



## HIV & AIDS in Colorado



---

## Colorado Department of Public Health and Environment

Integrated Epidemiological Profile of HIV and AIDS

Diagnosed through December 2011

# Table of Contents

<b>Acknowledgements</b> .....	<b>i</b>
<b>Acronym List</b> .....	<b>ii</b>
<b>Executive Summary</b> .....	<b>iii</b>
<b>Data Sources</b> .....	<b>iii</b>
<b>Strengths and Limitations of the Data</b> .....	<b>iv</b>
<b>List of Tables and Figures</b> .....	<b>vi</b>
<b>Description of Colorado</b> .....	<b>1</b>
<b>Epidemiological Trends in HIV and AIDS in Colorado</b> .....	<b>8</b>
HIV Disease in Colorado .....	8
HIV Disease by Gender .....	13
HIV Disease by Race.....	13
HIV Disease by Risk.....	16
HIV Disease by Age .....	17
Geographical Characteristics of HIV .....	18
HIV Related Mortality.....	18
<b>Demographic Characteristics of HIV Disease in High Risk Populations</b> .....	<b>20</b>
Men Who have Sex With Men.....	20
Injection Drug Use .....	22
Heterosexual Transmission .....	26
<b>Demographic Characteristics of Late Stage HIV Diagnoses</b> .....	<b>29</b>
<b>National HIV Behavioral Surveillance – Denver, Colorado</b> .....	<b>32</b>
<b>References</b> .....	<b>41</b>

## Acknowledgments

This HIV/AIDS Annual Report was produced by the STI/HIV Section, Colorado Department of Public Health & Environment. Access to this publication is available through the Internet at the following address:

<http://www.colorado.gov/cs/Satellite/CDPHE-DCEED/CBON/1251621400997>

Megan Duffy, MPH – Lead Author  
Melanie Mattson, STI/HIV Section Chief  
Anita Watkins, MPH  
Elaine Daniloff, MSPH  
Mary M Reed, MSPH  
Jean Ajayi  
Peter Brandauer  
Susanna Hernandez  
Pam Montoya  
Doug Robinson  
Kelly Voorhees, MSPH  
Phillip Whitt  
STI/HIV Registry Unit Staff  
HIV Care and Treatment Program Staff  
Stephanie Stark, RN – Denver Hospital Authority

The cooperation of physicians, local health departments, infection control practitioners, laboratories and coroners throughout the state is gratefully acknowledged. Without their cooperation, it would not be possible to provide these data.

**For further information about this report contact the STI/HIV Surveillance Program at 303-692-2700 and [cdphe\\_stihivdatarequest@state.co.us](mailto:cdphe_stihivdatarequest@state.co.us).**

## 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 2011, 10,108 cases of AIDS and 6,812 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 704 reported cases in 1993.

Antiretroviral treatment has reduced both mortality and morbidity among persons with HIV infection. AIDS-related mortality has decreased by 42 percent from 2007 to 2011 while the prevalence of PLWH has increased steadily. By December 2011, 11,359 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 73.4 percent of adult male HIV cases diagnosed in 2011. Among females, heterosexual transmission represents 47.3 percent of newly diagnosed adult HIV cases.

Cases of HIV/AIDS continues to be geographically centered in the Front Range population of Colorado, although IDU cases and cases with no identified risk continue to be reported more frequently 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 less than 500 mm<sup>3</sup> 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. Frequently, both HIV and AIDS cases are combined for purposes of characterizing the epidemic and for analysis of trends in those who are infected with HIV. Cases are reported to the CDPHE STI/HIV Surveillance Program and are entered into eHARS, the CDC sponsored database that is used to enumerate HIV and AIDS cases 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 mm<sup>3</sup> or those diagnosed with one of 21 opportunistic infections definitive of AIDS.

The Division of Local Affairs, State Demographer's Office has provided information about the characteristics of Colorado's population to allow comparisons to persons reported with HIV or AIDS. Colorado's demographic and geographic data is based on population forecasts when possible.

The Vital Statistics Section of CDPHE has provided cause of death data obtained from death certificates filed with the department through 2011.

The CDOC has 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. The CDPHE also collects local variables, such as incarceration or positive hepatitis C virus status, to provide additional information to 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 necessarily mean newly infected). However, the usefulness of this data is limited because it only includes persons who elected to be tested for HIV.

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 diagnosed 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, complete 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. Consequently, it is impossible 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.

## List of Tables and Figures

### Description of Colorado

**Figure 1:** Map of Colorado by County Classification

**Table 1:** 2011 Colorado Population by Age and Sex

**Table 2:** 2011 Colorado Population by Race and Sex

**Table 3:** 2011 Colorado Counties Percent of the Population by Race

**Table 4:** Percentage of the Population Under the Poverty Level by County, 2011

**Table 5:** Percentage of the State Non-Elderly Adults without Health Insurance Coverage by Race and Ethnicity, Colorado 2010-2011 & US 2011

**Table 6:** Percentage of Population 25 Years Old and Over, High School Graduates or Higher Degree by Gender and Metropolitan Statistical Areas, 2011

### Epidemiological Trends in HIV and AIDS in Colorado

**Table 7:** Adults/Adolescents Living with AIDS by Race, Colorado 2011 and United States 2010

**Figure 2:** Colorado AIDS and HIV by Year of Diagnosis (2007-11)

**Figure 3:** Annual Deaths among Persons Diagnosed with HIV and AIDS – Colorado (2007-11)

**Figure 4:** Annual Number of Diagnosed Persons Living with HIV and AIDS – Colorado (2007-11)

**Table 8a:** Characteristics of PLW HIV and AIDS in CO Through 12/31/11

**Table 8b:** Age Characteristics of PLW HIV and AIDS in CO through 12/31/11

**Figure 5:** Number of Persons Living with HIV or AIDS by Gender – Colorado (2007-11)

**Table 9:** Colorado HIV Cases Diagnosed by Race and Gender in 2011

**Figure 6:** HIV Rate per 100,000 Population by Race (with standard error bars) – Colorado (2007-11)

**Figure 7:** AIDS Rate per 100,000 Population by Race (with standard error bars)-Colorado (2007-11)

**Figure 8:** Persons Living with HIV/AIDS by Race – Colorado (2007-11)

**Table 10:** Colorado HIV Cases by Risk and Gender, Diagnosed 2011

**Figure 9:** Living with HIV Disease by Risk Reported – Colorado (2007-11)

**Table 11:** Colorado HIV Cases by Age Group and Gender, Diagnosed 2011

**Figure 10:** Living HIV/AIDS Rate per 100,000 Population by County of Residence at Time of Diagnosis – Colorado, 2011

**Table 12:** HIV Related Death Rate by Gender, 2011

**Table 13:** HIV Related Death Rate by Age, 2011

### Demographic Characteristics of HIV and AIDS in High Risk Populations

**Figure 11:** HIV Positive MSM by Race (2007-11), Compared to Male Population (2011) – Colorado

**Figure 12:** Percent of MSM HIV Cases by Age at Diagnosis – Colorado (2011)

**Figure 13:** Number of MSM with HIV/AIDS by Year of First Positive Test and Age at Diagnosis – Colorado (2007-11)

**Figure 14:** HIV/AIDS Cases by Risk Category - CO (1982-2011)

**Figure 15:** Cumulative IDU-Associated HIV/AIDS Cases by Race in Males – Colorado (2007-11)

**Figure 16:** Cumulative IDU-Associated HIV/AIDS Cases by Race in Females – Colorado (2007-11)

**Figure 17:** Number of IDUs with HIV/AIDS by Year of First Positive Test and Age – Colorado (2007-11)

**Figure 18:** IDU HIV Diagnosed Positive by Region Reported – Colorado (2007-11)

**Figure 19:** HIV/AIDS Cases Reported by Risk Category – Colorado (1982-2011)

**Figure 20:** Number of Heterosexually Transmitted HIV/AIDS Cases by Year of First Positive Test and Gender – Colorado (2007-11)

**Figure 21:** Newly Identified Cases of Heterosexually Transmitted HIV Cases by Racial Category – CO, 2011

**Figure 22:** Heterosexually Transmitted HIV by Age Reported – Colorado (2011)

**Table 14:** Number of Infants Born to HIV-infected Women by Year of Birth – Colorado (2007-11)

### Demographic Characteristics of Late Stage HIV/AIDS Diagnoses

**Figure 23:** New HIV Disease Late Stage Cases and Percentage in Colorado, 2001-2011

**Table 15:** Characteristics of New Late Stage & Non-Late Stage HIV Disease Diagnoses in Colorado, 2011

### National HIV Behavioral Surveillance – Denver, Colorado

**Figure 24:** Participating Metropolitan Statistical Areas in the National HIV Behavioral Surveillance System

**Table 16:** Sociodemographic Characteristics of Participants in the Third Cycle of MSM, National HIV Behavioral Surveillance Study – Denver (N=546), 2011

**Table 17:** Prevalence of Various HIV Surveillance Sexual Behaviors of Participants in the Third Cycle of MSM, National HIV Behavioral Surveillance Study – Denver (N=546), 2011

**Table 18:** Prevalence of Various HIV Surveillance Substance Use Behaviors of Participants in the Third Cycle of MSM, National HIV Behavioral Surveillance Study – Denver (N=546), 2011

**Table 19:** Prevalence of Various HIV Surveillance Testing & Prevention Behaviors of Participants in the Third Cycle of MSM, National HIV Behavioral Surveillance Study – Denver (N=546), 2011





## 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 resides in 13 counties designated as urban by the U.S. Census Bureau. Urban counties include: Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, El Paso, Garfield, Jefferson, Larimer, Mesa, Pueblo and Weld. A rural county has a total population of less than 50,000 inhabitants for the purposes of this map. 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 2011 Census estimation produced a population of 5,116,796 for Colorado. The state ranks twenty-second in the nation in population, accounting for approximately 1.65 percent of the U.S. population.<sup>2</sup>

## Age

The median age in Colorado was 36 years old in 2011. Of the state's population, 66 percent was between the ages of 18 and 65. The elderly population (over 65) continued to constitute 10 percent of the population.<sup>2</sup> **Table 1** illustrates the distribution of the population by age and gender.

**Table 1: 2011 Colorado Population by Age and Sex**

Age Group	Male	Percent	Female	Percent	Total	Percent
<10	354,937	13.8	338,316	13.3	693,253	13.5
10-14	172,426	6.7	165,557	6.5	337,983	6.6
15-19	176,243	6.9	163,799	6.4	340,042	6.6
20-24	187,764	7.3	171,810	6.7	359,574	7.0
25-29	196,445	7.7	182,829	7.2	379,274	7.4
30-34	188,335	7.3	178,398	7.0	366,733	7.2
35-39	178,373	6.9	167,595	6.6	345,968	6.8
40-44	181,261	7.1	173,886	6.8	355,147	6.9
45-49	179,604	7.0	179,791	7.1	359,395	7.0
50-54	185,851	7.2	189,136	7.4	374,987	7.3
55-59	166,742	6.5	172,356	6.8	339,098	6.6
60-64	142,168	5.5	147,354	5.8	289,522	5.7
≥65	257,046	10.0	318,774	12.5	575,820	11.3
<b>Total</b>	<b>2,567,195</b>	<b>100.0</b>	<b>2,549,601</b>	<b>100.0</b>	<b>5,116,796</b>	<b>100.0</b>

Source: U.S. Census Bureau, 2011 ACS 1 yr Tables, Age by Sex.<sup>2</sup>

## Race

Statewide, approximately 70 percent of population classified themselves as Non-Hispanic White, 20 percent as Hispanic, 4 percent as Black, 3 as Asian/Pacific Islander, and 2 percent classified 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: 2011 Colorado Population by Race and Sex**

Race	Male	Percent	Female	Percent	Total	Percent
White (Non-Hispanic)	1,781,707	69.4	1,785,876	70.0	3,567,583	69.7
Hispanic	546,598	21.3	523,968	20.6	1,070,566	20.9
Black (Non-Hispanic)	104,086	4.1	91,801	3.6	195,887	3.8
Asian/Hawaiian/Pacific Islander (Non-Hispanic)	67,541	2.6	80,187	3.1	147,728	2.9
American Indian/Alaskan Native (Non-Hispanic)	16,688	0.7	16,135	0.6	32,823	0.6
Two or More Race (Non-Hispanic)	50,575	2.0	51,634	2.0	102,209	2.0
<b>Total</b>	<b>2,567,195</b>	<b>100.0</b>	<b>2,549,601</b>	<b>100.0</b>	<b>5,116,796</b>	<b>100.0</b>

Source: U.S. Census Bureau, 2011 ACS 5 yr Tables, Race by Sex. <sup>3</sup>

**Table 3: 2011 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
Adams	53.0	38.2	2.8	3.6	0.6	1.7	451,443
Alamosa	49.0	46.5	1.0	1.0	1.1	1.5	15,710
Arapahoe	63.2	18.7	9.7	5.2	0.4	2.7	584,948
Archuleta	77.7	18.3	0.4	0.7	1.4	1.5	12,013
Baca	87.6	9.2	0.5	0.2	1.1	1.4	3,795
Bent	59.2	30.5	7.2	1.0	1.5	0.6	6,250
Boulder	78.8	13.7	0.9	4.3	0.4	2.0	299,378
Broomfield	78.7	11.6	1.3	6.0	0.5	1.9	57,352
Chaffee	86.1	9.7	1.6	0.7	0.9	1.0	17,932
Cheyenne	87.1	10.3	0.6	0.7	0.7	0.6	1,876
Clear Creek	91.4	5.4	0.7	0.6	0.6	1.3	9,012
Conejos	42.5	55.2	0.3	0.3	0.7	1.0	8,291
Costilla	32.6	64.2	0.3	1.0	0.9	1.0	3,662
Crowley	58.0	28.9	9.3	1.0	1.8	0.9	5,736
Custer	91.5	5.0	1.0	0.5	0.6	1.4	4,205
Delta	82.7	14.3	0.6	0.5	0.7	1.3	30,451
Denver	52.6	31.8	9.4	3.5	0.6	2.0	619,968
Dolores	89.3	4.7	0.4	0.2	2.8	2.6	2,056
Douglas	84.8	7.8	1.3	3.8	0.3	2.0	292,167
Eagle	66.9	30.4	0.6	1.0	0.3	0.8	51,854
Elbert	90.5	5.7	0.8	0.9	0.6	1.6	23,174
El Paso	71.7	15.4	5.9	3.0	0.6	3.4	636,963
Fremont	79.9	12.6	4.0	0.6	1.5	1.3	47,347

*continued on next page*

County	White (Non- Hispanic)	Hispanic	Black (Non- Hispanic)	Asian/PI (Non- Hispanic)	Amer. Indian/ AK Native (Non-Hispanic)	Multiple Races (Non- Hispanic)	Total Population
Garfield	68.5	28.6	0.5	0.7	0.5	1.2	56,270
Gilpin	90.0	5.6	0.7	1.5	0.4	1.5	5,467
Grand	89.3	7.9	0.4	0.9	0.4	1.2	14,548
Gunnison	88.0	8.8	0.5	0.7	0.6	1.3	15,408
Hinsdale	93.0	3.4	0.6	0.5	0.8	1.7	830
Huerfano	61.3	35.6	0.4	0.6	0.9	1.2	6,520
Jackson	87.4	10.5	0.3	0.1	0.9	0.8	1,370
Jefferson	79.6	14.6	1.1	2.7	0.5	1.6	539,884
Kiowa	92.2	6.1	0.3	0.0	0.3	1.1	1,433
Kit Carson	76.8	19.0	2.1	0.6	0.5	1.0	8,142
Lake	57.2	39.9	0.5	0.4	0.7	1.2	7,427
La Plata	79.8	12.2	0.5	0.7	4.9	1.8	51,917
Larimer	84.1	10.8	0.9	2.1	0.4	1.8	305,525
Las Animas	53.4	42.2	1.4	0.7	1.2	1.0	15,037
Lincoln	78.8	12.7	5.4	0.9	0.8	1.3	5,454
Logan	78.0	15.7	3.9	0.7	0.8	0.9	22,619
Mesa	82.7	13.6	0.6	0.9	0.6	1.5	147,083
Mineral	94.4	2.5	0.4	0.7	0.8	1.1	708
Moffat	82.2	14.8	0.3	0.7	0.7	1.4	13,451
Montezuma	74.7	11.6	0.4	0.5	11.0	1.8	25,442
Montrose	76.9	20.3	0.4	0.7	0.5	1.3	41,011
Morgan	61.2	34.4	2.6	0.6	0.4	0.9	28,175
Otero	56.2	40.5	0.7	0.8	0.6	1.2	18,865
Ouray	92.4	5.1	0.3	0.7	0.4	1.1	4,356
Park	91.3	4.9	0.5	0.7	0.8	1.8	16,089
Phillips	78.6	19.1	0.6	0.7	0.3	0.7	4,399
Pitkin	87.7	9.1	0.5	1.4	0.2	1.1	17,102
Prowers	62.0	35.7	0.6	0.4	0.6	0.7	12,549
Pueblo	53.9	41.6	1.8	0.8	0.6	1.3	160,545
Rio Blanco	85.2	10.8	0.9	0.6	0.7	1.8	6,782
Rio Grande	54.0	43.3	0.4	0.5	0.9	1.0	11,956
Routt	90.4	6.9	0.5	0.8	0.3	1.1	23,239
Saguache	56.5	39.8	0.3	0.9	1.1	1.3	6,228
San Juan	84.5	12.9	0.0	0.9	0.1	1.6	692
San Miguel	87.6	9.4	0.3	0.8	0.5	1.4	7,490
Sedgwick	84.9	12.3	0.3	0.7	0.4	1.4	2,364
Summit	82.6	14.3	0.8	1.0	0.2	1.1	27,972
Teller	90.2	5.6	0.6	0.8	0.8	1.9	23,356
Washington	89.0	8.8	0.7	0.3	0.2	1.0	4,770
Weld	67.3	28.5	1.0	1.3	0.6	1.4	258,638
Yuma	76.5	22.0	0.3	0.2	0.4	0.6	10,100

Source: U.S. Census Bureau, 2011 ACS 1 yr Tables, Race by County. <sup>4</sup>

## Poverty and Income

In 2011, the U.S. American Community Survey (ACS) estimated Colorado's median household income to be \$57,685 ( $\pm$ \$312) using a 5-year estimate.<sup>14</sup> The ACS estimated the percent of Coloradans living below the poverty level to be 12.5 percent in 2011<sup>6</sup>

which was down from 2010 at 13.2 percent. **Table 4** shows the percent of the population below poverty level per county in 2011. Douglas County had the lowest percentage of people living in poverty (4%) while Otero County had the highest percentage of people in poverty (26%). The highest percentage by county had decreased since 2010 when Crowley County had 34.7 percent of people below the poverty level.

**Table 4: Percentage of the Population Under the Poverty Level by County, 2011**

County	Percentage Under Poverty	County	Percentage Under Poverty	County	Percentage Under Poverty
	Level		Level		Level
Colorado	12.5	Elbert	5.8	Montezuma	16.9
		El Paso	11.7	Montrose	12.6
Adams	14.0	Fremont	15.9	Morgan	14.9
Alamosa	21.7	Garfield	10.5	Otero	25.7
Arapahoe	11.9	Gilpin	9.8	Ouray	7.2
Archuleta	7.7	Grand	8.7	Park	6.5
Baca	17.5	Gunnison	13.8	Phillips	12.0
Bent	20.8	Hinsdale	3.7	Pitkin	9.6
Boulder	13.1	Huerfano	22.5	Prowers	20.5
Broomfield	5.7	Jackson	15.1	Pueblo	17.8
Chaffee	9.7	Jefferson	8.5	Rio Blanco	11.4
Cheyenne	9.0	Kiowa	13.1	Rio Grande	17.3
Clear Creek	6.1	Kit Carson	11.3	Routt	7.0
Conejos	15.2	Lake	22.2	Saguache	25.3
Costilla	22.2	La Plata	10.6	San Juan	23.7
Crowley	18.4	Larimer	13.4	San Miguel	7.2
Custer	11.5	Las Animas	18.1	Sedgwick	14.9
Delta	14.1	Lincoln	11.1	Summit	10.1
Denver	18.8	Logan	15.0	Teller	7.5
Dolores	12.4	Mesa	12.7	Washington	11.8
Douglas	3.5	Mineral	7.1	Weld	13.8
Eagle	10.3	Moffat	13.3	Yuma	8.0

Source: U.S. Census Bureau, 2011 ACS 5 yr Tables, Poverty Status by County.<sup>6</sup>

## Employment

There were an estimated 225,730 persons who were unemployed in 2011, a rate of 8.3 percent, according to the Colorado Department of Labor. This rate is 6.7 percent lower than 2010 when 239,684 persons were unemployed at a rate of 8.9 percent.<sup>7</sup>

## Insurance

According to the Kaiser Family Foundation, 16 percent of Colorado's population was uninsured in 2010-2011. This was lower than the U.S. estimate of 18 percent in 2011 and ranked the state at 26th for uninsured nonelderly in the nation.<sup>8</sup> **Table 5** shows that the percentage of Colorado's population not covered by health insurance was much greater among Hispanics (28%) than among Whites (12%).

**Table 5: Percentage of the State Non-Elderly Adults without Health Insurance Coverage by Race and Ethnicity, Colorado 2010-2011 and United States 2011**

Race	Colorado	United States
White, Non-Hispanic	12.3	13.0
Black, Non-Hispanic	21.2	21.0
Hispanic	27.5	31.6
Other	19.0	17.9
<b>Total</b>	<b>16.1</b>	<b>18.0</b>

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

## Education

According to the Colorado Department of Education, in 2011 there was a combined public and non-public school enrollment of 854,265 persons in Colorado. School enrollment was comprised of 56 percent White, 32 percent Hispanic, 5 percent Black, 3 percent Asian/Pacific Islander, 3 percent two or more races and 1 percent American Indian. The overall dropout rate in Colorado during the 2010-2011 school year was 3.0 percent.<sup>9</sup> **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 Grand Junction 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), 2011.**

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	6.3	29.5	31.6	30.6	64.1	62.3	63.2
<b>Colorado</b>	6.9	7.3	7.1	46.8	49.3	48.1	46.2	43.4	44.8
<b>Springs MSA</b>									
<b>Denver-Aurora-Broomfield MSA</b>	11.1	10.4	10.7	42.7	44.5	43.6	46.2	45.1	45.7
<b>Fort Collins-Loveland MSA</b>	6.7	5.5	6.1	41.5	42.9	42.2	51.8	51.5	51.7
<b>Grand Junction MSA</b>	10.3	10.1	10.2	57.0	52.8	54.8	32.8	37.1	35.0
<b>Greeley MSA</b>	15.9	13.6	14.8	50.8	50.7	50.7	33.3	35.7	34.5
<b>Pueblo MSA</b>	15.3	13.3	14.3	55.1	53.6	54.3	29.6	33.0	31.4
<b>Colorado</b>	10.8	9.8	10.3	45.1	45.9	45.5	44.1	44.3	44.2
<b>United States</b>	15.3	14.0	14.6	49.2	49.9	49.6	35.5	36.1	35.8

Source: U.S. Census Bureau, 2011 Census ACS 5-year Estimate Data Tables, Education Attainment by Metropolitan Statistical Areas.<sup>5</sup>

## **Incarcerated persons**

According to data from the Colorado Department of Corrections, 22,814 adults were incarcerated in 2011; this was a slight decrease from 2010 when 22,980 persons were incarcerated. Twenty-two state correctional facilities housed 14,763 inmates, and the remaining 8,051 inmates were housed in contract facilities or county jails. During the time of data collection, seven CDOC facilities were located in Fremont County. Colorado's incarcerated population was 91 percent male and 9 percent female. Racial characteristics of the inmate population were as follows: 44 percent White, 33 percent Hispanic, 19 percent Black, 3 percent American Indian, and 1 percent Asian.<sup>10</sup>

## Epidemiological Trends in HIV Disease in Colorado

### Summary

- By the end of 2011, an estimated 11,359 Colorado residents were living with HIV Disease (an increase of 2.2 percent from 2010).
- Of the total number of people diagnosed with AIDS through 2011, 66 percent were White, 19 percent were Hispanic and 13 percent were Black.
- Blacks continue to be disproportionately affected by the HIV epidemic and represent 15 percent of PLWHA (prevalent cases) while comprising only 4 percent of Colorado's population.
- The 30-34 year old age group accounts for the largest proportion of newly diagnosed HIV cases (16%).
- Ninety-six percent of newly diagnosed HIV disease cases were reported in urban counties.
- There have been 5,585 AIDS-related deaths reported in Colorado from the beginning of the epidemic through the end of 2011.

### HIV Disease in Colorado

A cumulative total of 10,108 cases of AIDS and 6,812 cases of HIV infection have been reported in Colorado, and an estimated 11,359 persons were living with HIV disease through the end of 2011. Colorado's HIV prevalence of 124 persons per 100,000 population was lower than the U.S. prevalence of 334 for the entire U.S. in 2010. Colorado's 2011 AIDS prevalence was 98 persons per 100,000 population compared to the U.S. prevalence of 191 during the previous year. In 2010, Colorado ranked 29th in total AIDS cases reported among all states and represented 1 percent of all reported AIDS cases in 2010.

**Table 7** compares the racial characteristics of Colorado and U.S. AIDS cases through 2011. The majority of Colorado AIDS cases were White (60%), compared to the U.S. (34%). Blacks represented a lower percent of PLWA in Colorado, compared to the U.S. (15% to 44%, respectively), whereas Hispanics represented a higher percent of AIDS cases in Colorado (22%), compared to the U.S. (19%).



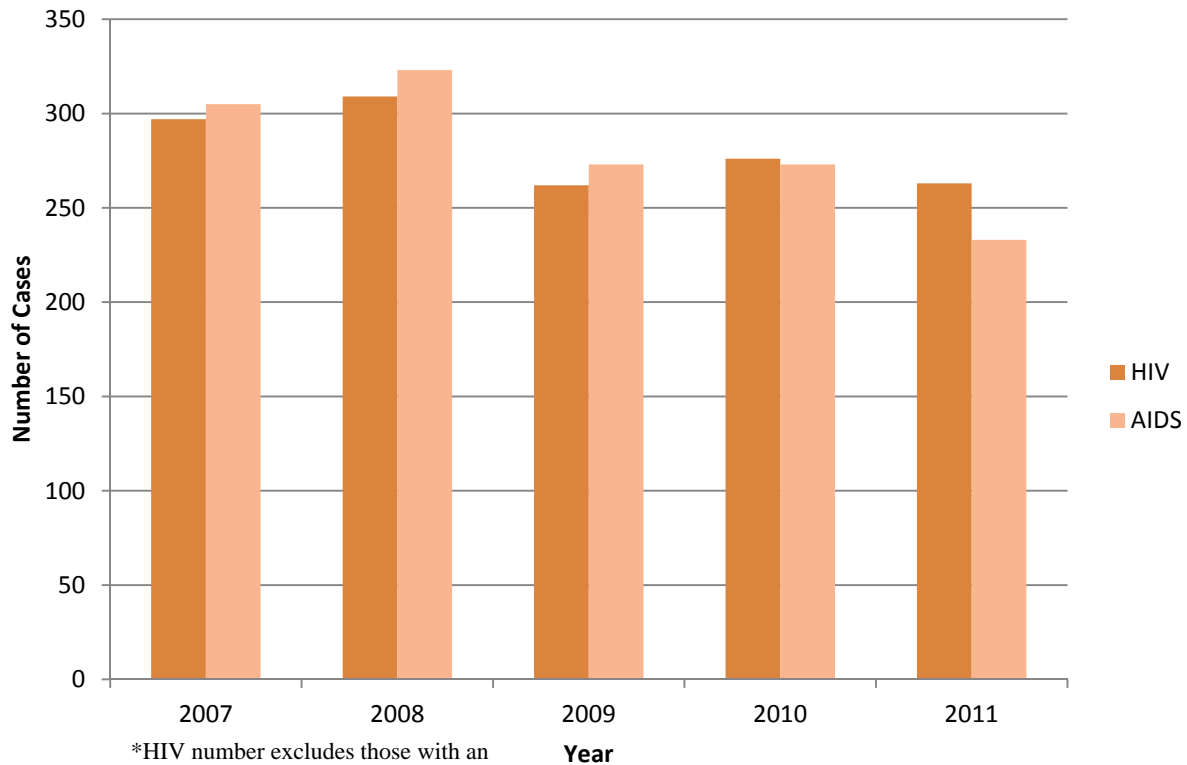
**Table 7: Adults/Adolescents Living with AIDS by Race, Colorado 2011 and United States 2010**

Race	Colorado		United States*	
	Number	Percent	Number	Percent
White	3,005	60.0	164,530	32.7
Hispanic	1,119	22.3	110,219	21.9
Black	762	15.2	212,357	42.2
Asian/PI	52	1.0	5,781	1.1
American Indian	45	0.9	1,730	0.3
Multiple Races	24	0.5	8,889	1.8
<b>Total</b>	<b>5,007</b>	<b>100.0</b>	<b>503,601</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 <sup>11</sup>

**Figure 2** illustrates reported cases of HIV and AIDS between 2007 and 2011. Newly diagnosed cases of HIV that did not progress to AIDS in the same year have decreased slightly, from 297 cases in 2007 to 263 cases in 2011. Similar to HIV, there has been a decrease in the number of newly diagnosed AIDS cases from 2007 to 2011.

**Figure 2: Colorado HIV and AIDS by Year of Diagnosis (2007-2011)**



**Figure 3** demonstrates the annual number of deaths among HIV and AIDS cases in Colorado. Deaths among AIDS cases have steadily declined between 2007 and 2011, during which a 35.8 percent decrease in deaths was observed.

**Figure 3: Annual Death among Persons Diagnosed with HIV and AIDS – Colorado (2007-2011)**

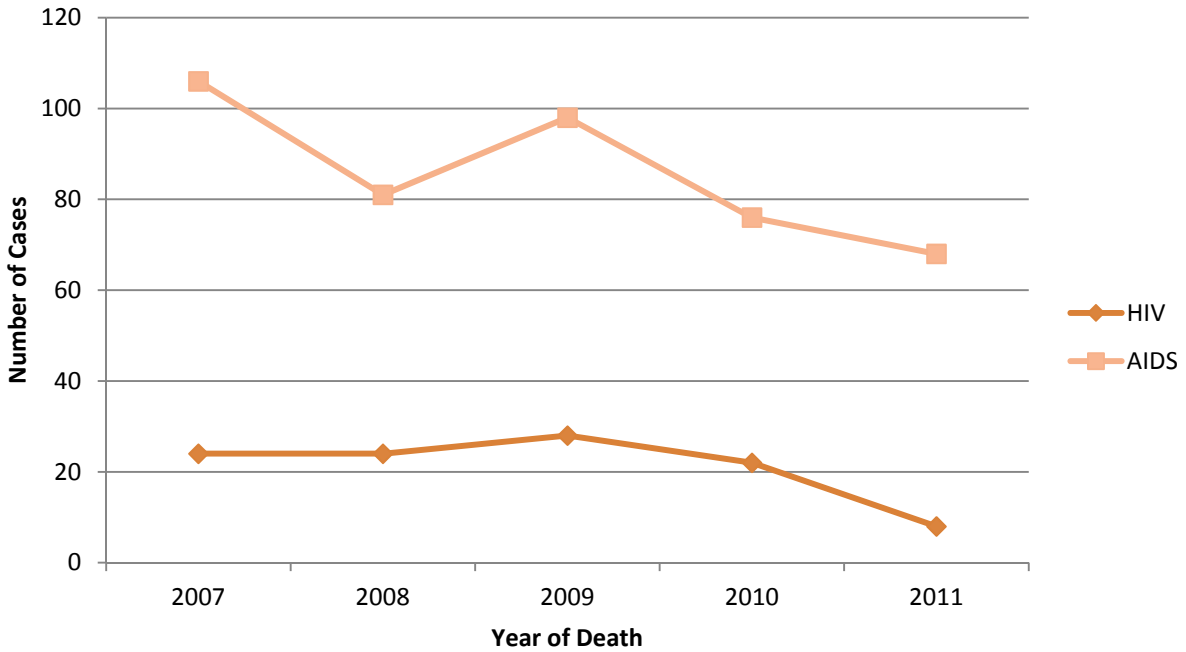
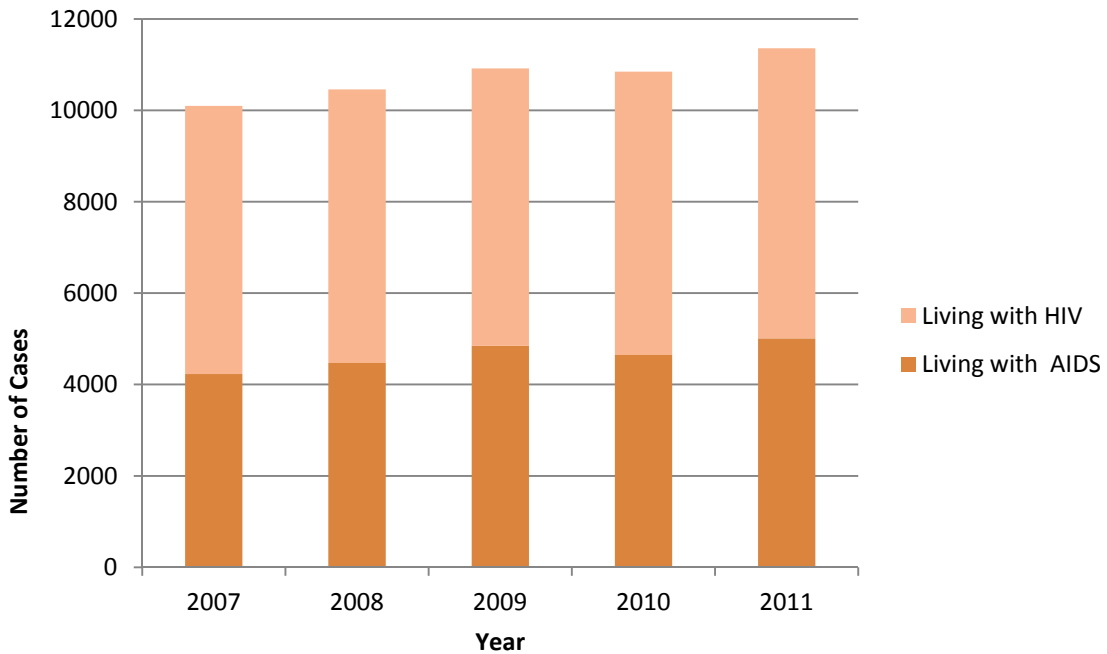


Figure 4 shows an increase in the number of PLWHA in Colorado during the last five years. By the end of 2011, there was an estimated 11,359 PLWHA in Colorado, an increase of 2.2 percent from 10,848 in 2010.

**Figure 4: Annual Number of Diagnosed Persons Living with HIV and AIDS – Colorado (2007-2011)**



**Tables 8a** and **8b** illustrate the demographic characteristics of PLWHA. Males represented the majority (89%) of PLWHA. Whites constituted the largest racial group living with HIV Disease, representing 64 percent of cases. Blacks continued to be disproportionately impacted by the epidemic. Although the percentage of Coloradans who identify as Black was 4 percent, Blacks represented 15 percent of PLWHA. Men who have sex with men was the predominant risk group, representing 65 percent of PLWHA. The majority (94%) of PLWHA lived in the urban areas of Colorado.

**Table 8a: Characteristics of PLW HIV and AIDS in Colorado Through 12/31/11**

	Living with HIV		Living with AIDS		Living with HIV/AIDS	
	Number	Percent	Number	Percent	Number	Percent
<b>Total</b>	6350	100.0	5009	100.0	11359	100.0
<b>Gender</b>						
<b>Male</b>	5,632	88.7	4,441	88.7	10,073	88.7
<b>Female</b>	718	11.3	568	11.3	1,286	11.3
<b>Race</b>						
<b>White</b>	4,270	67.2	3,006	60.0	7,276	64.1
<b>Hispanic</b>	1004	15.8	1,119	22.3	2,123	18.7
<b>Black</b>	887	14.0	763	15.2	1,650	14.5
<b>Asian</b>	54	0.9	49	1.0	103	0.9
<b>Pacific Islander</b>	5	0.1	3	0.1	8	0.1
<b>American Indian</b>	44	0.7	45	0.9	89	0.8
<b>Multiple Races</b>	24	0.4	24	0.5	48	0.4
<b>Unknown</b>	62	1.0	0	0.0	62	0.5
<b>Risk</b>						
<b>MSM</b>	4,158	65.5	3,163	63.1	7,321	64.5
<b>IDU</b>	421	6.6	423	8.4	844	7.4
<b>MSM/IDU</b>	509	8.0	451	9.0	960	8.5
<b>Heterosexual Contact</b>	540	8.5	568	11.3	1,108	9.8
<b>No Identified Risk</b>	660	10.4	357	7.1	1,017	9.0
<b>Pediatric</b>	51	0.8	14	0.3	65	0.6
<b>Transfusion/Hemophilia</b>	11	0.2	33	0.7	44	0.4
<b>Region</b>						
<b>Urban</b>	6,046	95.2	4,659	93.0	10,705	94.2
<b>Rural</b>	237	3.7	314	6.3	551	4.9
<b>Frontier</b>	46	0.7	36	0.7	82	0.7
<b>Unknown</b>	21	0.3	0	0.0	21	0.2

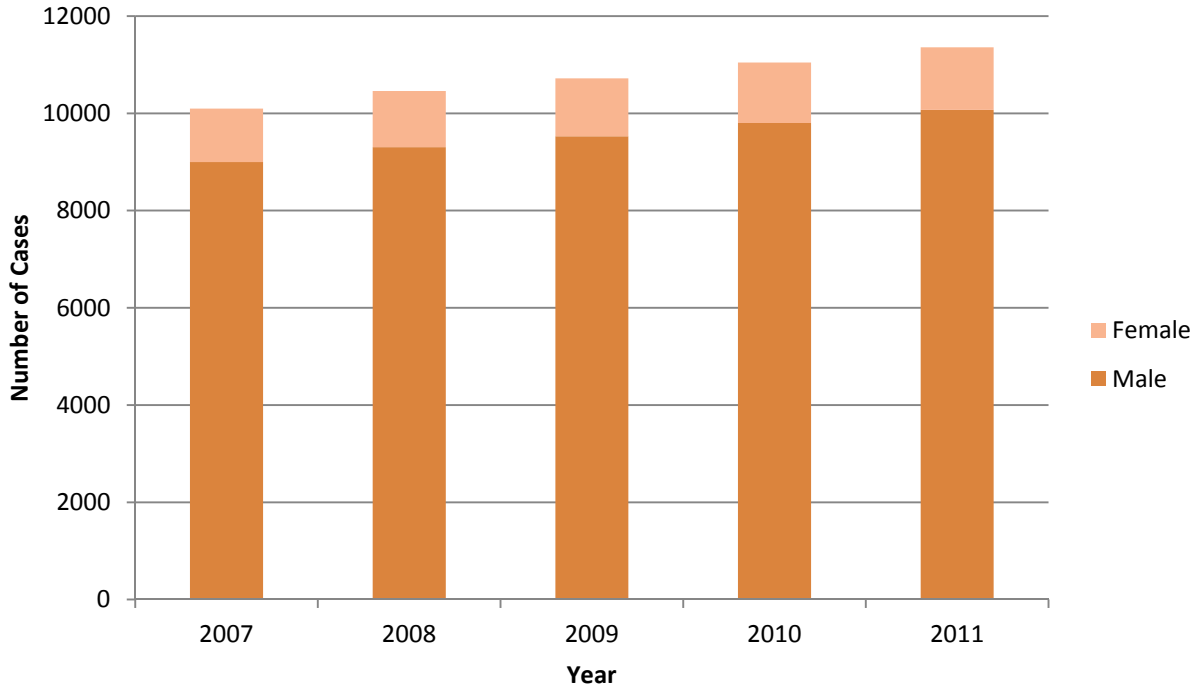
**Table 8b: Age Characteristics of PLW HIV and AIDS in CO Through 12/31/11**

	Living with HIV		Living with AIDS		Living with HIV/AIDS	
	Number	Percent	Number	Percent	Number	Percent
<b>Total</b>	6350	100.0	5009	100.0	11359	100.0
<b>Current Age Group</b>						
<5	6	0.1	1	0.0	7	0.1
5-9	20	0.3	1	0.0	21	0.2
10-12	4	0.1	0	0.0	4	0.0
13-14	4	0.1	1	0.0	5	0.0
15-19	20	0.3	4	0.1	24	0.2
20-24	154	2.4	45	0.9	199	1.8
25-29	311	4.9	146	2.9	457	4.0
30-34	467	7.4	260	5.2	727	6.4
35-39	506	8.0	449	9.0	955	8.4
40-44	814	12.8	760	15.2	1,574	13.9
45-49	1,191	18.8	1129	22.5	2,320	20.4
50-54	1,131	17.8	896	17.9	2,027	17.8
55-59	876	13.8	684	13.7	1,560	13.7
60-64	496	7.8	371	7.4	867	7.6
>65	350	5.5	262	5.2	612	5.4
<b>Age Group at HIV Diagnosis</b>						
<5	38	0.6	6	0.1	44	0.4
5-9	12	0.2	7	0.1	19	0.2
10-12	2	0.0	5	0.1	7	0.1
13-14	3	0.0	4	0.1	7	0.1
15-19	166	2.6	107	2.1	273	2.4
20-24	954	15.0	576	11.5	1,530	13.5
25-29	1456	22.9	970	19.4	2,426	21.4
30-34	1382	21.8	1069	21.3	2,451	21.6
35-39	1034	16.3	887	17.7	1,921	16.9
40-44	641	10.1	579	11.6	1,220	10.7
45-49	333	5.2	403	8.0	736	6.5
50-54	173	2.7	191	3.8	364	3.2
55-59	94	1.5	96	1.9	190	1.7
60-64	36	0.6	50	1.0	86	0.8
>65	26	0.4	59	1.2	85	0.7
<b>Age Group at AIDS Diagnosis</b>						
<5			4	0.1	4	0.0
5-9			3	0.1	3	0.0
10-12			0	0.0	0	0.0
13-14			3	0.1	3	0.0
15-19			25	0.5	25	0.2
20-24			207	4.1	207	1.8
25-29			622	12.4	622	5.5
30-34			1004	20.0	1004	8.8
35-39			1109	22.1	1,109	9.8
40-44			870	17.4	870	7.7
45-49			578	11.5	578	5.1
50-54			321	6.4	321	2.8
55-59			154	3.1	154	1.4
60-64			71	1.4	71	0.6
>65			38	0.8	38	0.3

## HIV Disease by Gender

Increases in the number of PLWHA can be observed among both men and women in the last five years (**Figure 5**). In 2007 women accounted for 10.9 percent of the living cases of HIV disease whereas, they accounted for 11.3 percent of cases as of December 31, 2011.

**Figure 5: Number of Persons Living with HIV or AIDS by Gender – Colorado (2007-2011)**



## HIV Disease by Race

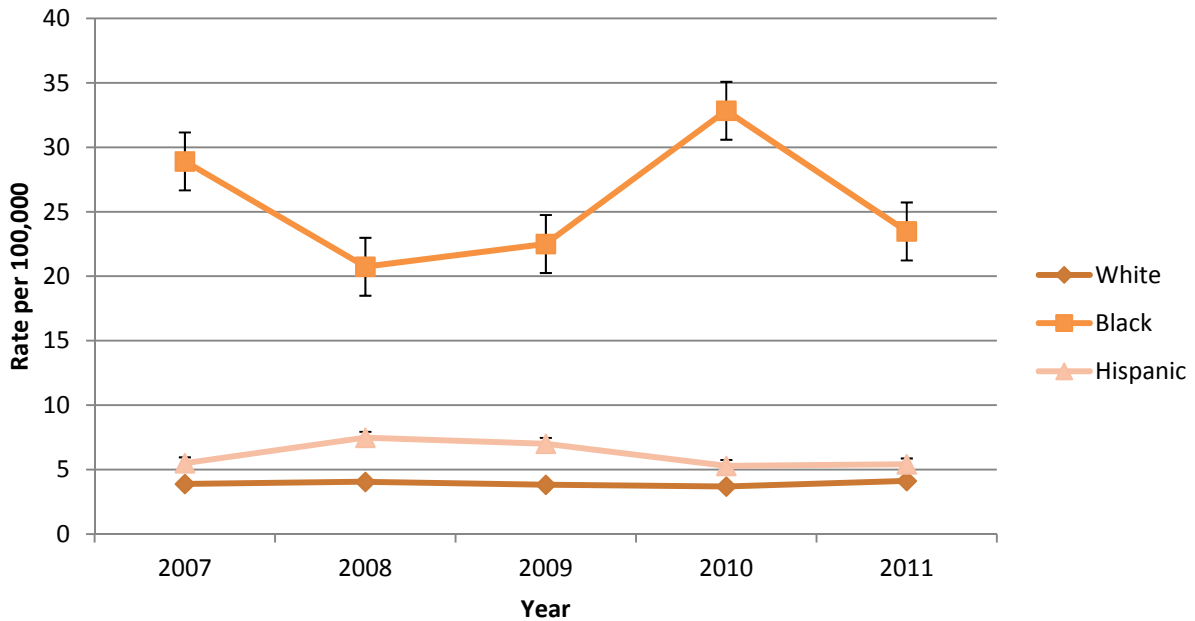
In 2011, 388 persons were newly diagnosed with HIV (including those who progressed to AIDS in the same year). Of those, 334 (86%) were male and 45 (14%) were female. By race/ethnicity, 208 (54%) were White, 61 (16%) were Black, 106 (27%) were Hispanic, 8 (2%) were Asian/Pacific Islander, and 5 (1%) were American Indian (**Table 9**). By gender, a greater proportion of females identified as Non-Hispanic Blacks (39%) compared to males (12%).

**Table 9: Colorado HIV Cases Diagnosed by Race and Gender in 2011**

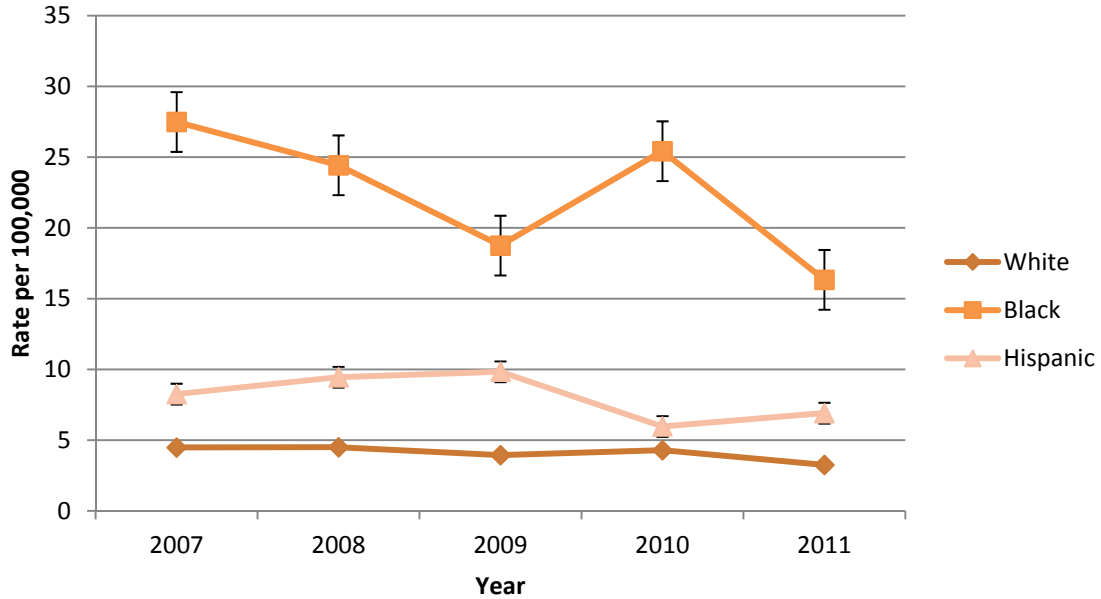
Race	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
White (Non-Hispanic)	188	56.3	20	37.0	208	53.6
Hispanic	95	28.4	11	20.4	106	27.3
Black (Non-Hispanic)	40	12.0	21	38.9	61	15.7
Asian/Hawaiian/Pacific Islander (Non-Hispanic)	8	2.4	0	0.0	8	2.1
American Indian/Alaskan Native (Non-Hispanic)	3	0.9	2	3.7	5	1.3
Two or More Race (Non-Hispanic)	0	0.0	0	0.0	0	0.0
<b>Total</b>	<b>334</b>	<b>86.1</b>	<b>54</b>	<b>13.9</b>	<b>388</b>	<b>100.0</b>

Although Whites represented the largest number of HIV/AIDS cases, **Figure 6** and **Figure 7** illustrate that when comparing population rate, Blacks, and to a lesser degree, Hispanics, were disproportionately affected by this epidemic. **Figure 6** demonstrates trends in rates of persons with a newly reported HIV diagnosis. **Figure 7** demonstrates trends in rates of persons reported with an AIDS diagnosis. Blacks had an HIV rate 7 times greater than that of Whites.

**Figure 6: HIV Rate per 100,000 Population of HIV Cases by Race (with standard error bars) – Colorado (2007-2011)**

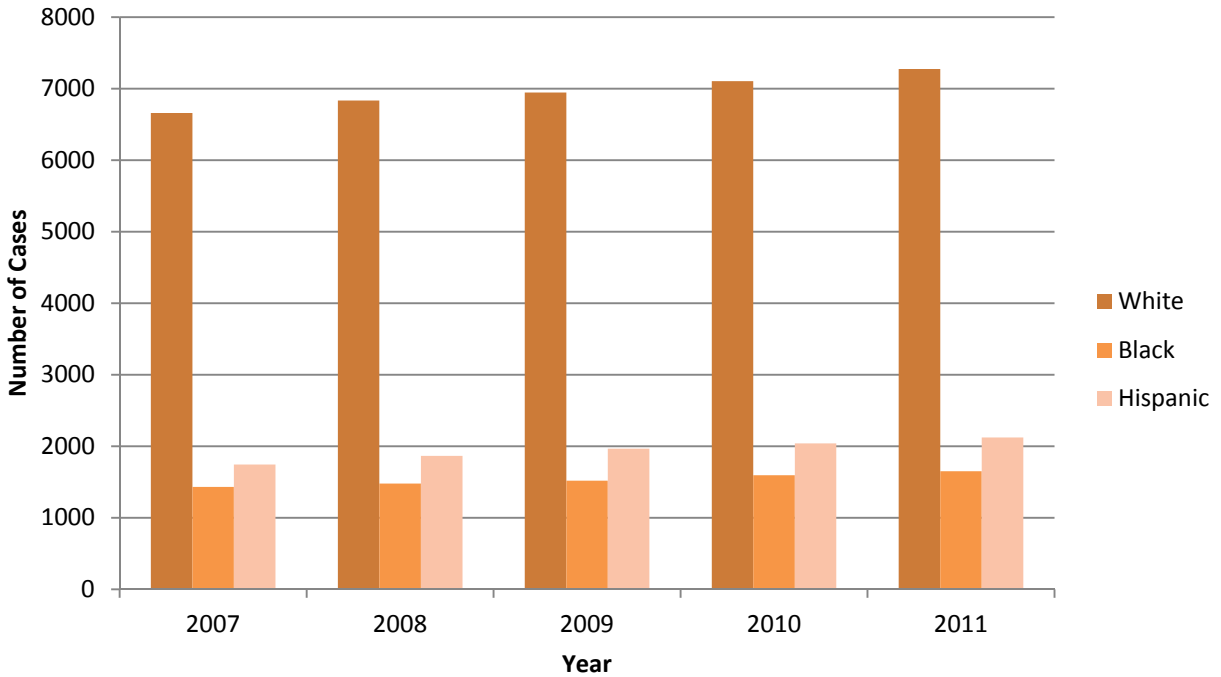


**Figure 7: AIDS Rate per 100,000 Population by Race (with standard error bars) – Colorado (2007-2011)**



The number of PLWHA by race is illustrated in **Figure 8**. Whites constituted the largest number and percentage of HIV/AIDS cases.

**Figure 8: Persons Living with HIV/AIDS Cases by Race – Colorado (2007-2011)**



The percent of foreign-born persons diagnosed with HIV/AIDS had been increasing among communities of color in the past five years. Among HIV cases newly diagnosed in 2011, 24 percent of those identified as Hispanics were foreign-born. The majority of

these persons were born in Mexico (81%). Twenty-nine percent of new HIV diagnoses among Blacks were foreign-born. The largest proportion of foreign-born blacks were born in Ethiopia (44%). Cultural and language barriers can make these groups a challenge for prevention services and care providers.

### HIV Disease by Risk

**Table 10** displays HIV cases diagnosed in 2011 by risk categories and gender. The largest proportion of males (74%) were classified as MSM. High-risk heterosexual contact continued to be the largest risk factor for females, accounting for 46 percent of the cases. Females also had a higher percentage (33%) of no identified risk compared to males (12%). The cases infected from pediatric transmission in 2011 were all born in foreign countries, particularly Africa, who immigrated or were adopted into the country.

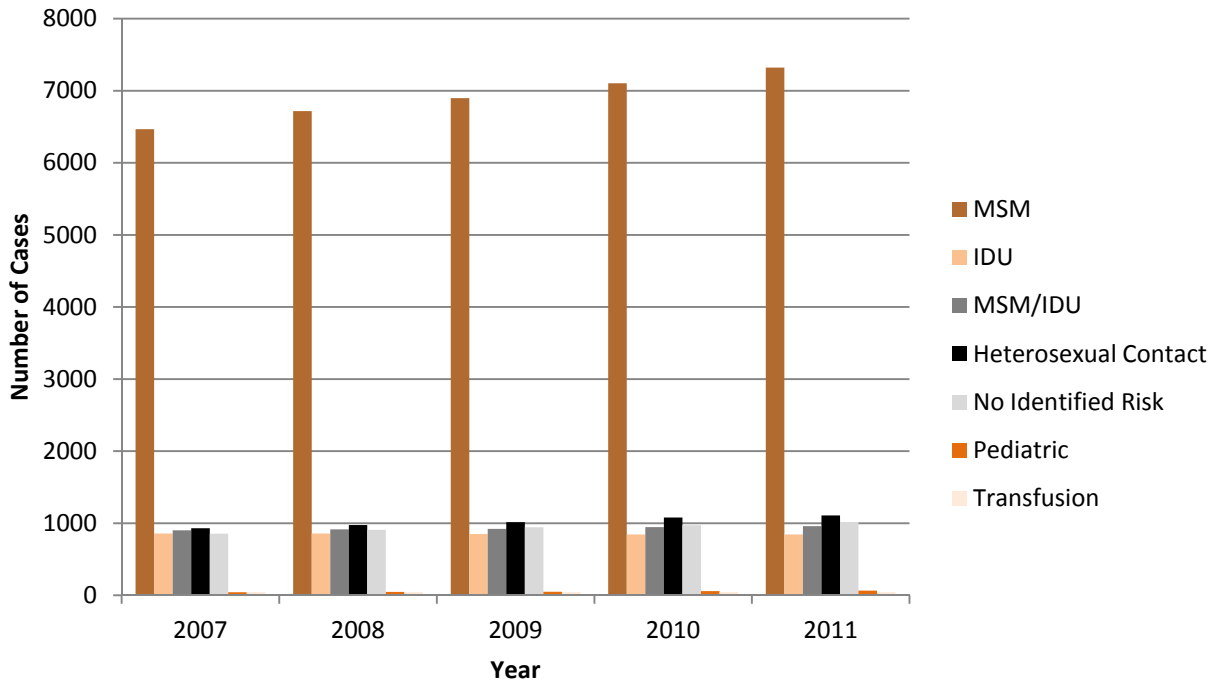
**Table 10: Colorado HIV Cases by Risk and Gender, Diagnosed 2011**

Risk	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
MSM	246	73.7	-	---	246	63.4
IDU	10	3.0	9	16.7	19	4.9
MSM/IDU	21	6.3	-	---	21	5.4
Heterosexual Contact	13	3.9	25	46.3	38	9.8
No Identified Risk	39	11.7	18	33.3	57	14.7
Pediatric	5	1.5	2	3.7	7	1.8
Transfusion/Hemophilia	0	0.0	0	0.0	0	0.0
<b>Total</b>	<b>334</b>	<b>86.1</b>	<b>54</b>	<b>13.9</b>	<b>388</b>	<b>100.0</b>

**Figure 9** demonstrates that the majority of PLWHA in Colorado were MSM (7321 cases representing 65 percent). MSM/IDU constituted an additional 9 percent (960 cases), and IDU constituted 7 percent (844 cases) of PLWHA through 2011. Heterosexual contact was a growing risk group (increasing 19.0 percent from 2007 to 2011), and persons with no identified risk increased 19 percent over the past five years.



**Figure 9: Living with HIV Disease Cases by Risk Reported – Colorado (2007-2011)**



**HIV Disease by Age**

**Table 11** describes the 388 cases of newly diagnosed HIV by age group at diagnosis and gender. Females had a higher percentage of cases in the 25-29 age group (17 percent in females versus 15 percent of males). However, the majority of both female (45%) and male (59%) cases were in the 20-39 age range.

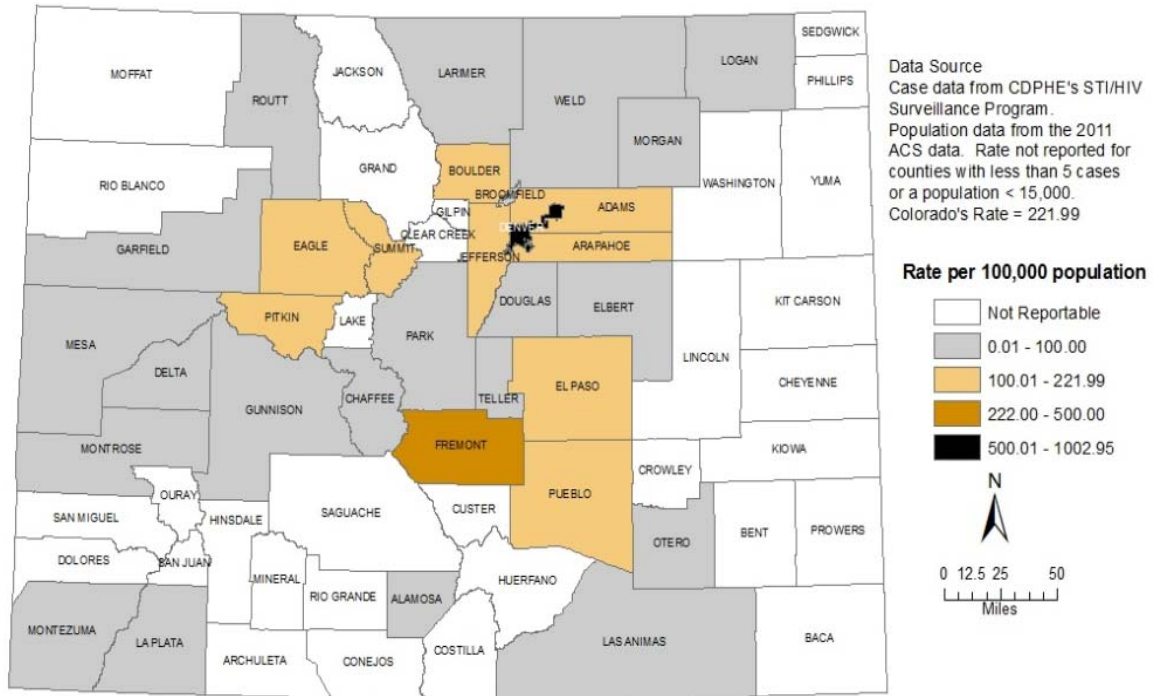
**Table 11: Colorado HIV Cases by Age Group and Gender, Diagnosed 2011**

Age Group	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
<5	2	0.6	1	1.9	3	0.8
5-9	3	0.9	1	1.9	4	1.0
10-12	0	0.0	0	0.0	0	0.0
13-14	0	0.0	1	1.9	1	0.3
15-19	3	0.9	3	5.6	6	1.5
20-24	54	16.2	3	5.6	57	14.7
25-29	51	15.3	9	16.7	60	15.5
30-34	57	17.1	6	11.1	63	16.2
35-39	33	9.9	6	11.1	39	10.1
40-44	45	13.5	9	16.7	54	13.9
45-49	35	10.5	4	7.4	39	10.1
50-54	27	8.1	5	9.3	32	8.2
55-59	13	3.9	5	9.3	18	4.6
60-64	4	1.2	1	1.9	5	1.3
>65	7	2.1	0	0.0	7	1.8
<b>Total</b>	<b>334</b>	<b>86.1</b>	<b>54</b>	<b>13.9</b>	<b>388</b>	<b>100.0</b>

## Geographical Characteristics of HIV

**Figure 10** demonstrates that the highest rates of HIV in Colorado were in the Front Range counties (and population centers) of Adams, Arapahoe, Boulder, Denver, Eagle, El Paso, Jefferson, Pitkin, Pueblo and Summit. These ten counties represented 90 percent of HIV/AIDS cases and 66 percent of Colorado’s population. This map shows that Fremont County had a disproportionate share of HIV cases. The Colorado state correctional facility that housed nearly all HIV infected state prisoners was located in Fremont County. Due to their incarceration, these cases did not place a burden for HIV care or prevention services on the surrounding rural community. Counties with fewer than five reported cases or with a population less than 15,000 are not included on this map.

**Figure 10: Living HIV/AIDS Rate per 100,000 Population by County of Residence at Time of Diagnosis – Colorado, 2011**



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

## HIV Related Mortality

The overall age-adjusted death rate for Colorado was 681 deaths per 100,000 population in 2011. The top two causes of death were cancer and heart disease. The death rate for these two causes was 144 and 131 per 100,000, respectively. The HIV related death rates by age and gender are illustrated in **Table 12** and **Table 13**.<sup>12</sup>

**Table 12: HIV Related Death Rate by Gender, 2011**

<b>Gender</b>	<b>Population</b>	<b>Deaths</b>	<b>Age Adjusted Death Rate per 100,000 population</b>
<b>Male</b>	2,564,846	42	1.5
<b>Female</b>	2,553,680	7	0.3
<b>Total</b>	5,118,526	49	1.2

**Table 13: HIV Related Death Rate by Age, 2011**

<b>Age Group</b>	<b>Population</b>	<b>Deaths</b>	<b>Age Adjusted Death Rate per 100,000 population</b>
<b>&lt;25</b>	1,975,451	0	0.0
<b>25-34</b>	745,046	3	0.1
<b>35-44</b>	705,069	11	0.4
<b>45-54</b>	735,787	20	0.5
<b>55-64</b>	626,736	10	0.2
<b>≥65</b>	330,437	5	0.2
<b>Total</b>	5,118,526	49	1.2

## Demographic Characteristics of HIV Disease in High Risk Populations

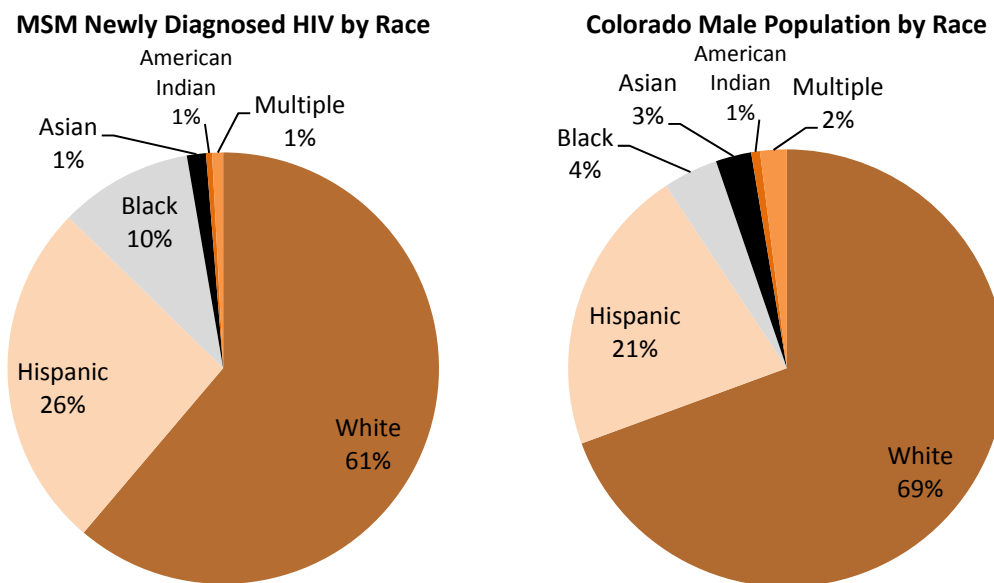
### Men Who Have Sex with Men

- The majority of Colorado’s HIV/AIDS cases can be attributed to MSM risk behaviors (65 percent of all cumulative cases)
- The number of new MSM HIV/AIDS cases remained relatively stable from 2009 to 2011 among Whites, remained relatively stable the past 5 years among Blacks, and has been declining until 2011 when there was a slight increase among Hispanics.
- HIV/AIDS cases diagnosed for MSM ages 20-29 years have increased by 28 percent in the last five years

### Racial/Ethnic Trends Among MSM

As **Figure 11** demonstrates, Blacks were over represented in the HIV epidemic among MSM; accounting for 4 percent of Colorado’s male population, but 10 percent of HIV cases diagnosed in MSM from 2007-2011. Hispanics were also over represented (26 percent of newly diagnosed HIV MSM cases) for their proportion of the male population (21%), while Whites represented 61 percent of newly diagnosed HIV MSM cases and 69 percent of the male population.

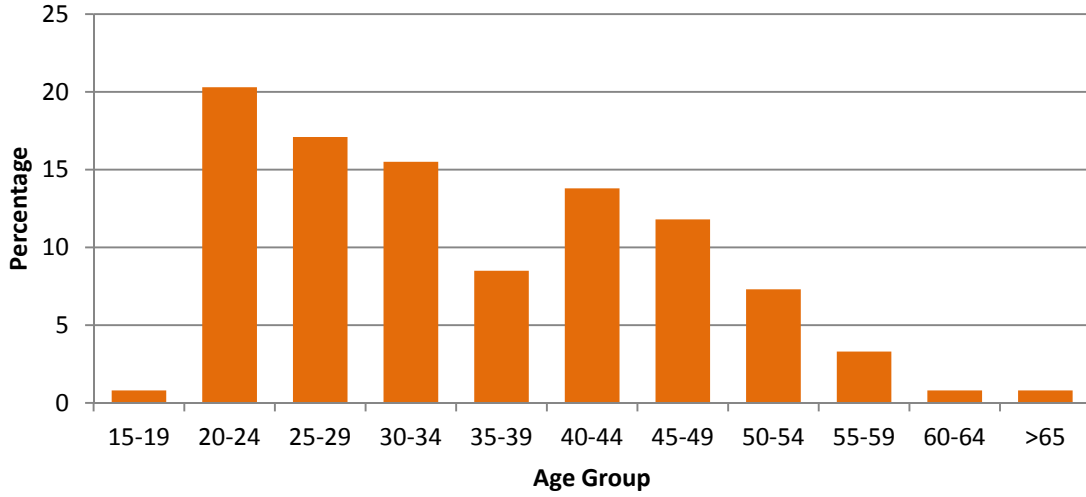
**Figure 11: HIV Positive MSM by Race (2007-2011) Compared to Male Population (2011) – Colorado**



## Age Trends Among MSM

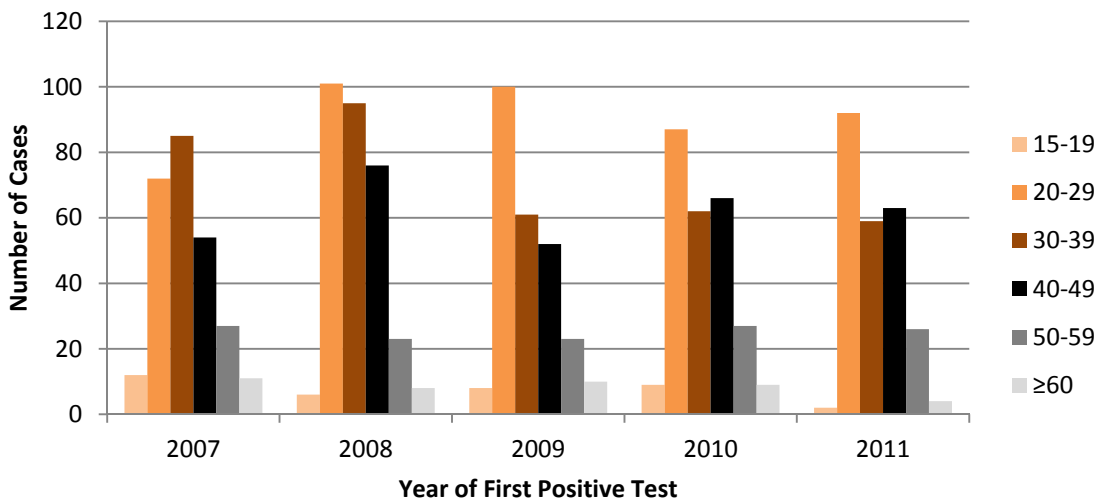
**Figure 12** depicts the percentage of newly diagnosed HIV cases among MSM by age in 2011. Fifty-three percent of new HIV diagnoses occurred among 20-34 year olds, which represented only 22 percent of the male population. Young men ages 20-29 years were over represented, accounting for 37 percent of the HIV epidemic and 15 percent of the male population.

**Figure 12: Percent of New MSM HIV Cases by Age at Diagnosis – Colorado (2011)**



**Figure 13** illustrates the number of HIV and AIDS cases diagnosed between 2007 and 2011 among MSM by age at diagnosis. HIV/AIDS cases diagnosed in MSM age 30-39 years have decreased by 30 percent whereas 20-29 years have increased by 28 percent from 2007 to 2011.

**Figure 13: Number of MSM with HIV/AIDS by Year of First Positive Test and Age at Diagnosis – Colorado (2007-2011)**



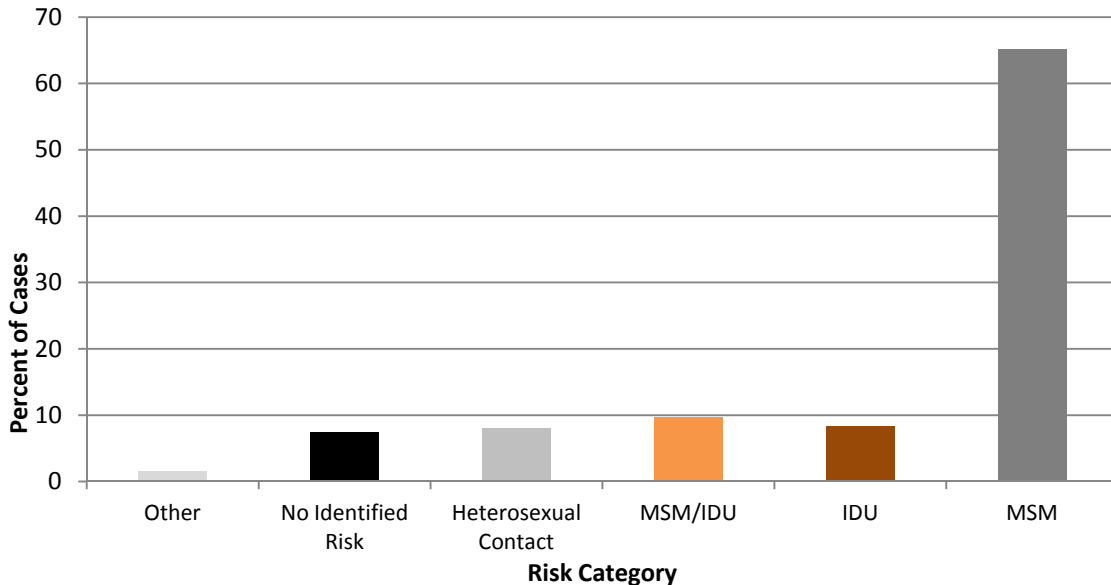
## Injection Drug Use

- IDU and MSM/IDU HIV/AIDS cases made up 18 percent of Colorado cases since the beginning of the epidemic through 2011.
- Males accounted for 80 percent of IDU-attributed HIV/AIDS cases reported.
- Whites made up 47 percent of IDU-only new HIV cases in 2011, while Hispanics made up 37 percent of IDU cases, and Blacks comprised 16 percent.
- IDU related cases of HIV/AIDS were most commonly diagnosed in the 20-29 age group from 2007-2010 and the 30-39 age group in 2011.

## Proportion of Epidemic among IDU

Through December 31, 2011, a cumulative total of 3,423 cases of HIV/AIDS were associated with IDU or MSM/IDU risk. Of these, 80 percent were reported in men and 20 percent were reported in women. **Figure 14** shows the proportion of the epidemic by risk group. IDU and MSM/IDU comprise 18 percent of the total HIV/AIDS cases reported in Colorado.

**Figure 14: HIV/AIDS Cases by Risk Category – Colorado (1982-2011)**

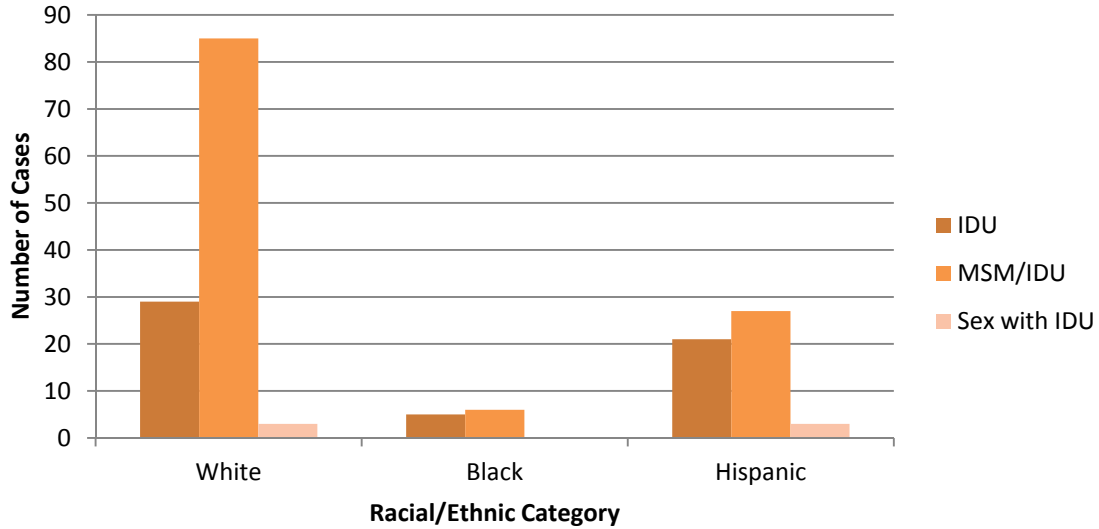


## Racial Ethnic Trends among IDU

The following two graphs illustrate the impact of IDU risk behaviors in both adult/adolescent males and females. Among males, 2,750 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 58 males diagnosed with HIV in 2007-2011 whose only risk was IDU, Whites accounted for 29 (50%) cases, Hispanics for 21 (36%) cases, and Blacks for 5 (9%) cases. Among the 121 males whose risk was MSM/IDU, White

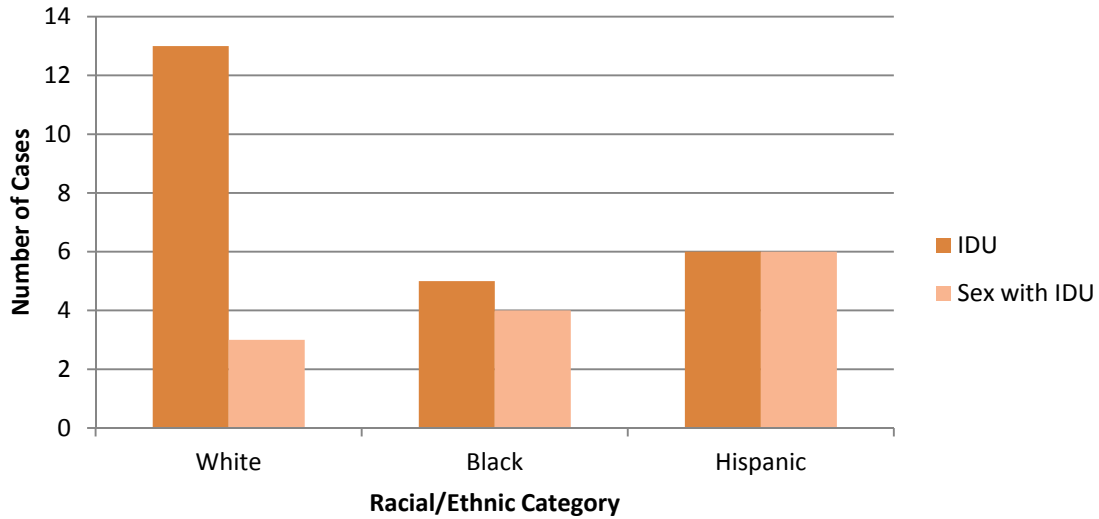
males accounted for the overwhelming majority of these cases (85 or 70%), Hispanics for 27 (22%) cases, and Blacks for 6 cases (5%).

**Figure 15: IDU-Associated HIV/AIDS Cases by Race in Males – Colorado (2007-2011)**



Among females, the number of IDU-related HIV or AIDS cumulative cases (673) was smaller than for males. From 2007 to 2011, 24 cases of HIV or AIDS in females were directly related to IDU as shown in **Figure 16**. Whites accounted for 13 (54%), Blacks accounted for 5 (21%) cases and Hispanics constituted 6 (25%). The number of cases of females who acquired their infection as a result of heterosexual contact with an IDU (N=13) was higher than for males in all racial/ethnic groups except Whites where they were equal. White females comprised 21 percent (N=3), Hispanic females comprised 43 percent (N=6), and Black females represented 29 percent (N=4) of this risk group.

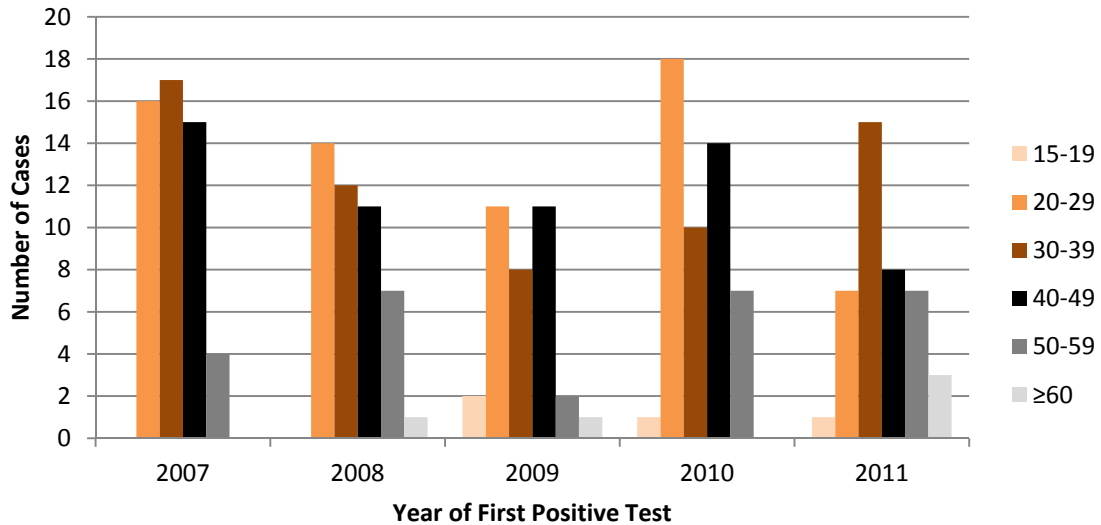
**Figure 16: IDU-Associated HIV/AIDS Cases by Race in Females – Colorado (2007-2011)**



**Age Trends among IDU**

Figure 17 illustrates newly diagnosed cases of HIV and AIDS for a five-year period from 2007 through 2011 among IDU. When reviewing cases of HIV and AIDS, all age groups showed a general decreasing trend in the number of cases reported from 2007 to 2011, with the exception of 30-39 which had increased both in 2010 and 2011. However, it should be noted that the number of IDU attributed HIV/AIDS cases remained small and caution should be exercised when interpreting these numbers. These data are presented to illustrate, HIV/AIDS trends in a small but important group of persons at risk for HIV infection, because they have injected drugs, and/or had sex with someone who has injected drugs.

**Figure 17: Number of IDUs with HIV/AIDS by Year of First Positive Test and Age at Diagnosis – Colorado (2007-2011)**

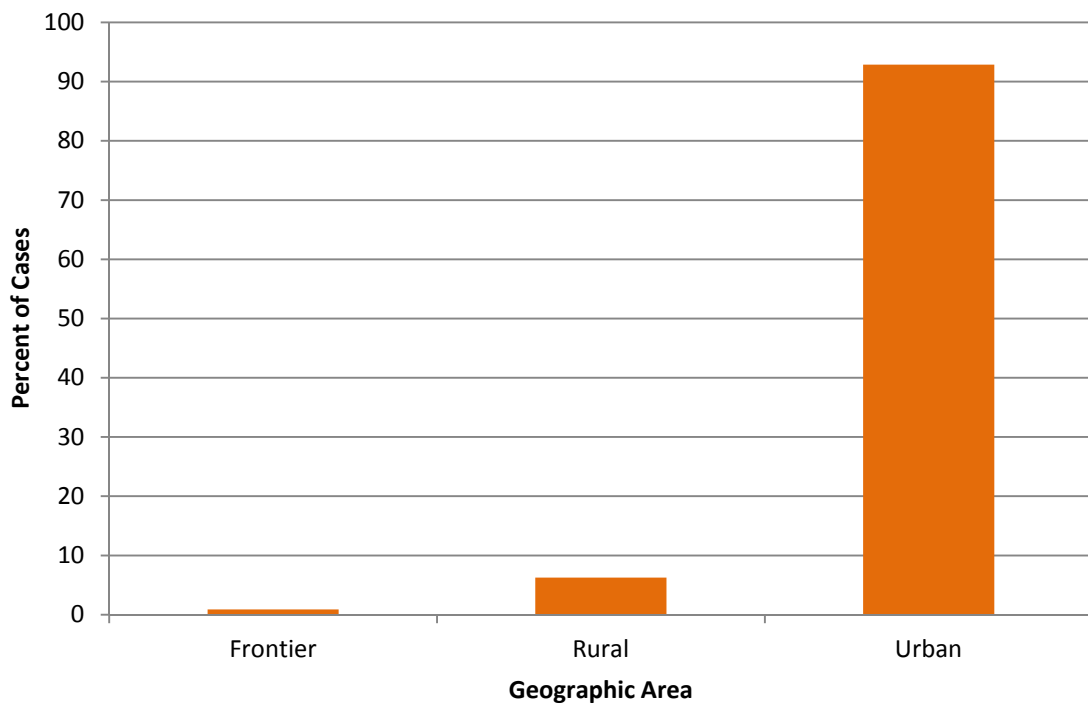




## HIV Among IDU by Region

**Figure 18** demonstrates that those IDU HIV cases diagnosed during the five year time period of 2007 through 2011 had largely been concentrated in urban areas. This was consistent with other risk groups, affirming that the Colorado HIV epidemic was largely centered in urban areas. Urban areas reported 93 percent of cases, rural areas 6 percent, and frontier areas 1 percent of cases. This pattern of HIV/AIDS case distribution among urban, rural and frontier regions has remained fairly stable since the beginning of the epidemic.

**Figure 18: IDU Associated HIV Diagnosed Positives by Region Reported – Colorado (2007-2011)**



## Heterosexual Transmission

- Heterosexual HIV transmission has decreased from 17 percent in 2007 to 10 percent in 2011.
- Females represented 67 percent of heterosexually transmitted HIV/AIDS cases in 2011.
- All three of the major race/ethnicity categories accounted for about 30 percent of cases diagnosed in 2011 transmitted by heterosexual contact.
- Heterosexual transmission of HIV was most commonly diagnosed in those persons aged 25-29 years representing 23 percent of cases.

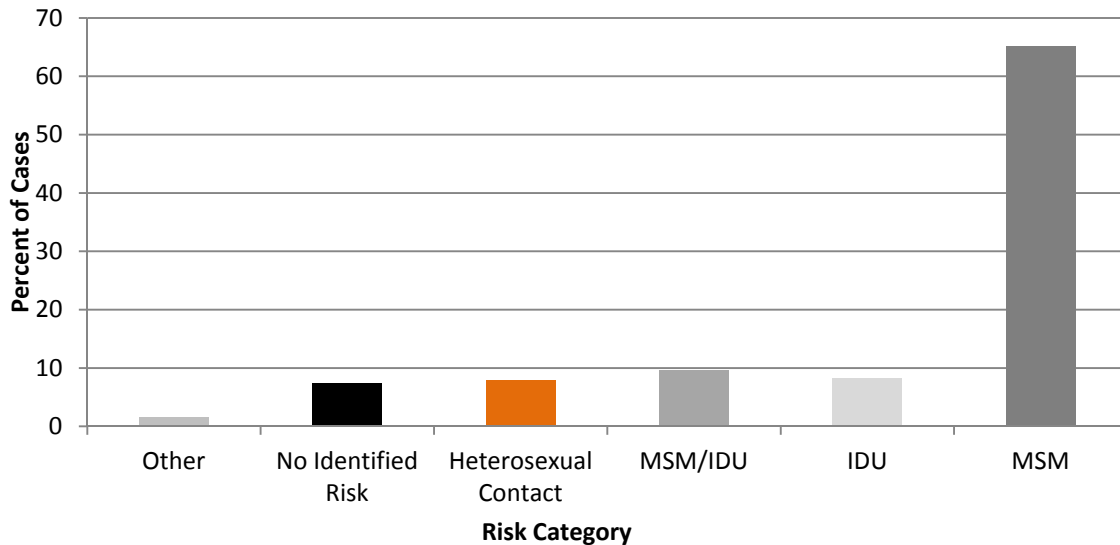
## Estimates of High Risk Heterosexual Behavior in Colorado

It is difficult to make an assessment of the number of persons in Colorado who engaged in heterosexual contact that put them at high risk for HIV. A diagnosis of a sexually transmitted infection (STI) would suggest that the person had engaged in unsafe sexual practices. Specific HIV prevention strategies should be directed toward these persons. In 2011, 21,811 cases of chlamydia and 2,363 cases of gonorrhea were reported to CDPHE.

## Proportion of Epidemic among Heterosexuals

Heterosexual transmission (**Figure 19**) accounted for 8 percent of Colorado's cumulative HIV/AIDS cases from years 1982 through 2011.

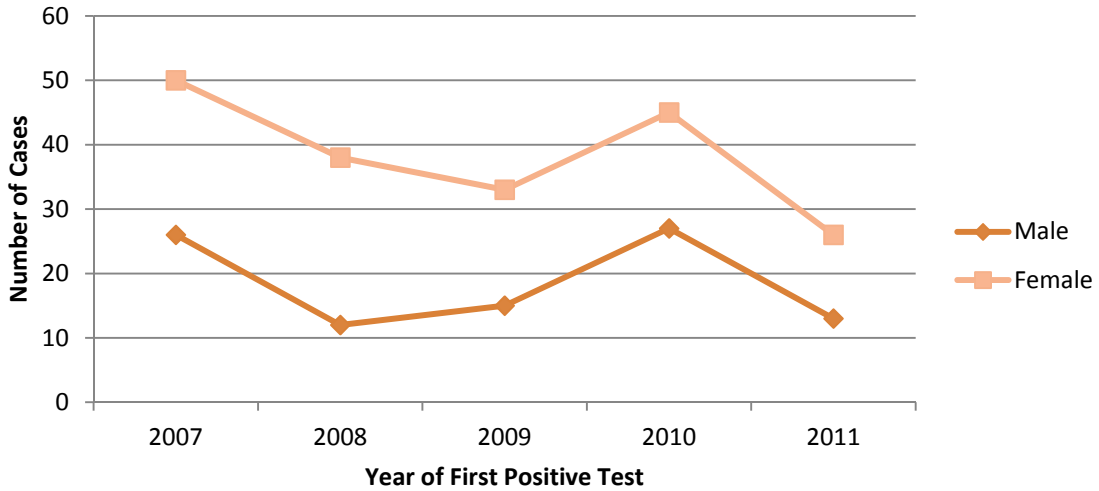
**Figure 19: HIV/AIDS Cases Reported by Risk Category – Colorado (1982-2011)**



**Figure 20** illustrates the number of heterosexually transmitted HIV/AIDS cases by year of first positive test and gender between 2007 and 2011. The overall number of heterosexually transmitted HIV/AIDS cases had decreased by 49 percent during the five-

year time period. Care should be taken in identifying trends in this group due to the small number of cases.

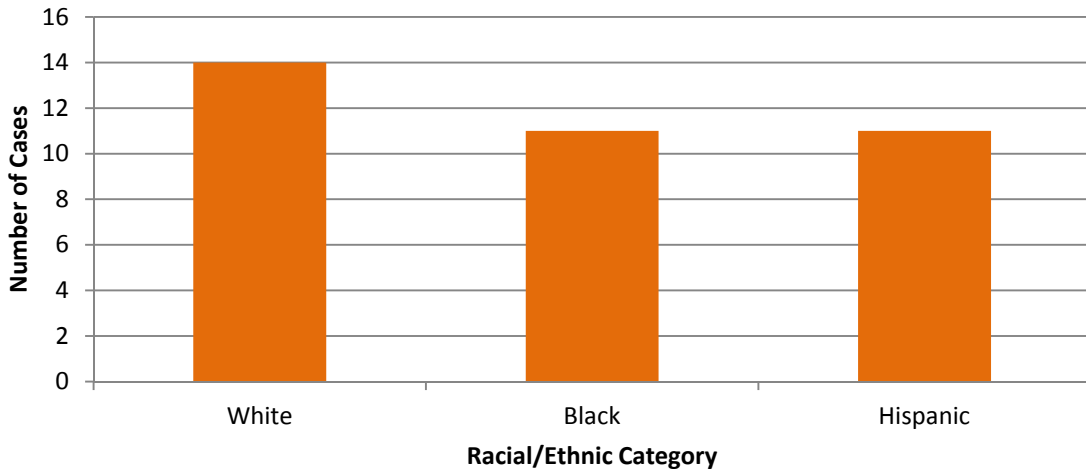
**Figure 20: Number of Heterosexually Transmitted HIV/AIDS Cases by Year of First Positive Test and Gender – Colorado (2007-2011)**



### Racial/Ethnic Trends Among High Risk Heterosexuals

Recently diagnosed cases of HIV attributed to heterosexual transmission are illustrated in **Figure 21**. All three of the major race/ethnicity groups accounted for a similar proportion among of the heterosexual transmission of HIV in 2011. Whites accounted for the largest with 14 (37%) cases, Hispanics accounted for 29 percent (N=11) of cases and Blacks accounted for 29 percent (N=11) of cases. In comparison to their percentage of the total population, racial/ethnic population, Blacks were over represented among heterosexually transmitted HIV cases.

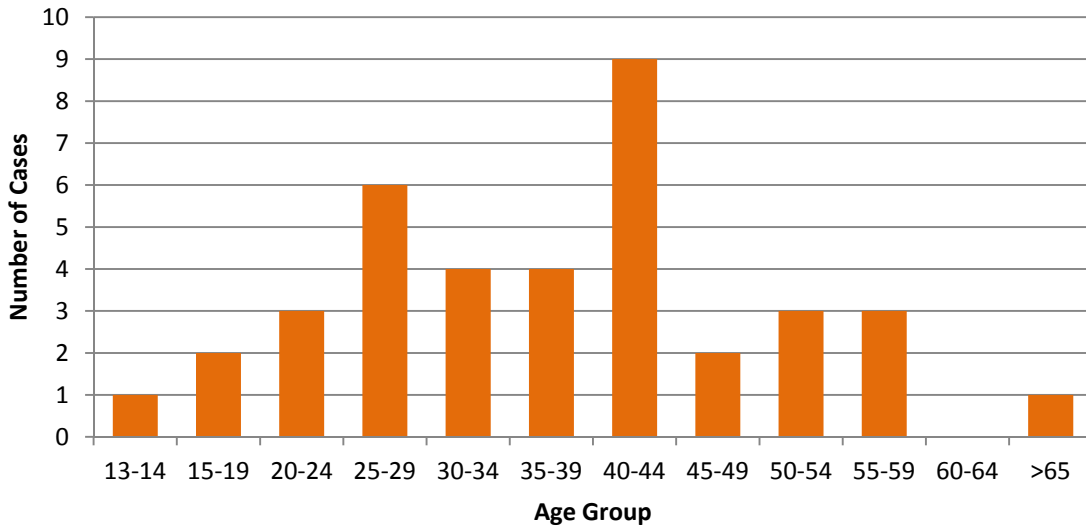
**Figure 21: Newly Identified Cases of Heterosexually Transmitted HIV Cases by Racial Category – Colorado (2011)**



## Age Trends Among High Risk Heterosexuals

**Figure 22** illustrates recently diagnosed cases of HIV attributed to heterosexual contact by age. This graph indicated the largest proportion (24%) of newly diagnosed cases occurred in both the 40-44 year old age groups. The 25-29 year old age group followed, representing 16 percent of the cases. The next highest contributing age groups were 30-34 & 35-39, representing 11 percent each of heterosexually transmitted HIV cases in Colorado.

**Figure 22: Heterosexually Transmitted HIV by Age of Diagnosis – Colorado, 2011**



## Infants Born to HIV-infected Women

As shown in **Table 14**, the number of infants known to be born to HIV-infected mothers did not exceed 30 until 2010 when it decreased. During 2007 to 2011, nine cases of confirmed perinatal transmitted HIV infection were reported. Of these nine perinatal cases, seven were born outside of the United States. According to CDPHE vital statistics data obtained from birth certificates, 1.5 percent of mothers who delivered a child in 2011 did not receive prenatal care, and 92 percent had reported an HIV test during pregnancy.<sup>13</sup>

**Table 14: Number of Infants Born to HIV-infected Women by Year of Birth – Colorado (2007-2011)**

Year of Birth	Number of Infants born to HIV Positive Women	Number of Infants who acquired HIV perinatally
2007	30	2
2008	29	4
2009	30	2
2010	23	1
2011	22	0
<b>Total</b>	<b>134</b>	<b>9</b>

## Demographic Characteristics of Late Stage HIV Diagnoses

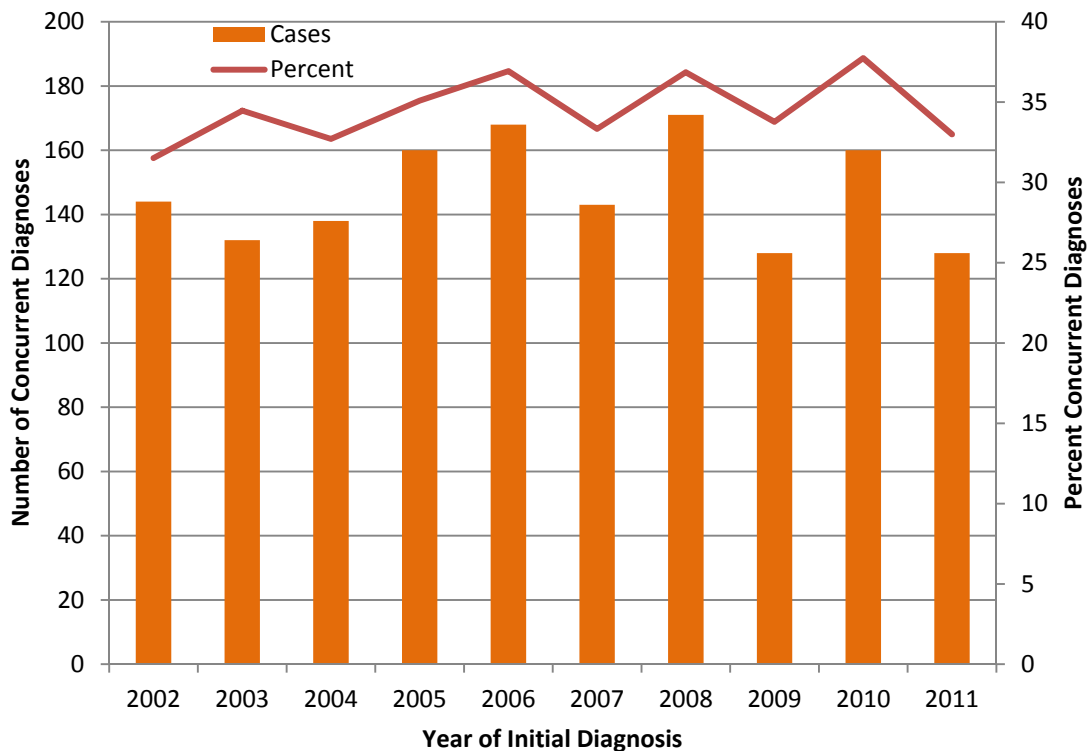
### Summary

- The racial/ethnic distribution of late stage diagnoses was 48 percent White, 38 percent Hispanic and 12 percent Black in 2011.
- The mean age of these late stage diagnoses was 42.
- Among late stage diagnoses, 56 percent reported MSM risk, 18 percent reported no identified risk and 13 percent reported heterosexual risk.
- Sixteen percent of concurrent diagnoses occurred in foreign born persons.

### Description of the concurrent diagnoses population

Late stage HIV diagnoses are defined as anyone who progresses to AIDS within one year (365 days) of their HIV diagnosis. As **Figure 23** demonstrates, the overall number and percentage of late stage cases has been relatively consistent for the last ten years. The percentage has ranged from 31 to 37 percent. In 2011, 128 of 388 new HIV diagnoses were late stage diagnoses (33%).

**Figure 23: New HIV Disease Late Stage Cases and Percentage in Colorado, 2002 – 2011**



**Table 15: Characteristics of New Late Stage & Non-Late Stage HIV Disease Diagnoses in Colorado, 2011**

	Late Stage		Non-Late Stage		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Total</b>	128	100.0	260	100.0	388	100.0
<b>Gender</b>						
Male	116	90.6	218	83.8	334	86.1
Female	12	9.4	42	16.2	54	13.9
<b>Race</b>						
NH White	61	47.7	147	56.5	208	53.6
Hispanic (all races)	48	37.5	58	22.3	106	27.3
NH Black	15	11.7	46	17.7	61	15.7
NH Asian/PI	3	2.3	5	1.9	8	2.1
NH American Indian	1	0.8	4	1.5	5	1.3
NH Multiple Races	0	0.0	0	0.0	0	0.0
<b>Age Group at HIV Diagnosis</b>						
<5	0	0.0	3	1.2	3	0.8
5-9	1	0.8	3	1.2	4	1.0
10-12	0	0.0	0	0.0	0	0.0
13-14	0	0.0	1	0.4	1	0.3
15-19	0	0.0	6	2.3	6	1.5
20-24	11	8.6	46	17.7	57	14.7
25-29	12	9.4	48	18.5	60	15.5
30-34	19	14.8	44	16.9	63	16.2
35-39	14	10.9	25	9.6	39	10.1
40-44	21	16.4	33	12.7	54	13.9
45-49	18	14.1	21	8.1	39	10.1
50-54	15	11.7	17	6.5	32	8.2
55-59	8	6.3	10	3.8	18	4.6
60-64	4	3.1	1	0.4	5	1.3
>65	5	3.9	2	0.8	7	1.8
<b>Risk</b>						
MSM	72	56.3	174	66.9	246	63.4
IDU	11	8.6	8	3.1	19	4.9
MSM/IDU	4	3.1	17	6.5	21	5.4
Heterosexual Contact	17	13.3	21	8.1	38	9.8
No Identified Risk	23	18.0	34	13.1	57	14.7
Pediatric	1	0.8	6	2.3	7	1.8
Transfusion/Hemophilia	0	0.0	0	0.0	0	0.0
<b>Region</b>						
Urban	118	92.2	252	96.9	370	95.4
Rural	7	5.5	6	2.3	13	3.4
Frontier	3	2.3	2	0.8	5	1.3
Unknown	0	0.0	0	0.0	0	0.0

Late stage HIV diagnoses are defined as anyone who progresses to AIDS within one year (365 days) of their HIV diagnosis.

**Table 15: Characteristics of New Late Stage & Non-Late Stage HIV Disease Diagnoses in Colorado, 2011, cont.**

	Late Stage		Non-Late Stage		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Total</b>	128	100.0	260	100.0	388	100.0
<b>Birth Country</b>						
United States (50 states)	107	83.6	227	87.3	334	86.1
Foreign Born	21	16.4	33	12.7	54	13.9
African	3	14.3	13	39.4	16	29.6
Asian	4	19.0	3	9.1	7	13.0
Caribbean	1	4.8	1	3.0	2	3.7
C. American	1	4.8	1	3.0	2	3.7
S. American	1	4.8	0	0.0	1	1.9
European	0	0.0	1	3.0	1	1.9
Middle East	1	4.8	2	6.1	3	5.6
Mexico	10	47.6	10	30.3	20	37.0
U.S. Dependent Areas	0	0.0	1	3.0	1	1.9
Other / Unknown	0	0.0	1	3.0	1	1.9

As shown in **Table 15**, foreign born persons comprised a larger percentage of late stage cases (16 percent) compared to non-late stage cases (13 percent). Late stage cases tended to be older than non-late stage cases with a larger percentage in the 40-54 year old age group (42% vs. 27%). Of those late stage diagnoses that were foreign born, 14 percent were from Africa, 48 percent were from Mexico and the remainder was from Asia, Caribbean, South and Central America and the Middle East.

## National HIV Behavioral Surveillance – Denver, CO

### 2011 MSM Cycle Summary

- Among 546 participants, 55 percent were White, 27 percent were Hispanic, and 11 percent were Black.
- The majority of participants were between 25 and 44 years of age (58%).
- Participants identified themselves as either homosexual (88%) or bisexual (12%).
- Among participants, 7 percent reported having been homeless at one point in their life with 35 percent of those reported being currently homeless.
- Seventy-two percent of participants reported currently having health insurance, of those with insurance, 67 percent having private insurance and 26 percent with public insurance.
- Seventy eight percent reported visiting a health care professional in the prior 12 months.
- Of those participants who reported having casual partners in the prior 12 months, 59 percent reported having unprotected anal sex with one or more casual partners.
- Of those participants who reported having one or more main partners in the prior 12 months, 77 percent reported having unprotected anal sex with a main partner.
- Nearly half of the participants (43%) reported being under the influence of either drugs or alcohol the last time they had sex.
- The proportion of participants who knew their unprotected sex partner's HIV status differed between main and casual partners. The proportion of participants who reported not knowing the HIV status of a casual partner was more than three times with the proportion of participants who reported not knowing the HIV status of a main partner.
- The most common location to have met their last sexual partner was at a bar or club (32%), followed by the internet (24%).
- A vast majority of participants reported having an HIV test (94%) with 66% having had a test within the prior 12 months.
- Of those participants who did not report having a test in the prior 12 months, most (42%) reported thinking they were at a low risk of infection as the reason not to get tested.
- Seventy-three percent of participants reported receiving free condoms in the prior 12 months and 79% of those reported using the free condoms.

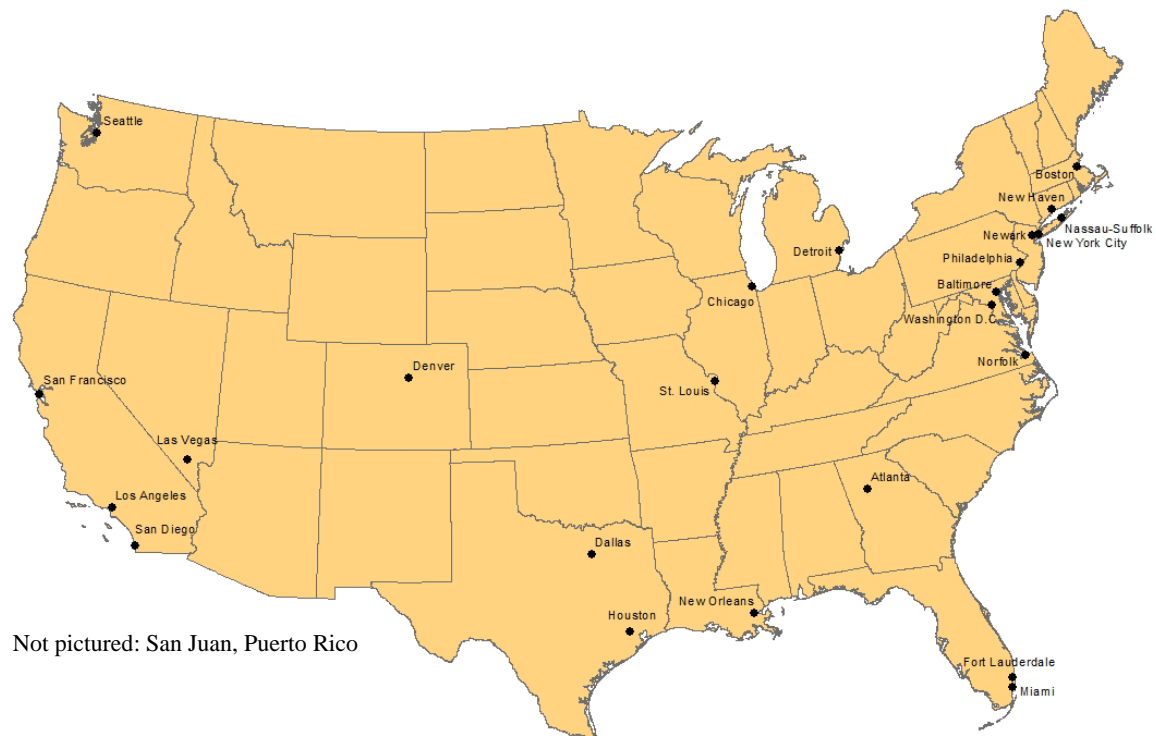


## Introduction

### National HIV Behavioral Surveillance System

In 2003, CDC, in collaboration with state and local health departments, initiated the National HIV Behavioral Surveillance (NHBS) system. The objective of the NHBS system is to monitor risk behaviors and access to prevention services among three populations at highest risk for HIV infection in the United States: MSM, IDU, and heterosexual adults in high risk areas. The system involved rotating cycles lasting 12 months of surveillance in these three populations. In 2011, the third cycle of men who have sex with men was completed; i.e the third iteration of the first cycle. Denver is one of 26 participating MSAs across the country (**Figure 24**). The Denver NHBS system is a collaborative effort between CDPHE and Denver Public Health (DPH).

**Figure 24: Participating Metropolitan Statistical Areas in the National HIV Behavioral Surveillance System**



### Overall Methods

A core questionnaire was administered to participants in all three cycles. The questionnaire included information about demographics, sexual behavior, injection and non-injection drug use, and HIV testing behavior. Specific questions were added for each cycle to address the specific needs of each target population. Interviews were administered in person using a handheld personal computer. Participation in all three cycles was voluntary and anonymous.

## Men who Have Sex with Men Cycle

Eligibility: All potential participants must: 1) Be men or transgender people born male who were approached by study staff at sample venues, 2) Be 18 years or older, 3) Be living in the participating MSA, 4) Have not previously completed an interview for the NHBS-MSM cycle, 5) Be able to complete the eligibility screener and interview in English or Spanish, and 6) Be able to provide informed consent.

Venue-Based Sampling: Local surveillance staff conducted venue-based, time-space sampling following a national surveillance protocol that organized activities into three components. First, staff conducted formative research to identify the venues, times and methods to recruit MSM. Next, staff constructed sampling frames of eligible venues and venue-specific, daytime periods that met MSM attendance, logistical, and safety eligibility criteria. The final component involved recruiting and interviewing men during sampling events.

Interviews were conducted between August 10, 2011 and November 17, 2011. Participants were recruited from eligible venues e.g. local bars, dance clubs, restaurants, community-based organizations, and bathhouses in Denver. Field interviewers established boundaries (an area or a line) for the selection of men at each venue. Men entering the established boundary were approached systematically for recruitment. Those eligible for participation who agreed to participate were accompanied to a private area to conduct the NHBS-MSM interview. Participants were offered compensation for their time and effort. No HIV testing was conducted as part of the MSM cycle.

## Cycle Demographics

As shown in **Table 16**, the majority of participants were White (55%) 25-44 year old (58%) males. A majority of participants reported a higher than high school education (74%), a full- or part-time job (73%), and health insurance (72%). Only 7 percent reported ever being homeless.

**Table 16: Sociodemographic Characteristics of Participants in the Third Cycle of MSM, National HIV Behavioral Surveillance Study – Denver (N=546), 2011**

Gender	N (%)
Male	546 (100.0)
Transgender	0 (0.0)
Race/Ethnicity	
White, non-Hispanic	298 (54.6)
Black, non-Hispanic	59 (10.8)
Hispanic	146 (26.7)
American Indian/Alaskan Native, non-Hispanic	13 (2.4)
Asian/Pacific Islander, non-Hispanic	12 (2.2)
Multiple Race, non-Hispanic	18 (3.3)
Age group	
18-24	87 (15.9)

*continued on next page*

25-34	184 (33.7)
35-44	135 (24.7)
45-54	85 (15.6)
≥55	55 (10.1)
<b>Education</b>	
< High School	17 (3.1)
High School or Equivalent	125 (22.9)
>High School	404 (74.0)
<b>Sexual Identity</b>	
Homosexual	481 (88.3)
Bisexual	63 (11.6)
Heterosexual	0 (0.0)
<b>Health Insurance</b>	
Currently have health insurance	393 (72.0)
Private	263 (66.9)
Public	103 (26.2)
None	27 (6.9)
<b>Annual Income</b>	
\$0-9,999	66 (12.1)
\$10,000-19,999	97 (17.8)
\$20,000-39,999	157 (28.7)
\$40,000-74,999	141 (25.8)
\$75,000 or more	85 (15.6)
<b>Employment Status</b>	
Full-time or Part-time	399 (73.1)
Full-time Student	23 (4.2)
Retired	32 (5.9)
Disabled	19 (3.5)
Unemployed	64 (11.7)
Other	8 (1.5)
<b>Incarceration History</b>	
Ever been in jail or prison for more than 24 hours	165 (30.3)
Been in jail or prison for more than 24 hours in the past 12 months	41 (24.8)
<b>Homeless in last 12 months</b>	
No	509 (93.2)
Yes, not currently	24 (4.4)
Yes, currently	13 (2.4)

Note: Categories may not add up to total due to missing data for individual variable, percentages do not reflect missing data.

## High-Risk Sexual Behaviors

Among men reporting anal sex with a main partner(s), 91 percent reported unprotected anal sex in the past 12 months and 89 percent of those knew their partner's HIV status. Men engaging in receptive and insertive anal sex reported that it was unprotected at the last encounter with a partner 56 percent and 50 percent of the time, respectively. Nearly half (43%) reported being under the influence of either alcohol or drugs during their last sexual encounter. The top three locations that participants reported meeting their last sex partner were a bar or club (32%), the internet (24%) and a bathhouse, sex club or sex resort (9%).

**Table 17: Prevalence of HIV Surveillance Sexual Behaviors of Participants in the Third Cycle of MSM, National HIV Behavioral Surveillance Study – Denver (N=546), 2011**

Age at first sexual experience with a man	N (%)	Total
≤20	434 (79.5)	546
21-30	99 (18.1)	546
>30	13 (2.4)	546
<b>Number of male partners in last 12 months</b>		
1-10	458 (83.8)	546
11-20	49 (9.0)	546
21-30	18 (3.3)	546
>30	66 (15.4)	546
<b>Number of main male partners</b>		
0	152 (35.0)	434
1-2	234 (53.9)	434
3-5	37 (8.5)	434
6-9	6 (1.4)	434
>10	5 (1.2)	434
<b>Number of casual male partners</b>		
1-10	327 (80.1)	408
11-20	32 (7.8)	408
21-30	29 (7.1)	408
>30	20 (5.0)	408
<b>Main Partners</b>		
Anal sex in last 12 months	327 (91.1)	359
Unprotected anal sex in last 12 months	250 (76.5)	327
Knew HIV status of partner of unprotected sex	220 (88.7)	250
HIV Positive	167 (75.9)	220
Gave money, drugs, etc in exchange for sex	5 (1.4)	358
Received money, drugs, etc. in exchange for sex	11 (3.1)	359
<b>Casual Partners</b>		
Anal sex in last 12 months	360 (81.6)	441
Unprotected anal sex in last 12 months	211 (58.6)	360
Knew HIV status of partner of unprotected sex	123 (58.3)	211
HIV Positive	74 (60.1)	123
Gave money, drugs, etc in exchange for sex	22 (5.0)	442
Received money, drugs, etc. in exchange for sex	24 (5.4)	443
<b>Last Sex Partner</b>		
Unprotected receptive anal sex	122 (55.5)	220
Unprotected insertive anal sex	159 (50.4)	275
Under the influence of alcohol or drugs	233 (42.7)	546
Both	51 (21.9)	233
Alcohol	162 (69.5)	233
Drugs	20 (8.6)	233
Marijuana	55 (78.6)	70
Speedballs (heroin and cocaine together)	11 (15.7)	70
Heroin	3 (4.3)	70
Crack cocaine	1 (1.4)	70
Knew partner's HIV status	361 (66.1)	546
HIV Positive	63 (17.5)	361

*continued on next page*

<b>Location met last partner</b>		
Internet	116 (24.2)	479
Chat Line	13 (2.7)	479
Bar/Club	151 (31.5)	479
Circuit part or rave	6 (1.3)	479
Cruising area	11 (2.3)	479
Adult Bookstore	8 (1.7)	479
Bathhouse, sex club or sex resort	39 (8.5)	479
Other	135 (28.2)	479
<b>Gone to a place gay men hangout/meet/socialize in last 12 months</b>		
Never	16 (2.9)	546
At least once a day	55 (10.1)	546
At least once a week	309 (56.6)	546
At least once a month	132 (24.2)	546
less than once a month	34 (6.2)	546
<b>Used the internet to meet/socialize with gay men for friendship or sex in last 12 months</b>		
Never	195 (35.8)	545
At least once a day	108 (19.8)	545
At least once a week	137 (25.1)	545
At least once a month	48 (8.8)	545
less than once a month	57 (10.5)	545

Note: Categories may not add up to total due to missing data for individual variable, percentages do not reflect missing data.

## Drug Use Behaviors

Only 10 percent of men reported ever injecting drugs and of those, 44 percent reported injecting drugs in the prior 12 months. Twenty percent reported never binge drinking (5 or more drinks in one sitting) in the prior 12 months. Over half (53%) reported using non-prescription drugs in the prior 12 months with marijuana use reported by a vast majority (84%).

**Table 18: Prevalence of HIV Surveillance Substance Use Behaviors of Participants in the Third Cycle of MSM, National HIV Behavioral Surveillance Study – Denver (N=546), 2011**

<b>Alcohol Use</b>		
<b>Binge drinking (5 or more in one sitting) in last 12 months</b>	<b>N (%)</b>	<b>Total</b>
Never	101 (20.3)	498
At least once a day	32 (6.4)	498
At least once a week	185 (37.1)	498
At least once a month	100 (20.0)	498
less than once a month	80 (16.1)	498
<b>Binge drinking (5 or more in one sitting) in last 30 days</b>		
0	185 (38.1)	485
1-10	246 (50.7)	485
11-20	34 (7.0)	485
21-30	19 (3.9)	485
>30	1 (<1)	485

*continued on next page*

<b>Injection Drug Use</b>		
<b>Ever injected any drugs</b>	56 (10.3)	546
<b>Age when first injected</b>		
≤20	15 (26.8)	56
21-30	23 (41.1)	56
>30	18 (32.1)	56
<b>Drugs Injected</b>		
<b>Injected drugs in last 12 months</b>	24 (43.6)	55
speedball (heroin and cocaine together)	3 (13.0)	23
heroin	7 (30.4)	23
powdered cocaine	5 (21.7)	23
crack cocaine	0 (0.0)	23
crystal meth	18 (78.3)	23
oxycontin	2 (8.7)	23
<b>Frequency used new, sterile needle in last 12 months</b>		
Never	1 (4.6)	22
Rarely	2 (9.1)	22
About half	1 (4.6)	22
Usually	4 (18.1)	22
Always	14 (63.6)	22
<b>Needle Safety</b>		
Shared needle at least once to inject in last 12 months	3 (12.5)	24
Shared needle to divide drugs in last 12 months	1 (4.2)	24
Knew HIV status of person last injected with	2 (33.3)	6
HIV Positive	2 (100)	2
Knew Hepatitis C status of person last injected with	1 (16.7)	6
HCV Negative	1 (100)	1
<b>Non-Injection Drug Use</b>		
<b>Non-prescription drug use in last 12 months</b>	290 (53.1)	546
Marijuana	244 (84.1)	290
Crystal meth	43 (14.8)	290
Crack cocaine	30 (10.3)	290
Powdered cocaine (smoked or snorted)	107 (36.9)	290
Downers (Valium, Ativan, Xanax)	49 (16.9)	290
Painkillers (Oxycontin, Vicodin, Percocet)	61 (21.0)	290
Hallucinogens (LSD, mushrooms)	53 (18.3)	290
X or Ecstasy	65 (22.4)	290
Heroin (smoked or snorted)	5 (1.7)	290
Poppers (amyl nitrate)	108 (37.2)	290
GHB	23 (7.9)	290
Special K (ketamine)	12 (4.1)	290
Viagra, Levitra or Cialis	94 (17.2)	546
Used for erectile dysfunction	52 (55.3)	94
<b>Alcohol and Drug Treatment</b>		
<b>Ever participated in alcohol treatment program</b>	114 (20.9)	546
Participated in last 12 months	42 (36.8)	114
<b>Ever participated in drug treatment program</b>	69 (12.6)	546
Participated in last 12 months	21 (30.4)	69

Note: Categories may not add up to total due to missing data for individual variable, percentages do not reflect missing data.

## STI/HIV Testing & Prevention Behaviors

Over three-quarters (78%) of participants reported visiting a health care professional in the prior 12 months and 48 percent of those were offered an HIV test at the visit. Nearly half (45%) of the men reported getting tested for an STI (excluding HIV and hepatitis). A small proportion (11%) reported being told by a health care provider of having hepatitis. Almost all (94%) have been tested for HIV. Only 19 percent have not tested for HIV in the prior two years and almost a third (33%) have not tested for HIV in the prior 12 months. Almost three-quarters (73%) received free condoms in the prior 12 months and 79 percent of those used the free condoms they received.

**Table 19: Prevalence of HIV Surveillance Testing & Prevention Behaviors of Participants in the Third Cycle of MSM, National HIV Behavioral Surveillance Study – Denver (N=546), 2011**

STI Testing Behavior	N (%)	Total
<b>STI testing in last 12 months</b>		
Chlamydia	211 (85.4)	247
Gonorrhea	205 (83.0)	247
Syphilis	227 (91.9)	247
Other STI	53 (21.9)	242
<b>STI diagnosis in last 12 months</b>		
Chlamydia	14 (6.6)	211
Gonorrhea	13 (6.3)	205
Syphilis	15 (6.6)	227
Other STI	6 (11.3)	53
<b>Hepatitis</b>		
Ever had a blood test for hepatitis B	336 (64.1)	524
Ever had a blood test for hepatitis C	384 (71.4)	538
Ever told had hepatitis by health care provider	60 (11.0)	546
A	0 (0.0)	56
B	50 (89.3)	56
C	5 (8.9)	56
Other (alcohol induced)	1 (1.8)	56
<b>Other STIs</b>		
Ever told had genital herpes by health care provider	34 (6.2)	546
Ever told had genital warts by health care provider	54 (9.9)	545
Ever told had human papillomavirus (HPV) by health care provider	31 (5.7)	545
<b>HIV Testing Behavior</b>		
Visited a health care professional in last 12 months	428 (78.4)	546
HIV test offered at health care visit	206 (48.1)	428
Ever tested for HIV	511 (93.6)	546
Tested for HIV while in jail or prison in last 12 months	8 (19.5)	41
<b>Number of times tested in past two years</b>		
0	105 (19.2)	546
1-5	349 (63.9)	546
6-10	49 (9.0)	546
>10	43 (7.9)	546

*continued on next page*

<b>Result of most recent HIV test</b>		
Negative	429 (84.1)	510
Positive	71 (13.9)	510
Never obtained results	8 (1.6)	510
Indeterminate	2 (<1)	510
<b>Reason not tested for HIV in last 12 months</b>		
Think at a low risk for infection	78 (42.4)	184
Afraid of result	33 (17.9)	184
Don't have time	14 (7.6)	184
Some other reason	15 (8.2)	184
No particular reason	44 (23.9)	184

<b>HIV Positive Individuals</b>		
Recent positive test was first positive test	43 (59.1)	71
Asked for names of partners by health dept	54 (73.0)	74
Gave names of partners	47 (87.0)	54
Ever had a negative test before first positive test	29 (69.0)	42
Seen by health care provider for HIV infection	72 (97.3)	74
Currently taking antiretroviral medications	62 (86.1)	72

<b>HIV Prevention</b>		
Received free condoms in last 12 months	401 (73.4)	546
Received free condoms from which place(s)		
HIV/AIDS-focused community-based organization	219 (54.6)	401
GLBTQ organization or community health center	102 (25.5)	401
Health center or clinic	45 (11.2)	401
Bar, club, bookstore, or other business	24 (6.0)	401
Some other place	11 (2.7)	401
Used free condoms received	315 (78.6)	401
Received individual-level HIV counseling in last 12 months	107 (19.6)	546
Received group-level HIV counseling in last 12 months	71 (13.0)	546

Note: Categories may not add up to total due to missing data for individual variable, percentages do not reflect missing data.



## References

1. Colorado Rural Health Center. <http://www.coruralhealth.org>
2. US Census Bureau, 2011 Census ACS 1-year Estimate Data Table B01001 (geography: State of Colorado).  
<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.
3. US Census Bureau, 2011 Census Estimates Data Table SC-EST2011-03 (geography: State of Colorado).  
<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.
4. US Census Bureau, 2011 Census ACS 1-year Estimate Data Table B03002 (geography: Colorado Counties).  
<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.
5. US Census Bureau, 2011 ACS 5-year Estimate Data Table B15002 (geography: Colorado Metropolitan Statistical Areas)  
<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.
6. US Census Bureau, 2011 ACS 5-year Estimate Data Table S1701 (geography: State of Colorado and all counties within)  
<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.
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 (2010-2011), US (2011).  
<http://www.statehealthfacts.org/prfileind.jsp?ind=143&cat=3&rqn=7>
9. Colorado Department of Education. Fall 2011 Pupil Membership.  
<http://www.cde.state.co.us/cdereval/rv2010pmlinks.htm>
10. Colorado Department of Corrections. Statistical Report, Fiscal Year 2011. May 2012.
11. 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/>
12. Colorado Health Information Dataset (CoHID). Death Data Statistics, 2011.  
<http://www.chd.dphe.state.co.us/cohid/Default.aspx>
13. Colorado Health Information Dataset (COHID). Birth Data Statistics, 2011.  
<http://www.chd.dphe.state.co.us/cohid/Default.aspx>
14. US Census Bureau, 2011 Census ACS 5-year Estimate Data Table B19013 (geography: State of Colorado).  
<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.