

Cardiothoracic Activity

Key messages

- At 31 March 2022, there were 328 patients on the active heart transplant list, 258 on the lung list and 9 on the heart-lung list
- Of the 785 organ donors after brain death during 2021-2022, 137 (17%) donated their heart and 95 (12%) donated at least one lung
- The number of heart transplants increased by 11% to 179; 54% of these were urgent heart transplants, 17% were super-urgent, and 29% were non-urgent
- The number of lung and heart-lung transplants increased by 20% this year to 109; 28% of these were urgent lung transplants, 2% were super-urgent, and 70% were non-urgent.
- There were 44 DCD heart transplants in 2021-2022, 22 more than the previous year

7.1 Overview

Note that the COVID-19 pandemic will have affected the number of offered, retrieved and transplanted organs in 2021-2022. This is particularly true for lung transplant activity which was severely impacted by the pandemic.

Last year the number of heart transplants increased by 11% to 179 compared with 2020-2021, and the number of lung or heart-lung transplants increased by 20% to 109. There were increases in both the heart and the lung transplant lists since 31 March 2021; this is because more patients joined the list during 2021-2022 due to the pandemic. The number of patients active on the heart transplant list at year end has increased by 64% since 2013, while the number of patients active on the lung or heart-lung transplant list has increased by 10% since 2013.

A summary of the deceased donor cardiothoracic activity from 1 April 2012 to 31 March 2022 is shown in **Figure 7.1** for heart activity and **Figure 7.2** for lung activity. Donors who donate both heart and lung(s) are included in both figures, but heart-lung block transplants and patients active on the transplant list for a heart-lung block are only included in **Figure 7.2**.

Figure 7.1 Deceased donor heart programme in the UK, 1 April 2012 - 31 March 2022, Number of donors, transplants and patients on the active transplant list at 31 March

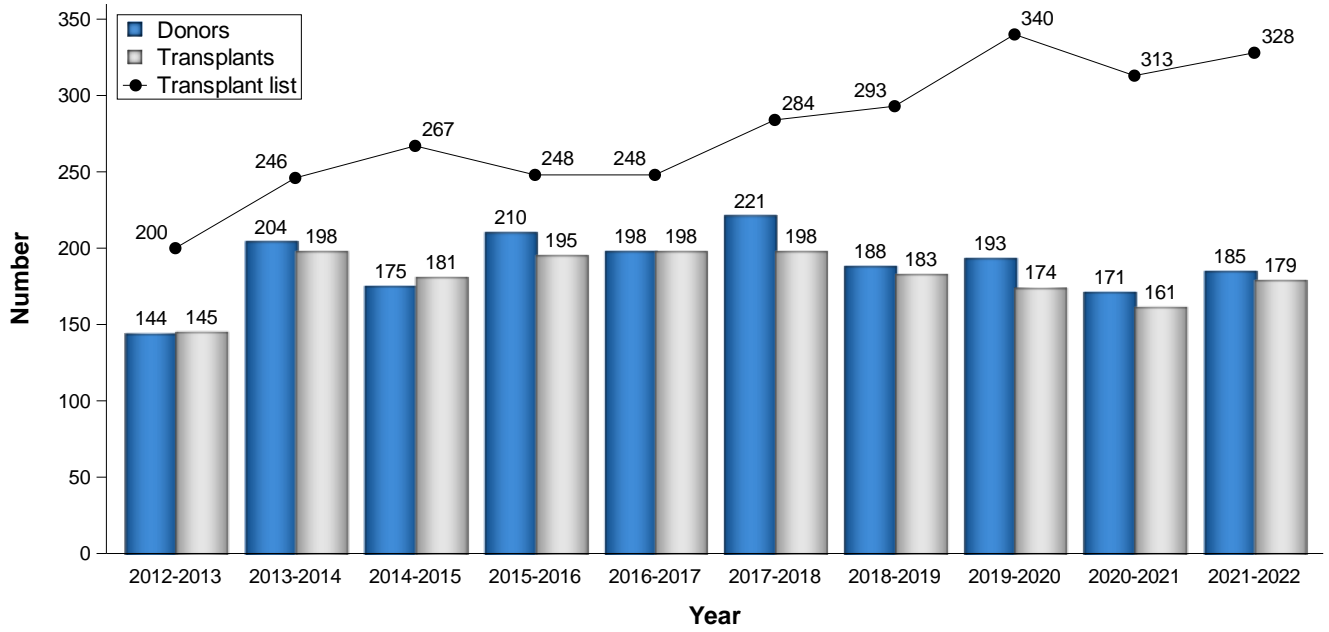
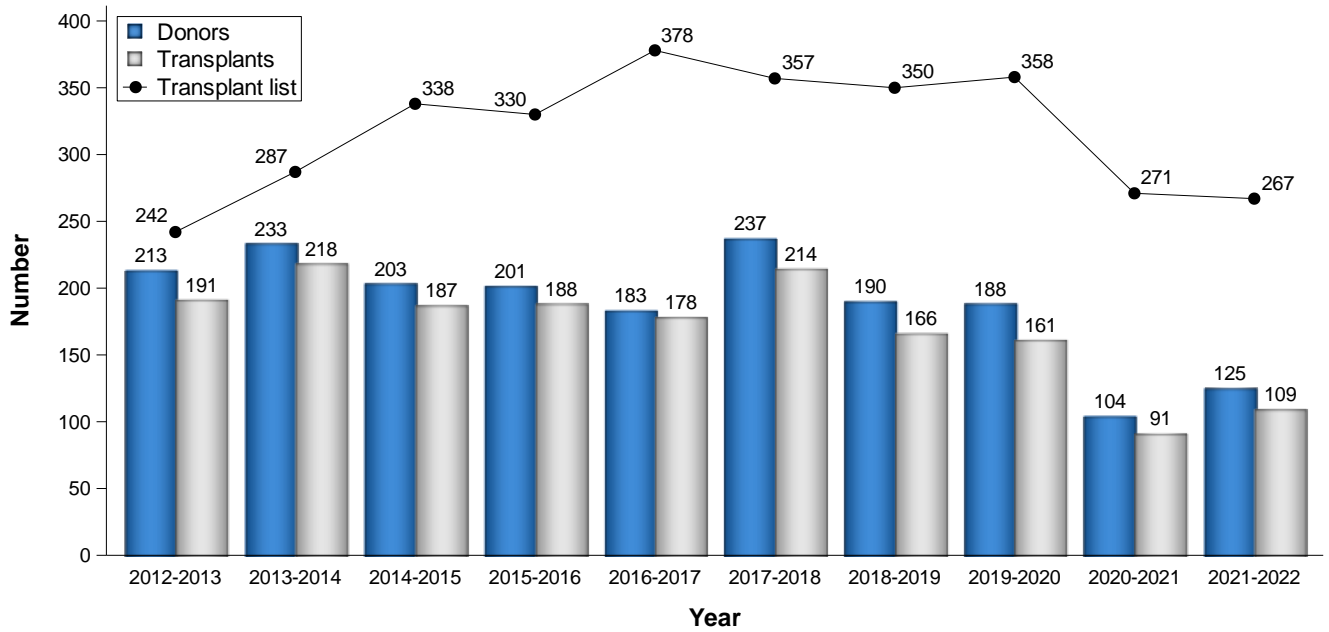


Figure 7.2 Deceased donor lung and heart-lung programme in the UK, 1 April 2012 - 31 March 2022, Number of donors, transplants and patients on the active transplant list at 31 March



7.2 Transplant list

Table 7.1 shows the number of patients on the active transplant lists at 31 March 2022 by centre. There were five patients waiting on the super-urgent heart transplant list. There were no patients waiting on the super-urgent lung transplant list, and ten patients waiting on the urgent lung transplant list. The lung transplant list accounts for 45% of the patients waiting for a cardiothoracic organ transplant. Overall, Newcastle and Harefield had the largest cardiothoracic transplant waiting lists on 31 March 2022.

Table 7.1 Patients on the cardiothoracic transplant lists at 31 March 2022 (2021) in the UK, by centre																
Centre	Active transplant lists															
	Non-urgent		Heart Urgent		Super-urgent		Heart-lung		Non-urgent		Lung Urgent		Super-urgent		TOTAL	
Adult																
Birmingham	43	(35)	4	(7)	0	(1)	2	(2)	42	(41)	0	(0)	0	(0)	91	(86)
Glasgow	14	(13)	2	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	16	(13)
Great Ormond Street	1	(3)	0	(0)	0	(0)	0	(1)	1	(1)	0	(0)	0	(0)	2	(5)
Harefield	62	(54)	4	(3)	2	(1)	0	(0)	55	(66)	0	(0)	0	(0)	123	(124)
Manchester	30	(33)	2	(1)	1	(1)	1	(1)	39	(48)	0	(0)	0	(0)	73	(84)
Newcastle	72	(77)	10	(5)	0	(0)	3	(1)	60	(60)	6	(4)	0	(0)	151	(147)
Papworth	32	(33)	3	(1)	1	(1)	2	(2)	43	(32)	3	(1)	0	(0)	84	(70)
TOTAL	254	(248)	25	(17)	4	(4)	8	(7)	240	(248)	9	(5)	0	(0)	540	(529)
Paediatric																
Great Ormond Street	14	(14)	4	(8)	1	(0)	1	(2)	7	(4)	1	(2)	0	(0)	28	(30)
Newcastle	17	(17)	9	(5)	0	(0)	0	(1)	1	(1)	0	(1)	0	(0)	27	(25)
TOTAL	31	(31)	13	(13)	1	(0)	1	(3)	8	(5)	1	(3)	0	(0)	55	(55)

During 2021-2022, there were 274 registrations onto the heart transplant list, 9 registrations onto the heart-lung transplant list and 186 onto the lung transplant list. Registration outcomes as at 31 March 2022 for patients on the list at 1 April 2021 and those joining the list during the year are shown in **Table 7.2**.

Table 7.2 Cardiothoracic organ transplant lists and new registrations in the UK, 1 April 2021 - 31 March 2022						
Outcome of patient at 31 March 2022	Active and suspended patients at 1 April 2021		New registrations in 2021-2022¹		TOTAL	
	N	%	N	%	N	%
Heart transplant list						
Remained active/suspended	238	65	130	47	368	57
Transplanted	76	21	102	37	178	28
Removed	39	11	34	12	73	11
Died	15	4	8	3	23	4
TOTAL	368		274		642	
Heart-lung transplant list						
Remained active/suspended	6	55	4	44	10	50
Transplanted ²	3	27	0	0	3	15
Removed	1	9	5	56	6	30
Died	1	9	0	0	1	5
TOTAL	11		9		20	
Lung transplant list						
Remained active/suspended	156	55	116	62	272	58
Transplanted	54	19	48	26	102	22
Removed	49	17	4	2	53	11
Died	26	9	18	10	44	9
TOTAL	285		186		471	

¹ Includes re-registrations for second or subsequent patients
² Patients may have received heart, lung, or heart-lung

Table 7.3 shows the transplant list rates per million population by country/NHS region of patient's residence. The overall UK heart transplant list rate at 31 March 2022 was 4.9 pmp and ranged from 2.9 to 6.9 across NHS regions. The overall UK lung transplant list rate was 4.0 pmp and ranged from 2.7 to 5.0 across NHS regions.

Table 7.3 Active cardiothoracic transplant list at 31 March, by country/NHS region of patient residence

Country/ NHS region of residence	Heart transplant list (pmp)				Lung transplant list (pmp)			
	2022		2021		2022		2021	
North East and Yorkshire	60	(6.9)	69	(8.0)	39	(4.5)	44	(5.1)
North West	35	(4.9)	31	(4.4)	34	(4.8)	36	(5.1)
Midlands	50	(4.7)	44	(4.1)	53	(5.0)	49	(4.6)
East of England	19	(2.9)	21	(3.2)	20	(3.0)	19	(2.9)
London	45	(5.0)	42	(4.7)	24	(2.7)	24	(2.7)
South East	43	(4.8)	34	(3.8)	28	(3.1)	26	(2.9)
South West	23	(4.1)	21	(3.7)	20	(3.5)	19	(3.4)
England	275	(4.9)	262	(4.6)	218	(3.9)	217	(3.8)
Isle of Man	0	(0.0)	1	(12.5)	0	(0.0)	1	(12.5)
Channel Islands	1	(5.9)	0	(0.0)	0	(0.0)	3	(17.6)
Wales	11	(3.5)	12	(3.8)	14	(4.4)	17	(5.4)
Scotland	24	(4.4)	19	(3.5)	26	(4.8)	22	(4.0)
Northern Ireland	16	(8.4)	16	(8.4)	8	(4.2)	10	(5.3)
TOTAL^{1,2}	328	(4.9)	313	(4.7)	267	(4.0)	271	(4.0)

¹Includes heart patients in 2022 (2021) residing in: Unspecified UK 0 (1); Republic of Ireland 1 (1); Overseas 0 (1)

²Includes lung patients in 2022 (2021) residing in: Unspecified UK 1 (1)

The transplant list outcomes for adult patients listed for a cardiothoracic organ transplant between 1 April 2018 and 31 March 2019 are summarised in **Figure 7.3**, **Figure 7.4** and **Figure 7.5**, for non-urgent heart, urgent heart and non-urgent lung registrations, respectively. These show the proportion of patients transplanted, still waiting, removed and those who died within six months, one year, two years and three years after joining the non-urgent or urgent heart list or the lung list, respectively. Within six months of listing, 13% of non-urgent heart patients were transplanted while 5% had died, compared with 55% transplanted and 4% died for urgent heart patients. Of those listed for a non-urgent lung transplant, 25% were transplanted within six months, rising to 45% after three years, however at three years, 20% had died. The patients removed from these lists may have subsequently died.

In October 2016 and May 2017, respectively, the super-urgent heart offering scheme and urgent and super-urgent lung offering schemes were introduced, with corresponding new registration types. The outcomes and median waiting times of such registrations are not represented in **Figures 7.3 – 7.5** and in **Tables 7.4** and **7.5**. The post-registration outcomes of super-urgent heart, super-urgent lung and urgent lung registrations are not presented due to the small number of patients who start off on these lists.

Figure 7.3 Post-registration outcome for 174 first non-urgent heart only registrations made in the UK, 1 April 2018 - 31 March 2019

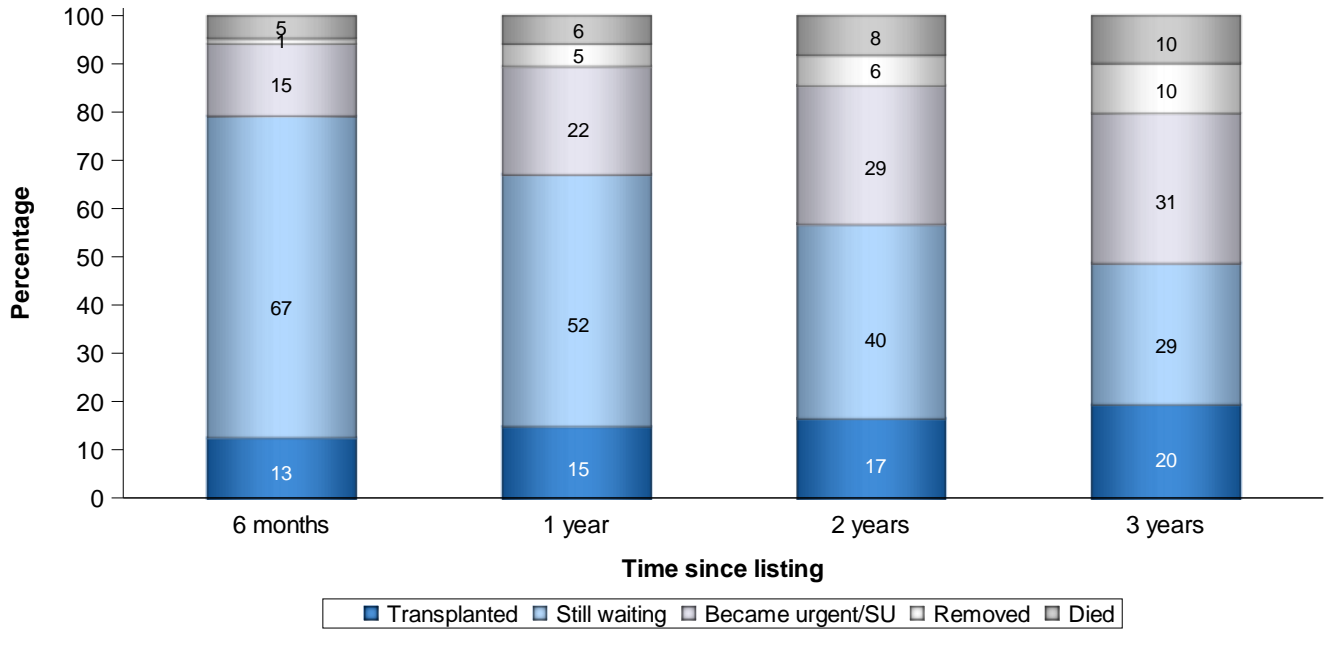


Figure 7.4 Post-registration outcome for 164 first urgent heart only registrations made in the UK, 1 April 2018 - 31 March 2019

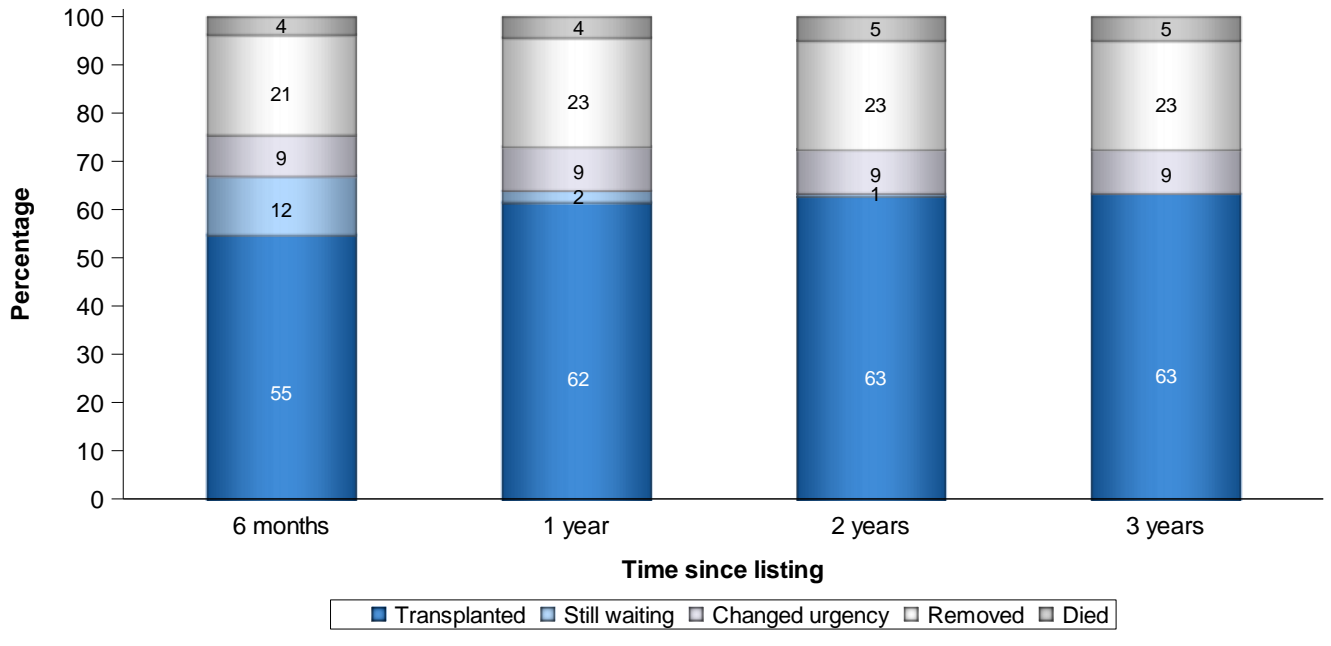


Figure 7.5 Post-registration outcome for 260 first non-urgent lung only registrations made in the UK, 1 April 2018 - 31 March 2019

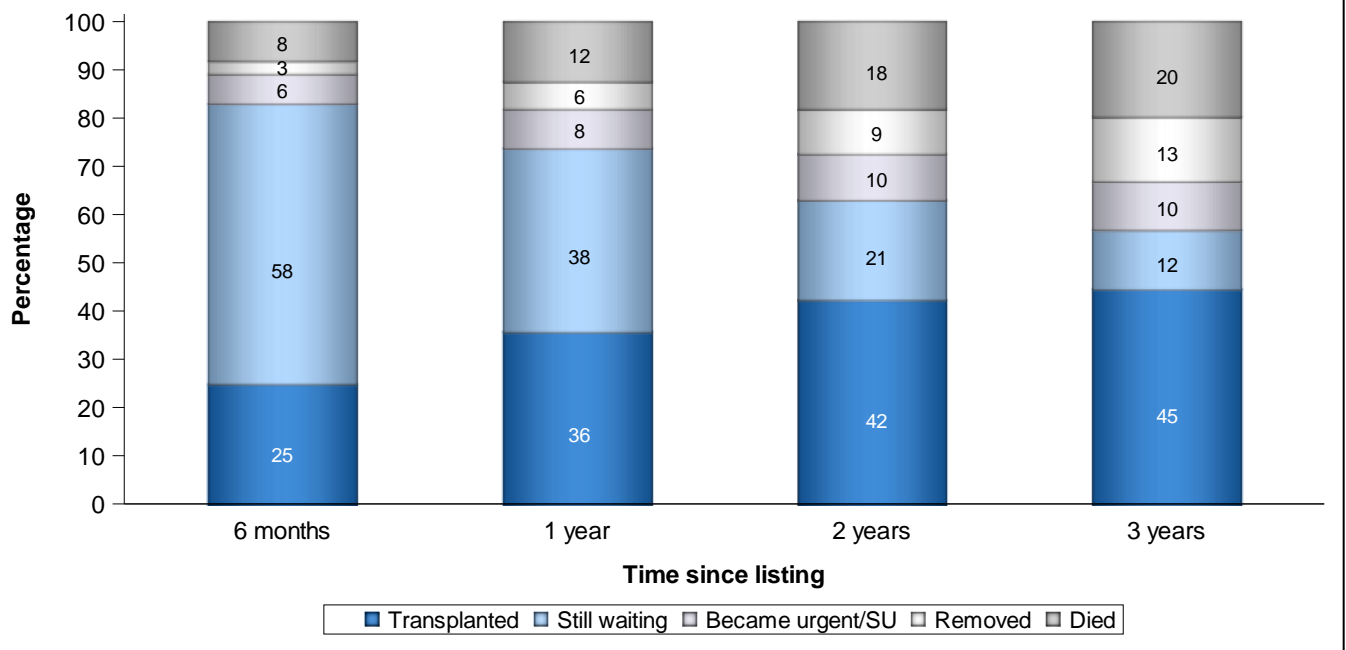


Table 7.4 and **Table 7.5** show the median waiting time to cardiothoracic organ transplant by blood group and ethnicity of patient, respectively, for patients registered between 1 April 2013 and 31 March 2019. The overall median waiting time to non-urgent heart transplantation for adult patients who were never on the urgent or super-urgent list was 6 years. For patients who had been on the urgent list, the overall median time on the urgent list before transplant was 37 days. For patients who had been on the super-urgent list ('ever super-urgent'), the overall median time on the super-urgent list before transplant was 10 days.

The overall median waiting time to non-urgent lung transplantation for adult patients who were never on the urgent or super-urgent list, was 380 days, but for blood group O patients alone was longer, at 590 days. The overall median time on the urgent list before transplant was 17 days. Median waiting time is not calculated for adult super-urgent lung patients due to the small number of registrations

For paediatric heart patients, the median waiting time was 510 days for non-urgent registrations and 91 days for urgent registrations (this is not broken down by blood group or ethnicity and is not presented for super-urgent patients due to low numbers). The overall median waiting time to non-urgent lung transplantation for paediatric patients who were never on the urgent or super-urgent list, was 202 days. Median waiting time is not calculated for paediatric urgent or super-urgent lung patients due to the small number of registrations. Note that these waiting time estimates are not adjusted for other relevant factors which may be influential and which may differ across blood or ethnic groups.

Table 7.4 Median waiting time to cardiothoracic transplant in the UK, for patients registered 1 April 2013 - 31 March 2019

Blood group	Number of patients registered	Waiting time (days)	
		Median	95% Confidence interval
Adult non-urgent heart¹			
O	235	-	-
A	252	1434	572 - 2296
B	57	1269	451 - 2087
AB	15	276	0 - 760
TOTAL	559	2189	-
Adult urgent heart²			
O	335	54	47 - 61
A	360	22	17 - 27
B	109	43	31 - 55
AB	39	25	17 - 33
TOTAL	843	37	33 - 41
Adult super-urgent heart	110	10	5 - 15
Paediatric non-urgent heart¹	56	510	65 - 955
Paediatric urgent heart²	254	91	73 - 109
Adult non-urgent lung¹			
O	715	590	502 - 678
A	676	247	206 - 288
B	156	404	168 - 640
AB	52	176	127 - 225
TOTAL	1599	380	326 - 434
Adult urgent lung²	99	17	11 - 23
Paediatric non-urgent lung¹	38	202	120 - 284

- Median and/or 95% confidence interval cannot be estimated due to insufficient numbers of patients transplanted

¹ Excludes patients that were moved to the urgent/super-urgent lists

² Excludes patients that were moved to the super-urgent list

Table 7.5 Median waiting time to cardiothoracic transplant in the UK, for patients registered 1 April 2013 - 31 March 2019

Ethnicity	Number of patients registered	Waiting time (days)	
		Median	95% Confidence interval
Adult non-urgent heart¹			
White	494	2189	-
Asian	38	1535	-
Black	19	-	-
Other	0	-	-
TOTAL	559	2189	-
Adult urgent heart²			
White	699	37	33 - 41
Asian	80	37	12 - 62
Black	42	63	15 - 111
Other	15	34	0 - 90
TOTAL	843	37	33 - 41
Adult super-urgent heart	110	10	5 - 15
Paediatric non-urgent heart¹	56	510	65 - 955
Paediatric urgent heart	254	91	73 - 109
Adult non-urgent lung¹			
White	1501	366	319 - 413
Asian	64	-	-
Black	20	-	-
Other	0	-	-
TOTAL	1599	380	326 - 434
Adult urgent lung²	99	17	11 - 23
Paediatric non-urgent lung¹	38	202	120 - 284

- Median and/or 95% confidence interval cannot be estimated due to insufficient numbers of patients transplanted

¹ Excludes patients that were moved to the urgent/super-urgent lists

² Excludes patients that were moved to the super-urgent list

7.3 Donor and organ supply

Table 7.6 shows the number of deceased organ donors identified in each heart allocation zone, and the number of donors where the heart was retrieved and transplanted, by donor type. It also shows the number in each zone who donated their lung(s) as well as their heart. Of the 785 DBD donors, 137 (17%) donated their heart, resulting in 136 transplants. Of the 612 DCD donors, 48 (8%) donated their heart, resulting in 44 transplants.

Table 7.7 shows the number of deceased organ donors identified in each lung allocation zone, and the number of donors where at least one lung was retrieved and transplanted, by donor type. It also shows the number in each zone who donated their heart as well as their lung(s). Of the 785 DBD donors, 95 (12%) donated at least one lung, with 87 proceeding to transplantation. Of the 612 DCD donors, 30 (5%) donated at least one lung, with 24 proceeding to transplantation.

Table 7.6 Heart organ donation and retrieval rates in the UK, 1 April 2021 - 31 March 2022, by heart allocation zone and donor type								
Heart Allocation Zone	Number of donors	DBD			Number of donors	DCD		Number donated heart and lungs
		Number of heart donors (utilised)	Number donated heart and lungs	Number of heart donors (utilised)		Number donated heart and lungs		
Birmingham	118	22	(22)	3	89	4	(4)	0
Glasgow	60	10	(10)	2	37	1	(1)	0
Harefield	176	34	(34)	9	153	15	(14)	3
Manchester	97	16	(16)	7	89	5	(4)	0
Newcastle	179	31	(30)	9	131	16	(16)	2
Papworth	155	24	(24)	9	113	7	(5)	1
TOTAL	785	137	(136)	39	612	48	(44)	6

Table 7.7 Lung organ donation and retrieval rates in the UK, 1 April 2021 - 31 March 2022, by lung allocation zone and donor type								
Lung Allocation Zone	Number of donors	DBD			Number of donors	DCD		Number donated heart and lungs
		Number of lung donors (utilised)	Number donated heart and lungs	Number of lung donors (utilised)		Number donated heart and lungs		
Birmingham	106	9	(7)	3	82	1	(0)	0
Harefield	245	33	(30)	13	180	12	(10)	4
Manchester	96	16	(16)	8	81	4	(4)	0
Newcastle	175	17	(15)	7	112	4	(2)	0
Papworth	163	20	(19)	8	157	9	(8)	2
TOTAL	785	95	(87)	39	612	30	(24)	6

The rates per million population for cardiothoracic organ donors are shown in **Table 7.8** by country/NHS region of residence. No adjustments have been made for potential demographic differences in populations. The overall heart donor rate was 2.8 pmp in 2021-2022 and varied across NHS regions from 1.8 pmp to 3.7 pmp. For lungs, the overall donor rate was 1.9 pmp in 2021-2022 and varied across NHS regions from 1.1 pmp to 2.8 pmp.

Table 7.8 Cardiothoracic donation rates for deceased donors in the UK, 1 April 2021 - 31 March 2022, by country/ NHS region												
Country/ NHS region of residence	Heart (pmp)					Lung(s) (pmp)						
	DBD		DCD		TOTAL	DBD		DCD		TOTAL		
North East and Yorkshire	21	(2.4)	10	(1.2)	31	(3.6)	16	(1.9)	4	(0.5)	20	(2.3)
North West	10	(1.4)	3	(0.4)	13	(1.8)	6	(0.8)	2	(0.3)	8	(1.1)
Midlands	20	(1.9)	10	(0.9)	30	(2.8)	12	(1.1)	8	(0.8)	20	(1.9)
East of England	13	(2.0)	6	(0.9)	19	(2.9)	10	(1.5)	1	(0.2)	11	(1.7)
London	14	(1.6)	3	(0.3)	17	(1.9)	13	(1.4)	3	(0.3)	16	(1.8)
South East	24	(2.7)	9	(1.0)	33	(3.7)	18	(2.0)	7	(0.8)	25	(2.8)
South West	9	(1.6)	4	(0.7)	13	(2.3)	5	(0.9)	1	(0.2)	6	(1.1)
England	111	(2.0)	45	(0.8)	156	(2.8)	80	(1.4)	26	(0.5)	106	(1.9)
Isle of Man	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Channel Islands	1	(5.9)	0	(0.0)	1	(5.9)	0	(0.0)	1	(5.9)	1	(5.9)
Wales	6	(1.9)	0	(0.0)	6	(1.9)	3	(0.9)	1	(0.3)	4	(1.3)
Scotland	9	(1.6)	1	(0.2)	10	(1.8)	6	(1.1)	1	(0.2)	7	(1.3)
Northern Ireland	3	(1.6)	0	(0.0)	3	(1.6)	1	(0.5)	0	(0.0)	1	(0.5)
TOTAL¹	137	(2.0)	48	(0.7)	185	(2.8)	95	(1.4)	30	(0.4)	125	(1.9)

¹ Includes 9 heart (7 DBD and 2 DCD) and 6 lung (5 DBD and 1 DCD) with an unknown UK postcode

7.4 Transplants

The number of cardiothoracic organ transplants by recipient country/NHS region of residence is shown in **Table 7.9**. No adjustments have been made for potential demographic differences in populations. The heart transplant rate ranged from 1.8 to 3.6 pmp across NHS regions and overall was 2.6 pmp. The lung transplant rate ranged from 0.9 to 3.2 pmp across NHS regions and overall was 1.6 pmp. Lung transplant rates include the small number of heart-lung transplants.

Table 7.9 Cardiothoracic transplant rates per million population (pmp) in the UK, 1 April 2021 - 31 March 2022, by country/ NHS region

Country/ NHS region of residence	Heart (pmp)			Lung(s) (pmp)		
	DBD	DCD	TOTAL	DBD	DCD	TOTAL
North East and Yorkshire	24 (2.8)	7 (0.8)	31 (3.6)	11 (1.3)	3 (0.3)	14 (1.6)
North West	12 (1.7)	3 (0.4)	15 (2.1)	9 (1.3)	4 (0.6)	13 (1.8)
Midlands	17 (1.6)	2 (0.2)	19 (1.8)	14 (1.3)	6 (0.6)	20 (1.9)
East of England	15 (2.3)	7 (1.1)	22 (3.4)	20 (3.0)	1 (0.2)	21 (3.2)
London	13 (1.4)	5 (0.6)	18 (2.0)	11 (1.2)	0 (0.0)	11 (1.2)
South East	14 (1.6)	7 (0.8)	21 (2.4)	8 (0.9)	5 (0.6)	13 (1.5)
South West	6 (1.1)	5 (0.9)	11 (1.9)	3 (0.5)	2 (0.4)	5 (0.9)
England	101 (1.8)	36 (0.6)	137 (2.4)	76 (1.3)	21 (0.4)	97 (1.7)
Isle of Man	1 (12.5)	0 (0.0)	1 (12.5)	0 (0.0)	1 (12.5)	1 (12.5)
Channel Islands	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Wales	5 (1.6)	0 (0.0)	5 (1.6)	3 (0.9)	0 (0.0)	3 (0.9)
Scotland	21 (3.8)	4 (0.7)	25 (4.6)	3 (0.5)	1 (0.2)	4 (0.7)
Northern Ireland	7 (3.7)	2 (1.1)	9 (4.7)	3 (1.6)	1 (0.5)	4 (2.1)
TOTAL¹	135 (2.0)	42 (0.6)	177 (2.6)	85 (1.3)	24 (0.4)	109 (1.6)

¹ Excludes 1 heart recipient who resides in the Republic of Ireland and 1 heart recipient who resides overseas

Table 7.10 and **Table 7.11** show cardiothoracic organ transplant activity for each centre by urgency status and donor type, respectively. In 2021-2022, a total of 288 transplants were carried out; an increase of 14% on 2020-2021. Of these, 179 were heart transplants, of which 127 (71%) were urgent or super-urgent and additionally, 44 (25%) were achieved from donors after circulatory death. There was a total of 109 lung or heart-lung transplants, of which 33 (30%) were urgent or super-urgent.

Table 7.10 Cardiothoracic transplants from deceased donors, 1 April 2021 - 31 March 2022 (2020 - 2021) by age group, centre, transplant type and urgency

Transplant centre	Transplant type												TOTAL				
	Non-urgent		Heart Urgent		Super-urgent		Heart-lung		Non-urgent		Lung Urgent				Super-urgent		
Adult																	
Birmingham	2	(4)	10	(12)	4	(10)	1	(1)	5	(4)	3	(2)	0	(0)	25	(33)	
Glasgow	10	(6)	11	(12)	3	(2)	0	(0)	0	(0)	0	(0)	0	(0)	24	(20)	
Great Ormond Street	3	(1)	0	(0)	0	(0)	0	(0)	0	(1)	0	(0)	0	(0)	3	(2)	
Harefield	8	(0)	11	(12)	5	(1)	0	(0)	23	(23)	1	(4)	1	(1)	49	(41)	
Manchester	2	(2)	11	(11)	3	(2)	0	(1)	12	(11)	4	(1)	0	(0)	32	(28)	
Newcastle	6	(4)	25	(16)	2	(3)	0	(0)	5	(16)	15	(5)	1	(0)	54	(44)	
Papworth	14	(14)	11	(15)	11	(8)	2	(0)	28	(13)	6	(6)	0	(0)	72	(56)	
TOTAL	45	(31)	79	(78)	28	(26)	3	(2)	73	(68)	29	(18)	2	(1)	259	(224)	
Paediatric¹																	
Great Ormond Street	3	(2)	11	(14)	2	(3)	0	(0)	0	(1)	2	(1)	0	(0)	18	(21)	
Newcastle	4	(2)	6	(5)	1	(0)	0	(0)	0	(0)	0	(0)	0	(0)	11	(7)	
TOTAL	7	(4)	17	(19)	3	(3)	0	(0)	0	(1)	2	(1)	0	(0)	29	(28)	

¹ Paediatric recipients are aged under 16 years at time of transplant

Table 7.11 Cardiothoracic transplants from deceased donors, 1 April 2021 - 31 March 2022 (2020 - 2021) by age group, centre, transplant type and donor type

Transplant centre	Transplant type												TOTAL	
	Heart				Heart-lung				Lung					
	DBD		DCD		DBD		DCD		DBD		DCD			
Adult														
Birmingham	13	(26)	3	(0)	1	(1)	0	(0)	6	(6)	2	(0)	25	(33)
Glasgow	21	(20)	3	(0)	0	(0)	0	(0)	0	(0)	0	(0)	24	(20)
Great Ormond Street	2	(0)	1	(1)	0	(0)	0	(0)	0	(1)	0	(0)	3	(2)
Harefield	13	(11)	11	(2)	0	(0)	0	(0)	21	(21)	4	(7)	49	(41)
Manchester	15	(15)	1	(0)	0	(1)	0	(0)	11	(11)	5	(1)	32	(28)
Newcastle	23	(20)	10	(3)	0	(0)	0	(0)	15	(16)	6	(5)	54	(44)
Papworth	26	(26)	10	(11)	2	(0)	0	(0)	27	(13)	7	(6)	72	(56)
TOTAL	113	(118)	39	(17)	3	(2)	0	(0)	80	(68)	24	(19)	259	(224)
Paediatric¹														
Great Ormond Street	15	(15)	1	(4)	0	(0)	0	(0)	2	(2)	0	(0)	18	(21)
Newcastle	7	(6)	4	(1)	0	(0)	0	(0)	0	(0)	0	(0)	11	(7)
TOTAL	22	(21)	5	(5)	0	(0)	0	(0)	2	(2)	0	(0)	29	(28)

¹ Paediatric recipients are aged under 16 years at time of transplant

At 31 March 2022 there were approximately 4,100 recipients with a functioning cardiothoracic organ transplant being followed-up as reported to the UK Transplant Registry.

The length of time that elapses between cardiothoracic organs being removed from the donor and their transplantation into the recipient is called the total ischaemia time (IT). Generally, the shorter this time, the more likely the organ is to work immediately and the better the long-term outcome. Please note some of these data include the use of donor organ maintenance systems, in which cases the IT reported will be an overestimate of the true ischaemia time.

In 2021-2022, the median IT for a DBD heart transplant was 3.5 hours (Inter-Quartile (IQ) range 2.9 – 3.9) and for a DCD heart transplant was 5.6 hours (IQ range 4.8 – 6.5) and overall was 3.7 hours (IQ range 3.2 – 4.6).

The median IT for a DBD donor lung transplant was 6.6 hours (IQ range 5.4 – 8.1) and for a DCD donor lung transplant was 7.9 hours (IQ range 6.7 – 9.4) and overall was 7.0 hours (IQ range 5.7 – 8.4).

7.5 Demographic characteristics

The age group, sex, ethnicity and blood group of deceased donors, transplant recipients and patients on the transplant list are shown in **Table 7.12**.

Table 7.12 Demographic characteristics of deceased cardiothoracic donors and transplant recipients, 1 April 2021 - 31 March 2022, and transplant list patients at 31 March							
		Donors		Transplant recipients		Active transplant list patients	
		N	(%)	N	(%)	N	(%)
Age	0-17	22	(8)	37	(13)	57	(10)
	18-34	96	(36)	31	(11)	61	(10)
	35-49	86	(32)	73	(25)	129	(22)
	50-59	36	(14)	85	(30)	173	(29)
	60-69	22	(8)	62	(22)	170	(29)
	70+	3	(1)	-	-	5	(1)
	mean (SD)	38	(15)	45	(17)	47	(18)
Sex	Male	130	(49)	189	(66)	383	(64)
	Female	135	(51)	99	(34)	211	(36)
	Unknown	0	-	0	-	1	-
Ethnicity	White	230	(88)	252	(89)	480	(82)
	Asian	9	(3)	22	(8)	65	(11)
	Black	6	(2)	5	(2)	29	(5)
	Other	16	(6)	5	(2)	9	(2)
	Unknown	4	-	4	-	12	-
Blood group	O	142	(54)	108	(38)	340	(57)
	A	102	(38)	131	(45)	178	(30)
	B	17	(6)	39	(14)	69	(12)
	AB	4	(2)	10	(3)	8	(1)
Graft number	First graft	-	-	285	(99)	582	(98)
	Re-graft	-	-	3	(1)	13	(2)
TOTAL		265	(100)	288	(100)	595	(100)