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THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF HEALTH

NATIONAL AIDS CONTROL PROGRAMME

HIV / AIDS / STD SURVEILLANCE

REPORT NO. 6, May 1992

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NOTE: This is preliminary and can produce different figures at any time. It is anticipated that final figures will be available by 30th June 1992.

Epidemiology Unit, NACP
Dar es Salaam
May, 1992.

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Acknowledgement.

We would like to thank all health workers, who have provided us with data on HIV and AIDS, and thus enabled us to compile this Epidemiological Report.

Distribution

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1. EXECUTIVE SUMMARY

AIDS Case reports¹

- * First 3 cases reported in 1983
- * 33,699 cases reported up to 31.12.1991
- * 34,605 cases reported sofar; doubling time 19.7 months
- * Only 1 out of 4 - 6 cases reported
- * Exponential increase will continue,
even when further HIV infections will stop

HIV infection rates

Blood donor data

Due to donor selection, these data increasingly underestimate HIV-infection rates

- * 5.8 % of male adults are HIV infected (1991)
- * 7.1 % of female adults are HIV infected (1991)
- * Most affected regions : (1991)
 - Kagera
 - Mbeya, Rukwa, Iringa
 - Dar es Salaam, Tanga

Ante-natal clinic data

- * Prevalence ranges from 2.3 % to 21.0 %

Orphans

- * Present estimate : 110,000 orphans

Projections

HIV Infections

- * 760,000 by the year 1990
- * 1,600,000 by the year 1995
- * 2,400,000 by the year 2000

AIDS Cases

- * 800,000 AIDS cases by the year 2000
(even if no more infections occur from 1990 : 480,000)
(worst case scenario : 850,000)

Orphans

- * On average 1 orphan per AIDS case :
- By the year 2000 :
 - at least 450,000 orphans
 - probably 750,000 orphans
 - at worst 1 million orphans

2. INTRODUCTION

This report covers the status of the HIV/AIDS epidemic in Tanzania mainland by May 1st 1992, and contains updated figures since the fifth report of August 1991.
Case reporting for 1991 is by now virtually complete.

The surveillance areas addressed in this report are :

- Reported AIDS cases
- HIV seroprevalence among blood donors
- HIV and syphilis seroprevalence among pregnant women attending antenatal clinics. (Data are now available from 12 sites.)
- HIV seroprevalence in youth : - survey results from Mwanza region
 - blood donor data for youth
- Survey results among Family Planning attenders in Dar-es-Salaam
- Survey results from High Transmission Area's (truck stops)
- Estimations of HIV seroprevalence in the general population.
- Projections of adult HIV infections and AIDS cases.
- Projections of paediatric HIV infections and AIDS deaths.
- Projections of orphans.

3. THE TANZANIAN AIDS SITUATION IN A GLOBAL CONTEXT.

The distribution of the HIV / AIDS epidemic by geographical area is shown in the following table:

GLOBAL DISTRIBUTION OF ESTIMATED HIV INFECTIONS,
REPORTED AND ESTIMATED ADULT AIDS CASES

Area	Estimated HIV ¹⁾	Reported AIDS ³⁾	Estimated AIDS
Africa	> 6,030,000	144,863	> 600,000
Americas	> 2,000,000	268,445	> 300,000
Asia	> 1,000,000	1,442	> 2,000
Europe	500,000	65,875	> 70,000
Australasia & Pacific	50,000	3,523	> 4,000
Total	> 10,000,000	484,148	> 976,000
Tanzania ²⁾	> 700,000	34,605	> 120,000

1) WHO/GPA, January 1992 2) NACP, May 1992 3) WER, April 1992
Note : The number of reported AIDS cases for Tanzania cannot be compared directly to the other figures, as date and completeness of reporting may differ.

4. AIDS CASE REPORTING

Since last report (June 1991), a total of 7,209 new AIDS cases have been recorded by the Ministry of Health from the regions.

The distribution of the new reported cases by year of diagnosis is as follows :

Year	Number
1990	22
1991	6,281
1992	906
Total	7,209

The cumulative number of AIDS cases by region and year, and the cumulative case rate (Number of cases per 100,000 population) is shown in table 1. The highest cumulative case rate was recorded for Dar-es-Salaam (702.2 per 100,000) and the lowest for Dodoma region (29.2 per 100,000).

The doubling time is presently 19.7 months.

Figure 2 shows the case rate over the years for four selected regions. Map 1 shows cumulative case rates by region.

The data are believed to reflect the real trend of AIDS cases, although the absolute numbers are assumed to be a factor 3 - 4 higher, due to under-reporting.

Given the large pool of HIV infections already existing in the population, as well as future infections that might occur in the years to come, a rapidly increasing number of AIDS cases will continue to be documented up to and beyond the year 2000.

4.1 Distribution of AIDS Cases by Age and Sex

Of cases reported so far, (1983 - 1991) age and sex are known for 17,103 cases. The overall cumulative case rate is 74.8 per 100,000 for men and 67.5 for females.

Highest case rates of approximately 3.0 per 1,000 are seen in 30 - 34 years old men and of 2.9 per 1,000 in 25 - 29 years old women. (table 2) The AIDS epidemic affects women at an earlier age than males. Case rates clear off in females at an earlier age than in males (figure 2).

The male/female ratio is 1.07. Taking in account that the general population has an excess of males, the M/F rate ratio is 1.11. (In cases up to mid 1991 these ratio's were 1.16 and 1.21 respectively.)

The M/F ratio of AIDS cases is expected to decrease further, as the ratio for HIV infection is 0.81).

5. SENTINEL SURVEILLANCE / ANTEPARTUM CLINICS

Four new sentinel sites were set up early in 1992 in Rukwa (Sumbawanga and Namanyere) and Ruvuma (Songea and Namtumbo), by the Mbeya Regional AIDS Control Programme in cooperation with GTZ.

The first data confirm the findings from bloodtransfusion data, that South-Western Tanzania is a high prevalence area.

The prevalence of HIV infection among women attending the various clinics by year is shown in Table 3a and figure 4.

The prevalence ranges between 2.3 % and 21.0 %.

Several sites (Mbeya urban and rural) continue to increase. Others (Mwanza and Bukoba) seem to have reached a plateau. The latter should not be interpreted as cessation of transmission: actually to maintain a prevalence of 15 - 25%, a considerable number of new infections must occur.

Simulations show, that at a constant rate of 5% of susceptibles becoming infected per year, the prevalence will ultimately stabilize at approx. 35%.

This is consistent with data reported by Killewo *et al.* from Bukoba town: in 1989 the incidence was reported as 48/1,000 (approx. 5%) in Bukoba town, while the prevalence reported for 1988 was 32%.

VDRL

Together with HIV surveillance among pregnant women, VDRL testing for syphilis has been going on for all pregnant women on their first attendance to the Maternal and Child Health (MCH) clinics. (see table 3b)

Vertical Transmission

Assuming 30% transmission from pregnant women to their offspring, the percentage of newborns expected to be infected ranges from 7 to 70 per 1,000 in the various sentinel sites.

6. SENTINEL SURVEILLANCE / BLOOD DONORS

6.1 INTRODUCTION

Reporting on serostatus of potential blood donors takes place since 1987, but is far from complete:

Year	Reported Number	Reported %	Age and Sex known Number	%
1987	4,256	3 %	480	11 %
1988	13,807	10 %	3,680	27 %
1989	35,049	24 %	12,251	35 %
1990	27,314	19 %	23,829	87 %
1991	57,294	40 %	55,595	97 %
1992	3,288	-	3,287	> 99 %

The number of blood transfusions taking place is estimated at 6 per 1,000 per year, i.e. approx. 144,000. As has been reported from other countries, sero-prevalence among blood donors is assumed to be decreasing, due to improved selection of blood donors, while prevalence in the general population is rising. As most blood donors in Tanzania are relatives of the recipient (see table on page 11), blood donor data are believed to be only moderately biased. It should be noted that HIV screening in 1987 - 1988 was limited to regional hospitals; the population screened was thus predominantly urban. By 1990 HIV screening had been expanded to all hospitals including rural low prevalence areas.

As all regions and most hospitals do report on the sero status of donors, these data give the most reliable estimates available for seroprevalence in the population at large.

Sero-prevalence and their trends over time differ markedly between both sexes, between various regions and between age groups.

6.2 Regional Differences (see table 4a-b, map 2a-b)

Overall time trends by region before 1989 are difficult to assess, as few regions reported data.

As data from different regions are assumed to be equally biased, the regional differences are real. Highest prevalences are found in :

- Lake Zone : Kagera
- Southern Highlands : Mbeya, Rukwa, Iringa
- Coast : Dar es Salaam, Tanga

6.3 Sex Differences

Overall female seroprevalence is higher than male seroprevalence up to age 45 (figure 5; table 5a-b) and shows a marked increase up to 1989. Since then it seems that prevalence rates are declining slowly, probably due to increased donor selection. The increase has been particularly alarming in the 15 - 19 and 20 - 24 year age group for women, and the 15 - 19 year age group for men.

Even taking in account that female donors are differing from males in average age (being younger), prevalence among female donors is considerably higher than in men (M/F ratio: 0.81). This is at odds with findings among AIDS cases, where the M/F ratio is 1.11, but decreasing over time. This probably reflects the fact that women are at higher risk for infection now than was the case when present-day cases were infected.

6.4 Age Differences

Prevalence by age for both sexes (table 5a-b, figure 5a-b) differ to some extent from the AIDS case rates by age and sex (table 2, figure 2): women peak earlier at age 20 - 24, and maintain higher prevalences over age 30. The graph for men is rather flat compared to the AIDS case rates, which peak at age 25 - 40.

6.5 HIV Infection in Adolescents

When blood donor data are broken down by age groups, it becomes apparent that the increase is largely due to a very rapid increase in prevalence among teenagers (15-19 years) and 20-24 year olds. (table 5a-b and figure 6a-b).

Among male 15 - 19 year olds, prevalence was 0.0% in 1987, and reached 3.4% by 1991. Among females 15 - 19 year olds, prevalence rose from 0.0% in 1988 to 7.9% in 1989, 7.5% in 1990, and for 1991 is at 5.0%. Prevalence among 20 - 24 year old females has increased from 0.0% to 13.5% in 1989, 9.6% in 1990 and for 1991 it is at 8.1%. It should be noted that these two age groups make up 37% of the adult population.

Figure 7 shows the prevalence by single years of age. The linear regression line runs from 1.71% at age 14 to 6.15% at age 25 for males, an increase of 0.4% per year of age. For females it runs from 3.0% at age 14 to 10.1% at age 25, an increase of 0.65% per year of age. This suggest considerable rates of transmission, even before the age of 14 years.

This is in line with behavioural data which indicate that 50% of adolescents have made their sexual debut by age 15.

Additional data on adolescents are available from a population based survey in 1990/91 in Mwanza region²

2 Data kindly provided by the Project Coordinator, TANER Project, Mwanza

These data show a marked difference between rural, roadside and urban sites.

Linear regression lines (graphs not shown) indicate an increase of 1.6% per year for Mwanza urban, 0.7% for roadside villages and 0.45% for rural villages.

At age 15, prevalences are 3.73% for urban sites, 3.41% for roadside villages and 0.57% for rural villages.

HIV Prevalence in Adolescents (linear regression)

	14 yrs.	25 yrs.	Increase % p.a.
Blood donors, M	1.71 %	6.15 %	0.40 %
Blood donors, F	3.00 %	10.13 %	0.65 %
	15 yrs.	24 yrs.	
Mwanza, urban	3.73 %	17.84 %	1.57 %
Mwanza, roadside	3.41 %	9.49 %	0.68 %
Mwanza, rural	0.57 %	4.61 %	0.45 %

7. HIV AND SYPHILIS IN HIGH TRANSMISSION AREAS

Results of a survey conducted between July - August 1991 along the Dar-es-Salaam - Makambako highway.

Site	Compliance	HIV prevalence	Syphilis (old)	Syphilis (active)
<u>Truck stops</u> male female	49 % 81 %	31.0 % 55.7 %	18.0 % 12.2 %	15.0 % 29.8 %
<u>Community</u> Male Female	89 % 91 %	6.5 % 17.8 %	22.6 % 5.9 %	9.7 % 16.1 %
<u>Trucking Company</u> Male	87 %	11.5 %	36.1 %	9.8 %

Compliance : percentage of people agreeing to be tested out of all people interviewed.

Old or treated syphilis : TPHA positive and RPR negative.

Active or untreated syphilis : TPHA positive and RPR positive.

³ Data kindly provided by AMREF

8. HIV AND OTHER STD's AMONG FAMILY PLANNING CLIENTS IN DAR-ES-SALAAM

Results of a survey conducted in Dar-es Salaam between March 1991 and January 1992.⁴

Prevalence of Laboratory Confirmed STD's

Disease		Prevalence
HIV	252 / 2009	12.5 %
Report of discharge	236 / 2009	11.7 %
Trichomoniasis	245 / 1773	13.8 %
Candidiasis	204 / 1773	11.5 %
Gonorrhoea	79 / 1773	4.5 %
Syphilis	50 / 2009	2.5 %

HIV Prevalence by Family Planning Clinic

Clinic	Pos. / Total	Prevalence
Ilala	39 / 288	13.5 %
Temeke	122 / 953	12.8 %
Mwananyamala	91 / 768	11.8 %
Total	252 / 2009	12.5 %

HIV Prevalence by age

Age	Prevalence
15 - 20 yrs	6.5 %
21 - 25 yrs	14.4 %
26 - 30 yrs	14.7 %
30 + yrs	10.8 %
Total	12.5 %

⁴ Data kindly provided by the investigators, Kapiga S., Lwihula G., Shao and Hunter D.

9. ESTIMATED SEROPREVALENCE IN THE GENERAL POPULATION

As blood donors are predominantly relatives of blood recipients, (see table below), we believe that seroprevalence in blood donors is reasonably representative of seroprevalence in the population at large.

	Percentage	Prevalence	N
Relative	97.2 %	4.3 %	40,032
Institutional Donor	1.5 %	1.1 %	608
Paid donor	1.3 %	6.5 %	540
Total	100.0 %	4.3 %	41,180

* Institutional donors (mainly secondary school students) have a significantly lower prevalence. ($P = <0.02$)

As blood donors are predominantly male and most are young adults, these figures have to be adjusted for age and sex.

When age- and sex- specific prevalences found in blood donors are extrapolated to the general population, one arrives at an estimated number of 273,000 infected adult males and 449,000 adult females (see table 9, figure 5), totalling 722,000 seropositive adults for Tanzania mainland in 1990.

Based on age specific fertility rates for Tanzanian woman, these women are estimated to have born 84,000 children in 1990, of whom approximately, 30% or 25,000 are born with HIV infection. The remaining 59,000 children are not infected, but have at least one parent who is likely to develop AIDS in the near future.

Including perinatally infected children, the total estimate of HIV seropositives is approximately 750,000. Over the years there has been an apparent decrease of HIV seroprevalence both among the male blood donors as well as female blood donors, probably due to selection, as the HIV seroprevalence among pregnant women has been rising over the years.

10. PROJECTIONS

The purpose of projections is, to show how the future will look like. The worst case scenario presented here, depicts future developments, if present trends in HIV infection rates continue unchanged.

Projection of Adult AIDS Cases

If the (estimated) number of seropositives is known, it is straight forward to calculate future AIDS cases, as the natural history of HIV infection is quite well known.

From cohort studies in the U.S.A., it is well established that 50% of HIV infected individual will have converted to AIDS 10 years after infection. In the absence of better data from Africa, the same rate of progression is assumed for Tanzania.

Based on the estimated number of 700,000 seropositives in 1990, AIDS cases are expected to develop as shown in figure 7.: a cumulative number of 80,000 by 1990, raising to 480,000 by the year 2,000. This is in the absence of any further HIV infection.

If HIV infections continue to occur at a rate of 1% per year up to 1995, the cumulative number of AIDS cases will be 800,000 by the year 2000.

Expressed in the number of new AIDS cases per year :

40,000 cases per year from 1990 - 2000 if no more HIV infections occur.
72,000 cases per year from 1995 - 2000 if transmission continues at 1% per year up to 1995.

Conclusion

The epidemic of AIDS cases has just started, and will become strikingly predominant during the 1990's reaching a cumulative number of 480,000 cases by the turn of the century, if HIV transmission is halted completely as from today.

It transmission continues at a rate of 1% per year up to 1995, this will result in 840,000 more infected adults, and 370,000 more AIDS cases up to the turn of the century.

Projection of Paediatric AIDS Cases and Infant Mortality Rates

Scenario :	Without AIDS :		With AIDS :	
	CMR per 1,000	Child Deaths	CMR per 1,000	Child Deaths
Low	150	180,000	167	200,000
Medium	150	180,000	175	210,000
High	150	180,000	192	230,000

Projection of Orphans

Projections of HIV / AIDS / Paediatric AIDS deaths / Orphans by the year 2000

Scenario	HIV infections	AIDS Cases (cum.)	Orphans (cum.)	Paediatric AIDS deaths
Low	760,000	480,000	450,000	20,000
Medium	1,600,000	800,000	750,000	30,000
High	2,400,000	850,000	830,000	50,000

- Low : Transmission reduced to 0% by 1990
- Medium : Transmission reduced to 0% by 1995
- High : Transmission reduced to 0% by 2000

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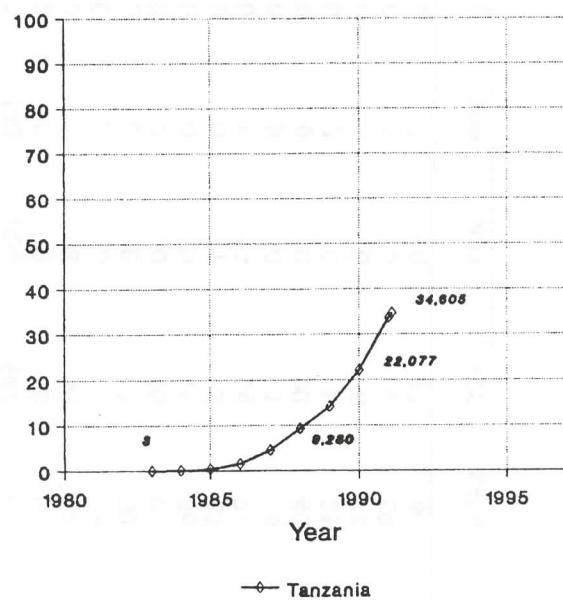
NACP / Tanzania : cumulative AIDS cases by region, 1983 – 1992 May.

Region\Yr	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	Population	*Rate	Rank	
Arusha Coast	0	0	0	10	47	217	429	579	873	899	1,351,675	66.5	16	
D'Salaam Dodoma	0	0	0	1	4	79	224	413	705	1,147	638,015	198.9	4	
Iringa Kagera	0	0	0	51	471	1,470	3,093	5,203	7,196	8,649	8,692	1,237,819	702.2	
Kigoma Kijaro	0	0	0	0	0	7	47	105	247	277	389	398	1,360,850	29.2
Lindi Mara	3	106	0	1	3	68	305	374	612	1,610	1,643	1,208,914	135.9	
Mbeya Morogoro	0	0	0	0	847	1,665	2,142	2,543	3,164	3,860	3,928	1,326,183	296.2	
Mtwara Mwanza	0	0	0	0	322	0	50	109	243	434	631	688	854,817	80.5
Rukwa Ruvuma	0	0	0	0	0	3	36	207	455	570	854	1,488	1,108,695	134.2
Shinyanga Singida	0	0	0	0	0	1	1	9	45	111	394	561	646,550	86.8
Tabora Tanga	0	0	0	0	0	3	30	99	139	237	476	495	970,942	51.0
TANZANIA	3	109	404	1,525	4,456	9,280	14,107	22,077	33,699	34,605	22,533,754	153.6		

* Rate per 100,000 population.

FIGURE 1

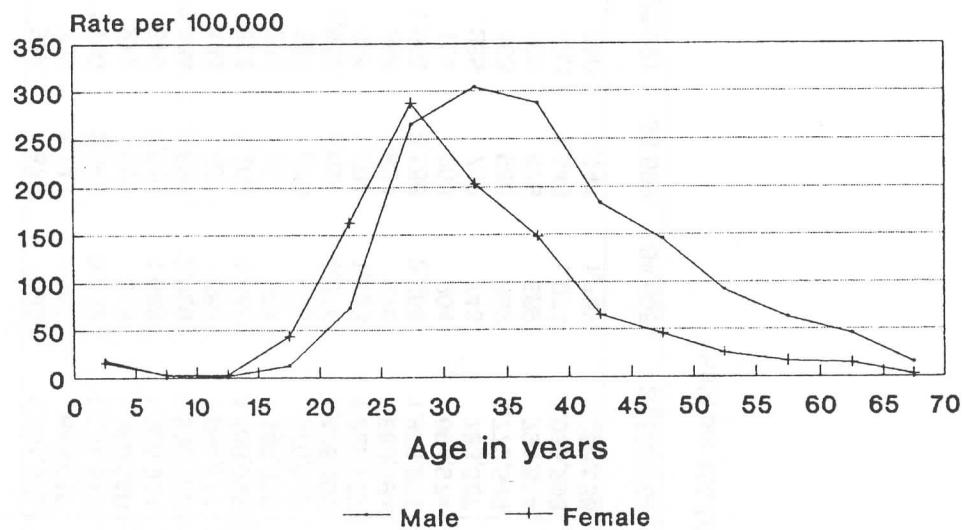
Reported AIDS cases 1983 - 1992



Epidemiology Unit / NACP, May 1992

FIGURE 2

AIDS case rates by age and sex, 1983 - 1992



Epidemiology Unit, May 1992.

TABLE 2

Distribution of new AIDS cases by age and sex, 1987 - 1992 May.

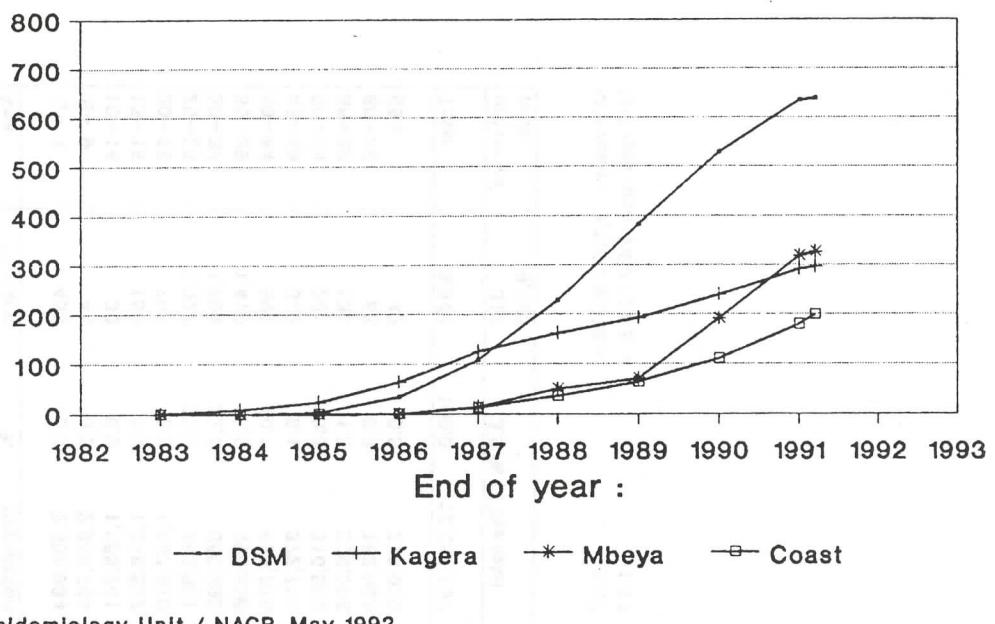
Age	Male			Female			Total					
	Number	%	Population	Rate	Number	%	Population	Rate	Number	%	Population	*Rate
0 - 4	466	5.3	2,501,834	18.6	399	4.8	2,474,728	16.1	865	5.1	4,976,562	17.4
5 - 9	44	0.5	2,066,764	2.1	68	0.8	2,055,045	3.3	112	0.7	4,121,809	2.7
10 - 14	30	0.3	1,588,241	1.9	50	0.6	1,593,470	3.1	80	0.5	3,181,711	2.5
15 - 19	158	1.8	1,288,892	12.3	560	6.8	1,285,902	43.5	718	4.2	2,574,794	27.9
20 - 24	788	8.9	1,067,910	73.8	1,820	22.0	1,119,240	162.6	2,608	15.2	2,187,150	119.2
25 - 29	1,977	22.3	745,321	265.3	2,262	27.4	785,896	287.8	4,239	24.8	1,531,217	276.8
30 - 34	1,994	22.5	655,392	304.2	1,507	18.3	742,984	202.8	3,501	20.5	1,398,376	250.4
35 - 39	1,410	15.9	490,636	287.4	876	10.6	590,806	148.3	2,286	13.4	1,081,442	211.4
40 - 44	892	10.1	486,976	183.2	372	4.5	567,344	65.6	1,264	7.4	1,054,320	119.9
45 - 49	542	6.1	372,713	145.4	183	2.2	404,581	45.2	725	4.2	777,294	93.3
50 - 54	291	3.3	316,552	91.9	85	1.0	338,841	25.1	376	2.2	655,393	57.4
55 - 59	131	1.5	209,008	62.7	36	0.4	217,725	16.5	167	1.0	426,733	39.1
60 - 64	83	0.9	182,928	45.4	28	0.3	190,796	14.7	111	0.6	373,724	29.7
65+	42	0.5	278,020	15.1	9	0.1	353,710	2.5	51	0.3	631,730	8.1
Total	8,848	100.0	12,251,187	72.2	8,255	100.0	12,721,068	64.9	17,103	100.0	24,972,255	68.5
unknown	317	3.5 % of the total	333	3.9 % of the total	67.5	650	3.7 % of the total	71.1	17,753			
total	9,165		8,588									

* Rate per 100,000 population.

M/F ratio : 9,165 / 8,588 =
M/F rate ratio 74.8 / 67.5 =1.07
1.11

FIGURE 3

AIDS Control Programme Cumulative AIDS case rates, 1983-1992 May



MAP 1

NACP - TANZANIA Cumulative AIDS case rates by region, May 1992.

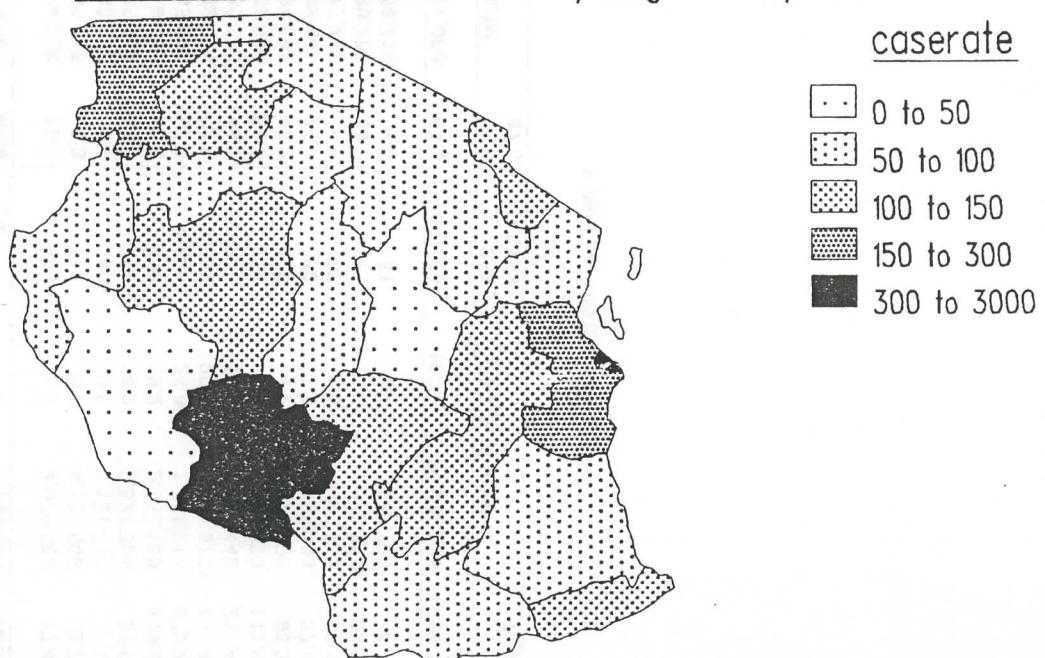


TABLE 4a

Seroprevalence in blooddonors by region for males, 1987 - 1992 May.

Region	1987	1988	1989	1990	1991	1992	Total
Arusha			0.00	1.93	2.31	0.97	2.11
Coast	0.00	5.00	4.63	4.12	4.59	3.37	4.45
DSM	1.49	7.50	2.51	7.69	6.77	7.94	6.52
Dodoma			1.90	6.14	3.58	0.00	3.59
Iringa			11.11	11.40	10.63	9.38	10.63
Kagera			10.48	10.10	10.30	9.42	10.22
Kigoma		7.46	1.19	1.19	2.44	2.63	1.96
Kili'jaro			1.27	5.20	2.79	1.36	2.88
Lindi			0.63	5.60	4.65		4.57
Mara			4.62	4.46	4.15	0.00	4.40
Mbeya	4.82	4.98	5.17	7.80	11.47		7.50
Morogoro		10.91	6.76	3.24	5.24	6.08	6.11
Mtwarra			4.92	2.05	4.39	3.45	3.97
Mwanza			15.33	5.55	6.28	3.70	6.29
Rukwa			11.59		10.26		10.53
Ruvuma		3.50	4.91	4.46	7.92		5.82
Shinyanga			12.96	4.29	6.01	3.36	5.70
Singida			3.13	2.25	3.03		2.73
Tabora			2.45	2.48	2.95		2.79
Tanga			6.59	6.16	7.66	5.08	6.99
TANZANIA	3.30	7.42	4.97	5.03	5.92	4.55	5.60

TABLE 4b

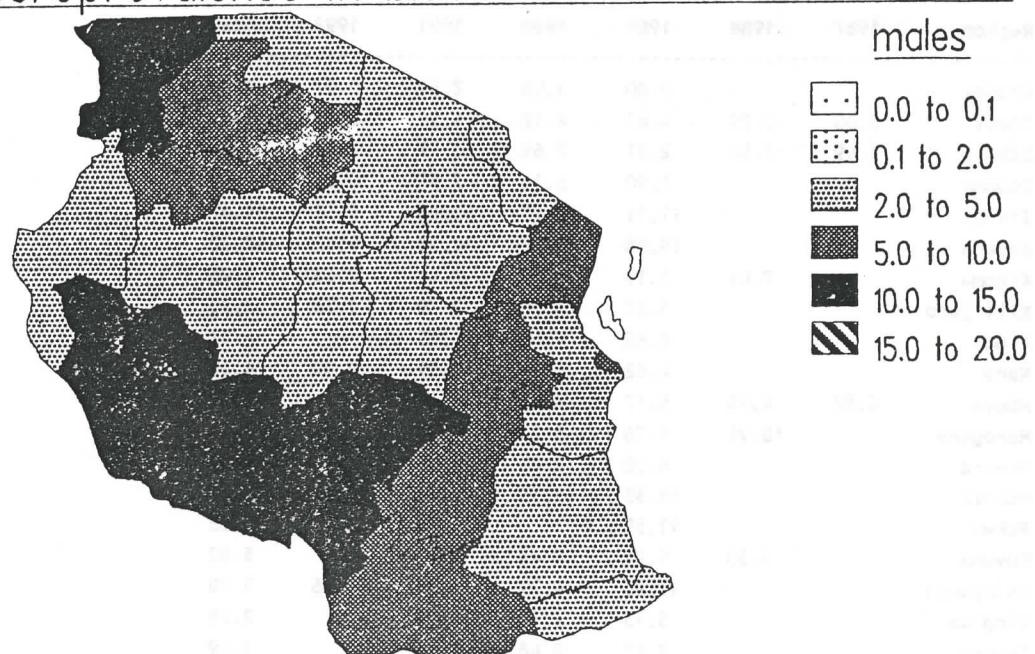
Seroprevalence in blooddonors by region for females, 1987-1992 May.

Region	1987	1988	1989	1990	1991	1992	Total
Arusha			0.00	0.88	5.50	2.25	4.43
Coast		0.00	6.90	6.06	5.26	3.33	5.17
DSM	0.00	14.29		0.00	11.61	0.00	10.53
Dodoma			0.00	5.88	3.30	0.00	3.20
Iringa			16.67	15.84	8.77	7.14	9.96
Kagera			9.68	12.64	12.84	5.75	12.36
Kigoma		29.63	9.43	1.80	5.06	9.52	6.70
Kili'jaro			3.85	6.67	3.27	4.00	3.52
Lindi			11.76	10.87	3.77		4.72
Mara			13.77	7.56	5.24	20.00	7.92
Mbeya	9.52	2.04	10.16	11.80	11.83		10.67
Morogoro		12.50	1.82	5.56	4.73	5.56	4.83
Mtwarra			0.00	1.79	4.19	13.64	4.38
Mwanza			7.50	5.20	6.40	0.00	6.14
Rukwa			24.00		20.00		21.18
Ruvuma		6.25	14.03	8.88	8.09		10.27
Shinyanga			33.33	16.47	18.38	0.00	18.03
Singida			10.53	2.17	2.19		2.73
Tabora			2.52	1.99	2.83		2.61
Tanga			23.53	2.13	8.89		8.74
TANZANIA	7.14	7.98	11.25	8.01	7.35	5.32	7.95

MAP 2a

NACP - TANZANIA

Seroprevalence in blooddonors for males 1991.



MAP 2b

NACP - TANZANIA

Seroprevalence in blooddonors for females 1991.

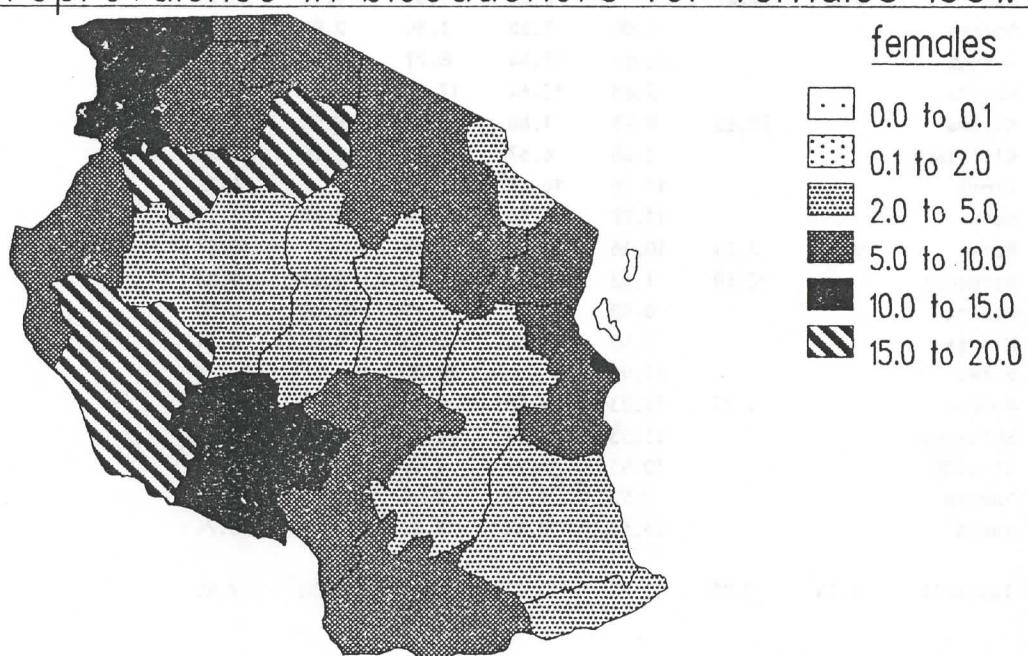


TABLE 5a

Prevalence of HIV for MALE blooddonors by age, 1987 - 1992 May.

Age	1987	1988	1989	1990	1991	1992	1987-'92
	Preval.						
15-19	0.00	1.56	1.82	3.35	3.41	1.62	3.03
20-24	3.36	6.77	4.53	4.71	5.14	4.04	4.99
25-29	1.80	8.30	6.04	5.00	6.80	5.04	6.30
30-34	2.13	9.25	5.34	5.55	6.48	5.12	6.20
35-39	7.81	8.71	5.46	4.29	6.26	3.07	5.74
40-44	7.14	10.05	3.79	3.81	4.93	3.77	4.67
45-49	10.00	5.56	2.15	5.19	4.71	4.65	4.61
50-54	0.00	4.17	3.05	3.81	4.51	0.00	4.13
55+	0.00	15.38	3.60	5.00	4.11	11.63	4.62
Total	3.32	7.71	4.87	4.76	5.82	4.29	5.49

TABLE 5b

Prevalence of HIV for FEMALE blooddonors by age, 1987 - 1992 May.

Age	1987	1988	1989	1990	1991	1992	1987-'92
	Preval.						
15-19	0.00	0.00	7.93	7.47	5.04	0.00	5.54
20-24	0.00	4.55	13.53	9.59	8.14	9.30	8.87
25-29	14.29	11.76	8.24	9.24	8.81	7.69	8.88
30-34	16.67	14.29	8.93	6.27	6.90	9.43	7.02
35-39	0.00	21.05	7.95	6.30	4.76	0.00	5.37
40-44	0.00	16.67	9.64	2.92	6.13	0.00	5.84
45-49	0.00	0.00	7.69	1.27	2.19	0.00	2.54
50-54	0.00	0.00	0.00	0.00	6.19	0.00	3.97
55+	0.00	0.00	0.00	10.00	7.69		7.25
Total :	7.14	7.51	9.60	7.71	7.15	5.64	7.45
Male/Female ratio:	0.46	1.03	0.51	0.62	0.81	0.76	0.74

FIGURE 6a

NACP - TANZANIA
HIV Prevalence, 1987-1992 May.
Male blooddonors, selected agegroups

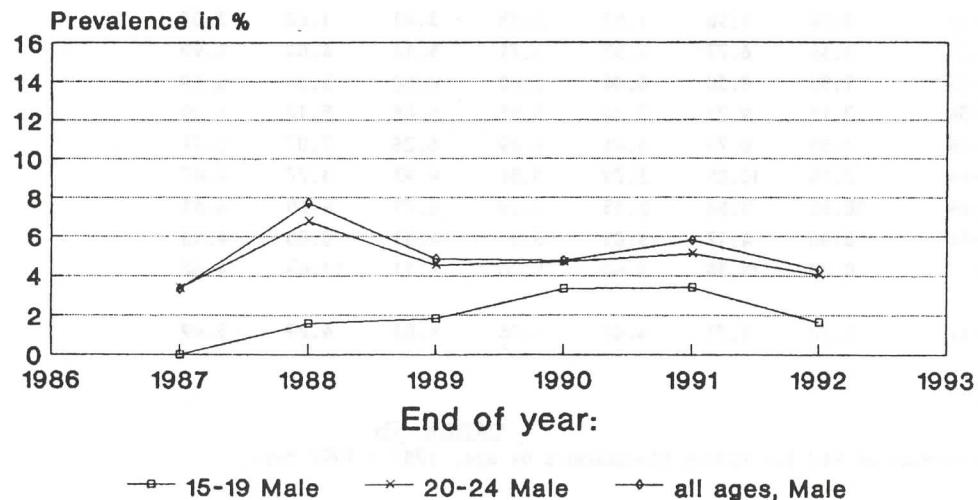
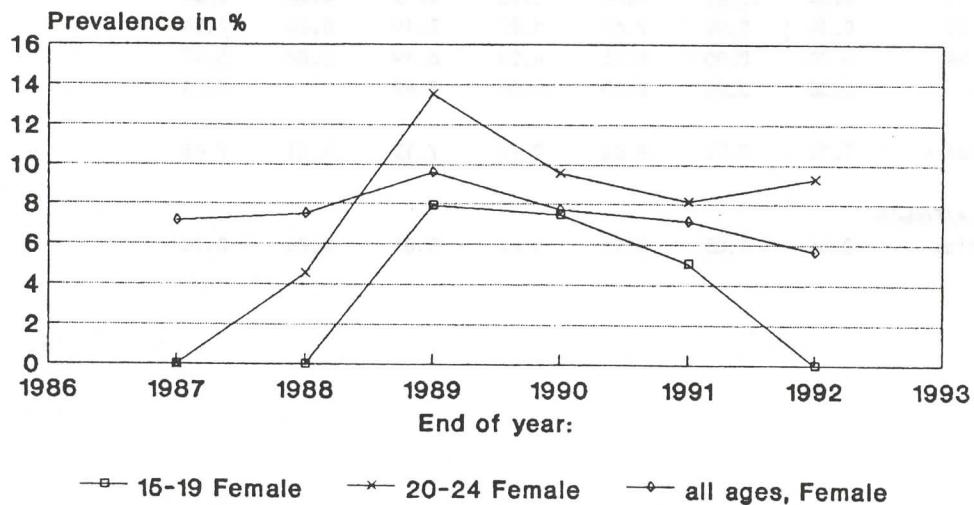


FIGURE 6b

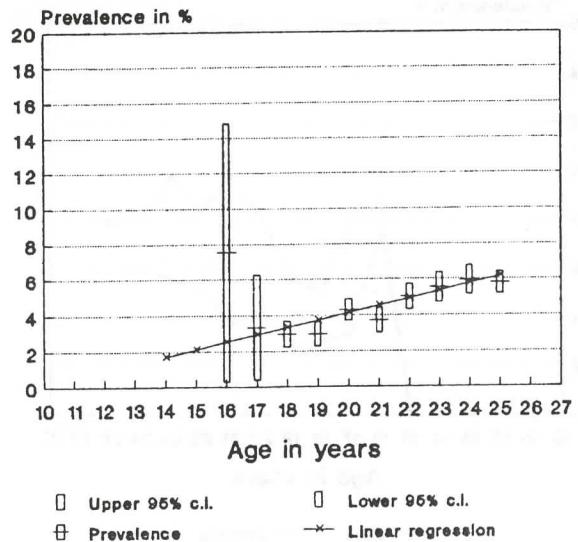
NACP - TANZANIA
HIV Prevalence, 1987 - 1992 May
Female blooddonors, selected agegroups



Epidemiology Unit, May 1992

FIGURE 7

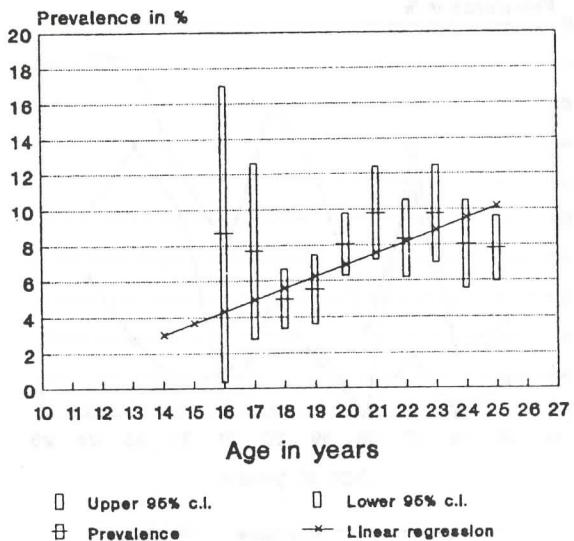
HIV Seroprevalence
in Adolescent Blooddonors.
(Male) 1987 - 1992 May



NACP, May 1992. (bte_yth)

FIGURE 7

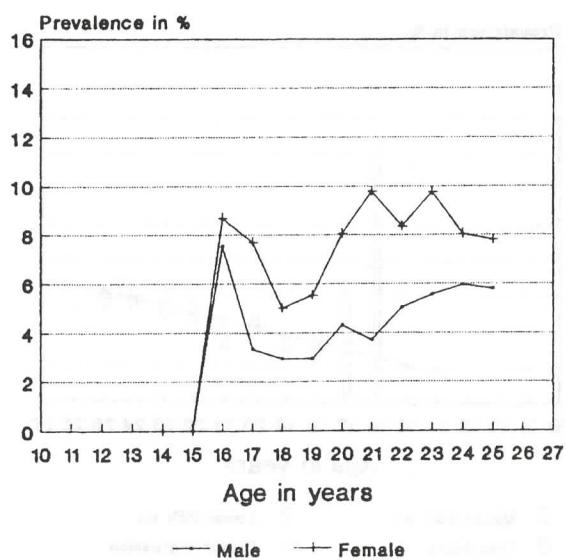
HIV Seroprevalence
in Adolescent Blooddonors.
(Female) 1987 - 1992 May



NACP, May 1992. (bte_yth)

FIGURE 8a

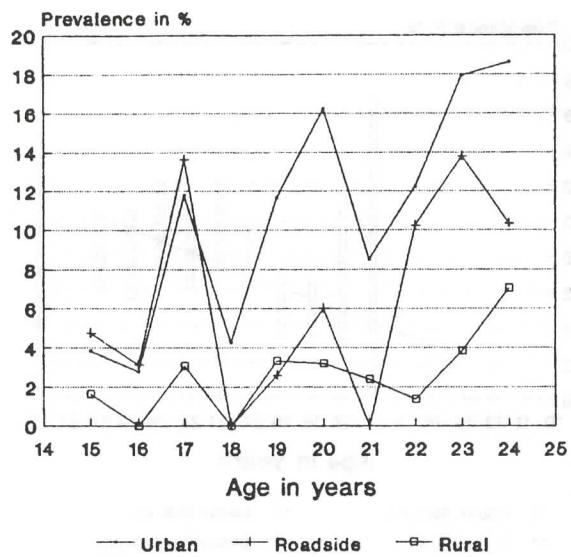
HIV Seroprevalence in Adolescent Blooddonors. 1987 - 1992



NACP, May 1992 (bt_yth_a)

FIGURE 8b

HIV Seroprevalence in Adolescents, Mwanza region 1990 survey



TANERA Project, Mwanza (mw_yth_a)

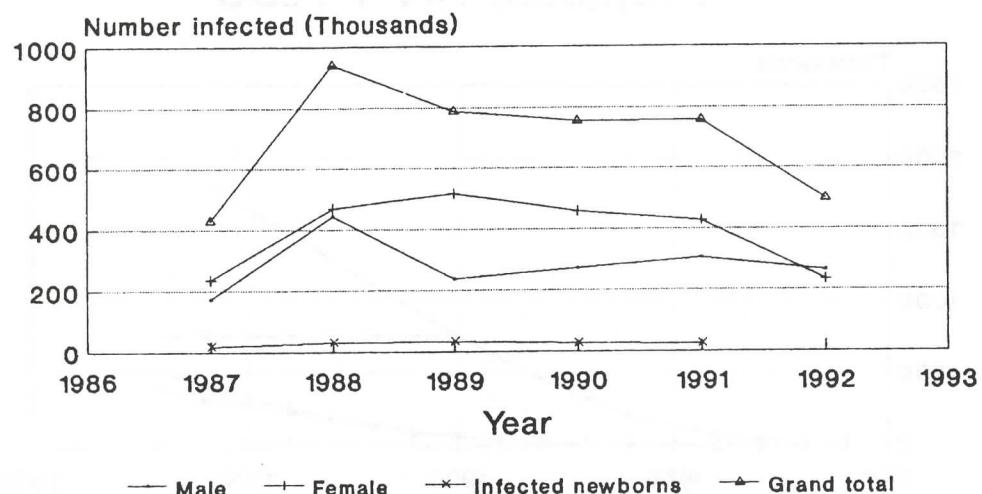
TABLE 6

Summary of estimated number of infected, 1986 – 1991
 (based on age adjusted blooddonor prevalence)

	1987	1988	1989	1990	1991
Males	173,656	443,054	238,683	271,460	305,908
Females	236,102	468,411	517,274	457,730	427,688
Total	409,758	911,465	755,957	729,190	733,597
Infected pregnant women	62,715	99,715	109,810	86,813	77,919
Infected newborns	18,815	29,914	32,943	26,044	23,376
Uninf. newb./pos. M.	43,901	69,800	76,867	60,769	54,543

FIGURE 9

Estimated number of HIV seropositives for Tanzania mainland



Epidemiology Unit, May 1992

FIGURE 10b

Projected HIV / Orphans

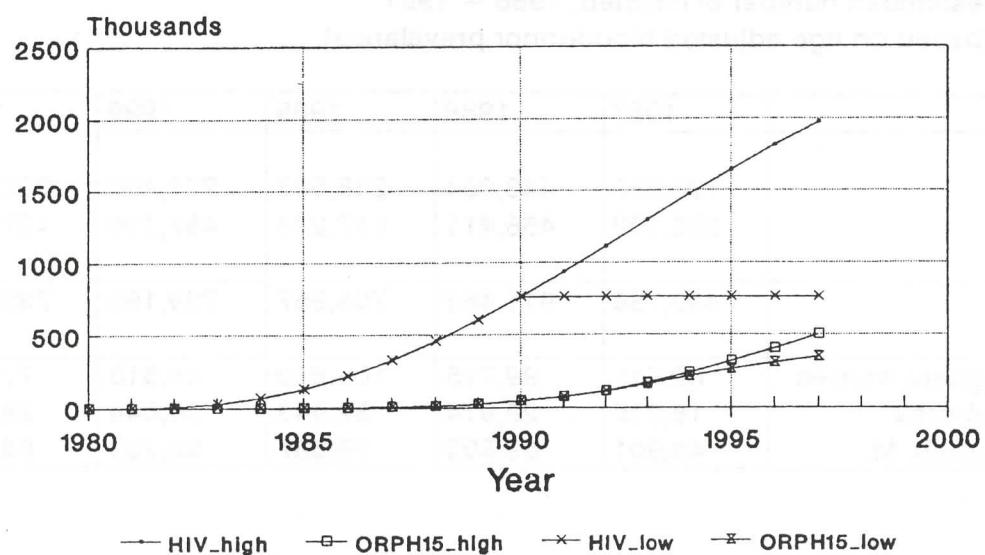
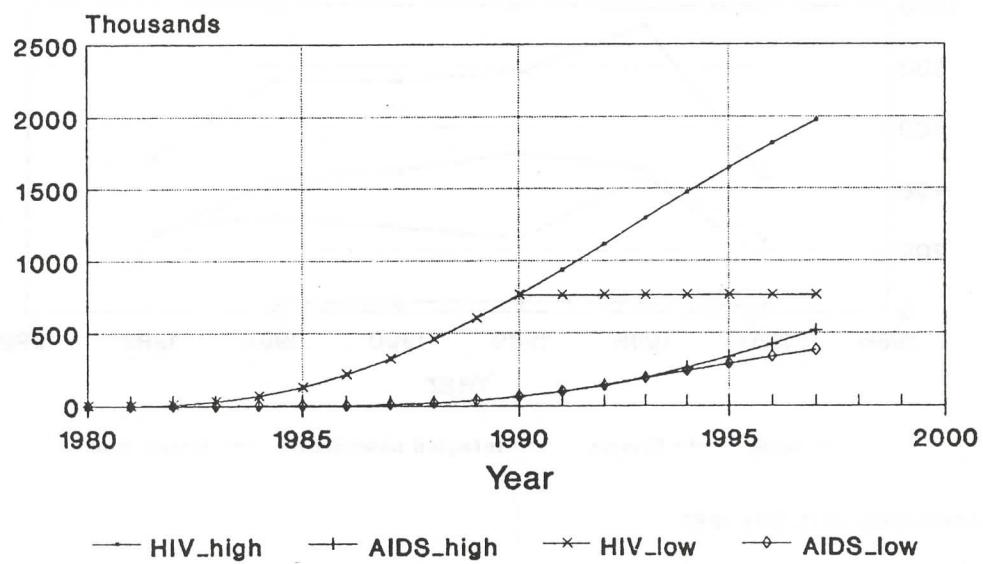


FIGURE 10a

Projected HIV / AIDS



Epidemiology Unit, May 1992