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*Governor*



**Richard Whitley**  
*Director*

State of Nevada  
Department of Health and Human Services

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# Where Are We Now: Epidemiology in Nevada

Office of Public Health Informatics & Epidemiology

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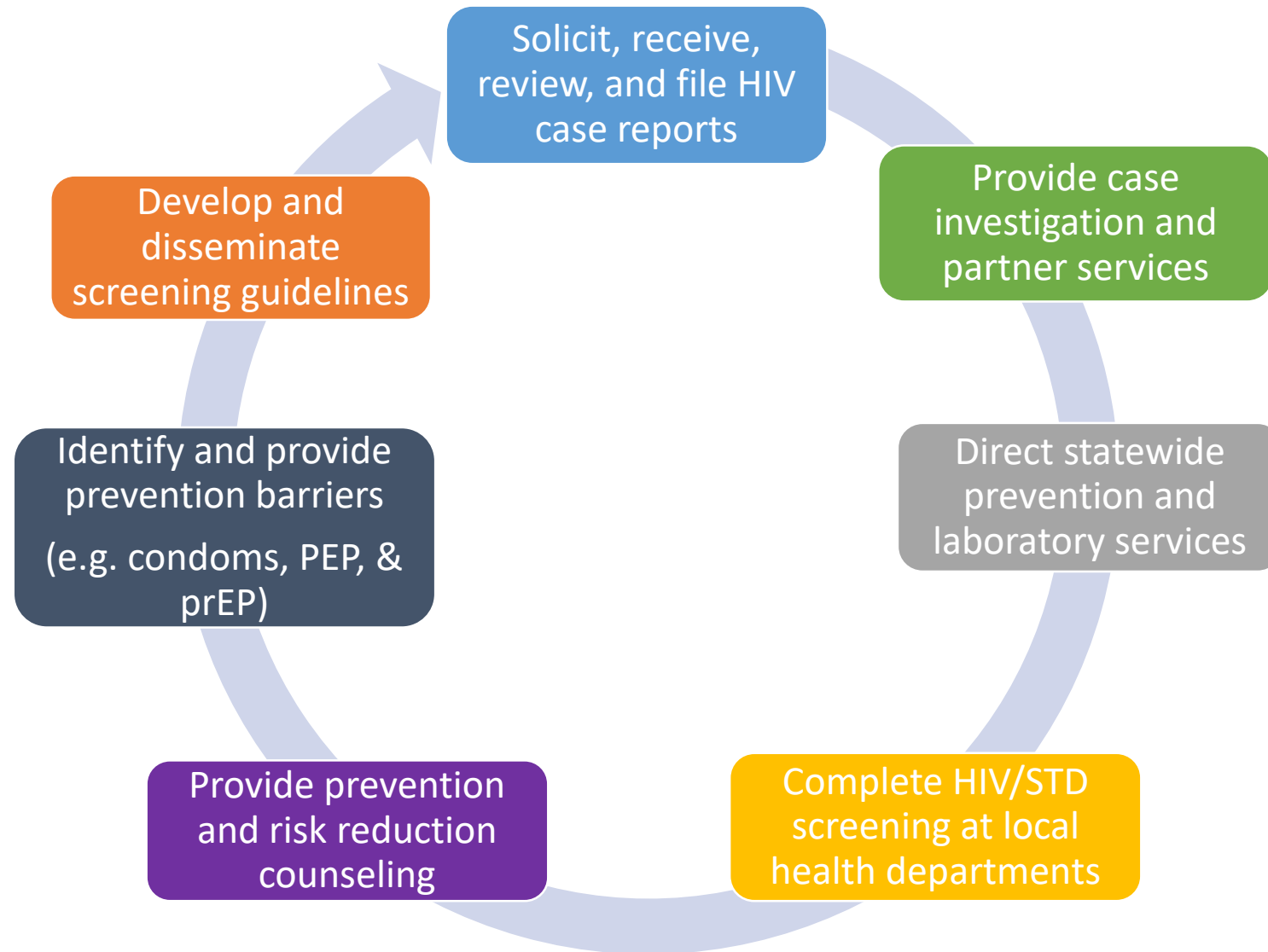
January 28, 2019



# HIV Surveillance in Nevada

- HIV/AIDS surveillance in Nevada requires the **collaboration** of several state and local agencies, as well as community agencies.
- The primary functions of the HIV/AIDS Surveillance Program in Nevada are to collect and **monitor** the epidemic and provide **data** for prevention and care efforts.
- The priorities are to increase individual knowledge, prevent new infections, reduce transmission, and enhance response capacity for all HIV related diagnosis.

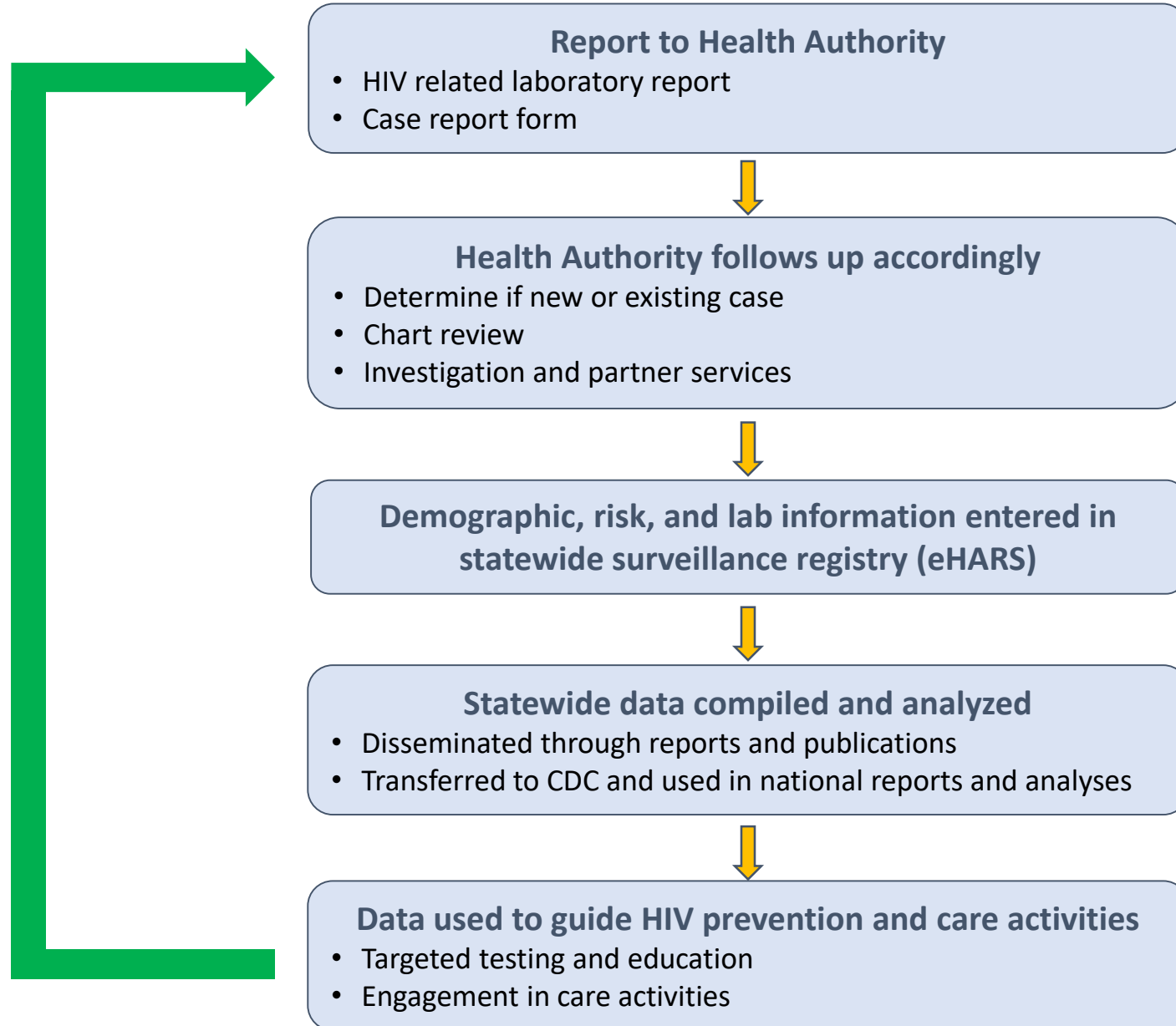
# Epidemiological Program Priorities



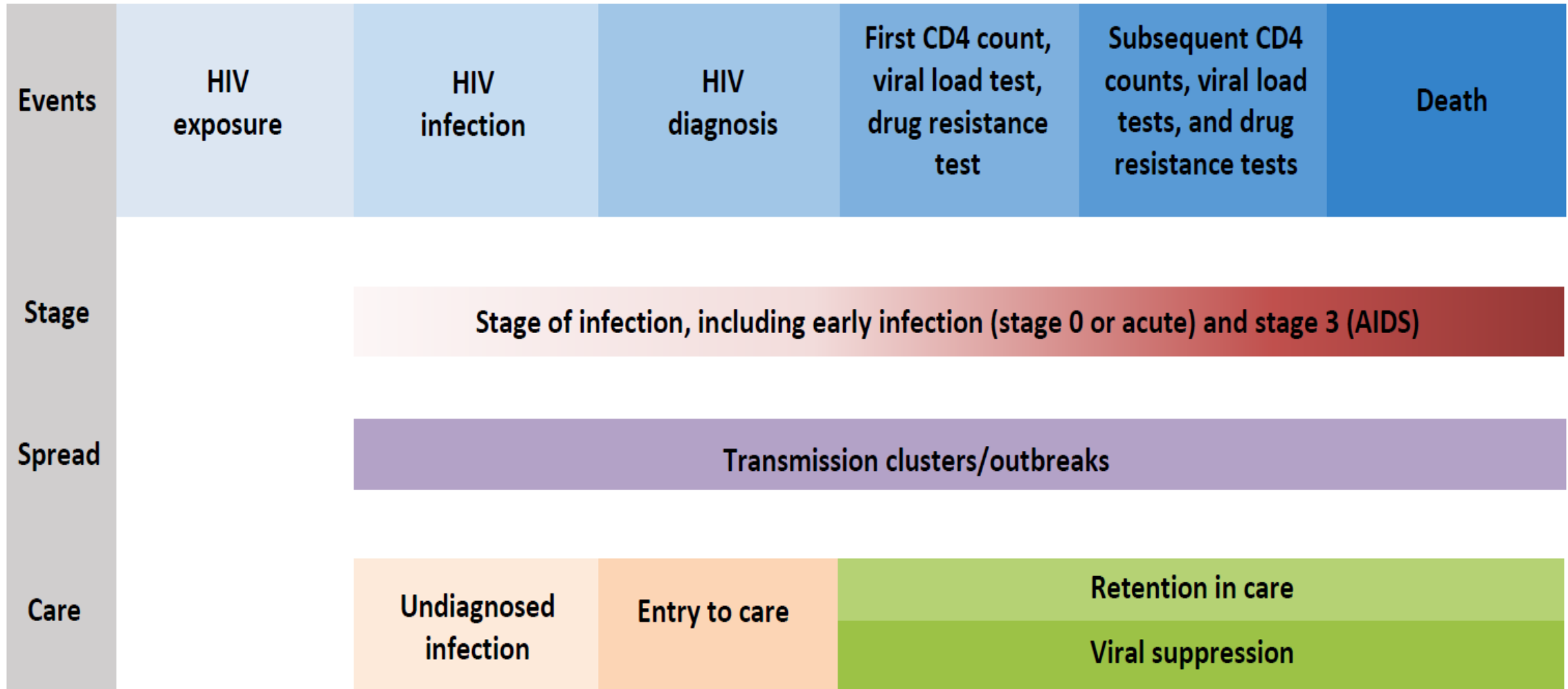
# Reporting HIV in Nevada

- Reporting Diseases: Human Immunodeficiency Virus (HIV) diagnosis defined as communicable disease in Nevada (*NAC 441A.040; NRS 441A.120*)
- Identified or suspected cases of HIV are to be reported to the health authority by telephone, fax, or electronic form in the form and manner specified by the health authority (see form).
  - Reporting of communicable diseases is required by the following:
    - Medical providers (*NAC 441A.240*)
    - Laboratories (*NAC 441A.235*)
    - Insurers (*NAC 441A.252*)
    - Parole or probation officers (*NAC 441A.243*)
    - Principal, director, or other person in charge of school, child care facility, or correctional facility (*NAC 441A.245*)
    - Blood bank (*NAC 441A.250*)
- According to Nevada Administrative Code, health authorities shall investigate reported cases of HIV and AIDS (*NAC 441A.450*).

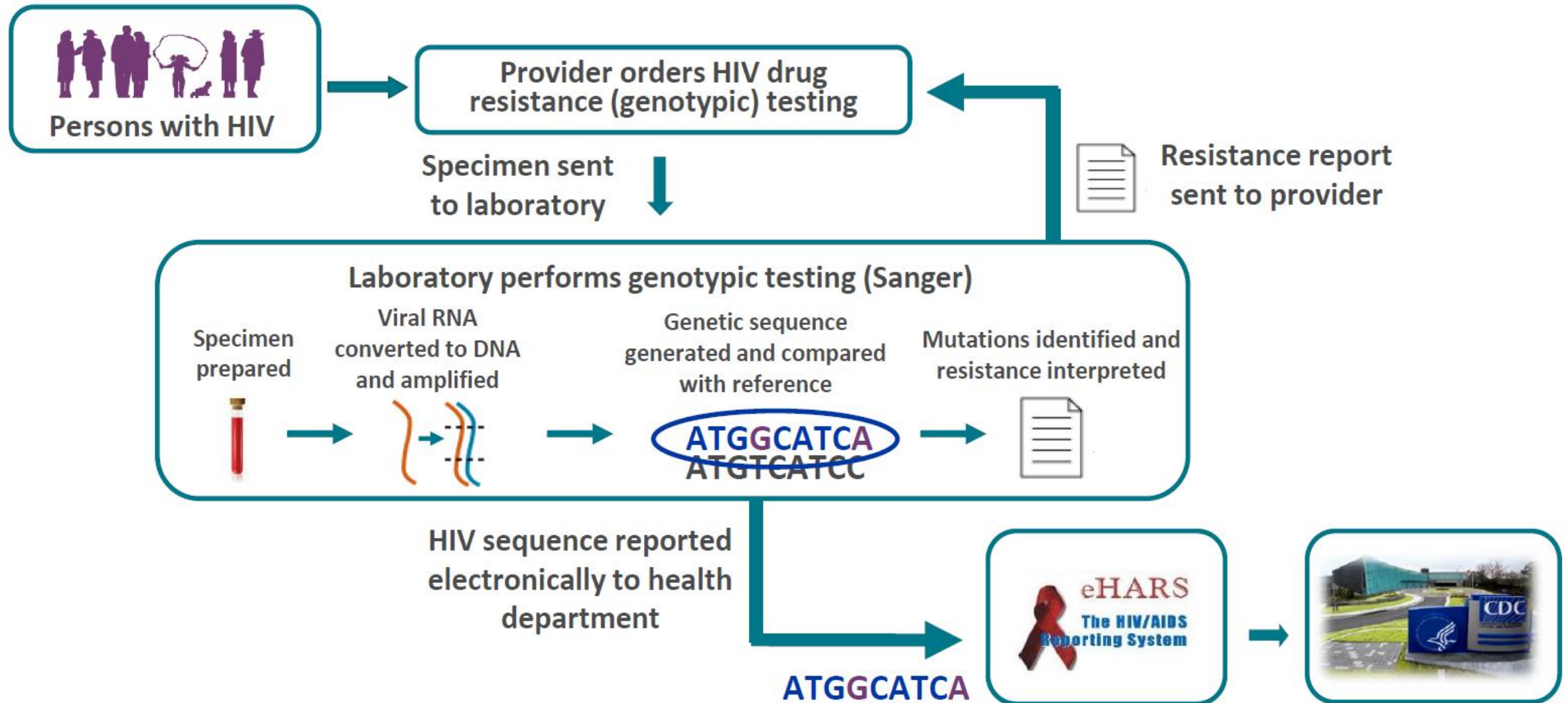
# HIV Surveillance Information Flow



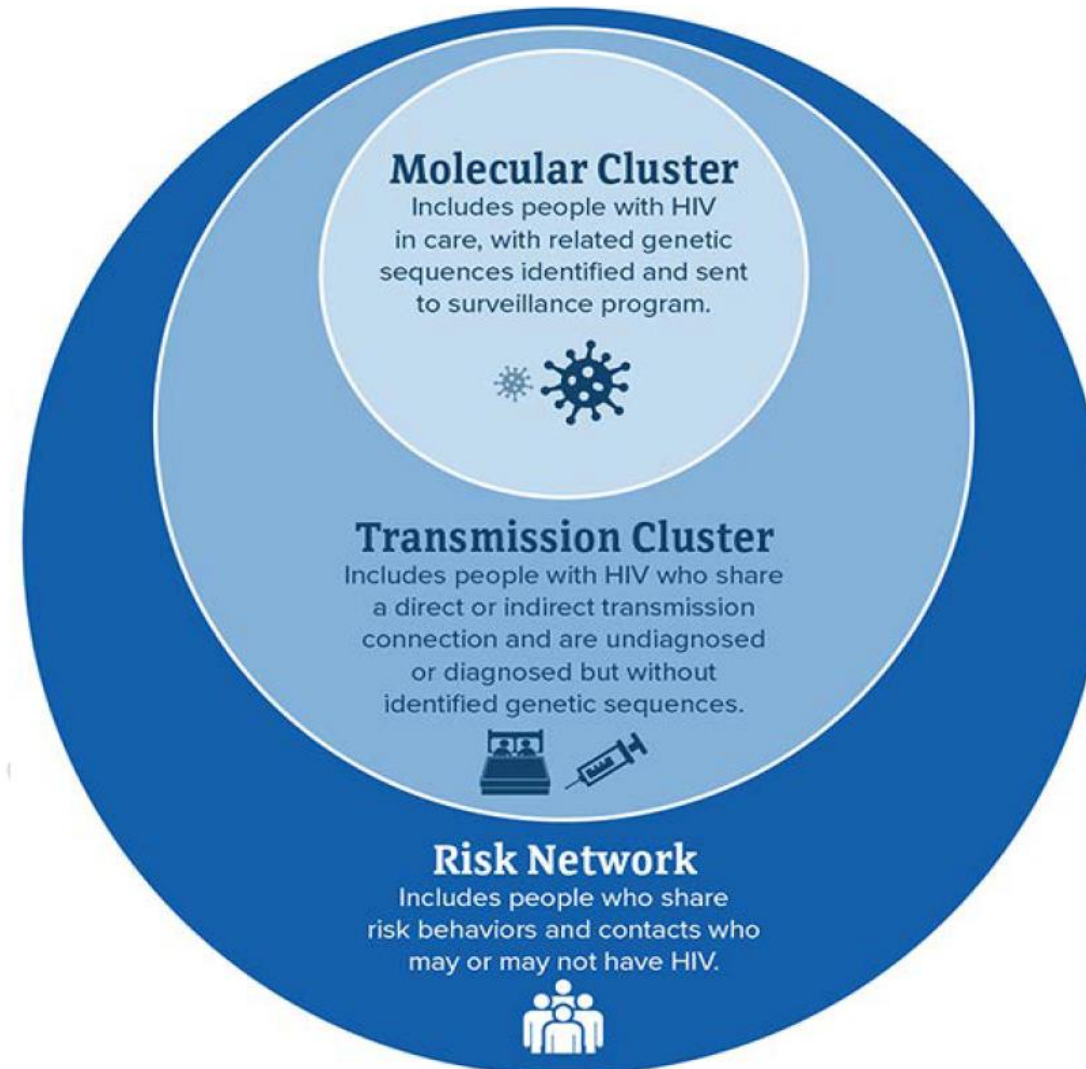
# Monitoring the Spectrum of HIV Infection



# Collection of Molecular Data

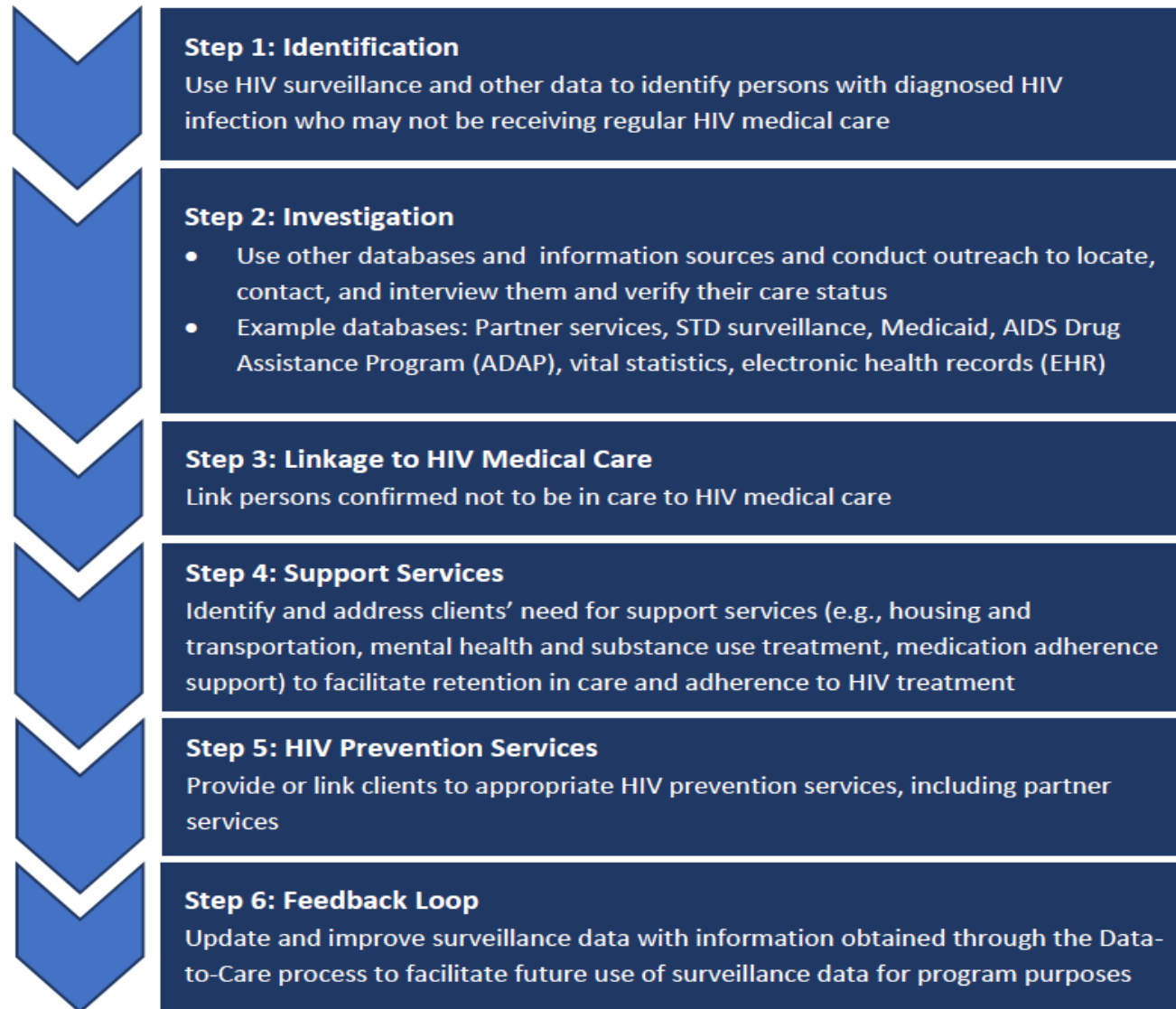


# Molecular cluster and how it relates to transmission cluster

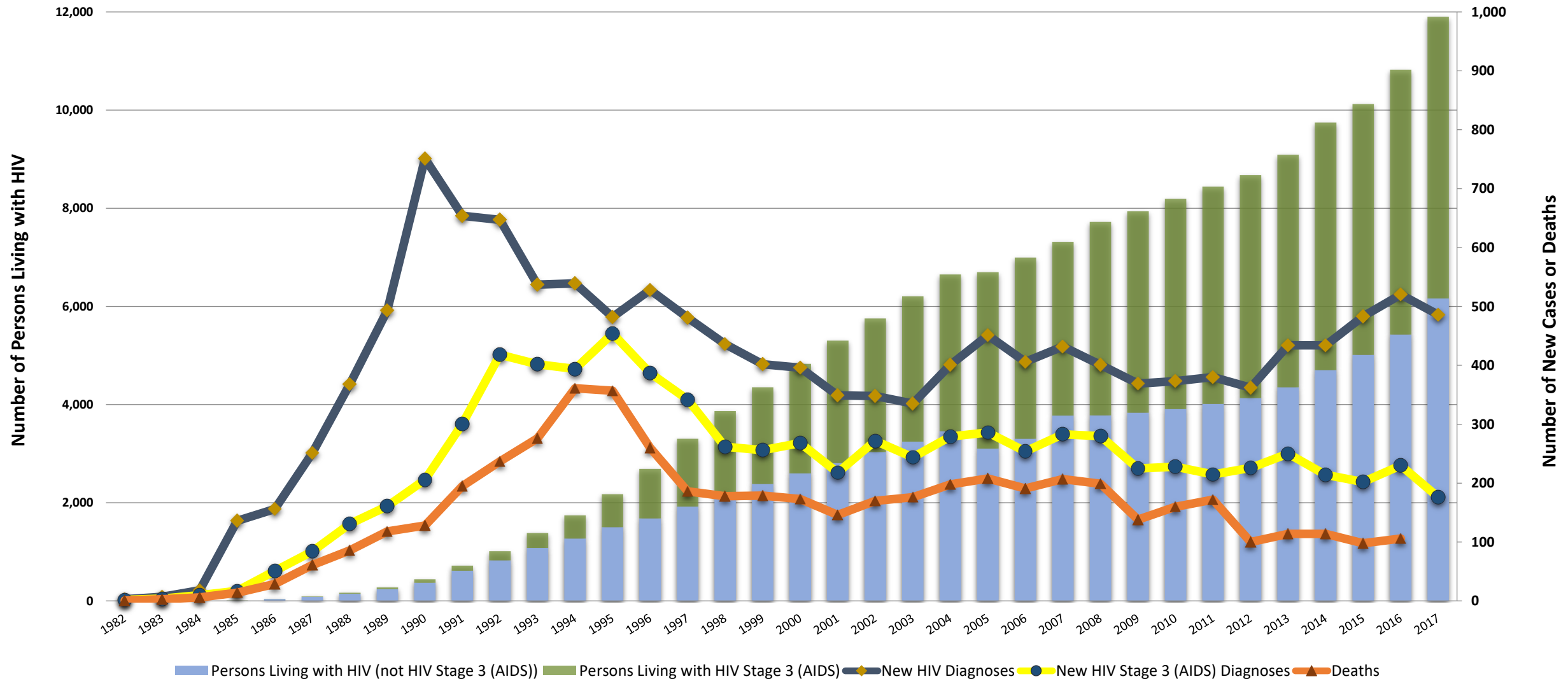




# Steps in Data-to-Care



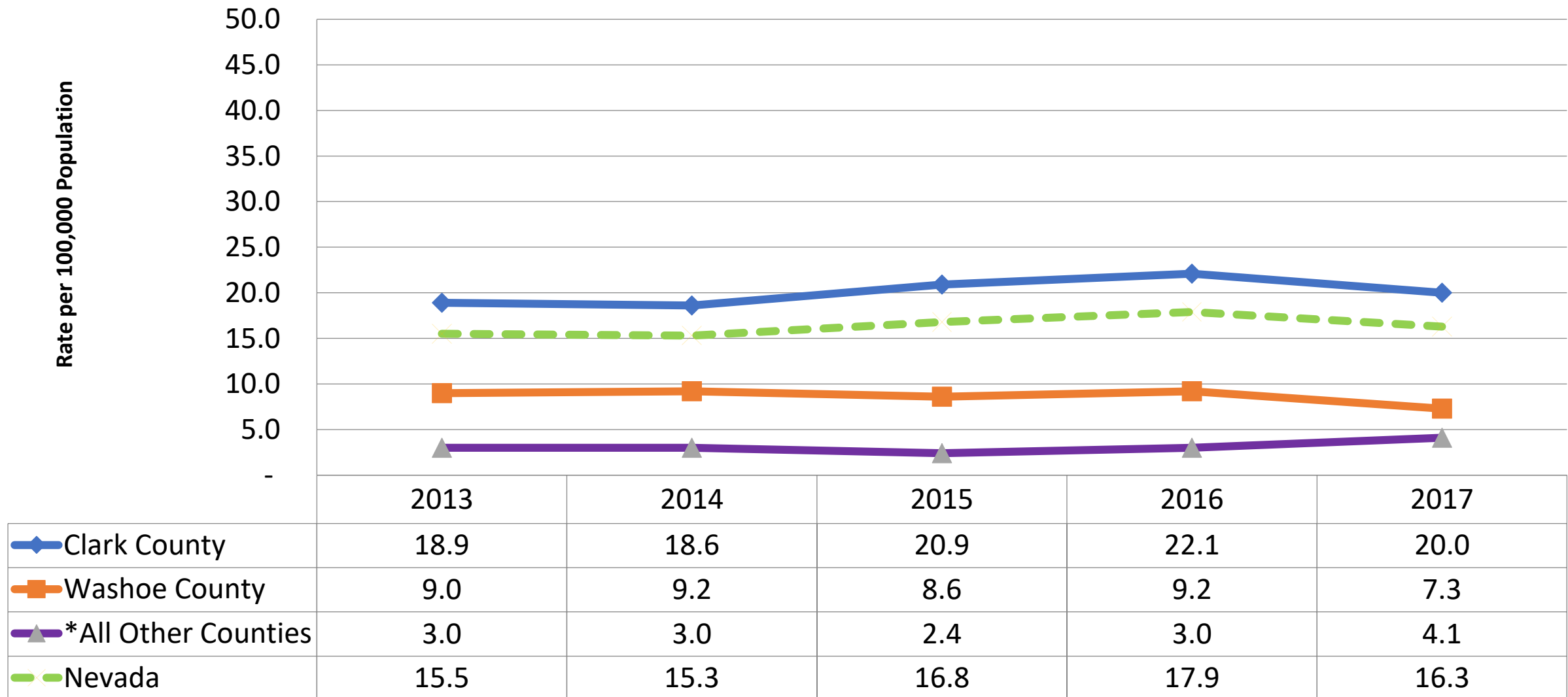
# Persons Living with HIV, New HIV Diagnoses, New HIV Stage 3 (AIDS) Diagnoses, and Deaths in Nevada, 1982- 2017



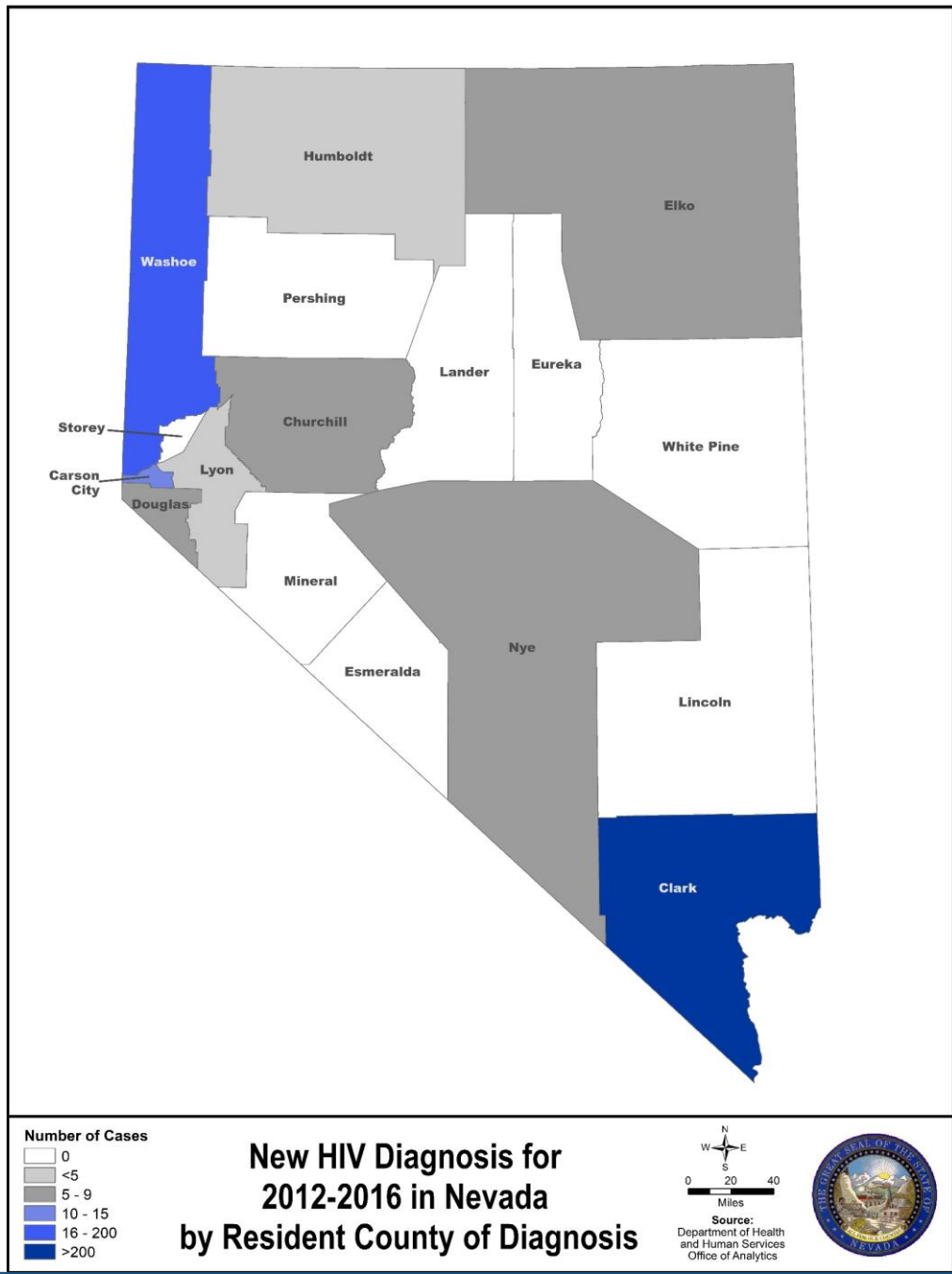
# Definition of New HIV Diagnosis

- Includes, persons newly diagnosed with HIV infection in Nevada (both living and deceased)
- Excludes, persons who were diagnosed in another state but who currently live in Nevada
- Includes, persons who were newly diagnosed with HIV and HIV stage 3 (AIDS) in the same year
- Based on diagnoses of HIV infection and does not include every person who has been infected with HIV
- Recent diagnosis may not reflect a new infection; an individual may be diagnosed with HIV many years after he/she was first infected

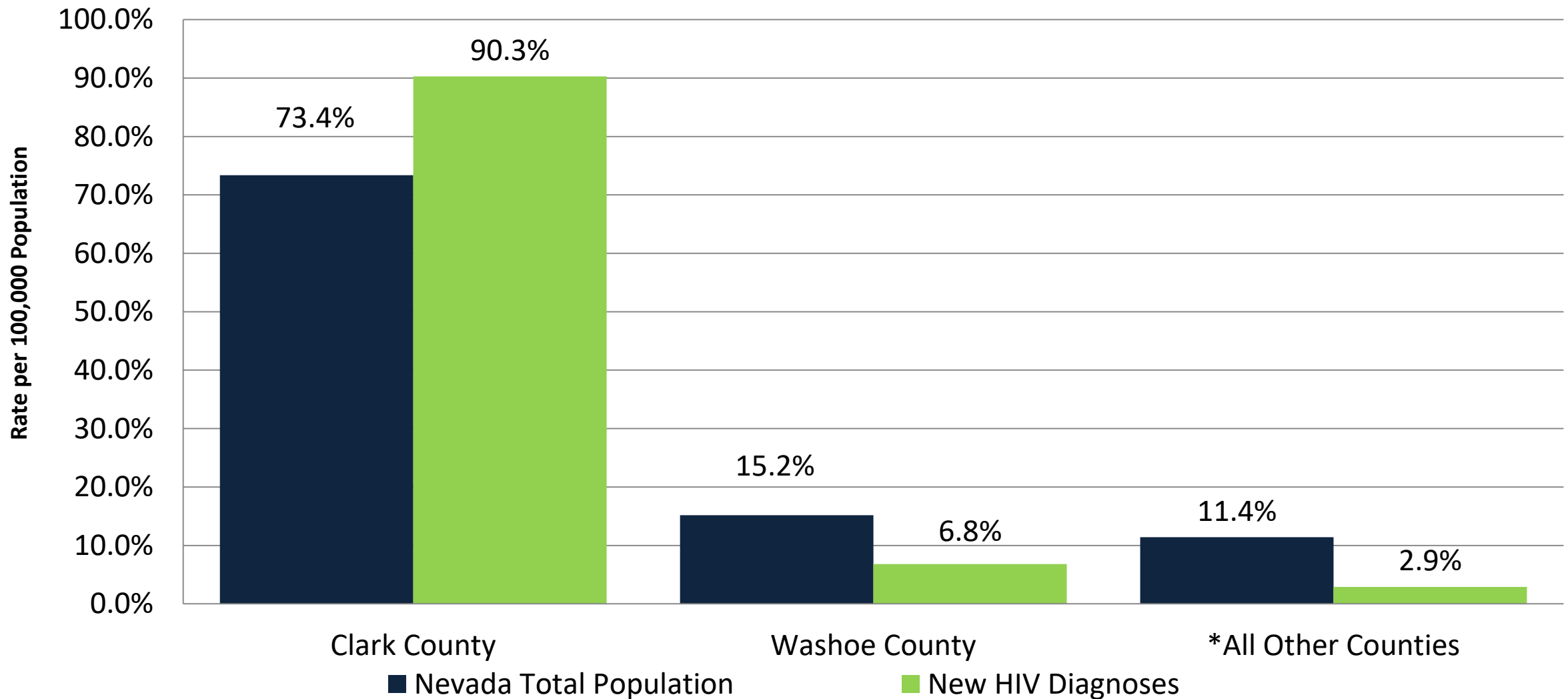
# New HIV Diagnoses by County in Nevada, 2012-2017



*\*All other counties include Carson City, Churchill, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Lyon, Mineral, Nye, Pershing, Storey, and White Pine Counties.*

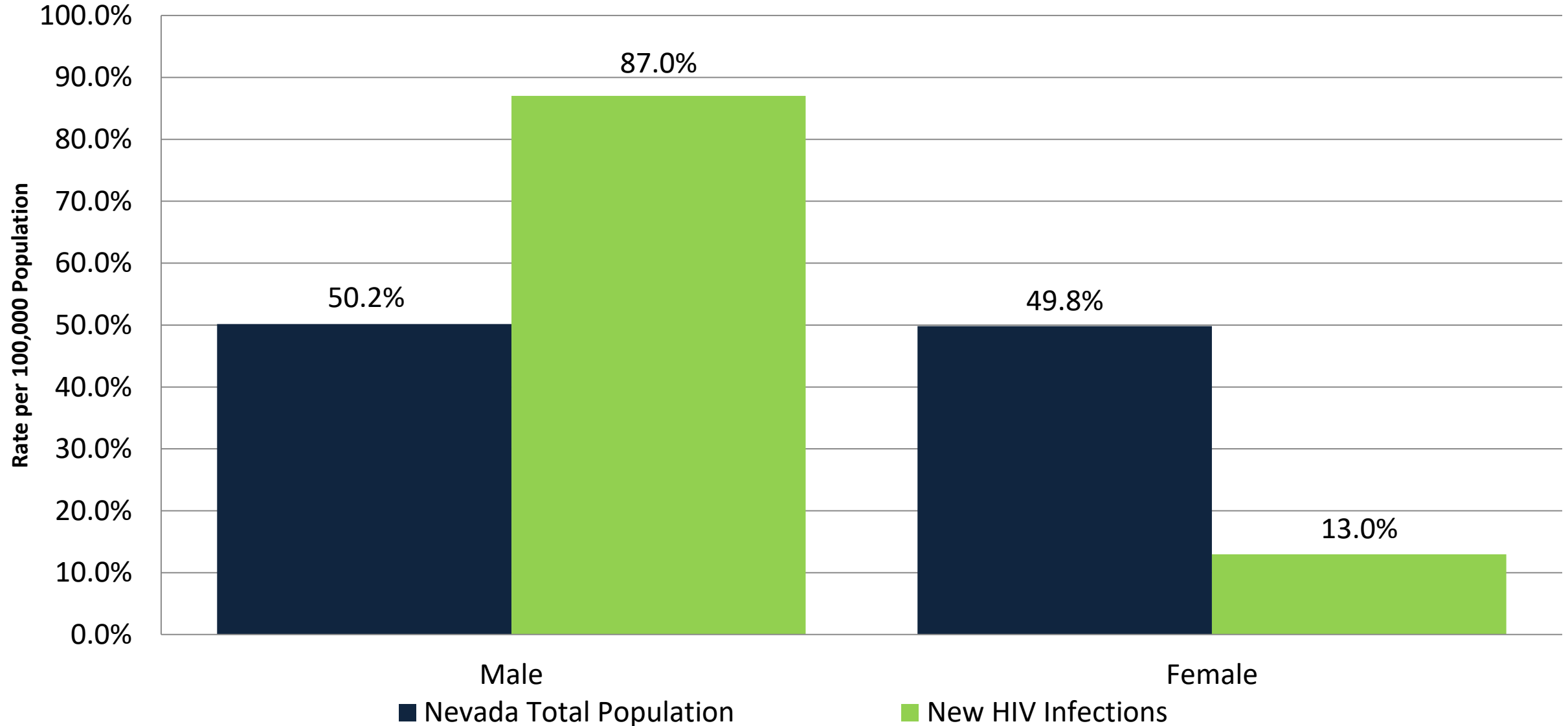


# New HIV Diagnoses by Region in Nevada, 2017

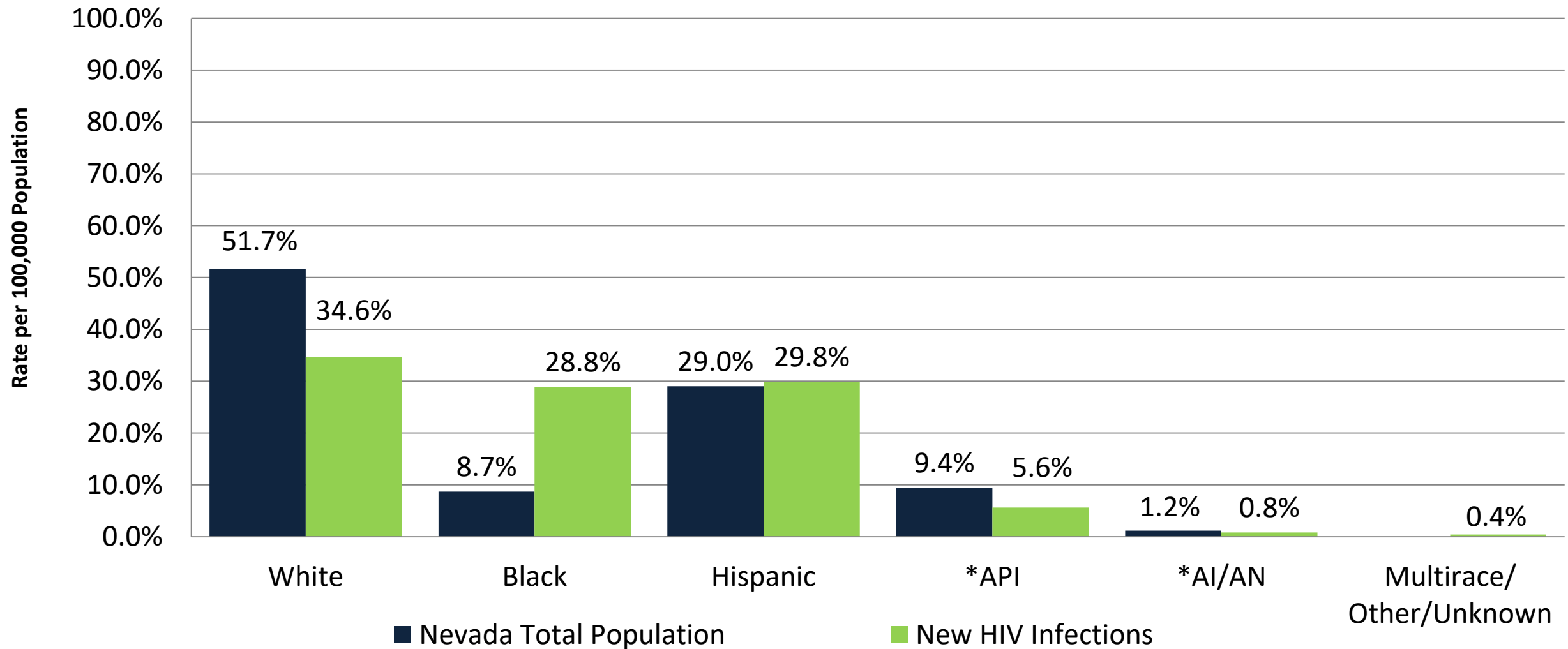


*\*All other counties include Carson City, Churchill, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Lyon, Mineral, Nye, Pershing, Storey, and White Pine Counties.*

# New HIV Diagnoses by Sex in Nevada, 2017



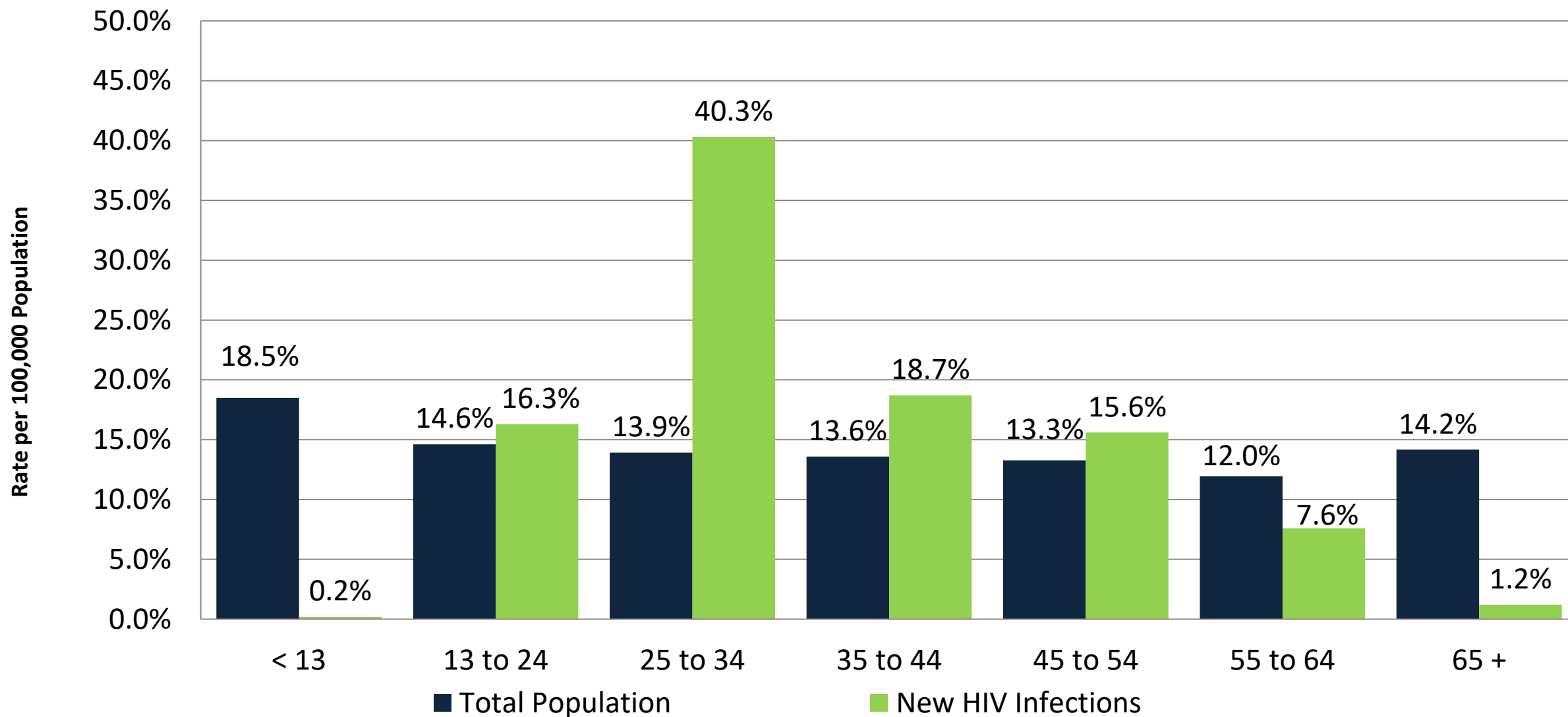
# New HIV Diagnoses by Race/Ethnicity in Nevada, 2017\*



\*API- Asian/Pacific Islander; AI/AN- American Indian/Alaskan Native \*\* Due to rounding some percent's may not equal 100%

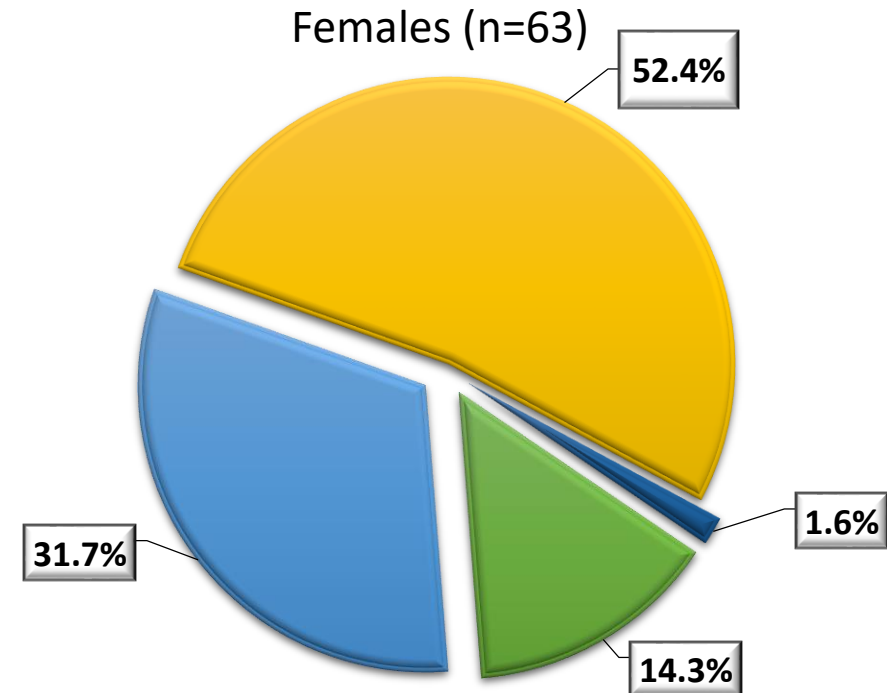
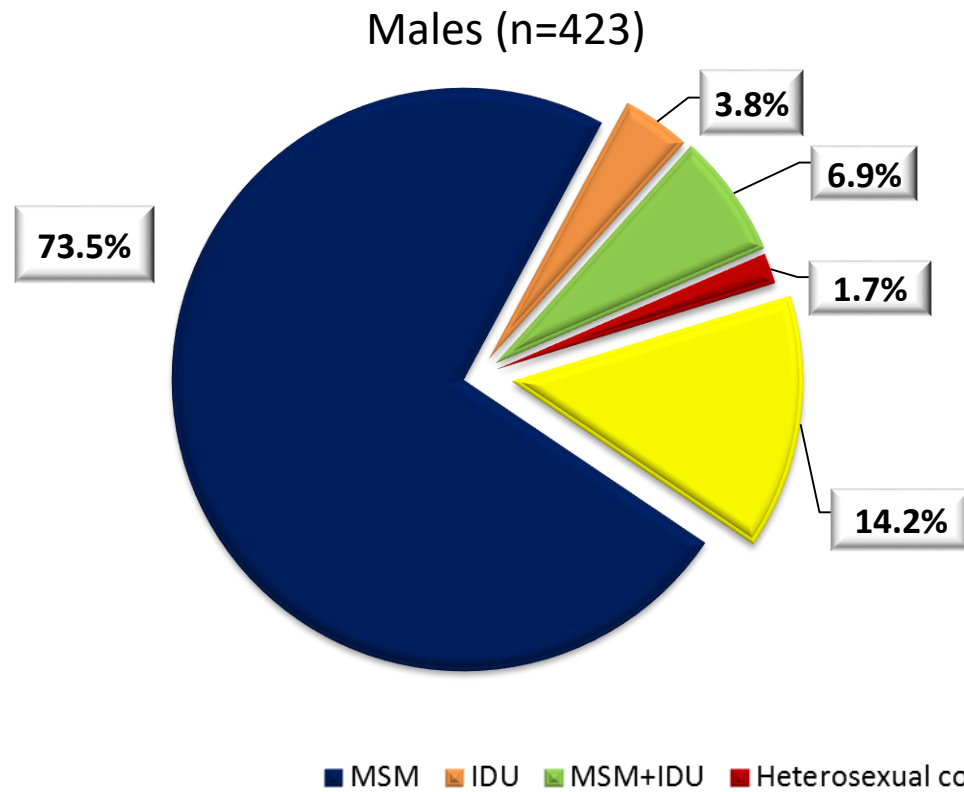


# New HIV Diagnoses by Age at Diagnosis in Nevada, 2017\*\*



**\*\* Due to rounding some percent's may not equal 100%.**

# New HIV Diagnoses by Transmission Category in Nevada, 2017\*\*



**MSM**- Male-to-male sexual contact

**IDU**- Injection Drug Use

**NIR/NRR**- No Identified Risk/No Risk Reported,

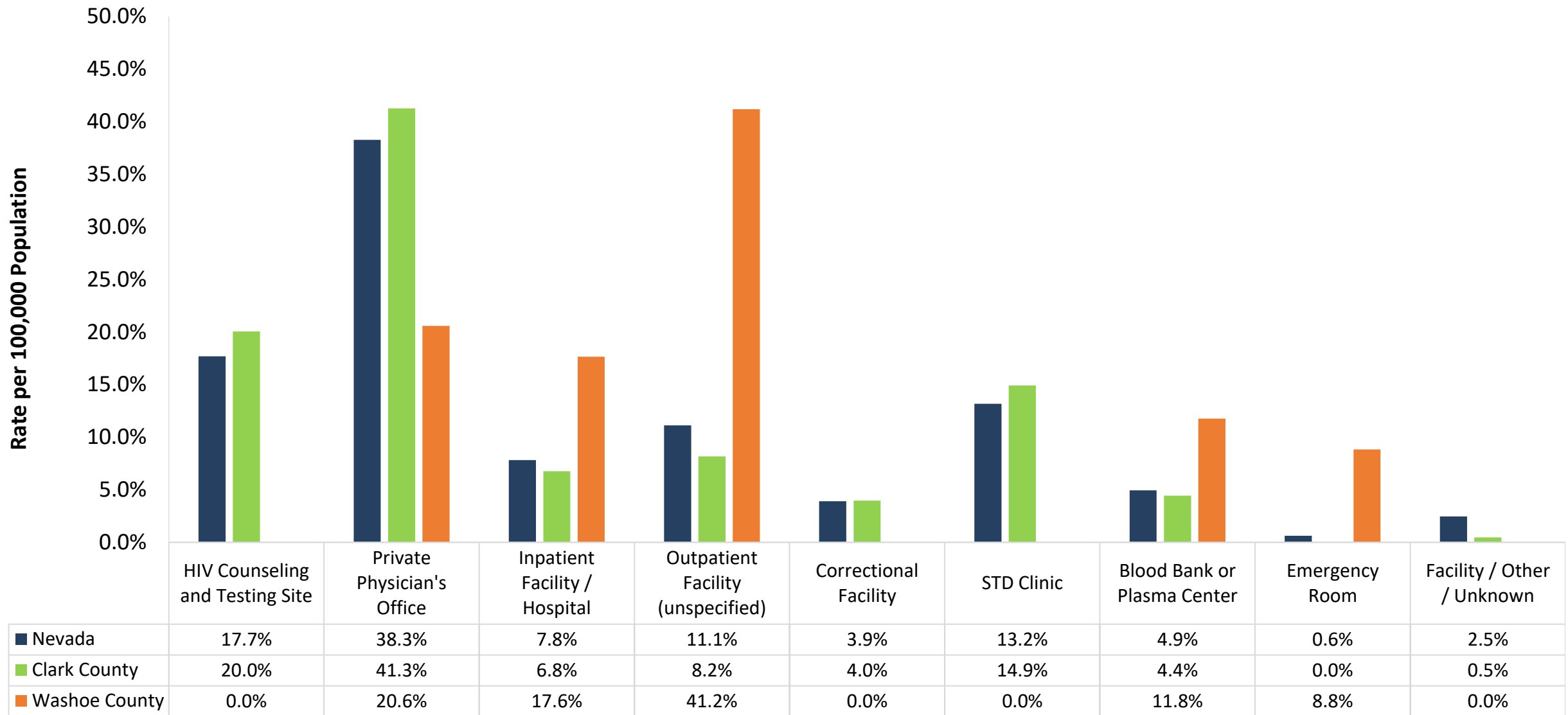
**Other** includes perinatal exposure and hemophilia/blood transfusion

**\*\* Due to rounding some percent's may not equal 100%.**

- Over ¾ of males reported MSM contact as a reported risk.
- The most commonly reported risk of transmission for females is heterosexual contact.

➤ **Heterosexual contact vs. NIR: Surveillance Definition**

# Facility of Diagnoses for New HIV Diagnoses, 2017~

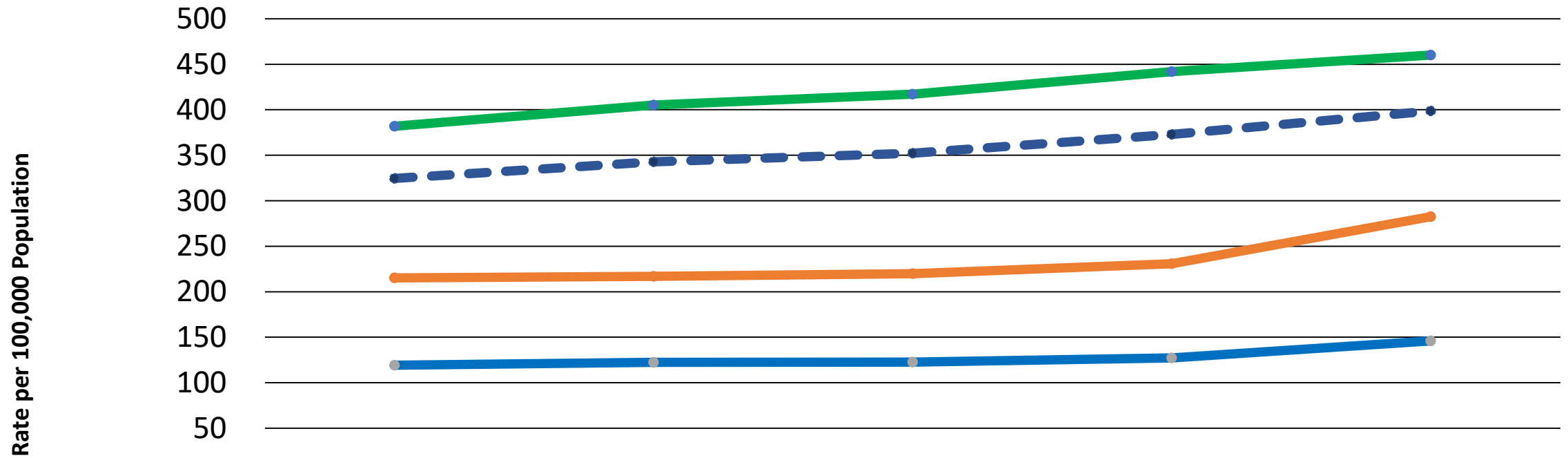


~Facility categories: adult HIV clinic, tuberculosis clinic and obstetrics and gynecology clinic reported no new HIV diagnoses.

# Definition of Persons Living with HIV (PLWH)

- Includes the total number of persons currently living with HIV and/or HIV stage 3 (AIDS) in Nevada, based on the most current address in eHARS (surveillance database).
- Includes persons who were diagnosed in another state but who currently live in Nevada, as well as persons diagnosed in Nevada.

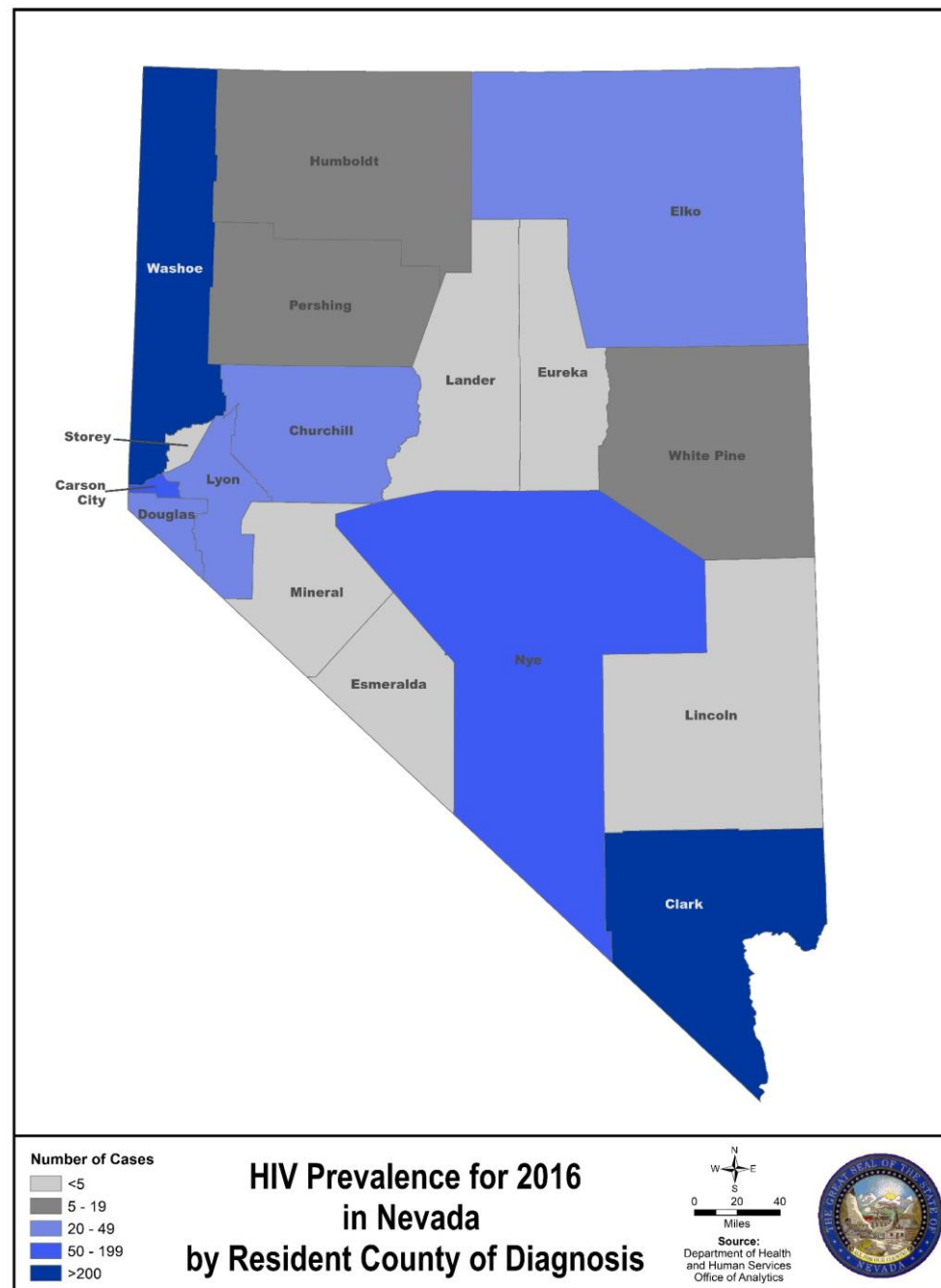
# Persons Living with HIV by Region in Nevada, 2017



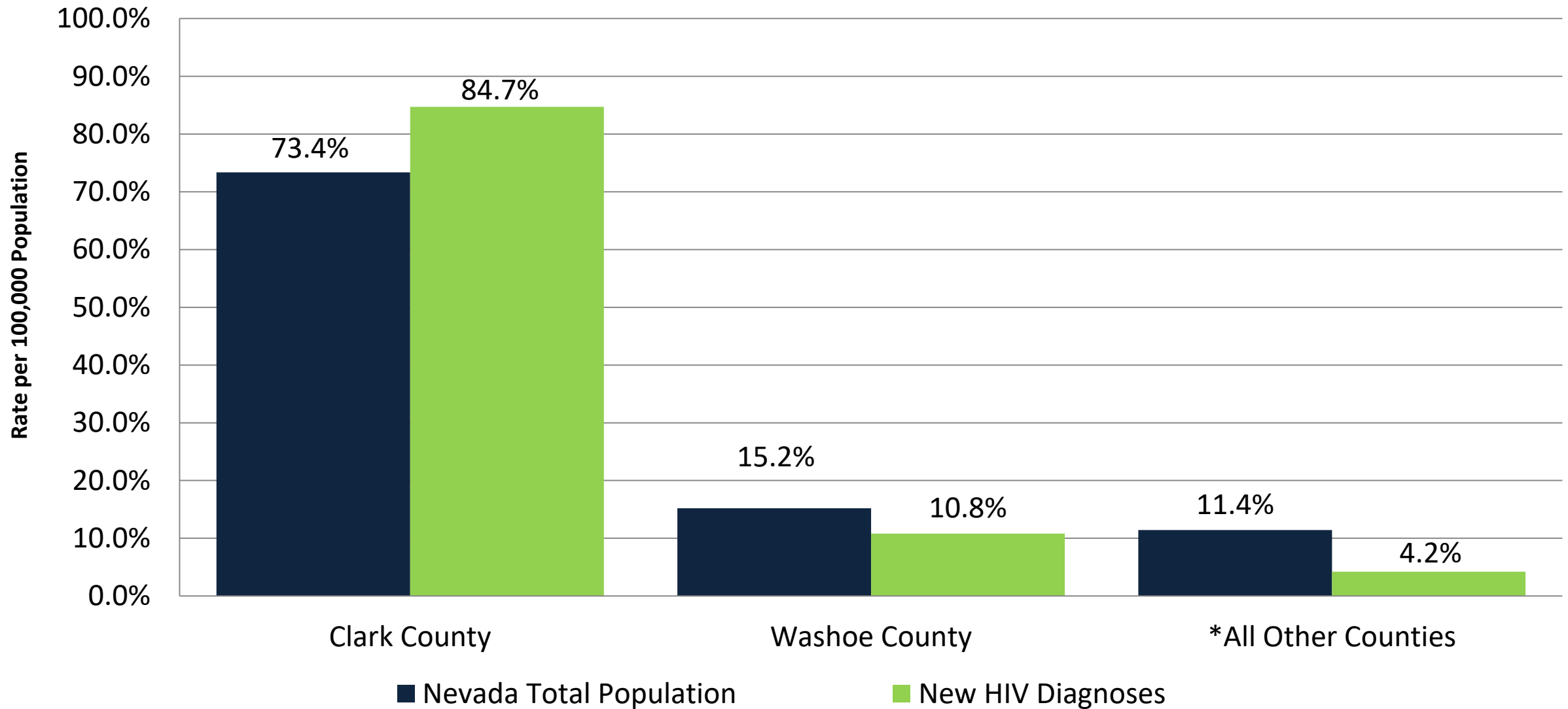
	2013	2014	2015	2016	2017
Clark County	381.8	405.1	417.1	441.8	460.1
Washoe County	215.3	217.0	219.8	230.8	282.6
*All Other Counties	119.3	122.5	122.7	127.3	146.0
Nevada	324.5	342.8	352.3	372.8	398.7

Clark County Washoe County \*All Other Counties Nevada

*\*All other counties include Carson City, Churchill, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Lyon, Mineral, Nye, Pershing, Storey, and White Pine Counties.*

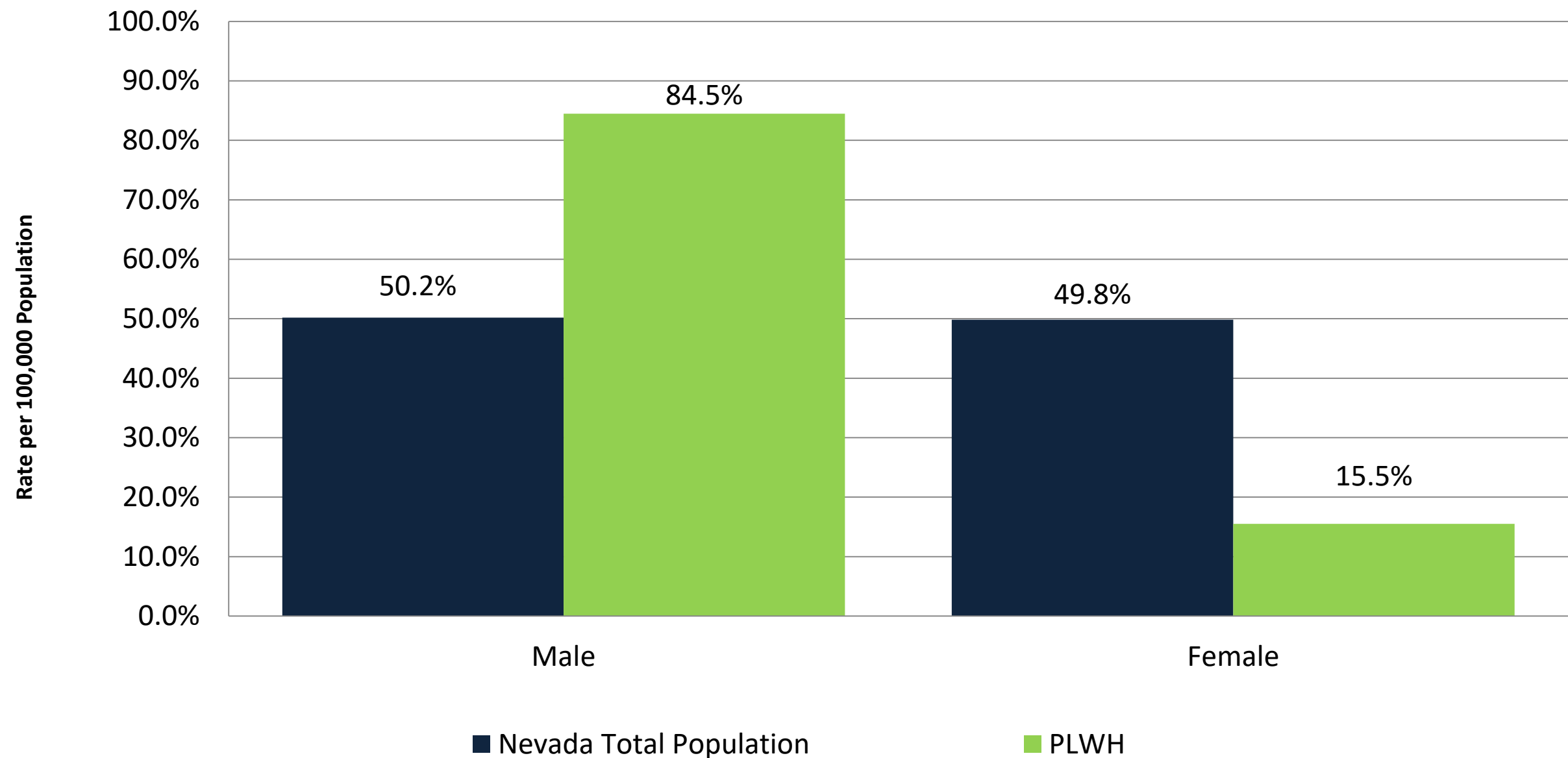


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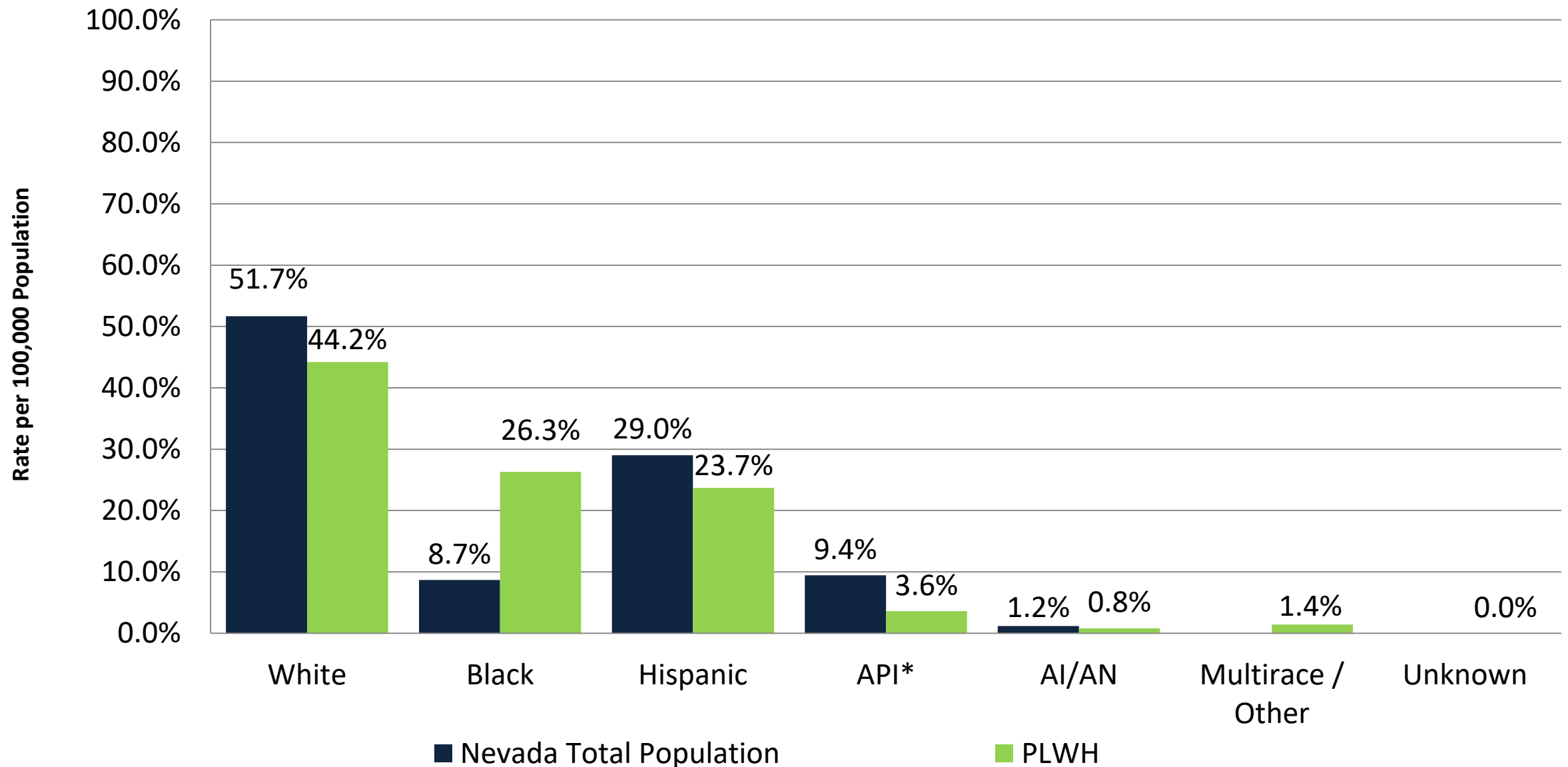
*\*All other counties include Carson City, Churchill, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Lyon, Mineral, Nye, Pershing, Storey, and White Pine Counties.*

# Persons Living with HIV by Sex in Nevada, 2017



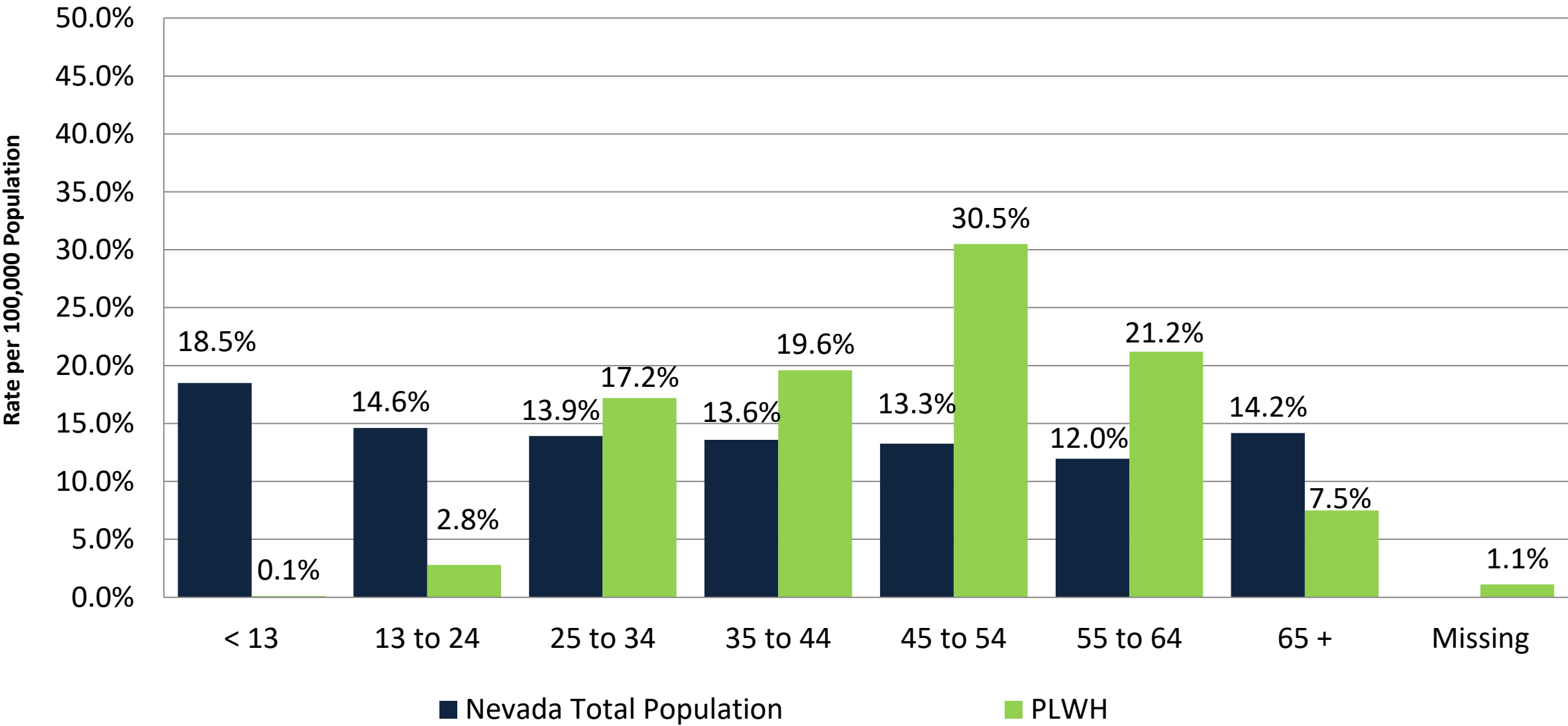


# Persons Living with HIV by Race/Ethnicity in Nevada, 2017\*



\*API- Asian/Pacific Islander; AI/AN- American Indian/Alaskan Native

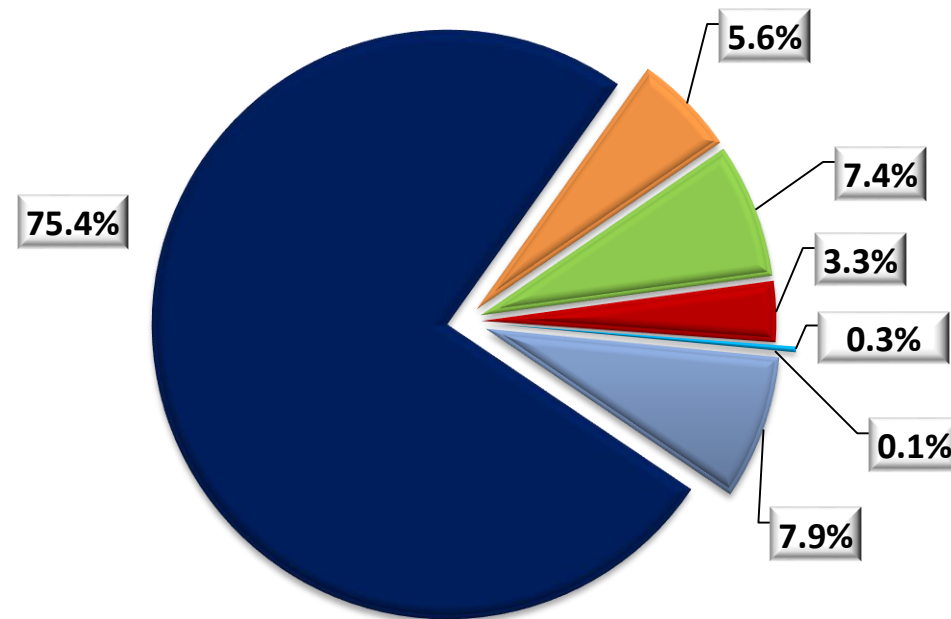
# Persons Living with HIV by Age at End of Year in Nevada, 2017\*



\* 1% (n=128) of PLWHA were missing age at end of year

# Persons Living with HIV by Transmission Category in Nevada, 2017

Males (n=10,054)



■ MSM ■ IDU ■ MSM+IDU ■ Heterosexual contact ■ Perinatal exposure ■ Transfusion/hemophilia ■ NIR/NRR/Other

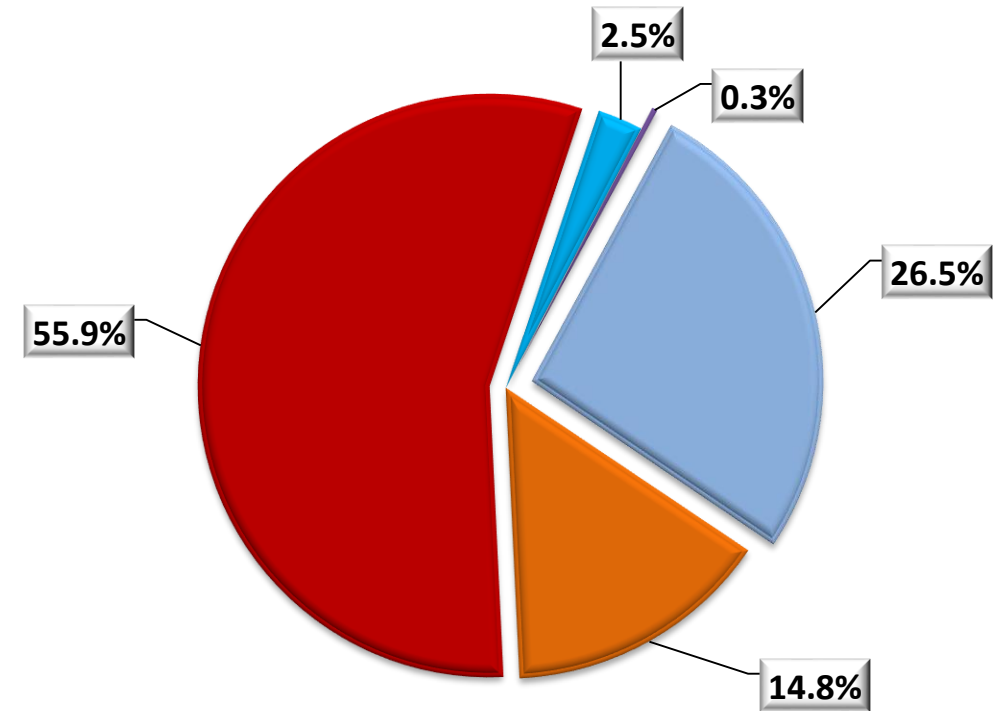
**MSM**- Male-to-male sexual contact

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**NIR/NRR**- No Identified Risk/No Risk Reported

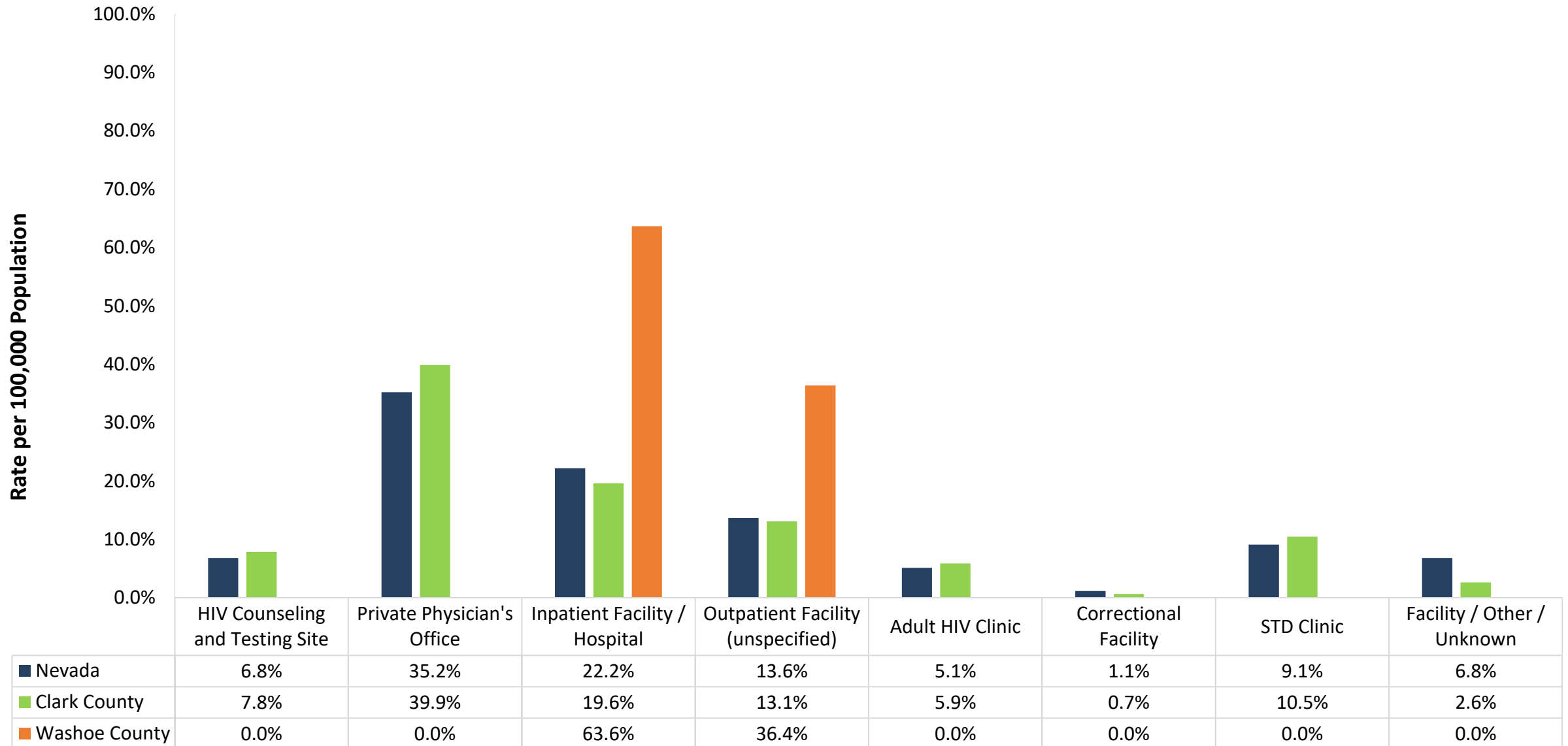
**Other**- includes perinatal exposure and hemophilia/blood transfusion

Females (n=1,847)



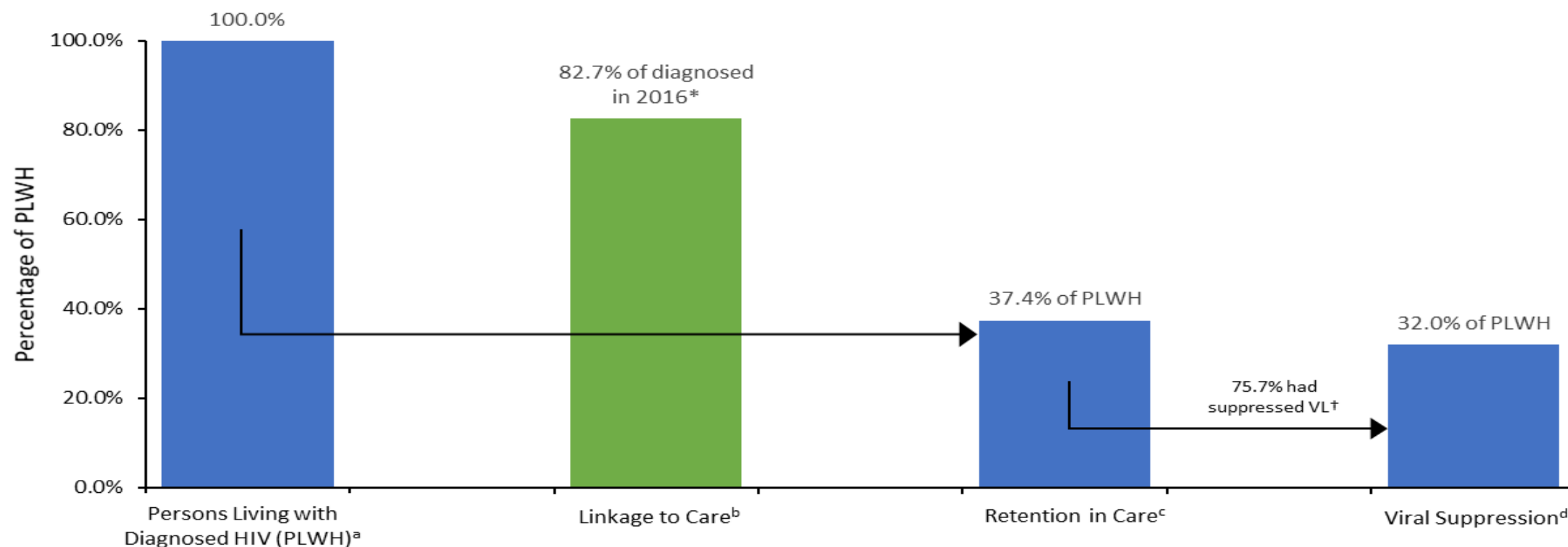
- In males, MSM is the highest risk factor with 75%.
- In females, heterosexual contact is the leading risk factor followed by IDU.

# Facility of Diagnoses for New Stage 3(AIDS) Diagnoses, 2017~



~Facility categories: Blood bank or plasma center, emergency room, tuberculosis clinic, obstetrics and gynecology clinic reported no new stage 3 (AIDS) diagnoses.

## Continuum of Care - Persons Living with HIV/AIDS, Nevada, 2016



**Source:** Division of Public and Behavioral Health, HIV/AIDS Reporting System (eHARS), data as of March 2018.

**a:** defined as persons diagnosed with HIV infection (regardless of stage of disease) through year-end 2015, who were alive at year-end 2016.

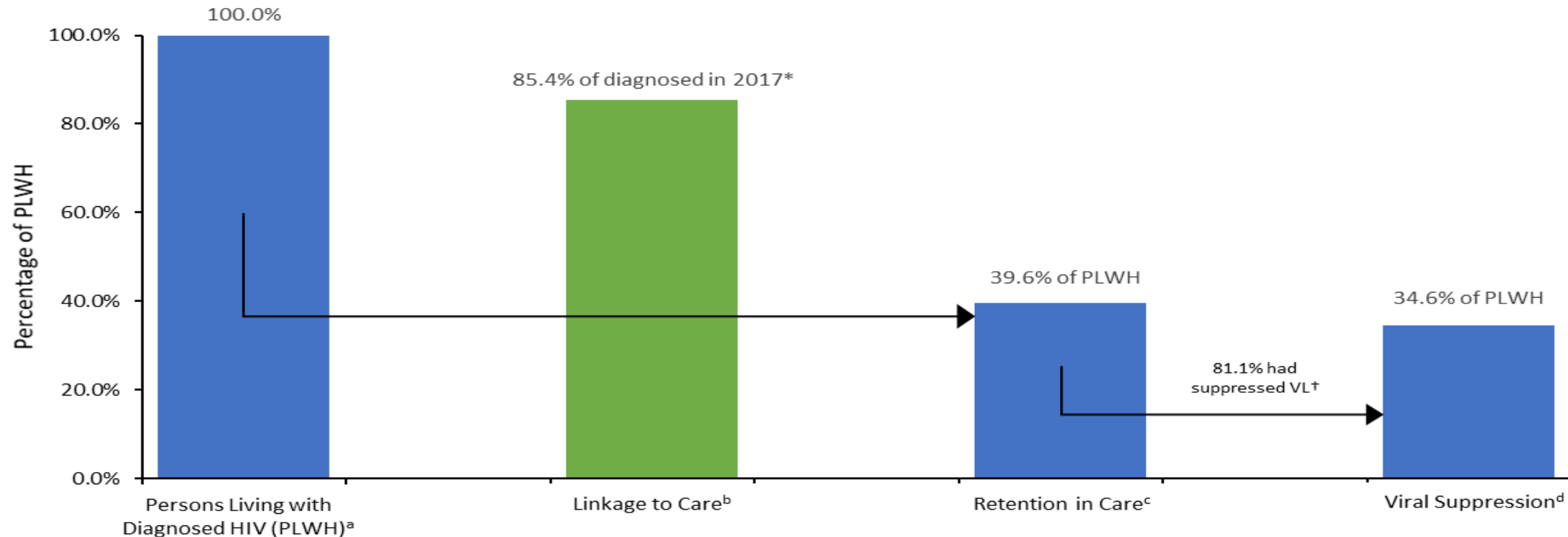
**b:** calculated as the number of persons linked to care within 3 months after HIV diagnosis during 2016, divided by the total number of persons diagnosed with HIV infection in 2016. Linkage to care is based on the number of persons diagnosed during 2016, and is therefore shown in a different color than the other bars with a different denominator.

**c:** calculated as the percentage of persons who had  $\geq 2$  CD4 or viral load test results at least 3 months apart during 2016 among those diagnosed with HIV through year-end 2015 and alive at year-end 2016.

**d:** calculated as the percentage of persons who had suppressed VL ( $\leq 200$  copies/mL) at most recent test during 2016, among those diagnosed with HIV through year-end 2015 and alive at year-end 2016.

<sup>†</sup> Calculated as number of persons who had suppressed VL ( $\leq 200$  copies/mL) at most recent test during 2016, among those who were retained in care during 2016.

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# Thank you



**For more information visit the  
Division of Public and Behavioral Health website at:**

<http://dpbh.nv.gov/>

**Contact**

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**Data Sources**

HIV data from March 2018 eHARS extract  
2017 population projections from NV Demographics 2017 vintage file