EL PASO COUNTY HEALTH DEPARTMENT 501 North Foote Avenue Colorado Springs, Colorado 80909-4598

ANNUAL REPORT
Sexually Transmitted Diseases/AIDS Program
January 1, 1989 - December 31, 1989

"It's not the business of the doctor to say that we must go to a watering place; it is his affair to say that certain results to health will follow if we do go to a watering place."

Chesterton

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"Don't ask the doctor; ask the patient"

Yiddish Proverb

INTRODUCTION

This is a hastily prepared document, principally a repository of dull numerical data. We like to have a lot of it in one place so that we don't have to look in a zillion places to find basic information.

We offer some interpretation here and there...The section on chlamydia, this year, is promising, even if not well written. We have made no use of the powerful graphic capabilities of our new microcomputers; these demand a lot of time and patience, neither of which is in abundant supply in our department. We have enough torture with our studies and with our mania to publish papers (thirty in 15 years; two-thirds in the last 5 years alone. It's aging us fast).

The Report is not intended to be read, but rather to be referred to. Hence it is unappealing in presentation. No apologies offered. If you're crazy enough to request a copy...

Lots was accomplished in 1989; lots more will be in 1990. Our patients are the most exciting part of the job. We're continually amazed at their willingness to cooperate with us and to reveal secrets of their lives. We're learning more from them than we are from anybody, just like the above proverb suggests. Thanks, patients; you make our working lives rewarding. We trust you feel the same about what we do for you.

<u>Part I</u>

AIDS Proper: A brief profile

Ninety-four persons (92 adults and 2 children) with full-blown AIDS have lived in El Paso County since the first reported case in the summer of 1982. About 62% (58/94) are known to be dead. Seventy-five AIDS cases were counted locally, while nineteen were diagnosed and counted elsewhere in the U.S.

The Pikes Peak region, comprising about 12 percent of the State's population, has recorded about 6 percent (75 of 1251) of overall cases counted in Colorado.

AIDS Cases Having Resided Locally (1982 through 1989)

	Counted Locally				Counted Elsewhere			<u>Grand Total</u>		
Cas	ses	Dead	Mortality	Cases	Dead	Mortality	Cases	Dead	Mortality	
82	1	1	100%	0	0	100%	1	1	100%	
83	0	_	_	3	3	100%	3	3	100%	
84	0	_	-	0	-	_	0	_	-	
85	6	6	100%	1	1	100%	. 7	7	100%	
86	14	12	86%	3	1.	33%	17	13	76%	
٤8 '	10	5	50%	5	4	80%	15	9	60%	
88	21	14	67%	5	5	100%	26	19	73%	
89	23	4	17%	2	2	100%	25	6	24%	
Tot	75	42	43%	19	16	84%	94	58	62%	

Thus, no case diagnosed before 1986 is alive and more than half diagnosed since are known to be dead (right column). The death rate is much higher for cases counted elsewhere (middle column) probably because many of these cases came here with advanced AIDS (came-home-to-die idea).

The overall AIDS death burden is relatively small; during the same time interval (1982-1989), 488 suicide deaths were reported in El Paso County.

AIDS (Full-blown) Cases: Risk Factor Classification ('82-'89):

	Men	Wome	en <u>Tota</u>	<u>1</u>
Gay/Bi-sexual		n/a	a 63	
Gay/I.V.User	9	n/a	a 9	
I.V. User	7	3	10	
Sex with IV U	ser/Hetero 0	4	4	
Hemophiliac	2	0	2	
Transfusion	2	2	4	
Other/Unknown	2	0	2	
Total	85	(90.4%) 9	(9.6%) 94	cases(100%)

Thus about 78% of <u>all</u> cases (but 87% of <u>male</u> cases) are in men who provide histories of sex with men.

AIDS Cases by Race/Ethnic Group

Full-blown cases roughly mirror our County's ethnic distribution (Blacks are over-represented): 75 (81%) white; 13 (14%) black; 5 (5%) Hispanic.

AIDS-virus Control Program

The AIDS-virus Control Program consists of two parts: the <u>Counseling/Testing Site</u> (Clinic facility) and the <u>Control</u> (<u>Outreach</u>) <u>Program</u>. What follows is a potpourri of data and observations that help paint an impressionistic picture of what is happening with AIDS-virus infection County-wide.

Surveillance Information:

Of the (estimated) 600-800 persons in our County with HIV infection, we have identified more than half. An additional 10-15% know that they are HIV infected, but are not known to us (e.g., they were tested elsewhere). Thus, two-thirds of HIV-infected persons locally (estimated) know they have the virus. A major part of our task is to let the other third know that they are infected, because we believe that to know is to diminish the probability of further transmission and disease progression.

AIDS-virus infection by source of report and gender (1982-1989)***

HIV-antibody testing has been available since the late spring of 1985. The following represents the distribution of all 462 infected persons thus far identified in El Paso County and where they were identified:

		Cases/ (%)	Men	Women
1.	Counseling/Testing Site (Health Department):	113 (24.5)	108	5
2.	V.D. Clinic	16 (3.5)	14	2
3.	VSR (prostitution)	8 (1.7)	2	6
4.	Drug Clinic	2 (0.4)	2	0
5.	Donor Centers:	68 (14.7)	62	6
6.	Military Installations:	86 (18.6)	76	10
7.	Doctors/Hospitals/Other:	169 (36.6)	153	16
	Total:	462 (100)	417	45

***INCLUDES AIDS cases

Notes: 1) Of the 462 cases, 73 (16%) are known to be dead, not all of HIV infection.

2) The low number of positives identified in the drug clinic is one of several rough indicators of the low prevalence of HIV in local IV drug users.

AIDS-virus Infected Persons by Risk Factor/Gender (1982-1989)

(Excludes the 86 military cases)

Category	Male	<u>Female</u>	<u>Total</u>
Homosexual Man Bisexual Man I.V. User Transfusion Sex with High-risk	202 (25=also 53 (13=also 30 7 3	IV) n/a 20 5 6	202 53 50 12 9
Undetermined	37 332	6 37	43 369

Our computer data base is not perfect yet; when the bugs are worked out, we'll find the 7 missing observations (There are 369 total non-military cases in the above Table; add the 86 military cases excluded from the Table and you get 455 cases. We have records on 462 cases: did the idiotic computer swallow seven cases? Nasty machines, these...)

Risk factors for military cases (ascertained since early 1987 by the military rather than civilian health workers) are reliably known for only about 40% of the 86 HIV positive troops: 23 cases are in men who have sex with men; 7 in IV drug users; and 5 are transfusion-associated. For the remaining 51 (60%) military cases, risk factors are not available to us, but we can predict them: virtually all will have the classic risk factors, with men having histories of bi-sexuality (as opposed to homosexuality) and/or IV drug use being the most likely.

Of the 43 cases classified in the Table as "Undetermined", most (29) are plasma donors we never located (very transient population), 8 were interview failures (i.e., they probably lied to us), and the rest (6) were out-of-state residents.

If we examine the Table by risk factor for those persons whom we were able to talk with (344, if you include the 8 interview failures), then 255 (76.4%) are men who had sex with men and 50 (15%) used drugs I.V. as their only risk factor. The rest belong to the "minor" (and undetermined) categories.

Of the 37 women in the Table, it is noteworthy that most were probably infected by needles (includes transfusion cases). Of the 6 women infected sexually, three practiced anal intercourse.

HIV Antibody Testing: Prostitutes (1985-1989)

A total of 247 prostitute women have been seen at our department since the summer of 1985, of whom 241 have been tested for HIV antibody (6 had collapsed veins that precluded phlebotomy by our staff). Eight (3.3%) are infected with HIV.

Testing is periodic and frequent on prostitute women who remain in our area. Of the 241 ever tested, 146 had one test only, 44 had 2; 23 have had 3 tests each; 12 had 4 tests; 5 have had 5; 6 have had 6 and 5 have had between 7 and 11 (!) tests each, for a grand total of 454 tests since mid-1985 (roughly ten percent of all HIV tests done by our Department).

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

AIDS-virus infection: Reason for presentation:

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. Coding errors in data entry for the 462 HIV positives identified thus far precludes our being able to include these data in the current Report. We will recode each patient's status individually (462 charts!) and present the data, by year, since 1985 in next year's Annual Report.

HIV Cases : Year of Detection

(Excludes 86 military cases)

It is interesting to note that the number of persons being currently identified as HIV positive has stabilized since early 1987, a good indicator that the disease is not spreading wildly.

Year	Me	Women	<u>Total</u>		
	Gay/Bisexual	I.V.	Undeterm.	A11	
1985**	32	11	3	3	49
1986	75	20	5	4	104
1987	40	12	11	4	67
1988	52	13	7	5	77
1989	45	12	9	4	70
				Total:	367

** Half-year data only (testing started mid-1985)
Data are missing on 9 civilian cases

Control Efforts/Case-finding:

Most health jurisdictions in the U.S. do not interview AIDS-virus infected patients for sexual/needle-sharing partner information; they consider the procedure ineffectual. Our view differs; we've conducted interviews on positive clients since the late fall of 1985.

AIDS-virus Contact Interviews:

(Excludes 86 military cases)

	<u>1985</u>		<u>1986</u>		1987		<u>1988</u>	
					Inter- View			
Cases	33		72		40	68 (1.7)		111 (2.1)

<u>1989</u>

Inter- Cts./ Index

Cases 46 108 (2.3)

Thus, since the beginning of our partner notification program in the fall of 1985, 244 interviews of civilian HIV cases have been performed, with 515 at-risk partners being named (2.1 per interview). These 244 interviewed cases represent 65% (244/376) of all civilian cases identified (462 HIV cases overall minus 86 military = 376 civilian cases).

Why were 132 (376 minus 244) civilian HIV cases not interviewed by us? Reasons are listed below:

- 1. 62 were not located (mostly transients)
- 2. 20 were dead at the time of report or shortly after
- 3. 16 were diagnosed before we started the interviewing program (and were not subsequently located)
- 4. 11 were interviewed in other jurisdictions (mostly Denver)
- 5. 18 were missed due to staff shortage (and not subsequently located)
- 6. 5 are currently being worked

In a word, we have contact-interviewed more than ninety percent (244/262) of HIV positive persons that were alive and that we could find.

Objections, particularly by gay political organizations, to partner notification programs are not usually shared by individual gay men: of the 244 interviews recorded above, 185 (76%) were conducted with gay men as patients; they named 396 partners (2.1 per interview; range 0-18 partners). Although it is true that in 41 (22%) of interviews with gay men, no contacts were elicited, the reasons were seldom because of refusal to name partners. Most often, partners resided in other parts of the country or were anonymous. (As of this writing we do not have precise data, because interviews have not been analyzed in depth; we're merely trying to make the point that individual gay men are seldom outraged by the Health Department's implementation of standard communicable disease control measures.

No data are being provided by the military on their cases; it <u>is</u> their policy, however, to do interviews and to forward information on named civilian partners to the Health Department.

A Brief Note on Seroconverters

Persons who initially test negative on the blood test and are found on subsequent (weeks to months later) testing to be positive are classified as seroconverters.

Since the inception of blood testing for AIDS-virus markers in June of 1985, 15 tested persons have seroconverted - all gay men, except for one prostitute woman. All 14 gay men continued unprotected high-risk (i.e., passive anal intercourse) sexual behavior despite counseling efforts. The prostitute continued sharing needles despite numerous counseling sessions.

Seroconverters by Year of Conversion

<u>Year</u>	<u>Cases</u>				
1986	4				
1987	5 (incl. prostitute)				
1988	1 "				
1989	5				

The observation of 15 seroconversions in 1500 days suggests that new transmission of HIV in our community is very low and provides powerful evidence for the idea that AIDS-virus, even under the classical conditions of sex and needles, is difficult to transmit. After all, many gay men and IV drug users continue to use unsafe practices a good deal of the time in a community that hosts several hundred infected persons.

Health Department Antibody Testing:

HIV testing began to be offered in other clinics during 1988, principally the VD Clinic and, to a lesser degree, the Family Planning and Prenatal Clinics. Heretofore, testing had been confined to our Counseling/Testing clinic and our Drug Abuse Clinic. The data below are aggregated to reflect total Health Department activity, irrespective of clinic.

We have performed 5000 tests for serologic evidence of AIDS-virus infection since June 1, 1985. About 1400 of these tests were done in 1989, with approximately 3.5% being positive. About 46% of clients requesting the test have no recognized risk factor, while 54% have one (31%) or multiple (23%) risk factors.

	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
No. of tests	664	1203	1392	1393

Note: During the initial testing period (last 6 months of 1985, through 1986), 8.2% (74 of 906 tested) were positive for HIV antibody, versus 3.5% currently (Calendar 1989); this decline is another rough indicator that transmission has slowed to a trickle.

Health Dept. Antibody Testing by Ethnic Group

Persons seeking the test reflect the ethnic composition of El Paso County, with Blacks being a bit over-represented: White: 79.3% Black: 10.6% Hispanic: 8.3% Other: 1.8%

AIDS-virus infection in children:

Five children are known to have suffered AIDS-virus infection in El Paso County since the beginning of the epidemic; three are known to have died. Some descriptive information is offered below: ("Age" means age at diagnosis, not current age.)

<u>Gender</u>	Age S	Status	Route of infection Year re	ported
Male Male Male Male Male	3 yrs 10 yrs 17 yrs Newborn 3 yrs	Alive* Dead	<pre>Infected mother (IV); at birth Transfusions (Hemophiliac) Transfusions (Hemophiliac) Inf. mother (transfusion); birth Inf. mother (transfusion); birth</pre>	1988 1985 1986 1985 1985

^{*} Alive as of last report; not attending school.

In summary:

We have a small AIDS-proper burden in El Paso County and the above indices suggest that it is a barely growing burden. This is a disease whose reproductive rate is and will remain low because it is a tough virus to transmit and because, at least in the developed world, behavior changes and medications will reduce the reproductive rate even further (way below unity, which is where equilibrium is reached).

Part II

Gonorrhea Control

Sustained behavior changes in our community are continuing to decrease gonorrhea's reproductive success; for calendar 1989, we are happy to report yet another decline, from 926 in 1988 to 861 (-7%) in 1989. Gonorrhea morbidity has been in the three-digit category two years in a row now. The last time it was in the three-digit range was in the 1960s.

A. Case-finding highlights: Gonorrhea

1989 was another good year from the contact interviewing point of view. Case reduction cannot be attributed to inadequate interviewing efforts.

Contact Interviewing Activity

	<u>'77-'79</u>	<u>'80-'82</u>	1983	1984	1985	1986	<u> 1987</u>	1988	1989
	(Avei	rages)							
Percent									
Interviewed	70%	93%	97%	94%	89%	90%	91%	90%	90%
Contacts									
per Case	1.35	1.87	1.8	1.8	1.7	1.8	1.7	1.5	1.6

Much of the modest decline in the quality of interviews since 1987 (we should be getting 1.7 to 1.8 per interview, as opposed to 1.6) can be attributed to the military, where contact interviews do not yield as many contacts (because soldiers have fewer sexual opportunities than civilians). The military's share of the gonorrhea burden continues to climb from 41% of all cases in the County in 1987 to almost half in 1989. (In the 1970s and early 1980s, it was usually 35-40%).

The shift is easily seen in the Table below:

Gonorrhea	Case Di	stribution
(El Paso	County	1987-1989)

Cases	1987	1988	1989
Civilian Fort Carson USAF	592 385(38.4%) 25(2.5%)	477 428(46.2%) 22(2.4%)	449 394(45.8%) 18(2.1%)
	1002	927	861

Gonorrhea Contact Tracing

Fewer new cases (N= 150) of gonorrhea were identified in 1989 as a consequence of contact tracing for probably two reasons: the reduced overall burden of cases and the increased proportion of cases that are now imported; this implies that their infected contacts are being identified elsewhere (for which we don't take credit).

	Local Contacts to Gonorrhea: Outcomes						
	1980-1982 <u>(Average)</u>	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%) 1	380 (100%)	1593 (100%)	1595 (100%)			

CONTINUED	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
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%)

That the quality of GC case-finding remains high is illustrated in the following Table: a continually strong proportion of cases are <u>actively</u> identified (Contacts).

Gonorrhea: Reason for Presentation (Epidemiologic category)

	1984	1985	1986
Volunteer "Screenee" Contact	838 (55%) 170 (11.1%) 517 (33.9%)	870 (56.9%) 210 (13.7%) 450 (29.4%)	680 (53.8%) 192 (15.2%) 393 (31%)
Total Cases	1525 (100%)	1530 (100%)	1265 (100%)
CONTINUED	1987	1988	<u>1989</u>
Volunteer "Screenee" Contact	537 (53.6%) 159 (15.9%) 306 (30.5%)	502 (54.2%) 140 (15.1%) 285 (30.7%)	485(56.3%) 133(15.5%) 243(28.2%)
Total Cases	1002 (100%)	927 (100%)	861 (100%)

And, historically (percentages only):

Volunteer "Screenee" Contact	1976 63.1 11.4 25.5	1977 62.2 10.7 27.1	1978 61 11.7 27.3	1979 62.8 10.1 27.1	1980 57.3 9.9 32.8	1981 51.7 8.3 40	1982 58 8 34	1983 55.6 11.9 32.5
CONTINUED Volunteer "Screenee" Contact		1984 55 11.1 33.9	1985 56.9 13.7 29.4	1986 53.8 15.2 31	1987 53.6 15.9 30.5	1988 54.2 15.1 30.7	1989 56.3 15.5 28.2	

Urethrally Asymptomatic Men

Men with inapparent infection have been vigorously pursued for fifteen years in El Paso County, and 1989 was a good year: the consistency in the trend is best viewed from the column at the far right.

<u>Year</u>	<u>Asymptomatic</u>	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

Gonorrhea Repeat Cases

Although the contribution to the gonorrhea burden made by repeaters is now low, its composition shows that of all people, minorities (especially young Black soldiers) have not practiced safer sex as much as whites have since the turning point year of 1985. This is worrisome because Black heterosexuals are at elevated risk for AIDS-virus infection to begin with and because VD probably facilitates infection with HIV once exposure occurs.

<u>Year</u>	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

In terms of bodies, 39 persons were repeaters; 34 had 2 episodes, 3 had 3 each, 1 had 4 cases, and 1 had 5! Thus these 39 persons generated 86 cases in all. Ethnically, 27 (70%!) of the 39 repeaters are Black; occupationally, 25 (64%) are in the Army.

As we look at gonorrhea case distribution since 1985, we see that the absolute number of cases in Blacks has remained very high even though the overall gonorrhea burden has dramatically declined, from 1530 cases in 1985 to 861 in 1989:

	Gonorrn	<u>ea Cases</u>	in Bla	<u>CKS</u>	
	1985	1986	1987	1988	1989
Number	743	637	519	542	532
% of all cases	(48.6)	(50.4)	(52)	(58.5)	(61.8)

Gonorrhea in Street Prostitutes

During the last two decades, almost 1200 prostitute women have worked locally; about 80% have been examined at our clinic since 1970 (the other 20% did not stay in the area long enough to become guests of our clinic!).

<u>Year</u>	<u>Original Visits</u> *	Gonorrhea Cases	% Positive
'70-'75(A	vg) 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
20-yr tot	al: 4069	739	18.2%

^{*}Original visits excludes "follow-up" visits.

Gonorrhea in Homosexuals

Some gay men are not adhering to safer sex practices, but on the whole things are going well. Of the 500 gonorrhea cases in men, 6 were in gay men, as opposed to 9 in 1988 (and in context of a generally declining contribution).

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%

Gonorrhea Case Rates:

(Assumes a 1989 population of about 404,000): We have the lowest <u>rate</u> ever. Nice.

Gonorrhea Rates (cases/100,000)

1970 // 1973 // 667 // 700 //	/ <u>1977</u> /	<u>/ 1980</u>	1981	1982	1983	1984
667 // 700 //	735 //	468	471	383	385	438
CONTINUED	1985	1986	1987	1988	1989	
	420	333	255	232	213	

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:

There was a modest number of such cases during 1989. In some areas of the country, particularly on either coast, the disease is well established. It took about ten years for entrenchment (as opposed to episodic outbreaks) to occur. We can expect to observe more cases (due to almost invariably to importation from these areas), but we doubt PPNG will become entrenched locally.

Since the introduction of PPNG into the USA in the spring of 1976, 105 cases have been diagnosed in El Paso County (96 confirmed; 9 probable). Because they occurred in context of 19,726 gonorrhea cases, a one half of one percent rate is "acceptable" (105 cases divided by 19,726).

There were 11 PPNG cases in 1989, compared to 16 in 1988; 8 (73%) were diagnosed at Fort Carson (5 men; 3 women).

Male-to-female ratio: gonorrhea

This ratio is a bit higher than last year, again due to the growing proportion of GC cases assumed by Fort Carson, where about 80 percent of cases are in men.

<u>Year</u>	<u>Males</u>	<u>Females</u>	<u>Ratio</u>
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

PART III

A. Chlamydia Control

It looks like the chlamydia burden in El Paso County is declining, along with the other STDs. We do not have rigorous data to support this assertion yet; thus, read this section with appropriate circumspection. In the past we've frequently ventured explanations and predictions before the evidence was in; it' fun and positively marvellous when you turn out to be right (You can count on Potterat resorting to "I told you so"; no modesty about the guy).

The data below suggest a genuine decline in chlamydia incidence, although probably another year of observation is needed to state it with confidence. Not simply a decline, but one associated with our assertive case-finding (contact interviewing and contact tracing) efforts, begun in late 1987.

Our feeling is that chlamydia is a fragile organism, a bit like the plasmid of PPNG, with a transmission rate much lower than that of its fraternal twin-sister disease, gonorrhea; consequently, even modest case-finding efforts should disproportionately interrupt transmission. We have spent more than a decade demonstrating that gonorrhea responds well to case-finding efforts; we now strongly suspect that chlamydia is going to be much more sensitive to perturbations in its transmission universe. We are currently intensifying contact tracing efforts by enrolling more cases outside the public clinics and military sectors.

Chlamydia Cases in VD Clinic

A sharp increase in both the number and proportion of patients in VD Clinic tested for chlamydia occurred during 1989, from every other patient (54.1%) in 1988 to four out of five (83.2%) during 1989. Surprisingly a substantial decline in the number and percentage of positives is (gratefully) noted.

Chlamydia Testing in VD Clinic

	1988		1989				
	Tests	Pos (%)	Tests	Pos (%)			
Men	921	230 (25)	1309	125 (9.5)			
Women	812	175 (21.6)	1393	151 (10.8)			
Total	1733	405 (23.4)	2702	276 (10.2)			

Note: 1733 tests out of 3203 original (not follow-up) patient visits versus 2702 tests out of 3246 eligible visits in 1989.

The precipitous decline in positivity may in part be due to the test used (MicroTrak during 1988 and Chlamydiazyme during 1989), in part to random variation, in part to people continuing to make conservative sexual decisions and perhaps in large part to our assiduous case-finding efforts during the last two years. Some modest evidence appears below, at least with data on women.

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 (awful word) screenees.

The data below are preliminary (information was gathered quickly for a fast overview); they indicate, especially for women a dramatic change in reason for detection, reflecting the impact of active case-finding.

Chlamydia Cases: Reason for Presentation:

Reason	1988	1989
Volunteer Screen Contact	138 (56.8%) 24 (9.9%) 81 (33.3%)	93 (64.6%) 9 (6.2%) 42 (29.2%)
WOMEN		
Volunteer/ Screen Contact	213 (79.5%) 55 (20.5%)	112 (51.6%) 105 (48.4%)

We suspect that the lack of noticeable change with men has something to do with asymptomatic carriage: one, men may undergo spontaneous cure often enough that by the time we get to them as contacts, many are truly negative (and thus not counted as cases in the above Table); and/or two, the chlamydia test or our procedure in collecting it is very, very insensitive in men. A clearer idea of what is happening will probably emerge in the next few months, as we look in greater detail.

Chlamydia Contact Interviews

	1	988	1989	
	Interviews	Contacts	Interviews	Contacts
Men	190	321 (1.7)	114	171 (1.5)
Women	229	379 (1.7)	176	309 (1.8)
Total	419	700 (1.7)	290	480 (1.7)

The declining caseload in our public clinics accounts for the nearly 130 fewer interviews conducted in 1989. The good news is that, with both gonorrhea and chlamydia declining, we can now enter the quasi-private (Planned Parenthood, Women's Health Service, etc) and private sectors (particularly hospital Emergency rooms) in our 1990 chlamydia efforts. Rock and Roll.

Part IV

Minor STD Program Data/Miscellaneous

VD Clinic attendance...is stable at about 4000 annually.

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

Note: Table excludes the approximately 2400 (AIDS-virus) Counseling/Testing Center visits in 1989.

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 is included. They are presented mainly as a trend indicator.

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

Infection	Wome	<u>n</u>						
	1982	1983	1984	1985	<u>1986</u>	1987	1988	1989
Chlamydia	No	Not Available here						151
Trichomoniasis	461	492	390	275	112	115	103	99
Monilia	456	463	391	318	110	188	231	284
NSV	250	279	257	233	297	240	337	435
Herpes (1st Episode)	51	59	25	18	38	33	35	25
Venereal warts	55	62	49	76	72	61	117	88
Scabies	4	4	3	4	9	4	10	11
Phithirus pubis	29	31	22	17 	29	24	22	36
Totals:	1306	1390	1137	941	667	665	1030	1129

Syphilis

We've never understood syphilis trends. No explanations offered.

<u>Year</u>	Infectious Syphilis	Late Syphilis	<u>Total</u>
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

Presentations

About 127 formal presentations were recorded, with a total audience of 5462 (excluding radio/television audiences), Thus, about 2.5 presentations a week, with an average audience of 43, were done in 1989. About 56% of audiences are students and about 20% are health-care workers. Although most presentations focus on AIDS an increasing proportion are generic in their focus (STD prevention rather than just AIDS prevention; the shift occurred sometime in 1988.

	1987	<u>1988</u>	<u>1989</u>
Total presentations Total audience	110 36 8 3	132 6847	127 5462
Students	45%	38%	56%
Health care workers	23%	23%	20%
Employers	10%	5%	2%
Trainers	10%	16%	7%
General audience	11%	17%	8%
High risk persons	3%	1%	6%

<u>Presentations by person</u> (in descending order):

	1987	<u>1988</u>	<u>1989</u>
Potterat	64	74	66
Muth	26	19	10
Woodhouse	0	17	20
Latimer	18	13	15
Castle	0	5	15
Drzewiczewski	2	2	0
Rogers	0	2	1

Summary of Medications Used (1989)

<u>VD Clinic</u>			Given to CHC
APPG (6 m.u.)	34	vials	0
Bicillin (1.2 m.u.)		syringes	Ō
Spectinomycin (2g)	8	vials	2 vials
Benemid (500mg)	320	tablets	100 capsules
Ampicillin (500mg)	2550	capsules	400 capsules
TCN (500mg): CDH	2150	capsules	1000 capsules
TCN (500mg): EPC 4	1600	capsules	0
Benadryl (50mg)	920	capsules	. 0
Erythromycin (250mg)	8264	tablets	0
Rocephin (250mg)	299	vials	20
Doxycycline	3738	capsules	0
E-Mycin (333)	782	tablets	0

PART V

The traditional Tables

1	MONTHLY	V.D.	CLINIC	AND LA	ABORATO	RY REI	PORT:	EL PAS	o cou	NTY HEA	ALTH DI	EPARTMENT	r, 1989
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CY89

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	, SEP	ост	NOV	DEC	CY89	POS.		PCT+
TESTING:																
HIV (Ab)	104	111	126	100	138	132	102	125	104	150	141	101	1434	74		5.2
HIV (CUMULATIVE)												5008		341		6.8
RPR	233	224	246	221	259	263	261	258	251	273	250	213	2952	47		1.6
FTA	3	2	1	7	5	6	5	6	6	2	4	2	49	21	4	2.9
DF	0	0	0	0	0	0	0	1	0	0	1	0	2	0		
GC SMEAR	128	136	142	125	122	131	150	146	134	142	133	98	1587	61		3.8
GC CULTURE:															\	
VDC MEN	134	151	165	135	125	141	170	162	138	146	139	101	1707	134	\	7.9
VDC WOMEN	144	130	146	141	137	175	145	200	115	173	139	184	1829	118	/	6.5
PNC WOMEN	29	22	37	17	41	26	12	12	12	10	20	29	267	5	ļ	1.9
FPC WOMEN	17	30	49	16	28	25	25	28	27	23	49	68	385	5		1.3
PMD WOMEN	116	114	116	111	87	111	91	99	69	117	80	98	1209	8		0.7
TOT: ALL PTS	0	2	12	7	7	7	5	29	14	13	15	5	116	0		-
CHLAMYDIA: FE	80	75	100	98	131	121	116	142	105	143	141	141	1393	151	1	6.8
TREATMENT:															/	!
GC TREAT	18	10.	19	22	24	26	22	39	40	33	19	13	285	n/a	/	
GC PRO-TREAT	24	14	24	15	21	24	32	17	16	19	27	15	248	n/a		
LUES TREAT	1	0	3	1	0 .	0	3	3	1	3	3	1	19	n/a	/	
LUES PRO-TREAT	0 ·	1	0	0	1	0	3	. 4	0	0	1	0	10	n/a		
NON-V.D. TREAT	168	180	224	191	197	220	167	168	224	298	285	233	2555	n/a		
CLINIC: NO.	13	12	14	12	14	13	13	13	13	13	11	13	154	n/a		
															,	

HIV TESTING EXCLUDES THE 98 MILITARY POSITIVES SINCE JULY 1985 AND 26 POSITIVE DONORS LOST TO FOLLOW-UP

add

MONTHLY CHLAMYDIA INVESTIGATIONS REPORT: EL PASO COUNTY HEALTH DEPARTMENT, 1989

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC CY89 PCT/TL

CONTACTS TO CHLAMYDIA: OUTCOME

NOT INFECTED	0	0	0	0	0	0	0	0.		0	,	0	,	2
	10	7	2	5	6	2	16	10	8	7	11		0.7	
BROUGHT - TX	10				- 0		10	10	0		11	3	87	17.5
PREVIOUS TX	7	6	2	3	5	3	8	3	2	2	12	4	57	11.4
NOT FOUND	4	5	3	0	4	1	7	3	0	3	4	0	34	6.8
REFUSED EXAM	5	0	5	1	2	1	4	2	0	1	2	0	23	4.6
UNLOCATABLE	2	5	3	0	2	1	3	6	1	0	1	0	24	4.8
TRANSFERRED	0	1	0	0	0	0	0	3	0	0	0	0	4	. 8
EPI TREATED	29	32	16	19	32	10	25	21	15	26	24	18	267	53.6
OTHER	0	0	0	0	0	0	0	0	0	1	0	0	1	.2
TOTAL	57	56	31	28	51	18	63	48	26	40	55	25	498	100 .

MONTHLY G.C. INVESTIGATIONS REPORT: EL PASO COUNTY HEALTH DEPARTMENT, 1989

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC CY89 PCT/TL

CONTACTS TO GONORRHEA: OUTCOME

		1				l	ı		ı	1 1			1	1
NOT INFECTED	0	0	1	0	1	0	1	1	0	0	0	1	5	.6
BROUGHT - TX	12	5	7	14	14	12	20	17	13	17	10	9	150	18.9
PREVIOUS TX	15	6	7	15	15	13	14	11	14	24	11	14	159	20
NOT FOUND	10	8	5	3	17	2	16	8	2	13	9	6	99	12.5
REFUSED EXAM	3	2	1	1	0	. 1	5	1	0	6	5	0	25	3.2
UNLOCATABLE	1	3	5	2	3	5	6	3	2	10	4	3	47	5.9
TRANSFERRED	0	1	0	0	1	2	0	3	0	1	1	0	9	1.1
EPI TREATED	19	18	19	16	29	23	43	32	24	29	28	17	297	37.5
OTHER	0	0	0	0	0	0	1	0	0	0	0	0 .	. 1	.13
TOTAL	60	43	45	51	80	58	106	76	55	100	68	50	792	100

Treatment Failure

None

	T				i														
Reporting Source	}		idity			ige G				Race			Pro	PX					
		phili			14-19		20-2		25-2		30-3		40+	1 0	Cav	Blk	Hisp	Syph	Gon
,Categories	P&S	E.L.	Other		Syph	Gon	Syph	Gon	Syph	Gon	Syph	Gon	Syph	Gon					
Private Physician																			,
Men	-		1	47		14		7		9	11	15		2	16_	27	5		
Women .		2	1	107	1	48		28	1	20	1	11			44	53	13		
V.D. Clinic Men	1		2	121		25		43	1	33	2	15		5	32	75	17	5	106
Women		3		130		56	2	41	1	19		12		2		54	19	5	164
	1			23		12		8	1	3		12				13	1.3		104
CHC/Pren/Family P.	 -	-	-	25.		12		0		3_	 					13			
Planned Parenthood				16		10		3		1		2			9	6	1 .		
Health Hold				5				3		1		1			2	2	1		
Fort Carson Men	1	1	1	318	1	48		199		49	1	19	1	3	50	259	_12		
Women		2		76	2	29		27		17		3			34	42	2		
Ent Air Base Men				6				4		2					1	5			
Women																			
Air Academy Men				8		5		2				1			4	4			and the second s
Women				4		1		2		1					2	2			
Totals	3	8	5	861	4	248	2	367	4	155	5	79	11	12	265	542.	70	10_	270

Clinic	Attendance:	4052	

(\$3284.00)

New: 2319

ER Males: 21 ER Females: 67

Return	:	173	•