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, 1993 - December 31, 1993

"None of us really understands what's going on with all these numbers."

David Allen Stockman
(On the U.S. budget, 1981)

CONTENTS

"When you come to a fork in the road,
take it."

Yogi (Lawrence Peter) Berra

INTRODUCTION

Our STD/HIV control programs comprise two parts: the mission and the infrastructure that supports it. For at least the last two decades, our operational energies have always been disproportionately allocated to the mission: venereal disease intervention. During 1993, for a constellation of reasons, the infrastructure could no longer be assigned low priority. The move into our new building early in 1993; compliance with many new rules and regulations (OSHA, CLIA, IRS, OEO, Medicaid, county government directives, state disease surveillance requirements, insurance company mandates, personnel matters, etc); and the evolution of program record keeping from a manual to manual -electronic system, consumed much cogitative and operational energy. We're pooped. And we miss our patients. Enough, already!

Early in 1993, we were at a fork in the road, and we took it. Where are we now?...in the process of re-channeling our energies to the mission, which has become singular again: chlamydia. (Gonorrhea, PPNG, Lues, Hepatitis-B, and HIV are on the run in El Paso County, with the lowest levels ever recorded for these diseases during 1993. This general downward trend made it possible for us to address infrastructure problems without feeling awful that disease control efforts were not getting priority consideration.)

Although the enclosed data (most of which are boring numerical indices of disease control efforts) reveal respectable work output, they are not stellar. Just good. We need to do gooder. The major difference between the terrific (quantity and quality) outputs of the three years preceding 1993 and those of 1993 can be summed up in two words: Perry Bethea. As you scan the 1993 indices, you will notice lower productivity -- most of which can be accounted for by the absence of a replacement for Perry, who left our employ in December of 1992.

We are currently doing two things to assure better containment of chlamydia: 1)fishing for resources from various potential donors (Beggars can't be choosers and we're begging.); and 2) re-organizing our personnel resources to do more chlamydia case-finding. Declining gonorrhea and HIV incidence and declining demand for HIV counseling and testing permit us to allocate more to chlamydia contact interviewing and contact tracing without exhausting our troops. Everyone is being asked to become at least a part-time infantryman, no matter what their specialty, in the fight against chlamydia.

PART I

Chlamydia control

We estimate that El Paso County hosts about 3000 cases of chlamydia annually. (There are about 1600 cases reported which, given a test that is about two-thirds accurate, really means that there would have been about 2500 diagnoses, given a 100% accurate test; in addition, under-reporting and under-detection due to patients not being routinely tested, particularly by private doctors, probably account for another 500 cases.)

What we record below are some data collected during the six years since we began our chlamydia control efforts. Because most of the data are from the public sector (with some from the military) we don't have a reliable picture. We also don't know much about the artifacts the data contain. For example, why is the chlamydia male-to-female ratio so different from that of its fraternal twin sister, gonorrhea? And why does morbidity fluctuate as unpredictably as it seems to? We need to meticulously collect surveillance information to explore these questions. Suffice it to say for now that chlamydia seems to behave in less predictable ways than gonorrhea, no matter how similar these two are; the tried and true answers for gonorrhea may simply not apply. We begin by providing the (sketchy) historical data we do have.

Laboratory reported chlamydia cases: 1993

	Men	Women	1993 Ratio	1992 Ratio
Private providers	44	304	1: 6.9	1: 5.9
STD Clinic	264	192	1.4: 1	1: 1.2
FPC/PNC/CHC*		199	N/A	N/A
Planned Parenthood		51	N/A	N/A
Ft. Carson	212	239	1:1	1: 1
Air Force	32	38	1:1.2	1: 1.7
Total	552	1023	1: 1.85	1: 1.9

*Family Planning, Prenatal, Community Health Center, clinics

About three-quarters of the cases are younger than 25; 92% are under age 30, virtually identical to 1992's reported cases.

Chlamydia cases by selected report source and gender

1988-1993

(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
1992	185	327	277	289	45	63	1186
1993	264	299	212	239	32	38	1084

The trend suggests that chlamydia is hyperendemic (rather than epidemic) and probably declining slightly (mainly in the military sector).

The Fort Carson data are notable because the male-to-female ratio is (almost always) roughly 1:1. (In comparison, 70% of their 1993 gonorrhea cases are diagnosed in men, a 2.3:1 ratio.) Is this an artifact of testing? of selective screening? of less rigorous contact tracing efforts? or is it something about the disease itself (i.e., the female reproductive tract is a superior ecological niche for chlamydia than the male's)?

The spectacular decline in Air Force-diagnosed cases probably reflects the more defensive sexual habits of the privileged in our society since the AIDS scare of the mid-1980s (The Air Force is composed of socio-economically privileged people compared to the Army).

As to why 1993 saw the highest number of male cases in the Health Department clinic since testing began (mid-1987), we don't know.

Chlamydia screening in Women's Clinics

1988-1993

Year	Family Planning		Prenatal/CNM	
	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)

* Only high-risk clients were tested in 1989

In 1988, the first full year of reasonably reliable testing, we were astounded by the very high rate of chlamydia positivity in Prenatal Clinic clients. We're pleased to note that this rate is considerably lower for the last three years. (Considering the damage that chlamydia can do to babies, principally pneumonia, we're tickled with these data; we would like to see the rate drop to the current FPC level (3.9%) or lower.)

Chlamydia cases in VD Clinic

The overall positivity rate declined dramatically from the first full-year of chlamydia screening in 1988 (we started in June of 1987) to 1993. How much is due to our inexperience with the test during the first 18 months (not likely to be a substantial distorter) and how much is due to better control efforts, particularly identifiying cases and removing infected sexual partners from the reservoir is not known. It is encouraging to note that we are testing more than twice the number of patients (3774: 1733= 2.2) and identifying roughly the same number of positives (451 vs. 405).

Chlamydia cases in VD Clinic
1988-1993

	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%)

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 classifed as contacts, while the latter as volunteers or screening detections.
The data below reflect STD, Family Planning, and Prenatal, Clinic patients.

Chlamydia Cases: reason for presentation:

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
Volunteer	111 (57.2%)	140 (56.2%)
Screen	27 (13.9%)	47 (18.9%)
Contact	56 (28.9%)	62 (24.9%)
	194 (100%)	249 (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%)

WOMEN: CONTINUED...

	1992	1993
Volunteer/ Screen	260 (75%)	226 (70.8%)
Contact	87 (25%)	93 (29.2%)
	347 (100%)	319 (100%)

Thus, about a quarter of H.D. cases are identified through contact tracing (for men or women), lower than it is for gonorrhea (about 30%), probably an artifact of the test's relative inaccuracy.

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. About half (578/1236) of women had their chlamydia detected as a consequence of contact tracing since 1988.

STD Clinic women with chlamydia: reason for presentation
(All H.D. Clinics)

	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
Volunteer/ Screen	135 (60.8%)	117 (57.1%)
Contact	87 (39.2%)	88 (42.9%)
	222 (100%)	205 (100%)

Chlamydia contact interviews
(All H.D. Clinics)

We have interviewed about 3000 civilian cases of chlamydia in the last five years, and obtained about 5000 contacts, with a consistent contact index of about 1.7 for both men and women. During 1993, we recorded a 10 percent decline in our contact index, a finding similar to that for gonorrhea interviewing (see below). Whether this reflects reduction in sexual adventurism (probable) on the part of infected patients or substandard interviewing (possible) is not known.

	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)

We are interviewing 90% of public sector chlamydia cases, almost all of the women, but only 70% of the men...

Proportion of chlamydia cases interviewed
(Health Dept. diagnosed cases)

	1988	1989	1990	1991	1992	1993
Reported Cases	511	361	638	689	512	517
Interviewed	82%	80%	82%	91.5%	86.5%	91.8%

Fort Carson's Preventive Medicine folks have been doing a nice job of interviewing their chlamydia cases at least since 1988 (same as we).

Proportion of chlamydia cases interviewed
(Fort Carson STD Clinic)

	1988	1989	1990	1991	1992	1993
Reported Cases	447	552	435	544	566	541
Interviewed	65%	63%	90%	77%	85%	88%

Thus, they have also had about 3085 cases reported and have interviewed three-quarters (2302/3085).

Chlamydia contact tracing

The number of contacts to chlamydia sought locally since contact tracing efforts began in 1988 has increased substantially. The low proportion of positives and greater proportion of uninfected contacts either has to do with testing (low sensitivity, especially from the male urethra) or with the possibility that chlamydia is not a tenacious infection in men (lots of spontaneous cure?). The first explanation is likelier to be the case, but we're guessing.

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
Infected (New cases)	184 (21.1)	160 (21)
Not infected	564 (64.6)	367 (48.2)
Not examined	125 (14.3)	235 (30.8)
	873 (100)	762 (100)

Thus, 4370 contacts have been sought locally in six years, of whom 875 (20%) were newly identified cases; about 2650 others were treated preventively but had negative tests. We bet that about 650 of these 2650 (about a quarter) were really positive, but the relatively insensitive tests did not show positive results. Thus, our chlamydia contact tracing efforts probably remove about 0.7 infected chlamydia patients per day. We should be getting at least one, preferably 1.5 per day.

Summary

We need to investigate the community form of this disease in a comprehensive way, the way we did for gonorrhea during the 1970s. Chlamydia is too serious and widespread of an infection to be attacked as a public health after-thought. We are exploring funding sources for a planned community-wide attack. Especially important will be resources to offer screening in many (selected) private, and quasi-private, sector medical settings, especially those that routinely do pelvic examinations on very young women.

Part II

HUMAN IMMUNODEFICIENCY VIRUS INFECTION

AIDS proper: a brief profile

At least 316 persons with full-blown AIDS have lived in El Paso County since the first reported case in the summer of 1982. About two-thirds are known to be dead. Two hundred and seven (two-thirds) were counted locally, while almost a third (109 cases) were diagnosed and counted elsewhere.

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

AIDS cases having resided locally

	Counted locally			Counted elsewhere			Total		
Yr.	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	12	(92)	6	2	(33)	19	14	(74)
1987	9	8	(89)	10	10	(100)	19	18	(95)
1988	24	22	(92)	10	9	(90)	34	31	(91)
1989	31	27	(87)	17	13	(77)	48	40	(83)
1990	24	19	(79)	14	7	(50)	38	26	(68)
1991	35	27	(77)	12	6	(50)	47	33	(70)
1992	23	10	(44)	19	8	(50)	42	18	(43)
1993	37	5	(14)	17	5	(29)	54	10	(19)
Ttl:	207	141	(68)	109	64	(59)	316	205	(65)

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).

Note: the 1993 change in the AIDS definition served to increase our AIDS totals. For example, without the definitional change, we would have reported 27 AIDS cases in 1993; with the change, the total is 54. This doubling only applies to 1993. Overall (1982-1993), 44 AIDS cases were reported that would not have met the pre-1993 definition. Thus our overall total went from 217 cases (the total up to 31 December 1992) to 316; without the definitional change, our aggregate total would have been 272 by 31 December 1993. Confused? (Four cases were added to 1990's total, three to 1991's, ten to 1992's, and 27 to 1993's (the 44 cases total mentioned above.)

HIV/AIDS cases by age at report and clinical status

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, 41 (15) means that 41 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.

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 much older at time of report than at time of initial diagnosis. The difference is illustrated in the following two tables. The first rtable records mean age at report to us; the second, mean age at initial diagnosis. (Based on YEARSTAT Report in computer.)

	Age at report	Total (AIDS)	
Year Reported	(Mean)	HIV+	Deaths
1982-85	30.6	41 (15)	8
1986	30.2	99 (19)	9
1987	29.9	84 (19)	11
1988	32.6	101 (34)	33
1989	32.0	104 (48)	15
1990	32.4	104 (38)	33
1991	32.6	96 (47)	42
1992	33.2	100 (42)	41
1993	32.9	102 (53)	35
Total		831 (315)	227

(There are a few missing cases: it should be 834 HIV cases and 316 AIDS cases. We'll work out the programming bug for next year's report. What's shown should give a sufficiently accurate picture for our present purposes. The disparity between the 205

deaths given in the AIDS Table at the beginning of this section and the 227 deaths in the HIV/AIDS Table directly above is that 22 people died with HIV, and not of it.)

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 are identified each year, which argues against the idea of rapid virus propagation, and note that the ratio of identified 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 case-to-death ratio is steadily declining, from 16.5:1 in 1986 (the first full year of testing) to 3.3:1 in 1993.

HIV/AIDS cases by age at diagnosis and clinical status

Year Diagnosed	Mean age	S.D.	All HIV/AIDS Cases
1982-85	30.7	8.7	71
1986	29.8	8.4	147
1987	29.6	7.6	108
1988	32.9	10.3	110
1989	32.1	10.1	111
1990	31.8	8.8	100
1991	31.7	9.0	77
1992	31.3	8.7	60
1993	31.0	6.8	43

Table has 7 missing observations (dates unavailable)

In comparing the two tables we note that there are fewer and fewer people newly being diagnosed as having HIV each year (especially during the 1990s; column at right): at least half of all cases being reported to us recently have received an HIV diagnosis elsewhere in the past. This is powerful evidence that the HIV epidemic is not growing in our region. The declining age since the peak in 1988 (from about 33 to 31 years) probably has to do with the availability of the test: earlier in the epidemic, people had to wait a long time to know they had HIV/AIDS, which tended to push the average age at diagnosis higher.

Miscellaneous age chronology data

In El Paso County, the mean age at acquisition of HIV is probably 28.3 years (based on data from 85 seroconverters); the mean age of those not known to have proceeded to AIDS or to have died is 34.1 (N= 493); the average age at AIDS is 35.5 (N= 315)

and at death, 37.2 years (N=201). Thus, the average HIV-infected person locally is about 1.5 years from an AIDS diagnosis and about three years from death (as of 12/31/93), meaning that we can expect many cases of AIDS by mid-1995 and many deaths by 1997.

Risk factor classification of AIDS and AIDS-Free Cases (1982-1993)

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 four main changes are: 1) for men---a lower proportion of gay men and a higher proportion of injecting drug users (IDU)...and yet the combined total (Gay and IDU) is about the same; 2) a slight increase in the percentage of women (see Legend at base of Table); for women 3) increased representation of IDU and (surprisingly) decreasing representation of sex as mode of acquisition; and 4) the predictable decrease in transfusion as a risk factor, as the blood supply gets 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 probably declining (at least, it's not growing).

Although not shown here, there is little difference between "known" and "suspected" risk factors. Roughly 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. (This observation and the data are being prepared for publication.) 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 (part educated guess) of risk classification.

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

	AIDS (Full-Blown)		HIV (AIDS-Free)	
	Men (N=287)*	Women (N=29)*	Men (N=462)*	Women (N=56)*
Gay/bi-sexual	74.3%	N/A	71.1%	N/A
Gay/ I.D. user	14.4%	N/A	13.7%	N/A
I.D. user	7.7%	38.5%	13.1%	51.1%
Sex with I.D./Hetero	0.7%	50.0%	0.6%	42.2%
Transfusion	2.9%	11.5%	1.5%	6.6%
Total	100%		100%	

*There are 66, or 8% of the total 834 cases, for which no risk factor information is available (47, or 77%, of these are Fort Carson cases, reflecting the tense two-year period starting in the Spring of 1987, when Fort Carson changed their approach to collaborating with us). Thus the true denominator for these four columns is 768. 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 10:1, but 8.3:1 for those not known to have AIDS. Thus the proportion of women is increasing slightly (from 9.1% to 10.8%); note that the numbers of infected women is small.

HIV 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 (1982-1993)

(Based on REPORT 9 in computer.)

HIV testing has been available since June of 1985. The following represents the distribution of all 834 infected adults (including full-blown AIDS cases) reported locally, and where they were identified. Note that three-quarters are detected outside of health department clinics. Note as well how few of our Drug Clinic clients are infected.

	Cases/(%)	Men	Women
1. Counseling/Testing Site (Health Dept.)	163 (14.5)	154	9
2. V.D. Clinic	38 (4.6)	34	4
3. VSR (Prostitution)	9 (1.1)	1	8
4. Drug Clinic	4 (0.5)	3	1
5. Donor centers	114 (13.7)	107	7
6. Military*	121 (14.5)	111	10
7. Doctors/hospitals/other	385 (46.2)	335	50
Total:	834 (100)	745(89.3%)	89 (10.7%)

* Actually, military doctors have reported 165 cases, of whom 121 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 768 (92% of 834 cases) with known information.

...viewed annually, since the test became available (percentages are shown):

Reason	Thru 1986	1987	1988	1989	1990	1991	1992	1993
Volunteer	28.8	20.7	11.1	16.5	20.4	11.4	29.4	20.5
Screen	62.4	72.4	80	70.9	64.5	78.5	63.5	74.4
Contact	18.4	6.9	8.9	12.7	15.1	10.1	7.0	5.1

100 percent

Overall, 19% are volunteers, 70% are screening discoveries, and 11% are contacts. Thus, only one out of five of all HIV cases discover infection as a consequence of wanting to know; fully four of five are informed as a consequence of screening or partner notification.
(Note: "Red-date" was used as baseline date for these data.)

It is easier to see the long term change in reason for presentation by compressing the data into two periods: early in the epidemic and currently:

Reason	July '85-June '88 (N=344)	Jan '91-Dec 93 (N=175)
Volunteer	20%	16.6%
Screen	68%	74.3%
Contact	12%	9.1%

100%

Note that there are twice as many cases in the early period; this is NOT artifactual. Fewer HIV infected people are being "fished out" of the pool, probably because the epidemic has crested: there ARE currently fewer folks out there who have not yet been identified, as opposed to early in the epidemic. And as the newly identified cases are being fished out, they are less likely to be fished out as volunteers.

HIV contact interviews
(1985-1993)

(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 incorrect. We dissent; we have successfully conducted such "partner notification" (contact tracing) interviews on positive clients since the late fall of 1985.

Year	No. Interviews	No. Contacts	Contact Index
1985*	28	56	2
1986	95	182	1.9
1987	45	78	1.7
1988	61	126	2.1
1989	64	130	2
1990	60	128	2.1
1991	43	80	1.9
1992	53	70	1.3
1993	38	68	1.8
Ttl:	487	918	1.9

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

The vast majority of HIV cases NOT interviewed were 1) not located (mostly transient donors) 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.

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).

That there are fewer interviews being done has to do with the fact that less than half of cases newly reported to us are really new (they've been talked to elsewhere. We counsel them, but only do interviews if one is indicated.

On 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 very difficult to transmit in all but rare cases.

Seroconverters by year of conversion

(Based on REPORT 2 in computer.)

Year	Civilians	Military	Total
1986	9	1	10
1987	5	2	7
1988	10	2	12
1989	9	3	12
1990	14	2	16
1991	10	5	15
1992	6	5	11
1993	1	1	2
Ttl:	64 (75%)	21 (25%)	85 (100%)

Not all seroconversions are observed. These data, however, are useful as a trend indicator. The relatively small annual burden (perhaps a dozen to 20 seroconversions actually occur in EL Paso County) and the accelerating annual HIV death burden (about 40 currently) argues for declining prevalence over time (implosion idea). Caveat on 1993 data: it usually takes a year or two to "observe" recent seroconversions; hence the 1993 data are artifactually low.

Seroconverters are not very young, contrary to the propaganda in the media reports; the average (mean) age at seroconversion is 28.3 years (Range 17 to 51 yrs). Only four of the 85 seroconverters are teens: 17 years old (one) and 19 (three). Forty percent convert in the 20-25 age interval and another 25% convert at ages 33-36. Thus, the distribution is somewhat bi-modal, with excessive risk in both the early twenties and early thirties.

Health Department HIV antibody testing

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 16,150 specimens for testing since 1 June 1985, with 3167 (about 20%) being done in 1993 alone.

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. The data clearly show that what we have is an epidemic of testing, rather than of HIV.

HIV testing in the CTS: 1985-1993

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

Thus, 10,736 tests in CTS yielded 173 positives (1.7%) in the 8.5 years since the test became available; more importantly, while testing tripled, the positivity rate declined 92%, a simply wonderful inverse relationship! The CTS alone has served to identify only roughly one positive per month for about 7 years.

HIV (Ab) testing in STD Clinic

	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

We see that while the number of persons tested rose appreciably since 1987, the positivity rate declined to zero. (All positive persons revealed recognized risk factors.) Overall, 3205 tests were done in STD Clinic, with 37 positives identified (1.2%). Almost a quarter of all HIV tests done at the health department originated in STD Clinic (3205/13941).

HIV testing in prostitute women (1985-1993)

A total of 462 women with histories of prostitution have been seen at our department since the summer of 1985, of whom 443 (96%) have been tested for HIV antibody. With 11, we were unable to obtain blood and 8 slipped through our Drug Clinic testing program.

Twenty-two (5%) are infected with HIV; of these, 15 are known to have worked locally and 7 had worked elsewhere and have never been observed working here.

Importantly no positive test has been obtained on a prostitute woman in two years (since Valentine's Day of 1992).

Only one prostitute who was negative on the initial test has seroconverted: on her fifth test (1987) in two years (risk factor: sharing contaminated needles).

AIDS-virus infection in children:

Nine children have been reported to us as being AIDS-virus infected since the beginning of the epidemic; only one is known to be alive, while seven are known to be dead.

"Age" means age at diagnosis, not current age. (Their ATS # are, in sequence, 1163, None, 10746, 2369, 4505, 6044, 7278, 10027, and 11338.)

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	Unknown**	Inf. mother (transfusion); birth	1985
Male	3 yrs	Alive*	Infected mother (IV); birth	1988
Female	Newborn	Dead	Inf. mother (Ct. to IV); 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	Dead	Transfusion (Hemophilia)	1993***

* Attending school locally (age 8 as of 1993)
** Presumed dead; no longer residing in this State
*** originally reported in Oklahoma in 1986

We assume that the uneven gender ratio (2:1 male --exclusive of hemophiliacs, who are almost always boys) is an artifact of small numbers.

In addition, there have been 6 newborns, two males and four females whose mothers are known to have HIV, but whose positive blood tests may represent transfer of the mother's antibody, rather than true infection. Of the six, three are temporarily lost to follow-up (ATS # 8129, 8044, 10789), while the other three are not infected (ATS # 10423, 11675, 13468). Two were born in 1991, three in 1992, and one in 1993.

add 15240
15241] neg

Part III

Gonorrhea control

The steep decline in gonorrhea incidence that accompanied the AIDS hysteria of the mid-1980s continues; for calendar year 1993, we report yet another decline, from 634 cases in 1992 to 517 (-18.5%) in 1993. Gonorrhea morbidity has now been in the three-digit category for six years in a row. (The last time it was in the three-digit range was in the 1960s.) Incidence has declined a whopping 66% since 1985--the birth year of the heterosexual AIDS scare.

Case-finding highlights: gonorrhea

In 1993 we, as usual, interviewed almost 90% of GC cases, but had a modest contact index (1.55, or about 10 percent lower than usual). Whether this reflects sexual conservatism on the part of GC patients (likely) or poorer interviewing (less likely) is unknown.

Contact interviewing activity

	'77-'79 (Averages)	'80-'82	1983	1984	1985	1986	1987	1988	1989	1990
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

...CONTINUED...

	1991	1992	1993
Interviewed	95.2%	92.1%	89.2%
Contacts per case	1.73	1.81	1.55

A notable shift occurred in gonorrhea case distribution during 1991: away from the military, remarkably enough, and it has been sustained since (the same applies to chlamydia). Overall, for all groups, gonorrhea incidence is half what it was in 1987.

Gonorrhea case distribution
(El Paso County 1987-1993)

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
Civilian	440 (56.7%)	368 (58%)	303 (58.6%)
Fort Carson	324 (41.8%)	255 (40.1%)	205 (39.7%)
USAF	12 (1.5%)	12 (1.9%)	9 (1.7%)
Total:	776	635	517

Gonorrhea contact tracing

A total of 136 gonorrhea cases were newly identified in 1993 as a consequence of contact tracing. The low number (389) of contacts sought locally reflects disease importation: more than a third of all named contacts reside outside of El Paso County; in addition, many in the "not examined" category are probably transient folks.

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%)

...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%)

Thus, the quality of GC case-finding remains high.

Gonorrhea: Reason for Presentation (Epidemiologic category)

	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	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	1992	1993
Volunteer	426 (54.9%)	344 (54.2%)	269 (52%)
"Screenee"	122 (15.7%)	107 (16.8%)	125 (24.2%)
Contact	228 (29.4%)	184 (29%)	123 (23.8%)
Total cases	776 (100%)	635 (100%)	517 (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
Volunteer	54.9	54.2	52.0
"Screenee"	15.7	16.8	24.2
Contact	29.4	29	23.8

Gonoccocal 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
Cases	71	44
Percent	25	21.3

The notable datum is the percentage recorded for the last five years: somewhere between a fifth and a quarter 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: very young, non-white, and living a rough life. All of these variables probably make for a lousy set of host defenses.

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

Gonorrhea repeat cases

The contribution to the gonorrhea burden made by repeaters is now at an all-time low.

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

In terms of bodies, 27 persons (14 men) were repeaters; 26 had 2 episodes, and 1 had 3. Thus these 27 persons generated 55 cases in all.

Ethnically, 21 (77.8%) of the 27 repeaters are black; occupationally, 13 (48%) of all repeaters are in the Army.

As we look at gonorrhea case distribution since 1985, we see that the absolute number of cases in blacks has declined precipitously since 1985 (about 56%)--especially during the last two years--even though the overall proportion of all gonorrhea cases in blacks is still very high (63%). Blacks are increasingly paying attention to safer sex messages, we believe. We are pleased that our campaign to target condom use to high-risk populations is probably contributing to this decline in incidence.

Gonorrhea cases in blacks

	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
Number	381	326
Percent	(60)	(63)

Gonorrhea in street prostitutes

The relatively low number of clinic visits by prostitute women during the last four years emphasizes the trend since the mid-1980s: the fear of viruses has reduced demand for prostitution and, consequently, fewer ladies are in the trade. The wonderfully low venereal disease rate since 1990 reflects the impact of relentless safer-sex initiatives, especially free condom distribution. The ladies are increasingly using them and the customers are likelier than ever to accept their use.

Year	Original visits*	Gonorrhea cases	% Positive
'70-'75(Avg)	133(Average)	39	29.3(Average)
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
1988	195	21	10.8
1989	192	24	12.5
1990	157	4	2.5
1991	148	7	4.7
1992	150	4	2.7
1993	114	6	5.2
24-yr total:	4638	760	16.4

*Original visits excludes "follow-up" visits.

Screening for chlamydia in prostitute women started June 1, 1987 and was not universally applied until mid-1989. In addition, until early 1989, there were some diagnostic ("indeterminate" results) problems. Specimen collection is also affected by menstruation. The following data, then, are not as rigorous as the gonorrhea data, but they are good trend indicators.

Chlamydia in prostitute women

	Visits	Tests(%)	Positive (% Pos)
Second Half of 1987	86	65 (76)	4 (6.2)
1988	195	145 (75)	19 (13.1)
1989	192	141 (73)	14 (10)
1990	157	144 (92)	7 (4.9)
1991	148	148 (100)	11 (7.4)
1992	150	148 (98.7)	7 (4.7)
1993	114	112 (98.2)	3 (2.7)

For comparison, the current positivity rate for non-prostitute women in VD Clinic is 9.9%!

Gonorrhea in homosexual men

Although many gay men may not always adhere to safer sex practices, generally, things are going well. Of the 310 gonorrhea cases in men, 3 were in gay men (7 in 1992).

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%

Gonorrhea case rates

(Assumes a 1993 population of about 415,000): We have the lowest rate per 100,000 ever...an 83% decline over the 1977 rate (apogee)!

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
	192	155	125

These data are nothing short of spectacular, and provide the most persuasive evidence for the sustained sexual habit changes noted in previous reports and for the efficacy of our gonorrhea control measures over time.

PPNG (penicillinase-producing N. gonorrhoeae) cases:

During 1993 we recorded only 2 cases (15 in 1992); we are thus back to our pre-1990 "background noise" (importation) levels (The 1990-1991 period witnessed an 18-month long self-sustaining PPNG epidemic in the socio-sexual networks of crack cocaine gangs.)

Since the introduction of PPNG into the USA in the spring of 1976, 200 cases have been diagnosed in El Paso County. They occurred in context of 22,494 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

Male-to-female ratio: gonorrhea

This ratio increased slightly during 1993, but is well within the expected range.

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

Part IV

Other STD Program data/miscellaneous

STD contact interviews: 1973-1993

Yr	Civilian Gonorrhea	Ft.Carson Gonorrhea	Syphilis (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			28	1425
'86	671	467	30			95	1263
'87	556	355	13			45	969
'88	442	395	9	419	234	61	1560
'89	418	358	17	290	355	64	1502
'90	424	357	21	523	336	60	1721
'91	445	294	27	703	421	43	1933
'92	339	246	13	571	481	53	1703
'93	267	194	28	517	475	38	1519
Ttl:	10800	9820	487	3023	2302	487	26839

Outreach: field investigations

During 1993 we performed 2168 field investigations in support of STD/HIV control, a virtual 30% decrease over 1992, a consequence of our losing a full-time contact tracer (Perry Bethea), of increased surveillance duties (chlamydia reporting), of cumbersome paperwork requirements by the Colorado Department of Health (reducing Chris Pratts's efficiency), and of the time-consuming outreach efforts for the Puerto Rico-Colorado Springs Project.

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
Total:	24510	1240	4984	12001	2232	44967

* 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
(1973-1993)

STD patient interviewing and the tracing of named partners occasioned the identification of 8000 new cases (called "broughts", short for brought to treatment in DIS jargon)since 1973, or about one per day.

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		

VD Clinic attendance...declined about 10 percent during 1993. Prima facie, this suggests an easier patient load. Actually, anyone working in the clinic will tell you the patient load is getting tougher. The reason? Women. About two-thirds of our clients are women (for years it was about 55%); management of their medical problems is more complex and time-consuming than it is for men.

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
		21-year total:	93,022
		(Mean = 4430 per year)	

Note: Table excludes the approximately 5500 HIV Testing Center visits in 1993.

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 upward trend for NGU/Chlamydia and in v.warts (both in men) during the last few years. No data are given for Herpes in 1991-93 because they were

not rigorously kept, but we know that case levels are low. Note also the spectacular decline in trichomoniasis and the increase in NSV (Gardnerella) in women since the early 1980s.

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...

	Men		
	1991	1992	1993
NGU/Chlamydia	667	696	675
Herpes	N/A	N/A	N/A
V. Warts	228	292	256
Scabies	20	29	23
P. Pubis	43	43	40
Totals:	958	1060	994

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
Chlamydia	275	216	203
Trichomoniasis	101	97	103
Monilia	315	320	271
NSV	633	685	548
Herpes	N/A	N/A	N/A
V. Warts	115	181	195
Scabies	13	11	8
P.Pubis	30	31	29
Totals:	1482	1541	1357

Syphilis

In the early 1970s, the rate was about 22 cases/100,000 population; the current rate is five times lower (about 4 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

Presentations

A minimum of 95 formal presentations were recorded, with a total audience of 4121 (excluding radio/television audiences). Thus, about two presentations a week, with an average audience of 44, were done in 1993.

The absence of data on on presentations by Dr. Muth (an inveterate pubic speaker) is artifactual. ["pubic" is not misspelled; it means adult in Latin and Dr. Muth gives many talks about adult topics like sex and drugs.] Dr. Muth may not be recording his talks on formal report cards or...

About half of audiences are students and about a third are health-care workers. The major shift over time has been the sustained interest on the part of health-care workers, and the declining interest on the part of the general public, employers and trainers. Ironically, high-risk persons were never much interested!

	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
Total presentations	117	128	95
Total audience	5065	5358	4778
Students	41.6%	52.8%	46.1%
Health Care Workers	30%	21.1%	37.9%
Employers	0.8%	1.7%	0.7%
Trainers	3.6%	5.5%	6.2%
General audience	14.1%	14.8%	7.7%
High risk persons	11%	4.1%	1.4%

Presentations by person

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

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

Summary of medications used (1993)

VD Clinic

Bicillin (1.2 m.u.)	159	syringes
Spectinomycin (2g)	11	vials
Benemid (500mg)	100	tablets
Amoxicillin (500mg)	2448	capsules
Benadryl (50mg)	778	capsules
Erythromycin (250mg)	6276	tablets
Rocephin (250mg)	11	vials
Doxycycline	25630	capsules
E-Mycin (333)	6660	tablets
Suprax (440mg)	609	tablets
Metronidazole (500mg)	1800	tablets
Ofloxacin	184	tablets (118 @ 400mg and 66 @ 300mg)

PART V

The traditional tables

"You can observe a lot by watching"

Yogi Berra

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	134	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

R	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	MONTHLY AVERAGE	ANNUAL TOTAL
1	70	60	66	52	63	86	49	52	88	80	58	52	65	776
2	54	65	72	40	53	35	52	60	39	78	32	54	53	634
3	29	39	26	29	25	47	37	70	33	51	36	95	43	517
4														
5														
6														
7														
8														
9														
10														
11														
02														
03														
04														
05														
06														
07														
08														
09														
10														
11														
12														

Venereal Disease Morbidity Report

Calendar 1993

Reporting Source	Morbidity				Age Group										Race			Pro	RX
	Syphilis			Gon	14-19		20-24		25-29		30-39		40+		Cau	Blk	Hisp	Syph	Gon
Categories	P&S	E.L.	Other		Syph	Gon	Syph	Gon	Syph	Gon	Syph	Gon	Syph	Gon					
Private Physician Men		1	2	42		15		11	1	8	1	6	1	2	18	23	4		
Women		2	1	49	1	23		15		7	2	4			26	20	6		
V.D. Clinic Men	1		1	118		24		47	1	24		21	1	2	17	90	13	20	139
Women		8	3	87	1	35	6	30	2	18	2	4			32	42	24	24	197
CHC/Pren/Family P.				5		4				1					2	2	1		
Planned Parenthood				2		1		1							1		1		
Health Hold				0															
Fort Carson Men	3	2	2	143		21	4	90	1	20	2	10		2	16	126	8		
Women	1			62		23		30	1	5		4			26	33	4		
Peterson A.F.B. Men				1		1										1			
Women				1		1									1				
Air Academy Men				6		2		3		1					2	4			
Women				1				1								1			
Totals	5	13	9	517	2	150	10	228	6	84	7	49	2	6	141	342	61	44	336

Clinic Attendance: 4499
New: 2646
Return: 1853

Treatment Failure None

ER Males: 27
ER Females: 32

MONTHLY V.D. CLINIC AND LABORATORY REPORT: EL PASO COUNTY HEALTH DEPARTMENT, 1993

	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP	OCT	NOV	DEC	CY	POS.	PCT+
TESTING:															
HIV (Ab)	303	286	236	367	266	220	310	249	267	230	210	223	3167	103	3.25
HIV (CUMULATIVE)													16150	722	4.47
RPR	278	237	317	292	234	317	296	307	281	260	247	341	3407	80	2.35
FTA	2	3	2	4	4	1	7	3	7	3	3	3	42	33	78.6
DF	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0
GC SMEAR	151	128	157	148	100	133	155	143	133	131	156	154	1689	69	4.1
GC CULTURE:															
VDC MEN	154	133	168	156	119	170	157	165	138	131	158	163	1812	104	5.7
VDC WOMEN	202	156	176	217	143	194	168	248	200	184	150	214	2252	85	3.8
PNC WOMEN	37	38	43	62	42	44	44	10	11	18	12	18	379	2	0.5
FPC WOMEN	167	108	136	188	119	164	122	40	40	52	41	41	1218	5	0.4
PMD WOMEN	8	17	9	5	9	3	1	2	19	13	0	0	86	0	0
CHLAMYDIA: MEN	136	139	169	135	119	157	156	148	137	136	149	149	1730	248	14.3
CHLAMYDIA: FE	169	135	176	178	127	179	169	188	195	181	143	204	2044	203	9.9
TREATMENT:															
GC TREAT	17	8	15	13	11	20	23	30	17	27	19	18	218	N/A	
GC PRO-TREAT	15	24	18	30	13	39	42	36	25	31	24	51	348	N/A	
LUES TREAT	2	4	5	6	7	3	4	3	6	2	7	5	54	N/A	
LUES PRO-TREAT	3	1	1	2	10	1	5	3	2	2	0	2	32	N/A	
NON-V.D. TREAT	241	219	263	245	209	281	257	272	266	291	239	287	3070	N/A	
CLINIC: NO.	11	12	14	13	12	14	13	13	13	13	12	12	152	N/A	

HIV TESTING EXCLUDES THE 133 MILITARY POSITIVES SINCE JULY 1985 AND 25 POSITIVE DONORS LOST TO FOLLOW-UP

MONTHLY G.C. INVESTIGATIONS REPORT: EL PASO COUNTY HEALTH DEPARTMENT, 1993

CONTACTS TO GONORRHEA: OUTCOME

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CY 1993	PCT/TL
NOT INFECTED	0	0	0	0	0	0	2	0	1	1	0	0	4	0.9
BROUGHT - TX	9	8	5	6	6	18	15	20	10	12	9	18	136	30.6
PREVIOUS TX	1	5	4	0	1	7	1	11	5	3	8	6	52	11.7
NOT FOUND	2	3	6	3	5	6	1	6	6	5	4	6	53	11.7
REFUSED EXAM	2	1	3	2	1	0	0	0	2	0	0	0	11	2.5
UNLOCATABLE	2	5	1	2	0	2	3	7	4	6	1	6	39	8.8
TRANSFERRED	0	0	0	0	0	0	1	0	0	0	0	0	1	0.2
EPI TREATED	6	16	14	6	5	13	9	20	21	9	9	18	146	32.8
OTHER	0	0	0	1	0	0	0	0	0	0	0	2	3	0.7
TOTAL	22	38	33	20	18	46	32	64	49	36	31	56	445	100

MONTHLY CHLAMYDIA INVESTIGATIONS REPORT: EL PASO COUNTY HEALTH DEPARTMENT, 1993

CONTACTS TO CHLAMYDIA: OUTCOME

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CY 1993	PCT/TL
NOT INFECTED	0	0	0	0	0	1	1	1	0	4	0	0	7	0.8
BROUGHT - TX	3	5	10	18	20	23	17	16	13	11	7	17	160	19.1
PREVIOUS TX	0	2	6	9	5	8	1	21	2	12	3	5	74	8.9
NOT FOUND	1	5	10	9	15	18	9	14	8	4	6	21	120	14.4
REFUSED EXAM	1	1	3	2	0	4	3	1	0	0	1	4	20	2.4
UNLOCATABLE	5	2	12	1	2	13	12	11	4	8	8	6	84	10.1
TRANSFERRED	1	0	1	0	0	2	3	0	0	1	0	1	9	1.1
EPI TREATED	19	30	26	24	27	45	39	40	23	35	25	27	360	43.1
OTHER	0	0	0	0	0	1	0	0	0	0	0	1	2	0.2
TOTAL	30	45	68	63	69	115	85	104	50	75	50	82	836	100

CHLAMYDIA
Monthly Venereal Disease Morbidity Report

Calendar 1993

Reporting Source	Morbidity				Age Group					Race			Pro	EX
	Syphilis			Chl	14-19	20-24	25-29	30-39	40+	Cav	Blk	Other	Chl	Chl
Categories	P&S	E.L.	Other		Chl	Chl	Chl	Chl	Chl					
Private Physician Men				44	13	11	5	5		2		2		
Women				304	131	73	37	24	6	69	18	21		
V.D. Clinic Men				264	69	100	52	32	7	108	114	76		
Women				187	94	53	19	15	2	90	46	46		
CHC/Pren/Family P.				199	88	73	26	7	1	86	39	51		
Planned Parenthood				51	24	18	6	2	1	9	4	5		
Health Hold				5	3	1				3	2			
Fort Carson Men				212	34	132	39	4	2	57	123	16		
Women				239	83	110	28	11	1	97	70	18		
Ent Air Base Men				7	1	2	2	1		1	4			
Women				8	1	4	3			6	2			
Air Academy Men				25	9	13	2			19	4	1		
Women				30	10	13	4	1		23	3	2		
Totals				1575	560 (37%)	603 (40%)	223 (14.8%)	102 (6.8)	20 (1.3)	571	429	238		

Clinic Attendance:
New:
Return:

560/1508 = 37%

ER Males:

Treatment Failure

1238

46% 35% 19%