

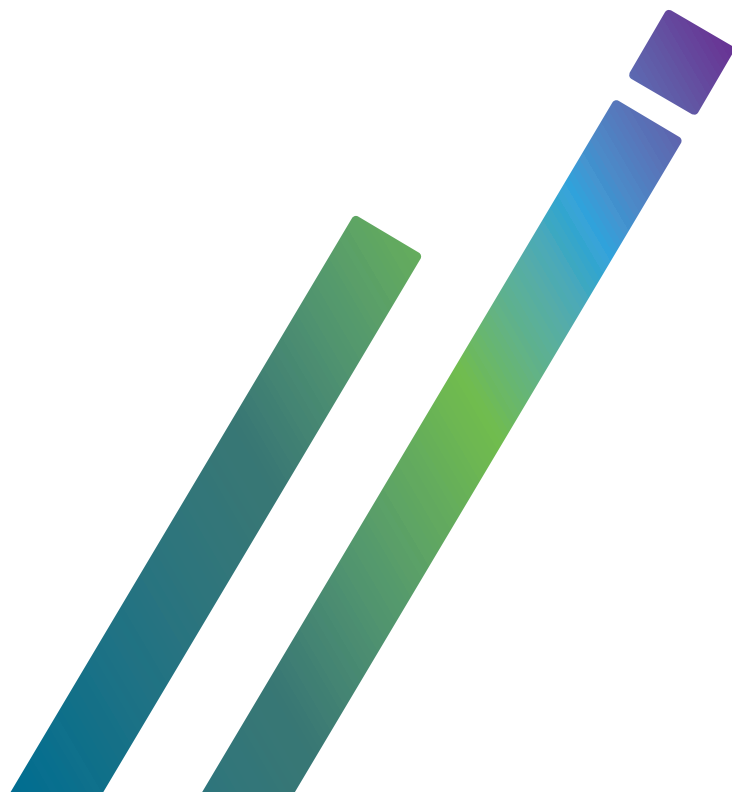


**Australian Government**

**Australian Institute of  
Health and Welfare**



# Children living in households with members of the Stolen Generations



**AIHW**





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# Summary

Aboriginal and Torres Strait Islander people who are members of the Stolen Generations (people who were forcibly removed from their families as a result of government policies across Australian jurisdictions) are recognised as experiencing worse outcomes in a range of areas, including health, socioeconomic, justice and housing, compared with other Aboriginal and Torres Strait Islander people who were not removed from their families.

This report provides a new perspective on the intergenerational impact of removal, by looking at outcomes for Aboriginal and Torres Strait Islander children aged under 15 who live in households with members of the Stolen Generations.

It examines 20 selected outcomes for children in 5 broad areas, including health, life stressors, school attendance, language and culture, and some household measures. Comparisons are made on these outcomes between children who live in households with members of the Stolen Generations and other Aboriginal and Torres Strait Islander children in households with adults of the same age who were not removed from their families.

Survey information about both the adults and children is also used to analyse the role of family characteristics, such as education level, employment status and any history of contact with the justice system, on child outcomes. These characteristics have all been shown to influence child development, health and wellbeing among Aboriginal and Torres Strait Islander children (for example, Anderson et al. 2017; AIHW 2015; Guthridge et al. 2016; Kikkawa 2015).

The Australian Bureau of Statistics carries out a series of Indigenous-specific surveys that collect data on a sample of both the children and adults who live in the same household. In this report it is the first time children included in these surveys have been connected to adults in the same household who were removed from their families to uncover direct evidence of the intergenerational effects of removal. In general, children living in these households were more likely to experience a range of adverse outcomes than other Aboriginal and Torres Strait Islander children. This report demonstrates a transfer of intergenerational poverty and trauma.

## Key findings

- In 2014–15, there were **an estimated 7,900 Indigenous children aged 0–14 who lived in the same household with a Stolen Generations family member**, representing around 3% of all Indigenous children in that age group.
- Compared with other Indigenous children, **children in the households with members of the Stolen Generations were significantly more likely to:**
  - have missed school without permission in the last 12 months
  - live in a home not owned by a family member
  - report having been treated unfairly at school for being Indigenous
  - have experienced stress in the last 12 months
  - live in a household that had cash-flow problems in the last 12 months
  - have poor self-assessed health.

# 1 Introduction

After the release of *Bringing them home 20 years on: an action plan for healing* (The Healing Foundation 2017), the Australian Government funded The Healing Foundation to identify the size, characteristics and needs of the Stolen Generations, as part of a broader Action Plan for Healing project.

The Healing Foundation commissioned the Australian Institute of Health and Welfare (AIHW) to conduct an independent quantitative analysis. This has resulted in 2 reports to date—a general report on the Stolen Generations and their descendants (AIHW 2018a) and a report on Stolen Generations members aged 50 and over (AIHW 2018b) using information from Australian Bureau of Statistics (ABS) surveys of Aboriginal and Torres Strait Islander people.

These reports found that Stolen Generations members and their adult descendants were more likely to experience many adverse life outcomes than other Aboriginal and Torres Strait Islander adults. Stolen Generations members aged 50 and over were also shown to consistently experience widespread disadvantage and health inequality compared with other Aboriginal and Torres Strait Islander people aged 50 and over.

This new report analyses specific aspects of the intergenerational connection between children and Stolen Generations members who live in the same household. It provides evidence for the ongoing intergenerational impact among the current cohort of Aboriginal and Torres Strait Islander children resulting from the removal of their family members in the past. This report uses a wider set of indicators on child outcomes to demonstrate the intergenerational effects than in previous studies on this topic (for example, Silburn et al. 2006; De Maio et al. 2005), which analysed the data collected in the Western Australian Aboriginal Child Health Survey (Zubrick et al. 2005, 2004).

## What data and methods were used?

This report uses data from the 2 most recent versions of the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) conducted by the ABS in 2008 and 2014–15 (Box 1). The data from these surveys were combined to increase the sample size and improve reliability of the estimated results.

The report analyses 20 health, cultural and socioeconomic outcomes for children living with at least 1 member of the Stolen Generations, compared with Aboriginal and Torres Strait Islander children in households where adults of the same age were not removed from their families. The comparisons are presented both as simple differences in the average values and as multivariate regression analysis that controls for the effects of other factors.

The method used in this study to uncover direct evidence of the intergenerational effects of removal from family—by connecting the children aged under 15 who are included in the NATSISS samples to adults in the same household who were removed from their families—is novel. To our knowledge, it has not been used before despite the great interest in documenting evidence on the intergenerational effects of removal from family.

### **Box 1: National Aboriginal and Torres Strait Islander Social Survey**

- The NATSISS is a large, nationally representative sample survey of the Aboriginal and Torres Strait Islander population that collects information for adult respondents (aged 15 and over) across a broad range of life areas, and a smaller range of information for child respondents (aged under 15).
- The information collected on children can be linked to the information on adults, based on a common identifier of all survey respondents within the same household.
- The 2014–15 NATSISS sampled 11,178 respondents (selected from 6,611 households), among whom 4,156 (37%) were children. The selected sample of children represented a reference population of around 243,000 in that age group.
- The 2008 NATSISS sampled 13,307 respondents (selected from 6,858 households), among whom 5,484 (41%) were children, representing a reference population of children of around 193,000.
- Within a selected household, individuals were randomly selected for personal interview. In non-remote areas, up to 2 Indigenous adults and up to 2 Indigenous children were selected. In remote areas, up to 1 Indigenous adult and up to 1 Indigenous child were randomly selected (ABS 2016a).

#### **NATSISS questions about removal from family**

- All adult respondents (aged 15 and over) in the NATSISS were asked the questions below about removal from family.

*The next few questions are about whether you or any of your relatives have been removed or taken away from your families. I know this may be upsetting for some people. Is it all right to ask you some questions about this?*

- 1. Have you been removed from your family by welfare or the government or taken away to a mission?*
- 2. Have any of your relatives been removed from their family by welfare or the government or taken away to a mission?*

*If yes to above:*

- 3. Are you able to tell me which of your relatives have been removed or taken away from their family (by welfare or the government or taken away to a mission)?  
(multiple responses allowed)*

- The method adopted in this study to identify the members of the Stolen Generations in a household is all persons born before 1972 in either of the 2008 and 2014–15 surveys who responded 'yes' to the first question above. See AIHW (2018a) for further details.

*Sources: ABS 2008, 2010, 2016b.*



## Who was included in the study?

This report compares outcomes for Aboriginal and Torres Strait Islander children (based on the NATSISS sample) by whether the child lives in a household with at least 1 adult family member in a specific age cohort that is associated with the Stolen Generations. (See Box 2 for explanations of the key terms used in this report.)

For all children included in this report's analysis, there is at least 1 adult Indigenous survey respondent who was born before 1972 in the same household. The 2 groups used for the comparative analysis differ only in whether that adult(s) born before 1972 reported having been removed from family or not.

This classification excludes from the analysis many other children in the NATSISS sample who did not have an adult family member in this age cohort who was also selected for the survey, or for whom the responses from the adults on the question about having been removed from their families were missing. (Around 2% of all adult respondents refused to answer the question on whether they were removed from family in both the 2008 and 2014–15 NATSISS.)

### Box 2: Terms used in the report

#### The 2 comparison groups

Children in Stolen Generations households (that is, children in the target group) comprise those aged under 15 who live in a household where there is at least 1 adult Indigenous respondent born before 1972 who is a husband, wife, partner or lone parent in the household, and who reported having been removed from family.

The estimated total number of children aged under 15 who live in households with Stolen Generations family members was 6,200 in 2008 and 7,900 in 2014–15, together representing around 3% of the total Indigenous population under age 15 in the combined 2008 and 2014–15 data set.

Children in the reference group comprise those aged under 15 who:

- live in a 1 Indigenous adult household where the only Indigenous adult is a survey respondent who was born before 1972, is a husband, wife, partner or lone parent in household, and reports not having been removed from family; or
- live in a 2 Indigenous adult household where both Indigenous adults are survey respondents who were born before 1972, are husband, wife, partner or lone parent in household, and both report not having been removed from family.

The estimated total number of children aged under 15 in the reference group created for this analysis was approximately 40,800 in 2008 and 25,700 in 2014–15.

#### Other terms

**Stolen Generations:** Aboriginal and Torres Strait Islander people who were born before 1972 and who reported they were removed from their families.

**Stolen Generations household:** A household where there is at least 1 Aboriginal and Torres Strait Islander survey respondent born before 1972 who reported having been removed from family.

*Note:* See AIHW (2018a) for the reasons behind the choice of 1972 as the cut-off year to define the Stolen Generations proxy population.

## What are the study's limitations?

In this study, classifying children into the target group and reference group depends on correctly classifying the adult members of the household as surviving Stolen Generations members.

That has some limitations, based on the data collected in these ABS surveys, and the need to use a proxy measure to identify the Stolen Generations. See the previous AIHW (2018a) report for more information.

There are also several new limitations for the analysis in this report (Box 3).

While these limitations of the data and the definitions used should be kept in mind in interpreting all the findings in this report, its main contribution is the results of the multivariate logistic regression analysis that identify the differences in outcomes for children living in Stolen Generations households compared with other children. These results are more robust to errors in the data and misclassifications of the categories of children used in the analysis as long as the potential errors are not of a systematic nature in a particular direction. We have taken steps to minimise the scope for such systematic errors by limiting the sample of children chosen for analysis to those who live in households with only 1 or 2 Indigenous adults whose removal status is known from the surveys (Box 3).

The reliability of the regression model results is also improved by pooling the sample of children from the 2008 and 2014–15 surveys.

### **Box 3: Some additional limitations related to the grouping of children**

- Complete information on the age, family relationships and removal status of all adults in the selected household is not collected in these ABS surveys. It is available only for those selected as a respondent to the survey. As such, the coverage of children in this study who do in fact live in households with members of the Stolen Generations will be incomplete if those adults were not selected for the survey, and the adult who was selected was not removed from family.
- However, all children classified in this study as living in a Stolen Generations household are identified accurately. For correctly classifying these children, it is sufficient to know there is at least 1 adult from the Stolen Generations cohorts among the adult(s) surveyed from that household. Additional details are not required on the removed- from- family status of all other adults in the household not selected for the survey.
- Some children in the reference group may be incorrectly classified if they live in large households with many adults, but the removal status is known for only 1 or 2 of the adults who were selected to be respondents to the survey. While steps were taken to minimise such errors by restricting the group of children selected as the reference group to be children from smaller sized households with more complete survey information on the adults (see Box 2), the scope for incorrect or incomplete classification of children needs to be noted.

*continued*

**Box 3 (continued): Some additional limitations related to the grouping of children**

- Living arrangements in some Indigenous households may be complex, and the exact family connections between the child and the adults in the household who are survey respondents may be difficult to ascertain (ABS 2016b). This report approximates the relationship between a child and an adult in the household by the survey variable specifying the adult's family relationship in the household.
- Family relationships of the study child to older family members who no longer live in the same household, or who have passed away, are not known from the survey. This can lead to an incomplete identification of all children who have grown up in a household with Stolen Generations family members, and affect the selection of children in the reference group who are classified as not being related to any Stolen Generations members.

## 2 Demographic characteristics

The total estimated population of the children in the 2 study cohorts (the target group and reference group) and their relative distribution by age, sex and remoteness area are shown in Table 1.

The target group of children living in Stolen Generations households, for the combined sample across the 2008 and 2014–15 surveys, represented an average reference population of 7,050 (around 6,200 in 2008 and 7,900 in 2014–15), of whom 52.5% were boys and 47.5% were girls. The population of the reference group of children (an average of 33,250 children, or around 66,500 in total in the combined surveys) had a slightly different gender balance, with 49% being boys and 51% girls.

The distribution by age for the target group of children shows 23% were aged 0–4, 33% aged 5–9 and 44% aged 10–14 (combined data for both surveys). Again, there was a slight difference in the age profile of the children in the reference group, with a smaller percentage in the youngest 0–4 age group (18%), 37% aged 5–9 and 45% aged 10–14.

The geographical classification by remoteness areas showed no difference in the relative distribution. For both groups of children 86% lived in non-remote areas and 14% lived in remote areas.

This is broadly similar to the pattern found in AIHW (2018a) for the classification by remoteness areas of the Stolen Generations cohort themselves: approximately 80% were in non-remote areas and 20% in remote areas, in the combined sample of the 2008 and 2014–15 NATSISS.

These small differences in the gender balance and age group distribution between the target and reference groups of children are inconsequential for the main multivariate regression modelling carried out in this report to estimate the effects of being a child living in Stolen Generations households. In all of the models estimated for the selected outcomes, age, gender and remoteness location are included as additional control factors, or explanatory variables, that have their separate direct effects on the outcomes being modelled.

**Table 1: Estimated population and distribution of children in study cohorts, by age, sex and remoteness, 2008 and 2014–15**

	Children in Stolen Generations households			Children in reference group
	2008	2014–15	Combined 2008 and 2014–15 total	Combined 2008 and 2014–15 total <sup>(a)</sup>
<b>Estimated population (number of children)</b>				
Age group (years)				
0–4	1,458	1,814	3,272	12,045
5–9	1,939	2,691	4,630	24,800
10–14	2,777	3,429	6,206	29,617
Sex				
Boys	3,396	4,007	7,403	32,510
Girls	2,778	3,927	6,705	33,952
Remoteness Area <sup>(b)</sup>				
Non-remote	5,199	6,922	12,121	56,800
Remote	975	1,012	1,987	9,662
<b>Total</b>	<b>6,174</b>	<b>7,934</b>	<b>14,108</b>	<b>66,462</b>
<b>Percentage distribution of the estimated population</b>				
Age group (years)				
0–4	23.6	22.9	23.2	18.1
5–9	31.4	33.9	32.8	37.3
10–14	45.0	43.2	44.0	44.6
Sex				
Boys	55.0	50.5	52.5	48.9
Girls	45.0	49.5	47.5	51.1
Remoteness Area <sup>(b)</sup>				
Non-remote	84.2	87.2	85.9	85.5
Remote	15.8	12.8	14.1	14.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) For the reference group of children, only the combined data for 2008 and 2014–15 are presented. There is no specific independent interest in the children in the reference group apart from demonstrating their equivalent distributional characteristics compared with the target group of children in Stolen Generations households in the combined 2008 and 2014–15 samples.

(b) The NATSISS data (accessed via ABS DataLab) distinguishes only the broader category of 'remote' or 'non-remote' place of residence for the survey respondents.

Sources: AIHW analyses of ABS 2010, 2016b.

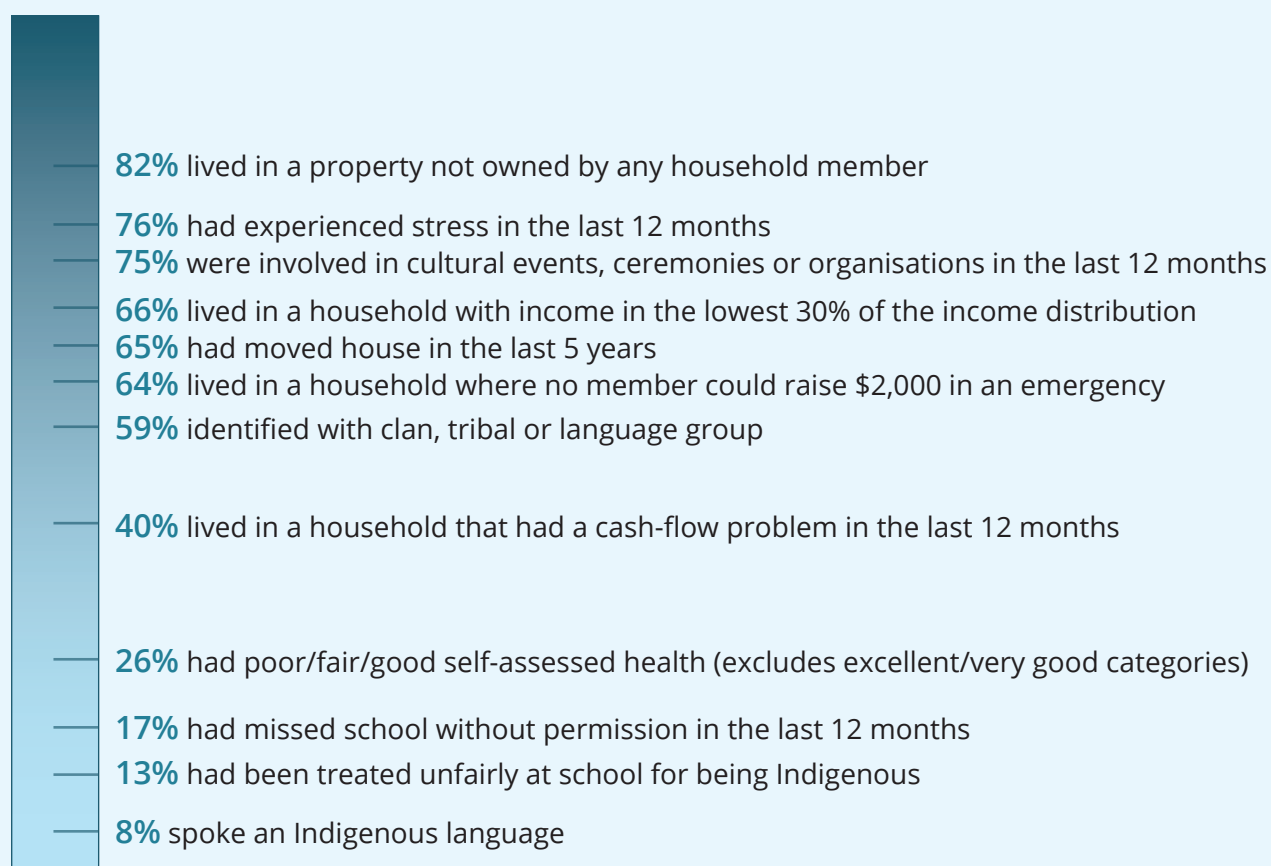
### 3 How are children in Stolen Generations households faring?

This section presents descriptive results on the 20 selected outcomes for children living in Stolen Generations households, and a comparison with the reference group of other children. It summarises the average characteristics of, and differences among, these 2 groups. These results look at each outcome individually, and do not adjust for potential influences on these outcomes other than the difference between being a child living in a Stolen Generations household and a child in the reference group.

The outcomes selected are based on those available for children aged under 15 in the NATSISS, and include several outcomes highlighted in the previous AIHW report on the effects of being removed from family for members of the Stolen Generations proxy population and descendants (AIHW 2018a).

The outcomes analysed mostly relate to the children themselves, but also include several relevant attributes on the socioeconomic status of the household in which the child lives, based on the guidance of ABS (2011). These household-level outcomes are likely to be more directly affected by the adverse socioeconomic impact of removal experienced by the Stolen Generations members themselves. However, they are also useful to assess outcomes for children, given the strong influences of socioeconomic circumstances on child development. Household-level characteristics, including household income, will reflect the combined outcomes associated with all household members, including the employment status and earnings capacity of adult household members other than the adults selected to be the survey respondents, of whom some are members of the Stolen Generations.

#### Among the children living in Stolen Generations households:



**Figure 1: Selected outcomes for children in Stolen Generations households and reference group of children, 2014–15 and 2008 combined data, average percentage of children (bottom horizontal axis) and the gap in percentage points (top horizontal axis)**



**Notes**

1. The percentages represented by the horizontal bars, to be read along the bottom axis, are based on the sample weights from each survey, without any further adjustments; so these percentages refer to an average of the reference population of children from both the 2008 and 2014–15 NATSISS.
2. The gap (in percentage points, to be read from the top horizontal axis) is simply the difference in the percentage of children who experience a specific outcome between the target group children in Stolen Generations households and the reference group of children. A positive value of the gap indicates the percentage of children is higher among the target group of children on that outcome.
3. Only gap values that are statistically significant at the 5% test level are presented in this figure by the diamonds. When gap values are not shown, the differences on those outcomes between the 2 groups of children are not statistically significant.

Sources: AIHW analyses of ABS 2010, 2016b.

## How do children living in Stolen Generations households compare with adult descendants?

The differences seen between children living in Stolen Generations households and the reference group of Indigenous children mirror to some extent the differences seen between the adult descendants of the Stolen Generations and their Indigenous reference group, described in AIHW (2018a). The children currently living in households with members of the Stolen Generations will themselves become adult descendants of the Stolen Generations, as defined in the previous AIHW analysis. The experience of trauma and the higher likelihood of other adverse outcomes for the adult descendants, as detailed in AIHW (2018a), will be conditioned by their own childhood experiences.

The outcomes that can be analysed from the ABS surveys for children aged under 15 in Stolen Generations households and for the adult descendants aged 18 and over, however, differ considerably. Where there are some related outcomes measured for both children and adult descendants, there are some common patterns and some differences.

The patterns for the cultural outcomes are most similar, with both the adult descendants and the children in Stolen Generations households having a higher degree of cultural identity and participation in cultural activities than their respective reference groups.

The ability to speak an Indigenous language provides a clear contrast. Among adult descendants, there is a significantly lower percentage able to speak an Indigenous language compared with their reference group of other Indigenous adults (AIHW 2018a:Table 4.1), but not so among the children living with Stolen Generations household members (Figure 1). Their ability to speak an Indigenous language is low, but is at the same level as the reference group of children. The presence of a Stolen Generations family member, who may be more conscious of traditional cultural heritage and languages, may be an important factor in the observed increase in the interest and ability of these children to speak Indigenous languages at the same level as the reference group of children.

## Selected differences in outcomes for girls and boys and by location

Some further comparisons were made to test the extent of the differences on these selected outcomes between children in Stolen Generations households and the reference group of children—separately for boys and girls, and for children in remote and non-remote areas.

The statistically significant differences between the children in Stolen Generations households and children in the reference group by gender and location are summarised in Box 4.



**Box 4: Some differences in outcomes for children in Stolen Generations households compared with the reference group of children, by gender and location (statistically significant differences only)**

<p><b>Girls</b> in Stolen Generations households were more likely than girls in the reference group to:</p> <ul style="list-style-type: none"> <li>✘ have experienced stress in the last 12 months</li> <li>✘ have moved house in last 5 years</li> <li>✓ identify with a clan/tribal/language group</li> <li>✓ recognise an area as a homeland</li> </ul> <p>And less likely than girls in reference group to:</p> <ul style="list-style-type: none"> <li>✘ live in a home owned by a household member</li> </ul>	<p><b>Boys</b> in Stolen Generations households were more likely than boys in the reference group to:</p> <ul style="list-style-type: none"> <li>✘ have no household members who could raise \$2,000 in an emergency</li> <li>✘ live in a household with cash-flow problems in the last 12 months</li> <li>✘ have missed school without permission in the last 12 months</li> </ul> <p>And less likely than boys in reference group to:</p> <ul style="list-style-type: none"> <li>✘ live in a home owned by a household member</li> </ul>
<p><b>In non-remote areas</b>, children in Stolen Generations households were more likely than children in the reference group to:</p> <ul style="list-style-type: none"> <li>✘ live in a household with cash-flow problems in the last 12 months</li> <li>✘ have no household members who could raise \$2,000 in an emergency</li> <li>✓ identify with a clan/tribal/language group</li> <li>✓ recognise an area as a homeland</li> </ul> <p>And less likely than children in reference group in non-remote areas to:</p> <ul style="list-style-type: none"> <li>✘ live in a home owned by a household member</li> </ul>	<p><b>In remote areas</b>, children in Stolen Generations households were more likely than children in the reference group to:</p> <ul style="list-style-type: none"> <li>✘ have experienced stress in last 12 months</li> <li>✘ live in a household with cash-flow problems in last 12 months</li> <li>✘ live with household members who ran out of money for basic living expenses in last 12 months</li> <li>✓ identify with a clan/tribal/language group</li> <li>✓ recognise an area as a homeland</li> <li>✓ participate in traditional cultural activities</li> </ul>
<p><i>Note:</i></p> <ul style="list-style-type: none"> <li>✓ indicates the relationship of being a child in a Stolen Generations household is favourable on that outcome</li> <li>✘ indicates the relationship of being child in a Stolen Generations household is adverse on that outcome</li> </ul>	

In addition, within the group of children in Stolen Generations households:

- boys were more likely than girls to have concerns about their learning due to health issues (as indicated by their primary carers). This was also the case in the reference group
- those living in remote areas were significantly more likely to live in a household that had run out of money for basic living expenses in the last 12 months than those in non-remote areas

In terms of location more broadly, children in remote areas (in both target and reference groups) were significantly more likely than children in non-remote areas to:

- identify with a clan/tribal/language group
- recognise an area as a homeland
- participate in cultural activities.

## 4 Intergenerational effects on children

This section presents results from analysis using multivariate regression models. These models are a way of describing the relationship between an outcome of interest and several explanatory variables at the same time so that the independent effect of each variable can be identified separately from the effects of the other variables.

The key results from these models are the estimates of the independent effect on child outcomes when that child lives in a Stolen Generations household (that is, with adults born before 1972 who had been removed from their families), after controlling for the effects of other factors (shown in Box 5) that might be related to the outcomes selected for analysis.

These models considered characteristics of the adult household member, such as education level and employment status. This allows for a better estimation of the intergenerational effects of removal of adults on child outcomes, accounting for the expected independent effect of parental education and employment on child outcomes.

The analysis was done separately for each of the selected 20 outcomes (as in Figure 1).

### **Box 5: Explanatory variables used in the models**

The following demographic and location variables were common to all estimated models:

- child lives in household with a Stolen Generations family member
- sex of child
- age categories (0–4, 5–9 and 10–14)
- remoteness classification (categorised only as remote or non-remote).

These additional explanatory variables were included selectively in each of the models

#### **Socioeconomic factors**

- adult in household is currently employed
- adult in household has completed Year 12
- household income level (ranked into 1 of 10 percentile groupings)

#### **Language and cultural factor**

- main language spoken at home is Indigenous for adult in household

#### **Miscellaneous factors**

- adult in household was incarcerated in last 5 years
- child lives in a lone-parent household
- child lives a mixed household (with non-Indigenous members)

#### **Time period indicator**

- indicator to distinguish the 2008 and the 2014–15 samples in the combined sample.

*Note:* The reference to the adult in the household is to the specific adult who was interviewed in the ABS surveys and who was in the Stolen Generations age cohort (born before 1972), and for whom there was a valid response on whether they were removed from their own family. These adults also have to be identified as being family members in the household, but it cannot be confirmed that they are the actual parent of the specific child included in the NATSISS sample from the same household.

The key results are presented as the odds ratios (see Box 6) related to the effect of being a child who lives in a Stolen Generations household compared with the reference group of children, and are summarised in Figure 2. Several outcomes are defined for different age groups of children within the overall group of all children aged 0 to 14.

#### **Box 6: What do odds ratios show?**

- An odds ratio higher than 1 indicates that the outcome is more likely to occur among the children in a Stolen Generations household than in the reference group.
- An odds ratio of less than 1 indicates that the outcome is less likely to occur among the children in a Stolen Generations household than in the reference group.
- An odds ratio of 1 indicates no difference between the 2 groups of children.

The further away the odds ratio is from 1, the stronger is the effect on a child living in a Stolen Generations household for the outcome of interest, even after controlling for the effects of the other variables included in the model. Standard statistical procedures were applied to test if the estimated odds ratios for the effects of living in a Stolen Generations household are significantly different from 1.

The multivariate regression analysis used in this report is similar to that in the previous larger report (AIHW 2018a) which contains a more detailed explanation of its methods and interpretation of results.

## **Worse life outcomes on 7 measures, better on 2**

In the combined results of the 2008 and 2014–15 surveys, children living in Stolen Generations households experienced higher odds of an adverse outcome in 7 of the 20 outcomes than the children in the reference group. (These 7 outcomes are part of the 9 outcomes marked in dark green in Figure 2.)

For example, they were 4.5 times as likely to have missed school without permission in the last 12 months, and 1.9 times as likely to report having been treated unfairly at school for being Indigenous.

For 2 other outcomes also marked in dark green in Figure 2 (identify with clan/tribal/language group and recognise a homeland), children living in households with Stolen Generations members were shown to be relatively more advantaged.

One other outcome showed a marginally significant negative effect related to no household members being able to raise \$2,000 in an emergency (marked in light green in Figure 2).

For the remaining 10 outcomes, there were no statistically significant differences between children living in Stolen Generations households and other children (marked in blue in Figure 2).

Generally, these results are similar to those in AIHW (2018a) on the greater likelihood of adverse outcomes among the adult descendants of removed persons than their reference group. For example, in the regression results for the adult descendants from the 2014–15 NATSISS, 11 (of a different set) of 20 selected outcomes showed a significantly higher likelihood of these adverse outcomes occurring among the adult descendants.

**Figure 2: Estimates of the effects on children living in a household with members of the Stolen Generations (in the cohort born before 1972), on 20 selected outcomes, odds ratio results from 2008 and 2014–15 NATSISS combined data**

<b>4.5 x</b>	as likely to	Have missed school without permission in last 12 months (aged 4–14)
<b>2.0 x</b>	as likely to	Identify with clan/tribal/language group (aged 3–14)
<b>2.0 x</b>	as likely to	Recognise a homeland (aged 3–14)
<b>1.9 x</b>	as likely to	Have been treated unfairly at school for being Indigenous (aged 2–14)
<b>1.8 x</b>	as likely to	Have experienced stress in last 12 months (aged 4–14)
<b>1.7 x</b>	as likely to	Have moved house in last 5 years
<b>1.6 x</b>	as likely to	Have poor self-assessed health
<b>1.6 x</b>	as likely to	Live in a household with cash-flow problems in last 12 months
<b>0.4 x</b>	as likely to	Live in a home owned by a household member
<b>1.5 x</b>	as likely to	Live in a household with no member able to raise \$2,000 in an emergency
<b>1.5 x</b>	as likely to	Have health issues leading to concerns on child's learning (aged 1–14)
<b>1.4 x</b>	as likely to	Have participated in cultural activities in last 12 months (aged 3–14)
<b>1.2 x</b>	as likely to	Be involved in cultural events, ceremonies or organisations in last 12 months (aged 3–14)
<b>1.0 x</b>	as likely to	Have problems sleeping in last 4 weeks
<b>1.0 x</b>	as likely to	Have stayed overnight somewhere else due to family crises in last 6 months
<b>1.0 x</b>	as likely to	Have stayed overnight somewhere else due to family crises in last 12 months
<b>1.0 x</b>	as likely to	Speak an Indigenous language (aged 3–14)
<b>0.9 x</b>	as likely to	Live in a household with income in the lowest 30%
<b>0.9 x</b>	as likely to	Live with household members who ran out of money for basic living expenses in last 12 months
<b>0.5 x</b>	as likely to	Usually attend school, preschool or kindergarten (aged 4–14)

Note: The colour scheme indicates whether the estimated odds ratio (OR) is statistically different from 1 at the 5% and 10% test levels.

■ Denotes the OR is significantly different from 1 at the conventional 5% level, consistent with a 95% confidence interval.

■ Denotes the OR is significantly different from 1 at the 10% level, consistent with a wider 90% confidence interval.

■ Denotes the estimated OR is not significantly different from 1 (meaning the outcome does not vary significantly between children in Stolen Generations households and the reference group of children).

Some of the odds ratio results for similar outcomes are quite close between the adult descendants and the children living in Stolen Generations households. In the 2014-15 results for the adult descendants, compared with the reference group who did not experience any type of family removal, the descendants were 1.4 times as likely to have poor self-assessed health (AIHW 2018a:Figure 5.2). The odds ratio result for children living in Stolen Generations households was 1.6 times as likely to have poor self-assessed health than the reference group of children (Figure 2).

These results provide a new perspective on how the intergenerational effects of removal from family that occurred for the Stolen Generations many years ago can still be seen in contemporary data about the children who live with the Stolen Generations.

## 5 Exploring further: other factors that influence outcomes for children

The previous section looked at the effect of being a child living in a household with members of the Stolen Generations, and found this significantly influenced 9 of the 20 outcomes modelled.

The modelling technique (multivariate logistic regression) also considered a range of other factors—listed in Box 5—and estimated how they separately influenced these selected outcomes for children. This section summarises the significant effects of the other explanatory variables in the models estimated for the 20 selected outcomes. These results are shown in Table 2. (Box 7 includes more detail on which variables were used in a specific model and how to interpret the results on these other variables).

Among these other factors, a child being older, and having an adult member in the household who has completed Year 12, influenced the greatest number of the 20 outcomes (Table 2).

A child's older age (compared with children aged 0–4) was significant in 8 of the 20 outcomes. It was a negative influence on 4 outcomes related to health, discrimination at school and experiencing stress. However, being older was positive in all 4 cultural outcomes, indicating greater cultural connections for older children.

Having an adult household member who had completed Year 12 had a beneficial influence on 6 child outcomes, including increased connection to culture, and reduced risk of experiencing household financial stress.

The effect of a child living in a remote location was significant for 5 outcomes: being beneficial for the 4 culture related outcomes but adverse for one (lower likelihood of the child living in a home owned by a household member).

Two other variables had a significant effect on 4 of the 20 selected outcomes:

- A child living with an adult member who has been incarcerated was adversely affected. They were more likely to not usually attend school or to miss school without permission, and more likely to live in a household experiencing financial stress.
- A child living in a household with Indigenous and non-Indigenous people showed mixed results. This improved both indicators of school attendance, but reduced cultural connections with a homeland and ability to speak an Indigenous language.

Other factors that had a significant effect on up to 2 outcomes were the child's sex, being part of a lone-parent family, and having higher household income.

The variable indicating the adult in the household was employed was used in models for 4 of the 20 outcomes (see Box 7). In all 4 of these models, the effect of the adult being employed was significant and beneficial—children were less likely to live in a household with income in the lowest 30%, or to live in a household experiencing any of the 3 financial stress-related outcomes.

**Table 2: Summary of the significant effects of other explanatory variables on the selected 20 outcomes**

Key explanatory variables	Effect on outcomes related to health, income, school attendance and financial stress	Effect on outcomes related to Indigenous cultural connections
Child is aged 5-9 or 10-14 (compared to 0-4)	<p><b>More likely to:</b></p> <ul style="list-style-type: none"> <li>• Have poor self-assessed health</li> <li>• Have health issues leading to concerns about child's development</li> <li>• Have been treated unfairly at school for being Indigenous</li> <li>• Have experienced stress in the past 12 months</li> </ul>	<p><b>More likely to:</b></p> <ul style="list-style-type: none"> <li>• Identify with clan/tribal/language group</li> <li>• Recognise a homeland</li> <li>• Participate in cultural activities</li> <li>• Be involved in cultural events</li> </ul>
Child lives in remote areas	<p><b>Less likely to:</b></p> <ul style="list-style-type: none"> <li>• Live in a home owned by a household member</li> </ul>	<p><b>More likely to:</b></p> <ul style="list-style-type: none"> <li>• Recognise a homeland</li> <li>• Participate in cultural activities</li> <li>• Be involved in cultural events</li> <li>• Speak an Indigenous language</li> </ul>
Boys	<p><b>More likely to:</b></p> <ul style="list-style-type: none"> <li>• Have poor self-assessed health</li> <li>• Have health issues leading to concerns about child's learning</li> </ul>	
Higher household income	<p><b>More likely to:</b></p> <ul style="list-style-type: none"> <li>• Live in a home owned by a household member</li> </ul>	
Lone-parent family	<p><b>More likely to:</b></p> <ul style="list-style-type: none"> <li>• Have been treated unfairly at school for being Indigenous</li> <li>• Have moved in the last 5 years</li> </ul>	
Adult household member has completed Year 12	<p><b>Less likely to:</b></p> <ul style="list-style-type: none"> <li>• Have stayed overnight somewhere else due to family crisis in last 6 months</li> <li>• Live in a household with no members being able to raise \$2,000 in an emergency</li> <li>• Live with household members who ran out of money for basic living expenses in last 12 months</li> </ul>	<p><b>More likely to:</b></p> <ul style="list-style-type: none"> <li>• Identify with clan/tribal/language group</li> <li>• Recognise a homeland</li> <li>• Participate in cultural activities</li> </ul>
Adult household member has been incarcerated	<p><b>More likely to:</b></p> <ul style="list-style-type: none"> <li>• Live in a household with no members being able to raise \$2,000 in an emergency</li> <li>• Live with household members who ran out of money for basic living expenses in last 12 months</li> </ul> <p><b>Less likely to:</b></p> <ul style="list-style-type: none"> <li>• Usually attend school, preschool or kindergarten</li> <li>• Live in a home owned by a household member</li> </ul>	
Household with both Indigenous and non-Indigenous people	<p><b>More likely to:</b></p> <ul style="list-style-type: none"> <li>• Usually attend school, preschool or kindergarten</li> </ul> <p><b>Less likely to:</b></p> <ul style="list-style-type: none"> <li>• Have missed school without permission in last 12 months</li> </ul>	<p><b>Less likely to:</b></p> <ul style="list-style-type: none"> <li>• Recognise a homeland</li> <li>• Speak an Indigenous language</li> </ul>

### **Box 7: Selection of explanatory variables and interpretation of results**

A common set of 12 explanatory variables (listed in Box 5) was selected for these logistic regression models, but some adjustments were necessary in the variables included in the actual model estimated for each specific outcome.

Each of the models estimated for the 20 outcomes always included the subset of 4 demographic and location variables (that is, the indicator of child living in a Stolen Generations household, sex of child, age category of child and residential location, classified only as remote or non-remote). Of the additional explanatory variables, 4 were included in each of the estimated models: adult in household has completed Year 12; adult in household was incarcerated in last 5 years; child lives in a lone-parent household; and a time indicator to distinguish the 2008 and the 2014–15 NATSISS sample of children in the combined data.

Selective adjustments were made with reference to including the other 4 variables. For example, household income is expected to be an important determinant of most of the outcomes measured at the child level. However, it cannot be used as an explanatory variable in the models for outcomes that are themselves measures of household income or financial stress. Hence, in four of these models for household measures (that is, household income in the bottom 30% and the three financial stress related outcomes), household income was not used as an explanatory variable but substituted with a close proxy—the employment status of the adult member of the household.

In the models for other outcomes, both the household income variable and adult employment status variable were not used simultaneously because of the close relationship between them. In choosing 1 of these variables, preference was given to household income because it represents a wider range of differences than just being employed or not.

Logistic regression models estimate the odds of an event occurring (that is, the outcome of interest, expressed as either occurring or not occurring), accounting for the explanatory variables included in the model. The estimated odds ratios for a specific variable can be interpreted as the difference in the likelihood of an outcome occurring due to that variable, after controlling for the effects of the other explanatory variables. For example, an estimated odds ratio of 2.1 on a gender variable (where boys are the reference category) implies that girls are 2.1 times as likely on average than boys to experience the outcome being modelled.

Some of the explanatory variables used, such as age of the child and household income, have multiple categories defined. In such cases, 1 subcategory of that variable is used as the reference group (for instance, child is aged 0–4); and the odds ratios are estimated for the effect of the child being in the older age group categories (5–9; or 10–14) compared with being aged 0–4.

The results in this section highlight the estimated odds ratios that are significantly different from 1, indicating which specific explanatory variables had a significant effect in increasing or decreasing the likelihood of observing the outcome of interest among all children included in this study, irrespective of whether or not they lived in a Stolen Generations household.



The results in this section strengthen the earlier findings in the section on 'Intergenerational effects on children' that highlighted only the specific effects associated with a child who lived in a Stolen Generations household on a range of adverse outcomes. The results summarised in this section indicate that the intergenerational effects of removal occur even after controlling for a range of other significant factors. These results help to strengthen the conclusion that the intergenerational effects estimated in this report represent the effects on the children of today that arise from the removal of the Stolen Generations members who live in the same household; and that these effects are separate from the independent effects of the other socioeconomic factors, such as lower educational and income levels and other adverse outcomes experienced by the Stolen Generations members themselves.

Among all of the variables considered in the estimated models, the effect of being a child in a Stolen Generations household was also the most persistent, with significant results found in 9 out of the 20 selected outcomes—more than for any of the other explanatory variables used in these models.

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## Abbreviations

ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
NATSISS	National Aboriginal and Torres Strait Islander Social Survey
OR	Odds ratios (estimated from logistic regression models)

## References

- ABS (Australian Bureau of Statistics) 2008. National Aboriginal and Torres Strait Islander Social Survey 2008 questionnaire. Canberra: ABS. Viewed 2 February 2018, <[http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/2B42D17241785A35CA2576D50016DBFB/\\$File/2008%20natsiss%20questionnaire.pdf](http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/2B42D17241785A35CA2576D50016DBFB/$File/2008%20natsiss%20questionnaire.pdf)>.
- ABS 2010. National Aboriginal and Torres Strait Islander Social Survey 2008, expanded Confidentialised Unit Record Files (CURFs), DataLab. (Findings based on use of ABS microdata.) Canberra: ABS.
- ABS 2011. Information Paper: Measures of Socioeconomic Status. ABS cat. no. 1244.0.55.001. Canberra: ABS.
- ABS 2016a. National Aboriginal and Torres Strait Islander Social Survey, 2014–15. ABS cat. no. 4720.0. Canberra: ABS.
- ABS 2016b. National Aboriginal and Torres Strait Islander Social Survey 2014–15, expanded Confidentialised Unit Record Files (CURFs), DataLab. (Findings based on use of ABS microdata.) Canberra: ABS.
- AIHW (Australian Institute of Health and Welfare) 2015. Educational outcomes for children in care: linking 2013 child protection and NAPLAN data. Cat. no. CWS 54. Canberra: AIHW.
- AIHW 2018a. Aboriginal and Torres Strait Islander Stolen Generations and descendants: numbers, demographic characteristics and selected outcomes. Cat. no. IHW 195. Canberra: AIHW.
- AIHW 2018b. Aboriginal and Torres Strait Islander Stolen Generations aged 50 and over. Cat. no. IHW 199. Canberra: AIHW.
- Anderson I, Lyons J, Luke J & Reich H 2017. Health determinants and educational outcomes for Indigenous children. In: Walter M, Martin K & Bodkin-Andrews G (eds). *Indigenous children growing up strong*. London: Palgrave Macmillan, 233–58.
- De Maio J, Zubrick S, Silburn S, Lawrence D, Mitrou F, Dalby R et al. 2005. The Western Australian Aboriginal Child Health Survey: measuring the social and emotional wellbeing of Aboriginal children and intergenerational effects of forced separation. Perth: Curtin University and Telethon Institute of Child Health Research.
- Guthridge S, Li L, Silburn S, Li S, McKenzie J & Lynch J 2016. Early influences on developmental outcomes among children, at age 5, in Australia's Northern Territory. *Early Childhood Research Quarterly* 35:124–34.
- HREOC (Human Rights and Equal Opportunity Commission) 1997. *Bringing them home*. Sydney: Spinney.
- Kikkawa D 2015. The impact of multiple disadvantage on children's social and emotional difficulties. In: Department of Social Services (DSS), *Footprints in Time: the Longitudinal Study of Indigenous Children—report from Wave 5*. Canberra: DSS, 78–81.
- Silburn S, Zubrick S, Lawrence D, Mitrou F, DeMaio J, Blair E et al. 2006. The intergenerational effects of forced separation on the social and emotional wellbeing of Aboriginal children and young people. *Family Matters* 75:10–17.
- The Healing Foundation 2017. *Bringing them home 20 years on: an action plan for healing*. Canberra: The Healing Foundation.
- Zubrick SR, Lawrence DM, Silburn SR, Blair E, Milroy H, Wilkes T et al. 2004. The Western Australian Aboriginal Child Health Survey: the health of Aboriginal children and young people. Vol 1. Perth: Telethon Institute for Child Health Research, 2004.
- Zubrick SR, Silburn SR, Lawrence DM, Mitrou FG, Dalby RB, Blair EM et al. 2005. The Western Australian Aboriginal Child Health Survey: the social and emotional wellbeing of Aboriginal children and young people. Vol. 2. Perth: Curtin University of Technology and Telethon Institute for Child Health Research.

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## Related publications

The following AIHW publications relating to the Stolen Generations members themselves and their adult descendants might also be of interest:

- AIHW 2018a. Aboriginal and Torres Strait Islander Stolen Generations and descendants: numbers, demographic characteristics and selected outcomes. Cat. no. IHW 195. Canberra: AIHW.
- AIHW 2018b. Aboriginal and Torres Strait Islander Stolen Generations aged 50 and over. Cat. no. IHW 199. Canberra: AIHW.





This report presents analyses of selected outcomes for Aboriginal and Torres Strait Islander children who live in households with members of the Stolen Generations. It shows these children are more likely than comparable other Aboriginal and Torres Strait Islander children to experience a range of adverse outcomes. The report provides a new perspective on the intergenerational impact of the initial removal of Aboriginal and Torres Strait Islander children from their families that led to the Stolen Generations.

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