

Minnesota Department of Health

STD, HIV and Hepatitis C 2016 Data Release







- MDH = Minnesota Department of Health
- STD = Sexually transmitted disease
- MSM = Men who have sex with men
- HCV = Hepatitis C virus
- HBV = Hepatitis B virus
- IDU = Injection drug use
- SSuN = STD Surveillance Network





Announcements

- STD Overview
- Syphilis
- Gonorrhea
- SSuN
- Chlamydia
- HIV
- Hepatitis C

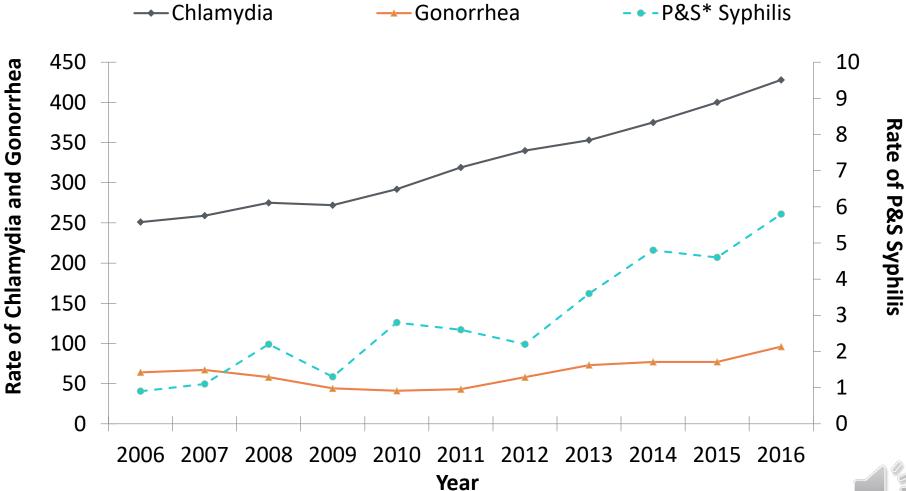


Highlights from the STD Surveillance Report, 2016

Minnesota Department of Health STD Surveillance System



STDs in Minnesota Rate per 100,000 by Year of Diagnosis, 2006-2016





STDs in Minnesota Number of Cases Reported in 2016

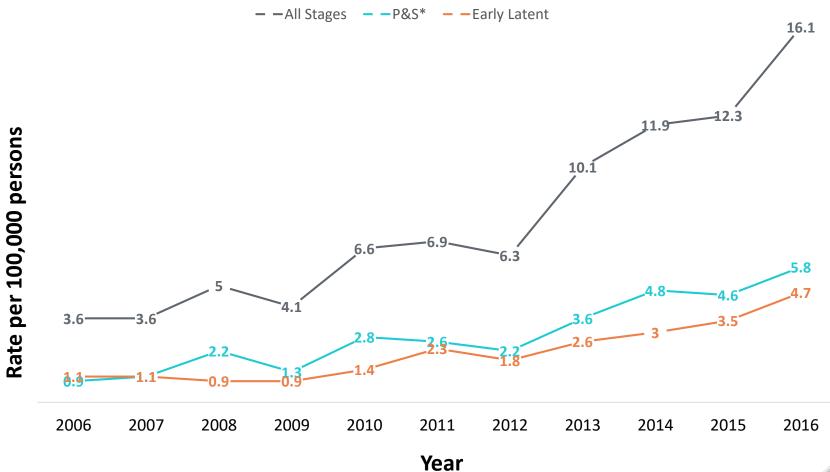
- Total of 28,631 STD cases reported to MDH in 2016:
 - 22,675 Chlamydia cases
 - 5,104 Gonorrhea cases
 - 852 Syphilis cases (all stages. Including 6 congenital syphilis)
 - 0 Chancroid cases



Syphilis

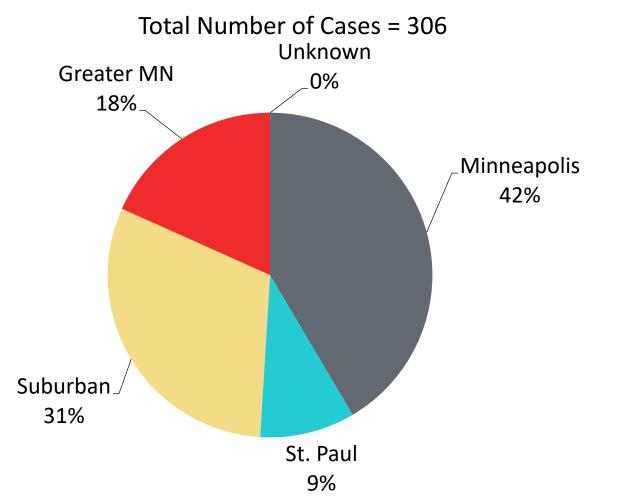


Syphilis Rates by Stage of Diagnosis Minnesota, 2006-2016





Primary & Secondary Syphilis Infections in Minnesota by Residence at Diagnosis, 2016

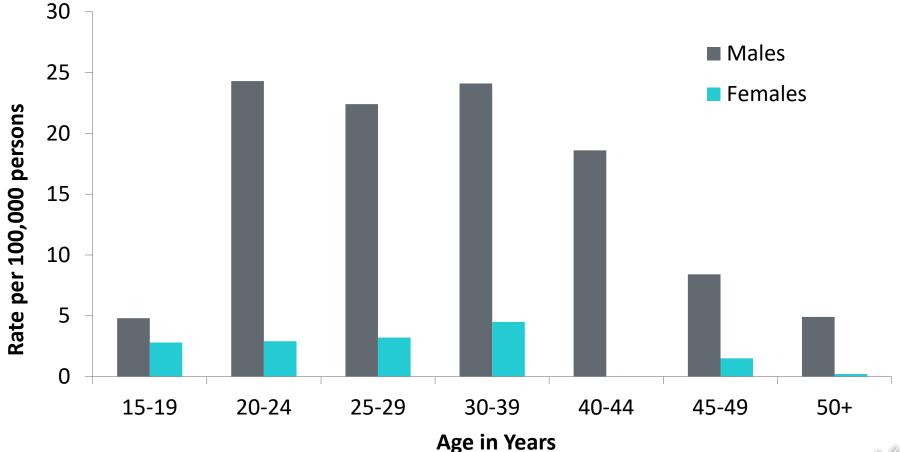


Suburban = Seven-county metro area including Anoka, Carver, Dakota, Hennepin (excluding Minneapolis), Ramsey (excluding St. Paul), Scott, and Washington counties.

Greater MN = All other Minnesota counties outside the seven-county metro area.

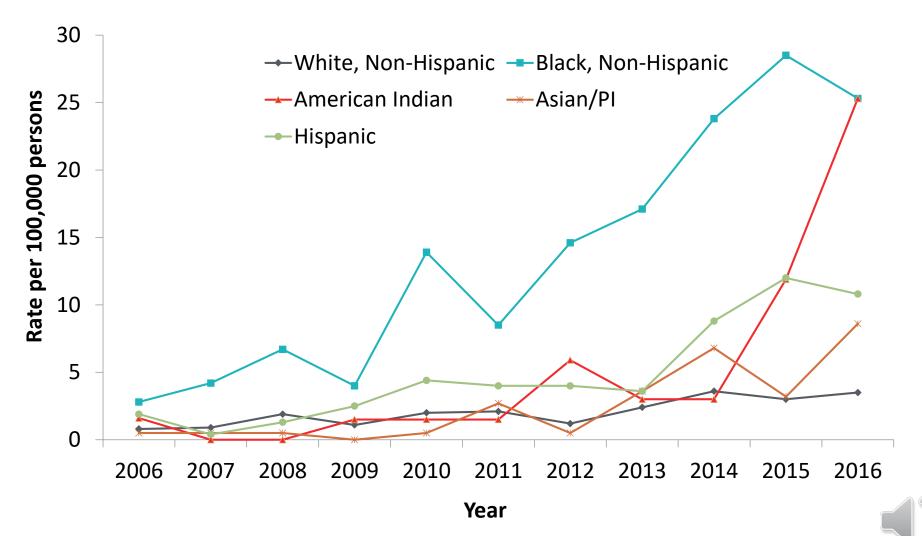


Age-Specific Primary & Secondary Syphilis Rates by Gender, Minnesota, 2016





Primary & Secondary Syphilis Rates by Race/Ethnicity Minnesota, 2006-2016



* Persons of Hispanic ethnicity can be of any race.

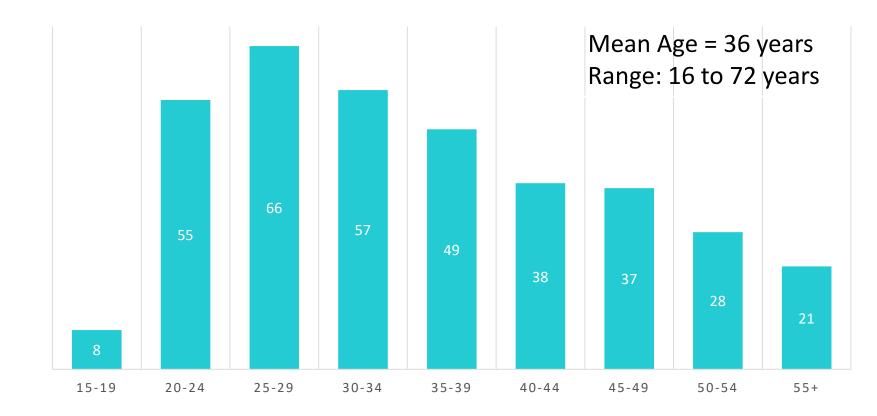
Early Syphilis Among Men Who Have Sex With Men in Minnesota



Early Syphilis⁺ by Gender and Sexual Behavior Minnesota, 2006-2016

Year	Early Syphilis Cases	Male Cases (%)	MSM Cases	
	, ,,	, , , , , , , , , , , , , , , , , , ,	(% of males)	
2006	104	90 (88)	80 (89)	
2007	114	111 (97)	103 (93)	
2008	163	158 (97)	140 (89)	
2009	117	106 (91)	96 (91)	
2010	221	207 (94)	185 (89)	
2011	260	246 (95)	218 (89)	
2012	214	196 (92)	158 (81)	
2013	332	298 (90)	261 (88)	
2014	416	374 (90)	283 (76)	
2015	431	341 (79)	222 (65)	
2016	557	468 (84)	359 (77)	

Early Syphilis⁺ Cases Among MSM by Age Minnesota, 2016 (n=359)



AGE IN YEARS

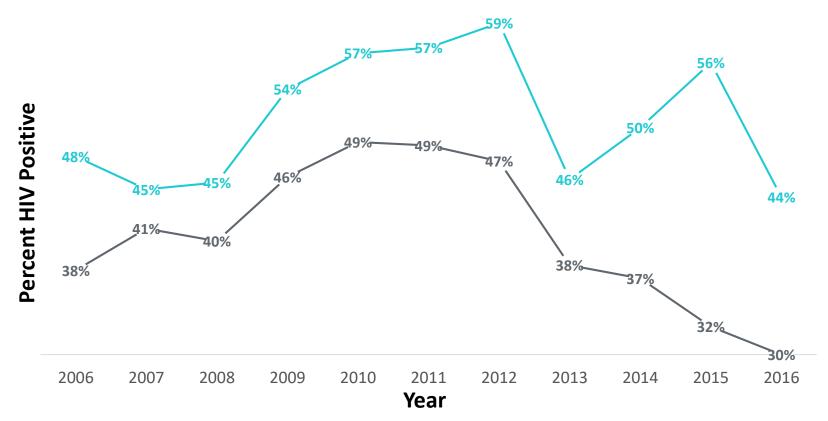


MSM=Men who have sex with men



Early Syphilis⁺ (ES) Cases Co-infected with HIV, 2006-2016

– All ES Cases
– MSM ES Cases



MSM=Men who have sex with men

Characteristics of Early Syphilis⁺ Cases Among MSM, Minnesota, 2016

- Gay and bisexual men account for 77% of cases among men.
- 62% of cases among MSM are White, but a disproportionate number of cases (17%) are African American.
- 44% of cases are also infected with HIV.



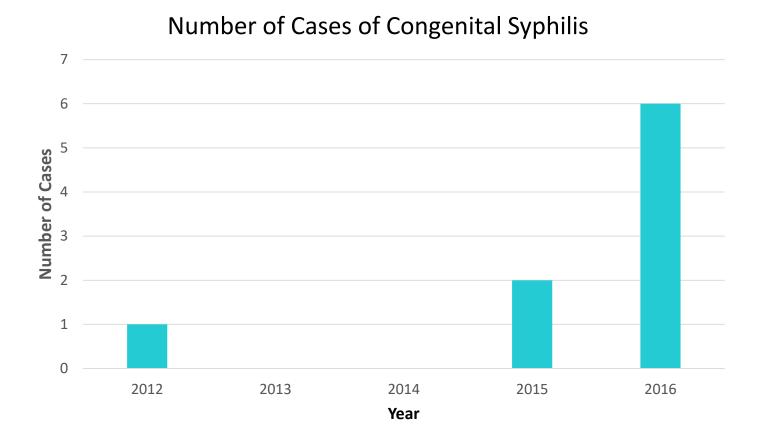
MSM=Men who have sex with men



Syphilis Among Females and Congenital Syphilis in Minnesota



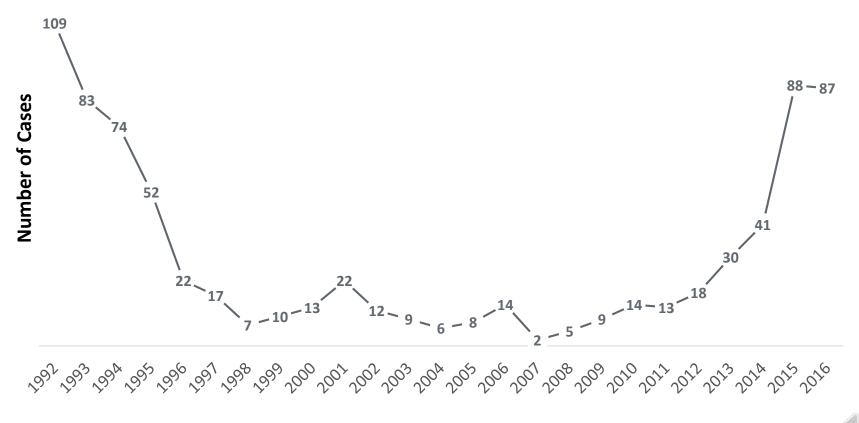
Congenital Syphilis in Minnesota 2012-2016



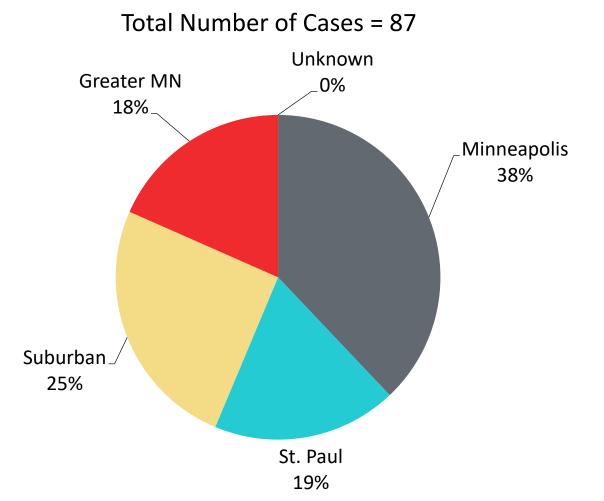


Female Early Syphilis cases

NUMBER OF FEMALE EARLY SYPHILIS CASES



Early Syphilis Infections in Women in Minnesota by Residence at Diagnosis, 2016



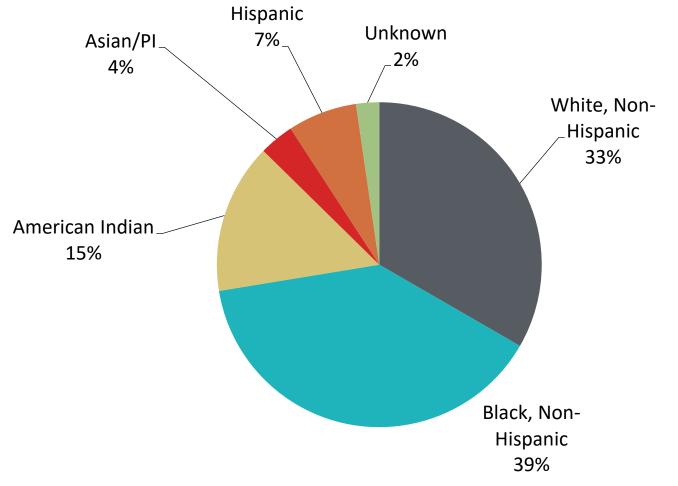
Suburban = Seven-county metro area including Anoka, Carver, Dakota, Hennepin (excluding Minneapolis), Ramsey (excluding St. Paul), Scott, and Washington counties.

Greater MN = All other Minnesota counties outside the seven-county metro area.



Early Syphilis Cases in Females by Race Minnesota, 2016

Total Number of Cases = 87





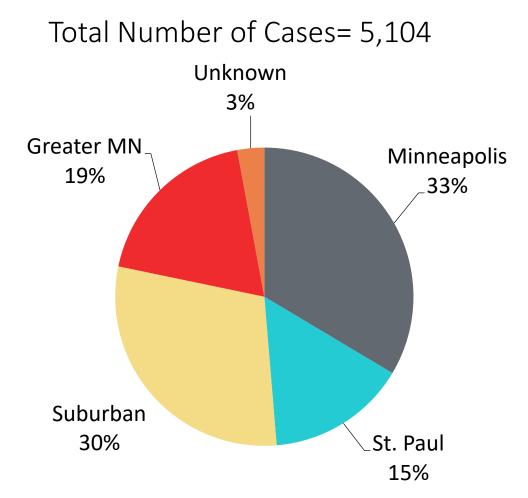
*Includes persons reported with more than one race



Gonorrhea



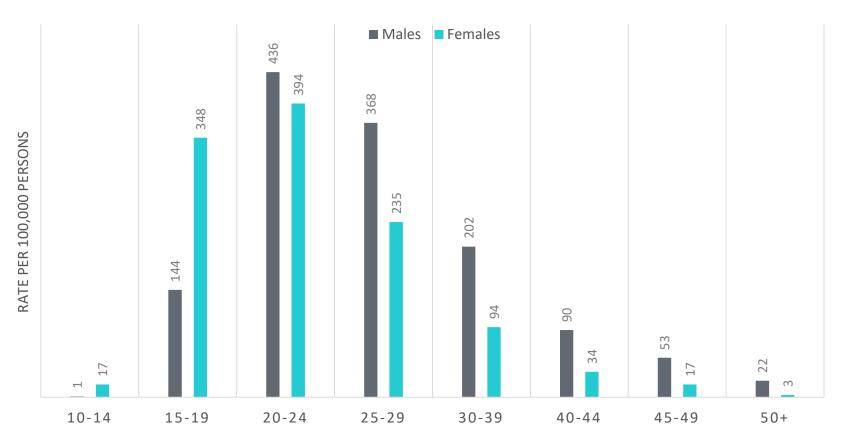
Gonorrhea Infections in Minnesota by Residence at Diagnosis, 2016



Suburban = Seven-county metro area including Anoka, Carver, Dakota, Hennepin (excluding Minneapolis), Ramsey (excluding St. Paul), Scott, and Washington counties.

Greater MN = All other Minnesota counties outside the seven-county metro area.

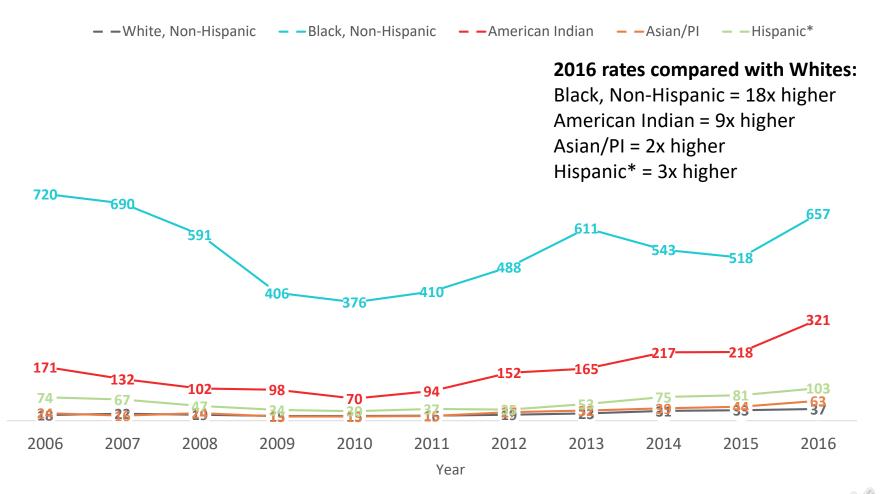
Age-Specific Gonorrhea Rates by Gender Minnesota, 2016



AGE IN YEARS



Gonorrhea Rates by Race/Ethnicity Minnesota, 2006-2016



* Persons of Hispanic ethnicity can be of any race



SSuN





Provider Investigation





FAX

Confidential Patient Investigation Supplement

The Minnesota Health Department is collaborating with the U.S. Centers for Disease Control and Prevention (CDC) to obtain additional information on a representative sample of gonorrhea cases reported to state and local health departments. This important information is urgently needed to help prevent emergence of antibiotic-resistant gonorrhea, to help prioritize public health resources for gonorrhea prevention and to better understand disease prevalence and incidence patterns in your community.

The patient named below was randomly chosen for this supplemental investigation from all cases routinely reported to the health department. This report is confidential; no identifying information on patients or clinicians will ever be released. Your cooperation in providing this information specific to the patient and diagnosis below is greatly appreciated. If you have questions or concerns about this supplemental investigation, please call the SSuN project coordinator Laura Tourdot at 651-201-3866 or the COC SSUN Project Officer, Division of STD Prevention, U.S. Centers for Disease Control and Prevention (404-639-8356).

Please FAX completed form to Minnesota Department of Health, (651)201-4040: Attn SSuN Project Coordinator

Patient										
Petient Last Name			Patient First Name				ML	Patient Date of Birth		
Diagnosis Repo	rted to Health De	partment	_							
Gonorrhea					If patient is NOT KNOWN to this practice/facility, please check here and return by FAX to the health department. D					
Diagnosis			Oute of diagnosis hepotto h	Date of diagnosis/report to health department		and return by FAX to the hearth department. D				
Provider Information (Please provide the following information										
Facility/Practice/Heelthcare Organization Name		Name of clinician examining this patient								
					□ MD	RN	D PA			
				1	ARNP	LPN	Other		atient Visit	
Physical location/fi	acility address			City		State	219	Phone	Fax	
is this faoility a l	Federally Qualifier	d Health Center (FG	HC)?		is this faoility a Community Health Center (CHC)?					
	Yes	No				Yes	No			
						L Tes	L NO			
Patient and Dia	gnostic Informati	on								
Does patient have health insurance? Were any of the following findings present on exam (oheok all that apply)?										
	Yes	No No	Urethritis	Proctitis	Epididymiti	is 🔲 PID	Discharge	Other	None	
Anatomic sites tested for gonorrhea (mark all that apply):					Anatomic sites testing positive for gonorrhea (mark all that apply):					
Urine 🗆	Urethra	Pharnyx	Cervix/Vaginal Swab		Urine Urine	Urethra	Pharnyx	Rectum		
_		_			_		_			
Rectum		Other			Cervix/Vagir	12	Other			
Was patient tested for HIV Infection at this visit?					Gender of patient's sex partners?					
								•		
	Yes	No No			Males only	Females only	Both	Unk		
								-		
Treatment Info	metica									
Has patient been treated for gonorrhea? I Yes, patient treated for gono				rrhea No, patient nottreated			Treatment Date:			
Please indicate treatment provided for gonorrhea (check ALL that apply, check dosage as indicated):										
Ceftriaxone: 125mg 250mg 500mg Azithromycin: 1g 2g										
Although a song a song Although at										
Doxycycline Cefixime 0			Other							
	Counseling / Referral									
Were any medications/prescriptions provided to patient to give to their sex partners?			Was patient counseled to prevent transmission/reinfection?			Was patient referred to health department for partner notification or other services?				
			-	And the second se	faction 2		and the second idea of	and an other second		

Confidential

This feasimile transmission contains confidential information, some or all of which may be protected health information as defined by the federal Health insurance Portability & Accountability Act (HIPAA) Privacy Rule. This transmission is intended for the exclusive use of the individual or entity to whomit is addressed and may contain information that is proprietary, privileged, confidential and/or exempt from disclosure under applicable law. If you are not the intended recipient (or an employee or agent responsible for delivering this facinite transmission to the intended recipient), you are hereby notified that any disclosure, dissemination, distribution or copying of this information is strictly prohibited and may be subject to legal estriction or sention. Nease notify the sender by telephone (number listed above) to arrange the return or destruction of the information and all copies.







Patient Investigation



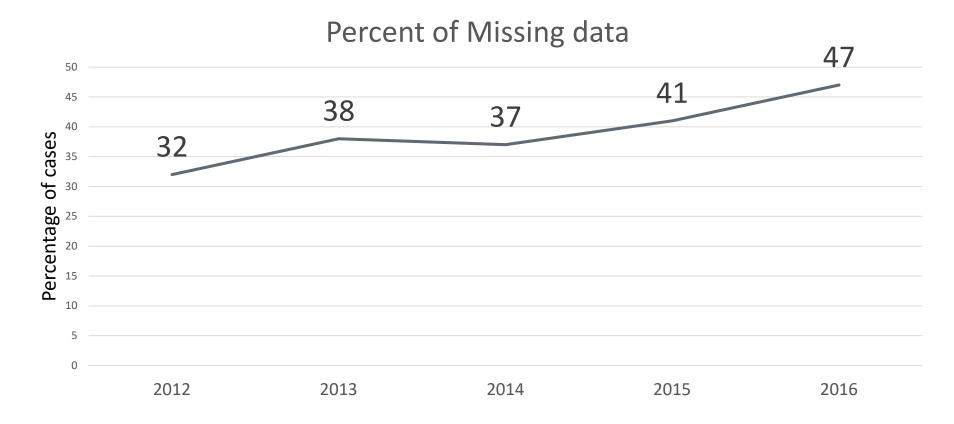
Gonorrhea is a notifiable condition in MN

- Please remember to notify all patients after any STD diagnosis that their name and information is required by law to be reported to MDH.
- Please ensure all STD case and lab reports are submitted to MDH with proper contact information.
- Please inform your patients, after a STD diagnosis, that they have a chance of being contacted by MDH for additional follow up.



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Gender of Sex Partner







PrEP

Currently, SSuN is the only source for PrEP data



Questions regarding SSuN

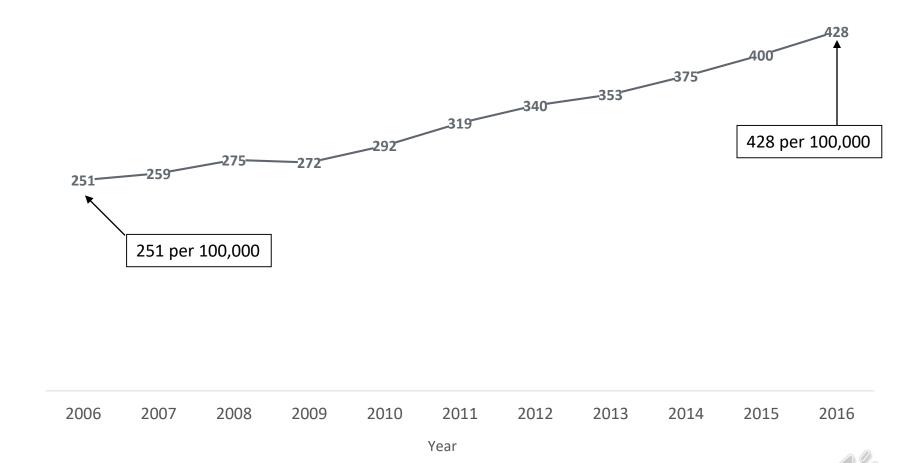
- Please contact Laura Tourdot
- Laura.Tourdot@state.mn.us
- 651-201-3866



Chlamydia

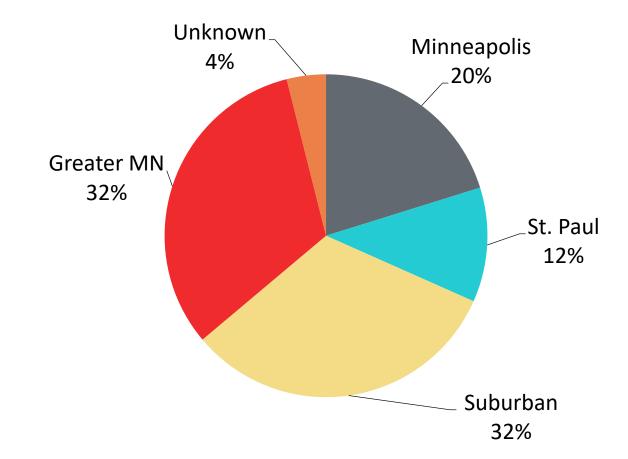


Chlamydia in Minnesota Rate per 100,000 by Year of Diagnosis, 2006-2016



Chlamydia Infections by Residence at Diagnosis Minnesota, 2016

Total Number of Cases = 22,675

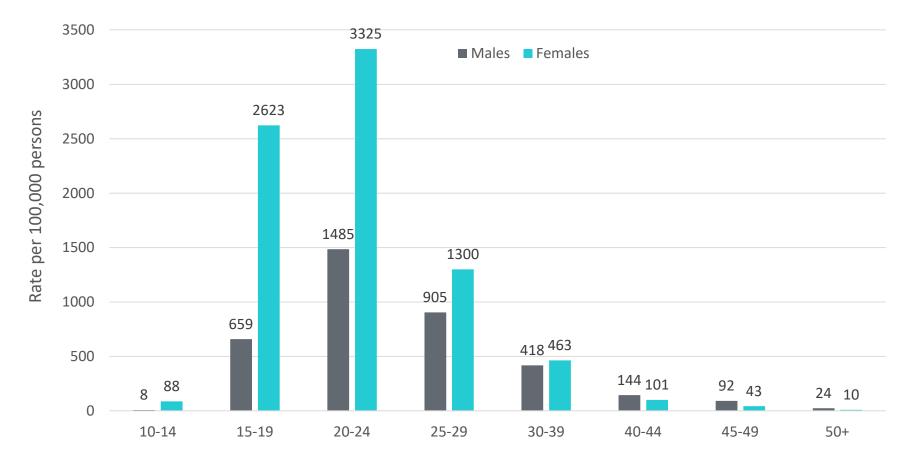


Suburban = Seven-county metro area including Anoka, Carver, Dakota, Hennepin (excluding Minneapolis), Ramsey (excluding St. Paul), Scott, and Washington counties.

Greater MN = All other Minnesota counties outside the seven-county metro area.



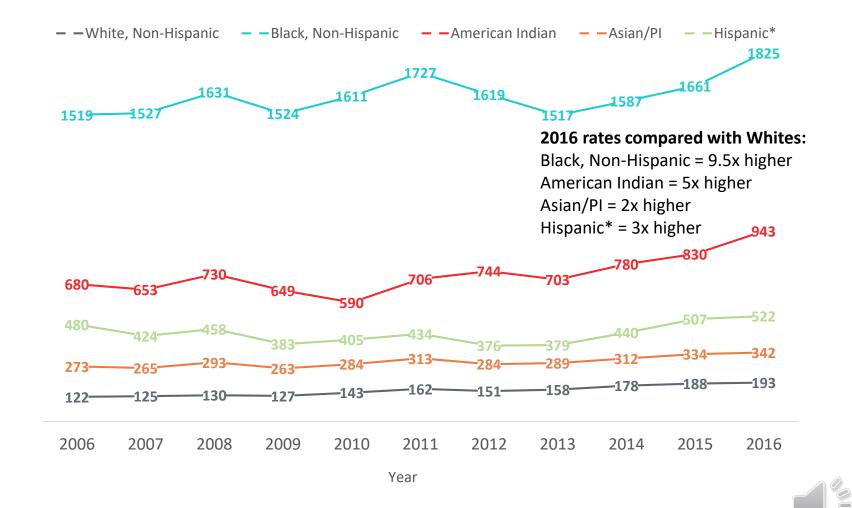
Age-Specific Chlamydia Rates by Gender Minnesota, 2016



Age in Years



Chlamydia Rates by Race/Ethnicity Minnesota, 2006-2016



* Persons of Hispanic ethnicity can be of any race

STD Surveillance Summary

Minnesota Department of Health STD Surveillance System



Summary of STD Trends in Minnesota

- From 2006-2016, the chlamydia rate increased by 71%. The rate of gonorrhea increased by 25%. Rates of reported syphilis increased in 2016 compared to 2015 by 30%.
- Minnesota has seen a resurgence of syphilis over the past decade, with men who have sex with men and those co-infected with HIV being especially impacted. However, the number of females is near the record high for the last decade.
- Persons of color continue to be disproportionately affected by STDs.
- STD rates are highest in the cities of Minneapolis and Saint Paul. However, chlamydia and gonorrhea cases in the Twin Cities suburbs and Greater Minnesota account for 61% of the reported cases in 2016.
- Between 2015 and 2016, early syphilis cases increased by 29%. Men who have sex with men comprised 77% of all male cases in 2016; cases among women are continuing to remain high.



Future Updates to STD Reporting

- New case report form to accommodate changes in treatment guidelines, requesting HIV testing status, and PrEP usage.
- Case report form is be able to be filled out on a computer and printed to be mailed or faxed in
- All cases co-infected with HIV (diagnosed in the last year)/Gonorrhea, HIV/Syphilis, and Early Syphilis will be continue to be assigned to MDH Partner Services for follow-up
- All Gonorrhea cases continue to have the potential for being contacted by MDH for additional follow-up



For more information, contact:

STD Surveillance Data

Dawn.Ginzl@state.mn.us, 651-201-4041

MDH Partner Services Program
<u>Brian.Kendrick@state.mn.us</u>, 651-201-4021



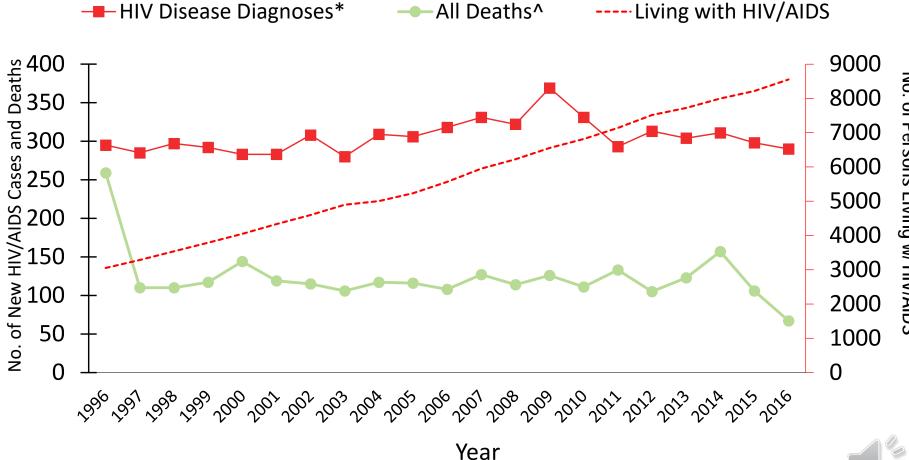


Highlights from the HIV Surveillance Report, 2016

Minnesota Department of Health HIV/AIDS Surveillance System



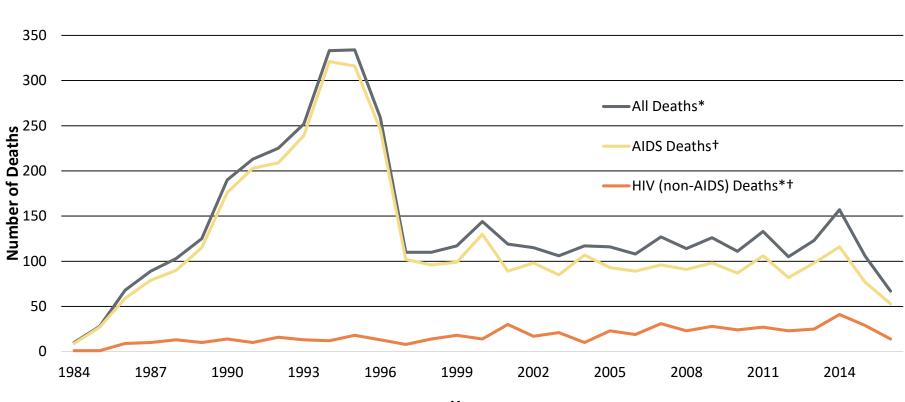
HIV/AIDS in Minnesota New HIV Disease Diagnoses, Deaths and Prevalent Cases by Year, 1996-2016



*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.

Reported Deaths among Persons with HIV in Minnesota, 1984-2016



Year

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

⁺ Number of deaths known to have occurred among people living with AIDS in Minnesota in a given calendar year, regardless of location of diagnosis and cause of death

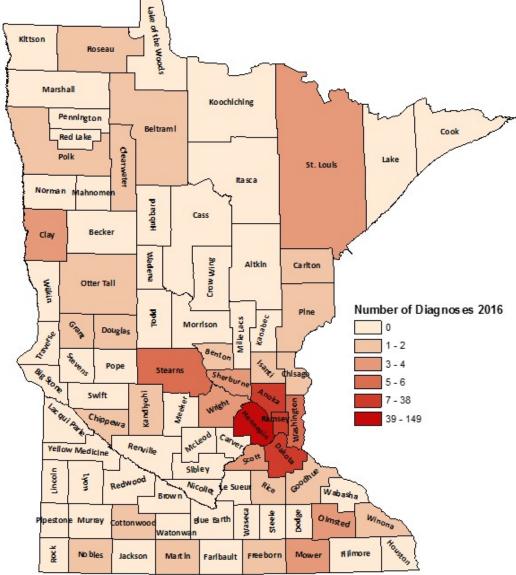
*⁺ Number of deaths known to have occurred among people living with HIV (non-AIDS) in Minnesota in a given calendar year, regardless of location of diagnosis and cause of death



Data Source: Minnesota HIV/AIDS Surveillance System

400

HIV Diagnoses* by County of Residence at Diagnosis, 2016

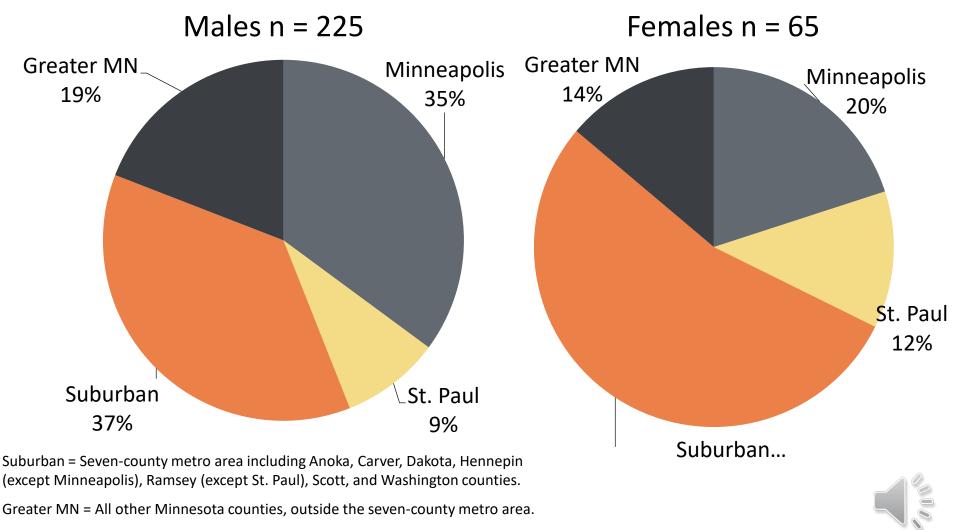


Total Number	290
Greater Minnesota	52
Suburban [#]	118
St. Paul	28
Minneapolis	92



*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, 2016



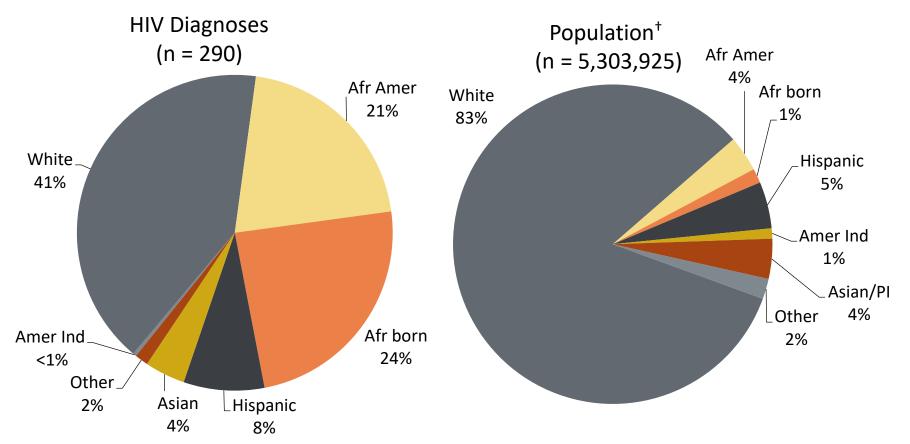
* HIV or AIDS at first diagnosis



Gender and Race/Ethnicity



HIV Diagnoses* in Year 2016 and General Population in Minnesota by Race/Ethnicity



* 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)



Number of Cases and Rates (per 100,000 persons) of HIV Diagnoses* by Race/Ethnicity⁺– Minnesota, 2016

Race/Ethnicity	Cases	%	Rate
White, non-Hispanic	119	41%	2.7
Black, African-American	60	21%	31.3
Black, African-born	70	24%	90.3**
Hispanic	24	8%	9.6
American Indian	1	0.3%	#
Asian/Pacific Islander	12	4%	5.6
Other^	4	1%	#
Total	290	100%	5.5

* 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

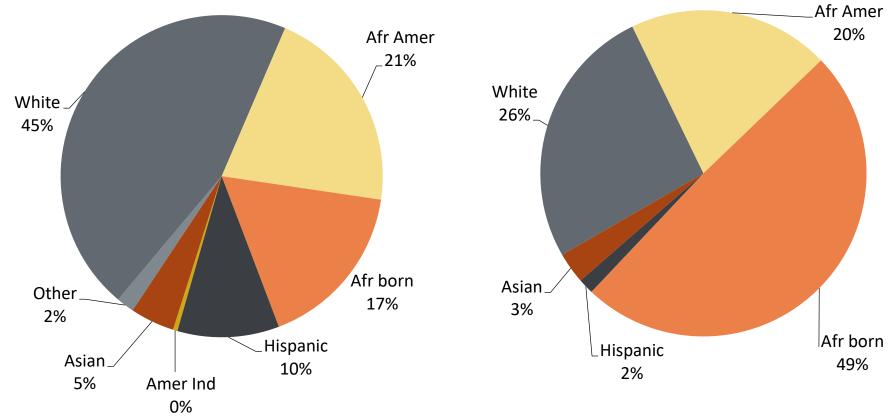
Number of cases too small to calculate reliable rate



HIV Diagnoses* Diagnosed in Year 2016 by Gender and Race/Ethnicity

Males (n = 225)

Females (n = 65)



- * 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 of Adult and Adolescent HIV Diagnoses** by Gender Identity and Risk⁺, Minnesota, 2016

Gender/Risk	Cases	%	Rate
Men (Total)	(223)	77%	10.3
MSM ⁺	139	62%	149.8
Non-MSM	84	38%	4.1
Women	63	22%	2.8
Transgender ^ (Total)	4	1%	X
Male to Female	2	50%	X
Female to Male	2	50%	X
Total	290	100%	5.5

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

⁺ "MSM" refers to both MSM and MSM/IDU. Estimate of 92,788

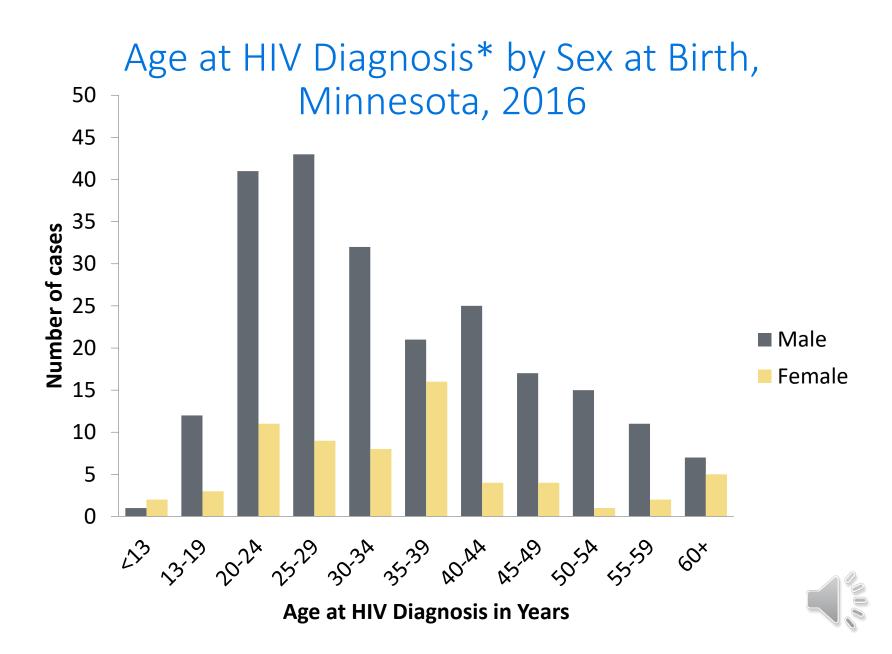
^ No current transgender estimate available











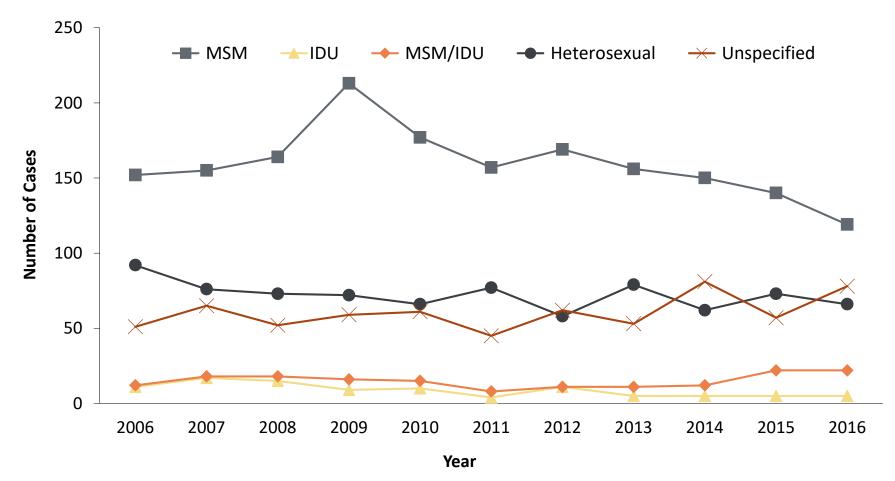
^{*} HIV or AIDS at first diagnosis



Mode of Exposure



HIV Diagnoses* by Mode of Exposure and Year, 2005 - 2016



*HIV or AIDS at first diagnosis Unspecified = No mode of exposure ascertained

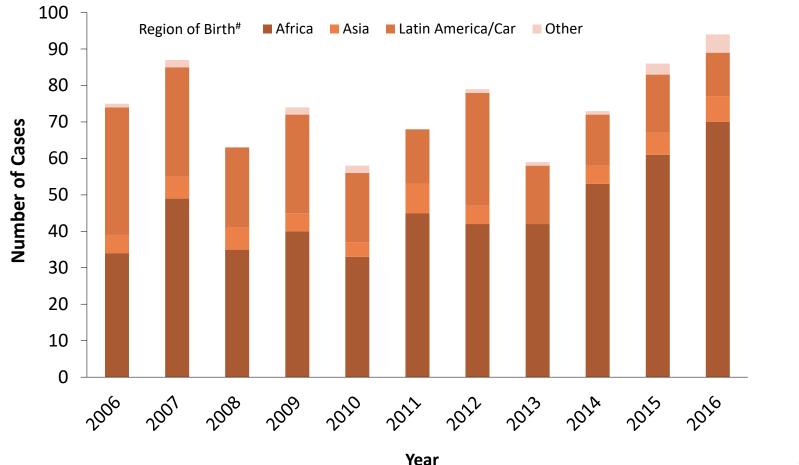




Foreign-born Cases



HIV Diagnoses* among Foreign-Born Persons⁺ in Minnesota by Year and Region of Birth, 2006 - 2016



* 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.

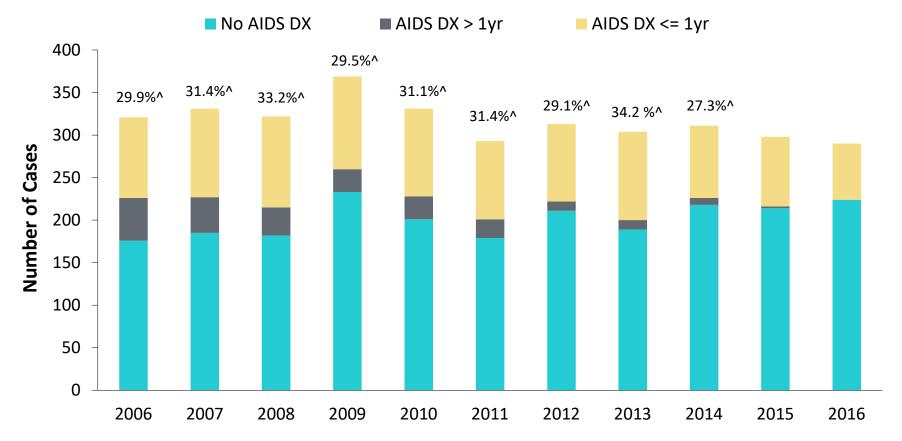
[#]Latin America/Car includes Mexico and all Central, South American, and Caribbean countries.



Late Testers: AIDS Diagnosis within one year of HIV Diagnosis



Time of Progression to AIDS for HIV Diagnoses in Minnesota*,2006 - 2016⁺



Year

*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

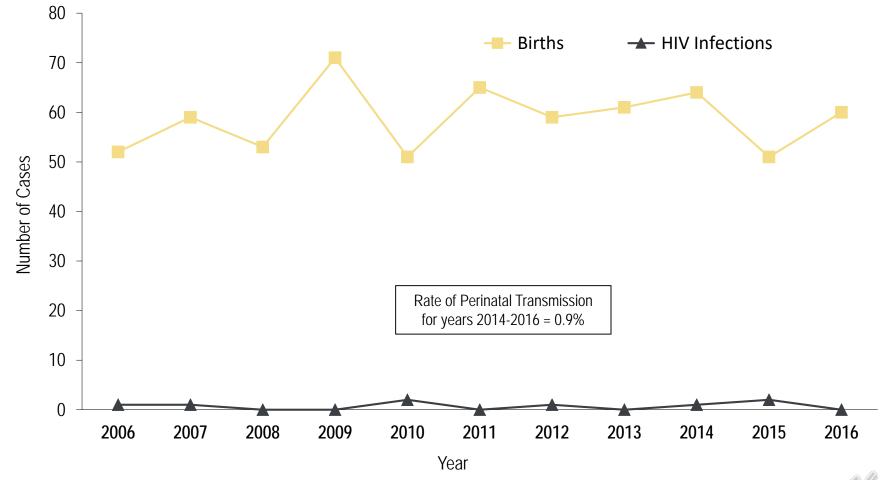
⁺ Numbers/Percent for cases diagnosed in 2016 only represents cases progressing to AIDS through March 20, 2017.



Births to HIV-Infected Women Perinatal Acquired HIV Infections



Births to HIV-Infected Women and Number of Perinatally Acquired HIV Infections* by Year of Birth, 2006 - 2016



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

Conclusion

- Total HIV diagnoses for 2016 similar to 2015
- Male to Male sex remains the leading risk factor for HIV
- More than half of newly reported cases were among communities of color
- Cases among 20-29 year olds remain high
- Cases of injection drug users indicate a continuing increase over the last two years
- Regionally, there was a 41% increase in new HIV cases in Greater Minnesota from the previous year





Thank You!

For more information, please contact:

Cheryl Barber, HIV/AIDS Surveillance Coordinator <u>Cheryl.barber@state.mn.us</u> (651) 201-5624



Highlights from the Hepatitis Surveillance Report, 2016

Minnesota Department of Health Hepatitis Surveillance System



Introduction

- Data in this presentation are current through 2016
- 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 2016 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. Most recent match with Minnesota death records was in 2017.
- Persons whose most recently reported state of residence was Minnesota are assumed to be currently residing in Minnesota unless MDH has knowledge of their relocation.

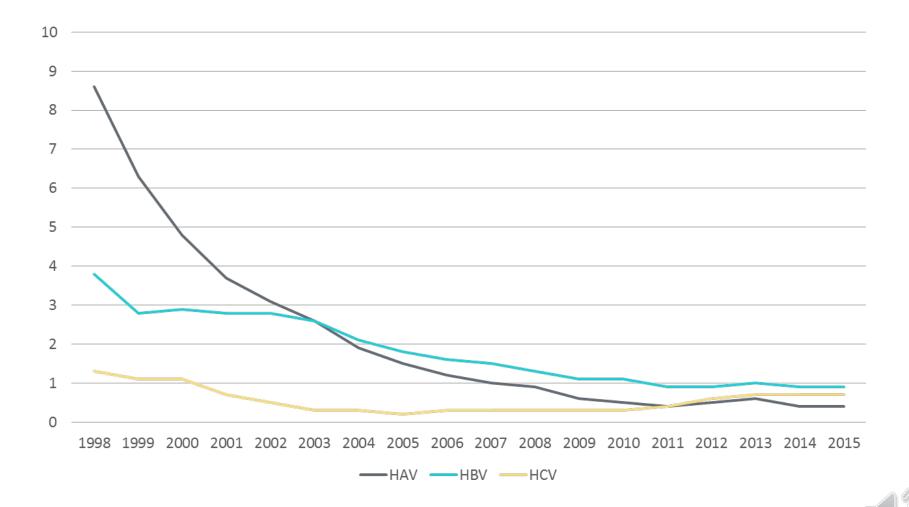


Acute Viral Hepatitis

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



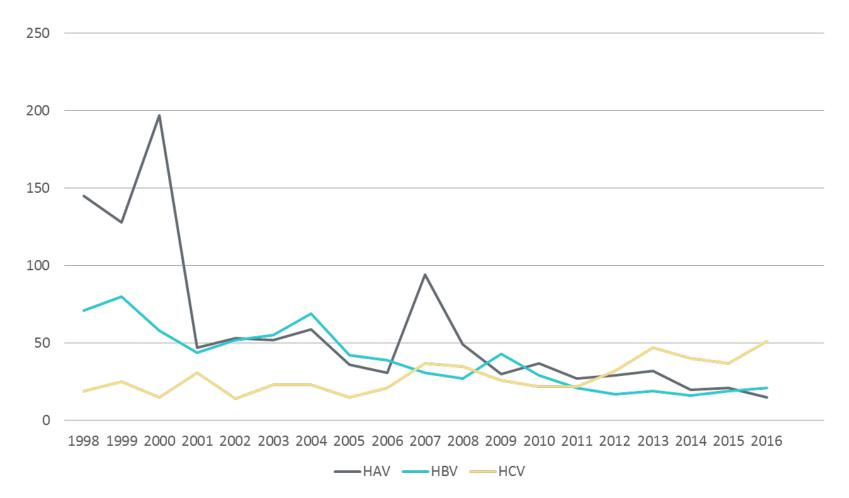
Reported rate per 100,000 population of acute viral hepatitis, United States, 1998-2015





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Number of Acute* Cases per year Minnesota, 1998-2016



*Acute cases include seroconverters for all years for HBV and HCV Data Source: MN Viral Hepatitis Surveillance System



Chronic Hepatitis C



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Overview of HCV in Minnesota

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

- Chronic cases
 - Probable anti-HCV + alone
 - Confirmed HCV RNA +



Reported Number of Persons Living with HCV in MN

 As of December 31, 2016, 35,623* 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. Data Source: MN Viral Hepatitis Surveillance System



Changes in Case Counting, 2016

- Removed resolved infections from case counts
- Completed match with death registry for 1997 through 2016

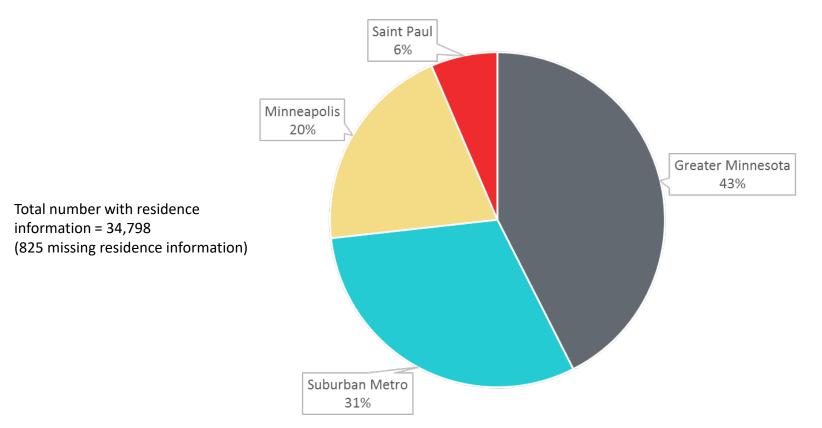


Changes in Case definitions

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



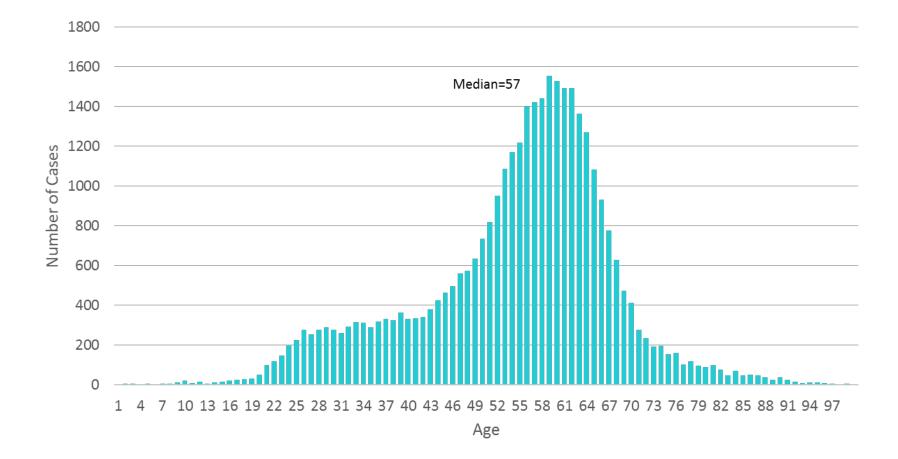
Persons Living with HCV in Minnesota by Current Residence, 2016



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.

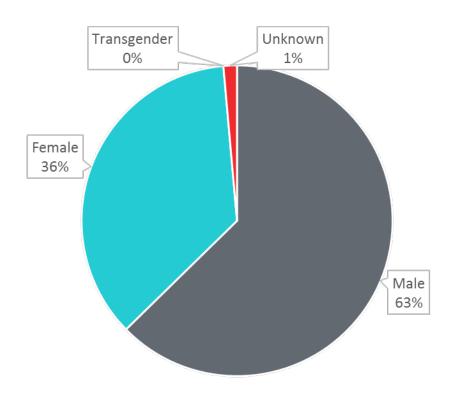


Persons Living with HCV in MN by Age, 2016



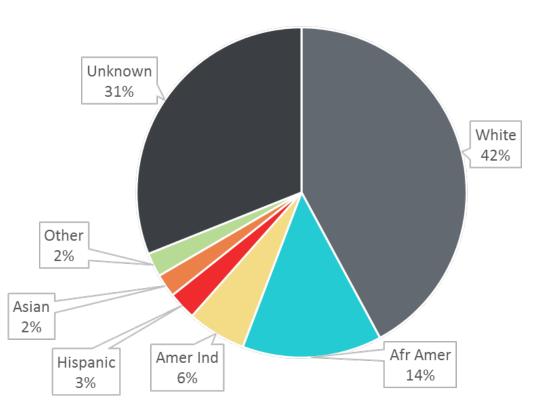


Persons Living with HCV in Minnesota by Gender*, 2016



*Includes anonymous methadone patients Data Source: MN Viral Hepatitis Surveillance System

Persons Living with Chronic HCV in Minnesota by Race, 2016



Afr Amer = African American /Black

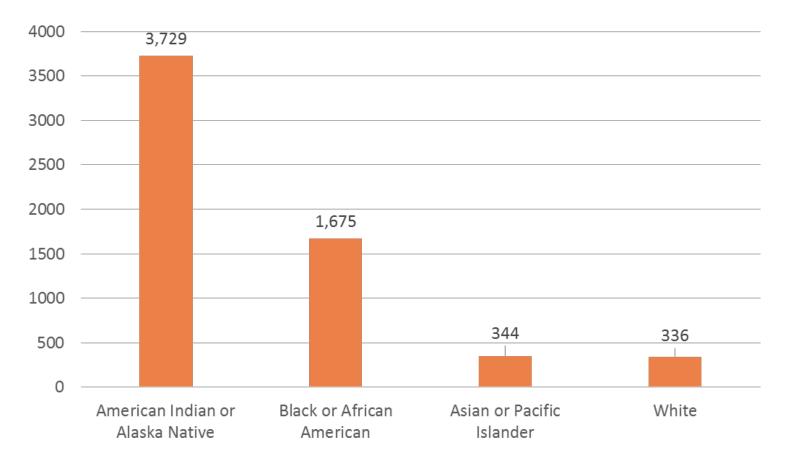
Asian=Asian or Pacific Islander

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*), 2016

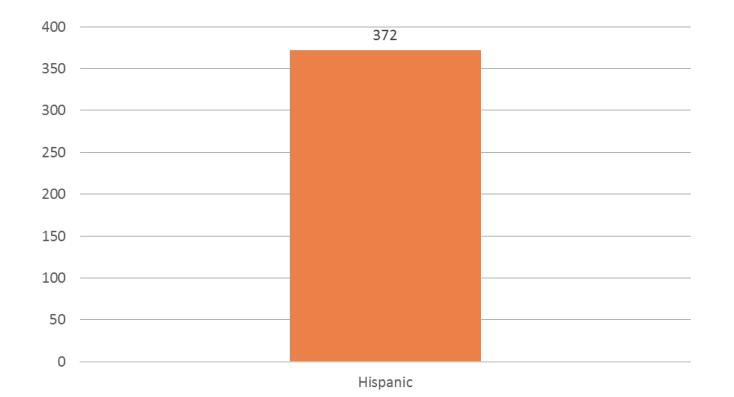


*Rates calculated using 2014 U.S. Census ACS data

Excludes persons with multiple races or unknown race, n=12,238



Persons Living with HCV in Minnesota by ethnicity rates (per 100,000 persons*), 2016



*Rates calculated using 2014 U.S. Census ACS data Excludes persons with unknown ethnicity, n=20,068 Data Source: MN Viral Hepatitis Surveillance System



Resolved HCV Infection

- Previously included in overall HCV case counts
- Defined as:
 - A positive HCV RNA test followed by a negative HCV RNA test
- Does NOT include:
 - Anti-HCV positive with a negative HCV RNA with NO past positive HCV RNA





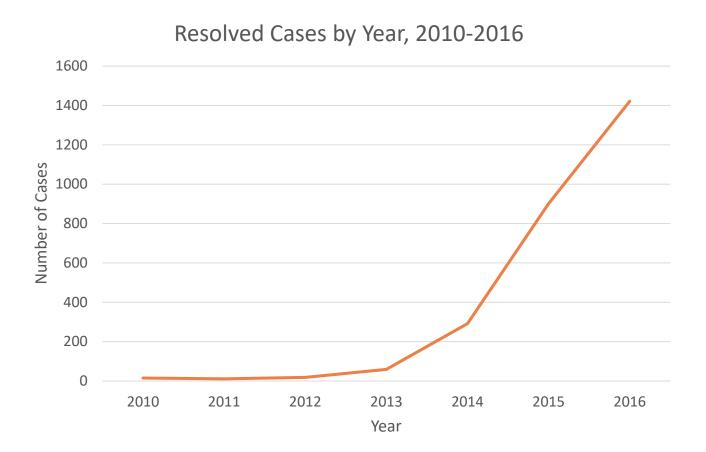
Resolved HCV, 2016

- Total of 3,502 Resolved Infections
- Median Age: 58



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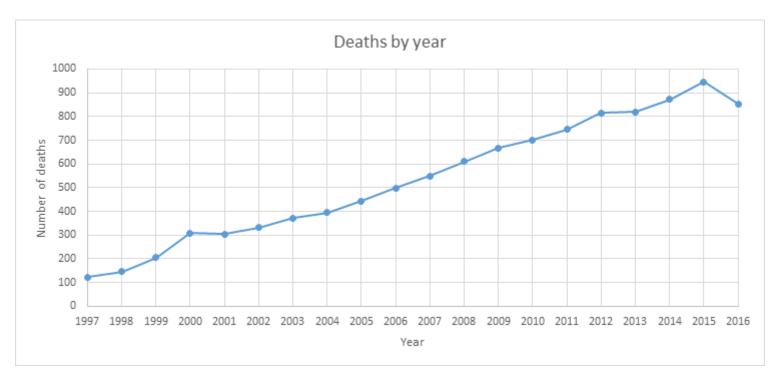
Resolved HCV, 2016 cont.





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HCV Cases Removed: 9,200



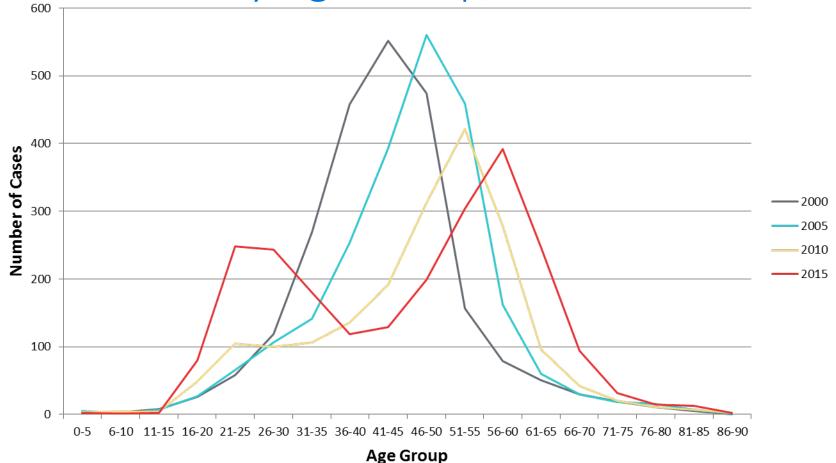




HCV in Persons Under 30



New Reports of HCV in Minnesota by Age Group, 2015





Hepatitis and HIV





- As of December 31, 2016*, 8,554 persons are assumed alive and living in Minnesota with HIV/AIDS
 - Of these 8,554 persons, 776 (9%) are co-infected with either Hepatitis B, C or both
 - Of the 776, 316 (41%) are living with HIV and Hep B
 - Of the 776, 416 (53%) are living with HIV and Hep C
 - Of the 776, 44 (6%) are living with HIV and Hep B/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.



Data Sources: Minnesota HIV/AIDS Surveillance System and Minnesota Hepatitis Surveillance System

Thank you!

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