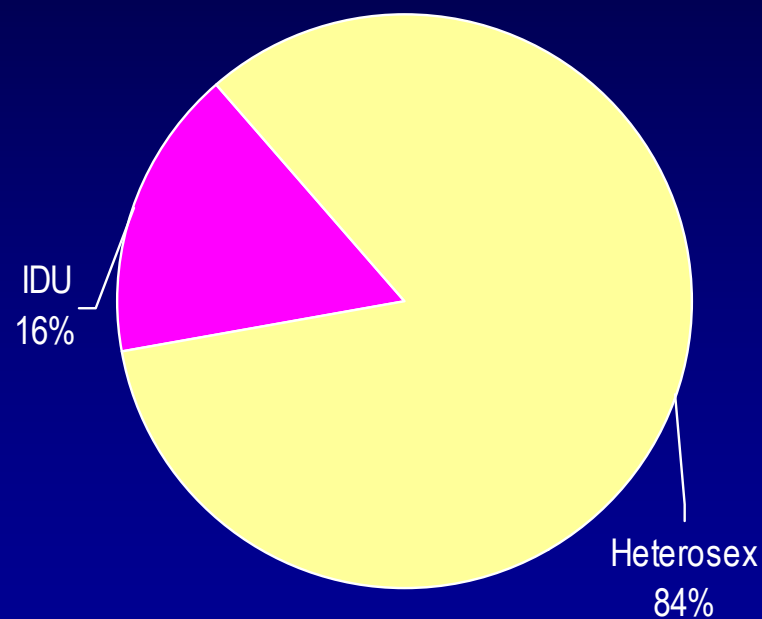
* HIV or AIDS at first diagnosis

† Mode of Exposure proportions have been estimated using cases for 2007-2009 with known risk. For more detail see the HIV Surveillance Technical notes.

HIV Infections* by Estimated Mode of Exposure† Diagnosis Years 2007 - 2009 combined

American Indian Females (n = 14)

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

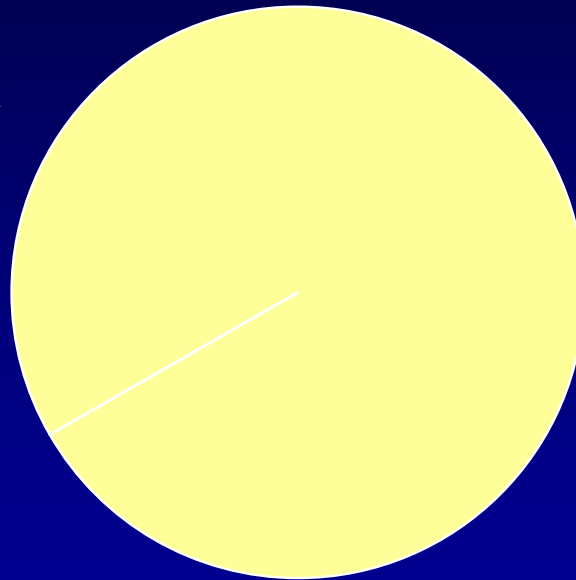
† Mode of Exposure proportions have been estimated using cases for 2007-2009 with known risk. For more detail see the HIV Surveillance Technical notes.

HIV Infections* by Estimated Mode of Exposure† Diagnosis Years 2007 - 2009 combined

Asian Females (n = 2)

CAUTION: Small number of cases – interpret carefully.

Heterosex
100%



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

* HIV or AIDS at first diagnosis

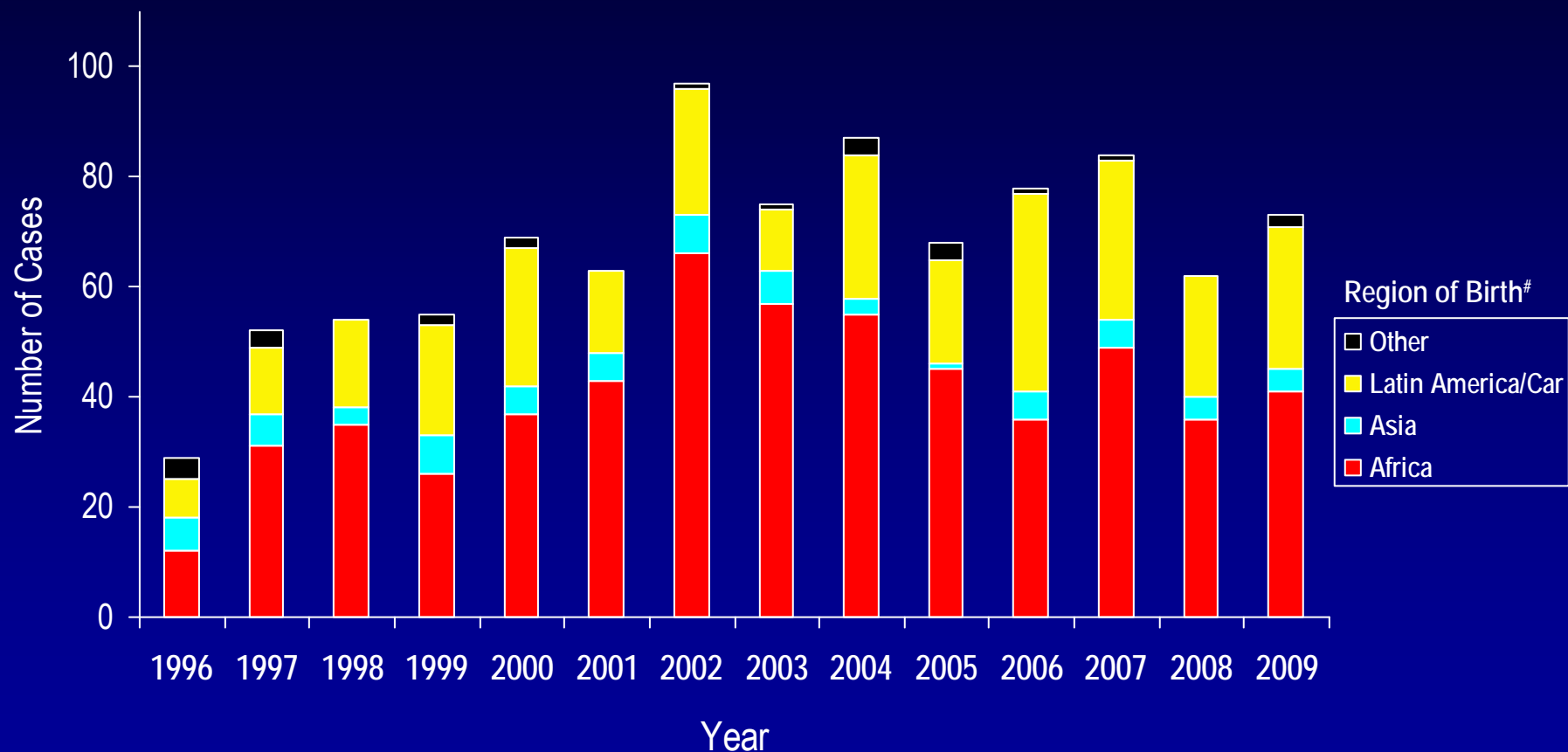
† Mode of Exposure has been estimated for cases with unknown risk using the following: 95% - Heterosexual and 5%-Other.

For more detail see the HIV Surveillance Technical notes.

Special Populations

Foreign-born Cases

HIV Infections* among Foreign-Born Persons† in Minnesota by Year of Diagnosis and Region of Birth, 1996 - 2009



* HIV or AIDS at first diagnosis

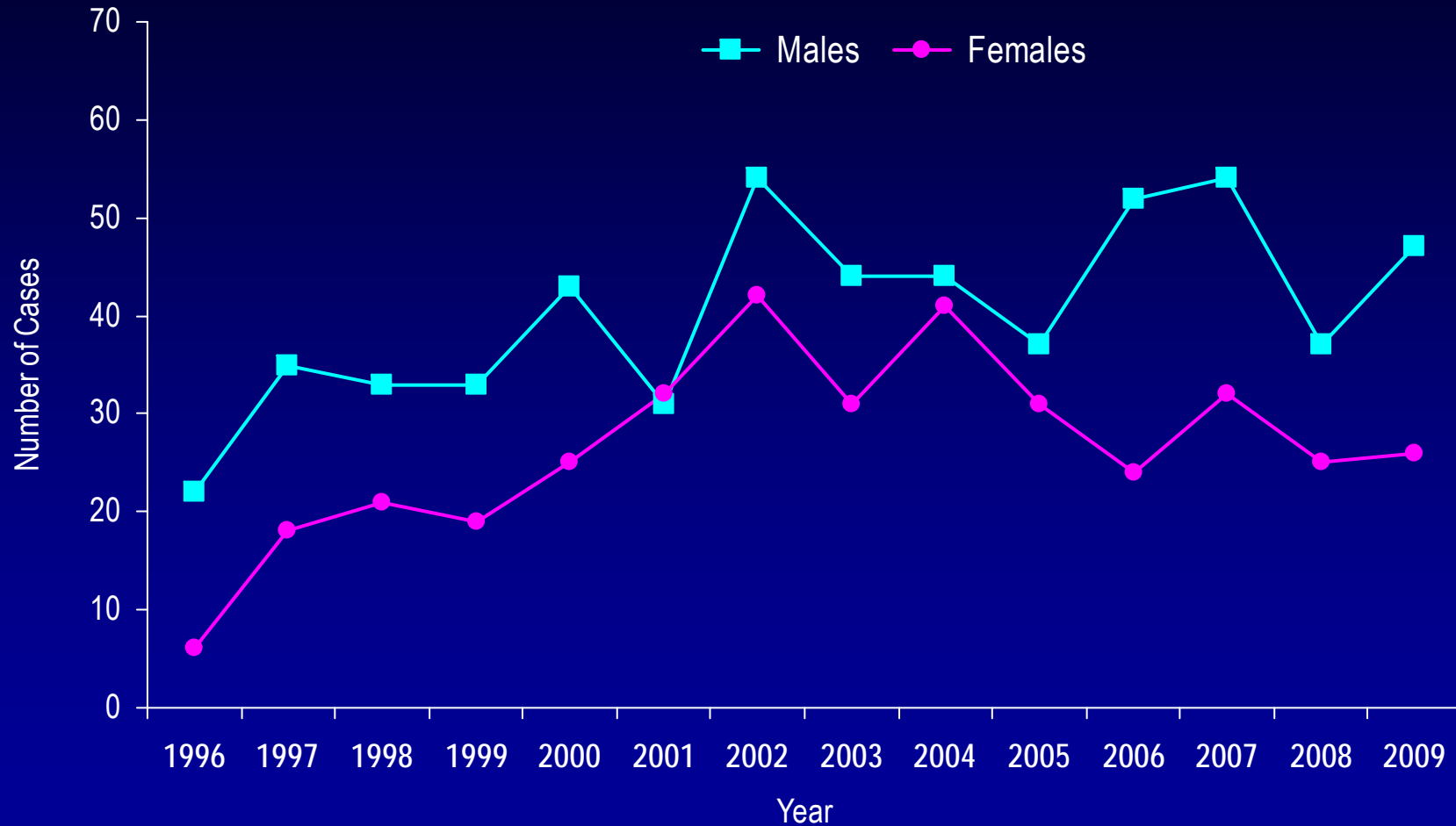
† Excludes persons arriving to Minnesota through the HIV+ Refugee Resettlement Program, as well as, other refugee/immigrants with an HIV diagnosis prior to arrival in Minnesota.

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

Data Source: Minnesota HIV/AIDS Surveillance System

HIV/AIDS in Minnesota: Annual Review

HIV Infections* Among Foreign-Born Persons† by Gender and Year of Diagnosis, 1996 - 2009



• HIV or AIDS at first diagnosis

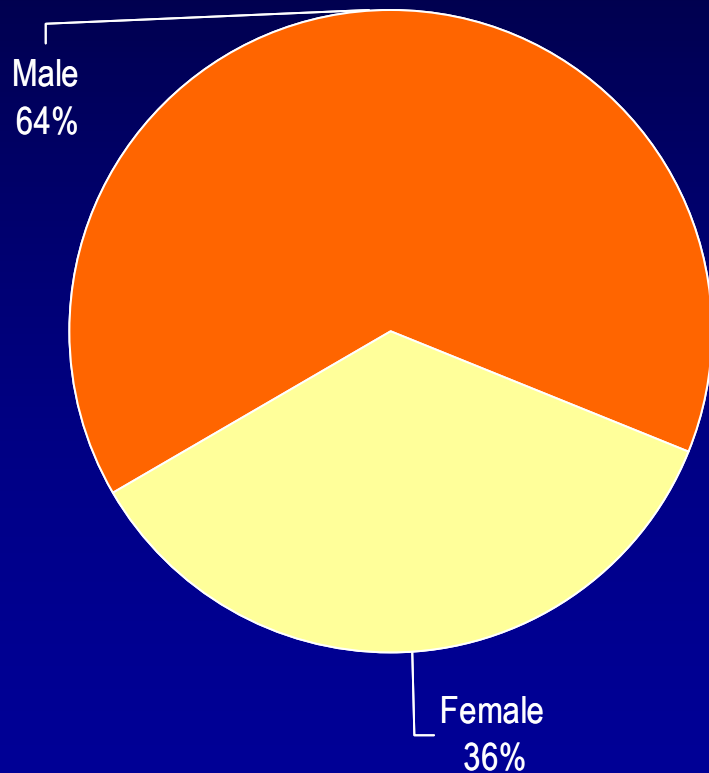
† Excludes persons arriving to Minnesota through the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants with an HIV diagnosis prior to arrival in Minnesota.

Data Source: Minnesota HIV/AIDS Surveillance System

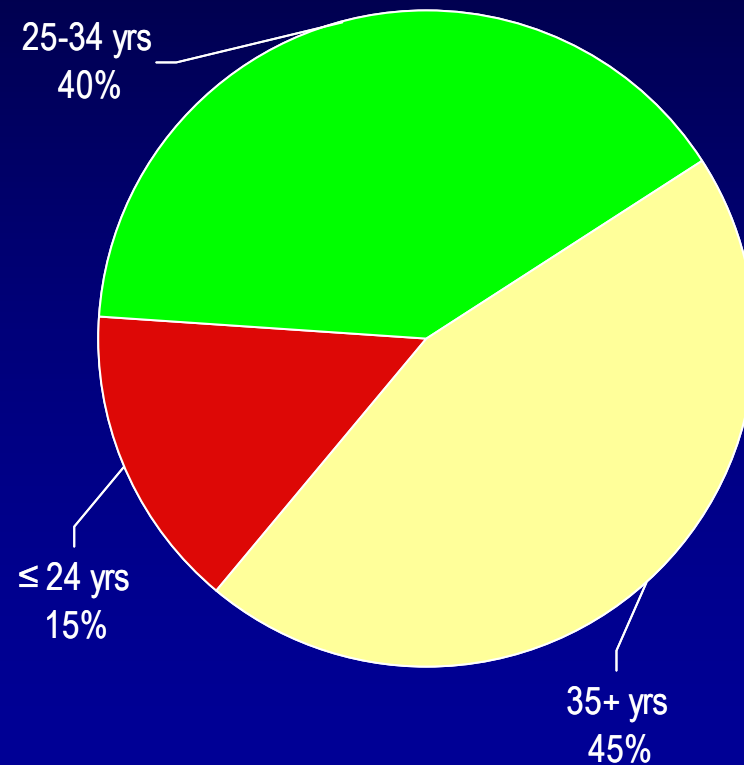
HIV/AIDS in Minnesota: Annual Review

HIV Infections* Among Foreign-Born Persons† by Gender and Age, 2009

Gender (n = 73)



Age (n = 73)



* 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.

Data Source: Minnesota HIV/AIDS Surveillance System

HIV/AIDS in Minnesota: Annual Review

Countries of Birth Among Foreign-Born Persons[†] Diagnosed with HIV*, Minnesota, 2009

- **Mexico** (n=15)
- **Cameroon** (n=6)
- **Ethiopia** (n=6)
- **Liberia** (n=6)
- **Kenya** (n=5)
- **Guatemala** (n=3)
- **Other[^]** (n=32)

* HIV or AIDS at first diagnosis

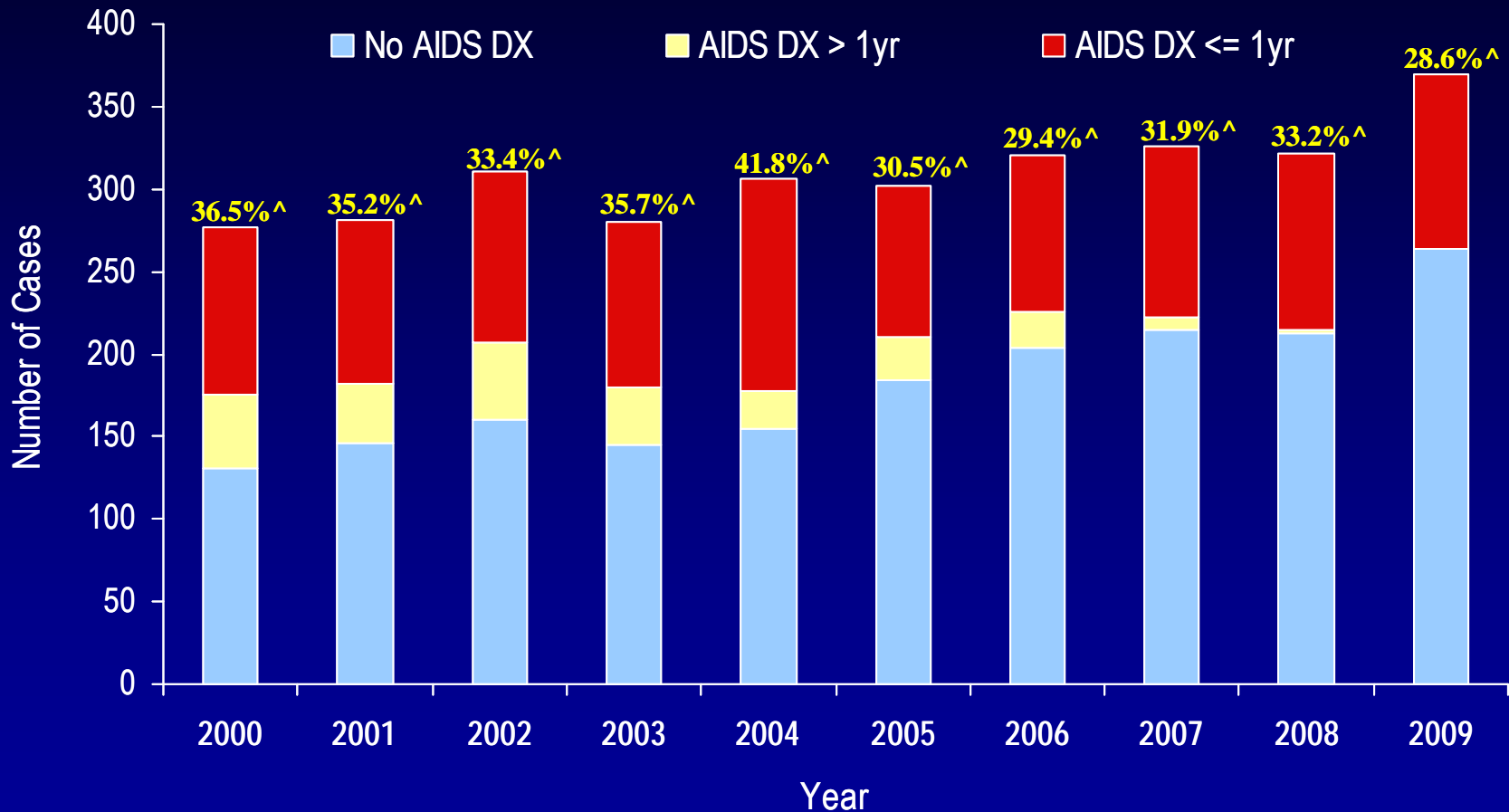
[†] Excludes persons arriving to Minnesota through the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants with an HIV diagnosis prior to arrival in Minnesota..

[^] Includes 22 additional countries.

Late Testers

(AIDS Diagnosis within one year of initial HIV Infection Diagnosis)

Time of Progression to AIDS for HIV Infections Diagnosed in Minnesota*, 2000 - 2009†



*Numbers include AIDS at 1st report and refugees in the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants diagnosed with AIDS subsequent to their arrival in the U.S.

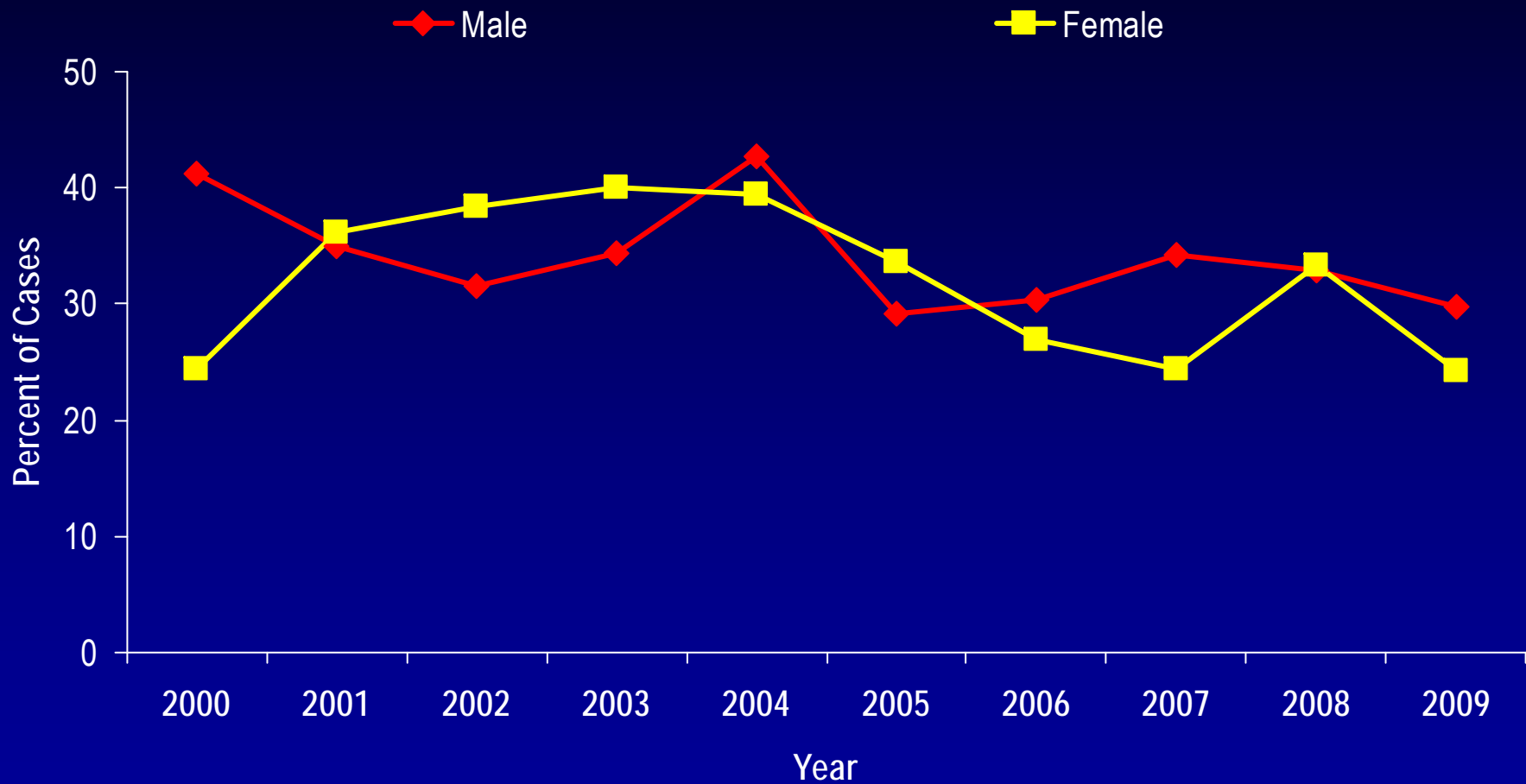
[^] Percent of cases progressing to AIDS within one year of initial diagnosis with HIV Infection.

† Numbers/Percent for cases diagnosed in 2009 only represents cases progressing to AIDS through January 2010.

Data Source: Minnesota HIV/AIDS Surveillance System

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Progression to AIDS within 1 year of initial HIV Infection* Diagnosis by Gender, 2000 - 2009†



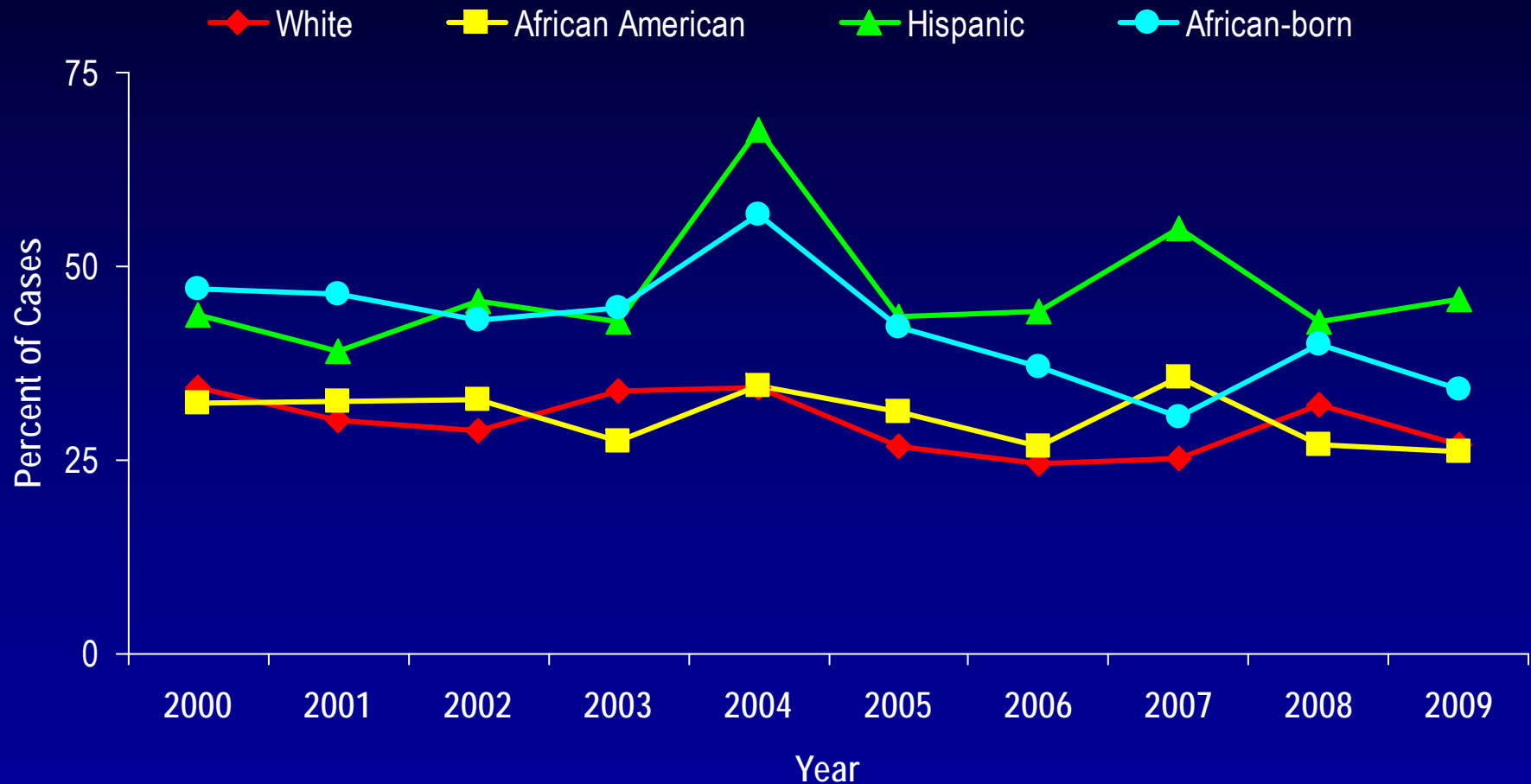
*Numbers include AIDS at 1st report and refugees in the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants diagnosed with AIDS subsequent to their arrival in the U.S.

† Numbers/Percent for cases diagnosed in 2009 only represents cases progressing to AIDS through January 2010.

Data Source: Minnesota HIV/AIDS Surveillance System

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Progression to AIDS within 1 year of initial HIV Infection* Diagnosis by Race/Ethnicity[^], 2000 - 2009[†]

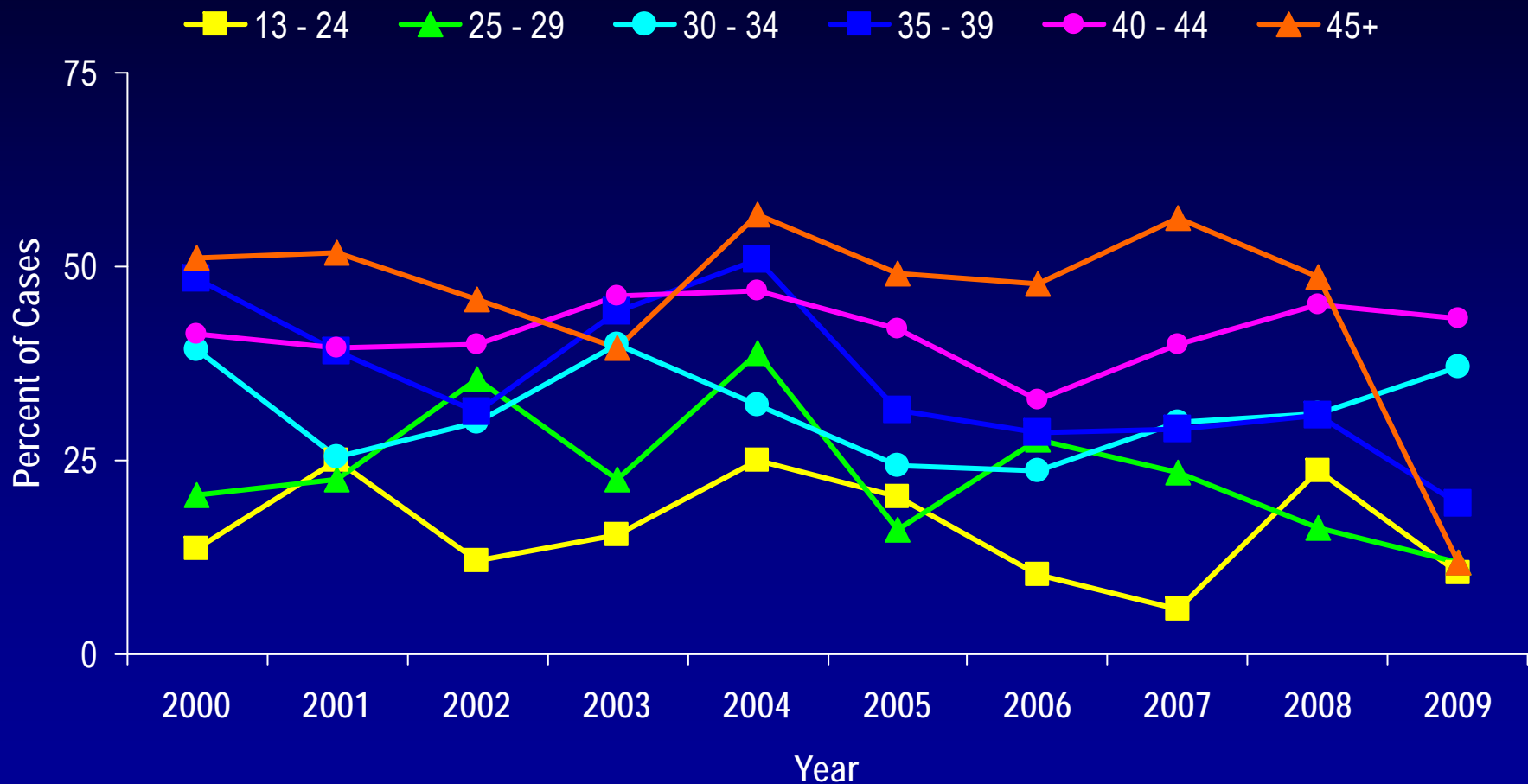


*Numbers include AIDS at 1st report and refugees in the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants diagnosed with AIDS subsequent to their arrival in the U.S.

[†] Numbers/Percent for cases diagnosed in 2009 only represents cases progressing to AIDS through January 2010.

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

Progression to AIDS within 1 year of initial HIV Infection* Diagnosis by Age[^], 2000 - 2009[†]

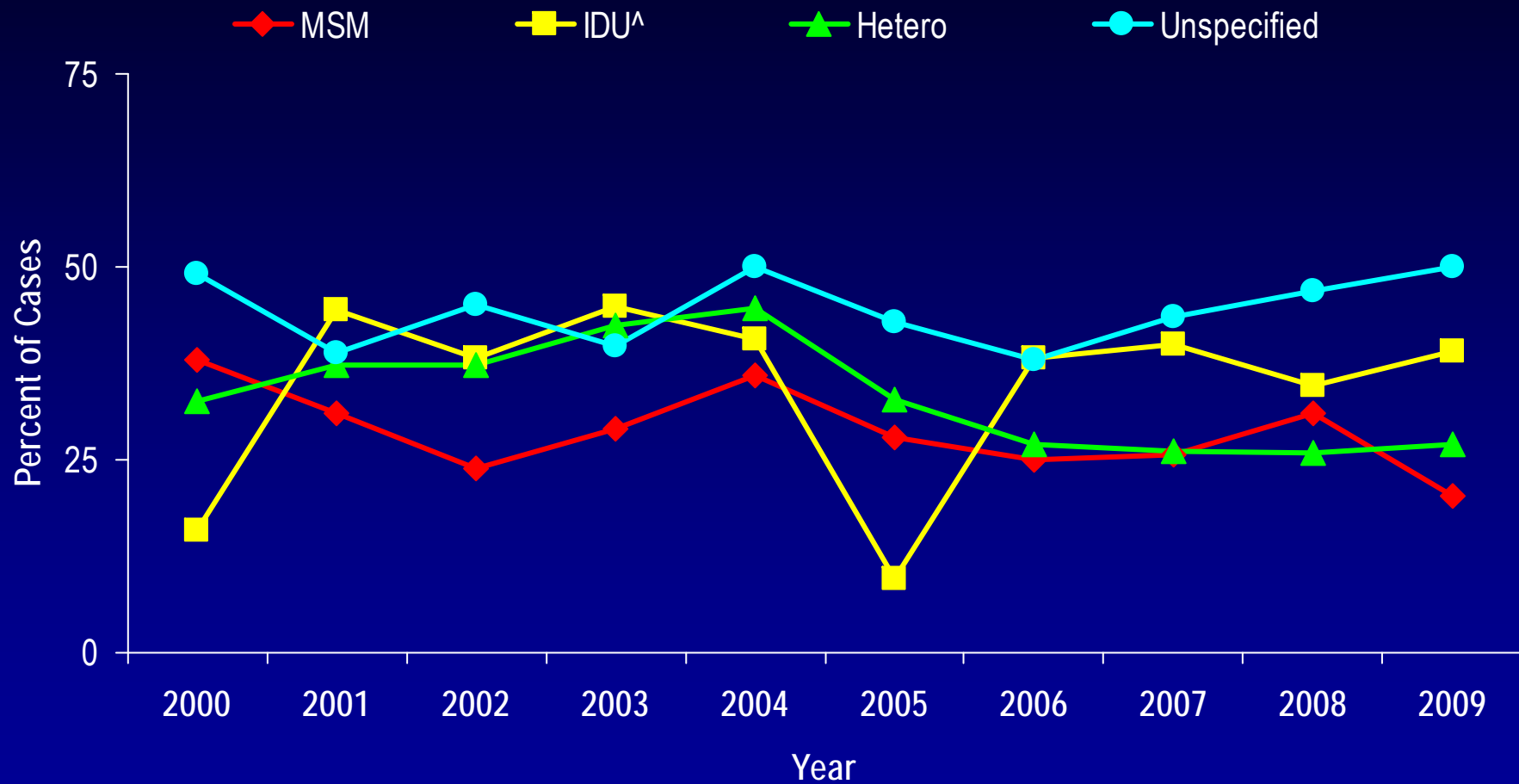


*Numbers include AIDS at 1st report and refugees in the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants diagnosed with AIDS subsequent to their arrival in the U.S.

[†] Numbers/Percent for cases diagnosed in 2009 only represents cases progressing to AIDS through January 2010.

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

Progression to AIDS within 1 year of initial HIV Infection* Diagnosis by Mode of Transmission, 2000 - 2009†

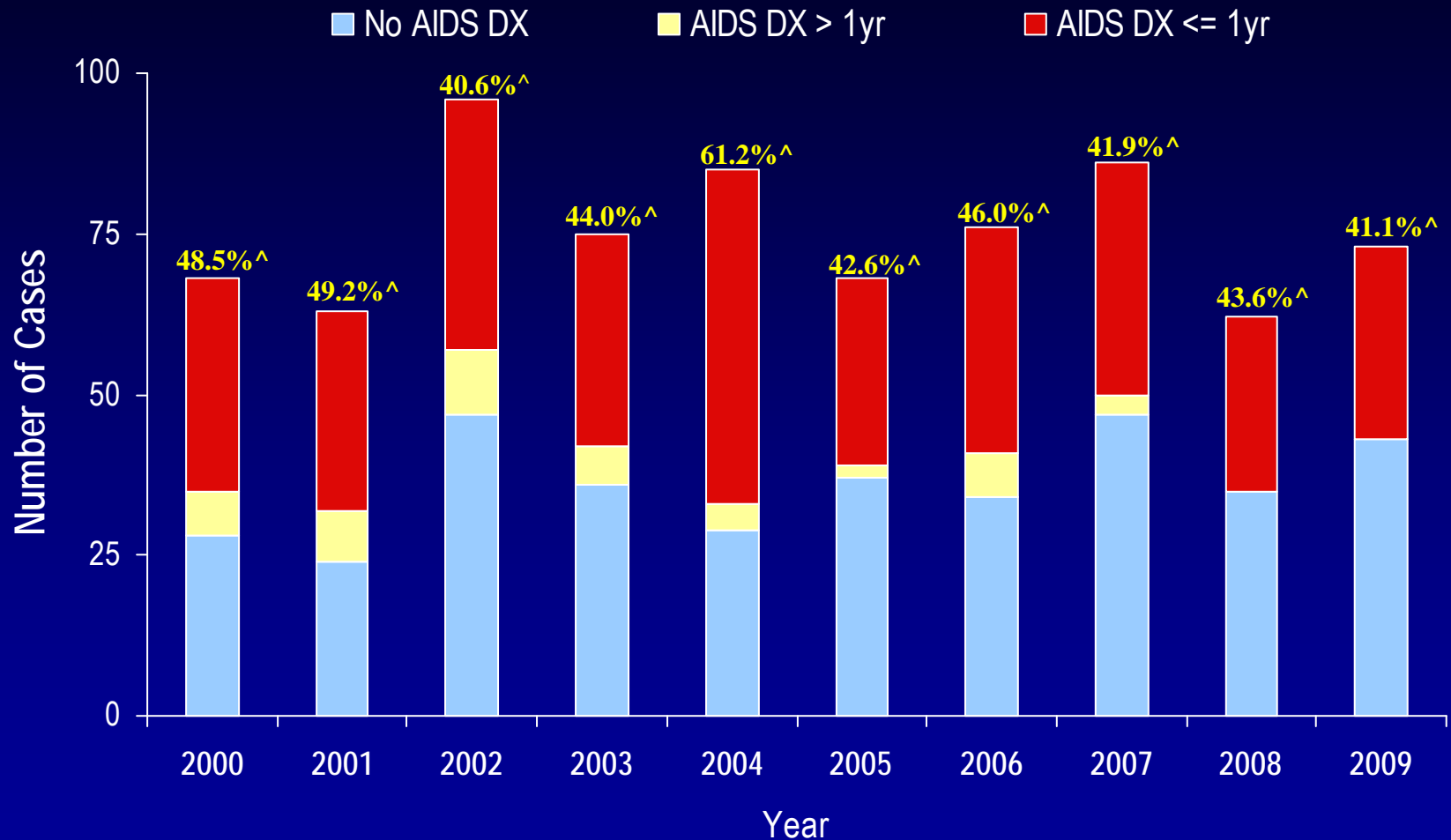


*Numbers include AIDS at 1st report and refugees in the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants diagnosed with AIDS subsequent to their arrival in the U.S.

† Numbers/Percent for cases diagnosed in 2009 only represents cases progressing to AIDS through January 2010.

^Includes MSM/IDU

Time of Progression to AIDS for HIV Infections* Diagnosed Among Foreign-Born Persons, Minnesota 2000 - 2009†



*Numbers include AIDS at 1st report and refugees in the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants diagnosed with AIDS subsequent to their arrival in the U.S.

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

† Numbers/Percent for cases diagnosed in 2009 only represents cases progressing to AIDS through January 2010.