

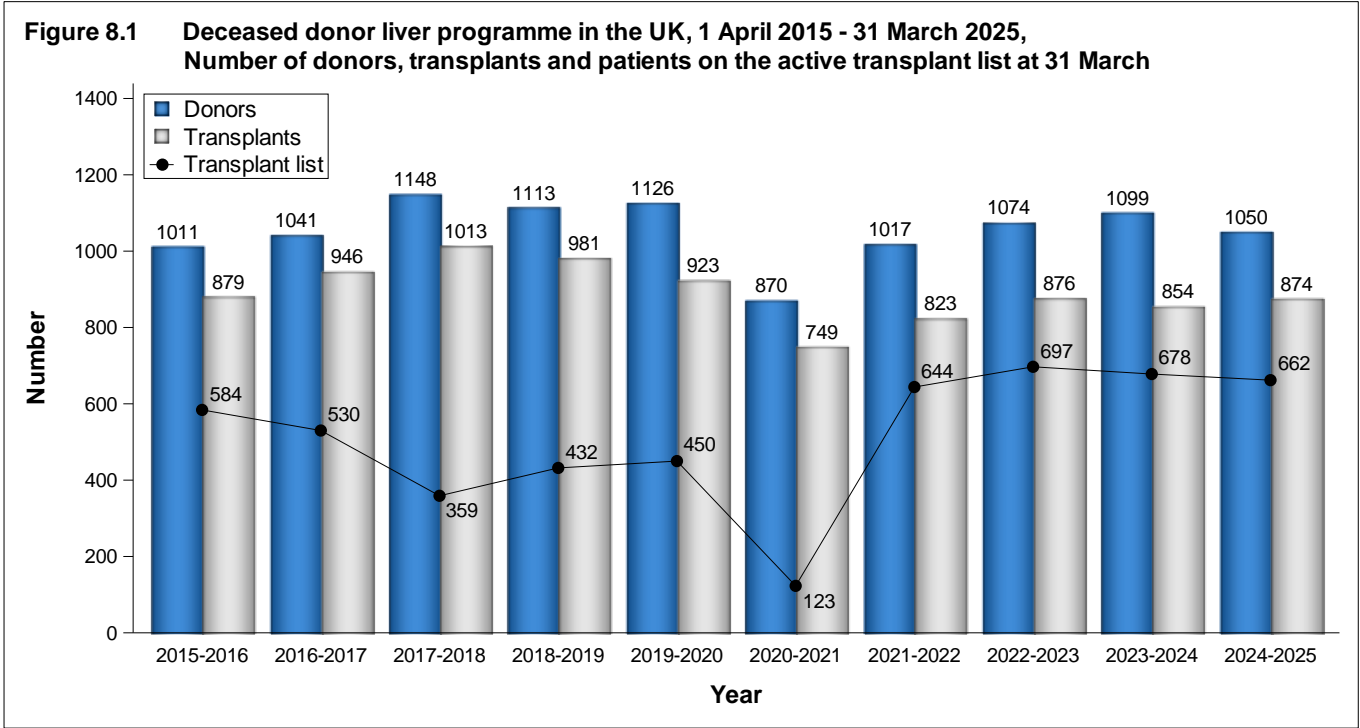
Liver Activity

Key messages

- The number of patients on the active liver transplant list at 31 March 2025 was 662, a decrease of 2% from 2024.
- The number of liver donors after brain death fell by 11% to 612, while transplants from donors after brain death fell by 4% to 561
- The number of liver donors after circulatory death increased by 7% to 438, while transplants from donors after circulatory death increased by 17% to 313 which was the highest ever number of DCD liver transplants performed in a financial year

8.1 Overview

The number of deceased liver donors and transplants in the UK in the last ten years is shown in **Figure 8.1**. There has been a decrease in the number of patients registered on the active liver transplant list between 2015-2016 and 2020-2021. However, this number has increased to 662 patients active in March 2025, higher than pre-pandemic levels. A decrease in donors was seen last year however in the previous three years the numbers of donors had steadily increased.



Intestinal transplants that used a liver are not included in the liver transplant activity reported. However, any livers retrieved and used for such transplants are included in the liver donor activity. Liver only transplants in intestinal failure patients are included in the liver transplant activity. Intestinal transplant activity is reported in Chapter 9.

The number of deceased donors, deceased and living donor transplants, and patients on the active transplant list, by centre, is shown in **Table 8.1**. The numbers of liver donors reflect the number of organs retrieved from within each centre's allocation zone (by any retrieval team) rather than the number of retrievals made by that centre. In 2024-2025, 1050 organ donors donated their liver for transplant: 612 donors after brain death and 438 donors after circulatory death. There were 662 patients on the active transplant list at 31 March 2025, a decrease of 2% from 31 March 2024.



Overall, the number of liver transplants (either whole liver or liver lobe transplants) from donors after brain death fell by 4% to 561 whilst the number of liver transplants from donors after circulatory death increased by 17% to 313, compared with the previous financial year. Additionally, there were 27 living liver lobe donor transplants (NHS Group 1: 16 and Group 2: 11).

Patients are prioritised as super-urgent if they require a new liver as soon as possible due to rapid failure of the organ. Other patients are referred to as elective. In 2024-2025, there were 73 deceased donor adult super-urgent transplants, representing 9% of all adult deceased donor transplants and 17 deceased donor paediatric super-urgent transplants, representing 23% of all paediatric deceased donor transplants.

Table 8.1 Deceased and living liver donors and transplants, 1 April 2024 - 31 March 2025 (2023-2024) and transplant list patients at 31 March 2025 (2024) in the UK, by age group and centre

Allocation zone/ transplant centre	Deceased donors ¹						Deceased transplants						Living donor transplants		Active transplant list	
	DBD		DCD		TOTAL		DBD		DCD		TOTAL					
Adult																
Birmingham	134	(122)	94	(57)	228	(179)	96	(127)	87	(32)	183	(159)	0	(0)	160	(187)
Cambridge	50	(63)	66	(56)	116	(119)	52	(64)	59	(52)	111	(116)	0	(0)	43	(45)
Edinburgh	71	(92)	57	(58)	128	(150)	40	(43)	26	(33)	66	(76)	0	(0)	62	(48)
King's College	152	(181)	100	(106)	252	(287)	103	(112)	53	(55)	156	(167)	0	(1)	189	(182)
Leeds	97	(130)	65	(79)	162	(209)	87	(79)	19	(36)	106	(115)	3	(2)	75	(88)
Newcastle	39	(35)	16	(20)	55	(55)	29	(22)	21	(25)	50	(47)	0	(0)	9	(11)
Royal Free	59	(52)	35	(28)	94	(80)	84	(80)	44	(31)	128	(111)	1	(0)	46	(53)
TOTAL	602	(675)	433	(404)	1035	(1079)	491	(527)	309	(264)	800	(791)	9 ^{2,6}	(6) ^{3,7}	584	(614)
Paediatric																
Birmingham	3	(4)	1	(0)	4	(4)	21	(20)	1	(1)	22	(21)	0	(0)	24	(19)
Cambridge	0	(0)	1	(0)	1	(0)	0	(0)	1	(0)	1	(0)	0	(0)	-	-
Edinburgh	0	(5)	0	(1)	0	(6)	0	(1)	0	(0)	0	(1)	0	(0)	-	-
King's College	1	(2)	1	(1)	2	(3)	36	(26)	2	(2)	38	(28)	12	(14)	44	(33)
Leeds	4	(1)	1	(1)	5	(2)	13	(12)	0	(0)	13	(12)	6	(11)	10	(12)
Newcastle	0	(1)	1	(0)	1	(1)	0	(1)	0	(0)	0	(1)	0	(0)	-	-
Royal Free	2	(3)	0	(1)	2	(4)	-	-	-	-	-	-	-	-	-	-
TOTAL	10	(16)	5	(4)	15	(20)	70	(60)	4	(3)	74	(63)	18 ⁴	(25) ⁵	78	(64)

¹ Includes donors whose livers were retrieved by other teams

² Includes 4 and 5 living liver lobe transplants in NHS Group 1 and Group 2 recipients, respectively

³ Includes 2 and 4 living liver lobe transplants in NHS Group 1 and Group 2 recipients, respectively

⁴ Includes 12 and 6 living liver lobe transplants in NHS Group 1 and Group 2 recipients, respectively

⁵ Includes 19 and 6 living liver lobe transplants in NHS Group 1 and Group 2 recipients, respectively

⁶ Includes 1 transplant at London Cromwell and 4 transplants at London Bridge involving private patients

⁷ Includes 1 transplant at London Cromwell and 2 transplants at London Bridge involving private patients

8.2 Transplant list

During 2024-2025, 1,148 patients joined the liver transplant list. Outcomes for patients on the list at 1 April 2024 and those joining the list during the year are shown in **Table 8.2**. There have been 109 (9%) new registrations that were super-urgent.

Table 8.2 Liver transplant list and new registrations in the UK, 1 April 2024 - 31 March 2025						
Outcome of patient at 31 March 2025	Active and suspended patients at 1 April 2024		New registrations in 2024-2025 ¹		TOTAL	
	N	%	N	%	N	%
Remained active/suspended	309	38	470	41	779	40
Transplanted	326	40	571	50	897	46
Removed ²	154	19	71	6	225	12
Died ³	16	2	36	3	52	3
TOTAL	805		1148		1953	

¹ Includes re-registrations for second or subsequent patients
² Includes 32 patients removed and re-registered at a different centre or on different pathway
³ Includes patients removed due to deteriorating condition

Table 8.3 shows the active transplant list in the UK at 31 March 2025 and 2024 by country/NHS region of patient's residence. At 31 March 2025, the overall rate was 9.8 pmp and ranged from 6.2 to 11.1 pmp across English NHS regions.

Table 8.3 Active liver transplant list at 31 March by Country/NHS region of patient residence				
Country/ NHS region of residence	Liver transplant list (pmp)			
	2025		2024	
North East and Yorkshire	51	(6.2)	68	(8.3)
North West	75	(10.0)	84	(11.2)
Midlands	121	(11.0)	129	(11.8)
East of England	45	(7.0)	54	(8.4)
London	85	(9.6)	86	(9.7)
South East	73	(7.8)	70	(7.5)
South West	64	(11.1)	56	(9.7)
England	514	(9.0)	547	(9.6)
Isle of Man	-		-	
Channel Islands	-		-	
Wales	33	(10.5)	31	(9.9)
Scotland	67	(12.3)	51	(9.4)
Northern Ireland	39	(20.4)	40	(20.9)
Total¹	662	(9.8)	678	(10.0)
¹ Includes patients in 2025 (2024) residing in: Unspecified UK 1 (1); Republic of Ireland 8 (6); Overseas 0 (2)				

An indication of longer term outcomes for patients listed for a liver transplant is summarised in **Figure 8.2**. This shows the proportion of patients transplanted or still waiting six months, one year and two years after joining the transplant list. It also shows the proportion removed from the transplant list and those dying while on the transplant list (which includes those patients removed due to condition deteriorated). At one year post-registration, 61% of patients had received a liver transplant while 8% of patients had died whilst waiting or had been removed due to their condition deteriorating. 4% had been removed for other reasons such as the patient's condition improving, or as a result of non-compliance or at the request of the patient or family.

Figure 8.2 Post-registration outcome for 1096 new elective liver only registrations made in the UK, 1 April 2022 - 31 March 2023

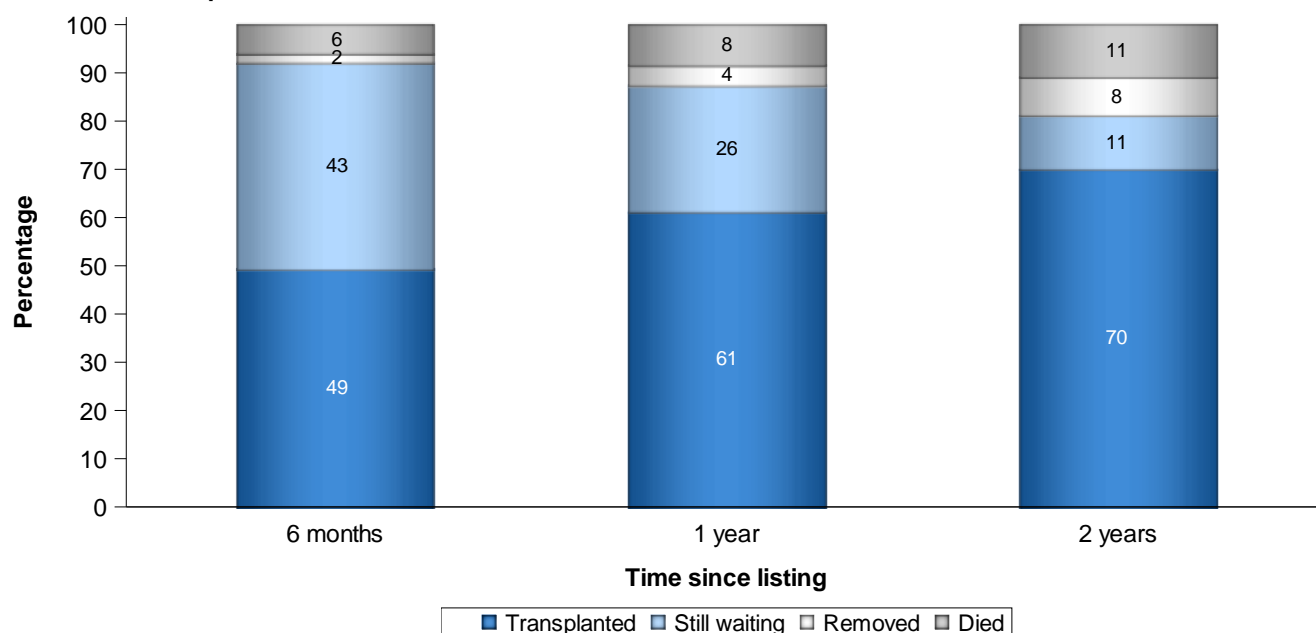


Table 8.4 and **Table 8.5** show the median waiting time to liver transplant for adult and paediatric elective registrations, separately, including a breakdown by blood group and ethnicity for adult elective registrations only. On average, adult patients wait 144 days for a transplant while paediatric patients wait an average of 183 days. Note that these waiting times are not adjusted for other relevant factors which may be influential and differ across blood or ethnic groups.

Table 8.4 Median waiting time to liver transplant in the UK, for patients registered 1 April 2022 - 31 March 2024			
Blood group	Number of patients registered	Waiting time (days)	
		Median	95% Confidence interval
Adult			
O	872	219	191 - 247
A	717	110	92 - 128
B	231	132	92 - 172
AB	72	30	14 - 46
TOTAL	1892	144	127 - 161
Paediatric	157	183	133 - 233

Table 8.5 Median waiting time to liver transplant in the UK, for patients registered 1 April 2022 - 31 March 2024

Ethnicity	Number of patients registered	Waiting time (days)	
		Median	95% Confidence interval
Adult			
White	1574	147	130 - 164
Asian	145	126	50 - 202
Black	53	132	0 - 288
Other	21	162	0 - 365
TOTAL¹	1892	144	127 - 161
Paediatric	157	183	133 - 233

¹ Includes 99 patients whose ethnicity was not reported

8.3 Donor and organ supply

Of the 1,403 actual organ donors, 1,050 (75%) donated their liver and 836 (80%) of these donated livers were used; see **Table 8.6**. Of livers retrieved from donors after brain death and donors after circulatory death, 86% and 71% were transplanted, respectively. Segments from one liver can be used in more than one transplant, see **Table 8.9**.

Table 8.6 Deceased liver donation and retrieval in the UK, 1 April 2024 - 31 March 2025, by allocation zone

Allocation zone	Number of donors						Number of livers retrieved (used)					
	Solid organ			Liver								
	DBD	DCD	TOTAL	DBD	DCD	TOTAL	DBD	DCD	TOTAL	DBD	DCD	TOTAL
Birmingham	146	160	306	137	95	232	137	(112)	95	(74)	232	(186)
Cambridge	57	98	155	50	67	117	50	(47)	67	(54)	117	(101)
Edinburgh	78	85	163	71	57	128	71	(61)	57	(37)	128	(98)
King's College	172	175	347	153	101	254	153	(130)	101	(73)	254	(203)
Leeds	109	117	226	101	66	167	101	(91)	66	(41)	167	(132)
Newcastle	42	27	69	39	17	56	39	(36)	17	(12)	56	(48)
Royal Free	72	65	137	61	35	96	61	(49)	35	(19)	96	(68)
TOTAL	676	727	1403	612	438	1050	612	(526)	438	(310)	1050	(836)

The rates per million population (pmp) for liver donors are shown in **Table 8.7** by donor country/NHS region of residence. No adjustments have been made for potential demographic differences in populations. The overall deceased liver donor rate was 15.5 pmp in 2024-2025 and ranged from 10.1 pmp to 19.5 pmp across English NHS regions.

Table 8.7 Liver donation rates for deceased donors in the UK, 1 April 2024 - 31 March 2025, by Country/ NHS region						
Country/ NHS region of residence	DBD		Liver donors (pmp) DCD		TOTAL	
North East and Yorkshire	74	(9.0)	50	(6.1)	124	(15.1)
North West	52	(6.9)	26	(3.5)	78	(10.4)
Midlands	96	(8.8)	69	(6.3)	165	(15.1)
East of England	52	(8.1)	73	(11.4)	125	(19.5)
London	59	(6.7)	31	(3.5)	90	(10.1)
South East	89	(9.5)	53	(5.7)	142	(15.1)
South West	54	(9.4)	53	(9.2)	107	(18.6)
England	476	(8.3)	355	(6.2)	831	(14.6)
Isle of Man	2	(25.0)	1	(12.5)	3	(37.5)
Channel Islands	1	(5.9)	0	(0.0)	1	(5.9)
Wales	40	(12.8)	13	(4.2)	53	(16.9)
Scotland	42	(7.7)	42	(7.7)	84	(15.4)
Northern Ireland	21	(11.0)	9	(4.7)	30	(15.7)
TOTAL¹	612	(9.1)	438	(6.5)	1050	(15.5)

¹ Include 48 donors with unknown UK postcode (30 DBD and 18 DCD)

8.4 Transplants

The number of liver transplants by recipient country/NHS region of residence are shown in **Table 8.8**. No adjustments have been made for potential demographic differences in populations. The deceased donor transplant rate ranged from 10.8 to 14.8 pmp across English NHS regions and overall was 12.8 pmp.

Table 8.8 Liver transplant rates per million population (pmp), in the UK, 1 April 2024 - 31 March 2025, by country and NHS region								
Country/ NHS region of residence	DBD		DCD		TOTAL		Living	
	N	(pmp)	N	(pmp)	N	(pmp)	N	(pmp)
North East and Yorkshire	79	(9.6)	32	(3.9)	111	(13.5)	5	(0.6)
North West	59	(7.8)	22	(2.9)	81	(10.8)	3	(0.4)
Midlands	79	(7.2)	63	(5.7)	142	(13.0)	1	(0.1)
East of England	52	(8.1)	43	(6.7)	95	(14.8)	0	(0.0)
London	77	(8.7)	33	(3.7)	110	(12.4)	3	(0.3)
South East	66	(7.0)	36	(3.8)	102	(10.9)	1	(0.1)
South West	47	(8.2)	36	(6.3)	83	(14.4)	0	(0.0)
England	459	(8.0)	265	(4.6)	724	(12.7)	13	(0.2)
Isle of Man	1	(12.5)	0	(0.0)	1	(12.5)	0	(0.0)
Channel Islands	2	(11.8)	0	(0.0)	2	(11.8)	0	(0.0)
Wales	31	(9.9)	16	(5.1)	47	(15.0)	0	(0.0)
Scotland	43	(7.9)	27	(5.0)	70	(12.8)	1	(0.2)
Northern Ireland	18	(9.4)	4	(2.1)	22	(11.5)	0	(0.0)
TOTAL^{1,2}	556	(8.2)	312	(4.6)	868	(12.8)	14	(0.2)
¹ Excludes 19 recipients who reside outside the UK (5 DBD, 1 DCD, 13 Living)								
² Includes 2 DBD recipients with an unknown UK postcode								

The number of whole, reduced and split liver transplants by urgency status of the transplant (elective, super-urgent) in 2024-2025 is shown in **Table 8.9**. The term 'reduced' is used when only one lobe of the liver is transplanted and the term 'split' applies when both lobes of the liver are transplanted into two different recipients.

Overall, the number of deceased donor liver transplants increased by 2% in 2024-2025. There were 874 deceased donor liver transplants performed in 2024-2025: 867 liver only transplants (778 whole liver, 66 split liver and 23 reduced liver lobes) and 7 simultaneous liver and kidney. Split liver transplants accounted for 74% of liver only lobe transplant activity.

Table 8.9 Deceased liver transplants performed in the UK, 1 April 2023 - 31 March 2025																
Transplant centre	2023-2024								2024-2025							
	Whole liver		Reduced liver		Split liver		TOTAL		Whole liver		Reduced liver		Split liver		TOTAL	
	E	SU	E	SU	E	SU	E	SU	E	SU	E	SU	E	SU	E	SU
Birmingham	140	19	5	2	14	0	159	21	162	15	5	1	18	4	185	20
Cambridge	99	13	0	0	4	0	103	13	96	10	0	0	6	0	102	10
Edinburgh	63	14	0	0	0	0	63	14	60	6	0	0	0	0	60	6
King's College	156	9	4	4	18	4	178	17	139	16	9	5	21	4	169	25
Leeds	100	12	3	1	11	0	114	13	97	9	3	0	9	1	109	10
Newcastle	42	6	0	0	0	0	42	6	42	8	0	0	0	0	42	8
Royal Free	94	12	0	0	5	0	99	12	114	11	0	0	3	0	117	11
TOTAL	694	85	12	7	52	4	758	96	710	75	17	6	57	9	784	90
E=Elective, SU=Super-urgent Birmingham, King's College and Leeds transplant paediatric patients																

The length of time that elapses between a liver being removed from the donor to its transplantation into the recipient is called the total preservation time. Generally, the shorter this time, the more likely the liver is to work immediately and the better the long-term outcome. In 2024-2025, the median total preservation time for a DBD donor whole liver only transplant was 8.5 hours (Inter-Quartile (IQ) range 6.8 – 10.3) and for a DCD donor whole liver only transplant was 7.0 hours (IQ range 5.3 – 8.6) and overall was 7.9 hours (IQ range 6.3 – 9.6). Please note some of the reported total preservation times may include the use of donor organ maintenance systems.

At 31 March 2025 there were approximately 12,300 recipients with a functioning liver transplant (or multi-organ including the liver) being followed-up as reported to the UK Transplant Registry.

8.5 Demographic characteristics

The age group, sex, ethnicity and blood group of liver donors, transplant recipients and transplant list patients are shown in **Table 8.10** along with the liver graft number for transplant recipients and patients active on the transplant list.

Table 8.10 Demographic characteristics of deceased liver donors and transplant recipients, 1 April 2024 - 31 March 2025, and transplant list patients at 31 March							
		Donors		Transplant recipients		Active transplant list patients	
		N	(%)	N	(%)	N	(%)
Age (years)	0-17	25	(2)	77	(9)	79	(12)
	18-34	131	(12)	90	(10)	100	(15)
	35-49	264	(25)	163	(19)	178	(27)
	50-59	267	(25)	247	(28)	178	(27)
	60-69	233	(22)	281	(32)	119	(18)
	70+	130	(12)	16	(2)	8	(1)
	mean	52	(16)	49	(18)	43	(18)
Sex	Male	588	(56)	552	(63)	347	(52)
	Female	462	(44)	322	(37)	315	(48)
Ethnicity	White	937	(91)	716	(83)	532	(82)
	Asian	41	(4)	90	(10)	72	(11)
	Black	24	(2)	32	(4)	32	(5)
	Other	10	(1)	15	(2)	6	(1)
	Unknown	38	-	21	-	20	-
Blood group	O	481	(46)	360	(41)	363	(55)
	A	437	(42)	360	(41)	203	(31)
	B	100	(10)	110	(13)	91	(14)
	AB	32	(3)	44	(5)	5	(1)
Graft number	First graft		-	797	(91)	585	(88)
	Re-graft		-	77	(9)	77	(12)
TOTAL		1050	(100)	874	(100)	662	(100)