Colorado HIV Surveillance Report 3rd Quarter 2011

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Publication Schedule: This report reflects events occurring through September 30, 2011 and reported by September 30, 2011, unless otherwise stated. Quarterly reports are published four times a year.

This report is available on the internet at:

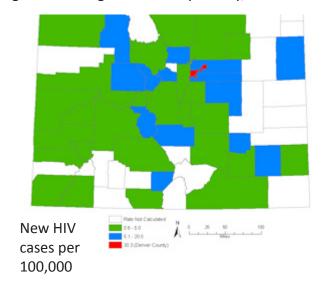
http://www.chd.dphe.state.co.us/topics.
aspx?q=Comm_Disease_Data



HIV IN COLORADO: AN OVERVIEW

- In Colorado, the first case of Acquired Immune Deficiency Syndrome (AIDS) was diagnosed in 1982.
- More than 16,800 people in Colorado have been diagnosed with HIV disease.
- Recently, the number of new HIV cases in Colorado has been nearly the same each year. Between 2006 and 2010, new HIV diagnoses averaged 430 per year.
- Treatment for HIV disease is both effective and widely available. Most people with HIV survive long after diagnosis.
- Nearly 11,300 people in Colorado have been diagnosed and are reported to be living with HIV disease. This number increases about 4 percent each year. About 1 in 6 people with HIV has not been diagnosed.

Figure 1. Average HIV rates by county, 2006-2010



HOW HIV/AIDS SURVEILLANCE WORKS IN COLORADO

Physicians, health care providers, hospitals, or any other person providing testing and/or counseling or treatment to a person with HIV infection are required by law to report HIV and AIDS related information to the Colorado Department of Public Health and Environment, or local health department. Laboratories must report tests that indicate HIV infection.

Identifying and reporting on new cases of HIV infection supports efforts to reduce the spread of the virus, assures that newly infected persons receive care as early as possible, and that persons who may have been exposed to HIV receive partner counseling and referral services. State and federal funding for HIV/AIDS disease control and care of infected persons is based on the number of reported cases, which means that Colorado receives resources to slow the spread of the virus and to pay for needed HIV/AIDS care services when HIV/AIDS surveillance is complete, accurate and timely.

For federal funding purposes, all states and territories count HIV/AIDS cases in the same manner: an individual gets counted as an HIV case in the county in which he/she resides at the time of his/her initial HIV diagnosis (not including a diagnosis made from an anonymous test).

Once that person progresses to AIDS, he/she will then be counted as an AIDS case in the county where he/she resides at the time of his/her AIDS diagnosis and will no longer be counted as an HIV case. This means that a county's HIV case count can actually go down over time if their HIV cases progress to AIDS in other counties. Additionally, states are continually working together to ensure that individuals are counted in only one state, so the case count for any individual county in Colorado could go down if we learn from another state that an individual in the county had an earlier diagnosis in another state.

For epidemiologic and community planning purposes, it is often helpful to evaluate all cases of HIV and AIDS as being part of one combined group: people who have been diagnosed with HIV disease. Most often in this report, the assignment of newly diagnosed (or incident) HIV cases, including concurrent diagnoses of HIV and AIDS, to a specific geographic region is based on the individual at the time of his/her initial diagnosis. The assignment of prevalent cases to a specific geographic region is based on newlogan.

HIV/AIDS Reporting Requirements:

REPORTING	ITEM TO REPORT	TIMELINE	TO WHOM				
Health care providers	HIV or AIDS	7 days	State or local health				
	diagnosis		department				
Health care facilities	HIV or AIDS	7 days	State or local health				
	diagnosis		department				
Laboratories	CD4 count <500/mm	7 days	State health				
	or CD4% <29%		department				
	Any HIV viral load						
	HIV genotype testing						
the set to set the state of the state	LIDV I AIDC	7.4.	Charla baadub				
Local health departments	HIV and AIDS	7 days	State health				
			department				

COLORADO HIV SURVEILLANCE QUARTERLY REPORT

DEFINITIONS

Case: A reported instance of HIV infection or AIDS in which the individual who received a confidential HIV or AIDS diagnosis resided in Colorado at the time of diagnosis. HIV cases do not include individuals with a current HIV diagnosis who were originally reported with HIV in another U.S. state or territory. AIDS cases include all individuals who resided in Colorado at the time of AIDS diagnosis, regardless of where an earlier HIV diagnosis might have taken place. For surveillance purposes, HIV positive persons who have not been tested or whose only test for HIV infection was performed anonymously are not considered "cases".

Confidence Interval (CI): A range of values for a measure that is thought to contain the true value at a specified level of statistical certainty (e.g. 95%). On the bar charts in this report, vertical lines with short horizontal lines at either end represent the 95 percent confidence interval for the point estimate represented by the bar.

Cumulative HIV/AIDS diagnoses: The number of cases of a disease reported or diagnosed in a specified time, regardless of current vital status. Cumulative cases include those who have died.

HIV/AIDS deaths: We use death certificate information to identify HIV/AIDS cases who have died. HIV or AIDS is not required to be a contributing factor in the patient's death.

Disease rate: A standardized proportion often used to represent risk for disease within a given population. A rate is usually calculated by dividing the number of cases (disease frequency) by the number of persons at risk for the disease (population estimate). Usually, the general population, rather than the population potentially exposed to HIV infection by various high-risk behaviors, is used as the denominator since the latter is unknown. In this report, all rates are reported as <u>cases per 100,000 persons</u>.

Exposure category: Cases of HIV disease are counted only once in a hierarchy of modes of transmission. Persons with more than one mode of transmission are classified in the transmission mode first in the hierarchy. The exception is men who have sex with men and inject drugs, which has its own category. Persons whose mode of transmission is classified as high-risk heterosexual have contact with a person with, or at increased risk for, HIV infection (e.g. an injection drug user). Undetermined risk represents persons for whom transmission risk history is incomplete.

HIV diagnosis date: The earliest date, month and year, associated with a verifiable report of HIV infection. Verifiable reports include positive antibody tests, detectable viral loads, positive antigens or cultures, or physician diagnoses, but not self-reported diagnosis dates, positive lab results from anonymous testing, or diagnosis dates from other states that remain unverified.

Incidence: The number of new cases of a disease that occur in a population during a certain time period, usually a year.

Late HIV diagnosis: Refers to anyone who is diagnosed with AIDS within 12 months of their initial HIV diagnosis. Also known as concurrent HIV/AIDS diagnosis.

New HIV diagnosis: Refers to anyone who is diagnosed with HIV in a given time period, regardless of disease status.

Prevalence: The total number of persons living with a specific disease or condition at a given time. HIV prevalence data are generally presented as "persons living with HIV disease."

Reporting delay: The time interval between the date a case is diagnosed and the date the case is reported to the health department. Reporting delays can result in recent surveillance data being less complete. However, in Colorado, most new HIV cases (>95%) are reported within six months of diagnosis.

Table 1. New HIV Cases

		Newly Diag	gnosed Cas	es of HIV D	isease			
Year of HIV diagnosis	2007	2008	2009	2010	2011	2007-2	2011	
	No.	No.	No.	No.	No.	No.	%	Rate
Total	437	461	385	421	274	1978	100	8.0
Gender								
Male	361	397	337	362	235	1692	85.5%	13.6
Female	76	64	48	59	39	286	14.5%	2.3
Age at HIV Diagnosis								
Under 13 years	3	5	3	8	6	25	1.3%	0.6
13-19 years	15	8	10	11	7	51	2.6%	2.1
20-29 years	114	136	134	129	82	595	30.1%	17.0
30-39 years	144	130	94	102	66	536	27.1%	15.0
40-49 years	104	117	92	103	65	481	24.3%	12.9
50-59 years	39	44	36	52	40	211	10.7%	6.2
60 years and over	18	21	16	16	8	79	4.0%	2.1
Race and Hispanic Origin								
White, not Hispanic	237	241	195	228	150	1051	53.1%	5.8
Black, not Hispanic	91	66	57	87	40	341	17.2%	32.2
Hispanic (All Races)	94	136	121	88	74	513	25.9%	11.3
Asian/Pacific Islander	11	12	5	10	6	44	2.2%	6.0
Amer. Indian/Alaska Native	2	4	4	4	4	18	0.9%	5.2
Multiple Race	2	2	3	4	0	11	0.6%	
Exposure Category								
Male-male sex (MSM)	258	304	251	259	155	1227	62.0%	
Injection Drug Use (IDU)	19	16	14	12	14	75	3.8%	
MSM & IDU	27	22	20	31	13	113	5.7%	
Heterosexual contact	77	51	48	69	31	276	14.0%	
Pediatric*	3	5	3	8	6	25	1.3%	
Transfusion/Hemophiliac	0	1	0	0	0	1	0.1%	
No Identified Risk/Other	53	62	49	42	55	261	13.2%	

^{*} Pediatric cases are individuals under age 13 years at the time of HIV or AIDS diagnosis. 24 of 25 pediatric cases were born outside the U.S. All HIV/AIDS surveillance data reported to the Colorado Department of Public Health & Environment as of September 30, 2011.

Table 2. People Living with HIV Disease as of September 30, 2011

	HIV only				AIDS		All cases of HIV disease			
	No.	%	Rate	No.	%	Rate	No.	%	Rate	
Total	6,289	100%	125.0	4,973	100%	98.9	11,262	100%	223.932	
Gender										
Male	5,583	89%	221.5	4,407	89%	174.8	9,990	89%	396.3	
Female	706	11%	28.1	566	11%	22.6	1,272	11%	50.7	
Age at HIV diagnosis										
Under 13 years	50	1%	5.6	17	0%	1.9	67	1%	7.5	
13-19 years	170	3%	36.1	106	2%	22.5	276	2%	58.7	
20-29 years	2391	38%	331.6	1535	31%	212.9	3,926	35%	544.5	
30-39 years	2392	38%	338.1	1950	39%	275.6	4,342	39%	613.8	
40-49 years	966	15%	134.6	969	19%	135.0	1,935	17%	269.6	
50-59 years	260	4%	37.2	288	6%	41.2	548	5%	78.3	
60 years and over	60	1%	6.5	108	2%	11.8	168	1%	18.3	
Current age [*]										
Under 13 years	28	0%	3.1	2	0%	0.2	30	0%	3.4	
13-19 years	25	0%	5.3	5	0%	1.1	30	0%	6.4	
20-29 years	462	7%	64.1	189	4%	26.2	651	6%	90.3	
30-39 years	952	15%	134.6	712	14%	100.6	1,664	15%	235.2	
40-49 years	2022	32%	281.7	1894	38%	263.9	3,916	35%	545.7	
50-59 years	1983	32%	283.5	1553	31%	222.0	3,536	31%	505.6	
60 years and over	817	13%	88.9	618	12%	67.3	1,435	13%	156.2	
Race and Hispanic Origin										
White, not Hispanic	4248	68%	120.7	2984	60%	84.8	7,232	64%	205.4	
Black, not Hispanic	864	14%	457.7	762	15%	403.6	1,626	14%	861.3	
Hispanic (All Races)	989	16%	95.2	1107	22%	106.6	2,096	19%	201.8	
Asian/Pacific Islander	56	1%	39.7	52	1%	36.8	108	1%	76.5	
Amer. Indian/Alaska Native	46	1%	147.2	44	1%	140.8	90	1%	288.1	
Multiple Race/Unknown	23	0%		24	0%		47	0%		
Exposure Category										
Male-male sex (MSM)	4104	65%		3128	63%		7,232	64%		
Injection Drug Use (IDU)	422	7%		425	9%		847	8%		
MSM & IDU	508	8%		444	9%		952	8%		
Heterosexual contact	536	9%		565	11%		1,101	10%		
Pediatric*	50	1%		17	0%		67	1%		
Transfusion/Hemophiliac	10	0%		29	1%		39	0%		
No Identified Risk/Other	659	10%		364	7%		1,023	9%		

^{*} Age as of September 30, 2011

All HIV/AIDS surveillance data reported to the Colorado Department of Public Health and Environment as of September 30, 2011.

[^] Pediatric cases are individuals under age 13 years at the time of HIV or AIDS diagnosis. 28 of 67 cases who were under age 13 at the time of HIV or AIDS diagnosis were born outside the U.S. or Territories.

Table 3. People Living with HIV Disease as of September 30, 2011:

Exposure Category by Gende		and Race/Ethnicity White Black			All Hispanic		Asian / Pacific Islander		American Indian/ Alaska Native		Multiple/ Unknown	
Exposure Category	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Males:												
Male-male sex (MSM)	5212	78%	652	54%	1226	67%	55	61%	34	55%	53	55%
Injection Drug Use (IDU)	281	4%	130	11%	148	8%	9	10%	4	6%	6	6%
MSM & IDU	697	10%	87	7%	145	8%	3	3%	16	26%	4	4%
Heterosexual contact	98	1%	186	15%	95	5%	13	14%	3	5%	2	2%
Pediatric^	11	0%	18	1%	7	0%	0	0%	0	0%	0	0%
Transfusion/Hemophiliac	26	0%	6	0%	2	0%	0	0%	0	0%	0	0%
No Identified Risk/Other	380	6%	134	11%	200	11%	10	11%	5	8%	32	33%
Total Males	6705	100%	1213	100%	1823	100%	90	100%	62	100%	97	100%
Exposure Category												
Females:												
Injection Drug Use (IDU)	151	29%	52	13%	52	19%	1	6%	12	43%	1	8%
Heterosexual contact	255	48%	276	67%	147	54%	11	61%	12	43%	3	23%
Pediatric^	7	1%	15	4%	3	1%	1	6%	0	0%	1	8%
Transfusion/Hemophiliac	5	1%	1	0%	3	1%	0	0%	0	0%	0	0%
No Identified Risk/Other	109	21%	69	17%	68	25%	5	28%	4	14%	8	62%
Total Females	527	100%	413	100%	273	100%	18	100%	28	100%	13	100%

[^] Pediatric cases are individuals under age 13 years at the time of HIV or AIDS diagnosis.

All HIV/AIDS surveillance data reported to the Colorado Department of Public Health and Environment as of September 30, 2011.

Table 4. HIV Diagnoses by Health Statistics Region (HSR) and County

Newly Diagnosed Cases of HIV Disease

Year of HIV diagnosis	2007	2008	2009	2010	2011	20	07-20	11	County	HSR
	No.	No.	No.	No.	No.	No.	% [†]	Rate	Rank [*]	Rank [*]
Region 1:	0	0	2	2	1	5	0%	1.4		21
Logan	0	0	0	0	0	0	0%	0.0	42	
Morgan	0	0	1	1	0	2	0%	1.4	37	
Phillips	0	0	0	0	1	1	0%	4.4	16	
Sedgwick	0	0	0	0	0	0	0%	0.0	42	
Washington	0	0	0	0	0	0	0%	0.0	42	
Yuma	0	0	1	1	0	2	0%	4.0	20	
Region 2: Larimer	8	12	7	11	5	43	2%	2.9	26	15
Region 3: Douglas	5	6	5	6	7	29	1%	2.1	33	18
Region 4: El Paso	29	27	21	37	24	138	7%	4.6	15	6
Region 5:	0	2	2	1	1	6	0%	3.1		14
Cheyenne	0	0	0	0	0	0	0%	0.0	42	
Elbert	0	2	2	1	0	5	0%	4.3	18	
Lincoln	0	0	0	0	1	1	0%	3.6	22	
Kit Carson	0	0	0	0	0	0	0%	0.0	42	
Region 6:	0	1	3	2	1	7	0%	1.9		20
Baca	0	0	0	0	0	0	0%	0.0	42	
Bent	0	0	1	1	0	2	0%	6.4	8	
Crowley	0	0	2	0	0	2	0%	6.7	7	
Huerfano	0	0	0	0	0	0	0%	0.0	42	
Kiowa	0	0	0	0	0	0	0%	0.0	42	
Las Animas	0	0	0	1	1	2	0%	2.5	28	
Otero	0	1	0	0	0	1	0%	1.1	41	
Prowers	0	0	0	0	0	0	0%	0.0	42	
Region 7: Pueblo	7	11	4	5	6	33	2%	4.2	19	8
Region 8:	0	0	3	4	1	8	0%	3.3		12
Alamosa	0	0	2	4	0	6	0%	7.6	6	
Conejos	0	0	1	0	1	2	0%	4.8	14	
Costilla	0	0	0	0	0	0	0%	0.0	42	
Mineral	0	0	0	0	0	0	0%	0.0	42	
Rio Grande	0	0	0	0	0	0	0%	0.0	42	
Saguache	0	0	0	0	0	0	0%	0.0	42	
Region 9:	2	3	4	0	0	9	0%	2.0		19
Archuleta	0	0	0	0	0	0	0%	0.0	42	
Dolores	0	0	0	0	0	0	0%	0.0	42	
La Plata	1	3	2	0	0	6	0%	2.4	30	
Montezuma	1	0	2	0	0	3	0%	2.4	30	
San Juan	0	0	0	0	0	0	0%	0.0	42	

[†] Percent of HSRs' new HIV disease diagnoses (2007-2011)

^{*} Counties ranked by HIV disease rate per 100,000 population

[^] Health Statistics Regions ranked by HIV disease rate per 100,000 population

Table 4. HIV Diagnoses by Health Statistics Region and County, continued

All HIV/AIDS surveillance data reported to the Colorado Department of Public Health and Environment as of September 30, 2011.

[†] Percent of HSRs' new HIV disease diagnoses (2007-2011)

^{*} Counties ranked by HIV disease rate per 100,000 population

[^] Health Statistics Regions ranked by HIV disease rate per 100,000 population

Table 5. Cumulative HIV/AIDS case counts and deaths by resident county and Health Statistics Region (HSR) at diagnosis, Colorado (reported as of 9/30/2011)

Statistics Region (113	Cumulative	Deat	-		ng		
	Cases	N	% [*]	HIV	AIDS	Total	Total %
Region 1:	70	28	40%	21	21	42	0.4%
Logan	16	8	50%	3	5	8	0.1%
Morgan	35	15	43%	10	10	20	0.2%
Phillips	4	3	75%	0	1	1	0.0%
Sedgwick	1	0	0%	1	0	1	0.0%
Washington	2	0	0%	1	1	2	0.0%
Yuma	12	2	17%	6	4	10	0.1%
Region 2: Larimer	279	74	27%	108	97	205	1.8%
Region 3: Douglas	134	31	23%	52	51	103	0.9%
Region 4: El Paso	1122	376	34%	437	309	746	6.6%
Region 5:	28	8	29%	12	8	20	0.2%
Cheyenne	0	0		0	0	0	0.0%
Elbert	17	5	29%	7	5	12	0.1%
Lincoln	7	1	14%	5	1	6	0.1%
Kit Carson	4	2	50%	0	2	2	0.0%
Region 6:	72	29	40%	23	20	43	0.4%
Baca	1	1	100%	0	0	0	0.0%
Bent	4	3	75%	1	0	1	0.0%
Crowley	3	0	0%	3	0	3	0.0%
Huerfano	9	3	33%	2	4	6	0.1%
Kiowa	0	0		0	0	0	0.0%
Las Animas	28	14	50%	10	4	14	0.1%
Otero	14	4	29%	4	6	10	0.1%
Prowers	13	4	31%	3	6	9	0.1%
Region 7: Pueblo	249	86	35%	81	82	163	1.4%
Region 8:	49	21	43%	10	18	28	0.2%
Alamosa	23	9	39%	6	8	14	0.1%
Conejos	4	1	25%	1	2	3	0.0%
Costilla	5	4	80%	1	0	1	0.0%
Mineral	1	0	0%	1	0	1	0.0%
Rio Grande	8	3	38%	1	4	5	0.0%
Saguache	8	4	50%	0	4	4	0.0%
Region 9:	69	20	29%	27	22	49	0.4%
Archuleta	3	1	33%	0	2	2	0.0%
Dolores	1	0	0%	0	1	1	0.0%
La Plata	46	14	30%	19	13	32	0.3%
Montezuma	15	5	33%	6	4	10	0.1%
San Juan	4	0	0%	2	2	4	0.0%
Region 10:	53	21	40%	16	16	32	0.3%
Delta	16	6	38%	5	5	10	0.1%
Gunnison	8	3	38%	2	3	5	0.0%
Hinsdale	2	1	50%	1	0	1	0.0%
Montrose	16	6	38%	4	6	10	0.1%
Ouray	2	1	50%	1	0	1	0.0%
San Miguel	9	4	44%	3	2	5	0.0%

^{*} Percent of county cases who have died (row %).

[^] Percent of total presumed living cases in Colorado (column %).

Table 5. Cumulative HIV/AIDS case counts and deaths by resident county and Health Statistics Region (HSR) at diagnosis, continued

	Cumulative	Dea	ths		ng		
	Cases	N	% *	HIV	AIDS	Total	Total %
Region 11:	36	12	33%	15	9	24	0.2%
Jackson	1	0	0%	0	1	1	0.0%
Moffat	11	4	36%	5	2	7	0.1%
Rio Blanco	3	1	33%	1	1	2	0.0%
Routt	21	7	33%	9	5	14	0.1%
Region 12:	249	56	22%	90	103	193	1.7%
Eagle	71	11	15%	24	36	60	0.5%
Garfield	52	12	23%	24	16	40	0.4%
Grand	21	6	29%	9	6	15	0.1%
Pitkin	43	11	26%	14	18	32	0.3%
Summit	62	16	26%	19	27	46	0.4%
Region 13:	284	75	26%	73	136	209	1.9%
Chaffee	14	5	36%	4	5	9	0.1%
Custer	3	0	0%	1	2	3	0.0%
Fremont	261	68	26%	66	127	193	1.7%
Lake	6	2	33%	2	2	4	0.0%
Region 14: Adams	974	276	28%	365	333	698	6.2%
Region 15: Arapahoe	1534	417	27%	591	526	1117	9.9%
Region 16:	647	167	26%	280	200	480	4.3%
Boulder	627	165	26%	269	193	462	4.1%
Broomfield	20	2	10%	11	7	18	0.2%
Region 17:	74	24	32%	15	35	50	0.4%
Clear Creek	28	6	21%	7	15	22	0.2%
Gilpin	14	9	64%	2	3	5	0.0%
Park	20	5	25%	4	11	15	0.1%
Teller	12	4	33%	2	6	8	0.1%
Region 18: Weld	224	76	34%	71	77	148	1.3%
Region 19: Mesa	135	38	28%	53	44	97	0.9%
Region 20: Denver	9575	3385	35%	3625	2565	6190	55.0%
Region 21: Jefferson	942	329	35%	312	301	613	5.4%
Unknown	14	2	14%	12	0	12	0.1%
STATEWIDE TOTAL	16,813	5,551	33%	6,289	4,973	11,262	100.0%

^{*}Percent of county cases who have died (row %).

All HIV/AIDS surveillance data reported to the Colorado Department of Public Health and Environment as of September 30, 2011.

[^] Percent of total presumed living cases in Colorado (column %).

ACKNOWLEDGEMENTS AND CONTACT INFORMATION

Our thanks to the medical providers who care for people with HIV/AIDS, to our local health partners, and to the state health laboratories – all of whom work diligently to ensure the timely and complete reporting of cases. These data are used to support the allocation of HIV prevention and care resources, to conduct program planning and evaluation, and to educate a broad range of individuals about HIV disease in Colorado.

For more information, please contact:

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