

SECTION 4

Deceased Organ Donor Profile

This section provides a detailed description of organ donor demographic characteristics, including gender, age, and ethnicity. This section also provides information about pre-existing medical conditions and virology screening assessed prior to deceased organ donation.

CONTENTS

Executive Summary	3
Suggested Citation	3
Donor Demographics	4
Donor Age and Gender	6
Donor Ethnic Origins	8
Donor Weight	9
Donor Medical Conditions	10
Diabetes	11
Cancer in Donor	11
Virology Screening	12

EXECUTIVE SUMMARY

A broad range of people become organs donors after death, from various ethnic backgrounds, of all ages, and many with complex health histories. Co-morbidities including diabetes mellitus, hypertension and smoking are common in organ donors. A prior history of cured cancer, or current localised tumours do not preclude donation. The donor evaluation process includes testing for viral infections such as hepatitis, CMV and EBV. These do not contraindicate donation but may influence organ allocation, for example, through prioritising immune recipients. This section provides information about the characteristics of actual donors in Australia and New Zealand in 2024.

SUGGESTED CITATION

H Opdam, C Davies, K Marshall, G Irish, 29th Report, Section 4: Deceased Organ Donor Profile. Australia and New Zealand Organ Donation Registry, Adelaide, Australia. 2025. Available at: https://www.anzdata.org.au/anzod/publications-2/annual-reports/

DONOR DEMOGRAPHICS

Table 4.1 contains a description of actual donors in Australia and New Zealand in 2024 compared to 2023. In Australia there continues to be more male than female donors. In both countries, there is a preponderance of blood groups O and A.

Table 4.1.1
Demography of Actual Deceased Donors in Australia 2023 - 2024

		2023		2024				
Australian Donors	DNDD	DCDD	Total	DNDD	DCDD	Total		
Gender								
Male	181 (54%)	117 (65%)	298 (58%)	199 (59%)	126 (66%)	325 (62%)		
Female	153 (46%)	62 (35%)	215 (42%)	136 (41%)	66 (34%)	202 (38%)		
Age (years)								
0-4	5 (1%)	_	5 (1%)	5 (1%)	1 (1%)	6 (1%)		
5-14	7 (2%)	2 (1%)	9 (2%)	7 (2%)	8 (4%)	15 (3%)		
15-24	38 (11%)	9 (5%)	47 (9%)	29 (9%)	9 (5%)	38 (7%)		
25-34	49 (15%)	19 (11%)	68 (13%)	35 (10%)	26 (14%)	61 (12%)		
35-44	65 (19%)	28 (16%)	93 (18%)	49 (15%)	24 (13%)	73 (14%)		
45-54	63 (19%)	41 (23%)	104 (20%)	66 (20%)	48 (25%)	114 (22%)		
55-64	62 (19%)	48 (27%)	110 (21%)	64 (19%)	51 (27%)	115 (22%)		
65-74	36 (11%)	31 (17%)	67 (13%)	58 (17%)	25 (13%)	83 (16%)		
75+	9 (3%)	1 (1%)	10 (2%)	22 (7%)	-	22 (4%)		
BMI (kg/m2)								
Underweight (<18.5)	21 (6%)	6 (3%)	27 (5%)	10 (3%)	6 (3%)	16 (3%)		
Normal (18.5-<25)	103 (31%)	49 (27%)	152 (30%)	122 (36%)	55 (29%)	177 (34%)		
Overweight (25-<30)	117 (35%)	63 (35%)	180 (35%)	112 (33%)	64 (33%)	176 (33%)		
Obese (>=30)	93 (28%)	61 (34%)	154 (30%)	91 (27%)	67 (35%)	158 (30%)		
Blood Group								
A	129 (39%)	67 (37%)	196 (38%)	151 (45%)	77 (40%)	228 (43%)		
AB	8 (2%)	5 (3%)	13 (3%)	6 (2%)	8 (4%)	14 (3%)		
В	37 (11%)	16 (9%)	53 (10%)	37 (11%)	26 (14%)	63 (12%)		
0	160 (48%)	91 (51%)	251 (49%)	141 (42%)	81 (42%)	222 (42%)		
Ethnicity								
Australian Non-indigenous	241 (72%)	151 (84%)	392 (76%)	245 (73%)	144 (75%)	389 (74%)		
Australian Indigenous	12 (4%)	3 (2%)	15 (3%)	18 (5%)	5 (3%)	23 (4%)		
New Zealand European	6 (2%)	-	6 (1%)	10 (3%)	4 (2%)	14 (3%)		
New Zealand Māori	3 (1%)	2 (1%)	5 (1%)	-	-	-		
Pacific Peoples	-	-	-	3 (1%)	-	3 (1%)		
European	20 (6%)	2 (1%)	22 (4%)	25 (7%)	13 (7%)	38 (7%)		
North African and Middle Eastern	4 (1%)	1 (1%)	5 (1%)	4 (1%)	3 (2%)	7 (1%)		
Asian	38 (11%)	19 (11%)	57 (11%)	25 (7%)	17 (9%)	42 (8%)		
American	5 (1%)	1 (1%)	6 (1%)	4 (1%)	2 (1%)	6 (1%)		
Sub-Saharan African	5 (1%)	_	5 (1%)	1 (0%)	4 (2%)	5 (1%)		

^{*}Ethnicity categories listed in Table 4.1 are based on the Australian Bureau of Statistics (ABS) and Stats NZ ethnicity classifications below:

Australian Non-indigenous: Oceanian - Australian

Australian Indigenous: Oceanian - Australian Aboriginal/Torres Strait Islander

New Zealand European: Oceanian - New Zealand European

New Zealand Māori: Oceanian - New Zealand Māori

Pacific Peoples: Oceanian - Melanesian and Papuan/Micronesian/Polynesian/Cook Islander/Fijian/Niuean/Samoan/Tongan/Tokelauan/Australian South Sea Islander/Cook Islands Māori

European: North-West European, Southern and Eastern European - Italian/Greek

North African and Middle Eastern: North African and Middle Eastern - Arab/Turkish

 $Asian: South-East\ Asian-Vietnamese/Filipino/Indonesian/Malay, North-East\ Asian-Chinese, Southern\ and\ Central\ Asian-Indian-Chinese, Southern\ and\ Central\ Asian-Chinese, Southern\ and\ Asian-Chinese,$

American: North American, Hispanic North American, South American, Central American, Caribbean Islander

Sub-Saharan African: Sub-Saharan African

Table 4.1.2

Demography of Actual Deceased Donors in New Zealand 2023 - 2024

		2023		2024				
New Zealand Donors	DNDD	DCDD	Total	DNDD	DCDD	Total		
Gender								
Male	32 (59%)	6 (60%)	38 (59%)	31 (57%)	10 (63%)	41 (59%)		
Female	22 (41%)	4 (40%)	26 (41%)	23 (43%)	6 (38%)	29 (41%)		
Age (years)								
0-4	-	-	-	1 (2%)	-	1 (1%)		
5-14	-	-	-	-	1 (6%)	1 (1%)		
15-24	11 (20%)	-	11 (17%)	5 (9%)	2 (13%)	7 (10%)		
25-34	14 (26%)	-	14 (22%)	10 (19%)	4 (25%)	14 (20%)		
35-44	9 (17%)	1 (10%)	10 (16%)	5 (9%)	2 (13%)	7 (10%)		
45-54	7 (13%)	2 (20%)	9 (14%)	9 (17%)	4 (25%)	13 (19%)		
55-64	9 (17%)	4 (40%)	13 (20%)	14 (26%)	2 (13%)	16 (23%)		
65-74	4 (7%)	2 (20%)	6 (9%)	9 (17%)	1 (6%)	10 (14%)		
75+	-	1 (10%)	1 (2%)	1 (2%)	-	1 (1%)		
BMI (kg/m2)								
Underweight (<18.5)	1 (2%)	-	1 (2%)	2 (4%)	2 (13%)	4 (6%)		
Normal (18.5-<25)	25 (46%)	4 (40%)	29 (45%)	18 (33%)	8 (50%)	26 (37%)		
Overweight (25-<30)	15 (28%)	4 (40%)	19 (30%)	15 (28%)	4 (25%)	19 (27%)		
Obese (>=30)	13 (24%)	2 (20%)	15 (23%)	19 (35%)	2 (13%)	21 (30%)		
Blood Group								
A	17 (31%)	2 (20%)	19 (30%)	16 (30%)	7 (44%)	23 (33%)		
AB	2 (4%)	-	2 (3%)	3 (6%)	1 (6%)	4 (6%)		
В	6 (11%)	1 (10%)	7 (11%)	4 (7%)	1 (6%)	5 (7%)		
0	22 (41%)	2 (20%)	24 (38%)	24 (44%)	4 (25%)	28 (40%)		
Not Collected	7 (13%)	5 (50%)	12 (19%)	7 (13%)	3 (19%)	10 (14%)		
Ethnicity								
New Zealand European	29 (54%)	7 (70%)	36 (56%)	31 (57%)	9 (56%)	40 (57%)		
New Zealand Māori	8 (15%)	-	8 (13%)	6 (11%)	1 (6%)	7 (10%)		
Pacific Peoples	5 (9%)	-	5 (8%)	2 (4%)	-	2 (3%)		
European	-	2 (20%)	2 (3%)	7 (13%)	2 (13%)	9 (13%)		
Asian	10 (19%)	1 (10%)	11 (17%)	6 (11%)	2 (13%)	8 (11%)		
American	1 (2%)	-	1 (2%)	1 (2%)	-	1 (1%)		
Sub-Saharan African	1 (2%)	_	1 (2%)	1 (2%)	2 (13%)	3 (4%)		

^{*}Ethnicity categories listed in Table 4.1 are based on the Australian Bureau of Statistics (ABS) and Stats NZ ethnicity classifications below: Australian Non-indigenous: Oceanian - Australian

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Asian: South-East Asian - Vietnamese/Filipino/Indonesian/Malay, North-East Asian - Chinese, Southern and Central Asian - Indian

American: North American, Hispanic North American, South American, Central American, Caribbean Islander

Sub-Saharan African: Sub-Saharan African

DONOR AGE AND GENDER

In Australia, the oldest donor was 82.9 years and the youngest was 1.2 years, with a mean age of 49.0 years. The majority (76.1%) of donors were aged between 15 and 64, with 19.9% aged 65 or older. In New Zealand, the oldest donor was 77.6 years and the youngest donor was 4.1 years, with a mean age of 45.6 years. The majority (81.4%) of donors were aged between 15 and 64, with 15.7% aged 65 or older.

Figure 4.1 shows the trends in donor numbers for each age group and gender; while there has been growth in all age groups this is more marked in the older age groups.

Figure 4.1.1

Age and Gender of Actual Deceased Donors

Australia 2016-2024

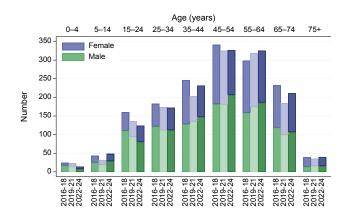
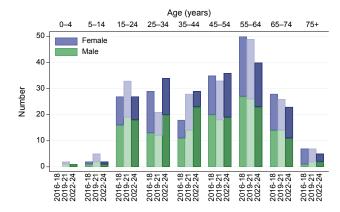


Figure 4.1.2

Age and Gender of Actual Deceased Donors

New Zealand 2016-2024



The median age for Australian male deceased donors in 2024 was 49.4 years and for Australian female deceased donors was 55.1 years. The median age for all Australian deceased donors in 2024 was 51.2 years. The median age for New Zealand male deceased donors in 2024 was 45.7 years and for New Zealand female deceased donors was 52.1 years. The median age for all New Zealand deceased donors in 2024 was 48.8 years (Figure 4.2).

Figure 4.2.1

Age of Male and Female Actual Deceased Donors 2016-2024 Australia

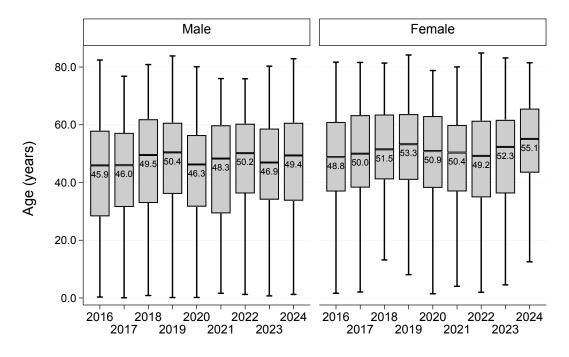
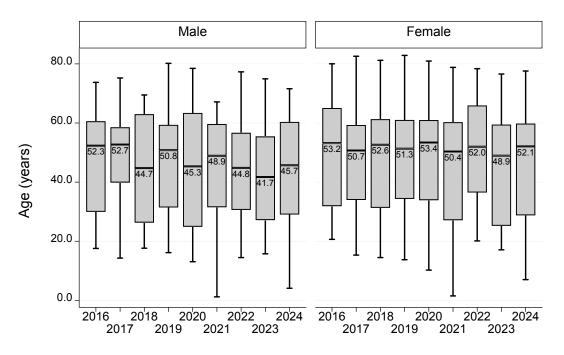


Figure 4.2.2

Age of Male and Female Actual Deceased Donors 2016-2024 New Zealand



DONOR ETHNIC ORIGINS

There have been no significant changes in the documented ethnicity of donors over the past five years in either Australia or New Zealand (Table 4.2).

Table 4.2
Ethnic Origin of Actual Deceased Donors, 2020-2024

Donor racial /			Australia	1			N	lew Zeala	nd	
ethnic origin*	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Australian Non-indigenous	335 (72%)	312 (74%)	333 (73%)	392 (76%)	389 (74%)	-	1 (2%)	-	-	-
Australian Indigenous	16 (3%)	17 (4%)	13 (3%)	15 (3%)	23 (4%)	-	-	-	-	-
New Zealand European	7 (2%)	5 (1%)	12 (3%)	6 (1%)	14 (3%)	50 (78%)	42 (64%)	41 (65%)	36 (56%)	40 (57%)
New Zealand Māori	3 (1%)	2 (0%)	2 (0%)	5 (1%)	-	5 (8%)	7 (11%)	5 (8%)	8 (12%)	7 (10%)
Pacific Peoples	4 (1%)	2 (0%)	3 (1%)	-	3 (1%)	5 (8%)	1 (2%)	3 (5%)	5 (8%)	2 (3%)
European	35 (8%)	31 (7%)	35 (8%)	22 (4%)	38 (7%)	1 (2%)	2 (3%)	4 (6%)	2 (3%)	9 (13%)
North African and Middle Eastern	13 (3%)	2 (0%)	7 (2%)	5 (1%)	7 (1%)	-	1 (2%)	-	-	-
Asian	36 (8%)	41 (10%)	44 (10%)	57 (11%)	42 (8%)	3 (5%)	8 (12%)	6 (10%)	11 (17%)	8 (11%)
American	6 (1%)	6 (1%)	1 (0%)	6 (1%)	6 (1%)	-	1 (2%)	2 (3%)	1 (2%)	1 (1%)
Sub-Saharan African	8 (2%)	3 (1%)	4 (1%)	5 (1%)	5 (1%)	-	3 (5%)	2 (3%)	1 (2%)	3 (4%)

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North African and Middle Eastern: North African and Middle Eastern - Arab/Turkish

Asian: South-East Asian - Vietnamese/Filipino/Indonesian/Malay, North-East Asian - Chinese, Southern and Central Asian - Indian

American: North American, Hispanic North American, South American, Central American, Caribbean Islander

Sub-Saharan African: Sub-Saharan African

DONOR WEIGHT

The allocation of heart, lungs and livers is based in part on the matching of recipient and donor size and weight. In 2024 there were 11 donors in Australia and 2 donors in New Zealand who weighed less than 40 kilograms. There were 99 donors in Australia and 11 donors in New Zealand who weighed 100 kilograms or more. (Table 4.3).

Table 4.3
Actual Deceased Donor Weight in Kilograms 2020 - 2024

Country	Year	0-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	Total
	2020	7	2	3	6	27	75	107	94	65	77	463
	2021	7	5	4	11	26	74	80	92	63	59	421
Australia	2022	4	8	6	7	41	72	83	80	77	76	454
	2023	5	3	2	16	35	76	100	102	79	95	513
	2024	5	4	2	13	30	82	102	112	78	99	527
	2020	0	0	1	2	4	9	9	12	13	14	64
	2021	2	0	0	4	6	13	6	16	8	11	66
New Zealand	2022	0	0	0	1	4	11	19	6	10	12	63
Zodiana	2023	0	0	1	2	6	9	19	13	6	8	64
	2024	1	0	1	1	8	10	13	18	7	11	70

DONOR MEDICAL CONDITIONS

Comorbid medical conditions are an important factor in determining donor suitability and one that is changing over time. Table 4.4 lists the medical conditions of donors by jurisdiction for 2024 by donor type.

Table 4.4
Comorbid Medical Conditions of Actual Deceased Donors by Jurisdiction 2024 n (%)

Donor Type	Medical Condition	QLD	NSW	ACT	VIC	TAS	SA	NT	WA	AUS	NZ
	Diabetes Type I	-	2 (2%)	-	-	-	-	-	2 (5%)	4 (1%)	-
	Diabetes Type II	2 (3%)	9 (11%)	-	7 (8%)	-	3 (10%)	1 (20%)	2 (5%)	24 (7%)	1 (2%)
DNDD	Hypertension	14 (23%)	23 (27%)	5 (42%)	31 (36%)	6 (30%)	8 (28%)	2 (40%)	13 (34%)	102 (30%)	10 (19%)
DNDD	Smoking- Current	28 (47%)	31 (37%)	6 (50%)	30 (34%)	7 (35%)	12 (41%)	3 (60%)	19 (50%)	136 (41%)	15 (28%)
	Cancer	4 (7%)	5 (6%)	1 (8%)	7 (8%)	-	1 (3%)	-	1 (3%)	19 (6%)	2 (4%)
	Total	60	84	12	87	20	29	5	38	335	54
	Diabetes Type I	1 (3%)	-	-	-	-	-	-	1 (12%)	2 (1%)	2 (12%)
	Diabetes Type II	-	3 (6%)	-	5 (7%)	1 (20%)	-	-	-	9 (5%)	1 (6%)
DODD	Hypertension	8 (22%)	11 (21%)	1 (100%)	22 (29%)	2 (40%)	5 (33%)	-	3 (38%)	52 (27%)	4 (25%)
DCDD	Smoking- Current	18 (50%)	16 (31%)	1 (100%)	32 (43%)	1 (20%)	7 (47%)	-	4 (50%)	79 (41%)	8 (50%)
	Cancer	2 (6%)	7 (13%)	-	4 (5%)	-	-	-	-	13 (7%)	1 (6%)
	Total	36	52	1	75	5	15	-	8	192	16
	Diabetes Type I	1 (1%)	2 (1%)	-	-	-	-	-	3 (7%)	6 (1%)	2 (3%)
	Diabetes Type II	2 (2%)	12 (9%)	-	12 (7%)	1 (4%)	3 (7%)	1 (20%)	2 (4%)	33 (6%)	2 (3%)
Takal	Hypertension	22 (23%)	34 (25%)	6 (46%)	53 (33%)	8 (32%)	13 (30%)	2 (40%)	16 (35%)	154 (29%)	14 (20%)
Total	Smoking- Current	46 (48%)	47 (35%)	7 (54%)	62 (38%)	8 (32%)	19 (43%)	3 (60%)	23 (50%)	215 (41%)	23 (33%)
	Cancer	6 (6%)	12 (9%)	1 (8%)	11 (7%)	-	1 (2%)	-	1 (2%)	32 (6%)	3 (4%)
	Total	96	136	13	162	25	44	5	46	527	70

DIABETES

There were 39 actual donors with type I or II diabetes mellitus in Australia in 2024. Of the 33 donors with type II diabetes mellitus, 1 did not have organs retrieved and 32 provided 59 organs that were transplanted (38 single kidneys, 10 livers, 7 double lungs, 1 single lungs and 3 hearts). The 6 actual donors with type I diabetes mellitus all had organs retrieved. They provided 11 organs that were transplanted (6 single kidneys, 3 livers and 2 double lungs).

In New Zealand, there were 4 actual donors with type I or II diabetes mellitus in 2023. The 2 donors with type II diabetes mellitus all had organs retrieved. They provided 2 single kidneys, 1 double lung and 1 liver which were transplanted. The 2 donors with type I diabetes mellitus provided 2 single kidneys and 2 livers.

CANCER IN DONOR

In Australia, 32 actual donors had a history of cancer prior to donation. Of these donors, there were 13 with skin only cancers, 16 with only non-skin cancers and 2 with skin and non-skin cancers. 1 actual donor did not have organs retrieved.

In New Zealand, 3 donors had a history of cancer. Of these donors, there were 2 with non-skin only cancers. 1 actual donor did not have organs retrieved.

VIROLOGY SCREENING

Table 4.5 lists the cytomegalovirus (CMV) status of donors by country from 2019 to 2024.

Table 4.5
Cytomegalovirus (CMV IgG) Status of Actual Deceased Donors, 2019 - 2024

CMVIeC			Aus	tralia			New Zealand					
CMV lgG	2019	2020	2021	2022	2023	2024	2019	2020	2021	2022	2023	2024
Positive	345	291	259	259	323	331	42	35	36	34	40	43
Negative	203	169	161	194	188	194	31	27	30	26	24	27
Not Done	0	2	1	0	1	2	1	2	0	3	0	0
Indeterminate	0	1	0	1	1	0	0	0	0	0	0	0
Not Reported	0	0	0	0	0	0	0	0	0	0	0	0
Total	548	463	421	454	513	527	74	64	66	63	64	70

Table 4.6 shows the Epstein-Barr virus (EBV) status of donors from 2019 to 2024.

Table 4.6
Epstein-Barr Virus (EBV IgG) Status of Actual Deceased Donors, 2019 - 2024

EDVIC			Aus	tralia			New Zealand					
EBV IgG	2019	2020	2021	2022	2023	2024	2019	2020	2021	2022	2023	2024
Positive	488	425	393	408	465	472	64	52	57	55	58	41
Negative	54	30	24	44	41	50	9	10	6	3	4	7
Not Done	3	5	1	1	3	1	1	2	3	3	1	22
Indeterminate	2	3	2	1	4	3	0	0	0	2	1	0
Not Reported	1	0	1	0	0	1	0	0	0	0	0	0
Total	548	463	421	454	513	527	74	64	66	63	64	70

Table 4.7 shows the hepatitis C antibody status of donors from 2019 to 2024.

Table 4.7
Hepatitis C Antibody Status of Actual Deceased Donors (Anti-HCV), 2019 - 2024

Anti-HCV			Aus	tralia			New Zealand					
Anti-HCV	2019	2020	2021	2022	2023	2024	2019	2020	2021	2022	2023	2024
Positive	15	21	27	27	28	39	1	3	0	3	1	1
Negative	525	439	391	422	480	487	73	61	65	60	63	69
Not Done	8	3	3	5	5	1	0	0	1	0	0	0
Indeterminate	0	0	0	0	0	0	0	0	0	0	0	0
Not Reported	0	0	0	0	0	0	0	0	0	0	0	0
Total	548	463	421	454	513	527	74	64	66	63	64	70

Table 4.8 shows the hepatitis B core antibody status of actual donors from 2019 to 2024.

Table 4.8
Hepatitis B Core Antibody Status of Actual Deceased Donors (Anti-HBcAb), 2019 - 2024

And: LID - Al-			Aus	tralia			New Zealand						
Anti-HBcAb	2019	2020	2021	2022	2023	2024	2019	2020	2021	2022	2023	2024	
Positive	25	28	29	26	30	34	7	9	5	11	7	4	
Negative	515	421	385	415	470	483	67	55	61	52	57	66	
Not Done	8	14	7	13	13	10	0	0	0	0	0	0	
Indeterminate	0	0	0	0	0	0	0	0	0	0	0	0	
Not Reported	0	0	0	0	0	0	0	0	0	0	0	0	
Total	548	463	421	454	513	527	74	64	66	63	64	70	

Since 1993, all consented actual and intended donors in Australia and New Zealand have been tested for hepatitis B surface antigen. Table 4.9 shows the status of actual donors from 2019 to 2024.

Table 4.9
Hepatitis B Surface Antigen Status of Actual Deceased Donors (HBsAg), 2019 - 2024

LID. A.:			Aus	tralia			New Zealand					
HBsAg	2019	2020	2021	2022	2023	2024	2019	2020	2021	2022	2023	2024
Positive	3	3	0	1	1	2	0	3	1	0	2	0
Negative	542	458	421	453	511	525	73	61	65	63	62	70
Not Done	3	2	0	0	1	0	1	0	0	0	0	0
Indeterminate	0	0	0	0	0	0	0	0	0	0	0	0
Not Reported	0	0	0	0	0	0	0	0	0	0	0	0
Total	548	463	421	454	513	527	74	64	66	63	64	70



SECTION 4

Deceased Organ Donor Profile