

HEPATITIS C IN COLORADO

A Summary of Cases Reported through 2003



**Colorado Department
of Public Health
and Environment**

**Published by:
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http://www.cdphe.state.co.us/dc/Hepatitis/hep_home**

March 5, 2004

Hepatitis C

Hepatitis C is the most common chronic bloodborne infection in the United States, with an estimated 2.7 to 4.0 million persons infected with the virus. The hepatitis C virus (HCV) is transmitted primarily through large or repeated percutaneous (through the skin) exposures to blood. HCV was first identified in 1988. A serological test for antibodies to HCV became commercially available in 1990.

Acute Hepatitis C Infection:

Acute hepatitis C is the first stage of hepatitis C infection. It starts when the person first gets infected and may last up to six months. Individuals with acute hepatitis either have mild symptoms or no noticeable symptoms at all. Elevations in serum ALT (Alanine aminotransferase) are the most characteristic feature during this stage. Fifteen to twenty-five percent of individuals appear to resolve hepatitis C infection, after the acute stage.

Chronic Hepatitis C Infection:

A large percentage of persons infected with hepatitis C, 75-85%, develop chronic infection. Patients need to be followed up to monitor long-term consequences of their chronic infection. The majority of patients with chronic hepatitis C tolerates their disease well and don't show symptoms or physical signs during the first twenty years of infection. Chronic liver disease progresses at a slow rate in most patients. It is estimated that 10 to 20% patients develop cirrhosis over a 20 to 30 year period, and 1-5% develop hepatocellular carcinoma (HCC).

Hepatitis C Transmission:

The hepatitis C virus is primarily transmitted through exposure to human blood. Individuals are at risk of infection if they:

- Have ever injected drugs, shared the drug, works, and/or cotton
- Have ever been on hemodialysis
- Have received a blood transfusion or solid organ transplant before July, 1992
- Have received clotting factor before 1987
- Have had a needle stick or blood splash to the eyes
- Were born to an infected mother

Hepatitis C Reporting Requirements:

In 1992, the Colorado Board of Health adopted rules requiring laboratories to report positive serum antibody titer or more specific tests to the state or local health department within seven days following the diagnosis.

In addition, physicians and hospitals are required to report cases of acute hepatitis C cases to the state or local health department within seven days following the diagnosis. Laboratory and physician reports should include the disease being reported, patient's name, date of birth, sex, race, ethnicity, address (including city, county, and phone number), physician's name, address and telephone number. The data that follows is based on laboratory and case reports to CDPHE.

<http://www.cdphe.state.co.us/op/regs/diseasecontrol/100901epidemiccommunicablediseasecontrol.pdf>

HEPATITIS C: COLORADO REPORTED CASES

**Table1: Cases By Report Date, Colorado Electronic Disease Reporting System (CEDRS)
January 1, 2003 through December 31, 2003**

Category	Total Acute HCV Cases		Total Chronic HCV Cases		TOTAL
	Number	(Percent)	Number	(Percent)	
Total	17	100	5,988	100	6,005
Sex	17	100%	5988	100%	6005
Male	9	52.94%	3,777	63.08%	3,786
Female	8	47.06%	2,111	35.25%	2,119
Unknown	0	0.00%	100	1.67%	100
Age at Diagnosis	17	100%	5988	100%	6005
<1	0	0.00%	77	1.29%	77
1-4	0	0.00%	3	0.05%	3
5-9	0	0.00%	4	0.07%	4
10-14	1	5.88%	5	0.08%	6
15-19	2	11.76%	48	0.80%	50
20-39	9	52.94%	1,803	30.11%	1,812
40-59	5	29.41%	3,635	60.70%	3,640
60-79	0	0.00%	356	5.95%	356
80+	0	0.00%	47	0.78%	47
Unknown	0	0.00%	10	0.17%	10
County of Residence at Diagnosis	17	100%	5,988	100%	6005
Adams	0	0.00%	217	3.62%	217
Alamosa	0	0.00%	6	0.10%	6
Arapahoe	2	11.76%	257	4.29%	259
Archuleta	0	0.00%	3	0.05%	3
Baca	0	0.00%	0	0.00%	0
Bent	0	0.00%	22	0.37%	22
Boulder	1	12.50%	66	1.10%	67
Broomfield	0	0.00%	6	0.10%	6
Chaffee	0	0.00%	18	0.30%	18
Cheyenne	0	0.00%	1	0.02%	1
Clear Creek	0	0.00%	3	0.05%	3
Conejos	0	0.00%	3	0.05%	3
Crowley	0	0.00%	21	0.35%	21
Custer	0	0.00%	6	0.10%	6
Delta	0	0.00%	26	0.43%	26
Denver	8	47.06%	1,502	25.08%	1510
Douglas	0	0.00%	55	0.92%	55
Eagle	0	0.00%	10	0.17%	10
El Paso	0	0.00%	445	7.43%	445
Elbert	0	0.00%	6	0.10%	6
Fremont	0	0.00%	119	1.99%	119
Garfield	0	0.00%	37	0.62%	37
Gilpin	0	0.00%	3	0.05%	3
Grand	0	0.00%	8	0.13%	8

HEPATITIS C: COLORADO REPORTED CASES

**Table1: Cases By Report Date, Colorado Electronic Disease Reporting System (CEDRS)
January 1, 2003 through December 31, 2003**

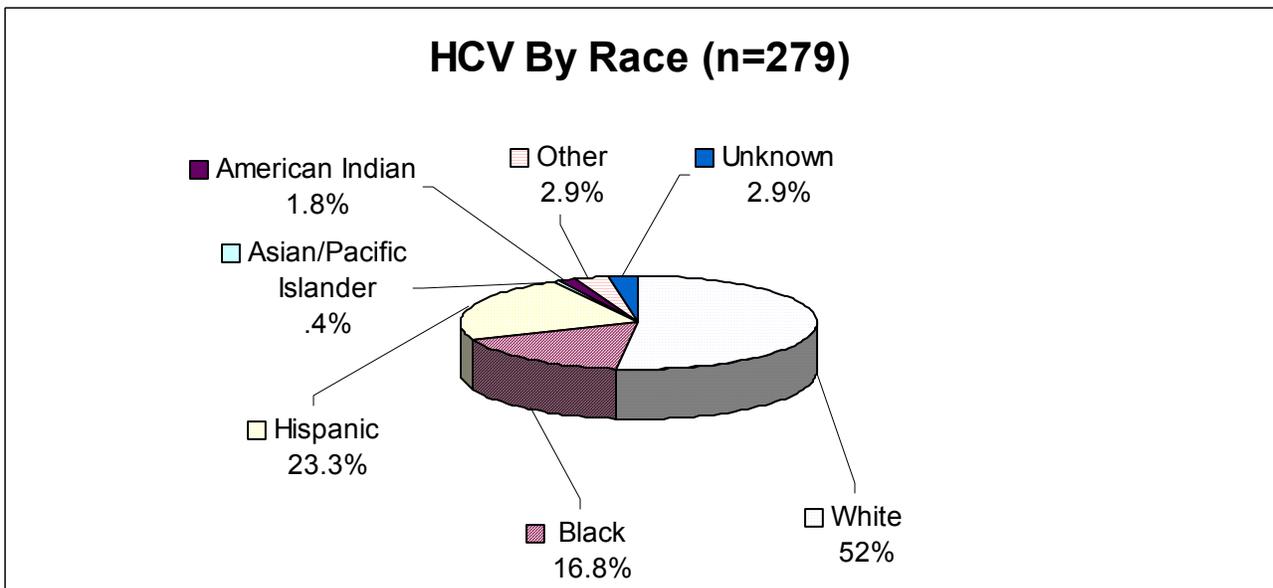
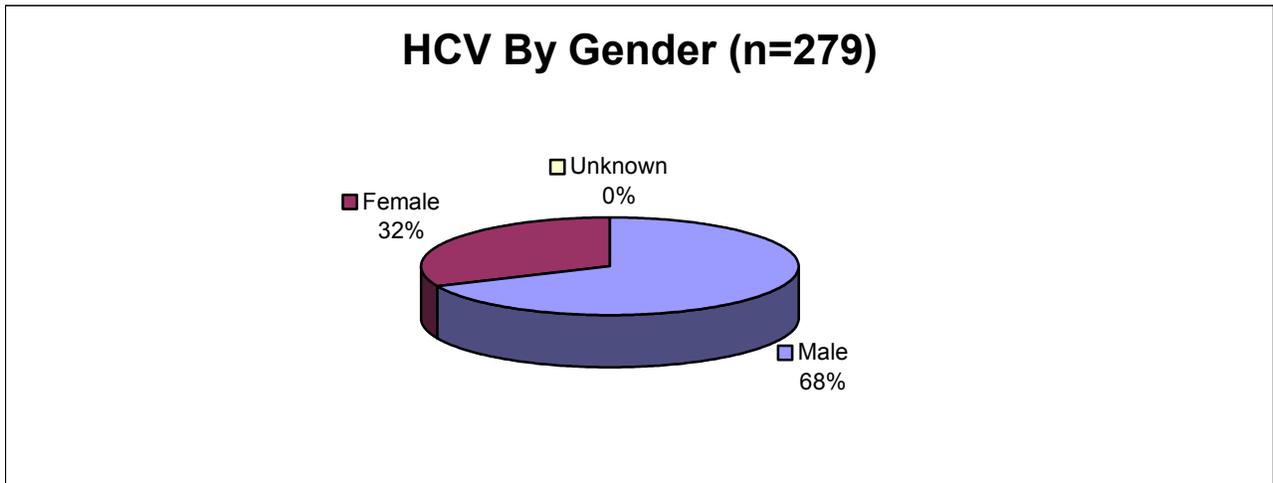
Category	Total Acute HCV Cases		Total Chronic HCV Cases		TOTAL
	Number	(Percent)	Number	(Percent)	
<u>County of Residence at Diagnosis</u>					
Gunnison	0	0.00%	7	0.12%	7
Hinsdale	0	0.00%	1	0.02%	1
Huerfano	0	0.00%	17	0.28%	17
Jackson	0	0.00%	1	0.02%	1
Jefferson	4	23.53%	323	5.39%	327
Kiowa	0	0.00%	1	0.02%	1
Kit Carson	0	0.00%	10	0.17%	10
La Plata	0	0.00%	40	0.67%	40
Lake	0	0.00%	2	0.03%	2
Larimer	0	0.00%	129	2.15%	129
Las Animas	0	0.00%	14	0.23%	14
Lincoln	0	0.00%	14	0.23%	14
Logan	0	0.00%	33	0.55%	33
Mesa	0	0.00%	116	1.94%	116
Moffat	0	0.00%	4	0.07%	4
Montezuma	0	0.00%	8	0.13%	8
Montrose	0	0.00%	12	0.20%	12
Morgan	0	0.00%	9	0.15%	9
Otero	0	0.00%	17	0.28%	17
Out of State	0	0.00%	3	0.05%	3
Park	0	0.00%	10	0.17%	10
Phillips	0	0.00%	1	0.02%	1
Pitkin	0	0.00%	9	0.15%	9
Prowers	0	0.00%	14	0.23%	14
Pueblo	2	11.76%	219	3.66%	221
Rio Grande	0	0.00%	6	0.10%	6
Routt	0	0.00%	7	0.12%	7
Saguache	0	0.00%	1	0.02%	1
San Juan	0	0.00%	4	0.07%	4
San Miguel	0	0.00%	4	0.07%	4
Summit	0	0.00%	6	0.10%	6
Teller	0	0.00%	24	0.40%	24
Unknown	0	0.00%	1973	32.95%	1973
Washington	0	0.00%	1	0.02%	1
Weld	0	0.00%	104	1.74%	104
Yuma	0	0.00%	4	0.07%	4
Total	17	100%	5988	100%	6,005

HEPATITIS C: COLORADO REPORTED CASES
Table 2: Cases From the HIV Counseling and Testing Sites
January 1, 2003 through December 31, 2003

Category	Total Tested		Total HCV Antibody Positive	
	Number	(Percent)	Number	(Percent)
<u>Sex</u>	<u>1385</u>	<u>100%</u>	<u>279</u>	<u>100%</u>
Male	925	66.8%	191	68.5%
Female	460	33.2%	88	31.5%
Unknown	0	0.0%	0	0.0%
<u>Race/Ethnicity</u>	<u>1385</u>	<u>100%</u>	<u>279</u>	<u>100%</u>
White	843	60.9%	145	52.0%
Black	182	13.1%	47	16.8%
Hispanic	258	18.6%	65	23.3%
Asian/Pacific Islander	14	1.0%	1	0.4%
American Indian	24	1.7%	5	1.8%
Other	30	2.2%	8	2.9%
Unknown	34	2.5%	8	2.9%
<u>Age at Diagnosis</u>	<u>1385</u>	<u>100%</u>	<u>279</u>	<u>100%</u>
0-4	1	0.1%	0	0.0%
5-9	0	0.0%	0	0.0%
10-14	8	0.6%	0	0.0%
15-19	127	9.2%	5	1.8%
20-24	251	18.1%	21	7.5%
25-29	191	13.8%	15	5.4%
30-34	247	17.8%	49	17.6%
35-39	170	12.3%	53	19.0%
40-44	177	12.8%	61	21.9%
45-54	170	12.3%	72	25.8%
55 & Over	40	2.9%	3	1.1%
Unknown	3	0.2%	0	0.0%
<u>Exposure Category</u>	<u>1385</u>	<u>100%</u>	<u>279</u>	<u>100%</u>
Injecting Drug User	556	40.1%	207	74.2%
Sex W/Injecting Drug User	158	11.4%	9	3.2%
MSM and Injecting Drug User	117	8.4%	36	12.9%
1-3 Different Sex Partners	197	14.2%	7	2.5%
4-6 Sex Partners	49	3.5%	2	0.7%
7-9 Sex Partners	7	0.5%	0	0.0%
10-19 Sex Partners	7	0.5%	0	0.0%
20+ Sex Partners	1	0.1%	1	0.4%
Occupational Exposure	4	0.3%	0	0.0%
Receiving Blood Transfusion/Products	5	0.4%	0	0.0%
Perinatal Transmission	0	0.0%	0	0.0%
Suspected Perinatal Transmission	25	1.8%	1	0.4%
History of STDs1	112	8.1%	12	4.3%
Receiving Money/Drugs For Sex	8	0.6%	0	0.0%
Sex W/Person Paid Money/Drugs For Sex	0	0.0%	0	0.0%
Other Non-HCV Related Risk				
Sexual Abuse/Assault	2	0.1%	0	0.0%
MSM and Sex W/Person W/HIV/AIDS	19	1.4%	1	0.4%
Remaining MSM	52	3.8%	0	0.0%

Category	Total Tested		Total HCV Antibody Positive	
	Number	(Percent)	Number	(Percent)
Sex W/Person W/HIV/AIDS	19	1.4%	0	0.0%
Women Who have Sex W/MSM	13	0.9%	0	0.0%
No Risk Info Available	34	2.5%	3	1.0%
<u>Geographical Distribution</u>	<u>1385</u>	<u>100%</u>	<u>279</u>	<u>100%</u>
Denver Metro	1165	84.1%	252	90.3%
Northeast	23	1.7%	1	0.4%
Northwest	28	2.0%	1	0.4%
South Central	12	0.9%	3	1.0%
Southeast	59	4.3%	8	2.9%
Southwest	27	1.9%	1	0.4%
Western Slope	51	3.7%	10	3.6%
Unknown	20	1.4%	3	1.0%
Outside Colorado	0	0.0%	0	0.0%

1Syphilis, Gonorrhea, Chlamydia, Herpes, Hep B.



HEPATITIS C: COLORADO REPORTED CASES

Table 3: Comparison of the HIV Database to CDRS for Cases Diagnosed from 1993 - December 31, 2003

Category	Total HIV/AIDS (since 93)*		Total HIV/AIDS with HCV	
	Number	(Percent)	Number	(Percent)
<u>Sex</u>	<u>7372</u>	<u>100%</u>	<u>1071</u>	<u>100%</u>
Male	6527	88.5%	907	84.7%
Female	845	11.5%	164	15.3%
<u>Age at Diagnosis</u>	<u>7372</u>	<u>100%</u>	<u>1,071</u>	<u>100%</u>
Under 5	18	0.2%	0	0.0%
5-12	7	0.1%	0	0.0%
13-19	78	1.1%	11	1.0%
20-29	1524	20.7%	186	17.3%
30-39	3368	45.7%	503	47.0%
40-49	1774	24.0%	307	28.7%
Over 49	602	8.2%	64	6.0%
Unknown	1	0.0%	0	0.0%
<u>Race/Ethnicity</u>	<u>7372</u>	<u>100%</u>	<u>1071</u>	<u>100%</u>
White	4784	64.9%	598	55.8%
Black	1073	14.6%	201	18.7%
Hispanic	1389	18.8%	241	22.5%
Asian/Pacific Islander	44	0.6%	6	0.6%
American Indian	70	0.9%	19	1.8%
Multiple Race	12	0.2%	6	0.6%
<u>Exposure Category</u>	<u>7372</u>	<u>100%</u>	<u>1,071</u>	<u>100%</u>
MSM	4523	61.4%	268	25.0%
Injecting Drug Use	821	11.1%	410	38.3%
MSM/IDU	680	9.2%	282	26.3%
Hemophilia	19	0.3%	23	2.1%
Hetero ct	651	8.8%	49	4.6%
Transfusion	22	0.3%	3	0.3%
NIR	630	8.5%	36	3.4%
Perinatal	26	0.4%	0	0.0%
Total	7346		1,071	

* HIV cases with diagnosis dates prior to 1993 were included when a co-infection of HCV was present in or after 1993.