

# HIV SURVEILLANCE REPORT, 2014

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, 2014 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 2014 and reported to the Minnesota Department of Health (MDH) HIV/AIDS Surveillance System.
- The data are displayed by year of HIV diagnosis.



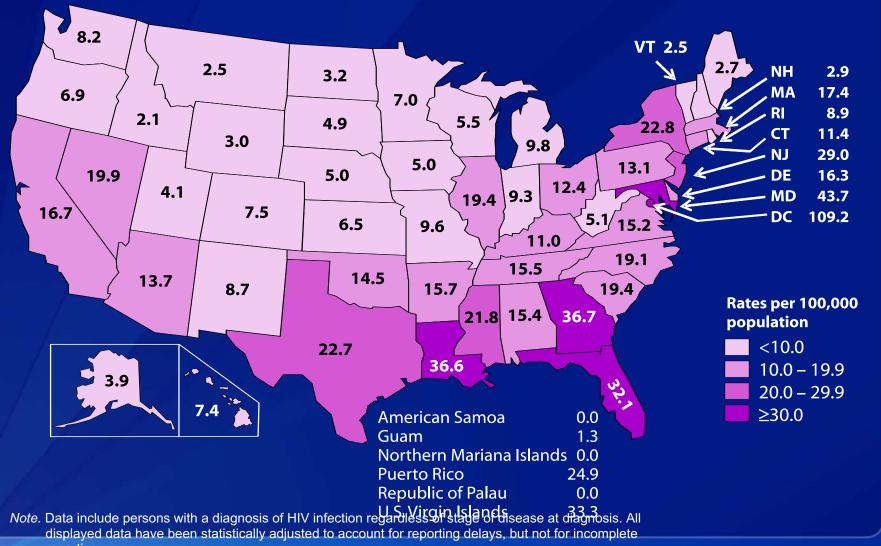
#### Introduction (II)

- 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 = 135).
- 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, 2014= 170), as well as, other refugees/immigrants reporting a positive test prior to their arrival in Minnesota (n=171).
- 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 <u>only</u> 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



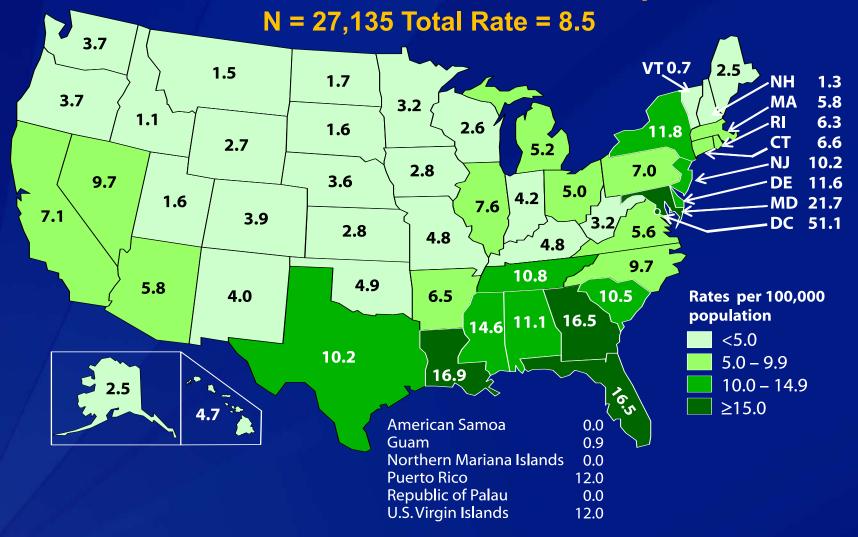
#### **National Context**

#### Rates of Diagnoses of HIV Infection among Adults and Adolescents, 2013—United States and 6 Dependent Areas N = 47,958Total Rate = 18.0



reporting.





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



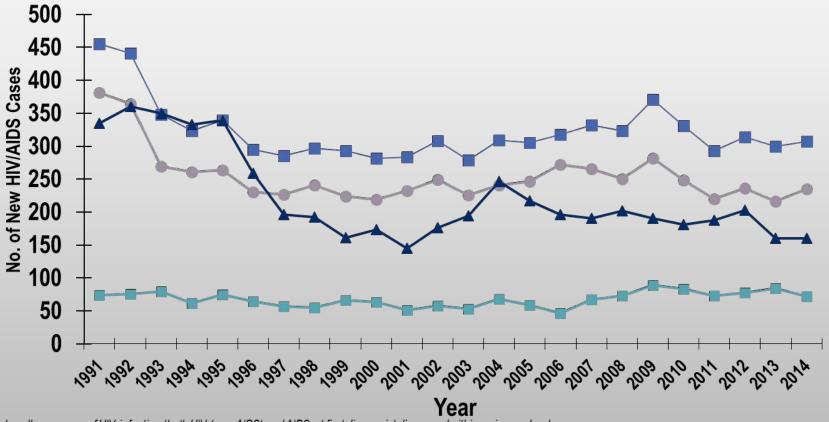
## Overview of HIV/AIDS in Minnesota



#### **HIV/AIDS** in Minnesota

#### New HIV Disease Diagnoses, HIV (non-AIDS) and AIDS Cases by Year, 1990-2014





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

<sup>^</sup>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.

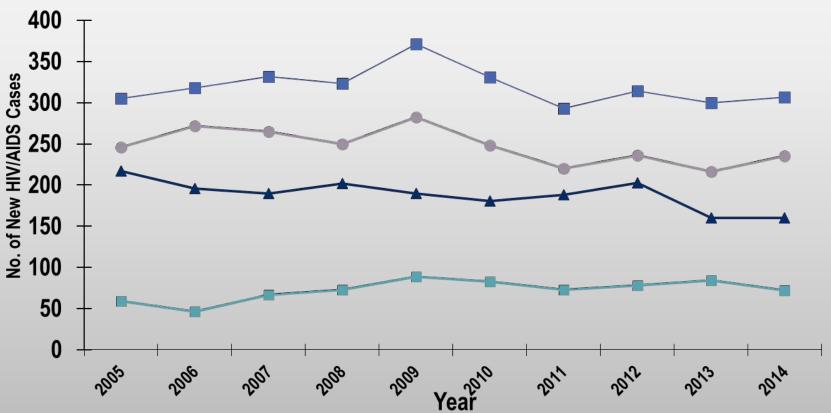
HIV/AIDS in Minnesota: Annual Review



#### **HIV/AIDS** in Minnesota

#### New HIV Disease Diagnoses, HIV (non-AIDS) and AIDS Cases by Year, 2005-2014





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

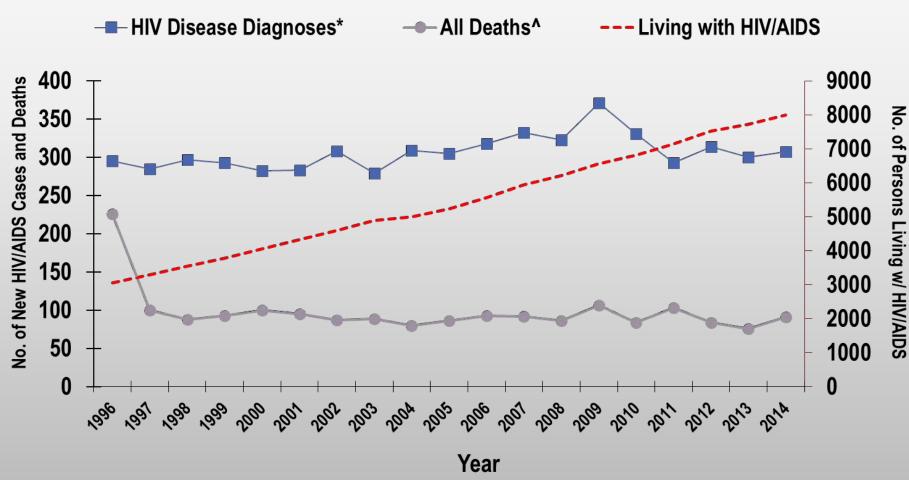
<sup>^</sup>Includes all new cases of AIDS diagnosed within a given calendar year, including AIDS at first diagnosis. This includes refugees in the HIV+ Resettlement Program, as well as, other refugee/immigrants diagnosed with AIDS subsequent to their arrival in the United States.

HIV/AIDS in Minnesota: Annual Review



#### **HIV/AIDS** in Minnesota

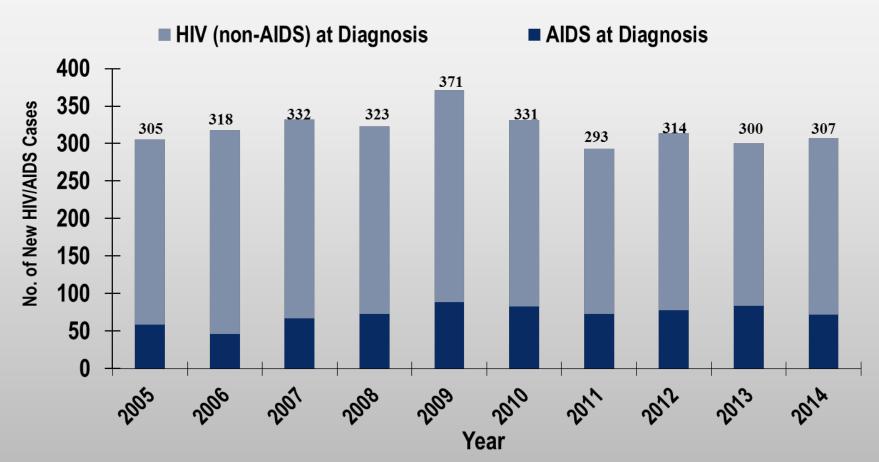
#### New HIV Disease Diagnoses, Deaths and Prevalent Cases by Year, 1996-2014



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



# HIV/AIDS in Minnesota HIV (non-AIDS) and AIDS at Diagnosis by Year, 2005-2014



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

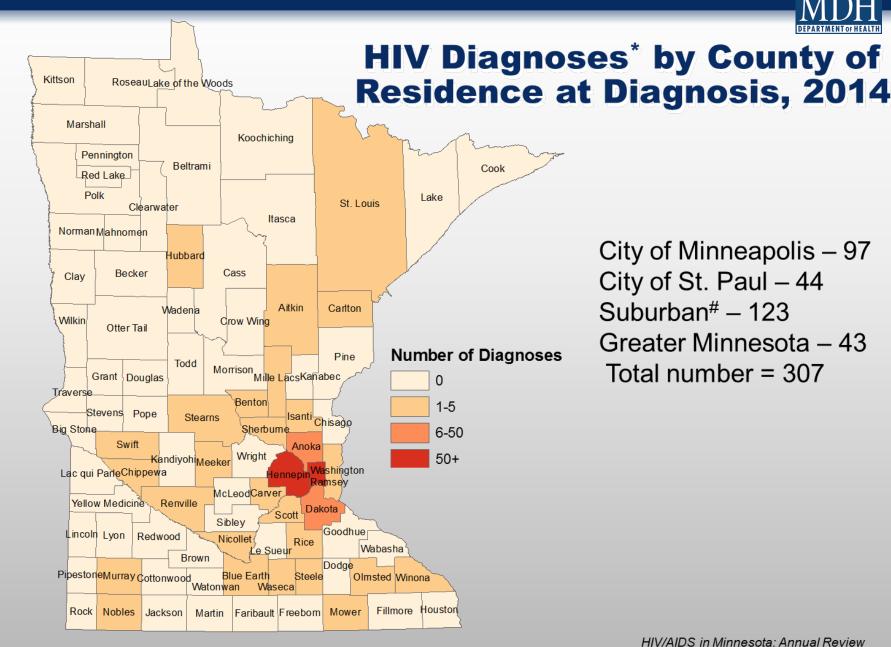


## HIV Diagnoses\* in Minnesota by Person, Place, and Time



#### **Place**

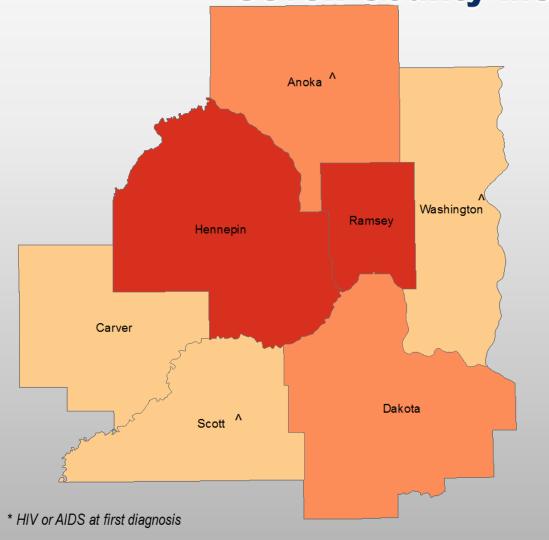




City of Minneapolis – 97 City of St. Paul – 44 Suburban# – 123 Greater Minnesota – 43 Total number = 307



HIV Diagnoses\* by County of Residence at Diagnosis, 2014
Seven-County Metro Area



#### Number of Diagnoses

0
1-5
6-50
50+

City of Minneapolis –97 City of St. Paul – 44 Suburban<sup>#</sup> – 123

Total number (Metro only) = 264

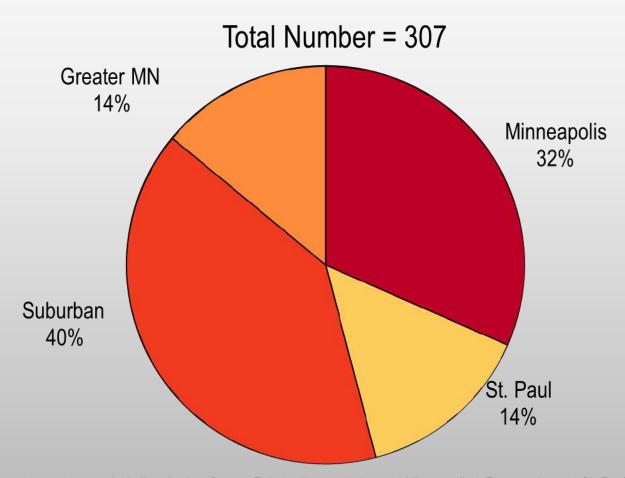
# 7-county metro area, excluding the cities of Minneapolis and St. Paul

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<sup>^</sup>Counties in which a state correctional facility is located.



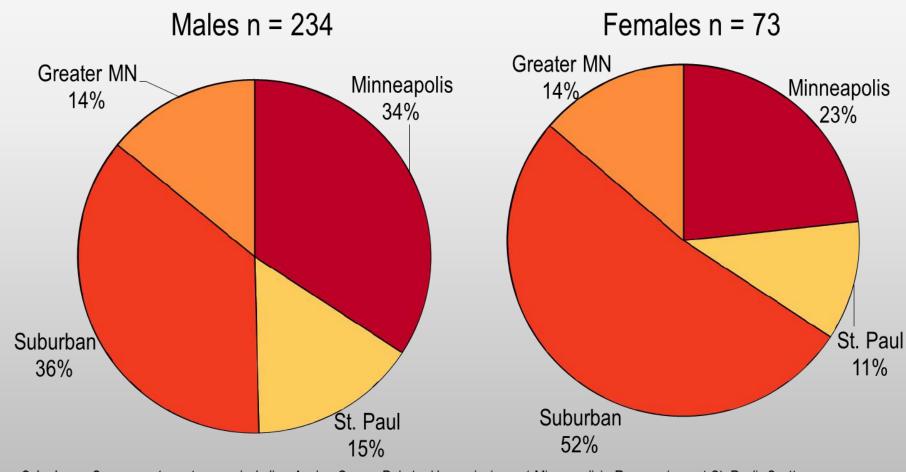
### HIV Diagnoses\* in Minnesota by Residence at Diagnosis, 2014



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 Diagnoses\* in Minnesota by Gender and Residence at Diagnosis, 2014



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.

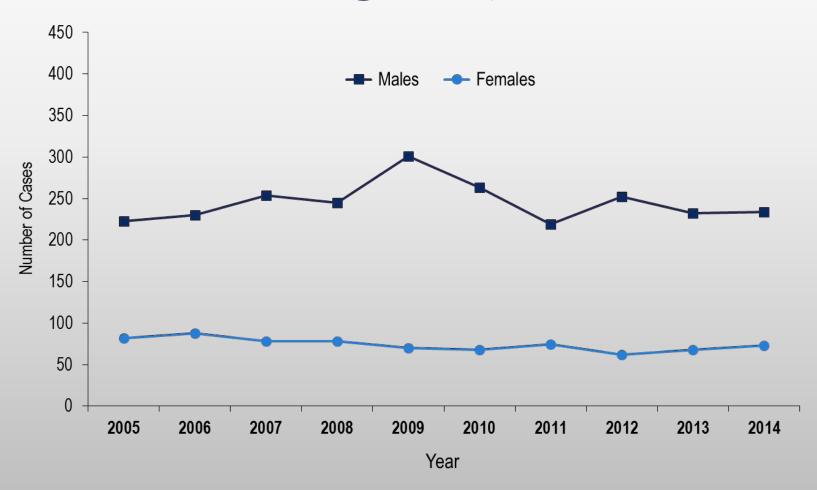
<sup>\*</sup> HIV or AIDS at first diagnosis



#### **Gender and Race/Ethnicity**

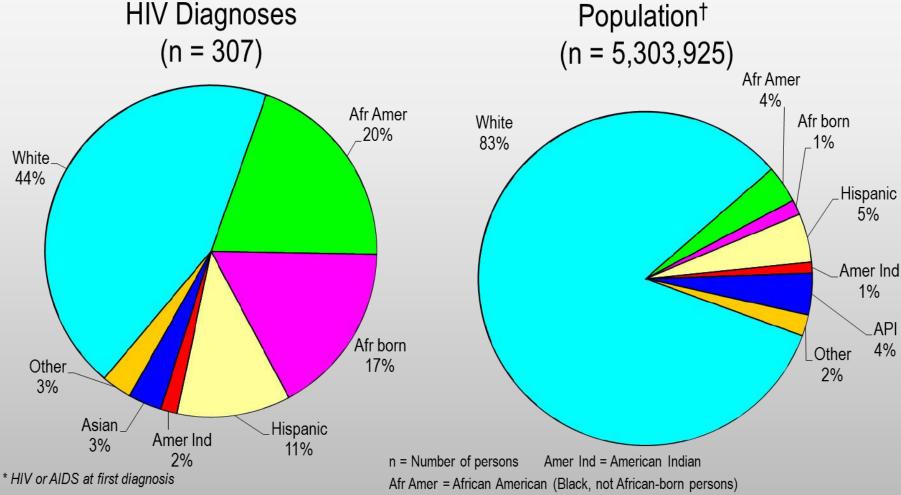


### HIV Diagnoses\* by Gender and Year of Diagnosis, 2005 - 2014





### HIV Diagnoses\* in Year 2014 and General Population in Minnesota by Race/Ethnicity

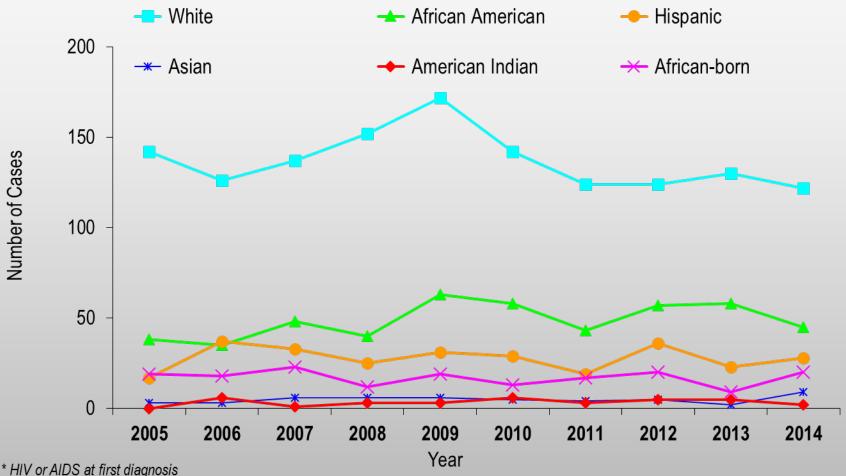


<sup>†</sup> Population estimates based on 2010 U.S. Census data

Afr born = African-born (Black, African-born persons)

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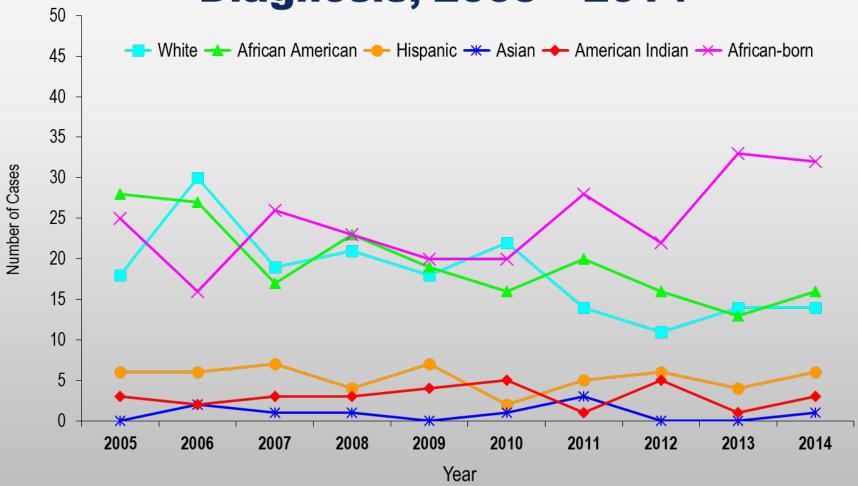
#### **HIV Diagnoses\* Among Males by** Race/Ethnicity† and Year of Diagnosis, 2005 - 2014



<sup>† &</sup>quot;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 – 2014



<sup>\*</sup> HIV or AIDS at first diagnosis

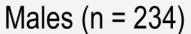
<sup>† &</sup>quot;African-born" refers to Blacks who reported an African country of birth; "African American" refers to all other Blacks.

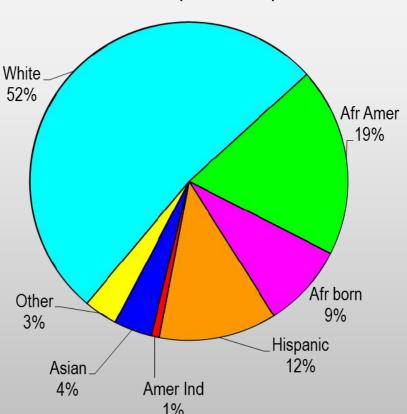
Cases with unknown race are excluded.

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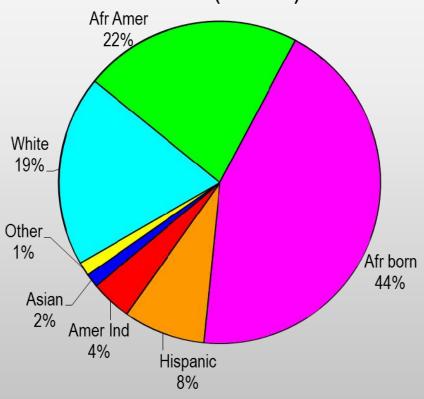


### HIV Diagnoses\* Diagnosed in Year 2014 by Gender and Race/Ethnicity





Females (n = 73)



\* 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, 2014

Race/Ethnicity	Cases	%	Rate
White, non-Hispanic	136	44%	3.1
Black, African-American	61	20%	31.8
Black, African-born	52	17%	67.0 <sup>††</sup>
Hispanic	34	11%	13.6
American Indian	5	2%	9.0
Asian/Pacific Islander	10	3%	4.7
Other^	9	3%	#
Total	307	100%	5.8

<sup>\*</sup> HIV or AIDS at first diagnosis; 2010 U.S. Census Data used for rate calculations.

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

<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 or missing race

<sup>#-</sup>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<sup>†</sup>, Minnesota, 2014

Gender/Risk	Cases	%	Rate
Men (Total)	(234)	76%	10.8
MSM <sup>†</sup>	155	66%	167.0 <sup>††</sup>
Non-MSM	79	34%	3.8
Women	72	24%	3.2
Total	306	100%	7.0

<sup>\*\*</sup>HIV or AIDS at first diagnosis over the age of 13;

<sup>• 2010</sup> U.S. Census Data for persons age 13 and over used for rate calculations.

<sup>† &</sup>quot;MSM" refers to both MSM and MSM/IDU.

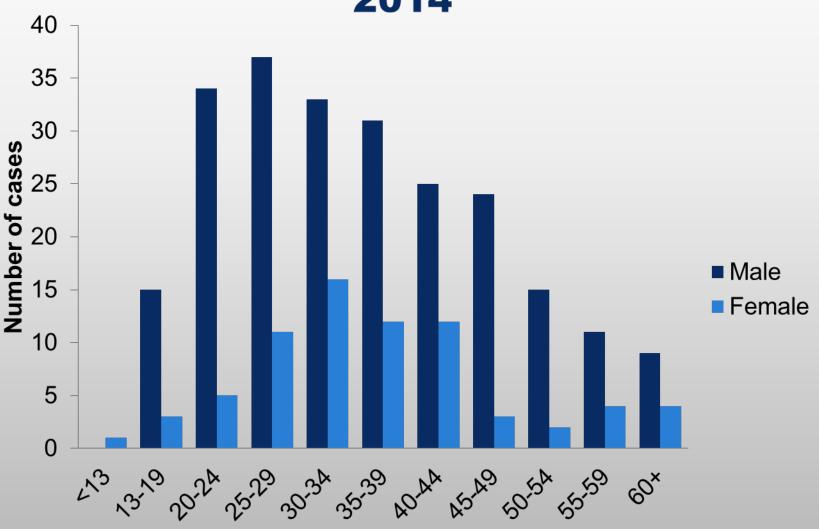
<sup>††</sup> Estimate of 92,788



#### Age



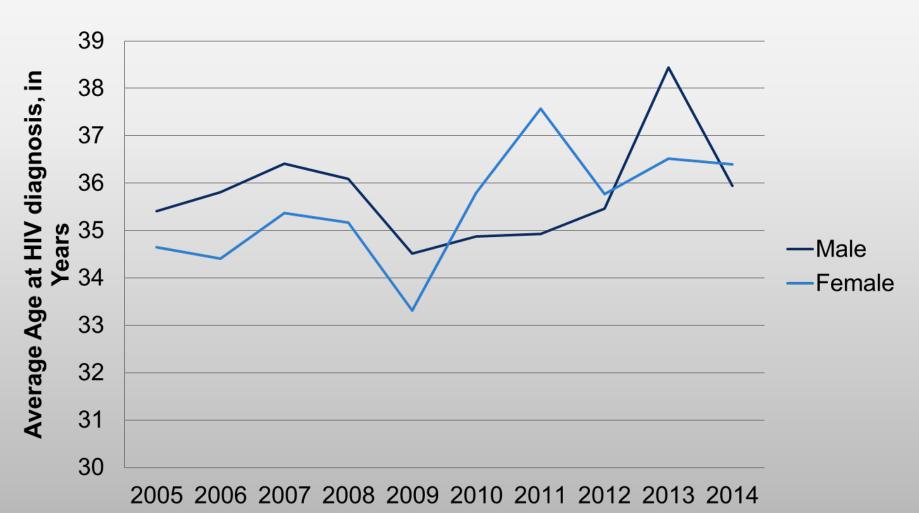
#### Age at HIV Diagnosis\* by Sex at Birth, 2014



Age at HIV Diagnosis in Years



### Average Age at HIV Diagnosis\* by Sex at Birth, 2005-2014



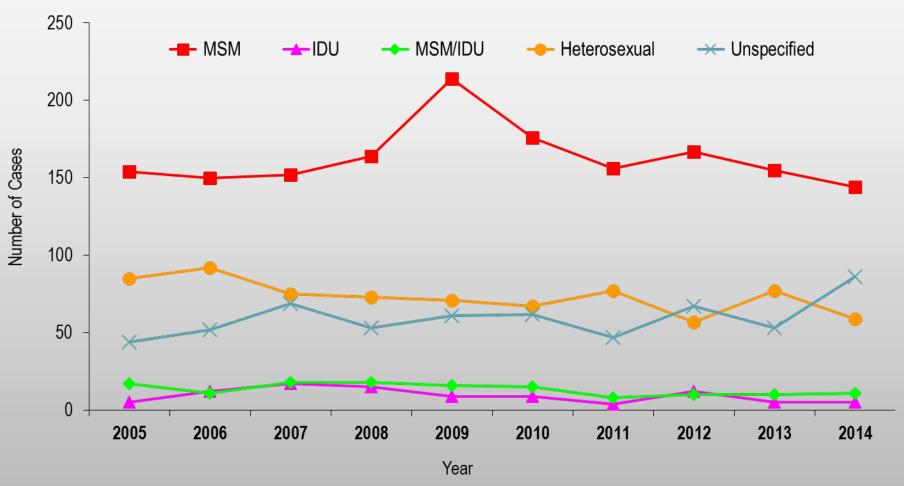
\* HIV or AIDS at first diagnosis



#### **Mode of Exposure**



### HIV Diagnoses\* by Mode of Exposure and Year, 2005 - 2014



MSM = Men who have sex with men
\* HIV or AIDS at first diagnosis

IDU = Injecting drug use

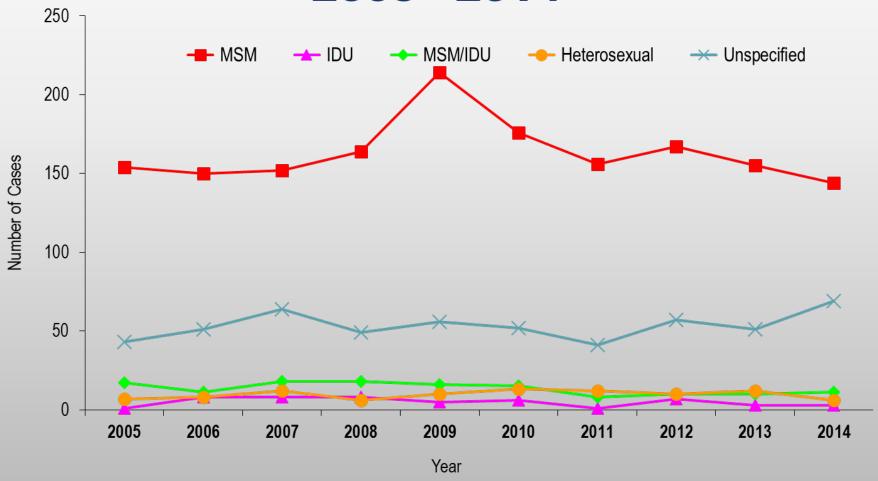
Heterosexual = Heterosexual contact

Unspecified = No mode of exposure ascertained

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## HIV Diagnoses\* Among Males by Mode of Exposure and Year, 2005 - 2014



MSM = Men who have sex with men

\* HIV or AIDS at first diagnosis

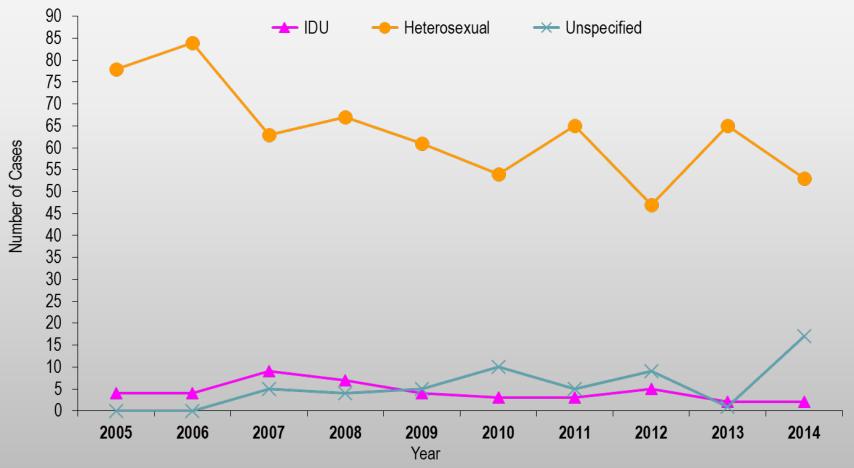
IDU = Injecting drug use

Heterosexual = Heterosexual contact

Unspecified = No mode of exposure ascertained



## HIV Diagnoses\* Among Females by Mode of Exposure and Year of Diagnosis, 2005 - 2014

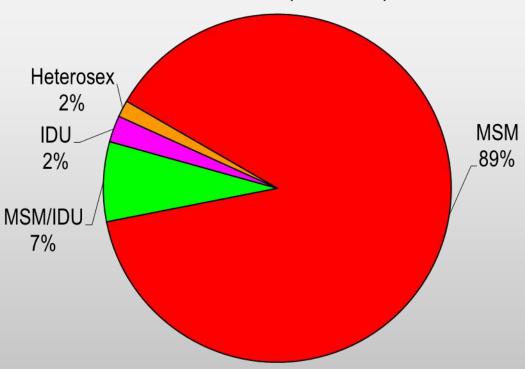


IDU = Injecting drug use Heterosexual = Heterosexual contact with HIV+ , bisexual, IDU, hemophiliac/blood project or organ transplant recipient, or with partner with unknown risk



### HIV Diagnoses\* by Estimated Mode of Exposure† 2012–2014 combined





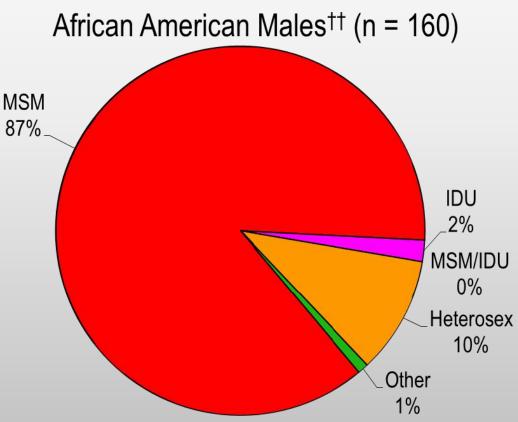
n = Number of persons MSM = Men who have sex with men IDU = Injecting drug use Heterosex = Heterosexual contact Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

<sup>\*</sup> HIV or AIDS at first diagnosis

<sup>†</sup> Mode of Exposure proportions have been estimated using cases for 2012-2014 with known risk. For more detail see the HIV Surveillance Technical notes.



### HIV Diagnoses\* by Estimated Mode of Exposure† 2012 - 2014 combined



n = Number of persons MSM = Men who have sex with men IDU = Injecting drug use Heterosex = Heterosexual contact Other = Hemophilia, transfusion, mother w/ HIV or HIV risk

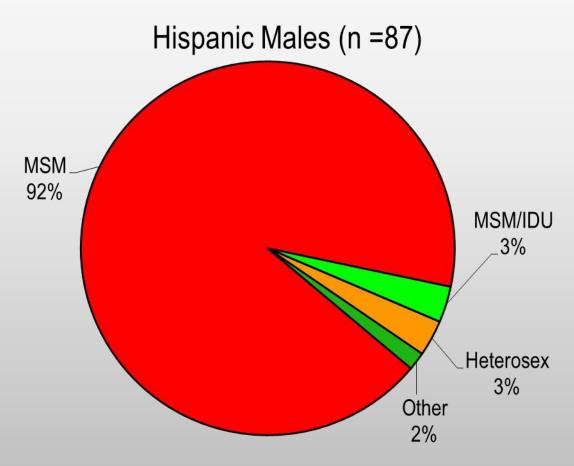
<sup>\*</sup> HIV or AIDS at first diagnosis

<sup>&</sup>lt;sup>†</sup> Mode of Exposure proportions have been estimated using cases for 2012-2014 with known risk. For more detail see the HIV Surveillance Technical notes.

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



### HIV Diagnoses\* by Estimated Mode of Exposure† 2012 - 2014 combined

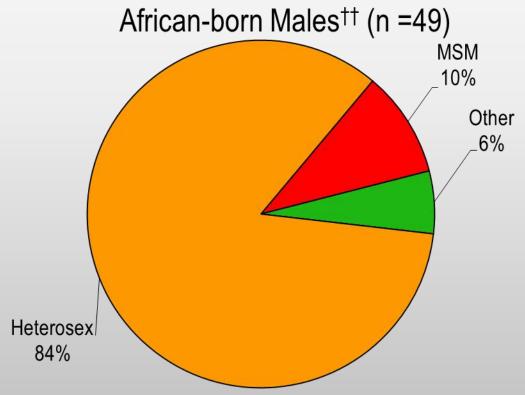


n = Number of persons MSM = Men who have sex with men IDU = Injecting drug use Heterosex = Heterosexual contact \* HIV or AIDS at first diagnosis

<sup>†</sup> Mode of Exposure proportions have been estimated using cases for 2012-2014 with known risk. For more detail see the HIV Surveillance Technical notes.



### HIV Diagnoses\* by Estimated Mode of Exposure†2012 - 2014 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

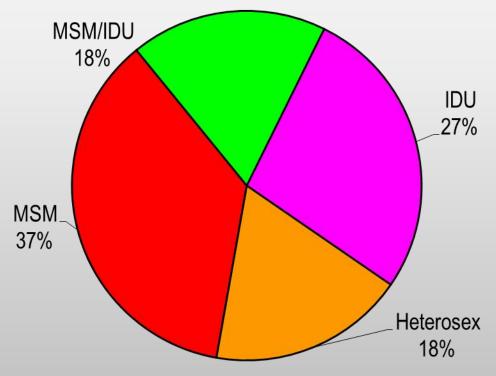
<sup>\*</sup> HIV or AIDS at first diagnosis

<sup>†</sup> 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.



American Indian Males (n = 12)

CAUTION: Small number of cases - interpret carefully.



n = Number of persons MSM = Men who have sex with men IDU

IDU = Injecting drug use

Heterosex = Heterosexual contact

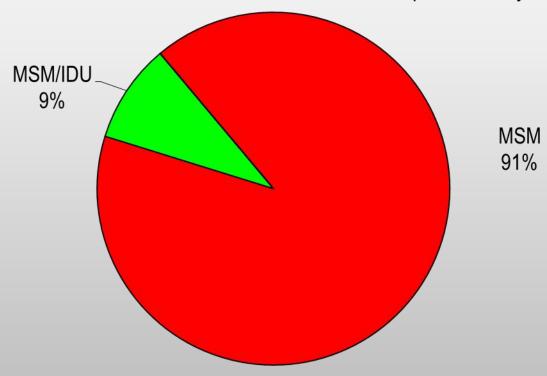
<sup>\*</sup> HIV or AIDS at first diagnosis

<sup>&</sup>lt;sup>†</sup> Mode of Exposure proportions have been estimated using cases for 2012-2014 with known risk. For more detail see the HIV Surveillance Technical notes.



Asian Males (n = 16)

CAUTION: Small number of cases – interpret carefully.



n = Number of persons MSM = Men who have sex with men

IDU = Injecting drug use

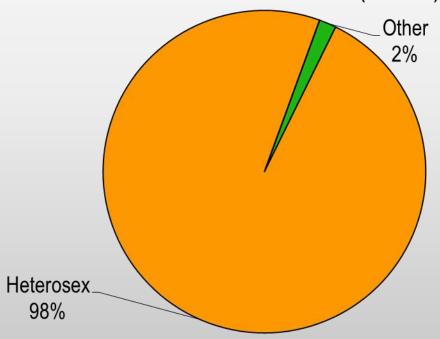
Heterosex = Heterosexual contact

<sup>\*</sup> HIV or AIDS at first diagnosis

<sup>†</sup> Mode of Exposure proportions have been estimated using cases for 2012-2014 with known risk. For more detail see the HIV Surveillance Technical notes.



African-born Females<sup>††</sup> (n = 87)



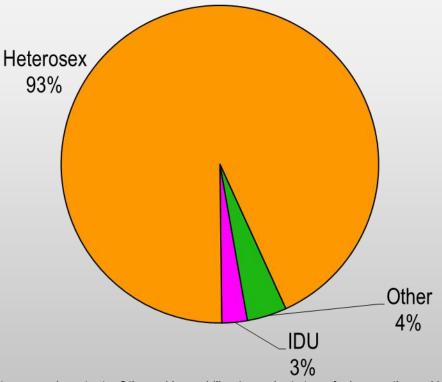
n = Number of persons Other = Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk Heterosex = Heterosexual contact

<sup>\*</sup> HIV or AIDS at first diagnosis

<sup>&</sup>lt;sup>†</sup> 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.



African American Females<sup>††</sup> (n = 45)



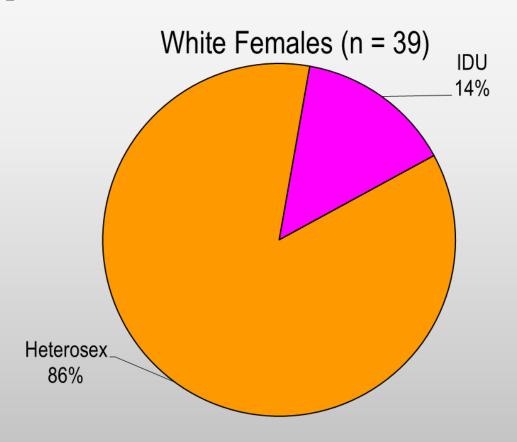
IDU = Injecting drug use Heterosex = Heterosexual contact Other = Hemophilia, transfusion, mother w/ HIV or HIV risk n = Number of persons

<sup>\*</sup> HIV or AIDS at first diagnosis

<sup>&</sup>lt;sup>†</sup> Mode of Exposure proportions have been estimated using cases for 2012-2014 with known risk. For more detail see the HIV Surveillance Technical notes.

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





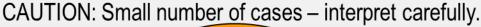
n = Number of persons IDU = Injecting drug use Heterosex = Heterosexual contact Other = Other risk, including perinatal

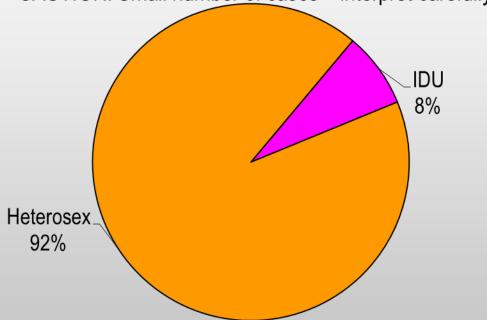
<sup>\*</sup> HIV or AIDS at first diagnosis

<sup>&</sup>lt;sup>†</sup> Mode of Exposure proportions have been estimated using cases for 2012-2014 with known risk. For more detail see the HIV Surveillance Technical notes.



Hispanic Females (n = 16)





IDU = Injecting drug use Heterosex = Heterosexual contact Other = Hemophilia, transfusion, mother w/ HIV or HIV risk n = Number of persons

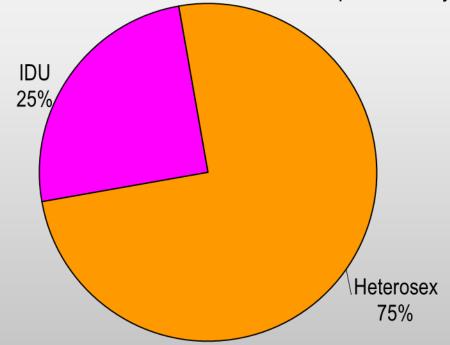
<sup>\*</sup> HIV or AIDS at first diagnosis

<sup>†</sup> Mode of Exposure proportions have been estimated using cases for 2012-2014 with known risk. For more detail see the HIV Surveillance Technical notes.



American Indian Females (n = 9)

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

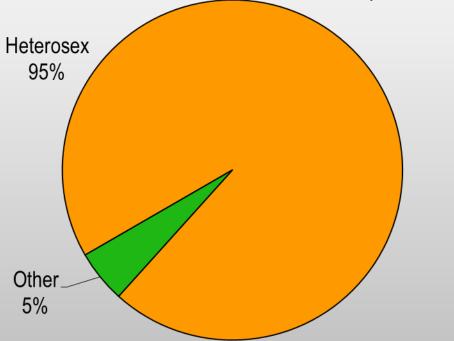
<sup>\*</sup> HIV or AIDS at first diagnosis

<sup>†</sup> Mode of Exposure proportions have been estimated using cases for 2012-2014 with known risk. For more detail see the HIV Surveillance Technical notes.



Asian Females (n = 1)

CAUTION: Small number of cases – interpret carefully.



n = Number of persons

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

Heterosex = Heterosexual contact

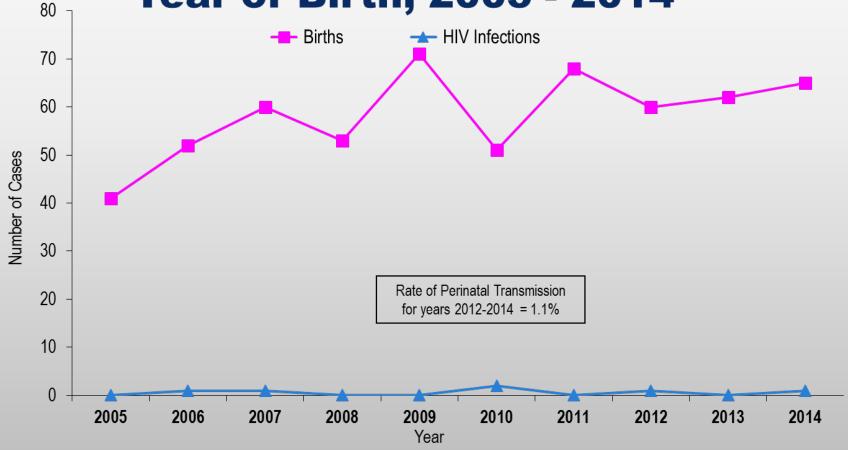
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<sup>\*</sup> HIV or AIDS at first diagnosis

<sup>†</sup> 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 Perinatally Acquired HIV Infections\* by Year of Birth, 2005 - 2014



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



### **Populations of Interest**

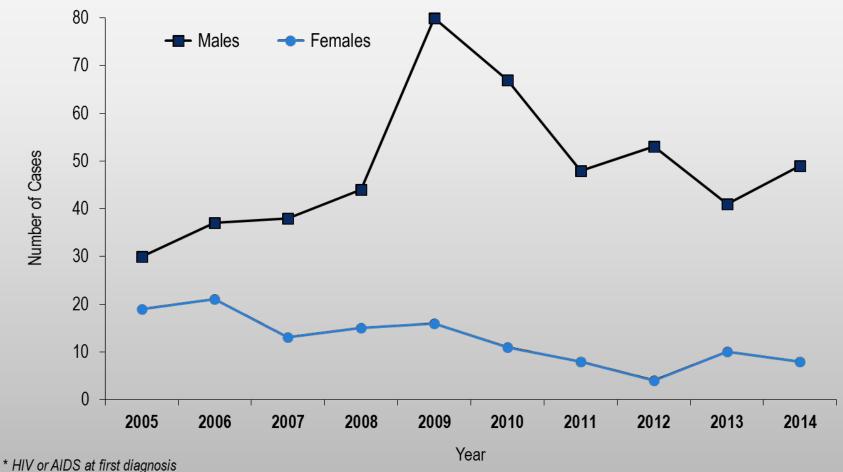


## Adolescents & Young Adults (Ages 13-24)\*

<sup>\*</sup> Case numbers are too small to present meaningful data separately for adolescents and young adults.



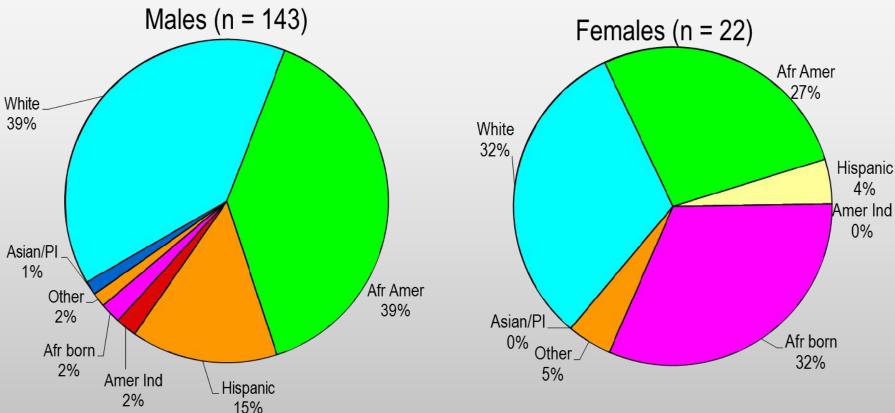
#### **HIV Diagnoses\* Among Adolescents** and Young Adults† by Gender and Year, 2005 - 2014



<sup>†</sup> 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, 2012 - 2014 Combined



<sup>\*</sup> HIV or AIDS at first diagnosis

n = Number of persons Amer Ind = American Indian

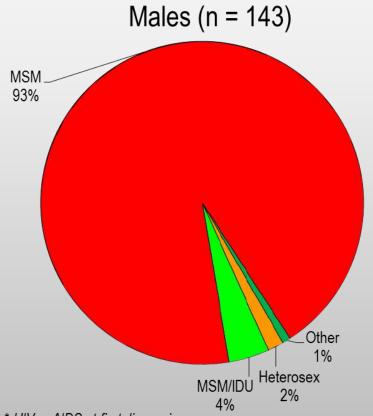
Afr Amer = African American (Black, not African-born persons)
Afr born = African-born (Black, African-born persons)

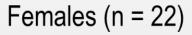
Other = Multi-racial persons or persons with unknown race

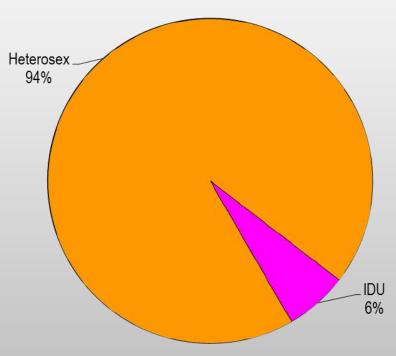
<sup>&</sup>lt;sup>†</sup> Adolescents defined as 13-19 year-olds; Young Adults defined as 20-24 year-olds.



## HIV Diagnoses\* Among Adolescents and Young Adults† by Gender and Estimated Exposure Group#, 2012- 2014 Combined







<sup>\*</sup> HIV or AIDS at first diagnosis

<sup>&</sup>lt;sup>†</sup> Adolescents defined as 13-19 year-olds; Young Adults defined as 20-24 year-olds.

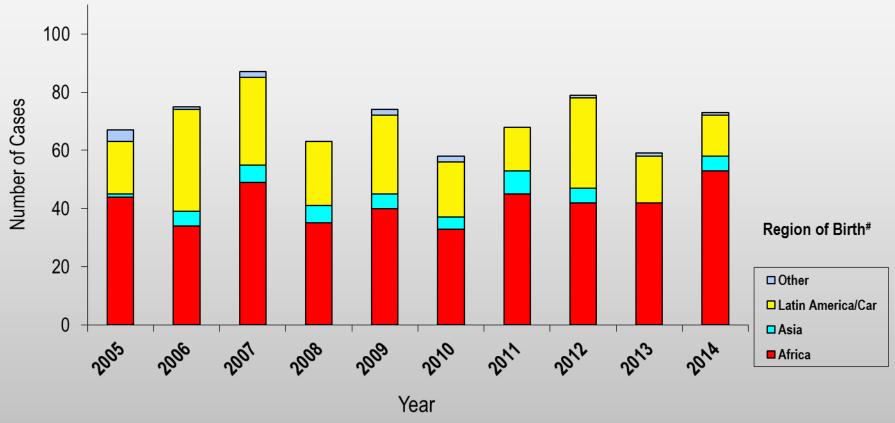
<sup>#</sup> Mode of Exposure proportions have been estimated using cases for 2012-2014 with known risk. For more detail see the HIV Surveillance Technical notes.



#### Foreign-born Cases



## HIV Diagnoses\* among Foreign-Born Persons† in Minnesota by Year and Region of Birth, 2005 - 2014



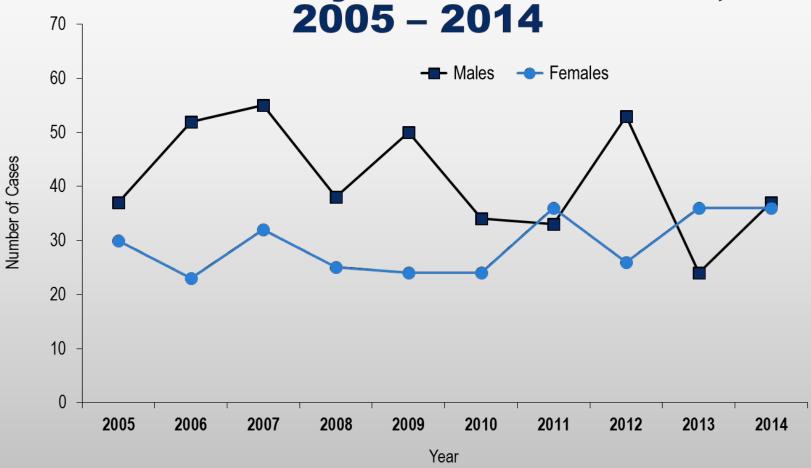
<sup>\*</sup> HIV or AIDS at first diagnosis

<sup>†</sup> 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.

<sup>\*</sup>Latin America/Car includes Mexico and all Central, South American, and Caribbean countries.



### HIV Diagnoses\* Among Foreign-Born Persons† by Gender and Year,



•HIV or AIDS at first diagnosis

<sup>†</sup> 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, 2014

```
Liberia (n=21)
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•Somalia (n=8)

Ethiopia (n=7)

Mexico (n=6)

•Kenya (n=3)

•Nigeria (n=3)

Cameroon (n=2)

Sudan (n=2)

•Cuba (n=2)

•Republic of S. Korea (n=2)

Other^ (n=17)

<sup>\*</sup> HIV or AIDS at first diagnosis

<sup>†</sup> 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.

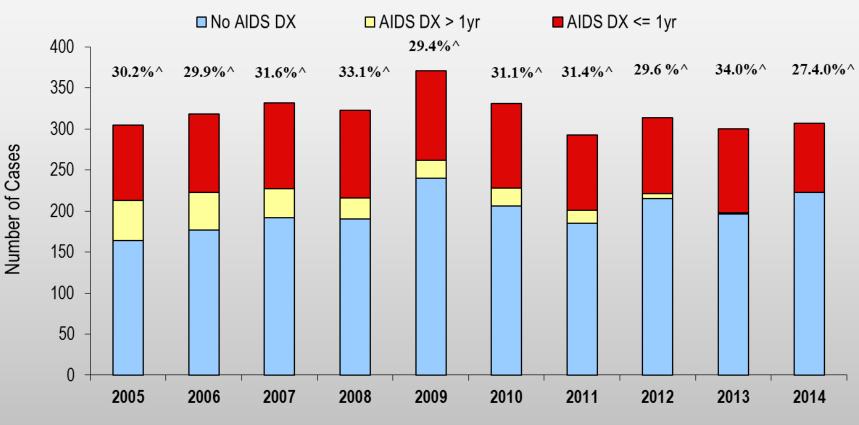


#### **Late Testers**

(AIDS Diagnosis within one year of initial HIV Diagnosis)



## Time of Progression to AIDS for HIV Diagnoses in Minnesota\*, 2005 - 2014†



<sup>\*</sup>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.

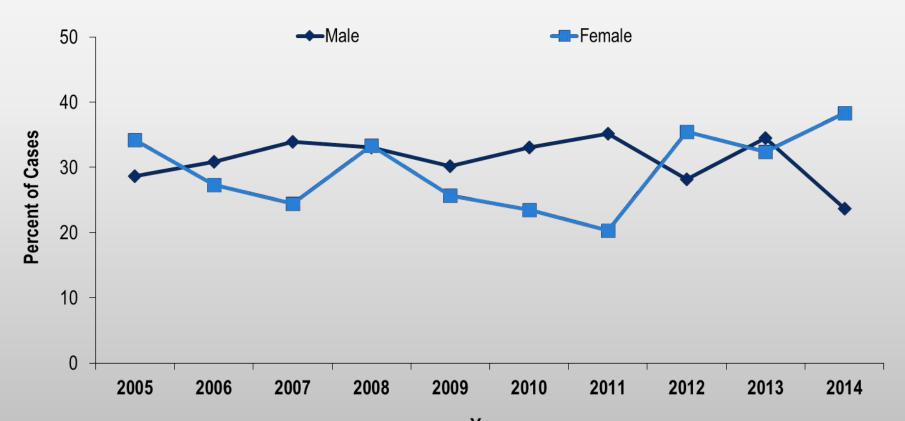
Year

<sup>^</sup> Percent of cases progressing to AIDS within one year of initial diagnosis with HIV

<sup>†</sup> Numbers/Percent for cases diagnosed in 2014 only represents cases progressing to AIDS through April 8, 2015.



## Progression to AIDS within 1 year of initial HIV Diagnosis\* by Sex at Birth, 2005 - 2014†

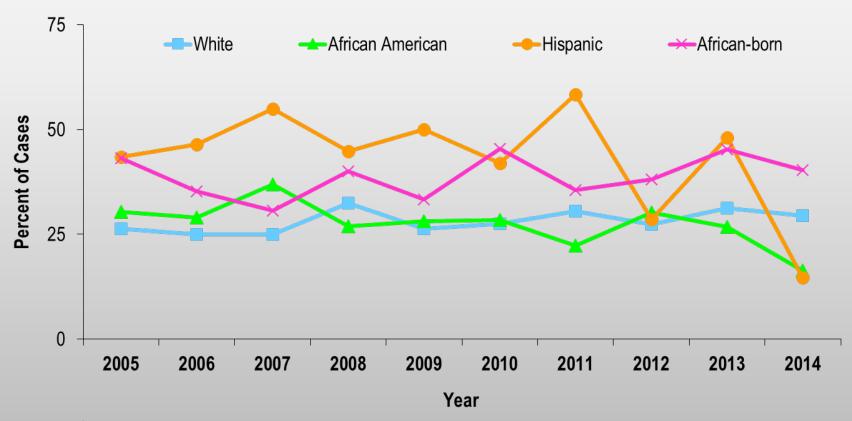


\*Numbers include AIDS at 1st report but exclude persons arriving to Minnesota through the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants with an HIV diagnosis prior to arrival in Minnesota.

<sup>&</sup>lt;sup>†</sup>Numbers/Percent for cases diagnosed in 2014 only represents cases progressing to AIDS through April 8, 2015.



## Progression to AIDS within 1 year of initial HIV Diagnoses\* by Race/Ethnicity^, 2005 - 2014<sup>†</sup>



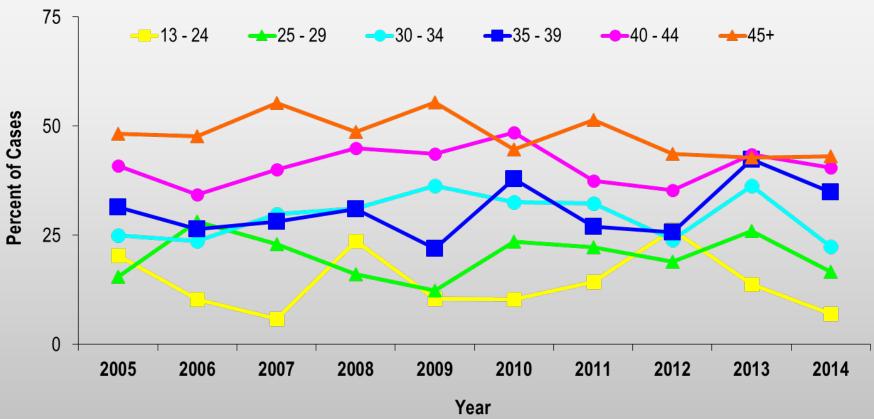
<sup>\*</sup>Numbers include AIDS at 1st report but exclude persons arriving to Minnesota through the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants with an HIV diagnosis prior to arrival in Minnesota.

 $<sup>^{\</sup>dagger}$  Numbers/Percent for cases diagnosed in 2014 only represents cases progressing to AIDS through April 8, 2015.

<sup>^</sup>Percentage not calculated if less than 10 cases diagnosed per year



## Progression to AIDS within 1 year of initial HIV Diagnosis\* by Age, 2005 - 2014<sup>†</sup>

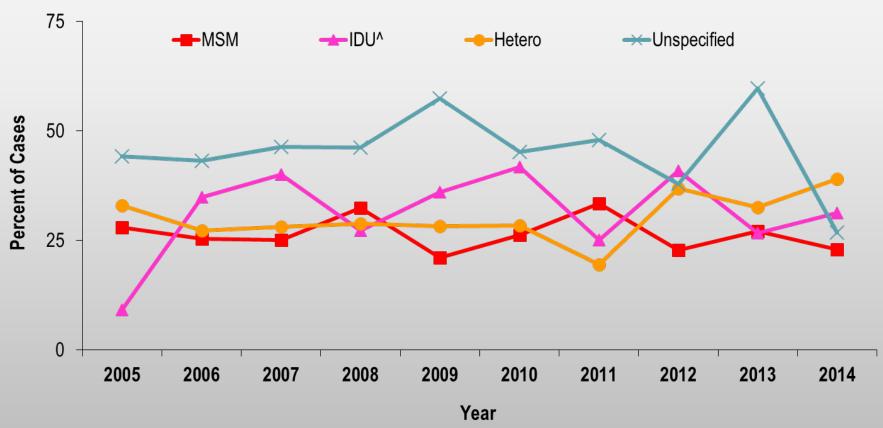


<sup>\*</sup>Numbers include AIDS at 1st report but exclude persons arriving to Minnesota through the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants with an HIV diagnosis prior to arrival in Minnesota.

<sup>&</sup>lt;sup>†</sup> Numbers/Percent for cases diagnosed in 2014 only represents cases progressing to AIDS through April 8, 2015.



## Progression to AIDS within 1 year of initial HIV Diagnosis\* by Mode of Transmission, 2005 - 2014<sup>†</sup>



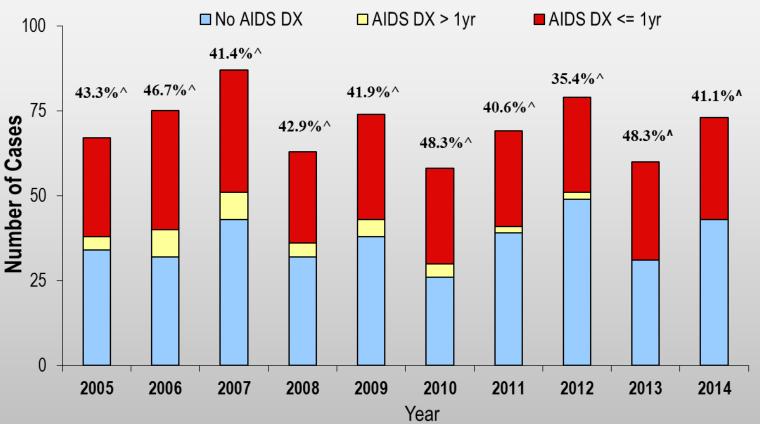
<sup>\*</sup>Numbers include AIDS at 1st report but exclude persons arriving to Minnesota through the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants with an HIV diagnosis prior to arrival in Minnesota.

<sup>&</sup>lt;sup>†</sup> Numbers/Percent for cases diagnosed in 2014 only represents cases progressing to AIDS through April 8, 2015.

<sup>^</sup>Includes MSM/IDU



## Time of Progression to AIDS for HIV Diagnoses\* Among Foreign-Born Persons, Minnesota 2005 - 2014<sup>†</sup>



<sup>\*</sup>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.

<sup>^</sup> Percent of cases progressing to AIDS within one year of initial diagnosis with HIV

<sup>&</sup>lt;sup>†</sup> Numbers/Percent for cases diagnosed in 2014 only represents cases progressing to AIDS through April 8, 2015.