EL PASO COUNTY HEALTH DEPARTMENT

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Colorado Springs, Colorado. 80909-4598

ANNUAL REPORT

Venereal Disease Program

January 1, 1986 - December 31, 1986

Were John Donne alive in the age of AIDS-virus infection, this is what he would have said:

> "...any man's disease diminishes me; And therefore never send to know for whom the bell tolls; it tolls for thee."

"Don't get it right;
Get it written."

Thurber

PART I

AIDS-VIRUS CONTROL

The AIDS-virus control program was born in 1986. Much was done during 1985, but mostly in "knee-jerk reflex" fashion; we muddled through somehow, without much structure and direction. We reacted in 1985; we acted in 1986. We erected the disease control scaffolding recommended long ago; it is both time-honored and effective: solid surveillance information, contact interviewing and tracing, mobilization of community resources, education of susceptibles and professionals etc. What we've done so successfully with syphilis and gonorrhea, we now do with AIDS-virus infection. We fail to see crucial differences.

This part of our Annual Report is probably flawed. Unlike the part discussing the traditional STDs, we have little experience with AIDS-virus data sets and their presentation. With gonorrhea, the Annual Report has become stereotypic; we're working on a similar approach for AIDS-virus information. Next year should record the improvement we seek, non?

During 1986, much was accomplished that is not reflected in the long series of boring Tables which follow. Here then, we catalog a few facts that should serve to convey an impression of the Program's scope. Our proudest achievement is the creation of the Southern Colorado AIDS Project; "creation" in the sense that we acted as the catalyst. It is now in the hands of capable, private citizens. The first AIDS-Support Group was born because of our dogged determination to see it succeed. Again we were the crucial catalyst.

To promote the dissemination of good information, we trained the bartenders of local gay bars, prepared mental health professionals for the rigors of counselling AIDS-virus infected persons, trained personnel who came in contact with drug abusers, and those who man the Helpline. We distributed educational materials everywhere: bars, clinics, military installations, etc. Referral lists for AIDS-virus infected persons were compiled, to help them sail the uncharted seas of the medical and public assistance bureaucracies. A readable and comprehensive pamphlet was written (Living with the AIDS Virus) to serve as a handy reference. In addition, nearly 100 presentations were given at schools, bars, agencies, military installations, private organizations, etc.

And last, but not least, we responded to the insatiable demand on the part of local media for information on AIDS-virus infection.

Program decisions, discoveries, and events were frequently in the news; about a dozen newspaper articles, several T.V. news reports, and two appearances in U.S. News and World Report. (At this point, we should emphasize Thurber's aphorism, shown above, since it applies so well to the media! We know we'll get a call from Terri Cotten at the Gazette for this one!)

AIDS: a brief epidemiologic profile

Two dozen persons (22 adults and 2 young hemophiliacs) with AIDS as defined by the CDC have lived in El Paso County since the first reported case in the summer of 1982; 14 (58.3%, including an 11 y/o hemophiliac) are dead. Nineteen of the 24 cases were counted locally; the others were diagnosed and counted elsewhere. The Colorado Springs area, comprising about 13 percent of the State's population has thus recorded only 6 percent of overall Colorado cases. Keep it down, Colorado Springs!

With the exception of the first case, a woman contact to an infected drug abuser (a man who is still alive and has yet to come down with AIDS), all have been male and all (with the exception of the 2 hemophiliacs and one adult man) have had sex with men.

Temporal Distribution of AIDS Cases/ Mortality

Year	Cases	Status	Mortality
1982	1	Dead	100%
1983	1	Dead	100%
1984	2	2 Dead	100%
1985	7	6 Dead/1 Alive	85.7%
1986	13	4 Dead/9 Alive	30.8%
Total	24	14 Dead/10 Alive	58.3%

AIDS-virus Control Program in El Paso County

The AIDS-virus Control Program consists of two parts: the Alternate Test Site (Clinic facility) and the Control (Outreach) Program. Data about the small universe comprising the test site will be treated last. What follows immediately 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:

Mandatory reporting of AIDS-virus infection took effect November 1, 1985. All medical providers, including those at military installations, are directed to report positive tests to the Health Department.

Of the 158 persons identified as having serologic evidence of infection since the test was offered June 1, 1985 only about half were ascertained in the Health Department setting (ATS):

AIDS-virus infection by source of report
(1985 and 1986)

Alternate Test Site:	74	(46.8%)
Blood/Plasma Donation Centers:	25	(15.6%)
Military Installations:	24	(14.9%)
Private Physicians:	10	(6.4%)
Civilian Hospitals:	25	(16.3%)
	158	(100%)

These 158 probably represent 15-20% of all persons who are estimated to be infected as of the end of 1986 in the Pikes Peak region. The reporting law has thus helped us identify every fifth or sixth infected person (so far).

AIDS-virus infection by ethnicity
(1985 and 1986)

White:	114	(72%)
Black:	33	(21%)
Hispanic:	8	(5%)
Other:	3	(2%)
	158	(100%)

Since blacks represent roughly 7% of the County's population, they are very overrepresented in the infected population; both hispanics and whitesare proportionally underrepresented.

AIDS-virus infection by gender

Of the 158 persons, 148 are men (93.7%) and 10 (6.3%), women.

AIDS-virus infected persons by Risk Factor
(Self-report information on 158 persons)

Homosexual Men:	70%	
Bisexual Men:	10%	
I.V. Drug User:	10%	
Contact to High Risk:	0.7%	(1 heterosexual(?) male)
Prostitute:	0.7%	
Transfusion:	2.7%	
Low-Risk Person:	1.5%	(2 persons who did not level with us?)
Unable to locate:	4%	(Mostly transient plasma donors)
	100%	

A note on Women:

Although ten women were formally identified as having markers for AIDS-virus infection, we know of an additional 4 who spent brief periods of time locally. Most of these 14 women acquired infection by needle-stick, one probably by rectal intercourse and another by (probable) conventional intercourse.

Risk Factor Distribution: Women

Proposed Route of infection		Race
I.V. Drug abuse:	5	
Transfusion:	6	
Rectal intercourse:	1	
Conventional intercourse:	1	
Not yet determined:	1	
Total:	14	(7 white/7 black)

Four of the women are known to have been pregnant while infected (2 are currently in mid-pregnancy; 2 have delivered). Of the three children delivered, both children of a transfused woman are infected, and one child (of an I.V. drug abuser) is apparently not infected (age 10 months).

Of the 14 women, 2 are known to be dead (one of AIDS, the other of the underlying disorder that occasioned her multiple transfusions.)

A word on donors (1985-1986):

As mentioned above, about 15 percent of all true positives identified in the County (25 persons) discovered their status as a result of plasma/blood donation. Of the 25, we were able to interview 23 for risk-factor information: all 23 had the risk factors which should have provoked self-exclusion from the donor pool. Two-thirds (15/23) were men reporting sexual activity with other men (2 of whom were I.V. drug abusers to boot!); the other third (8/23) supplied a history of I.V. drug abuse.

Note on "reactivity"/"positivity" for donors: Reactivity means that the normal value for the test was exceeded; positivity means the person's test is so highly and specifically reactive as to suggest true positivity.

During calendar 1986, there were 72 "reactive" donors reported from all sources; about one-third are true positives.

Casefinding Activities:

We believe that AIDS-virus infected persons should identify their partners, and that we [illegible] (either the patient or the Health Department) should locate exposed persons to offer counselling (at least) and testing (preferably). We feel that a person at elevated risk for infection ought to know, in the sense of moral obligation, his infection status and act accordingly. Those who argue that the psychic distress suffered by persons who find out they are positive makes this procedure inhumane: 1)underestimate

the toughness and resilience of infected patients, and 2)rob the infected person of the opportunity to take positive steps in his life (to reduce the probability of proceeding from infection to ARC to AIDS to death). Persons who do not know their infection status are very good at denial and denial has profound consequences for the individual and society at large. Enough of homilies, already...

Contact interviewing

This was implemented in late 1985 as a Program component, on an experimental basis. It will be more rigorously used in 1987 since we are now more confident of the correctness and feasability of the procedure.

AIDS-virus infected persons: contact interviews

Source of Report	Eligible for Interview	Interview Done	Contacts*/Index
Private Physician	33	24 (73%)	30 (1.25)
Military	31	17 (55%)	17 (1.00)
ATS	93	74 (80%)	111 (1.5)
	157	115 (73.2%)	158 (1.37)

*Note: Because the vast majority of health jurisdictions in this county will not trace AIDS-virus contacts only local contacts are recorded in this column.

Thus about three-quarters of all AIDS-virus positive cases were interviewed for contacts and an average of one (local) contact per case elicited.

What happened to these contacts? Were their little psyches so traumatized that they were paralyzed or threatened suicide? On the contrary, the procedure of being informed of exposure by a Health Department professional is well accepted by contacts. It's as if they expect the Health Department to do this.

Of the 158 contacts elicited, 136 were eligible for follow-up efforts on our part (22 were already known to us and required no follow-up). We were unable to find 35. Of the 101 who were eligible for counselling and testing, only 11 (10.9%) refused the blood test (they were counselled anyway). Again, of the 101 eligible, 22 (21.8%) were newly identified as cases of AIDS-virus infection as a result of our casefinding efforts.

Contact tracing outcomes (local contacts):

Disposition	Contacts
Newly identified cases:	22
Tested (not infected):	68
Previously tested (all positive):	22
Unable to locate:	35
Refused blood test:	11
	158

Thus, of all contacts elicited who were tested (22+68+22), roughly 40% were infected (44/112) and 60% had negative tests (68/112).

From another perspective, roughly 15 percent of all AIDS-virus identified persons in El Paso County are ascertained as a result of contact tracing. Not bad at all for a technique that's not supposed to work. (Eat your heart out, New York City!)

AIDS-virus infection: Reason for presentation

Volunteer:	80	(50.6%)
Screening:	56	(35.4%)
Contacts:	22	(14%)
	158	(100%)

Prostitutes and AIDS-virus infection

A good deal of publicity surrounded the identification of a local, working prostitute in Colorado Springs as a probable AIDS-virus carrier. Nothing further will be said about it here. Indeed, little will be said about our efforts since two papers are in various stages of preparation about viral infection in prostitutes (one about AIDS-virus; the other about hepatitis-B). Since the late summer of 1985, we've tested a little over one hundred female prostitutes, one of whom is a true positive. Some miscellaneous data are thrown in just for fun.

Street Prostitutes

Ethnic distribution:		Age distribution:	
White:	48%	14-19:	14%
Black:	40%	20-24:	31%
Hispanic:	6%	25-29:	35%
Indian:	4%	30-39:	14%
Other:	2%	40+:	6%
	100%		100%

About 1 percent have markers for AIDS-virus infection, 2 percent for Lues, and about 20 percent for HBV. (The gonorrhea rate of 19 percent is recorded ~~earlier~~ later in this report.) and at prod

Antibody Testing (Alternate Test Site)

We have offered free testing for serologic evidence of AIDS-virus infection since June 1, 1985. About 900 persons have been tested at our facility since then, roughly 50 per month:

By gender: 635 males: 271 females (2.34:1 ratio)

By Ethnicity:		
	722 white	(80%)
	95 black	(10%)
	70 hispanic	(8%)
	19 other	(2%)
	906 persons	

These 906 clients received 971 tests during this period of time (19 months). Overall about 100 clients (11%) were shown to be true positives.

As expected there were striking differences in positivity by gender and by ethnicity. Of the 271 women tested, only 6 (2.2%) were positive; of the 635 men, 101 (16%) were positive. By ethnicity, approximately 70% of the positives are white; 20 percent, black; and 15 percent, hispanic. Since the ethnic distribution of ATS clinic clients (See Table above) roughly mirrors El Paso County's ethnic profile, we conclude that minorities are overrepresented in the infected pool.

Client Category:

There was a modest decline in enrollment on the part of homosexual men seeking the test during 1986 (from 47.6% to 41.8% of all clients) and a corresponding increase on the part of I.V. drug abusers (from 10 to 15%). Increased participation of the latter reflects our Drug Clinic's efforts to enroll their clients. The proportion of clients seeking the test for other reasons did not differ from the 1985 profile. Overall, client distribution since June 1985 is:

Gay men:	309	(34.1%)
Bisexual men:	89	(9.8%)
I.V. drug users:	115	(12.7%)
Prostitutes:	105	(11.6%)(incl.3 male prostitutes
Transfusion:	25	(2.8%)
Very Low Risk clients:	154	(17%) (the AFRAIDS!)
Contacts to High Risk:	91	(10%)
Other:	18	(2%)
	906	(100)

Aside: Of these 906, 606 presented during 1986. Since most had to return in person for counselling and results, between 1000 and 1200 visits occured. Adding ATS and VD Clinic visits together yields about 5000 annual visits for our Programs, or roughly 100 per week. (This is a lot of traffic for our woefully inadequate waiting room/clinic area facilities! That's a hint, Dr. Muth.)

Of Seroconversion and seroconverters:

Persons who initially tested negative (blood test) and were found on subsequent (weeks to months later) testing to be positive are classified as seroconverters. Eighty-seven persons (about 10% of all clients in ATS) had repeat tests; 3 seroconverted. (These 87 persons had 124 repeat tests in all.)

No woman became a seroconverter (37 women, including 27 prostitutes.)

Of the 50 men retested, 43 were gay or bisexual; the 3 seroconverters, predictably, belonged to that group. This produces a seroconversion rate for gay men of 7% (3/43). It is hoped that this relatively high rate is a product of small numbers and/or of an unrepresentative sample of gay men. A rate under 5 percent would make us all feel more comfortable. The 3 seroconverters were very probably infected during the testing interval (i.e., we do not feel it was a failure of the test to accurately reflect evidence of infection).

PART II

GONORRHEA CONTROL

Overview: Declining morbidity a consequence of sexual conservatism?

For calendar year 1986 we report 1265 gonorrhea cases, a 17.3% decrease over 1985 (1530 cases). Previous decreases in incidence (from 2000 cases to 1500 during 1978; from 1550 cases to 1250 in 1982) were associated with vigorous control efforts. The present decline probably reflects a reduction in sexual adventurism on the part of susceptibles.

The relentless media coverage of genital herpes infection during the early 1980s, occurring as it did in context of a renascent conservatism, noticeably reduced the ranks of the sexually adventurous. The specter of AIDS-virus infection, sensationalized by the media in crescendo fashion since the spring of 1985, has served to swell the constituency of sexually cautious people even further. Whether "cautious" refers to reduction in the numbers of different sexual partners (likely) or to increased use of prophylactics (less likely) cannot be ascertained from our information. What is clearly suggested by the data, however, is that V.D. Program interventions cannot account for the observed decline. Of the 265 "missing cases" (1530 cases minus 1265) in 1986, fully three-quarters are in symptomatic men - the most sensitive indicator of recent sexual exposure and the best mirror for the behavior of members of our species most likely to be promiscuous (men). Their relative absence in the 1986 incidence figures is noteworthy. If our interpretation is correct, this is good news not only for society, but for minorities in particular. In the early 1980s, it was the white, middle class person in his twenties whose sexual behavior was most deeply affected by the genital herpes scare. Gonorrhea—being a disease disproportionately represented among the very young (teen-agers and early twenties), the non-white, and the underemployed - can probably be used as a marker that sexual behavior changes have now reached members of the community that have fewer advantages than their middle class, white counterparts. Let's cut the inelegant sociological jargon: sexual conservatism is reaching the underclass, (is that better?).

CASEFINDING HIGHLIGHTS

1986 marked the return to interviewing levels in the ninety percent range (barely) and a modest improvement in yield: 1138 of the 1265 cases were interviewed, with 2010 contacts elicited. Comparison with previous experience:

Contact Interviewing Activity

1977-1986

	1977-1979 (Averages)	1980-1982 (Averages)	1983	1984	1985	1986
ases Interviewed(%)	70%	93%	97.3%	94%	88.6%	90%
ontacts per interview	1.35	1.87	1.8	1.83	1.72	1.77

Of the contacts elicited and sought locally, it can be said that about 50 fewer infected cases were identified (than would have been, with optimal efforts) and that an equal number were not located that should have been found. That these less than optimal outcomes occurred in a low morbidity/caseload year is less forgiveable. (Let me be a real bureaucrat here: "The problem is being addressed; improvement is under way")

Local Contacts to Gonorrhea: Outcomes

	1977-1979 (Average)	1980-1982 (Average)	1983	1984	1985	1986
nfected New Cases)	194(22%)	380(29.6%)	357(25.9%)	475(29.8%)	375(23.5%)	276(22.4
ot Infected	356(40.4%)	500(38.9%)	567(41.1%)	637(40%)	593(37.2%)	490(39.7
ot examined	331(37.6%)	405(31.5%)	456(33%)	481(30.2%)	627(39.3%)	468(37.9
otal Sought:	881(100%)	1285(100%)	1380(100%)	1593(100%)	1595(100%)	1234(100

The "absence" of male symptomatic volunteers referred to in the Introduction is reflected in the Tables below: the 53.8 percentage is virtually the lowest on record (except 1981). A slight improvement in the proportion of cases identified actively ("contacts") occurred, but this gain was tempered by the increase in passively identified cases ("screenees"-isn't that an abominable word?) Tightening our casefinding efforts in 1987 should improve outcomes soon.

Gonorrhea: Reason For Presentation (Epidemiologic category)

Reason for presentation

	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%)

And, historically (percentages only):

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
olunteer	63.1	62.2	61	62.8	57.3	51.7	58	55.6	55	56.9	53.8
Screenee"	11.4	10.7	11.7	10.1	9.9	8.3	8	11.9	11.1	13.7	15.2
ontact	25.5	27.1	27.3	27.1	32.8	40	34	32.5	33.9	29.4	31

Gonococcal pelvic inflammatory disease (PID)

The number and proportion of gonorrhea cases involving serious reproductive tract involvement declined faster (20.3%) than gonorrhea generically did (17.3%) during 1986. Nice.

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
ases:	130	111	85	84	84	76	79	108	75	123	98
ct:	(18.3)	(15.5)	(15.4)	(16)	(14)	(12.5)	(17.3)	(21)	(12.7)	(19.7)	(17.7)

Note: Pct = percent of total infected women

Urethrally Asymptomatic Men

Men with inapparent infection have been vigorously pursued for a dozen years in El Paso County, and 1986 was a good year: 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

*(97 percent are urethrally positive; the rest, rectally or/and pharyngeally)

Gonorrhea repeat cases

Sexual conservatism is also apparent in the reduced amount and proportion of cases accounted for by repeaters: 1986 is the lowest on record. Remember that the persons most likely to be repeaters are the least advantaged members of society (some euphemism for riff-raff, non?)

Year	Repeat cases	Percent of all cases
1973	159	9.9
1974	180	11
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

In terms of bodies, 64 persons were repeaters; 56 had 2 episodes, 7 had 3 each; and one had 4 episodes. Thus these 64 persons generated 137 total cases in all.

Gonorrhea in street prostitutes

Historical background:

For the ten year interval(1977 through 1986) during which data were rigorously kept, about 750 different women (estimated) have offered their sexual services for money in El Paso County, of whom 673 were tested by our department. About half were "circuit" prostitutes - women who stayed a very short time and moved on to other areas-and an additional 20% of whom stayed for a few months only. The remainder (about 30%) can be referred to as "our" girls. Most of the venereal disease identified in street prostitutes can be attributed to importation by 70 percent of all prostitutes who are peripatetic.

The 673 women were tested on 2619 different occasions (a mean of four visits per lady) during the ten year period. Only original visits (exludes follow-up visits for test-of-cure, etc.) are recorded below, and for a 17 year period.

Year	Original Visits	Gonorrhea Cases	%positive
1970-1975(Averaged)	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	198	27	13.6
1983	214	31	14.5
1984	258	23	8.9
1985	254	27	10.6
1986	174	33	19.0
Total: 17 years	3514	676	19.2

Thus, about one in five examinations has resulted in a positive gonorrhea isolate since 1970. For 1986, most of the increase in cases and, above all, in the proportion infected (19%) can be accounted for by the influx of ladies who arrived in late summer to offer their services during the World Cycling Championships. Especially vigilant Vice Squad efforts produced numerous arrests during that period. It is estimated that, instead of the 33 cases observed in 1986 (2 of which were PPNG), 22 should have occurred.

Incidentally, it is also possible that the reduction in total visits (down to 174 for 1986) reflects diminished demand for prostitutes' services (i.e., reflects the reduction in sexual adventurism mentioned in the Introduction. This is just an educated (?) guess, though.)

Gonorrhea in homosexuals

The threat of AIDS-virus infection continues to deter promiscuous behavior among local gay men; the proportion of gonorrhea cases in all men contributed by homosexuals reflects this phenomenon. The decline is steady and has probably reached the lowest level it can:

Percent of male gonorrhea cases: 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% (lowest ever!)

Note: Had the rate been 16.2% (rather than 2.0) in 1986, there would have been about 100 additional GC cases in the County.

Field Investigations

A total of 2116 field investigation reports (2936s) were closed in 1986. (Field investigations include syphilis contacts, positive serologies, positive gonorrhea cultures, and GC contacts. The mean and median for more than a dozen years hovers around 1800.)

a. A total of 512 were newly identified infections: 276 gonorrhea contacts, 188 GC cultures, and 48 syphilis contacts and serologies. (The 276 "gonorrhea contacts" is a modest number. Under optimal conditions, it should have been about 325, as mentioned in Casefinding High lights, supra.)

b. About 23.3 percent of reports had unsuccessful outcomes (unable to reach the individual); this percentage should hover around 20.

Gonorrhea by aggregate report source

Since the advent, by about 1983, of immediately accessible and price-competitive medical care facilities (the Macdonald of hands-on care, such as Ready Care, Emergicare) and of pre-paid health plans (Peak Health, HMOs, etc.), the STD burden has inexorably shifted to the private sector, reversing the 1973-1982 trend of increasing enrollment to public and quasi-public facilities. The implications are chiefly operational: it takes at least 3 times the operational energy to conduct case management on private, as opposed to public or military, cases.

We are now back to the 1973 configuration. From 1973 to 1982 case distribution shifted from 23.3% to 13.6% of all cases presenting in the private sector. For 1986, it is 23.6 percent. The recent trend suggests that it will stabilize around 24 percent:

1973	//	1982	1983	1984	1985	1986
23.3%	//	13.6%	19%	17.8%	23.1%	23.6%

Unreported Cases

About half of one percent of gonorrhea cases are not spontaneously reported in El Paso County...

Year	Cases Not Reported (%)
1981	7 (0.45)
1982	5 (0.4)
1983	12 (0.94)
1984	9 (0.6)
1985	10 (0.65)
1986	3 (0.24)
6 years	46 (0.54)

Gonorrhea case rates:

(Assumes a 1986 population of about 370,000) We have about the same number of cases as in 1982-1983, but the lowest rate ever.

Gonorrhea Rates (cases/100,000)

1970	//	1973	//	1977	//	1980	1981	1982	1983	1984	1985	1986
667	//	700	//	735	//	491	473	387	387	459	437	342

PPNG (penicillinase-producing N. gonorrhoeae) cases:

There was a substantial increase in the number of such cases during 1986, a datum that reflects the national experience. In some areas of the country, particularly on either coast, the disease is probably becoming entrenched. It took almost ten years for entrenchment (as opposed to episodic outbreaks) to occur. We can expect to observe more cases (due almost invariably to importation from these areas), but we doubt PPNG will become entrenched locally.

Since the introduction of PPNG in the USA in the Spring of 1976, 63 cases have been diagnosed in El Paso County (56 confirmed; 7 probable). Because they occurred in context of 16, 936 gonorrhea cases, the 0.37% rate is "acceptable" (63 cases divided by 16, 936).

There were 20(!) PPNG cases in 1986, compared to four in 1985. Thirteen occurred in military personnel. More importantly, 8 (40%) were diagnosed between mid-September and mid-October (all military)- a fact that strikingly emphasizes its imported nature.

Male-to-female ratio: gonorrhea (1973-1986)

The underrepresentation of men in the 1986 gonorrhea burden is sharply reflected in this ratio. Because a disproportionate share of cases is traditionally contributed by Fort Carson (92% of whom are men) soldiers, this ratio has been high vis-a-vis women. The 1986 one is the lowest on record:

Year	Males	Females	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

Fort Carson Gonorrhea Program

If gonorrhea control in El Paso County looked pretty good in 1986, a major reason lies with improved performance on post. In the 1985 Annual Report, we highlighted Fort Carson's substandard case-finding efforts and delineated their cause (inexperienced staff). We predicted superior performance in 1986 and we were right. We're very pleased.

The Program reported 469 gonorrhea cases, a dramatic 24.4% decline over 1985 (620 cases). Indeed, the majority of the "missing cases" in 1986 can be attributed to lower incidence at Fort Carson: 151 of the 265 "missing cases", or 57% of the overall decline in the County.

Because about 70% of all cases (includes women) at Fort Carson are in symptomatic men and because 80% of all diagnosed cases there occur in non-whites, one discerns that the "missing cases" tend to be in young, non-white, acutely ill men (many of whom are of underclass extraction). Relative absence of representation in the recent gonorrhea burden by this population is a sure-fire marker (to us) that sexual adventurism is declining among the less advantaged.

Fort Carson gonorrhea interviews (1977-1986)

Indices declined markedly in the last 6 months of 1985 (not shown in Table below) but rose to respectable levels during 1986. Nice work.

Year	No. of interviews	Contacts Elicited	Contact Index
1977	626	388	0.62
1978	570	419	0.74
1979	645	534	0.81
1980	574	865	1.5
1981	632	1144	1.8
1982	605	1100	1.8
1983	516	868	1.7
1984	619	1003	1.62
1985	595	925	1.55
1986	467	742	1.6

Fort Carson: Contact tracing outcomes

As recorded in Annual Report 1985, the last six months of 1985 produced dismal indices: for example, a distressing 44.2% of contacts were classified "unable to locate" during that time. The Table below shows marked improvement (35%). And, although the number (110) of new cases identified appears small, it was derived from the interviewing of substantially fewer (about 25%) cases: the 110 newly identified cases represent a 26 percent yield (versus 22.8% in the last 6 months of 1985). Keep it up!

Contacts to Fort Carson cases

Year	New Cases Identified "Brought"	No. "Epi Treated"	Unable to locate
1977	70	79	42%
1978	53	42	50%
1979	57	81	55%
1980	119	82	36%
1981	235	195	29%
1982	199	160	27%
1983	148	157	29%
1984	203	185	27%
1985	160	173	37.9%
1986	110	132	35%

PART III

MINOR STD PROGRAM DATA/MISCELLANEOUS

VD Clinic attendance...
...has been stable for 5 years:

Year	New Visits	Return visits	Total
1982	2135	1721	3856
1983	2218	1691	3909
1984	2234	1650	3884
1985	2301	1565	3866
1986	2250	1562	3812

Note: Table excludes the 1200 Alternate Test Site visits in 1986.

Non-reportable STDs in V.D. Clinic

Data for non-reportable STDs were first recorded in a systematic way during calendar 1982. Although these data are not catholic (only VD Clinic is included), they support the idea that sexual adventurism may be declining.

Infection	Men					Women				
	1982	1983	1984	1985	1986	1982	1983	1984	1985	1986
GU	569	552	512	447	419	--	--	--	--	--
richomoniasis	--	--	--	--	--	461	492	390	275	112
onilia	--	--	--	--	--	456	463	391	318	110
SV	--	--	--	--	--	250	279	257	233	297
erpes (1st Episode)	70	83	34	32	59	51	59	25	18	38
eneral warts	131	185	127	132	172	55	62	49	76	72
cabies	17	21	15	10	19	4	4	3	4	9
hithirus Pubis	56	59	44	50	41	29	31	22	17	29
Totals:	843	900	732	671	710	1306	1390	1137	941	667

The most "reliable" indicator for men may be NGU; for women, Trichomoniasis. The trends show a steady decline for NGU since the "Herpes scare" years; for T. vaginalis, an even more dramatic one.

Syphilis-

The recent increase in cases first noted during 1984 continued into 1986. No reasons offered.

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

Faithfully submitted,

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PART IV

The traditional, boring Tables

EL PASO COUNTY GONORRHEA MORBIDITY
1973 - 1986
By Month

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	L. Phillips → 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	Woodhouse → 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

Monthly Venereal Disease Morbidity Report

Calendar 1986

Reporting Source	Morbidity				Age Group										Race			Pro	RX
	Syphilis			Gon	14-19		20-24		25-29		30-39		40+		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	1	2	86	1	12		41		19	2	11	1	3	51	27	12		
Women		3	3	147	2	49	3	55		30	1	13			83	45	25		
V.D. Clinic Men	2	5	2	198	1	26	1	81	1	53	5	29	1	9	102	67	38	5	225
Women	2	1	1	216		82		83	1	35	1	15	2	1	115	71	34	4	230
CHC/Pren/Family P.				25		6		15		3		1			10	11	4		
Planned Parenthood				45		23		19		2		1			24	18	3		
Health Hold				20		2		10		7		1			5	12	3		
Fort Carson Men	5	5		386	1	60	7	243	1	63	1	18		2	66	310	20		
Women		5	2	83		27	4	45	2	8	1	3			33	50	7		
Ent Air Base Men				27		5		16		2		2		2	12	15			
Women				9		4		3		1		1			5	4			
Air Academy Men		1		15	1	3		12							10	6			
Women				8		5		3							6	1	1		
Totals	10	21	10	1265	6	304	15	626	5	223	11	95	4	17	522	637	147	9	455

Clinic Attendance: 3812 ($4443.00, including $930.00 for Heptavax)

New: 2250

Return: 1562

Treatment Failure 2 Clinic patients (1 male)

ER Males: 40

ER Females: 75

Above includes one DGI (prostitute) and no prepubertal cases.

MONTHLY G.C. INVESTIGATIONS REPORT: EL PASO COUNTY HEALTH DEPARTMENT, 1986

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CY86	PCT/TL
CONTACTS TO GONORRHEA: OUTCOME														
NOT INFECTED	1	2	1	0	0	0	1	0	3	2	2	3	15	0.99
BROUGHT - TX	23	24	17	32	22	22	19	27	17	34	19	20	276	18.17
PREVIOUS TX	34	23	14	33	21	17	33	14	25	22	7	19	262	17.25
NOT FOUND	14	16	7	14	16	36	16	24	20	24	16	14	217	14.29
REFUSED EXAM	3	6	2	8	3	14	9	3	4	4	4	2	62	4.08
UNLOCATABLE	13	12	14	33	14	30	10	16	10	13	12	12	189	12.44
TRANSFERRED	2	1	4	0	1	1	2	6	0	3	1	2	23	1.51
EPI TREATED	34	44	39	57	31	30	41	45	34	37	43	34	469	30.88
OTHER	0	2	0	1	0	0	2	1	0	0	0	0	6	0.39
TOTAL	124	130	98	178	108	150	133	136	113	139	104	106	1519	100

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CY86	POS.	PCT+
TESTING:															
HTLV (AB)	52	43	57	55	38	50	56	77	71	59	56	50	664	95	14.31
HTLV (CUMULATIVE)												971	971	127	13.08
RPR	219	119	215	249	198	259	261	263	236	250	198	196	2663	98	3.68
FTA	5	9	5	11	8	5	7	3	4	5	3	5	70	38	54.29
DF	1	1	1	3	0	0	0	0	1	0	0	0	7	1	14.29
GC SMEAR	102	119	98	125	131	160	146	143	139	146	112	106	1527	131	8.58
GC CULTURE:															
VDC MEN	150	240	118	145	160	188	194	179	162	163	124	127	1950	208	10.67
VDC WOMEN	125	116	121	135	122	120	133	132	155	153	103	109	1524	238	15.62
PHC WOMEN	48	50	48	53	55	51	54	47	46	46	29	30	557	3	0.54
FPC WOMEN	19	20	20	10	10	20	12	18	22	17	9	10	187	2	1.07
PHD WOMEN	190	210	160	186	183	174	190	153	178	177	158	118	2077	24	1.16
CHC WOMEN	79	95	0	0	0	0	0	0	0	0	0	0	174	0	0.00
TOC :ALL PTS	29	28	32	29	28	16	33	26	26	24	18	20	309	13	4.21
TREATMENT:															
GC TREAT	48	40	38	44	27	44	45	42	37	60	38	29	492	NA	NA
GC PRO TREAT	28	35	37	37	25	32	58	45	46	40	30	42	455	NA	NA
LUES TREAT	3	5	1	2	4	2	2	1	4	2	1	0	27	NA	NA
LUES PRO TREAT	3	2	0	0	1	1	4	0	0	1	0	0	12	NA	NA
NON-V.D. TREAT	178	165	190	187	148	214	193	269	204	256	185	209	2398	NA	NA
CLINICS: NO.	14	12	13	13	13	13	12	13	13	14	11	12	153	NA	NA

HTLV TESTING EXCLUDES THE 31 MILITARY POSITIVES SINCE JULY 1985 AND 10 REACTIVE DONORS LOST TO FOLLOW-UP

V.D. Clinic

Summary of Medications Used

1/1/86-12/31/86

APPG (6m.u. vials)	151
BICILLIN (1.2m.u. syringes)	145
TROBICIN (2g. vials)	113
Benemid (500mg)	2050
Ampicillin (500mg)	8400
Tetracycline (SHD)	980
Tetracycline (CHD)	35,664
Benadryl (50mg)	50
E-mycin (250mg)	3,400
Rocephin	16

Note: In addition, the following were provided to Community Health Center (these are NOT included above):

Tetracycline	(500mg)	600
Ampicillin	(500mg)	350
Probenicid	(500mg)	100
Trobicin	(2g)	3
APPG	(6m.u.)	3