Steve Sisolak Governor



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State of Nevada Department of Health and Human Services

Where Are We Now: Epidemiology in Nevada

Office of Public Health Informatics & Epidemiology Kellie Ducker 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

Solicit, receive, review, and file HIV case reports

Develop and disseminate screening guidelines

Provide case investigation and partner services

Identify and provide prevention barriers (e.g. condoms, PEP, & prEP)

Direct statewide prevention and laboratory services

Provide prevention and risk reduction counseling

Complete HIV/STD screening at local health departments

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

Report to Health Authority

- HIV related laboratory report
- Case report form



Health Authority follows up accordingly

- · Determine if new or existing case
- Chart review
- Investigation and partner services



Demographic, risk, and lab information entered in statewide surveillance registry (eHARS)



Statewide data compiled and analyzed

- Disseminated through reports and publications
- Transferred to CDC and used in national reports and analyses



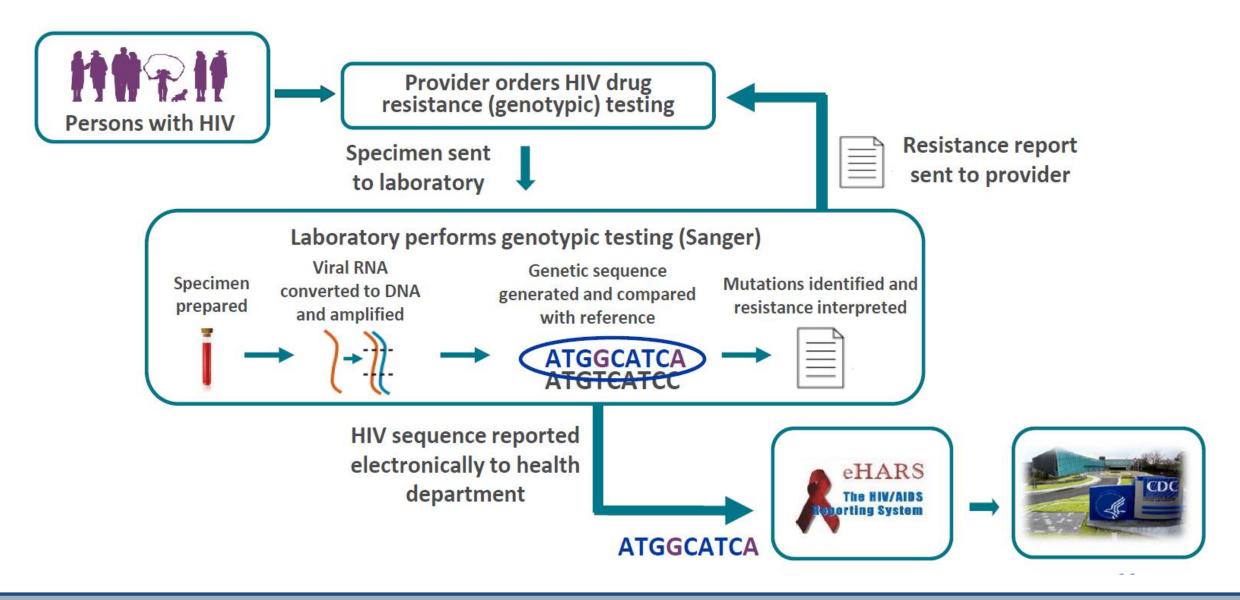
Data used to guide HIV prevention and care activities

- Targeted testing and education
- Engagement in care activities

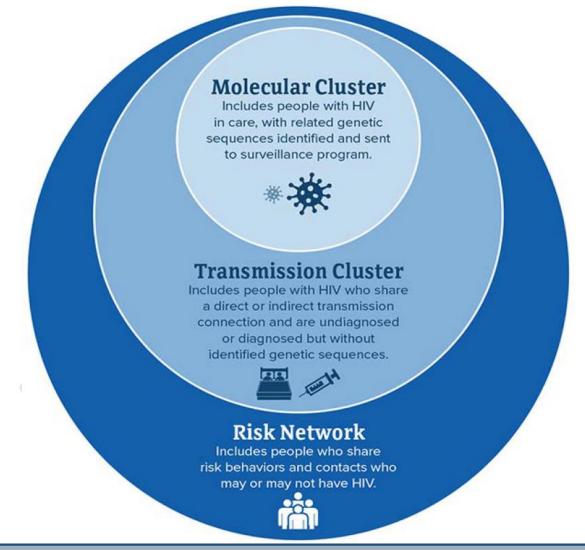
Monitoring the Spectrum of HIV Infection

Events	HIV exposure	HIV infection	HIV diagnosis	First CD4 count, viral load test, drug resistance test	Subsequent CD4 counts, viral load tests, and drug resistance tests	Death
Stage	Stage of infection, including early infection (stage 0 or acute) and stage 3 (AIDS)					
Spread		Transmission clusters/outbreaks				
Care		Undiagnosed infection	Entry to care		Retention in care Viral suppression	

Collection of Molecular Data



Molecular cluster and how it relates to transmission cluster



Steps in Data-to-Care

Step 1: Identification

Use HIV surveillance and other data to identify persons with diagnosed HIV infection who may not be receiving regular HIV medical care

Step 2: Investigation

- Use other databases and information sources and conduct outreach to locate, contact, and interview them and verify their care status
- Example databases: Partner services, STD surveillance, Medicaid, AIDS Drug
 Assistance Program (ADAP), vital statistics, electronic health records (EHR)

Step 3: Linkage to HIV Medical Care

Link persons confirmed not to be in care to HIV medical care

Step 4: Support Services

Identify and address clients' need for support services (e.g., housing and transportation, mental health and substance use treatment, medication adherence support) to facilitate retention in care and adherence to HIV treatment

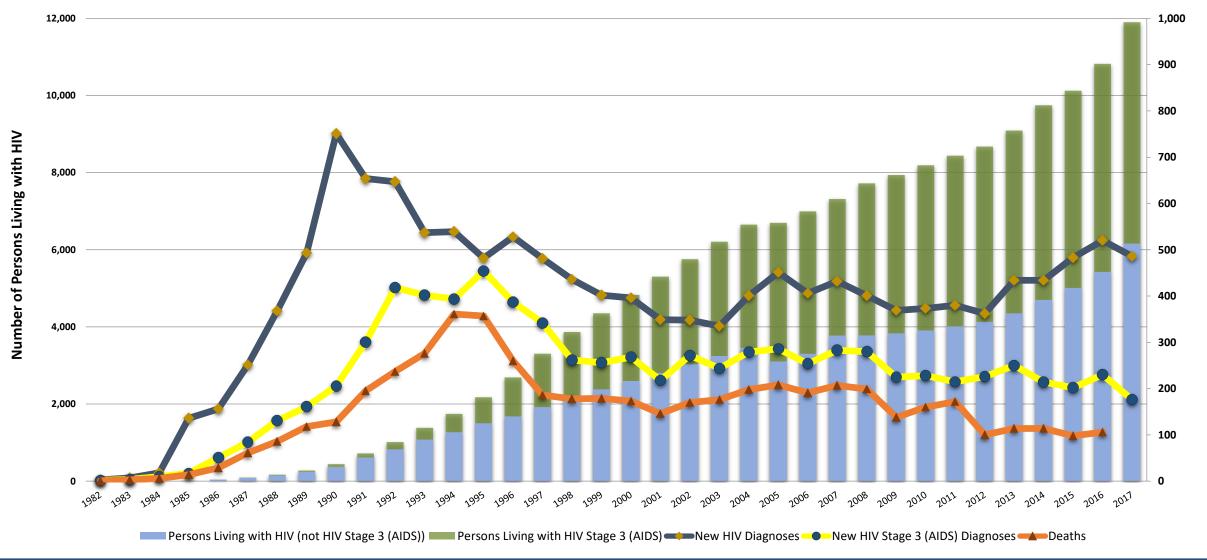
Step 5: HIV Prevention Services

Provide or link clients to appropriate HIV prevention services, including partner services

Step 6: Feedback Loop

Update and improve surveillance data with information obtained through the Datato-Care process to facilitate future use of surveillance data for program purposes

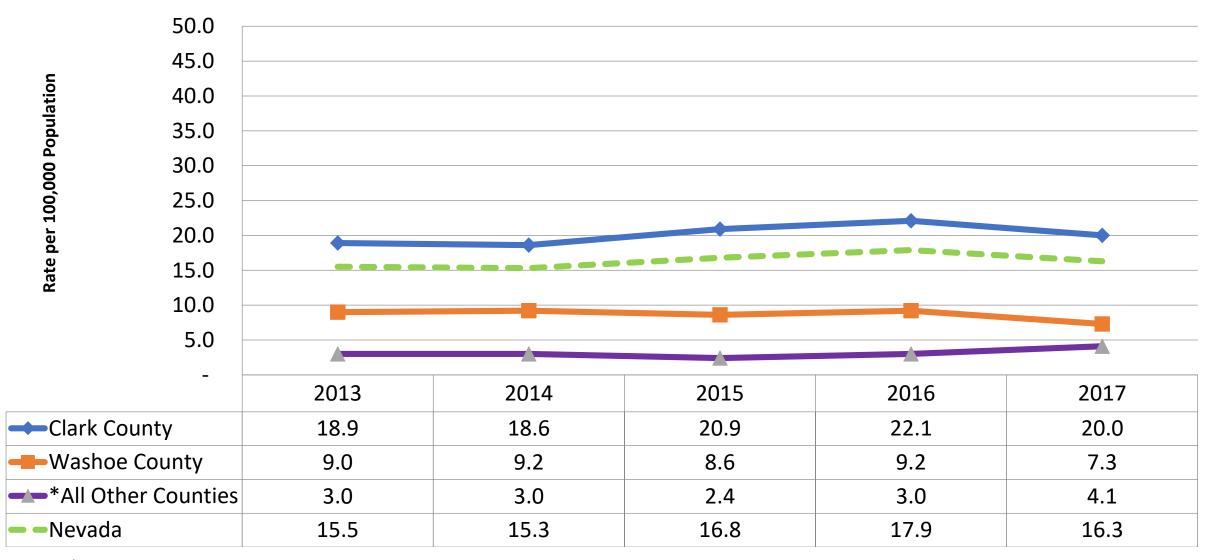
Persons Living with HIV, New HIV Diagnoses, New HIV Stage 3 (AIDS) Diagnoses, and Deaths in Nevada, 1982-2017



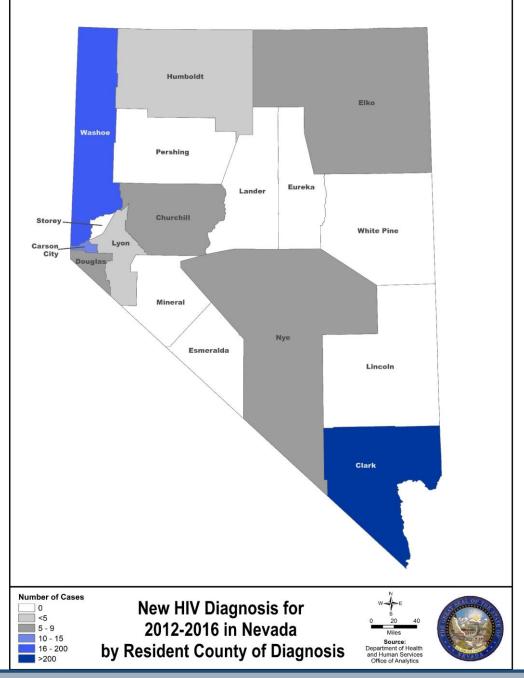
Definition of New HIV Diagnosis

- 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

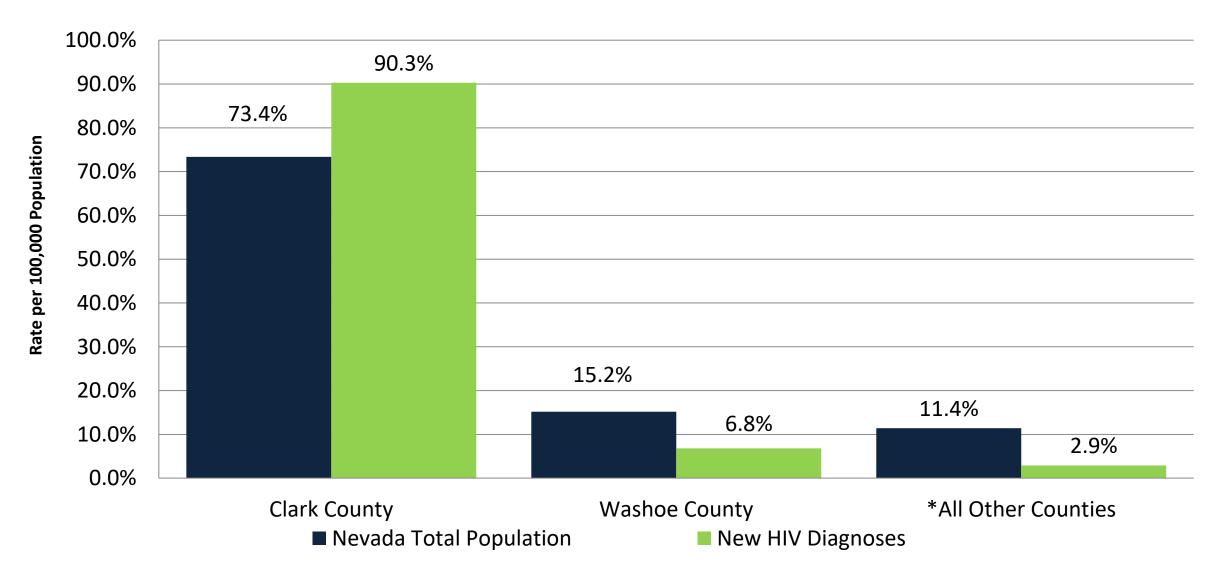
New HIV Diagnoses by County in Nevada, 2012-2017



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

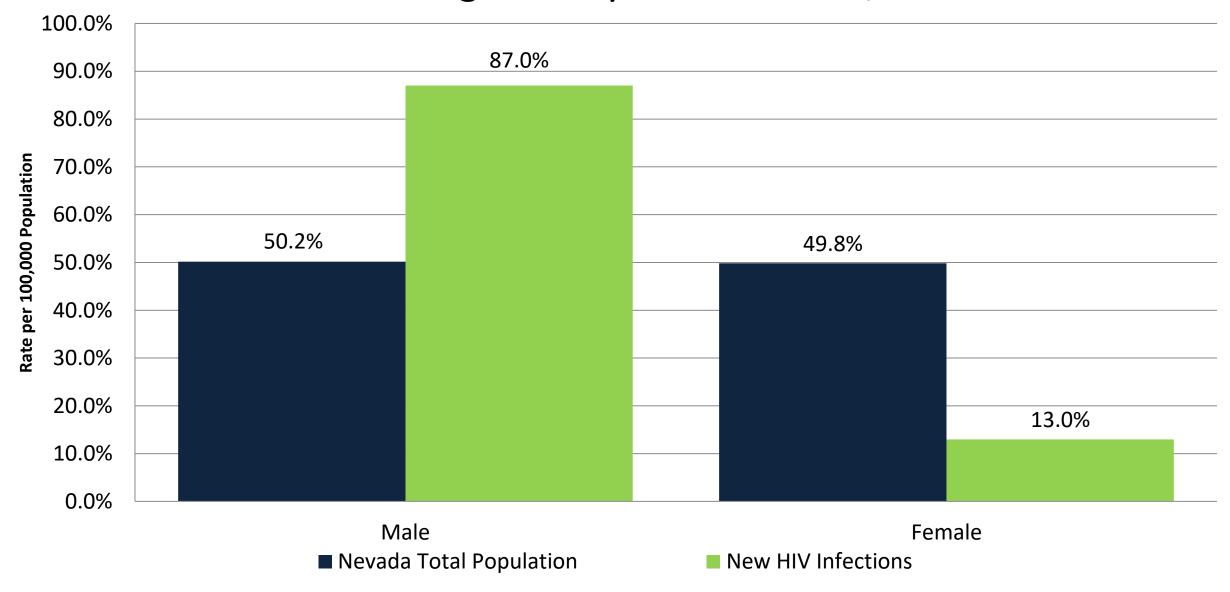


New HIV Diagnoses by Region in Nevada, 2017

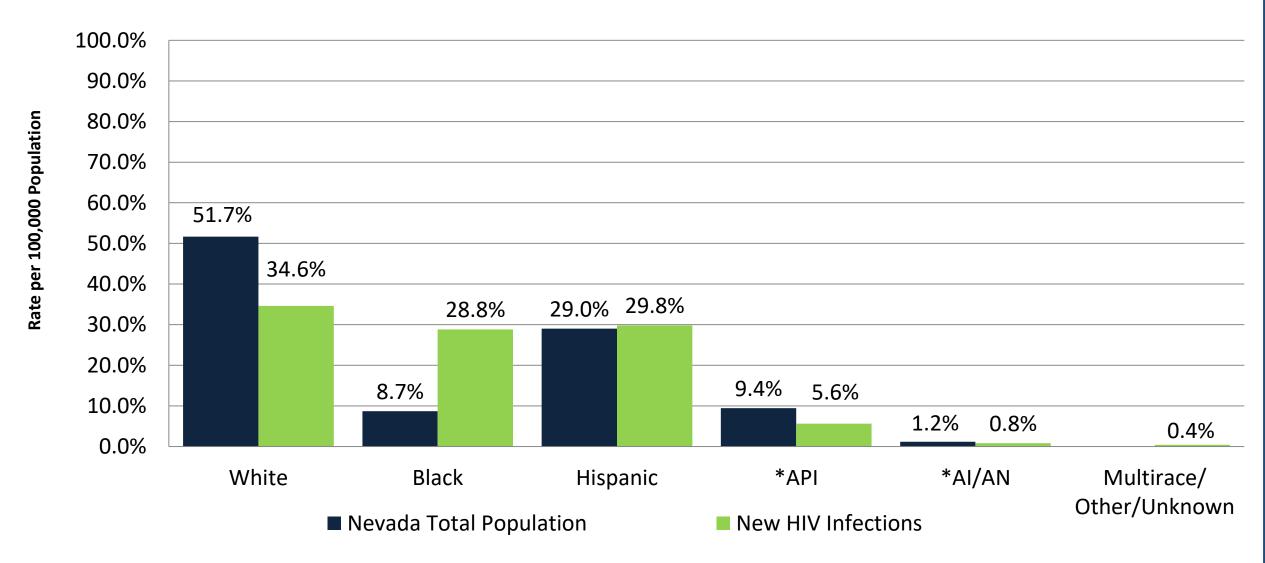


^{*}All other counties include Carson City, Churchill, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Lyon, Mineral, Nye, Pershing, Storey, and White Pine Counties.

New HIV Diagnoses by Sex in Nevada, 2017

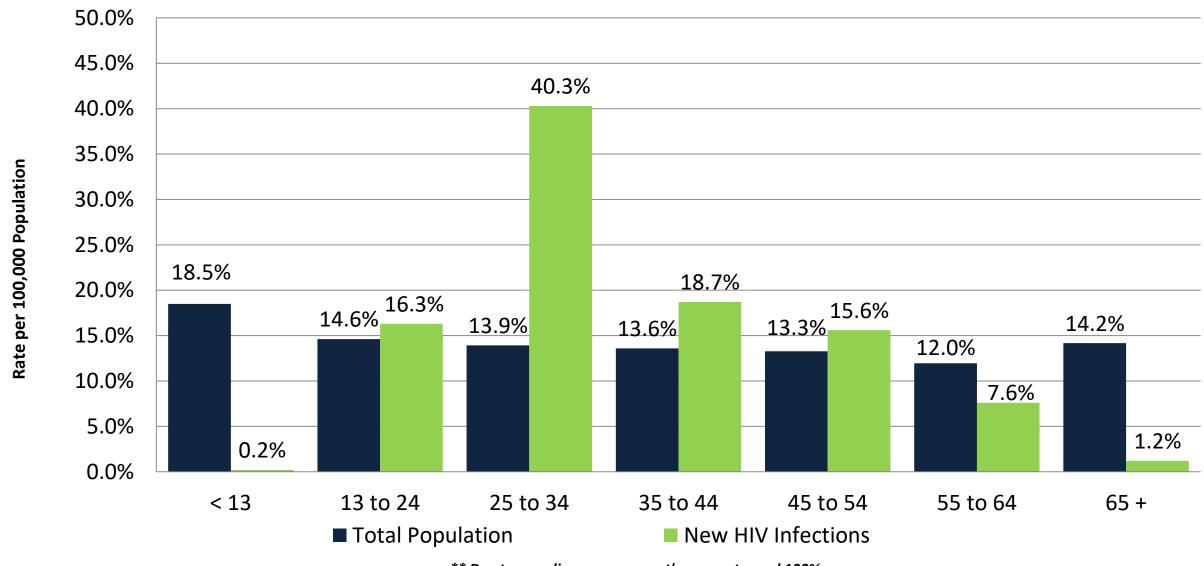


New HIV Diagnoses by Race/Ethnicity in Nevada, 2017*



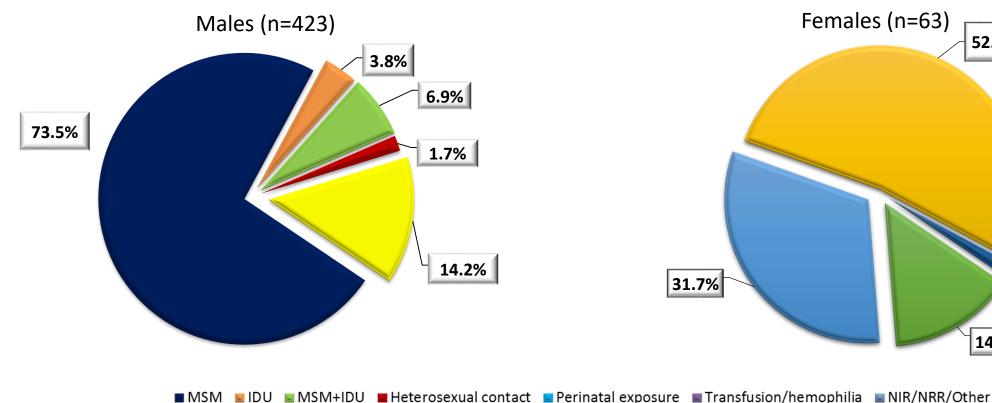
*API- Asian/Pacific Islander; AI/AN- American Indian/Alaskan Native ** Due to rounding some percent's may not equal 100%

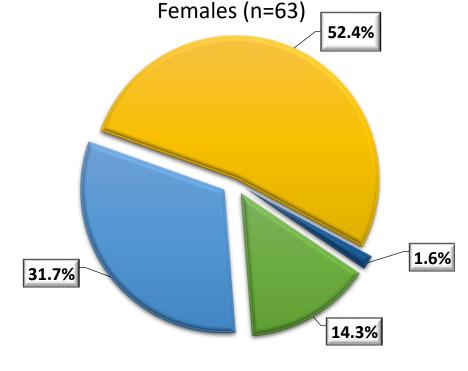
New HIV Diagnoses by Age at Diagnosis in Nevada, 2017**



^{**} 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

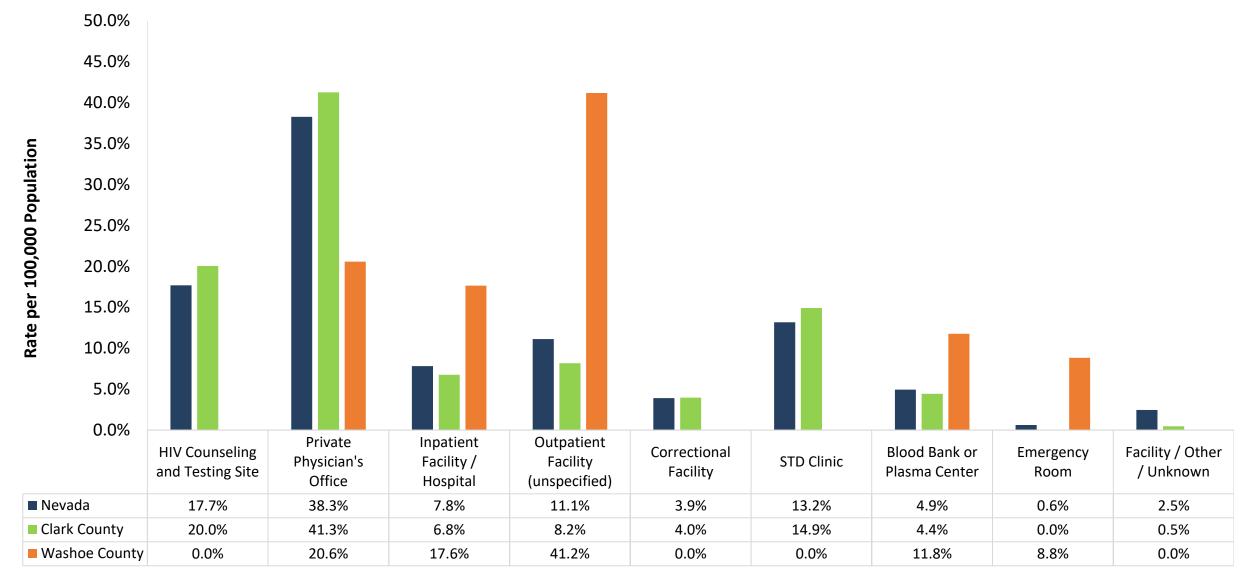
NIR/NRR- No Identified Risk/No Risk Reported,

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~



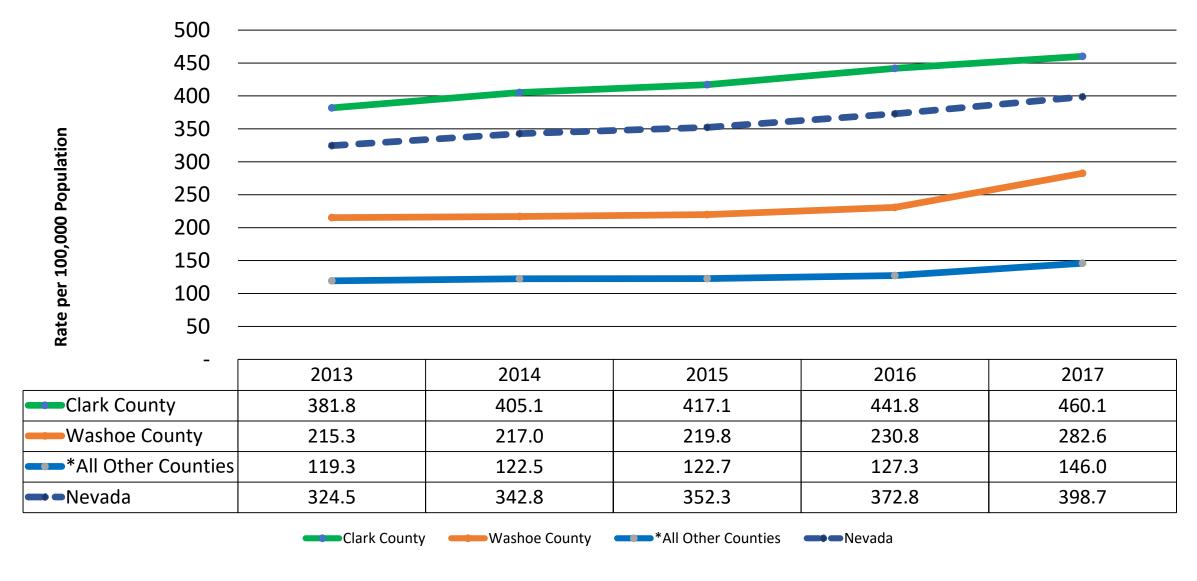
[~]Facility categories: adult HIV clinic, tuberculosis clinic and obstetrics and gynecology clinic reported no new HIV diagnoses.

Definition of Persons Living with HIV (PLWH)

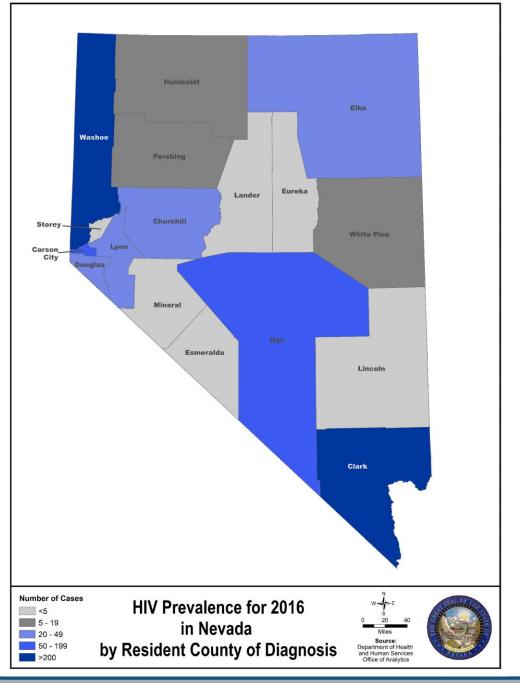
• Includes the total number of persons currently living with HIV and/or HIV stage 3 (AIDS) in Nevada, based on the most current address in eHARS (surveillance database).

• Includes persons who were diagnosed in another state but who currently live in Nevada, as well as persons diagnosed in Nevada.

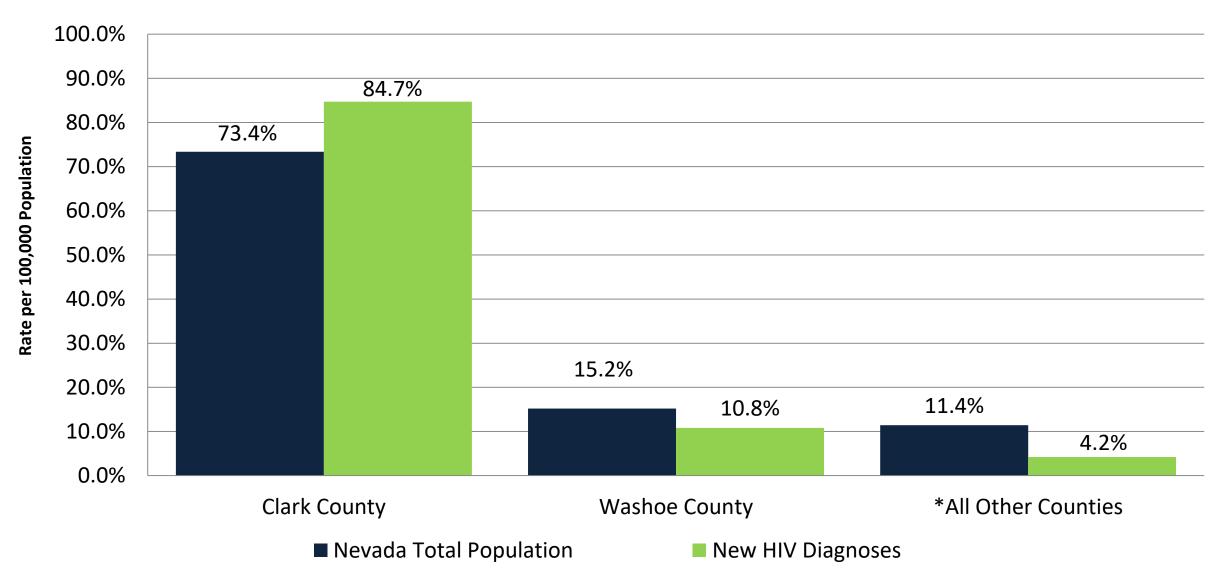
Persons Living with HIV by Region in Nevada, 2017



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

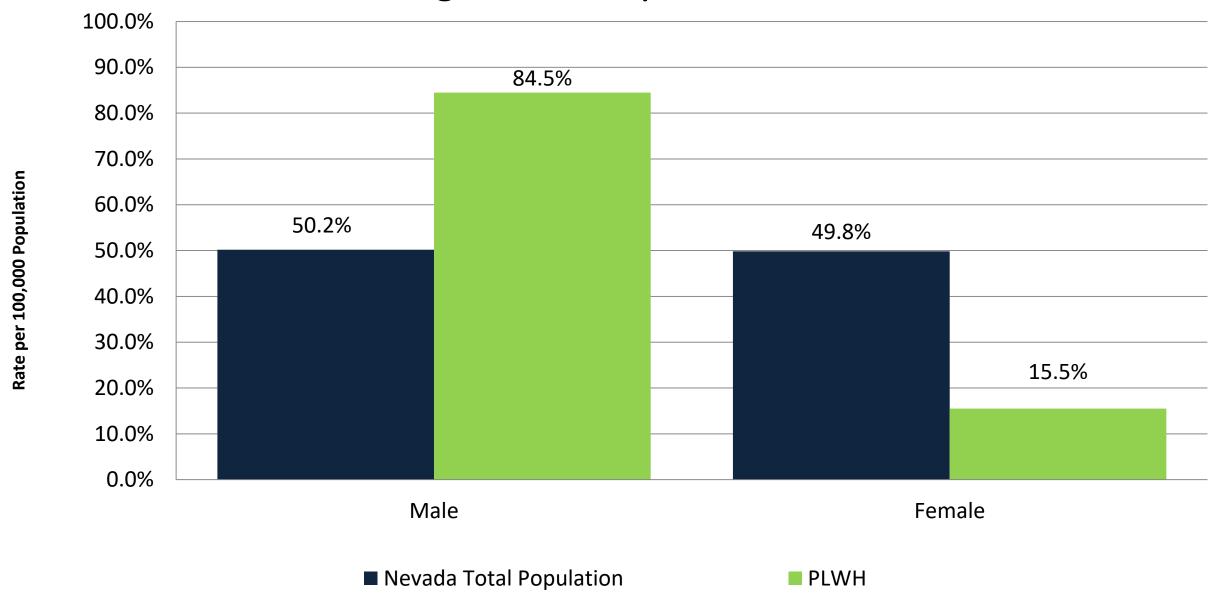


Persons Living with HIV by Region in Nevada, 2017

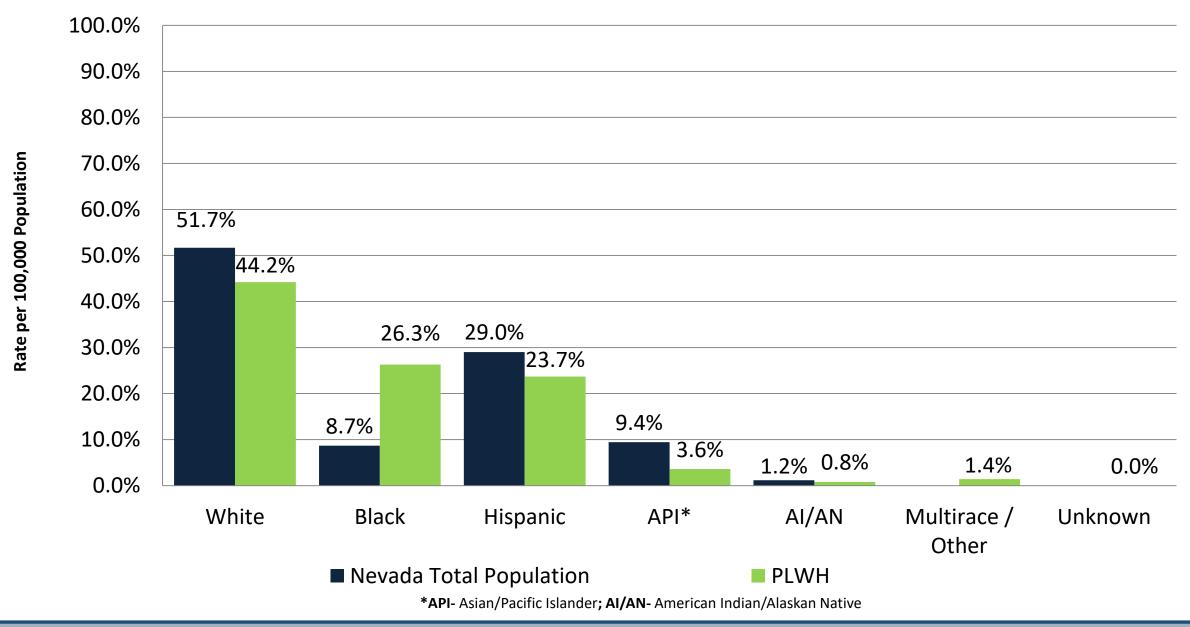


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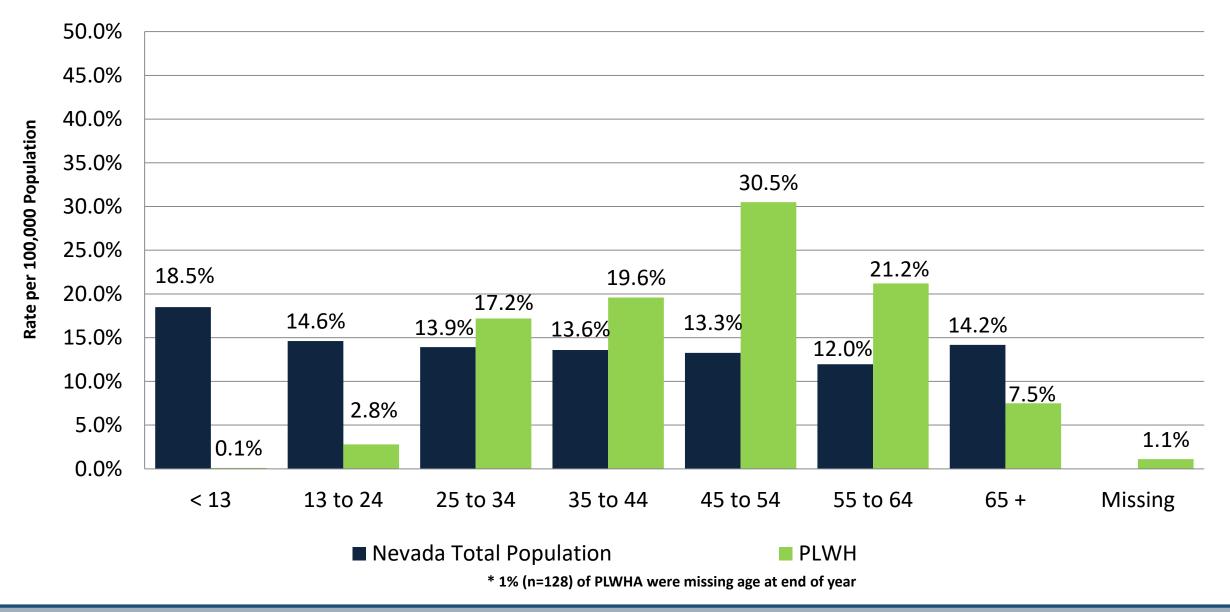
Persons Living with HIV by Sex in Nevada, 2017



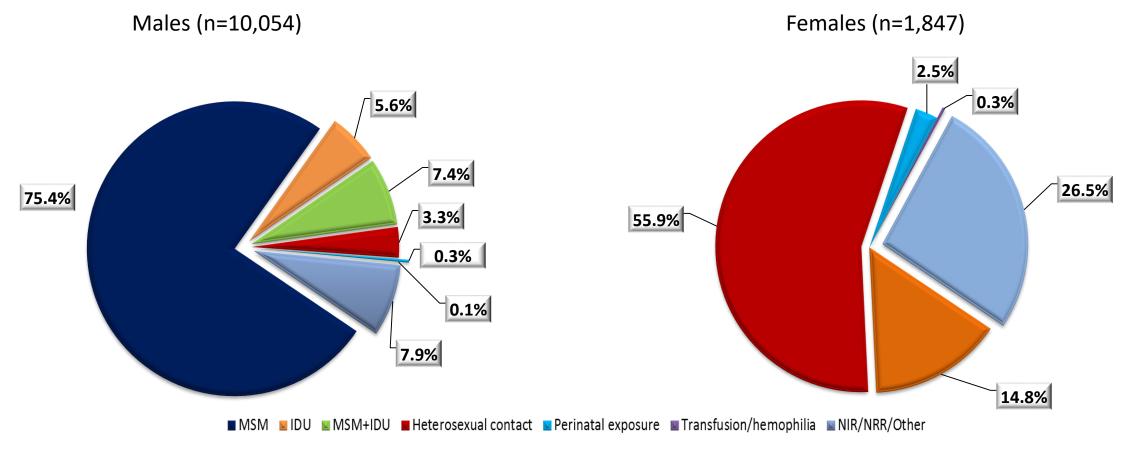
Persons Living with HIV by Race/Ethnicity in Nevada, 2017*



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



Persons Living with HIV by Transmission Category in Nevada, 2017



MSM- Male-to-male sexual contact

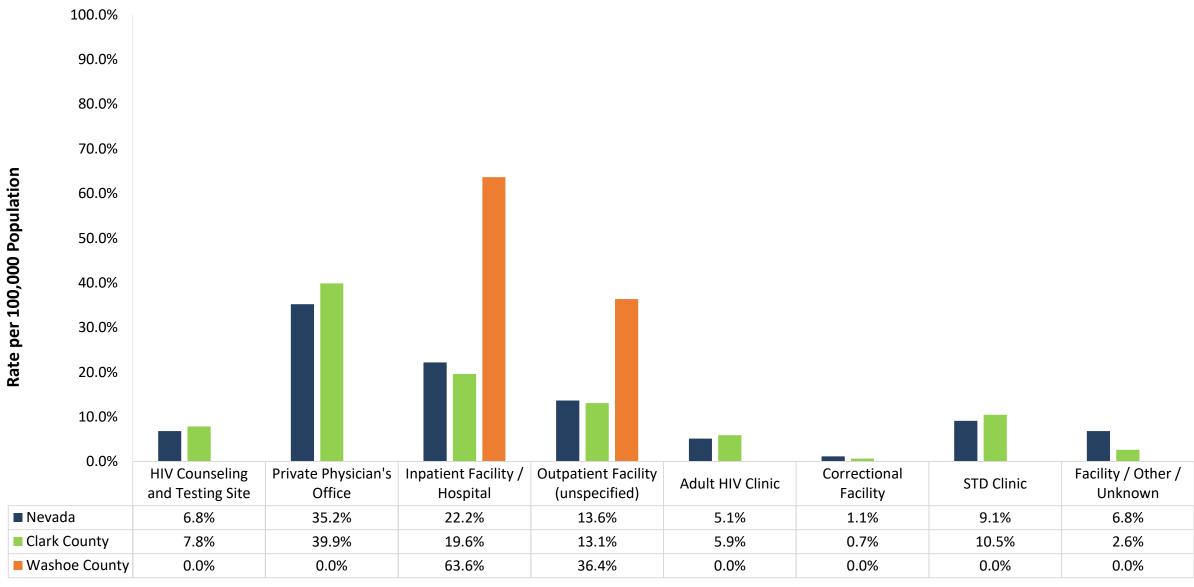
IDU- Injection Drug Use

NIR/NRR- No Identified Risk/No Risk Reported

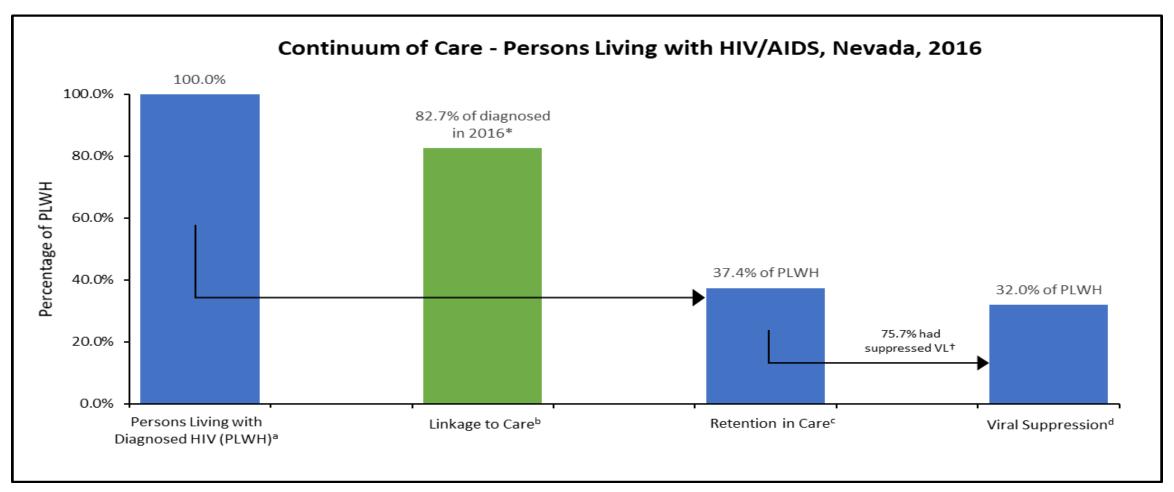
Other- includes perinatal exposure and hemophilia/blood transfusion

- 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.



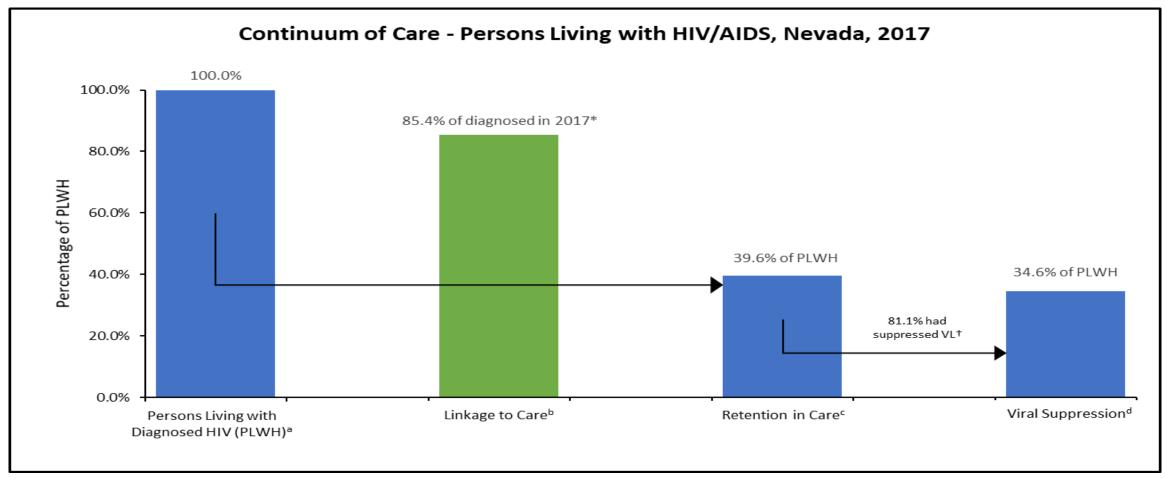
Source: Division of Public and Behavioral Health, HIV/AIDS Reporting System (eHARS), data as of March 2018.

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 ≥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 (<=200 copies/mL) at most recent test during 2016, among those diagnosed with HIV through year-end 2015 and alive at year-end 2016.

† Calculated as number of persons who had suppressed VL (<=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