



Highlights from the MN HIV Surveillance Report, 2015

HIV/AIDS Surveillance System



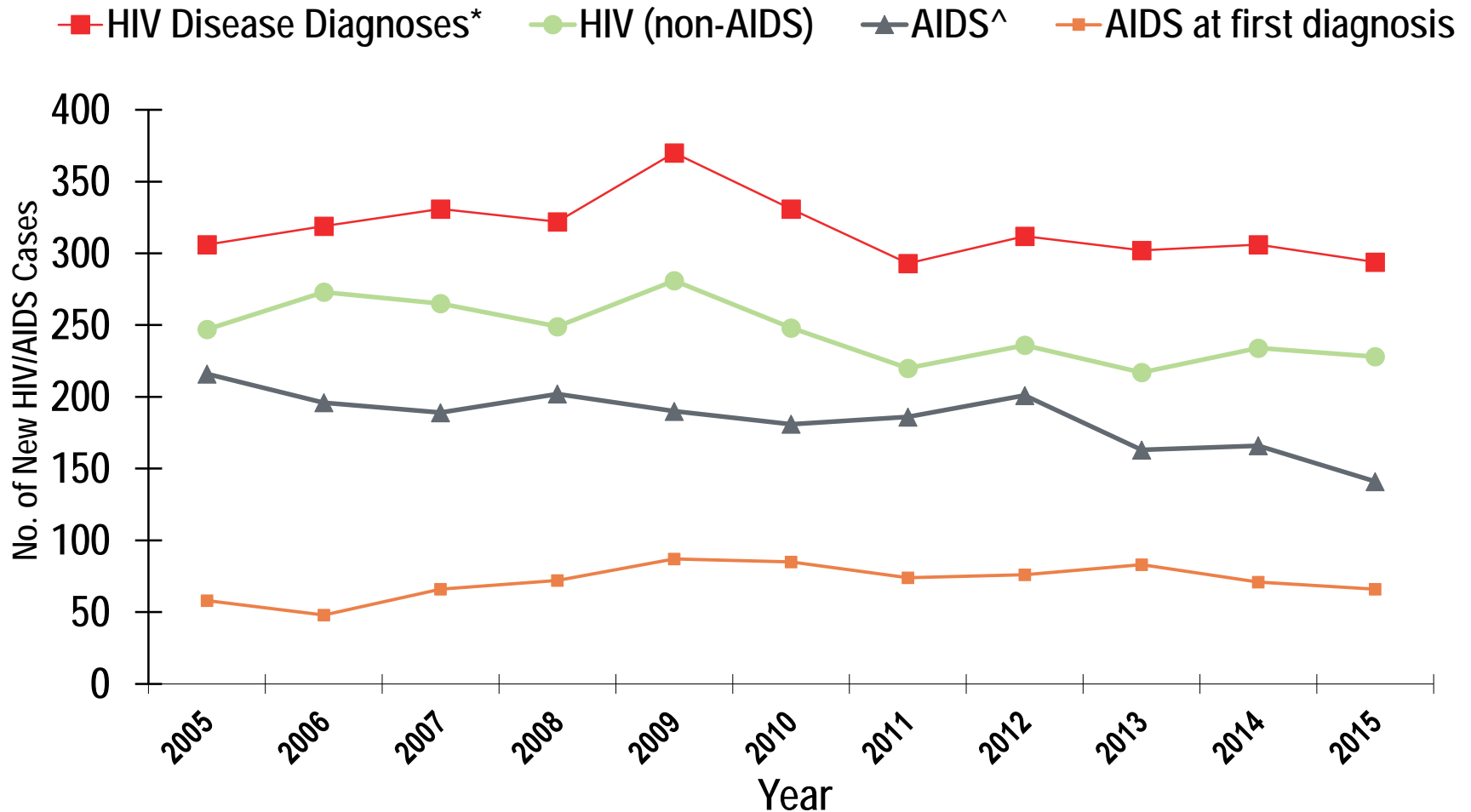
Minnesota
Department *of* Health

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



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.

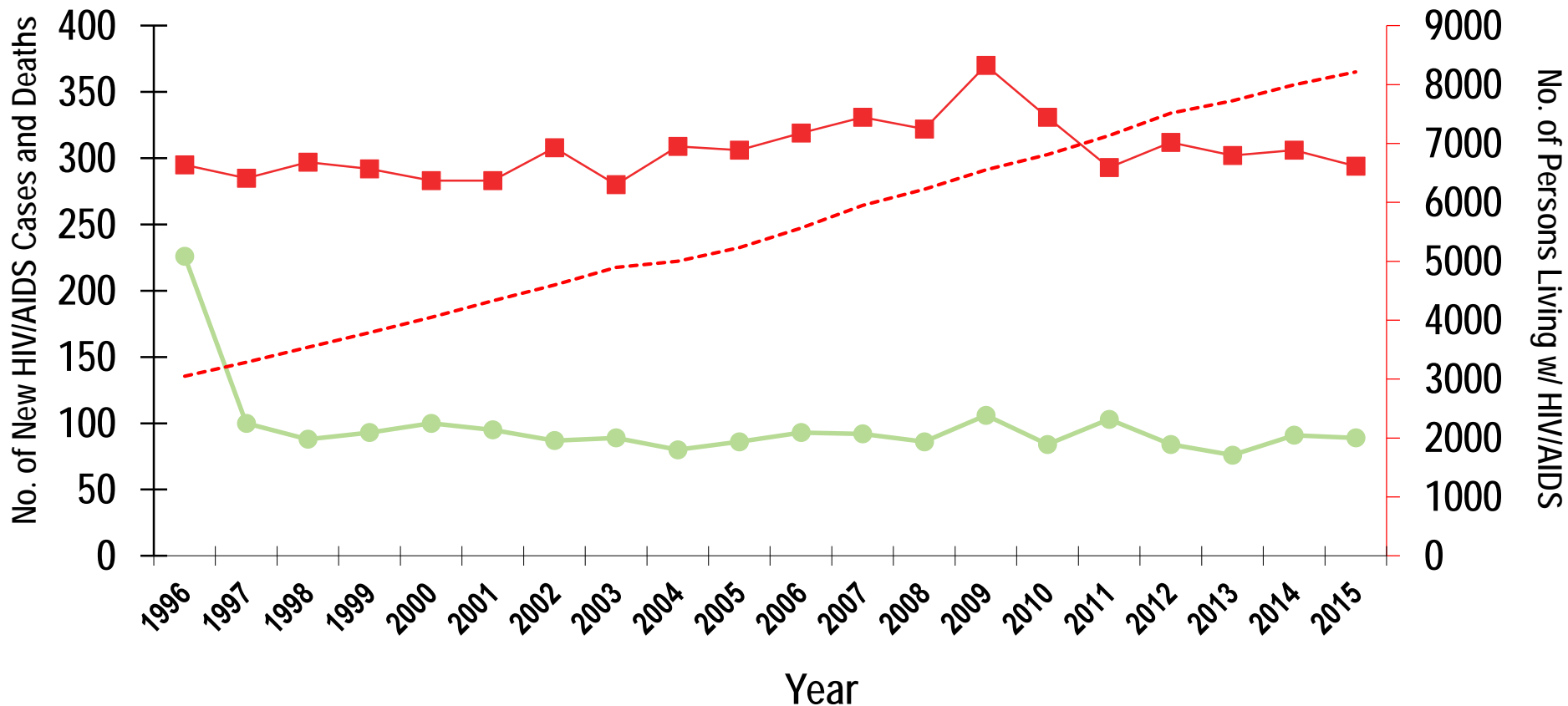
^Includes all new cases of AIDS diagnosed within a given calendar year, including AIDS at first diagnosis. This includes refugees in the HIV+ Resettlement Program, as well as, other refugee/immigrants diagnosed with AIDS subsequent to their arrival in the United States.



HIV/AIDS in Minnesota

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

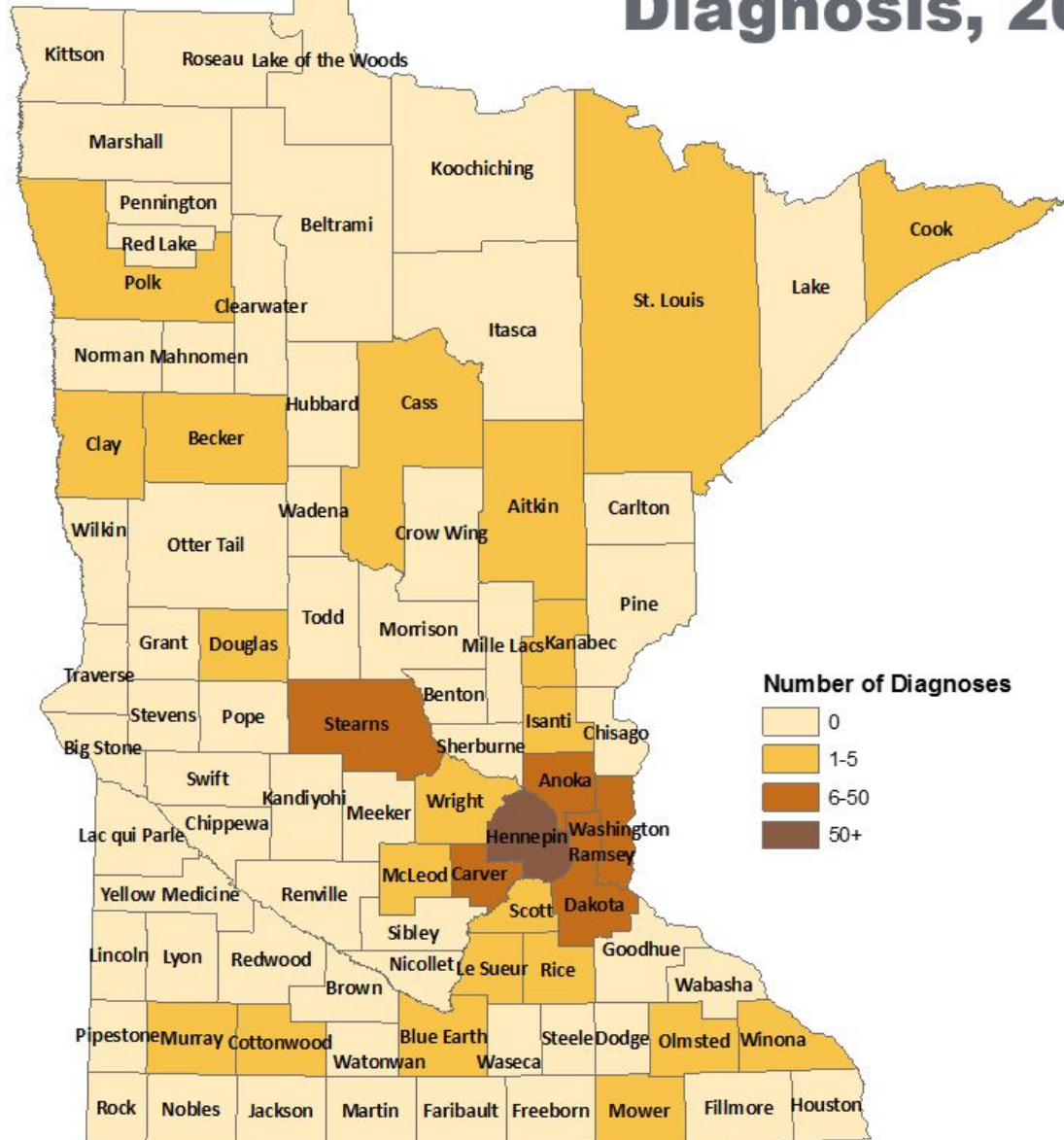
■ HIV Disease Diagnoses* ● All Deaths^ - - - Living with HIV/AIDS



*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 Diagnoses* by County of Residence at Diagnosis, 2015



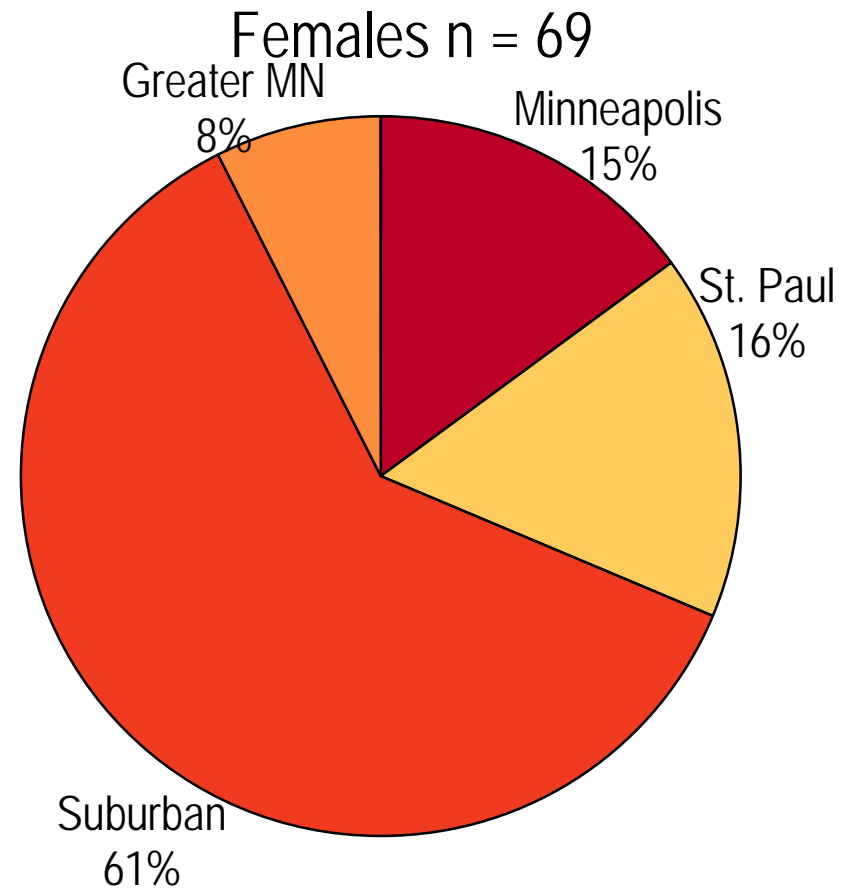
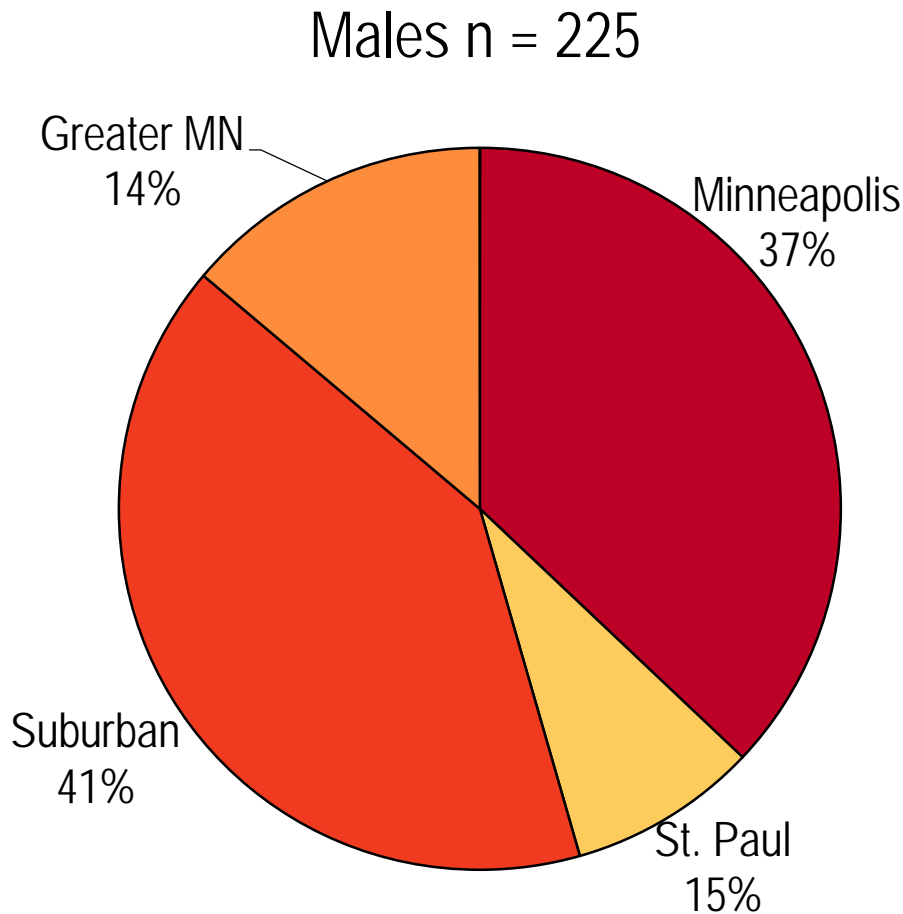
City of Minneapolis – 93
 City of St. Paul – 30
 Suburban# – 131
 Greater Minnesota – 37
 Total number = 294

*HIV or AIDS at first diagnosis

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



HIV Diagnoses* 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.

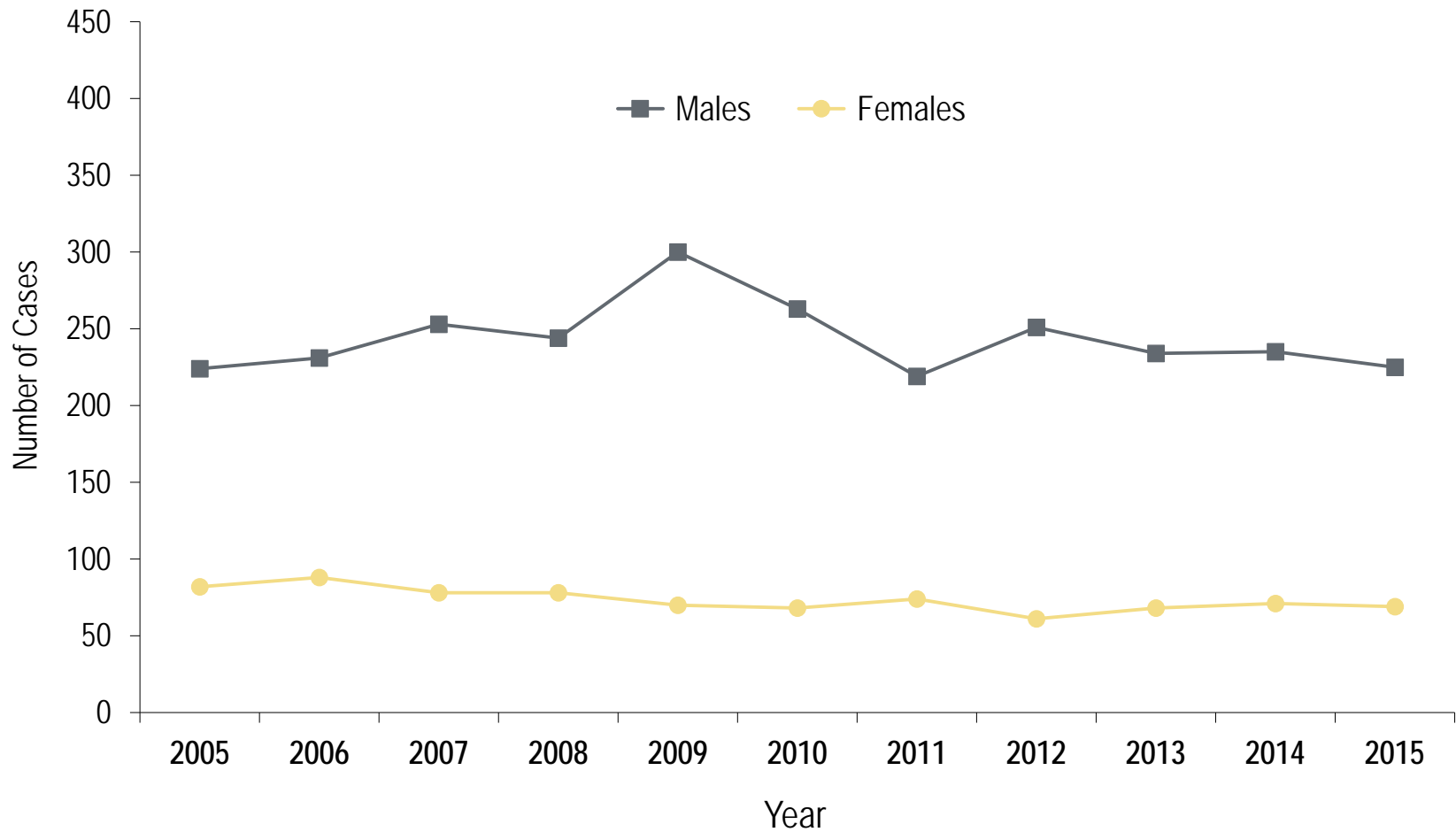
* HIV or AIDS at first diagnosis



Gender and Race/Ethnicity



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

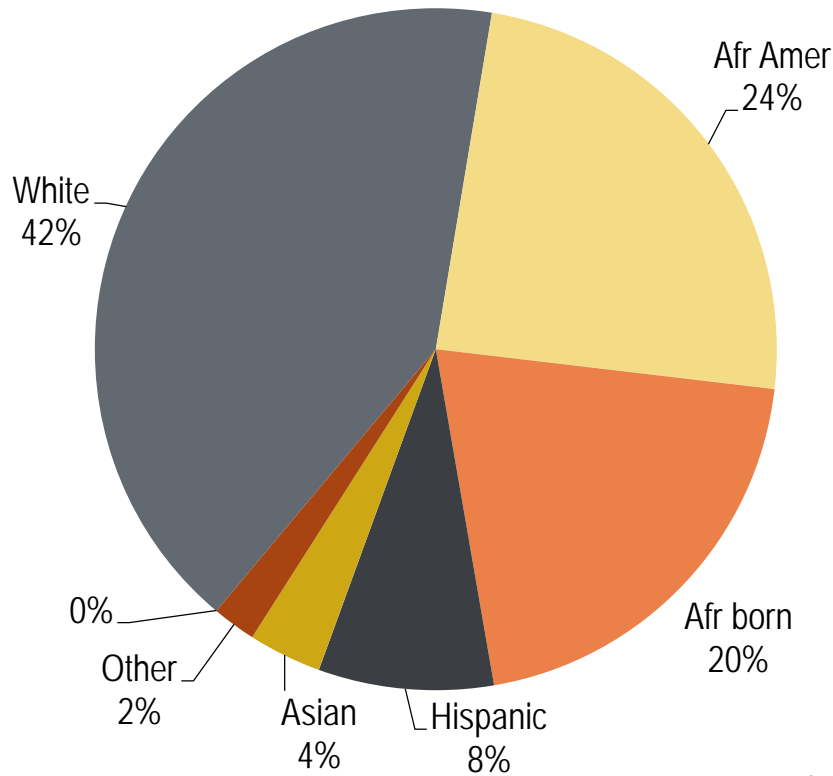


* HIV or AIDS at first diagnosis

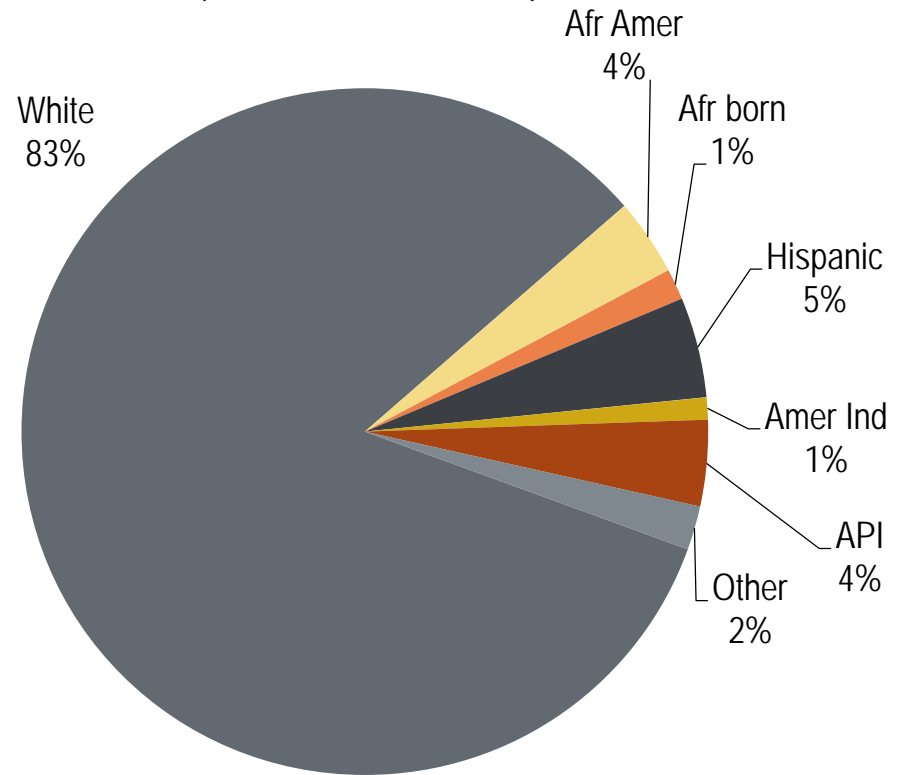


HIV Diagnoses* in Year 2015 and General Population in Minnesota by Race/Ethnicity

HIV Diagnoses
(n = 294)



Population†
(n = 5,303,925)



* HIV or AIDS at first diagnosis

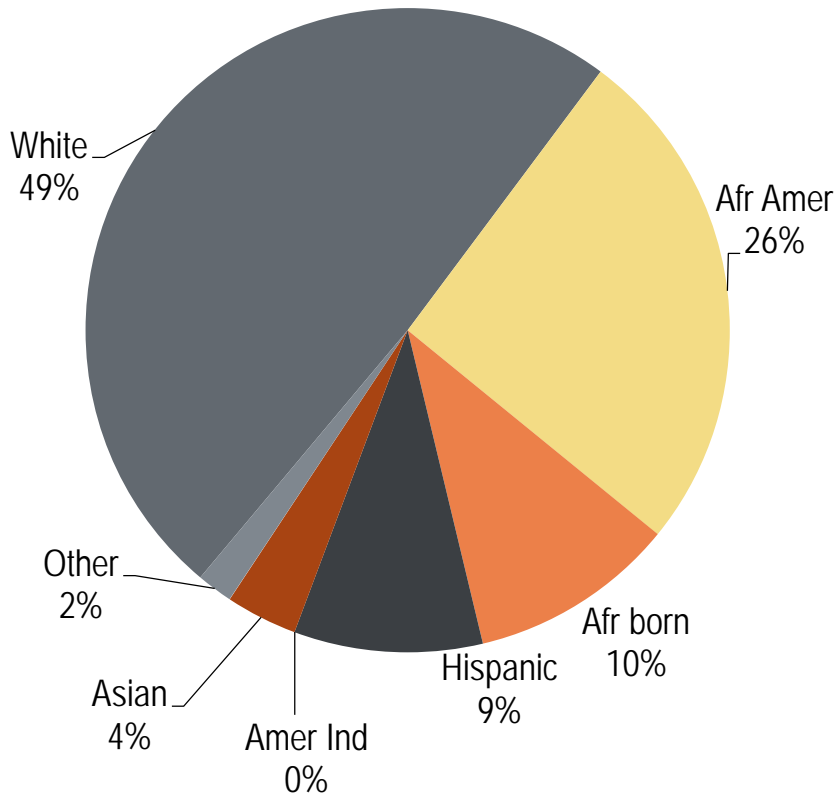
† Population estimates based on 2010 U.S. Census data.

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)

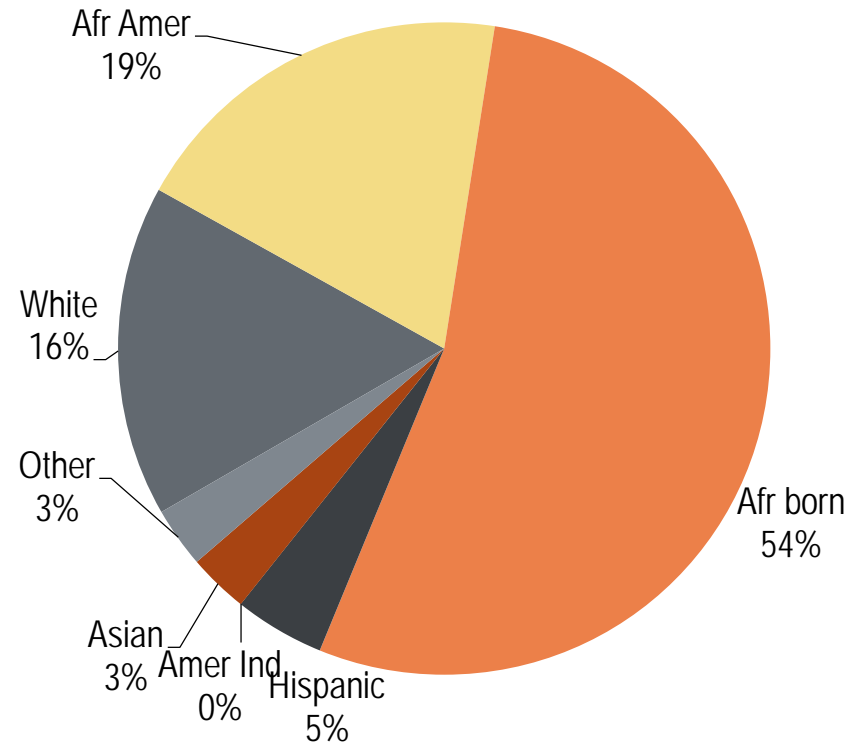


HIV Diagnoses* Diagnosed in Year 2015 by Gender and Race/Ethnicity

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	120	41%	2.7
Black, African-American	72	25%	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>	291	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

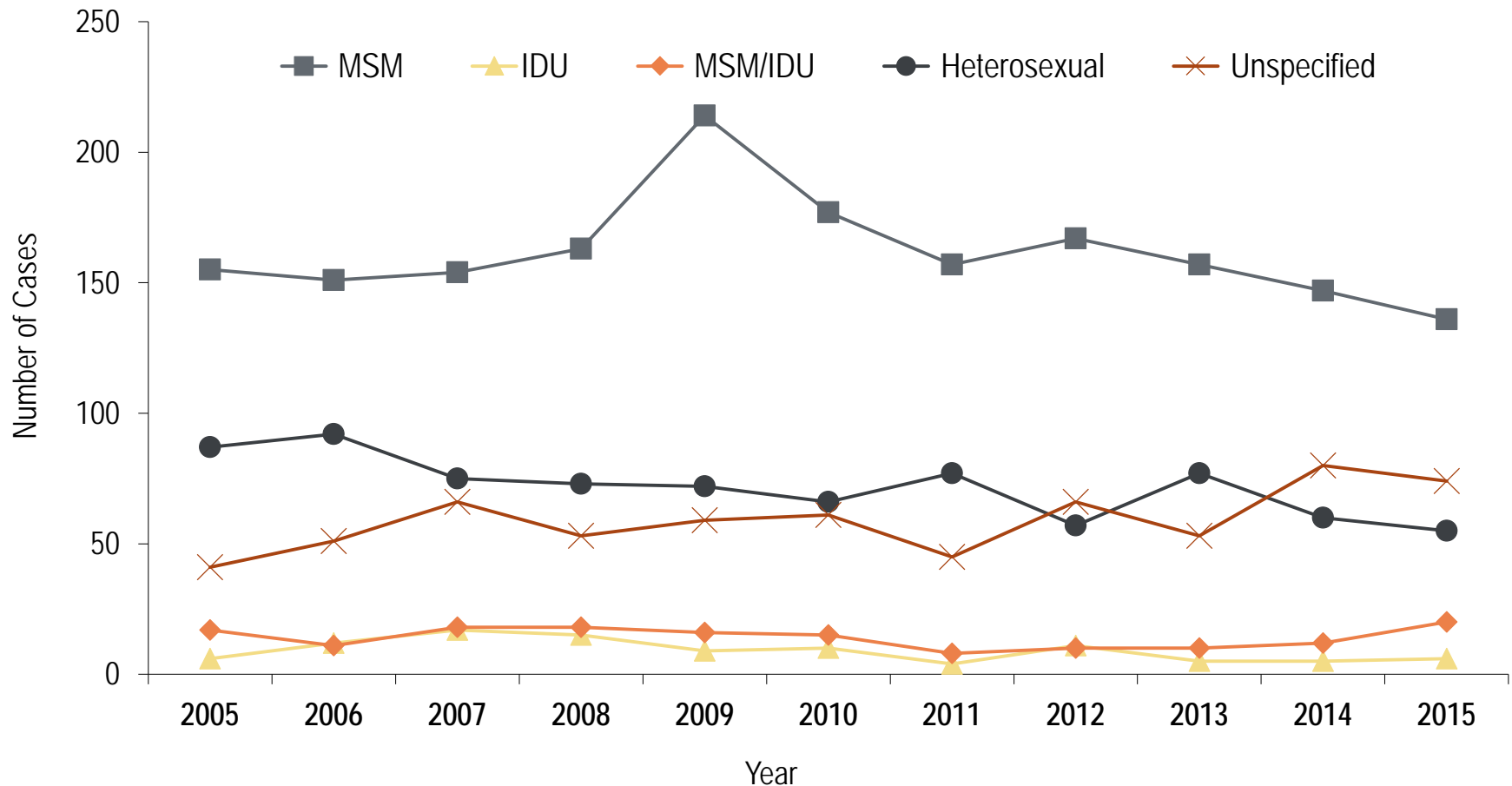
† "MSM" refers to both MSM and MSM/IDU.



Mode of Exposure



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



MSM = Men who have sex with men

IDU = Injecting drug use

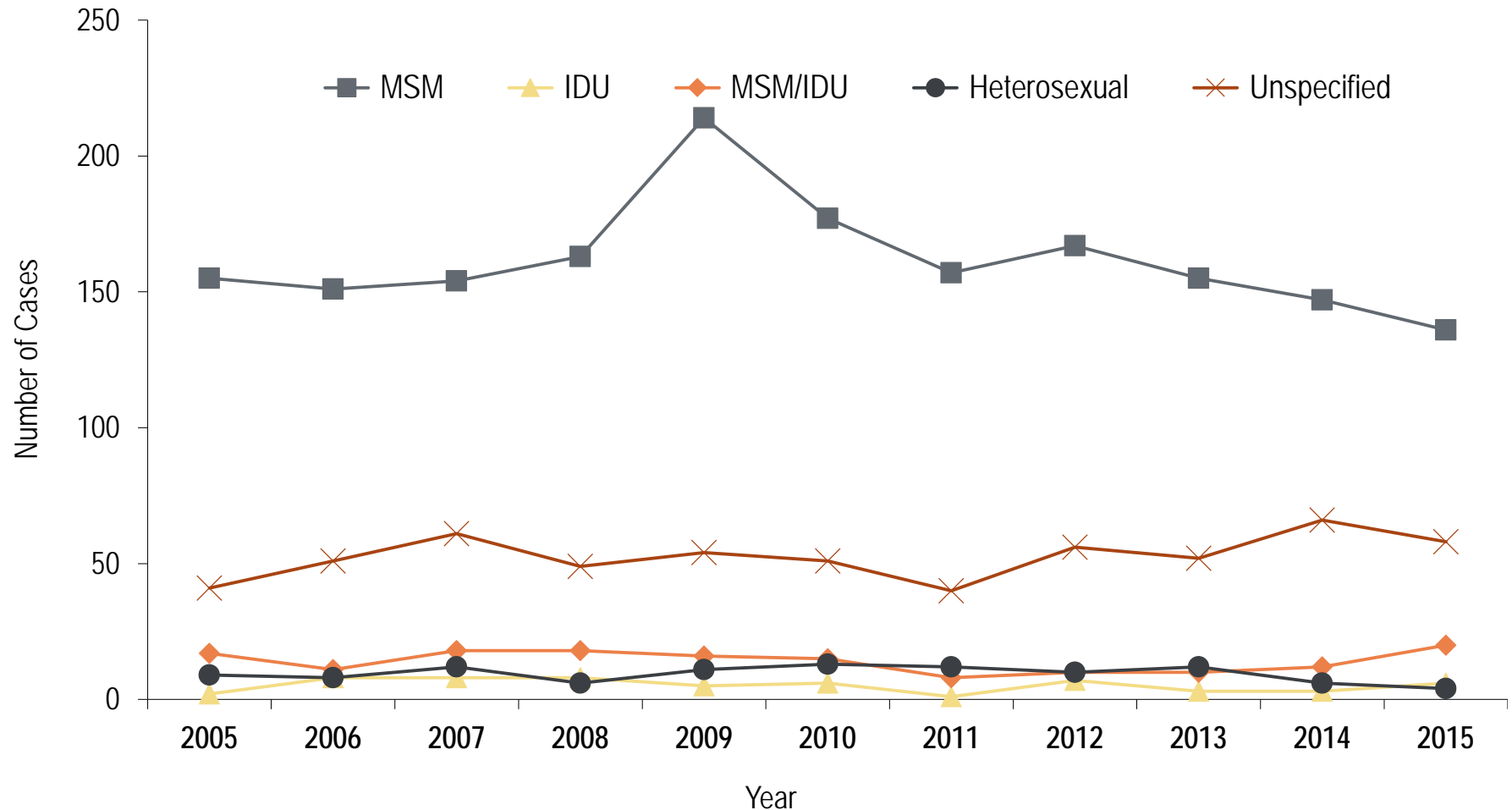
Heterosexual = Heterosexual contact

* 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

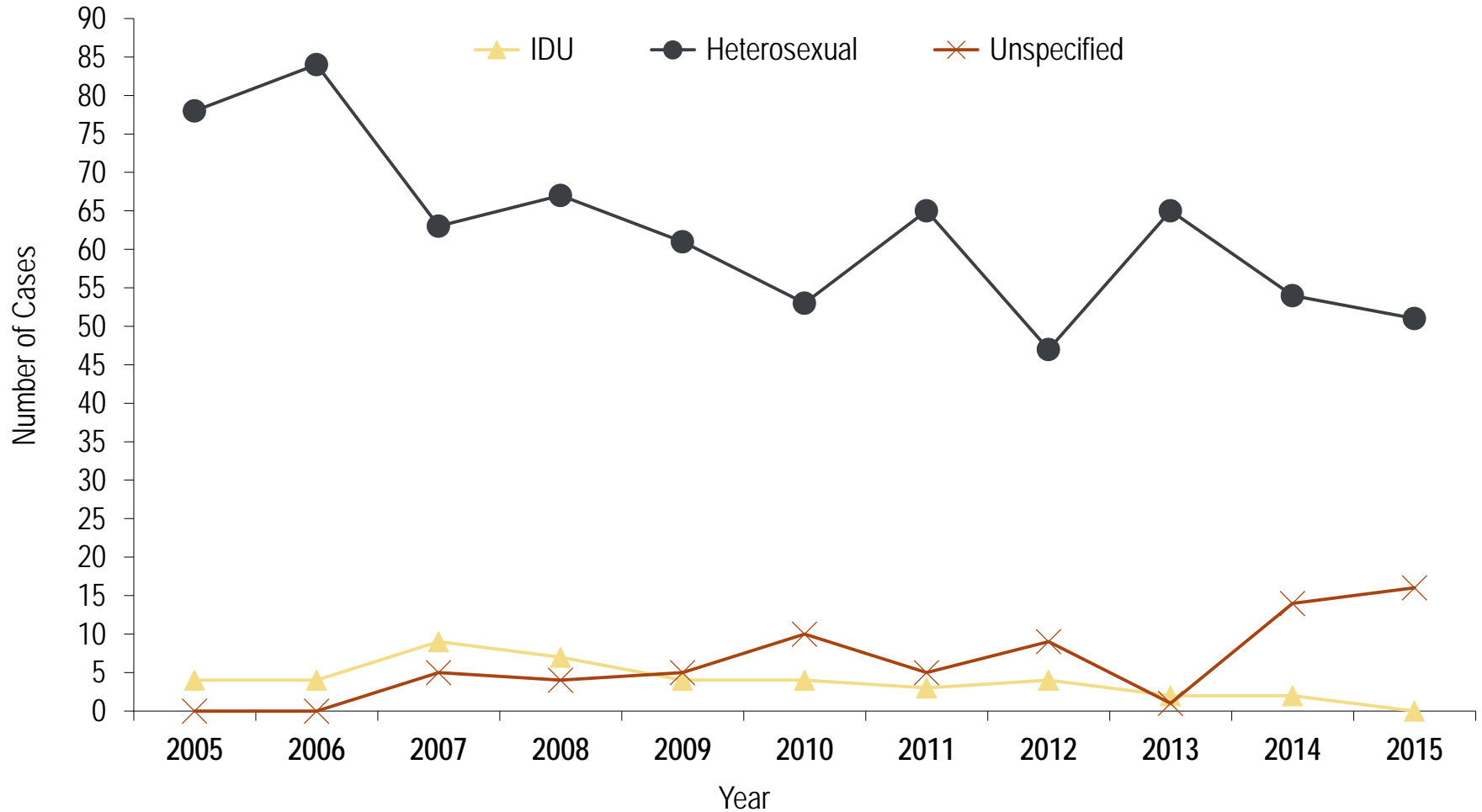
Heterosexual = Heterosexual contact

* 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



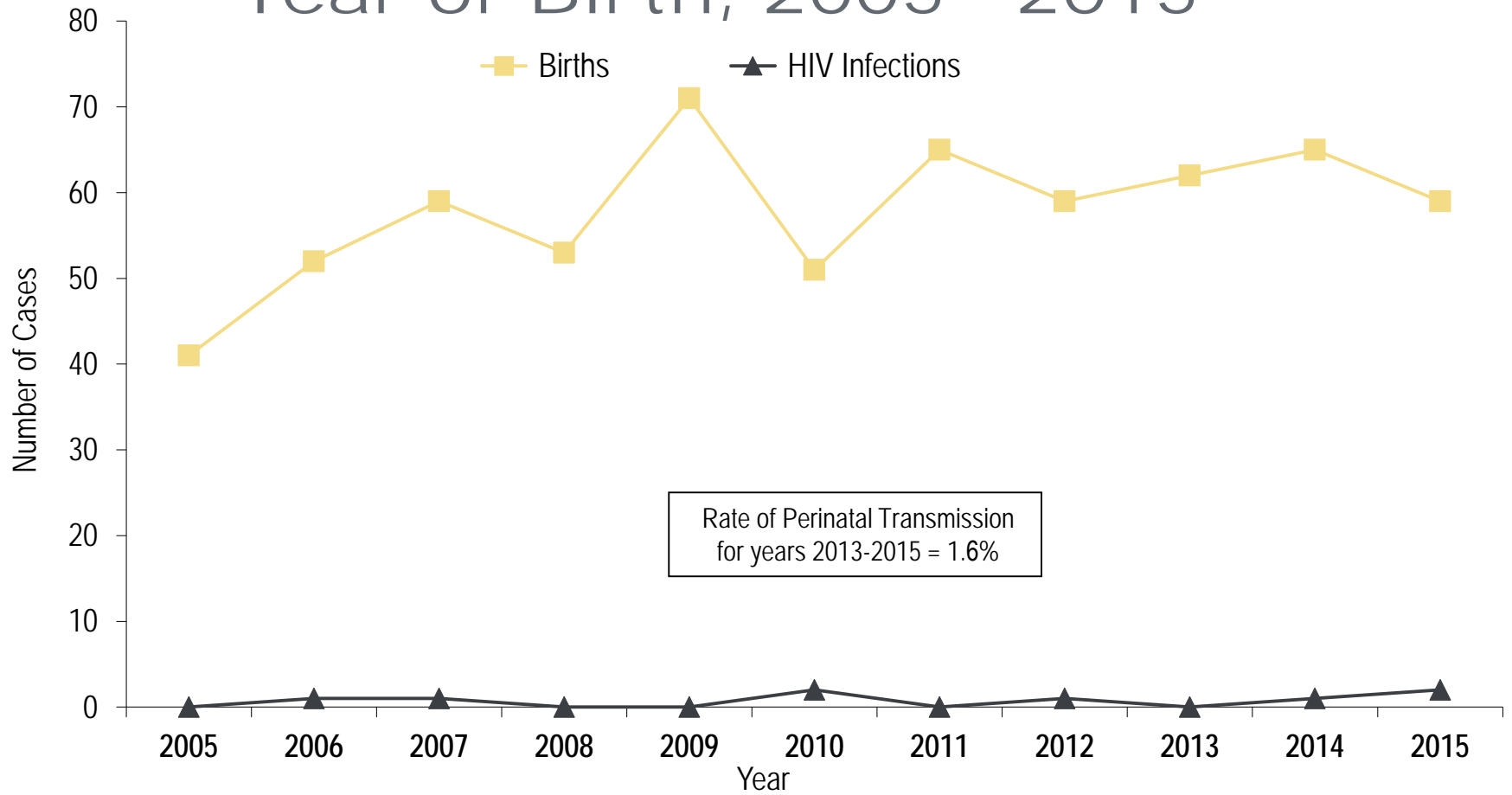
IDU = Injecting drug use Heterosexual = Heterosexual contact with HIV+ , bisexual, IDU, hemophiliac/blood project or organ transplant recipient, or with partner with unknown risk

Unspecified = No mode of exposure ascertained

* HIV or AIDS at first diagnosis



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



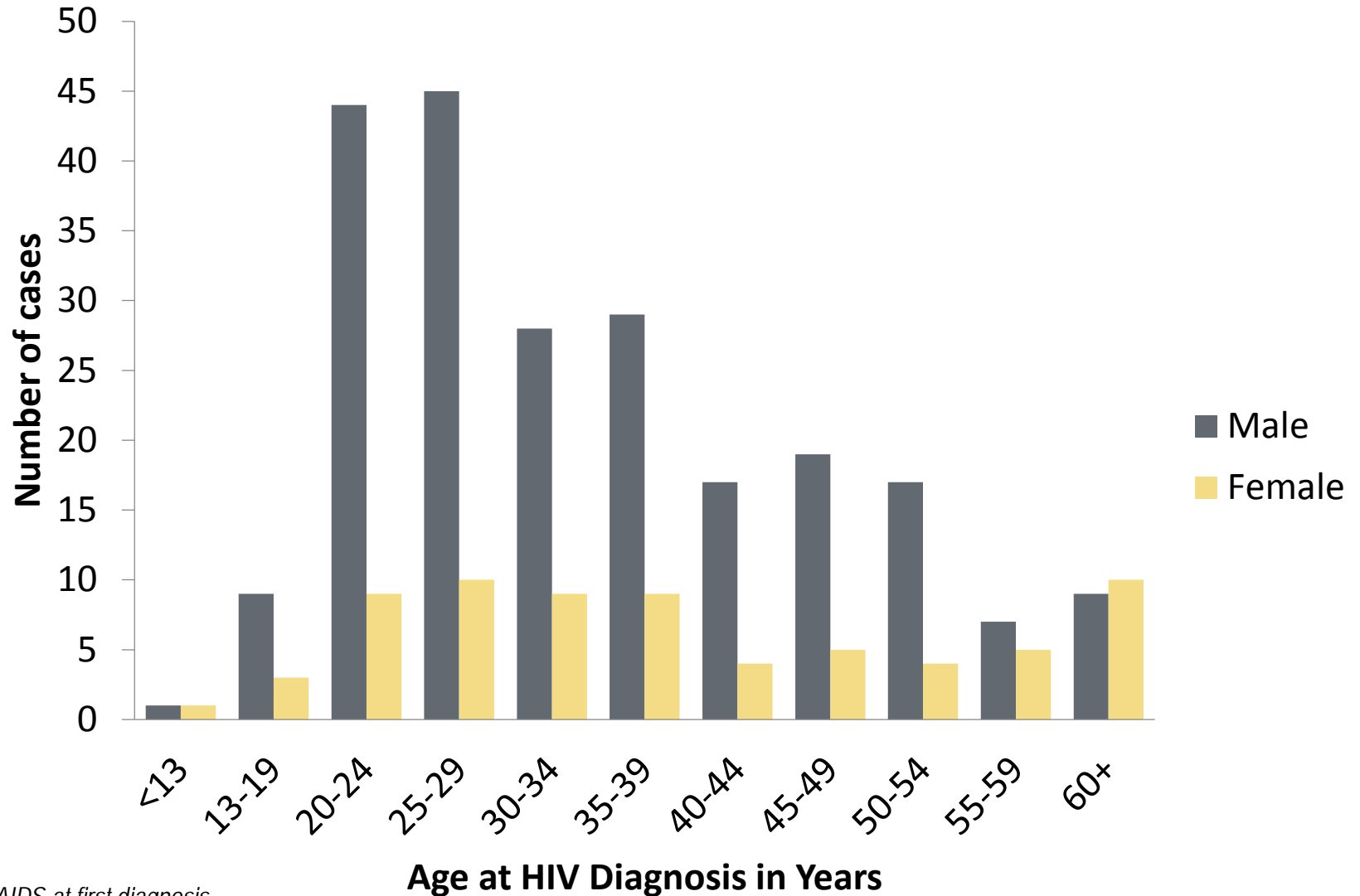
* HIV or AIDS at first diagnosis for a child exposed to HIV during mother's pregnancy, at birth, and/or during breastfeeding.



Age



Age at HIV Diagnosis* by Sex at Birth, 2015



* HIV or AIDS at first diagnosis

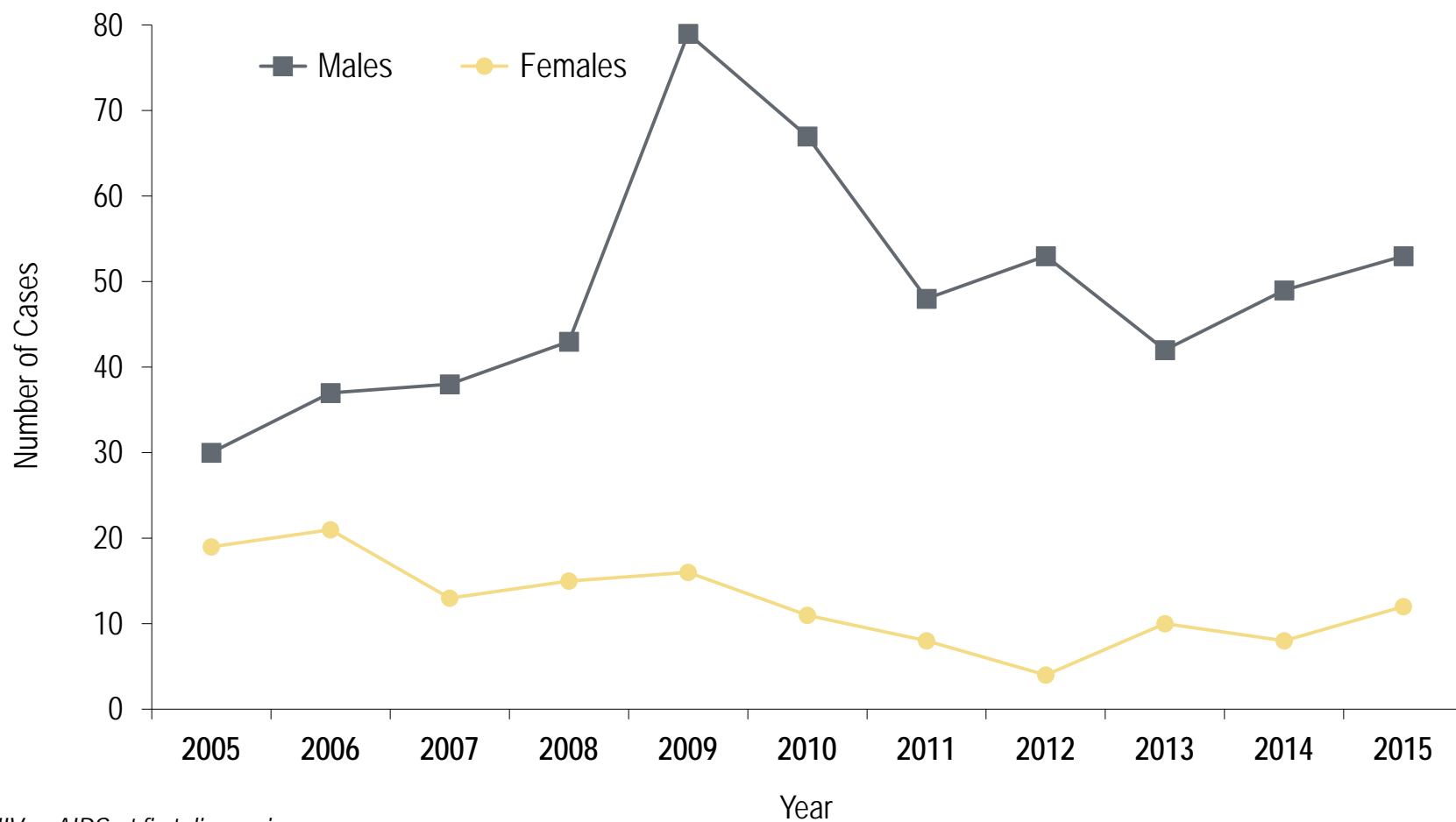


Adolescents & Young Adults (Ages 13-24)*

* *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



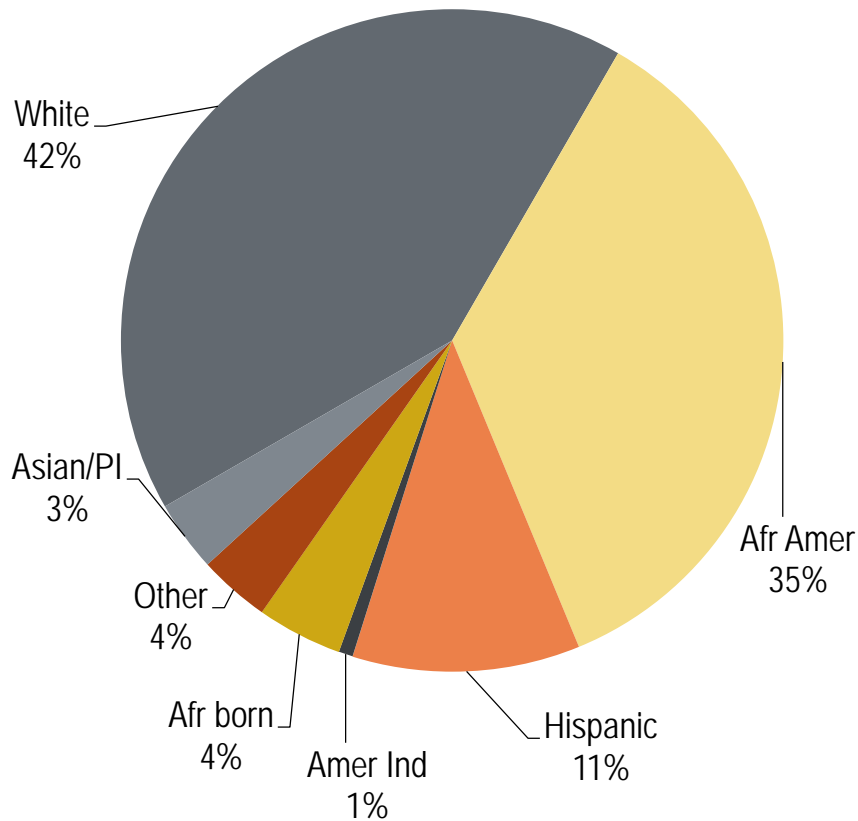
* HIV or AIDS at first diagnosis

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

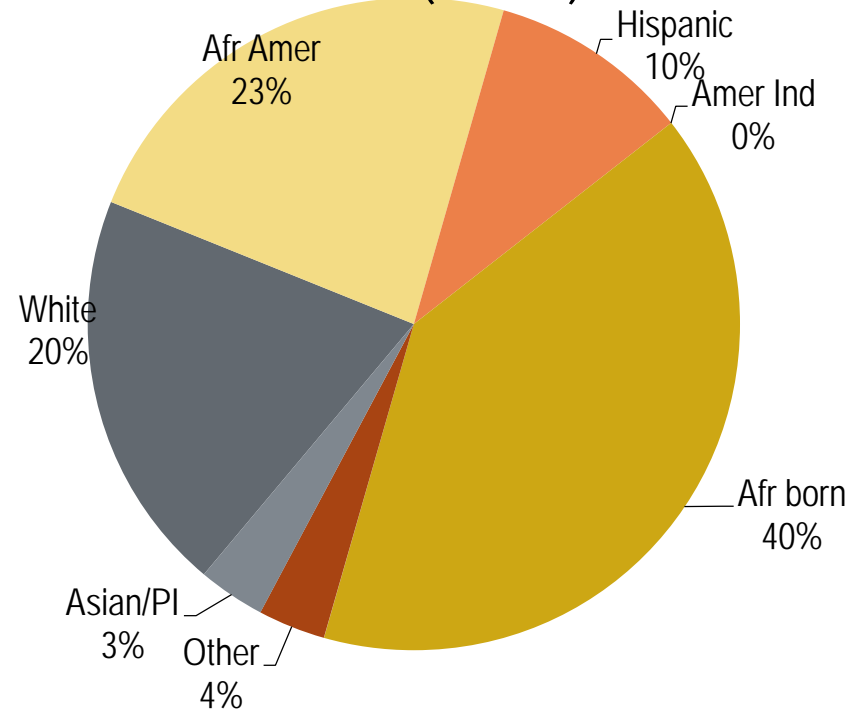


HIV Diagnoses* Among Adolescents and Young Adults† by Gender and Race/Ethnicity, 2013 - 2015 Combined

Males (n = 144)



Females (n = 30)



* HIV or AIDS at first diagnosis

† Adolescents defined as 13-19 year-olds;

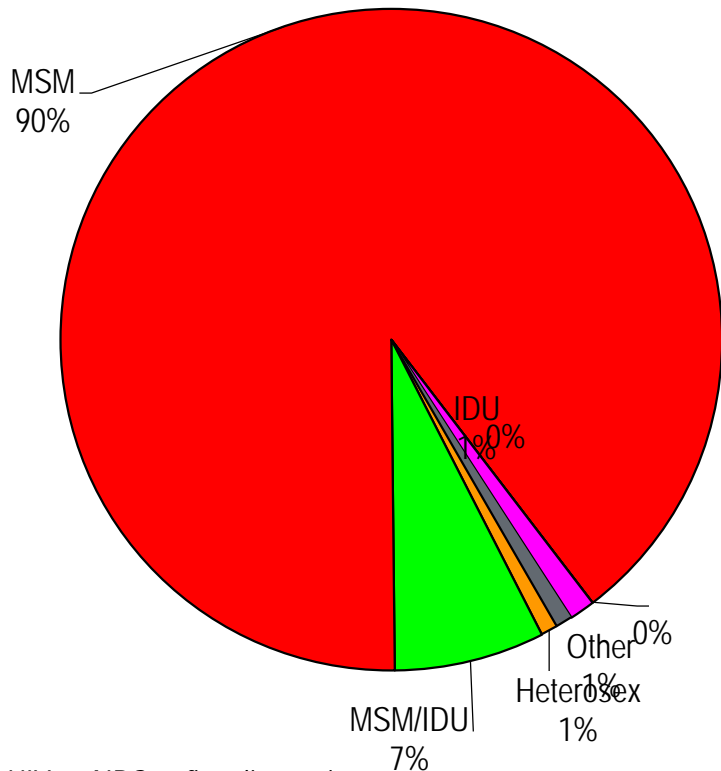
Young Adults defined as 20-24 year-olds.

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

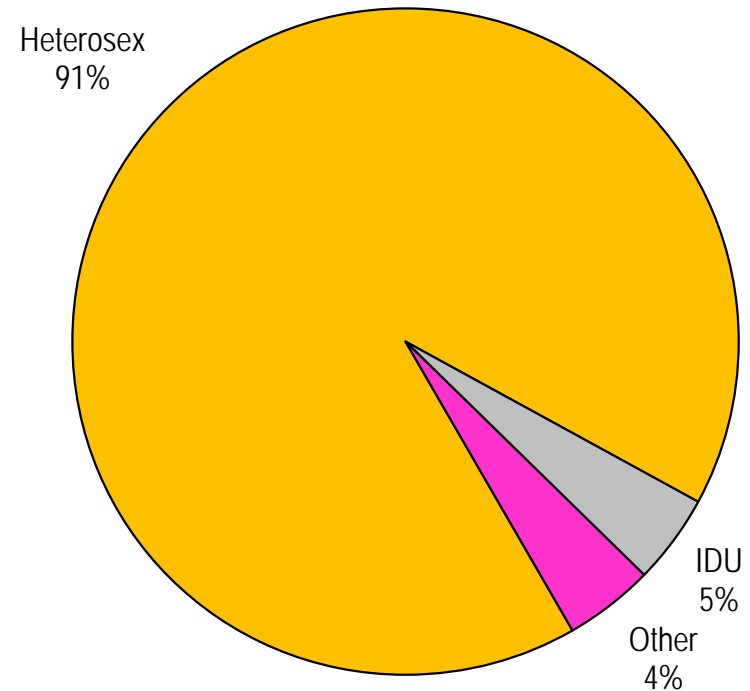


HIV Diagnoses* Among Adolescents and Young Adults† by Gender and Estimated Exposure Group‡, 2013 - 2015 Combined

Males (n = 144)



Females (n = 30)



* 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



HIV and Hepatitis B, C co-infection



HIV and Hepatitis B and C

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

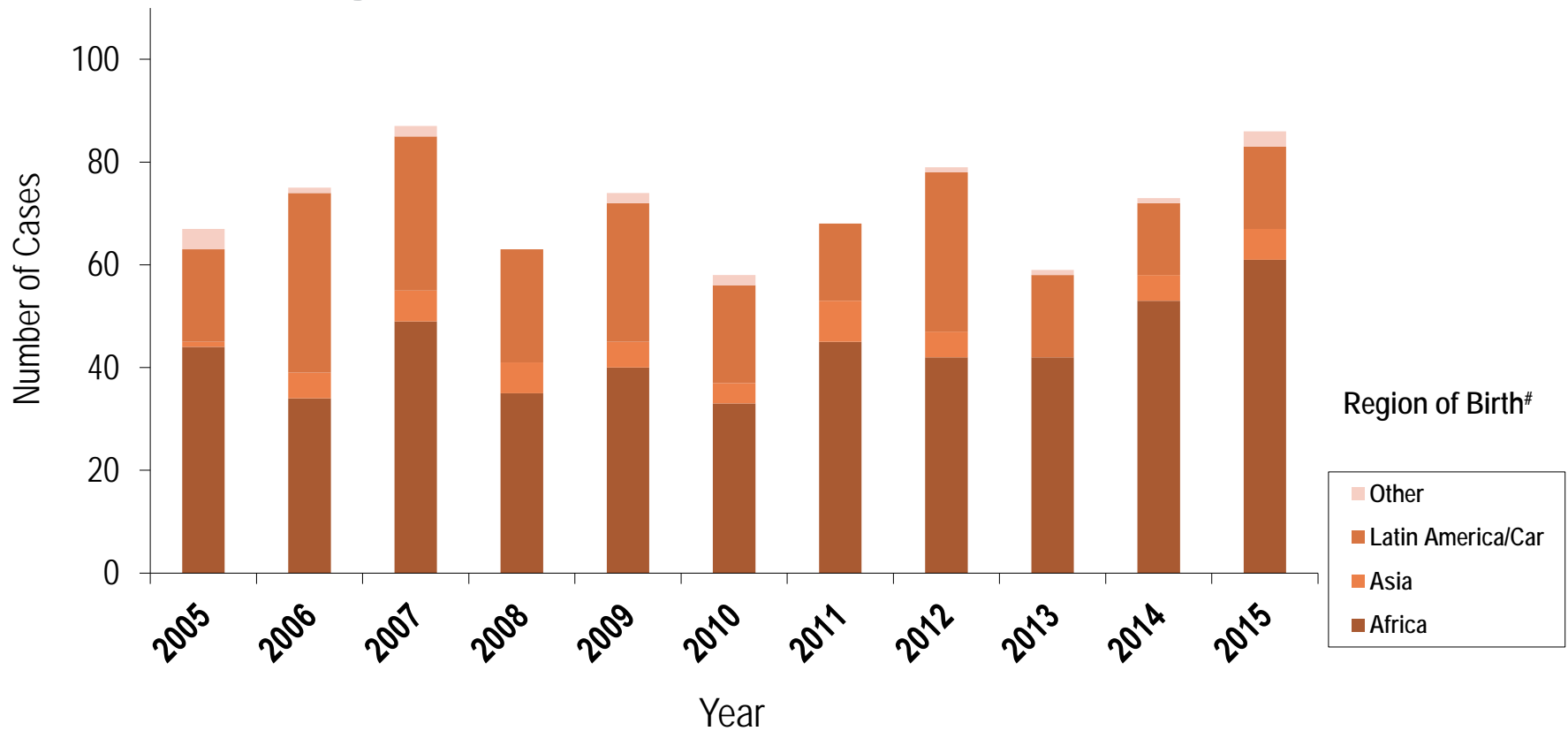
** This number includes persons who reported Minnesota as their current state of residence, regardless of residence at time of diagnosis. Includes state prisoners and refugees arriving through the HIV+ Refugee Resettlement Program, as well as, HIV+ refugee/immigrants arriving through other programs.*



Foreign-born Cases



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



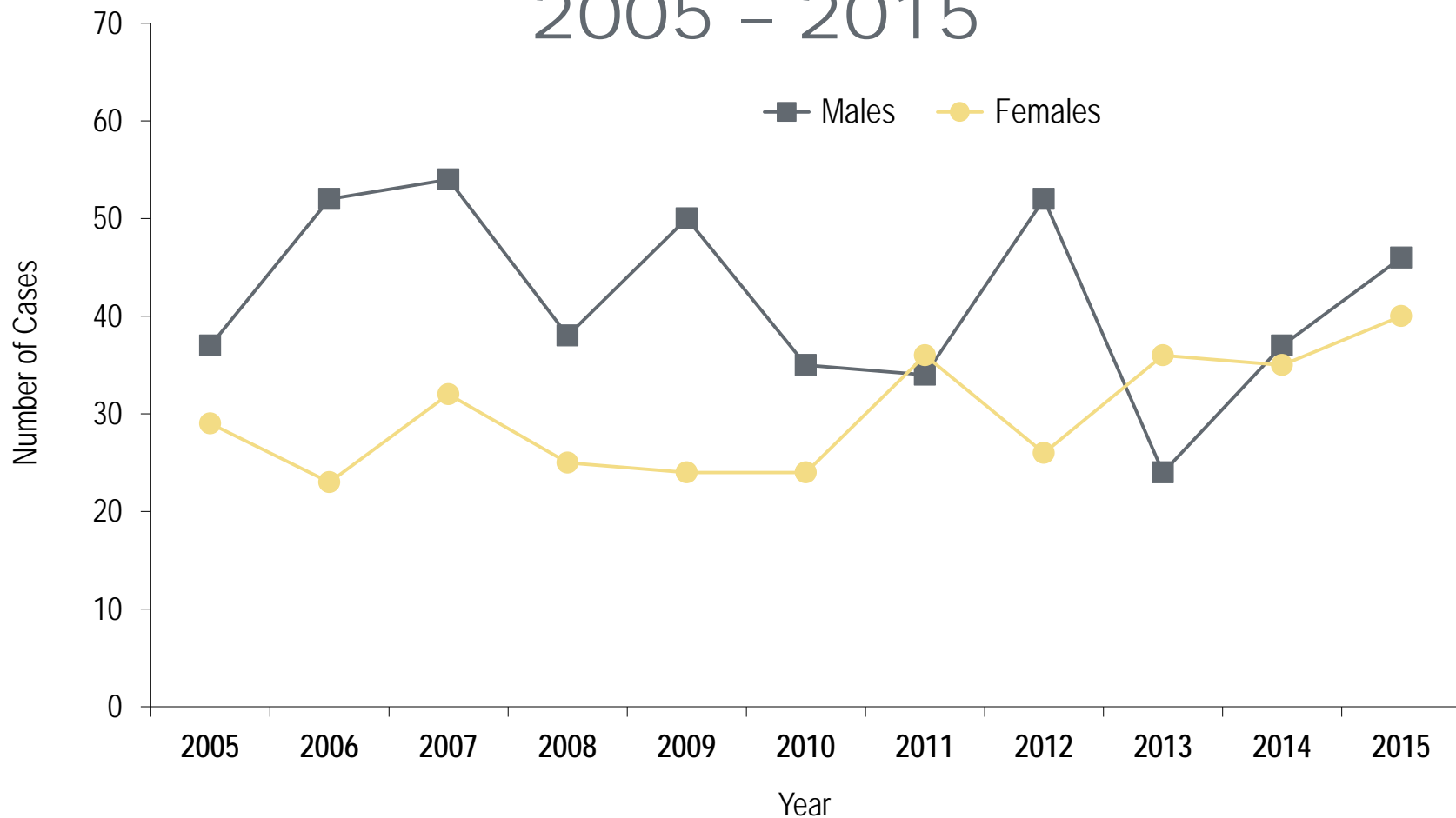
* HIV or AIDS at first diagnosis

† 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.

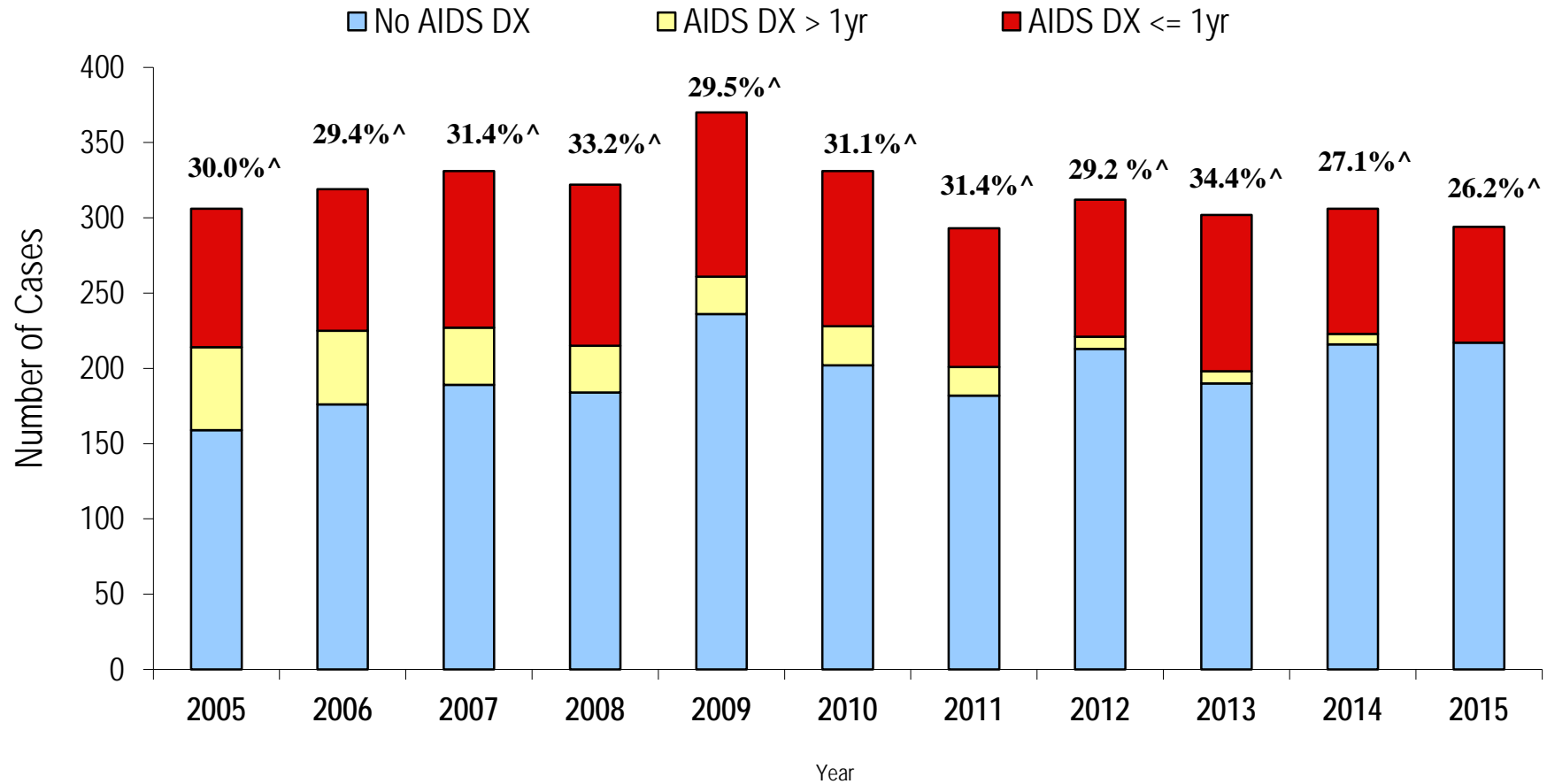


Late Testers

(AIDS Diagnosis within one year of initial HIV Diagnosis)



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



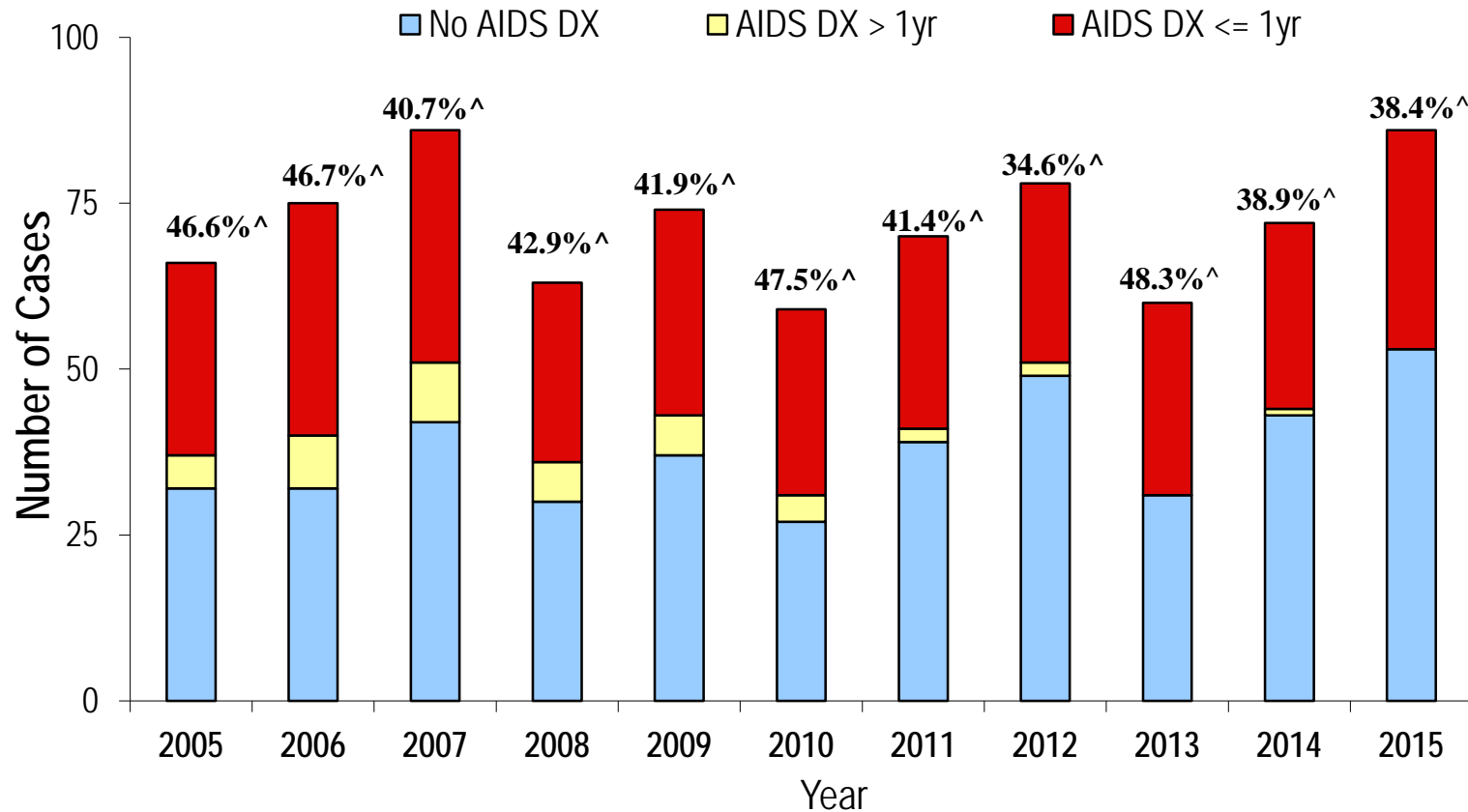
*Numbers include AIDS at 1st report but exclude persons arriving to Minnesota through the HIV+ Refugee Resettlement Program, as well as other refugee/immigrants with an HIV diagnosis prior to arrival in Minnesota.

[^] 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.



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.



Conclusion

- **Total HIV diagnoses for 2015 similar to 2014**
- **Male to Male sex remains the leading risk factor for HIV**
- **More than half of newly reported cases were among communities of color**
 - More than half among black African-born women
 - More than one-fourth among African-American men
- **Cases of injection drug users increased by 86%**
- **Cases among 20-29 year olds increased by 24%**



Thank You!

For more information, please contact:

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Pre-exposure prophylaxis (PrEP)

Christine L. Jones, M.S.W.

What is PrEP?

Pre-exposure prophylaxis, or PrEP, is a way for people who do not have HIV but who are at substantial risk of getting it to *prevent* HIV infection by taking a pill (Truvada) every day.





What puts a person at *substantial* risk?

- HIV-positive sexual partner
- Recent bacterial STD
- Multiple sex partners
- Inconsistent or no condom use
- Commercial sex work
- HIV-discordant couples wanting to conceive a child



How effective is PrEP?

Daily use can reduce risk of HIV from:

- Sexual transmission by more than **90%**
- Injection drug use by more than **70%**

***Combination with additional strategies
reduces risk even further.***



MDH and PrEP

Currently supports three PrEP programs:

- MSM
- High Risk Heterosexuals
- HIV-discordant Couples (conception)



What's Next?

- Expansion of PrEP programs throughout the state
- Education and recruitment of PrEP-friendly providers
- Education and awareness of PrEP within high risk communities

Thank You!

For more information, please contact:

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651-201-4030

japhet.nyakundi@state.mn.us

Hepatitis A, B & C in Minnesota, 2015

**Minnesota Department of Health
Hepatitis Surveillance System**

Kristin Sweet, PhD, MPH



Minnesota
Department *of* Health

Hepatitis Unit

Viral Hepatitis Overview

Introduction

- **Data in this presentation are current through 2015**
- **Definitions:**
 - **Acute case:**
 - Infected within the last six months
 - Symptomatic OR negative test in six months before diagnosis
 - **Chronic case:**
 - Infected for over six months
 - Asymptomatic or symptomatic
 - **Resolved cases:**
 - No evidence of current infection
 - Evidence of past infection

Data limitations

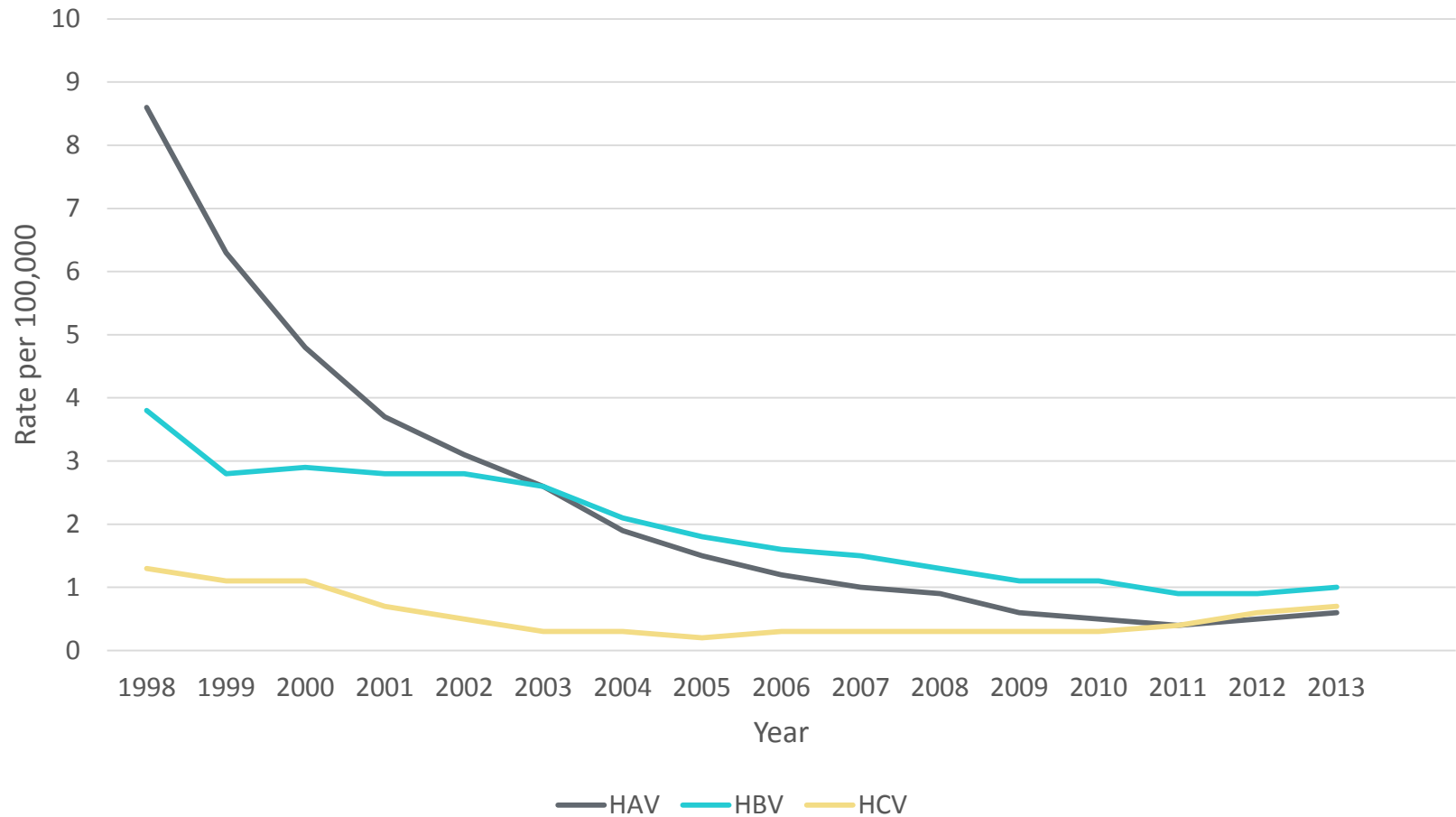
- **The slides rely on data from HCV and HBV cases diagnosed through 2015 and reported to the Minnesota Department of Health (MDH) Hepatitis Surveillance System.**
- **Some limitations of surveillance data:**
 - Data do not include hepatitis-infected persons who have not been tested
 - Data do not include persons whose positive test results have not been reported to the MDH
- **Persons are assumed to be alive unless the MDH has knowledge of their death.**
- **Persons whose most recently reported state of residence was Minnesota are assumed to be currently residing in Minnesota unless the MDH has knowledge of their relocation.**

Acute Viral Hepatitis

- **Acute case:**
 - Infected within the last six months
 - Symptomatic OR negative test within 6 months before diagnosis

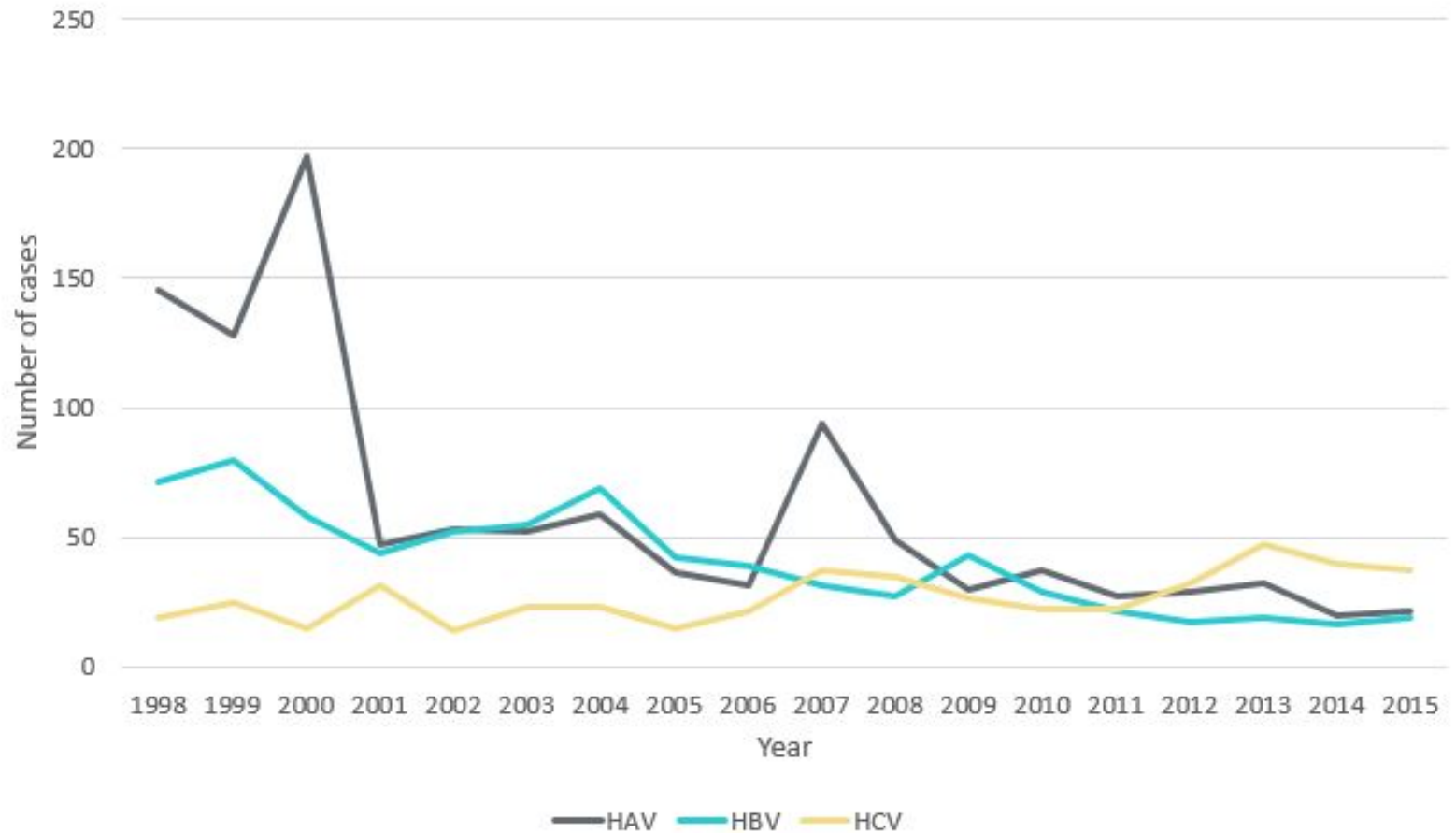


Reported rate per 100,000 population of acute viral hepatitis United States, 1998-2013





Number of Acute* Cases per year Minnesota, 1998-2015



Chronic Viral Hepatitis

Overview of Chronic HBV in MN

- **Chronic case:**
 - Infected for over six months
 - Includes cases with no evidence of recent infection
 - Asymptomatic or symptomatic

Reported Number of Persons with Chronic HBV in MN

- **As of December 31, 2015, 23,855*
persons are assumed alive and living
in MN with chronic HBV**

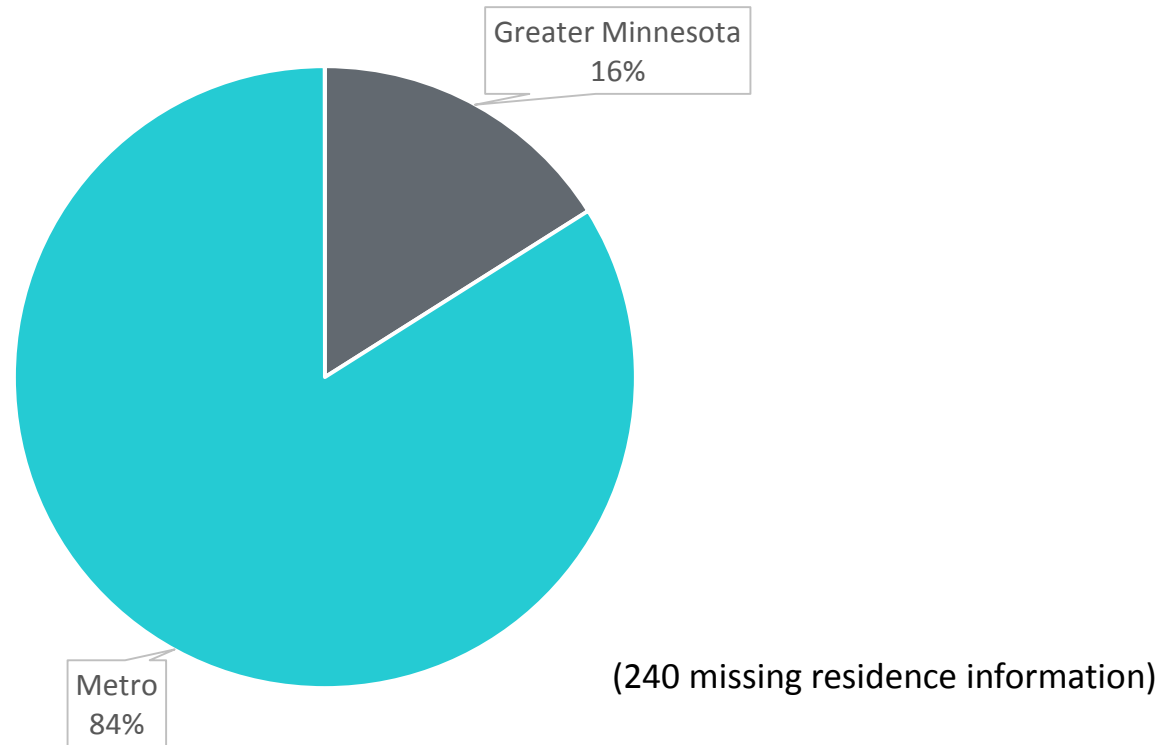
*Includes persons with unknown city of residence

Note: Includes all chronic, and probable chronic cases.



Persons Living with HBV in MN by Current Residence, 2015

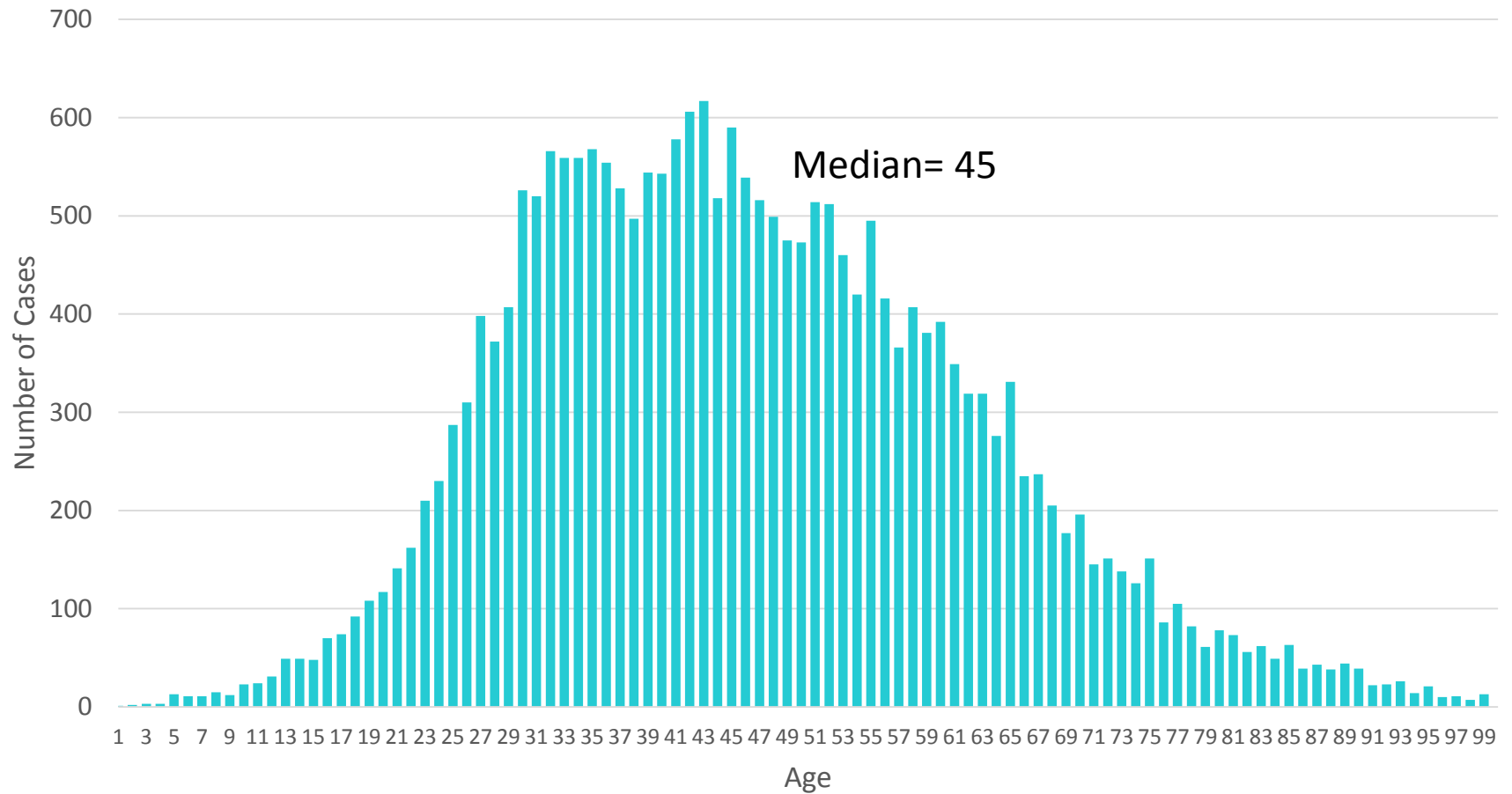
Total number with residence
information = 23,615



Metro = Seven-county metro area including Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington counties.
Greater MN = All other Minnesota counties, outside the seven-county metro area.

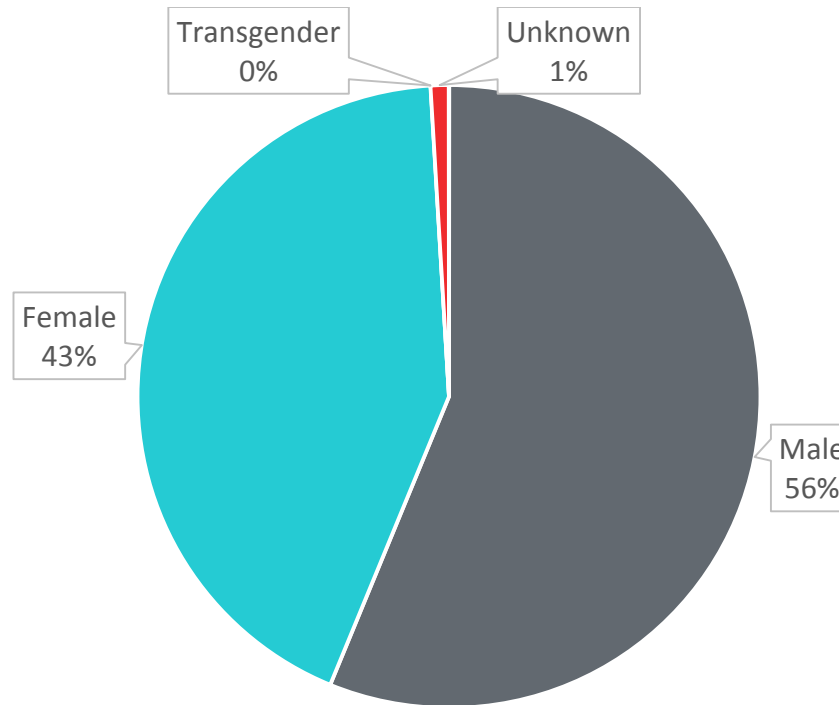


Persons with Chronic HBV in MN by Age, 2015



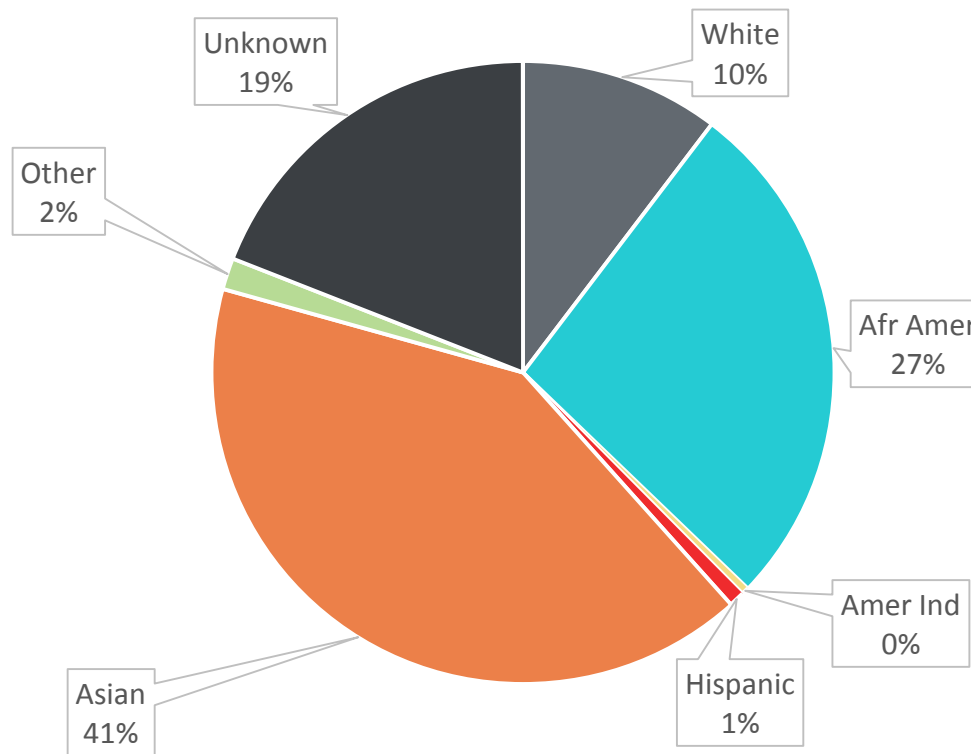


Chronic HBV in MN by Gender, 2015





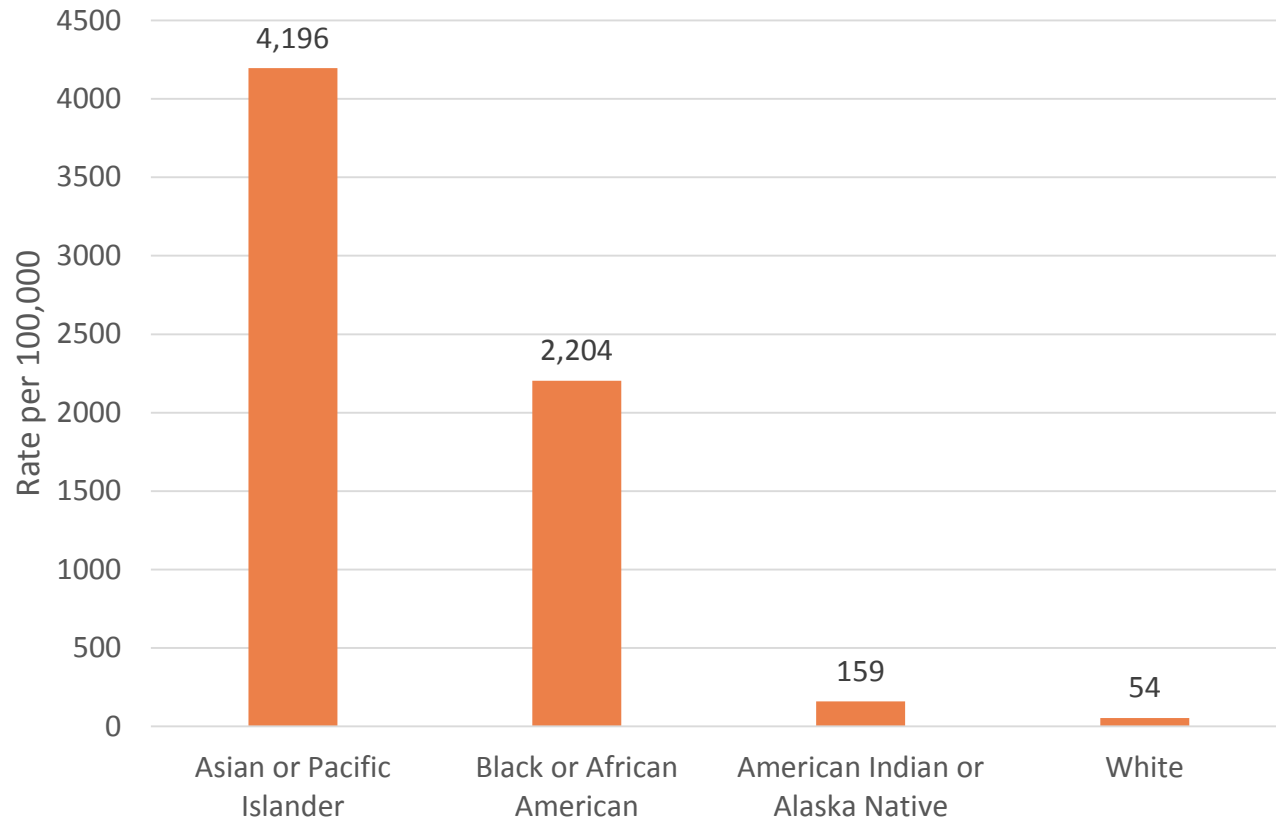
Persons Living with Chronic HBV in Minnesota by Race, 2015



Afr Amer = African American /Black Asian=Asian or Pacific Islander
Amer Ind = American Indian
Other = Multi-racial persons or persons with other race



Persons Living with Chronic HBV in Minnesota by Race rates (per 100,000 persons*), 2015

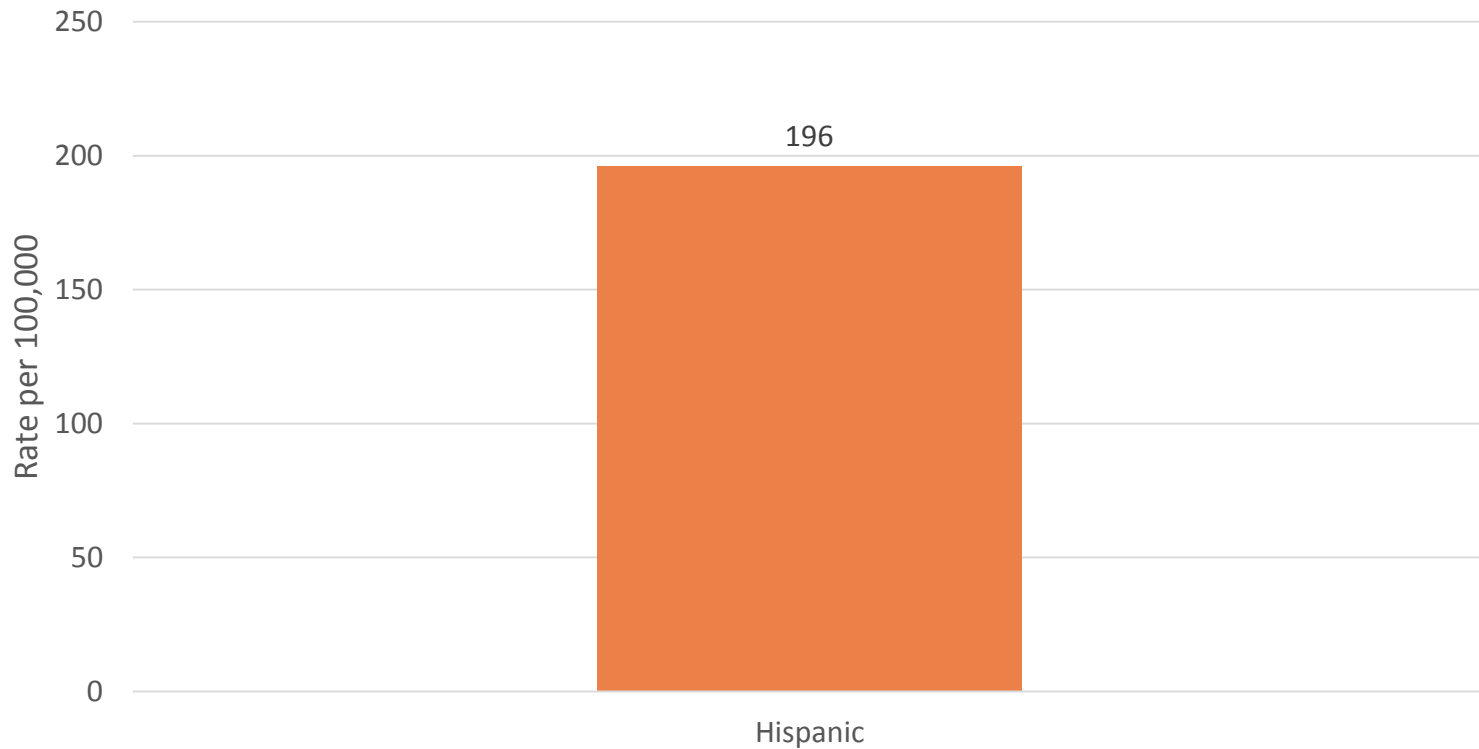


*Rates calculated using 2013 U.S. Census ACS data

Excludes 3,396 cases with multiple races and unknown race



Persons Living with HBV in Minnesota by Ethnicity rates (per 100,000 persons*), 2015

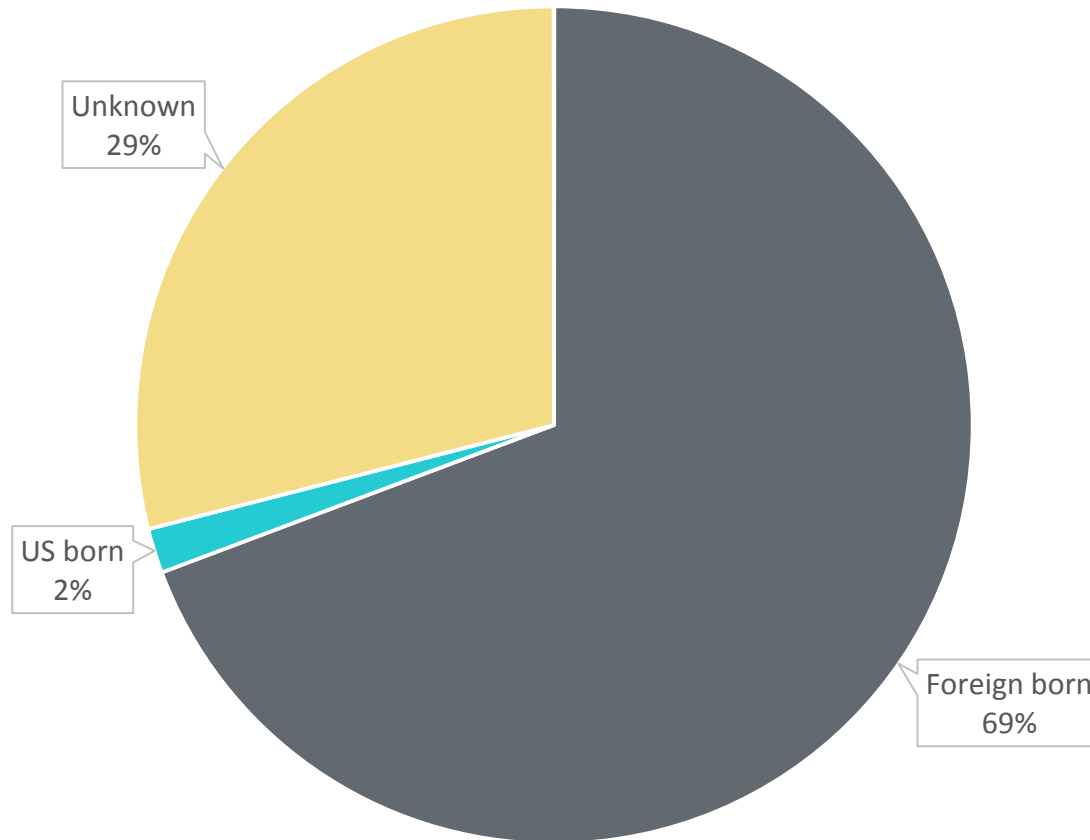


*Rates calculated using 2014 U.S. Census ACS data

Excludes persons with unknown ethnicity, n=19,432



Chronic HBV in MN by Place of Birth, 2015



Overview of HCV in Minnesota

A hepatitis C case is defined as current or past infection with hepatitis C and includes:

- **Acute cases:**
 - Infected within the last six months
 - Symptomatic
- **Chronic cases:**
 - Infected for over six months
- **Resolved cases:**
 - No evidence of current infection
 - Evidence of past infection

Reported Number of Persons Living with HCV in MN

- **As of December 31, 2015, 45,791*
persons are assumed alive and living
in MN with HCV**

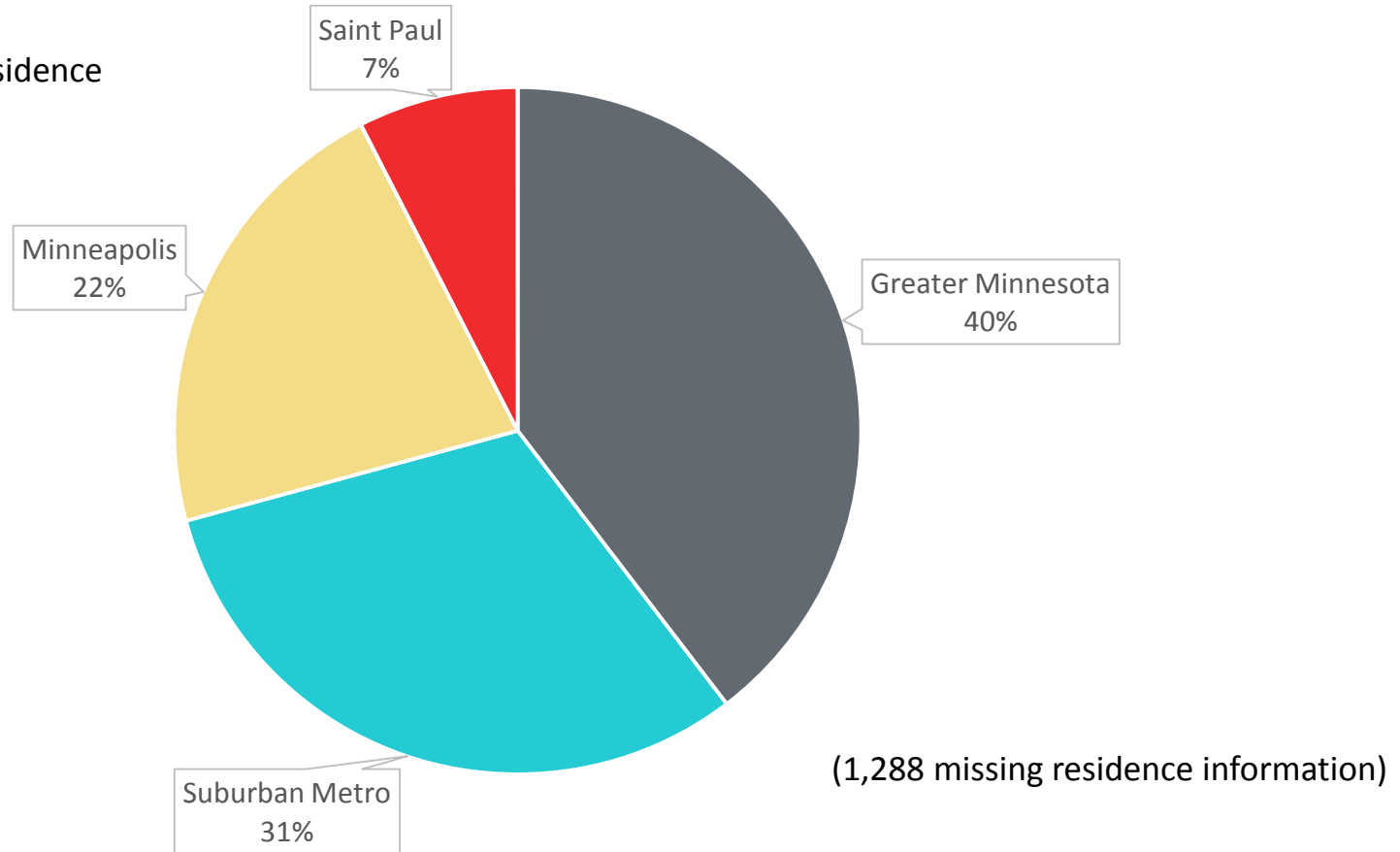
*Includes persons with unknown city of residence

Note: Includes all acute, chronic, probable chronic, and resolved cases.



Persons Living with HCV in MN by Current Residence, 2015

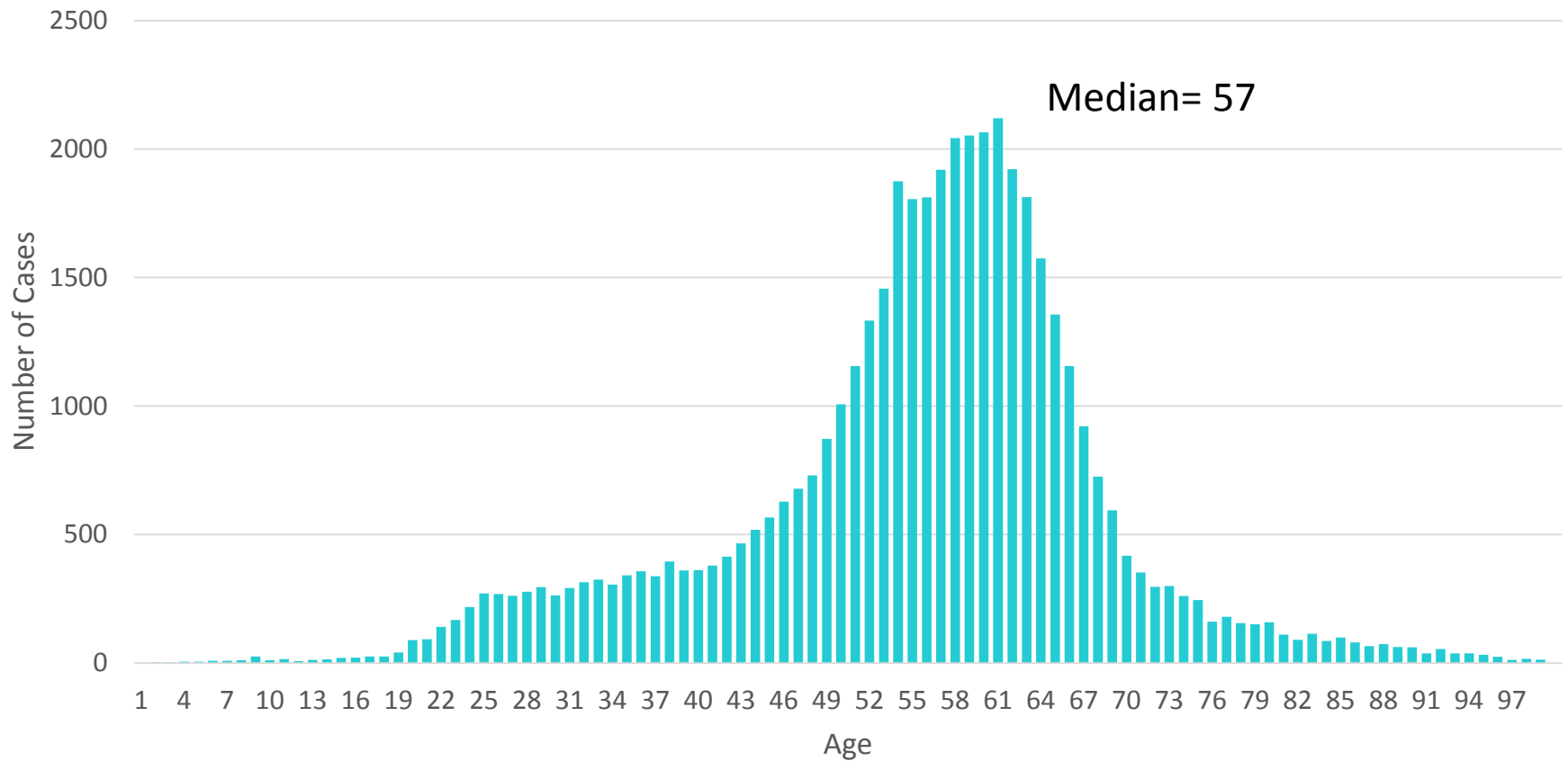
Total number with residence information = 44,503



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

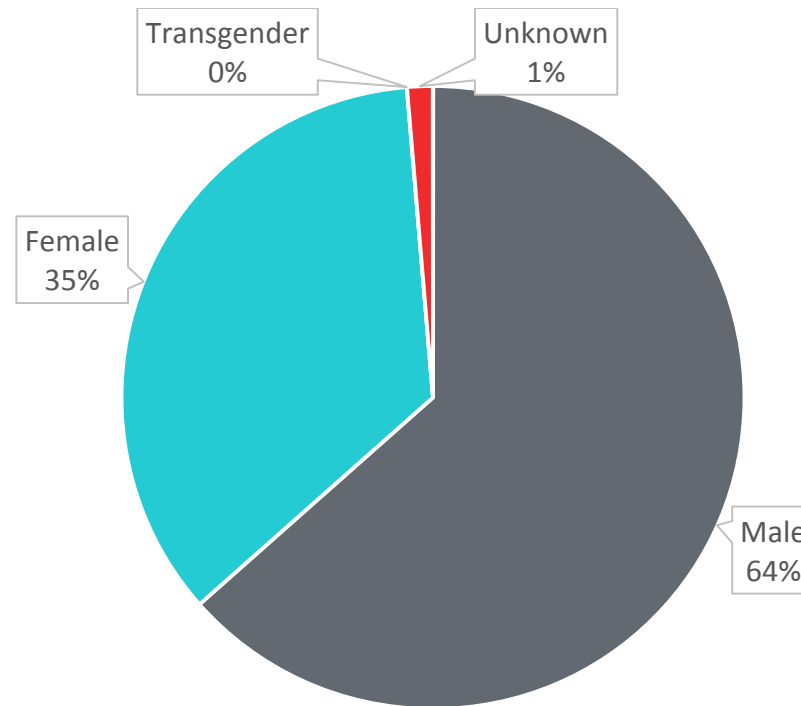


Persons Living with HCV in MN by Age, 2015



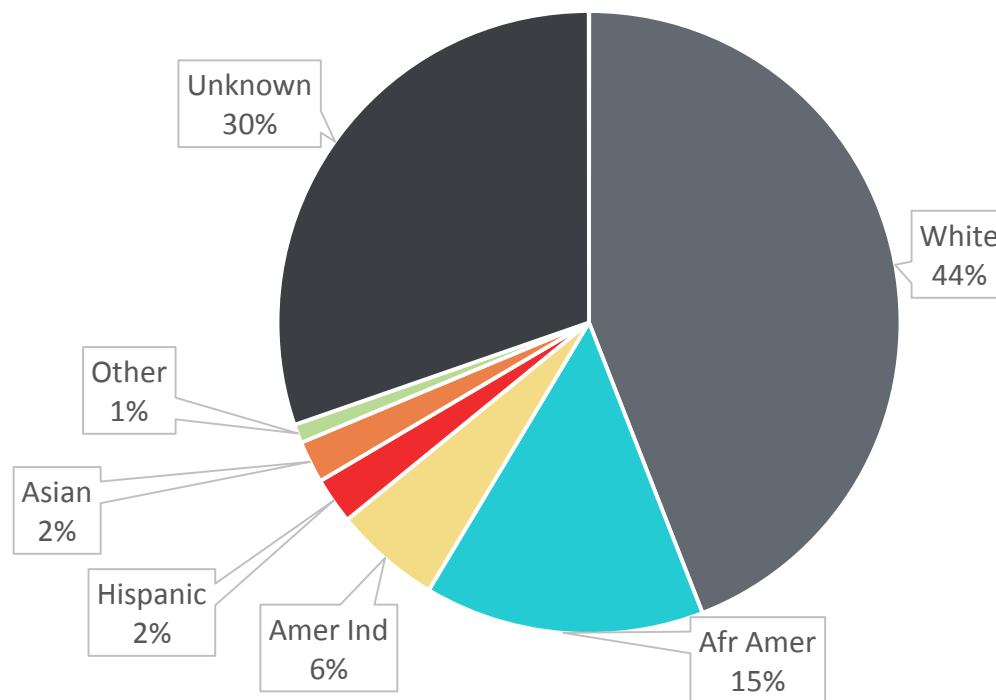


Persons Living with HCV in MN by Gender*, 2015



*Includes anonymous methadone patients

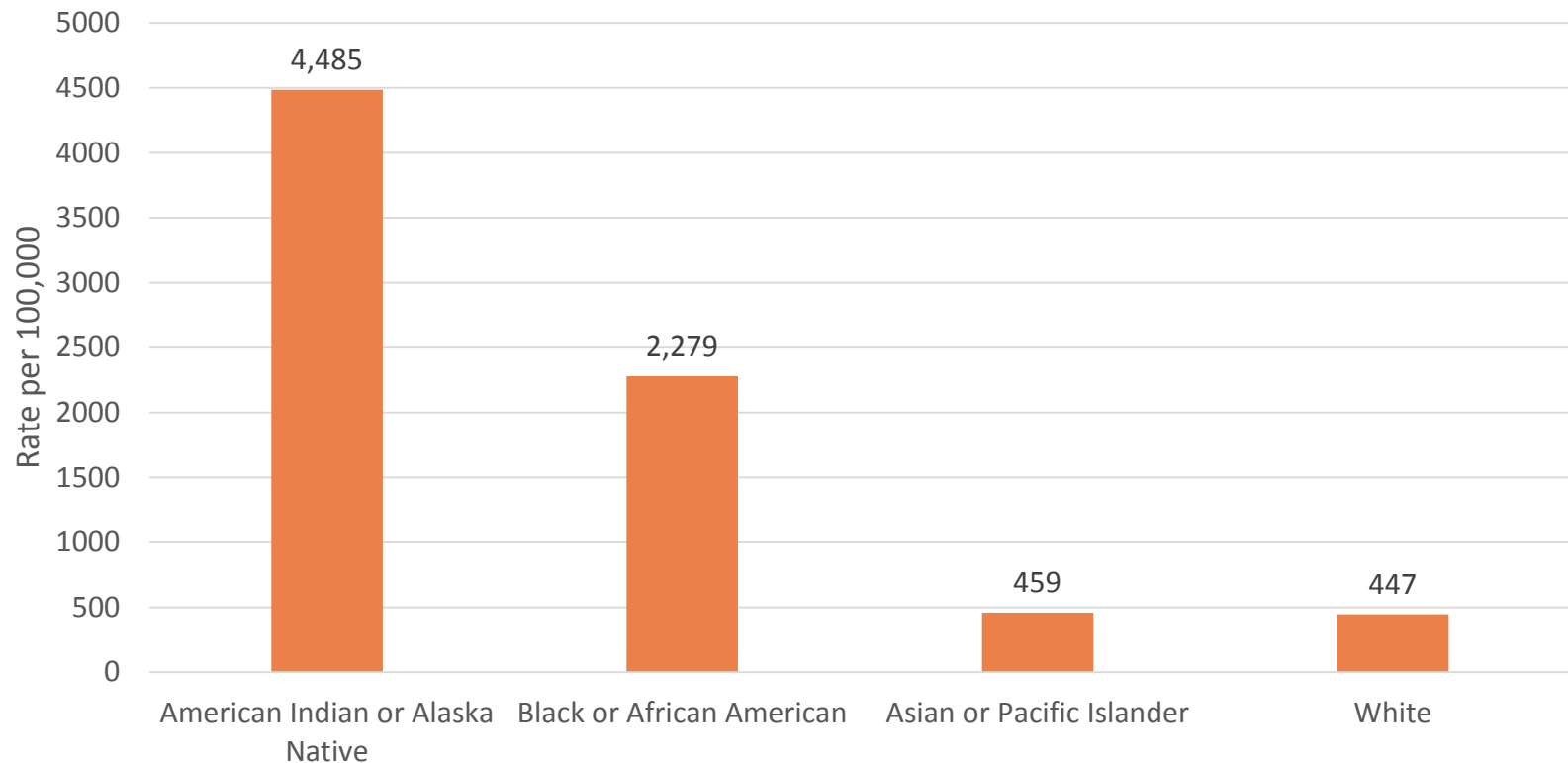
Persons Living with Chronic HCV in Minnesota by Race, 2015



Afr Amer = African American /Black Asian=Asian or Pacific Islander
Amer Ind = American Indian
Other = Multi-racial persons or persons with other race



Persons Living with HCV in Minnesota by Race rates (per 100,000 persons*), 2015

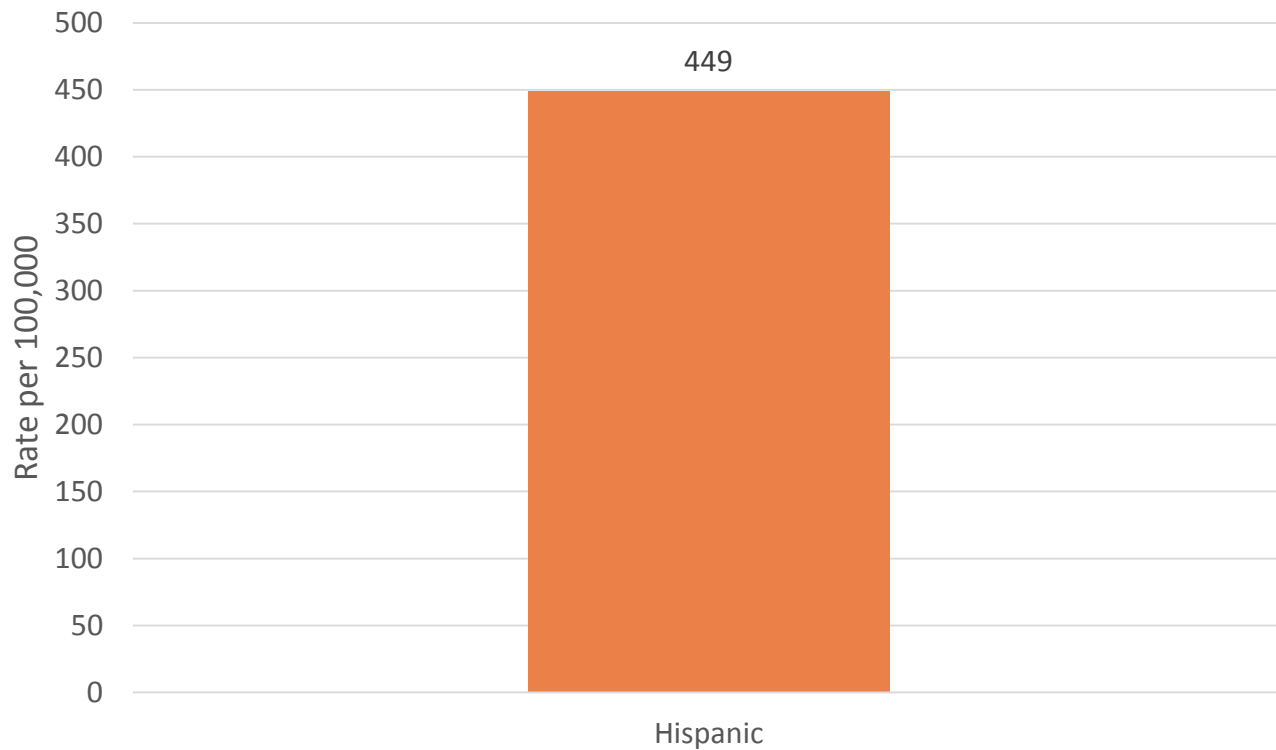


*Rates calculated using 2014 U.S. Census ACS data

Excludes persons with multiple races or unknown race, n=30,987



Persons Living with HCV in Minnesota by Ethnicity rates (per 100,000 persons*), 2015



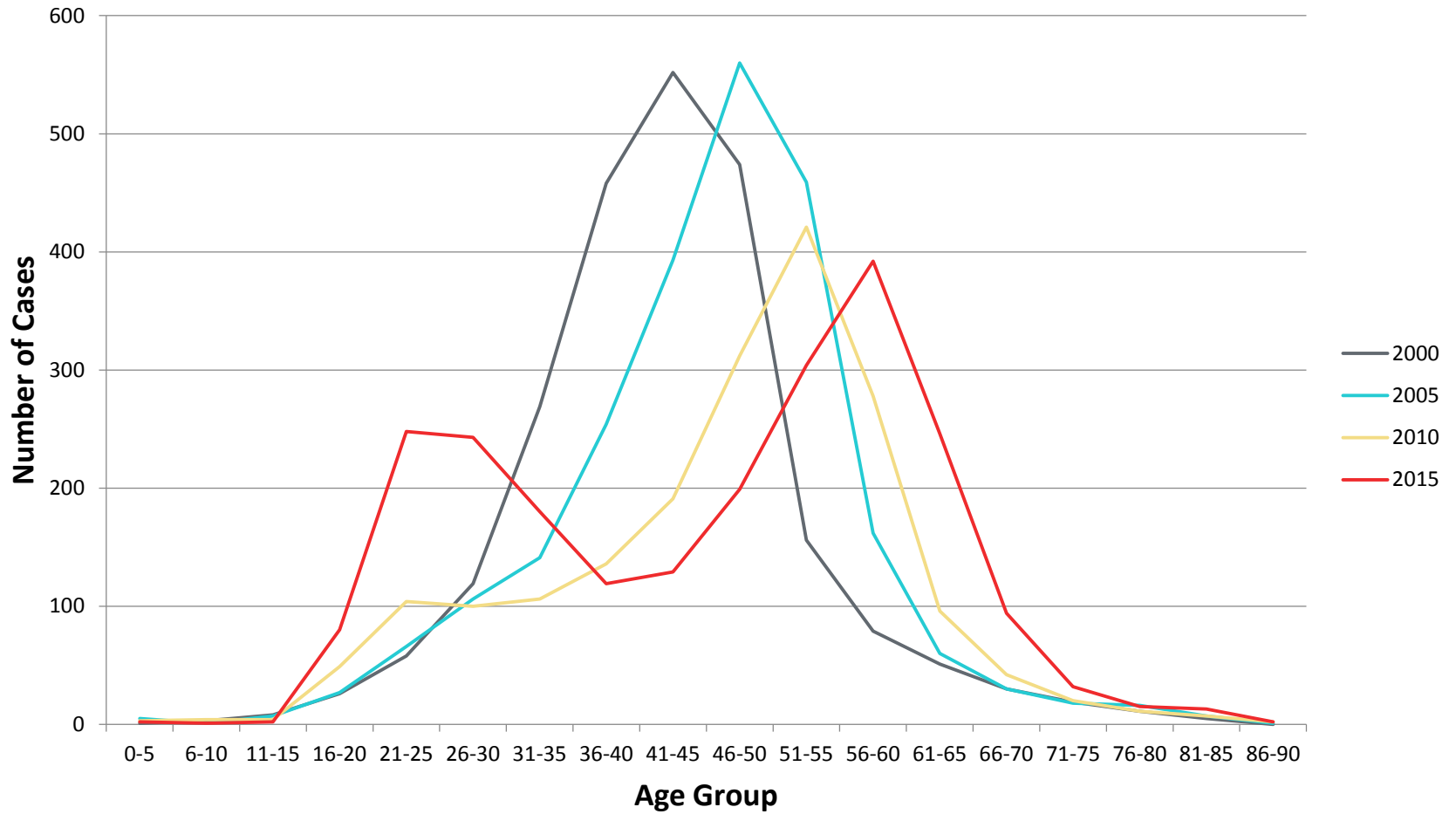
*Rates calculated using 2014 U.S. Census ACS data

Excludes persons with unknown ethnicity, n=19,432

Hepatitis C in Persons Under 30



New Reports of HCV in Minnesota by Age Group, 2015





New Reports of HCV in Minnesota by Year of Birth, 2015



Changes Ahead: Preparing for 2016

Big Changes in 2016

- **We will no longer include resolved hepatitis C cases in our prevalence estimates**

Changes in Case definitions

- **The national case definition changed for 2016**
 - Confirmed cases must have detectable RNA
 - Probable cases have **ONLY** a positive antibody test

Changes in Case definitions: MN

- **Next year**
 - Total case counts will EXCLUDE resolved cases



Thank You!

For more information, please contact:

Kristin Sweet, PhD, MPH

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(651) 201-4888

MDH Tuberculosis Program

Dzung Thai, MPH, TB Epidemiologist



Minnesota
Department *of* Health

STD/HIV/TB Section



MDH Tuberculosis Program

- **2015 TB data slides available this summer**
- **Website: www.health.state.mn.us/tb**
- **Phone: 651-201-5414 / 877-676-5414
(ask for the TB program)**



Questions? Thank You!

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www.health.state.mn.us/hiv