EL PASO COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT
301 South Union Boulevard
Colorado Springs, Colorado 80910

ANNUAL REPORT
Sexually Transmitted Diseases/HIV Programs
January 1, 1998 - December 31, 1998

"For every action, there is an
equal and opposite criticism."

Harrison's Postulate

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INTRODUCTION

This Report is full of sound numbers, signifying a lot. Warning: it is BORING. A compendium of sequences of numbers and percentages is always destined to induce sleep in even the most motivated reader. (Although numbers give reports rigor, they also induce mortis!) It is intended as a comprehensive repository of program data and trends spanning more than a quarter century, not simply as a summary of 1998 accomplishments (and, alas, shortcomings). It should be used as a rear view mirror: to know where you're going, it helps to know where you've been.

The Report arranges the infectious diseases that our programs are charged with controlling *in order of epidemiologic importance.* The overall impression distilled from the available data is that sexually transmissible and blood-borne infections are declining in incidence in El Paso County, and that our control initiatives have contributed to this desirable trend (Self-praise is no scandal). Gonorrhea rates have declined nearly 90% since inception of our control program in 1970, from 667 cases per 100,000 population to 79/100,000 in 1998. Chlamydia rates have declined by 16% since we initiated a formal control program in 1987, from 307 cases per 100,000 population to 258/100,000; the true rate of decline is likely to be twice the recorded one (i.e., about 33%), because testing technology has improved the probability of detecting the infection by a factor of two since 1987. The observed rate of new HIV infection has declined 85%, from 43 cases per 100,000 population in 1986 (the first full year of testing) to 6.6/100,000 in 1998. Infectious syphilis case rates declined 99% since 1973, from 19 cases per 100,000 population to 2 cases per *million.* Lastly, trends for non-reportable STD argue for substantial incidence declines during the 1990s.

STD/HIV transmission continues to occur, but at greatly diminished levels, in the socio-sexual networks of high-risk teens and adults (gang-associated persons, and men who choose men as sexual partners). The vast majority of teens and young adults are simply not contributing more than a negligible amount to observed transmission. We flatter ourselves into believing that there is indeed a powerful message in the observed association between our focal condom distribution efforts since 1988 (about 1.3 million dispensed in 11 years) and the accelerated rate of STD/HIV declines we report for El Paso County. We are positive that this self-flattery will have its detractors: we'll show you our data that support this point of view, if you show the data that support yours! Fair?

Comments, criticisms or suggestions are encouraged (To: John Potterat [719] 575-8608 or e-mail: smuth@rmi.net). Happy reading!

PART I

HEPATITIS-C PROGRAM

Monitoring infectious hepatitis has traditionally been the domain of our Department's Nursing Division. Because of the intersection between Hepatitis-B, Hepatitis-C, Hepatitis-D, and HIV/AIDS, it seems operationally desirable to incorporate control of these epidemiologically related hepatitites into the larger blood-borne infection rubric, which includes retroviruses such as HIV. Therefore our HIV Program acquired, in the Spring of 1998, the responsibility for Hepatitis-C surveillance and control. As of the end of 1998, this ambitious initiative was still a woefully underfunded mandate. But it's a real commitment, a real beginning.

Prodded by Dr. L.T. Kircher (Penrose Hospital Pathology Dept), we jointly approached the medical community to raise awareness of Hepatitis-C's seriousness and prevalence. The skeletal Hepatitis-C database in existence (containing about 3,500 reports of positive Hepatitis-C tests since the late 1980s) was exported to the HIV Program databases. A (Penrose Hospital) summer intern manually reviewed approximately 1,000 hospital medical records to retrieve medico-epidemiologic data; these are intended to comprise the base for sound estimates of Hepatitis-C prevalence and morbidity locally. Several grant proposals were written; some were successfully, though modestly, funded. As of the end of 1998, some data entry and screening funds were available, but the requested 1.5 F.T.E. positions to staff Hepatitis-C surveillance and control had not yet been allocated.

Initial start-up energies were channeled into 1) database conception and architecture; 2) coordination with the private and military medical sectors to assure their collaboration with case reporting and clinical data gathering; 3) obtaining clearance for data integrity (including assurances for confidentiality and for protection of human subjects); 4) developing extra-mural community resources for testing, counseling, and patient support-referral; 5) designing a targetted screening program to maximize impact of meagre resources; and 6) incessantly whining and begging for appropriate resources to do the job right.

PART II

CHLAMYDIA CONTROL

A Brief History

Chlamydia control was born in mid-1987 - an event occasioned by availability of affordable (but modestly sensitive) antigen tests. During 1988, we inaugurated formal contact tracing efforts and screening of high-risk women. By mid-1995, we significantly increased contact tracing efforts. Most importantly, starting on 1 July 1996, we implemented PCR testing in all health department clinics; this DNA-amplification method has the advantage of being virtually twice as accurate as first generation antigen tests. Enhanced diagnostic accuracy and enhanced contact tracing efforts are the two factors responsible for the substantial increase in reported chlamydia cases starting in 1996, from about 1200 cases

per year (in both 1995 and 1996) to about 1600 cases during 1998.

Our county's largest producer of positive chlamydia diagnoses is the Health Department (STD, Family Planning, Prenatal, and Pap clinics), followed closely by military installations (especially Fort Carson). Together, they contribute nearly three-quarters of all local diagnoses: about 40% of all county cases are diagnosed at the Health Department and about 33% at military clinics.

Starting in mid-1996, selected patients (contacts to chlamydia) at local military installations were tested with the superb PCR test. By late Spring of 1998, general PCR testing for chlamydia was implemented at Fort Carson clinics. More than 75% of the increase in reported cases between 1997 and 1998 (from 1367 cases to 1620) is accounted for by reports from military clinics (See Table below). Our data suggest that most of the remainder (25%) of the increase is due to superior contact tracing (more on that later; be patient!).

The Table below supports our epidemiologic interpretation, which "blames" superior technology and enhanced contact tracing, rather than enhanced chlamydia transmission in El Paso County. Comparing 1995 (as baseline year) to 1998, note that medical venues registering sharp increases are precisely those where PCR testing was eventually implemented. The venues registering declines - private doctor settings and Planned Parenthood - are not only places where use of the PCR is sporadic, but are also the sites that tend to detect prevalent (as opposed to incident) cases. Our interpretation (self-serving?) is that prevalence (old cases in the "reservoir") is declining and that incidence (new transmission) is, despite appearances, probably declining, or at least is not increasing. Our prediction is that when the masking effects of enhanced test sensitivity and enhanced contact tracing wear off, chlamydia morbidity will decline suddenly and substantially.

Lastly, the lopsided male-to-female ratio (there are roughly twice as many reported cases in women than in men; see Table below) is an artifact of screening (we often screen women and seldom screen men) and of the ecology of chlamydia in the human reproductive tract: men are twice as likely as women to experience spontaneous cure of chlamydia within a few weeks of initial infection.

Reported chlamydia cases: 1995-1998

	1998			1997	1996	1995
	Men	Women	Total (%)	Total (%)	Total (%)	Total(%)
Private doctor	46	244	290 (17.9)	250 (18.3)	238 (19.8)	332 (27.1)
STD Clinic	300	254	554 (34.2)	460 (33.7)	385 (32.0)	313 (25.6)
FPC/PNC/CHC*		156	156 (9.6)	229 (16.8)	219 (18.2)	177 (14.5)
Pl. Parenthood	1	31	32 (2.0)	17 (1.2)	40 (3.3)	52 (4.3)
Ft. Carson	214	275	489 (30.2)	322 (23.6)	276 (22.9)	284 (23.2)
Air Force	12	47	59 (3.6)	35 (2.6)	46 (3.8)	60 (4.9)
Detention/Zeb	24	16	40 (2.5)	54 (4.0)	N/A	N/A
Totals	597	1023	1620 (100)	1367 (100)	1204 (100)	1223 (100)

*Family Planning, Prenatal, Community Health Center, clinics

Because public and military clinics test (and screen) for chlamydia consistently, observation of secular trends from these sectors probably provides reliable sentinel information. The important sentinel indicator in the Table below is the column on the right. Note that since enhanced contact tracing (mid-1995) and enhanced PCR testing (mid-1996 for health dept and selected military patients) and enhanced PCR testing in military clinics (Spring 1998), reported morbidity predictably increases, nearly doubling in 4 years (from 657 cases in 1995 to 1251 in 1998).

Chlamydia cases by selected report source and gender
1988-1998 (Excludes private sector cases)

	H.D. Clinics		Fort Carson		Air Force		Total
	Men	Women	Men	Women	Men	Women	
1988	243	268	250	197	84	150	1192
1989	144	217	289	263	Unknown		N/A
1990	195	443	213	222	151(both)		1224
1991	253	436	288	256	118(both)		1351
Mandatory reporting begins...							
1992	185	327	277	289	45	63	1186
1993	264	299	212	239	32	38	1084
1994	264	332	226	255	20	47	1144
1995	163	150	114	170	13	47	657
1996	223	162	120	156	8	38	707
1997	261	324	158	164	7	28	942
1998	324	379	214	275	12	47	1251

Trends in health department clinics that tend to diagnose prevalent rather than incident cases (Family Planning, Prenatal, Pap clinics), unlike the STD Clinic (which probably sees more incident than prevalent cases), show steady declines during the 1990s. Note the very low number of positives in the Prenatal/Pap category (Prenatal alone accounts for 5 positive diagnoses from 151 tests, for a 3.3% rate, the lowest on record [it was 8.5% in 1997]).

Chlamydia screening in Women's Clinics
(1988-1998)

Year	Family Planning		Prenatal & PAP	
	Tests	Pos.(%)	Tests	Pos.(%)
1988	772	61 (7.9)	573	75 (13.1)
1989**	259**	30 (11.6)	410	30 (7.3)
1990	1379	121 (8.8)	471	50 (10.6)
1991	1559	114 (7.3)	537	39 (7.3)
1992	1701	65 (3.8)	586	45 (7.8)
1993	1812	70 (3.9)	531	31 (5.8)
1994	2058	66 (3.2)	512	41 (8.0)
1995	1789	44 (2.5)	420	12 (2.9)
1996	1946	68 (3.5)	508	51 (10.0)
1997	1753	82 (4.7)	418	16 (3.8)
1998	1780	62 (3.5)	355	6 (1.7)

** Only high-risk clients were tested in 1989

Chlamydia cases in STD Clinic

The following Table suggests the impact of both superior testing technology (mid-1996) and enhanced contact tracing efforts (mid-1995). As will be shown later, the large proportional and numerical increase in positive men reflects superior testing and enhanced contact tracing.

Chlamydia cases in VD Clinic
(1988-1998)

	1988		1989		1990	
	Tests	Pos (%)	Tests	Pos (%)	Tests	Pos (%)
Men	921	230 (25)	1309	125 (9.5)	1574	163 (10.4)
Women	812	175 (21.6)	1393	151 (10.8)	1707	195 (11.4)
Total	1733	405 (23.4)	2702	276 (10.2)	3281	358 (10.9)

	1991		1992		1993	
	Tests	Pos (%)	Tests	Pos (%)	Tests	Pos (%)
Men	1852	259 (14)	1924	185 (9.6)	1730	248 (14.3)
Women	2155	275 (12.8)	2210	216 (9.8)	2044	203 (9.9)
Total	4007	534 (13.3)	4134	401 (9.7)	3774	451 (12)

	1994		1995		1996	
	Tests	Pos (%)	Tests	Pos (%)	Tests	Pos (%)
Men	1917	226 (11.8)	1650	147 (8.9)	1700	215 (12.6)
Women	2224	207 (9.3)	1880	136 (7.2)	1998	171 (8.6)
Total	4141	433 (10.5)	3530	283 (8.0)	3698	386 (10.4)

	1997		1998	
	Tests	Pos (%)	Tests	Pos (%)
Men	1759	251 (14.3)	1998	298 (14.4)
Women	1907	208 (10.9)	2043	231 (11.3)
Total	3666	459 (12.5)	4041	518 (12.8)

Chlamydia: Reason for presentation

Patients find out they have chlamydia because they are sexual partners of infected persons or because they are concerned (symptoms, other STD, etc); the former are classifed as contacts, while the latter as volunteers or screening detections. The data below comprise STD, Family Planning, and Prenatal, Clinic patients (where the data are reliable).

Notice the improvement in the proportion and numbers of cases in men identified as a consequence of contact tracing - this proportion is generally between a quarter and a third; during the last 3 years, it's been one half. Importantly, the steady and steep decline in men "volunteer" cases argues for declining incidence (volunteers are

usually freshly infected, symptomatic males). Please compare men "volunteers" with "contacts" for the 1988-1995 period versus the 1996-1998 period: it is the inverse during the latter period copared to the former period. Contacts and screenees (awful word, non?) tend to be asymptomatic and to represent prevalent cases. (Interpretation of trends for women is presented in the next section below.)

Chlamydia Cases: reason for presentation
(All H.D. Clinics, 1988-1998)

MEN	1988	1989	1990	1991
Volunteer	138 (56.8%)	93 (64.6%)	123 (63%)	140 (55.3%)
Screen	24 (9.9%)	9 (6.2%)	9 (4.6%)	32 (12.7%)
Contact	81 (33.3%)	42 (29.2%)	63 (32.3%)	81 (32%)
	243 (100%)	144 (100%)	195 (100%)	253 (100%)

	1992	1993	1994	1995
Volunteer	111 (57.2%)	140 (56.2%)	124 (49.2%)	85 (55.2%)
Screen	27 (13.9%)	47 (18.9%)	41 (16.3%)	13 (8.4%)
Contact	56 (28.9%)	62 (24.9%)	87 (34.5%)	56 (36.4%)
	194 (100%)	249 (100%)	252 (100%)	154 (100%)

	1996	1997	1998
Volunteer	89 (40.3%)	95 (33.5%)	106 (32.5%)
Screen	18 (8.1%)	46 (16.2%)	62 (19%)
Contact	114 (51.6%)	143 (50.4%)	158 (48.5%)
	221 (100%)	284 (100%)	326 (100%)

WOMEN:

	1988	1989	1990	1991
Volunteer/ Screen	205 (76.5%)	112 (51.6%)	313 (70.7%)	291 (66.7%)
Contact	63 (23.5%)	105 (48.4%)	130 (29.3%)	145 (33.3%)
	268 (100%)	217 (100%)	443 (100%)	436 (100%)

	1992	1993	1994	1995
Volunteer/ Screen	260 (75%)	226 (70.8%)	229 (73%)	156 (73%)
Contact	87 (25%)	93 (29.2%)	85 (27%)	57 (27%)
	347 (100%)	319 (1060%)	314 (100%)	213 (100%)

	1996	1997	1998
Volunteer/ Screen	209 (75.2%)	247 (74%)	290 (75.3%)
Contact	69 (24.8%)	87 (26%)	95 (24.7%)
	278 (100%)	334 (100%)	385 (100%)

STD Clinic women with chlamydia: reason for presentation

To develop a sense for trends in women's reason for presentation (passive vs. active detection of cases) it is best to look at data from STD Clinic alone, since this clinic is the only reliable site where women are seen as contacts, or volunteers, or as screenees. Note that diagnosed cases nearly doubled between 1995 and 1998, relecting improved testing sensitivity and enhanced contact tracing.

	1988	1989	1990	1991
Volunteer/ Screen/ Contact	100(63%)	60(39%)	95(46%)	151(52.6%)
	59(37%)	95(61%)	113(54%)	136(47.4%)
	159(100%)	155(100%)	208(100%)	287 (100%)

	1992	1993	1994	1995
Volunteer/ Screen	135(60.8%)	117(57.1%)	117(58%)	76 (57.1%)
Contact	87(39.2%)	88(42.9%)	85(42%)	57 (42.9%)
	222(100%)	205(100%)	202(100%)	133 (100%)

	1996	1997	1998
Volunteer/ Screen	91 (56.9%)	110 (56.4%)	162 (63.8%)
Contact	69 (43.1%)	85 (43.6%)	92 (36.2%)
	160 (100%)	195 (100%)	254 (100%)

Civilian chlamydia contact interviews (1988-1998)

We have interviewed 6026 *civilian* cases of chlamydia in the last 11 years, and obtained 10,231 contacts, with a consistent contact index of about 1.7 for both men and women. The number of interviews has roughly doubled annually since 1995, as has the number of contacts.

	1988		1989		1990	
	No.	Contacts	No.	Contacts	No.	Contacts
Men	190	321 (1.7)	114	171 (1.5)	159	262 (1.65)
Women	229	379 (1.7)	176	309 (1.8)	364	659 (1.8)
Total	419	700 (1.7)	290	480 (1.7)	523	921 (1.76)

	1991		1992		1993	
	No.	Contacts	No.	Contacts	No.	Contacts
Men	269	453 (1.68)	220	352 (1.6)	186	267 (1.4)
Women	434	753 (1.74)	351	646 (1.84)	331	515 (1.56)
Total	703	1206 (1.72)	571	998 (1.73)	517	782 (1.51)

	1994		1995		1996	
	No.	Contacts	No.	Contacts	No.	Contacts
Men	144	223 (1.55)	107	162 (1.51)	213	379 (1.78)
Women	287	499 (1.74)	288	461 (1.6)	569	1047 (1.84)
Total	431	722 (1.68)	395	623 (1.58)	782	1426 (1.82)

	1997		1998	
	No.	Contacts	No.	Contacts
Men	239	433 (1.8)	302	506 (1.68)
Women	433	764 (1.76)	421	670 (1.6)
Total	672	1197 (1.78)	723	1176 (1.6)

Fort Carson's Preventive Medicine folks have been doing a wonderful job of interviewing chlamydia cases starting (as we did) in 1988. For 1998, they interviewed 90% of cases - a commendable result considering that implementation of PCR-based testing in late Spring was associated with a 50% increase in diagnoses in 1998: from 322 cases in 1997 (when they interviewed 98% of cases) to 489 in 1998.

Proportion of chlamydia cases interviewed
(Fort Carson)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Reported	447	552	435	544	566	541	481	284	276	322	489
Interviewed	65%	63%	90%	77%	85%	88%	93%	91%	95%	98%	90%

Overall, they have reported 4937 cases since 1988 and interviewed 82.4% (4067/4937).

Chlamydia contact tracing

Intensified contact tracing since 1995, coupled with implementation of PCR-based testing, combined to substantially increase the number (from 80 to 286) and proportion (from 12.5% to 31.2%) of newly diagnosed chlamydia contacts. Note also the rapid proportional decline in contacts "not infected": it's an artifact of superior tests, which are less likely to produce false negative results. Also encouraging is the declining number and rate of contacts who were not located ("not examined"). We may just be getting a bit gooder at finding people (self-serving comment, naturally).

Local contacts to chlamydia: Outcomes

	1988	1989	1990	1991
Infected (New cases)	97 (18.5)	87 (19.8)	118 (15.2)	229 (23)
Not Infected	279 (53.3)	268 (60.1)	553 (71.2)	613 (61.6)
Not Examined	147 (28.1)	85 (19.3)	106 (13.6)	153 (15.4)
Total:	523 (100)	440 (100)	777 (100)	995 (100)

	1992	1993	1994	1995
Infected (New cases)	184 (21.1)	160 (21)	115 (15.4)	80 (12.5)
Not infected	564 (64.6)	367 (48.2)	384 (51.5)	345 (53.7)
Not examined	125 (14.3)	235 (30.8)	247 (33.1)	217 (33.8)
	873 (100)	762 (100)	746 (100)	642 (100)

	1996	1997	1998
Infected (New cases)	202 (18.3)	246 (21.1)	286 (31.2%)
Not infected	373 (33.9)	314 (26.9)	296 (33.0%)
Not examined	526 (47.8)	606 (52.0)	315 (35.1%)
	1101 (100)	1142 (100)	897 (100%)

Thus, 9188 contacts have been sought locally in 11 years, of whom 1804 (19.6%) were newly identified cases; 4356 (47.4%) others were treated preventively but had negative tests.

Proportion of Chlamydia Cases in Teens

The first full year of mandatory chlamydia reporting was 1992; thus the data are reasonably reliable since then. The trend shows that teens contribute a stable proportion of overall cases (in the mid to high thirties), with absolute numbers of cases in teens not fluctuating much. The fact that we record in 1998 about the same number of cases as in 1992, when the tests were lousy and contact tracing efforts less intense supports our view that actual chlamydia transmission among teens is *at least* stable (and *may well be* declining).

Year	Total Cases	Cases (Percentage) in Teens	(Male	: Female)
1992	1592	567 (35.6)	107	460
1993	1575	585 (37.1)	132	453
1994	1687	658 (39.0)	128	530
1995	1223	478 (39.1)	79	399
1996	1203	444 (36.9)	74	370
1997	1367	526 (38.5)	110	416
1998	1620	590 (36.4)	128	462

Chlamydia and Gonorrhea Coinfections

Persons who are diagnosed with chlamydia belong to sexual networks that are different from persons who acquire gonorrhea. Typically, only 8 percent of chlamydia patients, for example, have concurrent gonorrhea infection. It is thus interesting to look at the characteristics of patients with coinfection, since these persons presumably straddle both (distinct) sexual networks. Such data are only available on computer since 1996. The dually-infected poster person is most often a teen-age female of African-American or Hispanic background. The substantial increase (during the last 3 years) in the proportion of dually-infected persons who are teen-aged minority females suggests transmission in gang sexual networks. We will obtain more ethnographic information during 1999 to confirm our

suspicion and to improve our interventions in those transmission-efficient sexual networks.

CT/GC Coinfection, by selected characteristics
(1996-1998)

	Number (%) female	Number (%) non-white	Number (%) in teens
1996	51 (52.6%)	66 (68.8%)	32 (33.3%)
1997	60 (56.6%)	73 (68.6%)	51 (48.1%)
1998	78 (57.4%)	104 (77.6%)	64 (47.1%)

Part III

HUMAN IMMUNODEFICIENCY VIRUS INFECTION

In El Paso County, the news about HIV is very good: not only are those who are infected dying at a dramatically lower rate than heretofore, but few people are getting infected each year. The combination of "miracle drugs" with improved behavioral self-defense by high-risk folks (men who have sex with men and drug injectors) have markedly contributed to the reductions in new transmission and mortality we happily report.

We record a spectacular 80% decrease in HIV/AIDS deaths since 1995 - our base year because miracle drugs were introduced late that year. We surmise two reasons: a survivor effect and miracle drugs, especially protease inhibitors. In brief, "survivor effect" refers to a phenomenon common in epidemics: those whose immune defenses against the infectious agent are strong tend to survive longer, while those with less effective defenses tend to die early. Thus, slowing of mortality was a predictable event - even in the absence of efficacious medications. We suspect - and this is only a guess - that most of the reduction in HIV/AIDS mortality can be attributed to better medications and much to a survivor effect.

AIDS Deaths (1995-1998)

1995: 68 ("Miracle" drugs introduced late 1995)
1996: 41
1997: 30
1998: 13

Not all HIV/AIDS deaths reported herein occurred locally. Patients who reside locally at time of diagnosis or time of report may subsequently move elsewhere; should they die elsewhere, we record these events in our database (more on that later).

This phenomenon - retarding death - is reflected in CD-4 count gains during the 1990s. (The data are soft in that not all HIV patients are CD-4 tested and, of those tested locally, obligatory reporting did not start until mid-1993.) The table below shows the mean CD-4 count as of the end of the reporting year for those alive (i.e., not known to be dead) as of the end of that year, by major risk category: men who have sex with men and/or injecting drug users. (We have CD-4 counts on about half of all living patients each year.) Lastly, we exclude women with HIV because the numbers are very small (mercifully).

Mean CD-4 Counts For Men With HIV Or AIDS Not Known To Be Dead As Of The End Of Reporting Year
(By major risk factor, 1992-1998)

(N= the number of patients with CD4 count data in that year.)

Year	Gay/Bisexual	Injectors	Gay injectors
1991	273 (N= 53)	327 (N= 11)	286 (N= 16)
1992	203 (N= 64)	155 (N= 11)	252 (N= 16)
1993	249 (N=106)	362 (N= 30)	198 (N= 23)
1994	282 (N=117)	217 (N= 28)	214 (N= 34)
1995	227 (N=123)	243 (N= 31)	242 (N= 37)
1996	229 (N=116)	316 (N= 32)	187 (N= 29)
1997	292 (N= 98)	320 (N= 21)	267 (N= 31)
1998	324 (N= 98)	362 (N= 21)	290 (N= 19)

We also note an encouraging secular trend: a declining proportion of HIV patients with counts below 200 - the initial point for onset for life-threatening infections.

Year	Percent (and Number) with < 200 Cells
1991	56 (N= 80)
1992	65 (N= 91)
1993	58 (N=159)
1994	52 (N=179)
1995	55 (N=191)
1996	60 (N=177)
1997	48 (N=150)
1998	41 (N=138)

AIDS proper: a brief profile

At least 733 adults with full-blown AIDS have lived in the Pikes Peak region since the first reported case in August 1982. About two-thirds (65%) are known to be dead. Nearly equal numbers of cases have been counted locally (376) compared to those diagnosed elsewhere (347) who moved (and were reported) here after their AIDS diagnosis.

Note: all data in this Report refer to *adult* HIV/AIDS cases. Pediatric cases (N= 15) are discussed in the last section of Part III.

AIDS cases having resided locally
(Based on Report1)

Yr.	Counted locally No.	Dead	(%)	Counted elsewhere No.	Dead	(%)	Total No.	Dead	(%)
1982	1	1	(100)				1	1	(100)
1983	2	2	(100)	3	3	(100)	5	5	(100)
1984	1	1	(100)	1	1	(100)	2	2	(100)
1985	7	7	(100)	1	1	(100)	8	8	(100)
1986	13	12	(92)	7	5	(71)	20	17	(85)
1987	9	9	(100)	12	12	(100)	21	21	(100)
1988	24	23	(96)	14	11	(79)	38	34	(90)
1989	32	30	(94)	32	28	(88)	64	58	(91)
1990	33	30	(91)	27	21	(78)	60	51	(85)
1991	33	29	(88)	32	26	(81)	65	55	(85)
1992	29	20	(69)	56	41	(74)	85	61	(72)
1993	45	22	(49)	47	33	(70)	92	55	(60)
1994	50	28	(56)	46	21	(46)	96	49	(51)
1995	44	17	(39)	32	10	(31)	76	27	(36)
1996	35	8	(23)	12	6	(50)	47	14	(30)
1997	18	2	(11)	9	4	(44)	27	6	(22)
1998	13	2	(15)	13	0	(0)	26	2	(8)
Ttl:	376	243	(65)	347	223	(65)	733	466	(65)

The above table shows year of diagnosis and whether the person diagnosed that year is known to be dead (the person may not have died in that specific year. For death by year in which it occurred, look 2 Tables below).

Thus, nearly three-fifths of all HIV-infected adults (N=1260) have so far progressed to AIDS (733/1260= 58%).

Percentage of Adult HIV Cases Having Progressed to AIDS

1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
14	11	18	20	21	26	29	38	42	51	53	57	58

HIV/AIDS cases by age at report and clinical status
(1982-1998) Based on Report2 and 2a

It is instructive to examine the data by 1) age at report and by 2) age at clinical diagnosis. (The numbers in parentheses in the Table below represent the AIDS subset. Thus, for example, 51 (40) means that 51 persons with HIV were identified, of whom 40 are known to have AIDS.) Age at Report refers to age at report *to our health department*. Death refers to the actual year in which the person died.

Because many HIV positive people move to El Paso County from elsewhere where they may have initially been diagnosed, it is possible for someone to be older at time of report than at time of initial diagnosis. The difference is illustrated in the following two tables. The first table records mean age at *report* to us; the second, mean age at *initial* diagnosis.

Year Reported	Age at report Mean	S.D.	Totals HIV(AIDS)	Deaths
1982-85	30.6	7.4	51 (40)	8
1986	30.1	8.5	128 (81)	9
1987	29.7	7.8	93 (60)	12
1988	32.6	10.6	101 (64)	31
1989	32.0	9.8	96 (55)	19
1990	32.5	9.8	99 (63)	37
1991	32.4	8.7	84 (47)	52
1992	33.1	9.3	99 (62)	55
1993	32.6	7.1	98 (60)	54
1994	33.6	7.0	110 (56)	64
1995	36.3	9.7	81 (43)	77
1996	36.7	9.8	99 (58)	45
1997	35.5	9.0	66 (24)	36
1998	35.5	8.7	55 (20)	14
Total			1260 (733)	513

Note the steadily increasing age, which argues for a prevalent cohort (historically, rather than recently, infected people progressing to disease and - more slowly presently - death). Note that roughly 100 persons with HIV have been reported each year (1986-1996) and that, during the last 2 years, half as many were reported. This notable decrease since 1997 supports the idea of an imploding epidemic.

HIV/AIDS cases by age at first diagnosis
(1982-1998) Based on Report3

Year Diagnosed	Mean age	S.D.	All HIV/AIDS Cases
1982-85	30.6	8.0	102
1986	29.5	8.1	161
1987	29.2	7.4	128
1988	32.3	10.3	127
1989	31.0	9.5	124
1990	31.0	8.6	122
1991	31.8	8.9	98
1992	31.9	8.3	83
1993	30.0	7.0	59
1994	33.5	7.5	74
1995	36.0	11.2	61
1996	36.4	11.1	55
1997	34.1	9.2	32
1998	35.8	9.6	32

In comparing the two tables we note that there are declining numbers of persons *newly being diagnosed* as having HIV each year (especially during the 1990s; column at right) and that people are increasingly older at time of first diagnosis. These data support neither idea that 1) lots of folks or/and 2) lots of young people are newly becoming infected. To record only 32 new diagnoses annually in each of the last 2 years is remarkable (and elegant) evidence that the HIV epidemic is imploding, as we predicted 10 years ago (We had a lucid crystal ball during the late 1980s!)

Miscellaneous age chronology data

In El Paso County, the mean age at acquisition of HIV is about 29 years (based on data from 171 seroconverters); the mean age of those not known to have proceeded to AIDS nor known to have died is 37.2 (N= 479); the average age at AIDS is 35.8 (N= 733) and at death, 37.6 years (N= 513). The fact that the mean age of people living with HIV is now OLDER than mean age at first AIDS diagnosis implies that people with HIV are now living disease-free for longer periods. This encouraging change was first noted in 1996 - the first time since 1988 (when we started keeping track of such trends).

HIV/AIDS Cases By Ethnicity

Until recently, there were too few HIV/AIDS cases in minorities to attempt meaningful comparisons by sex, risk category, and HIV stage: asking detailed questions produced cells with small numbers. Although the cumulative numbers are now large enough for men, this is still not the case for women (thus: please interpret data concerning women with appropriate circumspection).

HIV/AIDS Cases in MEN By Ethnicity and Disease Stage

Note: Here, as elsewhere in this report, missing observations are not counted as part of the denominator.

Ethnicity	AIDS (N=664)	HIV (AIDS-Free) N=438
White	489 (73.6%)	283 (64.6%)
African American	90 (13.6%)	91 (20.8%)
Hispanic/Other	85 (12.8%)	64 (14.6%)

We thus infer that HIV infection is "moving" into minority populations (as it is nationally), since AIDS-free HIV infection presumably represents "recent" virus acquisition, while AIDS presumably represents "historical" acquisition. The shift is less pronounced among men classified as Hispanic/Other than it is among African-Americans -- a shift that is even more dramatic among women with HIV/AIDS: while the HIV/AIDS burden among white women is stable by disease stage, that among Hispanic/Other women drops sharply, the "balance" of which is accounted for by the increase among African-American women. Caution: relatively small numbers (We're not complaining!).

HIV/AIDS Cases in WOMEN By Ethnicity and Disease Stage

Ethnicity	AIDS (N= 66)	HIV (AIDS-Free; N= 83)
White	38 (57.8%)	49 (59%)
African American	18 (27.2%)	28 (33.7%)
Hispanic/Other	10 (15.1%)	6 (7.2%)

If we examine cases by risk category and ethnicity, by gender, we see that white men are likelier to report homosexuality as a risk factor, while non-white heterosexual men are likelier to report drug injection. (Percentage totals are on horizontal axis.)

HIV/AIDS Cases in MEN By Ethnicity and Risk Category

(Report 4b)

Risk	White	African-American	Hispanic/Other
Gay/Bisexual	559 (73.8%)	96 (12.7%)	102 (13.5%)
Injecting Drugs (Gay)	117 (77%)	20 (13.2%)	15 (9.9%)
Injecting Drugs (Hetero)	54 (52.4%)	28 (27.2%)	21 (20.4%)
"Hetero" Sex	0	3 (100%)	0
Transfusion	19 (86.4%)	2 (9%)	1 (4.5%)
Unclassified	37	7	30

HIV/AIDS in WOMEN by Risk Category and Ethnicity

(Report 4b)

Risk	White	African-American	Hispanic/Other
Injecting Drug Use	49 (62%)	19 (24%)	11 (13.9%)
Transfusion	6 (85.7%)	1 (14.3%)	0
Sex	27 (55.1%)	19 (38.8%)	3 (6.1%)
Unclassified	5	7	2

Risk Category By Stage of Disease: MEN

(Report4)

Homosexuality and injecting drug use continue to account for the vast majority of HIV/AIDS cases in men; yet a modest shift over time toward a larger proportion being contributed by (heterosexual) injectors is noted. This shift is also associated with the shift toward greater representation by minorities noted above.

Risk	AIDS (N=667)	HIV (AIDS-Free; N= 444)
Gay/Bisexuality	462 (69.9%)	283 (72%)
Injecting Drug (Gay)	118 (17.9%)	44 (11.2%)
Injecting Drug (Hetero)	67 (10.1%)	60 (15.3%)
"Hetero" Sex	1 (0.2%)	2 (0.5%)
Transfusion	13 (2.0%)	4 (1%)
Unclassified	6	51

Risk Category By Stage of Disease: WOMEN

(Report4)

If we examine risk over time, we note an increase in women reporting injecting drug use. Since women injectors tend to shoot drugs with heterosexual injectors, this observation dovetails nicely with the (above) observation of the increasing proportion of HIV among heterosexual male injectors:

Risk	AIDS (N=66)	HIV (AIDS-Free; N= 83)
Injecting Drug Use	34 (54%)	49 (64.5%)
Sex	24 (38%)	25 (32.9%)
Transfusion	5 (8%)	2 (2.6%)
Unclassified	3	7

We thus surmise two distinct transmission universes: 1) networks involving men who have sex with men and 2) networks of heterosexual injectors. As a risk factor, heterosexual sex (whatever that means) is either poorly represented (MEN) or proportionally declining (WOMEN).

HIV/AIDS Control Program

This program consists of two parts: the Counseling/Testing site (CTS) and the Control Program proper (e.g., outreach efforts). What follows is a potpourri of data and observations that paint an impressionistic picture of what is happening locally with HIV infection.

HIV infection by source of report and gender (1982-1998) (Report9)

The following represents the distribution of adults with HIV (including full-blown AIDS cases) reported, and where they were first identified. Note that nearly four-fifths are detected outside of health department clinics. In recent years, the relative contribution of Donor Centers and the Military has been declining. Note also the low number identified from our Drug Clinic (not an artifact of testing levels).

	Ttl Cases/(%)	Men	Women
1. Health Dept. Testing Site	213 (16.9)	199	14
2. S.T.D. Clinic	62 (4.9)	47	15
3. Drug Clinic (McMaster's)	5 (0.4)	3	2
4. Donor centers	149 (11.8)	135	14
5. Military*	145 (11.5)	133	12
6. Doctors/hospitals/other	686 (54.4)	594	92
Total:	1260 (100)	1111 (88%)	149 (12%)

* Actually, military installations have reported 201 (16% of all) cases, of whom 145 were on active duty at time of report and 56 were retired or dependents (the latter are counted in category #7 above).

HIV infection by reason for presentation (1982-1998) (Report10)

A person's infection status is ordinarily detected via screening, or spontaneous presentation with symptoms (or curiosity), or contact tracing. Monitoring changes in presentation trends is important to assess the usefulness of screening or contact tracing efforts. The question we ask is: how did the HIV-infected person *initially* find out about his infection status ("Reason for presentation")? These data are based on the 1106 (88% of cases) with known information.

...viewed annually (percentages):

Reason	Thru 1986	1987	1988	1989	1990	1991	1992	1993	1994
Volunteer	19.9	20.2	11.8	14.6	20.7	10.1	27.8	18.3	17.1
Screen	63.6	74.2	79.6	74.4	65.2	79.8	65.6	74.4	69.7
Contact	16.5	5.6	8.6	11.0	14.1	10.1	6.7	7.3	13.1

	1995	1996	1997	1998	Total persons (%)
Volunteer	28.8	14.3	14.6	15	201 (18.2)
Screen	61.0	77.9	68.8	67.5	781 (70.6)
Contact	10.2	7.8	16.7	17.5	124 (11.2)

Note that, overall (1982-1998), every 10th case is detected as

a consequence of contact tracing, 70% as screenees, and about 18% as volunteers.

HIV contact interviews
(1985-1998) (Report11 & 12)

Many health jurisdictions in the United States are reluctant to interview HIV patients for sexual and needle-sharing partner information; they consider the procedure ineffectual or politically delicate. We've successfully conducted such "partner notification" (contact tracing) interviews on positive clients since the late fall of 1985.

Declining numbers of persons with a first diagnosis of HIV also means that fewer persons receive formal contact interviews.

Year	No. Interviews	No. Contacts	Contact Index
1982	1	2	2.0
1985*	14	34	2.4
1986	90	158	1.8
1987	47	82	1.7
1988	57	132	2.3
1989	61	128	2.1
1990	65	133	2.1
1991	49	97	2.0
1992	52	87	1.7
1993	44	75	1.7
1994	55	93	1.7
1995	23	40	1.7
1996	37	78	2.1
1997	32	123	3.8
1998	22	66	3.0
Ttl:	649	1328	2.1

* Last quarter of 1985 only (when we officially began)

There are many reasons for our not having conducted contact-interviewing on 611 cases (1260 adult cases ever reported; 649 interviewed by us). Those not interviewed were not successfully located (N=163 cases), or were not eligible for contact interview (N=377) because counseled or interviewed in the jurisdiction of original diagnosis, or we botched the opportunity (N= 28), or the client refused (N=15), or died (N= 15) before we were able to interview them. Lastly, some cases are in progress (N=13). Thus our Program has interviewed three-quarters of all *eligible* HIV/AIDS cases (649/868).

About one-fifth (132/649) of interviewed cases name no identi-iable partners and one-third (236/649) name only one; about half 44% (283/649) name two or more partners (range 2-18).

HIV seroconverters

Persons who initially test negative for HIV antibody and who are subsequently (weeks to months later) positive are classified as seroconverters - true public health failures, because it is easy, with modest effort, to avoid getting infected. Under most circum-tances, HIV is very difficult to acquire. Just as AIDS cases represent

the old face of the epidemic, so seroconverters represent the new - hence their importance as sentinel cases.

Seroconverters by year of conversion
(Report13)

Year	Civilians	Military	Total
1981	1	0	1
1982...	1	0	1
1986	9	1	10
1987	7	3	10
1988	11	3	14
1989	12	3	15
1990	10	8	18
1991	15	5	20
1992	9	6	15
1993	13	6	19
1994	11	5	16
1995	11	4	15
1996	5	3	8
1997	7	1	8
1998	2	0	2
Ttl:	124 (72.5%)	48 (27.5%)	172 (100%)

Not all seroconversions are observed; these data are mainly useful as a trend indicator. [Caveat on recent data: it usually takes a year or two to "observe" recent seroconversions; hence recent (i.e., last two years or so) data are artifactually low.

Much of the reason for the disproportionate representation of military cases (they're about one-tenth of our adult population) is artifactual: their population is frequently tested and those who are newly positive are repatriated from overseas. When repatriated locally, they're reported to us. Three-quarters of military seroconversions occur in soldiers (as opposed to air force, navy, or marine personnel.)

Seroconverters are not very young, contrary to the propaganda in media reports; the average (mean) age at seroconversion is 29.3 years (Range 17 to 57 yrs). Only 5 (3%) of the 172 seroconverters are teens: 17 years old (one) and 19 (four). Half convert in the 20-26 age interval and another third convert at ages 30-36. Thus, the distribution is bi-modal, with excessive risk in the first half of both the twenties and thirties. (Average age at seroconversion has not changed during the last decade: it's always very late twenties.)

Seroconverters tend to be men (158/172) who have sex with men (85%) or drug injecting men who have sex with men (10%). Only about 5% are heterosexual drug injectors. Whatever little new transmission has been occurring seems to be occurring in homosexual sexual-drug networks, and a very small amount in heterosexual injector networks.

Health Department HIV antibody testing
(1985-1998)

HIV testing began in the summer of 1985 in the Counseling/ Testing Site (CTS) and to be offered in other clinics, principally the STD clinic, in 1988. (Drug clinic clients were tested via the

generic testing site since the fall of 1985.) The data below are aggregated to reflect total H.D. activity, irrespective of clinic.

We have collected 27,499 specimens for testing since mid-1985 (a little over 2,000 tests per year); 2390 were done in 1998.

To develop a sense for trend in positivity, it is best to simply look at tests done in the CTS alone, since this is where the high-risk people are likeliest to seek testing. (*These are first tests and therefore exclude repeat testing.*) The trend is: high risk (gay) men seek testing (1985-1990), followed by increasing numbers of heterosexuals (particularly women), starting in the late 1980s. Then came Magic Johnson's revelation in the late fall of 1991, which deeply affected attendance levels for about 2 years (1992-1993). Then followed a period of sustained concern by heterosexuals, but at much lower levels (1994-1998).

HIV testing in the CTS: 1985-1998

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Tests	191	322	732	757	675	801	1284	2056	1726	1342
# positive	25	52	22	13	22	32	13	13	19	14
% positive	13	16	3	1.7	3.3	4	1	0.6	1.1	1

	1995	1996	1997	1998
Tests	1374	1328	926	858
No. positive	11	14	7	12
% positive	0.8	1	0.8	1.4

Thus, 14,372 tests in CTS yielded 269 positives (1.9%) in the 13.5 years since the test became available (July 1985); the CTS alone has served to identify only 1 positive per month during the last 11 years.

In the STD Clinic proper, we see that while the number of folks accepting testing increased appreciably since 1987, the positivity rate has steadily declined. (All positive persons revealed recognized risk factors.) Overall, 6665 tests have been collected in STD Clinic, with 46 positives identified (less than 1%). As for the Drug Clinic (McMaster's), 715 tests have been collected since 1985, with 5 positives being identified (5/715 - or 0.7% - also less than 1%!).

HIV (Ab) testing in STD Clinic
(1985-1998)

	1985-86	1987	1988	1989	1990	1991	1992	1993
No. of Tests	12	73	231	320	418	644	893	614
No. Positive	8	3	3	5	9	4	5	0
Percent Positive	75	4.1	1.3	1.6	2.2	0.6	0.6	0

	1994	1995	1996	1997	1998
No. of Tests	673	649	550	698	890
No. Positive	3	3	1	1	1
Percent Pos.	0.4	0.5	0.2	0.1	0.1

HIV Testing in Adult Detention Centers

Although we have provided jail-based testing services on demand for at least 10 years, specially tagged computer data are only available starting in 1998.

Year	Metro Jail	CJC Facility	Total
1998	35	154	189

AIDS-virus infection in children:

Since the beginning of the epidemic, 15 children have been reported to us as being AIDS-virus infected; half are known to be alive, virtually all of whom are recently diagnosed (since 1993).

"Age" means age at diagnosis, not current age. (Their CTS # are, in sequence: 1163, 2369, 4505, 6044, 7278, 10027, 10423, 10746, 11338, 13682, 14909, 17103, 17292, 17438, and 21861.)

(IDU = injecting drug user)

Gender	Age	Status	Route of infection	Year reported
Male	10 yrs	Dead	Transfusion (Hemophiliac)	1985
Male	Newborn	Dead	Inf. mother (transfusion); birth	1985
Male	3 yrs	Dead	Inf. mother (transfusion); birth	1985
Male	3 yrs	Alive*	Infected mother (IDU); birth	1988
Female	Newborn	Dead	Inf. mother (Ct. to IDU); birth	1990
Male	13 yrs	Dead	Transfusion (Hemophiliac)	1991
Male	Newborn	Dead	Inf. mother (Sex with HIV+);birth	1991
Female	6 mos.	Dead	Inf. mother (Sex with HIV+);birth	1992
Male	10 yrs	Alive	Transfusion (Hemophilia)	1993
Female	Newborn	Alive	Inf. mother (Sex with IDU)	1993
Male	20 mos.	Alive	Inf. mother (Risk unknown:Arizona)	1994
Female	3 mos.	Alive	Inf. mother (Risk unknown:Germany)	1994
Female	9 yrs	Alive	Inf. mother (Risk unknown as of now	1995
Female	9 years	Alive	Child sexual abuse (Infected dad?)	1996
Female	1 year	Alive	Inf. mother (IDU/prostitute)	1998

(Funny how there's about an equal number of males and females, yet the gender distribution clusters at the beginning (males) and at the end (females) of the Table!)

Passive maternal HIV antibody (not virus) transfer:

We also have records on 23 newborns whose mothers had HIV during their pregnancy. Of the 23, two are (temporarily) lost to follow-up (ATS # 8129 and 10789), while the other 21 are not infected (CTS # 1016, 3105, 4307, 6093, 8044, 8795, 11675, 13278, 13468, 15150, 15240, 15241, 17418, 17424, 18714, 19573, 19582, 19583, 19770, and 21130).

One was born in 1980, 1 in 1987, 1 in 1988, 4 in 1991, 4 in 1992, 1 in 1993, 3 in 1994, 2 in 1995, 2 in 1996, and 4 in 1997.

Part IV
GONORRHEA CONTROL

We report 384 cases of gonorrhea for calendar 1998, a 20% increase over 1997 (319 cases) - the first increase since 1994. Whether this increase reflects the national trend (a 17% increase during 1998, also the first increase nationally in many years) or reflects intensified local transmission is not known. We lean to the latter interpretation, suspecting intensified gonorrhea transmission in the sexual networks of local gangs (See also pp. 8-9, above). We experienced a similar situation during 1990 and 1991 within local gangs. In any event, as the data below indicate, the increase is not due to substandard control efforts. In addition, the increase should be viewed in context of the long-term trend: gonorrhea morbidity is currently 90% lower than it was at its recorded apogee in 1977:

Gonorrhea case rates per 100,000
(Assumes a 1998 population of about 485,000)

1970	1973	1977	1980	1981	1982	1983	1984	1985
667	700	735	468	471	383	385	438	420

1986	1987	1988	1989	1990	1991	1992	1993	1994
333	255	232	213	208	192	155	125	186

1995	1996	1997	1998
106	70	68	79

Contact interviewing activity
(1977-1998)

After 4 years (1994-1997) of less than stellar control efforts (due to job performance problems with the State Department of Health employee responsible for most gonorrhea control efforts), operational indices improved markedly during 1998. Contact interview levels once more reached the 90 percent benchmark and the contact index (averag number of contacts elicited per case) improved to the expected level.

	`77-`79	`80-`82	1983	1984	1985	1986	1987	1988	1989	1990
	(Averages)									
Interviewed	70%	93%	97%	94%	89%	90%	91%	90%	90%	93%
Ct Index	1.35	1.87	1.8	1.8	1.7	1.8	1.7	1.5	1.6	1.65

	1991	1992	1993	1994	1995	1996	1997	1998
Interviewed	95.2%	92.1%	89.2%	73.6%	81.0%	85.5%	81.5%	90.1%
Ct Index	1.73	1.81	1.55	1.52	1.54	1.61	1.53	1.77

Gonorrhea contact tracing (1980-1998)

Sixty-nine gonorrhea cases were newly identified as a consequence of contact tracing during 1998, a strong numerical and proportional improvement in new cases identified compared to the previous few years (1995-1997). In additon, a much lower number and proportion of sought contacts to gonorrhea went unexamined (e.g., unable to locate/refusals): the best level since 1993.

Local contacts to gonorrhea: Outcomes

	1980-1982	1983	1984	1985
New cases	380 (29.6%)	357 (25.9%)	475 (29.8%)	375 (23.5%)
Not infected	500 (38.9%)	567 (41.1%)	637 (40%)	593 (37.2%)
Not examined	405 (31.5%)	456 (33%)	481 (30.2%)	627 (39.3%)
Total sought	1285 (100%)	1380 (100%)	1593 (100%)	1595 (100%)

	1986	1987	1988	1989
New cases	276 (22.4%)	226 (25.6%)	197 (30.1%)	150(23.7%)
Not infected	490 (39.7%)	427 (48.3%)	269 (41.1%)	312(49.3%)
Not examined	468 (37.9%)	231 (26.1%)	188 (28.8%)	171(27.0%)
Total sought	1234 (100%)	884 (100%)	654 (100%)	633(100%)

	1990	1991	1992	1993
New cases	239 (30%)	214 (29.7%)	222 (31.1%)	136(35%)
Not infected	389 (49%)	361 (50.1%)	347 (48.5%)	150(38.5%)
Not examined	166 (21%)	145 (20.1)	146 (20.4%)	103(26.5%)
Total sought	894 (100%)	720 (100%)	715 (100%)	389 (100%)

	1994	1995	1996	1997
New cases	157 (33.1%)	78 (22.5%)	47 (21.8%)	44 (22.2%)
Not infected	152 (32.1%)	143 (41.2%)	82 (38.0%)	77 (38.9%)
Not examined	165 (34.8%)	126 (36.3%)	87 (40.2%)	77 (38.9%)
Total sought	474 (100%)	347 (100%)	216 (100%)	198 (100%)

	1998
New cases	69 (35.2%)
Not infected	83 (42.3%)
Not examined	44 (22.5%)
	196 (100%)

Gonorrhea case distribution (1987-1998)

Cases	1987	1988	1989	1990
Civilian	592 (59.1%)	477 (51.5%)	449 (52.1%)	425 (50.6%)
Fort Carson	385 (38.4%)	428 (46.2%)	394 (45.8%)	397 (47.3%)
USAF	25 (2.5%)	22 (2.4%)	18 (2.1%)	18 (2.1%)
Total:	1002	927	861	840

	1991	1992	1993	1994
Civilian	440 (56.7%)	368 (58%)	303 (58.6%)	531 (68.9%)
Fort Carson	324 (41.8%)	255 (40.1%)	205 (39.7%)	236 (30.5%)
USAF	12 (1.5%)	12 (1.9%)	9 (1.7%)	6 (0.8%)
Total:	776	635	517	773

	1995	1996	1997	1998
Civilian	326 (67.4%)	236 (69.0%)	225 (70.5%)	285 (74.2%)
Fort Carson	152 (31.4%)	102 (29.8%)	83 (26.0%)	95 (24.7%)
USAF	6 (1.2%)	4 (1.2%)	11 (3.5%)	4 (1.0%)
Total:	484	342	319	384

Gonorrhea morbidity is increasingly a civilian phenomenon. For the last quarter century, the military gonorrhea burden tended to dominate the local scene, with 40-45% of cases being reported from the military sector. During the last five years, a notable decline has occurred; the military now accounts for about a quarter of cases, with Fort Carson reporting one third the burden it reported during the late 1980s.

The proportion and number of gonorrhea cases accounted for by teens increased substantially during 1998. Nearly two-thirds of the increase in reported gonorrhea cases noted between 1997 and 1998 is attributable to teens. During the last decade, the large majority of all gonorrhea cases locally have occurred in the socio-sexual networks of African-Americans (see 5 tables below). Since, according to police records and our own experience, quite a few local gang members are young African-Americans, we suspect that the 1998 increase in gonorrhea morbidity may be linked to gang transmission.

Gonorrhea in Teens
(Since AIDS)

Year	Total Gonorrhea	Total (%) in teens
1981	1537	336 (21.9)
1982	1263	281 (22.2)
1983	1280	246 (19.2)
1984	1525	350 (23)
1985	1530	341 (22.3)
1986	1265	304 (24)
1987	1002	229 (22.9)
1988	927	214 (23.1)
1989	861	248 (28.8)
1990	840	247 (29.4)
1991	776	237 (30.5)
1992	635	207 (32.6)
1993	517	150 (29.1)
1994	773	246 (31.8)
1995	484	135 (27.9)
1996	342	92 (26.9)
1997	319	104 (32.6)
1998	384	145 (37.8)

Gonorrhea: Reason for Presentation (Epidemiologic category)

The following data reinforce our assertion that weaknesses in control efforts are not related to observed increase in case reports.

	1984	1985	1986
Volunteer	838 (55%)	870 (56.9%)	680 (53.8%)
"Screenee"	170 (11.1%)	210 (13.7%)	192 (15.2%)
Contact	517 (33.9%)	450 (29.4%)	393 (31%)
Total cases	1525 (100%)	1530 (100%)	1265 (100%)

	1987	1988	1989	1990
Volunteer	537 (53.6%)	502 (54.2%)	485(56.3%)	498 (59.3%)
"Screenee"	159 (15.9%)	140 (15.1%)	133(15.5%)	118 (14%)
Contact	306 (30.5%)	285 (30.7%)	243(28.2%)	224 (26.7%)
Total cases	1002 (100%)	927 (100%)	861 (100%)	840 (100%)

	1991	1992	1993	1994
Volunteer	426 (54.9%)	344 (54.2%)	269 (52%)	409 (52.9%)
"Screenee"	122 (15.7%)	107 (16.8%)	125 (24.2%)	148 (19.1%)
Contact	228 (29.4%)	184 (29%)	123 (23.8%)	216 (28%)
Total cases	776 (100%)	635 (100%)	517 (100%)	773 (100%)

	1995	1996	1997	1998
Volunteer	292 (60.3%)	212 (61.9%)	192 (60.3%)	215 (56%)
"Screenee"	72 (14.9%)	43 (12.5%)	49 (15.3%)	71 (18.5%)
Contact	120 (24.8%)	87 (25.6%)	78 (24.3%)	98 (25.5%)
Total cases	484 (100%)	342 (100%)	319 (100%)	384 (100%)

Gonoccocal pelvic inflammatory disease

The notable datum is the percentage recorded for the last 10 years: between 20-30% of all women with gonorrhea have signs or symptoms of PID. We suspect this has to do with the kind of woman who is currently getting GC: living a rough life.

	1976	1977	1978	1979	1980	1981	1982	1983
Cases	130	111	85	84	84	76	79	108
Percent	18.3	15.5	15.4	16	14	12	17	21

	1984	1985	1986	1987	1988	1989	1990	1991
Cases	75	123	98	73	73	73	87	74
Percent	12.7	19.7	17.7	16.3	18.6	20.2	25.4	23.6

	1992	1993	1994	1995	1996	1997	1998
Cases	71	44	73	67	37	48	62
Percent	25	21.3	20.2	29.8	23.9	30.6	31.0

Urethrally asymptomatic men

Men with inapparent infection have traditionally been vigorously pursued in El Paso County: the consistency in the trend is best viewed from the column at the far right.

Year	Asymptomatic	All men	Pct. Asymptomatic
1981	143	927	15.4
1982	116	814	14.3
1983	131	777	16.9
1984	139	936	14.9
1985	126	907	13.9
1986	106	712	14.9
1987	101	554	18.2
1988	92	534	17.2
1989	82	500	16.4
1990	78	513	15.2
1991	57	451	12.6
1992	61	354	17.2
1993	38	310	12.3
1994	70	412	17
1995	34	262	13
1996	24	187	12.8
1997	27	162	16.7
1998	28	184	15.2

Gonorrhea repeat cases

The contribution to the gonorrhea burden made by repeaters is very low and in keeping with the substantial declining recorded trend. (Can't blame the 1998 case increase on repeaters or the poor control efforts such data would imply.)

Year	Repeat cases	Percent of all cases
1973	159	9.9
1974	180	11.0
1975	129	7.7
1976	170	8.6
1977	229	11.5
1978	138	9.1
1979	156	10.2
1980	129	8.5
1981	136	8.8
1982	86	6.8
1983	89	6.9
1984	132	8.6
1985	92	6.0
1986	73	5.8
1987	48	4.8
1988	61	6.6
1989	47	5.6
1990	51	6.1
1991	50	6.4
1992	29	4.6
1993	28	5.4
1994	67	8.7
1995	25	5.1
1996	16	4.7
1997	11	7.0
1998	14	7.8

In terms of bodies, only 14 persons (6 men; 8 women) were repeaters in 1998. These 14 persons generated only 30 cases in all. (12 had 2 episodes and 2 had 3 episodes.)

Gonorrhea cases in African-Americans

Nearly two-thirds of all GC cases affect African-Americans, although the actual numbers have declined notably since the mid-1980s.

	1985	1986	1987	1988	1989	1990	1991
Number	743	637	519	542	532	576	546
Percent	(48.6)	(50.4)	(52)	(58.5)	(61.8)	(68.6)	(70.3)

	1992	1993	1994	1995	1996	1997	1998
Number	381	326	484	288	194	204	249
Percent	(60)	(63)	(66)	(61)	(60)	(64)	(64.8)

Gonorrhea in homosexual men (since AIDS)

Five of 184 GC episodes in men were acquired homosexually during 1998. The overall trend continues to support the view that most gay men are being careful in their sexual relationships.

Percent of male gonorrhea cases in gay men	
Before AIDS (Jan-Jun 1981)	16.2%
AIDS reported (Jul-Dec 1981)	9.4%
1982	6.9%
1983	7.2%
1984	6.5%
1985	5.4%
1986	2.0%
1987	0.2%
1988	1.7%
1989	1.2%
1990	0.4%
1991	1.3%
1992	2.0%
1993	1.0%
1994	Not available
1995	1.5%
1996	2.2%
1997	1.2%
1998	2.7%

PPNG (penicillinase-producing N. gonorrhoeae) cases:

During 1998 we recorded 4 cases of PPNG (21 during 1997). And although the number of cases is modest, the trend is for an increasing proportion by ten-year period (PPNG was discovered in 1976 and the first local case diagnosed in 1977).

PPNG By 10-Year Period and Recently

	PPNG Cases	Total Gonorrhea	Percentage of all GC
1977-1986:	63	16,939	0.37%
1987-1996:	180	8,100	2.2%
1997-1998:	25	703	3.6%

PPNG cases By Year (since their discovery)

1976	1977	1978	1979	1980	1981	1982	1983	1984
0	1	0	3	0	7	21	5	2

1985	1986	1987	1988	1989	1990	1991	1992	1993
4	20	15	16	13	44	32	15	2
	(1.6)	(1.5)	(1.7)	(1.5)	(5.2)	(4.1)	(2.4)	(0.4)

1994	1995	1996	1997	1998
14	4	25	21	4
(1.8)	(0.8)	(7.3)	(6.6)	(1.0)

Male-to-female ratio: Gonorrhea

This ratio is not only at an all-time low levels it is, for the first time, below parity for men! This has to do not only with the absence of gay men in GC transmission but, importantly, in the declining share o cases accounted for by Fort Carson (heavily male).

Year	Men	Women	Ratio
1973	984	613	1.6:1
1974	1015	615	1.65:1
1975	1033	643	1.61:1
1976	1266	712	1.78:1
1977	1284	714	1.8:1
1978	964	551	1.75:1
1979	1002	523	1.91:1
1980	918	602	1.52:1
1981	928	609	1.52:1
1982	807	456	1.77:1
1983	775	505	1.53:1
1984	936	589	1.59:1
1985	907	623	1.46:1
1986	712	553	1.29:1
1987	554	448	1.23:1
1988	534	393	1.36:1
1989	500	361	1.38:1
1990	513	327	1.57:1
1991	451	325	1.39:1
1992	361	274	1.32:1
1993	310	207	1.5: 1
1994	412	361	1.14:1
1995	262	222	1.18:1
1996	187	155	1.21:1
1997	162	157	1.03:1
1998	184	200	0.92:1

Part V

OTHER STD PROGRAM DATA/MISCELLANEOUS

Juvenile Detention Centers: Screening Program

As part of our effort to concentrate STD control resources on high-risk populations, we initiated an STD screening program at local juvenile detention centers in April 1997. Note that although the number of females screened nearly doubled, the number of chlamydia (CT) cases remained similar, as did gonorrhea (GC).

Juvenile Detention Gonorrhea & Chlamydia Screening

	Males			Females		
	Tests	CT Pos.(%)	GC Pos.(%)	Tests	CT Pos.(%)	GC Pos. (%)
1997	285	24 (8.4)	4 (1.4)	86	19 (22.1%)	3 (3.4)
1998	320	27 (8.4)	6 (1.9)	160	20 (12.5%)	2 (1.3%)

STD contact interviews: 1973-1998

We (along with our military colleagues) have conducted nearly 34,000 contact interviews since 1973.

Yr	Civilian Gonorrhea	Ft.Carson Gonorrhea	Syphilis (All)	Civilian Chlamydia	Military Chlamydia	HIV/ AIDS	Ttl
'73	339	420 (Est.)	48				807
'74	316	400 (Est.)	41				757
'75	334	404 (Est.)	35				773
'76	309	554 (Est.)	26				889
'77	424	520 (Est.)	14				958
'78	382	570	22				974
'79	693	645	18				1356
'80	759	574	18				1351
'81	843	632	19				1494
'82	617	620	17			1	1255
'83	693	552	15				1260
'84	780	644	27				1451
'85	749	619	29			14	1411
'86	671	467	30			90	1258
'87	556	355	13			47	971
'88	442	395	9	419	234	57	1556
'89	418	358	17	290	355	61	1499
'90	424	357	21	523	336	65	1726
'91	445	294	27	703	421	49	1939
'92	339	246	13	571	481	52	1702
'93	267	194	28	517	475	44	1525
'94	336	233	12	431	449	55	1516
'95	248	144	15	395	310	23	1135
'96	206	99	9	802	262	37	1415
'97	189	86	3	699	325	32	1334
'98	251	95	1	735	496	22	1600
Ttl:	12001	10477	527	6038	4144	649	33911

Outreach: field investigations

Nearly 58,000 client tracing investigations have been completed since 1973. The 45% increase since 1995 is due almost entirely to intensified case-finding surrounding chlamydia infection (we were able to assign additional case-finders in mid-1995).

Note: The categories "Gonorrhea, Syphilis, and Chlamydia" include only contacts (sexual partners) to these diseases.

Year	Gonorrhea	Syphilis	Chlamydia	Other*	HIV**	Total
1973	892	114	N/A	405	N/A	1411
1974	805	114		441		1360
1975	719	124		633		1476
1976	979	78		718		1775
1977	1199	53		530		1782
1978	870	92		580		1542
1979	1032	33		583		1648
1980	1256	46		572		1874
1981	2205	41		483		2729
1982	1307	29		446		1782
1983	1754	41		449		2244
1984	2078	45		472		2595
1985	2038	49		532	25	2644
1986	1519	59		538	307	2423
1987	1042	24	7	456	96	1625
1988	757	32	570	577	246	2182
1989	792	36	498	446	320	2092
1990	1051	37	946	716	331	3081
1991	916	66	1148	921	419	3470
1992	854	68	979	900	249	3050
1993	445	59	836	603	239	2182
1994	611	25	777	841	242	2496
1995	400	18	720	614	185	1937
1996	370	28	1438	626	304	2766
1997	344	17	1539	815	202	2917
1998	409	26	1298	827	239	2799
Total:	26644	1354	10756	15724	3404	57882

* Follow-up for positive syphilis serologies, positive GC and chlamydia tests, and test-of-cure follow-ups.

** Contacts to HIV and positive ELISA test follow-ups

Newly identified STD cases
(1973-1998)

STD patient interviewing and the tracing of named partners occasioned the identification of 9439 new cases (called "broughts", short for brought-to-treatment in jargon) since 1973, or about one per calendar day. The large increases since 1995 can be attributed to increased staff (since mid-1995) to fight chlamydia and to superior chlamydia tests, introduced in mid-1996.

Year	Broughts	Year	Broughts
1973	301	1987	240
1974	284	1988	299
1975	318	1989	244
1976	338	1990	366
1977	409	1991	447
1978	427	1992	418
1979	404	1993	296
1980	501	1994	276
1981	667	1995	155
1982	519	1996	289
1983	360	1997	320
1984	481	1998	399
1985	393		
1986	288		

STD Clinic Attendance

STD Clinic attendance has been pretty stable for years, with between 4,000 and 5,000 annual visits (Mean= about 4,400).

Year	New visits	Return visits	Total
1973	2449	2039	4488
1974	2938	2224	5162
1975	3508	2267	5775
1976	2988	2368	5356
1977	2546	2497	5043
1978	2316	2114	4430
1979	2201	2166	4367
1980	2209	1959	4168
1981	2471	2076	4547
1982	2135	1721	3856
1983	2218	1691	3909
1984	2234	1650	3884
1985	2301	1565	3866
1986	2250	1562	3812
1987	2042	1350	3392
1988	2323	1675	3998
1989	2319	1733	4052
1990	2223	2211	4434
1991	2387	2629	5016
1992	2664	2304	4968
1993	2646	1853	4499
1994	2769	2289	5058
1995	2273	1822	4095
1996	2360	1829	4189
1997	2202	1904	4106
1998	2492	2000	4492
		26-year total:	114,962

(Mean = 4422 per year)

Non-reportable STDs in STD Clinic

Non-reportable STDs were first systematically recorded in 1982. These data are not catholic, because only STD Clinic information is included. In addition, they are soft, because neither diagnostic nor surveillance criteria are rigorous. They are presented mainly as rough trend indicators.

MEN: Note the decline in urethritis ("NGU/Chlamydia") since the early 1990s, despite increased contact tracing and superior tests for chlamydia (from mid-1996 on). Another encouraging datum suggesting that young men may be more careful in sexual matters (condom use? serial rather than concurrent sexual partnerships?) is the pronounced decline in venereal warts diagnoses. No data are given for Herpes for 1991-98 because they were not rigorously kept, but anecdotal evidence suggests that case levels are low.

WOMEN: Note the stable-to-declining pattern for sexually transmissible disease diagnoses (chlamydia, trichomoniasis, venereal warts).

Infection	MEN								
	1982	1983	1984	1985	1986	1987	1988	1989	1990
NGU/Chlamydia	569	552	512	447	419	416	489	383	477
Herpes (1st Episode)	70	83	34	32	59	49	42	28	3
Venereal warts	131	185	127	132	172	119	244	252	310
Scabies	17	21	15	10	19	21	15	25	10
Phithirus pubis	56	59	44	50	41	54	40	43	38
Totals:	843	900	732	671	710	659	830	731	838

	MEN							
	1991	1992	1993	1994	1995	1996	1997	1998
NGU/Chlamydia	667	696	675	766	436	484	498	520
Herpes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V. Warts	228	292	256	303	157	102	84	97
Scabies	20	29	23	25	35	25	17	12
P. Pubis	43	43	40	24	19	22	13	15
Totals:	958	1060	994	1118	647	633	612	644

Infection	WOMEN								
	1982	1983	1984	1985	1986	1987	1988	1989	1990
Chlamydia	Not Available here						175	151	195
Trichomoniasis	461	492	390	275	112	115	103	99	79
Monilia	456	463	391	318	110	188	231	284	279
NSV	250	279	257	233	297	240	337	435	474
Herpes (1st Episode)	51	59	25	18	38	33	35	25	13
Venereal warts	55	62	49	76	72	61	117	88	112
Scabies	4	4	3	4	9	4	10	11	6
Phithirus pubis	29	31	22	17	29	24	22	36	31
Totals:	1306	1390	1137	941	667	665	1030	1129	1189

WOMEN

	1991	1992	1993	1994	1995	1996	1997	1998
Chlamydia	275	216	203	206	136	171	208	254
Trichomoniasis	101	97	103	116	89	103	92	107
Monilia	315	320	271	242	235	243	175	185
NSV	633	685	548	551	408	487	531	688
Herpes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V. Warts	115	181	195	207	84	73	53	37
Scabies	13	11	8	11	17	11	7	5
P.Pubis	30	31	29	31	20	17	2	7
Totals:	1482	1541	1357	1364	989	1105	1068	1283

Syphilis

In the early 1970s, the rate was about 22 cases/100,000; the current (*infectious syphilis*) rate is nearly 100 times lower: 2 cases per million!

Year	Infectious syphilis	Late syphilis	Total
1973	50	47	97
1974	52	17	69
1975	48	20	68
1976	39	17	56
1977	20	12	32
1978	26	19	45
1979	19	8	27
1980	23	4	27
1981	16	3	19
1982	18	7	25
1983	15	9	24
1984	26	4	30
1985	27	12	39
1986	31	10	41
1987	13	6	19
1988	11	8	19
1989	11	5	16
1990	14	3	17
1991	29	11	40
1992	13	15	28
1993	18	9	27
1994	9	16	25
1995	7	8	15
1996	9	15	24
1997	3	7	10
1998	1	11	12

STD/HIV and Prostitute Women (1970-1998)

Conscientious measures to control STD among local prostitute women began in June, 1970 with the introduction of mandatory gonorrhea and syphilis testing for *arrested* prostitutes (the so-called "Health Hold Order") and the application of contact tracing and street ethnography. The Health Hold Order was relinquished after a quarter of a century of use, effective 1/1/95 (because positivity

rates and other epidemiologic information no longer supported the idea that much transmission of STD or bloodborne infections could be attributed to these women). The steep decline in clinic visits by prostitutes is attributable in largest measure to abandonment of the Health Hold Order system and, in some measure, to declining numbers of prostitutes locally (by about 40% during the 1990s).

As the following (inelegant but informative) Table shows, the proportion of positive tests for gonorrhea was typically about 24% during the 1970s, 13% during the 1980s, and 4% (or lower) thereafter. As for chlamydia, the initial yearly prevalence of 6% reached a temporary high of 12% the following year, has stabilized at about 5% until 1996, and now seemingly exhibits the fluctuations associated with very small numbers.

As for HIV infection (data not shown), 697 (98%) of 710 women with histories of prostitution (here or elsewhere, currently or formerly) have been tested for HIV at our facilites since the summer of 1985 (when the test became available) and 27 (3.8%) have been positive. The positivity rate for women who ever practiced prostitution locally (3.8%) is lower by a factor of nearly two compared to women who practiced elsewhere (6.8%). As for risk factors, 23 (85%) of the 27 HIV-infected women admitted to a history of injecting drug use and 4 didn't (we feel that at least two lied).

Note before you inspect the following Table: Chlamydia testing started 1 July 1987; in addition, there are fewer chlamydia tests than visits because specimens, until recently, were not collected on menstruating patients.

Gonorrhea & Chlamydia in Local Prostitutes

Year	Original Visits (Number)	Gonorrhea Cases # (% Positive)	Chlamydia Cases # (% Positive)
1970	105	42 (40.0)	
1971	164	52 (31.7)	
1972	226	53 (23.5)	
1973	154	42 (27.3)	
1974	142	34 (23.9)	
1975	171	51 (29.8)	
1976	341	119 (34.9)	
1977	311	57 (18.3)	
1978	348	32 (9.2)	
1979	204	36 (17.6)	
1980	228	21 (9.2)	
1981	186	35 (18.8)	
1982	197	27 (13.6)	
1983	214	31 (14.5)	
1984	258	23 (8.9)	
1985	254	27 (10.6)	
1986	174	33 (19.0)	
1987	169	19 (11.2)	4 of 66 (6.0)
1988	195	21 (10.8)	17 of 138 (12.3)
1989	192	24 (12.5)	15 of 150 (10.0)
1990	157	4 (2.5)	9 of 144 (6.3)
1991	148	7 (4.7)	11 of 148 (7.4)
1992	150	4 (2.7)	7 of 148 (4.7)
1993	114	6 (5.2)	3 of 112 (2.7)
1994	133	10 (7.5)	7 of 130 (5.4)
(Totals for the 25 years of the Health Hold Order system):			
	4935	810 (16.4)	73 of 1036 (7.0)
1995	43	0 (0.0)	1 of 43 (2.3)
1996	50	3 (6.0)	7 of 48 (14.6)
1997	42	0 (0.0)	8 of 40 (20.0)
1998	39	2 (5.1)	1 of 39 (2.6)
(Totals since end of Health Hold System: 4 years):			
	174	5 (2.9)	17 of 170 (10.0)

Male prostitutes

Until the mid-1980s, male prostitutes were rarely observed in Colorado Springs. Between 1985 and 1994 (a decade) Colorado Springs police arrested 21 male prostitutes (all cross-dressers) on 28 occasions. (We served Health Hold Orders on all.) 3 of the 21 (14.3%) were positive for HIV, one for pharyngeal gonorrhea, and one for infectious syphilis.

Presentations

In 1998, 63 formal presentations were recorded, with a total audience of 2022 (excluding radio/television audiences): about one presentation/week, with an average audience of 32. Demand for such presentations was highest during the late 1980s and early 1990s, when concern about HIV ("AIDS Hysteria") was at its peak. Most current audiences comprise health workers and, importantly, high risk persons.

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Talks	110	132	127	113	117	128	95	69	101	58
Audience	3683	6847	5462	5165	5065	5358	4778	2334	3558	1761

	1997	1998
Talks	44	63
Audience	1026	2022

Summary of medications used in STD Clinic

All medications are provided by our State health department, except metronidazole and benadryl.

	1995	1996	1997	1998
Bicillin (1.2 m.u.)	48 syringes	88	47	34
Spectinomycin (2g)	2 vials	0	3	1
Benadryl (50mg)	400 capsules	0	0	Unknown
Erythromycin(250mg)	10772 tablets	7502	5948	5400
Rocephin (250mg)	10 vials	8	7	11
Doxycycline	25948 capsules	21618	24244	20988
Suprax (440mg)	666 tablets	785	640	641
Metronidazole(500mg)	3640 tablets	4260	860	1020
Ofloxacin	274 tablets	410	100	30 (est.)
Zithromax	None	65	200	286

Condom Distribution Program

An active program of condom distribution in high risk settings was initiated in late 1987 (See: *Morbidity and Mortality Weekly Report* of 14 February 1992, pp 94-95, 101). Especially targetted were prostitutes on "the stroll" (streets), along with their customers; men patronizing gay bars; In-(Drug Clinic) and Out-(street outreach) -Of-Treatment injecting drug users; and folks affiliated with street gangs. Good records, as opposed to anecdotal guesses or estimates, have been been maintained since 1993, when we moved into the new facilities on South Union.

Condoms Distributed: 1993-1998

1993:	50,000	1996:	247,000
1994:	103,000	1997:	172,000
1995:	215,000	1998:	220,000

There is a powerful temporal association between our assertive condom distribution efforts in targetted community settings and the pronounced, sustained declines in all STD/HIV in El Paso County during the 1990s. We estimate that, overall, we've distributed between 1,250,000 and 1,500,000 condoms (about 100,000 dollars) in 11 years.

PART VI

The traditional tables

"You can observe a lot by watching"

Yogi Berra

MONTHLY V.D. CLINIC AND LABORATORY REPORT: EL PASO COUNTY HEALTH DEPARTMENT, 1998

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CY	POS.	PCT+
TESTING:															
HIV (Ab)	191	172	187	200	170	204	231	224	232	192	193	194	2390		
HIV (CUMULATIVE)													28155		
RPR	299	270	257	284	261	263	316	319	337	304	273	302	3485	32	0.9
FTA	0	2	2	0	1	4	3	1	4	3	4	3	27	9	33.3
GC CULTURE:															
VDC MEN:	171	166	157	145	159	150	184	195	197	158	146	177	2005	92	4.6
VDC WOMEN	176	145	137	184	152	172	190	179	199	187	166	168	2055	81	4.0
PNC WOMEN:				(YEARLY TOTAL ONLY)									151	5	3.3
FPC WOMEN:				(YEARLY TOTAL ONLY)									1780	62	3.5
CHLAMYDIA: MEN	170	165	157	145	159	149	183	193	197	157	146	177	1998	282	14.1
CHLAMYDIA: WOMEN	176	145	137	182	152	172	187	178	197	184	166	168	2004	251	12.3
CHLAM TX/EPI	121	88	82	77	77	103	123	126	133	105	95	101	1231		
GC TREAT	13	9	10	5	7	14	19	10	14	13	15	10	139		
GC PRO-TREAT	18	32	20	19	27	22	29	32	31	22	31	24	307		
LUES TREAT	0	0	1	1	0	6	0	0	1	4	5	1	19		
LUES PRO-TREAT	1	0	1	2	0	1	0	0	0	3	1	0	9		
NON V.D. TREAT	94	70	82	88	90	79	98	112	108	120	70	112	1123		
CLINIC NO.	13	12	12	13	13	13	13	13	13	13	11	12	151		

	AGECLASS							RACE							
	?	< 14	14-19	20-24	25-29	30-39	40+	W	H	B	AI	OPI	OTH	?	ALL
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
RPTSRC															
Private Male	.	.	20	9	7	8	2	13	10	12	.	.	1	10	46
Private Female	1	2	116	83	30	10	2	116	33	35	1	3	2	54	244
VDC Male	.	.	70	136	56	33	5	80	59	155	1	5	.	.	300
VDC Female	.	3	134	81	25	9	2	110	45	83	7	9	.	.	254
Carson Male	1	.	22	133	41	17	.	66	20	122	.	1	1	4	214
Carson Female	.	1	94	121	46	12	1	104	23	122	3	7	1	15	275
Air Frc Male	.	.	4	6	.	2	.	3	1	5	.	.	.	3	12
Air Frc Female	.	.	16	27	2	1	1	23	2	9	.	1	1	11	47
FPC/PN Female	.	.	50	45	6	5	3	37	31	34	2	5	.	.	109
CHC Female	.	.	28	14	3	2	.	14	16	9	.	2	.	6	47
Pl Prnt Male	.	.	.	1	.	.	.	.	.	1	.	.	.	.	1
Pl Prnt Female	2	1	17	6	5	.	.	16	2	6	.	2	.	5	31
Oth pub Male	.	.	12	7	4	1	.	3	8	12	.	1	.	.	24
Oth pub Female	.	1	7	3	2	3	.	4	6	5	.	.	1	.	16
ALL	4	8	590	672	227	103	16	589	256	610	14	36	7	108	1620

	AGECLASS						RACE							
	< 14	14-19	20-24	25-29	30-39	40+	W	H	B	AI	OPI	OTH	?	ALL
	N	N	N	N	N	N	N	N	N	N	N	N	N	N
RPTSRC														
Private Male	1	5	10	5	7	3	7	7	14	1	.	1	1	31
Private Female	1	21	15	4	10	3	22	7	20	.	1	2	2	54
VDC Male	.	26	32	20	11	3	2	12	78	.	.	.	.	92
VDC Female	.	48	12	11	5	1	28	10	36	.	3	.	.	77
Carson Male	.	6	26	10	9	.	3	1	46	.	.	.	1	51
Carson Female	.	15	21	5	3	.	7	3	33	.	.	.	1	44
Air Frc Male	.	2	1	.	.	.	.	.	2	.	.	.	1	3
Air Frc Female	.	1	.	.	.	.	1	.	.	.	.	.	.	1
FPC/PN Female	.	6	1	.	1	.	1	2	5	.	.	.	.	8
CHC Male	.	1	1	.	.	.	.	.	2	.	.	.	.	2
CHC Female	.	5	4	2	.	.	3	3	4	.	.	.	1	11
Pl Prnt Female	.	1	.	.	.	1	2	.	.	.	.	.	.	2
Oth pub Male	.	4	.	1	.	.	.	2	3	.	.	.	.	5
Oth pub Female	1	1	1	.	.	.	.	1	1	.	.	1	.	3
ALL	3	142	124	58	46	11	76	48	244	1	4	4	7	384

Reported Gonorrhea Cases, by Month, 1973 - 1990

YEAR	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	MONTHLY AVERAGE	ANNUAL TOTAL
1973	175	150	102	93	122	122	134	149	188	124	146	93	133	1598
1974	110	79	108	133	138	143	203	198	127	155	101	134	135	1629
1975	133	138	122	145	116	126	191	186	171	124	82	146	140	1680
1976	140	119	154	138	158	155	185	174	246	131	213	165	165	1978
1977	193	117	133	182	161	215	134	193	149	145	212	164	167	1998
1978	143	124	107	128	112	134	119	136	129	137	137	118	126	1515
1979	161	106	97	106	105	117	130	175	166	117	136	109	127	1525
1980	164	149	73	118	109	122	156	170	98	118	126	117	127	1520
1981	117	120	126	118	140	174	137	148	99	144	128	86	128	1537
1982	95	96	98	83	94	127	115	149	118	97	94	97	105	1263
1983	113	97	108	97	87	98	118	110	128	148	90	86	107	1280
1984	96	115	161	127	105	113	153	142	113	133	131	136	127	1525
1985	98	96	98	138	132	127	179	155	127	157	97	126	128	1530
1986	97	96	96	98	94	99	99	148	119	124	97	98	105	1265
1987	79	80	98	93	98	98	99	92	73	67	58	66	83	1001
1988	92	75	72	58	79	79	59	86	86	88	94	58	77	926
1989	56	40	59	75	66	79	77	93	85	81	80	70	72	861
1990	69	35	39	67	76	62	68	97	71	87	85	84	70	840

Reported Gonorrhea Cases, by Month, 1991-1998

YEAR	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	MONTHLY AVERAGE	ANNUAL TOTAL
1991	70	60	66	52	63	86	49	52	88	80	58	52	65	776
1992	54	65	72	40	53	35	52	60	39	78	32	54	53	634
1993	29	39	26	29	25	47	37	70	33	51	36	95	43	517
1994	74	27	56	50	43	65	102	100	63	74	55	64	64	773
1995	59	57	29	34	47	47	50	35	29	38	40	22	40	484
1996	30	24	34	18	20	27	38	44	23	25	28	31	29	342
1997	19	24	24	31	26	29	27	35	33	27	14	30	27	319
1998	24	25	32	37	26	27	30	33	45	34	29	42	32	384
1999														
2000														
2001														
2002														
2003														
2004														
2005														
2006														
2007														
2008														
2009														
2010														
2011														
2012														