Annex 2

NATIONAL BLOOD SERVICE

INFECTION SURVEILLANCE

SIX MONTHLY INFECTION SURVEILLANCE REPORT - NO. 10

OCTOBER 1995 - JUNE 1999

DATA AT 31 December 1999

If you have any questions about the data in this report please contact Kate Soldan (NBA/PHLS-CDSC Infection Surveillance Officer) on 0181 200 6868 Extn. 4602

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Table 1. Infections detected in blood donors and the completeness of reporting: Donations collected from 01/10/1995 to 30/06/1999

Surveillance reports[1]	Infections in blood donors											
	Previous six months 01/07/1998-31/12/1998				*Most recent six months* 01/01/1999-30/06/1999				*Total*[4] 01/10/1995-30/06/1999			
	HBV (HBsAg)	HCV (anti-HCV)	HIV (anti-HIV)	*T.pallidum* (*Treponemal* antibodies)	HBV (HBsAg)	HCV (anti-HCV)	HIV (anti-HIV)	*T.pallidum* (*Treponemal* antibodies)	HBV (HBsAg)	HCV (anti-HCV)	HIV (anti-HIV)	*T.pallidum* (*Treponemal* antibodies)
a. Donations with confirmed marker of infection	63	94	13	47	57	102	12	54	468	912	94	385
- per 100,000 donations tested	4.63	6.91	0.96	3.46	4.05	7.24	0.85	3.84	4.45	8.68	0.89	3.66
- 1 in X donations	21,582	14,465	104,590	28,929	24,703	13,804	117,337	26,075	22,460	11,525	111,821	27,302
donations from new donors	55	62	5	18	49	84	6	25	394	655	56	177
- per 100,000 donations tested	36.43	41.07	3.31	11.92	28.46	48.79	3.48	14.52	33.18	55.15	4.72	14.90
- 1 in X donations	2,745	2,435	30,195	8,387	3,514	2,050	28,697	6,887	3,014	1,813	21,207	6,709
donations from repeat donors[2]	8	32	8	29	8	18	6	29	74	257	38	207
- per 100,000 donations tested	0.66	2.65	0.66	2.40	0.66	1.49	0.50	2.40	0.79	2.76	0.41	2.22
- 1 in X donations	151,087	37,772	151,087	41,679	151,087	67,150	201,449	41,679	125,994	36,279	245,357	45,041
b. Infected donors reported	63	91	13	46	54	100	12	50	460	881	92	362
- % of infections reported[3]	100%	97%	100%	98%	95%	98%	100%	93%	98%	97%	98%	94%
c. Exposure histories reported	48	75	13	35	42	85	8	38	354	704	78	259
- % of infections with exposure history reported[3]	76%	80%	100%	74%	74%	83%	67%	70%	76%	77%	83%	67%

Source: a. Donation Testing Surveillance monthly reports, b. Infected Donor Surveillance Section 1 reports, c. Infected Donor Surveillance Section

[2] May include repeat donors newly tested for markers of infection.

[3] i.e. percentage of a.

[4] 4 donors had markers of more than 1 infection: 1 donor had HBsAg(carriage) and HCV, 1 donor had HBsAg(carriage) and HIV and 2 donors had HCV and Treponemal antibodies.

Figure 1. Infections detected in blood donors and completeness of reporting: Donations collected from 01/10/1995 to 30/06/1999

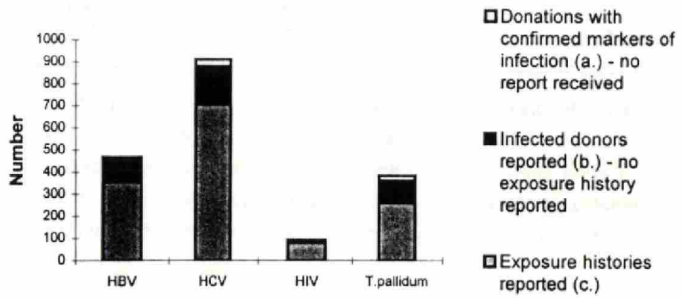


Table 2a. **Age and sex of infected blood donors: newly tested donors[1]**
Donations collected from 01/10/1995 to 30/06/1999

Reported infections	<25 years			25-29 years			30-34 years			35-39 years			40-44 years			45 years and over			Total			
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	NK	Total
HBV(HBsAg)	55	45	100	42	16	58	36	12	48	36	18	54	34	14	48	52	34	86	255	139	4	398
HCV	39	21	60	40	19	59	103	63	166	131	59	190	99	74	173	80	43	123	492	279	4	775
HIV	7	6	13	9	7	16	8	3	11	6	3	9	2	0	2	1	2	3	33	21	0	54
T.pallidum	3	3	6	5	7	12	15	13	28	16	10	26	14	10	24	44	33	77	97	76	2	175
Total	104	75	179	96	49	145	162	91	253	189	90	279	149	98	247	177	112	289	877	515	10	1402

Donations tested[2] (thousands)	<25 years			25-34 years			35-44 years			45 years and over			Total		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
By centres with known age & sex breakdown[3]	17.5	24.6	42.1	16.3	18.4	34.7	10.3	11.6	21.9	7.6	8.3	15.9	51.7	62.9	114.6
- % by age & sex	15%	21%	37%	14%	16%	30%	9%	10%	19%	7%	7%	14%	45%	55%	100%
All centres-*estimates*[4]	*181.3*	*254.9*	*436.3*	*168.9*	*190.7*	*359.6*	*106.7*	*120.2*	*226.9*	*78.8*	*86.0*	*164.8*	*535.8*	*651.8*	1187.6

Rate per 100,000 donations[5]	<25 years			25-34 years			35-44 years			45 years and over			Total		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
HBV (HBsAg)	30.9	18.0	23.3	47.0	14.9	30.0	66.7	27.1	45.7	67.2	40.2	53.1	48.4	21.7	34.1
HCV	22.3	8.5	14.2	87.6	44.5	64.8	223.1	114.5	165.6	105.2	51.8	77.3	95.1	44.3	67.6
HIV	3.9	2.4	3.0	10.3	5.4	7.7	7.7	2.5	5.0	1.3	2.4	1.9	6.3	3.3	4.6
T.pallidum	1.8	1.3	1.5	12.6	11.2	11.8	29.9	17.7	23.4	59.4	40.8	49.7	19.3	12.4	15.7

[1] Infected donors include those who have never attended a reporting blood centre previously (i.e. "new" donors) and donors who have not been tested for the marker previously.

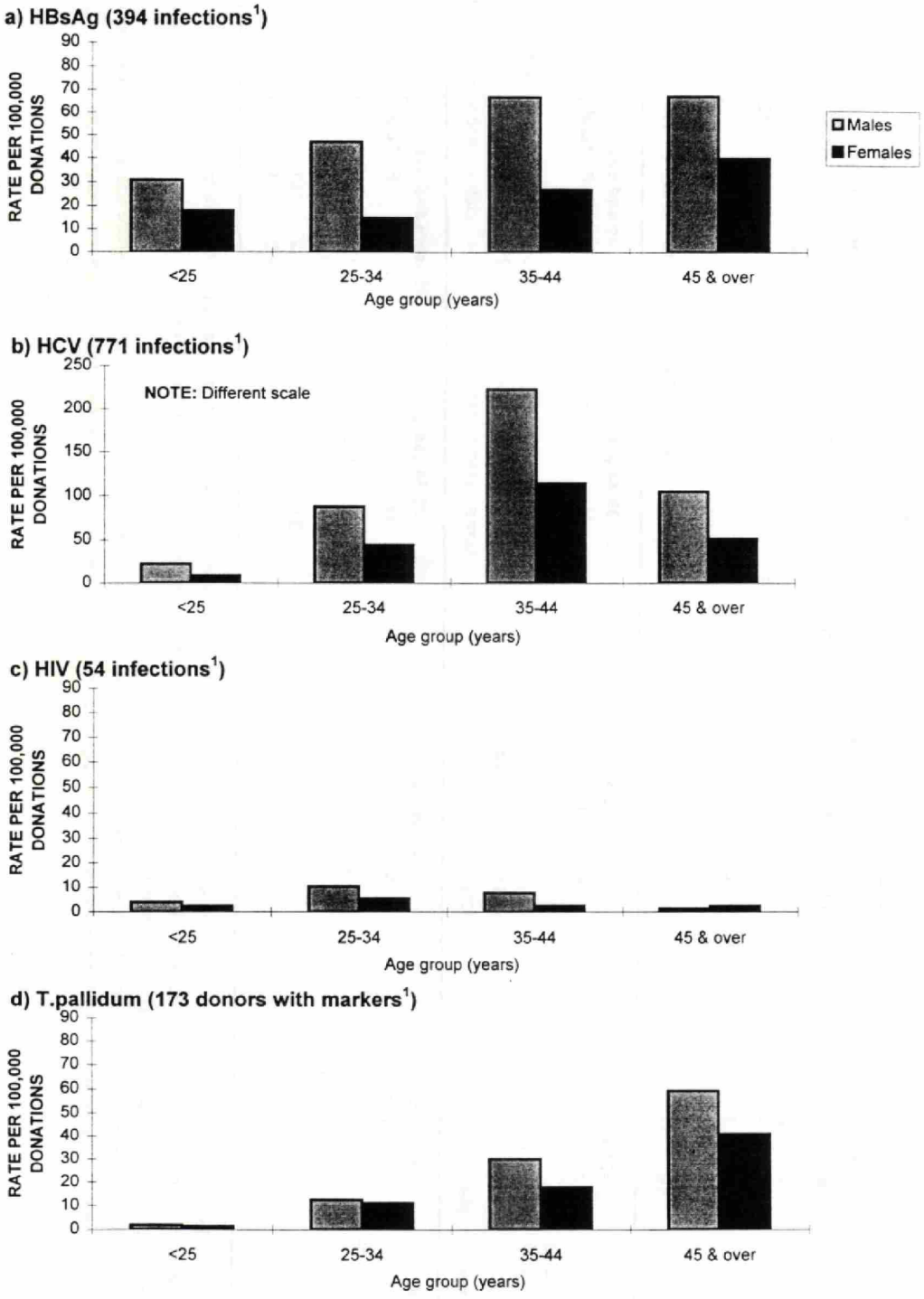
[2] The number of donations tested is the number of donations from "new" donors.

[3] Brentwood, Bristol, Dublin, Leeds and Manchester (some months).

[4] Estimates calculated by multiplying the total donations tested by the proportion found in each age and sex group at the four blood centres where age and sex breakdown was known.

[5] Adjusted for underreporting by multiplying the denominator estimate for each age and sex group by the proportion of all detected infections reported (cf table 1).

Figure 2a. **Age and sex of infected blood donors: newly tested donors**
Donations collected from 01/10/1995 to 30/06/1999



[1] Rates adjusted for underreporting by multiplying the denominator estimate for each age and sex group by the proportion of all detected infections reported (cf Table 1).

Table 2b. **Age and sex of infected blood donors: previously tested donors[1]**
Donations collected from 01/10/1995 to 30/06/1999

Reported infections	<25 years			25-29 years			30-34 years			35-39 years			40-44 years			45 years and over			Total			
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	NK	Total
HBV(HBsAg)	2	2	4	1	1	2	8	0	8	6	2	8	7	4	11	20	7	27	44	16	2	62
HCV	12	4	16	9	1	10	9	6	15	11	6	17	8	8	16	17	15	32	66	40	0	106
HIV	3	3	6	4	4	8	7	1	8	2	1	3	5	3	8	4	1	5	25	13	0	38
T.pallidum	2	2	4	4	3	7	7	7	14	7	6	13	20	10	30	75	41	116	115	69	3	187
Total	19	11	30	18	9	27	31	14	45	26	15	41	40	25	65	116	64	180	250	138	5	393

Donations tested[2] (thousands)	<25 years			25-34 years			35-44 years			45 years and over			Total		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
By centres with known age & sex breakdown[3]	34.0	46.6	80.6	111.5	98.0	209.5	145.5	108.6	254.1	185.7	127.5	313.2	476.7	380.7	857.4
- % by age & sex	4%	5%	9%	13%	11%	24%	17%	13%	30%	22%	15%	37%	56%	44%	100%
All centres-*estimates*[4]	*369.7*	*506.7*	*876.5*	*1212.5*	*1065.7*	*2278.2*	*1582.2*	*1180.9*	*2763.1*	*2019.3*	*1386.5*	*3405.8*	*5183.8*	*4139.8*	9323.6

Rate per 100,000 donations[5]	<25 years			25-34 years			35-44 years			45 years and over			Total		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
HBV (HBsAg)	0.6	0.4	0.5	0.8	0.1	0.4	0.8	0.5	0.7	1.0	0.5	0.8	0.9	0.4	0.7
HCV	3.4	0.8	1.9	1.5	0.7	1.1	1.2	1.2	1.2	0.9	1.1	1.0	1.3	1.0	1.2
HIV	0.8	0.6	0.7	0.9	0.5	0.7	0.5	0.3	0.4	0.2	0.1	0.1	0.5	0.3	0.4
T.pallidum	0.6	0.4	0.5	1.0	1.0	1.0	1.8	1.4	1.7	4.0	3.1	3.6	2.4	1.8	2.1

[1] Infected donors include only those "repeat" donors who have had a previous donation tested for the marker (but were not necessarily previously negative).

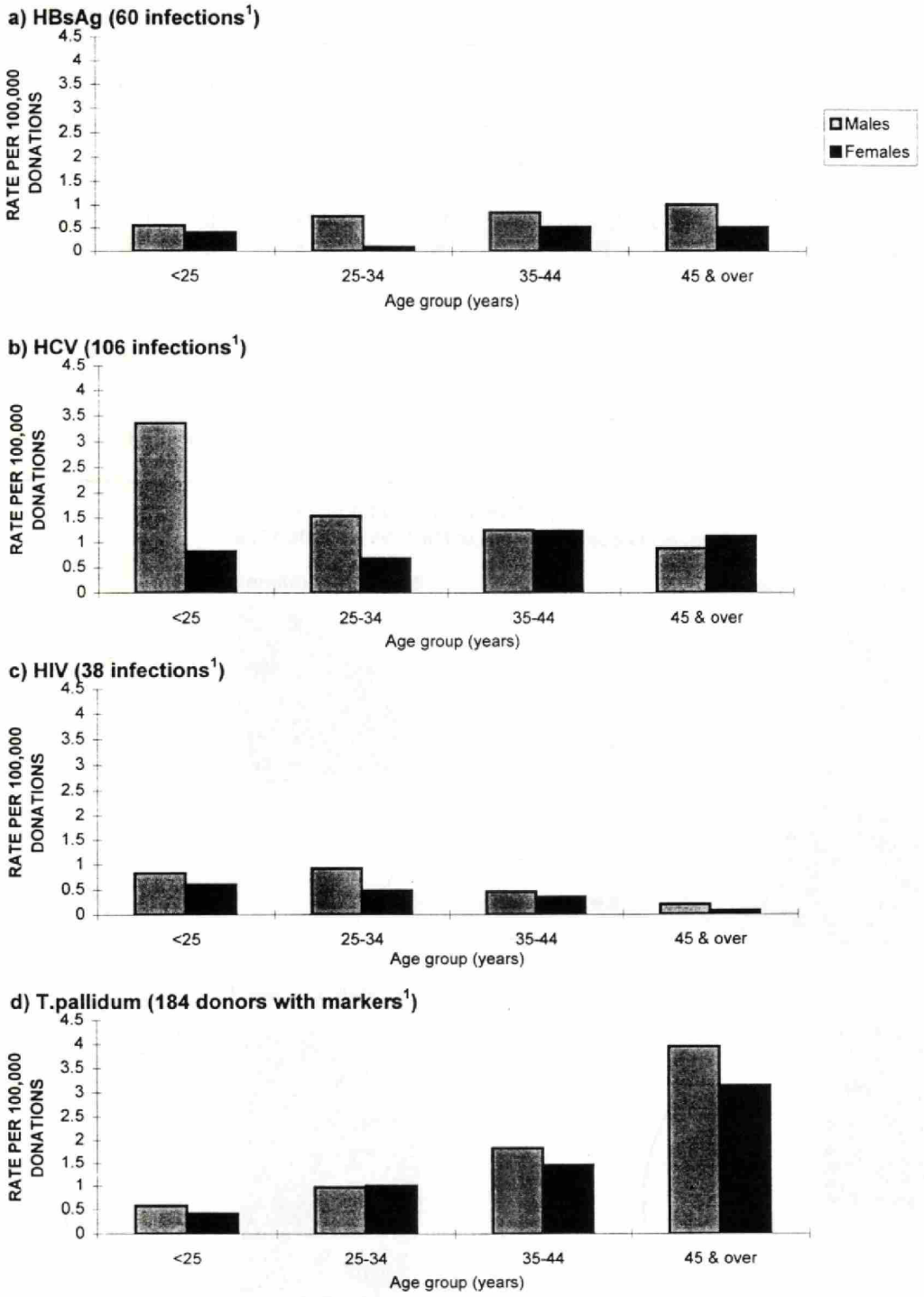
[2] The number of donations tested in the number of donations from "repeat" donors. Note - this will exceed the number of donors tested.

[3] Brentwood, Bristol, Dublin, Leeds and Manchester (some months).

[4] Estimates calculated by multiplying the total donations tested by the proportion found in each age and sex group at the four blood centres where age and sex breakdown was known.

[5] Adjusted for underreporting by multiplying the denominator estimate for each age and sex group by the proportion of all detected infections reported (cf table 1).

Figure 2b. **Age and sex of infected blood donors: previously tested donors**
Donations collected from 01/10/1995 to 30/06/1999



[1] Rates adjusted for underreporting by multiplying the denominator estimate for each age and sex group by the proportion of all detected infections reported (cf Table 1).

Table 3.

Ethnic group of infected blood donors
Donations collected from 01/10/1995 to 30/06/1999

Ethnic group	HBV (HBsAg)		HCV		HIV		T. pallidum (Treponemal antibodies)	
	No.	%	No.	%	No.	%	No.	%
Infections reported	460	100%	881	100%	92	100%	362	100%
White	193	42%	678	77%	67	73%	181	50%
Black-Caribbean	12	3%	7	1%	7	8%	25	7%
Black-African	39	8%	4	0.5%	4	4%	13	4%
Black-Other	0	0%	0	0%	0	0%	2	1%
Indian/Pakistani/Bangladeshi	37	8%	15	2%	0	0%	10	3%
Chinese	32	7%	1	0.1%	0	0%	1	0.3%
Other Asian	42	9%	5	1%	0	0%	3	1%
Mixed and other	1	0.2%	2	0.2%	0	0%	0	0%
Not available	104	23%	169	19%	14	15%	127	35%

Figure 3.

Ethnic group of infected blood donors
Donations collected from 01/10/1995 to 30/06/1999

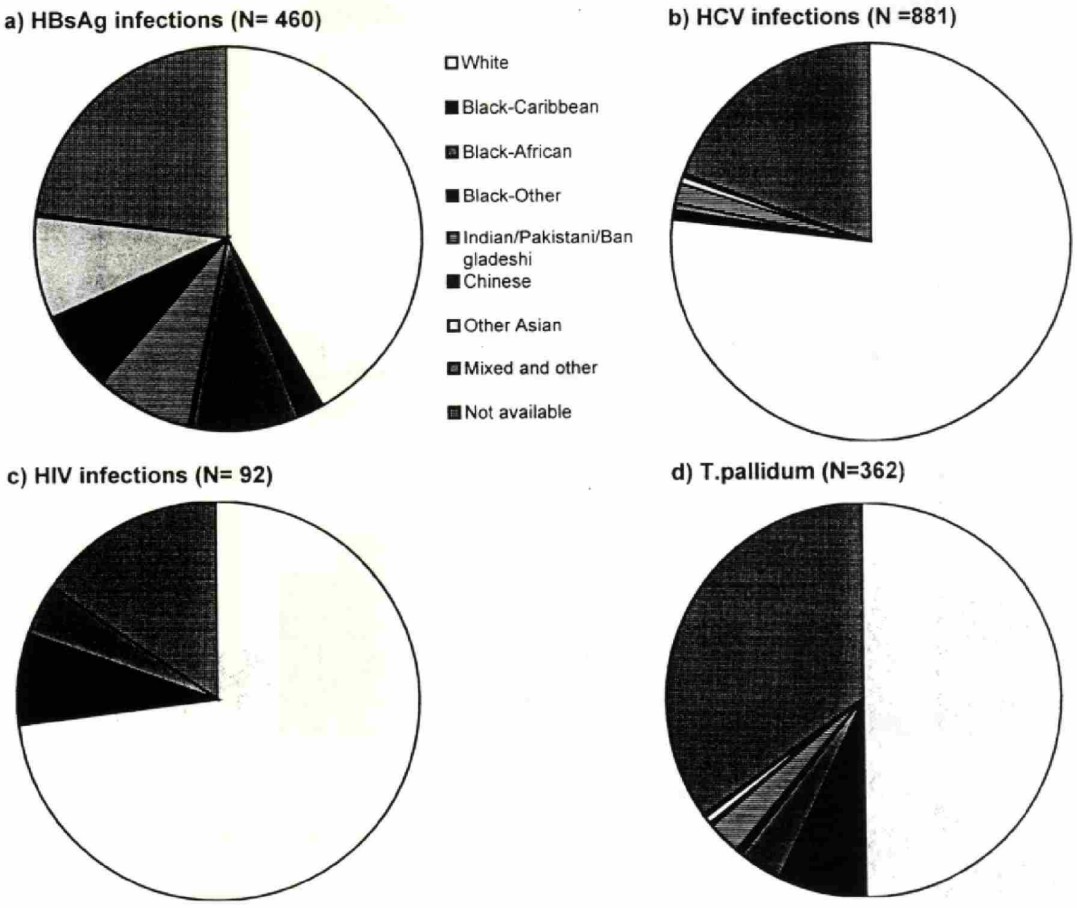


Table 4. Mean age (and 95% confidence intervals) of infected newly tested donors by infection marker and sex: Donations collected 01/10/1995 to 30/06/1999

	HBsAg	anti-HCV	anti-HIV	Treponemal antibodies	Any of these markers
Females	34.3 (32.2-36.4)	37.9 (36.9-38.9)	29.8 (26.2-33.4)	42.5 (40.1-44.9)	37.3 (36.4-38.2)
Males	40.6 (29.0-52.2)	40.1 (34.6-45.6)	30.7 (28.3-33.1)	43.3 (41.3-45.3)	40.3 (35.7-44.9)
Total	38.4 (30.9-45.9)	39.3 (35.8-42.8)	30.4 (28.5-32.3)	42.9 (41.4-44.4)	39.1 (36.2-42.0)

Figure 4. Mean age (and 95% confidence intervals) of infected newly tested donors by infection marker and sex: Donations collected 01/10/1995 to 30/06/1999

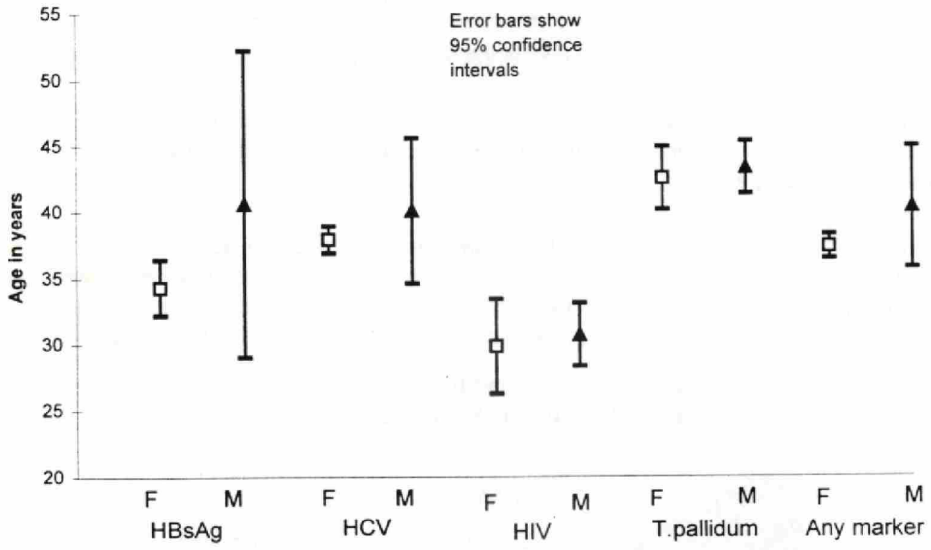


Table 5a. **Exposure categories of infected blood donors**
Donations collected from 01/10/1995 to 30/06/1999

HBsAg positive blood donors

How infection was probably acquired	Newly tested donors[1]	Previously tested donors	All donors HBsAg positive	%
Injecting drug use	2	2	4	1%
Sexual intercourse				
between men	5	1	6	2%
between men and women				
exposure to "high risk" partner(s)[2]	*3*	*0*	*3*	*1%*
exposure abroad[3]	*12*	*4*	*16*	*5%*
exposure in the UK[4]	*6*	*1*	*7*	*2%*
incomplete information	*11*	*3*	*14*	*4%*
Blood factor treatment	0	0	0	0%
Blood/tissue transfer	11	1	12	3%
Mother to infant	47	1	48	14%
Blood contact - documented	4	2	6	2%
Blood contact - possible	40	8	48	14%
Family/household contact	10	1	11	3%
No identified exposure	155	24	179	51%
Total	306	48[5]	354	100%

[1] Newly tested by the blood transfusion services included in this surveillance: may have had donations tested in other countries.

[2] Partner(s) exposed through sexual intercourse with men, IDU, blood factor treatment or blood/tissue transfer.

[3] Individuals from abroad, and individuals from the UK who have lived or visited abroad, for whom there is no evidence of "high risk" partner(s).

[4] No known "high risk" partner(s).

[5] Of these previously tested donors 28 report a previous negative result, 11 report an HBsAg positive previous donation (10 previously confirmed positive, 1 found to be positive on re-testing of archive) and for 9 the previous test results are not reported. Follow-up of possible seroconverters is underway and information about confirmed seroconverters will be presented in the next Infection Surveillance report (no.11).

Figure 5a. **Exposure categories of infected blood donors**
Donations collected from 01/10/1995 to 30/06/1999

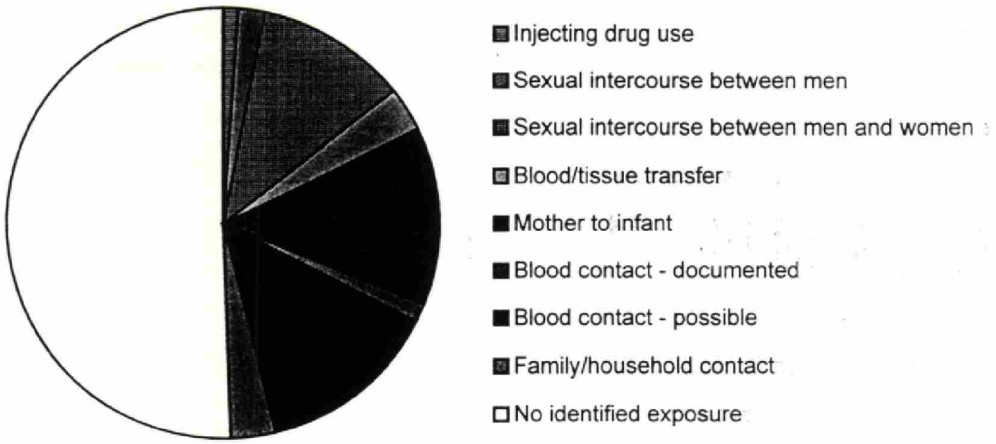


Table 5b. **Exposure categories of infected blood donors**
Donations collected from 01/10/1995 to 30/06/1999

HCV infected blood donors

How infection was probably acquired	Newly tested donors[1]	Previously tested donors	All donors HCV positive	%
Injecting drug use	205	10	215	31%
Sexual intercourse				
between men	0	1	1	0%
between men and women				
exposure to "high risk" partner(s)[2]	*45*	*2*	*47*	*7%*
exposure abroad[3]	*4*	*2*	*6*	*1%*
exposure in the UK[4]	*5*	*1*	*6*	*1%*
incomplete information	*6*	*0*	*6*	*1%*
Blood factor treatment	2	0	2	0%
Blood/tissue transfer	96	10	106	15%
Blood contact - documented	12	2	14	2%
Blood contact - possible[5]	159	23	182	26%
Family/household contact	2	1	3	0%
No identified exposure	94	22	116	16%
Total	630	74 [6]	704	100%

[1] Newly tested by the blood transfusion services included in this surveillance: may have had donations tested in other countries.

[2] Partner(s) exposed through IDU, blood factor treatment or blood/tissue transfer (pre Sept 91).

[3] Individuals from abroad, and individuals from the UK who have lived or visited abroad, for whom there is no evidence of "high risk" partner(s).

[4] No known "high risk" partner(s).

[5] Includes tattoos, acupuncture, possible occupational exposure to blood.

[6] Of these previously tested donors 35 report previous negative donations, 16 report previous reactivity not confirmed positive, 10 report previous positivity (8 previously confirmed positive, 2 found to be positive on re-testing of archive) and for 13 the results of the previous donation are not reported. Follow-up of possible seroconverters is underway and information about confirmed seroconverters will be presented in the next Infection Surveillance report (no.11).

Figure 5b. **Exposure categories of infected blood donors**
Donations collected from 01/10/1995 to 30/06/1999

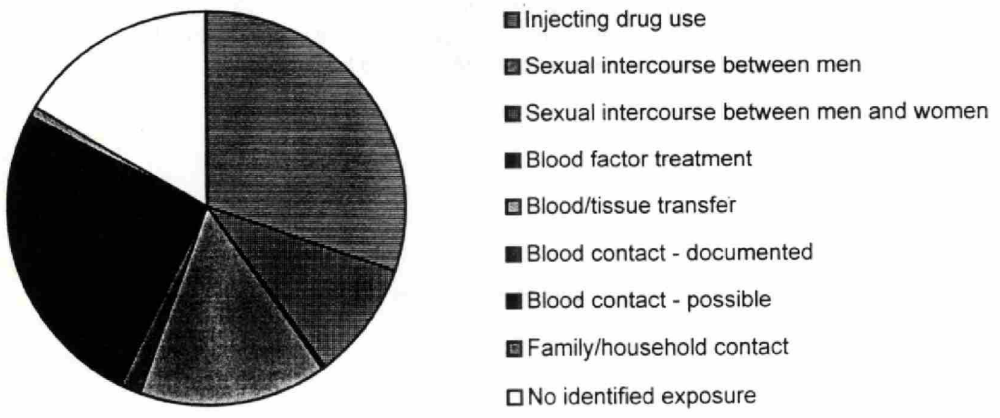


Table 5c. **Exposure categories of infected blood donors**
Donations collected from 01/10/1995 to 30/06/1999

HIV infected blood donors

How infection was probably acquired	Newly tested donors[1]	Previously tested donors	All donors HIV positive	%
Injecting drug use	1	0	1	1%
Sexual intercourse				
between men	14	16	30	33%
between men and women				
exposure to "high risk" partner(s)[2]	6	1	7	8%
exposure abroad[3]	9	7	16	17%
exposure in the UK[4]	10	11	21	23%
incomplete information	5	0	5	5%
Blood factor treatment	0	0	0	0%
Blood/tissue transfer	0	0	0	0%
Other	0	0	0	0%
No identified exposure[5]	9	3	12	13%
Total	54	38 [6]	92	100%

[1] Newly tested by the blood transfusion services included in this surveillance: may have had donation tested in other countries.
[2] Partner(s) exposed through sexual intercourse between men, IDU, blood factor treatment or blood/tissue transfer.
[3] Individuals from abroad, and individuals from the UK who have lived or visited abroad, for whom there is no evidence of "high risk" partner(s).
[4] No known "high risk" partner(s).
[5] Investigation continuing.
[6] All 38 positive previously tested donors had a previous anti-HIV tested donation in the UK recorded: 37 are known to have been anti-HIV negative, one with unknown previous test result.

Donors with markers of *T.pallidum* infection

Exposure history information was reported for 67% of donors with confirmed reactivity for *Treponemal* antibodies: 27% (68) of Treponemal antibody positive donors with exposure history information available had a history of Syphilis reported: 13 (5%) had a history of Yaws.

Comment on Tables 5d&e: The latest version of the surveillance form asks for reasons for non-disclosure prior to donation of probable routes of infection. 60 of 129 exposure histories reported on these new forms included a response to this question (Table 5d). Amongst the remaining 59, only 2 reported an identified probable route of infection. For 30, the probable route of infection was not a reason for pre-donation exclusion (NA). For 11, the probable route of infection occurred outside the period of time for which the donor selection criteria apply (EX). For 19 (13 HCV, 3 HIV and 3 TP) a risk factor was disclosed during post-diagnoses counselling that should have resulted in exclusion from donation (A): the reported reasons these risk factors were not disclosed prior to donation are shown in Table 5e.

Table 5d: Classification of applicability of donor selection criteria to infected donors with reasons why probable route of infection was not disclosed prior to donation reported (upto 30/06/1999).

NA = No exclusion criteria applicable, EX = Exclusion criteria expired, A = Exclusion criteria applied

How infection was probably acquired	HBV			HCV			HIV			T. pallidum			*Total*
	NA[1]	EX[2]	A	NA[1]	EX[2]	A	NA[1]	EX[2]	A	NA[1]	EX	A	
Injecting drug use						11							*11*
Sexual intercourse													*0*
between men									3			1	*4*
between men and women	4				1	2	1					2	*10*
Blood factor treatment				1									*1*
Blood/tissue transfer					4								*4*
Mother to infant	9												*9*
Blood contact - documented													*0*
Blood contact - possible	1	1		10	5								*17*
Family/household contact													*0*
No identified exposure				3						1			*4*
Total	***14***	***1***	***0***	***14***	***10***	***13***	***1***	***0***	***3***	***1***	***0***	***3***	***60***

Notes: [1] Including 5 repeat donors (4xHCV, 1xHIV, 3 previously negative, 1 not previously tested, 1 previous result not know). [2] Including 2 repeat donors (2xHCV, 1 previous negative, 1 not previously tested.)

Table 5e: Reasons for non-disclosure prior to donation of risk factors for which exclusion criteria applied (i.e. group "A" in table 5d):-

How infection was probably acquired	Infection	Reason stated for non-disclosure prior to donation
Injecting drug use	HCV	Single IDU only, therefore did not think it applied.
	"	Thought blood would be tested. Needed to know blood group for work.
	"	Told S.O. past history of hepatitis but informed by a hospital last year that no longer has it. Did not tick IDU because linked it with the hepatitis which had discussed with the S.O.
	"	Was only trying to help, and thought all was tested anyway.
	"	Did not think it relevant - a long time ago and did not share needles/syringes, although did share other injecting equipment[1]
	"	Did not think it was relevant as it was along time ago.
	"	Thought it was too long ago to matter.
	"	Knows others in the same situation who are long term donors.
	"	Did not fully understand the safety of blood leaflet.
	"	Asked for advice prior to session, and was assured that if had been cleared of hepatitis B and it was more than 12 months ago, it was OK.
	"	Didn't adequately read safety of blood leaflet. Also tries to forget one episode of IDU.
Sexual intercourse between men	HIV	Says that discussed with GP who told him it was OK to donate, and thinks "Blood Service has a prejudice against gays"[2]
	"	Did not see risk as had not had anal sex, and rated oral sex as messing around only.
	"	Regular donor - hard to self-exclude now.[3]
	T.pallidum	Assumed infection fully eradicated therefore OK.[4]
Sexual intercourse between men and women	HCV	Thought was in the clear as partner said had never shared a needle - only spoons (heroin addict) and was tested and negative in the past.
	"	Did not understand that spouse's history excluded donor, as spouse in no longer using drugs.
	T.pallidum	Had had blood tests before but no positive results.
	"	Not aware of risk.

Notes: [1,2,3&4] were repeat donors. [1]= not previously tested. [2,3] = previously negative. [4] = previously reactive.

Table 6a. **HCV infected blood donations: England & Wales**
Donations collected from 01/09/1991 to 30/06/1999

	New donors			Repeat donors[1]			Total		
	HCV infected	Donations tested	Rate per 100,000	HCV infected	Donations tested	Rate per 100,000	HCV infected	Donations tested	Rate per 100,000
1991 Sep-Dec	94	105,204	89.35	438	703,194	62.29	532	808,398	65.81
1992	289	303,597	95.19	518	2,190,696	23.65	807	2,494,293	32.35
1993	252	292,862	86.05	204	2,233,679	9.13	456	2,526,541	18.05
1994	254	313,363	81.06	125	2,209,965	5.66	379	2,523,328	15.02
1995	249	305,782	81.43	105	2,198,658	4.78	354	2,504,440	14.13
1996	191	296,156	64.49	72	2,243,229	3.21	263	2,539,385	10.36
1997	172	281,096	61.19	64	2,389,190	2.68	236	2,670,286	8.84
1998	117	266,540	43.90	67	2,235,443	3.00	184	2,501,983	7.35
1999 Jan-Jun	82	152,914	53.62	17	1,135,825	1.50	99	1,288,739	7.68
Total	1,700	2,317,514	73.35	1,610	17,539,879	9.18	3,310	19,857,393	16.67

[1] Including repeat donors newly tested for HCV infection.

Figure 6a. **HCV infected blood donations: England & Wales**
Donations collected from 01/09/1991 to 30/06/1999

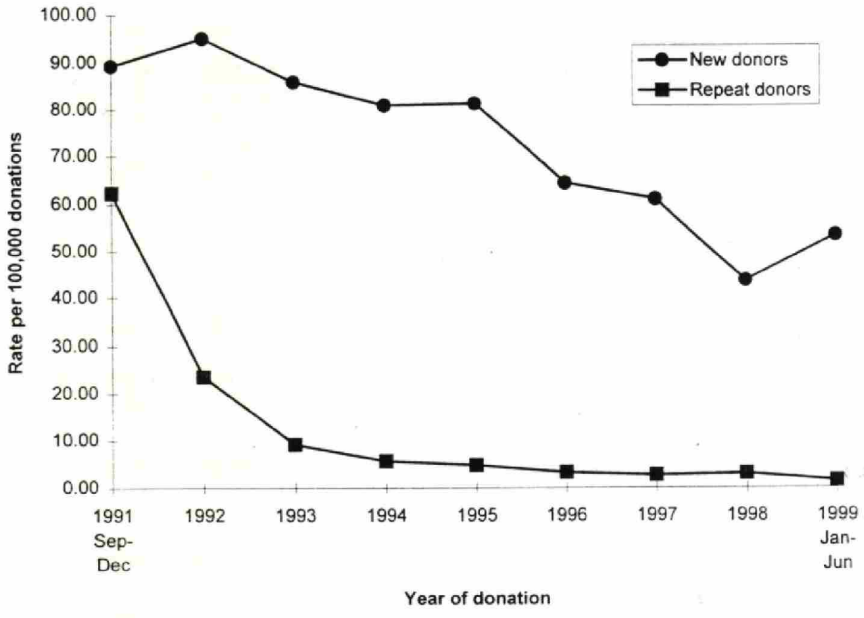


Table 6b. **HCV infected blood donations: Scotland**
Donations collected from 01/09/1991 to 30/06/1999

	New donors			Repeat donors[1]			Total		
	HCV infected	Donations tested	Rate per 100,000	HCV infected	Donations tested	Rate per 100,000	HCV infected	Donations tested	Rate per 100,000
1991 Sep-Dec	33	12,935	255.12	66	96,646	68.29	99	109,581	90.34
1992	55	34,879	157.69	102	297,946	34.23	157	332,825	47.17
1993	30	31,149	96.31	60	281,053	21.35	90	312,202	28.83
1994	25	29,396	85.05	39	283,313	13.77	64	312,709	20.47
1995	49	29,778	164.55	20	274,952	7.27	69	304,730	22.64
1996	34	29,905	113.69	19	270,782	7.02	53	300,687	17.63
1997	40	29,968	133.48	20	263,700	7.58	60	293,668	20.43
1998	31	28,667	108.14	13	256,438	5.07	44	285,105	15.43
1999 Jan-Jun	15	16,605	90.33	6	124,482	4.82	21	141,087	14.88
Total	312	243,282	128.25	345	2,149,312	16.05	657	2,392,594	27.46

[1] Including repeat donors newly tested for HCV infection.

Figure 6b. **HCV infected blood donations: Scotland**
Donations collected from 01/09/1991 to 30/06/1999

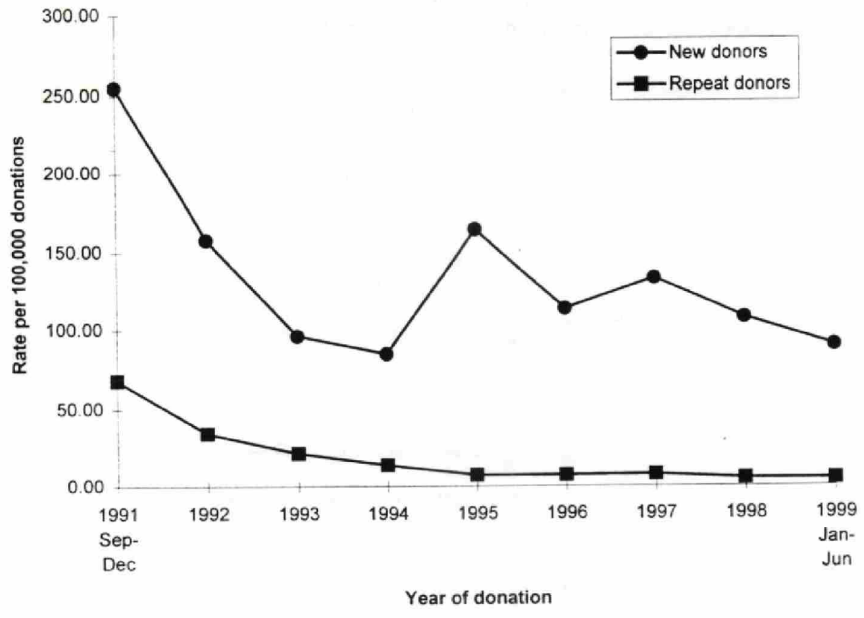


Table 7. **HIV infected blood donations: UK (i.e.England, Wales, Northern Ireland & Scotland)**
Donations collected from 01/10/1985 to 30/06/1999

	New donors			Repeat donors[1]			Total		
	HIV infected	Donations tested	Rate per 100,000	HIV infected	Donations tested	Rate per 100,000	HIV infected	Donations tested	Rate per 100,000
1985 Oct-Dec	5	-	-	8	-	-	13	610,918	2.13
1986	20	322,490	6.20	33	2,312,765	1.43	53	2,635,255	2.01
1987	12	340,770	3.52	11	2,246,471	0.49	23	2,587,241	0.89
1988	8	353,834	2.26	15	2,278,553	0.66	23	2,632,387	0.87
1989	17	372,748	4.56	20	2,368,391	0.84	37	2,741,139	1.35
1990	18	353,456	5.09	14	2,463,339	0.57	32	2,816,795	1.14
1991	16	442,692	3.61	15	2,506,550	0.60	31	2,949,242	1.05
1992	12	349,204	3.44	14	2,551,885	0.55	26	2,901,089	0.90
1993	11	333,574	3.30	9	2,581,492	0.35	20	2,915,066	0.69
1994	10	351,603	2.84	6	2,558,643	0.23	16	2,910,246	0.55
1995	17	352,229	4.83	13	2,548,813	0.51	30	2,901,042	1.03
1996	10	335,714	2.98	12	2,579,182	0.47	22	2,914,896	0.75
1997	22	319,609	6.88	10	2,720,413	0.37	32	3,040,022	1.05
1998	10	309,460	3.23	13	2,555,023	0.51	23	2,864,483	0.80
1999 Jan-Jun	6	178,746	3.36	5	1,288,482	0.39	11	1,467,228	0.75
Total	194	4,716,129	4.01	198	33,560,002	0.57	392	38,887,049	1.01

[1] Including repeat donors newly tested for HIV infection.

Figure 7.

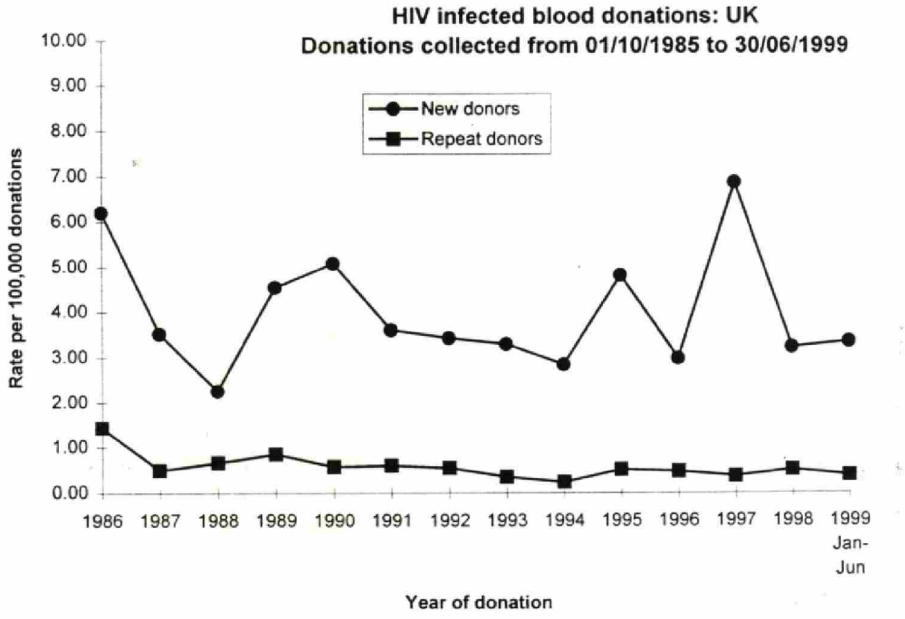
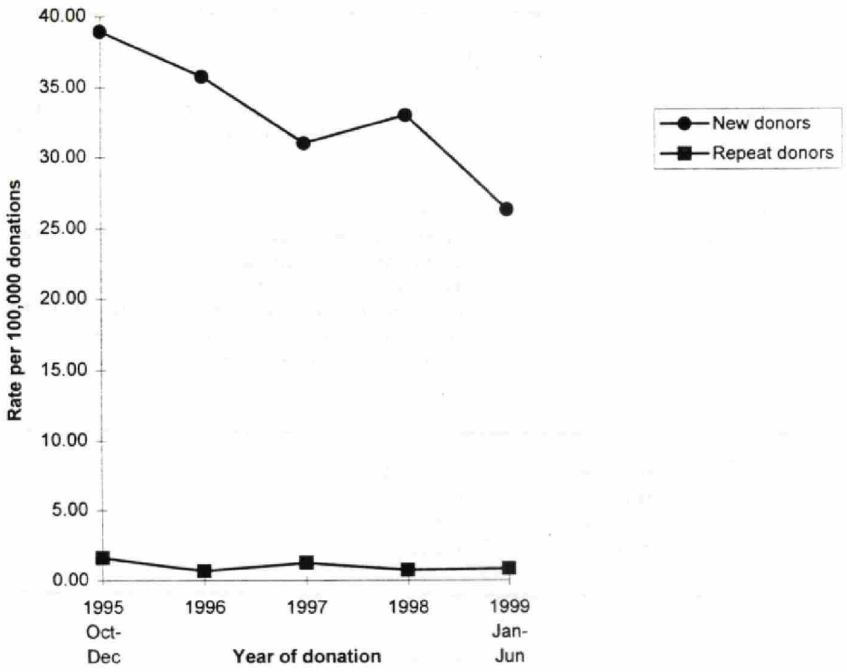


Table 8. HBsAg positive blood donations: UK (i.e.England, Wales, Northern Ireland & Scotland): 01/10/1995 to 30/06/1999

	New donors			Repeat donors[1]			Total		
	HBsAg positive	Donations tested	Rate per 100,000	HBsAg positive	Donations tested	Rate per 100,000	HBsAg positive	Donations tested	Rate per 100,000
1995 Oct-Dec	35	89,840	38.96	10	601,032	1.66	45	690,872	6.51
1996	120	335,714	35.74	18	2,579,182	0.70	138	2,914,896	4.73
1997	99	319,609	30.98	35	2,720,413	1.29	134	3,040,022	4.41
1998	102	309,460	32.96	19	2,555,023	0.74	121	2,864,483	4.22
1999 Jan-Jun	47	178,746	26.29	11	1,288,482	0.85	58	1,467,228	3.95
Total	403	1,233,369	32.67	93	9,744,132	0.95	496	10,977,501	4.52

[1] Including repeat donors newly tested for HBsAg.

Figure 8. HBsAg positive blood donations: UK
Donations collected from 01/10/1995 to 30/06/1999



Note: Prior to October 1995, HBsAg positive donors were reported to North London blood centre.

Table 9a. Post-transfusion infections reported from 01/07/1999 to 31/12/1999
Current status of post-transfusion infections initially reported from 01/07/1998 to 30/06/1999, previously pending investigation

Infection	*Date of transfusion*	*Date of onset/diagnosis*	*Implicated component*	*Outcome of donor/donation investigation*
BACTERIA				
Bacteria	Dec-98	Dec-98	Red cells	Pending
HBV				
HBV	Apr 97 - Nov 97	Jan-98	Mixed	Pending
HBV	Jul-98	Mar-99	Red cells	All HBsAg and anti-HBc negative.
HCV				
HCV	Jun-93 - Jul-93	Jan-97	Red cells	All anti-HCV negative at least 6 months after implicated donations.
HCV	Jun-92 - Dec-92	Jan-98	Red cells	Pending
HCV	Feb-92	May-98	FFP	Pending
HCV	Sep-97	Jun-96	Platelets	All anti-HCV and HCV PCR negative.
HIV				
HIV	Aug-85	Dec-97	Red cells	Transfusion prior to anti-HIV testing.

Post-transfusion infections initially reported from 01/07/1999 to 31/12/1999

Infection	*Date of transfusion*	*Date of onset/diagnosis*	*Implicated component*	*Outcome of donor/donation investigation*
BACTERIA				
Bacteria	**Aug-99**	**Aug-99**	**Platelets**	**B.cereus isolated from patient blood culture, implicated platelet pool (4 days old) and arm swab from skin of 1 donor.**
Bacteria	Aug-99	Aug-99	Mixed	Pending
Bacteria	**Jun-99**	**Jun-99**	**Platelets**	**Staph. epidermidis isolated from red cells of 1unit contributing to platelet pool.**
Bacteria	**Jun-99**	**Jun-99**	**Red cells**	**Yersinia entercolitica (same subtype) isolated from recipient's blood, implicated red cells (33 day's old), donation archive and fresh sample from donor. Donor with history of diarrhoea several weeks prior to donation.**
HBV				
HBV	Apr-99	Sep-99	Not known	All HBsAg and anti-HBc negative.
HBV	Sep 99 - Nov 99	May-99	Mixed	Pending
HBV	Aug-99	Oct-99	Red cells	Pending
HBV	Jan 99 - Mar 99		Red cells	Pending
HCV				
HCV	Sep 97 - Mar 98		Red cells	Pending
HCV	Apr-99	Jun-99	Red cells	Pending

Comment on Table 9a: None of the cases included as newly reported and pending complete investigation in the previous report have since been concluded to have been probably transmitted by transfusion. Four are still pending conclusion.
10 recipients diagnosed with post-transfusion infections were reported between July 1999 and the end of December 1999: **3** of these infections - all **bacteraemias** - (shown in **bold** above) have been shown to have been probably transmitted by transfusion. (The outcome of "pending" investigations will be given in future reports.)

Table 9b. Post-transfusion infections reported 01/10/1995 to 31/12/1999

Infection	Outcome of donor investigation/comment				
	Probable transfusion transmitted infection	Investigation concluded not transfusion-transmitted	Inconclusive investigation	Full investigation pending	*Total* [1]
HAV	1	1	-	-	*2*
HBV	5	27	3	7	*42*
HCV[2]	2	25	7	6	*40*
HIV[3]	1	3	1		*5*
Bacteria	11	3	5	2	*21*
Malaria	1[a]	-	-	-	*1*
CMV	-	-	-	1	*1*
Total	*21 (19%)*	*59 (53%)*	*16 (14%)*	*16 (14%)*	*112*

[1] An additional 23 post-tranfusion reactions suspected to be due to bacteria were reported.

[2] HCV infections (and HIV infections) associated with transfusion prior to testing blood donations for anti-HCV (anti-HIV) are not included.

[3] One additional investigation failed to confirm or refute transfusion transmission of HIV infection during the early 1990s. As the patient had received multiple transfusions, and had no other risk factors for infection, transfusion with HIV infectious blood was concluded to be the probable, although unproven, source of infection.

Figure 9b. Post-tranfusion infections reported 01/10/1995 to 31/12/1999

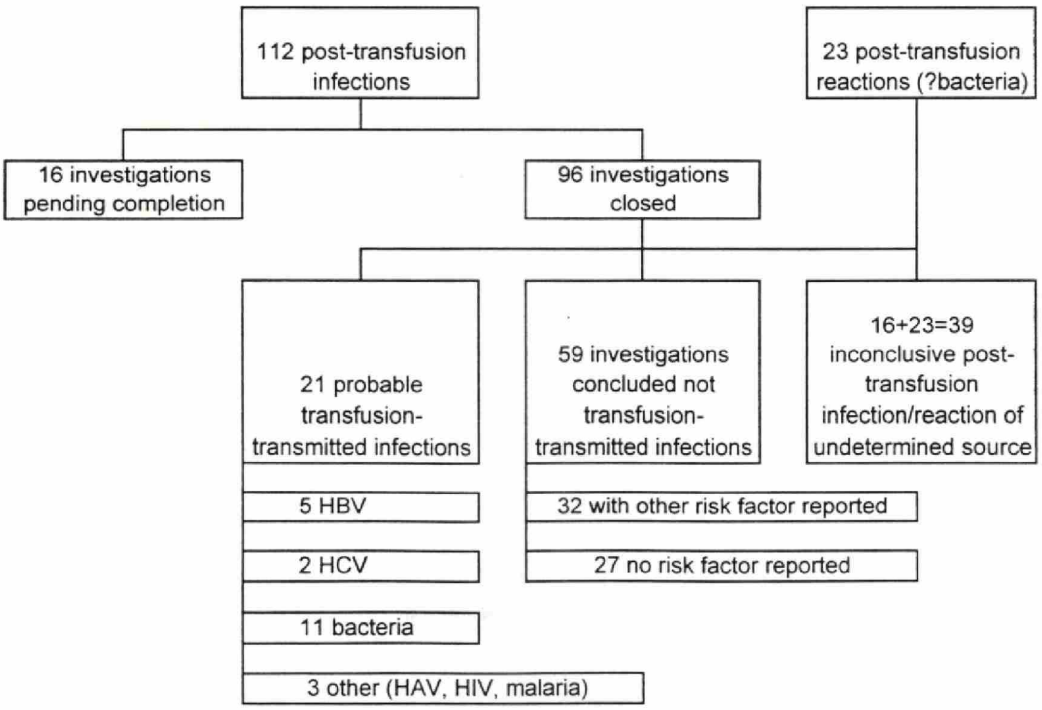


Table 10. Cumulative total transfusion transmitted infections: reported 01/10/1995-31/12/1999 by date of transfusion. The number of incidents is shown with the total number of infected recipients that were identified shown in brackets.

Year of transfusion	1990-94	1995	1996	1997	1998	1999	Total
Infection							
HAV		-	1(1)	-	-	-	1(1)
HBV	1(1)	1(1)	1(1)	1(1)	1(1)	-	5(5)
HCV		-	1(1)	1(1)	-	-	2(2)
HIV		-	1(3)	-	-	-	1(3)
Bacteria		1(1)	1(1)	3(3)	3(3)[ax2]	3(3)[a]	11(11)
Malaria		-	-	1(1)[a]	-	-	1(1)
Total	1(1)	2(2)	5(7)	6(6)	4(4)	3(3)	21(23)

Notes: [a] Infection was implicated in the death of recipient.