

nevada

HIV/AIDS Epidemiological Profile



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Executive Summary

Nevada has been experiencing extreme and persistent population growth. The US Census Bureau reported a slight slowing in population growth for Nevada, which had been among the four fastest-growing states each of the last 24 years, to only 1.8 percent between 2007 and 2008, ranking it eighth. Though not yet a majority-minority state, Nevada already has a minority population of 42 percent. As minority populations tend to have disproportionately high rates of disease, birth, and uninsured/underinsured persons, Nevada will need to have the infrastructure in place to provide appropriate health services should the population and disease burden in the state continue to increase. In addition, about 18 percent of Nevada's population lacks health insurance, giving the state one of the highest rankings (43rd) of uninsured persons in the nation. Finally, the United Health Foundation ranked the overall health of Nevada residents 42nd in the nation.

At the end of 2008, a total of 7,940 persons were known to be living with HIV/AIDS in Nevada, nearly half (46 percent) of whom had a diagnosis of AIDS. Currently, there are persons living with HIV in all 17 counties in the state. Declines in the number of deaths of persons with AIDS since 1995 were caused primarily by the slower progression of HIV-associated immune-deficiency among persons who used highly active antiretroviral therapy (HAART) (Centers for Disease Control and Prevention, 1998; Fleming et al., 1998; McNaghten et al., 1999; Palella et al., 1998).

Most new HIV infections continue to be diagnosed in Clark County, where 84 percent of all persons currently living with HIV/AIDS in Nevada reside. Clark County continues to have the highest new HIV diagnosis rates; in 2008, the rate of new HIV infections was 20 cases per 100,000 population. Washoe County, is the next most populous county in Nevada, 10 percent of all persons living with HIV/AIDS were residing here in 2008 and had a rate of 8.0 per 100,000 population of new HIV infections. The rest of the state is grouped into the Frontier and Rural (FaR) areas of Nevada, and 6 percent of the persons living with HIV/AIDS are residing in these 15 counties. The rate of new HIV infections in FaR areas of Nevada was only 2.1 cases per 100,000 population in 2008.

Of the total general population of Nevada, 7 percent are Black. The HIV diagnosis rate for this group continues to be disproportionately high. In 2008, it was 6 times higher than for Whites. In 2001, 27 percent of newly diagnosed HIV infections and 75 percent of newly diagnosed AIDS cases were among Blacks. For all racial groups in Nevada, the proportion of newly diagnosed HIV infections reported among men had increased steadily; men represented 83 percent of new HIV infections in 2008. Although HIV/AIDS rates in women have declined since 2004, rates in Black women have increased significantly. Rates among White women have been relatively stable.

Among Blacks, heterosexual contact has been the predominant mode of exposure since 2004. Among Whites, the predominant exposure remains male-to-male sexual activity. Since 2004, the number of cases among men who have sex with men (MSM) has increased substantially. Although the number of women living with HIV in Nevada has risen, perinatal transmission rates have dropped dramatically. The decrease in transmission rates has been attributed to the introduction of new legislation which improved testing and screening programs for pregnant women and increased the use of antiretroviral therapy in pregnant women and their infants.

The profile reports that White, MSM continue to be the largest group affected by HIV/AIDS in Nevada (2004-2005), followed by injection drug users (IDUs). Ethnic disparities exist for Blacks and Hispanics in Nevada. Native Americans, Asian Pacific Islanders, heterosexuals, and females with and without identifiable risk, have shown small increases in HIV incidence in recent years. Increase in HIV incidence rates among younger age groups has also been documented. Caution should be used in interpreting these increases, as HIV/AIDS incidence rates can fluctuate from year to year.

Results from this Epi Profile will be used to guide the Nevada State HIV Prevention Plan. Based on a review of the data in this report, the statewide HIV Community Planning Groups have set the priority populations.

Background

Acquired Immunodeficiency Syndrome (AIDS) is the most severe manifestation of Human Immunodeficiency Virus (HIV) disease. AIDS was first recognized in 1981 by the Centers for Disease Control and Prevention (CDC). Statewide surveillance for AIDS in Nevada began in 1982. Because the cause for AIDS was unknown at that time, the surveillance case definition included many opportunistic infections and cancers. Persons with AIDS were noted to have abnormalities in their immune systems that left them susceptible to certain infections. As more information became available, the AIDS surveillance case definition was modified in 1993 to emphasize the importance of the CD4+ T-lymphocyte count and the addition of three clinical conditions (pulmonary tuberculosis, recurrent pneumonia, and invasive cancer). The new AIDS definition also retained the 23 clinical conditions found in the previous definition from 1987.

In 1984, HIV was determined to be the cause of AIDS. HIV infects a specific cell of the immune system, the T-lymphocyte (CD4 T-cell), and kills the cell. Very often, HIV infection is without symptoms and people do not know they are infected. Most individuals infected with HIV develop detectable antibodies within 1 to 3 months after they contract the infection. However, they carry the virus in their blood and other body fluids and can infect other persons exposed to these fluids.

According to the American Public Health Foundation, two serologically and geographically distinct types of HIV have been identified that have similar epidemiological characteristics, known as HIV-1 and HIV-2. HIV-2 may have a pathogenicity slightly lower than HIV-1 and a slower disease progression.

The mode of transmission for HIV is through person to person contact, either through unprotected (homosexual or heterosexual) intercourse, contact of abraded skin or mucosa with body secretions (such as blood and semen), usage of HIV-contaminated needles and syringes, blood transfusion, or organ transplantation.

In 1992, Nevada initiated mandatory reporting of HIV infection by name. The purpose was to find persons with early HIV infection and ensure that they were educated about their disease and referred to appropriate treatment.

AIDS cases in this report are cases where an HIV-infected person has developed the disease called AIDS. The transition from HIV to AIDS occurs when the individual's CD4 count drops to below 200 cells/ μ L, the CD4+ T-lymphocyte percentage of total lymphocytes are under 14 percent, or if an opportunistic infection develops. Without proper treatment, HIV infection nearly always leads to AIDS. HIV (not yet AIDS) cases in this report are cases where an HIV-infected person has not yet developed the disease called AIDS. Once an HIV case becomes an AIDS case, the HIV and AIDS surveillance system is updated to reflect that occurrence. This report provides data on both HIV and AIDS as defined above. In the future, the CDC will rely more on HIV disease statistics than AIDS to track HIV/AIDS trends.

The purpose of reporting names of persons infected with HIV is to ensure that infected individuals can be located and provided with the necessary education, ensure appropriate treatment, and allow assistance with partner identification and notification. It also helps to ensure an unduplicated count of HIV cases. This arrangement has allowed Nevada to maintain its HIV and AIDS surveillance system. The overall goal of HIV/AIDS surveillance is to provide current information on HIV/AIDS trends to increase awareness of the disease, identify HIV testing needs, maintain education and prevention efforts, and reduce the incidence of HIV infection. This Epidemiological Profile was made possible with data from these surveillance systems.

The purpose of this profile is to establish the scope of HIV/AIDS in the state of Nevada. By preparing this profile to represent Nevada's communities, it should serve as an essential tool for the work of HIV/AIDS prevention and care planning teams.

Abbreviations

ADAP	AIDS Drug Assistance Program	PRAMS	Pregnancy Risk Assessment Monitoring System
AETC	HIV/AIDS Education and Training Center	RNR	reporting [HIV] not required
AIDS	acquired immunodeficiency syndrome	RWCA	Ryan White Comprehensive AIDS Resources Emergency (Act)
AI/AN	American Indian/Alaskan Native	SAMHSA	Substance Abuse and Mental Health Services Administration
API	Asian/Pacific Islander	SNHD	Southern Nevada Health District
ASD	Adult/Adolescent Spectrum of Disease study	STD	sexually transmitted disease
BRFSS	Behavioral Risk Factor Surveillance System	TB	tuberculosis
CARE	Comprehensive AIDS Resources Emergency (Act)	YRBSS	Youth Risk Behavioral Surveillance System
CDC	Centers for Disease Control and Prevention	VA	Veteran's Administration
CCHHS	Carson City Health and Human Services	WCHD	Washoe County Health District
CHIP	Context of HIV Infection Project		
CIDUS	Collaborative Injection Drug Users Study		
DAWN	Drug Abuse Warning Network		
DHAP	Division of HIV/AIDS Prevention (CDC)		
EHRAP	Expanded HIV Risk Assessment Project		
eHARS	HIV/AIDS Reporting System		
EMA	eligible metropolitan area		
FaR	Frontier and Rural		
HIV	human immunodeficiency virus		
EPI	epidemiology		
IDU	injection drug user		
HRSA	Health Resources and Services Administration		
MSM	men who have sex with men		
NCHSTP	National Center for HIV, STD, and TB Prevention (CDC)		
NDOC	Nevada Department of Corrections		
NIR	no identified risk		
NRR	no reported risk		
OOS	out of state		
OI	opportunistic infection		
PMD	private medical physician		
PLWA	people living with AIDS		
PLWH	people living with HIV		

Definitions

Adult AIDS

An adult AIDS classification is given to a person greater than or equal to 13 years of age at the time of diagnosis who has a confirmed HIV infection and an AIDS-defining opportunistic infection or a CD4+ cell count of less than 200 cells/ μ L or 14 percent.

Adult HIV Infection

Adult HIV infection is classified as a confirmed HIV infection among a person greater than or equal to 13 years of age at the time of diagnosis.

Age

Age is classified as the age of the individual at the time they are diagnosed with either HIV or AIDS.

Antibody

A substance produced by the body to counteract infectious agents.

Antigen

A foreign substance that is capable of stimulating immune response.

Antiretroviral drugs

Refers to drugs or agents that affect the capability of retroviruses such as HIV to reproduce; prescribed for treatment of retroviral infections such as HIV infection. The three common groups of antiretroviral agents for the treatment of HIV are: protease inhibitors, nucleoside analogs, and non-nucleoside reverse transcriptase inhibitors.

CD4 T-lymphocytes

A specialized type of cell that coordinates the immune system and is the main target of HIV (also called 'helper' T-cells).

Clinical status

Clinical status is determined as of the end of the calendar year or at date of death.

Co-morbidity

The occurrence of more than one illness, disease, or infection at the same time.

Concurrent HIV/AIDS

An AIDS diagnosis within 31 days of an HIV diagnosis is considered concurrent. Persons concurrently diagnosed with HIV and AIDS are included in the totals of both HIV diagnoses and AIDS diagnoses.

Confidential information

Any information about an identifiable person or establishment, when the person or establishment providing the data or described in it has not given consent to make that information public and was assured confidentiality when the information was provided.

Counseling and Testing

In the content of HIV/AIDS Surveillance, 'Testing' refers to testing of an individual for HIV infection. This service is generally accompanied by patient 'Counseling' before and after the test regarding the test, test results, interpretation of the test, and other related issues.

eHARS and STD*MIS

HIV/AIDS and STD database management systems for tracking surveillance diseases.

ELISA (enzyme-linked immunosorbent assay) test or EIA (enzyme immunosorbent assay)

A blood test that detects antibodies to HIV. The ELISA is commonly used as the initial screening test for the presence of antibodies to HIV. The ELISA test does not detect the disease AIDS but only indicates if viral infection has occurred. A positive HIV ELISA test is confirmed by a second, more specific test, such as the Western blot test.

Exposure

Contact with or possession of a characteristic that is suspected to influence the risk of developing a particular disease.

HIV/AIDS surveillance

The systematic collection, analysis, interpretation, dissemination, and evaluation of population-based information about persons with a diagnosis of HIV infection, persons with a diagnosis of AIDS.

Immunosuppression or immune deficiency

A state of the body where the immune system defenses do not function normally, thus making a person susceptible to diseases that they would not ordinarily develop; this can be the result of illness or the administration of certain drugs.

Definitions

Incubation period

The time interval between exposure to an infectious agent and the first clinical evidence of the resulting illness.

Initial Case Reports

The first report, whatever the source, which alerts the surveillance program to a case or possible case of HIV or AIDS. The initial report may be relatively complete and require little or no follow-up, or it may contain only minimal information and serve as a trigger for a more thorough investigation. Laboratory reports often fall into the latter category.

Morbidity

The occurrence of an illness, disease, or injury.

New HIV Infection (Incidence)

Number of cases newly diagnosed HIV infections over a given period of time, usually a year. In HIV surveillance, new diagnoses do not necessarily represent new infections, as newly diagnosed cases may have been infected for many years. Thus, only some newly diagnosed cases are also incident cases.

Opportunistic infection

Those diseases, which are caused by agents, that are commonly present in our bodies or environment but cause disease only when there is a change from normal, healthy conditions – such as when the immune system becomes suppressed.

Out-of-care

An HIV-infected person that has not received an HIV Detection/Antigen/Viral Load or CD4 (T-helper) laboratory test within one year or is not known to be receiving primary care services is considered to be out-of-care.

Partner notification

Refers to the process of informing the partners of HIV or STD infected individuals about their possible exposure to infection.

PCR (polymerase chain reaction)

A laboratory technique used to measure viral load.

Pediatric AIDS

A pediatric AIDS classification is given to a child less than 13 years of age at the time of diagnosis who has a confirmed HIV infection and an AIDS-defining opportunistic infection or a CD4+ cell count of less than 200 cells/ μ L or 14 percent.

Pediatric HIV infection

A pediatric HIV infection is classified as a confirmed HIV infection among a child less than 13 years of age at the time of diagnosis.

Persons Living with HIV/AIDS (Prevalence)

Total number of persons currently living with AIDS and/or HIV in Nevada, based on the most current address in eHARS.

Provider

Any source of HIV/AIDS surveillance information, such as a physician, nurse, dentist, pharmacist, or other professional provider of health care or hospital, health maintenance organization, pharmacy, laboratory, STD clinic, TB clinic, or other health care facility that forwards data into the surveillance system.

Rate

The rapidity at which a health event occurs as indicated by the number of cases per number of people.

Sentinel Health Event

Any event which has the potential to affect health, or result in death, disease, physical, or psychological injury.

Seroconversion

The development of antibodies to a particular antigen. When people develop antibodies to HIV, they “seroconvert” from HIV antibody negative to antibody-positive.

Serostatus

Positive or negative results of a diagnostic test, such as an ELISA, for a specific antibody.

STD (Sexually Transmitted Disease)

A group of diseases that are transmitted through sexual contact, usually including gonorrhea, herpes, Chlamydia, syphilis, and genital warts.

Sexually Transmitted Disease Surveillance

Presents surveillance information derived from the official statistics for the reported occurrence of nationally notifiable STDs in the United States, test positivity and prevalence data from numerous prevalence monitoring initiatives, sentinel surveillance of gonococcal antimicrobial resistance, and national health care services surveys.

Surveillance information

Details collected on an individual or individuals for completing routine or special surveillance investigations. Examples of HIV/AIDS surveillance information are the HIV/AIDS case report forms, ancillary notes about risk investigations and related questionnaires, notes about suspect cases, laboratory reports, ICD9/10 line lists, discharge summaries, death certification, and drug data stores.

Transmission risk

HIV/AIDS risk behavior associated with HIV transmission. The primary risk factors that have been identified are:

Men who have sex with men: includes males with reported sexual contact with another male, and males with no definitive risk and with history of a rectal STD or proctitis.

Injection drug user: includes persons who took non-prescribed drugs by injection, intravenously, intramuscularly or subcutaneously.

Heterosexual contact: includes persons who had heterosexual sex with an HIV-infected person, an injection drug user, or a person who has received blood products; for females only, history of heterosexual prostitution, multiple sex partners of the opposite sex, sexually transmitted disease, crack/cocaine use, heterosexual sex with a bisexual male, or unspecified probable heterosexual transmission.

Perinatal transmission: a risk factor for infants who were infected during gestation, birth or postpartum through breastfeeding to an HIV-infected mother.

Other transmission risks: include hemophilia, receipt of transfusions or transplants, and non-perinatal risk in pediatric cases (<13 years of age).

Unknown or Under Investigation

Persons who have no risk information reported by the provider or an expanded investigation has not been complete for them.

Viral Load

Refers to the number or amount of virus in an infected individual. For HIV, it is expressed as the number of HIV RNA copies/ml.

Western blot

A blood test used to detect HIV antibodies. The Western blot is used to “confirm” the results of the ELISA or other HIV screening tests.

Data Sources

Data were compiled from a variety of sources to provide the most complete picture possible. When interpreting the data, keep in mind that each of the data sources has strengths and limitations. A brief description of each of the data sources follows.

HIV/AIDS Reporting System (eHARS): Standardized case report forms are used to collect sociodemographic information, mode of exposure, laboratory and clinical information, vital status (i.e., living or dead), and referrals for treatment or services. HIV surveillance data may underestimate the number of recently infected persons because some infected persons either do not know they are infected or have not sought testing.

STD Reporting System (STD*MIS): The Nevada State Health Division, Office of Epidemiology STD Control Program conducts statewide surveillance to determine the number of reported cases of STDs and monitor trends. Other services include partner counseling and, to help reduce the spread of STDs, referral services for examination and treatment. In Nevada, chancroid, chlamydia, gonorrhea, and syphilis are reportable STDs. STD surveillance data can serve as a surrogate marker for unsafe sexual practices and demonstrate the prevalence of changes in a specific behavior. In addition, certain STDs can facilitate the transmission or acquisition of HIV infection.

Youth Risk Behavior Survey (YRBS): The YRBS is a self-administered questionnaire given every 2 years to a representative sample of students in grades 9 through 12 at the state and local level. The Nevada YRBS collects information on 6 categories of behaviors. The YRBS is a standardized questionnaire, so comparisons can be made across participating jurisdictions. Also, because the YRBS questionnaire is administered in school, the data are representative only of adolescents who are enrolled in school and cannot be generalized to all adolescents.

Henry J. Kaiser Family Foundation (statehealthfacts.org): The Henry J. Kaiser Family Foundation developed statehealthfacts.org as a project to provide free, up-to-date, and easy to use health data for all 50 states. On this website, HIV/AIDS data is available based on annual and cumulative counts, state rankings, and national averages. For this report, all data was pulled from the most current report and based on the most current national ranking which were in 2007.

Nevada State Demographer: The Interim 2008 Population Estimates are based on 2005 Population Estimates and 2008 County Population Estimates provided by the Nevada State Demographer on June 2006 and October 2008, respectively. The Interim 2008 population estimates were updated on June 2009 by the Nevada State Health Division, Bureau of Health Planning, Statistics and Emergency Response.

Ryan White Data: Data is collected from two sources: 1) Catalyst RX Pharmacy Benefits Manager. They provide a comprehensive list of all prescriptions for our 3 groups of clients. (ADAP-AIDS Drug Assistance Program, COB-Continuation of Benefits, SPAP-State Pharmacy Assistance Program). These programs are either paying for the total amount of the drugs or the co-pays and deductibles. 2) Eligibility screening – This process requires clients to renew their status every 6 months to maintain eligibility. The active client list is used to determine caseload for the program. Eligibility screening is currently handled by two separate systems (access DB & ARIES). It is a goal to incorporate this into a single database in the future.

TB Reporting System (NEDSS): Nevada's Tuberculosis data is collected using the Report of Verified Case of Tuberculosis (RVCT) standardized data collection form. As of January 2009, the Nevada TB Program manages the data via the National Electronic Disease Surveillance System (NEDSS). Nevada submits TB data electronically to the Centers for Disease Control and Prevention (CDC) Division of TB Elimination (DTBE).

Nevada Division of Mental Health and Developmental Services, Substance Abuse Prevention and Treatment Agency 2009 Epidemiology Profile.
http://mhds.nv.gov/index.php?option=com_content&task=view&id=108&Itemid=95

Bureau of Justice Statistics: <http://bjs.ojp.usdoj.gov/>

CDC 2007 HIV/AIDS Surveillance report:
<http://www.cdc.gov/hiv/topics/surveillance/resources/reports/index.htm#surveillance>

Profile Preparation

When making planning decisions, it is important to consider the overall strengths and limitations of this document. Although the profile is comprehensive and draws from a number of data sources, there are many things that the profile cannot explain. While the HIV/AIDS surveillance system in Nevada is extensive, it is based on data on people who have been tested confidentially for HIV. Consequently, HIV infections are under-detected and underreported because only persons with HIV who choose to be tested confidentially are counted. Also, persons are tested at differing times after they become infected, and many persons are not tested until HIV infection has progressed to AIDS. Thus, it is important to remember that the data in this report do not necessarily represent the characteristics of persons who have been recently infected with HIV, nor do they provide a true measure of HIV incidence.

The numbers of persons reported do not reflect the total burden of HIV disease in Nevada. Many persons are infected but do not know it because they have not been tested and therefore are not reported to health authorities. In the U.S., it is estimated that one-quarter to one-third of people infected with HIV are unaware of their status.

- We do not have an estimate of persons in Nevada who carry the virus but do not know it. One of the main goals of the state HIV/AIDS programs is to increase HIV testing in persons who have high-risk behaviors for infection, identify those infected, and refer them for treatment and prevention services, thus reducing the number of HIV infected persons who do not know they are infected and thereby reduce HIV transmission.

- The analysis of data from the Rural Counties in Nevada is limited by the relatively small size of their populations and low numbers of cases.

- Nevada is the 7th largest state in the nation in total square miles. Yet it has a relatively small population, with population centers concentrated in areas around the state, from the highly populated cities of Las Vegas and Henderson in Clark County to the frontier communities in Nevada's rural counties. Nevada has three local health authorities and one state health authority: Southern Nevada Health District, with central offices in Las Vegas; Washoe County Health District, with central offices in Reno; Carson City Health and Human Services with central offices in Carson City; and the Nevada State Health Division, with central offices in Carson City, which is the health authority in all of the counties other than Carson, Clark, Douglas, Lyon, and Washoe. Because of Nevada's unique population distribution, these authorities maintain an ongoing dialogue.

- Persons with unrecognized and untreated HIV infection may not have symptoms for years. The average time from untreated HIV infection to AIDS is eight to ten years. Many drugs are now available to treat HIV infection. The usual regimen is a combination of drugs that are taken daily. The goal of treatment is to reduce the amount of virus in the blood to "undetectable" levels by laboratory methods, and to maintain a level of T-lymphocytes that keeps the immune system function intact. When a person with HIV infection stays on an effective treatment regimen they may never reach the AIDS stage. Therefore, AIDS surveillance will not be a true indicator of the burden of HIV disease in our communities. The AIDS and HIV surveillance system is updated to reflect that occurrence. This report provides the results of both types of cases.

Profile Preparation

This profile was prepared by the HIV/AIDS Surveillance Program in the Nevada State Health Division's Office of Epidemiology in the Bureau of Health Planning, Statistics, and Emergency Preparedness. This profile was prepared in close collaboration with Nevada Ryan White and the HIV Prevention programs, the Northern and Southern Nevada HIV Planning Councils, as well as the Centers for Disease Control and Prevention.

This report used the following statistical methods to measure the effect of HIV/AIDS on specific populations, adjust for delays in reporting, and account for cases with missing risk information:

- Based on CDC guidance, all information for cases is based on the date of HIV or AIDS diagnosis and not on the report date. This calculation provides a more accurate estimation of when the cases were diagnosed with HIV or AIDS; however, diagnosis date does not necessarily represent when the case was infected with HIV, but the date of confirmatory tests.
- HIV prevalence estimates of persons living with HIV (not AIDS) and AIDS were calculated based on most current residence in eHARS. Cases were included in this estimate if they had a current residence in Nevada; cases may or may not have been diagnosed in Nevada. This method may under report or over report the number of persons living in Nevada due to a delay in relocation information on cases.
- New HIV infections and AIDS are based on date of diagnosis and only include cases whose residence at HIV or AIDS was Nevada. This is also known as "HIV Infection." Data include persons with a diagnosis of HIV infection (not AIDS), a diagnosis of HIV infection and a later diagnosis of AIDS, or concurrent diagnoses of HIV infection and AIDS.
- Case rates were calculated for the 12-month period per 100,000 population. For these rates, denominators were derived from the 2008 interim population estimates. For incidence estimates, the numerator is the number of new cases that were diagnosed during the 12-month period; for prevalence estimates, the numerator is the number of persons currently living with HIV/AIDS in Nevada.
- This report is based on 2008 data to allow time for reporting delay. Reporting delay refers to the time between the diagnosis of a case and receipt of the report by the health department. Cases recently diagnosed may not yet have been reported.
- Regarding "no reported risk or no identified risk" the cases that have been diagnosed recently are more likely to be reported without a specified risk (exposure). To provide data on the reclassification of risk over time, the cases with missing risk information have been assigned to the "NRR/NIR" risk category.
- Race and ethnicity information has been abbreviated and sometimes been put into collapsed categories due to small sample size. For ease in reading, two of the race categories have been abbreviated. White, not Hispanic will be shortened to White and Black, not Hispanic to Black, Asian Pacific Islander to API, and American Indian/Alaskan Native AI/AN.
- Death data for this report is based on cases whose most current residence was Nevada and cause of death may not necessarily have been due to HIV or AIDS. Deaths that occur in Nevada are reported to HIV/AIDS Surveillance Program and are reflected in case records; therefore, cases that have died out of state may not be reflected in this data.
- All data in this report reflects only cases that meet CDC eligibility for a case. CDC eligibility criteria includes: confirmatory HIV or AIDS lab results (or OI diagnosis from physician), birth sex, race/ethnicity, vital status, date of birth, and state number.
- Due to a small sample size in the FaR areas of Nevada, data is displayed in this report as Clark County, Washoe County, and All Other Counties. All Other counties include: Carson City, Lyon, Douglas, Elko, Nye, Churchill, Humboldt, White Pine, Pershing, Lander, Mineral, Storey, Lincoln, Eureka, and Esmeralda.

Profile Description

Organization of the Profile

This epidemiological profile presents specific information and data regarding the current status of HIV/AIDS in Nevada. The information contained in this profile will describe the general population in the state, the people who live with HIV/AIDS, and those who are most at risk for contracting HIV in the future.

The purpose of this complete Epi Profile is to serve as a current resource that includes figures for data from 2004 through 2008. This profile has been compiled to serve as an evaluation tool for justifying current HIV programs and policies in Nevada. Epidemiological information is crucial for prioritizing and targeting population groups at risk for contracting HIV. Defining HIV/AIDS issues can better equip local health districts, the Department of Corrections, and the Nevada State Health Division (NSHD) in addressing HIV/AIDS prevention policies in the state.

The information in this report is for statewide planning, but some regional data are presented. Detailed regional information is available within regional HIV/AIDS profiles. Funding for Nevada's HIV prevention and Surveillance programs comes from a cooperative agreement between the Centers for Disease Control and Prevention (CDC) and the Nevada State Health Division. CDC requires that the Nevada HIV Prevention Community Planning Groups (CPGs) utilize the most up-to-date and accurate epidemiological and demographic data available in setting priorities, and in the development of goals and objectives to guide and coordinate future HIV prevention efforts. The Epidemiological and Capacity Building and Evaluation component of the HIV/AIDS Surveillance Program provides the funding to compile the HIV/AIDS Epidemiological Profile and updates.

The epidemiologic profile is organized into 2 main sections, within which the 5 key questions are addressed.

Section 1: Core Epidemiologic Questions

This section provides the reader with an understanding of the characteristics of the general population in Nevada, the distribution of HIV disease, and a detailed look at persons at risk for HIV infection. The section is organized around 3 key questions:

Question 1: What are the sociodemographic characteristics of the general population in Nevada? Orients the reader to the overall demographic and socioeconomic characteristics of the general population of Nevada.

Question 2: What is the scope of the HIV/AIDS epidemic in Nevada? Examines the effect of the HIV/AIDS epidemic on a number of population groups in Nevada to help planners focus prevention and care services.

Question 3: What are the indicators of risk for HIV/AIDS infection in Nevada? Provides a detailed look at high-risk populations. Examines direct measures of risk behaviors associated with HIV transmission and indirect measures that may serve as indicators of high-risk behavior.

Section 2: Ryan White HIV/AIDS CARE Act Special Questions and Considerations

This section focuses on questions that pertain to HRSA HIV/AIDS care planning groups. Section 2 describes access to, use of, and standard of care among persons in Nevada who are HIV-infected. It is organized around 2 key questions:

Question 1: What are the patterns of utilization of HIV services of persons in Nevada? Characterizes the patterns in the use of services by a number of the populations living with HIV/AIDS in Nevada. Information is provided from HRSA-funded programs as well as supplemental studies that examine specific aspects of HIV care in Nevada.

Question 2: What are the number and characteristics of persons who know they are HIV-positive but who are not receiving primary medical care? Describes current studies in Nevada to assist in assessing the unmet need of persons who know they are HIV-positive, but who are not in care. Presents special studies in which persons living with HIV/AIDS are asked about their service needs and their perceptions of care in Nevada.

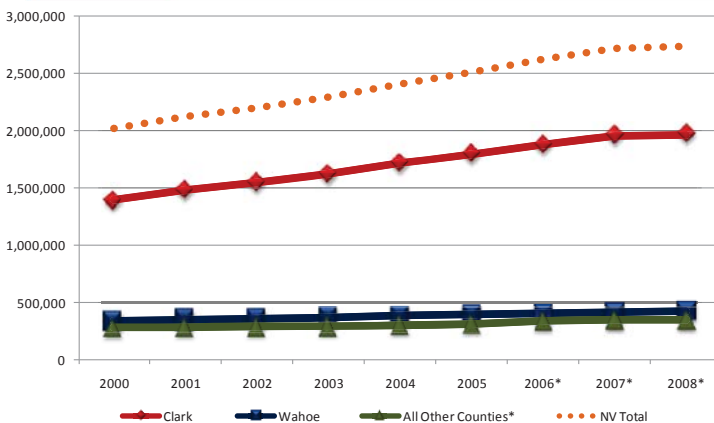
Section 1: Core Epidemiological Questions

Question 1: What are the socioeconomic and demographic characteristics of the general population in Nevada?

POPULATION OF NEVADA:

Nevada has been experiencing extreme and persistent population growth. The US Census Bureau reported a slight slowing in population growth for Nevada, which had been among the four fastest-growing states each of the last 24 years, to only 1.8 percent between 2007 and 2008, ranking it eighth. Though not yet a majority-minority state, Nevada already has a minority population of 42 percent. As minority populations tend to have disproportionately high rates of disease, birth, and uninsured/underinsured persons, Nevada will need to have the infrastructure in place to provide appropriate health services should the population and disease burden in the state continue to increase.

Figure 1 Population of Nevada by County: 2000-2008



Nevada is comprised of four major health authorities that provide public health services in their communities: Southern Nevada Health District (Clark County), Washoe County Health District (Washoe County), Carson City Health and Human Services (Carson City), and the Nevada State Health Division (NSHD) Frontier and Rural Public Health Service Program. Though the tribal reservations in rural and frontier Nevada function as a separate jurisdiction in Nevada, the NSHD works closely with Indian Health Services (IHS) staff to provide technical assistance if needed. Though there is an Inter-Tribal Council of Nevada and an Indian Health Board, each tribe and reservation functions as a unique entity.

HEALTH DISPARITIES:

In 2004, Nevada ranked 35th in overall health care expenditures and 47th for health care spending per capita. Based on state government health expenditures, Nevada ranked 40th nationally. In rural and frontier Nevada, the average population to one primary care provider, not including RNs, is 1,203:1, as compared to the urban areas with a ratio of 892:1. Douglas, Lyon, and Elko counties have the largest infrastructure of licensed primary care providers in the rural and frontier counties. Some counties, including Esmeralda, Eureka, and Storey, do not have any licensed primary care physicians. Another continuing workforce issue impacting the public health programs statewide is the nursing shortage. Nevada continues to rank first nationally in the nursing shortage. Further, Esmeralda and Eureka rely solely on RNs to provide health services in their counties. Ensuring basic medical services are provided throughout the state continues to be a challenge.

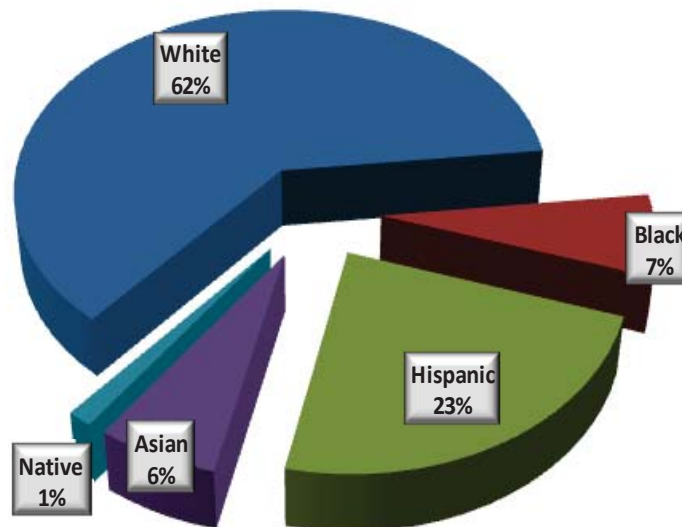
Table 1 Population of Nevada by County: 2008

	County	Number of Population	% of Total Population
1	Clark	1,967,716	72%
2	Washoe	423,833	15.5%
3	Carson City	57,600	2.1%
4	Lyon	55,820	2.0%
5	Douglas	52,131	1.9%
6	Elko	50,561	1.8%
7	Nye	47,370	1.7%
8	Churchill	26,981	1.0%
9	Humboldt	18,014	0.7%
10	White Pine	9,694	0.4%
11	Pershing	7,192	0.3%
12	Lander	5,891	0.2%
13	Mineral	4,401	0.2%
14	Storey	4,384	0.2%
15	Lincoln	4,352	0.2%
16	Eureka	1,553	0.1%
17	Esmeralda	1,240	0.0%
Total	Total	2,738,733	100%

Gender: In 2008, there were slightly more males (51%) compared to females (49%) residing in Nevada. Additionally, there were no significant differences among the racial/ethnic distribution between genders. Among racial/ethnic groups there were the same proportion of males as females except for among Hispanics where there were slightly more Hispanic males compared to females (12% vs. 11%).

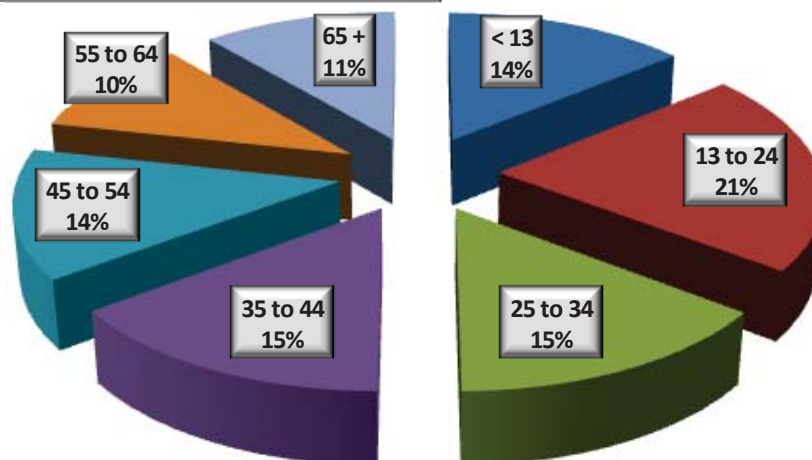
Race/Ethnicity: According to 2008 population estimates, the racial/ethnic composition of the state was 62% White, 23% Hispanic, 7% Black, 6% Asian/Pacific Islander and 1% American Indian/Alaska Native. Hispanics and Asian/Pacific Islanders are the fastest growing racial/ethnic groups in the state.

Figure 2 2008 Interim Population Estimates of Nevada by Race/Ethnicity: 2008



Age: Nevada had a young population with more than one-third (26%) of the population being youth (13-24) or young adults (25-34) and 14% younger than 13 years of age. While, 15% of the population in Nevada was between the ages of 35-44 (15%), and one-quarter of the population was 45 to 64 years old (24%), only 11% of the population was above retirement age (65 years of age or older).

Figure 3 2008 Interim Population Estimates of Nevada by Age: 2008



Section 1: Core Epidemiological Questions

Question 2: What is the scope of HIV/AIDS in Nevada?

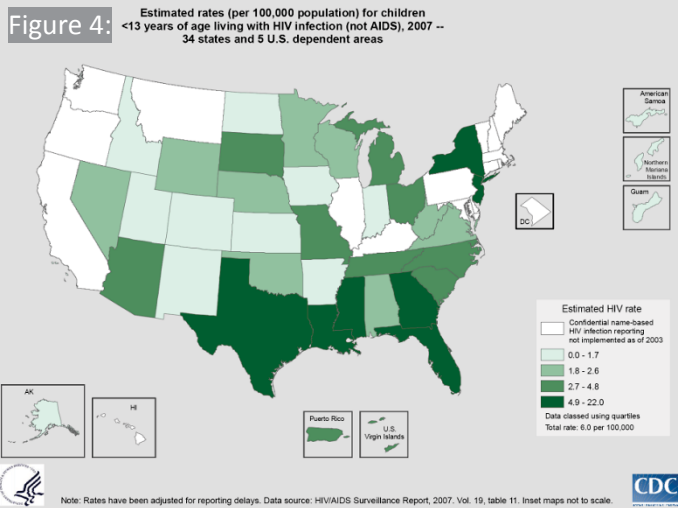
The HIV/AIDS epidemic has affected persons in all sex, age and racial/ethnic groups and all counties in Nevada. This effect, however, has not been the same for all groups. In the beginning of the epidemic, the number of cases of HIV infection increased most noticeably among White MSM. Although White MSM are still disproportionately affected by the epidemic, recent trends suggest a shift in the HIV/AIDS epidemic toward, Blacks, youth, and heterosexual adults.

To plan for HIV prevention and care and to allocate limited resources as the epidemic continues to change and the number of persons living with HIV continues to grow, it is extremely important to identify those populations most affected and most at risk for HIV infection.

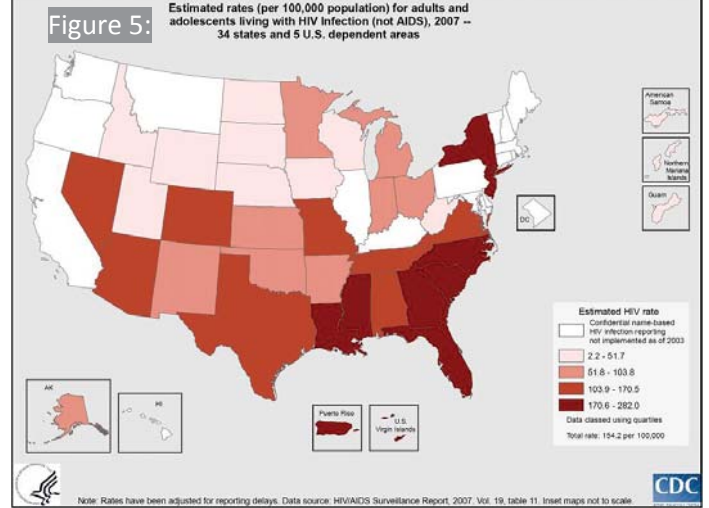
This section provides detailed information about location of the HIV epidemic throughout Nevada, demographic and risk characteristics of HIV-infected persons and trends in the statewide epidemic. It describes cases diagnosed in 2008 and five-year trends from 2004 through 2008. Unless noted, all data come from Nevada's HIV/AIDS Surveillance Program.

Highlights

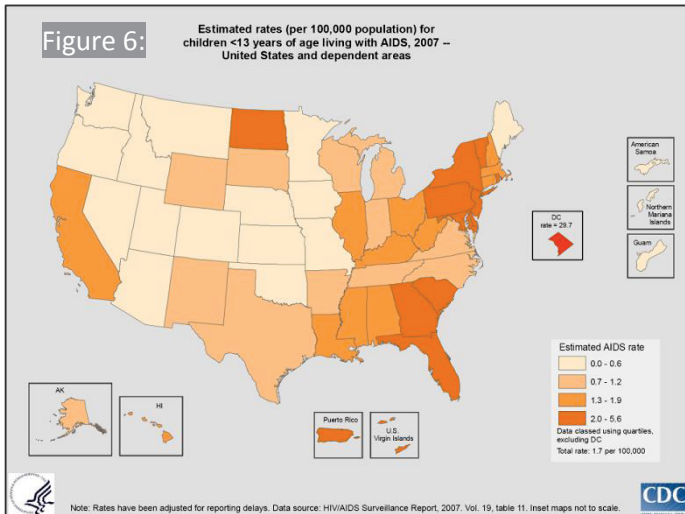
- In 2007, Nevada ranked 26th in the nation of the number of new AIDS cases and 29th in the nation among HIV Infection Cases Reported among States with Confidential Name-Based Reporting, 2007 (1=High, 51=Low).
- There are persons living with HIV in every county in Nevada, and the number continues to increase each year. At the end of 2008, a total of 7,940 persons were known to be living with HIV/AIDS in Nevada, 4,123 (52%) of whom had a diagnosis of AIDS.
- In 2008, there were 435 new HIV infections diagnosed in Nevada. Among these new diagnosis 91% (394) were diagnosed in Clark County, 8% (34) in Washoe County, and 2% (7) in the FaR areas in Nevada.
- The HIV diagnosis rate for Blacks continues to be disproportionately high and, in 2008, was more than 6 times higher than that for Whites. Although, in 2008, only 27% of newly diagnosed HIV infections were in the Black population, they had the highest rate at 61 per 100,000 population.
- Among all races/ethnicities, male-male sexual activity remains the predominant mode of exposure and has seen increasing trends over the past five years. Among Blacks, heterosexual contact has increased significantly since 2004.
- Men continue to lead the epidemic in Nevada among all racial and ethnic groups in Nevada. In 2008, women represented 15% of new HIV infections and have been declining since 2004. The proportion of Black women have remained relatively stable; yet among both Hispanics and Whites increased slightly from 2004 to 2008.
- Because of the introduction of new legislation which improved screening programs for pregnant women and the increased use of antiretroviral therapy in pregnant women and their infants, perinatal transmission rates have dropped dramatically (there were no perinatal HIV cases in 2008) .
- Since 1996, the number of new AIDS cases and deaths of persons with AIDS has decreased dramatically, coinciding with the widespread use of antiretroviral therapy. However, data from recent years indicate a leveling or a reversal of these declines, which may be due to factors such as late testing; limited access to, or use of, health services; and the limitations of current therapies.



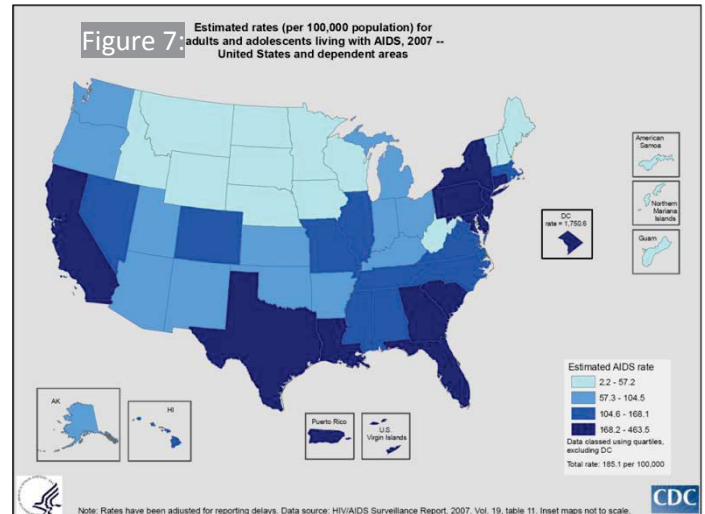
At the end of 2007, in the 39 areas with confidential name-based HIV infection reporting since at least 2003, the prevalence rate of HIV infection (not AIDS) among children was estimated to be 6.0 per 100,000. The estimated prevalence rate for children living with HIV infection (not AIDS) ranged from zero per 100,000 in New Mexico, North Dakota, American Samoa, Guam, and the Northern Mariana Islands to 22.0 per 100,000 in New York. In Nevada the rate was 2.1 per 100,000.



At the end of 2007, in the 39 areas with confidential name-based HIV infection reporting since at least 2003, the prevalence rate of HIV infection (not AIDS) among adults and adolescents was estimated to be 154.2 per 100,000. The estimated prevalence rate for adults and adolescents living with HIV infection (not AIDS) ranged from 2.2 per 100,000 (American Samoa) to 282.0 per 100,000 (New York). The rate in Nevada was 170.5 per 100,000.



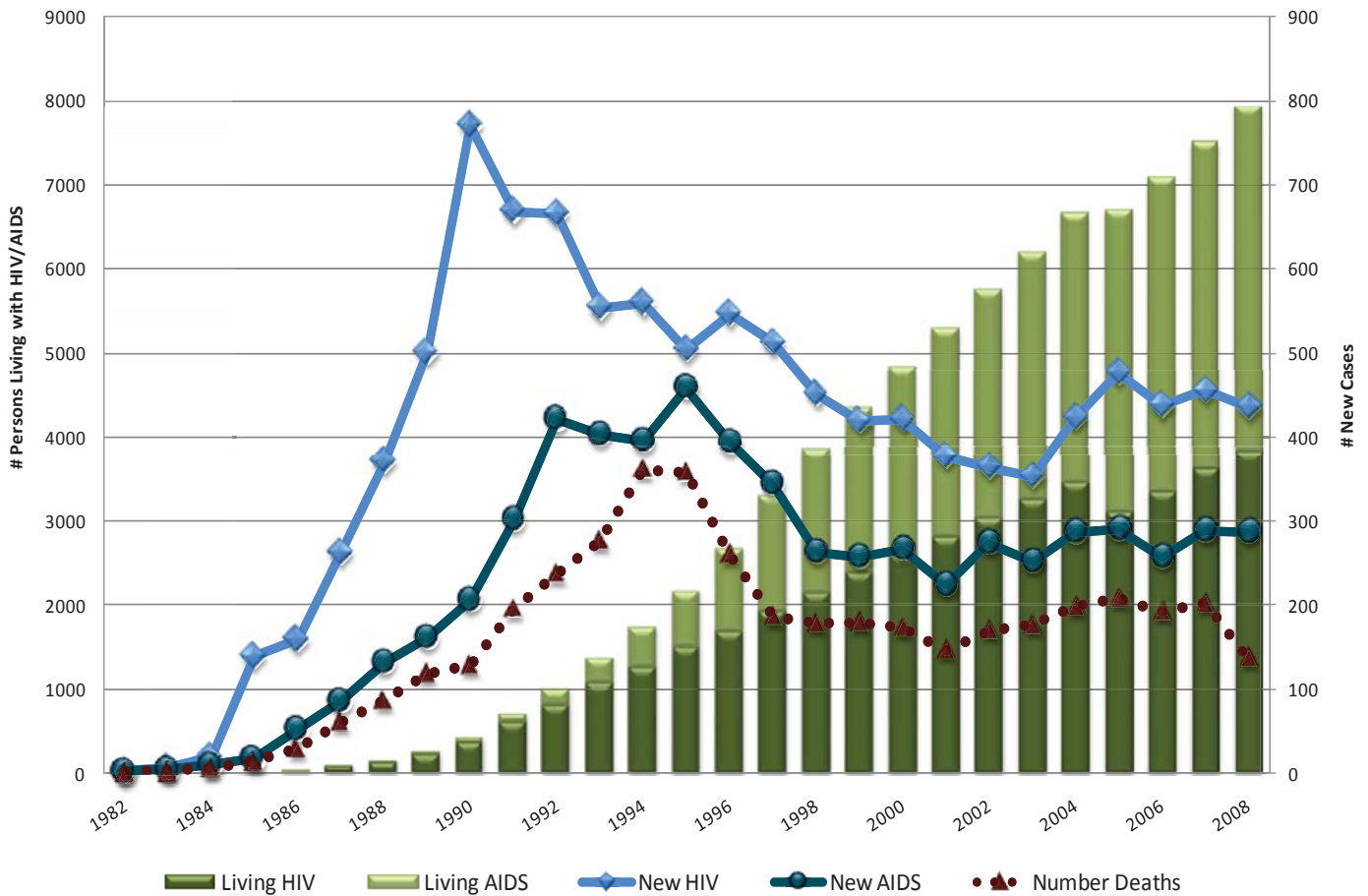
At the end of 2007, the AIDS prevalence rate among children in the United States was estimated to be 1.7 per 100,000. The estimated prevalence rate for children living with AIDS ranged from zero per 100,000 in Idaho, Maine, Montana, Utah, American Samoa, Guam, and the Northern Mariana Islands to 29.7 per 100,000 in the District of Columbia. The rate in Nevada was 0.6 per 100,000.



At the end of 2007, the AIDS prevalence rate among adults and adolescents in the United States was estimated to be 185.1 per 100,000. The estimated prevalence rate for adults and adolescents living with AIDS ranged from 2.2 per 100,000 (American Samoa) to 1,750.6 per 100,000 (District of Columbia). The rate in Nevada was 143.6 per 100,000.

How Does Nevada rank? According to Henry J. Keiser Family Foundation Health Statistics (2007), Nevada ranked 26th in the nation for the number of new AIDS cases; the annual AIDS case rate for males was higher than the national AIDS case rate (25.6 vs. 22.9); ranking males 10th in the nation for AIDS cases in Nevada. Additionally, Nevada ranked 29th in the nation among HIV Infection Cases reported among States with Confidential Name-Based Reporting, 2007 (1=High, 51=Low).

Figure 8 History of HIV/AIDS and Mortality in Nevada: 2004-2008



CDC Changes

- 1981- AIDS was first recognized by CDC
- 1982- U.S. CDC formally established the term Acquired Immuno Deficiency Syndrome (AIDS)
- 1983- HIV was identified as the cause of AIDS
- 1985- First commercial EIA, screening of US blood supply begins
- 1993- CDC AIDS case definition expanded (CD4<200, 26 OIs)

Nevada Advances in HIV Surveillance

- 1983- Nevada began statewide AIDS Surveillance
- 1992- Nevada became a "Name based" reporting system
- 2004 - Nevada began reporting cases by date of diagnoses
- 2008- Nevada's HIV/AIDS reporting system changed to eHARS

Medical Advances (introduction treatment)

- 1987- First antiretroviral drug approved by US FDA (Zidovudine or AZT)
- 1988- PCP prophylaxis
- 1992- Combination therapy
- 1994- ACTG 075: AZT reduces perinatal transmission
- 1995- First Protease Inhibitors were approved by U.S. FDA for prescription use. Beginning of HAART (Highly Active Antiretroviral Therapy)

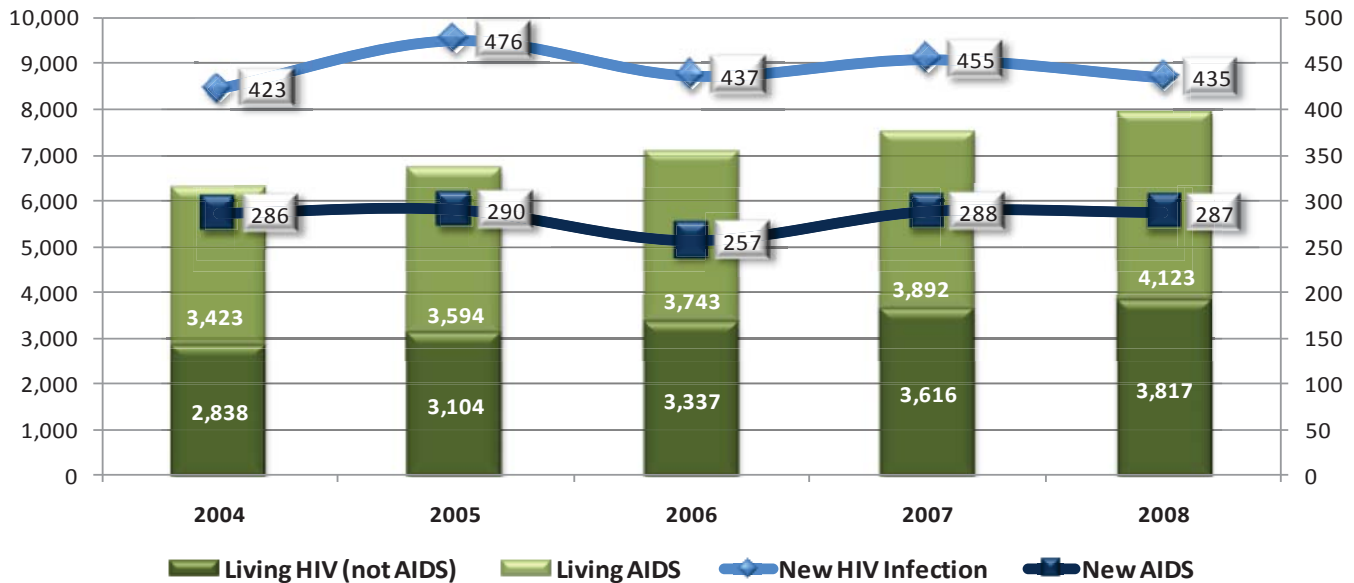
Table 2 Summary of HIV/AIDS in Nevada by Demographics and Risk Factors: 2008

	New HIV Infections			Persons Living with HIV/AIDS		
	N	%	Rate*	N	%	Rate**
County						
Clark	394	91%	20.0	6,643	84%	337.6
Washoe	34	8%	8.0	805	10%	189.9
All other Counties	7	2%	2.1	470	6%	139.3
Unknown County (NV)	0	0%	-	22	0%	-
Total	435	100%	15.9	7,940	100%	289.9
Sex						
Male	368	85%	26.5	6,617	83%	475.8
Female	67	15%	5.0	1,323	17%	98.1
Total	435	100%	15.9	7,940	100%	15.9
Race/Ethnicity						
White, non-Hispanic	191	44%	11.2	4,308	54%	253.4
Black, non-Hispanic	116	27%	61.3	1,861	23%	983.7
Hispanic	107	25%	16.7	1,488	19%	232.9
Asian//Pacific Islander	12	3%	6.9	180	2%	103.5
American Indian/Alaska Native	4	1%	11.0	70	1%	192.2
Multi-race	5	1%	N/A	33	0%	N/A
Total	435	100%	15.9	7,940	100%	15.9
Age at Diagnosis						
< 13	0	0%	0.0	60	1%	0.0
13 to 24	64	15%	13.6	823	10%	175.0
25 to 34	120	28%	29.9	2,865	36%	714.8
35 to 44	130	30%	32.0	2,780	35%	684.7
45 to 54	78	18%	20.9	1,090	14%	292.1
55 to 64	35	8%	12.3	274	3%	96.4
65 +	8	2%	2.6	48	1%	15.7
Total	435	100%	15.9	7,940	100%	15.9
Risk of Transmission						
MSM	293	67%	N/A	4,751	60%	N/A
MSM & IDU	19	4%	N/A	530	7%	N/A
Heterosexual contact	80	18%	N/A	1,001	13%	N/A
IDU	33	8%	N/A	819	10%	N/A
Perinatal exposure	0	0%	N/A	55	1%	N/A
Adult Hemophilic/Blood Transfusion	0	0%	N/A	15	0%	N/A
NRR/NIR	10	2%	N/A	769	10%	N/A
Total	435	100%	N/A	7,940	100%	N/A

* Cumulative Incidence Rate per 100,000

** Prevalence rate per 100,000

Figure 9 Annual Number of Persons Living with HIV/AIDS and New HIV and AIDS Cases in Nevada: 2004-2008



Persons Living with HIV/AIDS

The prevalence of HIV (not AIDS) and AIDS in Nevada can be combined and are represented as the total number of persons living with HIV/AIDS in Nevada. Numbers of persons living with HIV/AIDS is obtained from the Nevada HIV/AIDS Surveillance reporting system (eHARS) and is based on current address in the given year; cases may have not necessarily been diagnosed with HIV/AIDS in Nevada. For the purpose of this report, all data will be reported on using the HIV/AIDS combined numbers, as this is the best representation of the prevalence.

From 2004 through 2008, the number of HIV (not AIDS) and AIDS cases living in Nevada has increased steadily overtime. In 2004, the number of persons living with HIV (not AIDS) was 2,838 compared to 3,817 in 2008; representing a 34% increase. The number of persons living with AIDS was 3,423 in 2004 compared to 4,123 in 2008; representing a 20% increase. Overall, an estimated 7,940 persons were living with HIV/AIDS in Nevada, in 2008 representing a 27% increase since 2004. The increase in persons with HIV/AIDS living in Nevada may be attributable to the increase in total population growth of Nevada during this same time period as well as individuals living longer with HIV/AIDS.

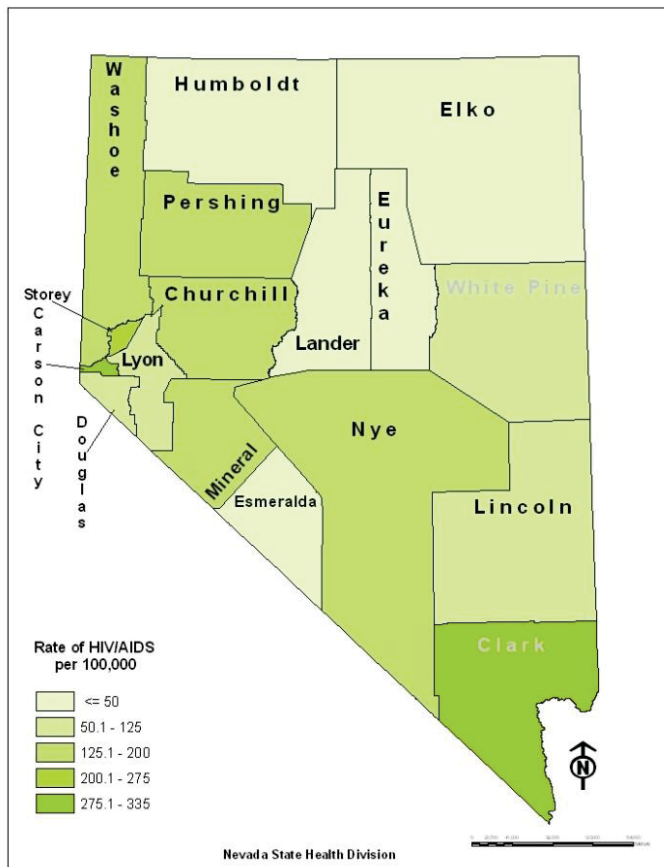
New HIV Infection

The incidence of newly diagnosed HIV infections and AIDS cases in Nevada is obtained from the Nevada HIV/AIDS Surveillance reporting system (eHARS) and is based on the date of confirmatory lab results. The numbers of new HIV infections and AIDS cases represent the number of individuals who were diagnosed in the given year; this number often overlaps with new HIV infections due to the co-occurring diagnoses of HIV and AIDS and therefore cannot be combined. For the purpose of this report all data will be reported on using the outcome of new HIV infection, as this is the best representation of incidence.

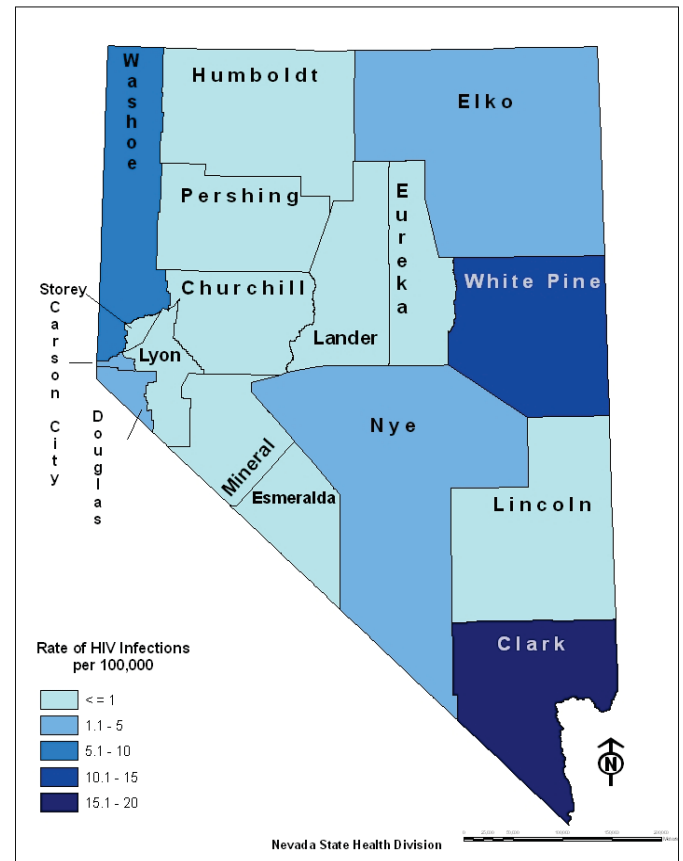
From 2004 through 2008, the number of newly diagnosed HIV infections has increased slightly from 423 new HIV infections in 2004 to 435 in 2008; representing a 3% increase; while there was no increase in the number of new AIDS diagnoses during this same time period. The greatest annual decrease for new HIV infections and AIDS diagnoses occurred from 2005 to 2006 followed by a steady increase from 2006 through 2008. The increase in the number of new HIV infections and not an increase in new AIDS cases may be an indicator that individuals are testing early or living longer with HIV before converting to AIDS.

Figure 10

Rate per 100,000 of Persons Living with HIV/AIDS in Nevada by County: 2008

**Figure 11**

Rate per 100,000 of New HIV Infection in Nevada by County: 2008



When we look at the rate of persons living with HIV/AIDS (prevalence rate) we get a different picture from the spatial mapping of newly diagnosed HIV Infections. Clark and Washoe counties continue to contribute the greatest morbidity; however, rates among other counties are also alarming. The spatial distribution of the rates of persons living with HIV/AIDS in 2008 in Nevada shows that the highest rate of prevalence of HIV/AIDS are located in Clark County (rate of 334.1 per 100,000). Pershing, Churchill, Mineral and Nye counties stand out, but the real surprises are Storey County and Carson City. The rate of persons living with HIV/AIDS in Carson City is in the same category as Clark County and Storey County which has the second highest rates of persons living with HIV/AIDS. In 2008, the rate of persons living with HIV/AIDS in Carson City was 310.08 per 100,000; followed by Storey County with a rate of 228.2 per 100,000. Although Washoe County has the second largest population in Nevada, this area has the fourth highest rate of persons living with HIV/AIDS in Nevada (189.9 per 100,000).

New HIV infections in Nevada reflect the population distribution in Nevada. Looking at the spatial distribution of new HIV infections in Nevada it becomes immediately obvious that Clark County accounts for the greatest number of new HIV infections in the state. In 2008, the rate of new HIV infections in Clark County was 20 per 100,000 population. White Pine County has the second highest rates of new HIV infections in Nevada in 2008, the high rate may be driven more by its low population (less than 10,000 residents) rather than a true high morbidity area, as there were less than five new HIV infections in this county in 2008. Washoe County, the second most populous county in Nevada, had the third highest rate (8.0 per 100,000) of new HIV cases in 2008. For Carson City, Douglas, Elko, and Nye Counties the rates of new HIV infections were between 1.1 and 5.0 per 100,000. Although these counties are small in population and the number of new cases, the impact of new cases in this area is significant as access to resources and care are difficult in these areas of Nevada.

Figure 12 Annual Number of New HIV Infections in Nevada by Sex: 2004-2008

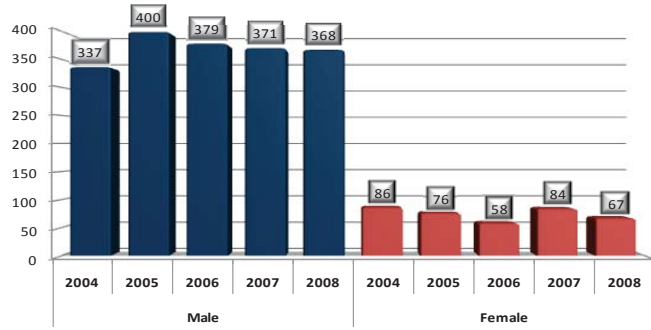


Figure 12: From 2004 to 2008, the number of new HIV infections increased among males. In 2008, the number of new HIV infections among males was 368; representing a 9% increase since 2004. The most significant increase was from 2004 to 2005, followed by a steady decline. From 2004 to 2008, the number of new HIV infections decreased among females. In 2008, the number of new HIV infections among females was 67; representing a 22% decrease since 2004.

Figure 13 Annual Number of New HIV Infections in Nevada by Race/Ethnicity: 2004-2008

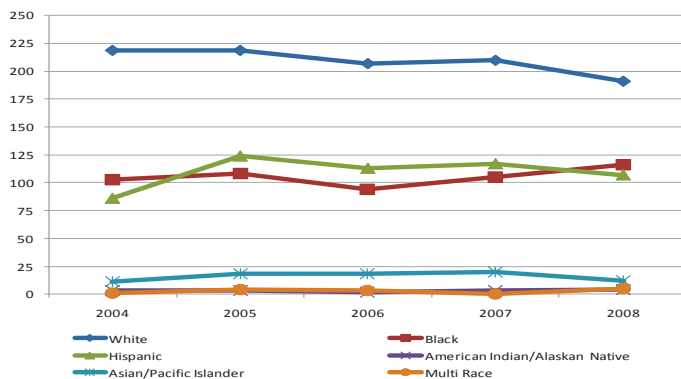


Figure 13: From 2004 to 2008, the number of new HIV infections declined among Whites yet increased among Blacks and Hispanics. In 2008, the number of new infections among Whites was 191; representing a 15% decrease since 2004. In 2008, new infections among Blacks was 116 and 107 among Hispanics; representing a 13% and 25% increases since 2004, respectively. Among all other races there were no significant changes from 2004 to 2008. Asian/Pacific Islanders accounted for 12 of the new cases in 2008, American Indian/Alaskan Natives accounted for four, and multi-race persons accounted for five of the new cases in 2008.

Figure 14 Annual Number of New Infections in Nevada by Age at Diagnosis: 2004-2008

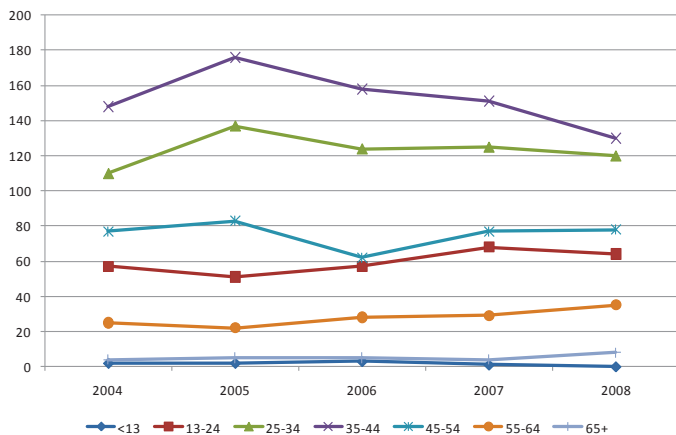


Figure 14: In 2008, there were no new HIV infections among individuals less than 13 years old. From 2004 to 2008, the number of new HIV infections increased most significantly among 13-24 and 25-34. In 2008, the number of new infections among individuals 13-24 was 64 and among 25 to 34 years olds was 120; representing a 15% and 9% increase since 2004, respectively. From 2004 to 2008, there was a steady decline among individuals 35 to 44 years of age. In 2008, the number of new HIV infections among 35 to 44 years old was 35; representing a 12% decline since 2004. There was a 4% increase of new HIV infections among 55-64 and a 50% increase among those 65 years and older.

Figure 15 Annual Number of New HIV Infections in Nevada by Risk of Transmission: 2004-2008

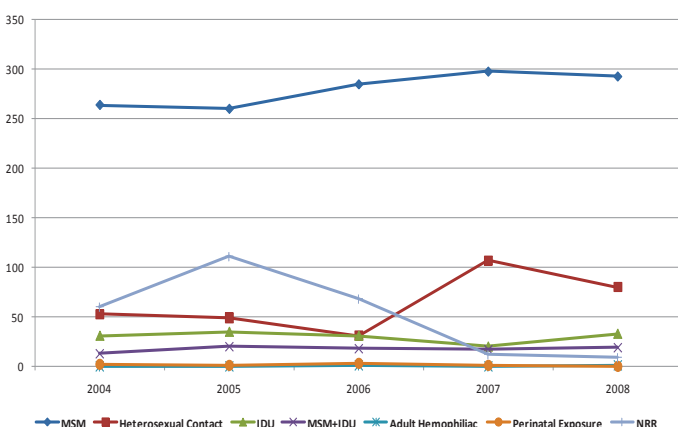


Figure 15: MSM accounted for more than two-thirds (67%) of the new HIV infections in Nevada in 2008. MSM increased 11% annually from 2004 to 2008. Although heterosexual contact only accounted for 18% of the new HIV infections in 2008, it increased from 53 cases in 2004 to 80 in 2008; representing a 51% increase. Trends of IDU (6% increase) and a combined risk of MSM and IDU (46% increase) have shown to be an increasing risk of HIV transmission in Nevada from 2004 to 2008. In 2004 there were two perinatal HIV cases and decreased to zero.

Figure 16 Annual Number of Persons Living with HIV/AIDS in Nevada by Sex: 2004-2008

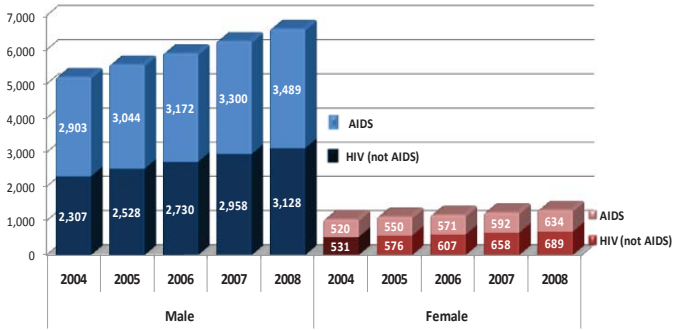


Figure 16: From 2004 to 2008, the number of males living with HIV/AIDS in Nevada increased 27% from 5,210 cases in 2004 to 6,617 in 2008. Among females living with HIV/AIDS in Nevada, in 2004 there were 1,051 females living with HIV/AIDS in Nevada and in 2008 there were 1,323; representing a 26% increase. Although a greater proportion of the male cases are AIDS compared to females; for both males and females, there was a greater increase among HIV (not AIDS) compared to AIDS cases from 2004 to 2008. This could suggest improved case management.

Figure 17 Annual Number of Persons Living with HIV/AIDS in Nevada by Race/Ethnicity, 2004-2008

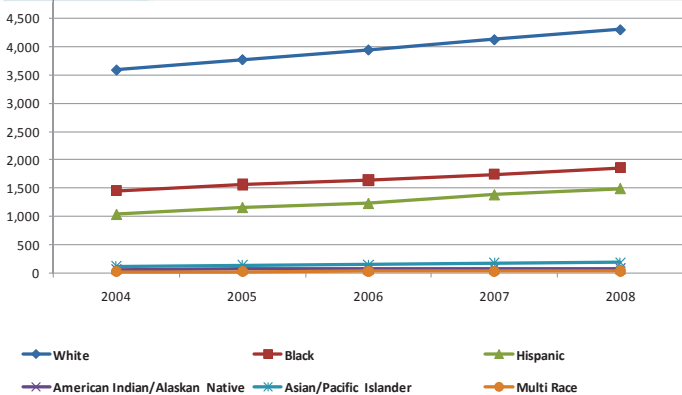


Figure 17: From 2004 to 2008, among persons living with HIV in Nevada there was an increase among all race and ethnicities. The most significant increase (with the exception of multi-race with an 83% annual increase) was among API, which increased 59% from 113 cases living with HIV/AIDS in 2004 to 180 in 2008. This increase was followed by Hispanics which increased 44% during this same time period, Blacks, which increased 28%, American Indians/Alaskan Natives, which increased 21%, and Whites which increased 20% among the persons living with HIV/AIDS in Nevada from 2004 to 2008.

Figure 18 Annual Number Persons Living with HIV/AIDS in Nevada by Age at Diagnosis: 2004-2008

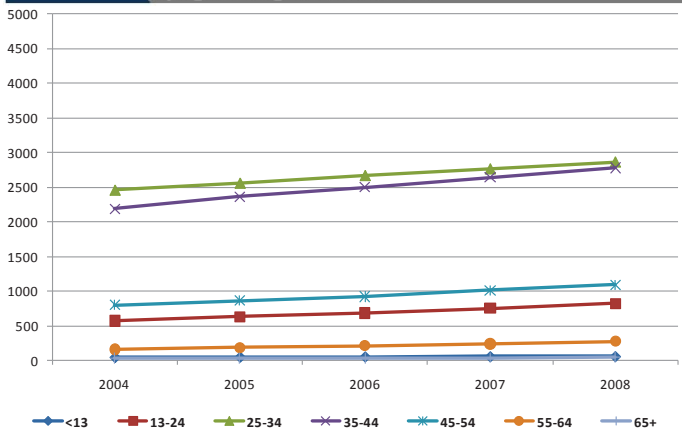


Figure 18: Among persons living with HIV/AIDS in Nevada there was an upward trend in all age groups. The most significant annual increases were among 55-64 year olds which increased from 161 cases in 2004 to 274 cases in 2008; representing a 70% increase. This was followed by 13-24 year olds which increased 44%, 45-54 year olds which increased 36%, 35-44 year olds which increased 27%, less than 13 year olds increased 25%, and 25-34 year olds increased 16% from 2004 to 2008 among persons living with HIV/AIDS in Nevada. These trends show that individuals are living longer with HIV/AIDS as we are seeing a significant increase among older individuals. MSM and IDU have increased 7% and 12% respectively during this time period. Perinatal exposure has increased 22% from 2004-2008, though there were no positive perinatal HIV cases in 2008.

Figure 19 Annual Number of Persons Living with HIV/AIDS in Nevada by Risk of Transmission: 2004-2008

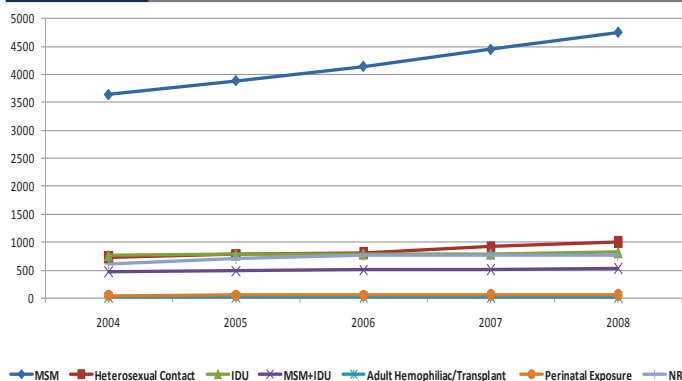


Figure 19: MSM continually represent the greatest number of cases as primary risk factor among persons living with HIV/AIDS in Nevada and increased 30% annually from 2004 to 2008. This is followed by heterosexual contact which has increased 38% from 2004 to 2008 and between 2007 and 2008 has become the second most commonly reported primary risk factor. IDU and a combined risk of MSM and IDU have increased 7% and 12% respectively during this time period.



Clark County is located in Southern Nevada. The county had a population of 1,967,716 according to the 2008 interim population estimates, accounting for 72% of Nevada's population.

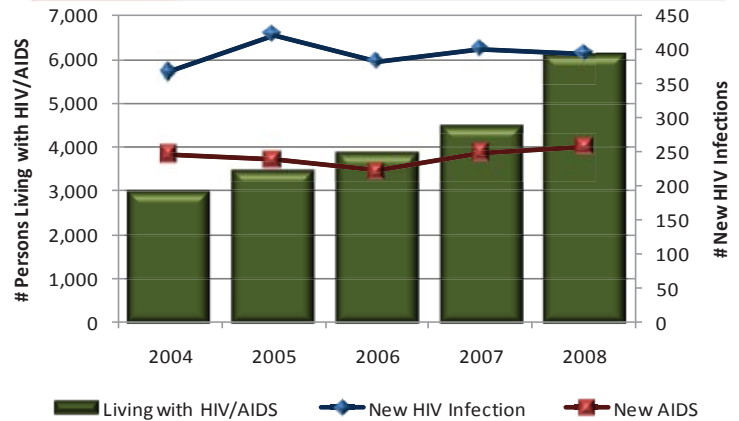
Clark County contains the city of Las Vegas, the state's most populous city. The population density was 174 people per square mile (67/km²) in 2006. The county's population was spread out with 25.60% under the age of 18, 9.20% from 18 to 24, 32.20% from 25 to 44, 22.30% from 45 to 64, and 10.70% who were 65 years of age or older.

In 2006, the median age of people in Clark County was 34 years.

The median income for a household in the county was \$53,536, and the median income for a family was \$59,485.^[7] Males had a median income of \$35,243 versus \$27,077 for females. The per capita income for the county was \$21,785.

About 7.9% of families and 10.8% of the population were below the poverty line, including 14.1% of those under age 18 years.

Figure 20 Number of Persons Living with HIV/AIDS and New HIV Infections in Clark County, Nevada: 2004-2008



Living with HIV/AIDS- The number of persons living with HIV/AIDS has increased significantly from 2004 to 2008. As of December 2008, there were an estimated 6,643 persons living with HIV/AIDS compared to 5,235 in 2004, representing a 20% increase in number of persons living with HIV/AIDS in Clark County from 2004 to 2008. The prevalence rate of persons living with HIV/AIDS in Nevada was 337.6 per 100,000 population.

New HIV Infection and AIDS- From 2004 through 2008, the number of newly diagnosed HIV infections and AIDS cases in Clark County has remained relatively consistent. Between 2005 and 2006, there was a slight decrease in the number of new HIV infections and from 2006 to 2008 there was an increase in the number of new AIDS cases. In 2004, Clark County had 368 new HIV infections and in 2008 there were 394; representing a 9% increase. The number of new AIDS cases increased only 1% from 2004 to 2008 with 247 cases in 2004 and 258 cases in 2008. The rate of newly diagnosed HIV infections in Clark County in 2008 was 20 per 100,000 population.

Table 3 Number of New HIV Infections in Clark County, Nevada by Facility at Diagnosis: 2008

Type of Facility	Number HIV Infection Diagnosed	% of Total Diagnosed cases
SNHD	150	38%
Hospital	109	28%
PMD	91	23%
VA	14	4%
NDOC	10	3%
Other	10	3%
METRO/VICE	6	2%
OOS	4	1%
Total	394	100%

Among the new HIV infections in Clark County, more than one-third (38%) were diagnosed by the Southern Nevada Health District (SNHD), 28% from a hospital in Clark County, 23% from a private medical provider (PMD), The remaining were diagnosed at the Veterans Administration (VA) (4%), Nevada Department of Corrections (NDOC) (3%), Other health care facility (3%), Metro/Vice (2%), and out of state facility (1%).

Figure 21 Percent of New HIV Infections in Clark County, Nevada by Sex: 2008

In 2008, in Clark County 85% (n=294) of the new HIV infections were among males and 15% (n=59) were among females. The rate of new HIV infections among males in Clark County in 2008 was 33.4 cases per 100,000 population compared to the rate of new HIV infections among females was 6.1 cases per 100,000 population.

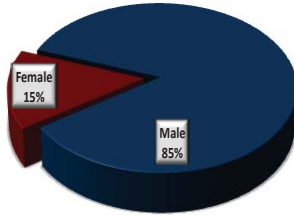
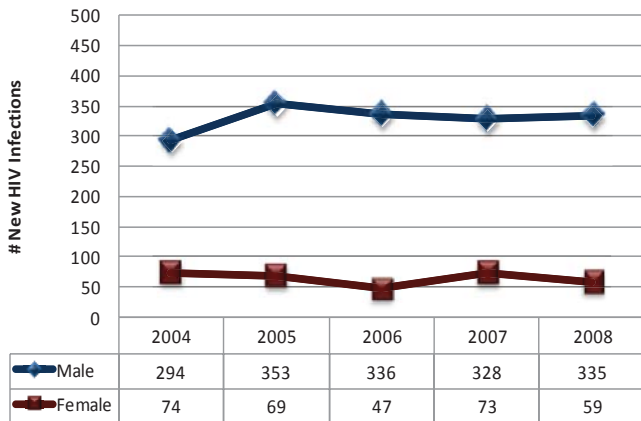


Figure 22 Trends of New HIV Infections in Clark County, Nevada by Sex: 2004-2008



The proportion of new HIV Infections among females over the past five years (2004-2008) has decreased, while increasing among males in Clark County. The prevalence of males living with HIV/AIDS in Clark County increased 28% annually from 2004 to 2008 while females living with HIV/AIDS in Clark County increased 23%. The number of new HIV infections increased 14% among males while decreased 20% among females from 2004 to 2008.

Figure 23 Percent of People Living with HIV/AIDS in Clark County, Nevada by Race/Ethnicity: 2008

In 2008, among persons living with HIV/AIDS in Clark County, the greatest proportion of cases was White (52%). Blacks, accounted for 25% of persons living with HIV/AIDS while, Hispanics accounted for 20%, and all the other races combined accounted for 5% (2% API, 1% AI/AN, and 0% Multi-race) of the persons living with HIV/AIDS.

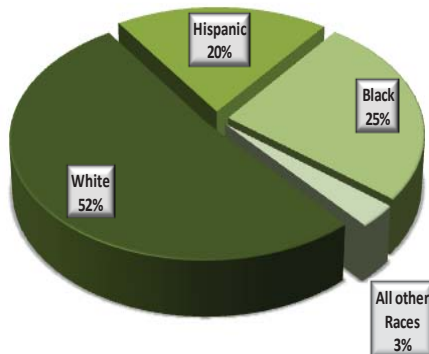
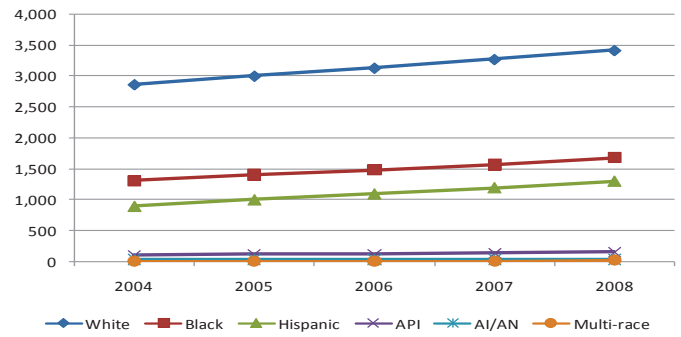


Figure 24 Trends of People Living with HIV/AIDS in Clark County, Nevada by Race/Ethnicity: 2004-2008



From 2004 to 2008, the number of Whites living with HIV/AIDS increased 19%, while the number of Blacks increased 28%, Hispanics 45%, API 56%, and AI/AN 18% in Clark County.

Figure 25 Percent of New HIV Infections in Clark County, Nevada by Race/Ethnicity: 2008

Among newly diagnosed HIV infections, less than half (41%) were White, more than a quarter (26%) were Hispanic/Latino persons, Black, accounted for slightly less than a third (28%), and all the other races combined accounted for five percent (3% API, 1% AI/AN, and 1% multi-race) of the new HIV infections in Clark County.

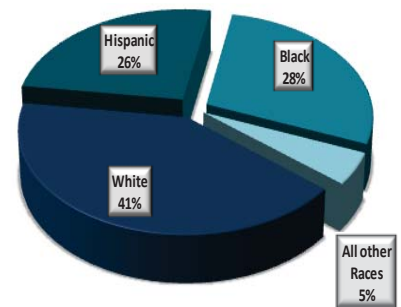
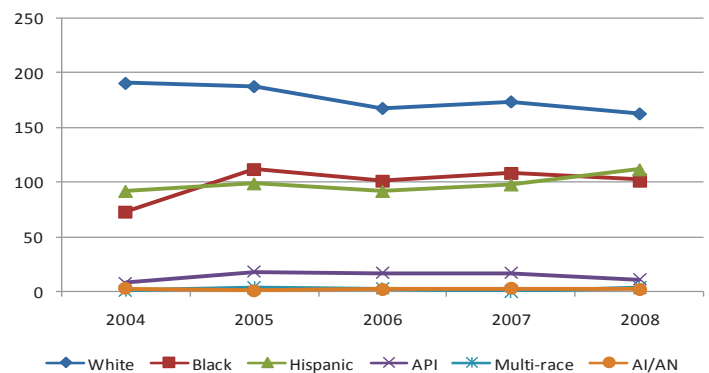
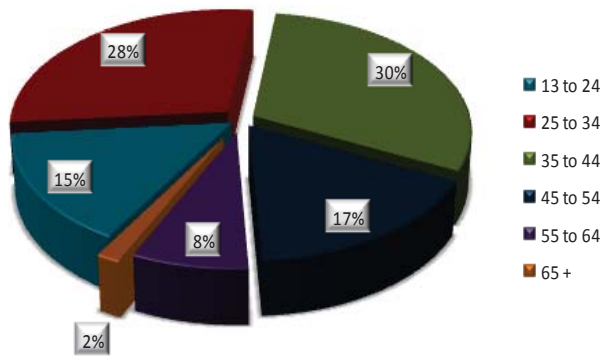


Figure 26 Trends of New HIV Infections in Clark County, Nevada by Race/Ethnicity: 2004-2008



In this same time period, there was a 40% increase in the number of newly diagnosed HIV infections among Hispanics, a 22% increase among Blacks, and a 38% increase among API. However, there was a decrease in the number of Whites (15%) and AI/AN (33%).

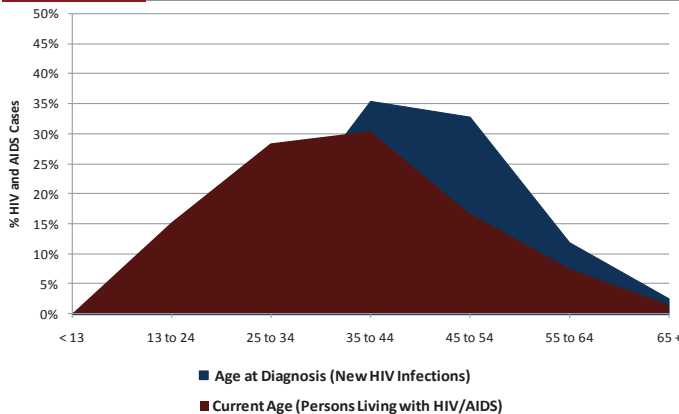
Figure 27 Percent of New HIV Infections in Clark County, Nevada by Age at Diagnosis: 2008



The proportion of new HIV infections in 2008 in Clark County, was greatest among 35-44 year olds (30%, n=120) and 25-34 year olds (28%, n=112). Youth (13-24) accounted for 15% (n=60), and there were no new HIV cases among individuals less than 13 years of age. Twenty-seven percent of new HIV infections were among those 45 years or age or older. Those 45-54 accounted for 17% (n=66) of the new HIV infections, 55-64 year olds 8% (n=60), and 65 and older accounted for 2% (n=6).

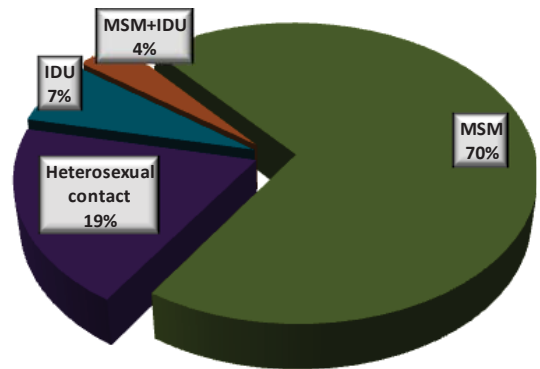
From 2004 to 2008, among newly diagnosed HIV infections, 55-65 year olds experienced the greatest annual percentage growth of 36% [22|30] followed by 13-24 [50|60] year olds and 25-34 [96|112] year olds in Clark County, Nevada in 2008.

Figure 28 Percent of HIV and AIDS Cases in Clark County, by Age at Diagnosis Compared to Current Age: 2008



Among new HIV infections in Clark County, there were more cases diagnosed between 25-34 years of age while, at the end of 2008 (age as of December 31, 2008) among persons living with HIV/AIDS in Clark County are primarily among the 35-54 age groups. Therefore, HIV/AIDS cases are showing to be diagnosed at a younger age; the cases currently living with HIV/AIDS in Clark County, Nevada are among older age groups.

Figure 29 Percent of New HIV Diagnosis in Clark County, Nevada by Risk Factor of Transmission: 2008



*Less than 1% reported NRR and Adult Hemophiliac and there were zero pediatric exposures.

Male to male sexual contact (MSM) was the most prevalent primary risk factor for persons with new HIV diagnoses in Clark County in 2008. In 2004, 64% of new HIV infections were among MSM compared to 70% in 2008, representing a 16% growth in cases with MSM as primary risk factor for HIV infection [236|275].

Heterosexual contact was the second most commonly reported primary risk factor for HIV infection in 2008 and experienced the most significant increase over the past five years. In 2004, 13% of new HIV infections had heterosexual contact as the primary risk factor compared to 19% in 2008. This increase represents a 63% annual percentage growth from 2004 to 2008 [46|75]. This may be a result of more thorough case follow-up as opposed to an increase in this behavior.

Injection drug use (IDU) is the third most common risk factor among new HIV cases, accounting for 7% of new case risk factors in 2008. In 2004, 25 of newly reported cases had IDU as primary risk factor compared to 27 in 2008 in Clark County; representing a slight increase (8%) in cases with a risk of IDU. Persons with newly diagnosed HIV who had the combined risk of MSM and IDU increased 46% from 10 cases in 2004 to 14 cases in 2008. Persons with this combined risk accounted for only 3% in 2004 and 4% in 2008 of the total new HIV diagnoses.

In 2008, although there were children born to HIV positive mothers (perinatally exposed to HIV) in Clark County, there were no new perinatal HIV positive cases reported in Clark County.

Table 4 New HIV and AIDS Diagnosis and Persons Living with HIV/AIDS in Clark County, Nevada by Demographics and Risk Factors: 2008

	New Diagnosis				Persons Living with HIV/AIDS	
	AIDS		HIV Infections		HIV/AIDS	
	N	%	N	%	N	%
Sex						
Male	217	84%	335	85%	2,929	85%
Female	41	16%	59	15%	518	15%
Total	258	100%	394	100%	3,447	100%
Race/Ethnicity						
White, non-Hispanic	103	40%	163	41%	1,748	51%
Black, non-Hispanic	69	27%	112	28%	858	25%
Hispanic	73	28%	102	26%	719	21%
Asian/Hawaiian/Pacific Islander	10	4%	11	3%	84	2%
American Indian/Alaska Native	2	1%	2	1%	27	1%
Multi-race	1	0%	4	1%	11	0%
Total	258	100%	394	100%	3,447	100%
Age at Diagnosis						
< 13	0	0%	0	0%	19	1%
13 to 24	16	6%	60	15%	187	5%
25 to 34	58	22%	112	28%	1,192	35%
35 to 44	98	38%	120	30%	1,309	38%
45 to 54	55	21%	66	17%	576	17%
55 to 64	25	10%	30	8%	147	4%
65 +	6	2%	6	2%	17	0%
Total	258	100%	394	100%	3,447	100%
Risk Factor						
MSM	182	71%	275	70%	2,229	65%
Heterosexual contact	46	18%	75	19%	428	12%
IDU	23	9%	27	7%	374	11%
NRR/Other	3	1%	3	1%	159	5%
MSM + IDU	3	1%	14	4%	229	7%
Perinatal exposure	1	0%	0	0%	21	1%
Adult Hemophilic/Blood Transfusion	0	0%	0	0%	7	0%
Total	258	100%	394	100%	3,447	100%



Washoe County is comprised of the cities Reno and Sparks. As of 2000 Census, the land area of Washoe County was 6,342.27 square miles and the population density was 53.5 people per square mile (21/km²).

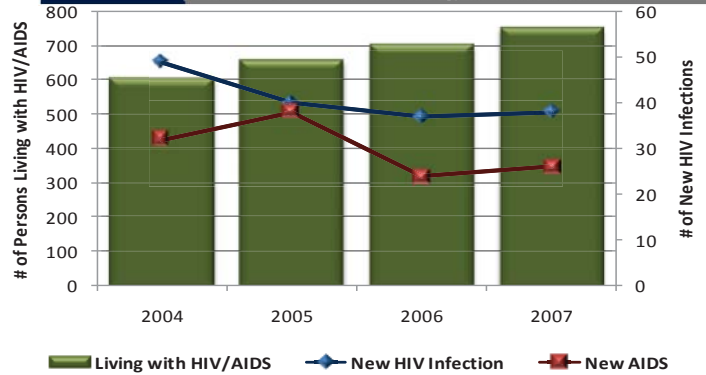
According to the United State Census Bureau, the estimated population in Washoe County in 2008 was 410,000. From April 1, 2000 to July 1, 2008 Washoe County experienced a 21% increase in population.

Males accounted for 50.8% of the total population in Washoe County and females 49.2%. The racial makeup of the county was 67.7% White, non-Hispanic, 2.6% Black or African American, 2.1% American Indian/Native American, 5.0% Asian, and 0.5% were Native Hawaiian or other Pacific Islander. Persons of Hispanic or Latino origin accounted for 21.2% of the population.

In the county the population was spread out with 16% were under the age of 13, 34% were between 13 and 24 years of age, 14% were 25-34, 15% were 35 to 44, 15% were 45 to 54, 11% were 55 to 64, and 11% were 65 years of age or older.

The median income in 2007 in Washoe County was \$54,524 and 10.2% of persons living in Washoe County were below the poverty line.

Figure 30 Number of Persons Living with HIV/AIDS and New HIV Infections in Washoe County, Nevada: 2004-2008



Living with HIV (not AIDS) and AIDS: (HIV/AIDS)- Among the 805 persons living with HIV/AIDS in Washoe County 45% (n=362) were only HIV (not AIDS) while 55% (n=443) were documented AIDS cases. The number of persons living with HIV/AIDS in Washoe County in 2004 to 805 in 2008, representing a 33% increase. The prevalence rate of persons living with HIV/AIDS in Washoe County in 2008 was 193 per 100,000 population.

New HIV Infections and AIDS- From 2004 through 2008, the number of newly diagnosed HIV infections and AIDS cases in Washoe County had decreased. In 2004 there were 49 new HIV infections in Washoe County accounting for 12% of the total new infections in Nevada. In 2008, there were 34 new HIV infections accounting for 8% of total new cases in Nevada. From 2004 to 2008 there was a 31% decline in new HIV infections in Washoe County. The cumulative incidence rate of new HIV infection in Washoe County in 2008 was eight per 100,000 population. The number of new AIDS in Washoe County cases decreased as well by 25% from 32 new AIDS cases in 2004 to 24 new AIDS cases in 2008. The cumulative incidence rate of new AIDS cases in Washoe County in 2008 was six per 100,000.

Table 5 Number of New HIV Infections in Washoe County, Nevada by Facility at Diagnosis: 2008

Type of Facility	Number HIV Infection Diagnosed	% of Total Diagnosed cases
Other	8	24%
PMD	7	21%
HOPES	7	21%
WCHD	6	18%
Hospital	5	15%
OOS	1	3%
Total	34	100%

Among the new HIV infections diagnosed in Washoe County in 2008, 24% were in other medical facilities, 21% by a Private medical provider (PMD), 21% by Northern Nevada HOPES, 18% from the Washoe County Health District, 15% from a hospital in Washoe County, and 3% out of state (OOS).

Figure 31 Percent of New HIV Infections in Washoe County, Nevada by Sex: 2008

In 2008, in Washoe County, 76% of the new HIV infections were male and 24% female. The rate of new HIV infections among males in Washoe County in 2008 was 12.1 cases per 100,000 population while the rate of new HIV infections among females was 3.8 cases per 100,000 population.

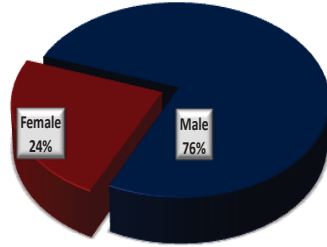
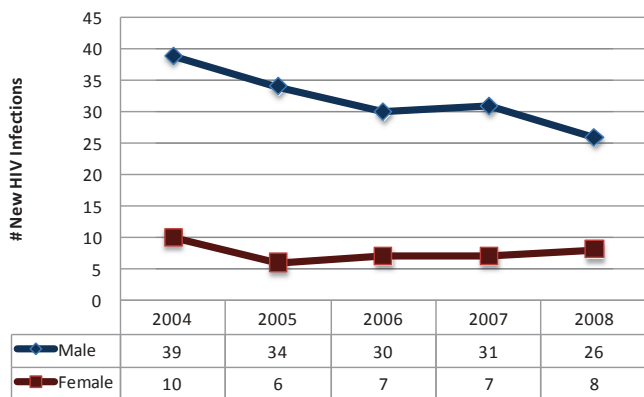


Figure 32 Trends of New HIV Infections in Washoe County, Nevada by Sex: 2004-2008



The proportion of new HIV Infections among females over the past five years (2004-2008) has decreased among both males and females in Washoe County. The number of new HIV infections decreased 33% among males and 20% among females from 2004 to 2008. However, the prevalence of males living with HIV/AIDS in Washoe County increased 30% from 2004 to 2008 while among females living with HIV/AIDS in Washoe County increased 54%.

Figure 33 Percent of Persons Living with HIV/AIDS in Washoe County, Nevada by Race/Ethnicity: 2008

In 2008, among persons living with HIV/AIDS in Washoe County, the greatest proportion of cases were among Whites, accounting for more than two-thirds of the cases (67%), followed by Hispanics 17%, 13% were Black, and all the other races combined accounted for 5% (2% API, 2%, AI/AN, and 1% multi-race) of the cases living with HIV/AIDS.

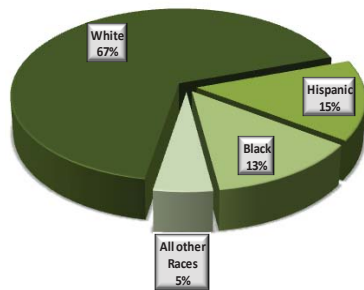


Figure 34 Percent of New HIV Infections in Washoe County, Nevada by Race/Ethnicity: 2008

Among newly diagnosed HIV infections, almost two-thirds (62%) were White, 15% were Hispanic, 12% were Black, and all the other races combined accounted for 12% (n=4) (3% API, 6% AI/AN, and 3% multi-race) of the total newly diagnosed HIV infections in Washoe County.

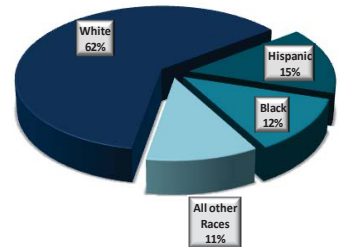
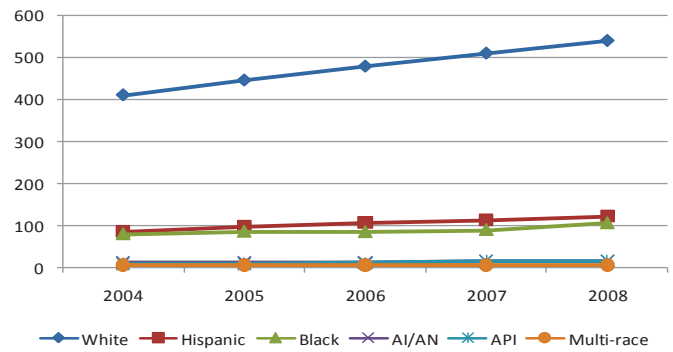
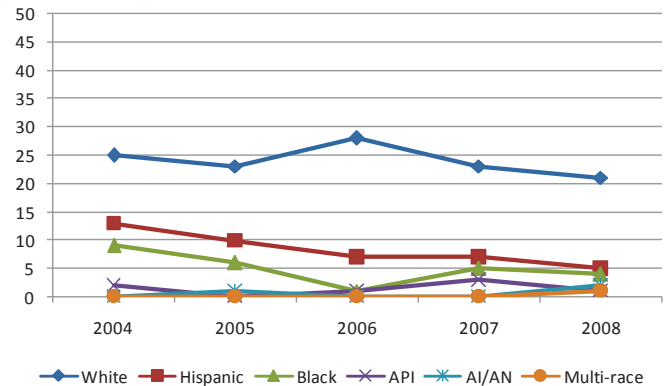


Figure 35 Trends of New HIV Infections in Washoe County, Nevada by Race/Ethnicity: 2004-2008



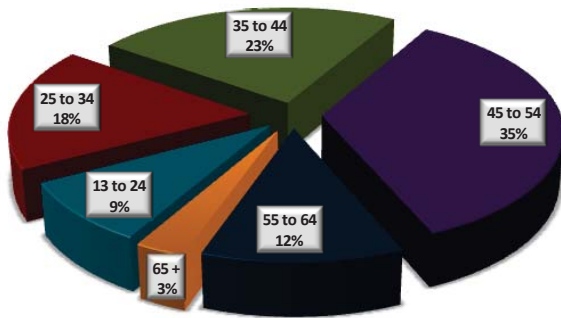
From 2004 to 2008, the number Whites living with HIV/AIDS increased 31%, while the number of Blacks increased 41%, Hispanics 33%, API 78%, and AI/AN 17% in Washoe County.

Figure 36 Number of New HIV Infections in Washoe County, Nevada by Race/Ethnicity: 2004-2008



Among new HIV infections, there was a decrease in all racial/ethnic groups in Washoe County in 2008. Whites experienced a 16% decline in number of new HIV infections while Hispanics decreased 62%, Blacks decreased 56%, API decreased 50% and there were no changes among AI/AN and those who identified as multi-race.

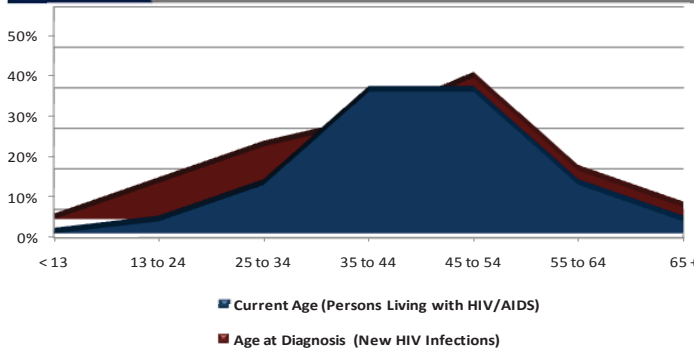
Figure 37 Percent of New HIV Infections in Washoe County, Nevada by Age at Diagnosis: 2008



The proportion of new HIV infections in 2008, in Washoe County, was greatest among 45-54 year olds (35%, n=120) and 35-44 year olds (23%). There were no new cases among individuals less than 13 years of age. Yet youth (13-24) accounted for 9% of the new HIV infections and young adults accounted for 18%. Older adults, those 55-64 and 65 and older accounted for 12% and 3% respectively.

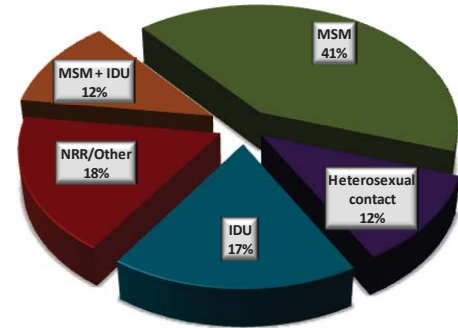
From 2004 to 2008, among newly diagnosed HIV infections, 55-65 year olds experienced the greatest annual percentage growth of 33% followed by individuals 55 and older. There were declines among all other age groups. From 2004 to 2008, the number of new HIV infections among 13-24 year olds decreased 57%, those 25-34 also decreased 57%, and 35-44 year olds decreased 50% in Washoe County. Although there were the most significant declines among younger individuals, they still make up the burden of the disease in Washoe County.

Figure 38 Number of Persons Living with HIV/AIDS by Age at Diagnosis Compared to Current Age in Washoe County, Nevada: 2008



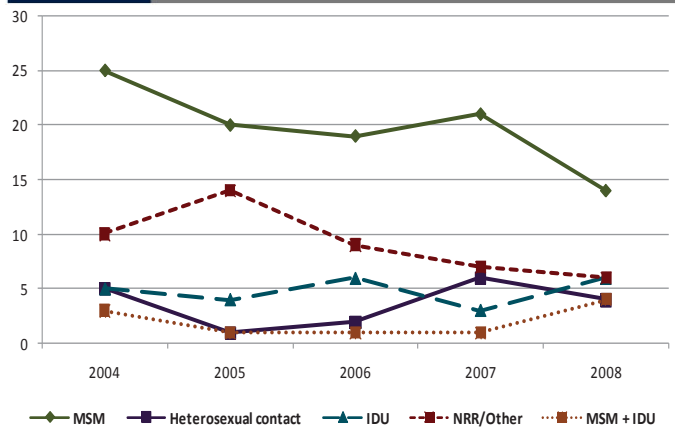
Comparing the age of newly diagnosed cases and the current age of persons living with HIV/AIDS in Washoe County, shows that peak of the newly diagnosed cases is in the older age group (45-54) compared to the majority of persons living with HIV/AIDS in Washoe County, whom are between 35-54 years of age. Additionally, there are a greater number of new HIV infections among the youth and young adults compared to the living cases in Washoe.

Figure 39 Percent of New HIV Infections in Washoe County by Risk Factor of Transmission: 2008



Male to male sexual contact (MSM) was the most prevalent primary risk factor, accounting for 41% of the persons with new HIV diagnoses in Washoe County, Nevada in 2008. Injection drug use (IDU) was the second most commonly reported primary risk factor among new HIV infection in Washoe County, accounting for 17% of the total; followed by, heterosexual contact (12%); and, a combined risk of MSM and IDU (12%). Cases with no reported risk (NRR) or risk unknown accounted for 18% of new HIV infections in Washoe County in 2008.

Figure 40 Trend in the Number of New HIV Infections in Washoe County by Risk Factors of Transmission: 2004-2008



In 2004, 51% of new HIV cases were among MSMs and in 2008, 41% had this risk factor, with a 44% annual decline in cases with MSM as primary risk factor for HIV infection. Among new HIV cases in Washoe County in 2008, IDU was reported as the primary risk factor for six of the new HIV infections in 2008 which was a 20% increase from the five cases in 2004 with this reported risk factor. Heterosexual risk experienced a 20% decrease in the number of new HIV infections from five cases in 2004 to four cases in 2008 who reported this as the primary risk factor for acquiring HIV infection. Persons with this dual risk accounted for 3% in 2004 and 4% in 2008 of the total new HIV diagnoses.

Table 6

New HIV and AIDS Diagnosis and Persons Living with HIV/AIDS in Washoe County, Nevada by Demographics and Risk Factors: 2008

	New Diagnosis				Persons Living with	
	AIDS		HIV Infections		HIV/AIDS	
	N	%	N	%	N	%
Sex						
Male	21	88%	26	76%	683	85%
Female	3	13%	8	24%	122	15%
Total	24	100%	34	100%	805	100%
Race/Ethnicity						
White	13	54%	21	62%	540	67%
Black	6	25%	4	12%	106	13%
Hispanic	2	8%	5	15%	122	15%
API	1	4%	1	3%	16	2%
AI/AN	2	8%	2	6%	14	2%
Multi-race	0	0%	1	3%	7	1%
Total	24	100%	34	100%	805	100%
Age at Diagnosis						
< 13	0	0%	0	0%	3	0%
13 to 24	0	0%	3	9%	71	9%
25 to 34	5	21%	6	18%	264	33%
35 to 44	5	21%	8	24%	314	39%
45 to 54	10	42%	12	35%	120	15%
55 to 64	3	13%	4	12%	27	3%
65 +	1	4%	1	3%	6	1%
Total	24	100%	34	100%	805	100%
Risk Factor						
MSM	12	50%	14	41%	423	53%
Heterosexual contact	0	0%	4	12%	76	9%
IDU	5	21%	6	18%	87	11%
NRR/Other	4	17%	6	18%	126	16%
MSM + IDU	3	13%	4	12%	89	11%
Perinatal exposure	0	0%	0	0%	1	0%
Adult Hemophilic/Blood Transfusion	0	0%	0	0%	3	0%
Total	24	100%	34	100%	805	100%



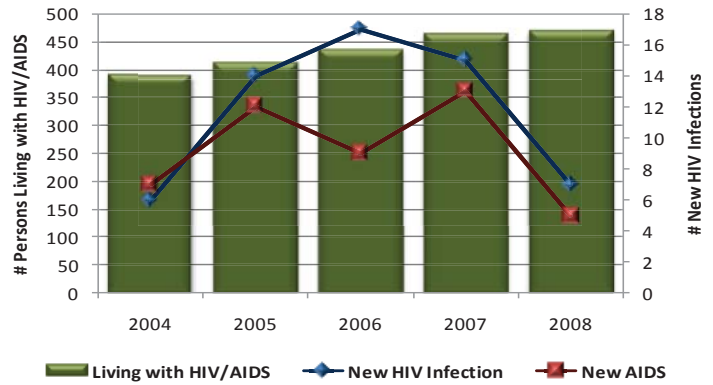
The Frontier and Rural (FaR) areas of Nevada account for 10.7 percent of the state population, but 86.9 percent of the state land mass, illustrating the challenges of serving these residents.

In Nevada, Carson City, Storey, Lyon, and Douglas counties are considered rural, and the remainder are considered frontier. Frontier area designation is defined as 7 persons or less per square mile. Nye County, located in the southern region of the state, is the third largest area county in the continental United States and has only 2.3 persons per square mile.

Most of Nevada’s rural and frontier communities are located a considerable distance from the state’s major health centers in the urban areas of the state. This distance makes it difficult for not only the residents to seek HIV services but for prevention and control staff to track and follow-up with new cases.

Due to the small sample size of new HIV infections in the FaR areas of Nevada, this section of this report will only report on persons living with HIV/AIDS for demographic and risk break down analyses.

Figure 41 Number of Persons Living with HIV/AIDS and New HIV Infections in FaR, Nevada: 2004-2008



Living with HIV (not AIDS) and AIDS: (HIV/AIDS)- In 2008 there were 470 persons living with HIV/AIDS in the Frontier and Rural (FaR) areas of Nevada, which accounted for 6% of the total number of persons living with HIV/AIDS in Nevada. In the FaR counties of Nevada, from 2004 to 2008 the number of persons living with HIV/AIDS has increased 20% from 391 in 2004 to 470 in 2008. The prevalence rate of persons living with HIV/AIDS in FaR in 2008 was 193 cases per 100,000 population.

New HIV Infection and AIDS- In 2008, there were seven new HIV infections in the FaR counties of Nevada; representing a 17% increase from 2004. The seven new HIV infections accounted for only 2% of the total new infections in Nevada. The cumulative incidence rate of new HIV infection in the FaR counties in Nevada in 2008 was eight per 100,000 population. From 2005 to 2006, there was a significant increase in the number of new HIV and AIDS cases in FaR, followed by a decline in 2007 to 2008. This could be due to an increase in testing in these areas.

Table 7 Rate per 100,000 of Persons Living with HIV/AIDS and New HIV Infections in FaR, Nevada: 2008

County	New HIV Infections	Persons Living with HIV/AIDS
Carson	1.7	310.8
Storey	0	228.2
Mineral	0	181.8
Pershing	0	180.7
Nye	4.2	149.9
Churchill	0	140.9
Lincoln	0	114.9
Douglas	3.8	113.2
Lyon	0	100.3
White Pine	10.3	72.2
Elko	2	37.6
Lander	0	33.9
Humboldt	0	17.7
Esmeralda	0	0
Eureka	0	0
Total	2.1	139.3

Figure 42 Percent of Persons Living with HIV/AIDS in FaR, Nevada by Sex: 2008

In 2008, in FaR, 80% (n=198) of new persons living with HIV/AIDS were among males and 20% (n=51) of the persons living with HIV/AIDS were among females.

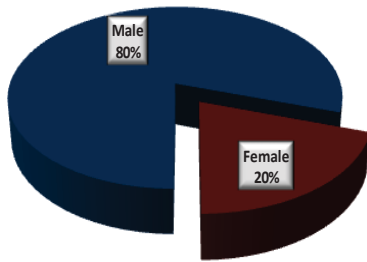
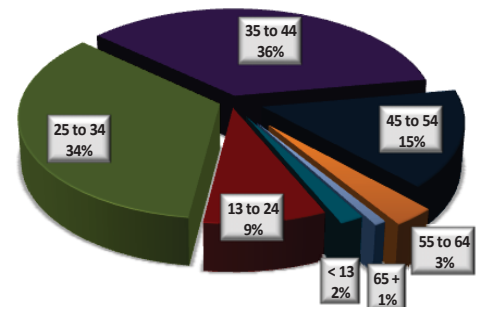


Figure 45 Percent of Persons Living with HIV/AIDS in FaR, Nevada by Age at Diagnosis: 2008

The proportion of persons living with HIV/AIDS was greatest among 35-44 (36%) and 25-34 year olds (34%). Those 45-54 years of age



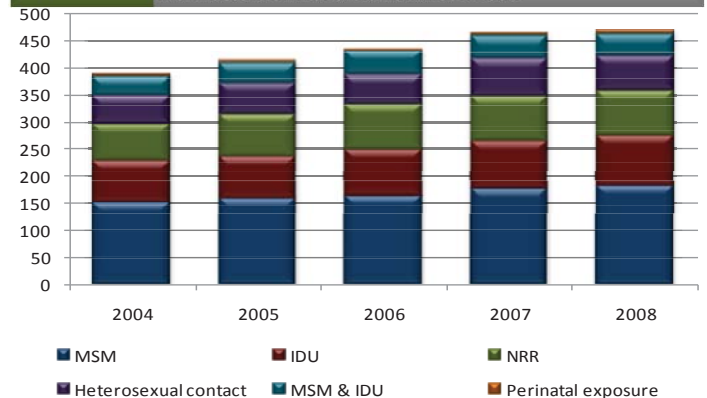
accounted for 15% of other persons living with HIV/AIDS, while 13-24 year olds accounted for 9%, 55-64 accounted for 3%, less than 13 year olds 2% and 65 and older 1%.

Figure 46 Percent of Persons Living with HIV/AIDS in FaR, Nevada by Risk Factors of Transmission: 2008



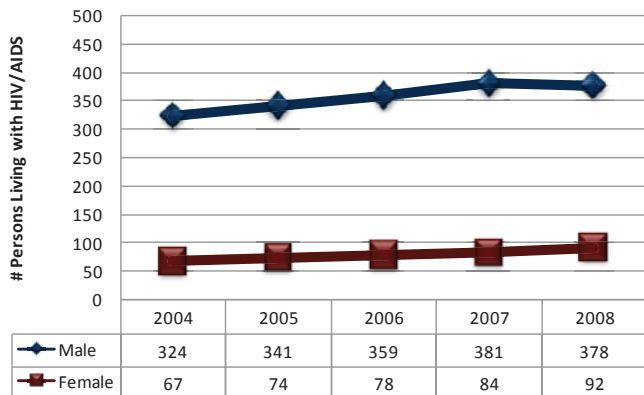
Male to male sexual contact (MSM) was the most common risk factor for persons living with HIV/AIDS in FaR. Primary risk of MSM accounted for 39%; followed by injection drug use (IDU) which accounted for 20% of primary risk factor, (NRR) or other risk unknown accounted for 17%, heterosexual contact accounted for 14% of the total, combined MSM and IDU as primary risk factor accounted for 9%, and perinatal exposure accounted for 1% of persons living with HIV/AIDS in FaR in 2008.

Figure 47 Trend of Persons Living with HIV/AIDS in FaR, Nevada by Risk Factors of Transmission: 2004-2008



From 2004 to 2008, there was a 21% increase among MSM, 19% among IDU, 23% among heterosexual contact, 14% among those with a combined risk of MSM and IDU, and a 40% increase among those perinataly exposed in the persons living with HIV/AIDS in FaR areas of Nevada.

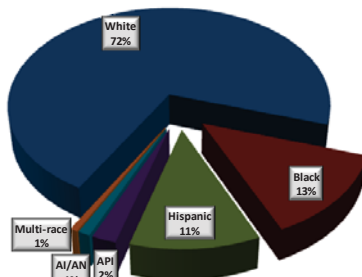
Figure 43 Trends of Persons Living with HIV/AIDS in FaR, Nevada by Sex: 2004-2008



From 2004 to 2008, the number of persons living with HIV/AIDS in FaR was on the upward trend for both males and females. Among males, there were 342 males living with HIV/AIDS in FaR areas and in 2008 there were 378; representing a 17% annual increase. Among females, there were 67 females living with HIV/AIDS in FaR areas and in 2008 there were 92; representing a 37% annual increase.

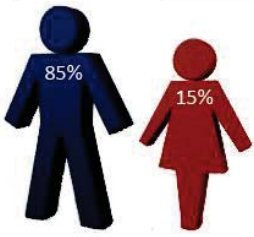
Figure 44 Percent of Persons Living with HIV/AIDS in FaR, Nevada by Race/Ethnicity: 2008

In 2008, among persons living with HIV/AIDS, the greatest proportion of cases were among White (72%) followed, Black (13%), Hispanics (11%), API (2%), and 2% for AI/AN (1%) and multi-racial (1%). Among persons living with HIV/AIDS from 2004 to 2008, there were slight increases among all racial/ethnic groups with the most notable among API (67% increase), AI/AN (43% increase), and Hispanics (33% increase). However, although there were increases among the number of cases, there was no increase in the proportion of cases for each racial/ethnic group.



SEX of HIV/AIDS Cases

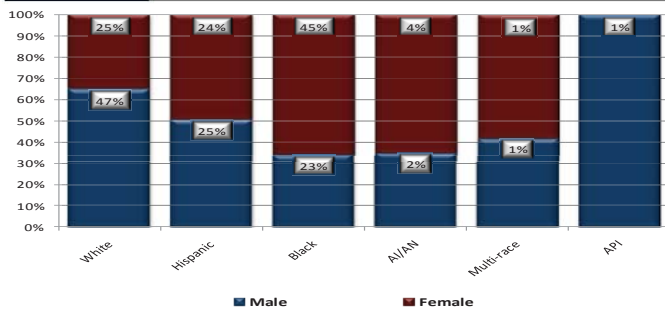
Figure 48 Percent of New HIV Infections in Nevada by Sex: 2008



Consistent with national estimates in 2008, in Nevada the greatest proportion of new HIV infections were among males. Males accounted for 85% of new HIV infections and 83% of persons living with HIV/AIDS in Nevada in 2008.

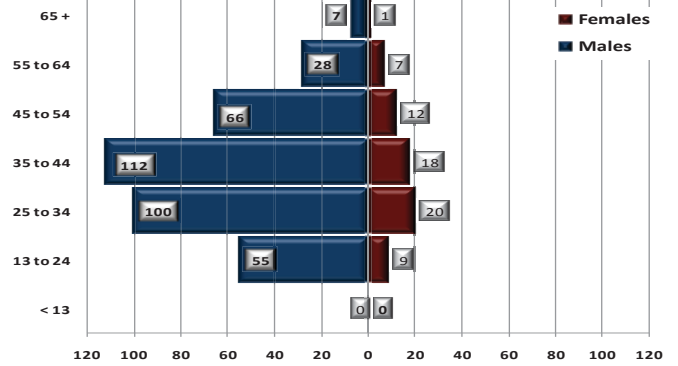
The rate of new HIV infections among males is 26.7 cases per 100,000 population. Females accounted for 15% of new HIV infections and 17% of persons living with HIV/AIDS in Nevada in 2008. The rate of new HIV infections among males is 5.0 cases per 100,000 population. Between 2004 and 2008, the number of new HIV infections among males increased 9% [337|368] while the number of new HIV infections among females decreased 22% [86|67] during this same time period. The number of males living in Nevada with HIV/AIDS increased 27% [5,210|6,617] between 2004 and 2008 and the number of females living with HIV/AIDS in Nevada increased 26% [5,210|6,617].

Figure 49 Percent of New HIV Infections in Nevada by Sex and Race/Ethnicity: 2008



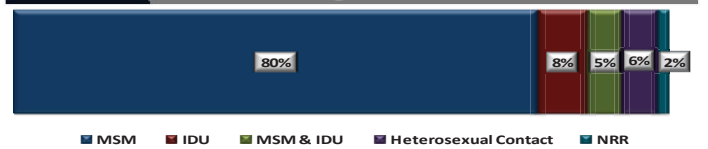
There are significant differences in the racial/ethnic makeup of new HIV infections in Nevada in 2008. While almost half (47%) of new HIV infections among males were White, only a quarter of the females were White. Among males, Black, non-Hispanics accounted for a quarter of the new HIV infections; yet, almost half (45%) of new HIV infection among females were Black. Hispanics made up almost a quarter of the new HIV infections for both males and females. There was a slight greater proportion of Asian/Pacific Islanders and those of Multi race that were males and Native American/Alaskan Native were 2 to 1, female to male.

Figure 50 Number of New HIV Infections in Nevada by Sex and Age at Diagnosis: 2008



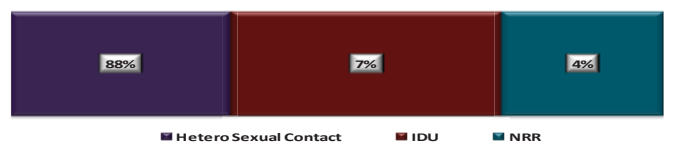
The distribution of new HIV infections differs by age in Nevada in 2008. New HIV infections among males were slightly older than females. For males, 30% (n=112) of the new HIV infections were among individuals 35-44 years of age compared to 30% (n=20) of females were 25-34 years of age. Overall, for both males and females the majority (57%) of new HIV infections were between 25-44 years of age. Males accounted for slightly more (15%, n=55) new HIV infections among youth (13-24) compared to females (13%, n=9). Females accounted for slightly more of the new HIV infections among older adults (55+) compared to males.

Figure 51 Percent of New HIV Infections in Nevada by Risk Factors of Transmission Among Males: 2008



In 2008, 80% of males newly diagnosed with HIV had a primary exposure of male to male sexual contact (MSM), 7% were injection drug users (IDU), 6% were heterosexual contact, 5% combined exposure of MSM and IDU, and 2% had no reported risk or an unknown risk. There were no primary exposure of adult hemophiliac, blood transfusion, transplant, or perinatal exposure.

Figure 52 Percent of New HIV Infections in Nevada by Risk Factors of Transmission Among Females: 2008



In 2008, 88% of females newly diagnosed with HIV had a primary exposure of heterosexual contact, 7% injection drug use (IDU), and 5% had no reported risk or an unknown risk. Less than 1% had a perinatal exposure and there no primary exposure of adult hemophiliac, blood transfusion, or transplant.



2008 Male HIV Highlights

- The rate of new HIV infection among males in Nevada in 2008 was 25.7 per 100,000.
- 85% of new HIV infections were among males.
- 47% of the new HIV infections were among Whites, followed by Hispanics (25%), and Blacks (23%).
- More than half (57%) of new HIV infections were among 25-34 year olds.
- The primary risk factor for new HIV infection was MSM (80%), followed by IDU (7%), heterosexual contact (6%), and MSM and IDU (3%).

Table 8 Summary HIV/AIDS Among Males in Nevada by Demographics and Risk Factor: 2008

	New Diagnosis				Persons Living with HIV/AIDS	
	AIDS		HIV Infections		N	%
	N	%	N	%	N	%
County						
Clark	217	89%	335	91%	5,539	84%
Washoe	21	9%	26	7%	683	10%
All other Counties	5	2%	7	2%	378	6%
Unknounwn County (NV)	0	0%	0	0%	17	0%
Total	243	100%	368	100%	6,617	100%
Race/Ethnicity						
White, non-Hispanic	107	44%	174	47%	3,755	57%
Black, non-Hispanic	56	23%	86	23%	1,338	20%
Hispanic	65	27%	91	25%	1,294	20%
Asian//Pacific Islander	11	5%	9	2%	151	2%
American Indian/Alaska Native	3	1%	4	1%	50	1%
Multi-race	1	0%	4	1%	29	0%
Total	243	100%	368	100%	6,617	100%
Age at Diagnosis						
< 13	0	0%	0	0%	29	0%
13 to 24	15	6%	55	15%	632	10%
25 to 34	54	22%	100	27%	2,393	36%
35 to 44	91	37%	112	30%	2,378	36%
45 to 54	56	23%	66	18%	926	14%
55 to 64	21	9%	28	8%	220	3%
65 +	6	2%	7	2%	39	1%
Total	243	100%	368	100%	6,617	100%
Risk Factor						
MSM	197	81%	293	80%	4,751	72%
MSM & IDU	7	3%	19	5%	530	8%
Heterosexual contact	14	6%	21	6%	252	4%
IDU	18	7%	28	8%	542	8%
Perinatal exposure	1	0%	0	0%	28	0%
Adult Hemophilic/Blood	0	0%	1	0%	10	0%
NRR/NIR	6	2%	6	2%	504	8%
Total	243	100%	368	100%	6,617	100%

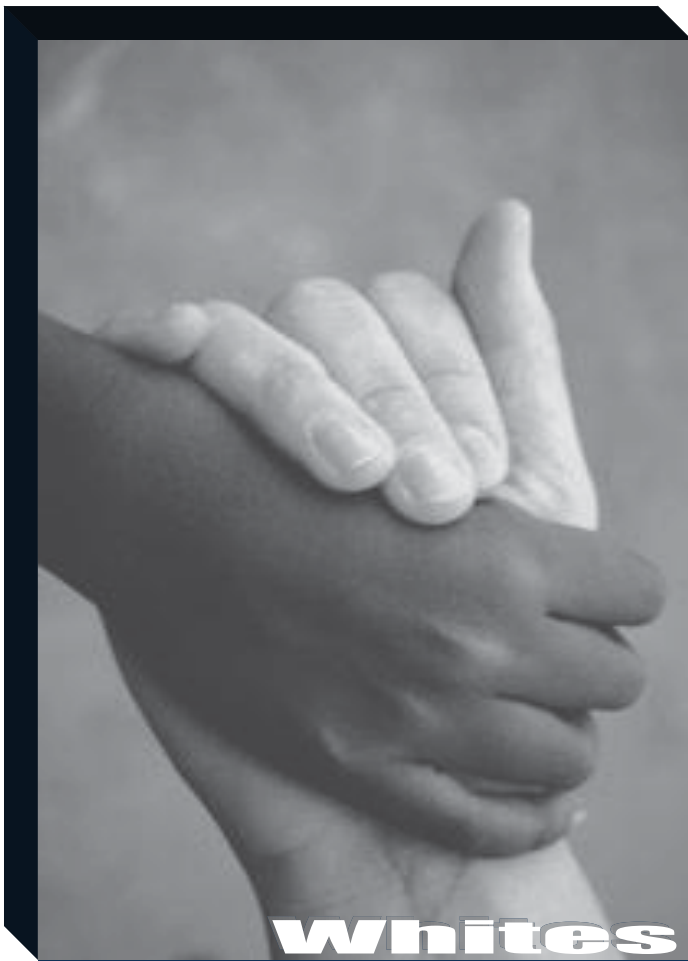
Table 9 Summary HIV/AIDS Among Females in Nevada by Demographics and Risk Factor: 2008

	New Diagnosis				Persons Living with HIV/AIDS	
	AIDS		HIV Infections		N	%
	N	%	N	%	N	%
County						
Clark	41	93%	59	88%	1,104	83%
Washoe	3	7%	8	12%	122	9%
All other Counties	0	0%	0	0%	92	7%
Unknounwn County (NV)	0	0%	0	0%	5	0%
Total	44	100%	67	100%	1,323	100%
Race/Ethnicity						
White, non-Hispanic	13	30%	17	25%	553	42%
Black, non-Hispanic	20	45%	30	45%	523	40%
Hispanic	10	23%	16	24%	194	15%
Asian//Pacific Islander	0	0%	3	4%	29	2%
American Indian/Alaska Native	1	2%	0	0%	20	2%
Multi-race	0	0%	1	1%	4	0%
Total	44	100%	67	100%	1,323	100%
Age at Diagnosis						
< 13	0	0%	0	0%	31	2%
13 to 24	1	2%	9	13%	191	14%
25 to 34	11	25%	20	30%	472	36%
35 to 44	14	32%	18	27%	402	30%
45 to 54	10	23%	12	18%	164	12%
55 to 64	7	16%	7	10%	54	4%
65 +	1	2%	1	1%	9	1%
Total	44	100%	67	100%	1,323	100%
Risk Factor						
Heterosexual contact	32	73%	59	88%	749	57%
IDU	10	23%	5	7%	277	21%
Perinatal exposure	0	0%	0	0%	27	2%
Adult Hemophilic/Blood Transfusion	0	0%	0	0%	5	0%
NRR/NIR	2	5%	3	4%	265	20%
Total	42	95%	64	96%	1,323	100%



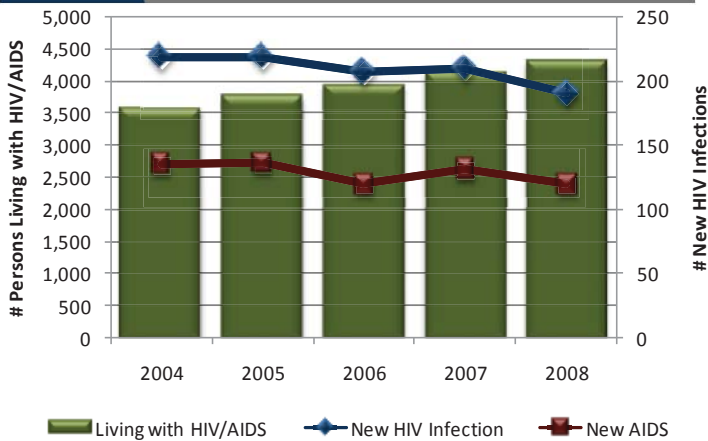
Female HIV Highlights

- The rate of new HIV infection among females in Nevada in 2008 was 5.0 per 100,000.
- 15% of new HIV infections were among females.
- 45% of the new HIV infections were among Blacks, followed by White (30%), and Hispanics (23%).
- More than half (57%) of new HIV infections were among 25-34 year olds.
- The primary risk factor for new HIV infection was heterosexual contact (73%), followed by IDU (23%).



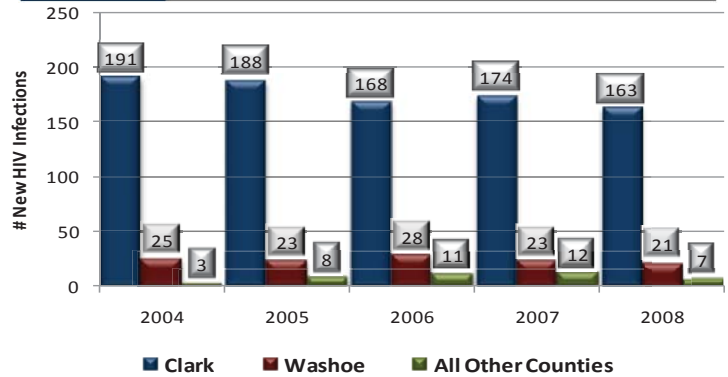
White, non-Hispanics continue to account for the majority of the HIV disease in Nevada. According to 2008 demographers interim population estimates, Whites represented 62% of Nevada’s total population and accounted for almost one-half (44%, n=120) of the 435 newly diagnosed HIV infections in Nevada in 2008. The rate of new HIV infections in Nevada among Whites was 11.2 cases per 100,000 Nevada residents.

Figure 53 Number of Persons Living with HIV/AIDS and New HIV Infections Among Whites in Nevada: 2004-2008



From 2004 to 2008, the number of new HIV infections in Nevada among Whites decreased by 13%, while during the same time period there was a 20% increase in the number of Whites living with HIV/AIDS in Nevada. The number of new AIDS cases has remained relatively stable while also experiencing a downward trend.

Figure 54 Number of New HIV Infections Among Whites by County of Diagnosis in Nevada: 2004-2008



Whites account for the greatest number and proportion of new HIV infections among all counties in Nevada; however, they do not necessarily account for the highest rates of new HIV infections in Nevada. Yet, the burden of disease in Clark County among Whites is alarming. In 2008, 85% of the new HIV infections among Whites were in Clark, 11% in Washoe County, and 4% in all other counties combined.

From 2004 to 2008, both Clark County and Washoe County experienced a slight decrease in the number of new HIV infections among Whites. For Clark County there was a 15% decrease and for Washoe County there was a 16% decrease; however, in all the other counties the number of new HIV infections among whites more than doubled.

Figure 55 Percent of New HIV Infections Among Blacks in Nevada, by Sex: 2008

In 2008, a majority of the new HIV infections among Whites were male, 91%, while 9% were female. The rate of new HIV infections among White males was 20.3 per 100,000 population and females was 2.0 per 100,000 population.

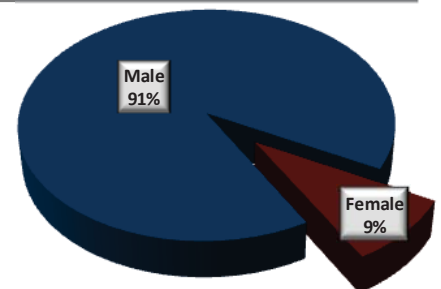
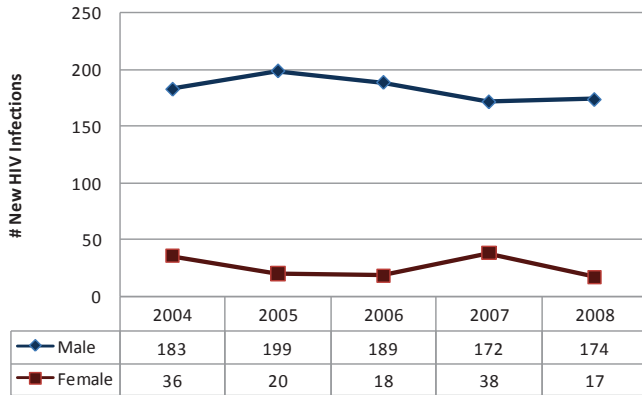
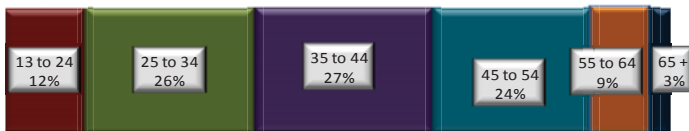


Figure 56 Trends of New HIV Infections Among Whites in Nevada, by Sex: 2004-2008



From 2004 to 2008, there were slight decreases in the number of new HIV infections among both White males and females but was more significant among males. In 2004, there were 183 new HIV infections among White males and in 2008 there were 174; this represents a 5% annual decrease. Among females there were 36 new HIV infections among White females in 2004 compared to 17 in 2008; this represents a 53% decrease in cases.

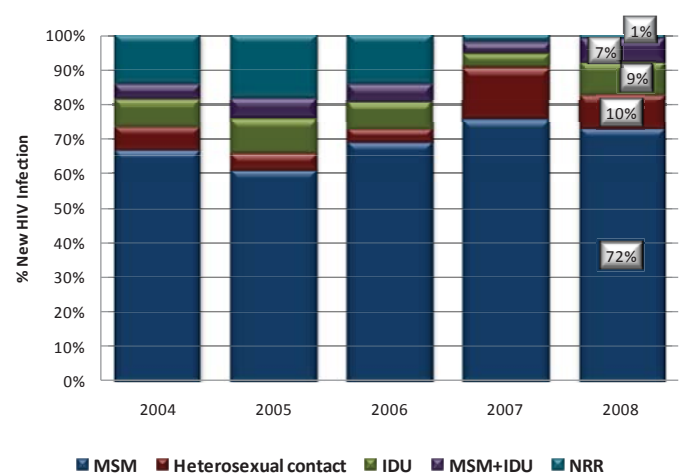
Figure 57 Percent of New HIV Infections Among Whites in Nevada, by Age at Diagnosis: 2008



Overall, half of the new HIV infections among Whites are among youth and young adults (13-34 year olds); however, upward trends over the past five years suggest that older White individuals are experiencing increases in new HIV infections in Nevada.

More than three-quarters of the new HIV infections among Whites in Nevada were between 25-54 years of age at time of diagnosis; 26% were 25-34, 27% were 35-44, and 24% were 45-54 years old. Although the greatest proportion of new HIV infections among Whites are among the younger individuals, the most notable increase was among individuals older than 45 years of age. From 2004 to 2008, 45-54 year olds increased 12% annually, 55-64 increased 6% annually, and among the 65 and older age group increased 67% annually. During this same time period, the 25-44 age groups among Whites are on the decline; 36% annual decrease among 25-34 year olds and 11% decrease among 13-24 year olds.

Figure 58 Trends of New HIV Infections Among Whites in Nevada, by Risk of Transmission: 2004-2008

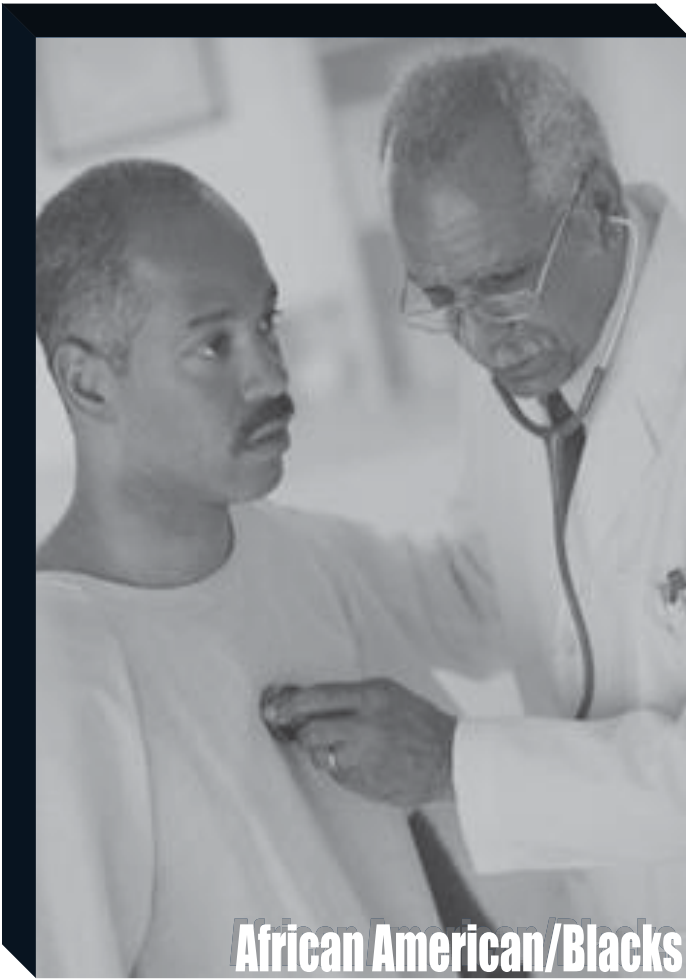


Almost one-half of the new HIV infections are among Whites, and they also account for the largest group of MSM in Nevada. The primary transmission risk for Whites in Nevada consistently has been MSM; accounting for 72% of the total new HIV infections among Whites in Nevada in 2008.

The number of Whites who reported Heterosexual contact increased 33% annually from 2004 to 2008 and accounted for 10% of the total risk for new HIV infections among Whites.

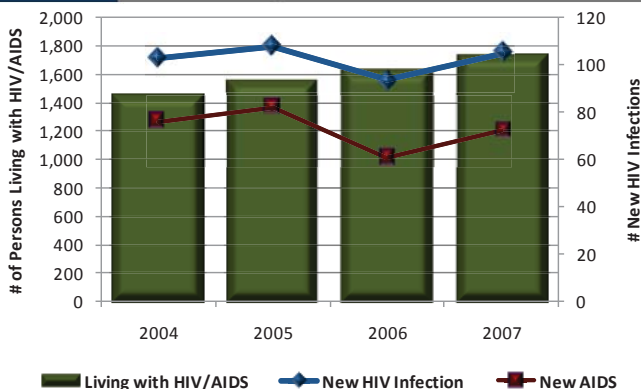
IDU was reported as the primary risk for 9% of Whites and the combined risk of MSM and IDU was reported for 7% in Nevada in 2008.

Less than 2% reported either no risk (NRR/NIR) (1%). The number of cases with no risk has decreased from 31 cases in 2004 to 2 cases in 2008; this is a result of improved interviewing by disease investigators.



African Americans continue to be disproportionately affected by HIV infection both nationally and in Nevada. According to 2008 interim population estimates, African Americans represented only 7% of Nevada’s total population; however, this group accounted for more than a quarter (27%, n=116) of the newly diagnosed HIV infections (N=435) in Nevada in 2008. The rate of new HIV infections in Nevada among Blacks was 62 cases per 100,000 Nevada residents.

Figure 59 Number of Persons Living with HIV/AIDS and New HIV Infections Among Blacks in Nevada: 2004-2008



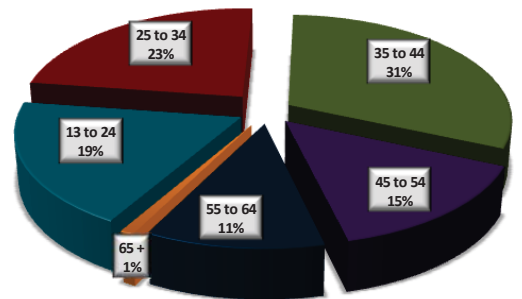
From 2004 to 2008, the number of new HIV infections in Nevada among Blacks increased by 13% while during the same time period there was a 28% increase in the number of Blacks living with HIV/AIDS in Nevada. The number of new AIDS cases has remained relatively stable between 2004 and 2008, with a slight decrease in new AIDS cases in 2006.

Within Nevada, there is a disproportionate amount of epidemic among this population in Clark County. Clark County has the highest percentage (9%) of African American residents in Nevada and accounted for 97% (n=112) of the 116 total new HIV infections among Blacks in 2008. The rate of new HIV infections for Clark County among Blacks was 3 cases per 100,000. From 2004 to 2008 Clark County experienced a 22% growth [92|112] in number of new HIV infections among Blacks.

Although Washoe County only accounted for 4% of new HIV/AIDS cases among Blacks, the annual rate of HIV infection in 2008 was 1 per 100,000 among Blacks. From 2004 to 2008 the number of new HIV infections among Blacks declined from nine to four in 2008 [9|4].

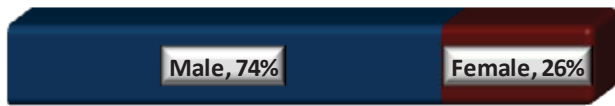
Figure 60 Percent of New HIV Infections Among Blacks in Nevada, by Age at Diagnosis: 2008

In 2008, the greatest proportion of the new HIV infections among Blacks were 35-44 years of age followed by 23% being 25-34 years of age. Youth ages 13-24 accounted for 19% of the new HIV infections among Blacks, 15% were 45-54, 11% were 55-64, and about 1% were above 65 years of age at the time of HIV diagnosis.



From 2004 to 2008, Blacks 55-64 and 25-34 years of age experienced the greatest percentage growth. Blacks 55-64 saw a 117% increase in the number of new HIV infections [6|13] and Blacks 25-34 increased 35% [20|27].

Figure 61 Number of New HIV Infections in Nevada Among Blacks, Sex: 2008



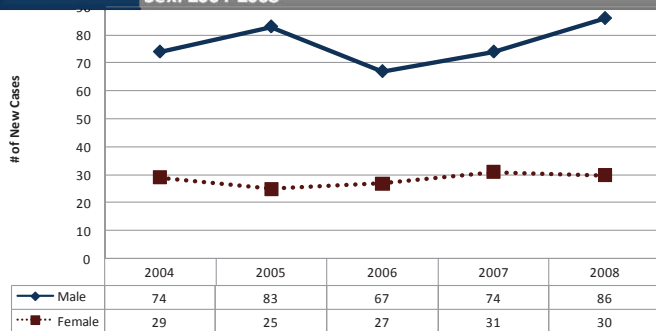
Black men and women overall are disproportionately affected by HIV/AIDS in Nevada. Black males continue to dominate the epidemic, yet new HIV infections are rising among females. In 2008 in Nevada, Black males accounted for 74% of the new HIV infections among Blacks and females accounted for more than a quarter of the new HIV infections (26%).

Figure 62 Number of Persons Living with HIV/AIDS in Nevada Among Blacks, Sex: 2008



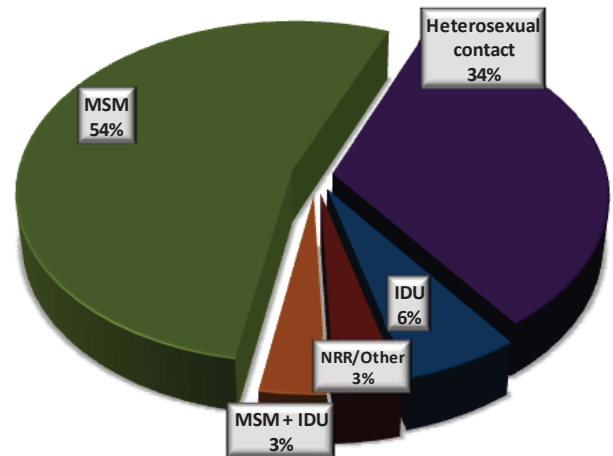
Among Black persons living with HIV/AIDS in Nevada in 2008, 71% were among males and almost one-third (29%) were among females, which is a greater proportion compared to the number of new cases among all females.

Figure 63 Trends of New HIV Infections in Nevada Among Blacks, by Sex: 2004-2008



In Nevada, this disparity of HIV is most evident among Black males however; there is an upward trend in new HIV infections among both Black males and females. From 2004 to 2008, Black males showed a 16% increase and Black females a 3% increase during this time period in Nevada.

Figure 64 Percent of New HIV Infections Among Blacks in Nevada by, Risk of Transmission: 2008



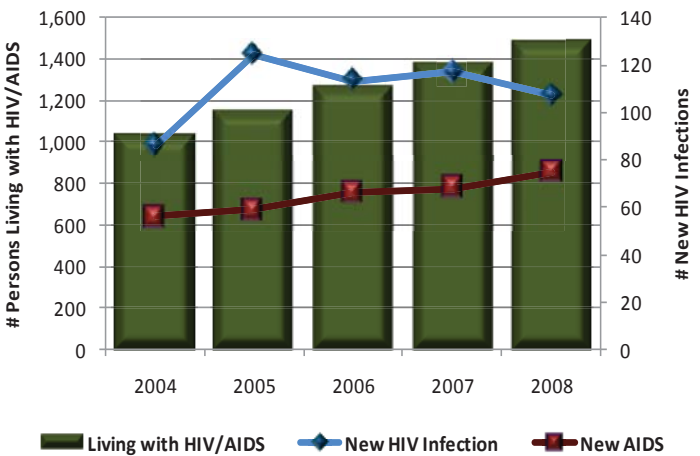
The most common risk factor for new HIV infections among Blacks in Nevada in 2008 was men who have sex with men (MSM) accounting for 54% (n=62) of the primary risk factors for HIV infection. Heterosexual contact was the second most common primary risk factor among Blacks, accounting for more than one-third of the new HIV infections. Injection drug use (IDU) accounted for only 6% and co-occurring risk of MSM and IDU accounted for 3% of the primary risk factors among new HIV infections among Blacks in Nevada.

From 2004 to 2008, heterosexual contact among Blacks increased 63% [46|75]. This is primarily due to increase among new HIV cases among Black females in Nevada. Additionally, the risk of IDU among Blacks increased 36% from 2004 to 2008 [22|30]. During this same time period MSM as the primary risk factor for HIV decreased 44% [25|14] and combined MSM and IDU doubled from two to four from 2004 to 2008, respectively.



Hispanics continue to be disproportionately affected by HIV infection both nationally and in Nevada. According to 2008 interim population estimates, Hispanics represented 39% of Nevada’s total population and accounted for 25% (n=107) of the total newly diagnosed HIV infections (N=435) in Nevada in 2008. In 2008, the rate of new HIV infections in Nevada among Hispanics was 10.1 cases per 100,000 Nevada residents.

Figure 65 Number of Persons Living with HIV/AIDS and New HIV Infections Among Hispanics in Nevada: 2004-2008



From 2004 to 2008, the number of new HIV infections in Nevada among Hispanics increased by 24% while the number of newly diagnosed AIDS cases increased 34%. The number of Hispanics living with HIV/AIDS increased 44% during this same time period in Nevada.

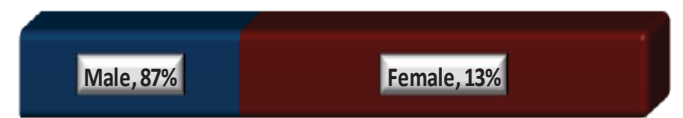
Within Nevada, there is a disproportionate amount of epidemic among this population in Clark County. In 2008, 95% of the total new HIV infections among Hispanics were in Clark County and the remaining 5% in Washoe County. From 2004 to 2008, Clark County experienced a 40% growth [73|102] in number of new HIV infections among Hispanics, while Washoe County had a 62% decrease from 13 cases in 2004 to 5 [13|5].

Figure 66 Percent of New HIV Infections Among Hispanics in Nevada, by Sex: 2008



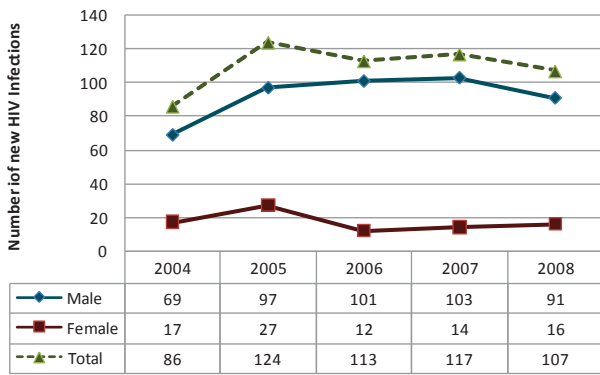
Hispanic men and women overall are disproportionately affected by HIV/AIDS, in Nevada. Hispanic males continue to dominate the epidemic. In 2008 in Nevada, Hispanic males accounted for 85% of the new HIV infections while females accounted 15% of the cases.

Figure 67 Percent of Persons Living with HIV/AIDS Hispanics in Nevada, by Sex: 2008



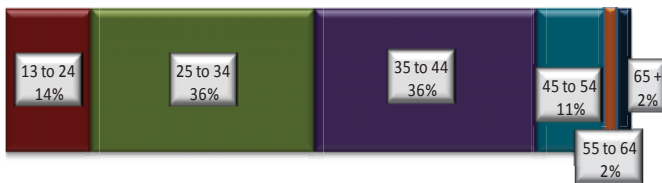
Among Hispanic persons living with HIV/AIDS in Nevada in 2008, 87% were among males and 13% were among females. Among both male and female Hispanics living with HIV/AIDS in Nevada, there were increases from 2004 to 2008. From 2004 to 2008, Hispanic males saw a 44% increase and Hispanic females saw a 46% increase. While there may be a slight decrease in the number of Hispanic females infected with HIV, there is an increase in the number of females living with HIV/AIDS in Nevada.

Figure 68 Trends of New HIV Infections in Nevada Among Hispanics, by Sex: 2004-2008



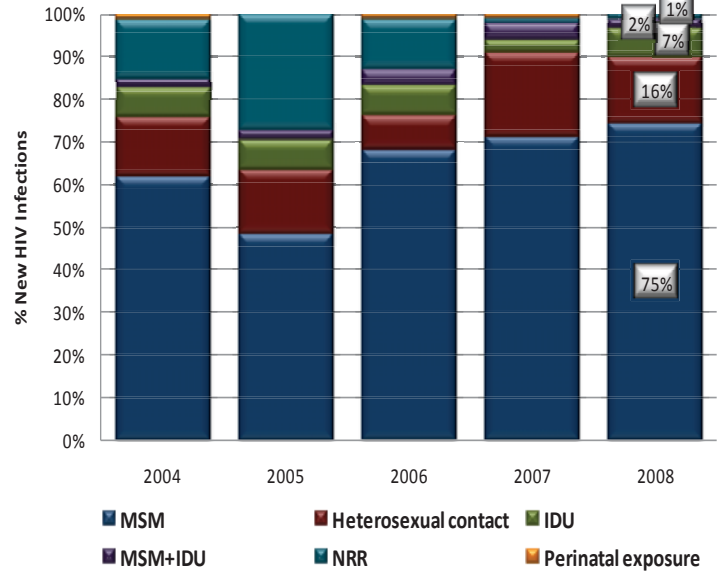
In Nevada, this disparity of HIV is most evident among Hispanic males however and there is an upward trend in new HIV infections. From 2004 to 2008, Hispanic males increased 32% from 69 new HIV infection cases in 2004 to 91 in 2008. Among Hispanic females, there has been a decrease in this population in Nevada over the past five years. In 2004, there were 17 new HIV infections among Hispanics females and in 2008 there were 16; this represents a decrease of 6% percent. Although there has been an overall decline in new HIV infections among females from 2004 to 2008, there was an increase from 2006 to 2008.

Figure 69 Percent of New HIV Infections Among Hispanics in Nevada, by Age at Diagnosis: 2008



Overall, half of the new HIV infections among Hispanics are among youth and young adults (13-34 year olds); 14% were 13-24 and 36% were 25-34. From 2004-2008 the number of new HIV infections among Hispanic youth (13-24) experienced the most notable increase; 10 cases in this group in 2004 to 15 cases in 2008, a 50% increase. In 2008, 35-44 year olds accounted for 36% of the new HIV infections among Hispanics followed by 45-54 year olds (11%), 55-64 year olds (2%) and 65 and older (2%). From 2004 to 2008, older adults (35-44) experienced a significant increase in number of cases in these age groups; 35-44 year olds increased 23%, while 45-54 year olds increased 33%. Consequently, there were decreases among both the less than 13 year olds and 55 and older Hispanics.

Figure 70 Trends of New HIV Infections Among Hispanics, by Risk of Transmission: 2004-2008



The most common risk factor for new HIV infections among Hispanics in Nevada in 2008 was men who have sex with men (MSM) accounting for 75% of the primary risk factors for HIV infection. From 2004 to 2008 there was a 51% increase for MSM as a primary risk for HIV transmission among Hispanics.

Heterosexual contact was the second most common primary risk factor among Hispanics, accounting for more than 16% of the new HIV infections. From 2004 to 2008 there was a 42% increase for heterosexual contact as a primary risk for HIV transmission among Hispanics.

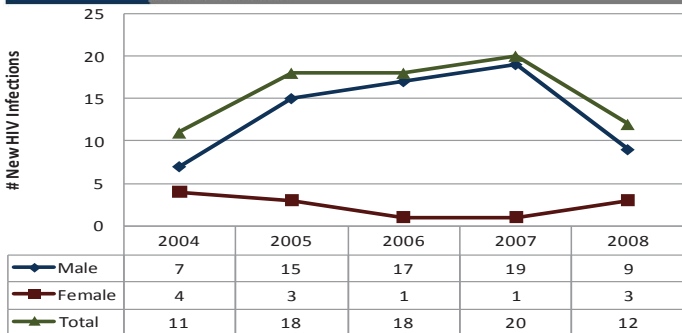
Injection drug use (IDU) accounted for 7%, combined risk of MSM and IDU accounted for 2%. From 2004 to 2008 there was a 17% increase for IDU as a primary risk for HIV transmission among Hispanics while there was no notable increase among those with a combined risk of MSM and IDU.

Perinatal exposure accounted for zero of the primary risk factors among new HIV infections among Hispanics in Nevada; this is down from 1% over the past several years.



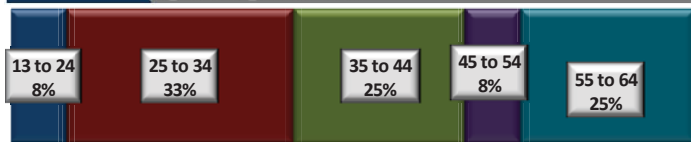
In Nevada in 2008, 2% of the persons living with HIV/AIDS in Nevada were API. Additionally, 3% of the new HIV infections were among APIs, an increase of 9% from 2004 to 2008. Among the new HIV infections among APIs, 75% of the cases were diagnosed in Clark County and 25% in Washoe County.

Figure 71 Trends of New HIV Infections in Nevada Among API, by Sex: 2004-2008



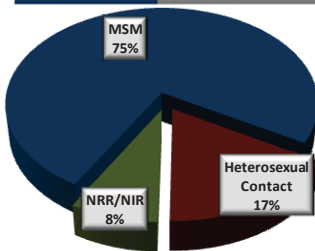
In 2008, 75% of the new HIV infections among APIs were male and 25% were female. From 2004 to 2008, the number of new HIV infections among male APIs increased 29% while among female APIs decreased 25%.

Figure 72 Percent of New HIV Infections in Nevada Among API, by Age at Diagnosis: 2008



In 2008, the majority of the new HIV infections among APIs was in the 25-34 year old age group followed by 35-44 (25%), 55-64 (25%), and 13-24 (8%). From 2004 to 2008, the number of new HIV infections among 25-34 year olds doubled.

Figure 73 Percent of New HIV Infections in Nevada Among API, by Risk of Transmission: 2008



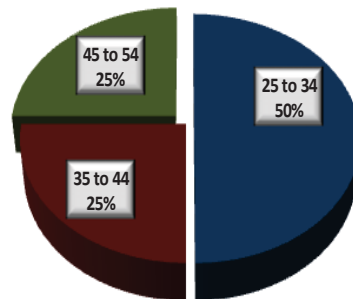
Among the APIs in Nevada, 75% had a primary risk of MSM and 17% had a primary risk of heterosexual contact. The risk of MSM among this group increased 50% from 6 cases in 2004 to 9 cases in 2008.



In Nevada in 2008, 2% of the persons living with HIV/AIDS in Nevada were AI/AN and from 2004 to 2008 there was a 21% increase among this group. Additionally, 1% of the new HIV infections were among AI/ANs and increased 33% annually from 2004 to 2008. Among the new HIV infections among AI/ANs, all of the cases were diagnosed in Clark County in 2008.

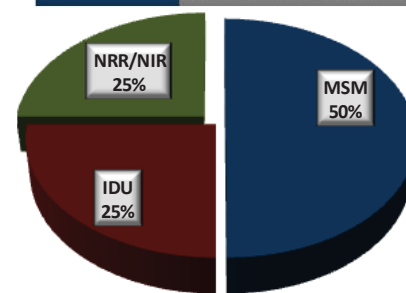
In 2008, the rate of new HIV infections among AI/ANs was 11.0 cases per 100,000 population. All of the new HIV infections among AI/ANs were male from 2006 through 2008. The rate of new HIV infections among males in Nevada, 2008 was 22.5 cases per 100,000 population.

Figure 74 Percent of New HIV Infections in Nevada Among AI/AN, by Age at Diagnosis: 2008



In 2008, of the new HIV infections among AI/ANs, half of the cases were between 25 to 34 years of age while the other half of the cases were between 35-54 years of age; 25% were between 35-44 and 25% were between 45-54 years of age. Although in 2008 there were no cases among those 13-24 years of age, one-third of the cases from 2004 to 2007 were among this age group.

Figure 75 Percent of New HIV Infections in Nevada Among AI/AN, by Risk of Transmission: 2008



Among the AI/ANs in Nevada, 50% had a primary risk of MSM and 25% had primary risk of IDU. The remaining 25% of cases had no reported or identified risk. These risk groups have remained consistent from 2004-2008. In Nevada, no cases have reported with heterosexual contact as a primary risk factor.

Among the AI/ANs in Nevada, 50% had a primary risk of MSM and 25% had primary risk of IDU. The remaining 25% of cases had no reported or identified risk. These risk groups have remained consistent from 2004-2008. In Nevada, no cases have reported with heterosexual contact as a primary risk factor.



Young people in the United States are at persistent risk for HIV infection. This risk is especially notable for youth of minority races and ethnicities.

Continual HIV prevention outreach and education efforts, including programs on abstinence and on delaying the initiation of sex, are required as new generations replace the generations that benefited from earlier prevention strategies. Unless otherwise noted, youth are persons who are 13–24 years of age.

In Nevada, the proportion of youth living with HIV/AIDS in 2008 was 15% of the total; moreover, the prevalence rate of persons living with HIV/AIDS between 13-24 was 175.0 per 100,000 population. Additionally, the rate of new HIV infections among this age group was 13.6 per 100,000 population. From 2004 to 2008 there has been a 12% annual increase in number of new HIV infections among youth in Nevada.

In 2008, the majority (94%) of the new HIV infections among youth were in Clark County and from 2004 to 2008 increased 20% in this area. In 2008, only 5% of the new HIV infections were among youth in Washoe County and 2% were in the FaR areas of Nevada. Rate of new youth HIV in Clark County in 2008 was 18.0 per 100,000, Washoe County was 3.9 per 100,000, and in FaR areas of Nevada were 1.7 per 100,000 population among youth in Nevada in 2008.

Males accounted for 86% of the new HIV infections among youth in 2008 and females accounted for 14% of the cases. From 2004 to 2008, the number of new HIV infections among males increased 20% and the number of cases among females declined overall during the past five years; however, have been on the rise since 2006.

Figure 76 Number of New HIV Infections in Nevada Among Youth (13-24), by Sex: 2004-2008

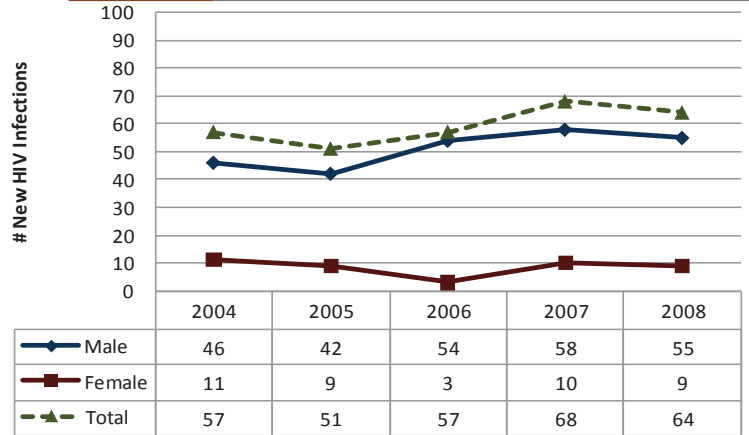
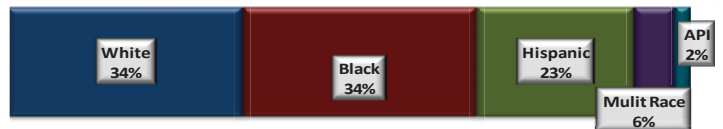
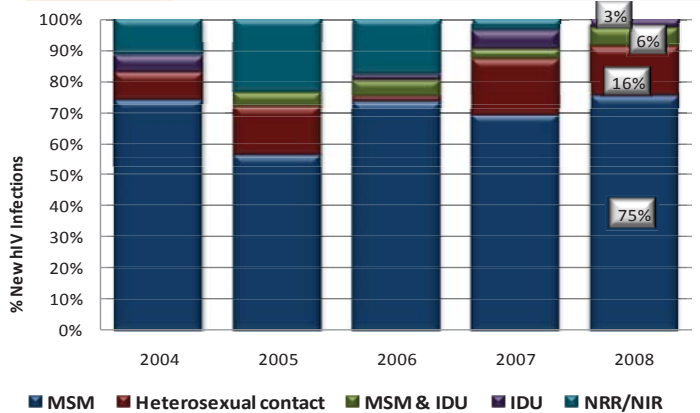


Figure 77 Percent of New HIV Infections in Nevada Among Youth (13-24) by Race/Ethnicity: 2004-2008



Whites and Blacks each made up more than one-third (34%) of the new HIV infections among youth in Nevada; Hispanics accounted for 23% of the new HIV infections, those who identified as multi-race accounted for 6%, and APIs accounted for 2% in 2008. Hispanics experienced the greatest increase in number of new HIV infections among youth, from 2004 to 2008 there was a 50% annual increase among this group.

Figure 78 Trends of New HIV Infections in Nevada Among Youth (13-24), by Risk of Transmission: 2004-2008

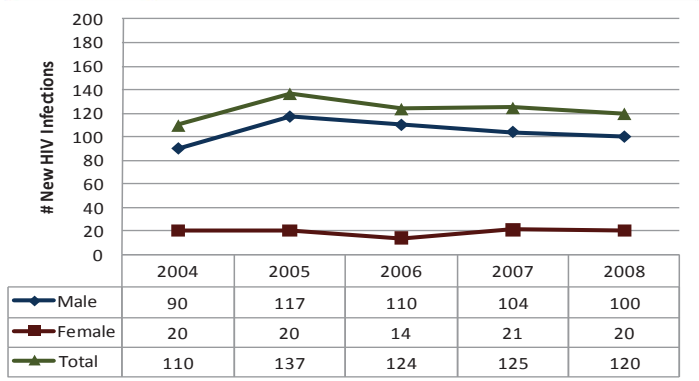


MSM has consistently been the primary risk for HIV infections among youth in Nevada, accounting for the risk of 75% of cases in 2008, and is continually increasing as a primary risk of HIV infection among youth. However, heterosexual contact has doubled from 2004 to 2008 and accounted for 16% of the new HIV infections. IDU accounted for 3% of new HIV infections, and trends for this risk among youth are declining. Combined risk of MSM and IDU accounted for 6% of the new HIV infections and from 2005 to 2008 has not seen change.

young adults (2-34 year olds)

Young adults include the age group 25-34 and accounted for more than one-third (28%) of the new HIV infections in 2008 in Nevada. The rate of new HIV infections among this group was 29.9 per 100,000 population.

Figure 79 Trends of New HIV Infections in Nevada Among Young Adults (25-34), Sex: 2004-2008



Males accounted for 83% of the new HIV infections among this age group in 2008 and increased 11% from 2004 to 2008. Females accounted for 17% of the new HIV infections among this age group in 2008 and saw no notable increase.

Figure 80 Percent of New HIV Infections in Nevada Among Young Adults (25-34), by Race/Ethnicity: 2008



Among the 25-34 age group, 41% of the cases were White, 32% of the cases were Hispanic, 23% were Black, 3% were API, and 2% were AI/AN in Nevada in 2008. Both Blacks and Hispanics experienced increases. From 2004 to 2008, the number of new HIV infections among Black young adults increased 35% and Hispanics increased 195%.

The primary risk factors for transmission for young adults in 2008 was MSM (72%) and heterosexual contact (18%). Both of these risk groups also experienced significant increases, MSM increased 26% and heterosexual contact as a primary risk factor increased 57%. IDU and the combined risk of MSM and IDU accounted for 3% and 5% of the mode of transmission for young adults, respectively.

adults (35-54 year olds)

Adults 35-54 years of age accounted for almost half of both the persons living with HIV/AIDS (49%) and new HIV infections (48%) in Nevada in 2008; one-third (30%) of these cases were between 35-44 year of age. The rate of new HIV infections among this age group in 2008 was 26.7 per 100,000 population.

In 2008, 90% of new HIV infections among this age group were in Clark County, 10% in Washoe County, and 1% in the FaR areas of Nevada. Additionally, 86% of the new HIV infections among adults were male and 14% female.

Almost one-half of the new HIV infections among adults were White (47%), one-quarter (25%) were Black, one-quarter (24%) were Hispanic, 2% were API, and 1% were AI/AN in Nevada in 2008.

More than two-thirds (65%) of adults in Nevada with a new HIV infection reported primary risk of transmission as MSM, 18% reported heterosexual contact, 11% reported IDU, 4% reported a combined risk of MSM and IDU, and 1% had no risk identified.

older adults (55+ year olds)

Older adults 55 years and older accounted for 4% of the persons living with HIV/AIDS in Nevada and 10% of the new HIV infections in 2008. The rate of new HIV infections among this age group in 2008 was 35.2 per 100,000 population.

In 2008, 84% of new HIV infections among this age group were in Clark County, 12% in Washoe County, and 5% in the FaR areas of Nevada. Additionally, 81% of the new HIV infections among older adults were male and 19% female.

Half of the new HIV infections among older adults were White (51%), one-third (33%) were Black, 9% were Hispanic, and 7% were API in Nevada in 2008.

More than one-half (56%) of older adults in Nevada with a new HIV infection reported primary risk of transmission as MSM, 23% reported heterosexual contact, 9% reported IDU, 2% reported a combined risk of MSM and IDU, and 9% had no risk identified.

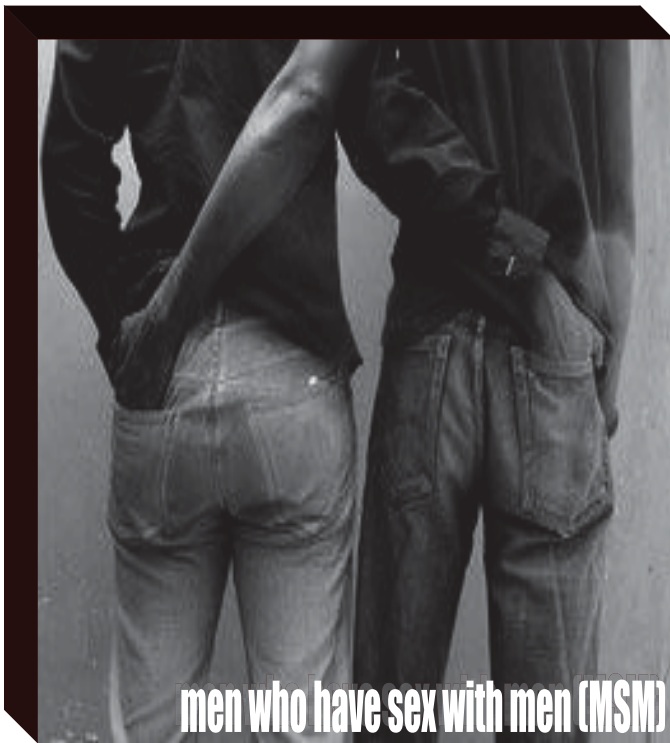
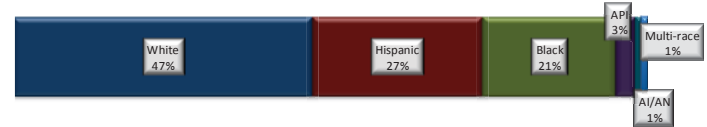
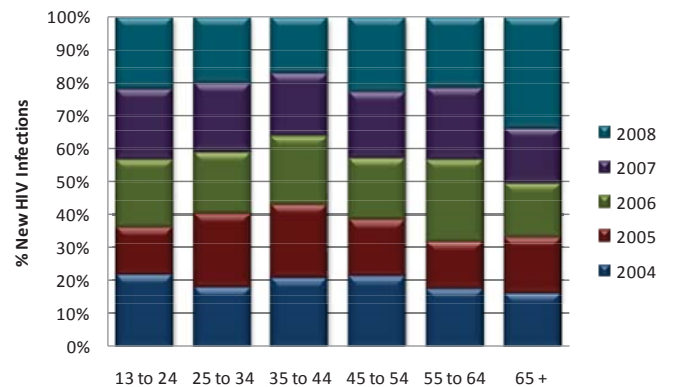


Figure 81 Percent of New HIV Infections in Nevada Among MSM, by Race/Ethnicity: 2004-2008



The racial/ethnic distribution of the MSM risk group has consistently been primarily White (47%), yet from 2004 to 2008 there was a 6% decrease among Whites for the MSM risk group. Hispanics accounted 27% of the MSM risk group in 2008 and from 2004 to 2008 experienced a 51% increase. Blacks accounted for 21% of the MSM risk group and increased 11% from 2004 to 2008. APIs accounted for only 3% of the MSM risk group in 2008, yet from 2004 to 2008 experienced a 50% increase. AI/AN (1%) and those of multi-race (1%) represented only 2% of the MSM risk group in 2008.

Figure 82 Trends of New HIV Infections in Nevada Among MSM, by Age at Diagnosis: 2004-2008

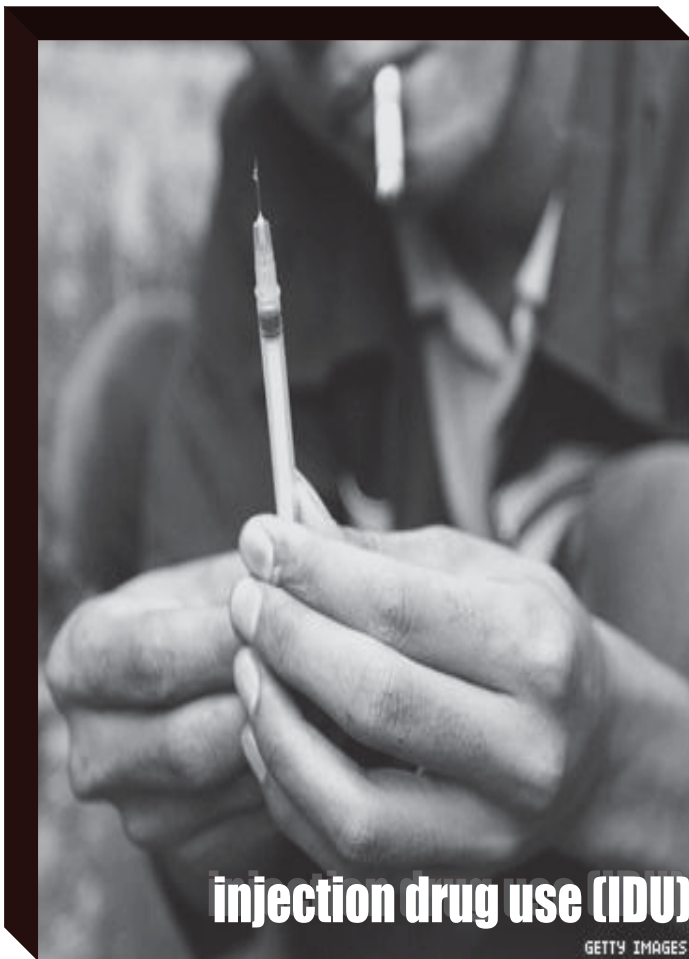


In 2008, 16% of the new HIV infections among the MSM risk group were among youth 13-24 years of age. From 2004 to 2008, there was a 14% increase among this age group. The 25-34 (30%) and 35-44 year olds (29%) accounted for two-thirds (59%) of the new HIV infections among the MSM risk group. From 2004 to 2008, the 25-34 year old group experienced a 26% increase [68|86] yet the 35-44 year olds experienced a 10% decrease [96|86] during this same time period. The 45-54 year old age group accounted for 17% of the cases among the MSM risk group and increased 14% from 2004-2008. The older adults 55+ accounted for 8%, and the most significant annual increase. From 2004 to 2008, 55-64 year old MSM increased 50% [12|18] while 65 and older individuals doubled.

The term *men who have sex with men (MSM)* refers to all men who have sex with other men, regardless of how they identify themselves (gay, bisexual, or heterosexual). In the United States and in Nevada, the impact of HIV and AIDS on MSM is alarming.

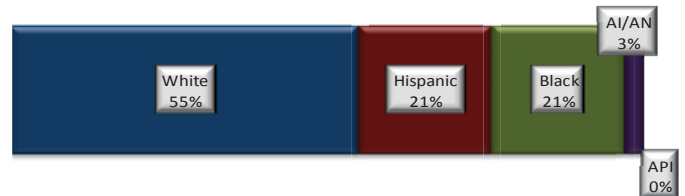
In 2008 in Nevada, for 60% of the persons living with HIV/AIDS in Nevada, MSM was the primary risk factor for HIV transmission. Among persons living with HIV/AIDS in Nevada, from 2004 to 2008 there was a 30% increase among individuals with MSM as the primary risk factor for HIV transmission. From 2004 to 2008 the number of new HIV infections whose primary risk factor was MSM increased 11% [264|293].

In Nevada, 95% of the new HIV infections whose primary risk was MSM were located in Clark County, 5% in Washoe County, and 1% in the FaR areas in 2008. While the FaR areas represent only 1% of the new cases among this risk group, these areas of Nevada had a 33% increase from 2004 to 2008 among the number of new HIV infections whose primary risk was MSM; Clark County had a 17% increase; and, Washoe County experienced a 44% decrease in the number of new HIV infections whose primary risk was MSM.



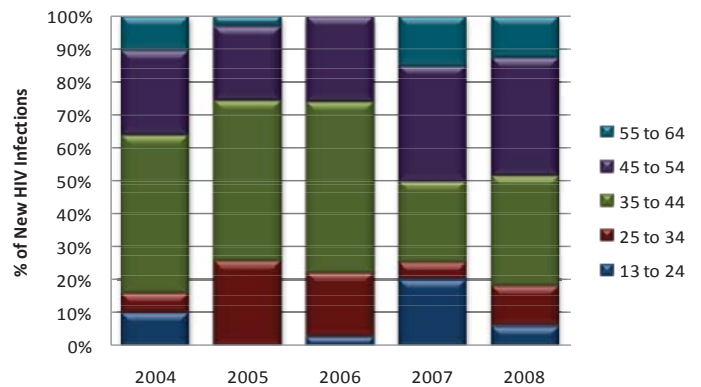
In 2004, females accounted for a greater proportion (61%) of the IDU cases among new HIV infections; however, from 2004 to 2008 females saw a 74% annual decrease and males experienced a 133% increase. In 2008, 85% of the new HIV infections whose primary risk was IDU were male.

Figure 84 Percent of New HIV Infections in Nevada Among IDU, by Race/Ethnicity: 2008



In 2008, over half (55%) of the new HIV infections whose primary risk was IDU were White, followed by 21% Black, 21% were Hispanic, and 3% AI/AN; there were no API. Among all the racial/ethnic groups, Hispanics were the only group who experienced any notable change from 2004 to 2008. During this time primary risk of IDU among Hispanics increased 17% [2 | 12].

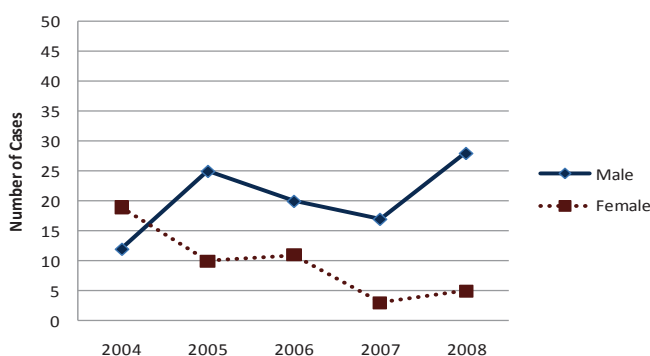
Figure 85 Percent of New HIV Infections in Nevada Among IDU, by Age at Diagnosis: 2004-2008



From 2004 to 2006, 35-44 year olds made up almost half of the cases of IDU; however, recent trends from 2007 to 2008, show that a decrease among that age group and an increase among 45-54 year olds, which in 2008 accounted for over one-third (36%) of the cases. Among 25-34 year olds, new HIV infections whose risk was IDU doubled from 6% of the cases in 2004 to 12% in 2008. Additionally, 13-24 year olds and 55-64 year olds are seeing decreases during this same time period.

In Nevada in 2008, 8% of the new HIV infections, the primary risk of infection was IDU. There has been an increase in IDU as a primary risk of transmission in Nevada; from 2004 to 2008 there was a 6% increase. Among new HIV infections in Washoe County, which accounted for 18% of the IDU cases, IDU increased 20% from 2004 to 2008. Clark County, which accounted for 18% of the IDU cases, saw an 8% increase during this time period.

Figure 83 Trends of New HIV Infections in Nevada Among IDU, by Sex: 2004-2008





In Nevada in 2008, 18% of the new HIV infections primary risk of infection was heterosexual contact. There has been an increase in heterosexual contact as a primary risk of transmission in Nevada, from 53 cases in 2004 to 80 cases in 2008, representing a 51% increase among this risk group.

Within Nevada, the majority of the new HIV infections with a heterosexual contact risk were in Clark County. In 2008, Clark County accounted for 94% of the heterosexual contact cases, and increased 63% from 2004 to 2008. Washoe County, which accounted for 5% of the heterosexual cases, saw a 20% decrease during this time period.

Females have consistently accounted for the majority of new HIV infection with primary risk of heterosexual contact. In 2008, three-quarters (74%) of the new HIV infections with a risk of heterosexual contact were among females compared to 26% among males. However, males have experienced a 133% increase from 2004 to 2008 while females have seen a 34% increase.

Figure 86 Trends of New HIV Infections in Nevada Among Heterosexual Contact Risk, by Sex: 2004-2008

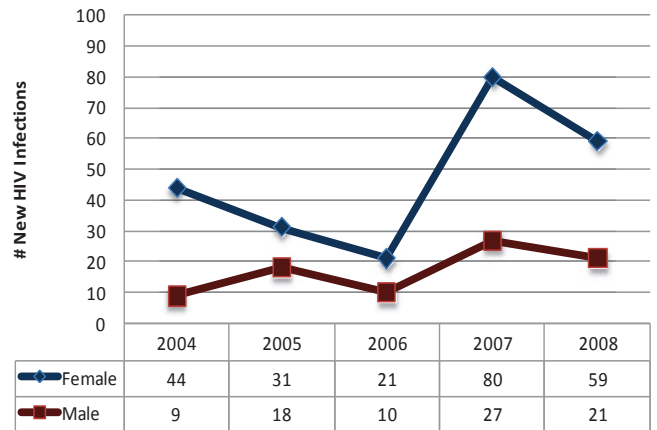
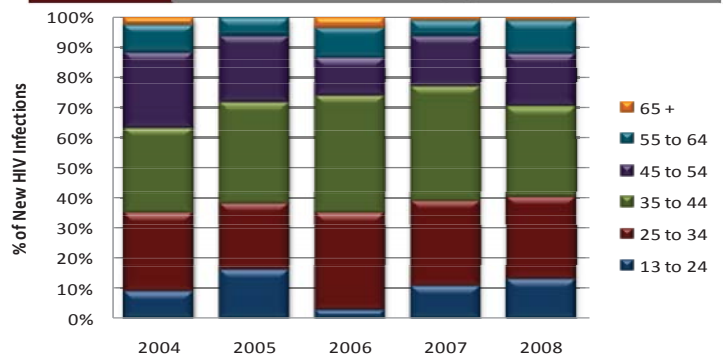


Figure 87 Percent of New HIV Infections in Nevada Among Heterosexual Contact Risk, by Race/Ethnicity: 2008



In 2008, Blacks disproportionately reported heterosexual contact as primary mode of exposure for HIV. Half (49%) of the new HIV infections whose primary risk of transmission was heterosexual contact were among Blacks, followed by one-quarter (25%) among Whites, and 21% among Hispanics, 3% among APIs and 3% were multi-racial.

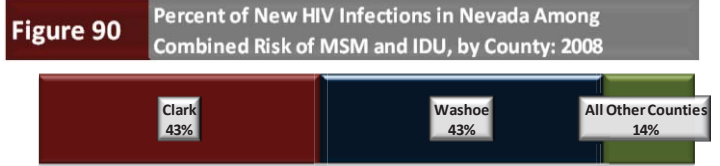
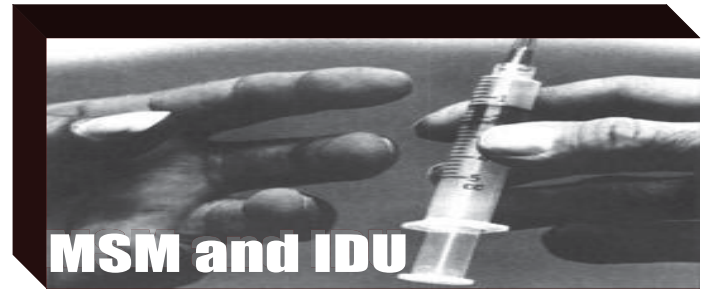
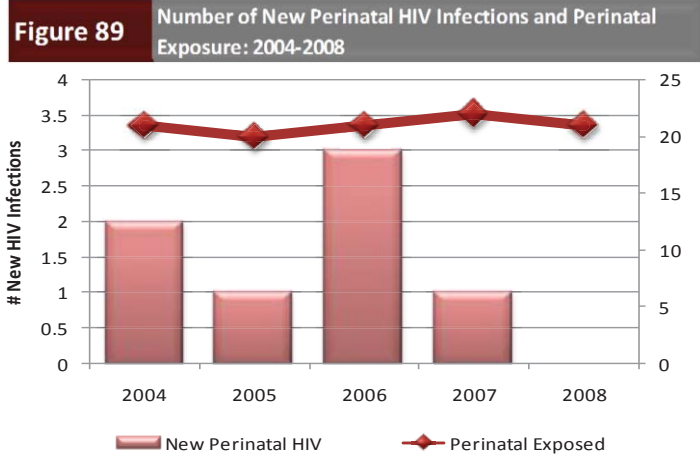
Figure 88 Percent of New HIV Infections in Nevada Among Heterosexual Contact Risk, by Age at Diagnosis: 2004-2008



From 2004 to 2008, 35-44 and 25-34 year olds made up around one-third of the cases each, with significant increases among both of these age groups during this five year period. Additionally, 13-24 year olds and 55-64 year olds are seeing significant increase during this same time period. In 2008, 13% of the cases were among 13-24 year olds, 28% were 25-34, 30% were 35-44, 18% were 45-54, and 12% were 55 or older.

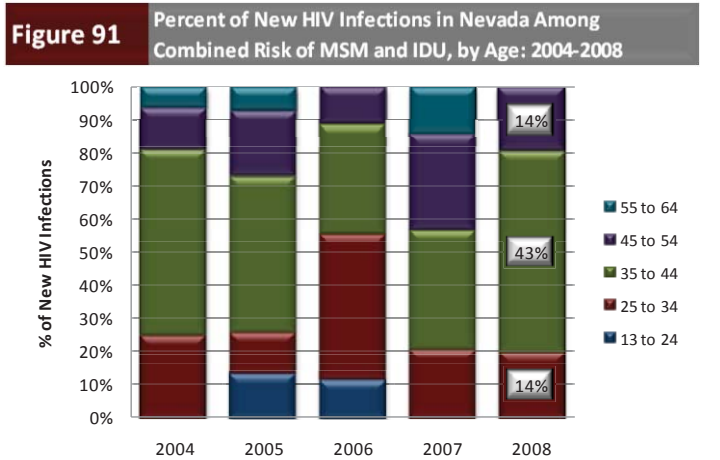


Since 2006, Nevada has more than doubled the number of HIV tests administered in Family Planning Clinics. In 2008, 707 HIV tests were administered compared to 336 in 2006. Since 2006 when CDC's guidelines came out, Nevada has had more HIV positive perinatally exposed cases reported. From 2006 to 2008 more pregnant women have learned their HIV status during pregnancy. It is likely the increase is due to increased testing during prenatal care as recommended in the CDC guidelines. Since 2007, after the passage of SB 266, Nevada has had no positive perinatal HIV cases. This could be due to more women being aware of their HIV status during and before delivery and providers appropriately treating HIV positive pregnant women, thus decreasing transmission. As a result of an increase in the use of rapid HIV tests during delivery, the number of mothers who learned their HIV status during labor doubled from 2006 to 2008. In 2008, there were 21 perinatally exposed cases of HIV in Nevada; however, there were zero confirmed cases of HIV.



In 2008, there were seven new HIV infections with a combined risk of MSM and IDU. There has been a decline in this risk group over the past five years. In 2008, 43% of the new HIV infections with a combined risk of MSM and IDU were diagnosed in Clark County, 43% in Washoe County, and 14% in all the other counties combined.

Among this group in 2008, 71% of the persons who reported this combined risk were White and 29% were Hispanic.



In 2008, almost one-half of the new HIV infections among individuals with a combined risk of MSM and IDU were between 35-44 years of age while both 25-34 year olds and 45-54 year olds accounted for 14% of the new cases each. In 2008, there were no new cases for this risk group among 13-24 year olds and 55-64 year olds; however, between 2004 and 2007, these age groups did have new HIV infections and are age groups that seem to fluctuate for this risk group.

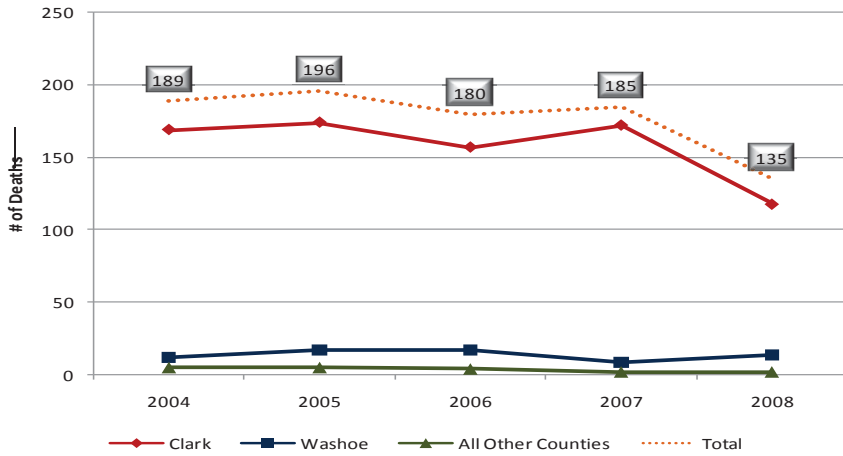
No Reported Risk (NRR/NIR)

From 2004 to 2008, the number of cases with no risk (NRR/NIR) has decreased from 28 new cases in 2004 had no risk compared to 8 cases in 2008, representing a 68% decrease. This is due to improved disease investigation efforts statewide. HIV Surveillance Programs in Nevada have dedicated time and effort to improve interviewing techniques for investigators as well as improved procedures for case follow-up.

Deaths due to HIV/AIDS continue to be among the top ten leading causes of death in the U.S. for individuals 15-54. According to the Kaiser Family Foundation, the age-adjusted death rate for HIV disease was 2.9 in Nevada compared to 4.0 in the nation, ranking Nevada 29th in the nation.

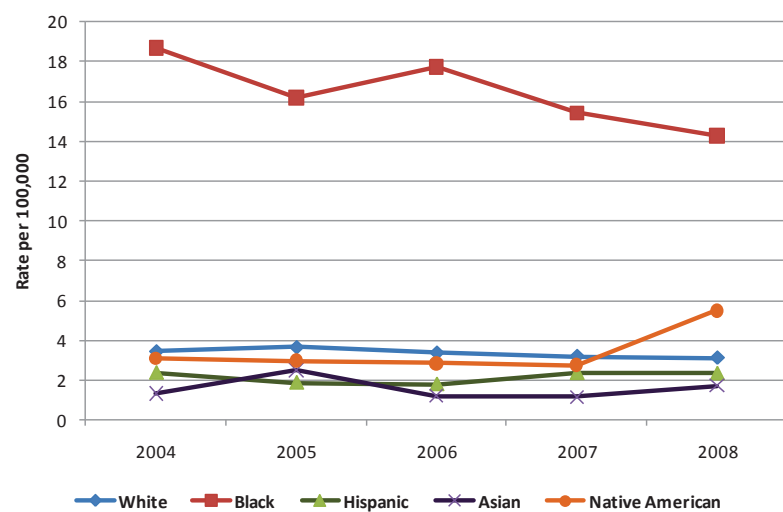
In Nevada, the number of deaths (not necessarily due to HIV or AIDS) among persons with HIV/AIDS has remained relatively stable from 2004-2007; however, in 2008 there was a 26% decline in the number of deaths. This may be due to delayed reporting of deaths and a true decline in deaths.

Figure 92 Number of Deaths Among HIV/AIDS Cases in Nevada, by County: 2004-2008



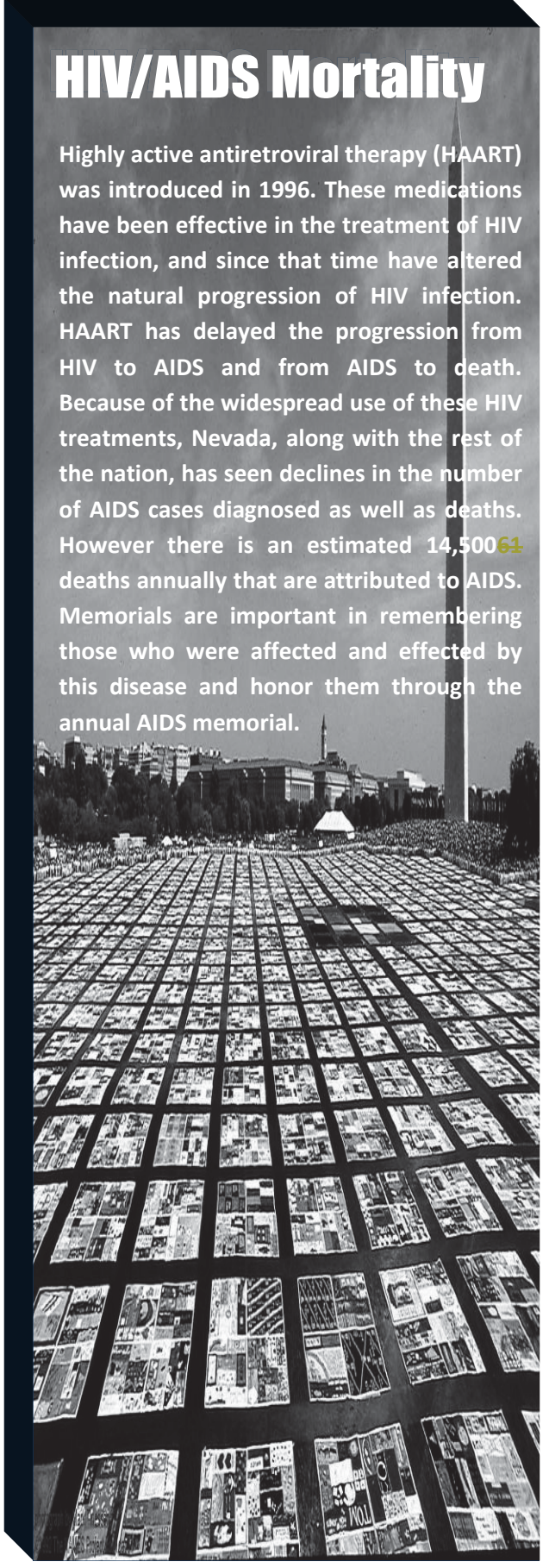
There continues to be racial disparities in the rates of deaths among individuals with HIV/AIDS in Nevada. In 2008, although the number deaths were greatest among Whites, the rates of death were highest among Blacks. This could be due to cultural differences in testing and care. It has been shown that Blacks test later in their disease, as well as being disproportionately affected by many other health disparities.

Figure 93 Rate per 100,000 of Deaths Among HIV/AIDS Cases in Nevada, by Race/Ethnicity: 2004-2008



HIV/AIDS Mortality

Highly active antiretroviral therapy (HAART) was introduced in 1996. These medications have been effective in the treatment of HIV infection, and since that time have altered the natural progression of HIV infection. HAART has delayed the progression from HIV to AIDS and from AIDS to death. Because of the widespread use of these HIV treatments, Nevada, along with the rest of the nation, has seen declines in the number of AIDS cases diagnosed as well as deaths. However there is an estimated 14,500-61 deaths annually that are attributed to AIDS. Memorials are important in remembering those who were affected and effected by this disease and honor them through the annual AIDS memorial.



Section 1: Core Epidemiological Questions

Question 3: What are the indicators of risk for HIV infection in Nevada?

The persons most likely to become infected with HIV are those who engage in high-risk behaviors and who live in communities where HIV prevalence is high. HIV surveillance data is often limited in the information obtained; therefore, collaboration of data is essential in identifying other high-risk populations. To help community planning groups understand the differing risks for HIV infection in Nevada, this section addresses the populations identified that are known to be at increased risk for HIV based on available HIV surveillance data and supporting data sources.

The primary focus of this section is to address groups that are at elevated risk of acquiring HIV. These groups include: individuals with a history of TB or STD, incarceration, and youth.

tuberculosis (TB)

Table 10 Number and Percent of Co-Infections of HIV and TB in Nevada: 2004-2008

	2004		2005		2006		2007		2008	
	n	%	n	%	n	%	n	%	n	%
HIV Status										
HIV Positive	3	3%	11	10%	4	4%	6	6%	3	3%
HIV Negative	87	92%	91	81%	85	84%	84	82%	86	84%
Not Offered	4	4%	10	9%	12	12%	11	11%	12	12%
Refused HIV Test	1	1%	0	0%	0	0%	0	0%	0	0%
Unknown	0	0%	0	0%	0	0%	1	1%	1	1%
Total TB Cases in Nevada	95	100%	112	100%	101	100%	102	100%	102	100%

Source: Nevada Tuberculosis Information Management System (TIMS), 2004-2008 (January 2009)

Because populations affected by TB are also disproportionately affected by other infectious diseases (HIV, hepatitis C virus (HCV), hepatitis B virus (HBV), and other STDs), the Nevada State TB Program encourages and provides all newly diagnosed TB cases with HIV testing. Persons coinfecting with HIV/AIDS and tuberculosis (referred to as HIV/TB or the “deadly duo”) tend to experience a rapid progression of both disease states. They are also more likely to have TB disease infect parts of their body other than the lungs which can delay diagnosis and treatment thus increasing the morbidity and mortality rate of those with HIV/TB.

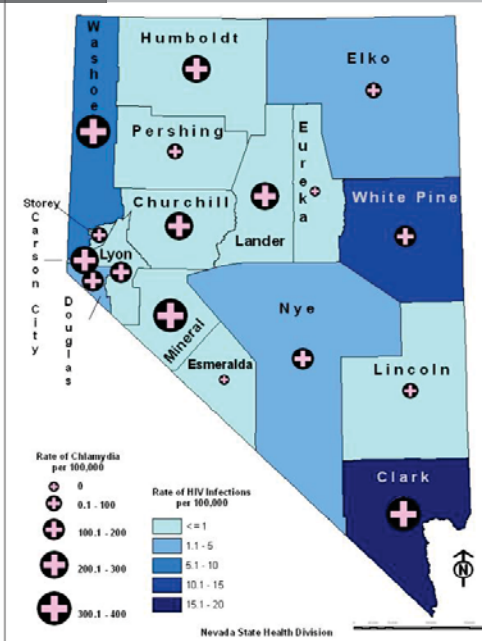
The Nevada State TB Program collaborates with the HIV/AIDS Surveillance Program to conduct TB and AIDS registry matches. This ensures completeness of reporting of HIV/TB co-infected patients, enabling the patients to obtain appropriate treatment and counseling as soon as possible. Synchronizing the treatment of both diseases is vital as a fulminant and potentially fatal inflammatory reaction to TB may occur when starting HAART (a phenomenon called immune reconstitution syndrome or unmasking TB) this is also why providers are encouraged to test HIV infected patients for TB.

sexually transmitted diseases (STD)

Individuals who have been infected with a STD are at least “two to five times more likely than uninfected individuals to acquire HIV if they are exposed to the virus through sexual contact.” In addition, if an individual who is HIV positive is also infected with another STD, there is a higher probability that the person can transmit HIV through sexual contact than other HIV-infected persons. Because various STDs can cause lesions or skin sores, an increased susceptibility to contracting other STDs and HIV via these damaged areas exists. The three most common reportable STDs in Nevada are: Chlamydia (CT), Gonorrhea (GC), and Syphilis. In Nevada in 2008, there were 9,639 new cases of Chlamydia, among which 76% were female. In 2008, among the 2,165 GC cases, males and females contracted GC in similar proportions (53 % vs. 47%). Of those CT cases with known race/ethnicity, the largest affected group was the White population (21%) and for GC cases Blacks (38%) accounted for the highest proportion of the cases. In 2008, there were 77 primary and secondary syphilis cases, of which 82% were male, 36% were White, and 26% were Black.

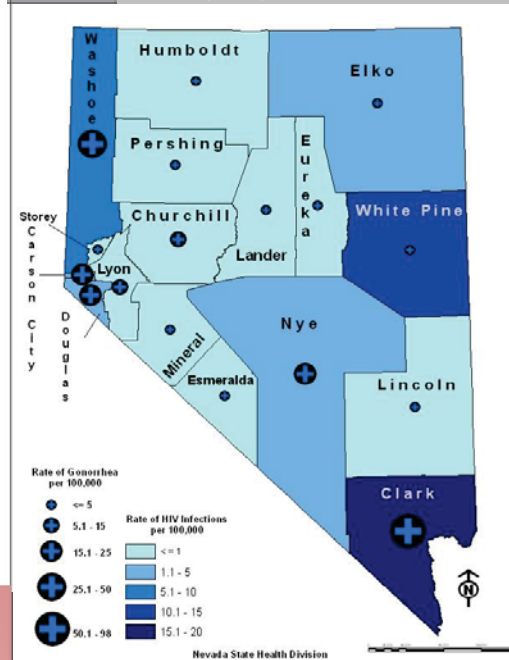
The maps show the spatial distribution rate of new HIV infections with rates of STDs overlaid. Although the maps do not show co-infections, they do display high morbidity areas for disease.

Figure 94 Relationship between HIV and Chlamydia Morbidity Rates in Nevada, by County: 2008



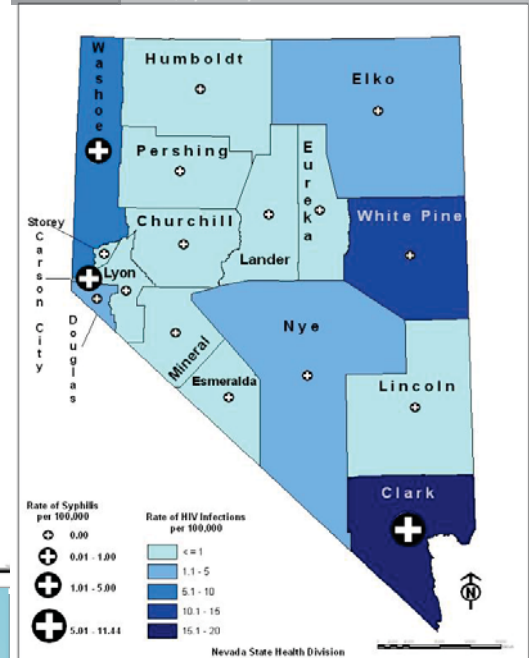
This map illustrates that there is a relationship between HIV and Chlamydia morbidity by county. Those counties with higher rates of new HIV infections also have high rates of Chlamydia. However, that relationship does not appear to be exclusive, as counties with very low HIV infection rates have Chlamydia rates that are also high (see for example Humboldt and Mineral counties). Chlamydia typically occurs in younger populations than HIV.

Figure 95 Relationship between HIV and Gonorrhea Morbidity Rates in Nevada, by County: 2008



When we look at the comparison between Gonorrhea and new HIV infections by county in Nevada for 2008, the relationship appears to be linear, as the rates of new HIV infections increase, so do the rates of Gonorrhea in that county. As expected, rates of Gonorrhea are greater in Nevada's more populated counties.

Figure 96 Relationship between HIV and Syphilis Morbidity Rates in Nevada, by County: 2008



In Nevada in 2008, there are only three counties in Nevada with Syphilis rates above zero (0) and the rates correspond linearly to the populations distributions. The comparison between Syphilis and new HIV infection rates show that the counties with high rates of new HIV infections also had higher rates of Syphilis.



Substance Abuse

The rates of HIV infection are 5 to 10 times higher inside correctional institutions than in general society. The most recent data available on incarcerated populations with HIV are available from the Bureau of Justice Statistics. This information was based on a report written on HIV in prisons using 2007 data. For the purposes of this profile, comparisons will be conducted on incarcerated populations living with HIV/AIDS in Nevada, the Western States*, and the United States. The national rate of incarcerated inmates living with HIV slowly decreased over a three year period, from 210 to 190 infected per 10,000 persons. In comparison, the rate of inmates living with HIV in Nevada was lower, fluctuating between 140 and 160 infected per 100,000 inmates.

At yearend 2008, a reported 21,987 inmates held in state or federal prisons were HIV positive or had confirmed AIDS (HIV/AIDS), accounting for 1.5% of the total custody population. In Nevada in 2008, there were 116 inmates in state/federal prisons with HIV/AIDS, accounting for 0.9% of the total custody population. Although the proportion of HIV/AIDS cases in prison in Nevada is lower than the national average, Nevada is higher than the percent in custody in the Western States (0.7%). Additionally, the proportion of cases reported to be HIV positive or have confirmed AIDS in Nevada is greater among females compared to males. In 2008, less than one percent (0.7%) of the HIV/AIDS cases in Nevada prisons was male and 2.7% of these cases were female.

The rate of AIDS-related deaths among persons in Nevada was 15 deaths per 100,000 inmates in 2008. This rate was higher than both the national death rate of inmates (9 deaths per 100,000 inmates) and among the western states (3 deaths per 100,000 inmates).

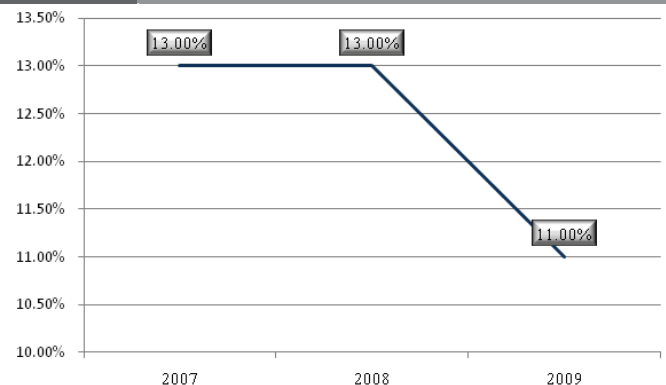
Alarming numbers of HIV/AIDS among individuals in state and federal prisons in Nevada as well as the elevated rates of AIDS related deaths among this group indicate that HIV/AIDS prevention/interventions need to address the incarcerated and re-entry populations.

*Western states: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Injection Drug Users in Treatment in Nevada

The Substance Abuse Prevention and Treatment Agency (SAPTA) keeps records on clients being treated at 24 substance abuse treatment programs throughout the state. The chart below shows the percentage of total admissions of those seeking treatment for injection drug use as the primary, secondary or tertiary substance of abuse. It is important to keep in mind that these people are being treated for substance abuse and this is a different population than the population in general.

Figure 97 Percent of Injection Drug Users Admitted for Treatment in Nevada: 2007



When clients are admitted for treatment, they are offered HIV/TB services which include education, counseling and testing, if requested. HIV services are offered to all clients admitted to SAPTA funded treatment programs. Injection drug users may be getting tested for HIV at facilities other than a substance abuse treatment program.



Youth (13-24) in Nevada are an important group to target for HIV prevention/intervention activities, as they are not only showing recent increases in new HIV infections but in other STDs (Chlamydia and Gonorrhea). Additionally, there are also upward trends among new HIV infections being diagnosed in 25-34 year olds, reiterating the importance of prevention among youth as many of these cases may have seroconverted while they were youth. Further, prevention efforts should occur prior to individuals participating in high risk taking behaviors.

Sexually Transmitted Diseases

Engaging in risk sexual risk taking behaviors and having STDs are known factors to increase the likelihood of acquiring HIV. HIV/AIDS education needs to take place at correspondingly young ages, before young people engage in sexual behaviors that put them at risk for HIV infection. Statewide, STD trends from the Nevada State Health Division’s STD Program indicate that among 13-19 year olds there has been a significant increase in the number of new Chlamydia and Gonorrhea cases among youth.

Figure 98 Trend in the Number of New Chlamydia Cases Among Youth by Sex in Nevada: 1993-2007

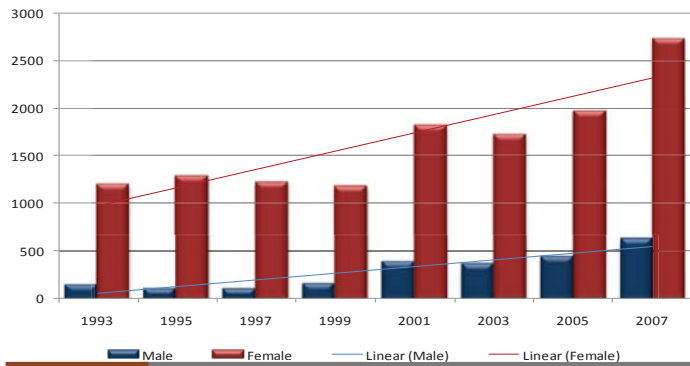
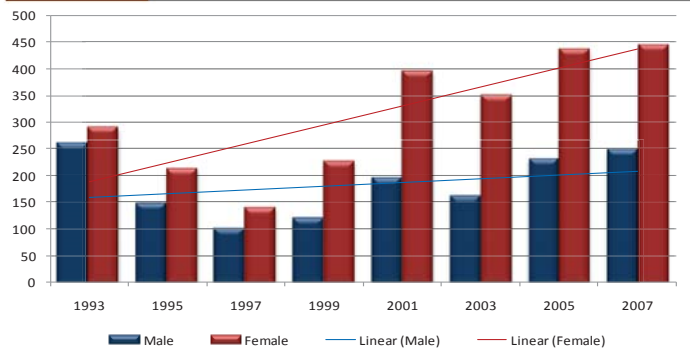


Figure 99 Trend in the Number of New Gonorrhea Cases Among Youth by Sex in Nevada: 1993-2007



High Sexual Risk-Taking Behaviors

Additionally, high school students are reporting an increase in high sexual risk taking behaviors. According to the Nevada Youth Risk Behavior Survey (YRBS), there was an increase in the proportion of youth who have ever had sexual intercourse, as well as an increase in early sexual initiation, multiple (4 or more) sexual partners, recent sexual intercourse, and unprotected sex (sex without a condom). This data also suggests that there are increases in lack of any pregnancy prevention method which corresponds to the increase in ever been pregnant or gotten someone pregnant.

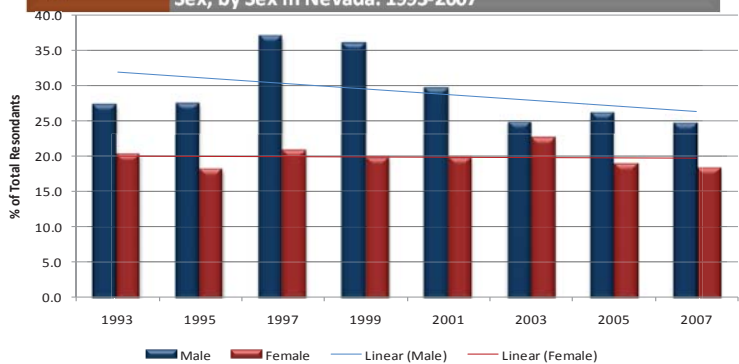
Table 11 Percent of Youth in Participation of: High Sexual Risk Taking Behaviors in Nevada

Behavior	2007 %	2009 %	Change from 2007-2009
Ever had sexual intercourse	42.8	49.0	↑
Had sexual intercourse for the first time before age 13	5.6	6.7	↑
During their lifetime, have had sexual intercourse with 4 or more partners	13.1	15.7	↑
Have had sexual intercourse in past 3 months	30.5	32.7	↓
Drank alcohol or used drugs before the last time they had sexual intercourse*	21.5	20.7	↓
Did not use a condom or partner used a condom the last time they had sex*	30.9	37.1	↑
Used withdrawal or no method at all to prevent pregnancy the last time they had sex*	16.5	16.9	↑
Ever been pregnant or gotten someone pregnant	4.3	5.4	↑
Ever been taught about AIDS or HIV infection in school	82.3	82.9	↑
Ever talked about HIV or AIDS infection with their parents or other adults in their family	-	54.5	N/A

*Among those who are sexually active

Substance Use: Young people in the United States use alcohol, tobacco, and other drugs at high rates. Both casual and chronic substance users are more likely to engage in high-risk behaviors, such as unprotected sex, when they are under the influence of drugs or alcohol. In Nevada, 38.6% of students reported they drank alcohol one or more times in the past 30 days and 22% reported binge drinking in the past 30 days.

Figure 100 Percent of Youth who Used Drugs or Alcohol Before Last Sex, by Sex in Nevada: 1993-2007



Section 2: Ryan White HIV/AIDS Care Act Questions and Considerations

Question 1: What are the patterns of utilization of HIV services by persons in Nevada?

This section focuses on information pertaining to the HRSA Ryan White HIV/AIDS Program. Specifically, this section characterizes the funding awards and patterns in the use of services by a number of populations in the state of Nevada. The information was provided by Kaiser State Health Facts, Nevada's Ryan White CARE funded programs, and the HIV/AIDS Surveillance Program.

Ryan White is administered by the U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), HIV/AIDS Bureau (HAB). Federal funds are awarded to agencies located around the country, which in turn deliver care to eligible individuals under funding categories called Parts A-F. First authorized in 1990, the Ryan White CARE Act was reauthorized by Congress in 2009 as the Ryan White HIV/AIDS Treatment Extension Act, and signed by President Obama on October 30, 2009. This bill extends the Ryan White Care Act for an additional four years.

The Nevada State Health Division Ryan White CARE Act receives Part B-National Grant Award and Part F-Special Projects of National Significance (SPNS) funding. The purpose of Part B funding is to improve the quality, availability, and organization of health care and support services for individuals and families with, or affected by, HIV/AIDS in each state or territory. In addition, the funding provides access to needed pharmaceuticals through the AIDS Drug Assistance Program (ADAP).

Funding

Based on the total Ryan White Program funding in fiscal year (FY) 2008, Nevada ranked 27th in funds received at \$14,849,501 (1st = highest, 51st = lowest). The breakdown of those funds by Ryan White section is as follows: Part A (Transitional Grant Area) - \$4,552,895; Part B (State award) - \$8,010,232, Part C (Primary Care Services)-

\$1,585,568, Part D (Women, Infant, Children, Youth) - \$500,806; Part F -SPNS (State award) - \$200,000.

The Ryan White Part B funding is broken down into several components: base funds, AIDS Drug Assistance Program (ADAP), ADAP Supplement, Minority HIV/AIDS Initiative, and Emerging Communities (EC). Part B base and ADAP funds are used for a variety of services including home and community-based services, continuation of health insurance coverage, and direct health and support services. In FY 2008, Nevada received Ryan White Part B funds for base and ADAP.

AIDS Drug Assistance Program (ADAP)

ADAP provides HIV-related prescription drugs to uninsured/underinsured individuals living with HIV/AIDS in the state. The Nevada ADAP funds in 2008 were distributed as follows: Prescription Drugs - \$4,310,397; Insurance Payments - \$494,540; Adherence and Monitoring - \$211,271, and; Quality Management - \$168,183. As of June 2008, Nevada ADAP had filled 1,430 total prescriptions with 655 clients served. Of the ADAP clients in Nevada in 2008, 88% were uninsured.

Current Ryan White Part B eligibility criteria include:

- Documented laboratory tests confirming diagnosis of HIV/AIDS
- Nevada residency
- Client income must not exceed 400% of Federal Poverty Guidelines-approx \$41,600/year for one
- Client may own a single-family home and a car
- Additional assets of the client may not exceed \$4,000
- Lab tests for T-Cell and Viral Load must be done every six months
- ADAP eligibility recertification every six months

There has been a 9.2% increase in case load and those receiving ADAP medications during the past fiscal year. It has not been determined if the CDC's prevention initiative is the result or if some of the out-of-care projects in Southern Nevada have increased utilization of ADAP. An additional factor contributing to consistent enrollment and utilization of ADAP are medication adherence programs in Las Vegas and Reno. The ADAP pharmacy benefit manager (PBM) monthly reports are now consistently indicating over 77.6% utilization rate by contrast to two years ago when these figures were fluctuating around 50%.

HIV/AIDS Services

HIV/AIDS services are predominately located in the Las Vegas and Reno metropolitan areas. The rural/ frontier areas of Nevada are challenged with access to care and people in those populations must often travel to the major metropolitan cities. The semi-urban Carson City area is steadily developing its own Health District and expanded services for Persons Living with HIV/AIDS.

The Nevada continuum of care, especially with respect to ADAP and primary medical care services, includes: Access to Healthcare Network (AHN) medical discount plan, Northern Nevada HIV Outpatient Program, Education, and Services (HOPES)-Reno, Carson City Health and Human Services, Community Outreach Medical Center (COMC)-Las Vegas, University Medical Center of Southern Nevada (UMCSN), and Aid for AIDS of Nevada-Las Vegas (AFAN). Services are delivered either directly or via network membership/referral. Medical and non-case management supports clients accessing and remaining in care. Ryan White Care Act vendors are required to have policy/evidence in place for timely follow-up with clients who drop out of service. There is no waiting list and all eligible individuals presenting with HIV/AIDS are receiving services.

A group representing Nevada's three health districts (Carson City Health and Human Services, Washoe County Health District and Southern Nevada Health District), the State AIDS Task Force, the HIV/AIDS Medical Advisory Board, the University of Nevada, Reno Medical School,

the Nevada State Health Division's HIV/AIDS Prevention and Surveillance Units, the Northern Nevada Planning Council, Ryan White Parts A, B, C and D met in October 2008 and identified service needs, gaps and barriers to care for people currently not in care. Nevertheless, it is important to note that according to the U.S. Department of Health and Human Services, Health Resources Administration (HRSA), several Nevada rural and frontier counties (Elko, Esmeralda, Eureka, Lander, Lincoln, Lyon and Storey) are considered as Medically Underserved Areas (MUA) and four counties (Washoe, Carson City, Clark, and Elko) are considered to be Medically Underserved Populations (MUP). As such, many persons who have an AIDS or HIV diagnosis may have limited access to medical care, especially in their respective communities. Since obtaining and continuing proper medical treatment is imperative for HIV/AIDS patients, access to health care is a substantial challenge for individuals in several counties in Nevada.

Compounding the limited availability of medical care in Nevada is the lack of medical insurance. Nevada historically has a higher rate of uninsured residents than the national average. The percentage of government-funded insurance is also historically lower in Nevada than the national average. Nevada is in an economic downturn which is projected to last through state fiscal year 2012; this may mean even more limitations on government-funded insurance. On a positive note, northern Nevada has developed a new pay-for-service non-profit (Access to Healthcare Network) which enables the working poor, with no insurance, to have access to a limited number of specialty care physicians. The individual must have the ability to pay for a significantly reduced charge (30% of Medicaid rates) for the service rendered. Payment can come from a funding source (such as Ryan White), employment, or a patient trust fund set up for the Network's use to help an individual attempting to pay for a medical service.

Nevada has a number of subgroups which are negatively impacted by the lack of resources mentioned above (Latinos, African Americans, Transgender, men having sex with men (MSM), undocumented, substance abusers, people with mental health issues, the homeless or those

near homelessness, and those incarcerated in Nevada's correctional system). Historically in Nevada, youth between the ages of 15 to 24, women of color, Native Americans and the gay population, both males and females seeking primary health care, are often underserved. The lack of child care hampers some families from seeking or keeping employment. There are limited dentists willing to provide oral health care to person known to be infected by HIV/AIDS. Mental health treatment is at a critical state in Nevada. Many persons seeking this service end up in hospital emergency rooms to receive limited services. Persons with HIV/AIDS who live in the rural parts of Nevada have extensive challenges in accessing services. Lack of transportation is at the fore-front along with the lack of primary care and/or oral health care providers who agree to treat those diagnosed with AIDS or HIV. Due to recent statewide budget cuts, transportation and housing has become even more limited. In most cases, the rural Nevada resident has to travel to the two urban cities (Reno and Las Vegas) to receive medical services. Nevada is in need of more public funding to adequately provide primary medical care and HRSA identified priority core and support services.

Nevada has offered a number of the HRSA defined core and support services beyond the central ADAP services. However, all the resources are located in Nevada's two urban cities. Northern Nevada HOPES offers the most comprehensive medical services in the Northern Nevada area, serving all counties with the exception of Clark, Nye, Esmeralda and Lincoln counties. The HOPES Clinic provides (either free or on a sliding fee scale) full primary health care, pharmacy and case management services as well as a number of support services. The Southern Nevada Health District provides these services through various funding streams or coordinates local service organizations (i.e. Aid for AIDS in Nevada (AFAN), Community Outreach Medical Center, Community Counseling Center, Golden Rainbow, and Saint Therese Center) provide direct service programs, food programs, prevention and education programs and community outreach. Although services are provided by a variety of organizations, both funded and not funded from Ryan White grants, some needs (i.e. pharmacy, housing,

transportation, mental health and substance abuse services, child care, and oral health) are greater than services available. Organizations such as the Veterans Hospital in Reno, HOPES, community health nursing, and tribal clinics are challenged by the demand for services. Again, as stated above, rural residents have a difficult time accessing services because most services (primary medical care, oral health, mental health treatment, and substance abuse treatment and case management) do not exist in their communities.

A number of barriers have been identified for those seeking HIV/AIDS services. Below is a list of important barriers identified in Nevada:

- There is a need to have physicians do an HIV test as part of "normal" testing.
- There is fear by those who are undocumented to seek testing or services.
- Lack of transportation, especially in rural Nevada.
- There is a need to develop new primary care providers (physicians, nurses, social workers, educators) and preparing clinical expertise but limited interest.
- Hours of services are typically Monday through Friday, from 8:00 a.m. to 5:00 p.m. but services may be needed during another part of the day/week.
- Available insurance does not cover pre-existing conditions.
- Unwillingness of providers to take patients who have a diagnosis of HIV/AIDS.
- Lack of services, especially in rural Nevada.
- Clients' non-compliance with directed/requested core or support services.
- Undiagnosed or untreated mental health issues.
- Lack of cultural diversity with nurses, social workers, physicians and educators.
- Disconnect between major funding sources causes difficulties in planning (including unanticipated needs).
- Lack of private funding and constraints in ability to move existing funds around to meet funding needs.
- Fragmentation of system.
- Location of existing services, especially lack of services in rural Nevada.

Section 2: Core Epidemiological Questions

Question 2: What are the number and characteristics of persons who know they are HIV-positive, but who are not receiving primary care?

The number of clients considered “out-of-care,” are also known as the “unmet need” in Nevada. The HIV/AIDS Surveillance Program has developed several strategies for identifying persons who know their status but who are not receiving primary medical care. The first project focuses on enumerating the persons who are reported as HIV infected, currently living in Nevada, and receiving routine medical care versus those who are not receiving care. To be counted as receiving care, the client must have received laboratory testing in the previous year or have been enrolled and active in ADAP. The number of persons living with HIV/AIDS (PLWH/A) in Nevada in 2008, was 7,427. Based on HIV/AIDS Surveillance data (eHARS) and the number of clients receiving care through ADAP, it was estimated that 3,982 (53.6%) of PLWHA were receiving primary medical care in 2008.

Nevada’s RW Program, in collaboration with the HIV Prevention Program, work with partner organizations to identify PLWH/A and refer them into care. RW Program case partner organizations are all required to have policies in place to follow-up with clients who drop out of service.

In 2007, law was passed to make mandatory that testing organizations refer HIV-positive people into treatment and if the organization does not have ability to make referrals it can access referrals through the Health Districts.

The 2009 Legislative Session approved a Rapid Testing Law: Allowing community based organizations (CBOs) to offer rapid testing. Also in 2009, the Nevada HIV Prevention Program and State AIDS Task Force increased testing efforts statewide to identify individuals with HIV/AIDS and refer into services.

Outreach services are provided by the Southern Nevada Health District, the Northern Nevada Outreach Team, ACCEPT, Washoe County Health District, and HOPES. Early intervention services are provided by HOPES, UMC Medical Services, Southern Nevada Health District, University of Nevada, Reno School of Medicine Clinic for high risk pregnancies and the Veterans Hospital. Clark County’s (Las Vegas) HIV program conducts database matches and identifies out-of-care positive individuals, contacts them to see if they are still in the area, and attempts to bring them into care.

Prioritized areas for the upcoming years, affecting resource allocations and adapting the system of care to meet these priorities, are described on the following page. Distance rural and frontier clients have to travel for services and the lack or limited transportation available was taken into consideration. Access to medical care was noted along with barriers which limit the health care providers willing to provide services to those with AIDS and HIV. Priorities to be considered include:

- 1) Use resources to identify the knowledge gaps with health care providers throughout the state and the rural frontier. Then, provide education on HIV and other medical issues, including the continuum of care (prevention, new infections, assessment and stabilization of clients and medical care).
- 2) Identify funds to develop and maintain a telemedicine system to increase access to knowledge and care, especially for rural and urban-underserved residents.
- 3) Promote universal testing through memorandums of understanding to help educate health professionals in rational for testing and develop protocols to implement.
- 5) Identify local primary care providers in rural Nevada willing to provide care to HIV/AIDS patients. Where possible, this may be done through the use of federally qualified health centers (FQHCs). Ask federally qualified health clinics (FQHCs) to expand their services to include oral health.
- 6) Cross-train staff on services and access points.
- 7) Integrate “direct observation therapy” (DOT) programming.
- 8) As funds permit, hire and train new case managers for rural Nevada.
- 9) Increase culturally sensitive knowledge and awareness among the state’s population about the transmission of HIV/AIDS or the implementation interventions which reduce stigma and discrimination towards persons who are infected and affected by HIV.
- 12) Increase collaboration, coordination and integration of HIV services into existing mental health and substance abuse programs.
- 13) Standardize and implement primary health care indicators and ensure compliance.
- 14) Use resources to increase testing for HIV and identify those who have fallen out of care through data matching and provide intensive targeted outreach to bring back to care.

HEALTHY PEOPLE 2010 INITIATIVE**Goal: Prevent HIV Infection and Its Related Illness and Death**

#	Objective Title	Progress Toward Meeting Goal Achieved in This Grant Year
13-1	Reduce AIDS among Adolescents and Adults	The impact of and access to antiretroviral therapies provided to patients by Ryan White Program Part B subgrantees are delaying progression to AIDS in many HIV-infected individuals. More patients in Nevada have HIV now that is not progressing to full-blown AIDS.
13-2	Reduce the Number of New AIDS Cases among Adolescent and Adult Men Who Have Sex with Men	The impact of and access to antiretroviral therapies provided to patients by Ryan White Program Part B subgrantees are delaying progression to AIDS in many HIV-infected individuals. Updates to the formulary allow providers to prescribe a variety of medications that respond to individual patient needs.
13-3	Reduce the Number of New AIDS Cases among Females and Males Who Inject Drugs	The impact of and access to antiretroviral therapies provided to patients by Ryan White Program Part B subgrantees are delaying progression to AIDS in many HIV-infected individuals. Updated formulary availability allows providers to prescribe a variety of medications that respond to individual patient needs. Case management efforts have resulted in increasing the number of injection drug users that receive drug treatment.
13-4	Reduce the Number of New AIDS Cases among Adolescent and Adult Men Who Have Sex with Men and Inject Drugs	The impact of and access to antiretroviral therapies provided to patients by Ryan White Program Part B subgrantees are delaying progression to AIDS in many HIV-infected individuals. Updated formulary allows providers to prescribe a variety of medications that respond to individual patient needs. Case management efforts have resulted in increasing the number of injection drug users that receive drug treatment.
13-5	Reduce the Number of Cases of HIV Infection among Adolescents and Adults	The latest epidemiological data does not indicate a reduction in this measure for Nevada. Educational programs and distribution of barrier contraception, is provided by the Nevada HIV Prevention Program.
13-6	Increase the Proportion of Sexually Active Persons Who Use Condoms	This objective has not been tracked or quantified.
13-7	Increase the Number of HIV-Positive Persons Who Know Their Serostatus	Ryan White medical adherence impacts the number of clients who know their serostatus and follow their prescribed treatment regimens. Infected persons are counseled about ways they can protect their own health and keep from infecting others. New treatments offer infected persons the promise of a longer, healthier life. Therapy is available for HIV-infected pregnant females to reduce the chance of transmitting HIV to their newborns.
13-8	Increase the Proportion of Substance Abuse Treatment Facilities that offer HIV/AIDS Education, Counseling, and Support	Treatment facilities funded by Nevada's Substance Abuse and Prevention Agency (SAPTA) provide HIV/AIDS testing/education/counseling/support through the local health districts. The Community Counseling Centers in Las Vegas and Carson City also offer HIV/AIDS education, counseling, and support.
13-9	Increase the Number of State Prison Systems That Provide Comprehensive HIV/AIDS, Sexually Transmitted Diseases, and Tuberculosis (TB) Education.	The Ryan White Part B Program works in conjunction with the Nevada Department of Corrections (DOC). Early intervention and discharge planning insure that inmates have access to treatment and continuity of care needed when incarcerated persons are released and return to their home communities. Early access to care reduces both immediate and long-term health care costs for correctional institutions and the community.
13-10	Increase the Proportion of Inmates in State Prison Systems Who Receive Voluntary HIV Counseling and Testing During Incarceration	Ryan White Program does not currently fund testing. However, the counties and CDC funded programs do fund testing upon entry into the prison system.
13-11	Increase the Proportion of Adults with Tuberculosis (TB) Who Have Been Tested for HIV	From 2004 to 2008 the National Average was 75.8%. During this time Nevada's average was 90%.
13-12	Increase the Proportion of Adults in Publicly Funded HIV Counseling and Testing Sites Who Are Screened for Common Bacterial Sexually Transmitted Diseases (STDs) (Chlamydia, Gonorrhea, and Syphilis) and are Immunized Against Hepatitis B Virus	The Ryan White Part B Program subgrants with the Access to Healthcare Network to provide outpatient primary care to enrolled clients in Northern Nevada. Washoe County Health District also offers HIV/AIDS/STD testing and Twinrix. As a result, the number of patients that have been tested for STD and Hepatitis has increased and treatment regimens have been initiated for those who tested positive. The majority of testing in the Southern Nevada Health District is done by the district itself and the Gay Lesbian Center of Las Vegas.
13-13	Increase the Proportion of HIV-Infected Adolescents and Adults Who Receive Testing, Treatment and Prophylaxis Consistent with Current Public Health Service Treatment Guidelines	The impact of and access to antiretroviral therapies provided to patients by Ryan White Program Part B subgrantees are delaying progression to AIDS in many HIV-infected individuals. An updated formulary allows providers to prescribe a variety of medications that respond to individual patient needs.
13-14	Reduce Deaths from HIV Infection	Deaths from HIV/AIDS in Nevada declined by approximately 53% from 2004 to 2008.
13-15	Extend the Interval of Time between and Initial Diagnosis of HIV Infection and AIDS Diagnosis in Order to Increase Years of Life of an Individual Infected with HIV	New drug therapies are added to the approved formulary in Nevada upon receipt of FDA approval, NASTAD pricing, and nomination for inclusion on the formulary by the Nevada Medical Advisory Board. These newer drug therapies have delayed the progression for HIV infection to an AIDS diagnosis for many persons and improved their quality of life.
13-16	Increase Years of Life of an HIV-Infected Person by Extending the Interval of Time between an AIDS Diagnosis and Death	New drug therapies are added to the approved formulary in Nevada upon receipt of FDA approval, NASTAD pricing, and nomination for inclusion on the formulary by the Nevada Medical Advisory Board. These newer drug therapies have delayed the progression for HIV infection to an AIDS diagnosis for many persons and improved their quality of life. We are also seeing a growing number of patients (97) that are now enrolled in our Medicare Part D Program for individuals over 62 years of age.
13-17	Reduce New Cases of Perinatally Acquired HIV Infection	2007 Nevada law requires: mandatory maternal HIV/AIDS testing in the first and third trimester; educating pregnant women on the testing options and benefit to child; all hospitals must test pregnant women if no history of prenatal care. With this law, and antiretroviral treatments for pregnant women, babies born with HIV in Nevada have been reduced to nearly zero.