

Cardiothoracic Activity

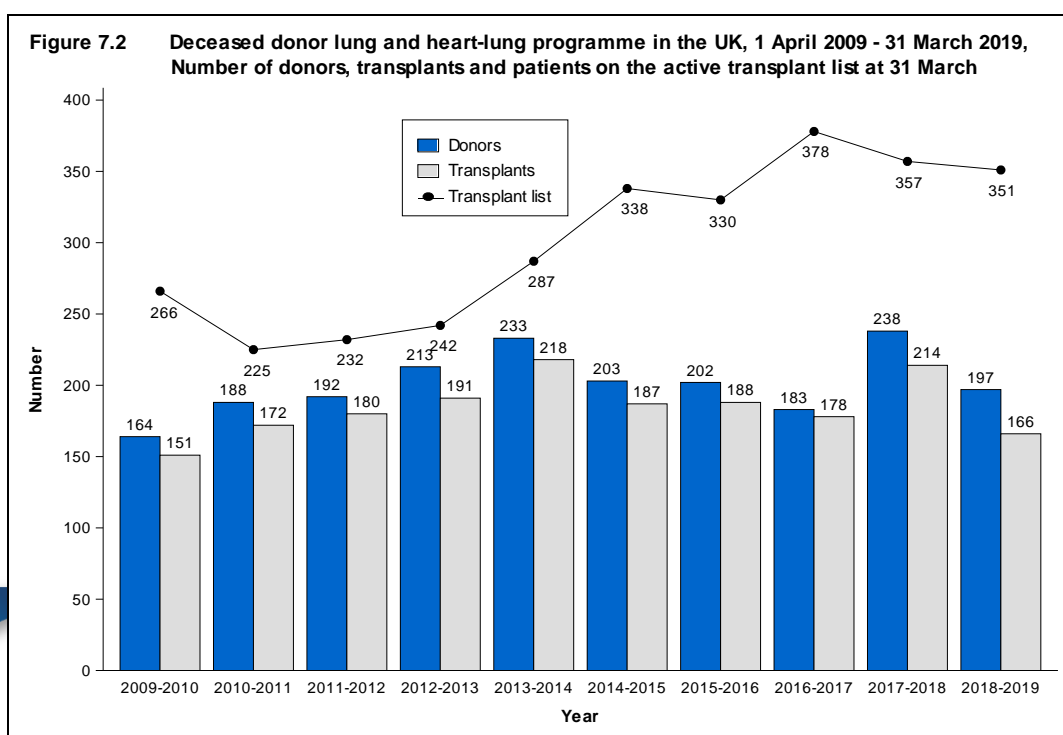
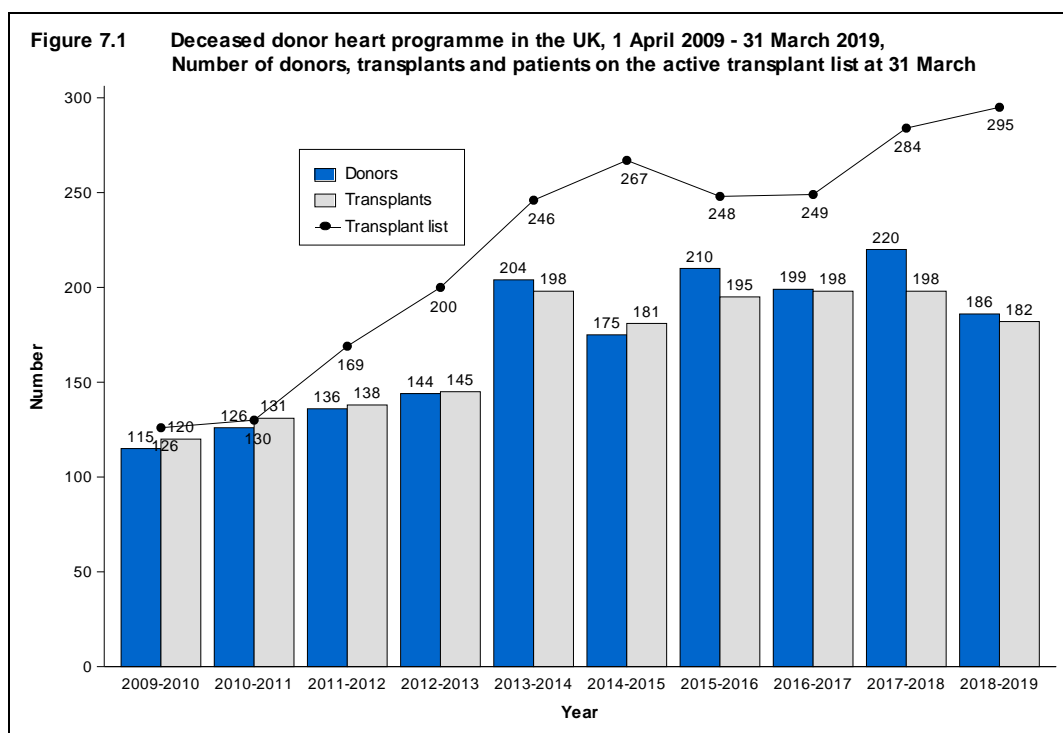
Key messages

- At 31 March 2019, there were 295 patients on the active heart transplant list, 339 on the lung list and 12 on the heart-lung list
- Of the 962 organ donors after brain death during 2018-2019, 153 (16%) donated their heart and 139 (14%) donated at least one lung
- The number of heart transplants fell by 8% to 182; 62% of these were urgent heart transplants, 13% were super-urgent and 24% were non-urgent
- The number of lung and heart-lung transplants from deceased donors fell by 22% this year to 166
- There were 31 DCD heart transplants in 2018-2019

7.1 Overview

Last year the number of heart transplants fell by 8% to 182 compared with 2017-2018, and the number of lung or heart-lung transplants fell by 22% to 166. There were increases in both the heart and the lung transplant lists since March 2018. The number of patients active on the heart transplant list at year end has increased by 134% since 2010, while the number of patients active on the lung or heart-lung transplant has increased by 32% since 2010.

A summary of the deceased donor cardiothoracic activity from 1 April 2009 to 31 March 2019 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**.



7.2 Transplant list

As of 18 May 2017, patients can be registered urgently and super-urgently on the lung transplant waiting list. These two new tiers were introduced with the primary aim to improve access to transplant for the sickest patients on the transplant list.

Table 7.1 shows the number of patients on the active transplant lists at 31 March 2019 by centre. There were two patients waiting on the super-urgent heart transplant list. There were no patients waiting on the super-urgent lung transplant list, and three patients waiting on the urgent lung transplant list. The lung transplant list accounts for 52% of the patients waiting for a cardiothoracic organ transplant. Overall, Newcastle and Harefield had the largest cardiothoracic lists on 31 March 2019.

Table 7.1 Patients on the cardiothoracic transplant lists at 31 March 2019 (2018) in the UK, by centre																
Centre			Heart		Super-urgent		Active transplant lists				Lung		Super-urgent		TOTAL	
	Non-urgent		Urgent				Heart-lung		Non-urgent		Urgent					
Adult																
Birmingham	30	(33)	4	(5)	1	(1)	2	(2)	44	(41)	0	(0)	0	(0)	81	(82)
Glasgow	17	(22)	3	(1)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	20	(23)
Harefield	59	(68)	4	(11)	0	(0)	2	(3)	110	(132)	0	(0)	0	(0)	175	(214)
Manchester	28	(30)	5	(3)	0	(1)	3	(4)	55	(44)	0	(0)	0	(0)	91	(82)
Newcastle	70	(61)	10	(7)	0	(0)	1	(2)	91	(88)	0	(0)	0	(0)	172	(158)
Papworth	27	(14)	1	(1)	1	(0)	4	(2)	31	(34)	0	(1)	0	(0)	64	(52)
TOTAL	231	(228)	27	(28)	2	(2)	12¹	(13)	331	(339)	0	(1)	0	(0)	603	(611)
Paediatric																
Great Ormond Street	18	(15)	6	(8)	0	(0)	0	(0)	3	(1)	3	(1)	0	(0)	30	(25)
Harefield	1	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(0)
Newcastle	5	(1)	5	(2)	0	(0)	0	(0)	2	(2)	0	(0)	0	(0)	12	(5)
TOTAL	24	(16)	11	(10)	0	(0)	0	(0)	5	(3)	3	(1)	0	(0)	43	(30)

¹ Includes two patients on the urgent heart-lung list

During 2018-2019, there were 310 registrations onto the heart transplant list while 7 registrations onto the heart-lung transplant list and 270 onto the lung transplant list. Registration outcomes as at 31 March 2019 for patients on the list at 1 April 2018 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 2018 - 31 March 2019						
Outcome of patient at 31 March 2019	Active and suspended patients at 1 April 2018		New registrations in 2018-2019¹		TOTAL	
	N	%	N	%	N	%
Heart transplant list						
Remained active/suspended	185	62	149	48	334	55
Transplanted	68	23	109	35	177	29
Removed	33	11	46	15	79	13
Died	12	4	6	2	18	3
TOTAL	298		310		608	
Heart-lung transplant list						
Remained active/suspended	10	71	5	42	15	58
Transplanted ²	5	36	0	0	5	19
Removed	3	21	2	17	5	19
Died	1	7	0	0	1	4
TOTAL	19		7		26	
Lung transplant list						
Remained active/suspended	180	53	165	61	345	56
Transplanted	93	27	67	25	160	26
Removed	35	10	14	5	49	8
Died	34	10	24	9	58	9
TOTAL	342		270		612	
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/Strategic Health Authority of patient's residence. The overall UK heart transplant list rate at 31 March 2019 was 4.5 pmp and ranged from 2.3 to 7.6 across the Strategic Health Authorities. The overall UK lung transplant list rate was 5.3 pmp and ranged from 3.6 to 7.2 across the Strategic Health Authorities.

Table 7.3 Active cardiothoracic transplant list at 31 March, by country/ Strategic Health Authority of patient residence								
Country/ Strategic Health Authority of residence	Heart transplant list (pmp)				Lung transplant list (pmp)			
	2019		2018		2019		2018	
North East	20	(7.6)	17	(6.4)	17	(6.4)	10	(3.8)
North West	31	(4.3)	36	(5.0)	42	(5.8)	35	(4.8)
Yorkshire and The Humber	33	(6.1)	25	(4.6)	39	(7.2)	40	(7.3)
North of England	84	(5.5)	78	(5.1)	98	(6.4)	85	(5.5)
East Midlands	11	(2.3)	7	(1.5)	23	(4.8)	21	(4.4)
West Midlands	28	(4.8)	29	(4.9)	30	(5.1)	34	(5.8)
East of England	21	(3.4)	20	(3.2)	22	(3.6)	32	(5.2)
Midlands and East	60	(3.6)	56	(3.3)	75	(4.5)	87	(5.2)
London	31	(3.5)	34	(3.9)	34	(3.9)	33	(3.7)
South East Coast	21	(4.5)	24	(5.1)	29	(6.2)	36	(7.7)
South Central	17	(3.9)	17	(3.9)	18	(4.1)	21	(4.8)
South West	21	(3.8)	19	(3.4)	29	(5.2)	31	(5.6)
South of England	59	(4.0)	60	(4.1)	76	(5.2)	88	(6.0)
England	234	(4.2)	228	(4.1)	283	(5.1)	293	(5.3)
Isle of Man	1	(12.5)	0	(0.0)	1	(12.5)	0	(0.0)
Channel Islands	0	(0.0)	0	(0.0)	1	(6.3)	0	(0.0)
Wales	10	(3.2)	10	(3.2)	22	(7.0)	19	(6.1)
Scotland	27	(5.0)	30	(5.5)	28	(5.2)	33	(6.1)
Northern Ireland	15	(8.0)	9	(4.8)	14	(7.5)	11	(5.9)
TOTAL^{1,2}	295	(4.5)	284	(4.3)	351	(5.3)	357	(5.4)

¹ Includes heart patients in 2019 (2018) resident in: UK unknown 3 (2); Republic of Ireland 2 (1); Overseas 3 (4)
² Includes lung patients in 2019 (2018) resident in: UK unknown 1 (1); Republic of Ireland 1 (0)

The transplant list outcomes for adult patients listed for a cardiothoracic organ transplant between 1 April 2015 and 31 March 2016 are summarised in **Figure 7.3**, **Figure 7.4** and **Figure 7.5**. 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, 12% of non-urgent heart patients were transplanted while 6% had died, compared with 73% transplanted and 5% died for urgent heart patients. Of those listed for a non-urgent lung transplant, 33% were transplanted within six months, rising to 60% after three years, however at three years, 20% had died. The patients removed from these lists may have subsequently died.

Figure 7.3 Post-registration outcome for 129 first non-urgent heart only registrations made in the UK, 1 April 2015 - 31 March 2016

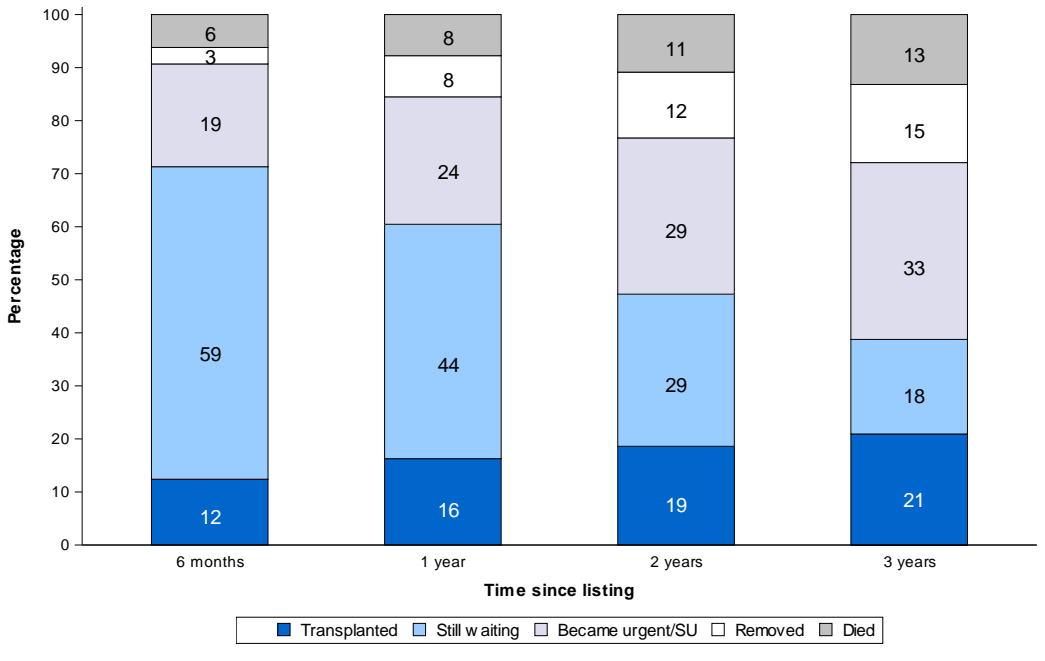
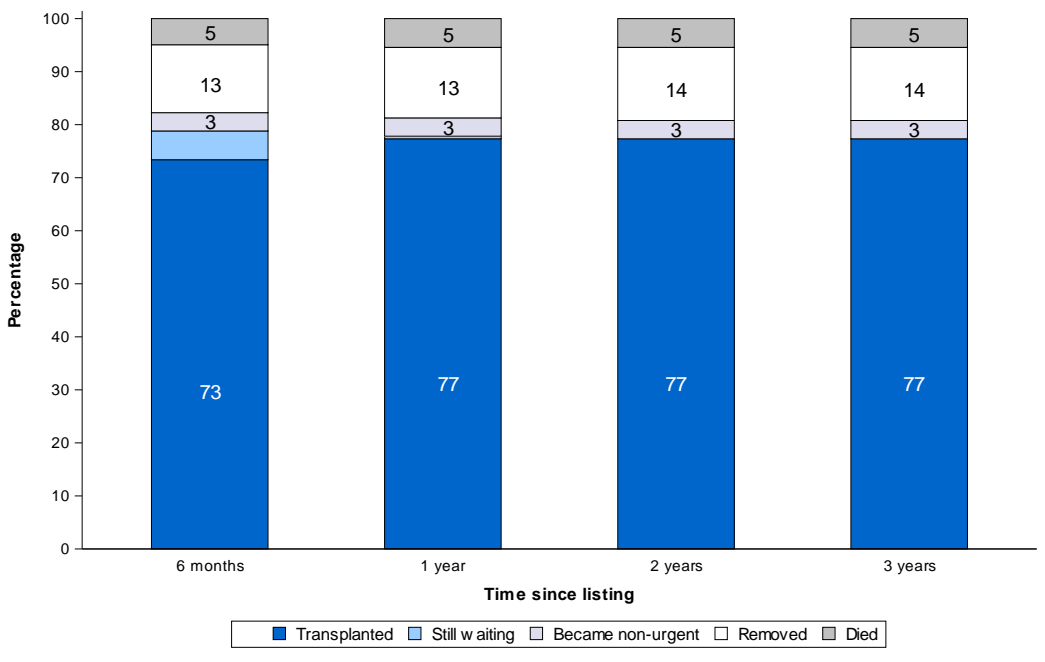


Figure 7.4 Post-registration outcome for 203 first urgent heart only registrations made in the UK, 1 April 2015 - 31 March 2016



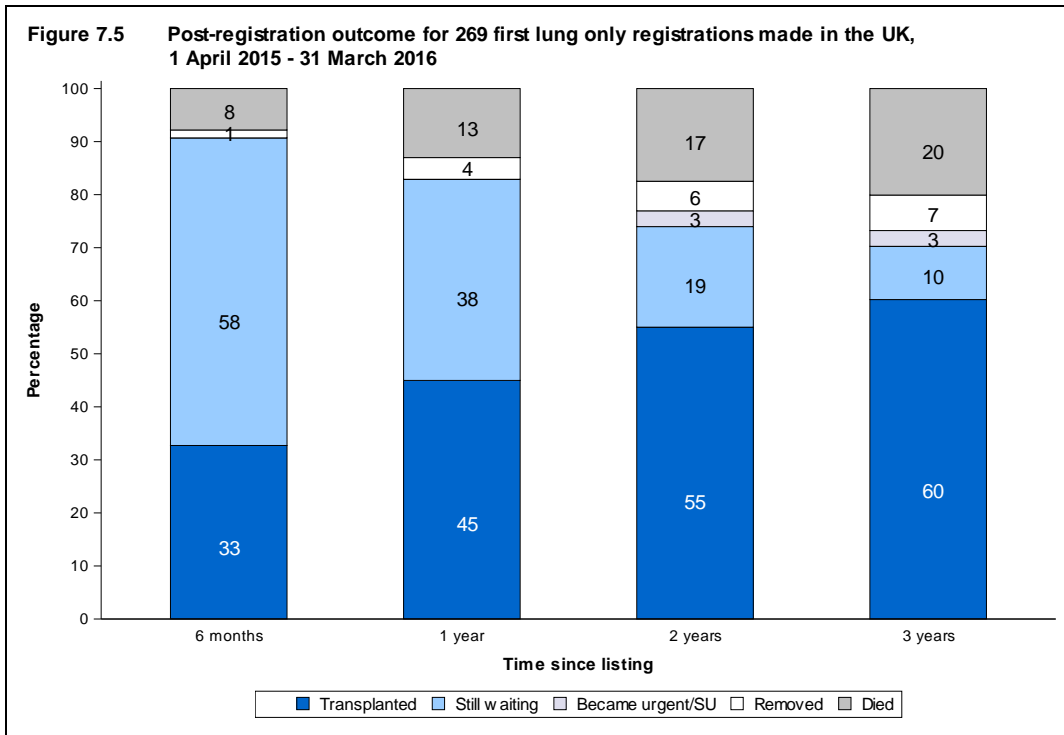


Table 7.4 and **Table 7.5** show the median waiting time to cardiothoracic organ transplant by blood group and ethnicity of patient, respectively, for patients registered between 1 April 2011 and 31 March 2016. The overall median waiting time to heart transplantation, for adults, was 1,085 days for patients who had never been on the urgent waiting list ('never urgent'). For patients who had been on the urgent list ('ever urgent'), the overall median time on the urgent list before transplant was 30 days. The overall median waiting time to lung transplantation, for adults, was 289 days, but for blood group O patients alone was 449 days. For paediatric heart patients, the median waiting time was 463 days for 'never urgent' registrations and 79 days for 'ever urgent' registrations (this is not broken down by blood group or ethnicity due to low numbers). Median waiting time is not calculated for paediatric lung patients due to the small number of registrations. Note that these waiting times 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 2011 - 31 March 2016, by blood group

Blood group	Number of patients registered	Waiting time (days)	
		Median	95% Confidence interval
Adult never urgent heart			
O ¹	176	-	-
A	191	424	299 - 549
B	45	497	210 - 784
AB	19	92	21 - 163
TOTAL	431	1085	611 - 1559
Adult ever urgent heart² (urgent waiting time only)			
O	305	49	41 - 57
A	281	17	15 - 19
B	95	38	28 - 48
AB	35	20	12 - 28
TOTAL	716	30	26 - 34
Paediatric never urgent heart	37	463	0 - 1044
Paediatric ever urgent heart (urgent waiting time only)	207	79	55 - 103
Adult lung			
O	608	449	379 - 519
A	573	186	154 - 218
B	129	232	192 - 272
AB	34	176	138 - 214
TOTAL	1344	289	252 - 326

¹ Median and/or 95% confidence interval cannot be estimated

² Includes registrations and waiting time on super-urgent list where applicable

Table 7.5 Median waiting time to cardiothoracic transplant in the UK, for patients registered 1 April 2011 - 31 March 2016, by ethnicity

Ethnicity	Number of patients registered	Waiting time (days)	
		Median	95% Confidence interval
Adult never urgent heart			
White	382	1298	702 - 1894
Asian	22	403	190 - 616
Black	19	742	85 - 1399
Other ¹	7	-	-
TOTAL²	431	1085	611 - 1559
Adult ever urgent heart³ (urgent waiting time only)			
White	612	29	25 - 33
Asian	59	36	18 - 54
Black	22	71	28 - 114
Other	17	34	24 - 44
TOTAL²	716	30	26 - 34
Paediatric never urgent heart	37	463	0 - 1044
Paediatric ever urgent heart	207	79	55 - 103
Adult lung			
White	1271	283	249 - 317
Asian	46	1191	279 - 2103
Black	15	731	369 - 1093
Other ¹	6	-	-
TOTAL²	1344	289	252 - 326

¹ Median waiting time not calculated for fewer than 10 patients

² Totals do not add up where we do not have ethnicity reported for all patients

³ Includes registrations and waiting time on super-urgent list where applicable

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 that had their heart 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 962 DBD donors, 153 (16%) donated their heart, resulting in 149 transplants. Of the 638 DCD donors, 33 (5%) donated their heart, resulting in 31 transplants.

Table 7.7 shows the number of deceased organ donors identified in each lung allocation zone, and the number of donors that had their lungs 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 962 DBD donors, 139 (14%) donated at least one lung, with 126 proceeding to transplantation. Of the 638 DCD donors, 58 (9%) donated at least one lung, with 39 proceeding to transplantation.

Note that from May 2017, hearts and lungs have had separate allocation zones and so the number of donors in zones does not match between heart and lung allocation zones. Prior to this, there were joint cardiothoracic allocation zones.

Table 7.6 Heart organ donation and retrieval rates in the UK, 1 April 2018 - 31 March 2019, by heart allocation zone and donor type								
Heart Allocation Zone	Number of donors	DBD			Number of donors	DCD		
		Number of heart donors (utilised)		Number donated heart and lungs		Number of heart donors (utilised)		Number donated heart and lungs
Birmingham	156	21	(19)	9	113	2	(1)	0
Glasgow	80	10	(10)	6	32	0	(0)	0
Harefield	190	27	(27)	11	135	7	(7)	3
Manchester	140	21	(21)	8	100	5	(4)	1
Newcastle	209	38	(38)	7	131	9	(9)	2
Papworth	187	36	(34)	14	127	10	(10)	2
TOTAL	962	153	(149)	55	638	33	(31)	8

Table 7.7 Lung organ donation and retrieval rates in the UK, 1 April 2018 - 31 March 2019, by lung allocation zone and donor type								
Lung Allocation Zone	Number of donors	DBD			Number of donors	DCD		
		Number of lung donors (utilised)		Number donated heart and lungs		Number of lung donors (utilised)		Number donated heart and lungs
Birmingham	144	21	(21)	8	102	7	(6)	0
Harefield	275	41	(41)	20	176	18	(10)	3
Manchester	135	14	(14)	5	99	6	(6)	1
Newcastle	220	35	(24)	11	108	13	(7)	1
Papworth	188	28	(26)	11	153	14	(10)	3
TOTAL	962	139	(126)	55	638	58	(39)	8

The rates per million population for cardiothoracic organ donors are shown in **Table 7.8** by country/Strategic Health Authority of residence. No adjustments have been made for potential demographic differences in populations. The overall heart donor rate was 2.8 pmp in 2018-2019 and varied across the Strategic Health Authorities from 1.8 pmp to 3.8 pmp. For lungs, the overall donor rate was 3.0 pmp in 2018-2019 and varied across the Strategic Health Authorities from 1.8 pmp to 4.9 pmp.

Table 7.8 Cardiothoracic donation rates for deceased donors in the UK, 1 April 2018 - 31 March 2019, by country/ Strategic Health Authority									
Country/ Strategic Health Authority	Heart (pmp)			Lungs (pmp)					
	DBD	DCD	Total	DBD	DCD	Total			
North East	9 (3.4)	1 (0.4)	10 (3.8)	10 (3.8)	3 (1.1)	13 (4.9)			
North West	10 (1.4)	6 (0.8)	16 (2.2)	16 (2.2)	5 (0.7)	21 (2.9)			
Yorkshire and The Humber	16 (2.9)	1 (0.2)	17 (3.1)	6 (1.1)	4 (0.7)	10 (1.8)			
North of England	35 (2.3)	8 (0.5)	43 (2.8)	32 (2.1)	12 (0.8)	44 (2.9)			
East Midlands	13 (2.7)	4 (0.8)	17 (3.6)	14 (2.9)	5 (1.0)	19 (4.0)			
West Midlands	17 (2.9)	0 (0.0)	17 (2.9)	11 (1.9)	3 (0.5)	14 (2.4)			
East of England	13 (2.1)	8 (1.3)	21 (3.4)	7 (1.1)	8 (1.3)	15 (2.4)			
Midlands and East	43 (2.6)	12 (0.7)	55 (3.3)	32 (1.9)	16 (1.0)	48 (2.9)			
London	27 (3.1)	6 (0.7)	33 (3.7)	18 (2.0)	9 (1.0)	27 (3.1)			
South East Coast	12 (2.6)	0 (0.0)	12 (2.6)	13 (2.8)	2 (0.4)	15 (3.2)			
South Central	5 (1.1)	3 (0.7)	8 (1.8)	6 (1.4)	6 (1.4)	12 (2.7)			
South West	9 (1.6)	1 (0.2)	10 (1.8)	15 (2.7)	4 (0.7)	19 (3.4)			
South of England	26 (1.8)	4 (0.3)	30 (2.1)	34 (2.3)	12 (0.8)	46 (3.1)			
England	131 (2.4)	30 (0.5)	161 (2.9)	116 (2.1)	49 (0.9)	165 (3.0)			
Isle of Man	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)			
Channel Islands	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)			
Wales	9 (2.9)	3 (1.0)	12 (3.8)	5 (1.6)	3 (1.0)	8 (2.6)			
Scotland	7 (1.3)	0 (0.0)	7 (1.3)	13 (2.4)	2 (0.4)	15 (2.8)			
Northern Ireland	6 (3.2)	0 (0.0)	6 (3.2)	5 (2.7)	4 (2.1)	9 (4.8)			
TOTAL	153 (2.3)	33 (0.5)	186 (2.8)	139 (2.1)	58 (0.9)	197 (3.0)			

DCD heart donation is not operational in all areas
Includes 4 donors where the hospital postcode was used in place of an unknown donor postcode

7.4 Transplants

The number of cardiothoracic organ transplants by recipient country/Strategic Health Authority 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 1.3 to 3.7 pmp across Strategic Health Authorities and overall was 2.7 pmp. The lung transplant rate ranged from 1.9 to 4.1 pmp across Strategic Health Authorities and overall was 2.5 pmp. Lung transplant rates include a small number of heart-lung transplants.

Table 7.9 Cardiothoracic transplant rates per million population (pmp) in the UK, 1 April 2018 - 31 March 2019, by country/ Strategic Health Authority									
Country/ Strategic Health Authority	Heart (pmp)			Lungs (pmp)					
	DBD	DCD	Total	DBD	DCD	Total			
North East	6 (2.3)	0 (0.0)	6 (2.3)	4 (1.5)	1 (0.4)	5 (1.9)			
North West	17 (2.3)	2 (0.3)	19 (2.6)	12 (1.7)	2 (0.3)	14 (1.9)			
Yorkshire and The Humber	7 (1.3)	0 (0.0)	7 (1.3)	13 (2.4)	1 (0.2)	14 (2.6)			
North of England	30 (2.0)	2 (0.1)	32 (2.1)	29 (1.9)	4 (0.3)	33 (2.1)			
East Midlands	10 (2.1)	3 (0.6)	13 (2.7)	9 (1.9)	1 (0.2)	10 (2.1)			
West Midlands	19 (3.2)	0 (0.0)	19 (3.2)	12 (2.0)	4 (0.7)	16 (2.7)			
East of England	15 (2.4)	4 (0.6)	19 (3.1)	11 (1.8)	9 (1.5)	20 (3.2)			
Midlands and East	44 (2.6)	7 (0.4)	51 (3.0)	32 (1.9)	14 (0.8)	46 (2.7)			
London	23 (2.6)	4 (0.5)	27 (3.1)	9 (1.0)	3 (0.3)	12 (1.4)			
South East Coast	8 (1.7)	7 (1.5)	15 (3.2)	18 (3.8)	1 (0.2)	19 (4.1)			
South Central	11 (2.5)	5 (1.1)	16 (3.7)	8 (1.8)	2 (0.5)	10 (2.3)			
South West	6 (1.1)	6 (1.1)	12 (2.2)	13 (2.3)	5 (0.9)	18 (3.2)			
South of England	25 (1.7)	18 (1.2)	43 (2.9)	39 (2.7)	8 (0.5)	47 (3.2)			
England	122 (2.2)	31 (0.6)	153 (2.8)	109 (2.0)	29 (0.5)	138 (2.5)			
Isle of Man	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)			
Channel Islands	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)			
Wales	7 (2.2)	0 (0.0)	7 (2.2)	6 (1.9)	2 (0.6)	8 (2.6)			
Scotland	11 (2.0)	0 (0.0)	11 (2.0)	9 (1.7)	5 (0.9)	14 (2.6)			
Northern Ireland	7 (3.7)	0 (0.0)	7 (3.7)	1 (0.5)	3 (1.6)	4 (2.1)			
TOTAL¹	149 (2.3)	31 (0.5)	180 (2.7)	125 (1.9)	39 (0.6)	164 (2.5)			

DCD heart transplantation is not operational in all areas
¹ Excludes 1 recipients who reside in the Republic of Ireland and 3 recipients who reside overseas. Includes 2 recipients whose postcode was unknown

Table 7.10 and **Table 7.11** show cardiothoracic organ transplant activity for each centre by urgency status and donor type, respectively. In 2018-2019, a total of 348 transplants were carried out; a fall of 16% on 2017-2018. Of these, 182 were heart transplants, of which 138 (76%) were in urgent or super-urgent patients and additionally, 31 (17%) were achieved from donors after circulatory death. There were a total of 162 lung only transplants, of which 26 (16%) were in urgent patients and 7 (4%) in super-urgent patients. There was a substantial reduction in the number of heart-lung transplants compared with 2017-2018.

Table 7.10 Cardiothoracic transplants from deceased donors, 1 April 2018 – 31 March 2019 (2017-2018), by age group and centre

Transplant centre	Heart						Transplant type						TOTAL			
	Non-urgent		Urgent		Super-urgent		Heart-lung		Lung(s)		Super-urgent					
Adult																
Birmingham	0	(1)	22	(17)	4	(2)	0	(2)	13	(13)	3	(5)	0	(2)	42	(42)
Glasgow	0	(1)	7	(4)	2	(6)	0	(0)	0	(0)	0	(0)	0	(0)	9	(11)
Harefield	6	(2)	23	(22)	6	(8)	0	(5)	38	(51)	6	(5)	6	(3)	85	(96)
Manchester	3	(7)	11	(8)	6	(6)	1	(1)	19	(23)	2	(6)	0	(0)	42	(51)
Newcastle	7	(1)	12	(17)	2	(4)	1	(3)	21	(25)	5	(18)	0	(0)	48	(68)
Papworth	21	(21)	20	(27)	4	(8)	0	(1)	34	(32)	8	(12)	1	(1)	88	(102)
TOTAL	37	(33)	95	(95)	24	(34)	2	(12)	125	(144)	24	(46)	7	(6)	314	(370)
Paediatric¹																
Great Ormond Street	5	(5)	10	(11)	0	(0)	2	(0)	4	(2)	0	(1)	0	(0)	21	(19)
Harefield	0	(0)	0	(0)	0	(1)	0	(0)	0	(0)	0	(0)	0	(0)	0	(1)
Manchester	0	(0)	0	(0)	1	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(0)
Newcastle	2	(5)	8	(14)	0	(0)	0	(0)	0	(2)	2	(1)	0	(0)	12	(22)
TOTAL	7	(10)	18	(25)	1	(1)	2	(0)	4	(4)	2	(2)	0	(0)	34	(42)

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

**Table 7.11 Cardiothoracic transplants from deceased donors,
1 April 2018 - 31 March 2019 (2017-2018), by age group and centre**

Transplant centre	Heart				Transplant type				Lung(s)				TOTAL	
	DBD		DCD		Heart-lung DBD		DCD		DBD		DCD			
Adult														
Birmingham	26	(20)	0	(0)	0	(2)	0	(0)	13	(17)	3	(3)	42	(42)
Glasgow	9	(11)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	9	(11)
Harefield	26	(30)	9	(2)	0	(5)	0	(0)	38	(45)	12	(14)	85	(96)
Manchester	19	(15)	1	(6)	1	(1)	0	(0)	18	(25)	3	(4)	42	(51)
Newcastle	20	(22)	1	(0)	1	(3)	0	(0)	17	(35)	9	(8)	48	(68)
Papworth	25	(40)	20	(16)	0	(1)	0	(0)	32	(37)	11	(8)	88	(102)
TOTAL	125	(138)	31	(24)	2	(12)	0	(0)	118	(159)	38	(37)	314	(370)
Paediatric¹														
Great Ormond Street	15	(16)	0	(0)	2	(0)	0	(0)	3	(3)	1	(0)	21	(19)
Harefield	0	(1)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(1)
Manchester	1	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(0)
Newcastle	10	(18)	0	(1)	0	(0)	0	(0)	2	(2)	0	(1)	12	(22)
TOTAL	26	(35)	0	(1)	2	(0)	0	(0)	5	(5)	1	(1)	34	(42)

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

At 31 March 2019 there were approximately 4,000 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. In 2018-2019 the median IT for a DBD heart transplant was 3.3 hours (Inter-Quartile (IQ) range 2.3 – 4.2) and for a DCD heart transplant was 5.3 hours (IQ range 4.8 – 5.1) and overall was 3.5 hours (IQ range 2.5 – 5.1).

The median IT for DBD donor lung transplant was 6.6 hours (IQ range 5.4 – 8.3) and for a DCD donor lung transplant was 8.0 hours (IQ range 6.4 – 9.7) and overall was 6.8 hours (IQ range 5.5 – 8.8). 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.

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 2018 - 31 March 2019, and transplant list patients at 31 March in the UK						
Age group (years)	Donors		Transplant recipients		Active transplant list patients	
	N	(%)	N	(%)	N	(%)
0 - 17	28	(9)	38	(11)	47	(7)
18 - 34	96	(30)	65	(19)	84	(13)
35 - 49	96	(30)	107	(31)	129	(20)
50 - 59	69	(22)	80	(23)	226	(35)
60 - 69	31	(10)	58	(17)	156	(24)
70+	0	(0)	0	(0)	4	(1)
mean (SD)	39	(16)	42	(17)	48	(17)
Male	169	(53)	206	(59)	388	(60)
Female	151	(47)	141	(41)	256	(40)
Not reported	0		1		2	
White	288	(91)	303	(87)	569	(88)
Asian	11	(3)	28	(8)	50	(8)
Black	4	(1)	8	(2)	19	(3)
Chinese	3	(1)	1	(0)	0	(0)
Other	11	(3)	7	(2)	7	(1)
Not reported	3		1		1	
O	179	(56)	147	(42)	334	(52)
A	107	(33)	148	(43)	238	(37)
B	25	(8)	35	(10)	66	(10)
AB	9	(3)	18	(5)	8	(1)
First graft			346	(99)	630	(98)
Re-graft			2	(1)	16	(2)
TOTAL	320	(100)	348	(100)	646	(100)