

**ANTI-HIV 1 TESTING OF BLOOD DONATIONS IN THE U.K.
1985-1989**

Since anti-HIV screening of blood donations commenced in October 1985 a total of 11,220,500 donations have been tested and 150 confirmed seropositives have been found; an incidence of approximately 1 in 75,000. A summary of the results of tests by year can be found in Table 1 where it can be seen that the positivity rate declined between 1985 and 1988 and the rate in 1987 was significantly lower than 1986 ($p < 0.001$). There is no significant difference in the rates for 1987, 1988 and 1989 although the rate increased during 1989.

Of the 24 male donors found seropositive in 1989 14 were established donors. Ten had donated since October 1985 and were seronegative on a previous occasion. Of the 5 established female donors, 3 previous donations were seronegative.

It is noticeable, also, that the ratio of female to male anti-HIV positive donors is higher for 1989 than in previous years. The majority of these were new or first-time donors.

Table 2 summarises the HIV seropositives found in first-time donors which have been monitored since February 1986. The trend for the seropositivity rate was down between 1986 and 1988, although not statistically significant; it increased in 1989. Overall, of the 1,426,952 new donors tested, 56 have been confirmed anti-HIV positive, an incidence of approximately 1 in 25,000. This is clearly higher than the rate for donations as a whole which is not surprising since seropositive donors are withdrawn from panels and do not donate again leading to a bias of seronegative regular donors.

The age ranges of the seropositive donors are shown in Table 3 and it can be seen that predominantly these donors are under the age of 40 years.

Attempts are made to recall all confirmed anti-HIV positive donors to the RTC for interview and counselling as appropriate. The majority respond and the analysis of risk activities is summarised in Table 4. Homosexual/bisexual men have accounted for a significant number of seropositive males since 1985 whilst the most frequent reason for HIV infection in females is sexual contact with a person at risk. Some donors deny risk and it is presumed that they are either concealing information or they have been infected heterosexually. This is a difficult group to analyse since some have only been interviewed on one occasion and it has been found with other donors that risk activities have not been admitted until a second or third interview has been held. Some admit to sexual contact with multiple partners.

Investigations of the recipients of products from seronegative donations from a donor who subsequently became seropositive have not, in general, been carried out. In those that have been followed up the patient has either succumbed to the primary disease or has been seronegative. One instance was found in Glasgow where two patients seroconverted following the transfusion of products from a donor who was anti-HIV negative in July 1986 and positive in October 1986.

In summary, the incidence of anti-HIV1 positive blood donations in the U.K. still remains low. The number of seropositive female

donors and the number of persons who have apparently become HIV infected heterosexually appears to have increased in 1989. The significance of this is not clear at present, but these observations require careful monitoring.

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HIV ANTIBODY POSITIVE BLOOD DONATIONS IN THE UK

	1985 Oct-Dec	1986 Jan-Dec	1987 Jan-Dec	1988 Jan-Dec	1989 Jan-Dec
No donations	611,824	2,638,291	2,590,405	2,635,516	2,744,464
Anti-HIV Pos					
Males	14	44	19	18	24
Females	0	9	5	5	12
Total	14	53	24	23	36
Rate per cent	0.002	0.002	0.001	0.0009	0.0013

Of the 150 confirmed positives, 119 were males and 31 females

ANTI-HIV 1 TESTS ON NEW DONORS - 1986-1989

	1986	1987	1988	1989
No. donations	322,740	341,046	371,058	392,108
anti-HIV Pos				
males	16	10	5	10
females	3	2	3	7
TOTAL	19	12	8	17
RATE PER CENT	0.006	0.003	0.002	0.004

TABLE 3

		AGE IN YEARS					
		<20	21-30	30-40	41-50	51-60	>60
1985	Male	2	11	1			
	Female						
1986	Male	5	25	11	1	2	
	Female		5	4			
1987	Male	3	11	3		2	
	Female		4				1
1988	Male	2	8	5	2	1	
	Female	1	3		1		
1989	Male	2	6	9	5	2	
	Female	1	8	3			
Total		16	81	36	9	7	1

TABLE 4

RISK FACTOR	1985		1986		1987		1988		1989	
	M	F	M	F	M	F	M	F	M	F
Homosexual/ Bisexual	8		23		11		11		11	
Intravenous Drug user	5		9	1			1		3	1
Sexual partner at risk			4	6		5	4	2	2	6
Blood transfusion				1					?1	
Ethnic origin	1		2		2				2	
Denies risk/ presumed heterosexual transmission			2	1	2		1	1	4	2
No information or not traced			2		2		1		1	2
Others:										
Many partners			1		1					1
Tattoo			1		1					
TOTAL	14		44	9	19	5	18	5	24	12