

# The National Organ Retrieval Service and Usage of Organs

## Key messages

- National Organ Retrieval Service teams attended 688 possible DBD donors and 911 possible DCD donors; 98% of these DBD donors and 80% of these DCD donors proceeded to donation
- Overall, 57% of organs offered from those donors that did proceed were transplanted, but individually, these rates were 86% for kidneys, 63% for livers, 22% for pancreases, 37% for hearts, 23% for lungs and 11% for bowels
- Overall, 84% of organs retrieved were transplanted, but individually, these rates were 88% for kidneys, 80% for livers, 50% for pancreases, 98% for hearts, 92% for lungs and 94% for bowels
- The number of deceased donors per million of population was 20.8, however 5% of actual donors resulted in no organ transplants, a decrease on the previous year (6%)

## 4.1 The National Organ Retrieval Service (NORS)

There are 16 NORS teams in total, ten abdominal and six cardiothoracic. Since January 2020, the abdominal aspect of the service increased capacity to eight abdominal NORS teams available to retrieve organs from deceased donors in the UK for transplantation, at any given time. Three cardiothoracic NORS teams are available at any given time, an arrangement that has been in place since April 2016.

NORS teams are mobilised using a sequence. The first and second teams in the sequence are defined for each UK hospital (largely based on travel times but adjusted to give a more even workload across NORS teams), while subsequent teams in the sequence are ordered based on travel time and availability, known as 'closest available'.

If a team is first in sequence for a particular donor hospital, they are required to attend possible donors at that hospital within an agreed timescale if at least one organ has been accepted for transplantation. If the team is already retrieving when they are called to attend, then a second team is called in to retrieve and so on.

The number of possible DBD and DCD donors that were attended by each of the teams in 2024-2025 is shown in **Table 4.1**. The geographical distribution of donors and the on-call arrangements lead to variation in these numbers across teams. The figures are broken down by whether the possible donor proceeded to organ donation (proceeding donors) or not. Non-proceeding donors are more common in the pool of potential DCD donors as prolonged time to death after treatment withdrawal can result in unsuitability of organs for transplantation. A small number of possible donors may be attended by local kidney transplant teams. This is typically for DCD donors when only the kidneys have been accepted for transplantation and the teams are appropriately reimbursed if they are willing and able to retrieve.

**Table 4.1** Number of proceeding and non-proceeding donors attended by each NORS team in the UK, 1 April 2024 – 31 March 2025

NORS team	DBD				DCD			
	Proceeding <sup>2</sup>	Non-proceeding	% non-proc	No. attended	Proceeding <sup>2</sup>	Non-proceeding	% non-proc	No. attended
<b>Abdominal</b>								
Birmingham <sup>1</sup>	62	-	-	62	92	21	19	113
Cambridge	79	2	2	81	111	26	19	137
Cardiff <sup>1</sup>	30	-	-	30	36	4	10	40
Edinburgh	47	2	4	49	67	10	13	77
King's	119	1	1	120	103	29	22	132
Leeds <sup>1</sup>	67	2	3	69	65	19	23	84
Manchester <sup>1</sup>	61	1	2	62	69	20	22	89
Newcastle	65	3	4	68	47	14	23	61
Oxford <sup>1</sup>	76	-	-	76	59	24	29	83
Royal Free <sup>1</sup>	68	1	1	69	75	16	18	91
<b>Abdominal total</b>	<b>674</b>	<b>12</b>	<b>2</b>	<b>686</b>	<b>724</b>	<b>183</b>	<b>20</b>	<b>907</b>
<b>Cardiothoracic<sup>1</sup></b>								
Birmingham	52	25	32	77	10	11	52	21
Glasgow	14	14	50	28	15	16	52	31
Harefield	34	40	54	74	28	20	42	48
Manchester	50	21	30	71	7	22	76	29
Newcastle	26	13	33	39	6	9	60	15
Papworth	29	21	42	50	47	29	38	76
<b>Cardiothoracic total</b>	<b>205</b>	<b>134</b>	<b>40</b>	<b>339</b>	<b>113</b>	<b>107</b>	<b>49</b>	<b>220</b>
<b>Total donors attended</b>	<b>676</b>	<b>12</b>	<b>2</b>	<b>688</b>	<b>727</b>	<b>184</b>	<b>20</b>	<b>911</b>

<sup>1</sup> Part-time teams

<sup>2</sup> For abdominal, at least one abdominal organ retrieved. For cardiothoracic, at least one cardiothoracic organ retrieved

For more detailed information regarding the National Organ Retrieval Service and individual team activity, an annual NORS report is available here: <https://www.odt.nhs.uk/statistics-and-reports/annual-national-organ-retrieval-service-report/>

## 4.2 Retrieval and usage of organs

The number of 'consented' donors ('authorised' donors in Scotland) and 'offered' donors (where at least one organ was offered for transplant) are shown in **Table 4.2**. Note that organs are not always offered from 'consented' donors, e.g. because the donor's condition deteriorates, or it is discovered the donor is unsuitable for organ donation. The number of organs offered from 'offered' donors is also shown. Each year a number of actual organ donors result in no transplants. Donors resulting in at least one transplant are termed 'utilised' donors and the number of actual and utilised donors is shown in **Table 4.2**. The number of donors per million of population (pmp) is also shown. In 2024-2025, 5% of actual donors resulted in no organ transplants, a decrease of 1% compared to the previous year.

<b>Table 4.2 Consented, offered, actual and utilised deceased donors in the UK, 1 April 2024 - 31 March 2025</b>					
	<b>DBD (pmp)</b>		<b>DCD (pmp)</b>		<b>Total (pmp)</b>
Consented donors <sup>1</sup>	736	(10.9)	1072	(15.9)	1808 (26.7)
Offered donors <sup>2</sup>	706	(10.4)	976	(14.4)	1682 (24.9)
<i>Kidneys offered</i>	1375		1899		3274
<i>Livers offered</i>	675		898		1573
<i>Pancreases offered</i>	416		372		788
<i>Bowels offered</i>	135		1		136
<i>Hearts offered</i>	397		187		584
<i>Lungs offered</i>	791		704		1495
Actual donors <sup>3</sup>	676	(10.0)	727	(10.8)	1403 (20.8)
Utilised donors <sup>4</sup>	661	(9.8)	673	(10.0)	1334 (19.7)

<sup>1</sup> Consented donors defined as patients where consent for at least one organ was given  
<sup>2</sup> Offered donors defined as donors where one or more organs were offered for transplantation  
<sup>3</sup> Actual donors defined as donors where one or more organs were retrieved  
<sup>4</sup> Utilised donors defined as donors where one or more organs were retrieved and transplanted

There were 1,403 actual deceased organ donors in 2024-2025, but not all organs from these donors were offered for transplantation. **Table 4.3** shows the number of organs offered, retrieved and transplanted from the 676 DBD and 727 DCD actual donors. The number of organs from these donors that were subsequently used for research purposes is also shown. The number of organs offered for transplantation excludes those where the donor did not meet the nationally agreed age criteria for suitability for donation of that specific organ. There are no nationally agreed age criteria for kidney and liver donation.

**Table 4.3 Donation and transplantation of organs from 1403 deceased donors in the UK, 1 April 2024 - 31 March 2025**

Organ	Organs meeting initial suitability criteria and offered for transplantation	Organs retrieved for transplantation		Organs transplanted			Organs used for research (from actual organ donors)
		N	% of offered	N	% of retrieved	% of offered	
<b>DBD donor organs</b>							
Kidney	1323	1290	98	1183	92	89	50
Liver	653	612	94	526	86	81	51
Pancreas	401	206	51	109	53	27	41
Bowel	133	16	12	15	94	11	0
Heart	386	144	37	143	99	37	1
Lung	773	196	25	186	95	24	6
<b>Total</b>	<b>3669</b>	<b>2464</b>	<b>67</b>	<b>2162</b>	<b>88</b>	<b>59</b>	<b>149</b>
<b>DCD donor organs</b>							
Kidney	1426	1403	98	1189	85	83	104
Liver	676	438	65	310	71	46	57
Pancreas	300	103	34	46	45	15	15
Heart	153	61	40	57	93	37	1
Lung	536	136	25	119	88	22	13
<b>Total</b>	<b>3092<sup>1</sup></b>	<b>2141</b>	<b>69</b>	<b>1721</b>	<b>80</b>	<b>56</b>	<b>190</b>
<b>Deceased donor organs</b>							
Kidney	2749	2693	98	2372	88	86	154
Liver	1329	1050	79	836	80	63	108
Pancreas	701	309	44	155	50	22	56
Bowel	134 <sup>1</sup>	16	12	15	94	11	0
Heart	539	205	38	200	98	37	2
Lung	1309	332	25	305	92	23	19
<b>Total</b>	<b>6761</b>	<b>4605</b>	<b>68</b>	<b>3883</b>	<b>84</b>	<b>57</b>	<b>339</b>

Suitability Criteria:

Pancreas: donors with a BMI < 40 or aged < 60 years (DBD) or aged < 55 years (DCD)

Bowel: donors aged < 60 years or weighting < 90kg

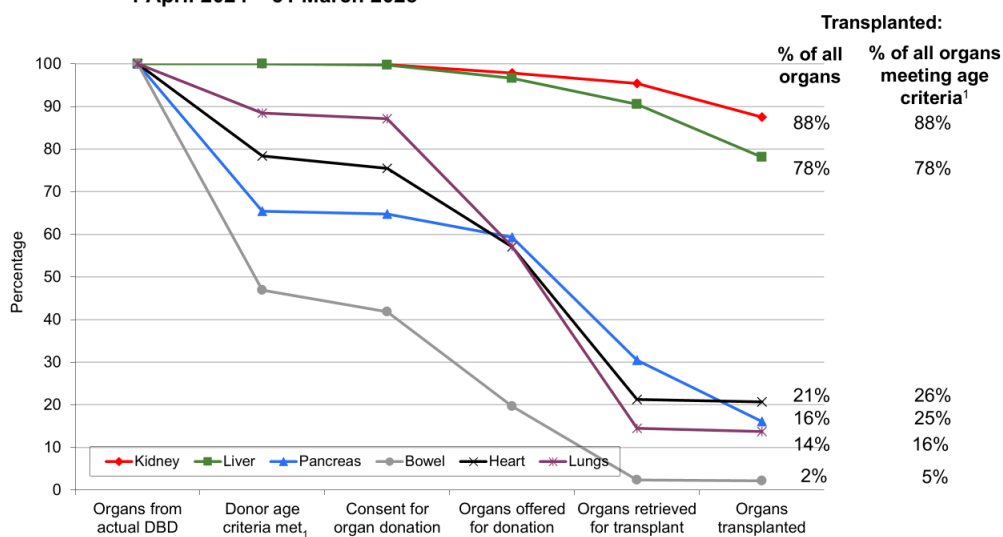
Heart: donors aged < 65 years (DBD) or aged < 55 years (DCD) or died due to myocardial infarction (DBD)

Lung: donors aged < 70 years

<sup>1</sup> Includes one offer of a DCD bowel

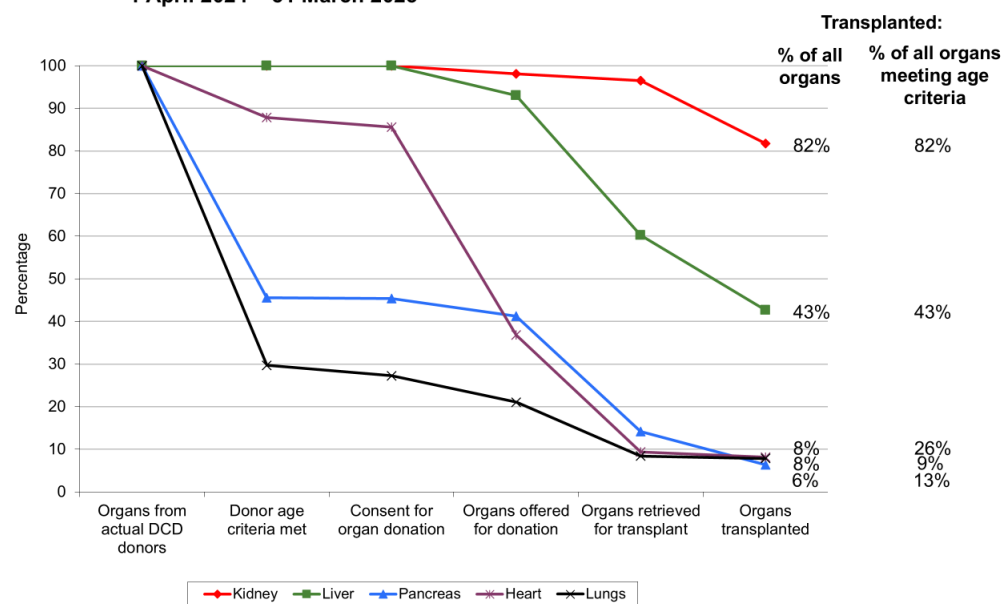
**Figures 4.1 and 4.2** show line graphs of the pathway for all donor organs through to transplantation. The charts start at 100% for each organ, representing all organs from the 676 DBD and 727 DCD donors. The proportion of these organs where any national donor age criteria are met is then shown, followed by the proportion with consent, the proportion offered, the proportion retrieved and finally the proportion transplanted. For example, **Figure 4.2** shows that 82% of the kidneys from the 727 DCD donors were transplanted. Transplantation rates for kidneys and livers are generally high, while for other organs, even after allowing for the agreed age criteria, the rates are generally low.

**Figure 4.1 Donation and transplantation rates of organs from DBD organ donors in the UK, 1 April 2024 – 31 March 2025**



<sup>1</sup> Hearts – in addition to age criteria, donors who died due to myocardial infarction are excluded  
 Bowels – in addition to age criteria, donors who weigh >=90kg are excluded

**Figure 4.2 Donation and transplantation rates of organs from DCD organ donors in the UK, 1 April 2024 – 31 March 2025**



Reasons for organs not being offered for transplantation, being offered but not accepted and being retrieved but not subsequently transplanted are shown in **Table 4.4** and **Table 4.5** for abdominal organs from DBD and DCD donors, respectively. **Table 4.6** shows the same information for cardiothoracic organs. Reasons for the medical unsuitability of an organ include infections, tumours, anatomy and disease. Non-medical reasons include donor size and donor instability. Clinical unsuitability of an organ encompasses poor perfusion, prolonged ischaemia, past history of the donor and, in the case of pancreases for islet usage, insufficiency of viable islet yield. Reasons reported under 'other' primarily include recipient related issues (such as no suitable recipients), but may also include logistical reasons and un-coded reasons reported of a miscellaneous nature.

These tables also show the number of organs from UK donors that were transplanted overseas. These organs were not accepted for transplantation by any UK transplant centre, but were accepted for suitable recipients identified elsewhere, usually in Europe. In 2024-2025 only a small number of livers, hearts and lungs were exported for transplantation outside the UK. Organs from outside the UK are occasionally imported for transplant. Further information on the import and export of organs can be found in **Appendix IV**.

The percentage of organs retrieved that were not transplanted are shown in **Figure 4.3**, **Figure 4.4**, **Figure 4.5**, **Figure 4.6** and **Figure 4.7** for kidneys, livers, pancreases, hearts, and lungs respectively. The rates are shown over the last decade. Some organs are found not to be suitable for transplantation after they have been retrieved. A number of organs retrieved but found not to be suitable for transplantation are instead used for research (with appropriate consent).

**Table 4.4 Reasons for non-retrieval and non-use of abdominal organs from DBD donors in the UK, 1 April 2024 - 31 March 2025**

	Kidney	Liver	Pancreas	Bowel
<b>All actual DBD organ donors</b>	<b>676</b>	<b>676</b>	<b>676</b>	<b>676</b>
Donors from whom organs not offered for donation	12	23	275	543
<b>Reasons for organs not being offered<sup>1</sup></b>				
Family permission refused	1	2	4	34
Permission refused by coroner	0	1	2	2
Permission refused other	0	1	3	4
Donor unsuitable - medical	0	0	1	2
Donor unsuitable - non-medical	0	0	22	4
Donor unsuitable - age	0	1	201	1
Organ unsuitable - clinical	9	15	37	23
Poor function	2	3	1	0
Donor age ≥ 60 or donor weight ≥ 90kg	0	0	0	359
Other	0	0	4	114
<b>Organs offered for donation</b>	<b>1323</b>	<b>653</b>	<b>401</b>	<b>133</b>
<b>Organs not retrieved (% of organs offered for donation)</b>	<b>33 (2)</b>	<b>41 (6)</b>	<b>195 (49)</b>	<b>117 (88)</b>
Donor unsuitable - medical	6	2	9	21
Donor unsuitable - non-medical	0	2	22	14
Donor unsuitable - age	0	0	15	9
Organ unsuitable - clinical	9	23	91	29
Poor function	14	7	19	2
Other	4	7	39	42
<b>Organs retrieved (% of organs offered for donation)</b>	<b>1290 (98)</b>	<b>612 (94)</b>	<b>206 (51)</b>	<b>16 (12)</b>
Organs transplanted in the UK	1183	524	109	15
Organs transplanted overseas	0	2	0	0
Organs not transplanted	107	86	97	1
<b>Reasons for organ not being transplanted</b>				
Donor unsuitable - medical	39	13	10	0
Donor unsuitable - non-medical	0	5	1	0
Donor unsuitable - age	2	0	0	0
Organ unsuitable - clinical	44	33	67	0
Poor function	2	7	0	0
Other	20	28	19	1
<b>TOTAL ORGANS RETRIEVED, NOT TRANSPLANTED (Number used for research)</b>	<b>107 (50)</b>	<b>86 (51)</b>	<b>97 (41)</b>	<b>1 (0)</b>

<sup>1</sup> Includes donors whose organ may have been offered but are outside of organ specific criteria



**Table 4.5 Reasons for non-retrieval and non-use of abdominal organs from DCD donors in the UK, 1 April 2024 - 31 March 2025**

	Kidney	Liver	Pancreas
<b>All actual DCD organ donors</b>	<b>727</b>	<b>727</b>	<b>727</b>
Donors from whom organs not offered for donation	15	51	427
<b>Reasons for organs not being offered<sup>1</sup></b>			
Family permission refused	0	0	1
Permission refused by coroner	0	2	4
Permission refused other	0	4	5
Donor unsuitable - medical	3	2	1
Donor unsuitable - non-medical	1	1	10
Donor unsuitable - age	0	1	351
Organ unsuitable - clinical	7	33	46
Poor function	3	6	1
Other	1	2	8
<b>Organs offered for donation</b>	<b>1426</b>	<b>676</b>	<b>300</b>
<b>Organs not retrieved (% of organs offered for donation)</b>	<b>23 (2)</b>	<b>238 (35)</b>	<b>197 (66)</b>
Donor unsuitable - medical	2	27	12
Donor unsuitable - non-medical	0	6	31
Donor unsuitable - age	4	39	18
Organ unsuitable - clinical	16	121	82
Poor function	0	23	7
Other	1	22	47
<b>Organs retrieved (% of organs offered for donation)</b>	<b>1403 (98)</b>	<b>438 (65)</b>	<b>103 (34)</b>
Organs transplanted in the UK	1189	310	46
Organs transplanted overseas	0	0	0
Organs not transplanted	214	128	57
<b>Reasons for organ not being transplanted</b>			
Donor unsuitable - medical	71	14	5
Donor unsuitable - non-medical	0	8	0
Donor unsuitable - age	2	0	3
Organ unsuitable - clinical	90	63	35
Poor function	7	22	1
Other	44	21	13
<b>TOTAL ORGANS RETRIEVED, NOT TRANSPLANTED (Number used for research)</b>	<b>214 (104)</b>	<b>128 (57)</b>	<b>57 (15)</b>

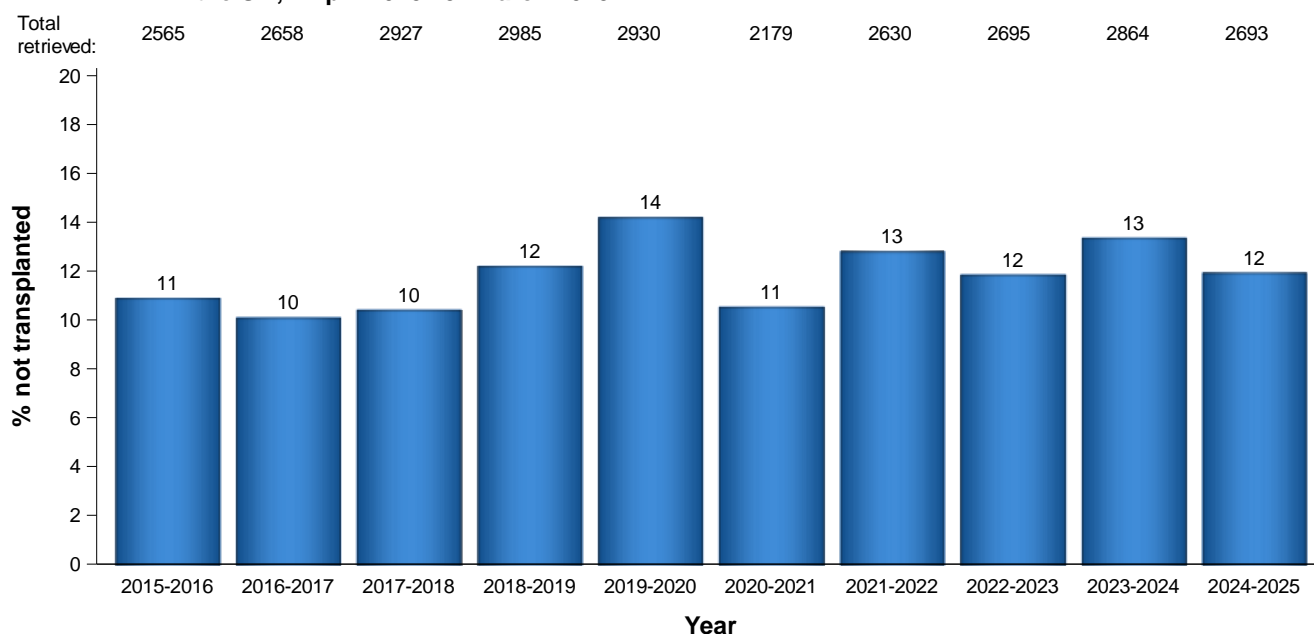
<sup>1</sup> Includes donors whose organ may have been offered but are outside of organ specific criteria

**Table 4.6 Reasons for non-retrieval and non-use of cardiothoracic organs from deceased donors in the UK, 1 April 2024 - 31 March 2025**

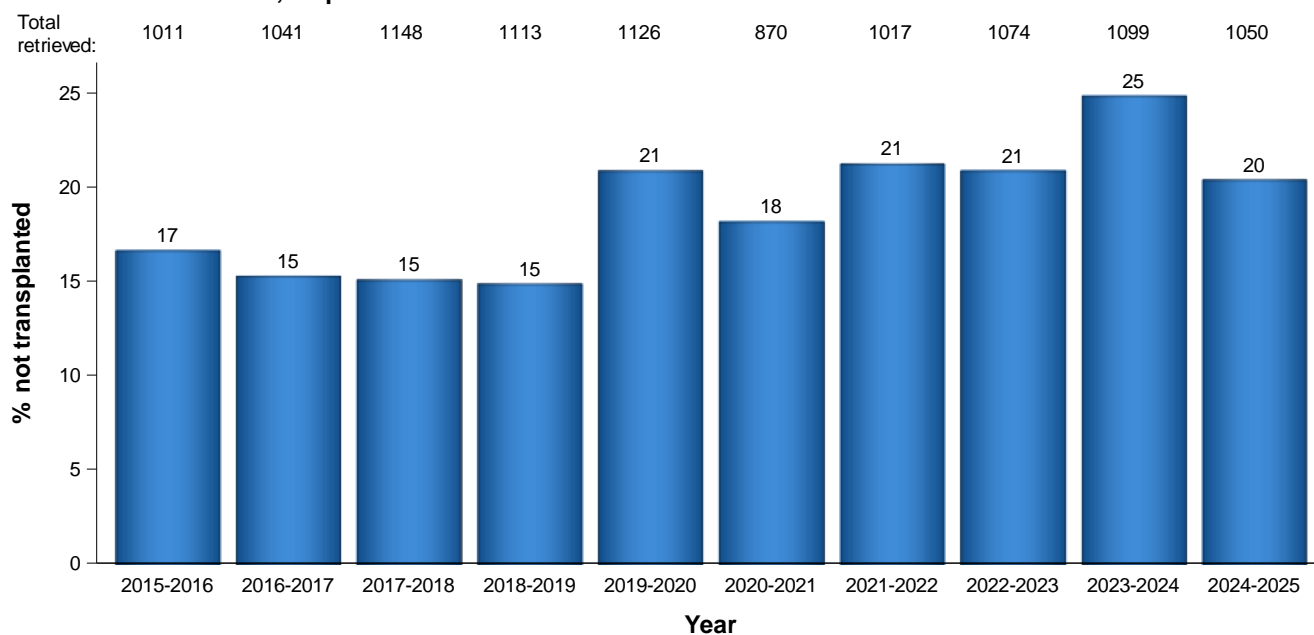
	Heart (DBD)	Lung (DBD)	Heart (DCD)	Lung (DCD)
<b>All actual organ donors</b>	<b>676</b>	<b>676</b>	<b>727</b>	<b>727</b>
Donors from whom organs not offered for donation	290	290	574	459
<b>Reasons for organs not being offered<sup>1</sup></b>				
Family permission refused	20	9	18	17
Permission refused by coroner	30	19	22	16
Permission refused other	7	3	7	4
Donor unsuitable - medical	2	14	7	26
Donor unsuitable - non-medical	2	0	10	3
Donor unsuitable - age	132	83	409	176
Organ unsuitable - clinical	54	64	67	95
Poor function	34	92	24	114
Other	9	6	10	8
<b>Organs offered for donation</b>	<b>386</b>	<b>773</b>	<b>153</b>	<b>536</b>
<b>Organs not retrieved (% of organs offered for donation)</b>	<b>242 (63)</b>	<b>577 (75)</b>	<b>92 (60)</b>	<b>400 (75)</b>
<b>Reasons for non-retrieval</b>				
Donor unsuitable - medical	12	22	7	18
Donor unsuitable - non-medical	16	40	4	40
Donor unsuitable - age	27	14	2	8
Organ unsuitable - clinical	78	122	38	98
Poor function	75	298	18	144
Other	34	81	23	92
<b>Organs retrieved (% of organs offered for donation)</b>	<b>144 (37)</b>	<b>196 (25)</b>	<b>61 (40)</b>	<b>136 (25)</b>
Organs transplanted in the UK	137	182	57	117
Organs transplanted overseas	6	4	0	2
Organs not transplanted	1	10	4	17
<b>Reasons for organ not being transplanted</b>				
Donor unsuitable - medical	0	0	0	2
Donor unsuitable - non-medical	0	0	0	0
Donor unsuitable - age	0	0	0	0
Organ unsuitable - clinical	0	2	0	2
Poor function	0	4	3	6
Other	1	4	1	7
<b>TOTAL ORGANS RETRIEVED, NOT TRANSPLANTED (Number used for research)</b>	<b>1 (1)</b>	<b>10 (6)</b>	<b>4 (1)</b>	<b>17 (13)</b>

<sup>1</sup> Includes donors whose organ may have been offered but are outside of organ specific criteria

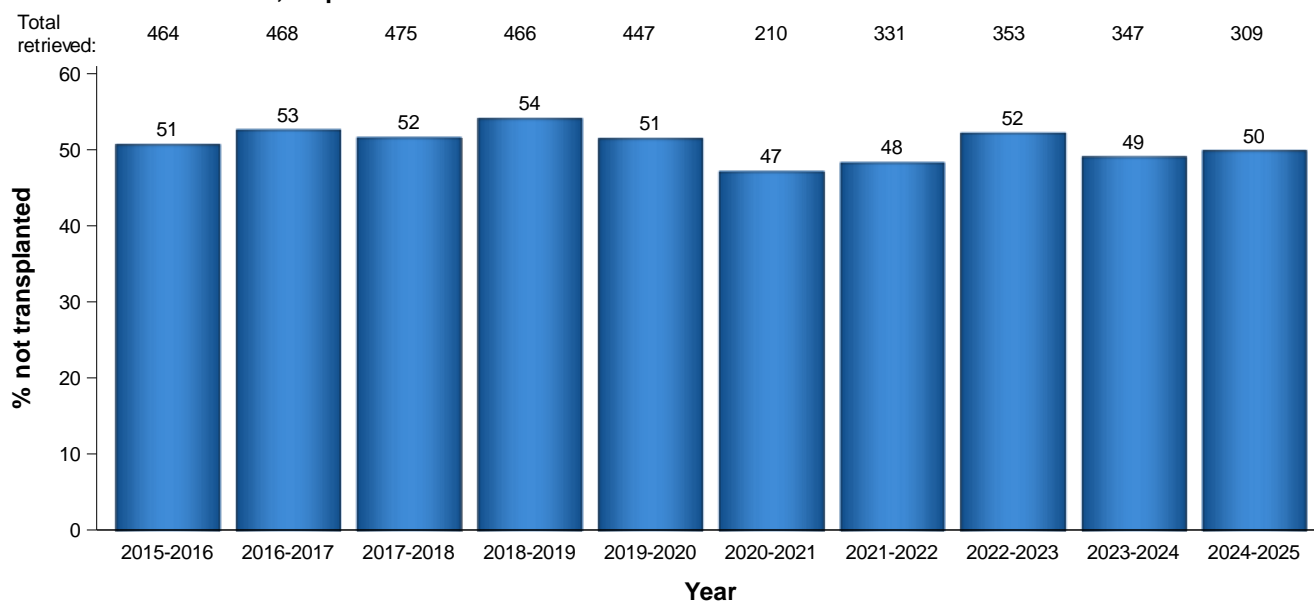
**Figure 4.3** Percentage of kidneys retrieved that were not transplanted from deceased organ donors in the UK, 1 April 2015 - 31 March 2025



**Figure 4.4** Percentage of livers retrieved that were not transplanted from deceased organ donors in the UK, 1 April 2015 - 31 March 2025

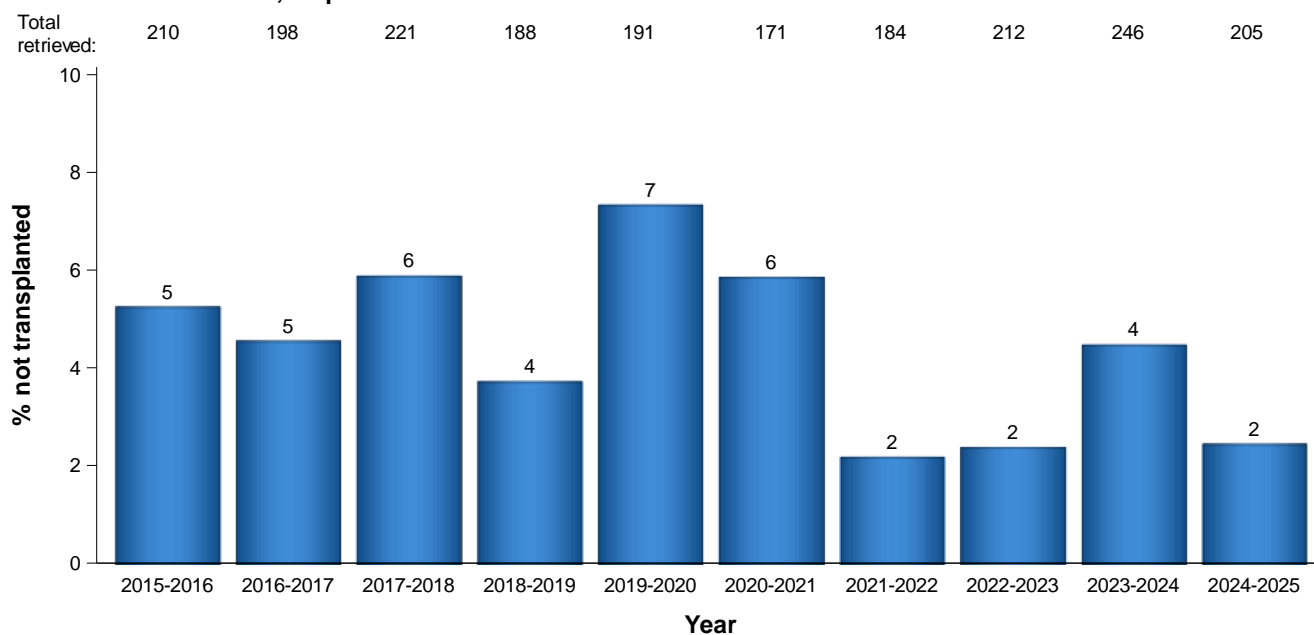


**Figure 4.5 Percentage of pancreases<sup>1</sup> retrieved that were not transplanted from deceased organ donors in the UK, 1 April 2015 - 31 March 2025**



<sup>1</sup>Includes pancreases retrieved for islet transplantation and not transplanted due to the outcome of the islet isolation

**Figure 4.6 Percentage of hearts retrieved that were not transplanted from deceased organ donors in the UK, 1 April 2015 - 31 March 2025**



**Figure 4.7 Percentage of lungs retrieved that were not transplanted from deceased organ donors in the UK, 1 April 2015 - 31 March 2025**

