

The NSW Child Development Study: Summary of Key Findings

The New South Wales Child Development Study (NSW-CDS) is a large longitudinal study led by the School of Clinical Medicine (Psychiatry and Mental Health) at the University of NSW. The main aim of the NSW-CDS is to provide evidence to enable improvement in the mental health and wellbeing of all Australian children. This Evidence Brief summarises the key findings from the NSW-CDS to support evidence-based decision-making for policy development, program design and practice in the child and family sector. The Brief also includes infographics that staff can use in presentations and communication materials.¹



Key messages

- By age 18 years, one in three (29.2%) young people in the study had some contact with child protection services, with one in four (24.9%) meeting the threshold for a risk-of-significant-harm (ROSH) report and almost three in 100 (2.6%) placed in out-of-home care.
- Children in the study cohort who had contact with child protection services or were in out-of-home care consistently had poorer outcomes across a range of domains than their peers who had no contact.
- At school entry, only three in 10 (32%) children in the study who had at least one substantiated ROSH report in their first five years of life were developmentally on track in all five domains of the Australian Early Development Census (AEDC), compared to around six in 10 (57.2%) of their peers without ROSH reports.
- Importantly, many young people in contact with child protection services show signs of resilience: more than half (55%) of the children known to child protection services by age 13 years had a 'stress-resistant' profile of social, emotional, and cognitive functioning across early and middle childhood, performing in the 'typically developing' range.
- One in five children (22.6%) who had contact with child protection services by age 11 years, also had police contact as a victim or person-of-interest between 11 and 14 years of age.

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- By age 13 years, one in 10 (9.8%) children who were known to child protection services had a diagnosis of mental disorder. Children in out-of-home care were more than five times as likely to have a mental health diagnosis than their peers who were not known to child protection services.
- By age 17 years, 5,212 young people (5.7% of the NSW-CDS sample) had recorded service contacts for self-harm or thoughts about suicide. These issues often came to the attention of child protection services before other services.

The findings from the NSW-CDS highlight opportunities for improved early intervention and comprehensive support systems for vulnerable children and their families particularly those with any contact with child protection services.

Introduction

What is the NSW-CDS?

The NSW-CDS is a longitudinal research project tracking the development of over 91,000 children in New South Wales from birth to adulthood using record linkage and cross-sectional survey data. The study provides insights into how mental disorders develop over time and how they relate to other issues like child protection, justice, education, and physical health issues. The NSW-CDS uses administrative data from state and commonwealth government departments and agencies, linking information on health, education, justice, child protection, and welfare payment records of children and their parents (where available). These data span the years 1971 to 2024, with plans for ongoing updates as the cohort grows older. The study began with children assessed on the Australian Early Development Census in 2009 (age 5-6 years) followed by the self-report Middle Childhood Survey in 2015 (age 11-12 years). Throughout 2022-2024, further record linkages were conducted to include information on the participants' later teenage years and early adulthood (for example, some data now spans birth to 20 years of age).



Over the past decade, NSW-CDS researchers have collaborated closely with government partners to translate their findings into actionable policies and programs. These efforts target four major areas: mental health and wellbeing, child protection, criminal justice, and education. The NSW-CDS has produced over 70 publications utilising the multi-agency linked data asset spanning four key research themes.

NSW-CDS Key Research Themes



Mental Health and Wellbeing

Identifying risk and protective factors affecting mental health and wellbeing from childhood to adulthood, including the earliest modifiable risk factors for targeted prevention programs.



Child Protection

Working collaboratively with Government to provide evidence-based findings to inform policy and practice reform in child protection, health and education.



Criminal Justice

Understanding the characteristics of young people who come into contact with the criminal justice system and the pathways of risk and resilience following early contact with the justice system.



Education

Improving our understanding of the factors that impact students' learning outcomes and engagement, and their relation to later mental health and social outcomes.

Key findings from the NSW-CDS

Key findings from the NSW-CDS for the four research themes: mental health and wellbeing, child protection, criminal justice, and education are presented below. Detailed data and analysis are available in the original publications. While some of this information extends beyond the remit of the Department of Communities and Justice (DCJ), the information presented will be of interest to other government partners and the sector more broadly.

Mental health and wellbeing



Mental health service utilisation

By the age of 17 years, a significant number of children and young people had received treatment for mental health conditions.

- Approximately one in eight (13.1%) children were treated for mental health conditions in public hospitals or ambulatory services.

- Around one in 33 (3.0%) of those with mental health conditions were involuntarily admitted to psychiatric units.
- More than two in five (43.7%) children treated for mental health conditions had multiple types of mental health diagnoses over time.
- The likelihood of using mental health services increased with age.
- Girls were more likely to receive services for mental disorders, but boys generally had their first contact with the mental health system at a younger age (Watkeys et al., 2024).

Reference: Watkeys, OJ, O'Hare, K, Dean, K, Laurens, KR, Tzoumakis, S, Harris, F, Carr, VJ & Green, MJ 2024, 'Patterns of health service use for children with mental disorders in an Australian state population cohort', Australian & New Zealand Journal of Psychiatry, vol. 58, no. 10, pp. 857-874, viewed 7 April, 2025, DOI 10.1177/00048674241258599.

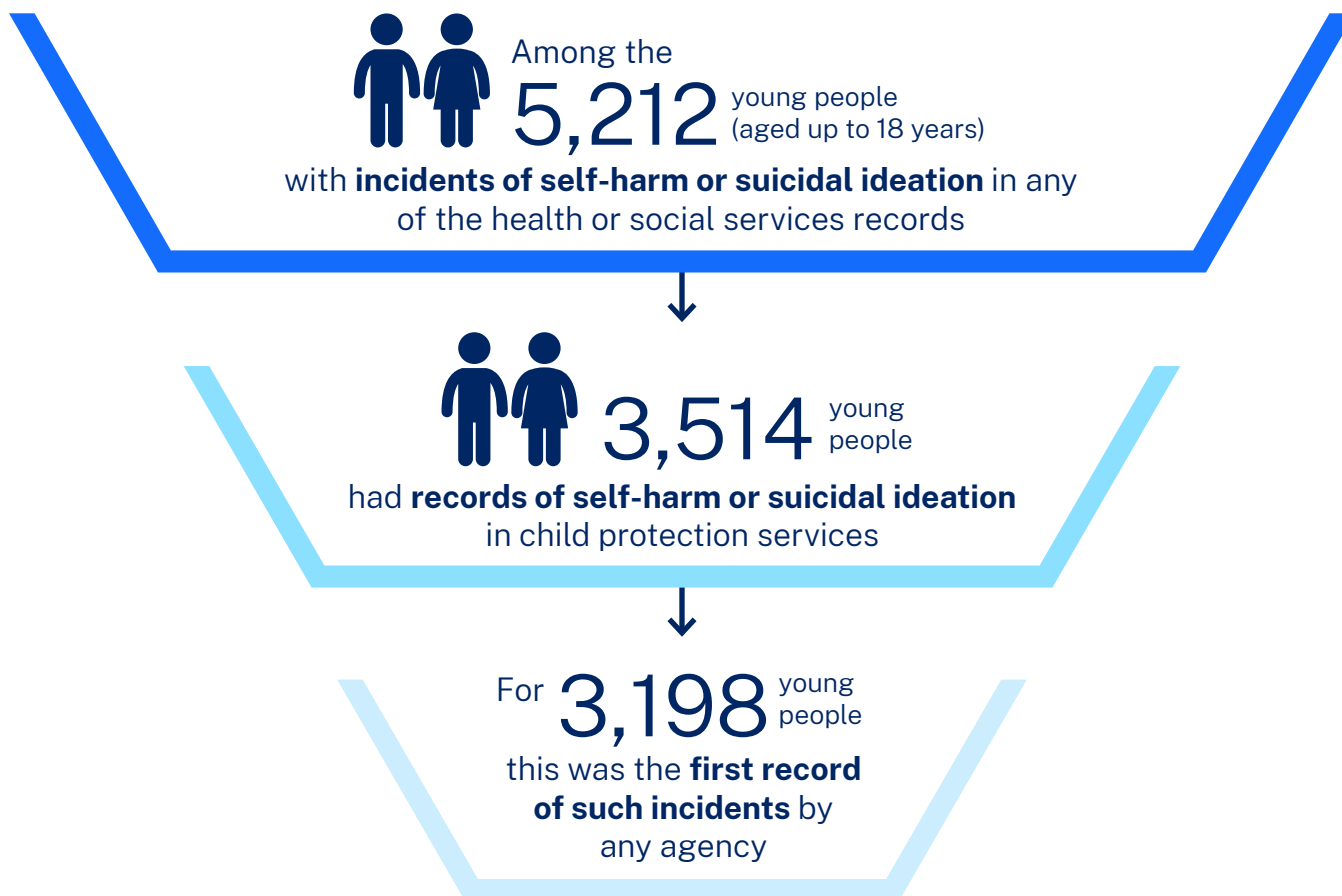
Suicide and self-harm

By the age of 17 years, a significant number of young people had recorded service contacts for self-harm or suicidal thoughts and/or behaviours, particularly those involved with child protection services.

- A total of 5,212 young people (5.7% of the NSW-CDS sample) had recorded service contacts for self-harm or thoughts about suicide by age 17 years. These instances were found in records from health services (emergency departments, hospitals, mental health ambulatory services) or other agencies (child protection, police). Many of the children and young people had more than one entry for self-harm or suicidal ideation (O'Hare, K, Watkeys, O, Dean K, 2023).
- Of the 5,212 young people with records of self-harm or suicidal thoughts/behaviours, almost two in three (67.4%) had been reported to child protection services for these issues (O'Hare, K, Watkeys, O, Dean K, 2023).
- For nine in 10 (91.0%) children reported to child protection services, this was their first recorded incident of self-harm and suicidal thoughts by any agency included in the NSW-CDS dataset. Note that these analyses did not include contacts with private mental health practitioners, such as psychologists and psychiatrists, which are only recently included in the NSW-CDS dataset (O'Hare, K, Watkeys, O, Dean K, 2023).
- Around one in 40 (2.4%) young people had self-harm or suicidal ideation incidents recorded by health services, and approximately three in four (75%) of these young people were known to child protection services (O'Hare, K, Watkeys, O, Harris, F, 2023).



A significant number of young people had recorded service contacts for self-harm or suicidal thoughts and/or behaviours:



Reference: O'Hare, K, Watkeys, O, Dean K, Tzoumakis, S, Whitten, T, Harris, F, Laurens, KR, Carr, VJ & Green, MJ, 2023, 'Self-harm and suicidal ideation among young people is more often recorded by child protection than health services in an Australian population cohort', *Australian & New Zealand Journal of Psychiatry*, vol. 57, no. 12, pp.1527-1537, viewed 7 April, 2025, DOI 10.1177/00048674231179652.

Reference: O'Hare, K, Watkeys, O, Harris, F, Dean, K, Carr, VJ & Green, MJ, 2023, 'Self-harm and suicidal ideation in children and adolescents in contact with child protection services', *Medical Journal of Australia*, vol. 218, no. 11, pp. 526-527, viewed 7 April, 2025, DOI 10.5694/mja2.51898.

FACSIAR Evidence to Action Note: March 2024, 'Supporting young people involved with child protection services who are at risk of self-harm and suicide', <https://dcj.nsw.gov.au/documents/about-us/facsiar/facsiar-publications-and-resources/Supporting-young-people-involved-with-child-protection-services-who-are-at-risk-of-harm-and-suicide-E2A-Note.pdf>

FACSIAR Lunch and Learn Webinar: September 2023, 'Preventing and responding to self-harm and suicidal ideation: latest research and best practice for children and young people in care', <https://dcj.nsw.gov.au/about-us/facsiar/facsiar-research-seminars/past-seminars/2023-seminars/september-2023.html>

Mental disorders of children with child protection contact

Mental disorder diagnoses were more common among children and young people known to child protection services, particularly those in out-of-home care.

- By age 13 years one in 10 (9.8%) children known to child protection services had a diagnosed mental disorder.

- In comparison, only one in 33 (2.9%) children not known to child protection services had a mental disorder diagnosis by the same age.

Of the children in the study:

1 in 10
known to child protection services had
a diagnosed mental disorder by age 13



In comparison
1 in 33
with no child protection contact had
a mental health diagnosis by age 13



- Children in out-of-home care were more than five times as likely to have a mental health diagnosis than their peers who were not known to child protection services by 13 years.
- The risk of a mental disorder among children who have experienced early life maltreatment is likely to be even higher as this analysis used hospital admission and outpatient mental health services data and does not include diagnoses and treatment by primary practitioners or those receiving private therapy (Green et al., 2020).

Reference: Green, MJ, Hindmarsh, G, Kariuki, M, Laurens, KR, Neil, AL, Katz, I, Chilvers, M, Harris & Carr, VJ 2020, 'Mental disorders in children known to child protection services during early childhood', *Medical Journal of Australia*, vol. 212, no. 1, pp. 22-28, viewed 7 April, 2025, DOI 10.5694/mja2.50392.

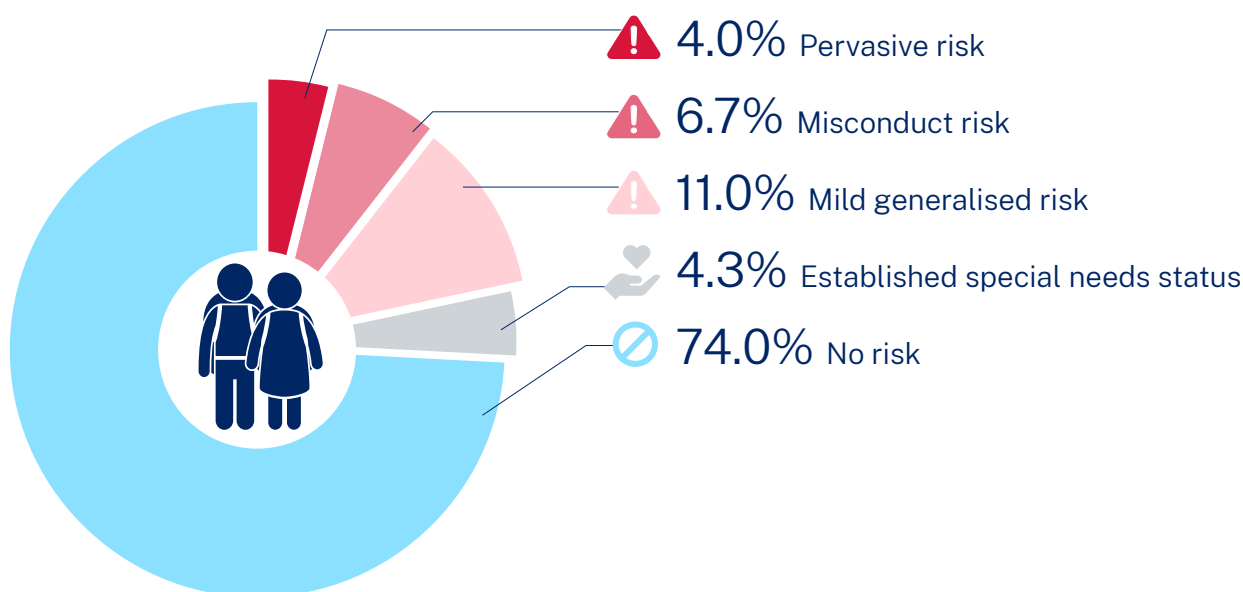
FACSIAR Evidence to Action Note: September 2020, 'What is the impact of early childhood maltreatment on mental health outcomes in middle childhood?', <https://dcj.nsw.gov.au/documents/about-us/facsiar/research-partnerships/FACSIAR-Maltreatment-and-childhood-mental-health-outcomes-E2A-Note.pdf>

Impact of early developmental vulnerabilities on childhood mental health

Children with specific patterns of developmental vulnerabilities at school entry were much more likely to develop mental disorders later in childhood, with regional and socio-economic factors influencing these risks.

- At school entry, one in 25 (4.0%) children in the NSW-CDS showed a 'pervasive' pattern of developmental vulnerabilities across the 16 subdomains of the Australian Early Development Census (AEDC). This means the children showed widespread developmental challenges in multiple areas assessed by the AEDC, such as emotional health, social skills, and cognitive skills (Green et al., 2019).
- One in 15 (6.7%) children showed a pattern of predominantly behavioural developmental vulnerabilities (termed 'misconduct risk'); these children exhibited significant challenges primarily in the form of disrespectful, hyperactive and aggressive behaviours (Green et al., 2019).
- One in 10 (11.0%) children showed 'mild generalised' developmental vulnerabilities across all 16 subdomains (Green et al., 2019).
- Children represented in these three developmental risk groups (defined by individual patterns of early developmental vulnerabilities at school entry) were more likely to have been exposed to child maltreatment, parental history of mental illness, parental history of criminal offending, socioeconomic disadvantage and perinatal adversities (Green et al., 2018).

Early developmental risk patterns in the population at school entry



- Children showing either the ‘pervasive’ or ‘misconduct’ pattern of early developmental vulnerabilities were more than two and a half times as likely to develop subsequent childhood mental disorder diagnoses compared to their peers with no developmental vulnerabilities (Green et al., 2019).
- The proportion of children within these early developmental risk classes varied across the state. Generally, higher proportions of at-risk children were found in regional and socio-economically disadvantaged areas. These children were more likely to be known to child protection services prior to school entry, and to have parents in contact with mental health and criminal justice systems (Harris et al., 2023).

Reference: Green, MJ, Tzoumakis, S, Laurens, KR, Dean, K, Kariuki, M, Harris, F, Brinkman, SA & Carr, VJ 2019, ‘Early developmental risk for subsequent childhood mental disorders in an Australian population cohort’, *Australian & New Zealand Journal of Psychiatry*, vol. 53, no. 4, pp. 304-315, viewed 7 April, 2025, DOI 10.1177/0004867418814943.

Reference: Green, MJ, Tzoumakis, S, Laurens, KR, Dean, K, Kariuki, M, Harris, F, O’Reilly, N, Chilvers, M, Brinkman, SA & Carr VJ, 2018, ‘Latent profiles of early developmental vulnerabilities in a New South Wales child population at age 5 years’, *Australian & New Zealand Journal of Psychiatry*, vol. 52, no. 6, pp. 530-541, 7 April, 2025, DOI 10.1177/0004867417740208.

Reference: Harris, F, Dean, K, Laurens, KR, Tzoumakis, S, Carr, VJ & Green, MJ 2023, ‘Regional mapping of early childhood risk for mental disorders in an Australian population sample’, *Early Intervention in Psychiatry*, vol. 16, no. 12, pp. 1269-1277, viewed 7 April, 2025, DOI 10.1111/eip.13281.

Early developmental vulnerabilities among children exposed to domestic violence

Children exposed to domestic violence before school entry faced significant developmental challenges and higher risks compared to their peers.

- According to police records, more than one in 100 (1.3%) children were victims of or had witnessed domestic violence before starting school.

- Children exposed to domestic violence were more than twice as likely to be developmentally vulnerable on each of the individual AEDC domains, compared to their peers with no such exposure (Whitten et al., 2022).

Children exposed to domestic violence showed specific patterns of developmental risk as assessed on the AEDC:

- Around one in 10 (10.6%) children were classified in the ‘pervasive risk’ category, meaning they faced significant challenges across multiple areas, such as emotional health, social skills, and cognitive skills.
- Around one in seven (13.4%) were classified in the ‘misconduct risk’ category, displaying behavioural problems involving aggressive or disruptive behaviour.
- Around one in six (18.2%) were classified in the ‘mild generalised risk’ category, displaying some difficulties across multiple areas but not at the same severity level as the other categories.

In contrast, only one in 24 (4.1%) children not exposed to domestic violence were classified as ‘pervasive risk’, one in 15 (6.9%) were classified in the ‘misconduct risk’ category, and around one in 10 (11.4%) were classified in the ‘mild generalised risk’ category (Whitten et al., 2022).

According to AEDC data, among children exposed to domestic violence:



Among children not exposed to domestic violence:



At school entry, children who experienced domestic violence in their first five years were:

- 3.5 times as likely to be classified as ‘pervasive risk’.
- More than twice as likely to be classified as ‘misconduct risk’ or ‘mild generalised risk’ (Whitten et al., 2022).

Reference: Whitten, T, Green, MJ, Tzoumakis, S, Laurens, KR, Harris, F, Carr, VJ & Dean, K 2022, ‘Early developmental vulnerabilities following exposure to domestic violence and abuse: Findings from an Australian population cohort record linkage study’, *Journal of Psychiatric Research*, vol. 153, pp. 223-228, viewed 7 April, 2025, DOI 10.1016/j.jpsychires.2022.07.012.

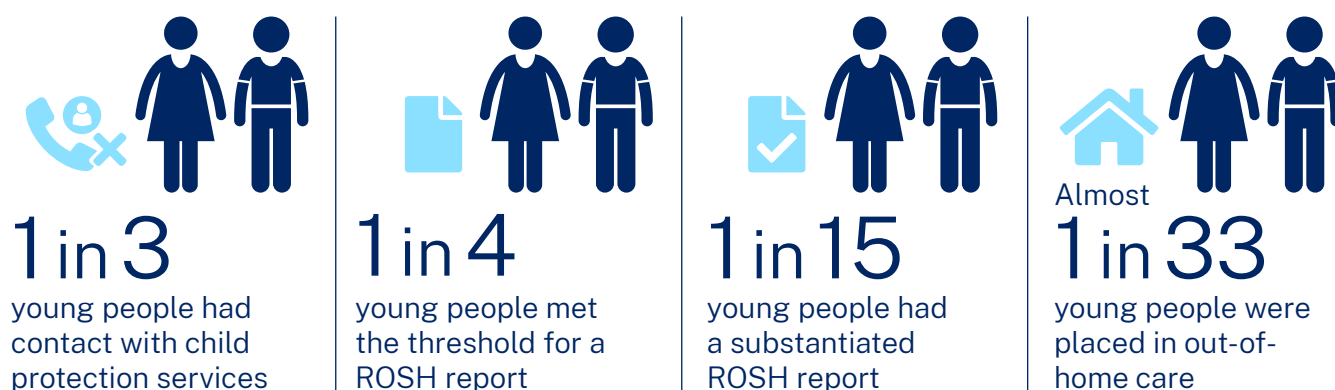
Child protection



By age 18 years, a significant number of children had contact with child protection services, with some showing intergenerational patterns of contact.

- One in three (29.2%) children had some contact with child protection services by the age of 18 years.
- One in four (24.9%) children met the threshold for a risk-of-significant-harm (ROSH) report.
- One in 15 (6.9%) children had a substantiated ROSH report.
- Almost one in 33 (2.6%) children were placed in out-of-home care (Green et al., 2024).

By age 18:



Intergenerational child protection contact was evident for one in 20 (5.0%) mothers and one in 60 (1.7%) fathers of the child cohort. These parents had a history of child protection contact during their own childhood that was identifiable in the dataset (Green et al., 2024). Intergenerational child protection contact is likely to be underestimated in the NSW-CDS owing to the large age-span of parents of the NSW-CDS child cohort. A proportion of the parents in the NSW-CDS would not have been under 18 years during the dataset collection years such that the extent of intergenerational contact with child protection services may be underestimated.

Reference: Green, MJ, Watkeys, OJ, Harris, F, O'Hare, K, Whitten, T, Tzoumakis, S, Laurens, KR, Carpendale, EJ, Dean, K & Carr, VJ, 2024, 'Cohort Profile Update: The New South Wales Child Development Study (NSW-CDS) – Wave 3 (child age ~18 years)', *International Journal of Epidemiology*, vol. 53, no. 3, dyae069, viewed 7 April, 2025, DOI 10.1093/ije/dyae069.

Parental risk factors and early child protection system contact

Parental mental health problems and criminal justice involvement are more prevalent among children in contact with the child protection system.

- Children of parents with mental health problems and justice system involvement had earlier contact with the child protection system compared to those without these risk factors.
- Parental mental disorders and criminal offending were particularly high among children in out-of-home care:
 - Over three in five children in out-of-home care had a mother with a mental health disorder (64.3%) or criminal conviction (62.9%).
 - Two in five (40.9%) children had a father with a mental health disorder.
 - Almost four in five (78.9%) children had a father with a criminal conviction (Whitten et al., 2021).

Reference: Whitten, T, Dean, K, Li, R, Laurens, KR, Harris, F, Carr, VJ & Green, MJ, 2021, 'Earlier contact with child protection services among children of parents with criminal convictions and mental disorders, *Child Maltreatment*, vol. 26, no. 1, pp. 63-73, viewed 7 April, 2025, DOI 10.1177/1077559520935204.

Children placed in out-of-home care before the age of 13-14 years could be identified with 95% accuracy based on six risk indicators. These indicators include:

- home environment problems (reported by their teachers on the AEDC)
- young maternal age (less than 25 years)
- maternal smoking during pregnancy
- maternal history of criminal offending and imprisonment
- paternal history of criminal offending and imprisonment
- maternal mental health disorder (Green et al., 2019).

Risk factors that could identify children with at least one out-of-home care placement before age 13-14 years with 95% accuracy:



Any four of these indicators identified children at risk of entering out-of-home care before the age of 13-14 years with 99.6 % accuracy. These risk factors should be understood in the context of social disadvantage and intergenerational trauma. They highlight opportunities and a need for early intervention and increased family support services to prevent children from being taken into care (Green et al., 2019).

Reference: Green, MJ, Kariuki, M, Chilvers, M, Butler, M, Katz, I, Burke, S, Tzoumakis, S, Laurens, KR, Harris, F & Carr, VJ, 2019, 'Inter-agency indicators of out-of-home-care placement by age 13-14 years: a population record linkage study', *Child Abuse & Neglect*, vol. 93, pp. 91-102, viewed 7 April, 2025, DOI 10.1016/j.chiabu.2019.04.013.

FACSIAR Evidence to Action Note: May 2020, What risk factors are associated with being placed in out-of-home care?, <https://dcj.nsw.gov.au/documents/about-us/facsiar/facsiar-publications-and-resources/TAB-A-Risk-factors-FINAL.pdf>

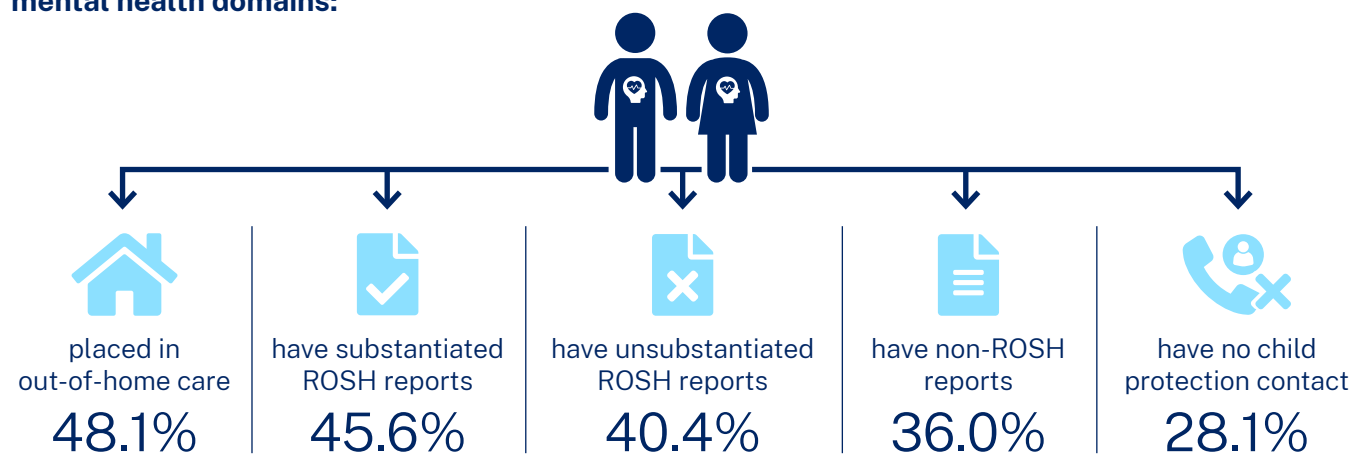
Impact of child protection involvement on self-reported mental health

Children in the NSW-CDS who were known to child protection services had higher rates of self-reported mental health problems at age 11 years compared to children with no such involvement, especially those with more intensive child protection contact.

- Almost one in two children with an out-of-home care placement (48.1%) and those with substantiated ROSH reports (45.6%) showed abnormal levels of mental health difficulties in at least one domain.

- Around two in five (40.4%) children with unsubstantiated ROSH reports, and more than one in three (36.0%) children with non-ROSH reports also reported mental health difficulties, compared to less than one in three (28.1%) children without child protection contact (O'Hare et al., 2023).

The proportion of children that have abnormal levels (top 10%) of difficulties in at least one of the mental health domains:



Reference: O'Hare, K, Hussain, A, Laurens, KR, Hindmarsh, G, Carr, VJ, Tzoumakis, S, Harris, F & Green, MJ, 2023, 'Self-reported mental health of children known to child protection services: an Australian population-based record linkage study. *European Child Adolescent Psychiatry*, vol. 32, no. 1, pp. 101-112, viewed 7 April, 2025, DOI 10.1007/s00787-021-01841-3.

FACSIAR Summary: February 2022. *Study examines self-reported mental health of children in contact with child protection services*, <https://dcj.nsw.gov.au/documents/about-us/facsiar/facsiar-publications-and-resources/cds-mental-health-summary-final.pdf>

FACSIAR Lunch & Learn Webinar: July 2022, *Improving mental health outcomes for children and young people in out-of-home care*, <https://dcj.nsw.gov.au/about-us/facsiar/facsiar-research-seminars/past-seminars/2022-seminars/july-2022.html>

Early childhood development among maltreated children

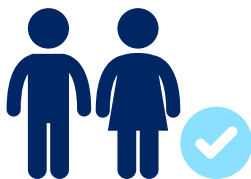
Children in the NSW-CDS who were the subject of substantiated ROSH reports in their first five years were less likely to be developmentally on track compared to children with no child protection contact.

- Only three in 10 (32.0%) of these children were assessed as developmentally on track in all five domains of the AEDC, compared to around six in 10 (57.2%) of their peers (Green et al., 2018).
- Children with substantiated ROSH reports who had not been placed in out-of-home care had the highest odds of developmental vulnerabilities. These vulnerabilities were most evident in physical health and wellbeing, language and cognitive skills (school-based), and communication skills and general knowledge (Rossen et al., 2019).

Among children with substantiated ROSH reports:

Only

3 in 10



were assessed as **developmentally on track** in all five domains of the AEDC

Among children with no child protection contact:

Around

6 in 10



were assessed as **developmentally on track** in all five domains of the AEDC

Reference: Green, MJ, Tzoumakis, S, McIntyre, B, Kariuki, M, Laurens, KR, Dean, K, Chilvers, M, Harris, F, Butler, M, Brinkman, SA & Carr, VJ, 2018. 'Childhood maltreatment and early developmental vulnerabilities at age 5 years, *Child Development*, vol. 89, no. 5, pp. 1599-1612, viewed 7 April, 2025, DOI 10.1111/cdev.12928.

Reference: Rossen, L, Tzoumakis, S, Kariuki, M, Laurens, KR, Butler, M, Chilvers, M, Harris, F, Carr, VJ & Green, MJ 2019, 'Timing of the first report and highest level of child protection response in association with early developmental vulnerabilities in an Australian population cohort', *Child Abuse & Neglect*, vol. 93, pp. 1-12, viewed 7 April, 2025, DOI 10.1016/j.chiabu.2019.04.007.

FACSIAR Evidence to Action Note: January 2018, *Child maltreatment in early childhood: developmental vulnerability on the AEDC*, <https://dcj.nsw.gov.au/documents/about-us/facsiar/facsiar-publications-and-resources/Child-maltreatment-in-early-childhood-developmental-vulnerability-on-the-AEDC-Evidence-to-action-Jan-2018.pdf>

FACSIAR Evidence to Action Note: May 2020, *Developmental vulnerability and contact with the child protection system*, <https://dcj.nsw.gov.au/documents/about-us/facsiar/facsiar-publications-and-resources/TAB-B-Dev.-vulnerability-FINAL.pdf>

Special healthcare needs in children involved with child protection services

Children who were involved with child protection services were more likely to need extra healthcare support in their first year of school compared to children who had not experienced maltreatment.

- Almost one in three (29.6%) of these children had an 'impairment of concern' at around five years old.
- More than one in three (32.2%) were identified as having 'special needs'.
- In comparison, the rates in the general population were around one in 24 (4.1%) for 'impairments of concern' and around one in 10 (8.6%) for 'special needs' (Hindmarsh et al., 2020).



Among children with child protection contact:

almost

1 in 3

had an **'impairment of concern'**
at around 5 years old



more than

1 in 3

were identified as having **'special needs'**



Among children with no child protection contact:

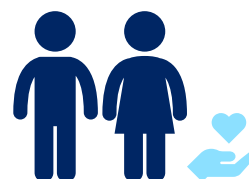
1 in 24

had an **'impairment of concern'**
at around 5 years old



1 in 10

were identified as having **'special needs'**



Reference: Hindmarsh, G, Laurens, KR, Katz, I, Butler, M, Harris, F, Carr, VJ & Green, MJ 2020, 'Child protection services for children with special healthcare needs: a population record linkage study', *Australian Journal of Social Issues*, vol. 56, no. 2, pp. 223-243, viewed 7 April, 2025, DOI 10.1002/ajs4.145.

FACSIAR Summary: February 2022, *Children with special health care needs and involvement with child protection services*, <https://dcj.nsw.gov.au/documents/about-us/facsiar/facsiar-publications-and-resources/cds-children-with-shcn-summary-final.pdf>

Hospital care and costs for children with child protection contact

Children known to child protection services had more hospital visits and higher healthcare costs for both physical and mental health conditions compared to their peers with no child protection service contact.

- Mental health care costs for children known to child protection services generally increased with age.
- In contrast, peers with no child protection contact had stable, low mental health care costs over time (Neil et al., 2020).

Reference: Neil, AL, Islam, F, Kariuki, M, Laurens, KR, Katz, I, Harris, F, Carr, VJ & Green, MJ, 2020, 'Costs for physical and mental health hospitalizations in the first 13 years of life among children engaged with child protection services', *Child Abuse & Neglect*, vol. 99, 104280, viewed 7 April, 2025, DOI 10.1016/j.chiabu.2019.104280.

Resilience of children known to child protection services

More than half of the children with child protection contact demonstrated resilience in some aspects of their development.

- More than one in two (55.0%) children known to child protection services showed a 'stress-resistant' profile across early and middle childhood, with social, emotional, and cognitive functioning in the 'typically developing' range.

- An additional one in seven (13.5%) children who had contact with child protection services showed an ‘emergent resilience’ profile, with improved social, emotional, and thinking skills from early to middle childhood.
- Children who belonged to the ‘emergent-resilient’ profile were more likely to have no substantiated ROSH reports after the age of five years and to report having community supports (Green et al., 2023).

Both profiles of resilience (stress-resistant and emergent-resilient) were associated with:



being female



personality characteristics of openness and extraversion

Children who were categorised as emergent-resilient were more likely to:



have no substantiated ROSH report in middle childhood



have community supports

Reference: Green, MJ, Piotrowska, PJ, Tzoumakis, S, Whitten, T, Laurens, KR, Butler, M, Katz, I, Harris, F & Carr, VJ, 2023, ‘Profiles of resilience from early to middle childhood among children known to child protection services, *Journal of Clinical Child & Adolescent Psychology*, vol. 52, no. 4, pp. 533-545, viewed 7 April, 2025, DOI 10.1080/15374416.2021.1969652.

FACSIAR Summary: February 2022, *Resilience from early to middle childhood in children known to child protection services*, <https://dcj.nsw.gov.au/documents/about-us/facsiar/facsiar-publications-and-resources/cds-resilience-summary-final.pdf>

Outcomes and challenges for children in out-of-home care

Children who were placed in out-of-home care faced significant challenges by age 13 years, with many experiencing mental health issues, academic difficulties, and/or police contact.

- Over seven in 10 (72.0%) children placed in out-of-home care had a mental disorder diagnosis, performed below national academic standards, and/or had police contact. These issues were more common for children in foster care but not for those in kinship placements.
- A higher number of placements and longer time between the first child protection notification and first placement were linked to greater risk of poor outcomes (O’Hare et al., 2023).

Challenges for children placed in out-of-home care:

Over

7 in 10

children placed in out-of-home care



had a mental disorder diagnosis



performed below national academic standards



and/or had police contact

Reference: O’Hare, K, Tzoumakis, S, Watkeys, O, Katz, I, Laurens, KR, Butler, M, Harris, F, Carr, VJ & Green, MJ 2023, ‘Out-of-home care characteristics associated with childhood educational underachievement, mental disorder, and police contacts in an Australian population sample’, *Child Abuse & Neglect*, vol. 139, no. 106120, viewed 7 April, 2025, DOI 10.1016/j.chiabu.2023.106120.

FACSIAR Lunch and Learn Webinar, April 2022, *NSW Child Development Study - Findings from the second wave of data linkage*, <https://dcj.nsw.gov.au/about-us/facsiar/facsiar-research-seminars/past-seminars/2022-seminars/april-2022.html>

Criminal justice



By age 17 years, a significant proportion of children had been in contact with police, often experiencing different types of interactions.

- By age 13 years, around one in six (15.6%) children had police contact as a victim, witness, or person-of-interest (Whitten et al., 2020).
- By age 17 years, this had increased to around one in four (26.8%) children with any type of police contact.
 - Around one in five (18.9%) had contact as a victim, one in eight (12.3%) as a person-of-interest and one in 16 (6.0%) as a witness (Whitten et al., 2024).
 - One in 13 (7.5%) children experienced all three types of contact (Whitten et al., 2024).

Reference: Whitten, T, Green, MJ, Tzoumakis, S, Laurens, KR, Harris, F, Carr, VJ, & Dean, K 2020, 'Children's contact with police as a victim, person of interest and witness in New South Wales, Australia', *Journal of Criminology*, vol. 53, no. 3, pp.387-410. viewed 7 April, 2025, DOI 10.1177/0004865819890894.

Reference: Whitten, T, Tzoumakis, S, Green, MJ, Laurens, KR, Harris, F, Carr, VJ, & Dean, K 2024 'Sex differences in the patterns of police contact during childhood and adolescence: a population-based study of 79,446 Australian young people', *Journal of Criminology*, viewed 7 April, 2025, DOI 10.1177/26338076241269755.

Child protection and justice system involvement

Children who had early contact with child protection services often went on to have interactions with police, and higher levels of child protection involvement increased the likelihood of later police contact.

- One in five (22.6%) children who had contact with child protection services by age 11 years also had police contact as a victim or person-of-interest between ages 11 and 14 years. Conversely, almost four in five (77.4%) children in contact with child protection services at that time, had no subsequent police contact as a victim or person-of-interest between ages 11 and 14 years (Athanassiou et al., 2024).
- Children with more serious child protection involvement, such as placement in out-of-home care or substantiated ROSH reports, were the most likely to have later police contact. Even children with less serious child protection involvement, including non-ROSH and unsubstantiated ROSH reports, had higher odds of police contact compared to children with no child protection involvement (Tzoumakis et al., 2024).
- Over half (52.3%) of children had child protection contact before their first interaction with police (Athanassiou et al., 2024).
- Children involved with child protection services had their first police contact at a younger age compared to those without prior child protection involvement (Athanassiou et al., 2024).

Reference: Athanassiou, U, Whitten, T, Tzoumakis, S, Laurens, KR, Harris, F, Carr, VJ, Green, MJ & Dean, K 2024, 'Contact with child protection services and subsequent rates of first police contact as a person of interest, victim or witness in early life', *Children and Youth Services Review*, vol. 163, 107705 viewed 7 April, 2025, DOI 10.1016/j.childyouth.2024.107705.

Reference: Tzoumakis, S, Whitten, T, Laurens, KR, Dean, K, Harris, F, Carr, VJ & Green, MJ, 2024, 'Levels of involvement with child protection services associated with early adolescent police contact as a victim and person of interest', *Journal of Interpersonal Violence*, vol. 39, no. 11-12, pp. 2708-2732, viewed 7 April, 2025, DOI 10.1177/08862605231223468.

Impact of early emotional and behavioural problems on police contact in middle childhood

Children with emotional or behavioural problems early in life were more likely to have police contact during middle childhood.

- Nearly one in three (31.3%) children who had police contact in middle childhood showed emotional or behavioural problems at around age five years, compared to one in five (20.8%) in the broader population sample.
- Emotional and behavioural problems at school entry were linked to a higher rate of police contact in middle childhood.
- The rate of police contact as a person-of-interest for these children was nearly four times higher than for children without emotional or behavioural problems (Dean et al., 2021).

Reference: Dean, K, Whitten, T, Tzoumakis, S, Laurens, KR, Harris, F, Carr, VJ & Green, MJ 2021, 'Incidence of early police contact among children with emerging mental health problems in Australia', *JAMA Network Open*, vol. 4, no. 6, e2112057, viewed 7 April, 2025, DOI 10.1001/jamanetworkopen.2021.12057.

Intergenerational risk factors for antisocial behaviours

Parental criminal history significantly impacts children's behaviour and increases their risk of police contact and emotional difficulties.

- Around one in seven (13.9%) mothers and one in three (32.0%) fathers of children in the NSW-CDS had a criminal conviction or had been imprisoned by the time their child reached age 18 years.
- Children with a parent who had a history of criminal offending showed increased aggressive behaviours at around age five years and conduct problems at around age 11 years (Whitten et al., 2019).
- Girls with offending parents were over four times as likely to have police contact as a person-of-interest between ages 10 and 14 years, while boys were over three times as likely, compared with children whose parents had no criminal convictions (Tzoumakis et al., 2020).
- Parental offending was also linked to a higher risk of emotional, attentional, and conduct difficulties in their children during early and/or middle childhood (Whitten et al., 2019).

Reference: Green, MJ, Watkeys, OJ, Harris, F, O'Hare, K, Whitten, T, Tzoumakis, S, Laurens, KR, Carpendale, EJ, Dean, K & Carr, VJ, 2024, 'Cohort Profile Update: The New South Wales Child Development Study (NSW-CDS) – Wave 3 (child age ~18 years)', *International Journal of Epidemiology*, vol. 53, no. 3, dyae069, viewed 7 April, 2025, DOI 10.1093/ije/dyae069.

Reference: Tzoumakis, S, Whitten, T, Piotrowska, P, Dean, K, Laurens, KR, Harris, F, Carr, VJ & Green, MJ, 2020, 'Gender and the intergenerational transmission of antisocial behavior' *Journal of Criminal Justice*, vol. 67, 101670, viewed 7 April, 2025, DOI 10.1016/j.jcrimjus.2020.101670.

Reference: Whitten, T, Laurens, KR, Tzoumakis, S, Kaggodaarachchi, S, Green, MJ, Harris, F, Carr, VJ & Dean, K 2019, 'The influence of parental offending on the continuity and discontinuity of children's internalizing and externalizing difficulties from early to middle childhood', *Social Psychiatry and Psychiatric Epidemiology*, vol. 54, pp. 965–975, viewed 7 April, 2025, DOI 10.1007/s00127-019-01670-5.

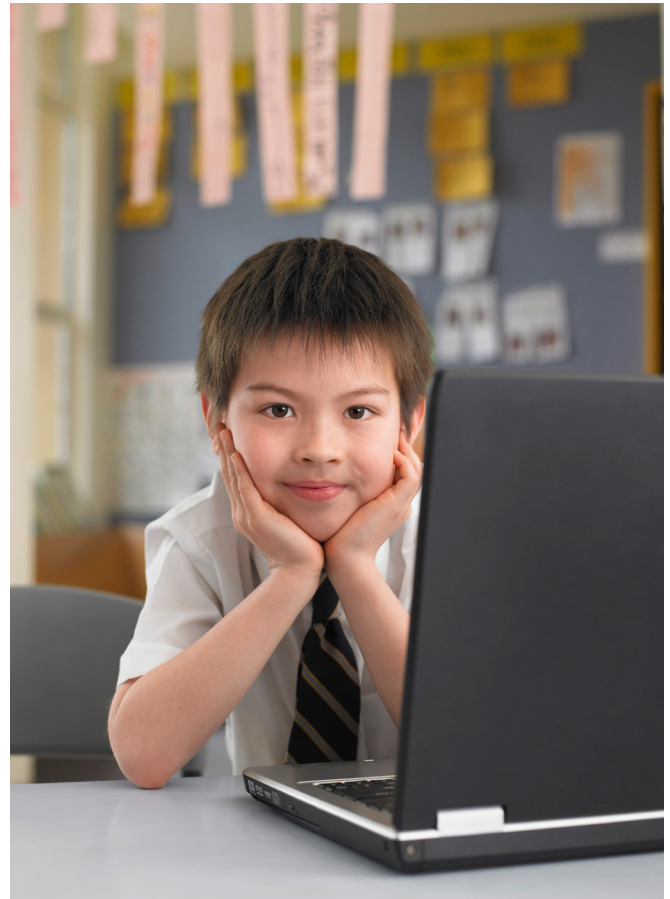
Education



Academic performance and school exclusions

The majority of children performed well on NAPLAN assessments, although a notable proportion faced school exclusions or required disability services.

- Almost nine in 10 (85.0%) of all children in the study scored above the National Minimum Standard on all NAPLAN assessments in Grades 3, 5, and 7 and around eight in 10 (78.0%) children achieved this standard in Grade 9.
- Among children enrolled in government schools, nearly one in five (20.0%) experienced a school exclusion (suspension or expulsion), and one in 18 (5.7%) received school services for a disability (Green et al., 2024).



Reference: Green, MJ, Watkeys, OJ, Harris, F, O'Hare, K, Whitten, T, Tzoumakis, S, Laurens, KR, Carpendale, EJ, Dean, K & Carr, VJ, 2024, 'Cohort Profile Update: The New South Wales Child Development Study (NSW-CDS) – Wave 3 (child age ~18 years)', *International Journal of Epidemiology*, vol. 53, no. 3, dyae069, viewed 7 April, 2025, DOI 10.1093/ije/dyae069.

Predicting academic underachievement from a range of early risk factors

Sustained underachievement in early grades affected a small percentage of children and was linked to various factors.

- Sustained underachievement in both Grades 3 and 5 occurred in one in 18 (5.7%) children.
- This underachievement was associated with sociodemographic, perinatal, and familial factors known at birth. Risk factors included young maternal age, no (or late first) antenatal visit, maternal smoking during pregnancy, pregnancy complications, socio-economic disadvantage, prenatal child protection notification, and maternal or paternal mental disorder or criminal offending history.
- Children with multiple adverse outcomes, such as sustained academic underachievement, substantiated maltreatment, police contact, and early childhood developmental vulnerability, could be reliably predicted by the presence of five or more risk factors known at birth (Green et al., 2022).

Reference: Green, MJ, Watkeys, OJ, Kariuki, M, Hindmarsh, G, Whitten, T, Dean, K, Laurens, KR, Harris, F & Carr, VJ 2022, 'Forecasting childhood adversities from conditions of birth', *Paediatric and Perinatal Epidemiology*, vol. 36, pp. 230–242, viewed 7 April, 2025, DOI 10.1111/ppe.12828.

Educational achievement for children with child protection contact

Children who were known to child protection services often had poorer reading and numeracy outcomes in Grades 3 and 5, with those in out-of-home care or with substantiated ROSH reports being particularly affected.

Children with substantiated ROSH reports were:



Children in out-of-home care were:



- Children placed in out-of-home care were 3-4 times as likely to achieve below-average scores and over three times less likely to achieve above-average scores, compared to children not known to child protection services.
- Children with substantiated ROSH reports were over three times as likely to achieve below-average scores and over 2.5 times less likely to achieve above-average scores compared to children not known to child protection services (Laurens et al., 2020).

Reference: Laurens, KR, Islam, F, Kariuki, M, Harris, F, Chilvers, M, Butler, M, Schofield, J, Essery, C, Brinkman, SA, Carr, VJ & Green, MJ 2020, 'Reading and numeracy attainment of children reported to child protection services: a population record linkage study controlling for other adversities', *Child Abuse & Neglect*, 101, 104326, viewed 7 April, 2025, DOI 10.1016/j.chiabu.2019.104326.

FACSIAR Evidence to Action Note, October 2021, *What is the relationship between childhood maltreatment and early educational outcomes?*, <https://dcj.nsw.gov.au/documents/about-us/facsiar/facsiar-publications-and-resources/What-is-the-relationship-between-childhood-maltreatment-and-early-educational-outcomes-October-2021-Evidence-to-Action-Note.pdf>

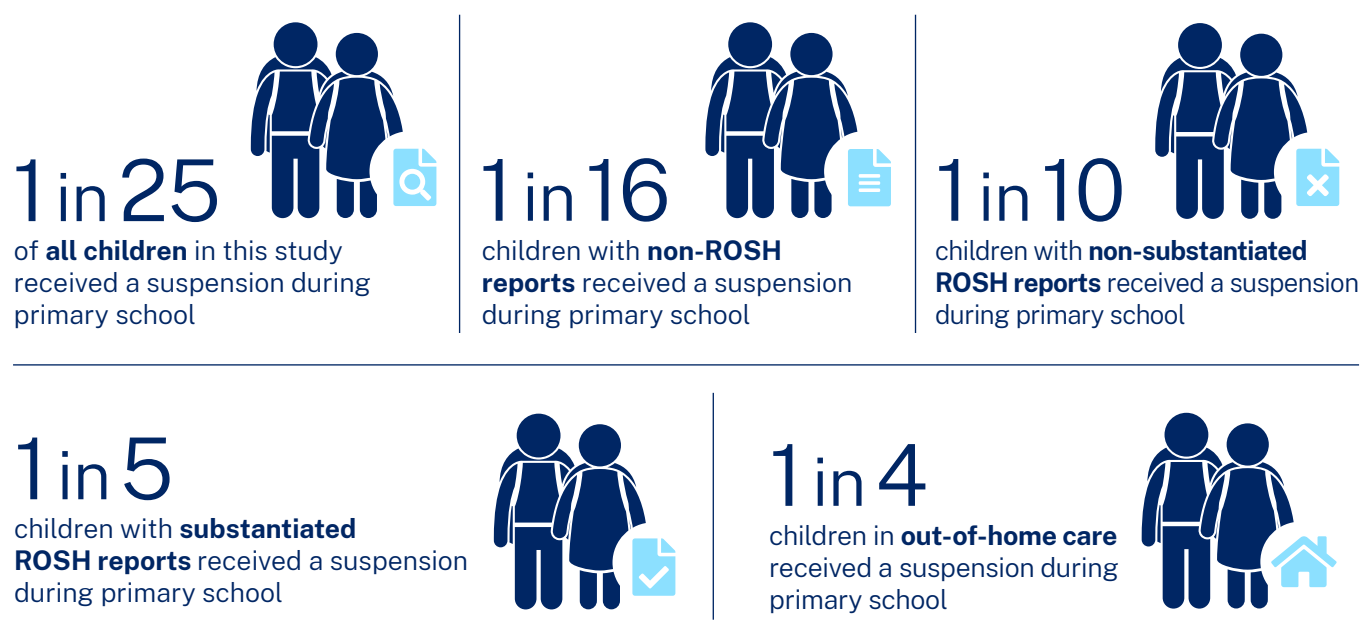
Child protection contact and school suspensions in primary school

Children involved with child protection services faced higher suspension rates in primary school than their peers.

- Overall, one in 25 (4.0%) children in this study received at least one suspension in Grades 3 to 6 in primary school. For children in contact with child protection services, this rate increases exponentially.
- Around one in 16 (6.2%) children with non-ROSH reports and around one in 10 (11.0%) children with non-substantiated ROSH reports were suspended.

- One in five (19.4%) children with substantiated ROSH reports, and one in four (25.6%) children in out-of-home care received at least one suspension.
- This does not mean that contact with child protection services causes suspensions, but that there are common factors associated with both child protection and suspensions, such as maltreatment, neglect and trauma.
- Other factors strongly associated with suspension include being a male student, showing teacher-reported aggressive behaviour at school entry, being from an Aboriginal family or a family experiencing socio-economic disadvantage (Laurens et al., 2021).²

Rates of primary school suspensions:



Reference: Laurens, KR, Dean, K, Whitten, T, Tzoumakis, S, Harris, F, Waddy, N, Prendergast, T, Taiwo, M, Carr, VJ & Green MJ 2021, 'Early childhood predictors of elementary school suspension: an Australian record linkage study', *Journal of Applied Developmental Psychology*, vol. 77, 101343. viewed 7 April, 2025, DOI 10.1016/j.appdev.2021.101343.

FACSIAR Evidence to Action Note: November 2022, *Are children who are known to child protection services more likely to be suspended from school?*, <https://dcj.nsw.gov.au/documents/about-us/facsiar/facsiar-publications-and-resources/Evidence-to-Action-Note-CDS-School-suspensions.pdf>

FACSIAR Lunch and Learn Webinar: February 2022, *Improving educational outcomes for children and young people with child protection contact*, <https://dcj.nsw.gov.au/about-us/facsiar/facsiar-research-seminars/past-seminars/2022-seminars/february-2022.html>

² For children with any child protection response, these factors should always be understood in the context of intergenerational disadvantage and trauma. In particular, being Aboriginal or Torres Strait Islander is not a 'risk factor' in and of itself. Rather, it is the systematic response of governments, intergenerational trauma and socioeconomic disadvantage experienced by many First Nations people that may place them at risk of poorer outcomes, including educational outcomes and suspensions.

Policy recommendations

The findings from the NSW-CDS highlight opportunities and a need for more integrated systems of early intervention across existing government agencies to prevent future adversities and provide comprehensive support for at-risk children and their families. This includes:

- Investing in early mental health, educational and psychosocial supports for the approximately 10% of children who begin school with a pattern of developmental vulnerability across multiple domains of functioning (i.e. the proportion of the population with ‘pervasive risk’ or ‘misconduct risk’ profiles on the AEDC at school entry).
- These children with risk patterns of early developmental functioning are more likely to require support for mental health problems later in childhood and adolescence, and/or become enmeshed in the criminal justice system. Annual (rather than every three years) administration of the AEDC would enable regular population monitoring of regions with a higher proportion of ‘at-risk’ children represented in the community, highlighting where increased services and supports may be needed.
- Extending the Out-of-Home Care Health Pathway to all children who have been the subject of ‘risk of significant harm’ reports (not just children placed in out-of-home care) to ensure adequate mental health support for vulnerable children as early as possible in the life-course.
- Extending the Out-of-Home Care Education Pathway to all children in contact with child protection services to boost learning and reduce their risk of receiving early suspensions from school.
- Providing additional educational support for children in contact with child protection services and/or in out-of-home care, who have received early suspensions or are at risk of suspension, is crucial. This support could include alternatives to school suspensions. For example, for Aboriginal children, this might involve changing the learning environment and content delivery to include structured learning in an outdoor setting, supported by Aboriginal teachers, caseworkers, psychologists, and Aboriginal support staff, thereby offering an alternative to suspension. Enhancing existing Personalised Learning and Support Planning for these children and others with complex needs, such as those with learning difficulties, disabilities, and trauma-related behavioural issues, should aim to improve educational outcomes and attendance by ensuring that their developmental and educational needs are met to prevent disengagement. These processes should ensure that individual needs are monitored and reviewed regularly to help each child reach their full learning potential. Additionally, making suspension a strategy of last resort and replacing at-home suspensions with suspensions at trauma-informed suspension centres is recommended for relevant populations
- Addressing parental risk factors and strengthening protective factors via the provision of holistic, trauma-informed services, especially for parents with multiple vulnerabilities, including intergenerational trauma, mental health problems and/or criminal justice involvement. This should be achieved by offering integrated, cross-agency, and culturally appropriate support services at key points in family contact with the health system (perinatal and early childhood), and the education system (early childhood care, school entry). This is important to help strengthen families and communities and improve long-term outcomes, safety, and wellbeing for Australian children.

Conclusion

The NSW-CDS findings provide important insights for the child protection and out-of-home care sector, as well as the NSW Government more broadly. A significant number of NSW children had contact with child protection services by age 18 years, with some showing intergenerational patterns of involvement. Children known to child protection services, particularly those in out-of-home care, exhibited higher rates of mental health disorders, self-harm, and suicidal ideation. Additionally, these children often faced poorer educational outcomes and higher suspension rates, highlighting the compounded disadvantages they experience. Children with early child protection contact also had higher rates of police involvement, particularly those with more serious child protection histories. Parental factors, such as mental health issues and criminal justice involvement, were significant predictors of early child protection contact and other adverse childhood experiences.

By adopting an integrated, family-centred approach that focuses on early intervention and targeted supports, the government can better address the complex needs of vulnerable children. It is critical to reduce re-reporting and prevent children entering out-of-home care. This will help improve long-term outcomes, increase resilience, and break the cycle of disadvantage.

Where can I find the NSW-CDS publications?

The [NSW-CDS website](#) provides accessible public summaries of all publications arising from the study, as well as information about other forms of research outputs.

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