COMMITTEE ON THE OMBUDSMAN, THE LAW ENFORCEMENT CONDUCT COMMISSION AND THE CRIME COMMISSION

2020 review: Questions on Notice

1. What are the leading natural causes of death for children, both generally, for Aboriginal children and children from disadvantaged backgrounds?

Of the 8,567 children who died in the 15 years to 2017, three quarters died from natural causes.

Aboriginal children

As illustrated below, over a 15 year period, the first and second leading cause of death for non-Indigenous and Aboriginal and Torres Strait Islander children were the same for both infants under 12 months of age and for children aged 1 – 17 years.

For infants, the leading two causes were conditions originating in the perinatal period (such as prematurity and respiratory disorders) followed by congenital anomalies (such as congenital heart malformation and neural tube defects).

For children aged 1 – 17 years the leading two causes were cancers and tumours, followed by nervous system diseases (such as cerebral palsy and epilepsy). For Aboriginal children, congenital anomalies was equal with nervous system diseases as the second leading cause of death.

The third leading cause differed. For non-indigenous infants, this was diseases of the nervous system whereas for Aboriginal and Torres Strait Islander children, this was respiratory disease. For children aged 1 – 17 years, the third leading cause of death for non-Indigenous children was congenital anomalies. For Aboriginal and Torres Strait Islander children, this was circulatory disease (for example, cardiomyopathy and acute myocarditis).

	1st	2nd	3rd				
Infants aged under one year							
Non-Indigenous	Perinatal	Congenital	Nervous system				
Aboriginal and Torres Strait Islander	Perinatal	Congenital	Respiratory				
Children aged 1-17 years							
Non-Indigenous	Cancers and tumours	Nervous system	Congenital				
Aboriginal and Torres	Cancors and tumours	Congenital	Circulatory				
Strait Islander		Nervous system					

Figure: leading natural causes of death 2003 – 2017, infants and children 1 – 17 years by Indigenous status

Notably, looking at all causes of death inclusive of injury, the leading causes of death for Aboriginal and Torres Strait Islander children include more injury-related causes than for non-Indigenous children.

	1st	2nd	3rd	4th	5th		
Infants aged under one year							
Non-Indigenous	Perinatal	Congenital	Nervous system	Endocrine	Respiratory		
Aboriginal and Torres Strait Islander	Perinatal	Congenital	Respiratory	Accidental threats to breathing	Nervous system		
Children aged 1-17 years							
Non-Indigenous	Cancers and tumours	Transport	Nervous system	Suicide	Congenital		
Aboriginal and Torres Strait Islander	Transport	Suicide	Drowning	Cancers and tumours	Congenital Nervous system		
Blue corresponds to deaths from natural causes and green corresponds to deaths from injury-related causes							

All leading causes of death 2003 – 2017, infants and children 1 – 17 years by Indigenous status

Children from disadvantaged backgrounds

The CDRT has not undertaken a specific analysis of leading natural causes of death and the influence of socio-economic disadvantage. While the general link between socioeconomic status (SES) and the risk of child death has been well-established, questions remain about the factors underpinning this relationship. We are in the planning stages of work for a research project in 2020 / 2021 that will focus on in-depth analyses of socio-economic status and other variables (such as maternal and child health) on the risk of dying during infancy and early childhood.

Our 2018 report *Spatial analysis of child deaths in NSW* (described in more detail below) identified that children living in disadvantaged areas across NSW were 1.8 times more likely to die from natural causes as children in least disadvantaged areas (p.46).

Earlier work in 2014 Causes of death of children with a child protection history 2002 – 2011 found that among deaths of children with a child protection history, area socio-economic status was a significant predictor of cause of death once variables were held constant for three causes of death: diseases of the nervous system, cerebral palsy and accidental drowning (p.39).

2. Can you provide us with that sort of spatial information so we can have a look at where there is a greater preponderance of these terrible incidents?

In April 2018, the NSW Ombudsman tabled a report: *Spatial analysis of child deaths in NSW*. The report, prepared by the Australian Institute of Health and Welfare on behalf of the CDRT, used data drawn from the NSW Child Death Register. The full report is available at:

https://www.ombo.nsw.gov.au/ data/assets/pdf_file/0006/54258/Spatial-analysis-ofchild-deaths-in-New-South-Wales.pdf

The report focuses on two issues – the geographic distribution of child deaths in NSW, and how the risk of death for a child varies by area-level characteristics. The report covers the 15-year period 2001 – 2015, and 8,657 children who died over that period.

The data is presented at Statistical Area 3 level. SA3 in NSW relates to 92 areas with average populations between 30,000 and 130,000.

Deaths are presented by number and by mortality rate:

- **Numbers of deaths** may be high in an area simply because there are larger numbers of children in an area. The number of deaths may be high, but the mortality rate low.
- **Mortality rate** (number of deaths per 100,000 children aged 0 17 years) is a measure of the risk of dying, allowing for comparison of risk across geographic areas or particular causes. An area can have a high mortality rate, but a low number of deaths.

Key findings

Children aged 0–17 - Number of deaths

The number of SA3s with more than 60 child deaths decreased from 11 in both 2001–2005 and 2006–2010 to 7 in 2011–2015.

The regions with the highest numbers of child deaths across all three time periods were Southwest and Western Sydney, the Central Coast and Newcastle.

The SA3 with the highest number of child deaths in 2011–2015 was Campbelltown, followed by Merrylands - Guildford, Mount Druitt, Fairfield, and Blacktown. These five areas accounted for 14.5% of all child deaths in New South Wales in that period.

Children aged 0–17 – mortality rates

The gap in child mortality rates between areas has narrowed over time.

The SA3 with the highest child mortality rate in 2011–2015 was Armidale, followed by Bourke - Cobar - Coonamble, Sydney Inner City, Orange, and Taree - Gloucester.

No SA3 had a significant increase in its child mortality rates between 2001 and 2015, and there was a significant decrease in 18 SA3s.

Infants (aged less than 12 months) - Number of deaths

The number of SA3s with more than 40 infant deaths decreased from 13 in 2005–2009 to 8 in 2010–2014.

In 2010–2014, 7 of the 8 SA3s with more than 40 infant deaths were concentrated in the greater Sydney region (the 8th was Newcastle).

The SA3 with the highest number of infant deaths in 2010–2014 was Campbelltown, followed by Merrylands - Guildford, Mount Druitt, Fairfield, and Blacktown. These 5 SA3s combined accounted for 16% of all infant deaths in New South Wales in 2010–2014.

Mortality rate (infant deaths per 1,000 live births)

There is much less variation between areas in recent infant mortality rates than in the earlier periods.

The SA3 with the highest infant mortality rate in 2010–2014 was Orange, followed by Kempsey - Nambucca, Taree - Gloucester, Upper Hunter, and Moree - Narrabri.

The SA3 with the lowest infant mortality rate in 2010–2014 was Dural - Wisemans Ferry, followed by Albury, Warringah, North Sydney - Mosman, and Eastern Suburbs - South. An additional 9 SA3s had between 1 and 4 infant deaths, so their infant mortality rates could not be calculated.

In 2010–2014, the infant mortality rate in the Orange SA3 was 5.6 times as high as the lowest infant mortality rate that could be calculated (1.35 in Albury).

No SA3 had a significant increase in its infant mortality rate over the period, and 13 SA3s had a significant decrease in their infant mortality rate.

Variations by area-level characteristics

The report analyses area level characteristics and child mortality rates, focusing on four domains: socio-economic context, social capital, housing and child health and development.

The risk of dying during childhood was greater for children living in more disadvantaged areas; the pattern is consistent across all included indicators. The likelihood of dying during childhood in New South Wales in 2011–2015 was:

- 1.7 times as high for children in high poverty areas as for those in low poverty areas
- 1.8 times as high for children in areas with the lowest levels of school engagement among 16-year-olds as for those in the areas with the highest levels of school engagement
- 1.5 times as high for children in areas with the highest levels of overcrowded housing as for those in the areas with the lowest levels of overcrowded housing
- 2.0 times as high for children in areas where 15% or more of children had been assessed as developmentally vulnerable on at least 2 of the 5 domains of the Australian Early Development Census (AEDC). This difference persists across all causes of death, where those in the areas of highest vulnerability were 1.8 times as likely to die of natural causes and 1.9 times as likely to die from external (injury-related) causes (such as transport-related accidents, accidental poisoning, drowning).

3. In relation to trends in child deaths, what relationship, if any, do you see with children in care? Is it improving? Not improving? Children known to the care authorities.

Children in care

109 children in care died over the 10-years 2008-2017:

- almost two-thirds (66) died from natural causes
- almost one-third (33) died from external injury-related causes
- cause of death was either not determined or yet to be determined for 10 children, of which seven were classified as Sudden Unexpected Death in Infancy (SUDI).

The overall number of deaths of children in care changes relative to the population of children in care. In our latest reporting period (2016 and 2017), 24 children who died were living in care. Seventeen died from natural causes. The majority (13) were children with disability who had significant health concerns and complex support needs. Six children in care died from external causes including three children who died from suicide. The cause of death has yet to be determined for one child.

The 17 children had varied placement and care arrangements, including voluntary care in a residential disability service, statutory out-of-home care, and supported out-of-home care.

The death of a child in care is reviewable by the Ombudsman (separate to the work of the CDRT). Our Report of Reviewable Deaths in 2014 and 2015 included a review of the risk-taking and suicide deaths of young people in care who were aged 13 – 17 years. This review, which looked at deaths between 2004 and 2015, found that while the majority died as a result of natural causes, of the 18 who died as a result of injury, 9 died by suicide and 6 in circumstances of high risk-taking. We continue to seek advice from the Department of Communities and Justice in its response to reports of risk of significant harm for children and young people in care, where these reports raise concerns about mental health or suicidal behaviours.

Children known to care authorities

We define child protection history (or 'known' to DCJ) as a child and/or their sibling(s) had been the subject of a report of risk of significant harm (ROSH), or a report about safety, welfare or wellbeing made to DCJ or to a Child Wellbeing Unit.

Over the 15 years to 2017, one in every five children who died in NSW had a child protection history (1,754 children). The majority of these children died as a result of natural causes. As a proportion of deaths, this has been consistent over time. However, between 2011 and 2016, less than 5% of children in NSW were the subject of a ROSH report. By comparison, the proportion of children who died and were the subject of a ROSH report increased from 12% to 19% in this period.

Over half (54%) of the children who died in circumstances of abuse or neglect during the 10-year period 2008 – 2017 had a child protection history. This indicates a strong association between fatal abuse and neglect and previous maltreatment (*Biennial report of deaths of children in New South Wales: 2016 and 2017, p133*)