

HIV in Minnesota 2013-2016

Disparities and Elimination Committee Meeting

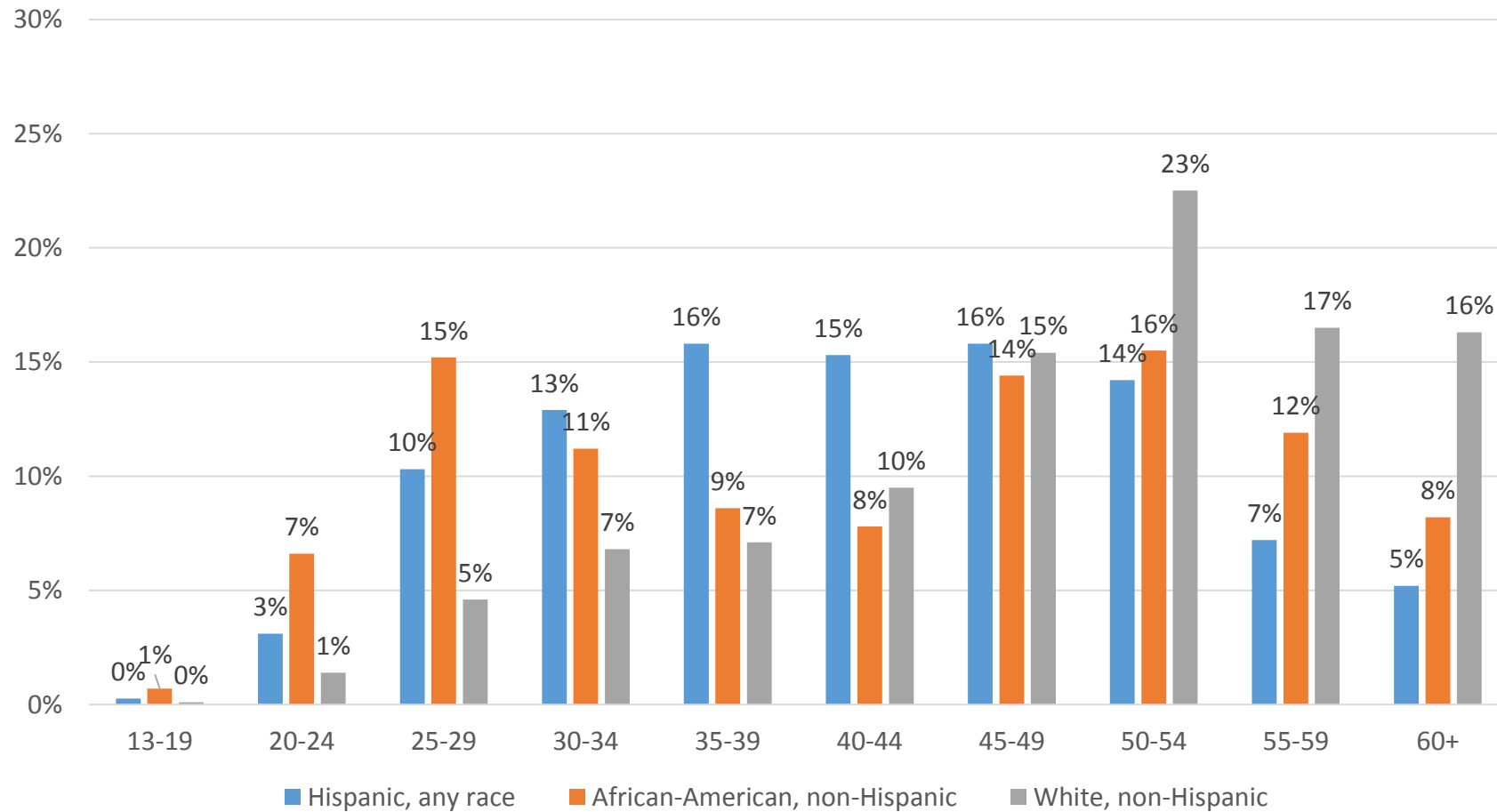
November 17, 2016

Jared Shenk, MPH

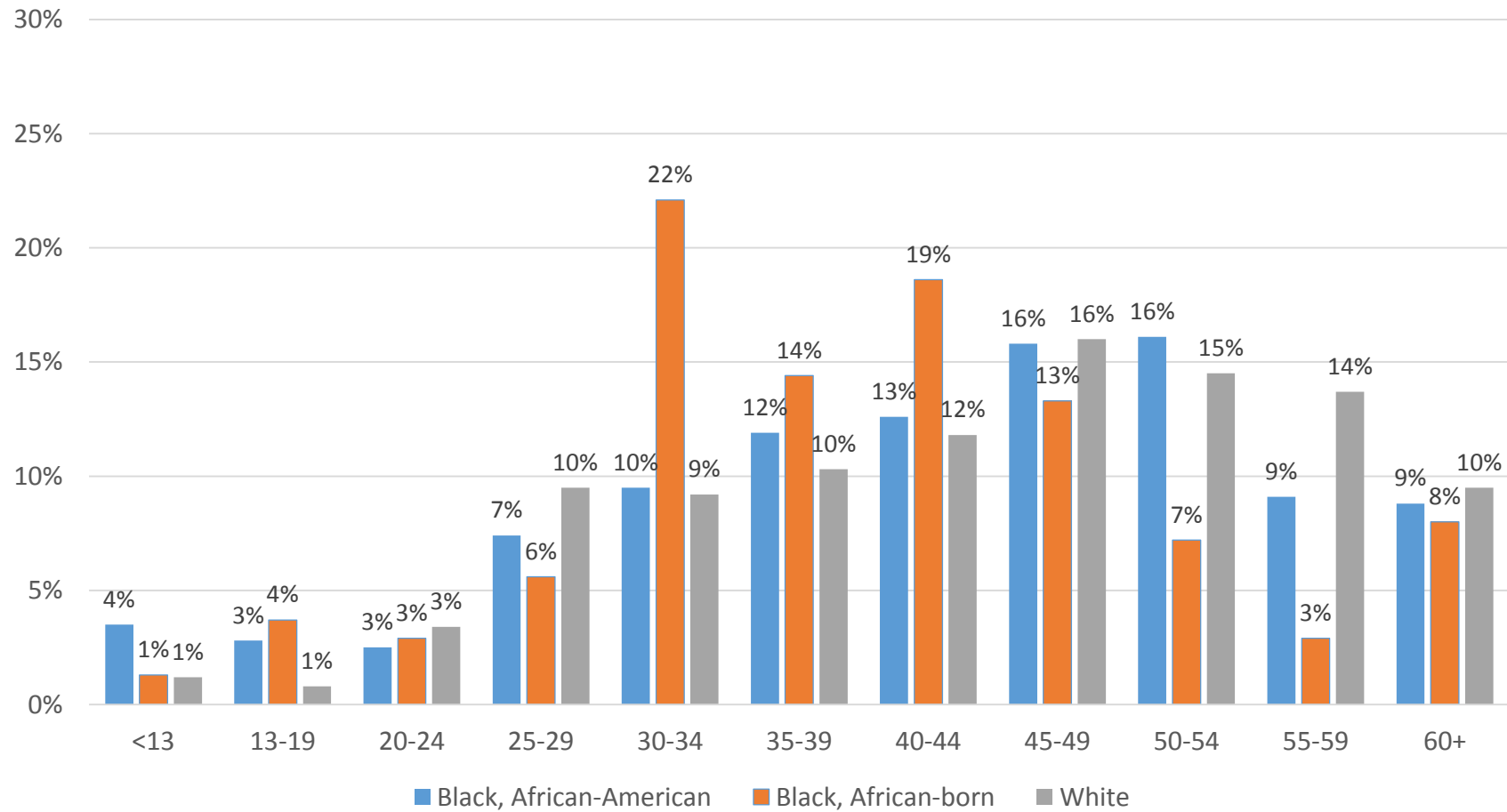
HIV Prevention and Care Epidemiologist

Follow-Up from Cheryl's September Presentation

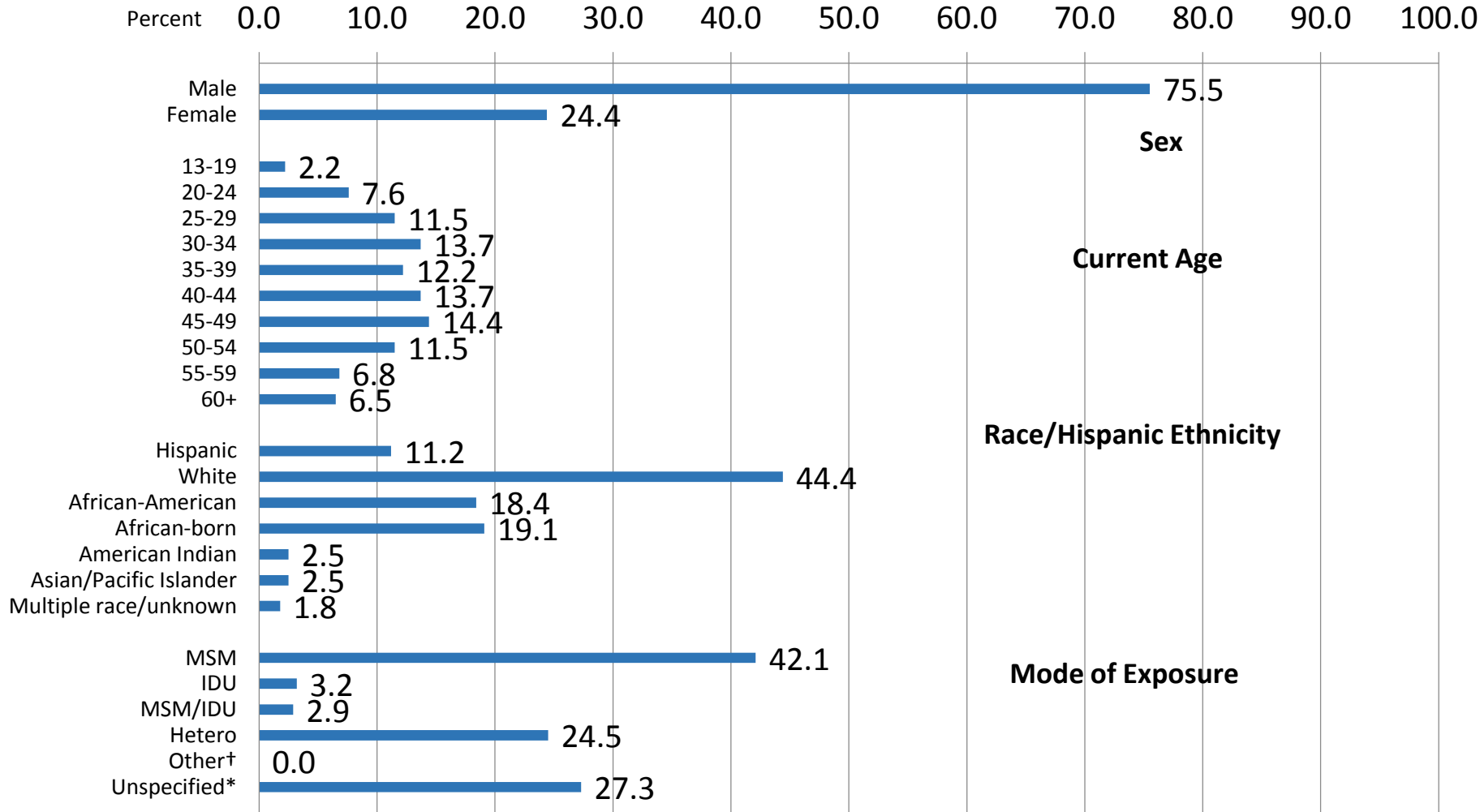
PLWHA in Minnesota, MSM African-American, Hispanic, and White by Age Groups as of 2015



PLWHA in Minnesota, Female Black/African-American, Black/African-born, and White by Age Groups as of 2015



Late-Testers (AIDS diagnosis 1 year or less) by Gender, Race/Ethnicity, Age groups, and Mode of Exposure (2012-2014)



†Includes Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

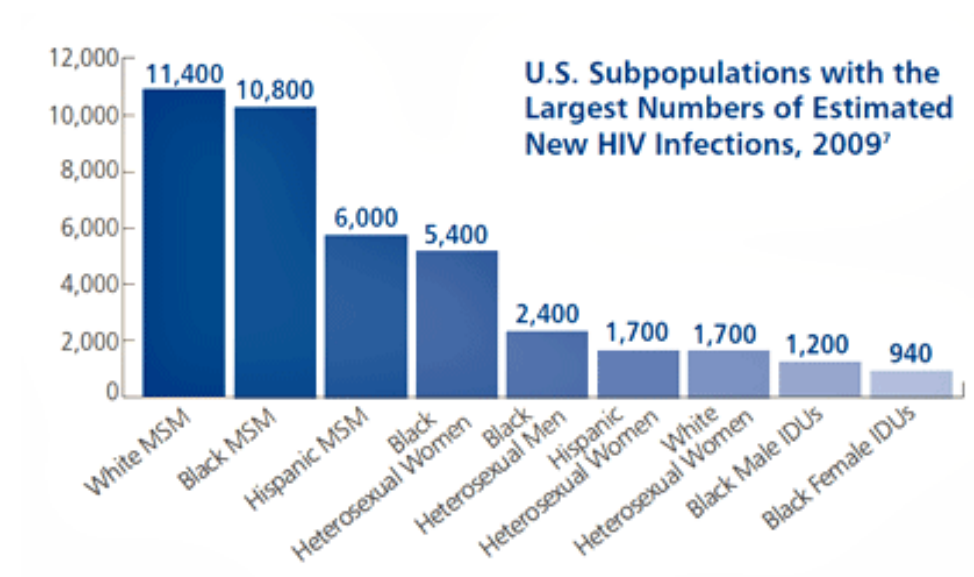
* No mode of exposure ascertained

What Will We Cover?

- High Impact HIV Prevention
- HIV Positivity in CTR Testing Data 2013-2016
- HIV Positivity in Surveillance Data 2013-2015
- Review of the Continuum of Care
- Priority Population Proposal

High Impact HIV Prevention

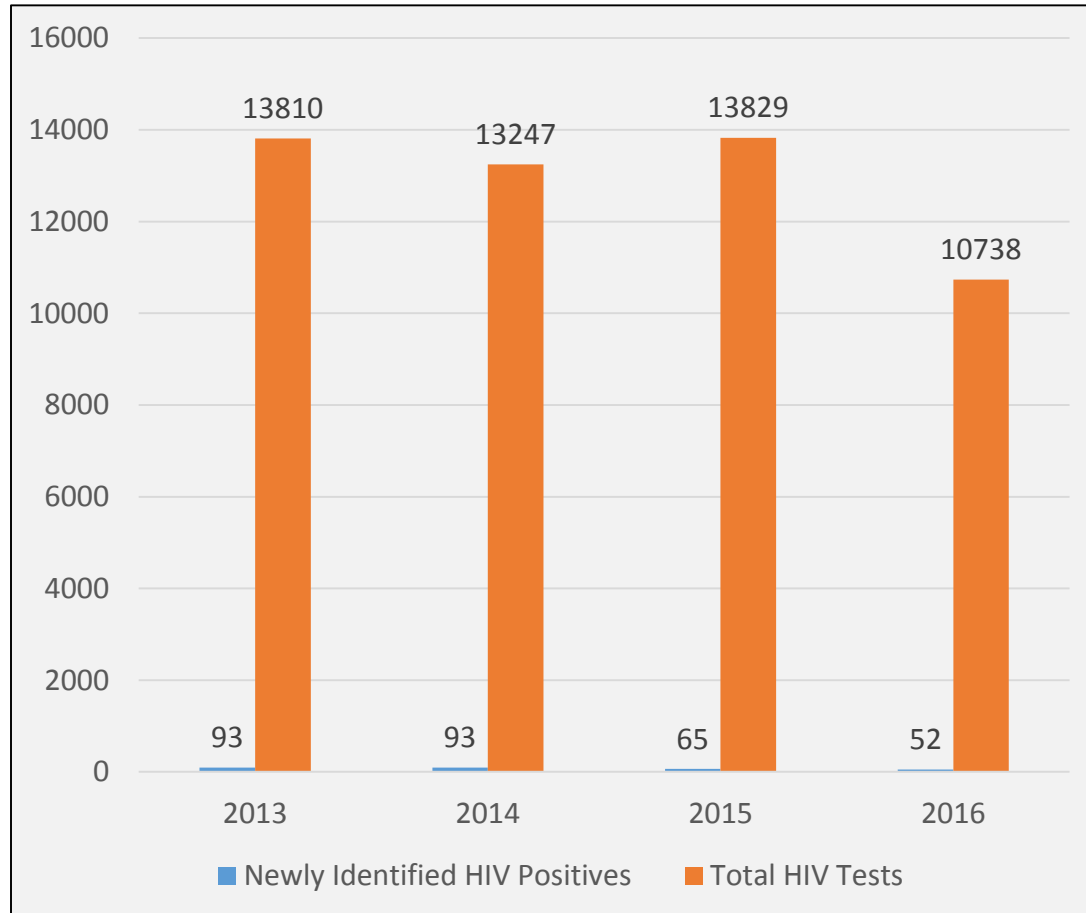
- Gay and bisexual men
- African Americans
- Latinos
- Injection Drug Users
- Transgender individuals



HIV Testing Data in Minnesota

- All CTR tests from Jan. 2013-Sept. 2016 (51,624)
- Caveats:
 - HIV testing data, not names-based, cannot connect with surveillance
 - Self-report by clients, entered by grantee staff
 - Country of birth incomplete, cannot separate Black race category
 - Risk information based on CDC algorithm, some transgender misclassified as MSM
- Follow-up: split up years yield small numbers, similar findings

CTR HIV Tests 2013-2016

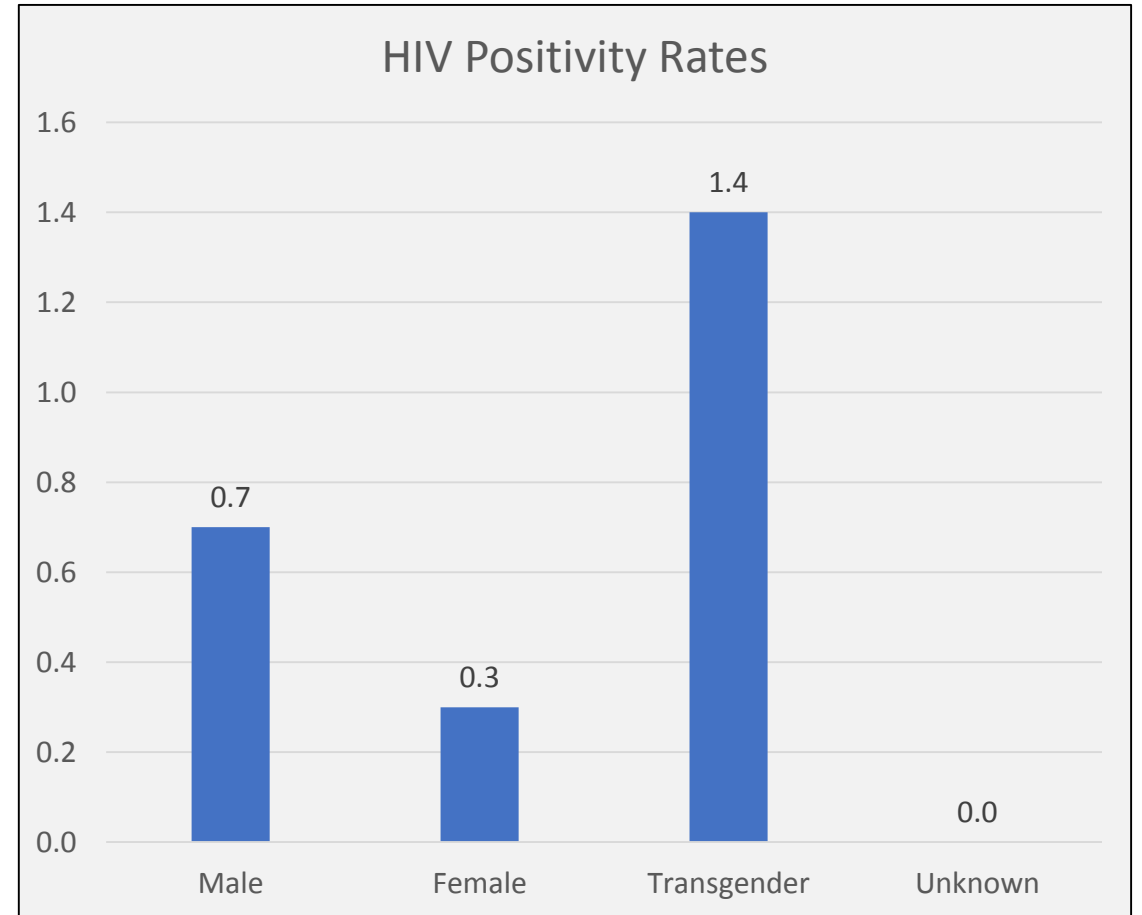


- Total Positives (303)
- Positivity Rates Per Year:
 - 2013 – 0.7
 - 2014 – 0.7
 - 2015 – 0.5
 - 2016 – 0.5
 - Overall – 0.6

Source: EvaluationWeb CTR Data
2013-2016

Breakdown of Total Tests and HIV-Positivity by Gender

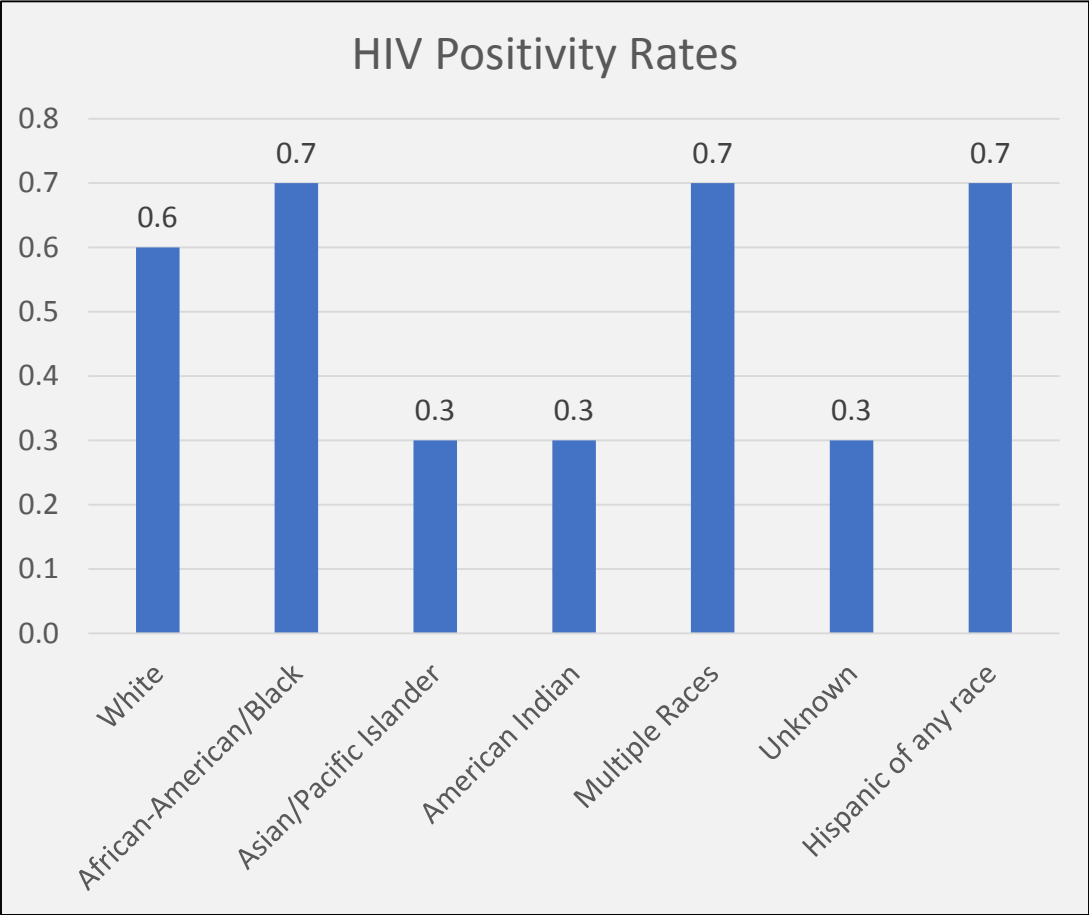
Client Characteristics	Number of Tests	Percent
Gender		
Male	36353	70.4
Female	14510	28.1
Transgender	485	0.9
Unknown	276	0.5



Source: EvaluationWeb CTR Data
2013-2016

Breakdown of Total Tests and HIV-Positivity by Race/Ethnicity

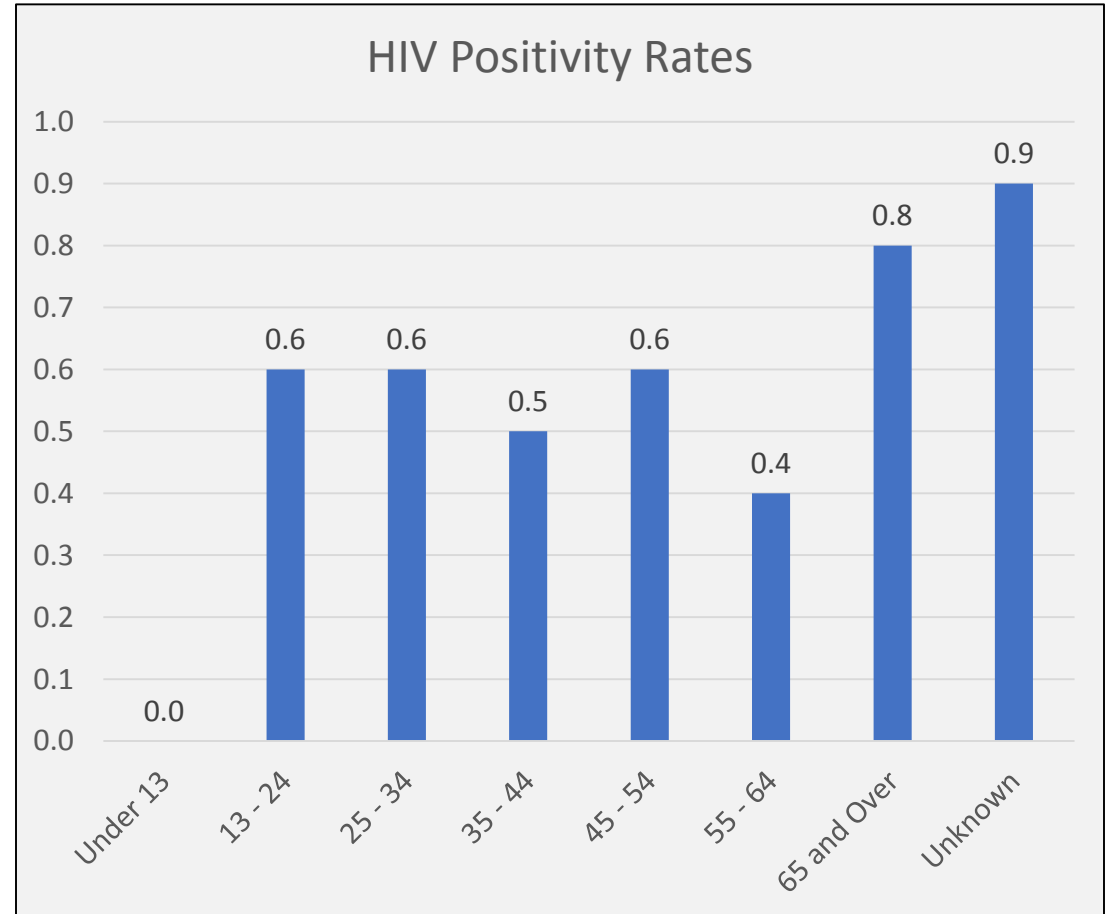
Client Characteristics	Number of Tests	Percent
Race/Ethnicity		
White	23610	45.7
African-American/Black	15402	29.8
Asian/Pacific Islander	1966	3.8
American Indian	2958	5.7
Multiple Races	1344	2.6
Unknown	1179	2.3
Hispanic (of any race)	5165	10.0



Source: EvaluationWeb CTR Data
2013-2016

Breakdown of Total Tests and HIV-Positivity by Age

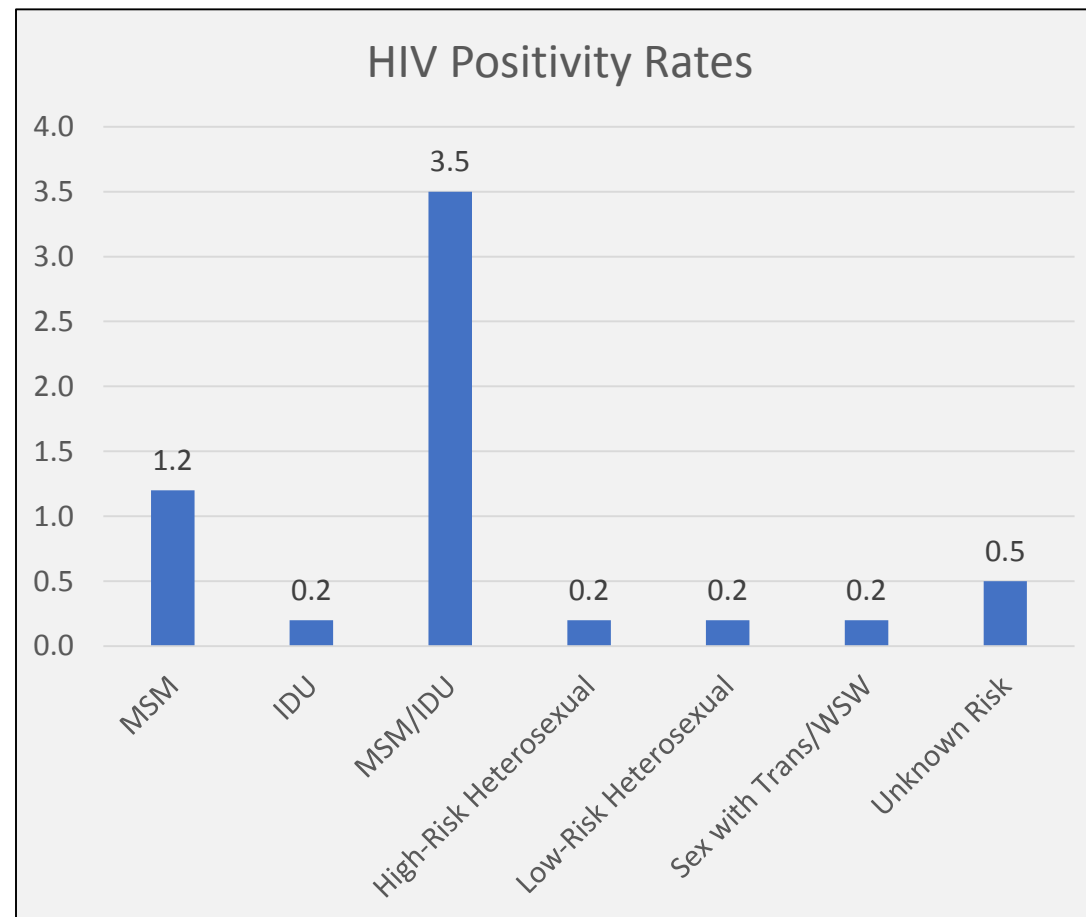
Client Characteristics	Number of Tests	Percent
Age		
Under 13	65	0.1
13 - 24	11577	22.4
25 - 34	19851	38.5
35 - 44	10156	19.7
45 - 54	6463	12.5
55 - 64	2794	5.4
65 and Over	603	1.1
Unknown	115	0.2



Source: EvaluationWeb CTR Data
2013-2016

Breakdown of Total Tests and HIV-Positivity by Risk

Client Characteristics	Number of Tests	Percent
Risk Category		
MSM	16082	31.1
IDU	2591	5.0
MSM/IDU	696	1.4
High-Risk Heterosexual	13654	26.5
Low-Risk Heterosexual	14808	28.7
Sex with Trans/WSW	515	1.0
Unknown Risk	3278	6.4



Source: EvaluationWeb CTR Data
2013-2016

Where are the disparities?

Demographic Variable	HIV-Positivity Rate
MSM/IDU	3.5
Transgender	1.4 (based on small numbers)
MSM	1.2
Unknown Age	0.9 (based on small numbers)
Age 65 and over	0.8 (based on small numbers)
African-American/Black	0.7
Multiple Races	0.7
Hispanic of any race	0.7
Male	0.7
AVERAGE RATE	0.6

Source: EvaluationWeb CTR Data
2013-2016

But which MSM are affected?

Demographic Variable	HIV-Positivity Rate
MSM/IDU	3.5
Transgender	1.4 (based on small numbers)
MSM	1.2
Unknown Age	0.9 (based on small numbers)
Age 65 and over	0.8 (based on small numbers)
African-American/Black	0.7
Multiple Races	0.7
Hispanic of any race	0.7
Male	0.7
AVERAGE RATE	0.6

Source: EvaluationWeb CTR Data
2013-2016

Looking a Little Closer at MSM

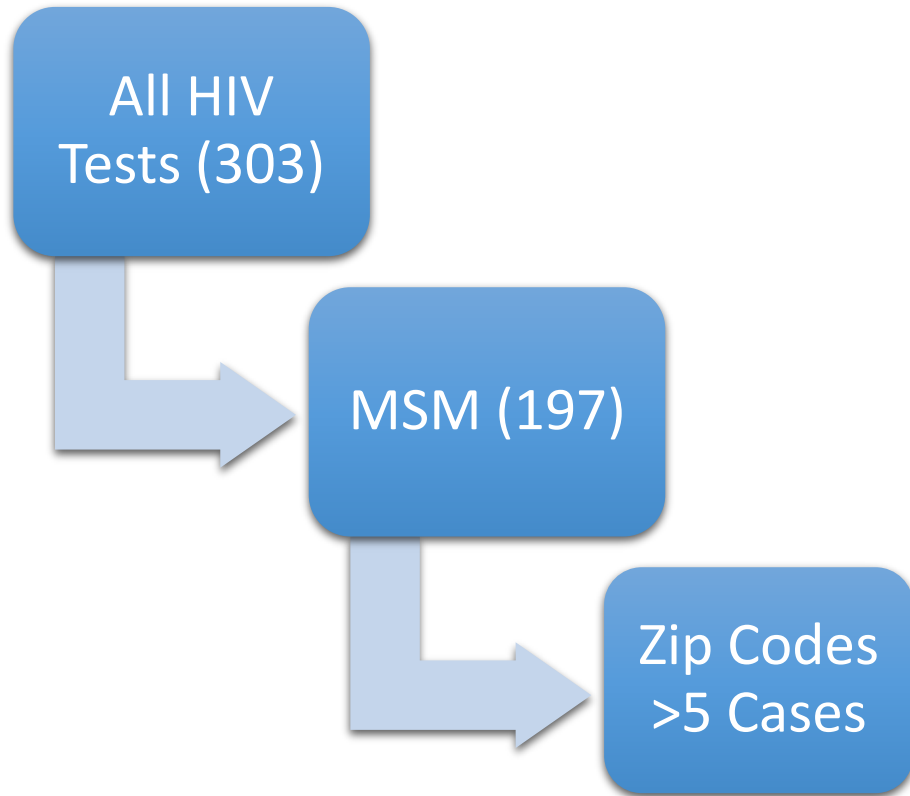
HIV Testing Positivity Rates Among MSM 2013-2016					
Age Group	MSM Overall	White MSM	Black MSM	Multi-Race MSM	Hispanic MSM
13-24	1.8	1.1	4.8	4.9	1.6
25-34	1.2	0.7	4.4	N/A	1.3
35-44	1.0	0.8	N/A	N/A	2.1
45-54	1.2	1.1	N/A	N/A	N/A

Source: EvaluationWeb CTR Data
2013-2016



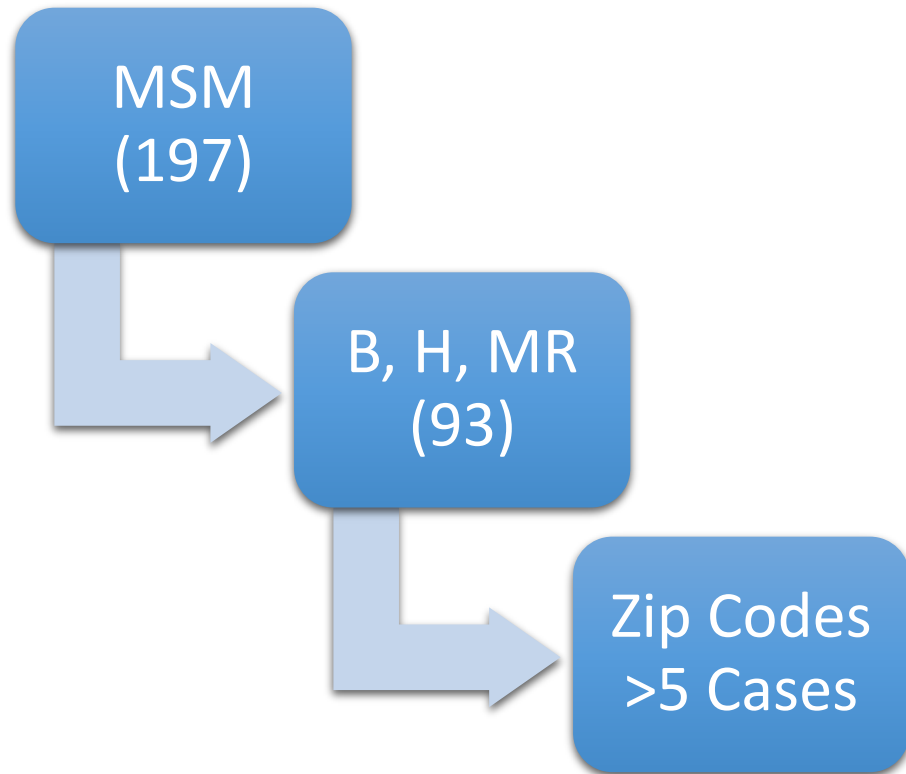
Reference Group

Where are these MSM living?



Zip Code (no. of cases)	City
55404 (15)	Minneapolis
55407 (14)	Minneapolis
55403 (12)	Minneapolis
55411 (9)	Minneapolis
55408 (9)	Minneapolis
55412 (7)	Minneapolis
55422 (7)	Golden Valley
55405 (6)	Minneapolis
55406 (6)	Minneapolis

Where are Black, Hispanic, and Multi-Race MSM living?



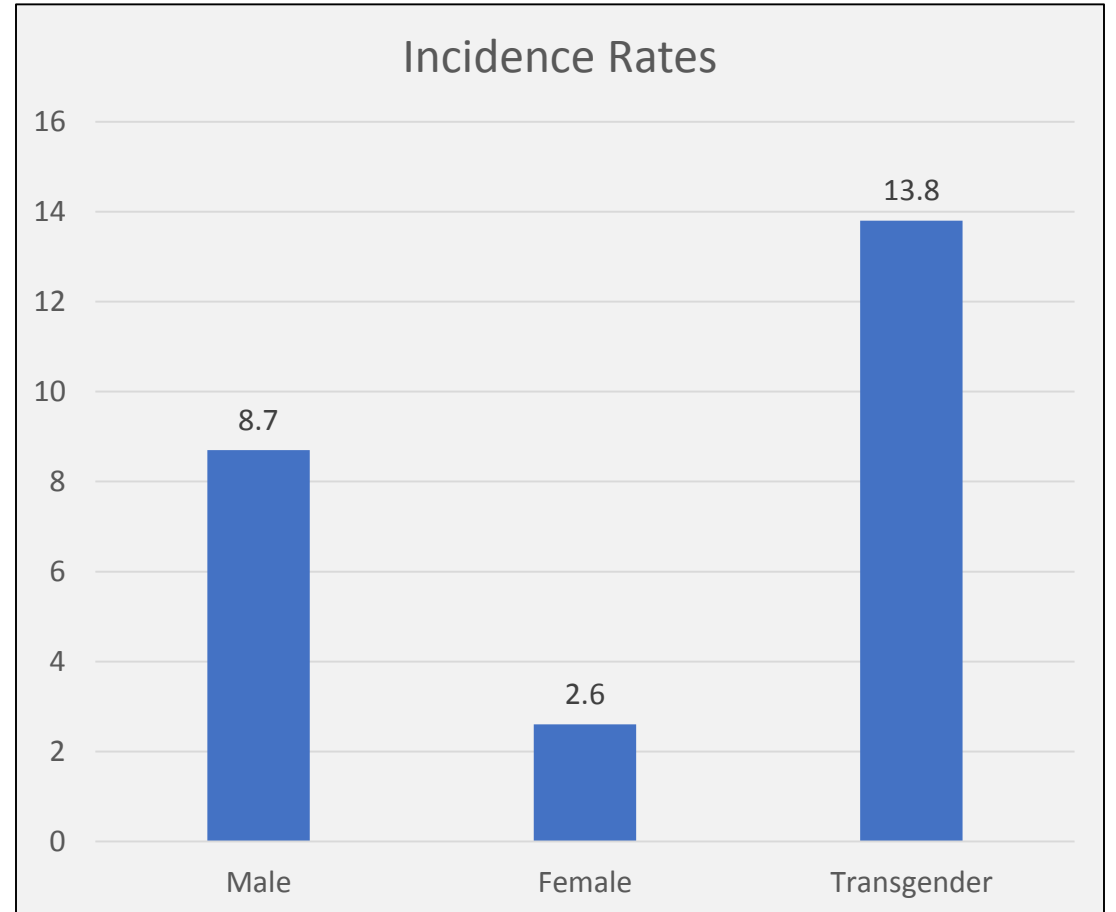
Zip Code (no. of cases)	City
55407 (9)	Minneapolis
55411 (9)	Minneapolis
55404 (6)	Minneapolis

HIV Surveillance Data in Minnesota

- All diagnosed and reported new HIV infections 2013-2015 (902)
- Overall incident rate 5.7 per 100,000 in Minnesota
- All incident rates are averaged over 3 years (2013, 2014, and 2015)
- Caveats:
 - Names-based, so cannot connect with HIV testing data
 - Risk from multiple sources (providers, DIS interviews, patient self-report)
 - Gender reported as sex at birth, so some transgender misclassified
 - Relies on what cases are reported to MDH
 - Risk classifies transgender MTF sex with male as MSM
 - Unable to calculate rates for all populations for direct comparison

Breakdown of New HIV Cases by Sex at Birth

Client Characteristics	Number of Positives	Percent
Sex at Birth		
Male	684	75.8
Female	208	23.1
Transgender	10	1.1
Unknown	0	0.0

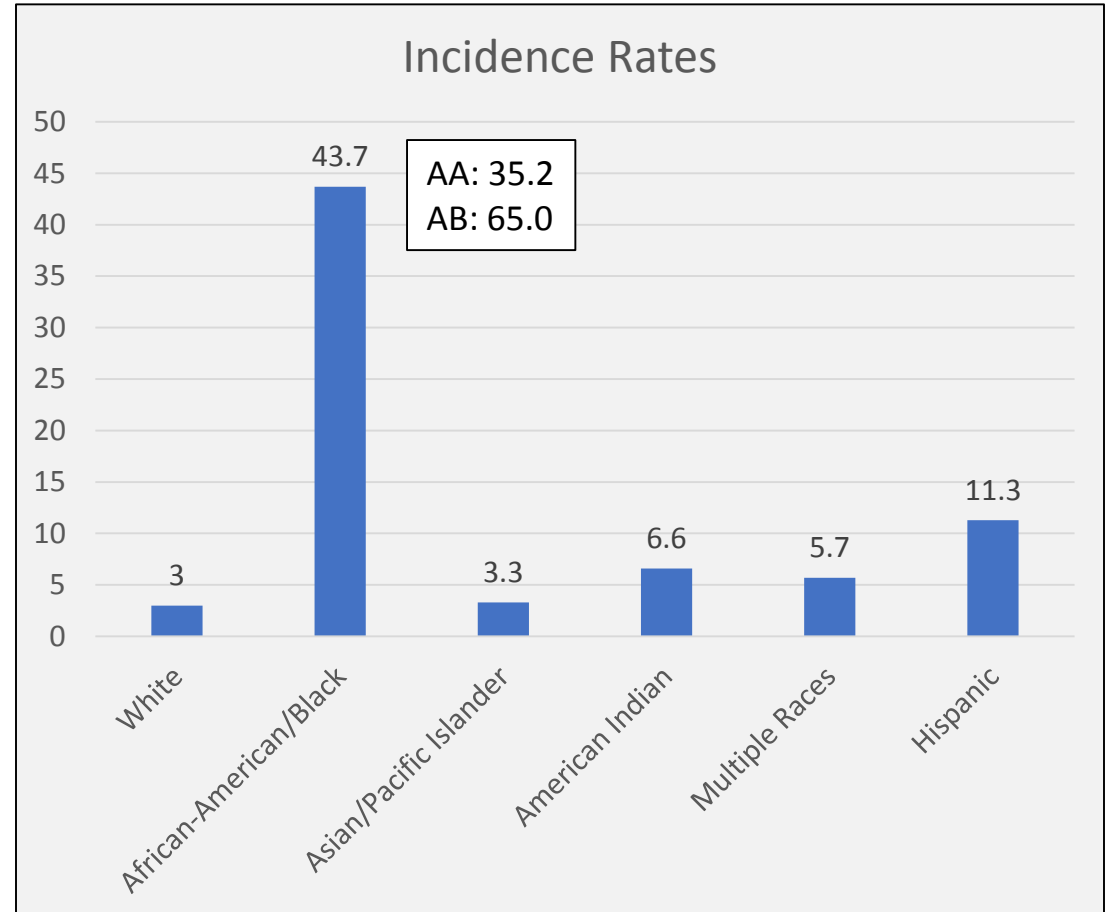


Source: eHARS HIV Surveillance System
2013-2015

Breakdown of New HIV Cases by Race/Ethnicity

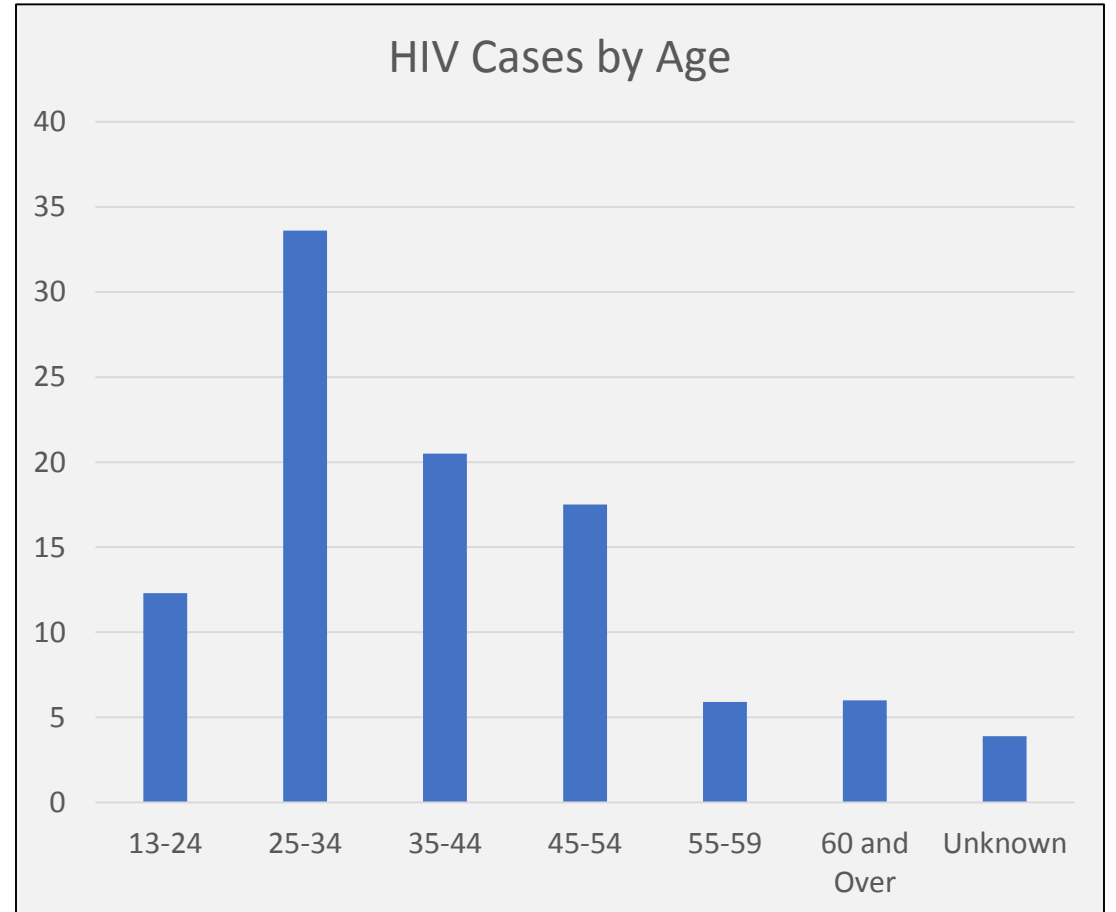
Client Characteristics	Number of Positives	Percent
Race/Ethnicity		
White	402	44.6
African-American/Black	355	39.4
Asian/Pacific Islander	21	2.3
American Indian	11	1.2
Multiple Races	17	1.9
Unknown	11	1.2
Hispanic (of any race)	85	9.4

Source: eHARS HIV Surveillance System
2013-2015



Breakdown of New HIV Cases by Age

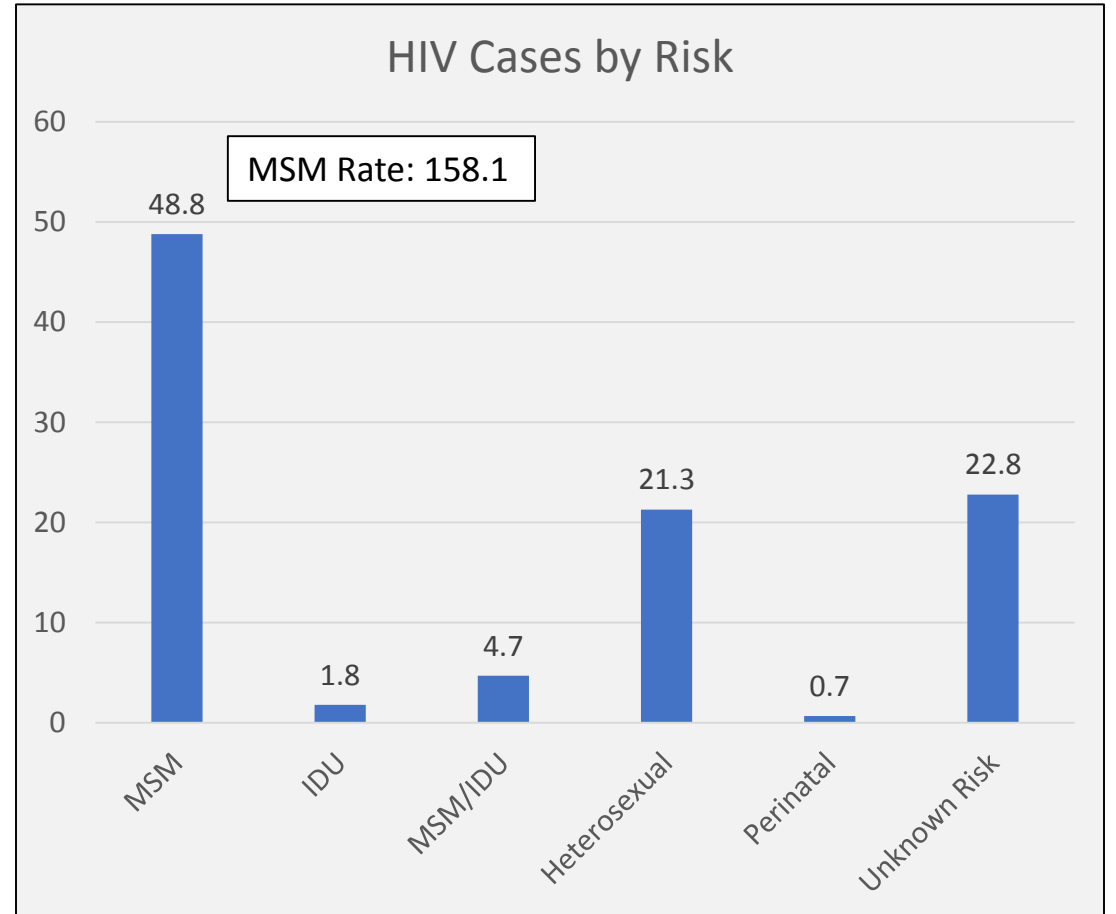
Client Characteristics	Number of Positives	Percent
Age		
Under 13	< 5	--
13 - 24	111	12.3
25 - 34	303	33.6
35 - 44	185	20.5
45 - 54	158	17.5
55 - 59	53	5.9
60 and Over	54	6.0
Unknown	35	3.9



Source: eHARS HIV Surveillance System
2013-2015

Breakdown of New HIV Cases by Risk

Client Characteristics	Number of Positives	Percent
Risk Category		
MSM	440	48.8
IDU	16	1.8
MSM/IDU	42	4.7
Heterosexual	192	21.3
Perinatal	6	0.7
Other	0	0.0
Unknown Risk	206	22.8



Source: eHARS HIV Surveillance System
2013-2015

Where are the disparities?

Demographic Variable	Incident HIV Rate (per 100,000)
MSM	158.1
African-Born	65.0
African-American	35.2
Transgender	13.8
Hispanic (of all races)	11.3
Male	8.7
American Indian	6.6 (based on small numbers)
Minnesota Overall Rate	5.7

Source: eHARS HIV Surveillance System
2013-2015

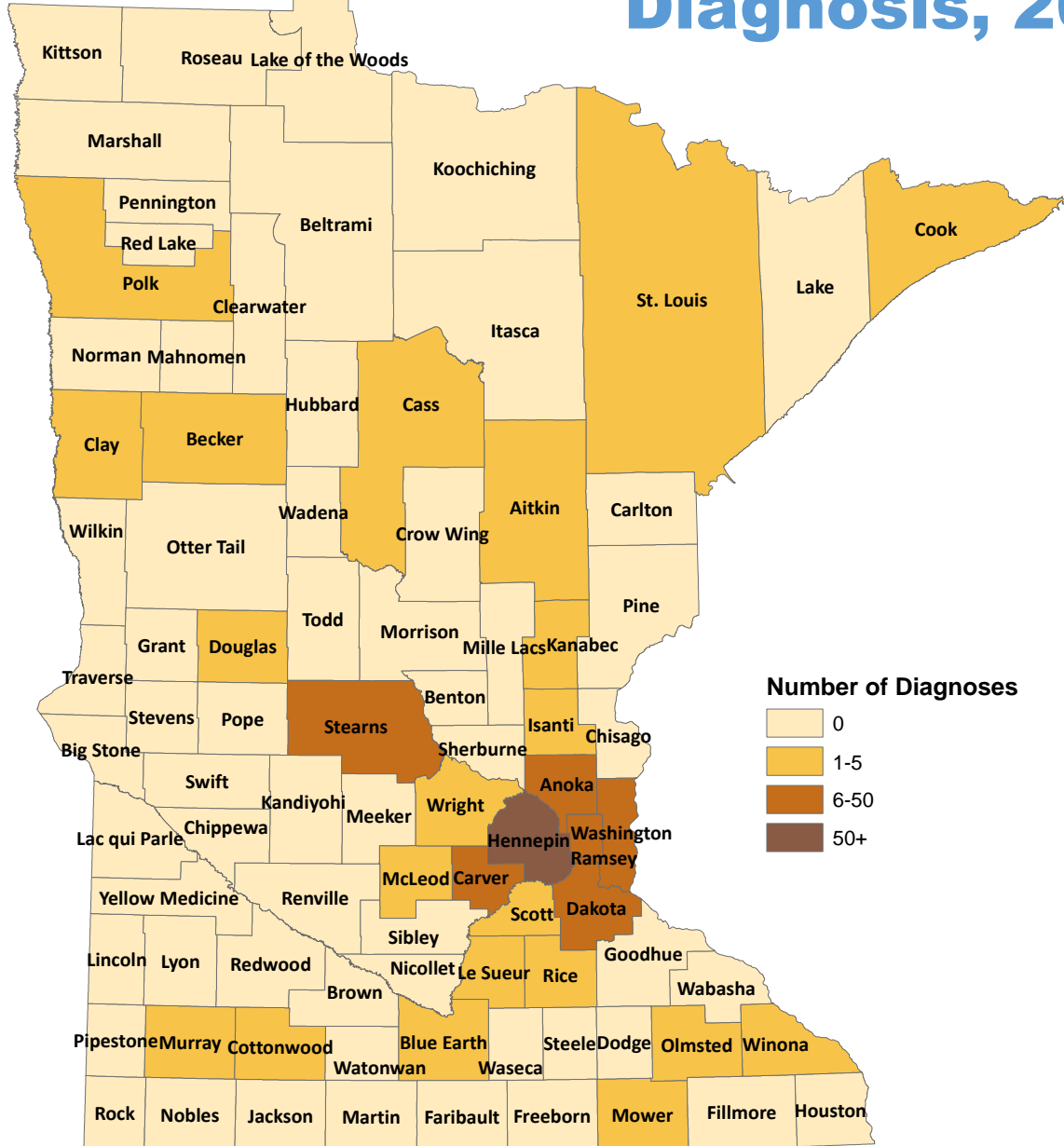
HIV Rates by Race and Sex at Birth

Demographic Variable	Incident HIV Rate (per 100,000)
Black Men	51.2
Black Women	34.8 (58 times higher than white women)
Hispanic Men	18.5
Multi-Race Men	8.9
American Indian Men	8.5
Asian/Pacific Islander Men	5.8
White Men	5.5
American Indian Women	4.7
Hispanic Women	3.4
Multi-Race Women	2.6
Asian/Pacific Islander Women	0.9
White Women	0.6

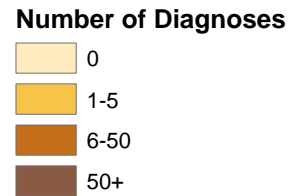
Source: eHARS HIV Surveillance System
2013-2015

Where in Minnesota are New HIV Cases?

HIV Diagnoses* by County of Residence at Diagnosis, 2015



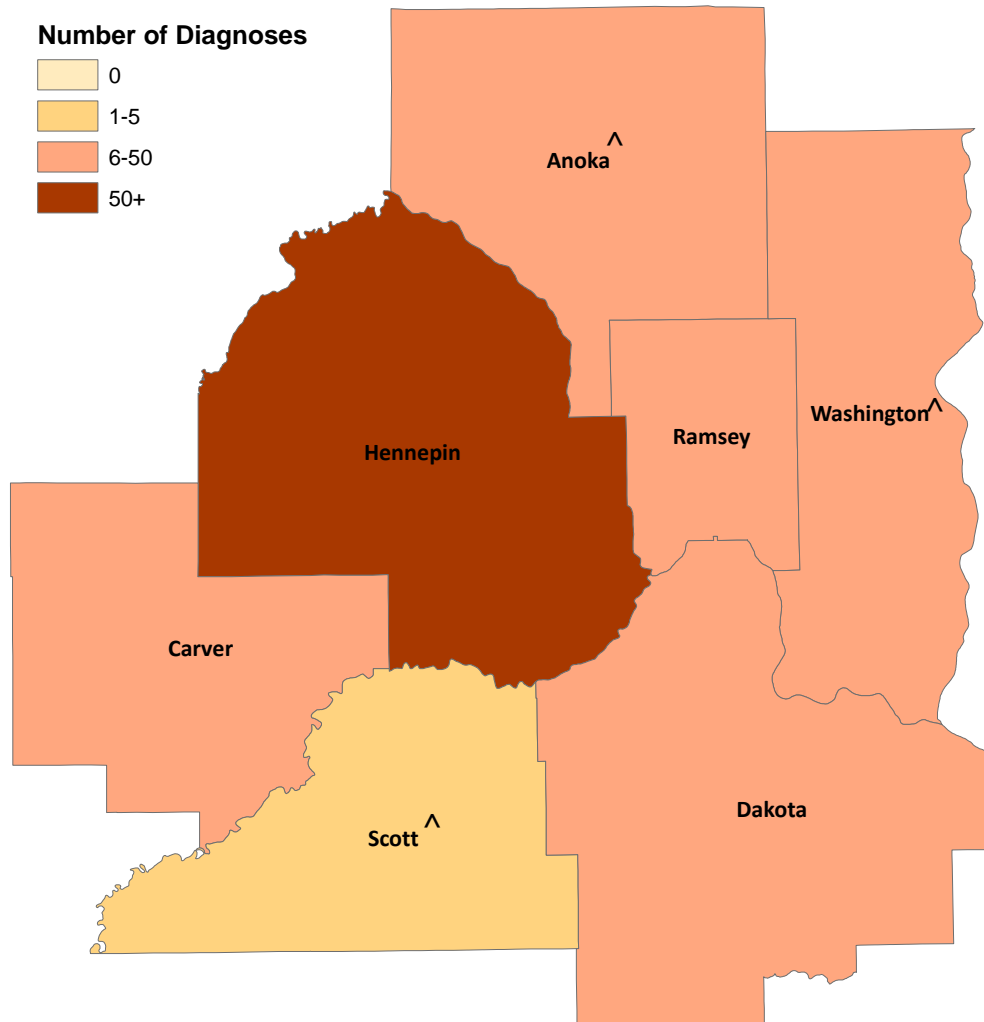
City of Minneapolis – 93
 City of St. Paul – 30
 Suburban# – 131
 Greater Minnesota – 37
 Total number = 294



*HIV or AIDS at first diagnosis

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

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



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

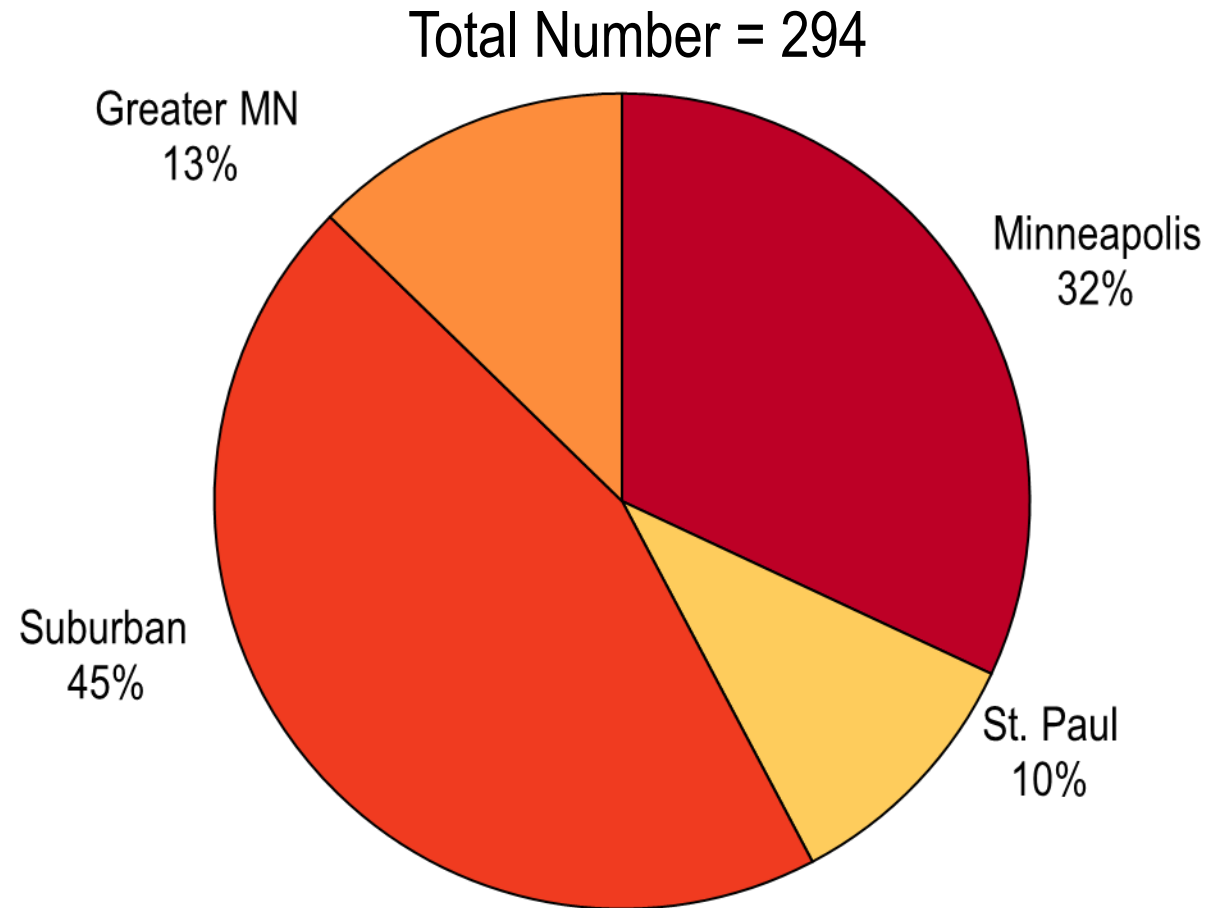
Total number (Metro only) = 255

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

* HIV or AIDS at first diagnosis

^Counties in which a state correctional facility is located.

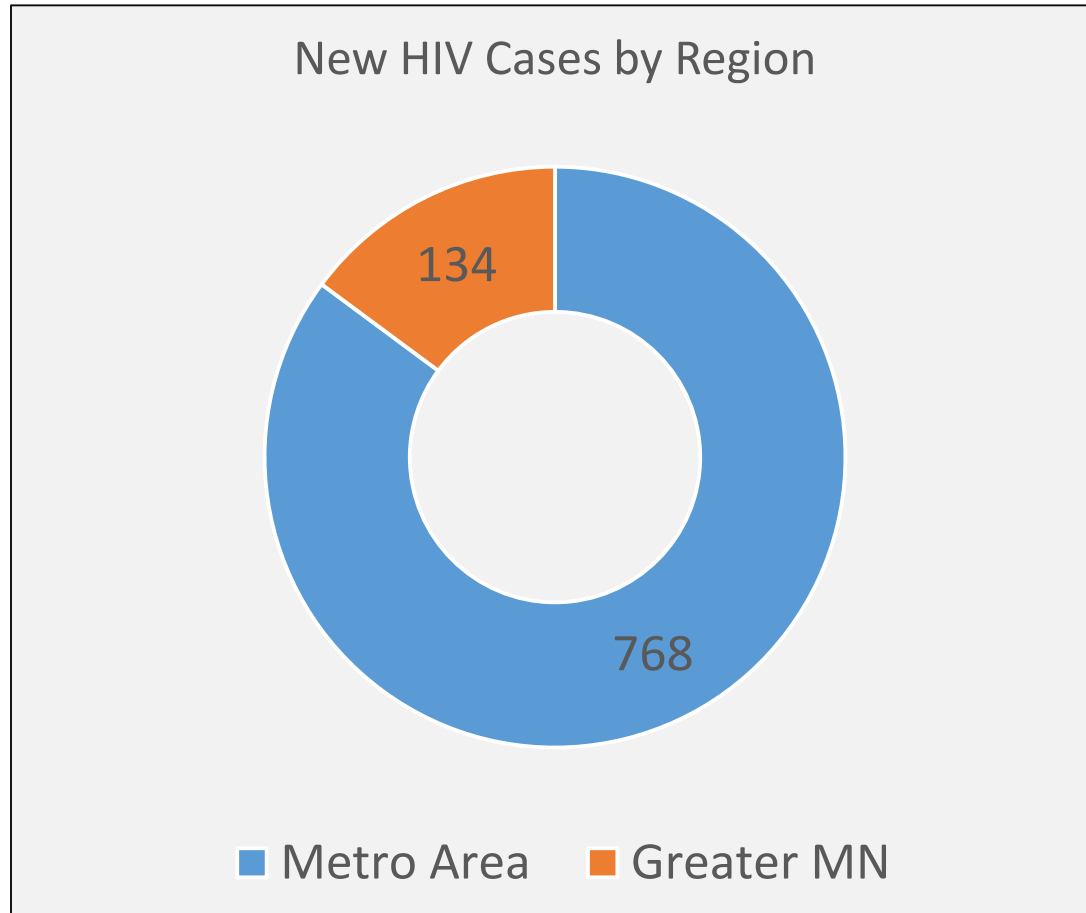
HIV Diagnoses* in Minnesota by Residence at Diagnosis, 2015



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

* HIV or AIDS at first diagnosis

New HIV Cases in Greater Minnesota



Risk	Number of New HIV Cases
MSM	69 (51.5%)
IDU	5 (3.7%)
MSM/IDU	6 (4.5%)
Heterosexual	23 (17.2%)
Unknown	29 (21.6%)

Sex at Birth	Number of New HIV Cases
Male	109 (81.3%)
Female	25 (18.7%)

New MSM HIV Cases in Minnesota

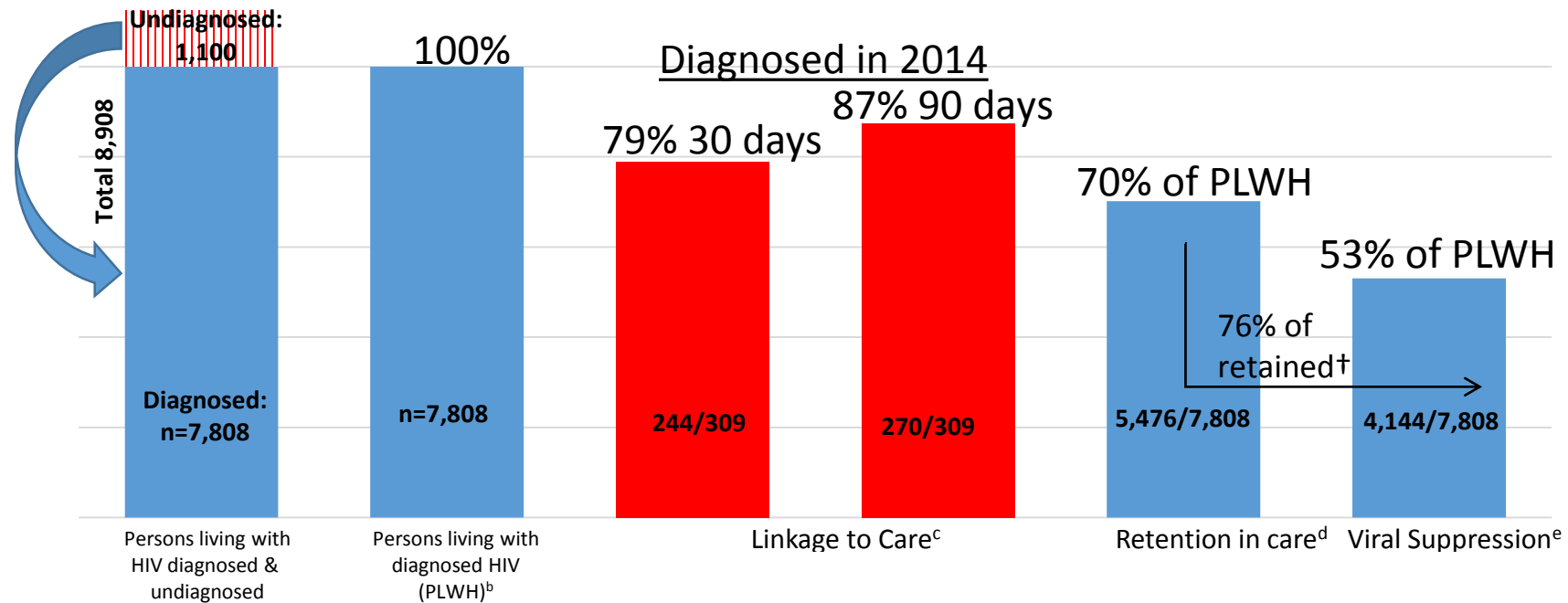
MSM in Greater Minnesota		
Race	Number of Cases	Percent
White	51	73.9%
African-American	6	8.7%
Hispanic	8	11.6%
Total	69	100.0%

MSM in Metro Area		
Race	Number of Cases	Percent
White	220	59.2%
African-American	85	23.0%
Hispanic	36	9.8%
Asian/PI	13	3.5%
Multi-Race	8	2.2%
Total	369	100.0%

Quick Review of HIV Continuum of Care

Major Take-Home Point: Not much difference in Retention in Care between populations

Percentages of persons with HIV engaged in selected stages of the continuum of care-Minnesota



^aDefined as persons undiagnosed (estimate 1,100 (640-1,500), 95% CI) and persons diagnosed (n=7808) aged 13 or more with HIV infection (regardless of stage at diagnosis) through year-end 2014, who were alive at year-end 2015.

^bDefined as persons diagnosed aged 13 or more with HIV infection (regardless of stage at diagnosis) through year-end 2014, who were alive at year-end 2015.

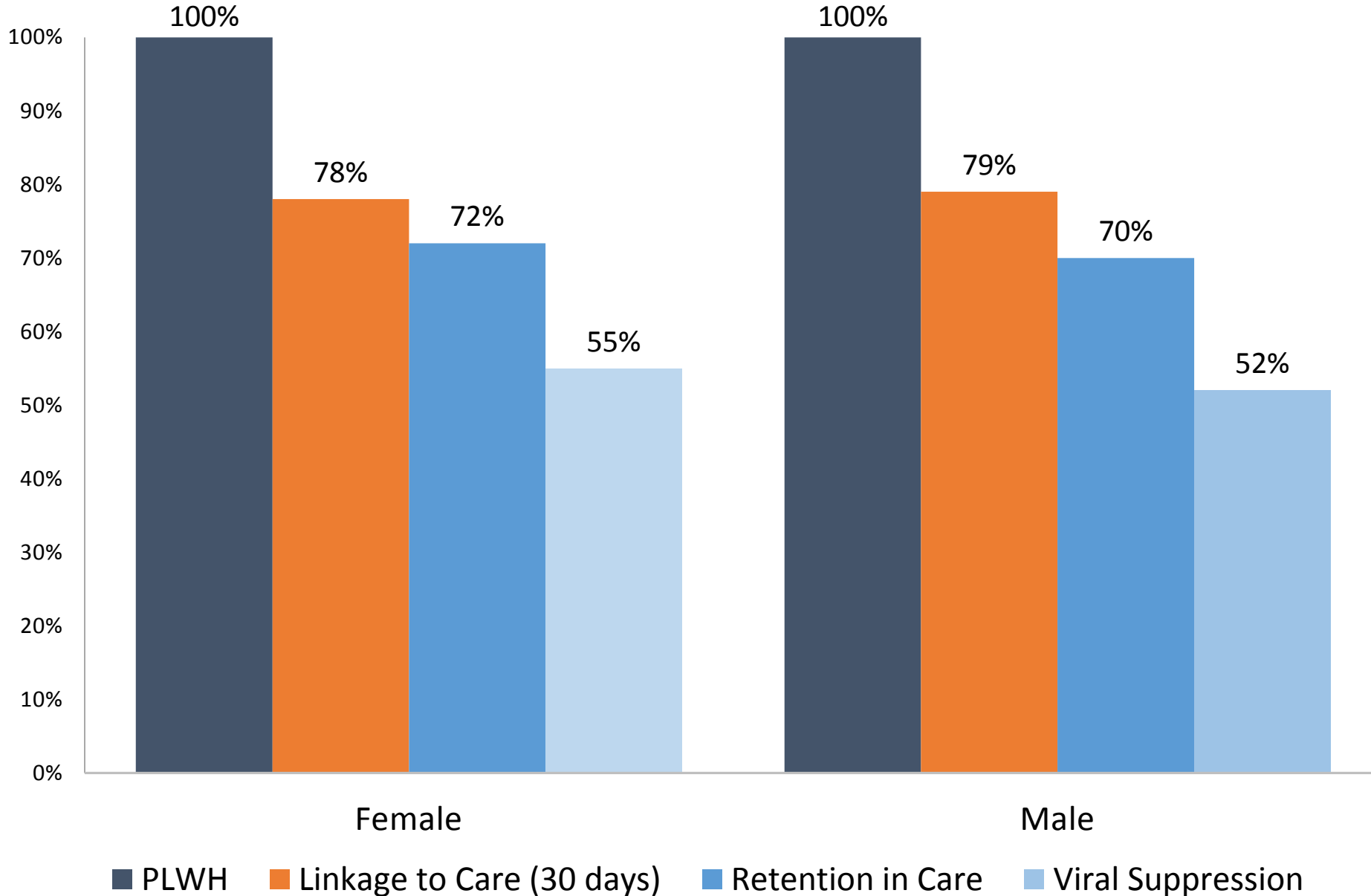
^cCalculated as the percentage of persons linked to care within 30 and 90 days after initial HIV diagnosis during 2014. Linkage to care is based on the number of persons diagnosed during 2014 and is therefore shown in a different color than the other bars with a different denominator.

^dCalculated as the percentage of persons who had ≥ 1 CD4 or viral load test results during 2015 among those diagnosed with HIV through year-end 2014 and alive at year end 2015.

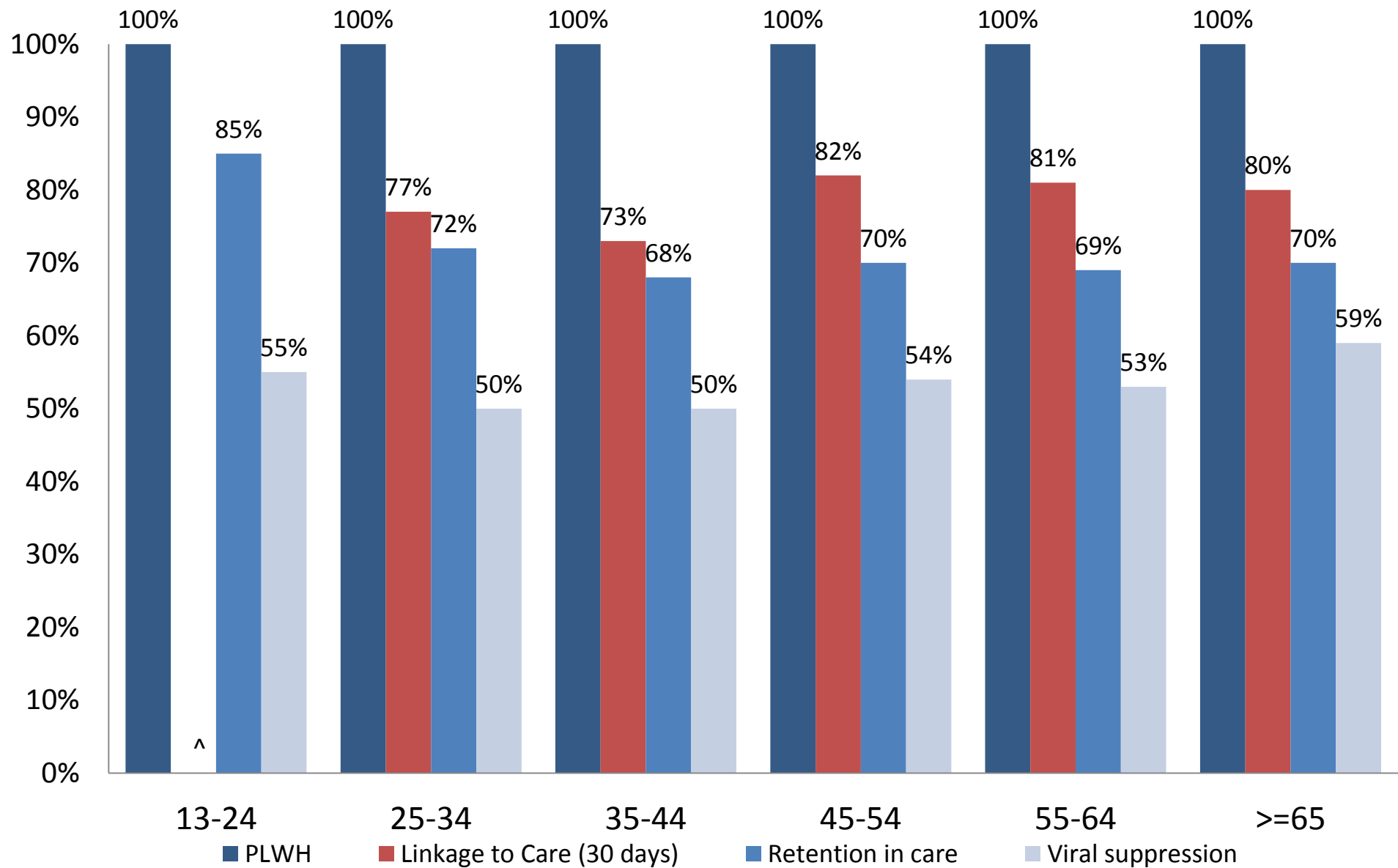
^eCalculated as the percentage of persons who had suppressed viral load (≤ 200 copies/mL) at most recent test during 2015, among those diagnosed with HIV through year-end 2014 and alive at year end 2015.

[†]Calculated as number of persons who had suppressed VL (≤ 200 copies/mL) at most recent test during 2015, among those who were retained in care during 2015 (4,144/5,476).

Percentage of persons diagnosed with HIV engaged in selected stages of the continuum of care, by sex at birth— Minnesota (2015)



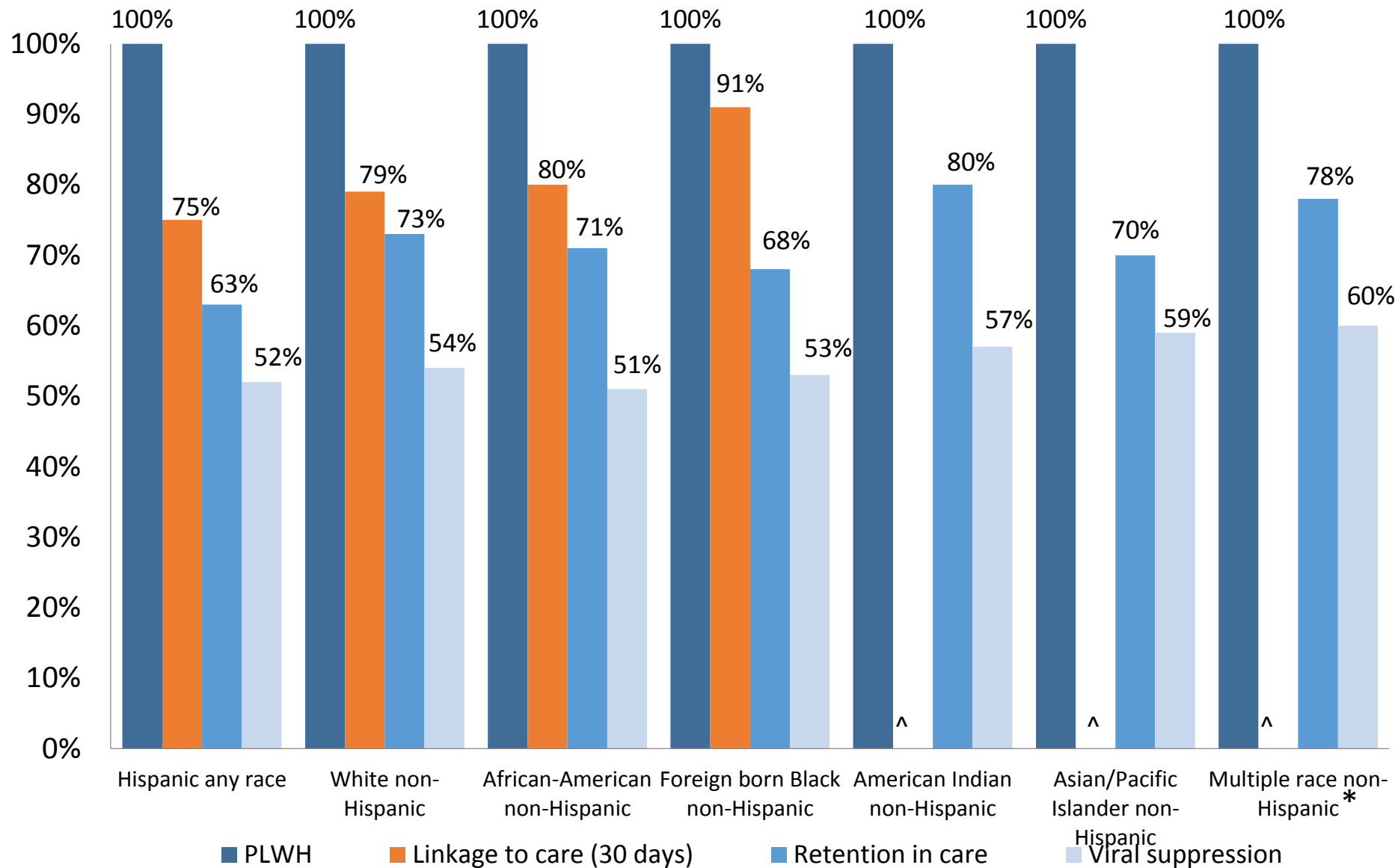
Percentage of persons diagnosed with HIV engaged in selected stages of the continuum of care, by age* – Minnesota (2015)



*Current age is used to calculate PLWH, retention in care and viral suppression. Age at HIV diagnosis is used for linkage to care

^ Not reportable strata n<=5

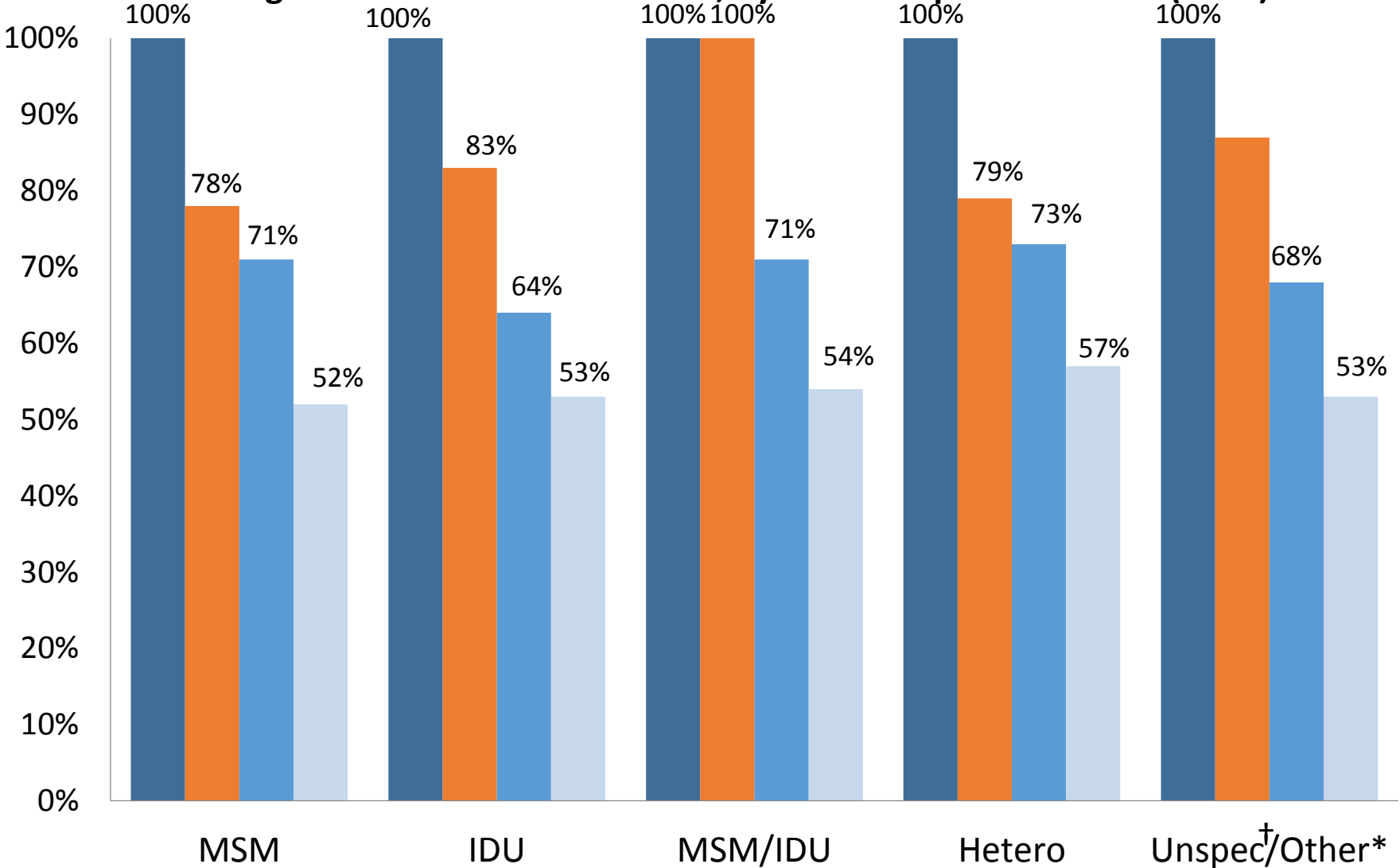
Percentage of persons diagnosed with HIV engaged in selected stages of the continuum of care, by race – Minnesota (2015)



*Persons with multiple races

^ Not reportable strata n<=5

Percentage of persons diagnosed with HIV engaged in selected stages of the continuum of care, by Risk Group— Minnesota (2015)



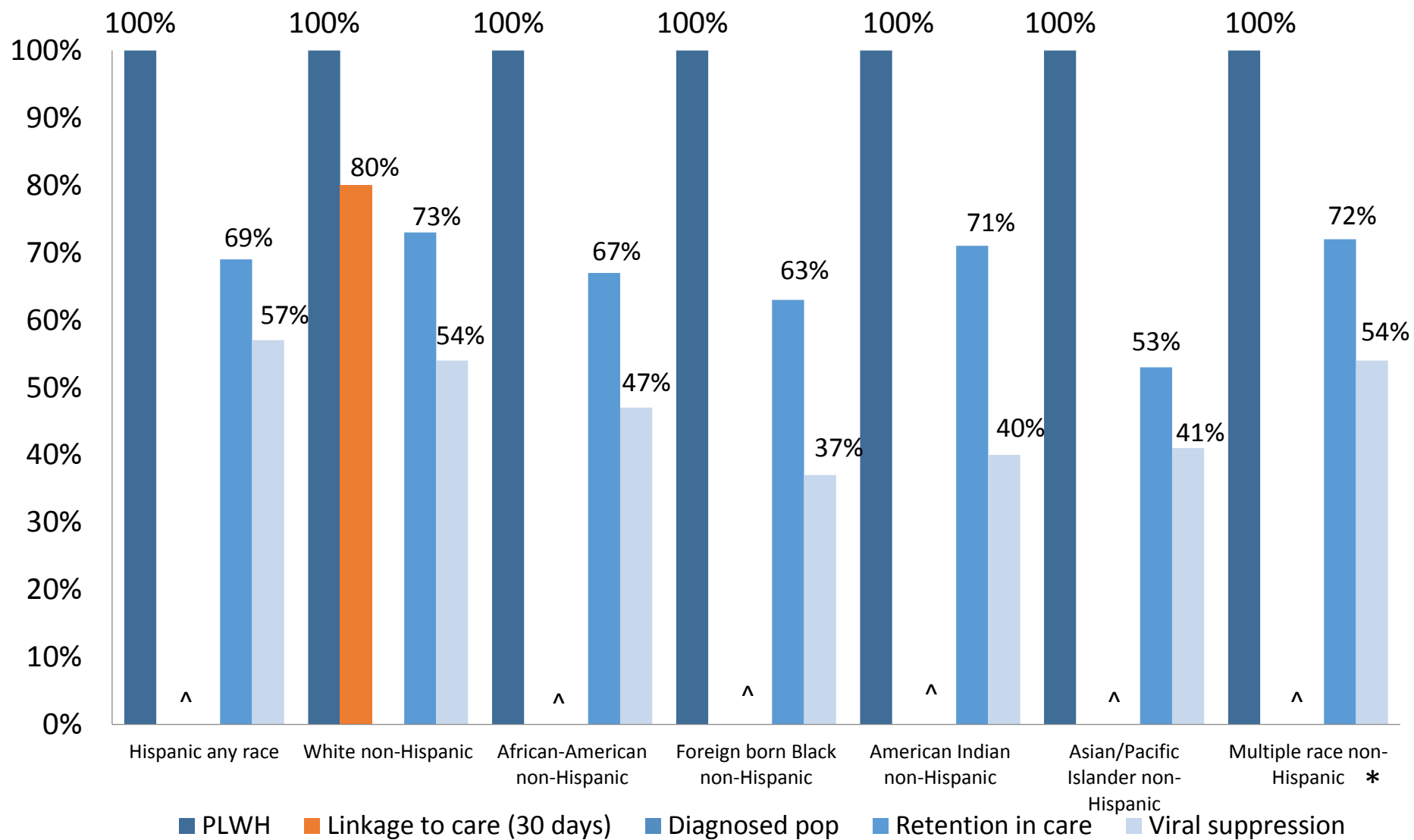
■ PLWH
 ■ Linkage to care (30 days)
 ■ Retention in care
 ■ Viral suppression

*Includes those with unspecified risk, Hemophilia, transplant, transfusion, mother w/ HIV or HIV risk

[†] No mode of exposure ascertained

MSM=Men who have sex with men IDU=Injection drug use
 Hetero=Heterosexual contact with HIV+, with IDU, with partner of unknown risk

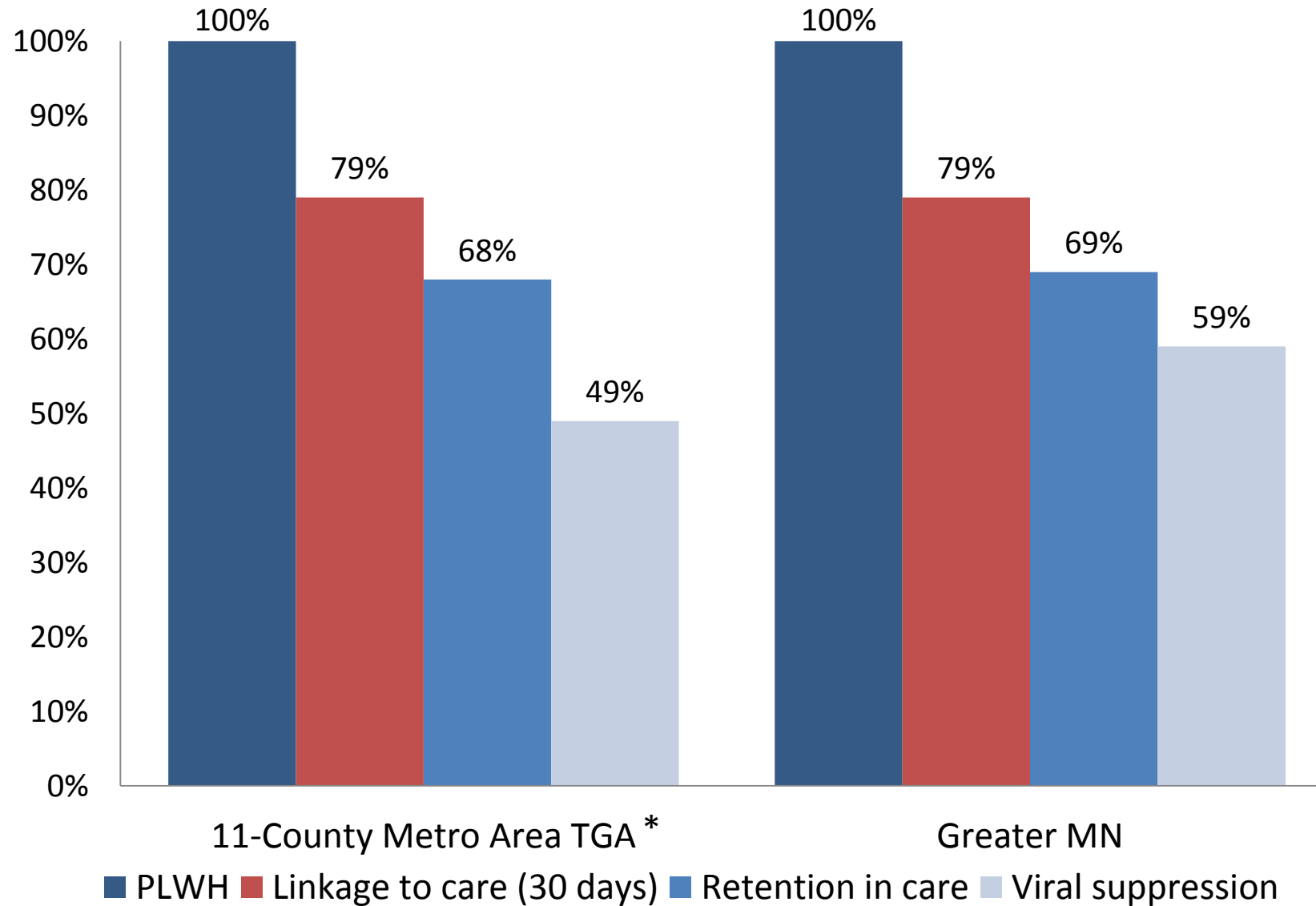
Percentage of MSM diagnosed with HIV engaged in selected stages of the continuum of care, by race – Minnesota (2015)



*Persons with multiple races

^ Not reportable strata n<=5

Percentage of persons diagnosed with HIV engaged in selected stages of the continuum of care, by geography of current residence— Minnesota (2015)

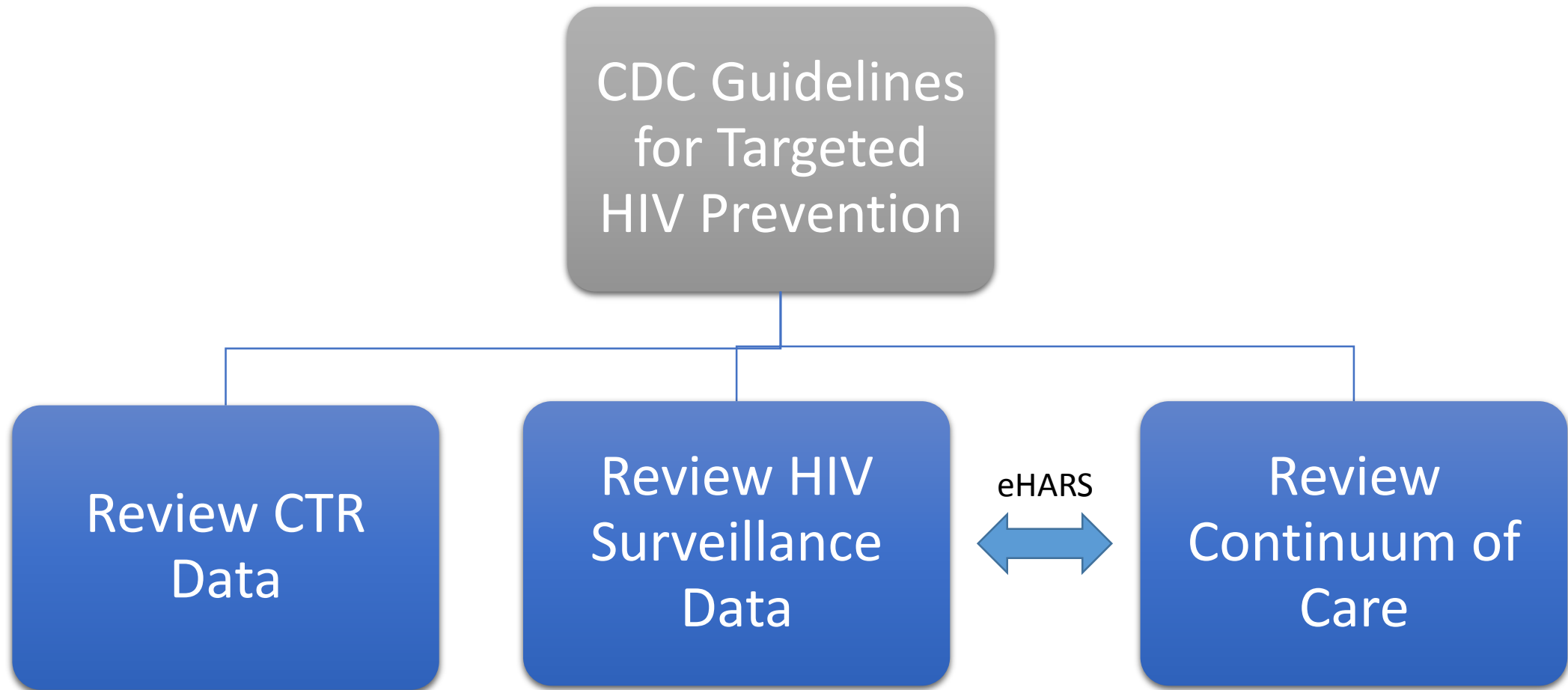


*Includes Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, Wright Counties

Prioritization of Populations for HIV Prevention Request for Proposals

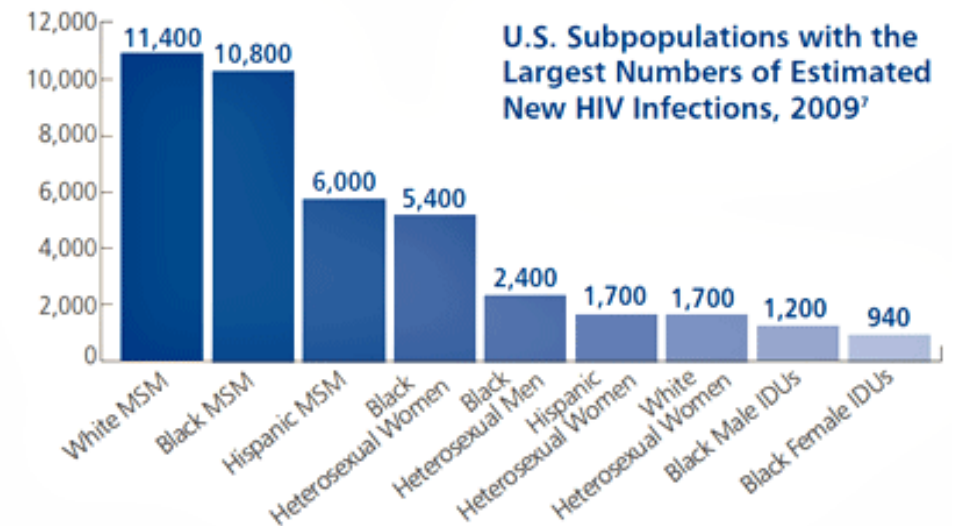
- 2 Tracks:
 - 7-County Metro Area:
 - HIV Testing
 - Syringe Exchange (Includes HIV/HCV Testing)
 - Prevention with HIV-Positives
 - Greater Minnesota:
 - HIV Testing
 - Syringe Exchange (Includes HIV/HCV Testing)
 - Prevention with HIV-Positives

Prioritization of Populations for HIV Prevention Request for Proposals



7-County Metro Area Populations

- HIV Testing:
 - 1) MSM (158.1 per 100,000)
 - Black (20.8% of Metro MSM, 3.8 rate)
 - Hispanic (10.1% of Metro MSM, 1.6 rate)
 - White (61.9% of Metro MSM, 0.8 rate)
 - 2) Black Women (34.8 per 100,000)
 - African-American (95% in Metro)
 - African-Born (89% in Metro)
 - 3) Transgender (13.8 per 100,000)
- Syringe Exchange
 - MSM/IDU, 77% of all IDU in Metro
- Prevention with HIV-Positives
 - All populations

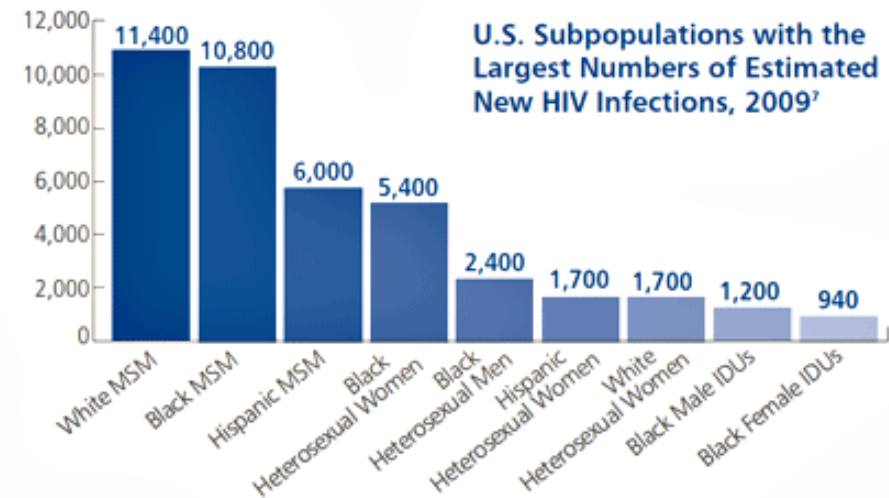


Source: <http://www.cdc.gov/hiv/policies/hip/risk.html>

Greater Minnesota Populations

17% of new HIV cases, need to target

- HIV Testing:
 - All MSM (51% of all new HIV)
- Syringe Exchange:
 - All IDU (50% IDU, 50% MSM/IDU)
- Prevention with HIV-Positives
 - All populations



Source: <http://www.cdc.gov/hiv/policies/hip/risk.html>

Questions?

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