Demographic Details

Of young Australians aged less than 26 years with a hearing loss, who have been fitted with a hearing aid or cochlear implant at 31 December 2018

Summary:

This circular contains summary data on children and young adults fitted with hearing aids or cochlear implants in Australia, who were under the age of 26 years at 31 December 2018 and who were provided with audiological and hearing aid or speech processor support services through Hearing Australia.

The data provides information at national and state / territory level and has been collated from Hearing Australia's electronic client and record management system databases (as a "snapshot"). It includes:

- Number of children who have an aided hearing loss
- Number of newly fitted children in the 2018 calendar year
- Fitting rates of children and young adults with hearing loss
- Hearing loss distribution of aided/implanted children and young adults
- Fitting rates for Aboriginal and Torres Strait Islander clients under 26 years of age.

The major characteristics of the report show:

- All aided and implanted children and young adults less than 26 years of age at 31 December 2018 who are identified as being 'current and active' as at 31 December 2018
- Data on children and young adults who were first fitted with hearing aids from 1 January to 31 December 2018.

Care should be taken when comparing information from previous reports, and particularly prior to 2007, due to their differing parameters, i.e. the dynamics of the child population characteristics and demography in the database, updated information and calculation rounding at the time the report was compiled.

Differences in other data and calculations shown for similar birth years in previous reports prior to 2007 are due to the timing of the 'snapshot" nature of the report (data were previously collated on 31 March each year) and a change from the way "hearing loss buckets" have been defined. In 2011, the "0-30dB & 31-60dB" groups changed to "0-40dB & 41-60dB" to better reflect the target condition of universal newborn hearing screening. Regular actions across the organization to review and update the information on all aided child clients in the database, have also affected the "snapshot" counts and calculations

Taking the above comments into account this report shows that on 31 December 2018 Hearing Australia provided audiological services, hearing aid and cochlear implant support to 25,381 citizens and permanent residents under 26 years of age, of which 2,274 (9 %) were Aboriginal or Torres Strait Islander.

- 22,326 were aged under 21 years;
  - 51.9% were male
  - 9.5% were Aboriginal or Torres Strait Islander
- 3,055 were aged from 21-25 years
  - 46.4% were male
  - 4.7% were Aboriginal or Torres Strait Islanders

During 2018 a total of 3,129 clients was fitted with hearing aids for the first time. 356 of these were children born in 2018. Of the clients first fitted during 2018,

- 2,876 were aged under 21 at the time of first fitting
- 253 were aged 21-25 years at the time of first fitting

Profile of the total client base.

At 31 December 2018, Hearing Australia supported the hearing rehabilitation needs of 25,381 citizens and permanent residents under 26 years of age. Figure 1 and Table 1 show the distribution of clients by state/territory of residence at 31 December 2018. Table 2 displays the distribution of clients aged less than 21 years. Table 3 displays the distribution of clients aged 21-25 years.

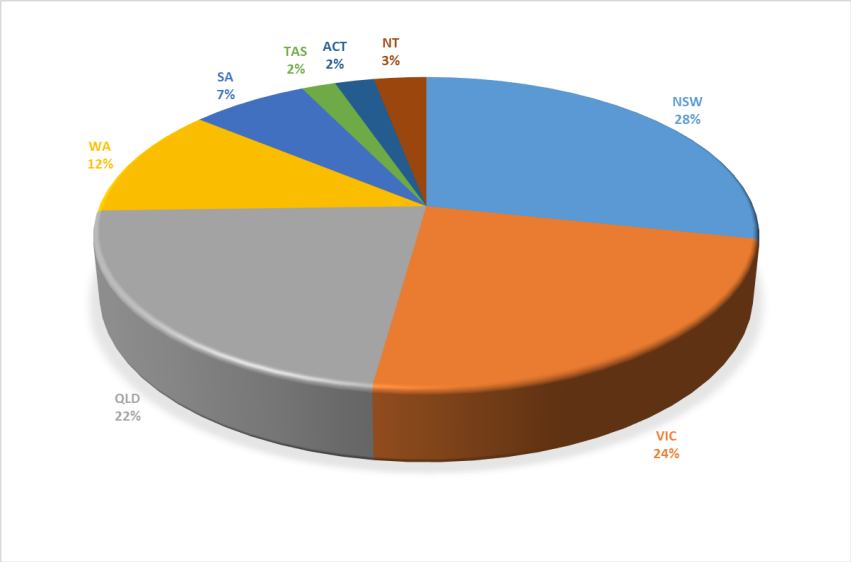

Figure 1: Aided/Implanted Young Australians less than 26 years of age, by state/territory – December 31, 2018.

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	National
Number	7195	6054	5673	2900	1721	501	571	766	25381
Percentage	28.3	23.9	22.4	11.4	6.8	2.0	2.2	3.0	100.0

Table 1: Distribution of Aided/Implanted Young Australians under 26 years of age, by state/territory.

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	National
Number	6255	5246	5060	2631	1515	427	499	693	22326
Percentage	28.0	23.5	22.7	11.8	6.8	1.9	2.2	3.1	100.0

Table 2: Distribution of Aided/Implanted Young Australians aged less than 21 years by state/territory

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	National
Number	940	808	613	269	206	74	72	73	3055
Percentage	30.8	26.4	20.1	8.8	6.7	2.4	2.4	2.4	100.0

Table 3: Distribution of Aided/implanted Young Australians aged from 21 to less than 26 years by state/territory

Nationally 12% of clients are Young Adults aged from 21 – 25 years.

Table 4 provides further detail about the distribution of aided clients by year of birth, state and territory.

Birth year	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	National
1993	178	175	122	57	42	12	16	14	616
1994	188	141	124	45	40	12	12	14	576
1995	188	171	122	56	42	17	12	16	624
1996	189	164	123	52	38	17	19	19	621
1997	197	157	122	59	44	16	13	10	618
1998	291	243	178	109	63	20	16	9	929
1999	296	240	189	119	74	23	24	11	976
2000	310	226	214	145	70	20	18	27	1030
2001	327	269	209	132	95	21	22	23	1098
2002	356	259	239	142	84	16	20	17	1133
2003	334	283	247	134	101	25	21	33	1178
2004	299	293	254	149	85	19	19	32	1150
2005	329	281	287	144	91	31	30	42	1235
2006	398	302	317	163	94	36	33	30	1373
2007	388	290	357	169	94	38	41	47	1424
2008	393	301	322	170	90	30	26	46	1378
2009	389	317	357	177	94	32	43	63	1472
2010	350	298	310	141	94	20	42	51	1306
2011	353	285	295	159	89	23	28	74	1306
2012	302	278	284	122	68	16	25	58	1153
2013	260	224	213	119	63	10	18	34	941
2014	217	216	204	96	60	10	24	40	867
2015	242	177	191	94	29	8	14	23	778
2016	174	184	153	57	23	12	15	13	631
2017	149	175	148	62	36	15	13	14	612
2018	98	105	92	28	18	2	7	6	356
Total	7195	6054	5673	2900	1721	501	571	766	25381

Table 4: All clients aged less than 26 years who have been fitted with a hearing aid and/or cochlear implant, National Summary by State/Territory and Birth Year at 31 December 2018

While over half (51.2%) of the total client base is male, this ratio is not preserved for the clients aged 21 – 25, of whom 46.4% are male. (Tables 5-7)

Gender	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	National
Male	52.4	51.7	51.6	49.7	49.0	50.1	47.8	47.5	51.2
Female	47.6	48.2	48.3	50.3	51.0	49.7	51.7	52.5	48.7
Intersex	0.1	0.0	0.1	0.0	0.1	0.2	0.5	0.0	0.1

Table 5: Gender of aided/implanted clients under 26 years of age by State/Territory as a percentage of the client base.

Gender	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	National
Male	52.9	52.4	52.5	50.2	49.9	49.6	48.9	48.5	51.9
Female	47.1	47.6	47.5	49.8	50.0	50.1	50.5	51.5	48.1
Intersex	0.0	0.1	0.1	0.0	0.1	0.2	0.6	0.0	0.1

Table 6: Gender of aided/implanted clients under 21years of age by State/Territory as a percentage of the client base.

Gender	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	National
Male	48.8	47.3	44.5	44.2	42.2	52.7	40.3	38.4	46.4
Female	50.9	52.7	55.5	55.8	57.8	47.3	59.7	61.6	53.6
Intersex	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

Table 7: Gender of aided/implanted clients 21 to <26 years of age by State/Territory as a percentage of the client base.

Hearing Loss

The vast majority of clients who use amplification have a 3 Frequency Average Hearing Loss (3FAHL) of 0 to 60 dBHL; that is their better ear hearing loss ranges from within normal limits to a moderate degree (Figure 2).

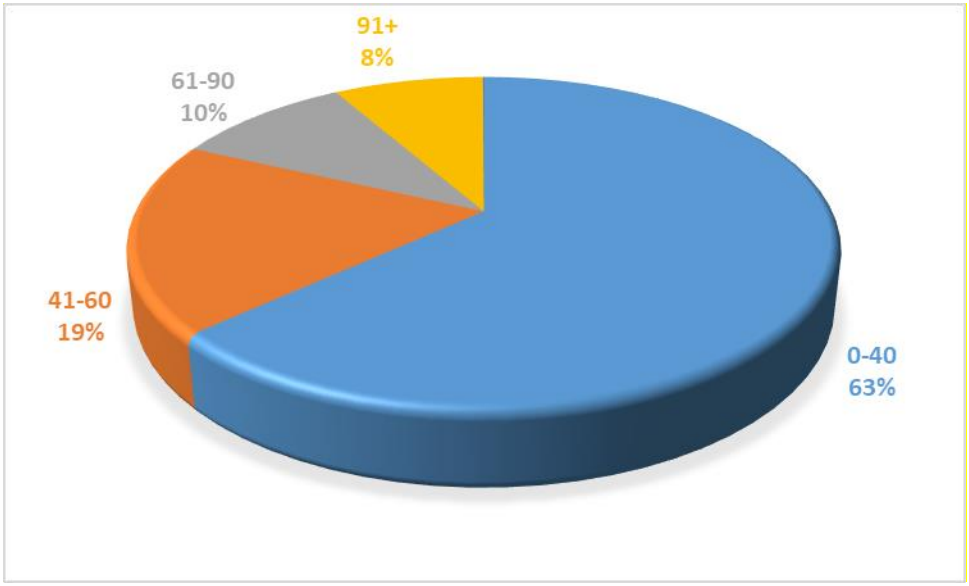

Figure 2: Distributionof hearing loss amongst total aided clients aged under 26 years at 31 December 2018 (3-Frequency Average Hearing Loss in the better ear)

The hearing loss profile for each state and territory is shown in Tables 8 & 9.

Better ear 3FAHL	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	National
0-40	4223	3677	3785	1962	1146	313	359	578	16043
41-60	1508	1119	991	488	302	108	109	131	4756
61-90	777	653	514	236	155	49	61	35	2480
91+	686	605	382	206	118	31	42	21	2091
Unknown	1	0	1	8	0	0	0	1	11
Total	7195	6054	5673	2900	1721	501	571	766	25381

Table 8: Latest Better Ear 3FA Hearing Loss of aided/implanted young Australians under 26 years of age at 31 December 2018

Better ear 3FAHL (dBHL)	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	National
0-40	58.7	60.7	66.7	67.7	66.6	62.5	62.9	75.5	63.2
41-60	21.0	18.5	17.5	16.8	17.5	21.6	19.1	17.1	18.7
61-90	10.8	10.8	9.1	8.1	9.0	9.8	10.7	4.6	9.8
91+	9.5	10.0	6.7	7.1	6.9	6.2	7.4	2.7	8.2
Unknown	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 9: Latest 3FA Hearing Loss of aided/implanted young Australians under 26 years of age, Percentage distribution

The hearing loss distribution amongst clients aged 21-25 differs from that of the younger age cohort, showing a higher proprotion of clients in the older cohort with more severe hearing losses. This is most likely to occur because children who are fitted to help manage mild or unilateral hearing loss in an education setting, cease device usage when they leave school.

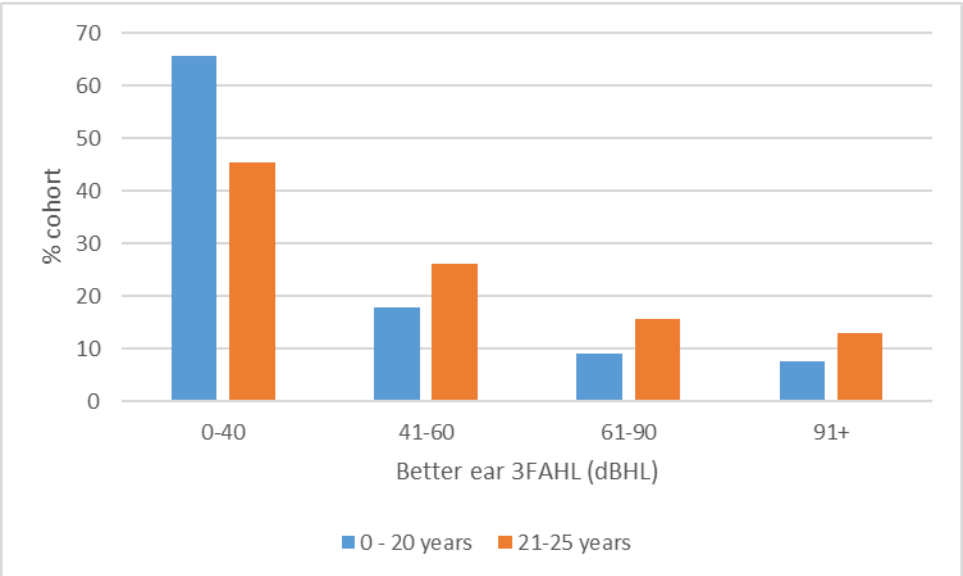

Figure 3: Hearing Loss distribution according to age cohorts (under 21 years vs 21 – 25 years) at 31 December 2018

Trends in device fitting

1. Hearing loss

Figure 4 displays fitting rates per thousand live births according to the better ear 3-Frequency-Average hearing loss for clients aged 0- 20 years, since 2010, when the demographic report began to use the current hearing loss groupings.

While fitting rates for moderate and greater degrees of hearing loss have remained stable, fitting rates have increased for those who have normal hearing to a mild loss in the better ear.

Several factors are likely to contribute to this increase:

- Improved technical flexibility of hearing aids to fit mild losses
- Increasing options for children with unilateral hearing loss, including the fitting of cochlear implants to children who have unaidable hearing in one ear and normal hearing in the other ear (also called Single Sided Deafness)
- Increased focus on fitting hearing aids to assist children who have a long-term conductive hearing loss due to middle ear disease
- Increasing focus upon the possible adverse impacts of mild & unilateral hearing loss on development.

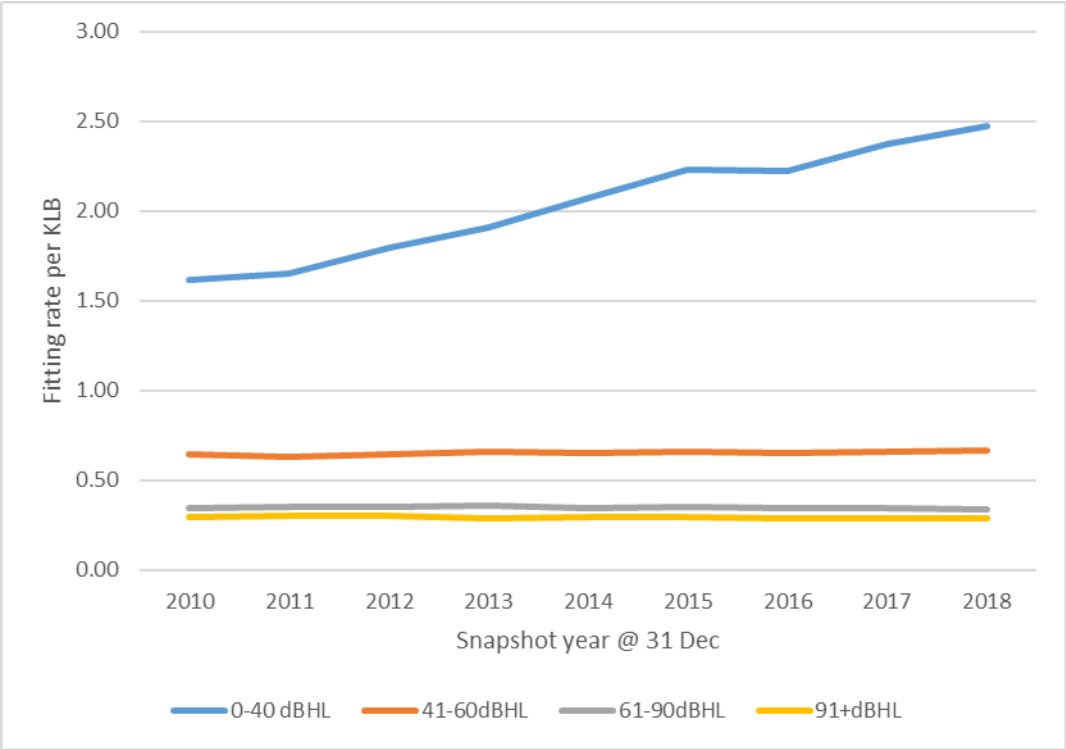

Figure 4: Fitting rates according to better ear 3-Frequency-Average Hearing loss since 2010 – clients from birth to 20 years of age. (Snapshot at 31 December, 2018)

Not all children have the same degree of hearing loss in each ear. Table 10a shows the distribution of better/worse hearing loss across all aided young Australians under 7 years of age while Table 10b shows the same data for clients aged 7 to 25 years.

- 62% of the younger age group have the same degree of hearing loss in both ears, compared with 56% of the older age group (note that this does not mean thresholds are identical in both ears)
- Clients aged from 7 – 25 years have a higher proportion of children who have been aided for what appears to be a unilateral hearing loss. 4% of this age group have a better ear 3 Frequency Average Hearing Loss less than 15 dBHL, compared with 1% of the children aged less than 7 years.
- The older age group also contains a greater proportion of aided children who have thresholds that are in the mild range of 0-40dBHL (3 Frequency Average) in both ears.

Notes:

Some caution should be applied when interpreting data for children with a hearing loss in the 0-14 dBHL range. This data indicates that the average hearing loss at 500, 1000 and 2000Hz is less than 15dBHL, but does not necessarily mean hearing loss is within normal limits for all frequencies from 250 – 8000 Hz.

		Worse ear 3FAHL (dBHL)						
Better ear 3FAHL (dBHL)		0-14	15-40	41-60	61-90	91+	Unknown	Total
	0-14	1%	3%	2%	3%	2%	0%	12%
	15-40		28%	11%	5%	2%	0%	47%
	41-60			17%	4%	1%	0%	22%
	61-90				9%	3%	0%	11%
	91+					7%	0%	7%
	Total	1%	32%	31%	21%	15%	1%	100%

Table 10a: comparison of better ear and worse ear hearing loss groupings – clients aged less than 7 years @ 31 December 2018

		Worse ear 3FAHL (dBHL)						
Better ear 3FAHL (dBHL)		0-14	15-40	41-60	61-90	91+	Unknown	Total
	0-14	4%	9%	5%	4%	3%	0%	25%
	15-40		25%	9%	3%	2%	0%	39%
	41-60			13%	4%	1%	0%	18%
	61-90				6%	3%	0%	9%
	91+					8%	0%	8%
	Total	4%	34%	28%	17%	18%	0%	100%

Table 10b: comparison of better ear and worse ear hearing loss groupings – clients aged 7-25 years @ 31 December 2018

Cochlear Implants

The database indicates that 3,055 children and young adults use a cochlear implant speech processor in one or both ears. While Hearing Australia supports maintenance and provides upgrade and replacement speech processors for these clients, the fitting and programming of the speech processors is undertaken by external clinics. Thus the data below are reliant upon the provision of information from external clinics and may not necessarily reflect the total number of clients who use a speech processor. The distribution of clients by year of birth and state/territory is shown in Table 11.

Birth year	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	National
1993	30	18	14	4	2	1	2	0	71
1994	27	19	17	9	4	0	3	0	79
1995	35	15	10	10	5	0	4	0	79
1996	36	30	18	9	5	0	1	0	99
1997	30	28	19	8	8	4	3	0	100
1998	40	31	17	9	6	2	0	0	105
1999	53	29	21	11	6	3	5	0	128
2000	43	25	30	17	1	1	5	1	123
2001	41	30	28	7	10	1	4	0	121
2002	56	40	34	7	5	3	4	1	150
2003	44	33	28	20	12	2	3	1	143
2004	44	28	30	17	7	2	1	0	129
2005	46	33	26	12	5	3	7	1	133
2006	45	30	31	16	4	1	4	1	132
2007	53	45	44	12	7	5	7	0	173
2008	51	38	28	13	7	2	6	0	145
2009	56	29	36	20	4	5	7	0	157
2010	61	31	30	8	5	3	1	1	140
2011	59	47	21	15	8	2	4	0	156
2012	57	37	43	10	11	1	5	2	166
2013	42	34	25	15	10	2	3	1	132
2014	39	38	25	16	9	0	6	1	134
2015	43	25	21	13	5	3	3	1	114
2016	28	21	18	9	1	1	3	3	84
2017	21	12	7	13	1	0	1	0	55
2018	4	1	0	1	0	0	1	0	7
Total	1084	747	621	301	148	47	93	14	3055

Table 11: Clients who have been fitted with a cochlear implant in one or both ears, by state/territory and birth year[1] at 31 December 2018.

[1] *Data likely to under-estimate cochlear implantee numbers*

Clients first fitted with hearing aids in 2018

Fitting rates remain relatively stable. During 2018, a total of 3,129 clients under 26 years of age were first fitted with amplification, a decrease of 1.3% from the previous year. 2,876 were aged less than 21 years at the time of first fitting whilst 253 were aged from 21 – 25 years. The distribution of clients by state and territory is found in Tables 12&13, with a more detailed analysis according to year of birth, state and territory in Table 14.

Clients first fitted – by state & territory.

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	National
Number	688	722	680	351	186	65	63	121	2876
Percentage	23.9	25.1	23.6	12.2	6.5	2.3	2.2	4.2	100.0

Table 12: Distribution of children under 21 years of age and fitted for the first time in 2018 - by state and territory.

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	National
Number	71	61	62	20	14	2	8	15	253
Percentage	28.1	24.1	24.5	7.9	5.5	0.8	3.2	5.9	100.0

Table 13: Distribution of clients aged 21 – 25 years of age and fitted for the first time in 2018– by state and territory

Birth year	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	National
1993	14	19	17	8	3	1	2	4	68
1994	12	8	12	3	5	0	2	5	47
1995	8	17	9	2	0	0	2	4	42
1996	21	9	12	3	1	0	2	2	50
1997	16	8	12	4	5	1	0	0	46
1998	20	12	17	4	6	1	1	0	61
1999	11	11	16	6	10	2	2	0	58
2000	19	10	10	5	4	3	0	1	52
2001	22	16	13	6	6	1	2	1	67
2002	26	16	14	8	8	1	1	1	75
2003	10	21	14	9	4	2	1	2	63
2004	17	16	17	11	10	2	1	3	77
2005	17	17	15	10	7	2	4	1	73
2006	29	24	24	17	8	5	2	2	111
2007	41	27	27	13	5	5	3	2	123
2008	22	31	30	20	9	6	3	1	122
2009	30	40	35	20	9	6	7	6	153
2010	33	43	33	18	11	2	4	10	154
2011	45	42	48	35	14	4	2	13	203
2012	59	58	55	37	12	3	6	18	248
2013	36	44	47	38	10	5	3	20	203
2014	27	41	45	21	13	3	3	19	172
2015	29	33	37	13	3	1	3	9	128
2016	41	33	24	6	3	3	3	2	115
2017	56	82	67	26	16	6	5	4	262
2018	98	105	92	28	18	2	7	6	356
Total	759	783	742	371	200	67	71	136	3129

Table 14: Clients less than 26 years of age who were first fitted with hearing aids in 2018. National Summary by State/Territory and Birth year.

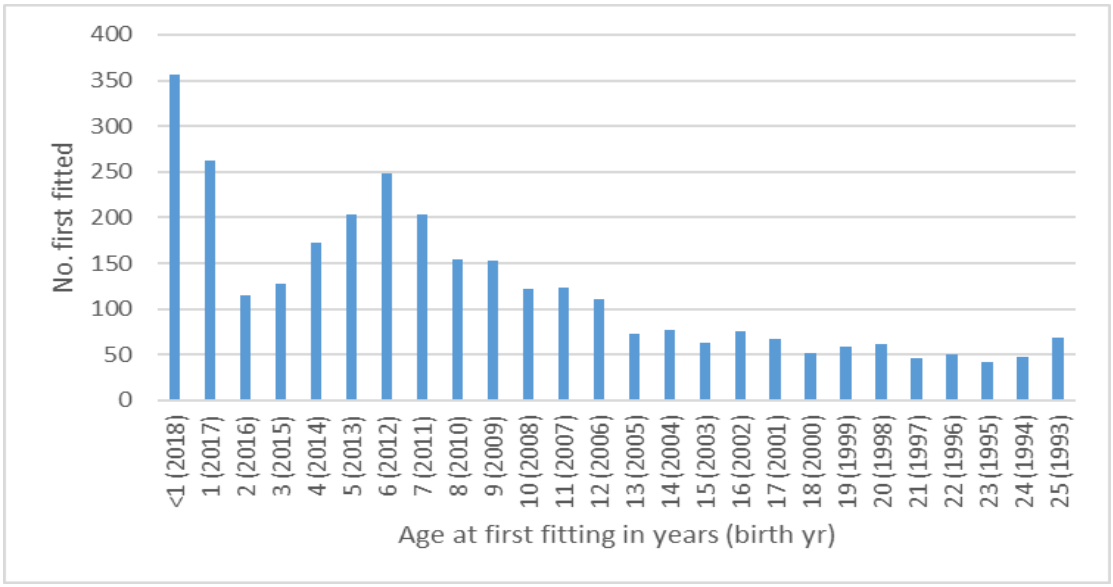

Figure 5: Clients first fitted with hearing aids during 2018, according to age & year of birth

The impact of Universal Newborn Hearing Screening continues to be apparent in the fitting profile of children shown in Figure 5, with the birth year 2018 showing the highest number of new fittings (11.4% of the total new fittings). A second peak in fittings occurs in early primary school. As can be seen in Figure 6, the vast majority of children who receive their first hearing aids in primary school have a mild or unilateral hearing loss (Better Ear 3FAHL $\leq$ 40 dBHL). A more detailed analysis by Birth Year and 3FAHL is found in Table 15.

"Late" hearing aid fittings may be due to a number of factors including

- Late onset or progressive sensorineural hearing loss,
- Children who develop a chronic conductive hearing loss due to Otitis Media,
- Children with a mild or unilateral hearing loss that was either
    - Diagnosed at an early age, but which did not require assistance with hearing until school entry or
    - Not detected until school entry.

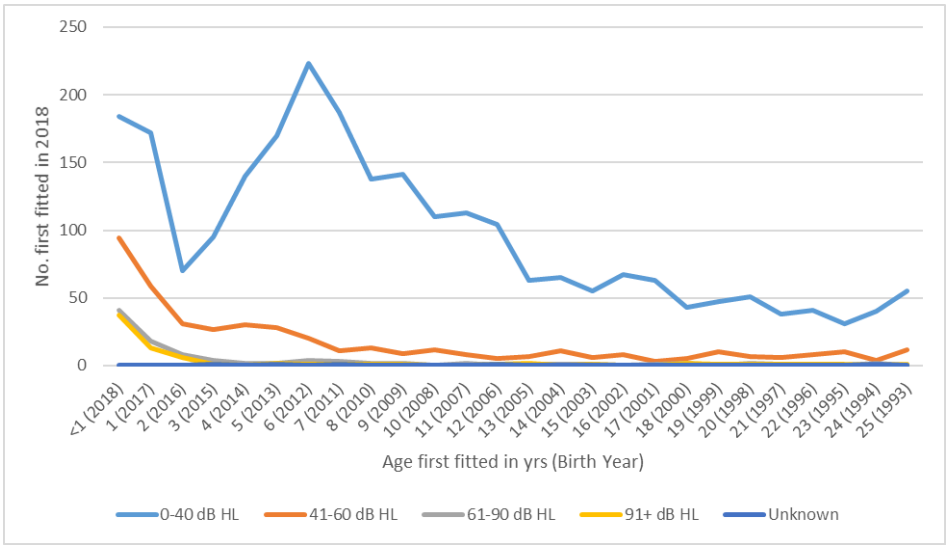

Figure 6: Hearing profile of clients first fitted in 2018 by age, better ear 3FAHL at 31 December 2018.

Birth year	0-40 dB HL	41-60 dB HL	61-90 dB HL	91+ dB HL	Unknown	Total	Percentage
1993	55	12	0	1	0	68	2.2
1994	40	4	2	0	1	47	1.5
1995	31	10	0	1	0	42	1.3
1996	41	8	0	1	0	50	1.6
1997	38	6	1	1	0	46	1.5
1998	51	7	2	1	0	61	1.9
1999	47	10	0	1	0	58	1.9
2000	43	5	2	2	0	52	1.7
2001	63	3	1	0	0	67	2.1
2002	67	8	0	0	0	75	2.4
2003	55	6	1	1	0	63	2.0
2004	65	11	1	0	0	77	2.5
2005	63	7	1	2	0	73	2.3
2006	104	5	0	1	1	111	3.5
2007	113	8	2	0	0	123	3.9
2008	110	12	0	0	0	122	3.9
2009	141	9	2	1	0	153	4.9
2010	138	13	2	1	0	154	4.9
2011	187	11	3	1	1	203	6.5
2012	223	20	4	1	0	248	7.9
2013	170	28	2	2	1	203	6.5
2014	140	30	2	0	0	172	5.5
2015	95	27	4	1	1	128	4.1
2016	70	31	8	6	0	115	3.7
2017	172	59	18	13	0	262	8.4
2018	184	94	41	37	0	356	11.4
Total	2506	444	99	75	5	3129	100.0

Table 15: Clients first fitted in 2018, by birth year and better ear 3FAHL category

Aboriginal and Torres Strait Islander clients.

Aboriginal and Torres Strait Islander children comprise 9.5% of the total aided/implanted child client base. They accounted for 80.8% of newly fitted children in the Northern Territory, 17.5% in Queensland and 22.4% in Western Australia.

While the peak age of first fitting for the entire child client base occurs in the first year of life (Figure 7), for the past ten years the peak for Aboriginal and Torres Strait Islander children has occurred in the primary school years. For the first time, 2018 data is suggesting that the peak is beginning to transition to the pre-school years (Figure 8).

This difference in peak first fitting age can be partially explained by the differences in cause of hearing loss between the two groups. A large proportion of hearing loss in non-Indigenous children is present and identified at birth. A large proportion of hearing loss experienced by Aboriginal and Torres Strait Islander children relates to ear disease which is not present at birth, but which appears early in life.

Since 2008, when this issue was identified, a range of actions have been taken across the Aboriginal and Torres Strait Islander hearing health sector, including by Hearing Australia, to diagnose hearing loss and intervene earlier. Analysis of 2008-2018 data shows a statistically significant increase over time for Aboriginal and Torres Strait Islander children in the probability of being fitted before age 1 year, before age 2 years, and before age 5 years.

In 2008, one in ten Aboriginal and Torres Strait Islander children aged 20 or younger were aided before the age of five years. In 2018, this had increased to one in 3.4 being aided before turning five. (Figure 8)

Table 16 shows the distribution of Aboriginal and Torres Strait Islander clients by birth year and state, while Table 17 shows the distribution of Aboriginal and Torres Strait Islander clients first fitted in 2018.

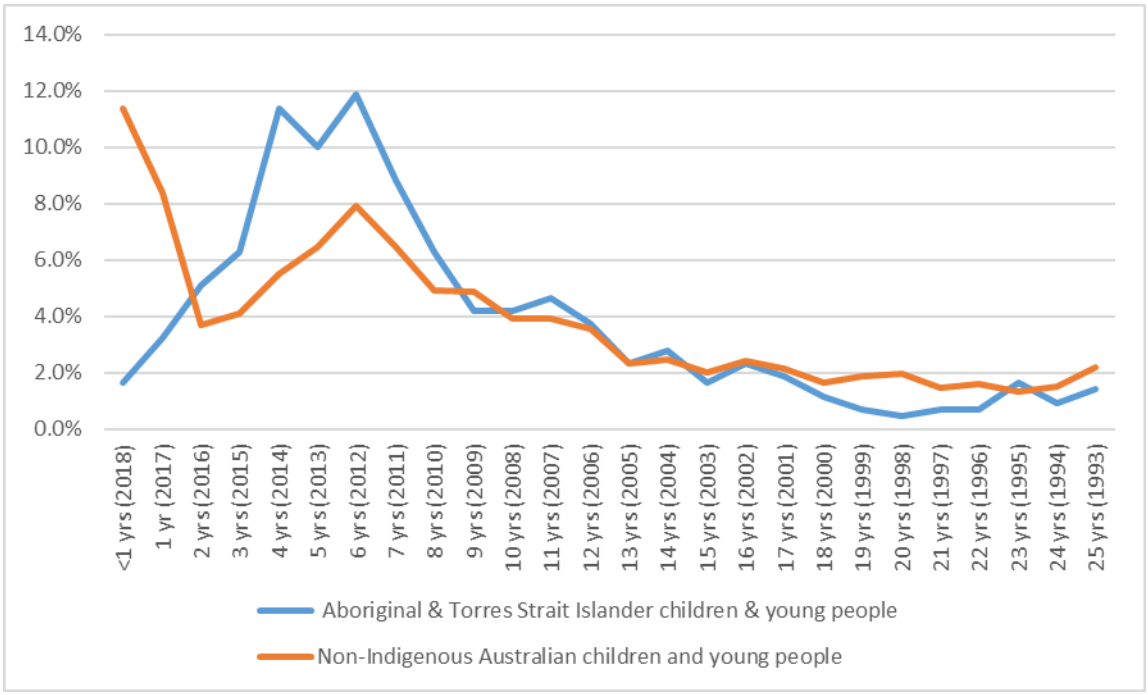

Figure 7: Age distribution of children first fitted in 2018, as a proportion of total new fittings – Aboriginal and/or Torres Strait Islander clients vs. non-Indigenous clients

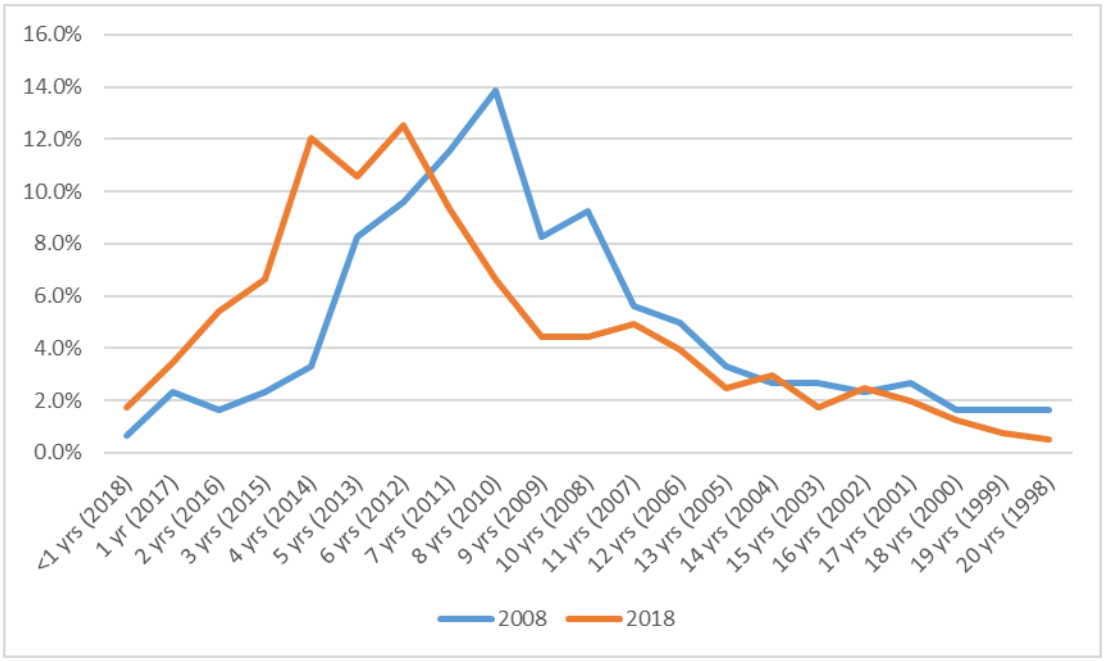

Figure 8: Age at first hearing aid fitting as a proportion of new fittings for Aboriginal and/or Torres Strait Islander clients first fitted in 2008 vs 2018.

Birth year	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	National
1993	3	1	7	3	0	0	0	11	25
1994	6	0	5	3	0	1	0	10	25
1995	6	1	12	0	1	0	0	15	35
1996	6	2	5	0	0	0	0	15	28
1997	8	1	6	3	5	0	0	8	31
1998	15	3	10	12	1	1	1	5	48
1999	22	6	2	12	3	0	1	9	55
2000	18	6	17	16	4	2	0	21	84
2001	18	2	16	28	14	0	1	17	96
2002	22	6	18	19	9	0	0	15	89
2003	17	1	30	12	12	2	0	28	102
2004	20	4	35	23	7	0	1	27	117
2005	21	3	41	21	5	2	1	28	122
2006	23	9	33	25	10	2	1	21	124
2007	30	9	46	28	6	1	0	37	157
2008	38	4	46	29	6	1	0	37	161
2009	20	8	38	28	10	0	0	56	160
2010	15	6	45	23	5	0	2	47	143
2011	19	2	56	31	7	1	1	64	181
2012	18	1	39	29	1	2	1	52	143
2013	12	1	31	25	7	0	0	23	99
2014	10	2	40	15	3	0	1	33	104
2015	11	2	28	4	0	0	1	17	63
2016	14	3	20	6	2	0	1	5	51
2017	6	1	10	4	0	0	0	3	24
2018	2	1	3	0	0	1	0	0	7
Total	400	85	639	399	118	16	13	604	2274

Table 16: Aboriginal and/or Torres Strait Islander clients aged less than 26 years who have been fitted with a hearing aid and/or cochlear implant, National summary by State/Territory and Birth Year – 31 December, 2018

Birth year	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	National
1993	0	0	1	2	0	0	0	3	6
1994	0	0	0	0	0	0	0	4	4
1995	1	1	1	0	0	0	0	4	7
1996	0	0	1	0	0	0	0	2	3
1997	1	0	0	1	1	0	0	0	3
1998	1	0	1	0	0	0	0	0	2
1999	1	1	0	0	1	0	0	0	3
2000	1	0	1	1	1	0	0	1	5
2001	3	0	0	3	2	0	0	0	8
2002	3	1	2	2	1	0	0	1	10
2003	0	1	2	2	0	0	0	2	7
2004	5	1	3	0	0	0	0	3	12
2005	1	0	3	2	2	0	1	1	10
2006	2	0	5	6	1	1	0	1	16
2007	6	2	5	5	1	0	0	1	20
2008	2	1	8	5	0	1	0	1	18
2009	0	2	3	5	3	0	0	5	18
2010	4	2	7	4	1	0	1	8	27
2011	4	0	11	10	1	0	0	12	38
2012	5	0	13	13	1	1	0	18	51
2013	3	0	12	13	2	0	0	13	43
2014	3	1	18	5	3	0	0	19	49
2015	3	1	14	1	0	0	0	8	27
2016	8	2	8	1	1	0	0	2	22
2017	3	0	8	2	0	0	0	1	14
2018	2	1	3	0	0	1	0	0	7
Total	62	17	130	83	22	4	2	110	430

Table 17: Aboriginal and/or Torres Strait Islander clients first fitted with hearing aids in 2018, National Summary by State/Territory and Birth Year.

Further information can be found in the summary tables in Appendix A.

Early Diagnosis – Newborn Hearing Screening

The target condition for Universal Newborn Hearing Screening (UNHS) is a bilateral, moderate or greater degree of sensorineural hearing loss. Evidence supports fitting of hearing aids by 6 months of age as promoting the best outcomes for children with congenital hearing loss.

Previous versions of this report have compared early hearing aid fittings with an expected incidence of moderate or greater, bilateral congenital hearing loss equal to 1.1 per thousand births and have not distinguished between the degrees of hearing loss amongst newly fitted babies. Recently the Australasian Newborn Hearing Screening Committee estimated that 0.9 children per thousand born will have a bilateral hearing loss of 40dB 3FAHL or greater.

Tables 18-26 present data about the expected number of children who would be born with the target hearing loss each year, the number of children fitted before 6 and 12 months of age and the % of expected fittings achieved for each state, territory and nationally. Universal Newborn Hearing Screening began in NSW in December 2002, rolling out around the nation over the next 9 years. The impact of UNHS can be seen in the increased fitting rates of infants over time in each state and territory.

- Data capture for the 2018 birth year is not yet complete because some babies who were born in 2018 will not turn 6 or 12 months of age until 2019.
- States and Territories with low birth rates are likely to demonstrate greater variation in the percentage of babies fitted before 6 and 12 months of age.
- There are a range of reasons why some babies may not be fitted with their first hearing aids before 6 months of age, including
    - Other health issues taking priority over management of the hearing loss
    - Attendance at appointments
    - Family choice.
- Note that the numbers of children born & aided in years prior to 2018 may vary from past reports if children ceased receiving service over the past year, due to ceasing device use, changing state or country of residence or becoming deceased.

Tables 18 – 26: Expected and Actual numbers of children fitted before 6 months and 12 months of age, who have a better ear 3FAHL >40dBHL. Births from ABS CAT 3301.0 except for 2018 which is an estimate.

Birth Year	Expected	Fit <6mth	Fit <12mth	% Fit <6mth	% Fit <12mth
2003	226	66	103	29.2	45.6
2004	229	78	103	34.1	45.0
2005	238	82	125	34.5	52.5
2006	244	130	162	53.3	66.4
2007	263	134	165	51.0	62.7
2008	272	151	177	55.5	65.1
2009	271	173	202	63.8	74.5
2010	273	155	187	56.8	68.5
2011	271	168	196	62.0	72.3
2012	279	187	221	67.0	79.2
2013	277	187	222	67.5	80.1
2014	270	201	229	74.4	84.8
2015	275	233	266	84.7	96.7
2016	280	218	252	77.9	90.0
2017	278	224	263	80.6	94.6
2018	278	162	172	58.3	61.9

Table 18 - National

Birth Year	Expected	Fit <6mth	Fit <12mth	% Fit <6mth	% Fit <12mth
2003	78	35	42	44.9	53.8
2004	77	33	44	42.9	57.1
2005	82	33	47	40.2	57.3
2006	83	51	65	61.4	78.3
2007	87	38	52	43.7	59.8
2008	90	60	69	66.7	76.7
2009	88	61	71	69.3	80.7
2010	91	51	61	56.0	67.0
2011	89	67	76	75.3	85.4
2012	89	51	60	57.3	67.4
2013	90	56	65	62.2	72.2
2014	82	63	68	76.8	82.9
2015	90	86	95	95.6	105.6
2016	86	62	67	72.1	77.9
2017	87	60	64	69.0	73.6
2018	87	52	53	59.8	60.9

Table 19 - NSW

Birth Year	Expected	Fit <6mth	Fit <12mth	% Fit <6mth	% Fit <12mth
2003	55	12	27	21.8	49.1
2004	56	20	26	35.7	46.4
2005	57	23	36	40.4	63.2
2006	59	28	34	47.5	57.6
2007	63	36	40	57.1	63.5
2008	64	31	35	48.4	54.7
2009	64	28	39	43.8	60.9
2010	64	32	41	50.0	64.1
2011	64	48	59	75.0	92.2
2012	70	48	58	68.6	82.9
2013	67	48	62	71.6	92.5
2014	67	51	61	76.1	91.0
2015	66	49	55	74.2	83.3
2016	75	63	74	84.0	98.7
2017	74	65	79	87.8	106.8
2018	74	49	52	66.2	70.3

Table 20 – Victoria

Birth Year	Expected	Fit <6mth	Fit <12mth	% Fit <6mth	% Fit <12mth
2003	44	7	13	15.9	29.5
2004	45	14	18	31.1	40.0
2005	47	15	24	31.9	51.1
2006	47	33	39	70.2	83.0
2007	55	34	42	61.8	76.4
2008	57	32	35	56.1	61.4
2009	60	43	44	71.7	73.3
2010	58	40	47	69.0	81.0
2011	57	22	27	38.6	47.4
2012	57	40	51	70.2	89.5
2013	57	44	49	77.2	86.0
2014	57	44	53	77.2	93.0
2015	56	48	55	85.7	98.2
2016	56	48	55	85.7	98.2
2017	55	47	60	85.5	109.1
2018	55	34	38	61.8	69.1

Table 21 - QLD

Birth Year	Expected	Fit <6mth	Fit <12mth	% Fit <6mth	% Fit <12mth
2003	22	6	10	27.3	45.5
2004	23	7	8	30.4	34.8
2005	24	5	8	20.8	33.3
2006	25	4	7	16.0	28.0
2007	26	8	10	30.8	38.5
2008	29	11	14	37.9	48.3
2009	28	17	22	60.7	78.6
2010	28	11	16	39.3	57.1
2011	29	13	15	44.8	51.7
2012	30	21	22	70.0	73.3
2013	31	20	25	64.5	80.6
2014	32	20	22	62.5	68.8
2015	32	28	35	87.5	109.4
2016	32	17	25	53.1	78.1
2017	31	20	24	64.5	77.4
2018	31	9	10	29.0	32.3

Table 22 - WA

Birth Year	Expected	Fit <6mth	Fit <12mth	% Fit <6mth	% Fit <12mth
2003	16	3	6	18.8	37.5
2004	15	3	6	20.0	40.0
2005	16	3	6	18.8	37.5
2006	16	9	10	56.2	62.5
2007	18	6	8	33.3	44.4
2008	18	12	16	66.7	88.9
2009	18	9	9	50.0	50.0
2010	18	17	17	94.4	94.4
2011	18	13	13	72.2	72.2
2012	18	17	20	94.4	111.1
2013	18	14	16	77.8	88.9
2014	18	13	15	72.2	83.3
2015	18	11	12	61.1	66.7
2016	18	9	11	50.0	61.1
2017	17	14	16	82.4	94.1
2018	17	10	11	58.8	64.7

Table 23 - SA

Birth Year	Expected	Fit <6mth	Fit <12mth	% Fit <6mth	% Fit <12mth
2003	5	0	0	0.0	0.0
2004	5	1	1	20.0	20.0
2005	6	1	2	16.7	33.3
2006	6	1	2	16.7	33.3
2007	6	4	4	66.7	66.7
2008	6	3	4	50.0	66.7
2009	6	7	9	116.7	150.0
2010	6	2	3	33.3	50.0
2011	6	1	1	16.7	16.7
2012	6	1	1	16.7	16.7
2013	5	1	1	20.0	20.0
2014	5	1	1	20.0	20.0
2015	5	4	4	80.0	80.0
2016	5	7	7	140.0	140.0
2017	5	7	7	140.0	140.0
2018	5	1	1	20.0	20.0

Table 24 - TAS

Birth Year	Expected	Fit <6mth	Fit <12mth	% Fit <6mth	% Fit <12mth
2003	4	2	4	50.0	100.0
2004	4	0	0	0.0	0.0
2005	4	2	2	50.0	50.0
2006	4	4	5	100.0	125.0
2007	4	8	9	200.0	225.0
2008	4	2	3	50.0	75.0
2009	4	8	8	200.0	200.0
2010	5	2	2	40.0	40.0
2011	5	3	4	60.0	80.0
2012	5	4	4	80.0	80.0
2013	5	1	1	20.0	20.0
2014	5	6	6	120.0	120.0
2015	5	5	5	100.0	100.0
2016	5	8	8	160.0	160.0
2017	6	5	5	83.3	83.3
2018	6	5	5	83.3	83.3

Table 25 - ACT

Birth Year	Expected	Fit <6mth	Fit <12mth	% Fit <6mth	% Fit <12mth
2003	3	1	1	33.3	33.3
2004	3	0	0	0.0	0.0
2005	3	0	0	0.0	0.0
2006	3	0	0	0.0	0.0
2007	4	0	0	0.0	0.0
2008	4	0	1	0.0	25.0
2009	3	0	0	0.0	0.0
2010	4	0	0	0.0	0.0
2011	4	1	1	25.0	25.0
2012	4	5	5	125.0	125.0
2013	4	3	3	75.0	75.0
2014	4	3	3	75.0	75.0
2015	4	2	5	50.0	125.0
2016	4	4	5	100.0	125.0
2017	3	6	8	200.0	266.7
2018	3	2	2	66.7	66.7

Table 26 - NT

APPENDIX A – SUMMARY TABLES.

Clients under 26 years of age who have been fitted with a hearing aid and/or cochlear implant, by birth year and calendar year first fitted, at 31 December 2018

		Year first fitted																										
Birth year		1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
	1993	14	63	35	36	54	39	31	20	13	21	14	12	13	19	12	7	18	12	9	5	16	16	15	25	29	68	616
	1994		11	69	61	29	45	29	29	26	18	16	12	16	16	9	9	16	14	11	12	12	9	21	19	20	47	576
	1995			9	69	52	33	47	50	34	24	25	17	16	14	19	11	12	13	13	16	9	19	16	33	31	42	624
	1996				21	77	63	37	42	38	30	23	18	12	19	13	11	20	12	16	14	16	20	22	22	25	50	621
	1997					24	69	58	48	33	47	46	27	24	18	17	16	13	17	8	20	18	19	15	20	15	46	618
	1998						28	78	67	51	62	64	47	45	47	41	33	35	31	28	26	28	28	40	44	45	61	929
	1999							25	94	63	59	48	70	73	65	43	36	38	33	33	29	27	37	35	46	64	58	976
	2000								40	87	81	57	52	86	82	44	50	51	43	38	33	46	36	40	52	60	52	1030
	2001									36	96	58	59	65	86	84	80	71	43	39	38	45	40	48	64	79	67	1098
	2002										35	98	64	66	79	75	97	81	71	44	47	50	57	46	74	74	75	1133
	2003											65	87	70	51	61	98	109	93	74	67	55	58	70	73	84	63	1178
	2004												81	88	66	43	71	104	125	100	59	79	55	52	75	75	77	1150
	2005													99	89	48	55	82	107	111	101	92	87	106	103	82	73	1235
	2006														127	121	67	79	84	111	138	96	121	100	96	122	111	1373
	2007															142	107	68	72	95	121	163	143	141	127	122	123	1424
	2008																164	112	76	72	98	157	170	156	123	128	122	1378
	2009																	190	121	78	83	119	182	214	174	158	153	1472
	2010																		169	148	79	97	124	162	190	183	154	1306
	2011																			204	155	93	81	140	190	240	203	1306
	2012																				228	173	76	74	147	207	248	1153
	2013																					242	171	74	99	152	203	941
	2014																						284	180	95	136	172	867
	2015																							316	231	103	128	778
	2016																								291	225	115	631
	2017																									350	262	612
	2018																										356	356
	Total	14	74	113	187	236	277	305	390	381	473	514	546	673	778	772	912	1099	1136	1232	1369	1633	1833	2083	2413	2809	3129	25381

DETAILS OF ABORIGINAL AND TORRES STRAIT ISLANDER CLIENTS UNDER THE AGE OF 26 YEARS WHO WERE FITTED WITH A HEARING AID OR COCHLEAR IMPLANT AT 31 DEC. 2018

State	First fitting age (months)						Total	Latest 3FAHL (dBHL)				
	<3	3 to <6	6 to <12	12 to <18	18 to <24	24+		0-40	41-60	61-90	91+	Unknown
NSW	21	16	17	13	12	321	400	285	75	18	22	0
VIC	1	5	1	2	3	73	85	68	9	7	1	0
QLD	10	24	21	15	16	553	639	516	70	28	24	1
WA	3	11	8	5	9	363	399	305	61	19	11	3
SA	3	1	1	2	1	110	118	96	15	6	1	0
TAS	0	1	0	0	0	15	16	14	2	0	0	0
ACT	1	1	0	0	1	10	13	9	2	2	0	0
NT	4	8	4	11	8	569	604	468	101	20	14	1
National	43	67	52	48	50	2014	2274	1761	335	100	73	5

DETAILS OF ABORIGINAL AND TORRES STRAIT ISLANDER CLIENTS UNDER THE AGE OF 21 YEARS WHO WERE FITTED WITH A HEARING AID OR COCHLEAR IMPLANT AT 31 DEC.2018

State	First fitting age (months)						Total	Latest 3FAHL (dBHL)				
	<3	3 to <6	6 to <12	12 to <18	18 to <24	24+		0-40	41-60	61-90	91+	Unknown
NSW	21	16	17	10	10	297	371	275	63	14	19	0
VIC	1	5	1	2	3	68	80	65	7	7	1	0
QLD	10	23	21	14	16	520	604	500	60	23	20	1
WA	3	11	8	5	9	354	390	300	58	18	11	3
SA	3	1	1	2	1	104	112	94	12	5	1	0
TAS	0	1	0	0	0	14	15	13	2	0	0	0
ACT	1	1	0	0	1	10	13	9	2	2	0	0
NT	3	8	4	10	8	512	545	437	81	15	11	1
National	42	66	52	43	48	1879	2130	1693	285	84	63	5

DETAILS OF ABORIGINAL AND TORRES STRAIT ISLANER CLIENTS AGED 21 – 25 YEARS WHO WERE FITTED WITH A HEARING AID OR COCHLEAR IMPLANT AT 31 DEC 2018

State	First fitting age (months)						Total	Latest 3FAHL (dBHL)				
	<3	3 to <6	6 to <12	12 to <18	18 to <24	24+		0-40	41-60	61-90	91+	Unknown
NSW	0	0	0	3	2	24	29	10	12	4	3	0
VIC	0	0	0	0	0	5	5	3	2	0	0	0
QLD	0	1	0	1	0	33	35	16	10	5	4	0
WA	0	0	0	0	0	9	9	5	3	1	0	0
SA	0	0	0	0	0	6	6	2	3	1	0	0
TAS	0	0	0	0	0	1	1	1	0	0	0	0
ACT	0	0	0	0	0	0	0	0	0	0	0	0
NT	1	0	0	1	0	57	59	31	20	5	3	0
National	1	1	0	5	2	135	144	68	50	16	10	0

DETAILS OF PERSONS UNDER THE AGE OF 26 YEARS WITH HEARING IMPAIRMENT WHO WERE FITTED WITH A HEARING AID OR COCHLEAR IMPLANT AT 31 DEC.2018
AUSTRALIA

Birth year	First fitting age (months)							Total fitted	RatePer1000Births	Latest 3FAHL (dBHL)				
	Births	<3	3 to <6	6 to <12	12 to <18	18 to <24	24+			0-40	41-60	61-90	91+	Unknown
1993	260229	2	12	29	35	14	524	616	2.4	271	180	100	65	0
1994	258051	4	9	21	40	37	465	576	2.2	267	154	80	74	1
1995	256190	2	9	27	41	28	517	624	2.4	284	173	96	70	1
1996	253834	3	14	32	42	38	492	621	2.4	281	148	103	89	0
1997	251842	4	18	35	38	31	492	618	2.5	280	143	99	95	1
1998	249616	5	22	36	51	26	789	929	3.7	537	174	124	93	1
1999	248870	9	18	41	61	23	824	976	3.9	558	202	107	108	1
2000	249636	14	19	56	39	48	854	1030	4.1	601	212	121	96	0
2001	246394	13	26	43	48	40	928	1098	4.5	712	194	102	90	0
2002	250988	19	26	45	44	28	971	1133	4.5	708	216	105	104	0
2003	251161	32	45	46	34	33	988	1178	4.7	806	185	75	112	0
2004	254246	35	58	39	40	34	944	1150	4.5	797	178	91	84	0
2005	264493	52	53	56	25	28	1021	1235	4.7	887	172	83	93	0
2006	270849	82	74	51	37	36	1093	1373	5.1	964	235	101	72	1
2007	292152	86	77	45	40	33	1143	1424	4.9	1016	205	101	102	0
2008	302272	103	91	42	36	35	1071	1378	4.6	991	210	97	80	0
2009	301253	115	118	54	28	39	1118	1472	4.9	1085	195	104	88	0
2010	303318	91	124	63	44	36	948	1306	4.3	922	221	83	80	0
2011	301617	128	127	55	53	41	902	1306	4.3	927	185	96	97	1
2012	309582	157	119	78	54	32	713	1153	3.7	791	185	98	79	0
2013	308065	176	125	64	49	30	497	941	3.1	586	184	100	69	2
2014	299697	214	115	76	50	58	354	867	2.9	515	174	117	60	1
2015	305377	230	164	88	68	57	171	778	2.5	425	193	100	59	1
2016	311104	215	159	80	47	62	68	631	2.0	312	184	82	53	0
2017	309142	242	184	119	50	17	0	612	2.0	336	160	74	42	0
2018	309142	202	125	29	0	0	0	356	1.2	184	94	41	37	0
Total	7219120	2235	1931	1350	1094	884	17887	25381	3.5	16043	4756	2480	2091	11

Births from ABS CAT 3301.0 except for 2018, which is an estimate

DETAILS OF PERSONS UNDER THE AGE OF 26 YEARS WITH A HEARING IMPAIRMENT WHO WERE FITTED WITH A HEARING AID OR COCHLEAR IMPLANT AT 31 DEC 2018

NSW

Birth year	Births	First fitting age (months)						Total fitted	Rate Per 1000Births	Latest 3FAHL (dBHL)				
		<3	3 to <6	6 to <12	12 to <18	18 to <24	24+			0-40	41-60	61-90	91+	Unknown
1993	89354	0	4	7	9	7	151	178	2.0	65	56	32	25	0
1994	87977	1	5	6	12	16	148	188	2.1	86	52	24	26	0
1995	87849	0	0	15	15	11	147	188	2.1	72	49	40	27	0
1996	86595	2	3	11	16	18	139	189	2.2	69	49	37	34	0
1997	87156	2	8	10	9	12	156	197	2.3	85	52	34	26	0
1998	85499	1	9	13	18	9	241	291	3.4	161	59	38	33	0
1999	86784	4	5	12	16	15	244	296	3.4	168	58	31	38	1
2000	86752	4	4	21	9	19	253	310	3.6	158	80	42	30	0
2001	84578	2	5	7	17	18	278	327	3.9	202	64	31	30	0
2002	86583	11	7	13	15	9	301	356	4.1	208	77	33	38	0
2003	86344	21	18	10	8	6	271	334	3.9	226	55	21	32	0
2004	85894	19	18	15	10	6	231	299	3.5	194	54	27	24	0
2005	91224	28	15	20	7	6	253	329	3.6	228	46	29	26	0
2006	92188	38	27	22	12	13	286	398	4.3	265	75	35	23	0
2007	96351	29	18	18	6	13	304	388	4.0	265	64	33	26	0
2008	100276	47	29	13	7	11	286	393	3.9	264	71	32	26	0
2009	98231	44	31	13	9	8	284	389	4.0	257	66	35	31	0
2010	101266	40	24	16	13	19	238	350	3.5	225	62	30	33	0
2011	99054	50	36	14	14	16	223	353	3.6	220	64	30	39	0
2012	98508	55	23	25	15	9	175	302	3.1	196	56	27	23	0
2013	100462	65	21	16	14	10	134	260	2.6	160	60	19	21	0
2014	91074	75	27	14	13	15	73	217	2.4	114	53	32	18	0
2015	100079	108	31	22	19	21	41	242	2.4	119	67	37	19	0
2016	96083	77	29	14	11	17	26	174	1.8	90	51	17	16	0
2017	96591	87	31	15	12	4	0	149	1.5	81	40	21	7	0
2018	96591	67	26	5	0	0	0	98	1.0	45	28	10	15	0
Total	2399343	877	454	367	306	308	4883	7195	3.0	4223	1508	777	686	1

Births from ABS CAT 3301.0 except for 2018, which is an estimate

DETAILS OF PERSONS UNDER THE AGE OF 26 YEARS WITH A HEARING IMPAIRMENT WHO WERE FITTED WITH A HEARING AID OR COCHLEAR IMPLANT AT 31 DEC. 2018
VICTORIA

Birth year	Births	First fitting age (months)						Total fitted	RatePer1000Births	Latest 3FAHL (dBHL)				
		<3	3 to <6	6 to <12	12 to <18	18 to <24	24+			0-40	41-60	61-90	91+	Unknown
1993	64049	1	6	13	17	1	137	175	2.7	75	55	25	20	0
1994	63974	3	2	9	14	10	103	141	2.2	60	39	21	21	0
1995	62591	1	2	7	17	7	137	171	2.7	90	43	19	19	0
1996	61143	0	7	13	14	6	124	164	2.7	76	33	32	23	0
1997	60732	2	5	16	7	8	119	157	2.6	73	31	25	28	0
1998	60492	2	7	12	19	10	193	243	4.0	149	33	35	26	0
1999	58875	5	5	15	19	5	191	240	4.1	128	48	36	28	0
2000	59171	4	10	21	16	11	164	226	3.8	127	43	31	25	0
2001	58626	4	15	16	13	9	212	269	4.6	172	45	24	28	0
2002	61478	0	10	17	17	10	205	259	4.2	156	42	27	34	0
2003	61058	1	16	18	10	8	230	283	4.6	189	46	22	26	0
2004	62417	5	21	12	14	8	233	293	4.7	203	40	25	25	0
2005	63297	11	18	18	9	12	213	281	4.4	194	37	20	30	0
2006	65245	15	19	12	8	12	236	302	4.6	201	56	24	21	0
2007	70325	17	28	7	11	5	222	290	4.1	192	41	22	35	0
2008	71184	14	23	11	10	9	234	301	4.2	200	48	32	21	0
2009	70928	21	23	19	6	12	236	317	4.5	237	40	22	18	0
2010	70572	12	31	18	13	7	217	298	4.2	214	44	19	21	0
2011	71444	35	27	19	19	8	177	285	4.0	182	43	28	32	0
2012	77405	30	38	21	18	9	162	278	3.6	189	45	20	24	0
2013	73969	34	35	22	17	9	107	224	3.0	123	49	29	23	0
2014	74224	42	29	28	15	17	85	216	2.9	119	45	32	20	0
2015	73568	30	45	22	25	13	42	177	2.4	97	44	24	12	0
2016	82892	45	60	23	21	20	15	184	2.2	86	55	24	19	0
2017	82094	63	50	42	13	7	0	175	2.1	92	47	22	14	0
2018	82094	53	41	11	0	0	0	105	1.3	53	27	13	12	0
Total	1763847	450	573	442	362	233	3994	6054	3.4	3677	1119	653	605	0

Births from ABS CAT 3301.0 except for 2018, which is an estimate

DETAILS OF PERSONS UNDER THE AGE OF 26 YEARS WITH A HEARING IMPAIRMENT WHO WERE FITTED WITH A HEARING AID OR COCHLEAR IMPLANT AT 31 DEC. 2018
QUEENSLAND

Birth year	Births	First fitting age (months)						Total fitted	RatePer1000Births	Latest 3FAHL (dBHL)				
		<3	3 to <6	6 to <12	12 to <18	18 to <24	24+			0-40	41-60	61-90	91+	Unknown
1993	46778	0	1	6	4	3	108	122	2.6	61	25	22	14	0
1994	46578	0	2	4	5	4	109	124	2.7	62	31	17	14	0
1995	46484	1	6	5	3	2	105	122	2.6	67	28	18	9	0
1996	47769	1	2	6	6	6	102	123	2.6	61	31	14	17	0
1997	46965	0	4	1	11	5	101	122	2.6	59	28	16	19	0
1998	47046	1	2	7	6	3	159	178	3.8	91	44	24	19	0
1999	46503	0	7	8	10	0	164	189	4.1	106	44	22	17	0
2000	47278	1	3	9	8	11	182	214	4.5	129	36	26	23	0
2001	47678	3	3	10	6	6	181	209	4.4	138	35	20	16	0
2002	47771	6	4	8	7	3	211	239	5.0	148	50	24	17	0
2003	48342	3	5	9	7	5	218	247	5.1	176	38	12	21	0
2004	49940	7	10	7	7	9	214	254	5.1	183	37	18	16	0
2005	51707	8	12	10	6	5	246	287	5.6	210	45	17	15	0
2006	52695	19	18	9	10	7	254	317	6.0	228	52	23	14	0
2007	61306	24	18	13	14	4	284	357	5.8	264	49	18	26	0
2008	63168	29	20	7	10	6	250	322	5.1	249	42	18	13	0
2009	66149	25	37	8	7	10	270	357	5.4	276	41	21	19	0
2010	64523	22	45	16	9	4	214	310	4.8	227	52	19	12	0
2011	63253	25	35	12	10	7	206	295	4.7	233	35	17	10	0
2012	63837	35	37	20	10	12	170	284	4.4	204	33	30	17	0
2013	63354	40	39	15	3	6	110	213	3.4	146	33	24	10	0
2014	63066	49	28	17	8	13	89	204	3.2	132	39	23	10	0
2015	61745	51	41	23	14	16	46	191	3.1	116	41	20	13	1
2016	61841	54	35	27	6	14	17	153	2.5	80	37	29	7	0
2017	61158	41	55	35	13	4	0	148	2.4	85	41	11	11	0
2018	61158	41	43	8	0	0	0	92	1.5	54	24	11	3	0
Total	1428092	486	512	300	200	165	4010	5673	4.0	3785	991	514	382	1

Births from ABS CAT 3301.0 except for 2018, which is an estimate

DETAILS OF PERSONS UNDER THE AGE OF 26 YEARS WITH A HEARING IMPAIRMENT WHO WERE FITTED WITH A HEARING AID OR COCHLEAR IMPLANT AT 31 DEC. 2018
WESTERN AUSTRALIA

Birth year	Births	First fitting age (months)						Total fitted	RatePer1000Births	Latest 3FAHL (dBHL)				
		<3	3 to <6	6 to <12	12 to <18	18 to <24	24+			0-40	41-60	61-90	91+	Unknown
1993	25081	0	0	1	1	1	54	57	2.3	31	13	11	2	0
1994	25138	0	0	1	5	3	36	45	1.8	20	10	8	6	1
1995	25139	0	1	0	3	4	48	56	2.2	20	18	9	8	1
1996	24793	0	1	2	1	2	46	52	2.1	25	11	6	10	0
1997	24776	0	0	3	5	2	49	59	2.4	29	12	8	9	1
1998	24717	1	3	3	2	2	98	109	4.4	67	17	14	10	1
1999	24849	0	1	1	4	1	112	119	4.8	78	22	7	12	0
2000	25093	3	0	2	5	3	132	145	5.8	97	21	15	12	0
2001	24002	2	1	3	3	3	120	132	5.5	95	22	9	6	0
2002	23601	0	4	2	2	1	133	142	6.0	98	30	10	4	0
2003	24273	3	3	4	1	8	115	134	5.5	88	19	11	16	0
2004	25295	3	5	1	4	6	130	149	5.9	105	19	13	12	0
2005	26253	1	5	3	1	3	131	144	5.5	109	16	8	11	0
2006	27777	2	2	3	2	1	153	163	5.9	122	24	9	7	1
2007	29165	6	3	2	3	6	149	169	5.8	128	23	11	7	0
2008	31851	4	9	3	6	4	144	170	5.3	131	21	9	9	0
2009	30879	9	11	7	1	6	143	177	5.7	130	25	11	11	0
2010	31424	6	8	8	3	2	114	141	4.5	104	24	7	6	0
2011	32259	10	11	5	4	5	124	159	4.9	119	20	11	9	0
2012	33627	17	8	6	3	0	88	122	3.6	88	22	8	4	0
2013	34516	20	10	8	7	2	72	119	3.4	76	24	9	8	2
2014	35403	21	15	8	8	7	37	96	2.7	62	15	11	7	1
2015	35135	22	33	13	5	1	20	94	2.7	55	23	9	7	0
2016	35429	17	17	11	4	5	3	57	1.6	31	17	4	5	0
2017	34498	22	15	18	6	1	0	62	1.8	36	13	7	6	0
2018	34498	20	5	3	0	0	0	28	0.8	18	7	1	2	0
Total	749471	189	171	121	89	79	2251	2900	3.9	1962	488	236	206	8

Births from ABS CAT 3301.0 except for 2018, which is an estimate

DETAILS OF PERSONS UNDER THE AGE OF 26 YEARS WITH HEARING IMPAIRMENT WHO WERE FITTED WITH A HEARING AID OR COCHLEAR IMPLANT AT 31 DEC. 2018
SOUTH AUSTRALIA

Birth year	Births	First fitting age (months)						Total fitted	RatePer1000Births	Latest 3FAHL (dBHL)				
		<3	3 to <6	6 to <12	12 to <18	18 to <24	24+			0-40	41-60	61-90	91+	Unknown
1993	20078	0	0	0	2	1	39	42	2.1	18	16	7	1	0
1994	19409	0	0	0	2	2	36	40	2.1	15	14	8	3	0
1995	19336	0	0	0	1	4	37	42	2.2	15	19	3	5	0
1996	19056	0	1	0	3	1	33	38	2.0	22	6	7	3	0
1997	18362	0	1	3	5	3	32	44	2.4	16	11	9	8	0
1998	18226	0	1	1	2	2	57	63	3.5	42	7	10	4	0
1999	17958	0	0	2	4	1	67	74	4.1	48	13	6	7	0
2000	17859	1	2	1	0	2	64	70	3.9	49	15	4	2	0
2001	17281	2	1	5	7	1	79	95	5.5	65	13	11	6	0
2002	17665	1	0	3	3	1	76	84	4.8	64	9	5	6	0
2003	17443	2	2	3	5	4	85	101	5.8	72	14	4	11	0
2004	17140	1	3	3	1	4	73	85	5.0	64	14	3	4	0
2005	17801	2	2	3	1	0	83	91	5.1	72	11	5	3	0
2006	18260	3	6	3	0	2	80	94	5.1	72	16	4	2	0
2007	19666	4	3	4	4	5	74	94	4.8	70	14	8	2	0
2008	20229	5	7	4	2	2	70	90	4.4	65	12	4	9	0
2009	19735	6	9	4	2	3	70	94	4.8	72	13	6	3	0
2010	20078	9	12	3	1	3	66	94	4.7	65	20	4	5	0
2011	19892	6	11	2	1	5	64	89	4.5	71	8	7	3	0
2012	20433	14	8	3	2	1	40	68	3.3	42	13	3	10	0
2013	20090	12	15	2	4	0	30	63	3.1	39	6	13	5	0
2014	20384	10	12	6	2	1	29	60	2.9	37	11	8	4	0
2015	19587	10	11	1	2	2	3	29	1.5	14	8	3	4	0
2016	19772	9	5	3	1	2	3	23	1.2	10	7	4	2	0
2017	19072	17	13	4	1	1	0	36	1.9	20	9	4	3	0
2018	19072	12	5	1	0	0	0	18	0.9	7	3	5	3	0
Total	493884	126	130	64	58	53	1290	1721	3.5	1146	302	155	118	0

Births from ABS CAT 3301.0 except for 2018 which is an estimate

DETAILS OF PERSONS UNDER THE AGE OF 26 YEARS WITH A HEARING IMPAIRMENT WHO WERE FITTED WITH A HEARING AID OR COCHLEAR IMPLANT AT 31 DEC. 2018
TASMANIA

Birth year	Births	First fitting age (months)						Total fitted	RatePer1000Births	Latest 3FAHL (dBHL)				
		<3	3 to <6	6 to <12	12 to <18	18 to <24	24+			0-40	41-60	61-90	91+	Unknown
1993	6835	0	0	2	1	0	9	12	1.8	7	3	1	1	0
1994	6844	0	0	0	1	1	10	12	1.8	7	3	1	1	0
1995	6570	0	0	0	2	0	15	17	2.6	7	8	2	0	0
1996	6457	0	0	0	0	2	15	17	2.6	6	8	3	0	0
1997	6007	0	0	2	0	0	14	16	2.7	7	4	3	2	0
1998	5978	0	0	0	4	0	16	20	3.3	12	4	3	1	0
1999	6032	0	0	2	2	0	19	23	3.8	12	8	0	3	0
2000	5692	0	0	0	0	2	18	20	3.5	17	2	0	1	0
2001	6430	0	0	0	0	1	20	21	3.3	12	5	3	1	0
2002	6003	0	0	1	0	2	13	16	2.7	12	0	3	1	0
2003	5752	0	0	0	2	1	22	25	4.3	20	3	0	2	0
2004	5809	0	1	1	1	0	16	19	3.3	12	4	1	2	0
2005	6310	1	0	1	0	0	29	31	4.9	20	8	2	1	0
2006	6475	1	1	1	2	0	31	36	5.6	28	4	3	1	0
2007	6663	2	2	0	2	0	32	38	5.7	28	3	4	3	0
2008	6775	2	1	1	0	0	26	30	4.4	20	8	1	1	0
2009	6627	4	5	3	0	0	20	32	4.8	20	6	3	3	0
2010	6385	0	2	1	1	1	15	20	3.1	10	5	3	2	0
2011	6608	1	1	0	3	0	18	23	3.5	16	4	2	1	0
2012	6168	0	1	2	1	0	12	16	2.6	11	4	1	0	0
2013	6049	1	0	0	1	0	8	10	1.7	5	2	2	1	0
2014	5935	1	2	1	1	0	5	10	1.7	7	1	2	0	0
2015	5680	2	2	1	1	0	2	8	1.4	4	1	1	2	0
2016	5968	3	6	0	1	1	1	12	2.0	4	6	2	0	0
2017	5610	2	8	2	3	0	0	15	2.7	8	3	3	1	0
2018	5610	0	2	0	0	0	0	2	0.4	1	1	0	0	0
Total	161272	20	34	21	29	11	386	501	3.1	313	108	49	31	0

Births from ABS CAT 3301.0 except for 2018 which is an estimate

DETAILS OF PERSONS UNDER THE AGE OF 26 YEARS WITH A HEARING IMPAIRMENT WHO WERE FITTED WITH A HEARING AID OR COCHLEAR IMPLANT AT 31 DEC. 2018

ACT

Birth year	Births	First fitting age (months)						Total fitted	RatePer1000Births	Latest 3FAHL (dBHL)				
		<3	3 to <6	6 to <12	12 to <18	18 to <24	24+			0-40	41-60	61-90	91+	Unknown
1993	4414	0	1	0	1	0	14	16	3.6	9	5	0	2	0
1994	4461	0	0	1	1	1	9	12	2.7	6	2	1	3	0
1995	4415	0	0	0	0	0	12	12	2.7	5	2	4	1	0
1996	4396	0	0	0	1	3	15	19	4.3	15	2	2	0	0
1997	4208	0	0	0	1	1	11	13	3.1	5	3	2	3	0
1998	3982	0	0	0	0	0	16	16	4.0	9	7	0	0	0
1999	4253	0	0	1	6	1	16	24	5.6	11	5	5	3	0
2000	4065	1	0	2	1	0	14	18	4.4	8	5	3	2	0
2001	3938	0	1	2	0	1	18	22	5.6	11	4	4	3	0
2002	4112	1	0	1	0	2	16	20	4.9	10	5	2	3	0
2003	4128	1	1	2	1	1	15	21	5.1	11	5	2	3	0
2004	4174	0	0	0	1	1	17	19	4.6	14	4	1	0	0
2005	4210	1	1	0	1	1	26	30	7.1	20	4	1	5	0
2006	4484	4	1	1	3	1	23	33	7.4	24	5	2	2	0
2007	4757	4	4	1	0	0	32	41	8.6	29	6	5	1	0
2008	4808	2	2	2	0	2	18	26	5.4	21	3	1	1	0
2009	4860	6	2	0	2	0	33	43	8.8	33	2	5	3	0
2010	5152	2	1	1	3	0	35	42	8.2	30	11	1	0	0
2011	5121	1	4	3	2	0	18	28	5.5	21	4	0	3	0
2012	5461	2	3	1	4	0	15	25	4.6	19	2	4	0	0
2013	5545	2	4	1	3	2	6	18	3.2	12	3	3	0	0
2014	5552	11	1	2	1	3	6	24	4.3	13	4	7	0	0
2015	5542	6	0	2	1	0	5	14	2.5	9	2	3	0	0
2016	5152	6	4	0	1	3	1	15	2.9	4	9	0	2	0
2017	6207	7	5	1	0	0	0	13	2.1	8	3	2	0	0
2018	6207	3	3	1	0	0	0	7	1.1	2	2	1	2	0
Total	123604	60	38	25	34	23	391	571	4.6	359	109	61	42	0

Births from ABS CAT 3301.0 except for 2018 which is an estimate

DETAILS OF PERSONS UNDER THE AGE OF 26 YEARS WITH HEARING IMPAIRMENT WHO WERE FITTED WITH A HEARING AID OR COCHLEAR IMPLANT AT 31 DEC. 2018

NT

Birth year	Births	First fitting age (months)						Total fitted	RatePer1000Births	Latest 3FAHL (dBHL)				
		<3	3 to <6	6 to <12	12 to <18	18 to <24	24+			0-40	41-60	61-90	91+	Unknown
1993	3603	1	0	0	0	1	12	14	3.9	5	7	2	0	0
1994	3626	0	0	0	0	0	14	14	3.9	11	3	0	0	0
1995	3766	0	0	0	0	0	16	16	4.2	8	6	1	1	0
1996	3562	0	0	0	1	0	18	19	5.3	7	8	2	2	0
1997	3588	0	0	0	0	0	10	10	2.8	6	2	2	0	0
1998	3641	0	0	0	0	0	9	9	2.5	6	3	0	0	0
1999	3576	0	0	0	0	0	11	11	3.1	7	4	0	0	0
2000	3685	0	0	0	0	0	27	27	7.3	16	10	0	1	0
2001	3822	0	0	0	2	1	20	23	6.0	17	6	0	0	0
2002	3724	0	1	0	0	0	16	17	4.6	12	3	1	1	0
2003	3790	1	0	0	0	0	32	33	8.7	24	5	3	1	0
2004	3551	0	0	0	2	0	30	32	9.0	22	6	3	1	0
2005	3660	0	0	1	0	1	40	42	11.5	34	5	1	2	0
2006	3696	0	0	0	0	0	30	30	8.1	24	3	1	2	0
2007	3896	0	1	0	0	0	46	47	12.1	40	5	0	2	0
2008	3944	0	0	1	1	1	43	46	11.7	41	5	0	0	0
2009	3820	0	0	0	1	0	62	63	16.5	60	2	1	0	0
2010	3899	0	1	0	1	0	49	51	13.1	47	3	0	1	0
2011	3954	0	2	0	0	0	72	74	18.7	65	7	1	0	1
2012	4104	4	1	0	1	1	51	58	14.1	42	10	5	1	0
2013	4053	2	1	0	0	1	30	34	8.4	25	7	1	1	0
2014	4026	5	1	0	2	2	30	40	9.9	31	6	2	1	0
2015	4004	1	1	4	1	4	12	23	5.7	11	7	3	2	0
2016	3927	4	3	2	2	0	2	13	3.3	7	2	2	2	0
2017	3882	3	7	2	2	0	0	14	3.6	6	4	4	0	0
2018	3882	6	0	0	0	0	0	6	1.5	4	2	0	0	0
Total	98681	27	19	10	16	12	682	766	7.8	578	131	35	21	1

Births from ABS CAT 3301.0 except for 2018, which is an estimate