# Australian Cerebral Palsy Register 2025 Bulletin

Birth prevalence and trends in cerebral palsy, birth years 1995-2018









### What is the Australian Cerebral Palsy Register?

The Australian Cerebral Palsy Register (ACPR) is an electronic database of data uploaded from the CP Registers in each state and territory of Australia, from which individual identifiers have been removed and replaced by a unique code in order to ensure privacy of data.

The Australian Cerebral Palsy Register (ACPR) Group sincerely thanks all the people with cerebral palsy (CP), families and health professionals involved in this Australia wide effort. In these endeavours, we aim to collect the most accurate and complete data possible to monitor CP in Australia, identify causal pathways, evaluate preventive strategies and evaluate management options for those with CP and their families.

The ACPR is hosted by the Cerebral Palsy Alliance Research Institute in Sydney, with ethical oversight by The University of Sydney Human Research Ethics Committee (2020/HE000463) and the Aboriginal Health and Medical Research Council of New South Wales (1388/18). The ACPR is funded by the Cerebral Palsy Alliance Research Foundation.

The ACPR exists as a result of collaborative partnerships between all the Australian state and territory CP registers, and the organisations which support each register:

ACPR/ Australian Capital Territory/	Sarah McIntyre*, Hayley Smithers- Sheedy*, Shona Goldsmith*,	Cerebral Palsy Alliance Research Institute, The University of	
New South Wales (ACT/NSW) Cerebral Palsy Registers	Emma Waight, Georgina Henry, Tan Martin and Nadia Badawi	Sydney	
Est 2005	cpregister@cerebralpalsy.org.au		RESEARCH FOUNDATION
Northern Territory (NT) Cerebral Palsy Register	Fiona Kay*, Cassie Goldsworthy and Danielle Astell	Women, Children & Youth, Royal Darwin Hospital	NORTHERN
Est 2008	cpregister.ths@nt.gov.au		GOVERNMENT
Queensland (QLD) Cerebral Palsy Register	Megan Auld* and Jacinta Quartermaine	Choice, Passion, Life	စ္တင္စာင္စ
Est 2006	cpregister@cplqld.org.au		choice • passion • life
South Australian (SA) Cerebral Palsy Register	Catherine Gibson*, Jennifer Hernandez and Heather Scott*	Women's and Children's Health Network	Government of South Australia
Est 1998	cpregister@sa.gov.au		of South Australia SA Health Hospital
Tasmanian (TAS) Cerebral Palsy Register	Jessica Lawrence, Clare Wiltshire and Eliza Maloney*	Tasmanian Department of Health	TASMANIAN HEALTH SERVICE
Est 2008	rehab.service@ths.tas.gov.au		
Victorian (VIC) Cerebral Palsy Register	Sue Reid*, Gina Hinwood, Angela Guzys, Dinah Reddihough, Christine Imms and Rod Hunt	Murdoch Children's Research Institute at the Royal Children's Hospital	murdoch
Est 1986	vic.cpregister@rch.org.au		
Western Australian (WA) Register of Developmental Anomalies - Cerebral Palsy	Gareth Baynam, Noula Gibson, Dylan Gration, Katherine Langdon, Michele Hansen* and Linda Watson*	Department of Health Western Australia	Western Australian Departmental Australian Departmental Anomalies
Est 1977	linda.watson@health.wa.gov.au michele.hansen@health.wa.gov.au		operation anomalies

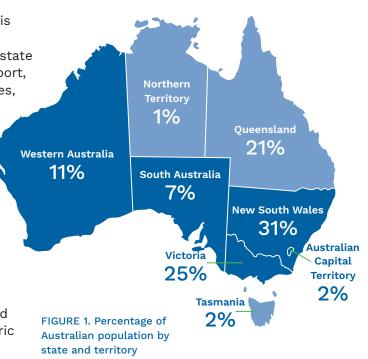
\*ACPR Policy Group Members

### Reporting

In order to provide timely reporting of CP data, this short bulletin provides a snap-shot of CP birth prevalence, birth years 1995-2018. All Australian state and territory CP registers are included in this report, with Australian Capital Territory, New South Wales, South Australia, Victoria and Western Australia included in the combined prevalence trends.

Please see a map (Figure 1) showing Australian states and territories and the percentage of total population. Australia is a geographically large country with varying population densities and accessibility to services. The current total population is 27.2 million people<sup>1</sup> with around 290,000 live births per year<sup>2</sup>.

National Perinatal Data Collection live births and neonatal survivor data (1995–2018) were provided by the Australian Institute of Health and Welfare<sup>3</sup> and the Consultative Council on Obstetric and Paediatric Mortality and Morbidity.



### Acknowledgements



Thank you to all members of the **ACPR Group** for their expertise, time and commitment in collecting, verifying and providing data, attending meetings, participating in working groups and writing this Bulletin.

Members of the Australian Cerebral Palsy Register Group with colleagues from the New Zealand and Vietnam Cerebral Palsy Registers

The work of the ACPR is guided by the **Community, Aboriginal and Torres Strait Islander Reference Group.** We thank and acknowledge all members who contribute their time and expertise so generously to this work: Megan Auld, Gareth Baynam, Leanne Diviney, Catherine Gibson, Shona Goldsmith, Dylan Gration, Michele Hansen, Danielle Headland, Gina Hinwood, Katherine Langdon, Sophie Marmont, Tan Martin, Anne Masi, Sarah McIntyre, Simon Paget, Heather Scott, Juanita Sherwood, Emma Stanton, Emma Waight and Linda Watson.

The design shown throughout this report was derived from the Cerebral Palsy Alliance Reconciliation Action Plan artwork created by Leah Cummins, a proud Mayi woman from North-Western Queensland. The artwork represents the strong and bold community of people who support Cerebral Palsy Alliance's vision of a *world of opportunity for people with cerebral palsy and similar disabilities, and their families.* We sincerely thank the families and individuals with CP who generously consented in 2024/2025 to allow inclusion of their photos in this Bulletin.

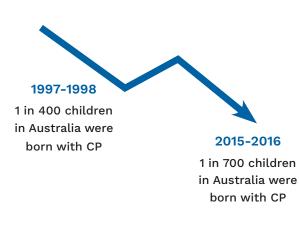
### **Community Summary**

The Australian Cerebral Palsy Register (ACPR) is the largest single-country register of cerebral palsy (CP) in the world. The 2025 ACPR Bulletin (birth years 1995-2018) includes >11,000 people with CP.

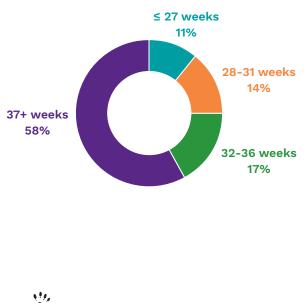
Thank you to all the families and health professionals who so generously support this work.

### Rate of CP in Australia

Since 1997-1998 the rate of CP in Australia has declined from 2.4 to 1.5 per 1000 live births in 2015-2016. Provisional ACPR data for the 2017-2018 birth years suggest that this decline has continued.



Proportion of children with pre/perinatally acquired CP born at different gestational age groups





# Rates of pre/perinatally acquired CP across gestational age groups



### Children born ≤ 27 weeks

Following a long period of decline, the rate of CP increased between 2013-2016. Provisional data suggest the rate has increased again in 2017-2018. The ACPR group intends to conduct further research to explore potential reasons for this increase, at a time when more babies are surviving at much earlier gestations.



#### Children born 28-31 weeks

The decline in the rate of CP has continued between 2013-2016. Provisional data suggest there was a small increase for this group in 2017-2018.



**Children born 32-36 weeks** The decline in the rate of CP continued between 2013-2016. Provisional data suggest there was a further decline in 2017-2018.



**Children born 37+ weeks** After a long period of decline, the rate of CP was stable between 2013-2016. Provisional data suggest there was a further decline in 2017-2018.



## All cerebral palsy

# TABLE 1. Register count of children with pre/perinatally and post-neonatally acquired CP by state/territory of birth (1995-2018)

	Pre/perinatally acquired CP n (%)	Post-neonatally acquired CP n (%)	TOTAL CP n (%)
ACT/NSW	3565	244	3809
NT	137	21	158
QLD	2004	95	2099
SA	849	42	891
TAS	192	5	197
VIC	2737	155	2892
WA	1530	123	1653
TOTAL	11014 (94)	685 (6)	11699 (100)

### TABLE 2. CP birth prevalence per 1000 live births, state/territory of birth combined (1995-2018)

	1995- 1996	1997- 1998	1999- 2000	2001- 2002#	2003- 2004	2005- 2006	2007- 2008	2009- 2010	2011- 2012	2013- 2014	2015- 2016	2017- 2018*
ACT/NSW <sup>#</sup>												
SA/VIC/WA	2.1	2.4	2.2	2.1	2.0	2.1	1.9	1.8	1.6	1.5	1.5	1.3*
(95% CI)	(1.9, 2.3)	(2.2, 2.6)	(2.1, 2.5)	(2.0, 2.2)	(1.8, 2.1)	(1.9, 2.2)	(1.8, 2.0)	(1.7, 1.9)	(1.5, 1.7)	(1.4, 1.7)	(1.4, 1.6)	(1.2, 1.4)

Combined data from ACT/NSW, SA, VIC, WA #ACT/NSW data included from 2001 \*Provisional data

The birth prevalence of CP in Australia is 1.5 per 1000 live births.

Table 2 reports combined data and shows that the recent decline in the birth prevalence of CP has been sustained in the 2015-2016 birth years.

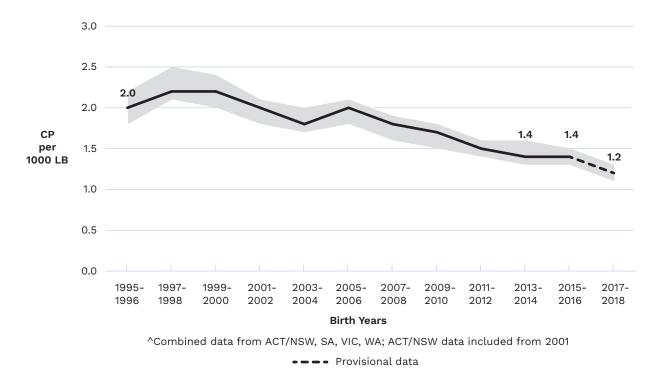
Provisional data for 2017-2018 suggest this decline has continued. Data for these birth years will be finalised in the 2027 ACPR Report.

## Prenatally and perinatally acquired cerebral palsy

# TABLE 3. Count of children with CP and birth prevalence per 1000 live births (LB) by state/ territory of birth (1995-2018)

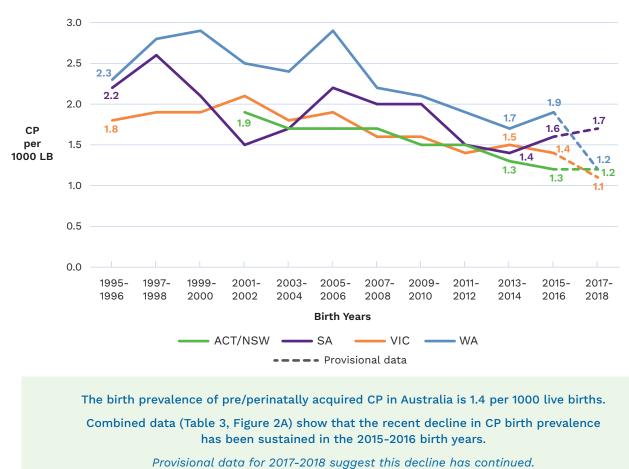
Birth Years	1995- 1996	1997- 1998	1999- 2000	2001- 2002	2003- 2004	2005- 2006	2007- 2008	2009- 2010	2011- 2012	2013- 2014	2015- 2016	2017- 2018*
ACT/NSW												
СР	261	306	288	336	312	331	341	311	309	276	255	239
CP/1000 LB	1.4	1.7	1.6	1.9	1.7	1.7	1.7	1.5	1.5	1.3	1.2	1.2
NT												
СР	11	12	17	8	16	9	12	14	15	10	6	7
CP/1000 LB	1.6	1.7	2.4	1.1	2.3	1.2	1.6	1.8	1.9	1.3	0.8	0.9
QLD												
СР	160	145	158	135	194	183	229	219	186	153	163	79
CP/1000 LB	1.7	1.5	1.6	1.4	1.9	1.6	1.9	1.8	1.5	1.2	1.3	0.7
SA												
СР	83	95	76	53	58	79	79	81	61	55	62	67
CP/1000 LB	2.2	2.6	2.1	1.5	1.7	2.2	2.0	2.0	1.5	1.5	1.6	1.7
TAS												
СР	9	10	16	21	24	24	26	28	13	11	6	4
CP/1000 LB	0.7	0.8	1.3	1.9	2.2	2.0	2.1	2.3	1.1	0.9	0.5	0.4
VIC												
СР	225	236	232	258	232	252	231	231	206	228	226	180
CP/1000 LB	1.8	1.9	1.9	2.1	1.8	1.9	1.6	1.6	1.3	1.4	1.2	1.1
WA												
СР	116	144	147	122	122	158	133	128	126	120	134	80
CP/1000 LB	2.3	2.8	2.9	2.5	2.4	2.9	2.2	2.1	1.9	1.7	1.9	1.2
Combined d	ata from <i>i</i>	ACT/NSW	, SA, VIC, V	WA								
CP/1000 LB (95% CI)	<b>2.0</b> (1.8, 2.2)	<b>2.2</b> (2.1, 2.5)	<b>2.2</b> (2.0, 2.4)	<b>2.0</b> (1.8, 2.1)	<b>1.8</b> (1.7, 2.0)	<b>2.0</b> (1.8, 2.1)	<b>1.8</b> (1.6, 1.9)	<b>1.7</b> (1.5, 1.8)	<b>1.5</b> (1.4, 1.6)	<b>1.4</b> (1.3, 1.6)	<b>1.4</b> (1.3, 1.5)	<b>1.2</b> (1.1, 1.3)

Shaded cells indicate population level ascertainment \*Provisional data









Data for these birth years will be finalised in the 2027 ACPR Report.

## Prenatally or perinatally acquired cerebral palsy by gestational age

## TABLE 4. CP birth prevalence per 1000 live births (LB)/neonatal survivors (NNS), gestational age group, state/territory of birth combined^ (1995-2018)

Birth Years	1995- 1996	1997- 1998	1999- 2000	2001- 2002 <sup>#</sup>	2003- 2004	2005- 2006	2007- 2008	2009- 2010	2011- 2012	2013- 2014	2015- 2016	2017- 2018*
≤27 weeks n=843												
Prevalence/ LB	63.5	79.2	59.5	48.2	44.7	46.4	39.0	43.1	28.9	28.7	32.4	39.4
(95% CI)	(49.5, 81.2)	(63.3, 98.8)	(46.1, 76.5)	(39.1, 59.3)	(35.9, 55.6)	(37.8, 56.8)	(31.4, 48.4)	(35.0, 52.9)	(22.3, 37.4)	(22.0, 37.1)	(25.4, 41.3)	(31.5, 49.2)
Prevalence/ NNS	109.8	124.3	95.4	84.7	76.9	81.6	65.5	72.1	48.0	46.6	50.1	60.7
(95% CI)	(85.9, 139.4)	(99.8, 153.9)	(74.2, 121.9)	(68.8, 103.8)	(62.0, 95.1)	(66.7, 99.5)	(52.8, 81.1)	(58.7, 88.3)	(37.1, 61.9)	(36.1, 60.0)	(39.3, 63.7)	(48.6, 75.5)
28-31 weeks n=1006	;											
Prevalence/ LB	39.3	38.5	46.5	31.6	30.4	33.3	35.9	35.8	29.1	23.4	21.4	22.9
(95% CI)	(30.6, 50.5)	(30.1, 49.2)	(37.2, 57.9)	(25.8, 38.6)	(24.6, 37.4)	(27.5, 40.3)	(29.9, 43.0)	(29.9, 42.8)	(23.7, 35.3)	(18.8, 29.1)	(16.9, 27.0)	(18.2, 28.8)
32-36 weeks n=1236	i											
Prevalence/ LB	4.7	5.3	4.8	4.8	4.9	4.7	4.1	4.4	4.0	4.1	3.6	2.9
(95% CI)	(3.6, 6.0)	(4.1, 6.7)	(3.7, 6.1)	(3.9, 5.7)	(4.1, 5.9)	(3.9, 5.6)	(3.4, 4.9)	(3.7, 5.2)	(3.4, 4.8)	(3.5, 4.9)	(3.0, 4.4)	(2.4, 3.5)
37+ weeks n=4347												
Prevalence/ LB	1.2	1.4	1.3	1.2	1.1	1.2	1.1	0.9	0.9	0.9	0.9	0.7
(95% CI)	(1.1, 1.4)	(1.2, 1.6)	(1.2, 1.5)	(1.1, 1.3)	(1.0, 1.2)	(1.1, 1.3)	(1.0, 1.2)	(0.8, 1.0)	(0.8, 1.0)	(0.8, 1.0)	(0.8, 1.0)	(0.6, 0.8)

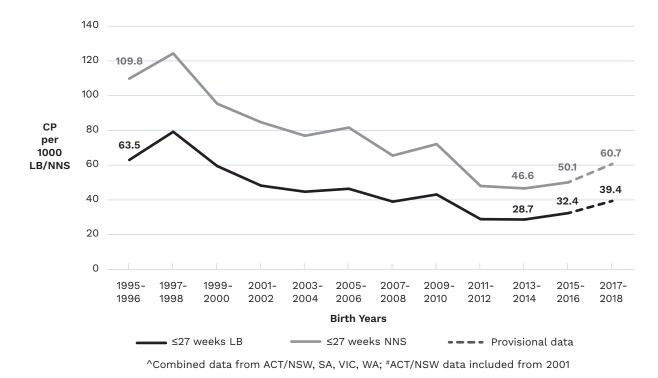
^Combined data from ACT/NSW, SA, VIC, WA #ACT/NSW data included from 2001 \*Provisional data

Explanatory note regarding birth prevalence per 1000 neonatal survivors:

In Table 4 and Figure 3A and 3B the prevalence of CP per 1000 neonatal survivors for those born extremely preterm ( $\leq$ 27 weeks) is higher than the prevalence of CP per 1000 live births. This reflects the higher number of neonatal deaths (see glossary) in extremely preterm babies compared with other gestational age groups, where prevalence per live births and neonatal survivors are either very similar or the same.

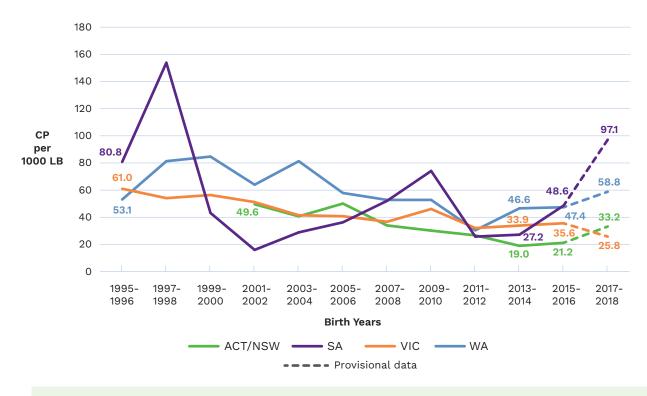


Australian Cerebral Palsy Register Bulletin, Birth Years 1995-2018, April 2025



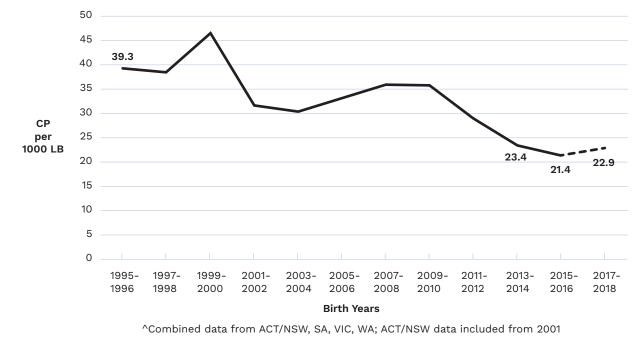






Combined data (Table 4, Figure 3A) show an increase in CP birth prevalence for children born ≤27 weeks between the 2013-2014 and 2015-2016 birth years.

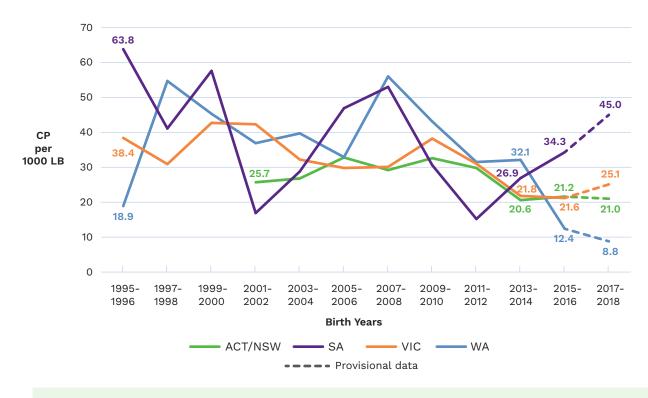
Provisional data for 2017-2018 suggest a further increase in CP birth prevalence. Data for these birth years will be finalised in the 2027 ACPR Report. .....





•==• Provisional data

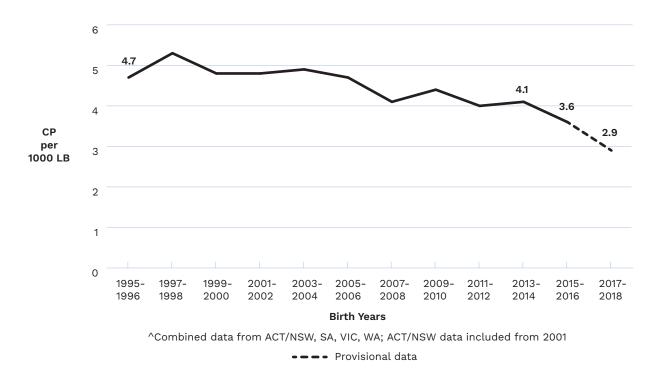




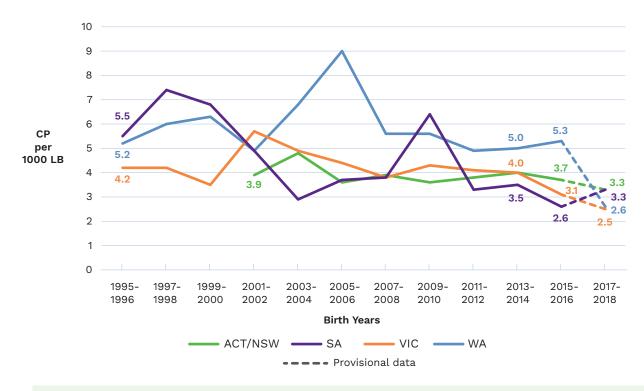
Combined data (Table 4, Figure 4A) show the decline in CP birth prevalence for children born 28-31 weeks has continued into the 2015-2016 birth years.

Provisional data for 2017-2018 suggest a small increase in CP birth prevalence. Data for these birth years will be finalised in the 2027 ACPR Report.









Combined data (Table 4, Figure 5A) show a further decline in CP birth prevalence for children born 32-36 weeks gestation between the 2013-2014 and 2015-2016 birth years.

Provisional data for 2017-2018 suggest that this decline continues. Data for these birth years will be finalised in the 2027 ACPR Report.

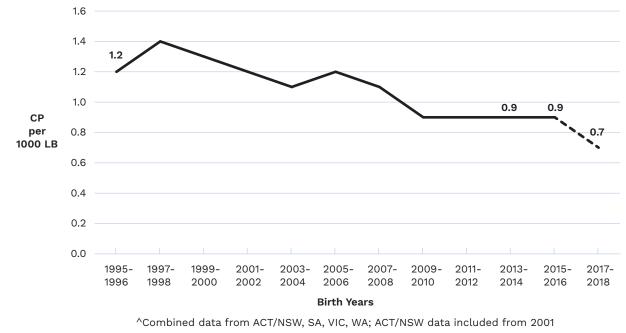
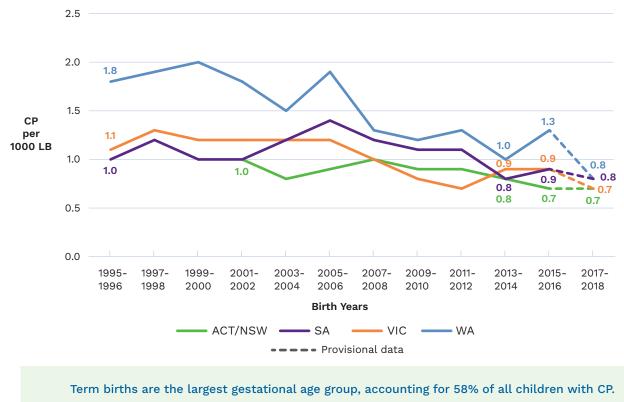


FIGURE 6A. CP birth prevalence, children born at 37+ weeks gestation per 1000 live births (LB),

state/territory of birth combined^ (1995-2018)

•==• Provisional data





Combined data (Table 4, Figure 6A) show the birth prevalence of CP in this group has remained stable between the 2013-2014 and 2015-2016 birth years.

Provisional data for 2017-2018 suggest a decline in CP birth prevalence. Data for these birth years will be finalised in the 2027 ACPR Report. .....

### CP registers/surveillance programs in the Asia-Pacific

The ACPR Group has been privileged to work with researchers across the Asia-Pacific region to support the development and establishment of new CP registers. Support provided ranges from general encouragement and advice to collaboration on new research.



The ACPR Group has the pleasure of regularly liaising with our colleagues and friends in New Zealand/Aotearoa. The **New Zealand CP Register** (NZCPR)/ Te Rēhita a Hōkai Nukurangi Aotearoa was established in 2015 and has a vision to be the source of relevant and highquality information to support research and positive health outcomes for all people in Aotearoa New Zealand with CP.

2017 saw the establishment of the **Singapore Cerebral Palsy Registry.** This program aims to improve the overall understanding of CP in Singapore and to assist in planning of services and resources for people with CP.

Many low- and middle-income countries (LMICs) have both high population density and high prevalence of CP compared with high income countries (HICs). However, until relatively recently there has been little available data to understand CP in these settings. It has been exciting to see the establishment of multiple registers across LMICs including **Bangladesh**, **China**, **India**, **Indonesia**, **Nepal**, **Sri Lanka**, **Thailand**, **Vanuatu** and **Vietnam**. The programs and research outputs associated with these registers have been extraordinary and are a credit to the committed teams leading and working on them.

### The Global Low-and Middle-Income Country Cerebral Palsy Register



The **Global Low-and Middle-Income Country Cerebral Palsy Register** (GLM CPR) is a multi-country network dedicated to advancing CP research and services in LMICs. Its activities are guided by four core pillars: (i) research, (ii) service/ research translation, (iii) capacity development, and (iv) advocacy. As part of its research efforts, GLM CPR-affiliated CP registers collect and collate data on epidemiology of CP using a standardized, harmonized protocol. Since its establishment in 2018, the network has grown exponentially, now encompassing 60+ organizations across 18 LMICs. Over the past five years 8500+ children with CP have been registered into the GLM CPR, 4000+ families received services and 170+ professionals have been trained in early detection and community-based intervention and clinical management of children with CP.

To date, affiliated CP registers have collectively published 50 high-impact, peer-reviewed journal articles, many featuring combined data from multiple registers.

## Glossary

### All cerebral palsy

This includes all children with cerebral palsy not differentiated by timing of brain injury.

### Prenatally or perinatally acquired cerebral palsy

Cerebral palsy resulting from brain maldevelopment or insult during the prenatal or perinatal period (throughout pregnancy and during the first 28 completed days after birth).

### Post-neonatally acquired cerebral palsy

Cerebral palsy resulting from a recognised post-neonatal brain injury acquired more than 28 days after birth and before 2 years of age.

......

#### Live birth

The complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached; each product of such a birth is considered live born (AIHW).<sup>4</sup>

### Neonatal death

Death of a live born baby within 28 days of birth.<sup>4</sup>

### **Preterm birth**

Babies born alive before 37 weeks of pregnancy are completed.

The sub-categories of preterm birth, based on gestational age are:

- extremely preterm (less than 28 weeks)
- very preterm (28-31 weeks)
- moderately to late pre-term (32–36 weeks)

#### Denominator Data Source: National Perinatal Data Collection (NPDC)<sup>3</sup>

The NPDC covers both live births and stillbirths, where gestational age is at least 20 weeks or birthweight is at least 400 grams (except in Victoria and Western Australia, where births are included if gestational age is at least 20 weeks or, if gestation is unknown, birthweight is at least 400 grams). Live births and stillbirths include termination of pregnancy after 20 weeks.<sup>3</sup>

#### References

- 1. Australian Bureau of Statistics. (2024, June). National, state and territory population. ABS. https://www.abs.gov.au/statistics/people/population/national-state-and-territory-population/jun-2024
- Australian Bureau of Statistics. (2023). Births, Australia. ABS. https://www.abs.gov.au/statistics/people/population/births-australia/latest-release
- 3. National Perinatal Data Collection 2022; Quality Statement https://meteor.aihw.gov.au/content/799298
- 4. Australian Institute of Health and Welfare. (2024, March) Glossary. https://www.aihw.gov.au/reports-data/australias-health/summaries/glossary



### Australian Cerebral Palsy Register

- T: 02 9975 8000
- E: cpregister@cerebralpalsy.org.au

W: cpregister.com

Recommended citation for this bulletin:

Australian Cerebral Palsy Register Bulletin Birth years 1995-2018, March 2025

