



# HIV & AIDS in Colorado



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**Colorado Department  
of Public Health  
and Environment**

Integrated Epidemiological Profile of HIV and AIDS  
Prevention and Care Planning reported through December  
2010

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**For further information about this report contact the STI/HIV Surveillance Program at 303-692-2700.**

## Acronym List

ADAP	AIDS Drug Assistance Programs
AIDS	Acquired Immune Deficiency Syndrome
ARVDR	Antiretroviral Drug Resistance
BMSA	Boulder Metropolitan Statistical Area
CARE Act	Comprehensive AIDS Resources Emergency Act
CDC	Centers for Disease Control and Prevention
CDOC	Colorado Department of Corrections
CDPHE	Colorado Department of Public Health and Environment
CI	Confidence Interval
DPH	Denver Public Health
eHARS	Evaluation HIV and AIDS Reporting System
EIA	Enzyme Immunoassay
GED	General Education Development
HCV	Hepatitis C Virus
HET	Heterosexual
HIS	HIV Incidence Surveillance
HIV	Human Immunodeficiency Virus
HRA	High Risk Areas
IDU	Injection Drug Use or Injection Drug User
MAI	Minority AIDS Initiative
MSA	Metropolitan Statistical Area
MSM	Men Who Have Sex With Men
MSM/IDU	Men Who Have Sex With Men and Injection Drug User
NHBS	National HIV Behavioral Surveillance
NNRTI	Non-Nucleoside Reverse Transcriptase Inhibitor
NRTI	Nucleoside Reverse Transcriptase Inhibitor
PLWH	Persons Living with HIV
PLWHA	Persons Living with HIV/AIDS
SPNS	Special Projects of National Significance
STARHS	Serologic Testing Algorithm for Recent HIV Seroconversion
STI	Sexually Transmitted Infection
TTH	HIV Testing and Treatment History

## Executive Summary

Through 2010, 9,870 cases of AIDS and 6,681 cases of HIV infection have been diagnosed and reported in Colorado. Significant decreases in AIDS incidence have been observed both in the United States and in Colorado since the introduction and use of new anti-HIV drug therapies in 1996. Overall the number of reported cases of AIDS each year in Colorado has continued to decrease since a peak of 702 reported cases in 1993.

Antiretroviral treatment has reduced both mortality and morbidity among persons with HIV infection. AIDS-related mortality has decreased by 57 percent from 2006 to 2010 while the prevalence of PLWH has increased steadily. By December 2010, 11,115 persons were known to be living with HIV or AIDS in Colorado.

The epidemic in Colorado is still overwhelmingly driven by sexual exposure, primarily among MSM, which continues to be the most significant risk group and accounts for 71 percent of adult male HIV cases diagnosed in 2010. Among females, heterosexual transmission represents 67 percent of newly diagnosed adult HIV cases.

Cases of HIV/AIDS continue to be geographically centered along Colorado's Front Range population, although IDU cases and cases with no identified risk continue to be reported more often from rural/frontier counties. Although the number of women living with HIV in Colorado continues to increase, perinatal transmission has decreased dramatically since 1996. The decrease in transmission rates is attributed to the widespread screening of pregnant women for HIV and the use of anti-retroviral drugs during and after pregnancy, labor and delivery.

## Data Sources

Colorado law requires that both laboratories and physicians report cases of HIV and AIDS within seven days to CDPHE. In the case of laboratories, all tests indicative of or highly correlated with HIV, such as HIV positive antibody tests, all HIV viral loads, and CD4 counts of  $< 500 \text{ mm}^3$  are reportable.

The data that form the basis of this report are principally reports of HIV and AIDS among persons who were living in Colorado at the time of their diagnosis. Both HIV and AIDS cases are often combined for purposes of characterizing the epidemic and for analysis of trends. Cases are reported to the CDPHE STI/HIV Surveillance Program and are entered into a CDC sponsored database that is used to enumerate HIV and AIDS in Colorado. AIDS cases in this report meet the 1993 U.S. Centers for Disease Control and Prevention surveillance case definition for AIDS, which includes HIV-infected persons with CD4 counts of less than  $200 \text{ mm}^3$  or those diagnosed with one of 21 opportunistic infections definitive of AIDS.

Colorado's Division of Local Affairs State Demographer's Office provided information about the characteristics of Colorado's population to allow comparisons to persons reported with HIV or AIDS. CDPHE's Vital Records Section provided cause of death data from death certificates filed through 2010. The CDOC provided data on the demographic characteristics of the prison population. The U.S. Census Bureau provided a variety of demographic and socioeconomic data on Colorado. The Colorado Department of Labor and Employment provided data on employment in Colorado.

## **Strengths and Limitations of the Data**

Both HIV and AIDS have been reportable by name from laboratories and care providers since 1985 by regulation and since 1987 by state statute. In 1987, CDPHE initiated an active system of surveillance for HIV and AIDS in order to accurately characterize the epidemic in Colorado. CDPHE also collects incarceration and HCV co-infection information for HIV prevention and care planners.

In general, persons who are infected with HIV, without treatment, will eventually progress to AIDS. For some persons, this progression may be relatively rapid (less than two years) but it usually occurs over a five to 10 year period. Thus, aggregate data about AIDS cases may have limited use for HIV prevention planning because they characterize persons (and their risk behaviors) who may have been infected more than 10 years ago. The introduction of highly active anti-retroviral therapies have further altered the natural history of HIV and delayed progression to AIDS, making AIDS data less useful each year for planning purposes. Data is available for persons recently diagnosed with HIV (which does not mean newly infected).

Finally, data about risk are less complete for newly diagnosed HIV-infected persons than for persons with AIDS. Investigation of risk factors for HIV occurs over time. Persons who are newly infected may not have discussed the risk factors with HIV counselors, disease intervention specialists, or their health care providers. As the patient seeks care and agrees to interviews, risk is more likely to be ascertained.

The location where a case of HIV or AIDS is "counted" presents a special challenge. Jurisdiction of a case of either HIV or AIDS is established at the time of diagnosis. Individual cases are not monitored for changes in address. Thus, it is difficult to measure the impact of migration in or out of any county or Colorado as a whole.

When appropriate, changes in disease trends over time are calculated using 95 percent confidence intervals. Statistical significance is noted when the calculated disease rate from one time period to the next fall outside the limits set by the confidence intervals.

Lastly, caution should be exercised when interpreting small numbers. Population rates based on small numbers may be particularly misleading.

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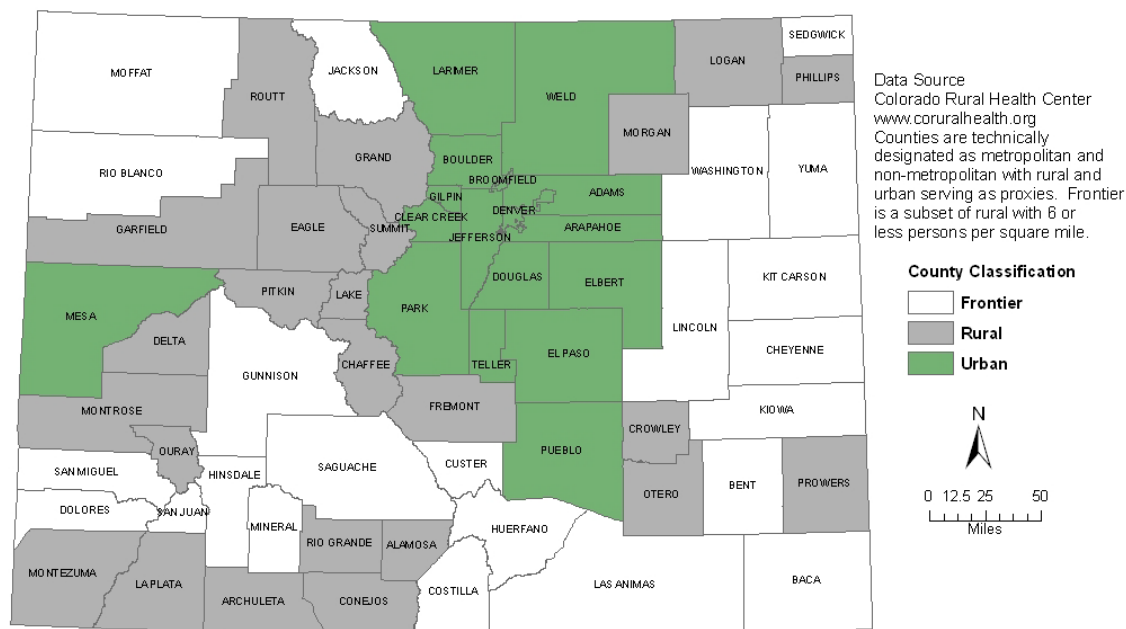
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# Description of Colorado

## Summary

- The majority of Colorado's population reside in 17 counties.
- As of December 2010, Colorado's population is estimated to be 5,029,771 with an approximately equal distribution between men and women.
- Sixty-six percent of Coloradoans are between the ages of 18 and 65.
- Colorado's population is 70 percent White, 20.7 percent Hispanic and 3.8 percent Black. Asian/Pacific Islander, American Indian, Multiple races, and other races encompass the remaining 5.5 percent.
- Colorado ranked 17th in the nation's poverty level rating in 2010. In 2010, Douglas County had the lowest percent of persons living in poverty (4%), while Crowley County had the highest percent (35%).
- Colorado's unemployment rate was 8.9 percent in 2010 compared to 8.3 percent in 2009, a 6 percent increase.
- Colorado's percent of nonelderly uninsured persons was lower (15.5%) than reported nationally (18.5%) in 2010.
- In 2010, cancer was the leading cause of death in Colorado.
- The number of incarcerated persons in Colorado decreased from 23,210 in 2009 to 22,980 in 2010.

Figure 1: Map of Colorado by County Classification



Source: Colorado Rural Health Center<sup>1</sup>



## Geography

Colorado is a geographically rural state. It is made up of 64 counties and has a landmass of 104,095 square miles. The majority of Colorado's population reside in 17 counties designated as metropolitan areas as defined by the U.S. Office of Management and Budget. A metropolitan area has a total population of at least 100,000 inhabitants and at least one urbanized area of at least 50,000 inhabitants. These counties include: Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, El Paso, Elbert, Gilpin, Jefferson, Larimer, Mesa, Park, Pueblo, Teller and Weld. Counties classified as Frontier, a subset of Rural, have six or fewer persons per square mile. All three classifications and their counties are pictured in **Figure 1** above.

## Population

The 2010 Census produced a population of 5,029,196 for Colorado. The state ranks twenty-second in the nation in population, accounting for approximately 1.6 percent of the U.S. population.<sup>2</sup>

## Age

The median age in Colorado is 36 years old in 2010. Of the state's population, 66 percent is between the ages of 18 and 65. The elderly population (over 65) continues to constitute 10 percent of the population.<sup>2</sup> **Table 1** illustrates the distribution of the population by age and gender.

**Table 1: 2010 Colorado Population by Age and Gender**

Age Group	Male	Percent	Female	Percent	Total	Percent
<10	354,143	14.0	338,420	13.5	692,563	13.8
10-14	170,192	6.8	162,462	6.5	332,654	6.6
15-19	175,730	7.0	163,745	6.5	339,475	6.8
20-24	181,765	7.2	166,850	6.7	348,615	6.9
25-29	192,007	7.6	180,452	7.2	372,459	7.4
30-34	181,317	7.2	172,502	6.9	353,819	7.0
35-39	182,350	7.2	171,255	6.8	353,605	7.0
40-44	175,758	7.0	170,281	6.8	346,039	6.9
45-49	185,148	7.3	186,487	7.4	371,635	7.4
50-54	184,243	7.3	186,820	7.4	371,063	7.4
55-59	161,766	6.4	166,598	6.6	328,364	6.5
60-65	132,389	5.3	136,891	5.5	269,280	5.4
>65	243,854	9.7	305,771	12.2	549,625	10.9
<b>Total</b>	<b>2,520,662</b>	<b>100.0</b>	<b>2,508,534</b>	<b>100.0</b>	<b>5,029,196</b>	<b>100.0</b>

Source: U.S. Census Bureau, 2010 Census 100% Data Tables, Age by Gender.<sup>2</sup>

## Race

Statewide, approximately 70 percent of the population classify themselves as Non-Hispanic Caucasian, 20 percent as Hispanic, 4 percent as Black, 3 percent as Asian/Pacific Islander, and 2 percent classify themselves as mixed race. The following tables show the racial breakdowns in Colorado by gender (**Table 2**) and county (**Table 3**). It should be noted that some of the subsequent tables may have slightly different denominators.

**Table 2: 2010 Colorado Population by Race and Gender**

Race	Male	Percent	Female	Percent	Total	Percent
<b>White (Non-Hispanic)</b>	1,756,868	69.7	1,763,925	70.3	3,520,793	70.0
<b>Hispanic</b>	529,799	21.0	508,888	20.3	1,038,687	20.7
<b>Black (Non-Hispanic)</b>	100,158	4.0	88,620	3.5	188,778	3.8
<b>Asian/Hawaiian/Pacific Islander (Non-Hispanic)</b>	64,330	2.6	76,895	3.1	141,225	2.8
<b>American Indian/Alaskan Native (Non-Hispanic)</b>	15,884	0.6	15,360	0.6	31,244	0.6
<b>Two or More Race (Non-Hispanic)</b>	49,808	2.0	51,039	2.0	100,847	2.0
<b>Total</b>	2,520,662	100.0	2,508,534	100.0	5,029,196	100.0

Source: U.S. Census Bureau, 2010 Census 100% Data Tables, Race by Gender.<sup>3</sup>

**Table 3: 2010 Colorado Counties Percent of the Population by Race**

County	White (Non-Hispanic)	Hispanic	Black (Non-Hispanic)	Asian/PI (Non-Hispanic)	Amer. Indian/ AK Native (Non-Hispanic)	Multiple Races (Non-Hispanic)	Total Population
<b>Adams</b>	53.2	38.0	2.8	3.6	0.6	1.7	441,603
<b>Alamosa</b>	49.6	46.0	0.9	0.9	0.9	1.5	15,445
<b>Arapahoe</b>	63.2	18.4	9.7	5.2	0.4	2.8	572,003
<b>Archuleta</b>	78.2	17.8	0.3	0.7	1.4	1.5	12,084
<b>Baca</b>	87.7	9.2	0.5	0.2	1.0	1.2	3,788
<b>Bent</b>	59.0	30.5	7.6	0.9	1.4	0.6	6,499
<b>Boulder</b>	79.4	13.3	0.8	4.1	0.4	1.9	294,567
<b>Broomfield</b>	79.4	11.1	0.9	6.1	0.4	1.9	55,889
<b>Chaffee</b>	86.6	9.4	1.5	0.6	0.8	1.0	17,809
<b>Cheyenne</b>	88.1	9.7	0.4	0.6	0.6	0.7	1,836
<b>Clear Creek</b>	92.1	4.7	0.6	0.6	0.6	1.3	9,088
<b>Conejos</b>	41.8	56.0	0.1	0.3	0.6	1.0	8,256
<b>Costilla</b>	30.8	66.0	0.2	1.0	0.8	0.9	3,524
<b>Crowley</b>	57.9	29.0	9.5	1.0	1.6	1.0	5,823
<b>Custer</b>	92.0	4.7	1.0	0.4	0.5	1.3	4,255
<b>Delta</b>	83.0	14.0	0.4	0.5	0.6	1.3	30,952
<b>Denver</b>	52.2	31.8	9.7	3.4	0.6	2.1	600,158

Dolores	90.9	4.0	0.1	0.2	2.7	2.1	2,064
Douglas	85.2	7.5	1.1	3.8	0.3	2.0	285,465
Eagle	67.3	30.1	0.5	1.0	0.3	0.8	52,197
Elbert	91.0	5.3	0.7	0.8	0.5	1.6	23,086
El Paso	72.0	15.1	5.8	3.0	0.6	3.5	622,263
Fremont	80.4	12.3	3.9	0.6	1.5	1.3	46,824
Garfield	68.8	28.3	0.4	0.7	0.5	1.1	56,389
Gilpin	90.9	4.9	0.5	1.5	0.6	1.4	5,441
Grand	89.7	7.5	0.3	0.9	0.4	1.2	14,843
Gunnison	89.1	8.2	0.3	0.6	0.4	1.3	15,324
Hinsdale	93.2	2.8	0.4	0.4	0.8	1.7	843
Huerfano	61.9	35.3	0.3	0.4	0.8	1.2	6,711
Jackson	87.4	10.8	0.0	0.1	0.9	0.8	1,394
Jefferson	79.9	14.3	0.9	2.6	0.5	1.6	534,543
Kiowa	93.3	5.6	0.2	0.0	0.2	0.7	1,398
Kit Carson	76.4	19.0	2.6	0.5	0.6	0.8	8,270
Lake	58.2	39.1	0.3	0.4	0.6	1.1	7,310
La Plata	80.3	11.8	0.3	0.6	5.0	1.8	51,334
Larimer	84.5	10.6	0.8	2.0	0.4	1.7	299,630
Las Animas	54.2	41.6	1.3	0.7	1.1	1.2	15,507
Lincoln	79.5	12.5	5.1	0.7	0.7	1.4	5,467
Logan	78.2	15.6	3.9	0.6	0.8	0.9	22,709
Mesa	83.1	13.3	0.5	0.8	0.6	1.5	146,723
Mineral	95.2	2.9	0.3	0.1	0.6	0.8	712
Moffat	82.7	14.4	0.2	0.6	0.7	1.3	13,795
Montezuma	75.1	11.0	0.2	0.5	11.4	1.7	25,535
Montrose	77.5	19.7	0.3	0.6	0.5	1.3	41,276
Morgan	61.7	33.8	2.7	0.5	0.4	0.9	28,159
Otero	56.5	40.3	0.5	0.8	0.6	1.2	18,831
Ouray	93.4	4.4	0.1	0.7	0.3	1.0	4,436
Park	91.6	4.8	0.4	0.6	0.7	1.7	16,206
Phillips	79.4	18.7	0.3	0.7	0.3	0.6	4,442
Pitkin	87.9	9.1	0.5	1.2	0.1	1.1	17,148
Prowers	62.7	35.2	0.4	0.3	0.5	0.7	12,551
Pueblo	54.1	41.4	1.7	0.8	0.6	1.3	159,063
Rio Blanco	86.3	10.0	0.7	0.5	0.7	1.7	6,666
Rio Grande	55.1	42.4	0.2	0.4	0.9	0.9	11,982
Routt	90.6	6.8	0.4	0.7	0.3	1.1	23,509
Saguache	56.4	40.1	0.2	0.8	1.1	1.3	6,108
San Juan	85.1	12.0	0.0	1.0	0.1	1.4	699
San Miguel	88.5	8.6	0.3	0.8	0.4	1.3	7,359
Sedgwick	85.6	12.1	0.3	0.7	0.3	0.9	2,379
Summit	82.7	14.2	0.7	1.0	0.2	1.0	27,994
Teller	90.6	5.5	0.4	0.7	0.7	1.9	23,350
Washington	89.4	8.5	0.6	0.2	0.1	1.0	4,814
Weld	67.6	28.4	0.8	1.2	0.6	1.4	252,825
Yuma	77.9	20.8	0.2	0.2	0.3	0.5	10,043

Source: U.S. Census Bureau, 2010 Census 100% Data Tables, Race by County. <sup>4</sup>

## Poverty and Income

In 2010, the U.S. American Community Survey estimated Colorado's median household income to be \$55,945 ( $\pm$  \$318) using a 3-year estimate. The U.S. Department of Agriculture estimates the percent of Coloradoans living below the poverty level to be 13.2 percent in 2010.<sup>6</sup> **Table 4** shows the percent of the population below poverty level per county in 2010.

**Table 4: Percentage of the Population Under the Poverty Level by County, 2010**

County	Percentage Under Poverty Level	County	Percentage Under Poverty Level	County	Percentage Under Poverty Level
Colorado	13.2	Elbert	6.5	Montezuma	17.4
		El Paso	13.4	Montrose	15.0
Adams	13.0	Fremont	16.7	Morgan	14.2
Alamosa	21.0	Garfield	9.6	Otero	19.9
Arapahoe	11.4	Gilpin	7.5	Ouray	9.4
Archuleta	13.1	Grand	8.3	Park	9.3
Baca	17.3	Gunnison	14.5	Phillips	11.4
Bent	30.9	Hinsdale	9.4	Pitkin	7.0
Boulder	13.6	Huerfano	22.7	Prowers	23.0
Broomfield	6.0	Jackson	15.1	Pueblo	19.6
Chaffee	12.9	Jefferson	8.8	Rio Blanco	8.6
Cheyenne	12.1	Kiowa	13.0	Rio Grande	17.3
Clear Creek	8.6	Kit Carson	14.0	Routt	7.7
Conejos	21.3	Lake	14.4	Saguache	25.1
Costilla	25.7	La Plata	11.5	San Juan	15.9
Crowley	34.7	Larimer	13.6	San Miguel	10.0
Custer	15.0	Las Animas	18.8	Sedgwick	13.6
Delta	15.7	Lincoln	17.9	Summit	10.1
Denver	21.3	Logan	16.3	Teller	8.7
Dolores	12.9	Mesa	14.7	Washington	13.9
Douglas	3.5	Mineral	11.9	Weld	14.3
Eagle	8.5	Moffat	10.1	Yuma	12.5

Source: U.S. Department of Agriculture, Economic Research Service, 2010 County-Level Poverty Rates for Colorado.<sup>6</sup>

## Employment

There were an estimated 239,684 persons who were unemployed in 2010, a rate of 8.9 percent, according to the Colorado Department of Labor. This number is 6 percent higher than 2009 when 225,791 persons were unemployed at a rate of 8.3 percent.<sup>7</sup>

## Insurance

According to the Kaiser Family Foundation, 15.5 percent of Colorado’s population was uninsured in 2009-2010. This is slightly lower than the U.S. estimate of 18.5 percent in 2010.<sup>8</sup> **Table 5** shows that the percentage of Colorado’s population not covered by health insurance was much greater among Hispanics (28.8 percent) than among Whites (11.2 percent).

**Table 5: Percentage of Colorado Non-Elderly Adults without Health Insurance Coverage by Race and Ethnicity, 2010**

Race	Colorado	United States
<b>White (Non-Hispanic)</b>	11.2	14.0
<b>Hispanic</b>	28.8	32.1
<b>Black</b>	20.7	23.3
<b>Other</b>	15.1	19.0
<b>Total</b>	15.5	18.5

Sources: Henry J. Kaiser Family Foundation State Health Facts.<sup>8</sup>

## Education

According to the Colorado Department of Education, in 2010 there was a combined public and non-public school enrollment of 843,316 persons. School enrollment was comprised of 56.8 percent White, 31.6 percent Hispanic, 4.8 percent Black, 3.1 percent Asian/Pacific Islander, 2.8 percent two or more races and 0.9 percent American Indian.<sup>9</sup> The overall dropout rate in Colorado during the 2009-2010 school year was 3.1 percent. **Table 6** shows the percent of the population graduating from high school and college by gender. Compared to other MSAs and the state as a whole, the Boulder MSA had the highest proportion of higher education degrees, the Pueblo MSA had the highest proportion of high school graduates or GEDs and the Greeley MSA had the highest proportion of the population without a high school diploma or GED.

**Table 6: Percentage of Population 25 Years Old and Over, High School Graduates or Higher Degree by Gender and Metropolitan Statistical Areas (MSA), 2010.**

Area	No HS Diploma/GED			HS Grad/Equivalent			Higher Degree		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
<b>Boulder MSA</b>	6.4	6.1	6.2	29.1	31.0	30.0	64.6	62.9	63.7
<b>Colorado Springs MSA</b>	6.8	7.2	7.0	46.8	49.5	48.2	46.4	43.2	44.7
<b>Denver-Aurora-Broomfield</b>	11.4	10.6	11.0	42.6	44.5	43.6	45.9	44.9	45.4

MSA									
<b>Fort Collins-Loveland MSA</b>	7.2	5.5	6.3	41.7	43.0	42.4	51.1	51.5	51.2
<b>Grand Junction MSA</b>	10.4	10.2	10.3	57.0	54.2	55.6	32.6	35.6	34.1
<b>Greeley MSA</b>	16.0	14.7	15.3	50.9	49.5	50.2	33.1	35.8	34.4
<b>Pueblo MSA</b>	15.0	12.9	13.9	56.6	55.2	55.9	28.4	32.0	30.3
<b>Colorado</b>	11.1	10.0	10.5	45.1	45.9	45.5	43.9	44.1	44.0
<b>United States</b>	15.4	14.0	14.7	49.4	50.1	49.7	35.2	35.8	35.6

Source: U.S. Census Bureau, 2010 Census ACS 3-year Estimate Data Tables, Education Attainment by Metropolitan Statistical Areas.<sup>5</sup>

### **Incarcerated persons**

According to data from the Colorado Department of Corrections, 22,980 persons were incarcerated in 2010 . Twenty-two state correctional facilities housed 14,432 inmates, and the remaining 8,548 inmates were housed in contract facilities or county jails. Seven CDOC facilities are located in Fremont County. Colorado’s incarcerated population is 91 percent male and 9 percent female. Racial characteristics of the inmate population are as follows: 45 percent White, 32 percent Hispanic, 20 percent Black, 3 percent American Indian, and 1 percent Asian.<sup>11</sup>

# Epidemiological Trends in HIV Disease in Colorado

## Summary

- By the end of 2010, an estimated 11,115 persons were living with HIV Disease in Colorado (an increase of 2.1 percent from 2009).
- Of the total number of people diagnosed with AIDS through 2010, 57 percent were White, 21.1 percent were Hispanic and 17.9 percent were Black.
- Blacks continue to be disproportionately affected by the HIV epidemic and represent 14.4 percent of PLWHA (prevalent cases) while comprising only 3.8 percent of Colorado's population.
- The 30-34 year old age group accounts for the largest proportion of newly diagnosed HIV cases (16 percent).
- Ninety-three percent of newly diagnosed HIV disease cases were reported in urban counties.
- There have been 4,989 AIDS-related deaths reported in Colorado.

## HIV Disease in Colorado

A cumulative total of 9,870 cases of AIDS and 6,681 cases of HIV infection have been reported in Colorado, and an estimated 11,115 persons were living with HIV disease through the end of 2010. Colorado's HIV prevalence of 124 persons per 100,000 population is lower than the prevalence of 334 for the entire U.S. in 2009. Colorado's 2010 AIDS prevalence was 97 persons per 100,000 population compared to the U.S. prevalence of 191. In 2009, Colorado ranked 29th in total AIDS cases reported among all states and represented 0.92 percent of all reported AIDS cases in 2009.

**Table 7** compares the racial characteristics of Colorado and U.S. AIDS cases through 2010. The majority of Colorado AIDS cases are White (60.7 percent), compared to the U.S. (34.3 percent). Blacks represent a lower percent of PLWA in Colorado, compared to the U.S. (15.2 percent to 43.5 percent, respectively), whereas Hispanics represent a higher percent of AIDS case in Colorado (21.7 percent), compared to the U.S. (19.4 percent).

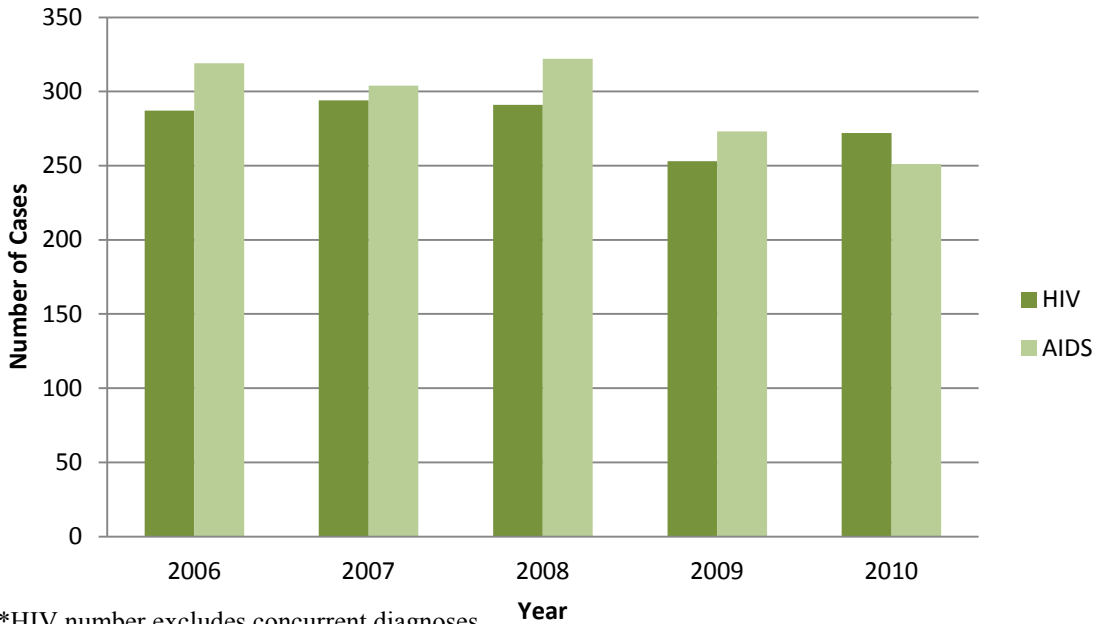
**Table 7: Adults/Adolescents Living with AIDS by Race, Colorado 2010 and United States 2009**

Race	Colorado		United States*	
	Number	Percent	Number	Percent
White	2,965	60.7	161,808	33.8
Hispanic	1,058	21.7	94,717	19.8
Black	740	15.2	207,216	43.3
Asian/PI	50	1.0	5,437	1.1
American Indian	43	0.9	1,690	0.4
Multiple Races	25	0.5	7,359	1.5
<b>Total</b>	<b>4,881</b>	<b>100.0</b>	<b>478,227</b>	<b>100.0</b>

\*Source: CDC HIV/AIDS Surveillance Report, Adults and adolescents living with an AIDS diagnosis, by race/ethnicity and selected characteristics, year-end 2009 – United States, Vol. 22, Table 22

**Figure 2** illustrates newly reported cases of HIV and AIDS between 2006 and 2010. Newly diagnosed cases of HIV have decreased slightly, from 287 cases in 2006 to 272 cases in 2010. Similar to HIV, there has been a decrease in the number of newly diagnosed AIDS cases from 2006 to 2010 (21 percent).

**Figure 2: Colorado AIDS and HIV by Year of Diagnosis (2006-2010)**

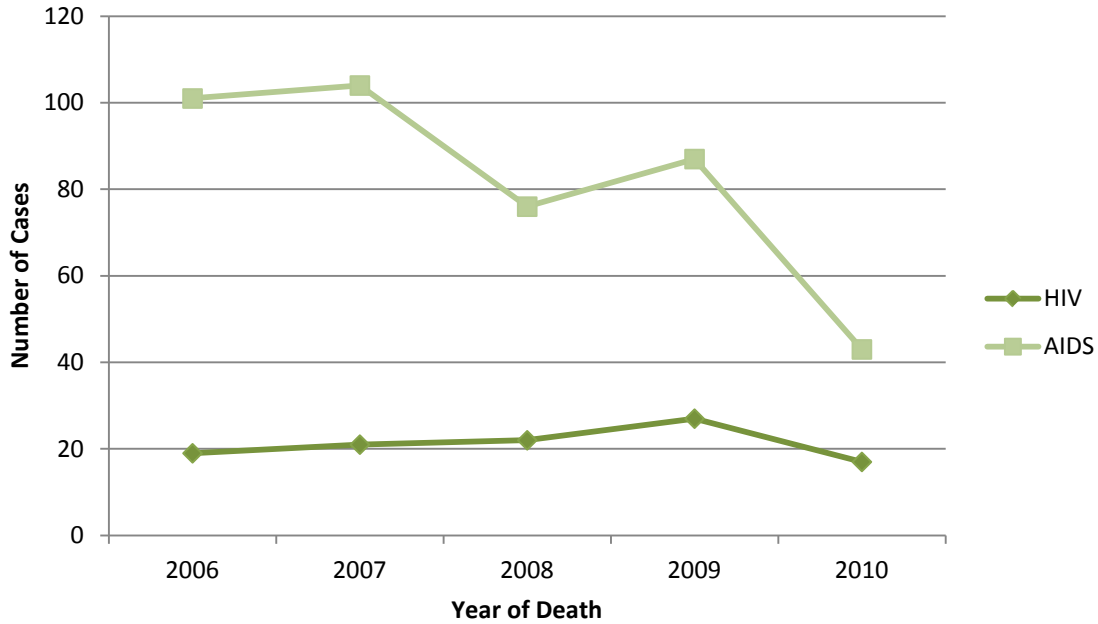


\*HIV number excludes concurrent diagnoses.



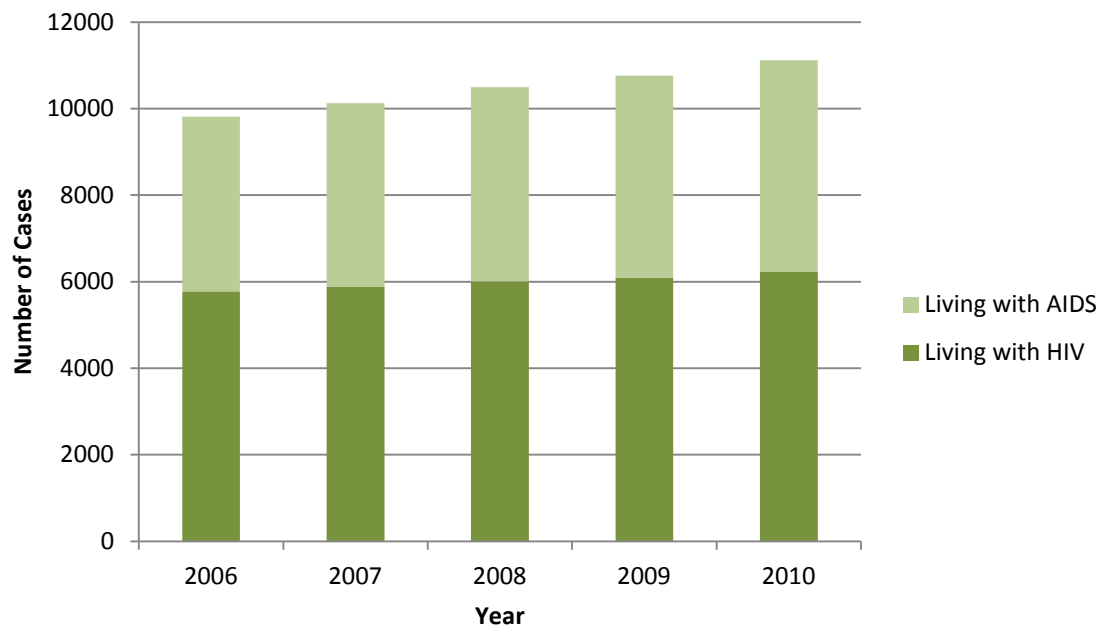
**Figure 3** shows the annual number of deaths among HIV and AIDS cases in Colorado. Deaths among AIDS cases have steadily declined between 2006 and 2010, during which a 57 percent decrease in deaths was observed.

**Figure 3: Annual Death among Persons Diagnosed with HIV and AIDS – Colorado (2006-2010)**



**Figure 4** shows an increase in the number of PLWHA in Colorado during the last five years. By the end of 2010, there was an estimated 11,115 PLWHA in Colorado, an increase of 2 percent from 2009.

**Figure 4: Annual Number of Diagnosed Persons Living with HIV and AIDS – Colorado (2006-2010)**



**Tables 8a** and **8b** illustrate the demographic characteristics of PLWHA. Males represent the majority (89 percent) of PLWHA. Whites constitute the largest racial group living with HIV disease, representing 65 percent of cases. Blacks continue to be disproportionately impacted by the epidemic. Although the percent of Coloradans who identify as Black is 3.8 percent, Blacks represent 14.4 percent of PLWHA. Men who have sex with men is the largest risk group, representing 64 percent of PLWHA. The majority (94 percent) of PLWHA live in Colorado’s urban areas.

**Table 8a: Characteristics of PLW HIV and AIDS in Colorado Through 12/31/10**

Gender	Living with HIV		Living with AIDS		Living with HIV/AIDS	
	Number	Percent	Number	Percent	Number	Percent
Male	5,534	88.8	4,326	88.6	9,860	88.7
Female	700	11.2	555	11.4	1,255	11.3
<b>Race/Ethnicity</b>						
White	4,214	67.6	2,965	60.7	7,179	64.6
Hispanic	975	15.6	1,058	21.7	2,033	18.3
Black	861	13.8	740	15.2	1,601	14.4
Asian	50	0.8	46	0.9	96	0.9
Pacific Islander	5	0.1	4	0.1	9	0.1
American Indian	45	0.7	43	0.9	88	0.8
Multiple Races	21	0.3	25	0.5	46	0.4
Unknown	63	1.0	0	0.0	63	0.6
<b>Risk</b>						
MSM	4,051	65.0	3,077	63.0	7,128	64.1
IDU	428	6.9	436	8.9	864	7.8
MSM/IDU	505	8.1	437	9.0	942	8.5
Heterosexual Contact	530	8.5	542	11.1	1,072	9.6
No Identified Risk	665	10.7	345	7.1	1,010	9.1
Pediatric	44	0.7	11	0.2	55	0.5
Transfusion/Hemophilia	11	0.2	33	0.7	44	0.4
<b>Region</b>						
Urban	5,932	95.2	4,542	93.1	10,474	94.2
Rural	245	3.9	306	6.3	551	5.0
Frontier	44	0.7	33	0.7	77	0.7
Unknown	13	0.2	0	0.0	13	0.1

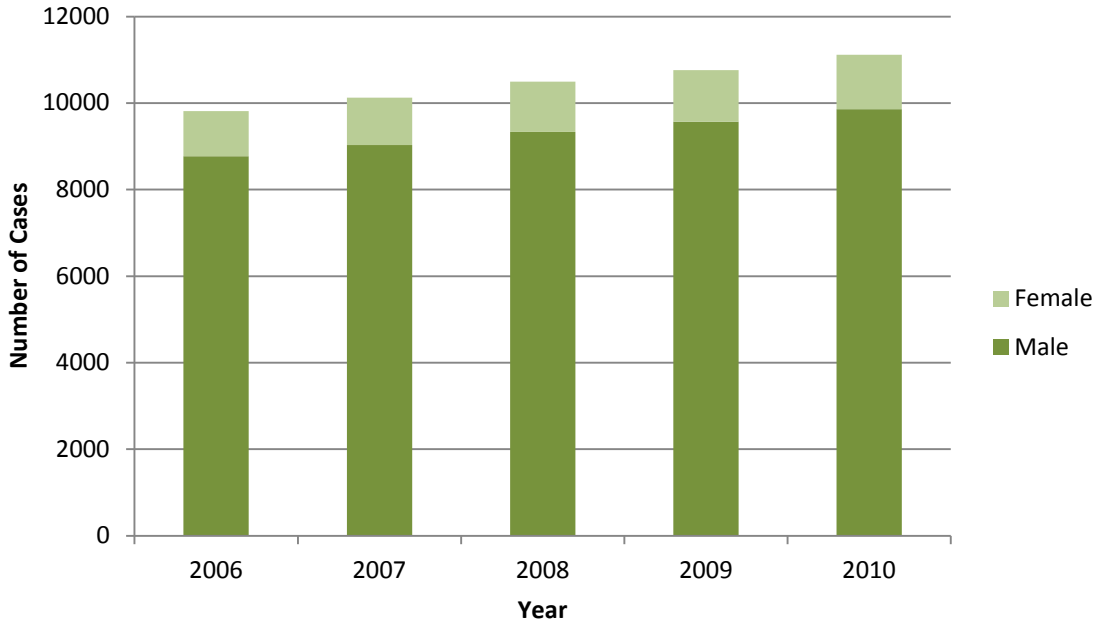
**Table 8b: Age Characteristics of PLW HIV and AIDS in CO Through 12/31/10**

Current Age Group	Living with HIV		Living with AIDS		Living with HIV/AIDS	
	Number	Percent	Number	Percent	Number	Percent
<5	5	0.1	1	0.0	6	0.1
5-9	17	0.3	0	0.0	17	0.2
10-12	2	0.0	1	0.0	3	0.0
13-14	2	0.0	1	0.0	3	0.0
15-19	24	0.4	3	0.1	27	0.2
20-24	142	2.3	48	1.0	190	1.7
25-29	322	5.2	139	2.8	461	4.1
30-34	450	7.2	256	5.2	706	6.4
35-39	528	8.5	478	9.8	1,006	9.1
40-44	876	14.1	793	16.2	1,669	15.0
45-49	1,243	19.9	1,145	23.5	2,388	21.5
50-54	1,060	17.0	816	16.7	1,876	16.9
55-59	817	13.1	634	13.0	1,451	13.1
60-64	435	7.0	327	6.7	762	6.9
>65	311	5.0	239	4.9	550	4.9
<b>Age Group at HIV Diagnosis</b>						
<5	32	0.5	5	0.1	37	0.3
5-9	10	0.2	5	0.1	15	0.1
10-12	3	0.0	5	0.1	8	0.1
13-14	4	0.1	4	0.1	8	0.1
15-19	166	2.7	98	2.0	264	2.4
20-24	925	14.8	565	11.6	1,490	13.4
25-29	1,440	23.1	937	19.2	2,377	21.4
30-34	1,371	22.0	1,049	21.5	2,420	21.8
35-39	1,025	16.4	881	18.0	1,906	17.1
40-44	619	9.9	564	11.6	1,183	10.6
45-49	322	5.2	385	7.9	707	6.4
50-54	167	2.7	183	3.7	350	3.1
55-59	88	1.4	92	1.9	180	1.6
60-64	35	0.6	50	1.0	85	0.8
>65	27	0.4	58	1.2	85	0.8
<b>Age Group at AIDS Diagnosis</b>						
<5			4	0.1	4	0.1
5-9			2	0.0	2	0.0
10-12			0	0.0	0	0.0
13-14			3	0.1	3	0.1
15-19			23	0.5	23	0.5
20-24			192	3.9	192	3.9
25-29			595	12.2	595	12.2
30-34			911	18.7	911	18.7
35-39			1,103	22.6	1,103	22.6
40-44			850	17.4	850	17.4
45-49			564	11.6	564	11.6
50-54			305	6.2	305	6.2
55-59			142	2.9	142	2.9
60-64			71	1.5	71	1.5
>65			36	0.7	36	0.7

## HIV/AIDS by Gender

Increases in the number of PLWHA can be observed among both men and women in the last five years (**Figure 5**). In 2006, females accounted for 10.6 percent of the living cases of HIV disease. In 2010, females represented 11.3 percent of PLWHA.

**Figure 5: Number of Persons Living with HIV or AIDS by Gender – Colorado (2006-2010)**



## HIV/AIDS by Race

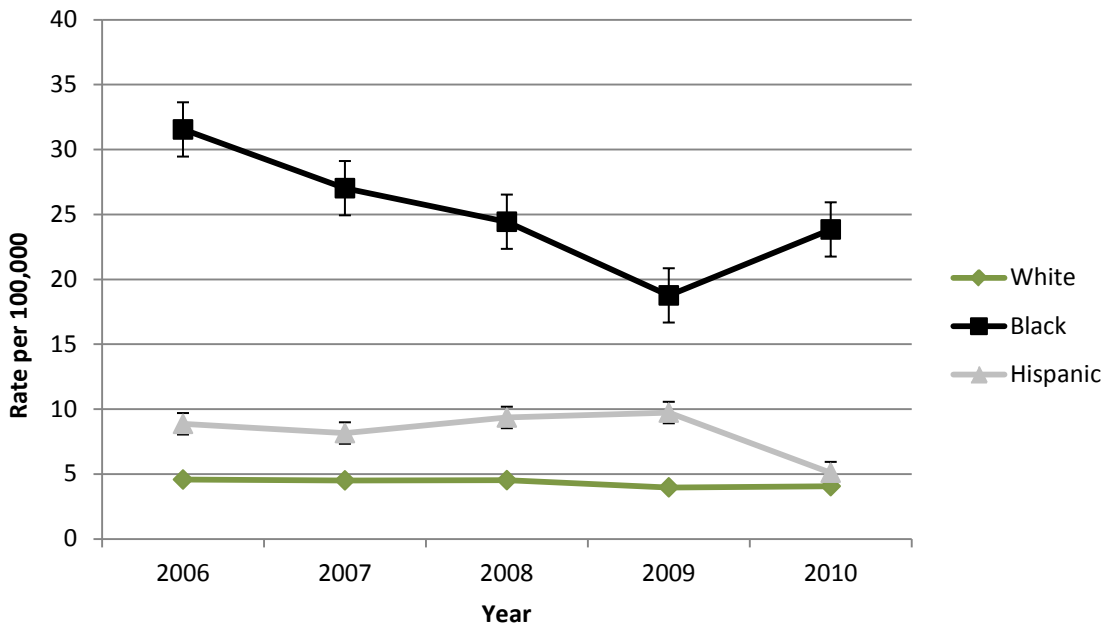
In 2010, 411 persons were newly diagnosed with HIV (including those with a concurrent AIDS diagnoses). Of these, 350 (85%) were male and 61 (15%) were female. By race/ethnicity, 229 (56%) were White, 81 (20%) were Black, 85 (21%) were Hispanic, 9 (2.2%) were Asian/Pacific Islander, and 4 (1%) were American Indian (**Table 9**). By gender, a greater proportion of females identified as Non-Hispanic Black (46%) compared to males (15%).

**Table 9: Colorado HIV Cases Diagnosed by Race and Gender in 2010**

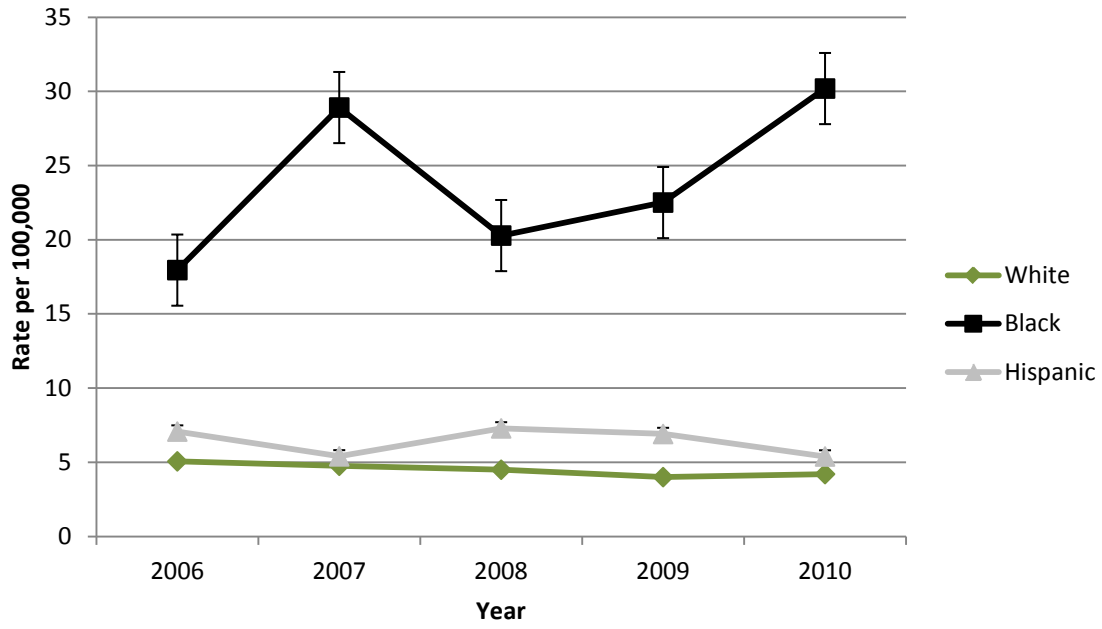
Race	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
White (Non-Hispanic)	214	61.1	15	24.6	229	55.7
Hispanic	71	20.3	14	23.0	85	20.7
Black (Non-Hispanic)	53	15.1	28	45.9	81	19.7
Asian/Hawaiian/Pacific Islander (Non-Hispanic)	7	2.0	2	3.3	9	2.2
American Indian/Alaskan Native (Non-Hispanic)	2	0.6	2	3.3	4	1.0
Two or More Race (Non-Hispanic)	3	0.9	0	0.0	3	0.7
<b>Total</b>	<b>350</b>	<b>85.2</b>	<b>61</b>	<b>14.8</b>	<b>411</b>	<b>100.0</b>

Although Whites represent the largest number of both AIDS and HIV cases, **Figures 6** and **Figure 7** illustrate that when comparing population rates, Blacks, and to a lesser degree, Hispanics, are disproportionately affected by this epidemic. **Figure 6** shows trends in rates of persons reporting an AIDS diagnosis. **Figure 7** demonstrates trends in rates of persons with newly reported HIV diagnoses. Blacks have an HIV rate that is 7 times greater than Whites.

**Figure 6: AIDS Rate per 100,000 Population by Race (with standard error bars) – Colorado (2006-2010)**

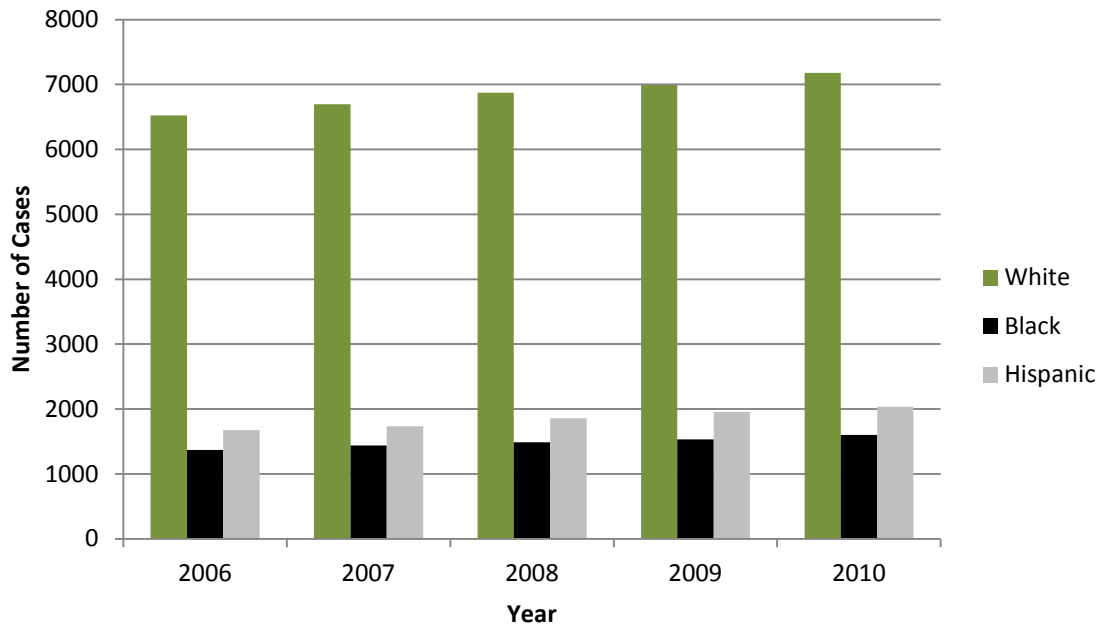


**Figure 7: HIV Rate per 100,000 Population of HIV Cases by Race (with standard error bars) – Colorado (2006-2010)**



The number of PLWHA by race is illustrated in **Figure 8**.

**Figure 8: Persons Living with HIV/AIDS Cases by Race – Colorado (2006-2010)**



The percent of foreign-born persons diagnosed with HIV/AIDS has been increasing among communities of color in the past five years. Among new HIV diagnoses in 2010, 26 percent of those identifying as Hispanic were foreign-born. The majority of these persons were born in Mexico. Twenty-nine percent of new HIV diagnoses among Blacks were foreign-born. The majority of these persons were born in Ethiopia. Cultural and language barriers can make these groups a challenge for prevention and care providers.

### HIV/AIDS by Risk

**Table 10** shows HIV cases diagnosed in 2010 by risk categories and gender. Heterosexual contact continues to be the largest risk factor for females, accounting for 67 percent of the cases. All 8 pediatric transmission cases were foreign born

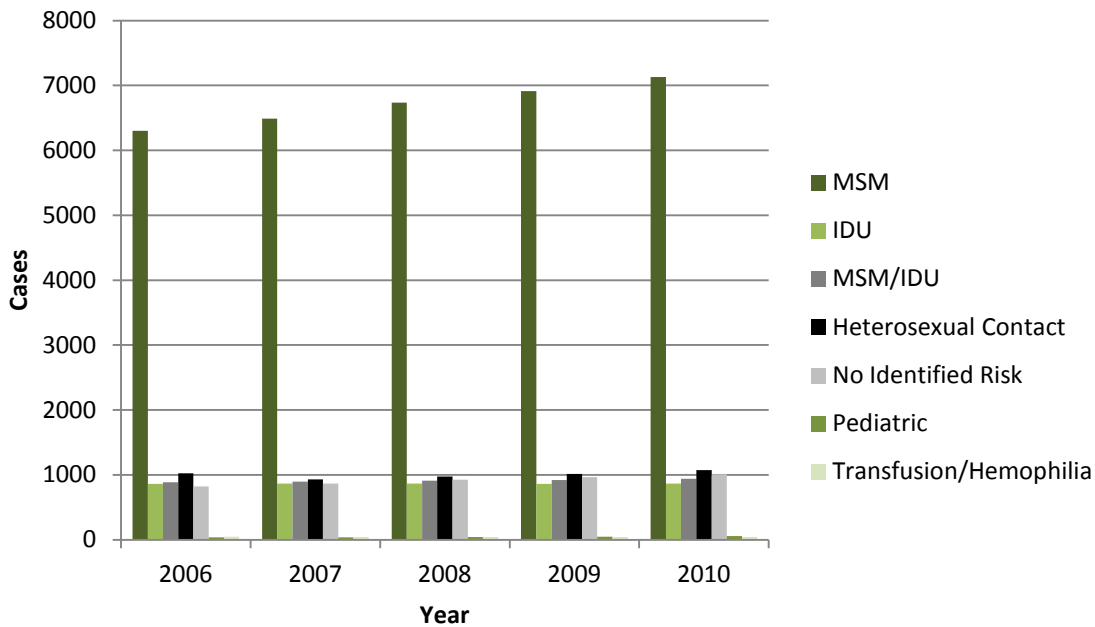
**Table 10: Colorado HIV Cases by Risk and Gender, Diagnosed 2010**

Risk	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>MSM</b>	249	71.1	-	---	249	60.6
<b>IDU</b>	8	2.3	3	4.9	11	2.7
<b>MSM/IDU</b>	28	8.0	-	---	28	6.8
<b>Heterosexual Contact</b>	23	6.6	41	67.2	64	15.6
<b>No Identified Risk</b>	38	10.9	13	21.3	51	12.4
<b>Pediatric</b>	4	1.1	4	6.6	8	1.9
<b>Transfusion/Hemophilia</b>	0	0.0	0	0.0	0	0.0
<b>Total</b>	350	85.2	61	14.8	411	100.0

**Figure 9** clearly demonstrates that the majority of PLWHA in Colorado are MSM. MSM/IDU constitute an additional 8.5 percent (942 cases), and IDU comprise 7.8 percent (864 cases) of PLWHA through 2010. Among PLWHA, the proportion reporting heterosexual contact as their risk factor increased 5 percent from 2006 to 2010, whereas those reporting no known risk increased 23 percent.



**Figure 9: Living with HIV Disease Cases by Risk Reported – Colorado (2006-2010)**



**HIV by Age**

**Table 11** describes the 411 new HIV diagnoses by age group and gender. Females had a higher percentage of cases in the 25-29 age group (18 percent of females versus 14.6 percent of males). However, the majority of both female (61 percent) and male (54 percent) cases occurred in the 20-39 age range.

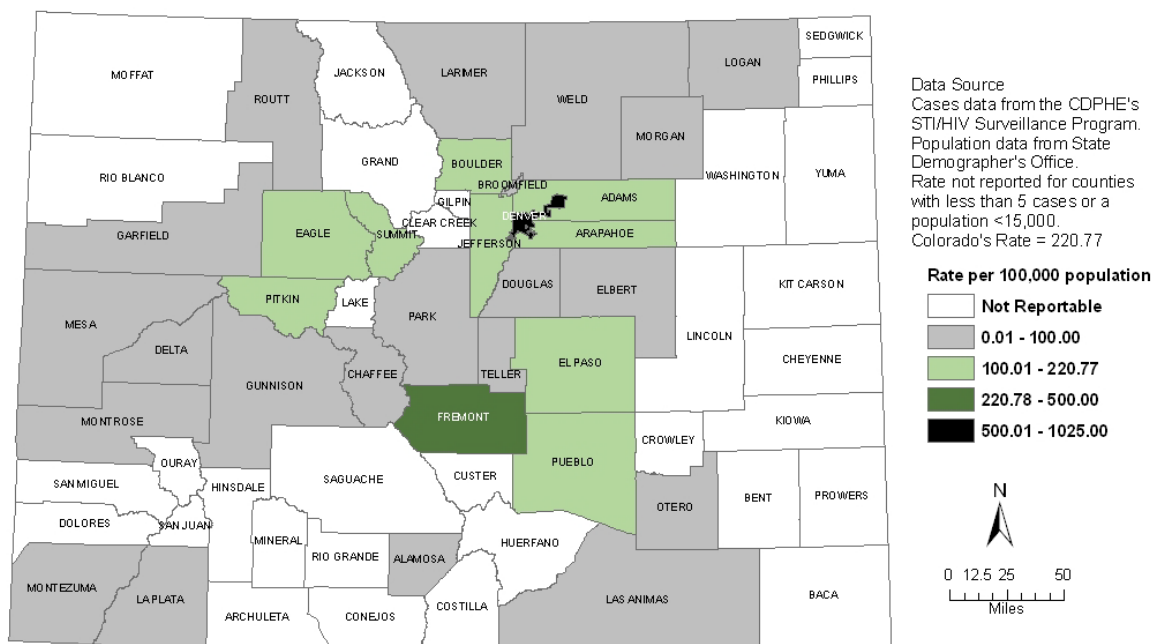
**Table 11: Colorado HIV Cases by Age Group and Gender, Diagnosed 2010**

Age Group	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
<5	0	0.0	3	4.9	3	0.7
5-9	4	1.1	1	1.6	5	1.2
10-12	0	0.0	0	0.0	0	0.0
13-14	0	0.0	0	0.0	0	0.0
15-19	10	2.9	2	3.3	12	2.9
20-24	55	15.7	4	6.6	59	14.4
25-29	51	14.6	11	18.0	62	15.1
30-34	52	14.9	14	23.0	66	16.1
35-39	31	8.9	8	13.1	39	9.5
40-44	46	13.1	7	11.5	53	12.9
45-49	44	12.6	0	0.0	44	10.7
50-54	26	7.4	6	9.8	32	7.8
55-59	19	5.4	2	3.3	21	5.1
60-64	8	2.3	1	1.6	9	2.2
>65	4	1.1	2	3.3	6	1.5
<b>Total</b>	<b>350</b>	<b>85.2</b>	<b>61</b>	<b>14.8</b>	<b>411</b>	<b>100.0</b>

## Geographic Characteristics of HIV

**Figure 10** shows that the highest rates of HIV occur in the Front Range counties (and population centers) of Adams, Arapahoe, Boulder, Denver, Eagle, El Paso, Jefferson, Pitkin, Pueblo and Summit. These ten counties account for 90 percent of HIV/AIDS cases and 66 percent of Colorado’s population. This map shows that Fremont County has a disproportionate share of HIV cases. The Colorado state correctional facility that houses virtually all HIV infected state prisoners is located in Fremont County. Due to their incarceration, these cases do not place a burden for HIV care or prevention services on the surrounding rural community.

**Figure 10: Living HIV/AIDS Rate per 100,000 Population by County of Residence at Time of Diagnosis – Colorado, 2010**



Note: Rates for counties with less than five cases or population <15,000 are not shown.

## HIV Related Mortality

**Table 12** and **Table 13** illustrate the HIV related death rates by gender and age .

**Table 12: HIV Related Death Rate by Gender, 2010**

Gender	Population	Deaths	Death Rate per 100,000 population
Male	2,520,662	59	2.3
Female	2,508,534	8	0.3
Total	5,029,771	67	1.3

**Table 13: HIV Related Death Rate by Age, 2010**

Age Group	Population	Deaths	Death Rate per 100,000 population
<25	1,713,307	0	0.0
25-34	726,278	7	1.0
35-44	699,644	8	1.1
45-54	742,698	26	3.5
55-64	597,644	20	3.3
≥65	549,625	4	0.7
Total	5,029,771	67	1.3

# Demographic Characteristics of HIV and AIDS in High Risk Populations

## Summary

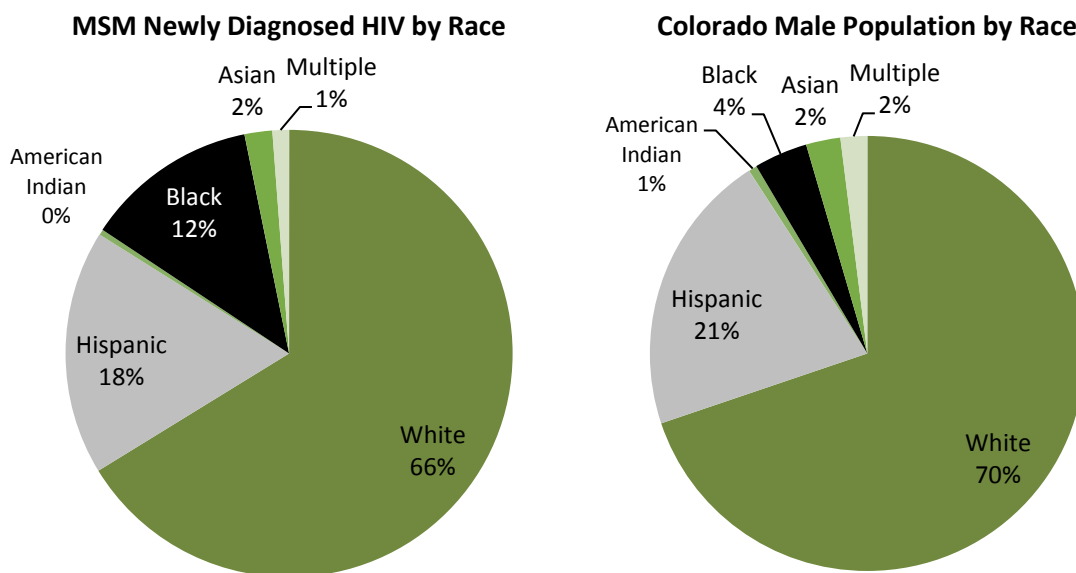
### Men Who Have Sex with Men

- The majority of Colorado’s HIV/AIDS cases can be attributed to MSM risk (65 percent of all cases)
- The number of new MSM HIV/AIDS cases has decreased among Whites, remained relatively stable among Blacks, and has decreased among Hispanics
- HIV/AIDS cases diagnosed among MSM ages 50-59 years have increased by 30 percent in the last five years

### Racial/Ethnic Trends Among MSM

As **Figure 11** demonstrates, Blacks are over represented in the HIV epidemic among MSM. Blacks account for 3.8 percent of Colorado’s male population and 12.5 percent of new HIV diagnoses among MSM in 2010. Hispanics account for 18 percent of newly diagnosed HIV cases among MSM. White MSM represent 66 percent of newly diagnosed HIV cases.

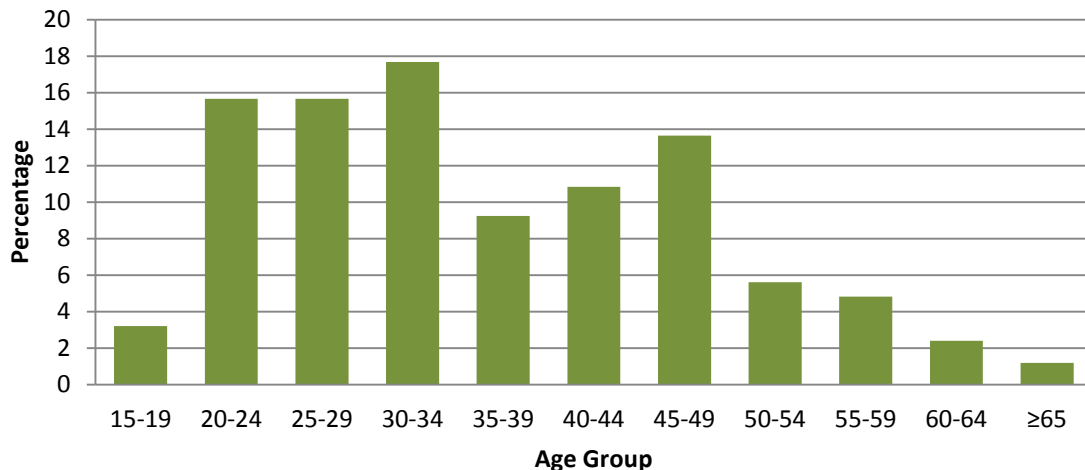
**Figure 11: HIV Positive MSM by Race, Compared to Male Population – Colorado (2010)**



## Age Trends Among MSM

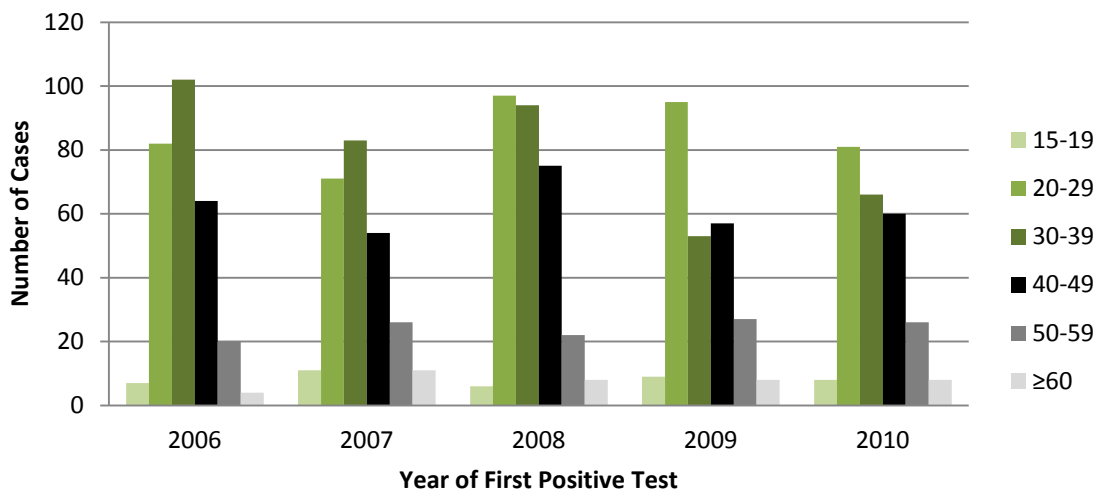
**Figure 12** shows the percentage of newly diagnosed HIV among MSM by age. Forty-nine percent of new HIV diagnoses occurred among 20-34 year olds which represent only 22 percent of the male population. Young men ages 20-29 years account for 15 percent of new HIV diagnoses.

**Figure 12: Percent of MSM HIV Cases by Age at Diagnosis – Colorado (2010)**



**Figure 13** illustrates the number of HIV and AIDS cases diagnosed between 2006 and 2010 among MSM by age at diagnosis. HIV/AIDS cases diagnosed in MSM ages 30-39 years decreased by 35 percent, whereas diagnoses in the 50-59 age group increased by 30 percent from 2006 to 2010.

**Figure 13: Number of MSM with HIV/AIDS by Year of First Positive Test and Age at Diagnosis – Colorado (2006-2010)**



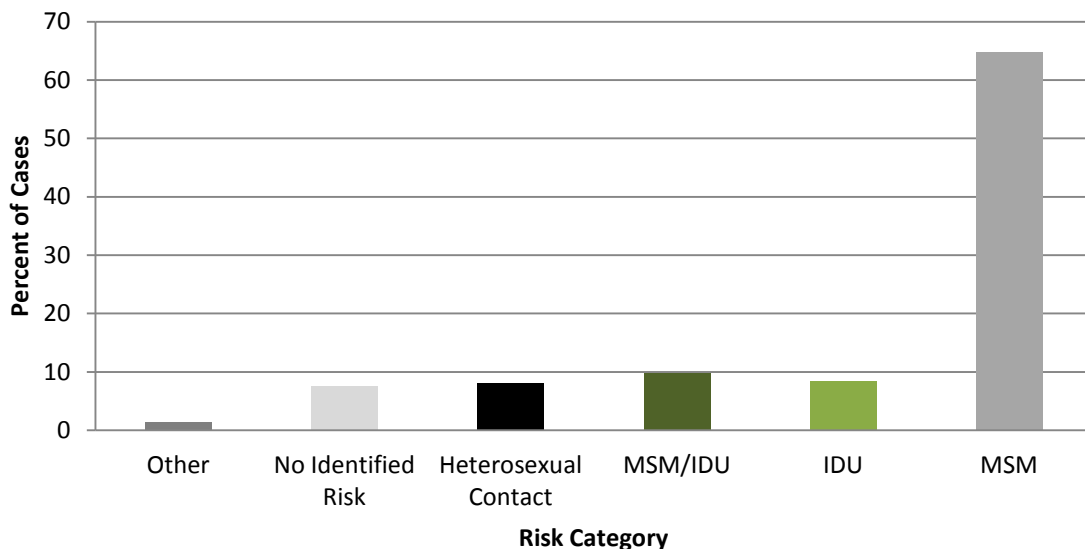
## Injecting Drug Use

- IDU and MSM/IDU HIV/AIDS cases comprise 18.3 percent of Colorado cases.
- Males account for 86 percent of IDU-attributed HIV/AIDS cases.
- Whites account for 46 percent of IDU-only new HIV cases in 2010, while Hispanics account for 27 percent of IDU cases, and Blacks comprise 27 percent.
- IDU related HIV/AIDS cases occur most often in the 30-39 age group.

## Proportion of Epidemic among IDU

Through December 31, 2010, a cumulative total of 2,997 cases of HIV/AIDS were associated with IDU or MSM/IDU risk. Of these, 86 percent were reported in men and 14 percent were reported in women. **Figure 14** shows the proportion of the epidemic by risk group.

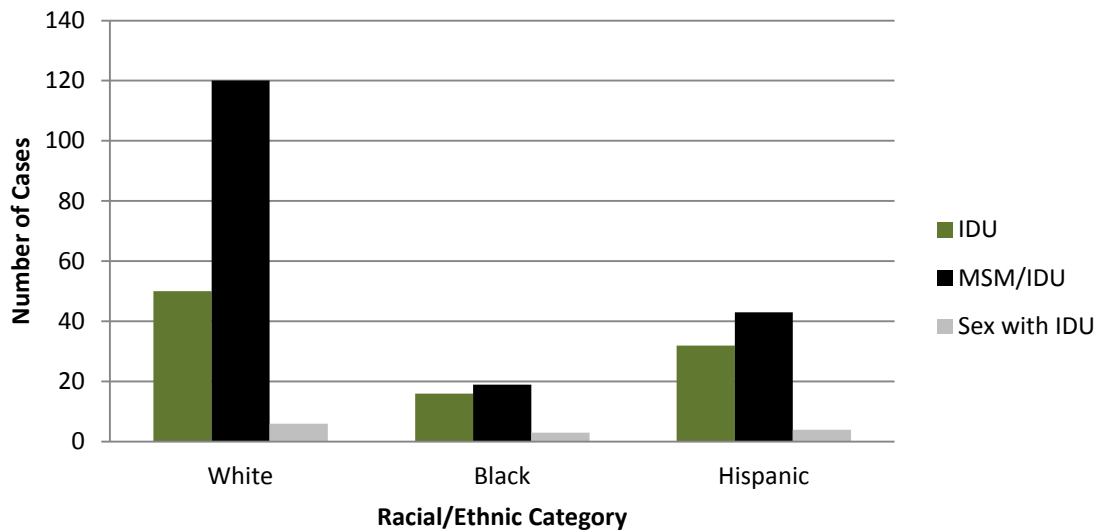
**Figure 14: HIV/AIDS Cases by Risk Category – Colorado (1982-2010)**



## Racial Ethnic Trends among IDU

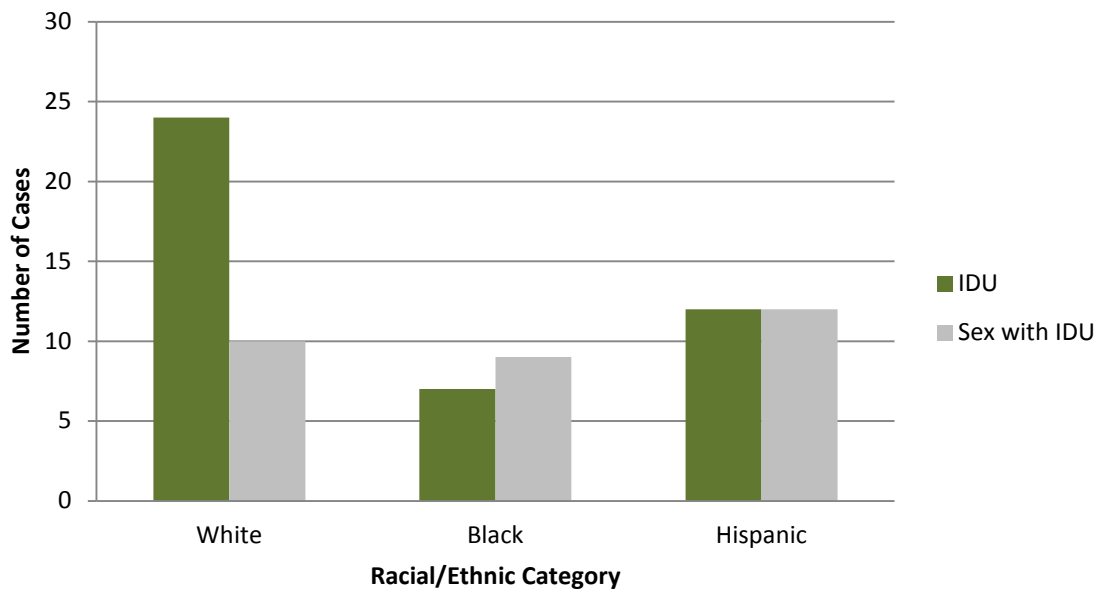
The following two graphs illustrate the impact of IDU risk behaviors in both adult and adolescent males and females. Among males, 2,709 cumulative cases of HIV or AIDS were related to IDU, either through IDU, MSM/IDU, or heterosexual contact to an IDU. **Figure 15** shows that among the 104 males diagnosed with HIV or AIDS in 2006-2010 whose only risk was IDU, Whites account for 50 (48 percent) cases, Hispanics for 32 (31 percent) and Blacks for 16 (15 percent) cases. Among the 239 males reporting MSM/IDU risk, White males account for the overwhelming majority of these cases (120 or 50 percent), Hispanics for 43 (18 percent), and Blacks for 19 (8 percent) of cases.

**Figure 15: Cumulative IDU-Associated HIV/AIDS Cases by Race in Males – Colorado (2006-2010)**



Among females, the number of IDU-related HIV or AIDS cumulative cases (666) is smaller than for males as shown in **Figure 16**. From 2006 to 2010, 47 cases of HIV or AIDS in females were directly related to IDU. Whites account for 24 (51 percent), Blacks account for 7 (15 percent) and Hispanics account for 12 (26 percent). The number of cases of females who acquired their infection as a result of heterosexual contact with an IDU (N=32) is higher than for males in all racial/ethnic groups. White females comprise 31 percent (N=10), Hispanic females comprise 38 percent (N=12), and Black females represent 28 percent (N=9) of this risk group.

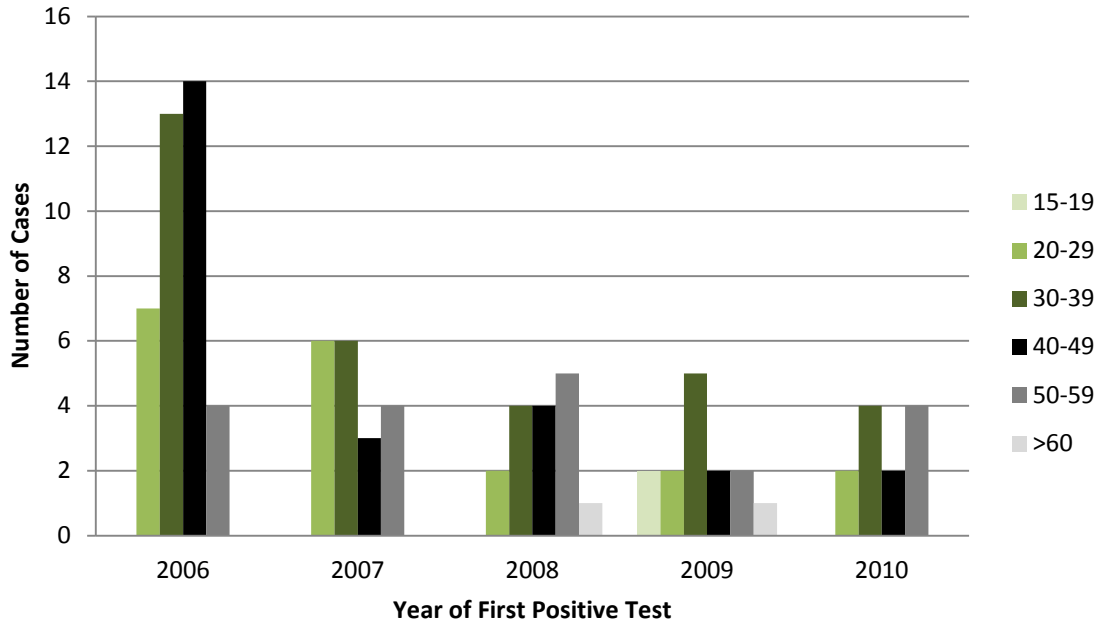
**Figure 16: Cumulative IDU-Associated HIV/AIDS Cases by Race in Females – Colorado (2006-2010)**



## Age Trends among IDU

**Figure 17** illustrates newly diagnosed cases of HIV and AIDS for a five-year period from 2006 through 2010 among IDU. When reviewing cases of HIV and AIDS, all age groups show a general decreasing trend in the number of cases reported from 2006 to 2010, with the exception of 15-19. The 15-19 age group did not account for any cases until 2009 and then returned to none again in 2010. However, it should be noted that the number of IDU attributed HIV/AIDS cases remains small and caution should be exercised when interpreting these numbers.

**Figure 17: Number of IDUs with HIV/AIDS by Year of First Positive Test and Age at Diagnosis – Colorado (2006-2010)**

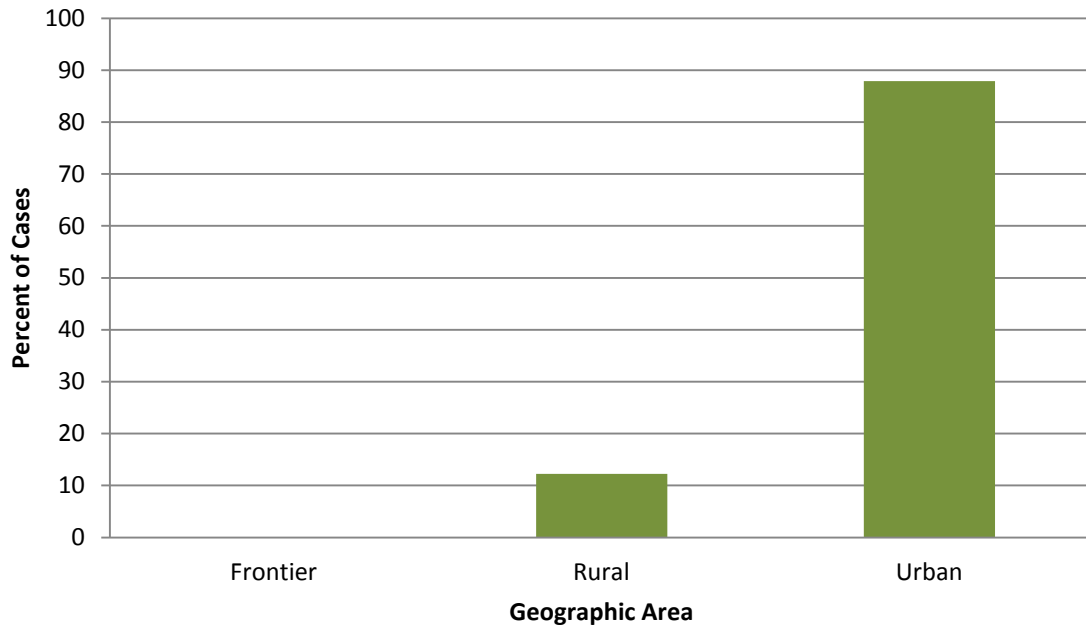


## HIV Among IDU by Region

**Figure 18** demonstrates that those IDU HIV cases diagnosed during the five year time period of 2006 through 2010 have largely been concentrated in urban areas. This is consistent with other risk groups, affirming that the Colorado HIV epidemic is largely centered in urban areas. Urban areas report 88 percent of cases, rural areas account for 12 percent and frontier none. This pattern of HIV/AIDS case distribution among urban and rural regions has remained fairly stable since the beginning of the epidemic.



**Figure 18: IDU HIV Diagnosed Positive by Region Reported – Colorado (2006-2010)**



### **Heterosexual Transmission**

- Heterosexual HIV transmission has decreased slightly from 15.8 percent in 2006 to 15.6 percent in 2010.
- Females represent 65 percent of heterosexually transmitted HIV/AIDS cases.
- Blacks are more affected by heterosexual transmission than other racial/ethnic categories, representing 48.4 percent of cases diagnosed in 2010.
- Heterosexual transmission of HIV is most commonly diagnosed in those persons aged 25-29 or 40-44 years representing 19 percent of cases, each.

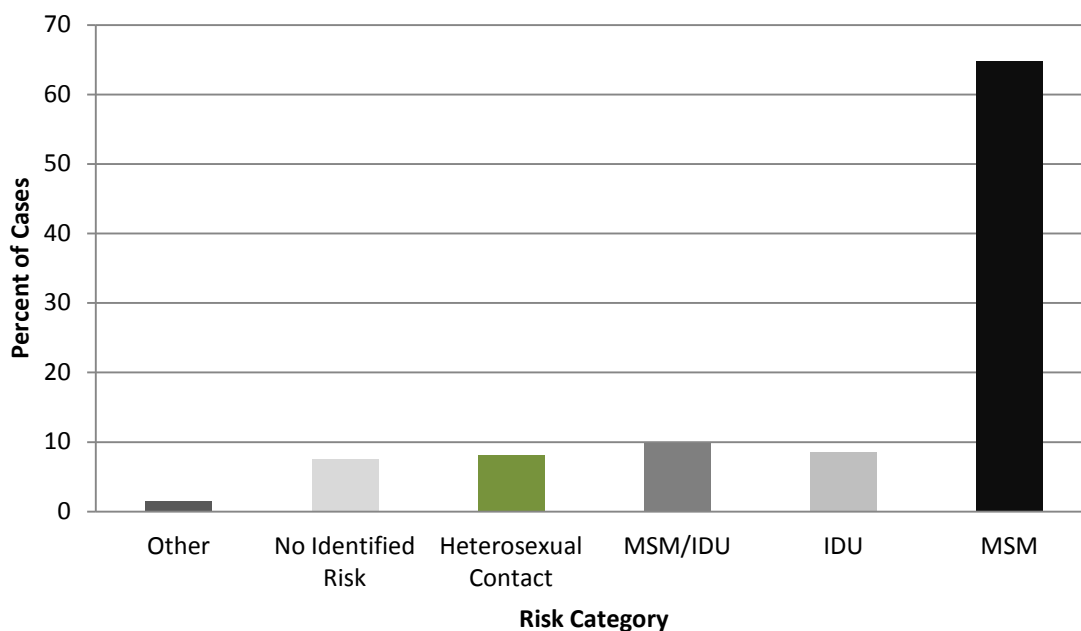
### **Estimates of High Risk Heterosexual Behavior in Colorado**

It is difficult to estimate the number of persons in Colorado who engage in heterosexual contact that puts them at high risk for HIV. A sexually transmitted disease diagnosis suggests that the person has engaged in unsafe sexual practices. Specific HIV prevention strategies should be directed toward these persons. In 2010, 19,447 cases of chlamydia and 2,787 cases of gonorrhea were reported to CDPHE.

### Proportion of Epidemic among Heterosexuals

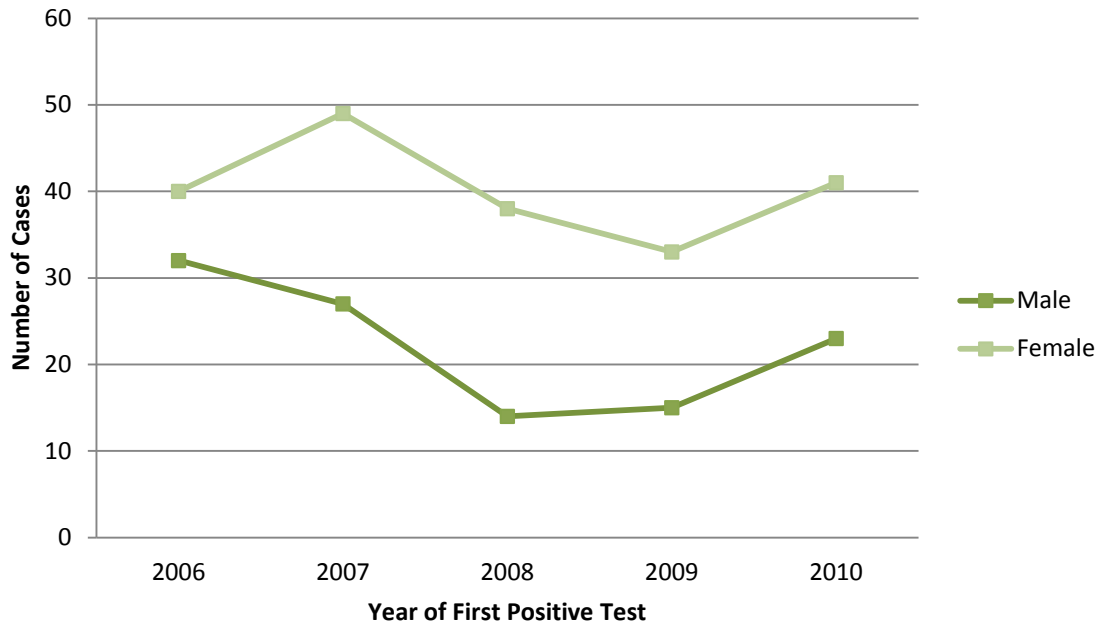
Heterosexual transmission (**Figure 19**) accounts for 8 percent of Colorado’s cumulative HIV/AIDS cases.

**Figure 19: HIV/AIDS Cases Reported by Risk Category – Colorado (1982-2010)**



**Figure 20** illustrates the number of heterosexually transmitted HIV/AIDS cases by year of first positive test and gender between 2006 and 2010. The overall number of heterosexually transmitted HIV/AIDS cases decreased by 11 percent during the five-year time period. Care should be taken in identifying trends in this group due to the small number of cases.

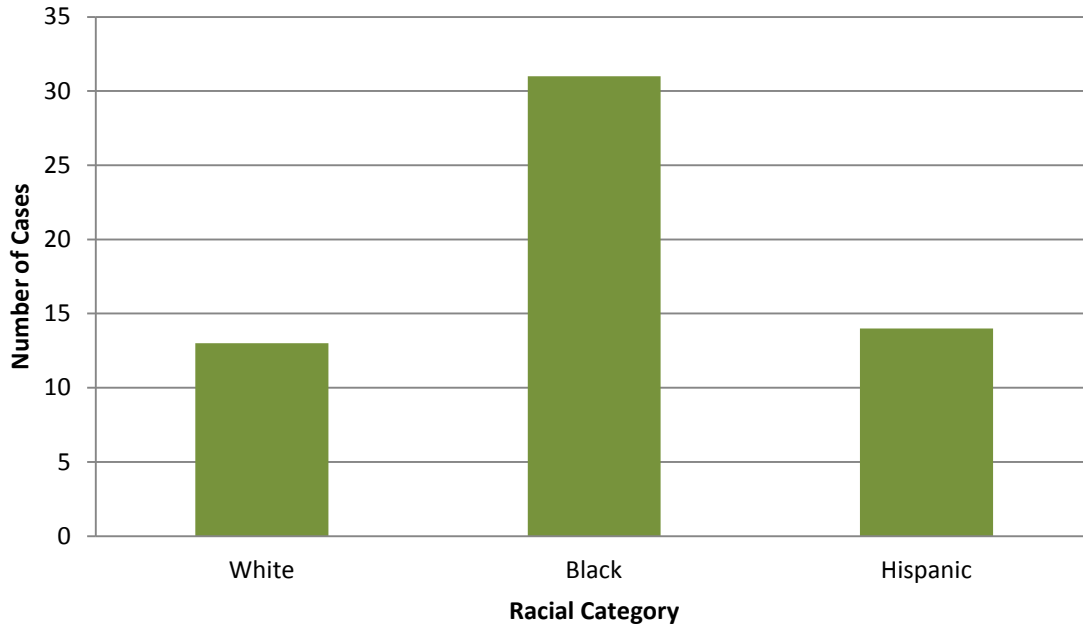
**Figure 20: Number of Heterosexually Transmitted HIV/AIDS Cases by Year of First Positive Test and Gender – Colorado (2006-2010)**



### **Racial/Ethnic Trends Among High Risk Heterosexuals**

Recently diagnosed cases of HIV attributed to heterosexual transmission are illustrated in **Figure 21**. Blacks represent the largest heterosexual transmission risk group with 31 (48 percent) cases diagnosed in 2010. Hispanics account for 14 percent of cases and Whites for 13 percent. In comparison to their percent of the total population, Blacks are over represented among heterosexually transmitted HIV cases.

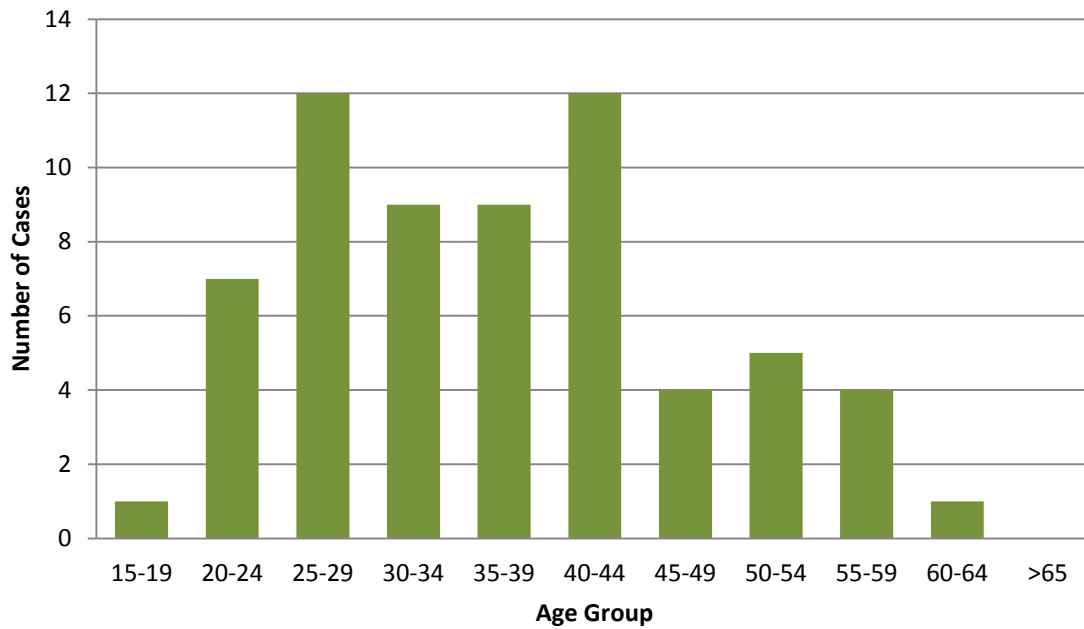
**Figure 21: Newly Identified Cases of Heterosexually Transmitted HIV Cases by Racial Category – Colorado (2010)**



### **Age Trends Among High Risk Heterosexuals**

**Figure 22** illustrates recently diagnosed heterosexual contact attributed HIV cases by age group. This graph indicates that the largest proportion (19 percent) of newly diagnosed cases occurs in the 25-29 and 40-44 year old age groups. The 30-34 and 35-39 year old age groups follow, representing 14 percent of cases. The next highest contributing age group is young adults ages 20-24 years, representing 11 percent of heterosexually transmitted HIV cases in Colorado.

**Figure 22: Heterosexually Transmitted HIV by Age of Diagnosis – Colorado, 2010**



**Infants Born to HIV-infected Women**

As shown in **Table 14**, the number of infants known to be born to HIV-infected mothers remained close to 30 until 2010 when the annual number decreased. Among these births, two cases of confirmed perinatal transmitted HIV infection were reported in the time period 2006-2010. According to CDPHE Vital Records Division’s birth certificates, 1.4 percent of mothers who delivered a child in 2010 did not receive prenatal care. Ninety percent reported an HIV test during pregnancy.<sup>14</sup>

**Table 14: Number of Infants Born to HIV-infected Women by Year of Birth – Colorado (2006-2010)**

Year of Birth	Number of Infants born to HIV Positive Women	Number of Infants who acquired HIV perinatally
2006	28	0
2007	30	1
2008	28	0
2009	29	1
2010	19	0
<b>Total</b>	<b>134</b>	<b>2</b>

# Demographic Characteristics of Concurrent HIV/AIDS Diagnoses

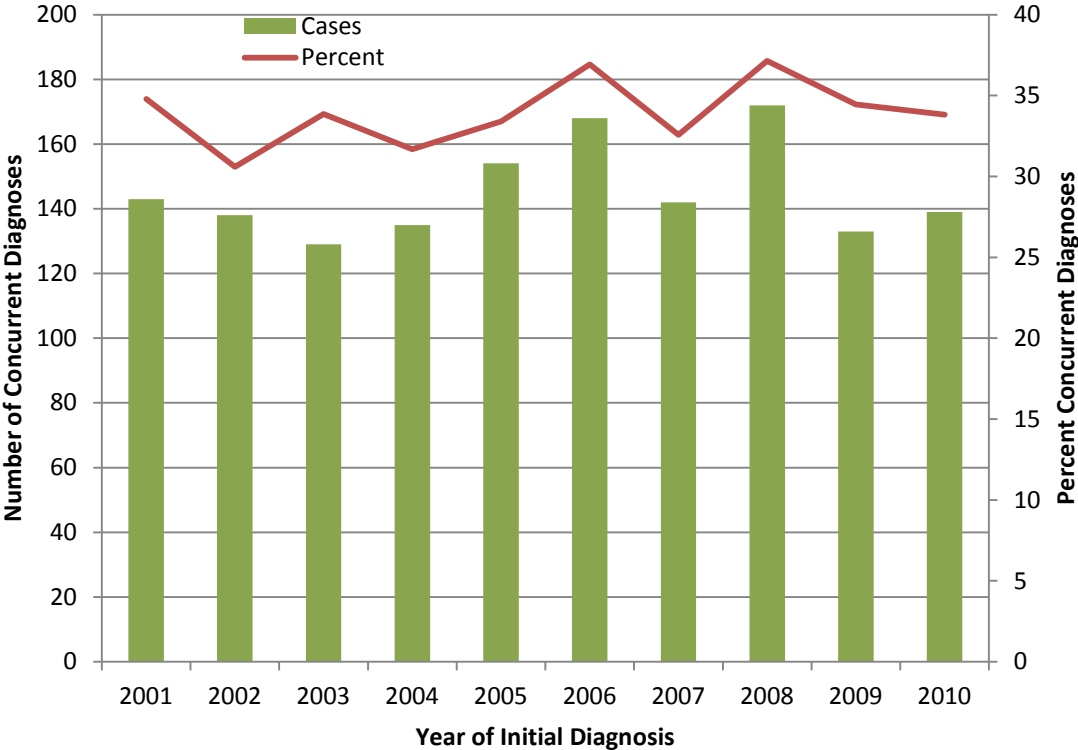
## Summary

- The racial/ethnic distribution of concurrent diagnoses is 58 percent White, 21 percent Hispanic and 17 percent Black.
- The mean age of those concurrently diagnosed with HIV/AIDS was 41.
- Among concurrent diagnoses, 59 percent reported MSM risk, 20 percent reported heterosexual contact and 16 percent reported no identified risk.
- Twenty one percent of concurrent diagnoses occurred in foreign born persons.

## Description of the concurrent diagnoses population

As **Figure 23** demonstrates, the overall number and percentage of concurrent cases has been relatively consistent for the last ten years. The percentage has ranged from 30 to 37 percent. In 2010, 139 of 411 new HIV diagnoses were concurrent HIV/AIDS diagnoses (34 percent).

**Figure 23: New HIV Disease Concurrent Cases and Percentage in Colorado, 2001 - 2010**



**Table 15: Characteristics of New HIV Disease Diagnoses in Colorado, 2010**

	Concurrent		Non-Concurrent		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Total</b>	139	100.0	272	100.0	411	100.0
<b>Gender</b>						
Male	120	86.3	230	84.6	350	85.2
Female	19	13.7	42	15.4	61	14.8
<b>Race</b>						
NH White	81	58.3	148	54.4	229	55.7
Hispanic (all races)	29	20.9	56	20.6	85	20.7
NH Black	24	17.3	57	21.0	81	19.7
NH Asian/PI	4	2.9	5	1.8	9	2.2
NH American Indian	1	0.7	3	1.1	4	1.0
NH Multiple Races	0	0.0	3	1.1	3	0.7
<b>Age Group at HIV Diagnosis</b>						
<5	0	0.0	3	1.1	3	0.7
5-9	0	0.0	5	1.8	5	1.2
10-12	0	0.0	0	0.0	0	0.0
13-14	0	0.0	0	0.0	0	0.0
15-19	2	1.4	10	3.7	12	2.9
20-24	16	11.5	43	15.8	59	14.4
25-29	15	10.8	47	17.3	62	15.1
30-34	13	9.4	53	19.5	66	16.1
35-39	15	10.8	24	8.8	39	9.5
40-44	25	18.0	28	10.3	53	12.9
45-49	21	15.1	23	8.5	44	10.7
50-54	14	10.1	18	6.6	32	7.8
55-59	10	7.2	11	4.0	21	5.1
60-64	5	3.6	4	1.5	9	2.2
>65	3	2.2	3	1.1	6	1.5
<b>Risk</b>						
MSM	82	59.0	167	61.4	249	60.6
IDU	2	1.4	9	3.3	11	2.7
MSM/IDU	5	3.6	23	8.5	28	6.8
Heterosexual Contact	28	20.1	36	13.2	64	15.6
No Identified Risk	22	15.8	39	14.3	61	14.8
Pediatric	0	0.0	8	2.9	8	1.9
Transfusion/Hemophilia	0	0.0	0	0.0	0	0.0

**Table 15: Characteristics of New HIV Disease Diagnoses in Colorado, 2010, cont.**

	Concurrent		Non-Concurrent		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Total</b>	139	100.0	272	100.0	411	100.0
<b>Birth Country</b>						
United States (50 states)	110	79.1	236	86.8	346	84.2
Foreign Born	29	20.9	36	13.2	65	15.8
African	15	51.7	20	55.6	35	53.8
Asian	1	3.4	0	0.0	1	1.5
Caribbean	0	0.0	0	0.0	0	0.0
C. American	1	3.4	1	2.8	2	3.1
S. American	0	0.0	1	2.8	1	1.5
European	0	0.0	2	5.6	2	3.1
Middle East	0	0.0	0	0.0	0	0.0
Mexico	11	37.9	9	25.0	20	30.8
U.S. Dependent Areas	0	0.0	0	0.0	0	0.0
Other / Unknown	1	3.4	3	8.3	4	6.2

As shown in **Table 15**, foreign born persons comprise a large percent of concurrent cases (21 percent). Concurrent cases tend to be older than non-concurrent cases with a larger percentage in the 40-54 year old age group (43 vs. 25). Of those concurrent diagnoses that are foreign born, 52 percent are from Africa, 38 percent are from Mexico and the remainder are from Asia and Central America.



## References

1. Colorado Rural Health Center. <http://www.coruralhealth.org>
2. US Census Bureau, 2010 Census 100% Data Table QT-P2 (geography: State of Colorado). <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.
3. US Census Bureau, 2010 Census 100% Data Table PCT12H-O (geography: State of Colorado). <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.
4. US Census Bureau, 2010 Census 100% Data Table P5 (geography: Colorado Counties). <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.
5. US Census Bureau, 2010 Census ACS 3-year Estimate Data Table S1501 (geography: Colorado MSA). <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.
6. US Department of Agriculture. Economic Research Service, 2010 County-Level Poverty Rates for Colorado. <http://www.census.gov/did/www/saipe/data/statecounty/data/2010.html>
7. Colorado Department of Labor and Employment. Colorado LMI Gateway, Labor Force Information. <http://lmigateway.coworkforce.com>
8. The Henry J. Kaiser Family Foundation. State Health Facts. Colorado: Uninsured Rates for the Nonelderly by Race/Ethnicity, states (2009-2010), US (2010). <http://www.statehealthfacts.org/prfileind.jsp?ind=143&cat=3&rgn=7>
9. Colorado Department of Education. Fall 2010 Pupil Membership. <http://www.cde.state.co.us/cdereval/rv2010pmlinks.htm>
10. US Census Bureau, 2009 American Community Survey. Metropolitan Statistical Area Selected Social Characteristics in the United States, 2009. <http://factfinder.census.gov>
11. Colorado Department of Corrections. Statistical Report, Fiscal Year 2010. February 2011.
12. Centers for Disease Control and Prevention. HIV/AIDS Surveillance Report, 2010. Vol. 22. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2010. <http://cdc.gov/hiv/topics/surveillance/resources/reports/>
13. Colorado Health Information Dataset (CoHID). Death Data Statistics, 2010. <http://www.chd.dphe.state.co.us/cohid/Default.aspx>
14. Colorado Health Information Dataset (COHID). Birth Data Statistics, 2010. <http://www.chd.dphe.state.co.us/cohid/Default.aspx>