

# Seroprevalence of SARS-CoV-2-specific antibodies among Australian blood donors: Supplementary materials

31 January 2023

## Purpose of this document

In 2022, the Australian COVID-19 Serosurveillance Network has conducted regular serological surveys among Australian blood donors (aged 18 years and over) to measure prevalence of antibodies to SARS-CoV-2 in Australia. The surveys were conducted every 13 weeks (approximately) with four rounds completed:

- Round 1: 23 February – 3 March 2022
- Round 2: 9 June – 18 June 2022
- Round 3: 23 August – 2 September 2022
- Round 4: 29 November – 13 December 2022

This document contains information on survey populations at each round and all results in table format.

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## 1. Anti-spike protein seroprevalence

**Table 1. Crude SARS-CoV-2 anti-spike protein seroprevalence among Australian blood donors by jurisdiction, age group and sex, 23 February – 3 March 2022 (Round 1)**

	<b>Overall</b> n/N (%; 95% CI)	<b>Victoria</b> n/N (%; 95% CI)	<b>NSW</b> n/N (%; 95% CI)	<b>Queensland</b> n/N (%; 95% CI)	<b>WA</b> n/N (%; 95% CI)	<b>SA</b> n/N (%; 95% CI)	<b>Tasmania</b> n/N (%; 95% CI)	<b>NT</b> n/N (%; 95% CI)	<b>ACT</b> n/N (%; 95% CI)
<b>Overall</b>	5089/5185 (98.1; 97.7–98.5)	1086/1099 (98.8; 98.0–99.4)	1136/1155 (98.4; 97.4–99.0)	1095/1135 (96.5; 95.2–97.5)	983/999 (98.4; 97.4–99.1)	202/205 (98.5; 95.8–99.7)	214/216 (99.1; 96.7–99.9)	196/199 (98.5; 95.7–99.7)	177/177 (100; 97.9–100)
<b>Age group (years)</b>									
18–29	1147/1160 (98.9; 98.1–99.4)	228/228 (100; 98.4–100)	257/260 (98.8; 96.7–99.8)	288/292 (98.6; 96.5–99.6)	205/210 (97.6; 94.5–99.2)	37/38 (97.4; 86.2–99.9)	30/30 (100; 88.4–100)	51/51 (100; 93.0–100)	51/51 (100; 93.0–100)
30–39	973/993 (98.0; 96.9–98.8)	196/200 (98.0; 95.0–99.5)	233/235 (99.1; 97.0–99.9)	207/215 (96.3; 92.8–98.4)	199/203 (98.0; 95.0–99.5)	25/26 (96.2; 80.4–99.9)	39/39 (100; 91.0–100)	49/50 (98.0; 89.4–99.9)	25/25 (100; 86.3–100)
40–49	871/895 (97.3; 96.0–98.3)	201/202 (99.5; 97.3–100)	193/202 (95.5; 91.7–97.9)	182/190 (95.8; 91.9–98.2)	183/187 (97.9; 94.6–99.4)	25/25 (100; 86.3–100)	32/33 (97.0; 84.2–99.9)	18/19 (94.7; 74.0–99.9)	37/37 (100; 90.5–100)
50–59	951/972 (97.8; 96.7–98.7)	218/223 (97.8; 94.8–99.3)	188/189 (99.5; 97.1–100)	198/211 (93.8; 89.7–96.7)	183/184 (99.5; 97.0–100)	49/49 (100; 92.7–100)	49/50 (98.0; 89.4–99.9)	38/38 (100; 90.7–100)	28/28 (100; 87.7–100)
60–69	838/852 (98.4; 97.3–99.1)	180/183 (98.4; 95.3–99.7)	190/192 (99.0; 96.3–99.9)	163/168 (97.0; 93.2–99.0)	153/155 (98.7; 95.4–99.8)	51/52 (98.1; 89.7–100)	46/46 (100; 92.3–100)	33/34 (97.1; 84.7–99.9)	22/22 (100; 84.6–100)
70–89	309/313 (98.7; 96.8–99.7)	63/63 (100; 94.3–100)	75/77 (97.4; 90.9–99.7)	57/59 (96.6; 88.3–99.6)	60/60 (100; 94.0–100)	15/15 (100; 78.2–100)	18/18 (100; 81.5–100)	7/7 (100; 59.0–100)	14/14 (100; 76.8–100)
<b>Sex</b>									
Male	2955/3017 (97.9; 97.4–98.4)	625/634 (98.6; 97.3–99.3)	635/646 (98.3; 97.0–99.1)	667/696 (95.8; 94.1–97.2)	604/611 (98.9; 97.7–99.5)	123/126 (97.6; 93.2–99.5)	102/104 (98.1; 93.2–99.8)	103/104 (99.0; 94.8–100)	96/96 (100; 96.2–100)
Female	2134/2168 (98.4; 97.8–98.9)	461/465 (99.1; 97.8–99.8)	501/509 (98.4; 96.9–99.3)	428/439 (97.5; 95.6–98.7)	379/388 (97.7; 95.6–98.9)	79/79 (100; 95.4–100)	112/112 (100; 96.8–100)	93/95 (97.9; 92.6–99.7)	81/81 (100; 95.5–100)

**Table 2. Crude SARS-CoV-2 anti-spike protein seroprevalence among Australian blood donors, by jurisdiction, age group and sex, 9 June – 18 June 2022 (Round 2)**

	<b>Overall</b> n/N (%; 95% CI)	<b>Victoria</b> n/N (%; 95% CI)	<b>NSW</b> n/N (%; 95% CI)	<b>Queensland</b> n/N (%; 95% CI)	<b>WA</b> n/N (%; 95% CI)	<b>SA</b> n/N (%; 95% CI)	<b>Tasmania</b> n/N (%; 95% CI)	<b>NT</b> n/N (%; 95% CI)	<b>ACT</b> n/N (%; 95% CI)
<b>Overall</b>	5086/5139 (99.0; 98.7–99.2)	1028/1035 (99.3; 98.6–99.7)	1214/1226 (99.0; 98.3–99.5)	1128/1226 (98.5; 97.6–99.1)	971/982 (98.9; 98.0–99.4)	209/210 (99.5; 97.4–100)	199/203 (98.0; 95.0–99.5)	173/174 (99.4; 96.8–100)	164/164 (100; 97.8–100)
<b>Age group (years)</b>									
18–29	1122/ 1127 (99.6; 99.0–99.9)	236/ 237 (99.6; 97.7–100)	304/ 305 (99.7; 96.7–99.8)	253/254 (99.6; 97.8–100)	190/191 (99.5; 97.1–100)	36/36 (100; 90.3–100)	26/27 (96.3; 91.0–99.9)	36/36 (100; 93.0–100)	41/41 (100; 91.4–100)
30–39	1046/ 1056 (99.1; 98.3–99.5)	214/ 214 (100; 98.3–100)	243/248 (98.0; 95.4–99.3)	230/233 (98.7; 96.3–99.7)	211/213 (99.1; 96.6–99.9)	40/40 (100; 91.2–100)	40/40 (100; 91.2–100)	41/41 (100; 91.4–100)	27/27 (100; 87.2–100)
40–49	903/ 914 (98.8; 97.9–99.4)	166/ 167 (99.4; 96.7–100)	203/203 (100; 98.2–100)	191/195 (97.9; 94.8–99.4)	198/202 (98.0; 95.0–99.5)	35/35 (100; 90.0–100)	29/31 (93.6; 78.6–99.2)	46/46 (100; 92.3–100)	35/35 (100; 90.0–100)
50–59	982/ 993 (98.9; 98.0–99.4)	199/ 203 (98.0; 95.0–99.5)	209/211 (99.1; 96.6–100)	244/244 (100; 98.5–100)	196/198 (99.0; 96.4–99.9)	39/40 (97.5; 86.6–99.9)	39/40 (97.5; 86.8–99.9)	23/24 (95.8; 78.9–99.9)	33/33 (100; 89.4–100)
60–69	772/ 781 (98.8; 97.8–99.5)	168/ 169 (99.4; 96.7–100.0)	197/198 (99.5; 97.2–100)	151/158 (95.6; 91.1–98.2)	128/128 (100; 97.2–100)	37/37 (100; 90.5–100)	48/48 (100; 92.6–100)	20/20 (100; 83.2–100)	23/23 (100; 85.2–100)
70–89	261/ 268 (97.4; 94.7–98.9)	45/45 (100; 92.1–100)	58/61 (95.1; 86.3–99.5)	59/61 (96.7; 88.7–99.6)	60/60 (96.0; 86.3–99.5)	22/22 (100; 84.6–100)	17/17 (100; 80.5–100)	7/7 (100; 59.0–100)	5/5 (100; 47.8–100)
<b>Sex</b>									
Male	2839/2876 (98.7; 98.2–99.1)	556/561 (99.1; 97.9–99.7)	657/667 (98.5; 97.3–99.3)	656/670 (97.9; 96.5–98.9)	569/574 (99.1; 98.0–99.7)	114/115 (99.1; 95.3–100)	110/112 (98.2; 93.7–99.8)	92/92 (100; 96.1–100)	85/85 (100; 95.8–100)
Female	2247/2263 (99.3; 98.9–99.6)	472/474 (99.6; 98.5–99.9)	557/559 (99.6; 98.7–100)	472/475 (99.4; 98.2–99.9)	402/408 (98.5; 96.8–99.5)	95/95 (100; 96.2–100)	89/91 (97.8; 92.3–99.7)	81/82 (98.8; 93.4–100)	79/79 (100; 95.4–100)

**Table 3. Crude SARS-CoV-2 anti-spike protein seroprevalence among Australian blood donors, by jurisdiction, age group and sex, 23 August – 2 September 2022 (Round 3)**

	<b>Overall</b> n/N (%; 95% CI)	<b>Victoria</b> n/N (%; 95% CI)	<b>NSW</b> n/N (%; 95% CI)	<b>Queensland</b> n/N (%; 95% CI)	<b>WA</b> n/N (%; 95% CI)	<b>SA</b> n/N (%; 95% CI)	<b>Tasmania</b> n/N (%; 95% CI)	<b>NT</b> n/N (%; 95% CI)	<b>ACT</b> n/N (%; 95% CI)
<b>Overall</b>	4983/5005 (99.6; 99.3–99.7)	1102/1105 (99.7; 99.2–99.9)	1180/1185 (99.6; 99.0–99.8)	956/960 (99.6; 99.8–99.9)	989/996 (99.3; 98.5–99.7)	205/206 (99.5; 96.6–99.9)	200/202 (99.0; 96.1–99.8)	186/186 (100; 98.0–100)	165/165 (100; 97.8–100)
<b>Age group (years)</b>									
18–29	911/ 911 (100; 99.6–100)	227/ 227 (100; 98.4–100)	248/ 248 (100; 98.5–99.8)	173/173 (100; 97.9–100)	136/136 (100; 97.3–100)	23/23 (100; 85.2–100)	30/30 (100; 88.4–100)	39/39 (100; 91.0–100)	35/35 (100; 90.0–100)
30–39	903/ 904 (99.9; 99.2–100)	184/ 184 (100; 98.0–100)	208/208 (100; 98.2–99.3)	166/166 (100; 97.8–100)	200/201 (99.5; 96.6–99.9)	36/36 (100; 90.3–100)	33/33 (100; 89.4–100)	47/47 (100; 92.5–100)	29/29 (100; 88.1–100)
40–49	963/ 970 (99.3; 98.5–99.7)	204/ 205 (99.5; 96.6–99.9)	219/220 (99.6; 96.8–100)	212/213 (99.5; 96.7–99.5)	198/201 (98.5; 95.5–99.5)	32/32 (100; 89.1–100)	29/30 (96.7; 79.6–99.5)	26/26 (100; 86.7–100)	43/43 (100; 91.8–100)
50–59	1089/ 1097 (99.3; 98.6–99.6)	232/ 233 (99.6; 97.0–99.9)	248/250 (99.2; 96.9–100)	235/237 (99.2; 96.7–99.2)	214/216 (99.1; 96.4–99.8)	52/52 (100; 93.2–100)	40/41 (97.6; 84.5–99.7)	38/38 (100; 90.7–100)	30/30 (100; 88.4–100)
60–69	837/ 839 (99.8; 99.1–99.9)	203/ 203 (100; 98.2–100.0)	180/180 (100; 98.0–100)	144/145 (99.3; 95.3–99.3)	168/168 (100; 97.8–100)	44/45 (97.8; 85.7–99.7)	48/48 (100; 92.3–100)	32/32 (100; 89.1–100)	18/18 (100; 81.5–100)
70–89	280/ 284 (98.6; 96.3–99.5)	52/53 (98.1; 87.8–99.7)	77/79 (97.5; 90.4–99.4)	26/26 (100; 86.8–100)	73/74 (98.7; 99.8–91.0)	18/18 (100; 81.5–100)	20/20 (100; 83.2–100)	4/4 (100; 39.8–100)	10/10 (100; 69.2–100)
<b>Sex</b>									
Male	2784/2796 (99.6; 99.3–99.8)	622/625 (99.5; 98.5–99.9)	679/682 (99.6; 98.6–99.9)	532/534 (99.6; 98.5–99.9)	557/561 (99.3; 98.1–99.7)	105/105 (100; 96.5–100)	110/110 (100; 96.7–100)	95/95 (100; 96.2–100)	84/84 (100; 95.7–100)
Female	2199/2209 (99.6; 99.2–99.8)	480/480 (100; 99.2–100)	501/503 (99.6; 98.4–99.9)	424/426 (99.5; 98.1–99.9)	432/435 (98.3; 97.9–99.8)	100/101 (99.0; 93.2–99.9)	90/92 (97.8; 91.7–99.5)	91/91 (100; 96.0–100)	81/81 (100; 95.5–100)

**Table 4. Crude SARS-CoV-2 anti-spike protein seroprevalence among Australian blood donors, by jurisdiction, age group and sex, 29 November – 13 December 2022 (Round 4)**

	<b>Overall</b> n/N (%; 95% CI)	<b>Victoria</b> n/N (%; 95% CI)	<b>NSW</b> n/N (%; 95% CI)	<b>Queensland</b> n/N (%; 95% CI)	<b>WA</b> n/N (%; 95% CI)	<b>SA</b> n/N (%; 95% CI)	<b>Tasmania</b> n/N (%; 95% CI)	<b>NT</b> n/N (%; 95% CI)	<b>ACT</b> n/N (%; 95% CI)
<b>Overall</b>	4975/4996 (99.6; 99.4–99.7)	1088/1090 (99.8; 99.3–100)	1168/1171 (99.7; 99.2–99.9)	984/992 (99.2; 98.4–99.6)	982/989 (99.3; 98.5–99.7)	202/203 (99.5; 96.6–99.9)	199/199 (100; 98.2–100)	184/184 (100; 98.0–100)	168/168 (100; 97.8–100)
<b>Age group (years)</b>									
18–29	847/849 (99.8; 99.1–99.9)	173/173 (100; 97.9–100)	233/233 (100; 98.4–100)	190/191 (99.5; 96.4–99.9)	137/138 (99.3; 95.0–99.9)	35/35 (100; 90.0–100)	24/24 (100; 85.8–100)	29/29 (100; 88.1–100)	27/27 (100; 87.2–100)
30–39	940/944 (99.6; 98.9–99.8)	176/176 (100; 97.9–100)	218/219 (99.5; 96.8–99.9)	167/169 (98.8; 95.4–99.7)	213/214 (99.5; 96.8–99.9)	36/36 (100; 90.3–100)	33/33 (100; 89.4–100)	60/60 (100; 94.0–100)	37/37 (100; 90.5–100)
40–49	908/912 (99.6; 98.8–99.8)	206/207 (99.5; 96.7–99.9)	207/207 (100; 98.2–100)	183/184 (99.5; 96.2–99.9)	184/186 (98.9; 95.8–99.7)	35/35 (100; 90–100)	29/29 (100; 88.1–100)	32/32 (100; 89.1–100)	32/32 (100; 89.1–100)
50–59	1047/1053 (99.4; 98.7–99.7)	247/248 (99.6; 97.2–99.9)	247/249 (99.2; 96.8–99.8)	207/208 (99.6; 96.7–99.9)	208/209 (99.5; 96.7–99.9)	40/41 (97.6; 84.5–99.7)	36/36 (100; 90.3–100)	30/30 (100; 88.4–100)	32/32 (100; 89.1–100)
60–69	912/915 (99.7; 99.0–99.9)	228/228 (100; 98.4–100.0)	186/186 (100; 98.0–100)	181/183 (98.9; 95.7–99.7)	169/170 (99.4; 95.9–99.9)	37/37 (100; 90.5–100)	51/51 (100; 93.0–100)	28/28 (100; 87.7–100)	32/32 (100; 89.1–100)
70–89	321/323 (99.4; 97.6–99.9)	58/58 (98.1; 93.8–99.7)	77/77 (100; 95.3–100)	56/57 (98.3; 88.6–99.8)	71/72 (98.6; 90.8–99.8)	19/19 (100; 82.4–100)	26/26 (100; 86.8–100)	5/5 (100; 47.8–100)	9/9 (100; 66.4–100)
<b>Sex</b>									
Male	2772/2784 (99.6; 99.2–99.8)	592/593 (99.8; 98.8–99.9)	674/676 (99.7; 98.8–99.9)	550/555 (99.1; 97.9–99.6)	546/549 (99.5; 98.3–99.8)	101/102 (99.0; 94.7–100)	117/81172 (100; 96.9–100)	91/91 (100; 96.0–100)	101/101 (100; 96.4–100)
Female	2203/2212 (99.6; 99.2–99.8)	496/497 (99.8; 98.6–100)	495/496 (99.8; 98.8–99.9)	433/436 (99.3; 97.9–99.8)	435/439 (99.1; 97.6–99.7)	101/101 (100; 99.2–100)	82/82 (100; 95.6–100)	93/93 (100; 96.1–100)	68/68 (100; 94.7–100)

## 2. Anti-nucleocapsid protein seroprevalence

**Table 5. Crude SARS-CoV-2 anti-nucleocapsid protein seroprevalence among Australian blood donors, by jurisdiction, age group and sex, 23 February – 3 March 2022 (Round 1)**

	<b>Overall</b> n/N (%; 95% CI)	<b>Victoria</b> n/N (%; 95% CI)	<b>NSW</b> n/N (%; 95% CI)	<b>Queensland</b> n/N (%; 95% CI)	<b>WA</b> n/N (%; 95% CI)	<b>SA</b> n/N (%; 95% CI)	<b>Tasmania</b> n/N (%; 95% CI)	<b>NT</b> n/N (%; 95% CI)	<b>ACT</b> n/N (%; 95% CI)
<b>Overall</b>	881/5185 (17.0; 16.0–18.0)	248/1099 (22.6; 20.1–25.2)	247/1155 (21.4; 19.1–23.9)	293/1135 (25.8; 23.3–28.5)	5/999 (0.5; 0.2–1.2)	21/205 (10.2; 6.5–15.2)	13/216 (6.0; 3.2–10.1)	29/199 (14.6; 10.0–20.3)	25/177 (14.1; 9.4–20.1)
<b>Age group (years)</b>									
18–29	315/1160 (27.2; 24.6–29.8)	78/228 (34.2; 28.1–40.8)	74/260 (28.5; 23.1–34.4)	123/292 (42.1; 36.4–48.0)	2/210 (1.0; 0.1–3.4)	8/38 (21.1; 9.6–37.3)	7/30 (23.3; 9.9–42.3)	11/51 (21.6; 11.3–35.3)	12/51 (23.5; 12.8–37.5)
30–39	215/993 (21.7; 19.1–24.3)	50/200 (25.0; 19.2–31.6)	72/235 (30.6; 24.8–37.0)	64/215 (29.8; 23.7–36.4)	2/203 (1.0; 0.1–3.5)	3/26 (11.5; 2.4–30.2)	3/39 (7.7; 1.6–20.9)	16/50 (32.0; 19.5–46.7)	5/25 (20.0; 6.8–40.7)
40–49	144/895 (16.1; 13.7–18.7)	42/202 (20.8; 15.4–27.0)	48/202 (23.8; 18.1–30.2)	45/190 (23.7; 17.8–30.4)	1/187 (0.5; 0–2.9)	3/25 (12.0; 2.5–31.2)	0/33 (0; 0–10.6)	0/19 (0; 0–17.6)	5/37 (13.5; 4.5–28.8)
50–59	116/972 (11.9; 10.0–14.1)	41/223 (18.4; 13.5–24.1)	30/189 (15.9; 11.0–21.9)	36/211 (17.1; 12.2–22.8)	0/184 (0; 0–2.0)	4/49 (8.2; 2.3–19.6)	2/50 (4.0; 0.5–13.7)	1/38 (2.6; 0.1–13.8)	2/28 (7.1; 0.9–22.8)
60–69	71/852 (8.3; 6.6–10.4)	30/183 (16.4; 11.3–22.6)	19/192 (9.9; 6.1–15.0)	19/168 (11.3; 6.9–17.1)	0/155 (0; 0–2.4)	1/52 (1.9; 2.3–19.6)	0/46 (0; 0–7.7)	1/34 (2.9; 0.1–15.3)	1/22 (4.5; 0.1–22.8)
70–89	20/313 (6.4; 3.9–9.7)	7/63 (11.1; 4.6–21.6)	4/77 (5.2; 1.4–12.8)	6/59 (10.2; 3.8–20.8)	0/60 (0; 0–6.0)	2/15 (13.3; 1.7–40.5)	1/18 (5.6; 0.1–27.3)	0/7 (0; 0–41.0)	0/14 (0; 0–23.2)
<b>Sex</b>									
Male	499/3017 (16.5; 15.2–17.9)	143/634 (22.6; 19.4–26.0)	134/646 (20.7; 17.7–24.1)	170/696 (24.4; 21.3–27.8)	4/611 (0.7; 0.2–1.7)	13/126 (10.3; 5.6–17.0)	4/104 (3.8; 1.1–9.6)	14/104 (13.5; 7.6–21.6)	17/96 (17.7; 10.7–26.8)
Female	382/2168 (17.6; 16.0–19.3)	105/465 (22.6; 18.9–26.7)	113/509 (22.2; 18.7–26.1)	123/439 (28.0; 23.9–32.5)	1/388 (0.3; 0–1.4)	8/79 (10.1; 4.5–19.0)	9/112 (8.0; 3.7–14.7)	15/95 (15.8; 9.1–24.7)	8/81 (9.9; 4.4–18.5)

**Table 6. Crude SARS-CoV-2 anti-nucleocapsid protein seroprevalence among Australian blood donors, by jurisdiction, age group and sex, 9 June – 18 June 2022 (Round 2)**

	<b>Overall</b> n/N (%; 95% CI)	<b>Victoria</b> n/N (%; 95% CI)	<b>NSW</b> n/N (%; 95% CI)	<b>Queensland</b> n/N (%; 95% CI)	<b>WA</b> n/N (%; 95% CI)	<b>SA</b> n/N (%; 95% CI)	<b>Tasmania</b> n/N (%; 95% CI)	<b>NT</b> n/N (%; 95% CI)	<b>ACT</b> n/N (%; 95% CI)
<b>Overall</b>	2375/5139 (46.2; 44.8–47.6)	513/1,035 (49.6; 46.5–52.7)	611/1226 (49.8; 47.0–52.7)	560/1145 (48.9; 46.0–51.8)	368/982 (37.5; 34.4–40.6)	88/210 (41.9; 35.2–48.9)	81/203 (39.9; 33.1–47.0)	80/174 (46.0; 38.4–53.7)	74/164 (45.1; 37.4–53.1)
<b>Age group (years)</b>									
18–29	695/1127 (61.7; 58.8–64.5)	164/237 (69.2; 62.9–75.0)	196/305 (64.3; 58.6–69.6)	161/254 (63.4; 57.1–69.3)	91/191 (47.6; 40.4–55.0)	19/36 (52.8; 35.5–69.6)	16/27 (59.3; 38.8–77.6)	27/36 (75.0; 57.8–87.9)	21/41 (51.2; 35.1–67.1)
30–39	555/1056 (52.6; 49.5–55.6)	122/214 (57.0; 50.1–63.7)	133/248 (53.6; 47.2–60.0)	128/233 (54.9; 48.3–61.4)	97/213 (45.5; 38.7–52.5)	23/40 (57.5; 40.9–73.0)	23/40 (57.5; 40.9–73.0)	17/41 (41.5; 26.3–57.9)	12/27 (44.4; 25.5–64.7)
40–49	434/914 (47.5; 44.2–50.8)	72/167 (43.1; 35.5–51.0)	112/203 (55.2; 48.1–62.1)	90/195 (46.2; 39.0–53.4)	90/202 (44.6; 37.6–51.7)	15/35 (42.9; 26.3–60.6)	15/31 (48.4; 30.2–66.9)	19/46 (41.3; 27.0–56.8)	21/35 (60.0; 42.1–76.1)
50–59	386/993 (38.9; 35.8–42.0)	84/203 (41.4; 34.5–48.5)	89/211 (42.2; 35.4–49.2)	103/244 (42.2; 35.9–48.7)	62/198 (31.3; 24.9–38.3)	18/40 (45.0; 29.3–61.5)	12/40 (30.0; 16.6–46.5)	8/24 (33.3; 15.6–55.3)	10/33 (30.3; 15.6–48.7)
60–69	236/781 (30.2; 27.0–33.6)	61/169 (36.1; 28.9–43.8)	60/198 (30.3; 24.0–37.2)	58/158 (36.7; 29.2–44.7)	23/128 (18.0; 11.7–25.7)	6/37 (16.2; 6.2–32.0)	11/48 (22.9; 12.0–37.3)	8/20 (40.0; 19.1–63.9)	9/23 (39.1; 19.7–61.5)
70–89	69/268 (25.7; 20.6–31.4)	10/45 (22.2; 11.2–37.1)	21/61 (34.4; 47.0–47.7)	20/61 (32.8; 21.3–46.0)	5/60 (10.0; 3.3–21.8)	7/22 (31.8; 13.9–54.9)	4/17 (23.5; 6.8–49.9)	1/7 (14.3; 0.4–57.9)	1/5 (20.0; 0.5–71.6)
<b>Sex</b>									
Male	1270/2876 (44.2; 42.3–46.0)	269/561 (48.0; 43.7–52.2)	320/667 (48.0; 44.1–51.8)	303/670 (45.2; 41.1–49.1)	208/574 (36.2; 32.3–44.1)	44/115 (38.2; 29.4–47.8)	43/112 (38.4; 29.4–48.1)	45/92 (48.9; 38.3–59.6)	38/85 (44.7; 33.9–55.9)
Female	1105/2263 (48.8; 46.8–50.9)	244/474 (51.5; 46.9–56.1)	291/559 (52.1; 47.8–56.3)	257/475 (54.1; 49.5–58.7)	160/408 (39.2; 34.5–44.1)	44/95 (46.3; 36.0–56.9)	38/91 (41.8; 31.5–52.6)	35/82 (42.7; 31.8–54.1)	36/79 (45.6; 34.3–57.2)



**Table 7. Crude SARS-CoV-2 anti-nucleocapsid protein seroprevalence among Australian blood donors, by jurisdiction, age group and sex, 23 August – 2 September 2022 (Round 3)**

	<b>Overall</b> n/N (%; 95% CI)	<b>Victoria</b> n/N (%; 95% CI)	<b>NSW</b> n/N (%; 95% CI)	<b>Queensland</b> n/N (%; 95% CI)	<b>WA</b> n/N (%; 95% CI)	<b>SA</b> n/N (%; 95% CI)	<b>Tasmania</b> n/N (%; 95% CI)	<b>NT</b> n/N (%; 95% CI)	<b>ACT</b> n/N (%; 95% CI)
<b>Overall</b>	3265/5005 (65.2; 63.9–66.5)	740/1105 (67.0; 64.1–69.7)	797/1185 (67.3; 64.5–69.9)	633/960 (65.9; 62.9–68.9)	614/996 (61.7; 58.6–64.6)	130/206 (63.1; 56.3–69.4)	112/202 (55.5; 48.5–62.2)	131/186 (70.4; 63.5–76.6)	108/165 (65.5; 57.9–72.3)
<b>Age group (years)</b>									
18–29	726/911 (79.7; 77.0–82.2)	182/227 (80.2; 74.5–84.9)	210/248 (84.7; 79.6–88.7)	132/173 (76.3; 69.4–82.1)	102/136 (75.0; 67.0–81.6)	19/23 (82.6; 61.6–93.4)	21/30 (70.0; 51.5–83.7)	33/39 (84.6; 69.6–93.0)	27/35 (77.1; 60.4–88.2)
30–39	655/904 (72.5; 69.5–75.3)	133/184 (72.3; 65.4–78.3)	159/208 (76.4; 70.2–81.7)	120/166 (72.3; 65.0–78.6)	138/201 (68.7; 61.9–74.7)	26/36 (72.2; 55.5–84.4)	22/33 (66.7; 49.1–80.6)	38/47 (80.9; 67.0–89.8)	19/29 (65.5; 46.8–80.4)
40–49	662/970 (68.3; 65.3–71.1)	144/205 (70.2; 63.6–76.1)	155/220 (70.5; 64.1–76.1)	143/213 (67.1; 60.5–73.1)	134/201 (66.7; 59.9–72.8)	20/32 (62.5; 44.8–77.4)	20/30 (66.7; 48.2–81.1)	18/26 (69.2; 49.3–83.9)	28/43 (65.1; 49.8–77.8)
50–59	691/1097 (63.0; 60.1–65.8)	151/233 (64.8; 58.5–70.7)	156/250 (62.4; 56.2–68.2)	151/237 (63.7; 57.4–69.6)	134/216 (62.0; 55.4–68.3)	33/52 (63.5; 49.6–75.4)	20/41 (48.8; 34.0–63.8)	24/38 (63.2; 46.9–76.9)	22/30 (73.3; 54.9–86.1)
60–69	413/839 (49.2; 45.9–52.6)	100/203 (49.3; 42.4–56.1)	84/180 (46.7; 39.5–54.0)	74/145 (51.0; 42.9–59.1)	80/168 (47.6; 40.2–55.2)	26/45 (57.8; 43.0–71.3)	24/48 (50.0; 36.1–63.9)	16/32 (50.0; 33.2–66.8)	9/18 (50.0; 28.3–71.7)
70–89	118/284 (41.6; 36.0–47.4)	30/53 (56.6; 43.1–69.2)	33/79 (41.8; 31.4–52.9)	13/26 (50.0; 31.7–68.4)	26/74 (35.1; 25.1–46.6)	6/18 (33.3; 15.7–57.3)	5/20 (25.0; 10.8–48.0)	2/74 (50.0; 12.2–87.8)	3/10 (50.0; 9.9–62.6)
<b>Sex</b>									
Male	1802/2796 (64.5; 62.7–66.2)	409/625 (65.4; 61.6–69.1)	449/682 (65.8; 62.2–69.3)	354/534 (66.3; 62.2–70.2)	335/561 (59.7; 55.6–63.7)	68/105 (64.8; 55.1–73.3)	63/110 (57.3; 47.8–66.2)	69/95 (72.6; 62.8–80.7)	55/84 (65.5; 54.7–74.9)
Female	1463/2209 (66.2; 64.2–68.2)	331/480 (69.0; 64.7–72.9)	348/503 (69.2; 65.0–73.1)	279/426 (65.5; 60.8–69.9)	279/435 (64.1; 59.5–68.5)	62/101 (61.4; 51.5–70.4)	49/92 (53.3; 43.0–63.2)	62/91 (68.1; 57.8–76.9)	53/81 (65.4; 54.4–75.0)

**Table 8. Crude SARS-CoV-2 anti-nucleocapsid protein seroprevalence among Australian blood donors, by jurisdiction, age group and sex, 29 November – 13 December 2022 (Round 4)**

	<b>Overall</b> n/N (%; 95% CI)	<b>Victoria</b> n/N (%; 95% CI)	<b>NSW</b> n/N (%; 95% CI)	<b>Queensland</b> n/N (%; 95% CI)	<b>WA</b> n/N (%; 95% CI)	<b>SA</b> n/N (%; 95% CI)	<b>Tasmania</b> n/N (%; 95% CI)	<b>NT</b> n/N (%; 95% CI)	<b>ACT</b> n/N (%; 95% CI)
<b>Overall</b>	3537/4996 (70.8; 69.5–72.0)	777/1090 (71.3; 68.5–73.9)	855/1171 (73.0; 70.4–75.5)	672/992 (67.7; 64.8–70.6)	700/989 (70.8; 67.9–73.5)	147/203 (72.4; 65.9–78.1)	128/199 (64.3; 57.4–70.7)	135/184 (73.4; 66.5–79.3)	123/168 (73.2; 66.0–79.4)
<b>Age group (years)</b>									
18–29	706/849 (83.2; 80.5–85.5)	137/173 (79.2; 72.5–84.6)	197/233 (84.6; 79.3–88.7)	149/191 (78.0; 71.6–83.3)	123/138 (89.1; 82.7–93.3)	30/35 (85.7; 69.8–94.0)	21/24 (87.5; 67.5–95.9)	24/29 (82.8; 64.5–92.7)	25/27 (92.6; 74.6–98.2)
30–39	720/944 (76.3; 73.5–78.9)	135/176 (76.7; 69.9–82.4)	170/219 (77.6; 71.6–82.7)	123/169 (72.8; 65.6–79.0)	167/214 (78.0; 72.0–83.1)	26/36 (72.2; 55.5–84.4)	21/33 (63.6; 46.2–78.1)	48/60 (80.0; 67.9–88.3)	30/37 (81.1; 65.2–90.8)
40–49	694/912 (76.1; 73.2–78.8)	155/207 (74.9; 68.5–80.3)	165/207 (79.7; 73.7–84.7)	126/184 (68.5; 61.4–74.8)	148/186 (79.6; 73.2–84.8)	29/35 (82.9; 66.6–92.1)	20/29 (69.0; 50.2–83.1)	27/32 (84.4; 67.4–93.4)	24/32 (75.0; 57.3–87.0)
50–59	703/1053 (66.8; 63.9–69.5)	171/248 (69.0; 62.9–74.4)	168/249 (67.5; 61.4–73.0)	139/208 (66.8; 60.1–72.9)	136/209 (65.1; 58.4–71.2)	29/41 (70.7; 55.1–82.6)	22/36 (61.1; 44.5–75.5)	17/30 (56.7; 38.7–73.0)	21/32 (65.6; 47.8–79.9)
60–69	548/915 (59.9; 56.7–63.0)	149/228 (65.4; 58.9–71.3)	111/186 (59.7; 52.5–66.5)	105/183 (57.4; 50.1–64.4)	95/170 (55.9; 48.3–63.2)	24/37 (64.9; 48.4–78.5)	29/51 (56.9; 43.0–68.7)	17/28 (60.7; 41.9–76.8)	18/32 (56.3; 38.9–72.2)
70–89	166/323 (51.4; 46.0–56.8)	30/58 (51.7; 39.0–64.2)	44/77 (57.1; 45.9–67.7)	30/57 (52.6; 39.8–65.2)	31/72 (43.1; 32.3–54.7)	9/19 (47.4; 26.7–69.0)	15/26 (57.7; 38.4–74.9)	2/5 (40.0; 9.9–80.2)	5/9 (55.6; 25.0–82.5)
<b>Sex</b>									
Male	1968/2784 (70.7; 69.0–72.4)	427/593 (72.0; 68.3–75.5)	494/676 (73.1; 69.6–76.3)	367/555 (66.1; 62.1–70.0)	390/549 (71.0; 67.1–74.7)	70/102 (68.6; 59.0–76.9)	74/117 (63.3; 54.1–71.5)	71/91 (78.0; 68.3–85.4)	75/101 (74.3; 64.8–81.9)
Female	1569/2212 (70.9; 69.0–72.8)	351/497 (70.6; 66.5–74.5)	362/496 (73.0; 69.6–76.3)	304/436 (69.7; 65.2–73.9)	309/439 (70.4; 65.9–74.5)	77/101 (76.2; 66.9–83.6)	54/82 (65.9; 54.9–75.3)	64/93 (68.8; 58.7–77.4)	48/68 (70.6; 58.7–80.2)

### 3. Demographic characteristics of study populations

Figure S1. Distribution of demographic characteristics among samples collected by round, compared with the broader blood donor population<sup>1</sup> and Estimated Residential Population (ERP)<sup>2</sup>, by age group (A) and sex (B) for each jurisdiction

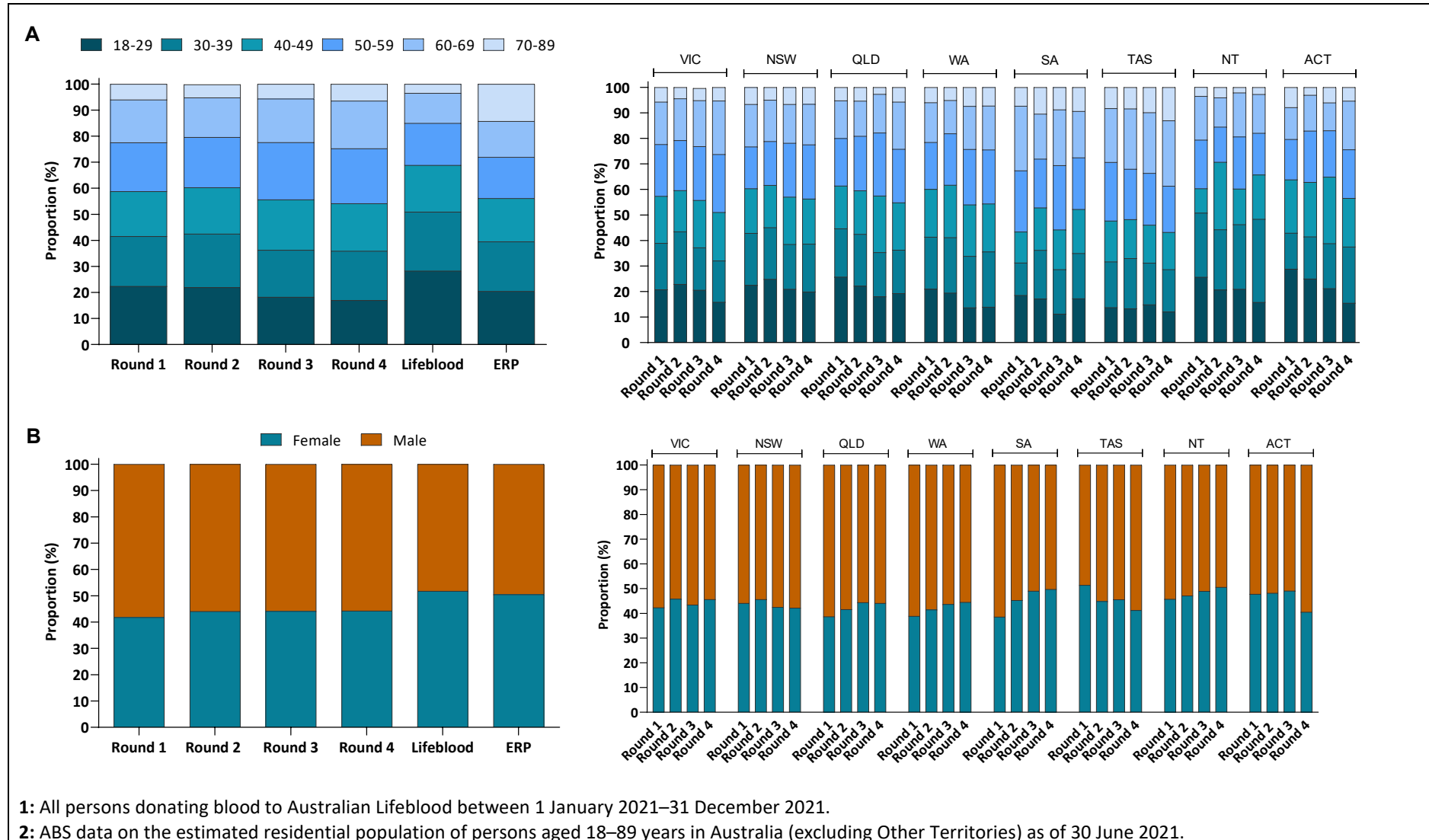
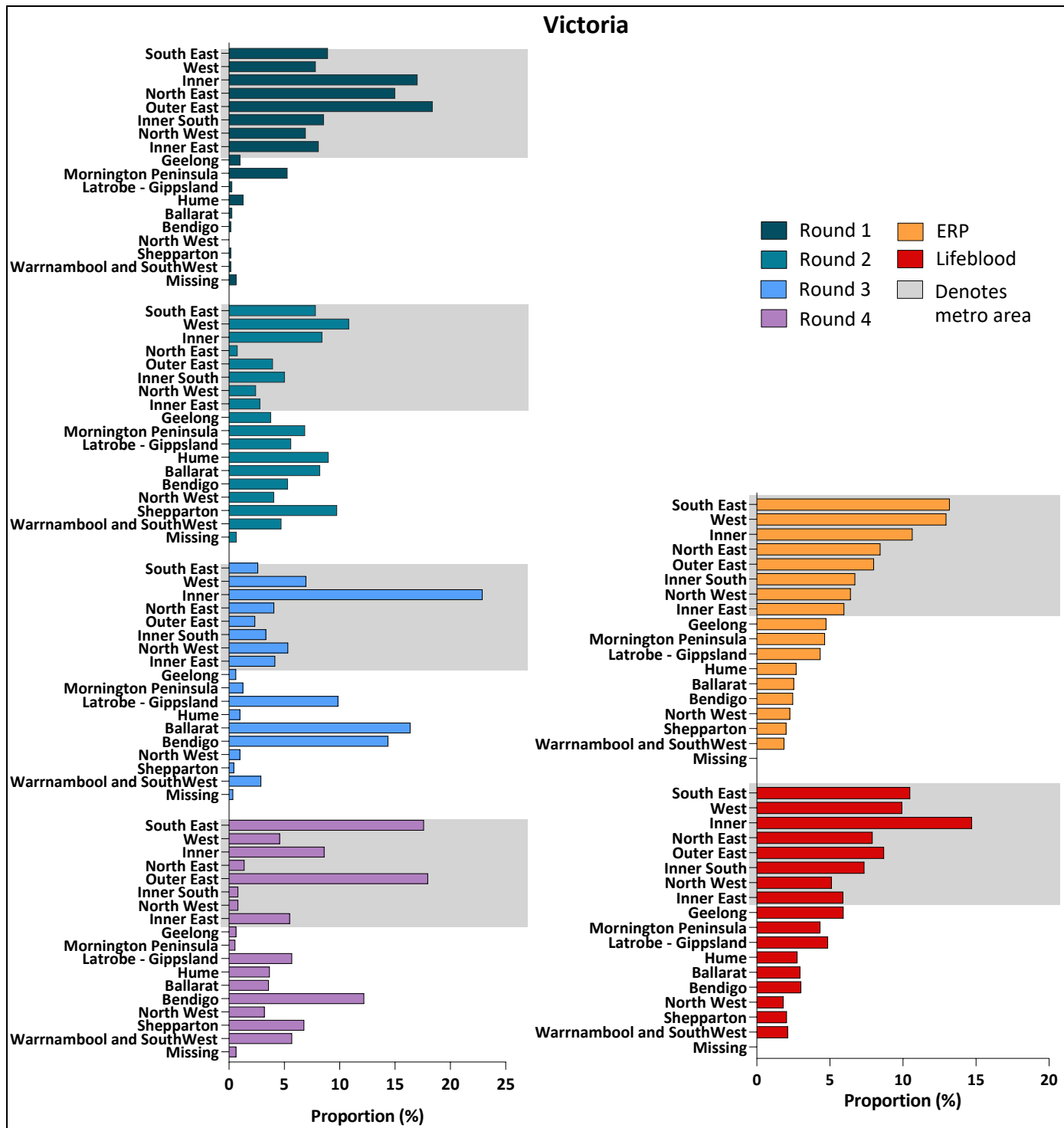
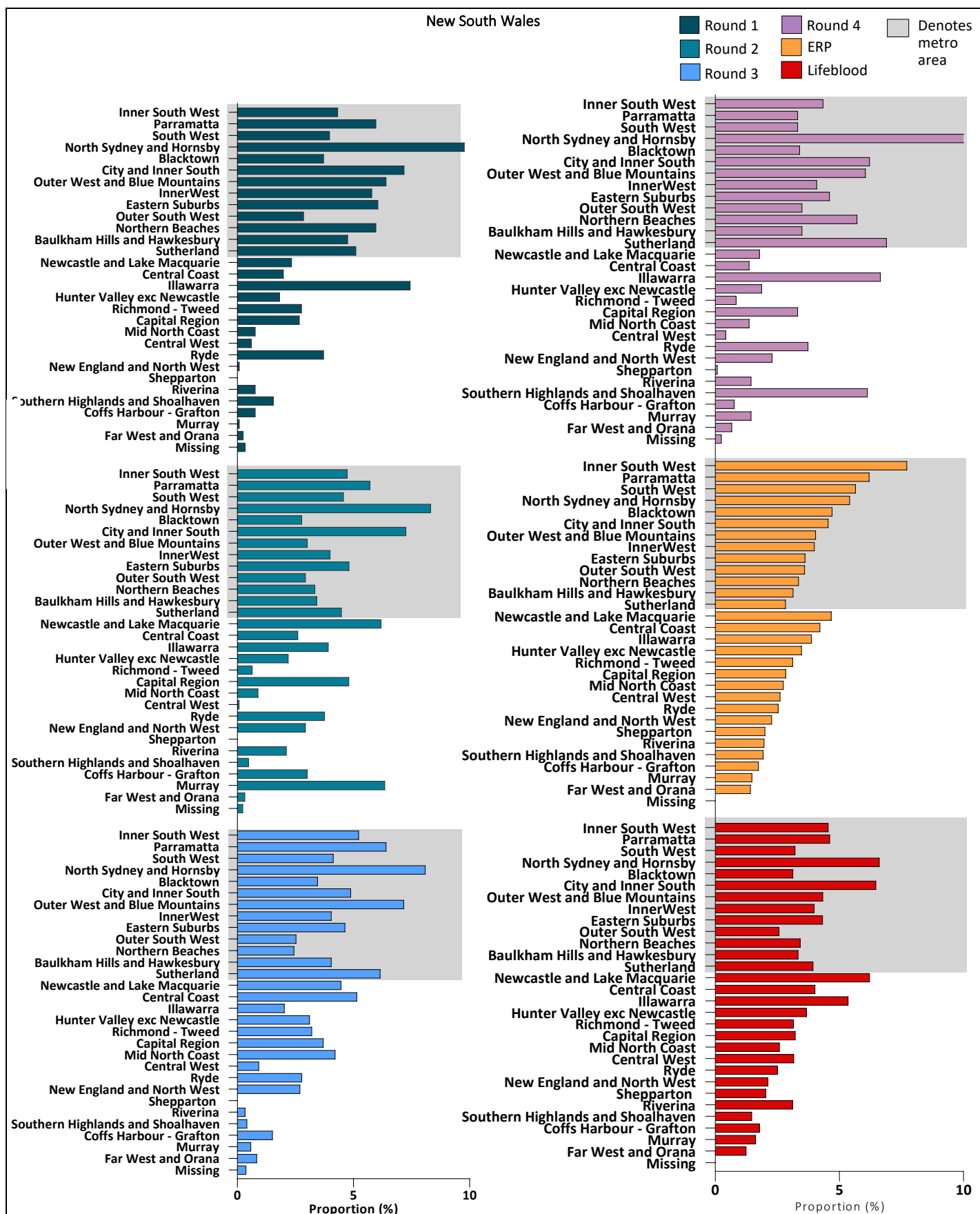


Figure S2. Distribution of demographic characteristics by Statistical Area Level 4 (SA4) in Victoria compared with the broader blood donor population<sup>1</sup> and Estimated Residential Population (ERP)<sup>2</sup>



1: All persons donating blood to Australian Lifeblood between 1 January 2021–31 December 2021.  
 2: ABS data on the estimated residential population of persons aged 18–89 years in Australia (excluding Other Territories) as of 30 June 2021.

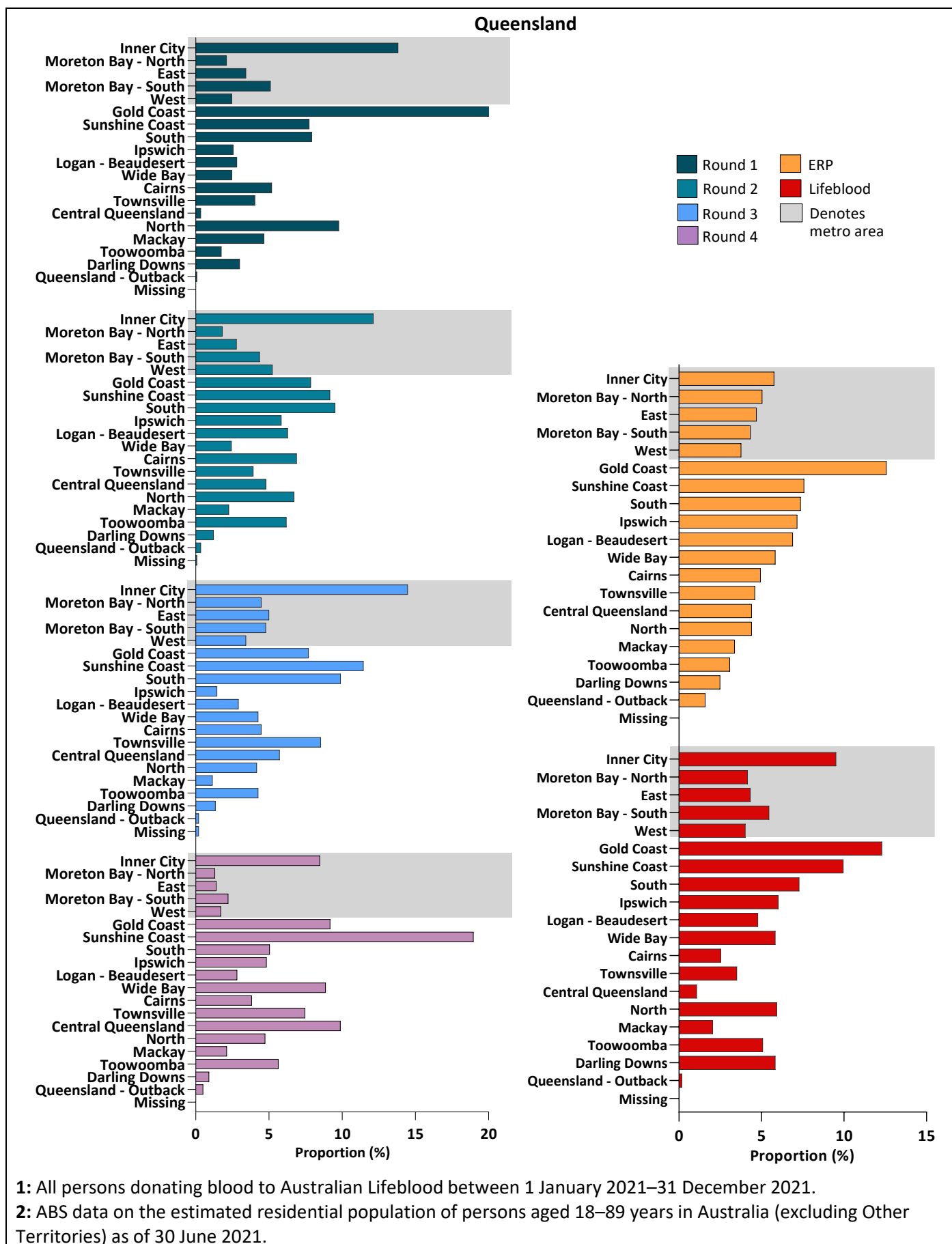
**Figure S3. Distribution of demographic characteristics by Statistical Area Level 4 (SA4) in New South Wales compared with the broader blood donor population<sup>1</sup> and Estimated Residential Population (ERP)<sup>2</sup>**



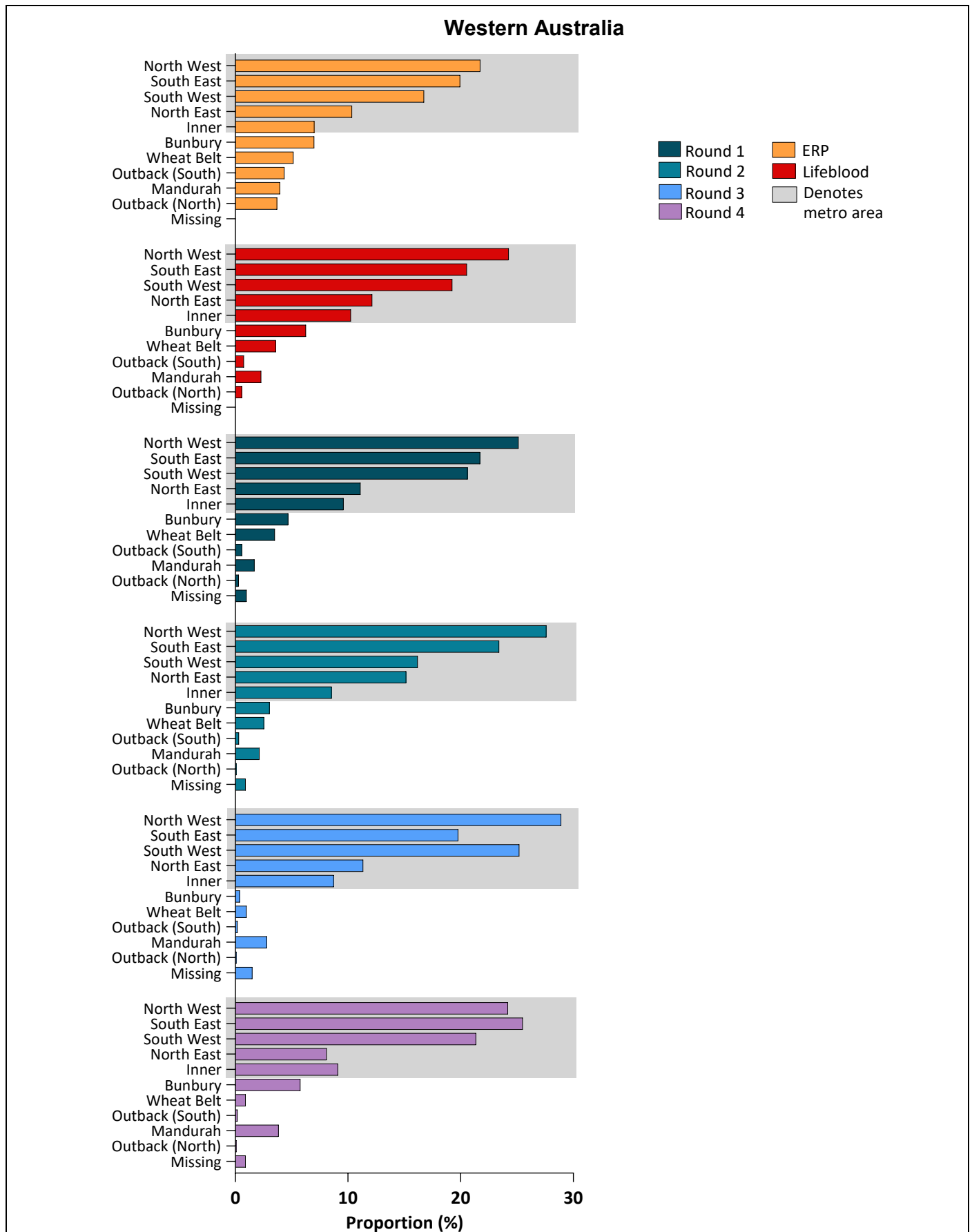
1: All persons donating blood to Australian Lifeblood between 1 January 2021–31 December 2021.

2: ABS data on the estimated residential population of persons aged 18–89 years in Australia (excluding Other Territories) as of 30 June 2021.

Figure S4. Distribution of demographic characteristics by Statistical Area Level 4 (SA4) in Queensland compared with the broader blood donor population<sup>1</sup> and Estimated Residential Population (ERP)<sup>2</sup>



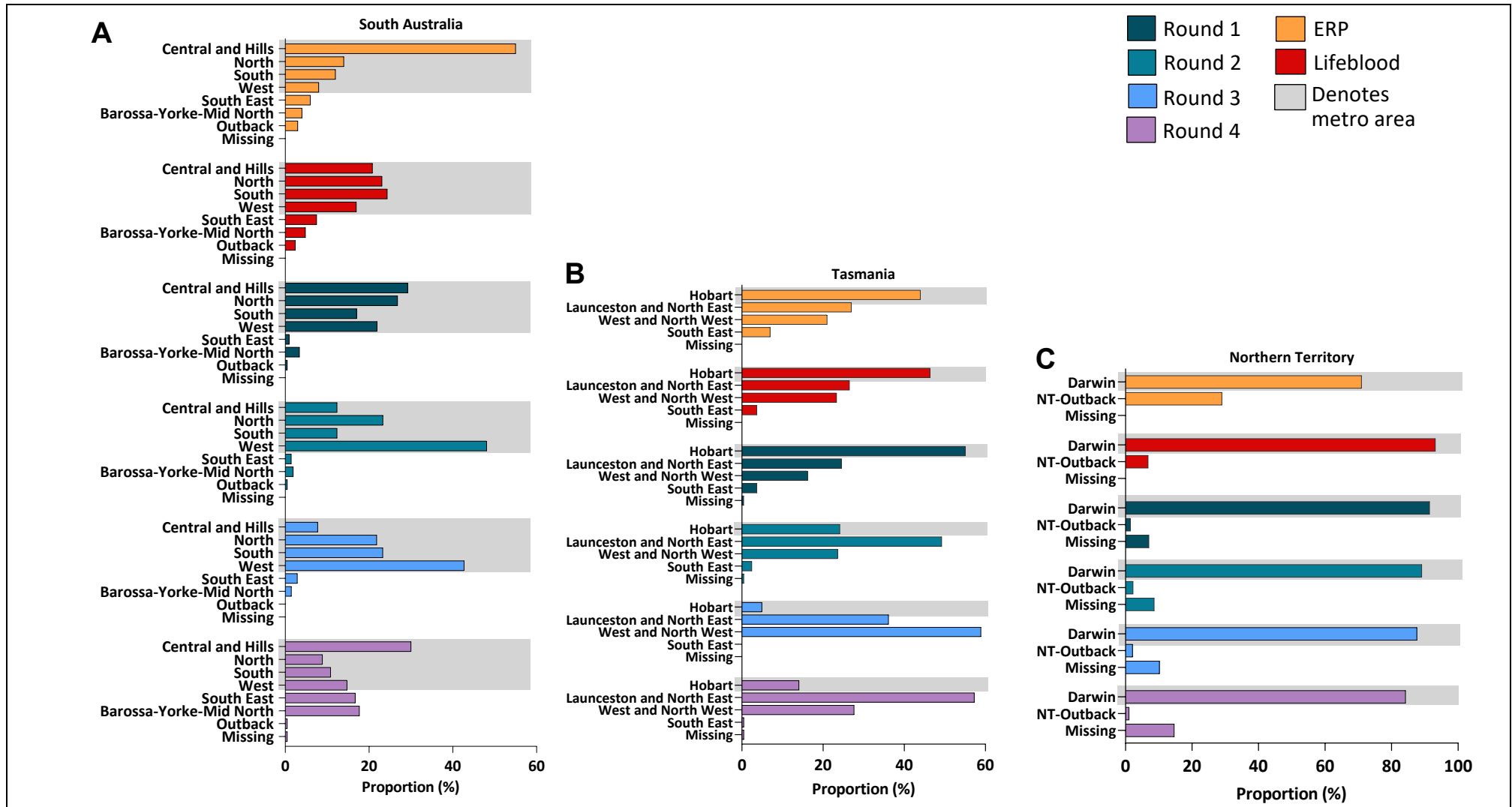
**Figure S5. Distribution of demographic characteristics by Statistical Area Level 4 (SA4) in Western Australia compared with the broader blood donor population<sup>1</sup> and Estimated Residential Population (ERP)<sup>2</sup>**



**1:** All persons donating blood to Australian Lifeblood between 1 January 2021–31 December 2021.

**2:** ABS data on the estimated residential population of persons aged 18–89 years in Australia (excluding Other Territories) as of 30 June 2021.

Figure S6. Distribution of demographic characteristics by Statistical Area Level 4 (SA4) in South Australia (A), Tasmania (B), and Northern Territory (C) compared with the broader blood donor population<sup>1</sup> and Estimated Residential Population (ERP)<sup>2</sup>



1: All persons donating blood to Australian Lifeblood between 1 January 2021–31 December 2021.

2: ABS data on the estimated residential population of persons aged 18–89 years in Australia (excluding Other Territories) as of 30 June 2021.

The Australian Capital Territory is made up of a single SA4 hence not presented.