

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, 1995 - December 31, 1995

"I and my public understand each other very well: it doesn't hear what I say, and I don't say what it wants to hear."

Karl Kraus (1874-1936)

To those with HIV:

"I have known how sickness bends,
I have known how sorrow breaks, -
How quick hopes have sudden ends,
How the heart thinks till it aches
Of the smile of buried friends.

Elizabeth Barrett Browning
(*Proof And Disproof*)

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This Report is dedicated to Stephen Quintus Muth, our Data Manager, whose wizardry with computer algorithms should terrify Gary Kasparov.
(Watch out for *Deep Quintus*, Gary!)

INTRODUCTION: ODE TO HEALTH EDUCATION

This Report is a repository of boring sequences of numbers and percentages; these will induce sleep in even the most motivated reader. Yet all of the current data, without exception, point to happy news: INCIDENCE DECLINE -- substantial decline in El Paso County of all sexually transmissible diseases, including HIV. Our interpretation is that we are reaping the benefits of the relentless SAFER-SEX campaigns of the eighties and nineties. Finally! Just as awareness of another major public health concern - tobacco use - took a while to translate into measurable progress in our populations, so with STD/HIV. The reader may go to sleep on this Report, but we won't. We know the price of declining incidence is eternal vigilance. And so our control mode - a full-court press against STD/HIV - will not change.

For the first time in a quarter century of conscientious control efforts, we cannot ascribe much of the credit for current STD/HIV incidence decline to vigorous contact-tracing. (Yet such efforts must continue, intensively, the better to accelerate, or at least maintain, gains in reduced incidence and prevalence.) How do we know? Denver and the rest of Colorado are also experiencing rapid decline in STD, most notably chlamydia, in the absence of intensive contact tracing. Locally, STD for which we do no formal case-finding, for example, venereal warts, genital herpes, trichomoniasis and non-gonococcal urethritis, are also been diagnosed at substantially reduced levels. As you read this Report, keep this interpretive framework in mind (incidence decline) - since both strong and weak disease trend indicators point in the same wonderful direction.

We now have a golden opportunity to apply greater pressure on chlamydia: declining numbers make it easier to reach a much larger proportion of reported cases (from, say, 50-60% to 80-85%). Most of our contact-tracing energies will now be focused on chlamydia, without neglecting HIV, gonorrhea or syphilis. Such is our game plan for 1996.

Some of the 1995 data recorded in this Report are less than stellar - our favorite standard - because we operated the entire year with one less FTE (full-time employee) than usual. A constellation of circumstances produced this shortage: the retirement of a key employee early in the year (Helen Zimmerman); the resignation, effectively by mid-year, of a seasoned veteran (Nancy Brace); the temporary loss (for a quarter) of one to maternity leave (Helen Rogers); and the effectively half-time contribution, during the second half of the year, of our State assignee (Chris Pratts). Promotions and the time-consuming hiring-training process, not to mention the expanded operational role (due to the HIV "Community Response Process") of a key HIV employee, made 1995 a challenging year. Most of the lacunae in traditional performance recorded herein can be blamed on these realities. We are now at full strength...

- NO EXCUSES IN 1996 !!! -

PART I
Chlamydia control

Chlamydia incidence appears to be declining - for the first time since we began our formal control measures in mid-1987. Reported cases during 1995 (N= 1223) constitute a 27.5% decline over 1994 (N= 1687). That this represents an incidence decline, rather than simply a decline in prevalent cases, is suggested by an analysis of cases by report source. Traditionally, most new transmission cases attend our STD Clinic and Fort Carson's Clinic, two sites that experienced *spectacular* (on the order of 40%) declines in reported cases during 1995. Prevalent cases tend to be passively detected in the private and quasi-private sectors: their proportional and numerical declines are modest by comparison to the public and Army sectors (on the order of 10%, excepting Planned Parenthood).

Incidence decline is not a consequence of recently intensified case-finding efforts (particularly contact tracing); not only does analysis of local data not support this view, but so do Colorado Dept of Health data: preliminary information (as of this writing) suggests a similar decline in reported chlamydia cases Statewide (from about 9,000 cases in 1994 to about 6600 in 1995).

Laboratory reported chlamydia cases: 1995 vs 1994
(All Report Sources)

	<u>Men</u>	<u>Women</u>	<u>1995</u> <u>Total (%)</u>	<u>1994</u> <u>Total (%)</u>
Private providers	39	293	332 (27.1)	369 (21.9)
STD Clinic	163	150	313 (25.6)	487 (28.9)
FPC/PNC/CHC*		177	177 (14.5)	201 (11.9)
Planned Parenthood		52	52 (4.3)	82 (4.9)
Ft. Carson	114	170	284 (23.2)	481 (28.5)
Air Force	13	47	60 (4.9)	67 (4.0)

Total	329	894	1223 (100)	1687 (100)

*Family Planning, Prenatal, Community Health Center, clinics

Another observation argues for *incidence* decline: the male to female ratio (0.5:1 in 1994, data not shown; 0.37:1 in '95). This pronounced disparity is not simply due to the fact that the currently used chlamydia tests are lousier for men than for women or that women are likelier to be tested than men, but (probably) to fewer infections being currently transmitted to men (who, about 50% of the time, will have symptoms from the urethra and hence will tend to go to doctors).

Male-to-Female Ratio, Reported Chlamydia Cases
(1992-1995)

(The first full year of mandatory chlamydia reporting was 1992.)

<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>
0.5:1	0.54:1	0.5:1	0.37:1

Because the public and military clinics test (and screen) for chlamydia consistently, observation of secular trends from these sectors probably provides reliable sentinel information. Note the *spectacular* difference between 1994 and 1995 (-42.6%); note as well that as fewer high-risk (STD Clinic and Fort Carson) men are newly getting infected, fewer women (their contacts) are being infected, and thus diagnosed, in the clinics where contact tracing is heavily emphasized (public and military ones).

Chlamydia cases by selected report source and gender
1988-1995
(Excludes private sector cases)

	<u>H.D. Clinics</u>		<u>Fort Carson</u>		<u>Air Force</u>		<u>Total</u>
	Men	Women	Men	Women	Men	Women	
1988	243	268	250	197	84	150	1192
1989	144	217	289	263	Unknown		N/A8
1990	195	443	213	222	151(both)		1224
1991	253	436	288	256	118(both)		1351
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 (-42.6%)

Yet other data of interest to bolster the *incidence* (as opposed to prevalence) decline argument being advanced in this Report appear in the Table below. Family Planning Clinic cases tend to represent prevalence, while Prenatal cases, incident ones. (There are two reasons for this view: the extremely young age of our Prenatal Clinic clients, which argues for recent acquisition of chlamydia, and the impressionistic idea that male partners of pregnant women are likelier "to fool around" while their lady is pregnant, since the ladies may be less interested in sex while inconvenienced by pregnancy. Is there any way to say these things more delicately?) Note the pronounced decline in Prenatal cases, both in terms of absolute numbers and proportional decline, compared to the modest decline in Family Planning Clinic.

Chlamydia screening in Women's Clinics

1988-1995

Year	<u>Family Planning</u>		<u>Prenatal/CNM</u>	
	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)

* Only high-risk clients were tested in 1989

Chlamydia cases in VD Clinic

Incidence decline means fewer infected men and women, and thus fewer patients in STD Clinic. This is precisely what is observed for 1995. Note the approximately 15% decline in testing for either gender. (The very fact of proportional decline by gender suggests reduced transmission, since you would expect an infected man to bring to examination roughly one woman per incident infection.)

The positivity rate for women in STD Clinic is now similar to that of women in Family Planning and Prenatal Clinics when we began our control efforts. In any event, it is the lowest on record, as it is for men.

Chlamydia cases in VD Clinic

1988-1995

	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)

CONTINUED...

	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%)

CONTINUED...

	1994		1995	
	Tests	Pos (%)	Tests	Pos (%)
Men	1917	226 (11.8)	1650	147 (8.9)
Women	2224	207 (9.3)	1880	136 (7.2)
Total	4141	433 (10.5)	3530	283 (8.0)

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 VD, etc); the former are classified as contacts, while the latter as volunteers or screening detections. The data below reflect STD, Family Planning, and Prenatal, Clinic patients (where the data are reliable).

The 1995 data also support the *incidence* decline view: a more than 30% decline in men who present as volunteers (who tend to have urethral symptoms suggestive of recent infection), from 124 cases in 1994 to only 85 in 1995. Declining male incidence argues for fewer infected women (their contacts; note the proportionally similar decline between 1994 and 1995 (from 85 to 57 women contacts)).

Changes cannot be attributed to diminishing contact tracing efforts, since a robust proportion of all cases are *actively* identified (contacts as opposed to volunteers or screenees).

Chlamydia Cases: reason for presentation
All H.D. Clinics, 1988-1995

MEN

Reason	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%)

MEN: CONTINUED...

	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%)

1995 STD/HIV Annual Report

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%)

WOMEN: CONTINUED...

	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%)

STD Clinic women with chlamydia: reason for presentation

To develop a sense for the trend in reason for presentation (passive vs. active detection of cases) it is best to look at women with chlamydia in STD Clinic alone, since the STD Clinic is the site where women present as contacts and as volunteers or as screenees. Roughly half (720/1571) of STD Clinic women with chlamydia had their disease detected as a consequence of contact tracing between 1988 and 1995.

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

...CONTINUED...

	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%)

Chlamydia contact interviews
(All H.D. Clinics)

We have interviewed nearly 4000 civilian cases of chlamydia in the last eight years, and obtained about 6500 contacts, with a consistent contact index of about 1.7 for both men and women. During 1995, we interviewed 80% of all Health Dept cases (STD, FPC, and PNC Clinics) AND 126 private sector cases (30% of such cases). During 1996, we intend to interview most (about 80%) of the projected 400 private sector cases.

	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)

CONTINUED...

	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)

CONTINUED...

	1994		1995	
	No.	Contacts	No.	Contacts
Men	144	223 (1.55)	117	177 (1.51)
Women	287	499 (1.74)	314	501 (1.6)
Total	431	722 (1.68)	431	678 (1.57)

Fort Carson's Preventive Medicine folks have been doing an increasingly better job of interviewing their chlamydia cases starting (as we did) in 1988.

Proportion of chlamydia cases interviewed
(Fort Carson)

	1988	1989	1990	1991	1992	1993	1994	1995
Reported Cases	447	552	435	544	566	541	481	284
Interviewed	65%	63%	90%	77%	85%	88%	93%	91%

Thus, they have also had about 3850 cases reported and have interviewed four-fifths (3051/3850); we don't know of any other organization that interviews that high a proportion of its chlamydia cases. They should be very proud of themselves.

Chlamydia contact tracing

The number of contacts to chlamydia sought locally declined about 14% in 1995, as did the number and proportion of newly identified cases from contact tracing efforts. The lower proportion of newly identified cases (probably) reflects lack of new transmission: prevalent cases yield fewer new positive contacts per case interviewed (since prevalent cases reflect historical, rather than recent, transmission). Intensified contact interviewing and contact tracing efforts during 1996 will provide better data on which to assess the veracity of our assertion.

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)

...CONTINUED...

	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)

Thus, 5758 contacts have been sought locally in eight years,

of whom 1070 (18.6%) were newly identified cases; 3379 others were treated preventively but had negative tests. We bet that about 850 of these 3379 (about a quarter) were really positive, but the relatively insensitive tests did not show positive results.

Part II

HUMAN IMMUNODEFICIENCY VIRUS INFECTION

AIDS proper: a brief profile

At least 526 adults with full-blown AIDS have lived in El Paso County since the first reported case in the summer of 1982. About three-fifths are known to be dead. Three hundred and six (three-fifths) were counted locally, while almost two fifths (218 cases) were diagnosed and counted elsewhere.

Note: all data in this Report refer to ADULT HIV/AIDS cases. Pediatric cases (N= 14) are discussed in the last section.

AIDS cases having resided locally

Yr.	<u>Counted locally</u>			<u>Counted elsewhere</u>			<u>Total</u>		
	No.	Dead	(%)	No.	Dead	(%)	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)				7	7	(100)
1986	13	11	(85)	9	4	(44)	22	15	(68)
1987	9	9	(100)	11	10	(91)	20	19	(95)
1988	25	23	(92)	14	11	(79)	39	34	(87)
1989	31	28	(90)	23	21	(91)	54	49	(91)
1990	32	28	(87)	20	12	(60)	52	40	(77)
1991	34	30	(88)	27	14	(52)	61	44	(72)
1992	27	15	(56)	37	23	(62)	64	38	(59)
1993	47	20	(43)	36	15	(42)	83	35	(42)
1994	49	15	(31)	26	5	(19)	75	20	(27)
1995	29	3	(10)	12	1	(8)	41	4	(10)
Ttl:	307	193	(63)	219	120	(55)	526	313	(60)

The above table (Based on REPORT 1 in computer) shows year of diagnosis and whether the person diagnosed that year is known to be dead (i.e., the person may not have died in that year. For death by year in which it occurred, look 2 Tables below).

For the first time, more than half of all (N=1025) HIV cases have progressed to AIDS (526/1025= 51%). This rate is increasing rapidly each year, as shown below:

Proportion of all HIV Cases Having Progressed to AIDS

1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
14%	11%	18%	20%	21%	26%	29%	38%	42%	51%

Note: the 1993 change in the AIDS definition served to increase our AIDS rates. Overall, during 1993-5, 122 AIDS cases were reported that would not have met the pre-1993 definition. (One case was added to 1989's total, 2 to 1990's, 5 to 1991's, 12 to 1992's, 38 to 1993's, 34 to 1994's and 30 to 1995's.)

HIV/AIDS cases by age at report and clinical status (1982-1995)

It is instructive to examine the data by age at report and by clinical diagnosis. (The numbers in parentheses in the Table below represent the AIDS subset. Thus, for example, 51 (15) means that 51 persons with HIV were identified, of whom 15 are known to have AIDS.) Age at Report refers to age at report to our health department. Death refers to the year that the person died.

Because some HIV positive people move to El Paso County from other areas 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. (Based on YEARSTAT Report in computer.)

Year Reported	Age at report		Totals	
	(Mean)	S.D.	HIV(AIDS)	Deaths
1982-85	30.0	8.5	51 (15)	8
1986	30.1	8.5	129 (22)	9
1987	29.9	7.8	91 (20)	11
1988	32.4	11.1	101 (39)	31
1989	32.0	9.8	96 (54)	18
1990	31.9	10.4	99 (52)	36
1991	32.0	9.6	85 (61)	44
1992	32.7	10.1	97 (64)	48
1993	32.5	7.3	97 (83)	41
1994	33.0	8.2	110 (75)	44
1995	35.9***	10.5	69 (41)	48
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Total			1025 (526)	338**

**Of the 338 deaths, 313 occurred in AIDS patients and 25 in

AIDS-free HIV persons. Thus fully one-third of all adult HIV clients are known to be dead (338/1025) as of 12/31/95.

***The 1995 datum is heavily influenced by 5 outliers: men ages 53, 57, 60, 63, and 69 at time of report. Were they to be excluded, the value would be 33.8 rather than 35.9.

Nevertheless, note the steadily increasing age, which argues for a prevalent cohort (historically infected people progressing to disease and death, rather than newly infected folks). Note that about 100 persons with HIV are reported each year (exception: 1995, with only 69 new reports), which argues against the idea of rapid virus propagation, and note that the ratio of reported cases to deaths is getting lower--suggesting that within a few years, more people will die with HIV in a given year than will be newly identified as HIV cases. The HIV case-to-death ratio has declined 10-fold, from 14.3:1 in 1986 (129:9), the first full year of testing, to 1.43:1 (69:48) in 1995.

HIV/AIDS cases by age at first diagnosis and clinical status
(1982-1995)

Year Diagnosed	Mean age	S.D.	All HIV/AIDS Cases
1982-85	30.8	8.4	86
1986	29.6	8.2	155
1987	29.5	7.4	118
1988	32.4	10.3	117
1989	31.7	9.8	122
1990	31.6	8.8	106
1991	31.6	8.7	87
1992	31.6	8.8	67
1993	30.4	7.0	54
1994	34.0	7.6	61
1995	36.2***	10.8	46

Table has 6 missing observations (dates unavailable)

***Value would be 33.8 were 5 outliers removed (See Legend, previous Table)

In comparing the two tables we note that there are declining numbers of persons *newly being reported and, most importantly, newly being diagnosed* as having HIV each year (especially during the 1990s; column at right).

Miscellaneous age chronology data

In El Paso County, the mean age at acquisition of HIV is probably 28.6 years (based on data from 116 seroconverters); the mean age of those not known to have proceeded to AIDS or to have

died is 35.2 (N= 468); the average age at AIDS is 35.6 (N= 526) and at death, 37.4 years (N= 338). Thus, the average HIV-infected person locally is less than one year from an AIDS diagnosis and a little more than two years from death (as of 12/31/95), meaning that we can expect a substantial increase in AIDS diagnoses during 1996 and many deaths during 1997-1998.

Risk factor classification of AIDS and AIDS-Free Cases
(1982-1995)

Comparing AIDS to HIV cases, you can get a feel for the changing face of the epidemic. AIDS cases represent the earlier face of the epidemic. The main changes are: 1) for men---a higher proportion of heterosexual injecting drug users (IDU); 2) a slight increase in the percentage of women (see Legend at base of Table); for women 3) slightly increased representation of sex (as opposed to IDU) as mode of acquisition; and 4) the predictable decrease in transfusion (for both genders) as a risk factor, as the blood supply has gotten safer.

In a word, the HIV "epidemic" is not getting out of the socio-drug-sexual networks of injecting drug users and of men who have sex with men, and it is imploding.

Although not shown here, there is little difference between "known" and "suspected" risk factors. About 10% of HIV/AIDS cases don't admit to classic risk factors; the public health interviewer then makes a determination of risk ("suspected"). When you compare the percentage distribution of "known" vs. "suspected" risk factors, they are a virtual mirror image. For the Table below, we make no distinction between "known" and "suspected", since they are, for operational purposes, identical; thus the Table represents the best view (10% educated guess) of risk classification.

(These data are based on REPORT 4 in the computer.)

	AIDS (Full-Blown)		HIV (AIDS-Free)	
	Men (N=469)*	Women (N=55)*	Men (N=436)*	Women (N=64)*
Gay/bi-sexual	70.6%	N/A	73.0%	N/A
Gay/ I.D. user	17.3%	N/A	9.5%	N/A
I.D. user (Hetero)	9.3%	54.9%	15.1%	53.5%
Sex with IDU/Hetero	0.4%	35.3%	0.8%	41.4%
Transfusion	2.4%	9.8%	1.6%	5.1%
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Total	100%		100%	

*There are 82, or 8% of the total 1024 cases, for which no

risk factor information is available. Thus the true denominator for these four columns is 942. (We are using the full N in parentheses to show the complete case distribution by gender. Notice that the male-to-female ratio for AIDS cases is 8.5:1, but 6.8:1 for those not known to have AIDS. Thus the proportion of women is increasing (from 10.5% to 12.8%); note that the *numbers* of infected women is small.

HIV/AIDS Control Program

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

HIV infection by source of report and gender (1982-1995)

(Based on REPORT 9 in computer.)

The following represents the distribution of infected adults (including full-blown AIDS cases) reported, and where they were identified. Note that three-quarters are detected outside of health department clinics. In recent years, the relative contribution of Donor Centers and the Military has been declining. Note also how few of our Drug Clinic clients are infected.

	<u>Ttl Cases/(%)</u>	<u>Men</u>	<u>Women</u>
1. Counseling/Testing Site (Health Dept.)	183 (18.0)	173	10
2. V.D. Clinic	42 (4.1)	36	6
3. VSR (Prostitution)	9 (0.9)	1	8
4. Drug Clinic	4 (0.4)	2	2
5. Donor centers	135 (13.3)	123	12
6. Military*	129 (12.7)	119	10
7. Doctors/hospitals/other	512 (50.5)	443	69

Total:	1014 (100)	897(88.5)	117(11.5)

There are 11 missing observations (9 men and 2 women)

* Actually, military doctors have reported 173 cases, of whom 129 are in uniform and 44 are retired or dependents...the latter are lumped in category #7 above.

HIV infection by reason for presentation
(Based on REPORT 10 in computer.)

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 944 (92% of cases) with known information.

...viewed annually (percentages):

Reason	Thru 1986	1987	1988	1989	1990	1991	1992	1993	1994
Volunteer	19.6	20.7	12.0	15.9	20.4	10.1	28.7	19.8	17.1
Screen	64.2	72.4	79.3	73.2	64.5	79.7	64.4	75.3	69.7
Contact	16.2	6.9	8.7	11.0	15.7	10.1	6.9	4.9	13.1

100 percent

...CONTINUED...

1995

Volunteer	31.6
Screen	55.3
Contact	13.2

We have no explanation for the dramatic change recorded during 1995: why nearly a third of newly reported cases were detected via the client's wish to know (31.6% is the highest ever). It may be a statistical blip, like 1992. Note that every 7th case is detected as a consequence of contact tracing (13.2%).

HIV contact interviews
(1985-1995)

(Based on REPORT 11 in computer.)

Many health jurisdictions in the United States do not interview HIV patients for sexual and needle-sharing partner information; they consider the procedure ineffectual or politically delicate. We have successfully conducted such "partner notification" (contact tracing) interviews on positive clients since the late fall of 1985. Only half (N=25) of eligible clients were interviewed in 1995 because of staff shortage; most of these 25 backloged interviews will be completed in early 1996.

Year	No. Interviews	No. Contacts	1995 STD/HIV Annual Report Contact Index
1985*	30	57	1.9
1986	96	184	1.9
1987	46	78	1.7
1988	62	126	2.0
1989	66	141	2.1
1990	60	128	2.1
1991	43	81	1.9
1992	58	86	1.5
1993	43	62	1.4
1994	54	94	1.7
1995	25	36	1.5

Ttl:	583	1073	1.8

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

The vast majority of HIV cases NOT interviewed were 1) not located (mostly transients) or died at time of diagnosis, or 2) not eligible (because counselled/interviewed in the jurisdiction that originally diagnosed the case, or 3) we missed the opportunity. (We formally contact interview 60% of reported cases.)

Between 20% and 25% of cases name no identifiable partners and one-third name only one; about 40% 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. HIV is usually difficult to transmit.

Seroconverters by year of conversion

Year	Civilians	Military	Total
1981	1	0	1
...			
1986	9	1	10
1987	6	2	8
1988	10	2	12
1989	10	3	13
1990	13	2	15
1991	11	5	16
1992	8	5	13
1993	7	6	13
1994	6	5	11
1995	3	1	4

Ttl:	84 (72%)	32 (28%)	116 (100%)

Not all seroconversions are observed. These data, however,

are useful as a trend indicator. The relatively small annual burden (perhaps up to two dozen seroconversions actually occur in EL Paso County) and the accelerating annual HIV death burden (about one per week currently) argues for declining prevalence over time (implosion idea). 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.

Seroconverters are not very young, contrary to the propaganda in the media reports; the average (mean) age at seroconversion is 28.6 years (Range 17 to 51 yrs). Only four of the 116 seroconverters are teens: 17 years old (one) and 19 (three). Forty percent convert in the 20-25 age interval and another 20% convert at ages 33-36. Thus, the distribution is bi-modal, with excessive risk in both the early twenties and early thirties. (Average age at seroconversion has not changed during the last decade.)

Through the 1980s, seroconverters tended to be men; only two (4.5%) of 44 seroconverters were women. During the 1990s, women have been catching up: 8 of 72 (11%) recent (1990-1995) converters are women. Half (5/10) of these 10 women are injecting drug users, while almost all of the men (97%) are men who have sex with other men and 3% are IDU. Whatever transmission is occurring locally is predominantly homosexual, rather than via needles.

Health Department HIV antibody testing
(1985-1995)

HIV testing began in the summer of 1985 in the Counselling/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 21,364 specimens for testing since 1 June 1985; 2573 were done in 1995, about the same as 1994 (N=2641). Demand for testing has stabilized.

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.

HIV testing in the CTS: 1985-1995

	1985-86	1987	1988	1989	1990	1991	1992	1993	1994
Tests	878	764	784	658	835	1814	2777	2226	1817
No. positive	68	18	19	14	17	12	12	13	12
% positive	7.7	2.4	2.4	2.1	2.0	0.7	0.4	0.6	0.7

...CONTINUED...

1995

Tests 1904
 No. positive 11
 % positive 0.6

Thus, 14,457 tests in CTS yielded 196 positives (1.4%) in the 10.5 years since the test became available; the CTS alone has served to identify only about one positive per month for the last 9 years.

	<u>HIV (Ab) testing in STD Clinic</u>							
	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
CONTINUED...	1994	1995						
No. of Tests	673	649						
No. Positive	3	3						
Percent Pos.	0.4	0.5						

We see that while the number of persons tested rose appreciably since 1987, the positivity rate has steadily declined. (All positive persons revealed recognized risk factors.) Overall, 4527 tests were done in STD Clinic, with 43 positives identified (1%).

Chronically Mentally Ill Street Outreach Project
 (Summer of 1995)

During the third quarter of 1995, HIV counseling and testing services were offered, in addition to those provided at the Health Dept., in several community-based settings and outdoors. Target populations were the presumably underserved: the homeless, the mentally ill, and out-of-treatment injecting drug users. A total of 241 persons were accommodated. Most agreed to HIV testing and slightly less than one percent (2 persons) were newly diagnosed as HIV infected. Details of this investigation have been submitted for publication by the lead investigator (Nancy Brace RN); pre-publication copies are available in our department.

AIDS-virus infection in children:

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

"Age" means age at diagnosis, not current age. (Their ATS # are, in sequence, 1163, 17292, 10746, 2369, 4505, 6044, 7278, 10027, 11338, 10423, 13682, 14909, 17103, and 17418.)

<u>Gender</u>	<u>Age</u>	<u>Status</u>	<u>Route of infection</u>	<u>Year reported</u>
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)	1990
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	Newborn	Alive	Inf. mother (IDU prostitute)	1996

* Attending school locally (age 10 as of 1995)

In addition, there have been 7 newborns whose mothers had HIV during pregnancy. Of the seven, 3 are temporarily lost to follow-up (ATS # 8129, 10789, 15150), while the other four are not infected (ATS # 8044, 11675, 13278, 13468). Two were born in 1991, 2 in 1992, 1 in 1993, and 2 in 1994.

For (from?) those who died of AIDS:

"Is it indeed so? If I lay here dead,
 Wouldst thou miss any life in losing mine?
 And would the sun for thee more coldly shine
 Because of grave-damps falling around my head?"

From: *Portuguese Sonnets* (# XXIII)
 Elizabeth Barrett Browning

Part III

Gonorrhea control

We report 484 cases of gonorrhea for calendar 1995, a 37% decline over 1994, and the lowest total and attack rate on record. The decline probably reflects society-wide conservatism vis-a-vis sexual adventurism. More and more people are seemingly using self-defense in the sexual arena (being selective about sexual partners and/or using barrier methods, such as condoms) to minimize risk. Some empiric evidence supports this view: the average number of sex partners per interview has been declining for at least three years (see below).

Case-finding highlights: gonorrhea

Gonorrhea case-finding efforts during 1995 were good, but not stellar. The case-worker who handles most of the civilian gonorrhea cases (the State assignee) was on leave much of the second half of 1995 and did not inform us that he needed help with his case-load until late December 1995. Missed cases are being sought as this is being written. With a gonorrhea case-load of fewer than 500 annual cases, about 95%, rather than the observed 89% (see below), should be interviewed.

Contact interviewing activity
(1977-1995)

	77-79	80-82	1983	1984	1985	1986	1987	1988	1989	1990
	(Averages)									
Interviewed	70%	93%	97%	94%	89%	90%	91%	90%	90%	93%
Contacts per Case	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					
Interviewed	95.2%	92.1%	89.2%	73.6%	88.6%					
Contacts per case	1.73	1.81	1.55	1.52	1.54					

Gonorrhea case distribution
(1987-1995)

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
...CONTINUED...				
	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
...CONTINUED...				
	1995			
Civilian	326 (67.4%)			
Fort Carson	152 (31.4%)			
USAF	6 (1.2%)			

Total:	484 (100%)			

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 occurring in the military sector. During the last two years, a notable decline has occurred; the military now accounts for about a third of cases.

The proportion of gonorrhea cases accounted for by teens is declining for the first time in seven years; teens seemed to be the last age-category of clients in Colorado Springs who were paying much attention to Safer-Sex messages. Both the numerical and proportional trend is encouraging. Only 135 teens were diagnosed with gonorrhea in 1995, the lowest number on record.

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)

Gonorrhea contact tracing
(1980-1995)

Only 78 gonorrhea cases were newly identified as a consequence of contact tracing during 1995. Of concern is the high percentage (and number) of contacts not examined (36.3). Ordinarily, the proportion of contacts examined (New cases + Not Infected) hovers around 75%. How much of this difference (75% vs the observed 65% during the last two years) reflects poorer quality contact tracing efforts and how much reflects changing epidemiologic patterns (fewer incident vs. prevalent cases, the latter expectedly yielding fewer newly identifiable cases) can be determined by more rigorous contact tracing efforts during 1996. (Incidentally, it's best to contrast two comparable, recent years: 1993 and 1995. Unlike 1994, these two years had similar overall totals; 1994 was a statistical blip.)

Local contacts to gonorrhea: outcomes

	1980-1982 (Average)	1983	1984	1985
Infected (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%)

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...CONTINUED...	1986	1987	1988	1989
Infected (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%)

...CONTINUED...	1990	1991	1992	1993
Infected (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%)

...CONTINUED...	1994	1995
Infected (New cases)	157 (33.1%)	78 (22.5%)
Not infected	152 (32.1%)	143 (41.2%)
Not examined	165 (34.8%)	126 (36.3%)
Total sought	474 (100%)	347 (100%)

Gonorrhea: Reason for Presentation (Epidemiologic category)
(C:\MYSAS\DISEASE\MF-94.SAS.)

The following data reinforce the observation that GC case-finding efforts during 1995 may not have been optimal (we won't know for sure until 1996 data are in). Ordinarily, about 30% of cases are identified by contact referral (an active process), as opposed to the more passive process of screening or waiting for symptoms to appear ("volunteers"); for 1995, it is only about 25%.

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	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%)	
...CONTINUED... 1987				
	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%)
...CONTINUED... 1991				
	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%)
...CONTINUED... 1995				
Volunteer	292 (60.3%)			
"Screenee"	72 (14.9%)			
Contact	120 (24.8%)			

Total cases	484 (100%)			

And, historically (percentages only):

	1976	1977	1978	1979	1980	1981	1982	1983
Volunteer	63.1	62.2	61	62.8	57.3	51.7	58	55.6
"Screenee"	11.4	10.7	11.7	10.1	9.9	8.3	8	11.9
Contact	25.5	27.1	27.3	27.1	32.8	40	34	32.5
...CONTINUED...								
	1984	1985	1986	1987	1988	1989	1990	
Volunteer	55	56.9	53.8	53.6	54.2	56.3	59.3	
"Screenee"	11.1	13.7	15.2	15.9	15.1	15.5	14	
Contact	33.9	29.4	31	30.5	30.7	28.2	26.7	
...CONTINUED...								
	1991	1992	1993	1994	1995			
Volunteer	54.9	54.2	52.0	52.9	60.3			
"Screenee"	15.7	16.8	24.2	19.1	14.9			
Contact	29.4	29	23.8	28	24.8			

Gonococcal pelvic inflammatory disease

	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
CONTINUED...	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
CONTINUED...	1992	1993	1994	1995				
Cases	71	44	73	67				
Percent	25	21.3	20.2	29.8				

The notable datum is the percentage recorded for the last seven years: somewhere between 20-30% of all women with gonorrhea have PID signs or symptoms. We suspect this has to do with the kind of woman who is currently getting gonorrhea: living a rough life. Part of the increased proportion observed during 1995 may be an artifact of data recording practices (changed in early 1995): the definition was liberalized to included all women who complained of lower abdominal pain around the time of diagnosis.

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

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1991	57	451	12.6
1992	61	354	17.2
1993	38	310	12.3
1994	70	412	17
1995	34	262	13

We suspect that part of the reason for the numerical and proportional decrease observed during 1995 reflects weaker contact tracing efforts, since asymptomatic men are principally captured as a consequence of contact tracing.

Gonorrhea repeat cases

The contribution to the gonorrhea burden made by repeaters is relatively stable at about 5% of all reported cases. When control efforts are poor, this rate hovers around 10%.

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

In terms of bodies, 22 persons (14 men) were repeaters; 20 had 2 episodes, 1 had 3, and 1 had 4. Thus these 21 persons generated 47 cases in all.

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Gonorrhea cases in African-Americans

Three-fifths of all GC cases affect African-Americans. Note that the 1995 percentage is lower than that of 1990-1991 and 1994 (when we experienced outbreaks in local gangs). The relatively lower proportion attributed to African-Americans in 1995, as well as the low absolute numbers, in conjunction with the (above) observation that the proportion of GC cases in teens was declining, lend support to our assessment that local gangs are being more cautious sexually.

	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)

...CONTINUED...

	1992	1993	1994	1995
Number	381	326	484	288
Percent	(60)	(63)	(66)	(61)

Gonorrhea in homosexual men
(Since AIDS)

During 1995, 4 of 264 men with gonorrhea claimed sexual exposure to other men. The trend continues to support our view that most gay men are being careful in their sexual relationships.

Percent of male gonorrhea cases in gay men

Before AIDS (1-6/81)	16.2%
AIDS reported (7/81-12/81)	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	0.04%
1991	1.3%
1992	2.0%
1993	1.0%
1994	Not available
1995	1.5%

Gonorrhea case rates

(Assumes a 1995 population of about 460,000): The current rate is the lowest on record. The rate is an incredible 85% lower than during the peak years of the epidemic (mid-1970s). We're on the verge of cracking the "100" (cases per hundred thousand) barrier!

Gonorrhea rates (cases/100,000)

1970	1973	1977	1980	1981	1982	1983	1984
----	// ----	// ----	----	----	----	----	----
667	700	735	468	471	383	385	438
CONTINUED...		1985	1986	1987	1988	1989	1990
		----	----	----	----	----	----
		420	333	255	232	213	208
CONTINUED...		1991	1992	1993	1994	1995	
		----	----	----	----	----	
		192	155	125	186	106	

PPNG (penicillinase-producing N. gonorrhoeae) cases:

During 1995 we recorded 4 cases, one of the lowest years in a decade. Since the introduction of PPNG into the USA in the spring of 1976, only 218 cases have been diagnosed in El Paso County. They occurred in context of 23,751 gonorrhea cases, a 0.9% PPNG rate.

PPNG cases

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
1994	1995							
----	----							
14	4							

Male-to-female ratio: gonorrhea

This ratio is hovering at all-time low levels (very near parity). This has to do not only with the absence of gay men in GC morbidity but, importantly, in the declining share of cases accounted for by Fort Carson (heavily male).

Year	Men	Women	1995 STD/HIV Annual Report 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

Part IV

Other STD Program data/miscellaneousSTD contact interviews: 1973-1995

We've conducted almost 30,000 contact interviews since 1973; during 1995, we interviewed about one-fifth fewer cases than in 1994. This is due not simply to declining morbidity but to staff shortage. During 1996, we will be at full strength and our 1996 numbers will reflect it. Our intention is to substantially increase the number and proportion of chlamydia cases being interviewed for sex partner information.

Yr	Civilian Gonorrhea	Ft.Carson Gonorrhea	Syphillis (All)	Civilian Chlamydia	Ft.Carson 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				1254
'83	693	552	15				1260
'84	780	644	27				1451
'85	749	619	29			30	1427
'86	671	467	30			96	1264
'87	556	355	13			46	970
'88	442	395	9	419	234	62	1561
'89	418	358	17	290	355	66	1504
'90	424	357	21	523	336	60	1721
'91	445	294	27	703	421	43	1933
'92	339	246	13	571	481	58	1708
'93	267	194	28	517	475	43	1524
'94	336	233	12	431	449	54	1518
'95	285	144	15	431	310	25	1210 (-20%)

Ttl:	11654	10197	514	3885	3061	583	29894

Outreach: field investigations

Almost 50,000 client tracing investigations have been completed since 1973. During 1995, about one-fifth fewer were done compared to the previous year, with about half of the shortfall being attributable to reduced gonorrhea case-finding efforts (State assignee).

1995 STD/HIV Annual Report

During 1995 we performed 1937 field investigations in support of STD/HIV control, a 22% decrease over 1994. Most of this 22% decline can be accounted for by the pronounced decline in gonorrhea morbidity (which generates fewer contacts to chase, and fewer positive cultures to confirm, under "Other"). Although Chlamydia also declined substantially during 1995, contact tracing levels remained high because case-workers interviewed a larger proportion of reported cases than in previous years (because of the addition of case-finding resources in mid-1995).

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

<u>Year</u>	<u>Gonorrhea</u>	<u>Syphilis</u>	<u>Chlamydia</u>	<u>Other*</u>	<u>HIV**</u>	<u>Total</u>
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

Total:	25521	1283	6481	13456	2659	49400

* 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
(1973-1995)

STD patient interviewing and the tracing of named partners occasioned the identification of 8431 new cases (called "broughts", short for brought to treatment in jargon) since 1973, or about one per day. Note that the 1995 total is the lowest on record. The difference reflects the poorer gonorrhea case-finding indices mentioned earlier and the decline in chlamydia *incident* cases (prevalent cases are less likely to yield newly infected contacts).

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

VD Clinic attendance declined by nearly a fifth during 1995. Declining GC and Chlamydia incidence implies a diminution of sex partners referred to the clinic. In support of this view, attendance by African-American clients declined from 30% of clinic visitors during 1994 to 27% during 1995. (African-American contacts to STD usually attend public clinics like ours.) Clinic attendance is currently at levels experienced during the 1980s, and 10% below the 23-year mean of roughly 4400 visits. (See Next page)

1995 STD/HIV Annual Report

<u>Year</u>	<u>New visits</u>	<u>Return visits</u>	<u>Total</u>
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

 23-year total: 102,175
 (Mean = 4442 per year)

Note: Table excludes HIV Testing Center visits.

Non-reportable STDs in V.D. Clinic

Data for non-reportable STDs were first recorded in a systematic way during calendar 1982. These data are not catholic, because only STD Clinic information is included. In addition, they are very soft, because neither diagnostic nor surveillance criteria are rigorous. They are presented mainly as rough trend indicators. Please note the strong decline in male urethritis ("NGU/Chlamydia") after years of strong increases (the 1990s, which were due to our chlamydia screening efforts, starting in the late 1980s). Another encouraging datum arguing for people being more careful in sexual matters is the tremendous decline in venereal warts diagnoses. No data are given for Herpes for 1991-95 because they were not rigorously kept, but we know that case levels are low. For women, note the spectacular decline in all classic sexually transmissible disease diagnoses. The only stable ones are those that are not rigorously sexually transmitted (like yeast and gardnerella).

1995 STD/HIV Annual Report

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

...CONTINUED...

Infection	Men				
	1991	1992	1993	1994	1995
NGU/Chlamydia	667	696	675	766	436
Herpes	N/A	N/A	N/A	N/A	N/A
V. Warts	228	292	256	303	157
Scabies	20	29	23	25	35
P. Pubis	43	43	40	24	19
Totals:	958	1060	994	1118	647

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

...CONTINUED...

	Women				
	1991	1992	1993	1994	1995
Chlamydia	275	216	203	206	136
Trichomoniasis	101	97	103	116	89
Monilia	315	320	271	242	235
NSV	633	685	548	551	408
Herpes	N/A	N/A	N/A	N/A	N/A
V. Warts	115	181	195	207	84
Scabies	13	11	8	11	17
P. Pubis	30	31	29	31	20
Totals:	1482	1541	1357	1364	989

Syphilis

In the early 1970s, the rate was about 22 cases/100,000 population; the current (infectious syphilis) rate is fifteen times lower (1.5 cases per 100,000).

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

Presentations

At least 101 (just like Dalmatians) formal presentations were recorded, with a total audience of 3588 (excluding radio/television audiences). Thus, about 2 presentations a week, each with an average audience of 36, were done in 1995. About one-third of presentations were devoted to the CS Police Dept (Nancy Brace), hence the high "Employers" percentage during 1995.

	1987	1988	1989	1990
Total presentations	110	132	127	113
Total audience	3683	6847	5462	5165
Students	45%	38%	56%	39%
Health care workers	23%	23%	20%	25%
Employers	10%	5%	2%	4%
Trainers	10%	16%	7%	3%
General audience	11%	17%	8%	22%
High risk persons	3%	1%	6%	7%
...CONTINUED...	1991	1992	1993	1994
Total presentations	117	128	95	69
Total audience	5065	5358	4778	2334
Students	41.6%	52.8%	46.1%	14%
Health Care Workers	30%	21.1%	37.9%	50.6%
Employers	0.8%	1.7%	0.7%	0
Trainers	3.6%	5.5%	6.2%	5.7%
General audience	14.1%	14.8%	7.7%	25.8%
High risk persons	11%	4.1%	1.4%	3.8%
...CONTINUED...	1995			
Total presentations	101			
Total audience	3558			
Students	41%			
Health care workers	19.3%			
Employers	22.4%			
Trainers	1%			
General audience	5.7%			
High risk persons	11.5%			

Presentations by person

	1987	1988	1989	1990	1991	1992	1993	1994	1995
Potterat	64	74	66	65	67	52	58	46	47
Muth	26	19	10	10	4	5	??	??	??
Woodhouse	0	17	20	8	5	10	4	5	N/A
Latimer/Sears	18	13	15	16	9	10	??	??	??
Castle	0	5	15	8	0	13	??	??	??
Plummer	2	2	0	2	3	1	0	0	1
Rogers	0	2	1	3	5	0	9	2	3
Bethea				1	21	15	N/A	N/A	N/A
Zimmerman					1	0	0	0	1
Pratts					2	0	9	0	0
Brace						22	15	16	49

Presentations represent a substantial investment in operational energy: each requires an average of 2 hours for preparation, travel, and delivery.

Summary of medications used
(1995)

The decline in STD incidence and consequent lower clinic attendance is reflected in the amounts of medications dispensed in STD Clinic

VD Clinic

	<u>1994</u>	<u>1995</u>
Bicillin (1.2 m.u.)	85 syringes	48
Spectinomycin (2g)	22 vials	2
Amoxicillin (500mg)	921 capsules	0
Benadryl (50mg)	300 capsules	400
Erythromycin(250mg)	13476 tablets	10772
Rocephin (250mg)	9 vials	10
Doxycycline	32712 capsules	25948
E-Mycin (333)	4610 tablets	0
Suprax (440mg)	964 tablets	666
Metronidazole(500mg)	4400 tablets	3640
Ofloxacin	182 tablets	274

PART V

The traditional tables

"You can observe a lot by watching"

Yogi Berra

MONTHLY V.D. CLINIC AND LABORATORY REPORT: EL PASO COUNTY HEALTH DEPARTMENT, 1995

	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP	OCT	NOV	DEC	CY	POS.	PCT+
TESTING:															
HIV (Ab)	213	205	194	172	148	204	249	323	240	190	226	209	2573	15	0.6
HIV (CUMULATIVE)													21364	N/A	
RPR	278	253	296	220	270	269	322	276	248	298	243	260	3233	41	1.3
FTA	0	4	4	2	2	1	5	3	6	0	2	2	31	19	61.3
DF	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0
GC SMEAR	138	112	96	92	114	158	113	112	80	126	131	140	1412	55	3.9
GC CULTURE:															
VDC MEN	152	125	165	119	152	147	169	180	117	162	135	151	1774	94	5.3
VDC WOMEN	200	168	187	130	154	163	177	218	105	177	160	149	1988	73	3.7
PNC WOMEN	19	28	44	37	39	31	5	44	39	46	37	37	406	3	0.7
FPC WOMEN	43	42	62	43	54	47	40	52	27	33	41	38	522	3	0.6
PMD WOMEN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHLAMYDIA: MEN	147	129	148	117	130	140	161	137	133	141	127	140	1650	147	8.9
CHLAMYDIA: FE	173	151	156	114	141	165	173	190	131	178	158	150	1880	136	7.2
TREATMENT:															
GC TREAT	9	19	15	10	11	18	15	11	10	9	14	8	149	N/A	
GC PRO-TREAT	49	42	32	16	13	29	34	24	14	22	24	20	319	N/A	
LUES TREAT	1	1	4	2	0	2	4	3	8	4	0	0	29	N/A	
LUES PRO-TREAT	0	0	0	2	0	2	1	1	2	0	0	0	8	N/A	
NON-V.D. TREAT	103	119	177	90	160	169	178	177	170	185	125	155	1808	N/A	
CLINIC: NO.	13	12	13	12	14	13	13	13	13	13	11	13	153	N/A	

MONTHLY G.C. INVESTIGATIONS REPORT: EL PASO COUNTY HEALTH DEPARTMENT, 1995

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CY95	PCT/TL
CONTACTS TO GONORRHEA:														
OUTCOME														
TOGETHER														
NOT INFECTED	1	1	0	0	0	0	0	0	0	0	0	0	2	0.5
BROUGHT - TX	10	19	3	7	6	16	8	6	1	2	78	18.8		
PREVIOUS TX	6	13	7	9	2	7	6	6	1	7	64	15.5		
NOT FOUND	12	22	3	3	3	14	7	8	3	0	75	18.1		
REFUSED EXAM	0	0	1	1	0	5	1	2	0	1	11	2.7		
UNLOCATABLE	4	5	0	9	3	2	3	8	3	3	40	9.7		
TRANSFERRED	0	0	0	0	0	0	0	1	0	0	1	0.2		
EPI TREATED	7	36	8	9	6	23	22	9	8	13	141	34.1		
OTHER	0	0	0	0	1	1	0	0	0	0	2	0.5		
TOTAL	40	96	22	38	21	68	47	40	16	26	414	100%		

MONTHLY CHLAMYDIA INVESTIGATIONS REPORT: EL PASO COUNTY HEALTH DEPARTMENT, 1995

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC CY95 PCT/TL

CONTACTS TO CHLAMYDIA: OUTCOME	TOGETHER							TOGETHER								
NOT INFECTED	0		2	0	1	0	1		1	0	1	0	6	0.8		
BROUGHT - TX	1		18	5	5	5	13		13	9	5	6	80	11.0		
PREVIOUS TX	1		6	0	5	0	5		29	8	7	11	72	9.9		
NOT FOUND	5		21	2	21	8	16		13	20	3	4	113	15.5		
REFUSED EXAM	0		3	0	1	1	10		5	5	1	2	28	3.8		
UNLOCATABLE	2		14	1	10	3	7		9	22	3	5	76	10.4		
TRANSFERRED	0		0	0	1	1	3		1	1	0	0	7	1.0		
EPI TREATED	18		48	11	22	14	48		72	40	36	30	339	46.6		
OTHER	0		0	0	1	0	1		0	4	0	1	7	1.0		
TOTAL	27		112	19	67	32	104		143	109	56	59	728	100%		