Annual Report 2008 – 2009

Child Death & Serious Injury Review Committee

Government of South Australia

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Our Commitment to the Environment

This Annual Report was produced as an electronic version in order to keep the carbon emissions from its production to an absolute minimum.

Letter of Transmission

Hon Jennifer Rankine MP
Minister for Families and Communities

Dear Minister

I submit to you for presentation to Parliament the 2008–2009 Annual Report of the South Australian Child Death and Serious Injury Review Committee which has been prepared pursuant to Part 7C of the *Children's Protection Act 1993*.

This report highlights the Committee's activities in fulfilling its statutory obligations.

In compliance with the *Public Sector Management Act 1995* and the *Public Finance and Audit Act 1987* a further report concerning the management of human resources and financial issues of the Committee has been submitted as part of the Annual Report of the Department for Families and Communities 2008–2009.

Yours faithfully

Dymphna Eszenyi
Chair
Child Death and Serious Injury Review Committee

30 October 2009

Chair's Foreword

This is the fourth Annual Report to be presented to Parliament under Part 7C of the *Children's Protection Act* 1993.

When a child dies, it is sometimes necessary to examine the circumstances of the death to see whether lessons can be learned and to take steps to ensure that this does not occur again. The Committee is not the only body examining the circumstances of the deaths of children. One of the highlights of this year has been the number and outcome of inquests that the State Coroner has held into the deaths of children. The South Australian Maternal, Perinatal and Infant Mortality Committee also conducts careful reviews into the deaths of infants under one year of age.

The Committee also has a charter to ensure that systems remain accountable and to identify areas for systemic change that will assist in the prevention of death or serious injury of children within the South Australian community. In the course of this year's activities, the Committee has identified a number of key areas where systemic changes could prevent the death and serious injury of children. The Committee:

- has made further recommendations it believes would lead to a reduction in the number of infants who die in unsafe sleeping environments;
- supports the introduction of expanded legislation in relation to child restraint use in motor vehicles but has great concerns about how this policy will be implemented in rural and remote areas of the State;
- has called for the development of a Youth Suicide Prevention Strategy so that efforts are co-ordinated and integrated;
- has made recommendations about how the antenatal period is utilised as the key time to engage 'at risk' families; and
- has ongoing concerns about case management practices, not just within the child protection system but across agencies such as health and education.

The Committee remains deeply committed to finding ways to ensure that agencies and departments implement changes and remain accountable and committed to the safety and wellbeing of children.

The Committee thanks the community of individuals and agencies who have contributed to its work over the past year.

Finally, I join with the Committee members and Secretariat in extending sympathy to the families and friends of the children whose deaths have been considered during the past year.

Dymphna Eszenyi
Chair

Child Death and Serious Injury Review Committee

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Glossary

AARD	Aboriginal Affairs and Reconciliation Division, Department of the Premier and Cabinet South Australia
ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
Act	*Children's Protection Act 1993*
AEC	Adverse Events Committee – Families SA
AIHW	Australian Institute of Health and Welfare
APY Lands	Anangu Pitjantjatjara Yankunytjatjara Lands
ARIA+	Index of Remoteness and Accessibility, Australia
ATSI	Aboriginal and Torres Strait Islander
CAMHS	Child and Adolescent Mental Health Service
CASR	Centre for Automotive Safety Research
CDSIRC 2006	Child Death and Serious Injury Review Committee Annual Report 2005 – 2006
CDSIRC 2007	Child Death and Serious Injury Review Committee Annual Report 2006 – 2007
CDSIRC 2008	Child Death and Serious Injury Review Committee Annual Report 2007 – 2008
CESDI	Confidential Enquiry into Sudden Deaths in Infants (Fleming et al. 2000)
CFS	Country Fire Service
COAG	The Council of Australian Governments
Coroner	State Coroner
CYWHS	Children, Youth and Women's Health Service
DFC	Department for Families and Communities
FHV	Family Home Visiting
FSID	Foundation for the Study of Infant Deaths
ICD–10	International Classification of Disease (Version 10)
IMR	Infant Mortality Rate
IRSD	Index of Relative Socio-economic Disadvantage
MAC	Motor Accident Commission
NCCH	National Centre for Classification in Health, Brisbane
NSW CDRT	New South Wales Child Death Review Team
OCBA	Office of Consumer and Business Affairs
Registrar	Registrar, Births Deaths and Marriages
SAPOL	South Australia Police
SEIFA	Socio-Economic Indexes for Areas, Index of Relative Disadvantage (IRSD)
SIDS	Sudden Infant Death Syndrome
SUDI	Sudden Unexpected Death in Infancy
TKP	Tjunjuniku Kuranyukutu Palyantjaku
UHV	Universal Home Visit
WHO	World Health Organization

Acknowledgements

The Committee wishes to thank the following individuals and organisations for making themselves available to support the Committee's work:

Mrs Val Edyvean, Registrar, Births Deaths and Marriages, and staff;

Mr Mark Johns, State Coroner and staff;

Ms Meg Clarke, Senior Project Officer, Epidemiology Branch, SA Health;

Ms Sue Walker, Associate Director and **Garry Waller,** Senior Classification Officer, National Centre for Classification in Health, Brisbane;

Ms Tracey Kemp and staff of Information Technology and Communication Services, DFC.

Committee Members

Chair

Ms Dymphna Eszenyi

Members

Mr Brian Butler

Professor Roger Byard

Ms Linda Doré

Ms Dianne Gursansky

Dr Diana Hetzel

Ms Samantha Laubsch

Mr Christopher Shakes

Dr Nigel Stewart

Detective Superintendent John Venditto

Ms Fiona Ward

Ms Helen Wighton

Ms Dana Shen (from 23–10–2008)

Ms Alison Tucker (until 20–03–2009)

Dr Richenda Webb (until 07–07–2008)

Secretariat

Executive Officer

Dr Sharyn Watts

Senior Project Officer

Ms Ellen Rosenfeld

Administrative Officer

Ms Mary Surman (until 23-12-2008)

Ms Melanie Przibilla (from 30-03-2009)

Executive Summary

This is the fourth annual report of the Child Death and Serious Injury Review Committee to be tabled in Parliament.

Purpose and Establishment

The Child Death and Serious Injury Review Committee was established by the *Children's Protection Act 1993 (the Act)* in February 2006.

The role of the Child Death and Serious Injury Review Committee is to contribute to the prevention of death or serious injury to South Australia's children.

The Committee reviews the circumstances and causes of deaths and serious injuries to children and makes recommendations to Government for changes to legislation, policies and procedures that may help prevent similar deaths or serious injuries.

Activities

The Committee continues to monitor and analyse information about the circumstances and causes of the deaths of all children in South Australia. This Annual Report contains information about the deaths of children in South Australia from 1 January 2008 – 31 December 2008.

In the reporting period from 1 July 2008 – 30 June 2009, the Committee has also submitted six in-depth reviews to the Minister for Families and Communities. These reviews considered the deaths of 16 children and young people. This Annual Report summarises these reviews and the recommendations arising from them and comments on the progress of the implementation of its previous recommendations.

Highlights from the 2008-2009 Annual Report

One hundred and twenty children died in South Australia in 2008.

After monitoring these deaths and reviewing the circumstances and causes of selected deaths, the Committee has recommended changes in legislation, policies, procedures and practices with the aim of contributing to the prevention of similar deaths.

Illness and Disease

Consistent with previous years and known mortality trends, there continues to be a predominance of deaths attributable to illness and disease (71%).

Transport Related Deaths

After setting aside deaths from illness and disease, more children died in road crashes than in any other circumstances (9%). Motor vehicle crash fatalities which occurred in 2008 were consistent with the known patterns of crash involvement of young drivers. Deaths of younger children were clearly associated with failing to use appropriate child restraints in motor vehicles. Five children under nine years of age died in four transport crashes in 2008 and at least three were unrestrained, including two young Aboriginal children. Three of these crashes occurred in remote areas of the State.

In 2008 the State Government announced its commitment to adopting expanded national laws for the use of child restraints in motor vehicles. The Committee welcomes these changes but thinks it is important that the new laws are supported by strategies that give country people, and in particular rural and remote Aboriginal communities, access to the child restraint advice and fitting services that are available to people living in the metropolitan area.

Unsafe Infant Sleep Environments

As in previous years, the Committee has identified sudden and unexpected infant deaths occurring in unsafe sleeping environments as a serious concern. Of the 14 infants who died suddenly and unexpectedly in 2008, eight infants, regardless of the cause of death, had identifiable risk factors in their sleeping environment. This included all six deaths which were from 'undetermined causes.' Co-sleeping and use of pillows continued to be common to these cases.

The Committee is aware that SA Health has provided $300 000 to implement a safe sleeping initiative. A representative of the Committee is a member of the Safe Sleeping Advisory Committee convened by the Child Youth and Women's Health Service (CYWHS) to address the 2008 recommendations by the Coroner, the Child Death and Serious Injury Review Committee and the Maternal, Perinatal and Infant Mortality Review Committee about safe sleeping. The Child Death and Serious Injury Review Committee wishes to see outcomes from this project as soon as possible.

In South Australia the parent of every infant is offered a home visit through the Universal Home Visiting (UHV) program provided through CYWHS. Of the eight infant deaths that occurred in an unsafe sleeping

environment in 2008, seven had received a UHV from a qualified nurse practitioner.

The Committee views the UHV as an excellent opportunity to discuss safe sleeping arrangements and therefore has made the following new recommendation:

Risk factors in an infant's sleeping environment can be reduced through the timely provision of both practical support and appropriate information. The universal home visitor is ideally placed to address these issues with parents and carers. The Child Youth and Women's Health Service should revise its policies, guidelines and training for universal home visiting staff to make it a priority to give guidance about safe sleeping issues to each family and to monitor and follow up on each family's response. This approach should utilise evidence-based best practice models and should be audited regularly to ensure it is being put in place properly.

Co-sleeping

The Committee has particularly noted the emergence of co-sleeping as a prominent risk factor for sudden and unexpected infant death. In four of the eight cases in 2008 where deaths occurred in an unsafe sleeping situation, co-sleeping was identified as a risk factor. This pattern has continued from 2007. Because of the number of deaths associated with co-sleeping, the Committee has made a specific recommendation regarding this practice:

Policies and procedures of Government and non-government agencies who provide services to infants and their families should clearly state that the safest place for an infant to sleep, for at least the first six months, is in an Australian Standards approved cot made up in accordance with SIDS and Kids guidelines, located next to the parents' bed.

Co-sleeping with infants (whether in a bed or on a sofa, mattress or chair) should be strongly discouraged because it carries with it a clear risk of the infant dying. Any warning should note also that the risk of death is greatly increased if the baby is of low birth weight or premature, or if adults in the household are smokers, or if the co-sleeping adult has been drinking, has taken medication or drugs or is very tired.

Suicide

The deaths of two young people were attributed to suicide in 2008. In September 2008 the Committee submitted to the Minister for Families and Communities a group review of ten deaths attributed to suicide during 2005-2006. The Committee noted that the work of lead agencies in suicide prevention in South Australia is conducted without the support of a State suicide prevention strategy.

The Committee recommended that:

- a State suicide prevention strategy be devised for South Australia, including a dedicated youth suicide prevention strategy. The State strategy should comprehensively address suicide prevention as an issue crossing government, non-government and community sectors;
- a permanent Ministerial advisory council for suicide prevention should be established to oversee the State strategy;
- resources should be allocated by the Department of Health for interventions where suicide attempts by children and young people result in hospital presentation or admission, with a focus on ongoing case management planning, not merely discharge planning. Monitored therapeutic strategies should continue for an extended period of time after discharge, and include consultation with the young person and their family, and relevant health, education and other community agencies;
- pathways to assistance, appropriate resources and long term supports should be provided to sustain families where multiple stressors are identified in early stages of children's lives;
- resources should be allocated for maintaining active communication between services such as mental health, child protection, education and employment creation, particularly in regional, rural and remote South Australia, to optimise service provision for groups of high risk young people; and
- State-wide suicide postvention programs for young people should be supported and evaluated on an ongoing basis.

In the previous reporting year the Committee submitted two separate reviews to the Minister for

Executive Summary

Families and Communities about the deaths attributed to suicide of two young Aboriginal people. Its recommendations focussed on the provision of services in rural and remote areas that would ensure the health and wellbeing of Aboriginal children and young people.

Drowning

Two young children drowned in private pools or ponds in 2008. The Committee noted again, with concern, two recurring themes in child pool drownings: adults temporarily disengaging safety mechanisms designed to prevent pool access, and adults misjudging children's safety around water.

Further to an earlier review of two infant deaths in a rainwater tank, the Committee has received advice from Standards Australia that a change would be made in the current revision of the *Rainwater Tank and Installation Handbook* published by Standards Australia such that *'all rainwater tank openings for all types of above ground and below ground rainwater tanks (will) be designed to withstand human load bearing forces.'*

'At Risk' Groups

Children living in areas of socioeconomic disadvantage were more likely to die than children who came from areas of least disadvantage. Twenty-two percent of families whose children died (26 deaths) had prior contact with the child welfare system in the previous three years. This contact was not about single incidents of abuse but was usually for problems that are commonly associated with the neglect of children such as alcohol and drug use, mental health problems, domestic violence, poor child supervision and transient lifestyles.

Infants 'At Risk'

The Committee is aware that the Family Home Visiting (FHV) program operated through CYWHS is designed to provide a further service for families who meet certain eligibility criteria (eg young mother, ATSI infant etc). Through its scrutiny of records, it has become apparent to the Committee that the FHV program is not available to families who have particularly 'high needs' due to drug use, mental health or similar issues. In addition the Committee has noted that there appears to be no standard approach to managing notifications from the birth hospital to Families SA about such 'high needs' families.

It is the view of the Committee that such 'high needs' families require specialised and often intensive and ongoing home-based support, beginning with antenatal services, so that risks can be assessed and a supportive relationship established with the families before the infant is born.

In light of these findings, the Committee has made the following recommendation:

> *Antenatal services and a specialised intensive home-based support service should be provided for families with a high need for support who are not eligible for the CYWHS Family Home Visiting program and who may not fall within the legislative responsibilities of the child protection system. Identifying and supporting these families is essential because their infants are at an elevated risk of sudden death.*

The need for supportive relationships to be developed with 'high needs' families before the birth of a child was also identified in three in-depth reviews of infant deaths due to fatal assault, accidental suffocation and an 'undetermined' cause. The Committee established that there was difficulty in maintaining any contact with these families once the infant and the mother were discharged from hospital.

These reviews made several recommendations about Families SA 'High Risk Infants' Program' which provides intensive home-based support for 'high risk' families. Recommendations related to the assessment of 'high risk' and the timeliness of responses once infants were identified as 'high risk'.

The review of these three infant deaths also prompted the Committee to make recommendations about case management practices. The substance of the recommendations in these and previous years' reviews were essentially the same. It is of great concern to the Committee that its reviews continue to give rise to recommendations about fundamental case management practices.

Parents and Multiple Disadvantage

Because many of the child deaths it reviews occur in families with multiple disadvantages, the Committee continues to seek information about

Executive Summary

how Families SA's policies and procedures for parenting and multiple disadvantage are put in place, monitored and evaluated.

Aboriginal Children

Eleven Aboriginal children died in 2008; nine percent of the total number of children who died in this year. The over-representation of Aboriginal children in South Australia's child death numbers has been acknowledged and discussed in previous Annual Reports and continues to be of concern to the Committee.

Based on its in-depth reviews, the Committee has previously made recommendations about the health and wellbeing of Aboriginal children. A central recommendation was the need for case management and planning practices in the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands to be auspiced by a single 'lead agency'. Although Families SA, the Aboriginal Affairs and Reconciliation Division (Department of the Premier and Cabinet) and the Department of Education and Children's Services have all supported this recommendation in principle, none of these agencies has yet accepted this role.

Children under the Guardianship of the Minister

The Committee is continuing its investigation into the nature and extent of serious injury sustained by children whilst under the guardianship of the Minister.

The Committee notes that action has now been taken that should ensure that all deaths of children under the guardianship of the Minister are reported to the Coroner, even if the death is from 'natural causes'.

The Committee was concerned that only 30 percent of young people aged over 15 years who leave care had a transition plan on file. The Committee has written to the Minister recommending that the remaining 70 percent of young people who leave care have a transition case plan prepared before they leave.

Children with Disabilities

An in-depth review of the death of a child with a disability led the Committee to recommend that Families SA should attach high priority to notifications of concern about children with disabilities, and that a priority response was required especially where there were indications of multiple disadvantages in the child's family.

The review also led the Committee to recommend that Families SA's communications with parents or carers living with a child who has a disability should involve face-to-face contact, especially if, as appears to be the practice in this instance, a case can be closed when there is no response to a letter. The Committee recommended that Families SA should not close the file of any child living in a family with multiple disadvantages, and in particular when the child has a disability, simply because the parent or carer fails to respond to a letter or attend an appointment. Such a failure to respond may well indicate that the child and his/her family need *more* rather than less support.

Exchange of Information

In 2007, after reviewing the death of a young child, the timely and relevant exchange of information between responsible agencies was identified as an issue. The Committee recommended legislative change to enable Centrelink to exchange information with Families SA and any other relevant South Australian Government agency providing support to children. Through the Coalition of Australian Governments (COAG), State and Commonwealth agencies have developed a policy to facilitate the exchange of information about children and families at risk. The Committee expects that COAG will in due course evaluate the use and effectiveness of this policy.

Other Matters

The Committee has continued to advocate for improved safety of children. In the area of product safety, the Committee has been active in supporting the efforts of other agencies to identify and review potentially unsafe infant sleeping products. The Committee is pleased to note the implementation of its recommendation about blind cord safety.

A continuing task for the Committee is to improve its monitoring of the effect of its recommendations on the health and wellbeing of children and young people. In the coming year the Committee will seek advice from the Council for the Care of Children about ways to use the council's recently published framework *Look out for Young South Australians* for this purpose.

Structure of the Annual Report

This report has five sections.

SECTION 1: COMMITTEE OVERVIEW AND PLANS 2008-2009

The history of the Committee is outlined in this section. A synopsis of the legislation that established the Committee's powers and functions is provided. This section also contains an overview of the Committee's activities in the financial year 2008–2009, including its contribution to South Australia's Strategic Plan. An outline of the Committee's plans for the coming year are also presented in this section.

It will be noted that the report about the Committee's activities is inclusive of work between 1 July 2008 - 30 June 2009 whereas in Section 2 the numbers of deaths referred to are based on the calendar year 2008. This difference in reporting periods reflects the unavoidable time delays between a death and the availability of relevant information such as post mortem results, major crash reports etc. By reporting on deaths in the previous calendar year the amount of missing data is minimised, resulting in a more comprehensive and informative account of deaths in a twelve month period. Reporting by calendar year is also consistent with the practices of the Australian Bureau of Statistics (ABS) and other child death review teams. Complementing the reporting of death statistics in the calendar year is information about the other activities of the Committee such as the in-depth review of deaths, which are based on the financial year just ended.

SECTION 2: CHILD DEATHS SA: 1 JANUARY 2008 – 31 DECEMBER 2008

The Committee reports here on the deaths of children in South Australia during the 2008 calendar year.

SECTION 3: IN-DEPTH REVIEWS SA: 1 JULY 2008 – 30 JUNE 2009

This section describes the review process, the status of cases the Committee has identified for review, and provides a synopsis of the recommendations arising out of the reviews it has undertaken. Monitoring of responses to the Committee's recommendations is also presented in this section.

SECTION 4: OTHER MATTERS

This section provides details about methodological issues, discussion of definitional issues referred to in Section 2, and a bibliography.

Section 1

Committee Overview and Plans 2008 – 2009

Section 1: Activities, Progress and Plans

1.1 PURPOSE

The role of the Child Death and Serious Injury Review Committee is defined within Part 7C of the *Children's Protection Act 1993* and is to contribute to the prevention of death or serious injury to children in South Australia.

The Committee reviews the circumstances and causes of death or serious injury to children and makes recommendations to Government that may help prevent similar deaths or serious injuries. Recommendations suggest changes in legislation, policies, procedures or practices.

1.2 ESTABLISHMENT

The Child Death and Serious Injury Review Committee was established by the *Children's Protection Act 1993* (the *Act*) in February 2006. It is an initiative arising out of recommendations made in *Our best investment: a State plan to protect the interests of children (Layton, 2003).* An interim committee operated under directions issued by Cabinet from April 2005 until February 2006.

The work of the Committee is funded by the Keeping Them Safe initiative with further contributions from the Department for Families and Communities, the Department of Health and the Department of Education and Children's Services. From its inception a secretariat located within the Department for Families and Communities has assisted the Committee. Administrative, financial and human resource management is overseen by this department.

1.3 LEGISLATION

The *Children's Protection (Keeping them Safe) Amendment Act 2005* authorises the Committee to:

- maintain a database of the circumstances and causes of child death or serious injury that occurs in South Australia;
- review child deaths and serious injury with the aim of identifying legislative or administrative means of preventing similar deaths or injuries;
- request any person to produce a document that is relevant to a review;
- enter into arrangements with other Government agencies for the release of information relevant to a review;
- recommend legislative or administrative change based on its reviews;
- monitor the implementation of its recommendations; and
- maintain links with similar bodies interstate and overseas.

The Committee is not required to individually review all cases of child death or serious injury and is prevented by legislation from undertaking a review unless there is no risk that the review would compromise an ongoing criminal investigation of the case or coronial inquiry. However, it should review cases:

- where there are indications of abuse or neglect; or
- where the child or a member of the child's family has been the subject of a child protection notification in the past three years; or
- where the child was under the guardianship of the Minister or was in the care of a Government agency; or
- that have been referred to it by the Coroner.

The information acquired by the Committee cannot be disclosed to any person and is not required to be disclosed under the *Freedom of Information Act 1991.*

The Committee must report to the Minister for Families and Communities as required and annually. The Minister must table the Committee's annual report in Parliament.

Compared to similar committees in other States and Territories, the powers and functions of the Committee are unique for a number of reasons:

- the Committee has the dual functions of keeping a database of the circumstances and causes of child deaths and of conducting in-depth reviews. In other Australian jurisdictions these functions are the responsibility of different agencies within that jurisdiction;
- the Committee's focus is not only the deaths of children 'known' to the child protection system, but also includes any child who may have died from actual or suspected abuse or neglect; children in detention; children under the care and protection of the Minister; or cases referred by the Coroner; and
- the Committee considers deaths where the circumstances suggest that systemic changes could be made to prevent similar deaths or serious injuries. e.g. deaths associated with product or environmental safety such as inflatable beds, strollers or water tanks.

The Committee also has a legislative responsibility for the review of serious injury.

1.4 COMMITTEE ACTIVITIES 2008– 2009

From 1 July 2008 to 30 June 2009 the Committee met on ten occasions.

Sub-committees and screening teams met as required.

During this period the Committee:

- continued to identify and screen all child deaths occurring in South Australia (see Section 2 *Child Deaths South Australia 2008*);
- considered the eligibility of all screened cases for in–depth review, chose eligible cases for review, and commenced or completed in–depth reviews of certain cases (see Section 3 *In-Depth Reviews 2008-2009*);
- presented its *Annual Report 2007–2008* to the Minister for Families and Communities for Parliament;
- continued to develop its work about serious injury;
- corresponded on an *ad hoc* basis with relevant agencies where the Committee identified immediate opportunities to contribute to the prevention of further deaths or serious injuries. For example, the Committee wrote to the Motor Accident Commission about young pedestrian safety;
- met with a number of agencies or organisations in a position to contribute to the work of improving the health and wellbeing of children in South Australia; and
- hosted the Annual Meeting of the Australian and New Zealand Child Death Review Teams.

With regard to the quality and accountability of its own functions, the Committee:

- ensured that all members of the Committee and the Secretariat had current criminal history checks in place; and
- provided comment in relation to the Committee's activities in a review of quasi-judicial bodies.

1.5 PLANS

The Committee will continue to:

- support South Australia's Strategic Plan to contribute to, and monitor improvements in, the health and wellbeing of South Australia's children;
- monitor the impact of the strategies associated with the *National Framework for Protecting Australia's Children 2009-2010* (Council of Australian Governments, 2009);
- monitor and analyse trends and patterns in the deaths of children;
- conduct in-depth reviews of certain cases of child death;
- monitor the implementation of the recommendations arising from these activities; and
- expand its work in the area of serious injury.

Section 2

Child Deaths South Australia 2008

Opportunities for prevention can be identified through the systematic collection and analysis of morbidity and mortality data and through the analysis of the circumstances surrounding particular child deaths and serious injuries. Improvements to child focused systems and services, and changes to legislation, policies or practices can assist in the prevention of further deaths and injuries, and contribute to reducing human and financial costs to the community.

CDSIRC, 2008

Section 2: Child Deaths South Australia 2008

2.1 CHILD DEATHS SOUTH AUSTRALIA 2008

One hundred and twenty children ranging in age from birth up to eighteen years died in South Australia in 2008. Nearly two-thirds (73 deaths - 61%) were male.

2.1.1 Death Rate [1]

The death rate for 2008, which excludes the deaths of nine children who were not usually resident in South Australia, was 32.3 deaths per 100 000 children. Death rates between 2005-2007 have fluctuated by 1-2 deaths per year; 34.5, 32, and 33.5 deaths per 100 000 children respectively.

2.1.2 Infant Mortality Rate

Infant mortality rates are accepted throughout the world as an indicator of the health status of a population.

Information about infant mortality in South Australia is recorded in a number of different statistical collections, including the Australian Bureau of Statistics, the South Australian Maternal, Perinatal and Infant Mortality Committee and this Committee. Each collection has slightly different ways of registering and recording the deaths of infants, consequently the infant mortality rates will differ, although overall trends are consistent.

Seventy-one infants aged less than one year died in South Australia in 2008. There were 19 819 live births[2]. The 2008 infant mortality rate (IMR) based on these figures, was 3.6 deaths per 1000 live births. In previous years, IMRs of 4.6 (2005), 3.4 (2006) and 4.1 (2007) deaths per thousand live births have been recorded by the Committee. The observed 2008 rate is clearly consistent with previous findings. It is important to interpret these rates with caution however, due to the relatively small numbers involved (ABS, 2006).

2.2 OVERVIEW OF DEATHS

Table 1 shows a breakdown of child deaths in South Australia for 2008 by cause, sex and age.

The overall number and pattern of deaths by age and cause of death in 2008 is similar to that reported in previous years.

2.3. AGE AND CAUSE OF DEATH

Table 1 shows that 40 percent of deaths (48 deaths) were accounted for in the first 28 days of life and most of these infants (96%) died from some form of illness or disease. Twenty-nine of these deaths were associated with conditions which occurred during late pregnancy or the early weeks of life. In fact 32 deaths (68%) were of infants less than one day old.

Table 1 Deaths of children by sex and age, South Australia 2008

Cause of Death (per Committee Classification)	< 28 days	28 days to 1 year	1-4 years	5-9 years	10-14 years	15-17 years	Sub Total	Total
Illness or Disease								
Female	21	7	3	4		2	37	85
Male	25	7	3	4	3	6	48	
SIDS & Undetermined Causes								
Female			1	1			2	8
Male	1	5					6	
External Causes								
Female	1	3	2	1		1	8	25
Male		1	3	2	2	9	17	
Other								
Cause not yet known (both male)						2	2	2
TOTAL	**48**	**23**	**12**	**12**	**5**	**20**		**120**
PERCENTAGE	**40.0**	**19.2**	**10.0**	**10.0**	**4.2**	**16.7**		**100**

** Source: Child Death and Serious Injury Review Committee database.*

1 Death rates for males and females adjusted for age have not been calculated as fluctuations in small numbers make these rates unreliable.

2 Information provided by the SA Maternal Perinatal and Infant Mortality Committee.

It is important to view this finding in the context of the data source. The Committee's information is based on all deaths of children up to 18 years of age recorded by the Office of Births, Deaths and Marriages, regardless of the weight or length of gestation of the infant. Details obtained from perinatal death certificates for all infants less than 28 days old indicated that in ten deaths the birth weight was less than 400 grams (Range: 140 grams-365 grams) and the length of gestation ranged from 18-23 weeks. The birth weight of two infants was not recorded.

Sixty-three children died (60% of deaths) in the first year of life. The predominance of illness or disease as a cause of death continued to be observed in the 28 days to one year age cohort. Children aged 28 days to one year accounted for 23 (19%) of the deaths in 2008 and consistent with known sex differences in mortality rates at this age, there were more deaths of males than females.

Causes of death other than illness or disease, which offer greater opportunities for prevention, are also important in this slightly older group of infants. Five infants older than 28 days but less than one year died from 'undetermined' causes, usually related to unsafe sleeping environments. The circumstances of these deaths are discussed in detail in Section 2.8 *Sudden Unexpected Deaths in Infancy.*

Of the total number of child deaths recorded in 2008, it is noteworthy that the proportion of male to female deaths is approximately equal for children aged 1-9 years, but in the older age cohort an increase in male deaths is observed. For example, five males and no females aged 10-14 years died in 2008, and seventeen males aged 15-17 years died compared to three females. This pattern is consistent with observations made in the previous four years. With the exception of 2006, the annual number of male deaths has been greater than the annual number of female deaths.

As children grow older, the proportion of deaths from external causes increases. This pattern in age and cause of death reflects the growth and development of children. Infants are particularly vulnerable both in terms of their individual health and their dependence on adult care. The increasing independence and associated risk-taking behaviour of young people is reflected in the greater number of deaths from external causes in this older age group.

A more detailed breakdown of cause of death by age is presented in Table 2.

The three main categories of cause of death: illness or disease; SIDS and undetermined causes; and external causes are discussed in more detail in the following sections.

2.4 DEATHS DUE TO ILLNESS OR DISEASE

In 2008, 71 percent of deaths (85 deaths) were attributed to illness or disease. From 2005-2007 the percentage of deaths from these causes has been 56%, 69%, and 65% respectively.

Causes of death include infections, cancer, nervous system diseases such as epilepsy, and diseases of the respiratory system such as asthma. Also included are deaths arising from conditions associated with pregnancy, labour and birth and from congenital conditions such as heart malformations or chromosomal abnormalities. Some of these conditions are associated with chronic ill health which increases vulnerability to infections such as pneumonia or are associated with medical or surgical interventions that increase vulnerability to secondary illnesses such as sepsis.

As discussed in Section 2.3 *Age and Cause of Death,* there is a predominance of deaths from illness and disease, particularly amongst children less than one year of age. The South Australian Maternal, Perinatal and Infant Mortality Committee publish a comprehensive annual report that details the deaths of infants up to one year of age from all causes. A reader seeking detailed information about causes of death in this age cohort is referred to infant mortality publications produced by the Pregnancy Outcome Unit of SA Health via the following link: [3]

http://www.health.sa.gov.au/pehs/pregnancyoutcome.htm

With regard to the total number of children in South Australia who died in 2008 from illness or disease, the following information is provided.

2.4.1 Conditions Occuring in the Perinatal Period

Thirty-three of the 85 deaths from illness or disease were related to conditions that occurred during the late stages of pregnancy or the early weeks of life. Nearly two-thirds (22 deaths) were male. The underlying causes attributed to eleven of these deaths were related to the length of gestation and the growth

3 South Australian Maternal, Perinatal and Infant Mortality Committee Annual Report last accessed on 1 September 2009.

Table 2: Deaths of children by cause of death and age, South Australia 2008*

Cause of Death (per Committee Classification)	< 28 days	28 days to 1 year	1-4 years	5-9 years	10-14 years	15-17 years	Total	%
Illness or Disease								
Certain conditions originating in the perinatal period	29	3				1	33	27.5
Congenital malformations, deformations and chromosomal abnormalities	15	4	2	2	1	3	27	22.5
Cancer	1		2	4	2	3	12	10.0
Diseases of the nervous system	1	2		1			4	3.3
Endocrine, nutritional and metabolic diseases		1	1			1	3	2.5
Diseases of the circulatory system		2					2	1.7
Diseases of the respiratory system			1	1			2	1.7
Certain infections and parasitic diseases		1					1	0.8
Diseases of the musculoskeletal and connective tissue		1					1	0.8
Illness or Disease - Total	**46**	**14**	**6**	**8**	**3**	**8**	**85**	**70.8**
SIDS & Undetermined Causes								
Undetermined	1	5	1	1			8	6.7
SIDS								
SIDS & Undetermined Causes - Total	**1**	**5**	**1**	**1**			**8**	**6.7**
External Causes[4]								
Transport		1	1	3		6	11	9.2
Fatal Assault		2	1		1	1	5	4.2
Accidents		1	1		1	1	4	3.3
Drowning			2				2	1.7
Suicide						2	2	1.7
Health-system related	1						1	0.8
External Causes - Total	**1**	**4**	**5**	**3**	**2**	**10**	**25**	**20.8**
Other								
Cause Not Yet Known						2	2	1.7
TOTAL (deaths per age group)	**48**	**23**	**12**	**12**	**5**	**20**	**120**	
PERCENTAGE (deaths per age group)	**40.0**	**19.2**	**10.0**	**10.0**	**4.2**	**16.8**		**100**

** Source: Child Death and Serious Injury Review Committee database.*

of the foetus; seven of these infants were extremely premature and two deaths were related to extremely low birth weight. Nine deaths were attributed to complications arising during pregnancy, labour or delivery including two deaths associated with premature rupture of membranes and two deaths resulting from chorioamnionitis. Chorioamnionitis is an inflammatory condition which occurs during pregnancy. It is usually caused by bacterial infection and is one of the most common causes of brain injuries in newborns. Five deaths were associated with some form of brain haemorrhage. Two deaths resulted from bacterial infection. Lack of oxygen to the brain resulting in acute brain injury - hypoxic ischaemic encephalopathy - resulted in two deaths, one much later in the child's life.

4 Section 4.1.2 provides a definition for each external cause of death.

2.4.2 Congenital Malformations, Deformations and Chromosomal Abnormalities

Twenty-seven children died from various congenital or chromosomal abnormalities: 19 in the first year of life and eight in later years. Ten deaths were related to chromosomal abnormalities; five of these deaths were associated with Down's Syndrome in children less than four years of age. The other 14 deaths were associated with various congenital malformations including two deaths of infants with diaphragmatic hernia, four deaths of children with heart malformations and three deaths associated with malformations of the brain.

2.4.3 Deaths Due to Other Illness

Cancer

Twelve children died from various forms of cancer. The small number of child deaths due to different types of cancer is not sufficient to yield meaningful data and the interested reader is referred to publications of the SA Cancer Registry of the Department of Health for detailed epidemiological reports about cancer deaths. These reports can be found at: [5]

http://www.health.sa.gov.au/pehs/branches/branch-cancer-registry.htm

Asthma

The deaths of two children were attributed to asthma during 2008 whereas in the previous three years there was only a single death. The Committee is aware that the Australian Institute of Health and Welfare (AIHW) has recently published a report titled *Burden of disease due to asthma in Australia 2003* which states that asthma is the leading cause of burden of disease among children, with *'61% of the total burden of asthma in the community borne by children aged 0 to 14 years'.* The link to that publication is found at: [6]

http://www.aihw.gov.au/publications/index.cfm/title/10749

There are also several other publications by the AIHW that are relevant to asthma incidence and mortality in Australia and the reader seeking specialised information is referred to Asthma in Australia 2008. This AIHW site can be accessed via the following link: [7]

http://www.aihw.gov.au/publications/index.cfm/title/10584

Infections

There was only one death in 2008 where the underlying cause of death was an infection. In seven other cases, infections were secondary to the underlying causes of death which were congenital or chromosomal abnormalities or malignant cancers. A range of infections were noted including pneumonia, cytomegalovirus, septicaemia and bacterial infections.

2.5. DEATHS DUE TO SIDS AND UNDETERMINED CAUSES

Six infants, all males, died from undetermined causes in 2008. There were no deaths attributed to SIDS in this period. As discussed in more detail in Section 2.8.2 *SUDI Deaths in South Australia 2008,* there was no unequivocal evidence that would allow these deaths to be attributed to a particular cause, however in each case known risk factors contributing to a potentially unsafe sleep environment (such as pillows, soft bedding etc) were identified.

2.6 DEATHS DUE TO EXTERNAL CAUSES

In 2008, 21 percent of the total number of children who died in South Australia died from external causes (25 deaths). From 2005-2007, the percentage of deaths from external causes has been 27%, 35% and 25% respectively.

External causes of death encompass deaths from fatal assault and suicide and non-intentional deaths resulting from transport crashes, drowning and various kinds of accidents such as falls, poisoning and suffocation. This category of death also includes deaths from health system related adverse events. The criteria the Committee used to classify deaths into each of these categories are detailed in Section 4.1.2 *The Committee's Classification of Cause of Death.*

A breakdown of deaths of children from external causes by age has been provided in Table 2, and Table 3 provides information relating to deaths from external causes by sex. The difference between the numbers of males compared to the number of females who died in 2008 was quite pronounced, with 17 deaths of males and eight deaths of females. The majority of male deaths were in transport crashes. In 2008 as in each of the previous reporting years, the leading external causes of death for all children were those

5 SA Cancer Registry last accessed 1 September 2009.

6 Australian Institute of Health and Welfare (AIHW), Burden of disease due to asthma in Australia 2003, Report last accessed on 1 September 2009.

7 Australian Institute of Health and Welfare (AIHW) publications last accessed on 1 September 2009.

related to transport incidents. In addition to these deaths, five children died as a result of some form of fatal assault or injury. Although only one death from fatal assault was recorded in 2007, in previous years, the number of deaths attributed to this cause was similar to 2008 (2005 – 4 deaths, 2006 – 6 deaths).

Table 3: Deaths of children from external causes by sex, South Australia 2008*

Classification	NUMBER OF DEATHS Females	Males	Total	%
EXTERNAL CAUSES				
Transport	4	7	**11**	**44**
Fatal Assault	1	4	**5**	**20**
Accidents	1	3	**4**	**16**
Drowning	1	1	**2**	**8**
Suicide		2	**2**	**8**
Health-system related	1		**1**	
TOTAL	**8**	**17**	**25**	**100**

** Source: Child Death and Serious Injury Review Committee database*

Transport, fatal assault and accidental deaths are considered in greater detail in the following sections of the report.

2.6.1 Transport [8]

Eleven children died in ten transport incidents in 2008. Seven were males aged between 10-17 years. Two young female children were Aboriginal. The circumstances of the transport deaths are shown in Table 4.

Table 4: Transport deaths by circumstance and age, South Australia 2008*

Cause of Death	0-4 years	5-9 years	10-17 years	Total
Pedestrian			1	**1**
Passenger	2	3	1	**6**
Driver			3	**3**
Pedal Cyclist			1	**1**
TOTAL	**2**	**3**	**6**	**11**

** Source: Child Death and Serious Injury Review Committee database*

All the deaths in 2008 involved motor-vehicles; one young person was a pedal cyclist.

Young Motor Vehicle Drivers

The Committee is aware of the vast body of research pertaining to the vulnerability of inexperienced young drivers. A recent South Australian study by Kloeden (2008), summarised in the following publication by the Centre for Automotive Safety Research (CASR), identified the greater rate of crash involvement of young drivers. [9]

http://casr.adelaide.edu.au/casrpubfile/703/CASRnewlyyoungdriversSA1036.pdf

This study confirmed that the period of greatest risk was when the driver first obtained their provisional licence, but that the risk declined over the first year as they acquired more experience. The study also reported that the most common type of accident for newly licensed drivers involved hitting a fixed object or a right-hand turn manoeuvre. The three transport deaths in South Australia in 2008 that involved a young driver were consistent with this. Two involved collisions with fixed objects and one crash resulted from an inexperienced driver pulling out in front of traffic in an attempt to turn right. Alcohol was a factor in only one case.

The Committee is aware of the activities of organisations such as CASR and of committees such as the Road Safety Advisory Council and supports the implementation of any evidence-based strategies that will improve the safety of young drivers.

Appropriate Use of Seat Belts and Child Restraints

Seat belts and age appropriate child restraints have been proven to reduce the risk of death and serious injury in the event of a motor vehicle crash, yet it is known that young children continue to be passengers without such safety equipment. Five children under nine years of age died in four crashes in 2008 and at least three were unrestrained. Three of these crashes occurred in remote areas of the State.

The Committee notes that in 2008 the State Government announced its commitment to adopting expanded national laws for the use of child restraints in motor vehicles. The Committee welcomes these changes but thinks it is important that the new laws are supported by strategies that give country people,

8 Transport deaths include deaths arising from incidents involving a device used, or designed to be used for, moving people or goods from one place to another. These incidents may involve pedestrians and include railway or water transport. Incidents may occur on public highways or places other than a public highway.

9 Centre for Automotive Studies website last accessed 1 Sept 2009.

and in particular rural and remote Aboriginal communities, access to the child restraint advice and fitting services that are available to people living in the metropolitan area.

The Safety of Young Pedestrians

The Committee noted in its previous report that it had written to the Motor Accident Commission (MAC) regarding the campaigns that MAC was conducting to enhance the safety of young pedestrians, especially those in rural areas. MAC indicated that it had specific road safety campaigns that were State-wide and targeted young people.

2.6.2 Fatal Assault [10]

Four males and one female died from some form of fatal assault or intentional injury in 2008. Three children were less than four years of age and two children were aged between 10-17 years. Causes of death included poisoning, suffocation and assault.

In two cases involving young children a parent has been charged with murder and these charges were pending at the time of writing. In both cases where young people were fatally assaulted, the perpetrator was alleged to be another young person. Both incidents occurred in circumstances where there were a number of other young people present, but no adult supervision. Only one of these five children had prior contact with the child protection system.

Issues arising from these deaths, which the Committee may consider in greater detail once police and coronial investigations have been concluded, include:

- the impact of a parent's mental health on their ability to care for young children; and
- the role and importance of risk-taking, alcohol consumption and parental supervision of older children. These issues were common to the circumstances of a number of deaths of young people in transport crashes, other forms of accidents such as poisoning and falls, and fatal assault.

2.6.3 Accidents [11]

Three children died from injuries sustained in unintentional accidents. Two deaths occurred in the 0-4 age group. The death of one young infant was attributed to suffocation and this death is considered in Section 2.8.3 SUDI and Safe Sleeping Issues along with other deaths where there were risk factors for sudden and unexpected death in the infant's sleeping environment. The cause of death for the other young child was also suffocation but in this case suffocation resulted from entrapment in a filing cabinet (Byard & Charlwood, 2009). One young person died from accidental poisoning.

Coronial Inquest - December 2008

In December 2008 the State Coroner conducted an inquiry into the death of a 13 month old boy who was found in his cot, hanging from a looped blind cord in which he had accidentally become entangled. The Coroner recommended that the Ministers for Health and Consumer Affairs conduct a public awareness and education campaign about the dangers to infants, presented by curtain and blind cords. He also recommended that these Ministers enact legislation requiring mandatory safety standards for blind cords, their installation and fixation to the wall. He recommended that the Office for Consumer and Business Affairs implement regulatory measures regarding this legislation.

In relation to the death of this young child, the Committee's previous report (CDSIRC, 2008) noted the lack of current legislative requirements for the manufacture and installation of blind cords.

The Committee is pleased to note the implementation of recommendations about blind cord safety.

2.6.4 Other *External Causes of Death*

Other external causes of death for 2008 were associated with very small numbers of deaths, but raised issues about prevention for the Committee.

Drowning

Two young children aged between 1-3 years drowned in private pools or ponds. In both cases each child had unrestricted access to the pool or pond and the carer(s) assumed that the child was safe.

In previous years the Committee has monitored deaths in similar circumstances and a number of issues emerge from these deaths:

10 The Committee characterises a fatal assault as 'the death of a child from acts of violence perpetrated upon him or her by another person' (Lawrence, 2004; p 842).

11 Accidents exclude deaths attributed to transport incidents, fires or drowning. Also referred to as deaths from unintentional injuries, accidents most commonly include suffocation, strangulation and choking, falls and poisoning.

- Preventable child deaths occurred because adults disengaged existing safety mechanisms designed to prevent child access. Young children had easy access to the pool because the self-latching, self-closing gate had been 'propped' open and/or house doors were left open for various reasons such as pool cleaning and easy repeat access; and/or
- Adults may have misjudged the child's safety around water. Swimming lessons or admonishments to 'stay away from the water' may have falsely bolstered the adults' assumptions about the child's safety.

In March 2009, following the review of several toddler drownings which had occurred in the 2007-2009 reporting periods, the Committee wrote to the Royal Life Saving Association of South Australia and to Kidsafe SA about the circumstances of these deaths. The Committee requested each agency explore health promotion avenues regarding messages about the dangers of 'propping' self-latching, self-closing pool gates open and consider targeting fathers and grandparents in any campaign regarding pool safety awareness.

Kidsafe SA responded to the Committee's letter indicating the short and long term actions it would take including an increased emphasis on these issues in its workforce training and its community safety awareness work.

The Chair of the South Australian Water Safety Coordinating Committee also responded and alerted the Committee to the State Water Safety Plan 2008-2010. The aim of this plan is to ensure organisations work together to reduce the risk of drowning deaths and water-related injuries. One of the risk demographics identified has been toddler and child drownings and the Committee was assured that its concerns were reflected in the Water Safety Plan.

In September 2008, the Committee conducted an in-depth review into the drowning deaths of two toddlers in an above ground rainwater tank. Details of the recommendations and subsequent actions taken by the Minister for Families and Communities can be found in Section 3.3.2 *In-Depth Review: Drowning.*

Suicide [12]

The deaths of two young men aged between 15-17 years were attributed to suicide. Both incidents occurred in regional or remote areas of the State.

The Committee submitted an in-depth review of ten suicide deaths which had occurred in the years 2005-2006 to the Minister for Families and Communities. Previously the Committee had undertaken reviews of three young people whose deaths were attributed to suicide; two of these deaths were of young Aboriginal men. Details about the recommendations and the responses received about these reviews, can be found in Section 3.5.6 *Monitoring Recommendations About Aboriginal Children.*

Fire-related Deaths

There were no deaths attributed to fire-related accidents in 2007 or 2008.

Coronial Inquest - December 2007

In December 2007 the Coroner released his findings into the deaths of nine individuals in the 2006 fires which occurred on the Yorke Peninsula, South Australia - the Wangarry Fires Inquest. Four children died in these fires. The Coroner made no specific recommendations in relation to the Country Fire Authority's 'Stay or Go' policy and the safety of children. Given the circumstances of the deaths of these children the Committee was particularly concerned about the vulnerability of children, women or elderly people in similar situations. It obtained information from various agencies such as the Department of Education and Children's Services and the metropolitan and country fire authorities about policies and programs that might address issues with regard to fire safety and children. The Committee wrote to the Country Fire Authority (CFS) expressing its concerns about the 'Stay or Go' policies that do not address the vulnerability of children, women or elderly people.

At the time of writing the Committee awaits the CFS response to the recommendations arising from the Victorian Bushfires Royal Commission and anticipates that the issues it has raised will be addressed in any new policies and guidelines.

12 The Committee classifies a death as suicide where the intent of the child was clearly established. It also attributes a death to suicide if careful examination of coronial, police, health and education records indicated a probable intention to die.

2.7 'AT RISK' GROUPS OF CHILDREN

It is well known that poor social and economic circumstances adversely affect health throughout life. Since children who are geographically isolated, Aboriginal, or live in poverty, are more likely to be at risk of poorer health and wellbeing, deaths of children in these 'at risk' populations are examined in more detail in the following sections.

2.7.1 Contact with Families SA

'All children have a right to grow up in an environment free from neglect and abuse. Their best interests are paramount in all decisions affecting them.'

The Council of Australian Governments (COAG) has recently released the *National Framework for Protecting Australia's Children 2009-2020.*

The Report can be found at: [13]

http://www.familiesaustralia.org.au/publications/pubs/child_protection_framework.pdf

The framework detailed in this report was endorsed by COAG on 30 April 2009. The Honourable Mike Rann MP, Premier of South Australia, represents the interests of South Australia's children at COAG. The intended outcome of the framework and the strategies which underpin it is that:

'Australia's children will be safe and well.'

To measure this outcome COAG has set a target, agreed to by all representatives, of:

'Substantial and sustained reduction in child abuse and neglect in Australia over time.'

At a State level, the Committee will monitor the impact of the supporting strategies through the association of child deaths and children who have had contact with the child protection system in the previous three years.

In 2008, of the 120 children who died, 26 children (22%), their siblings or members of their immediate family had some form of contact with Families SA in the three years preceding their death. This proportion of children or their families in contact with the child protection system is consistent with findings in previous years.

It is noteworthy that overall, more than half (14) of these children, prior to their death, resided in the most disadvantaged areas of the State (SEIFA quintiles 4 and 5).

Although the majority of children (17 or 65%) were resident in major city areas, eight of these seventeen children lived in areas of disadvantage. The remaining nine children who lived in regional or remote areas were all in areas of disadvantage.

Table 5 shows the ages and causes of death for this group of children.

Over half of these deaths were attributed to illness or disease. This pattern is similar to that of previous years and consistent with that of the general population. What is noteworthy however is the number of deaths from 'undetermined causes'. Four of these five deaths were of infants less than one year old and involved sudden and unexpected death associated with unsafe sleeping environments. This issue is discussed at length in Section 2.8.3 *SUDI and Safe Sleeping Issues.*

Table 5: Deaths of children and contact with Families SA, by cause of death and age, South Australia 2008*

Cause of Death	<1 years	1-4 years	5-9 years	10-14 years	15-17 years	Total
Illness or Disease	8	1	2	1	2	**14**
Undetermined Causes	4	1				**5**
External Causes		2		2	2	**6**
Cause not yet known					1	**1**
TOTAL	**12**	**4**	**2**	**3**	**5**	**26**

* *Source: Child Death and Serious Injury Review Committee database*

13 National Framework for Protecting Australia's Children 2009-2020, report last accessed on 1 September 2009.

Families SA – Nature of Contact

Eight children had been the subject of one notification in the three years preceding their death. However, for the majority there were multiple notifications for either the child or their siblings. In several cases, very young parents were themselves the subject of notifications. These parents often had a long history of contact with child welfare services.

In four cases, the birth hospital notified Families SA at the time of discharge of its concerns about the ability of parents to care for the infant. Some of these infants had chronic medical conditions but other notifications were based on the hospital's knowledge of the family's circumstances. There appeared to be no standard approach to the management of these notifications in either the health or the child protection systems. A number of these cases are being considered for review by the Committee.

As in previous reports, the issues most frequently arising in notifications were not single incidents of physical or sexual abuse, but were concerns about the parent(s)' ability to care for their child or children. Concerns about the care of children with disability and/or chronic and complex medical conditions often prompted notifications from health care or education services. Other issues prompting notifications were the combination of parental alcohol or drug use, domestic violence, accommodation and financial difficulties that impaired the parent(s)' ability to feed, clothe and house their children, to supervise them adequately, to ensure they attended school and to care for them physically and emotionally.

Each of these deaths has been screened by the Committee and the circumstances and causes of the death have been considered. In twelve cases the Committee requested further information prior to deciding whether to review the case in greater detail. Two cases have been reviewed in-depth and these reviews will be submitted to the Minister for Families and Communities on completion.

Families SA – Aboriginal Children

At a national level, it is known that Indigenous children are over-represented in child protection systems. AIHW (2009) has reported that Aboriginal and Torres Strait Islander children are six times more likely to be the subject of a notification to child protection authorities that on investigation by the authority, is confirmed to have occurred. The AIHW report can be found at: [14]

http://www.aihw.gov.au/publications/index.cfm/title/10687

Four of the eleven Aboriginal children who died in 2008, or their families, had contact with Families SA in the three years preceding their deaths. Three deaths were of very young infants, two of whom had some form of illness. In two of these three cases the infant's mother had a long history of contact with Families SA. In both cases the concerns of the hospital staff about the family's circumstances and the ability of the parent(s) to care for the infant, had prompted notifications to Families SA when the infant was born. Both mothers were very young. Domestic violence and drug and alcohol use were consistent issues prompting notifications about the care of children or their siblings in these and other cases.

Similar trends have been reported by other child death review committees. The Western Australian Child Death Review Committee (2008) conducted a qualitative analysis of the deaths of 22 Aboriginal children 'known' to the child protection system who died in circumstances of neglect.

The majority of these children were less than one year old and all of the families had a long history of contact with the child protection system, including a history of contact for other siblings and for the parents of these children. Alcohol and drug use and domestic violence were identified as risk factors relating to the care of children in almost all families, in addition to homelessness, mental health problems and poverty. That Committee found that the overall service system response in relation to these families was inadequate. This report can be found at: [15]

http://ndri.curtin.edu.au/local/docs/pdf/publications/T187.pdf

2.7.2 Aboriginal Children

Eleven Aboriginal children died in 2008; nine percent of the total number of children who died in this year. Six children were female.

Three children were normally resident in other states and territories; NSW, NT and Queensland. All of these children died from illness or disease.

14 AIHW report last accessed on 4 September 2009.

15 The Western Australian Child Death Review Committee (2008), report last accessed on 1 September 2009.

From 2005-2008 the percentage of Aboriginal children who have died relative to the total number of deaths in each year, has shown only minor fluctuations: 12.5% in 2005; 9% in 2006 and 10% in 2007.

Table 6 shows the causes of death for Aboriginal children in 2008.

Table 6: Deaths of Aboriginal children by cause of death and age, South Australia 2008*

Cause of Death	<1 year	1-4 years	5-9 years	10-14 years	Total
Illness or Disease	4	1	1		**6**
Undetermined Causes	1				**1**
External Causes	1	1		1	**3**
Cases not yet known				1	**1**
TOTAL	**6**	**2**	**1**	**2**	**11**

** Source: Child Death and Serious Injury Review Committee database*

Approximately half of these deaths were attributed to illness or disease. Three young infants died from conditions associated with prematurity. Two children died from heart failure associated with underlying congenital or chromosomal conditions.

Three of the eight Aboriginal children who were resident in South Australia at the time of their death lived in the State's most remote and most socioeconomically disadvantaged areas. Two of these children died in transport crashes in these remote areas. These children were travelling unrestrained in the car with at least one parent and several other people. The issue of young children and child restraints is discussed in more detail in Section 2.6.1 *Transport.*

Three other children lived in some of the State's most disadvantaged areas, but in major city or regional locations.

The over-representation of Aboriginal children in South Australia's child death numbers has been acknowledged and discussed in previous annual reports (CDSIRC 2007; CDSIRC 2008). Consistent across these four reporting years has been the young age of these children. Apart from reflecting the greater vulnerability of infants, young age at death also highlights the intergenerational nature of socioeconomic disadvantage. Poor living conditions, homelessness, unemployment, illness, higher rates of smoking and poor maternal health will increase the likelihood that a greater proportion of Aboriginal infants will die. At the time of writing, a report auspiced by Save the Children indicated that Indigenous children were three times more likely to die before their fifth birthday than non-Indigenous children. This report can be found at: [16]

http://www.savethechildren.org.au/plugins/editors/tinymce/jscripts/tiny_mce/plugins/filemanager/files/media/NewbornandChildSurvivalinAustralia.pdf

Aboriginal Children – State and National Initiatives

The health and wellbeing of Aboriginal children is a focus of both State and National initiatives and the Committee is aware of a number of programs including acoustic enhancement to all classrooms on the APY Lands and swimming pool based 'learn to swim' lessons for these children. However there appears to be no indication that these or other State or National initiatives that were identified in the Committee's previous report (CDSIRC 2008) have had any notable impact on the number, circumstances or causes of death for Aboriginal children in 2008.

The Committee will continue to monitor responses to previous recommendations arising out of several in-depth reviews about Aboriginal children and young people.

2.7.3 The Impact of Socioeconomic Disadvantage – SEIFA

The SEIFA (Socio-Economic Indexes for Areas) Index of Relative Socio-economic Disadvantage (IRSD) draws on a variety of personal and household characteristics (available from the 2006 Census) to rank household and socioeconomic status. In this report, SEIFA scores are divided into five quintiles, each representing approximately one fifth of the population, with the least disadvantaged populations represented by quintile 1, and the most disadvantaged represented by quintile 5.

Table 7 presents the total number of deaths by major cause in the five IRSD quintiles. Only the 111 children who were resident in South Australia at the time of their death are included. Numbers for the three most commonly occurring causes of death are given.

16 Save the Children report last accessed on 20 September 2009

Table 7: Deaths of children by area of socioeconomic disadvantage (SEIFA IRSD), South Australia 2008*

Cause of Death	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	Total
Illness or Disease						
Certain conditions originating in the perinatal period	3	8	7	4	8	30
Congenital malformations, deformations and chromosomal abnormalities	5	3	6	5	7	26
Cancer	3	3	2	1	3	12
Other Diseases	1	3	1	2	4	11
Illness or Disease - Total	**12**	**17**	**16**	**12**	**22**	**79**
Undetermined Causes						
Undetermined	1		3		4	8
Undetermined Causes - Total	**1**		**3**		**4**	**8**
External Causes						
Transport	1		3	2	3	9
Accidents		1		1	2	4
Fatal assault	1		2		1	4
Other causes	1		1	1	2	5
External Causes - Total	**3**	**1**	**6**	**4**	**8**	**22**
Other						
Cause Not Yet Known			1		1	2
TOTAL	**16**	**18**	**26**	**16**	**35**	**111**

** Source: Child Death and Serious Injury Review Committee database*

Table 7 shows that the number of deaths in quintile 5, which represents areas of greatest disadvantage in South Australia, was double the number of deaths in quintile 1, which represents the least disadvantaged areas of the State. It is known that children from poorer families are at greater risk of death than those living in more affluent households and this pattern is evident in the deaths of children in South Australia during 2008. The same association between death and disadvantage has been observed in the Committee's previous reports (CDSIRC 2006; CDSIRC 2007; CDSIRC 2008).

In 2008 this socioeconomic gradient of deaths was consistent across deaths from illness and disease, with 12 deaths in areas of least disadvantage and 22 in areas of greatest disadvantage, and across deaths attributed to external causes – three deaths in areas of least disadvantage and eight in areas of greatest disadvantage. Four of the eight the deaths from 'undetermined' causes were of children living in areas of greatest disadvantage.

2.7.4 The Impact of Geographical Remoteness – ARIA+

The Accessibility and Remoteness Index of Australia or ARIA+[17] is a distance-based measure which defines five categories of remoteness based on road distance to major service centres. Categories are determined by reference to postcode (AIHW, 2004).

17 See Section 4.1.8 for more details.

The categories are:

- ***major city*** - where there are assumed to be minimal restrictions on the accessibility to the widest range of goods, services and opportunities for social interaction. In South Australia, Adelaide is an example of a major city area;
- ***inner regional*** - e.g. areas such as the Adelaide hills;
- ***outer regional*** - e.g. areas such as Mount Gambier;
- ***remote*** - e.g. areas such as Port Lincoln; and
- ***very remote*** – children living in a very remote area would be assumed to have very little access to goods and services or opportunities for social interaction. Areas of northern South Australia are examples of very remote areas.

Table 8 gives details of the total number of deaths in ARIA+ categories, each major cause of death, and the death rates. Due to small numbers, four of the ARIA+ categories have been collapsed: inner and outer regional are represented by 'regional' areas and remote and very remote areas are included under 'remote.' Only the 111 children who were resident in South Australia at the time of their death are included in these figures. Numbers of deaths for the three most commonly occurring causes of death are given.

Death rates in major city areas such as Adelaide and regional areas such as Mt Gambier were similar; between 30-32 deaths per 100 000 children aged under 18 years occurred in these kinds of areas. These rates are similar to those recorded in previous years. For example in 2007 the death rates in major city and regional areas were 33 deaths per 100 000 children and 31 deaths per 100 000 children respectively.

Although the number of deaths in remote areas appears much lower than the number of deaths in either major city or regional areas, the death rate, which takes into account the number of deaths relative to the number of children living in these areas, is much higher in remote areas - 51 deaths per 100 000 children – when compared to the rates in either major city or regional areas. This rate is not as high as the rate in

Table 8: Deaths of children and geographic remoteness (ARIA+), South Australia 2008*

Cause of Death	Major City	Regional	Remote	Total
Illness or Disease				
Certain conditions originating in the perinatal period	20	7	3	30
Congenital malformations, deformations and chromosomal abnormalities	20	5	1	26
Cancer	8	4		12
Other Illness or Disease	9	2		11
Illness or Disease - Total	**57**	**18**	**4**	**79**
Undetermined Causes				
Undetermined	5	3		8
Undetermined Causes - Total	**5**	**3**		**8**
External Causes				
Transport	5	2	2	9
Accidents	2	2		4
Fatal assault	4			4
Other causes	3	1	1	5
External Causes - Total	**14**	**5**	**3**	**22**
Other				
Cause Not Yet Known	2			2
TOTAL	**78**	**26**	**7**	**111**
RATE PER 100 000	**32**	**30**	**51**	

**Source: Child Death and Serious Injury Review Committee database*

2007 (73 deaths per 100 000 children in remote areas), but remains high enough to indicate the elevated risk of children living in remote areas compared to those living in either major city or regional areas.

ARIA⁺ – Deaths by Cause

As is the case in the total population, the number of children dying from either illness or disease, in major cities, regional areas and remote areas, is much higher than the number of children dying from external causes.

2.8 SUDDEN UNEXPECTED DEATHS IN INFANCY

Sudden unexpected death in infancy (SUDI) has been described as an 'umbrella' term that is used for all sudden unexpected deaths of infants under one year of age.

2.8.1 The Definition of 'Sudden Unexpected Death in Infancy' and its Use for Prevention

The definition of SUDI currently adopted by the Committee encompasses the sudden and unexpected deaths of infants under one year of age from all causes including illness, disease, unintentional accidents such as transport crashes, drowning and accidental suffocation. Deaths from intentional causes, particularly fatal assault also fall under this definition if, as is often the case, they occurred suddenly and unexpectedly. This definition also encompasses the sudden and unexpected deaths of infants that cannot be explained, including sudden infant death syndrome (SIDS) where no cause of the death can be found, and deaths from undetermined or unascertained causes where various circumstantial factors may have contributed to the death, but the pathological and anatomical evidence at post mortem are not sufficient to definitively consider these circumstances to have caused the death.

Deaths attributed to SIDS are subject to a further set of classification guidelines. These guidelines take into account the availability and quality of information to determine categories of SIDS which reflect the degree of certainty with which the SIDS cause of death has been made. Byard and Marshall (2007) refer to this as the 'gradient of certainty.'

In terms of the Committee's work and reporting, these definitions are important because they enable a degree of comparison across jurisdictions both nationally and internationally. However, for the purposes of prevention, the use of these definitions of SUDI and SIDS create certain dilemmas because a common set of known risk factors relating to the sleeping environment of infants can be present in deaths from both explained and unexplained causes. For example, deaths from explained causes such as accidental suffocation or illness and deaths attributed to SIDS or undetermined causes will often share similarities in the known risk factors present at death. Although the death may not be directly attributed to these factors, it is quite clear from the available research that they contribute to the likelihood of death occurring. More importantly, they are preventable. Campaigns in the early 90s that encouraged parents to put infants to sleep on their backs demonstrated that changes in the infant's environment and sleep position, when promoted at a population level, can lead to a decrease in the number of deaths attributed to causes such as SIDS.

Prevention of infant deaths in such circumstances has always been a particular concern for the Committee. Over the years, it has commented on the circumstances of infant deaths and made recommendations in both its Annual Reports and its in-depth reviews about systemic changes that may help to improve the safety of infant sleeping environments.

For this reason, information in this section of the report is presented in two ways. Firstly, the sudden unexpected deaths of infants are classified and reported according to the definitions of SUDI and SIDS that the Committee has adopted and which are in line with both international definitions and those agreed to by the Australian and New Zealand Child Death and Prevention Group. Secondly, for the purposes of prevention, the sudden unexpected deaths of infants where risk factors in the infant's sleeping environment were present are considered as a group, regardless of their cause of death. It is the Committee's view that, in terms of prevention, this is the most effective way to monitor the most commonly occurring risk factors that were present at the time of these deaths and to make recommendations that may help to change them.

2.8.2 SUDI Deaths in South Australia 2008

Fourteen infants under one year of age died suddenly and unexpectedly in 2008. Nine were male and three were Aboriginal. Eight of these 14 deaths were attributed to explained causes. These causes were

Table 9: Death of children attributed to SUDI, South Australia 2008*

SUDI Classification	Number of deaths <28 Days	<1 Year	Total
EXPLAINED			
Death occurring in the course of an acute illness that was not recognised by carers and/or health professionals as potentially life threatening	2		**2**
Death arising from a pre-existing condition that had not been previously recognised by health professionals		2	**2**
Death resulting from any form or accident, trauma or poisoning		4	**4**
Explained Death - TOTAL			**8**
UNEXPLAINED			
Deaths that were unexpected and unexplained at autopsy	1	5	**6**
Unexplained Deaths - TOTAL			**6**
TOTAL	**3**	**11**	**14**

**Source: Child Death and Serious Injury Review Committee database*

established through examination of the circumstances of the deaths and the autopsy report. Six infants, all males, died from undetermined causes. Table 9 gives further details.

Of the eight deaths that were unexpected, but attributed to recognisable causes, the deaths of two infants less than 28 days old were attributed to acute illnesses that were not recognised by parents and two other deaths were from conditions not recognised by health professionals. Four infant deaths resulted from some form of accident, trauma or poisoning with two deaths attributed to intentional injury; one to accidental asphyxia and one to a transport crash.

Six deaths were unexpected and unexplained at autopsy; all were attributed to undetermined causes. As in 2007, there were no deaths attributed to SIDS in 2008.

Eight of the 14 infants who died suddenly and unexpectedly were living in major city areas. Four of the eight infants living in major city areas and four other infants living in either regional or remote areas were located in the State's areas of greatest disadvantage.

2.8.3 SUDI and Safe Sleeping Issues

Of the 14 infants who died suddenly and unexpectedly in 2008, eight infants, *regardless of the cause of death,* had one or more identifiable risk factors for SUDI in their sleeping environment including all six deaths from undetermined causes.

The notable risk factors in the sleeping environments of these infants were:

- infants placed to sleep on their side or stomach;
- infants placed to sleep in the parental bed and sharing the bed with a parent or parents and other siblings;
- infants placed to sleep in other locations such as a pusher or on a lounge suite;
- pillows, especially U-shaped pillows had been used to support the infant or prevent them from 'rolling'; and
- soft sleeping surfaces and/or multiple layers of soft material under the infant.

The eight infants who died in unsafe sleeping environments ranged in age from 19 days to five months. Seven of the eight were male. The majority were reported to be healthy infants with no problems at birth or prior to their sudden death.

In this and previous reporting years, the number of infants who died suddenly and unexpectedly at home where risk factors for unsafe sleep were identified, continue to outnumber those who died in other circumstances such as from illness or disease, fatal assault, drowning or transport accidents. For example, combining the data for 2007 and 2008 the Committee noted that in at least half of the total SUDI deaths over that two year period, there were known risks associated with the infant's sleeping environment. The Committee believes that there are a number of ways in which these risks could be reduced.

2.8.4 Opportunities for Reducing Risk: Addressing Unsafe Sleeping

The Committee has identified a number of ways in which issues about unsafe sleeping could be addressed.

The Universal Home Visit

In South Australia, the parent(s) of every infant is offered a home visit through SA Health's Universal Home Visiting program. This visit should occur within the first six weeks of life and provides an opportunity to discuss and examine sleeping practices and the sleep environment and for advice to be given that will improve the safety of the infant.

Of the eight infant deaths in 2008 that occurred in an unsafe sleep environment, seven infants and their parent(s) had received a Universal Home Visit (UHV) from a qualified nurse practitioner. These visits generally occurred within four weeks of discharge from hospital. Several infants who were assigned a priority status received their visit within a week of discharge. Review of the information provided about the universal home visits indicated that although the home visit may have occurred promptly, arrangements for follow-up services, when needed, were often not undertaken in a timely manner and discussions and decisions about these infants were poorly documented.

Given the number of infants who die in unsafe sleeping environments each year, and the opportunity provided by the UHV to discuss safe sleeping, the Committee has made the following recommendation:

Recommendation 1: Universal Home Visiting

Risk factors in an infant's sleeping environment can be reduced through the timely provision of both practical support and appropriate information. The universal home visitor is ideally placed to address these issues with parents and carers. The Child, Youth and Women's Health Service should revise its policies, guidelines and training for universal home visiting staff to make it a priority to give guidance about safe sleeping issues to each family and to monitor and follow up on each family's response. This approach should utilise evidence-based best practice models and should be audited regularly to ensure it is being put in place properly.

The Family Home Visiting Program

The Committee is aware that the Family Home Visiting (FHV) program operated through CYWHS is designed to provide a further service for families who meet certain eligibility criteria (eg young mother, ATSI infant etc). Through its scrutiny of records, it has become apparent to the Committee that the FHV program is not available to families who have particularly 'high needs' due to drug use, mental health or similar issues.

It is the view of the Committee that such 'high needs' families require specialised and often intensive and ongoing home-based support, beginning with antenatal services, so that risks can be assessed and a supportive relationship established with the families before the infant is born.

In light of these findings, the Committee has made the following recommendation:

Recommendation 2: 'High Needs' Families

Antenatal services and a specialised intensive home-based support service should be provided for families with a high need for support who are not eligible for the Child, Youth and Women's Health Service Family Home Visiting program and who may not fall within the legislative responsibilities of the child protection system. Identifying and supporting these families is essential because their infants are at an elevated risk of sudden death.

The Committee has also made recommendations about this issue in three in-depth reviews conducted in this reporting year (See Section 3.3.3 *Three In-Depth Reviews: High Risk Infants).*

Contact with Families SA

Of the eight infant deaths that occurred in an unsafe sleeping environment, four families had prior contact with Families SA. Notifications usually concerned the parents' ability to care for this infant or other siblings. Contact with the child protection system is considered by the Committee as a further opportunity for discussion with parents about how and where their infant is sleeping.

The Committee is aware that Families SA has recently finalised a safe sleeping policy and that consideration is being given to relevant training for Families SA staff and contracted non-government organisations.

Co-sleeping

Co-sleeping was identified as a risk factor in four of the eight cases in 2008 where death occurred in an

unsafe sleeping situation. This pattern has continued from 2007. In six of the 13 deaths where risk factors in the sleeping environment were present, a consistent factor identified was co-sleeping.

Combining information about the circumstances of death for 2007 and 2008 where co-sleeping occurred (10 cases), co-sleeping occurred consistently with the mother, but sometimes also with the father, and/or with other siblings. The capacity of the bed-sharer(s) to be aroused from sleep appeared to have been compromised by alcohol, drug or medication use in six of the ten cases. Some needed to be aroused from sleep by another adult when the infant was found unresponsive. These incidents usually occurred in the parental bed. In several cases the mattress was soft, and/or covered with multiple layers of bedding. One or several adult pillows were often present in the bed. It was noted that the time between being placed to sleep and found unresponsive in five of the eight cases was longer than five hours; with two infants not checked for nine hours.

Most of these infants were described as healthy at birth, and in the days or weeks prior to their death. The infants ranged in age from two weeks to ten months, with the average being three months. Most were said to have been placed to sleep on their back. Reports about their position when found were often contradictory. For example 'damp patches' were noted on bedding or the bed-sharer's clothes, suggesting some time spent face down or up against the adult bed-sharer, and parental statements were sometimes at odds with autopsy reports of lividity.

In 2009 the New Zealand Coroner, after an extensive inquiry into the deaths of six infants, recommended that:

> *'the public health advice in relation to safe infant care practices and safe sleeping environments be strengthened and broadened as to make it clear that:*
>
> - *bed-sharing by adults and siblings with infants under six months exposes the infant to the risk of death and should be avoided; and*
> - *the safest place for babies to sleep for the first six months of life is in a cot beside the parental bed.'*

His inquiry considered evidence about bed-sharing from several sources including policy statements made by the American Academy of Pediatrics Task Force on Sudden Infant Death Syndrome (2005) which stated that:

> *'bed-sharing, as practiced in the United States and other Western countries, is more hazardous than the infant sleeping on a separate surface and, therefore recommends that infants not bed share during sleep.' (p.1252)*

The recommendations made by the New Zealand Coroner can be accessed at: [18]

http://www.justice.govt.nz/courts/coroners-court/documents/recommendations-2007/december-2007/Recommendation-Harris-Reipail-26-Dec-2007.pdf

Similarly, the United Kingdom based Foundation for the Study of Infant Deaths (FSID) promotes a *'Sleep safe, sleep sound, share a room with me'* policy that states: *'The Safest Place for your baby to sleep is in a crib or cot in a room with you for the first six months'.* Its leaflet points out the additional dangers (ie enhanced risks) of bed sharing for carers who smoke, drink, take medication or are very tired; and for infants who are low birth weight or premature.

The Committee has considered the trend in its own data in the past two years where co-sleeping was a common element in many deaths. It has reviewed the evidence from these international bodies and from other experts including Professor Byard, [19] who is a member of the Committee. It has determined that it endorses the view that there are a number of ways in which co-sleeping may heighten the risk of SUDI including suffocation, entanglement, overlaying, or overheating. In view of this the Committee supports the messages promoted by the American Academy of Pediatrics, the New Zealand Coroner and FSID and makes the following recommendation:

> ***Recommendation 3: Co-sleeping***
>
> *Policies and procedures of Government and non-government agencies who provide services to infants and their families should clearly state that the safest place for an infant to sleep, for at least the first six months, is in an Australian Standards approved cot made up in accordance with SIDS and Kids guidelines, located next to the parents' bed.*

18 Recommendations made by the NZ Coroner last accessed on 20 October, 2009.
19 Professor Roger Byard, personal communication, September 2009

Co-sleeping with infants (whether in a bed or on a sofa, mattress or chair) should be strongly discouraged because it carries with it a clear risk of the infant dying. Any warning should note also that the risk of death is greatly increased if the baby is of low birth weight or premature, or if adults in the household are smokers, or if the co-sleeping adult has been drinking, has taken medication or drugs or is very tired.

The following pamphlet produced by the FSID is considered to be an excellent example of an appropriate brochure for families, which could possibly be adapted for use in Australia and with specific cultural groups. This pamphlet can be viewed via the following link: [20]

http://fsid.org.uk/Document.Doc?id=26

2.9 SUMMARY: CHILD DEATHS SOUTH AUSTRALIA 2008

One hundred and twenty children died in South Australia in 2008. The death rate, based on the deaths of 111 children who were South Australian residents at the time of their death, was 32.3 per 100 000 children – a rate not dissimilar from previous years. The majority of deaths were of male children. Nearly three-quarters (71%) died from some form of illness or disease.

As in previous years, after setting aside deaths from illness and disease, more children died in transport crashes than in any other circumstances. The Committee identified the issue of child restraints in motor vehicles as especially relevant to this year's deaths in transport crashes.

As in previous years the deaths of a number of infants under one year of age were attributed to an 'undetermined' cause. In the circumstances of these deaths the Committee noted common risk factors for unsafe sleeping. This year the Committee has highlighted the issue of co-sleeping and the dangers that co-sleeping can pose for infants.

Aboriginal children were once again over represented in the deaths of South Australian children. They comprised nine percent of the total number of children who died. Many more children who died, regardless of cause, came from areas of socio-economic disadvantage. As in previous years, disadvantage is also reflected in the number of families who had had contact with the child welfare system. This contact was not about single incidents of abuse but was more likely to involve notifications about problems that lead to the neglect of children: alcohol and drug use, mental health problems, domestic violence, poor child supervision and transient life styles.

20 UK FSID report last accessed on 1 September 2009.

Section 3

In-depth Reviews 2008-2009

'When a child dies, we lose part of our future...'
Klass, 2007

Section 3: In-depth Review of Child Deaths

3.1 COMMITTEE'S POWERS AND FUNCTIONS

Part 7C of the Act gives the Committee authority to undertake the in-depth review of cases of child death and serious injury. (See Section 1.3 *Legislation*).

The objective of such reviews is the identification of desirable changes in legislation, policies, practices or procedures that will reduce the likelihood of deaths or serious injuries in similar circumstances.

3.2 IN–DEPTH REVIEW PROCESS

The Committee has developed processes for the screening and review of child deaths. These processes are evaluated and reviewed each year, but have remained essentially the same for the past three years.

3.2.1 Screening and Selection of Cases for Review

Since its establishment by legislation in February 2006, the Committee has considered the deaths of all children since 1 January 2005, for review.

Diagram 1 (Section 4.1 1 *Access to Information and the Process for Screening and Review of Deaths*) outlines the processes for determining which cases screened by the Committee will be considered for in-depth review. Information about the death of each child is considered by one of the Committee's four screening teams. In general, a screening team will determine whether a case that it has screened should be presented to the full committee as one to be considered for in depth review. Once screened by the Committee, if not immediately eligible for review, a case may be allocated to one of several categories including:

- ***Not eligible for review*** - a case will be considered ineligible for review under S52S (2) of the *Act* – if the child was not normally resident in the State at the time of death or serious injury or the incident resulting in death or serious injury did not occur in the State;
- ***Not for review*** - a case may not require in-depth review if the screening of information available at the time indicates that there are no systemic issues arising from the death that the Committee considers need to be addressed. These cases are assigned a category of death e.g. illness or disease, SUDI, transport, fatal assault etc and the details are kept on the Committee's database until required for inclusion in the relevant Annual Report; or
- ***Pending further information*** - in some cases the Committee requests further information prior to making a decision regarding in-depth review. Such information may take weeks or months to acquire.

The majority of cases awaiting further information are deaths attributed to illness or disease or health-system-related adverse events. The medical screening team maintains a high level of scrutiny regarding the circumstances of the deaths of children from these causes, especially where children have received health system services, have had complex conditions requiring a high level of care, or where there has been an interface between medical, welfare and other systems. The medical screening team will attribute the death of a child to a health-system-related adverse event if it is considered that the circumstances indicate that health system issues may have played some part in the circumstances of the death, based on the records available at the time of screening.

Although only some cases proceed to in-depth review, the medical screening team has found that there are common issues associated with health-system-related adverse events including:

- supervision of inexperienced staff;
- functioning of medical equipment and technologies;
- provision of adequate standards of medical care;
- provision of support to parents for the care of children with complex medical conditions;
- discharge planning practices; and
- communication between health staff, with staff from other agencies and/or with children and their families or carers.

Some transport deaths are also included in this group where the transport screening team has flagged cases which have the potential for in-depth review but are awaiting information such as the South Australia Police (SAPOL) Major Crash Investigation Unit final report.

Currently the Committee has 51 cases where a decision whether to conduct an in-depth review will be made once further information relating to the cases becomes available and has been considered by the relevant screening team.

- ***Pending completion of investigations*** - in depth reviews cannot proceed until criminal or coronial investigations are finalised. In accordance with

Section 52S (4) of the *Act*, the Committee must ensure that its review processes will not compromise criminal or coronial investigations before it undertakes a review. Criminal investigations are considered to be concluded once any person involved in the death or serious injury of the child has been sentenced, or once SAPOL have determined they have no further interest in the matter. Investigations conducted by the Coroner are considered to have ended when the Coroner has made a finding into the cause of death or a coronial inquiry has been completed.

Currently the Committee has 14 cases where a decision whether to conduct an in-depth review will be made once coronial and or criminal investigations are finalised. Most of these cases are deaths attributed to fatal assault or neglect.

In July 2008 the former Minister for Families and Communities, Minister Weatherill, referred a number of cases involving neglect and serious injury to the Committee. The Committee awaits the completion of criminal investigations before considering the review of these cases.

- ***Awaiting assignment*** - in any reporting year, there are also cases ready for review but awaiting assignment of a 'review team' to undertake the review. Two cases are currently in this category.

3.2.2 Reporting Requirements

The Committee submits a report to the Minister for Families and Communities at the conclusion of each in-depth review. This report provides details of the case that has been reviewed. It includes a synopsis of all relevant documents and records and the Committee's comments on the information contained in these documents. The report contains the Committee's recommendations about systemic issues that may contribute to the prevention of similar deaths or serious injuries.

3.3 COMPLETED REVIEWS AND ASSOCIATED RECOMMENDATIONS

The Committee has submitted six in-depth reviews to the Minister for Families and Communities in this reporting period. These reviews considered the deaths of sixteen children and young people.

3.3.1 In-Depth Review: Suicide

In September 2008 the Committee submitted a group review of ten deaths attributed to suicide between 2005-2006. This review established the following:

- There were equal numbers of young males and females. They were aged between 15-17 years at the time of their death, with the exception of a ten year old. Most came from metropolitan areas, although two young Aboriginal males were from remote areas. The mechanism of death was hanging, except for one young person who died from a self-inflicted gunshot wound.
- Several young people had backgrounds of family violence and a number of these young people and/or their families had contact with Families SA. Some had periods of hospitalisation after prior suicide attempts, contact with mental health services, poor self-esteem, and histories of deliberate self-harming behaviours like self-lacerations. A number had communicated suicidal intent to peers. Seven were at school but most experienced a degree of school disruption, periods of non-attendance and suspensions. Some had received school counselling.

The Committee considers that the death by suicide of any young South Australian is of extreme concern. At the highest level of systemic change, the Committee identified that the work of lead agencies in suicide prevention in South Australia were conducted in the absence of a State-wide suicide prevention strategy. As such it recommended that:

- a State suicide prevention strategy be devised for South Australia including a dedicated youth suicide prevention strategy. The State strategy should comprehensively address suicide prevention as an issue crossing government, non-government and community sectors; and
- a permanent Ministerial advisory council for suicide prevention should be established to oversee the State strategy.

The Committee also recommended that:

- Resources should be allocated by the Department of Health for interventions where suicide attempts by children and young people result in hospital presentation or admission, with a focus on ongoing case management planning, not merely discharge planning. Monitored therapeutic strategies should

continue for an extended period of time after discharge, and include consultation with the young person and their family, and relevant health, education and other community agencies.

- Pathways to assistance, appropriate resources and long term supports should be provided to sustain families where multiple stressors are identified in early stages of children's lives.
- Resources should be allocated for maintaining active communications between services such as mental health, child protection, education and employment creation, particularly in regional, rural and remote South Australia, to optimise service provision for groups of high risk young people.
- State-wide suicide postvention programs for young people should be supported and evaluated on an ongoing basis.

At the time of writing, the Committee was considering the responses it had received from the Ministers for Health, Education and Mental Health and Substance Abuse.

In the previous reporting year the Committee submitted two separate reviews to the Minister for Families and Communities about the deaths attributed to suicide of two young Aboriginal males in remote areas of the State. The extreme disadvantage from birth for these two Indigenous young people was in stark contrast to the circumstances of the regional and urban young people whose deaths were attributed to suicide. These Indigenous young people had chronic ill health from infancy, far higher rates of school non-attendance and change of domicile and family carers, than the non-Indigenous young people.

The Committee considered that all children have rights to education leading to prospects of employment and services related to their mental/emotional wellbeing but acknowledged the challenges in attaining these goals for young people from remote areas.

Meeting these challenges requires ongoing, careful long-term planning and resource allocation. Section 3.5.6 *Monitoring Recommendations About Aboriginal Children* summarises the responses to these recommendations.

3.3.2 In-Depth Review: Drowning

In September 2008 the Committee submitted a review into the deaths of two young children in a rainwater tank. This review noted that there were no requirements to ensure that above ground rainwater tank lids are designed and installed to prevent child access and no definition of 'child resistance' in the handbook released by Standards Australia - *Rainwater Tank Design and Installation Handbook* (HB230-2006), which serves as a default standard.

At the Committee's request, the Minister for Families and Communities wrote to Standards Australia about this issue. Standards Australia have indicated that a change would be made in the current revision of the Handbook such that *'all rainwater tank openings for all types of above ground and below ground rainwater tanks be designed to withstand human load bearing forces.'* On the issue of a definition of 'child resistance' Standards Australia did not consider that such a definition should be covered in its Handbook.

3.3.3 Three In-Depth Reviews: High Risk Infants

In March 2009 the Committee submitted reviews into the deaths of three infants. Two infants were eight weeks old and one was seven months old. These infants died from various causes including fatal assault, accidental suffocation and an 'undetermined' cause. The Committee chose to submit all three reviews to the Minister for Families and Communities at the same time because the recommendations arising from each review were the same.

Comprehensive antenatal support services

The reviews into the deaths of these young infants prompted recommendations about the provision of comprehensive antenatal support services for families with particular kinds of challenges:

- parents who are very young;
- parents who have problems with alcohol or drug use;
- parents who have disabilities and/or mental health needs;
- parents who do not have stable, long term housing; and with any of the above
- parents who have the care of several small children.

The Committee's recommendations emphasised the need to develop supportive rather than investigative relationships with parents. The Committee highlighted the need for these supportive relationships to be developed with families before an infant is born, and particularly with families facing the kinds of challenges

outlined above because of the difficulty in maintaining contact at all with these families once the infant and the mother have been discharged from hospital.

To prevent the deaths of infants in similar circumstances, the Committee recommended that antenatal programs:

- help parents build their parenting skills;
- offer practical resources such as an Australian Standards approved cot and information or discussions that will help parents to understand how best to provide a safe sleeping environment for their infant; and
- address the special risks to infants in families with problems of domestic violence, transient life styles, alcohol and drug use, mental health problems and disability.

The Committee considered that addressing these problems at birth or post-discharge was often too late to substantially reduce the risks for infants born into these circumstances.

The Committee's recommendations emphasised that such services should not be withdrawn until the infant's safety and wellbeing could be assured.

These antenatal support services should of course be closely linked with the postnatal support services recommended and discussed in Section 2.8.4 *Opportunities for Reducing the Risks – Addressing Unsafe Sleeping*. In that section the need for a specialised, intensive, home-based support service is identified for those families who are not eligible for the Family Home Visiting program and who do not fall within the legislative responsibilities of the child protection system.

Families SA's High Risk Infants' Policy and guidelines

The Committee made several recommendations about Families SA's High Risk Infants' Policy and Guidelines because it was concerned about the ways in which 'risk' was assessed and about the timeliness of responses once infants were identified as 'high risk.' Its reviews showed that some infants were not recognised as 'high risk' despite indicators that were apparent in the antenatal period, at birth and/or at discharge from hospital. The Committee's recommendations highlighted the need to account for risk factors such as:

- appropriate sources of parental social support;
- each parent's ability to care for the child;
- the impact of parental drug and alcohol use on parenting abilities;
- each parent's understanding of and capacity to provide safe sleeping arrangements;
- any history of domestic violence between partners and the impact this may have on the safety of the infant;
- the child protection history of other siblings or of the infant's parents and the possible impact of those histories on the care of this infant;
- the number and source of previous notifications about the infant or their siblings, especially where notifications have originated from professionals in other service agencies;
- each parent's history (including the history of their families of origin) of contact/avoidance of contact with welfare services and the impact this might have on the care of this infant; and
- the family's use of and contact with other services and agencies which may impact on the provision of services to this infant.

The Committee recommended that Families SA demonstrate how the assessment of risks would be used to develop a comprehensive case plan for an infant and their family.

No response has been received to these recommendations, despite their raising fundamental practice issues.

3.3.4 In-Depth Review: Children with Disabilities

In June 2009 the Committee reviewed the death of a young Aboriginal child who died from causes associated with his severe epilepsy and chronic ill health. This child was also profoundly intellectually disabled.

The Committee made recommendations that emphasised the need for case planning to include provision of services that addressed the needs of families with disabled children. It recommended that Families SA should attach high priority to notifications of concern about children with disabilities and that a priority response was required to them, especially when there were indications of multiple disadvantage in the child's family.

Its review also led the Committee to recommend that Families SA's communications with parents or carers living with a disabled child should involve face-to-face contact, especially if, as appeared to be the practice in this instance, a case can be closed when there is no response to a letter.

The Committee recommended that Families SA should not close the file of any child living in a family with multiple disadvantages, and in particular when the child has a disability, simply because the parent or carer failed to respond to a letter or attend an appointment. Such a failure to respond may well indicate that the child and his/her family need more rather than less support.

The Committee submitted the review associated with these recommendations in June 2009 and awaits a response from the Minister for Families and Communities.

3.3.5 In-Depth Reviews: Recommendations About Case Management Practices

The reviews of three infant deaths and the review of the death of a young Aboriginal child prompted the Committee to make recommendations about case management practices. The substance of the recommendations in these and previous years' reviews are essentially the same.

It is of great concern to the Committee that its reviews continue to give rise to recommendations about fundamental case management practices.

In these two reviews recommendations addressed issues such as:

- preparing and implementing a case plan that engages and supports families;
- preparing a needs assessment;
- monitoring engagement;
- maintaining support services for as long as they are needed; and
- ensuring one agency has 'lead agency' responsibilities.

The Committee has received responses to similar recommendations from several agencies which outline policies and procedures designed to guide and support case workers to develop and maintain their case management skills.

However, the Committee noted that case files failed to demonstrate that the case management policies and procedures described by Families SA had been implemented in ways which resulted in better outcomes for children.

3.4 IN-DEPTH REVIEWS IN PROGRESS

In addition to the completed reviews outlined above, the Committee has several in-depth reviews in progress. At the time of writing, 11 cases are currently under review. These cases include a 'group' review about the deaths of six very young Aboriginal infants in 2007, two infant deaths relating to unsafe sleeping, the death of a profoundly disabled child and the death of a young person from accidental poisoning. Several cases of fatal assault where coronial and criminal proceedings have recently been concluded are also in the preliminary stages of review.

The serious injury review team has been reviewing the experiences of a sample of children under the Guardianship of the Minister, with the aim of identifying the nature and extent of serious injury sustained during guardianship. In the course of this review, the case files of five randomly selected children have been intensively scrutinised, and themes or patterns of experience identified. As a result of this work, the review team has identified very similar experiences and issues across each of the five cases, and an interim report has been provided to the Committee about these issues. It is anticipated that a final report will be completed by the end of 2009.

3.5 MONITORING OF RECOMMENDATIONS

The Committee's process for monitoring the progress of its recommendations is:

- to forward recommendations to the Minister for Families and Communities;
- for the Minister to seek responses from relevant portfolios and service providers; and
- for the Minister's department to collate responses and send them to the Committee.

A summary of recommendations and responses arising from the Committee's reviews is detailed in the following sections.

3.5.1 Monitoring Recommendations About Child Protection Practices: Families SA Adverse Events Committee

In 2008 the Committee commented on changes that Families SA had proposed to the structure and membership of its Adverse Events Committee and

that Committee's review processes. The Committee awaits further information about the changes that have been made.

3.5.2 Monitoring Recommendations About Development of Expertise in Child Protection

In September 2007, the Committee recommended identification, accreditation and support for medical practitioners to develop skills in child protection, especially those in rural areas.

The Committee received an update on the implementation of this recommendation from the Minister for Health. The Minister for Health said that Country Health SA and the Southern Adelaide Health Service were developing a protocol to support regional health units to manage child protection concerns with the aim of increasing the awareness of specialist child protection services available to support country health units and to assist health professionals manage child protection matters appropriately.

On the topic of the expertise and support available to health professionals in rural areas about child protection matters the Committee noted coronial recommendations published in April 2009 about the death of an Aboriginal infant in 2004. The Coroner recommended that the Minister for Health (and the Minister for Families and Communities) consider appointing suitably qualified and trained medical practitioners as child protection service representatives in each rural region in South Australia. This recommendation is designed to address the same gap in knowledge and service provision identified by the Committee in its review.

The Committee will follow-up the progress of these recommendations with SA Health.

3.5.3 Monitoring Recommendations About Children Under the Guardianship of the Minister

In the previous reporting year the Committee submitted a review to the Minister for Families and Communities about a young man who had died whilst under the Minister's guardianship. It recommended that all children under the Minister's guardianship be provided with a single stable care arrangement and that every child under guardianship have a comprehensive up-to-date case plan.

In September 2008 the Committee received a response from the Minister about these recommendations. The Minister said that all children have a case plan that is completed after an incident of abuse or neglect had been confirmed. This plan aimed to ensure that service provision was purposeful, timely, structured, goal-directed and regularly updated. Placement planning processes aimed to provide the most suitable and stable placement to meet the needs of young people and ensure that foster carers were trained and supported.

The Minister agreed that all children and young people in alternative care should be given the opportunity to benefit from long term, stable placement and that processes were in place to enable the best care options to be identified as early as possible. The Minister stated:

> *'It is certainly my desire that the high standard of care and appropriate systems and processes provided to this young person apply to all children under my guardianship and I am confident that Families SA's commitment will ensure this occurs.'*

3.5.4 Monitoring Recommendations About Deaths Reported to the Coroner

A supplementary issue arising from the review into the death of a young man under the guardianship of the Minister concerned the deaths of children and young people and the role of the State Coroner.

The *Coroner's Act 2003* requires the death of a person 'in the custody or under the guardianship of the Minister' under the *Children's Protection Act 1993* to be reported to the Coroner.

In December 2008 the Committee made recommendations to the Minister for Families and Communities about systemic changes to practices within the department and SA Health to ensure that all deaths of children who were under guardianship of the Minister were reported to the State Coroner. The Committee was aware, from the information available on its database, that this issue was particularly relevant with regard to the deaths of children or young people from 'natural' causes.

Responses received from SA Health and the Minister for Families and Communities indicated that changes have been made which will ensure that this issue does not recur.

3.5.5 Monitoring Recommendations About Parenting and Multiple Disadvantage

In 2007 the Committee submitted a review to the Minister for Families and Communities about the death of a young child where the parent responsible for the child's care was ill-equipped to recognise how ill the child was or to know how to respond to the child's needs. The Committee made several recommendations about the needs of families facing multiple disadvantages, including the need for across government investment in programs to meet the needs of children in such circumstances. Other recommendations were for the provision of services to young adults from such circumstances who struggle with the challenges of parenting, and for the assessment of 'neglect.'

In September 2008 the Committee received a response from the Minister who had sought advice about these recommendations from both Families SA and the Council for the Care of Children.

The Families SA Response

The Families SA response referred to numerous policies and procedures in place that were relevant to problems identified by the Committee. Having considered this response, the Committee wrote again to the Minister noting that although such policies were an important basis for providing guidance to case workers and managers, the Committee:

> *'was left wondering about the resources available for the implementation of each policy, but more importantly the ways in which implementation would be evaluated in terms of better outcomes for children, their families and for young people transitioning into adult lives after being in the care of the Minister.'*

The Committee requested that Families SA provide some documentation about quality assurance and accountability mechanisms for these policies.

In June 2009 the Minister replied:

> *'I am aware of the need for Families SA to develop more robust measures for the implementation, accountability and quality assurance of its policies once finalised.'*

The Minister was satisfied that this work was occurring and provided information about Families SA's care and protection framework, transitioning from care policies, a draft policy about working together to strengthen vulnerable families, and a draft policy about integrated practice and financial counselling. The Committee is considering the Minister's response.

The Council for the Care of Children

In July 2008 the Council for the Care of Children provided advice to the Committee on its recommendations about children and multiple disadvantage. The Committee has consulted the Council and now awaits further advice from the Council.

The Guardian for Children and Young People

The Committee wrote to the Guardian for Children and Young People asking for her opinion about the effectiveness of Families SA's policies and procedures for young people under the guardianship of the Minister, especially for young people who are in the process of leaving care.

The Guardian acknowledged that current Families SA policies and procedures represented a sound approach to meeting the needs of children and young people leaving care. However, she identified some gaps in the system which included:

- the lack of a standard for young people leaving care that would indicate when a young person had an appropriate level of 'readiness, ability and confidence to live independently in the community';
- that only 30 percent of young people in care aged over 15 years have a transition plan on file;
- inconsistent commitment within Families SA to transition planning;
- sometimes poor relationships between carers and Families SA;
- insufficient Youth Support Teams to support young people;
- inconsistent monitoring and assessment among case workers to ensure independent living skills of young people; and
- Families SA policies and procedures that were not supported by robust review processes.

The Guardian identified a number of groups of young people who were missing out on the services they needed including:

- young people without an allocated case worker;
- young parents struggling with the challenges of parenting; and

- young people with complex needs such as disability and/or mental health problems.

The Guardian suggested that to address these issues, Families SA could include a standard about young people and independent living in its policies, introduce evaluation and review processes and address the specific needs of certain groups of young people.

The Committee found the Guardian's response extremely helpful in understanding the impact of Families SA's policies. The Committee wrote to the Minister in September 2009 asking her to indicate:

- what steps have been taken to ensure that the remaining 70 percent of young people over 15 years who were in care have a transition plan;
- the ways in which gaps in service provision to the groups identified by the Guardian will be filled;
- if a standard for independent living skills has been adopted; and
- evidence for the evaluation and monitoring of the impact of her department's policies about young people leaving care.

The Committee is awaiting a response from the Minister.

3.5.6 Monitoring Recommendations About Aboriginal Children

In March 2008 the Committee submitted a review about the death, attributed to suicide, of a young Aboriginal man who lived in remote South Australia. In September 2008 the Committee received a response from the Minister for Families and Communities which contained information from Families SA, DECS, SA Health and the Aboriginal Affairs and Reconciliation Division (AARD) of the Department of the Premier and Cabinet (DPC).

The Committee had recommended a comprehensive plan to address the health of all children on the APY Lands. The Ministers for Health and Mental Health said that although health services on the APY Lands were primarily funded by the Australian Government, AARD and DECS, in late 2007, had facilitated a whole-of-government meeting to co-ordinate early childhood development and planning for children on the APY Lands. The Ministers acknowledged that:

> *'To advance a review or development of a health services plan for children on the APY Lands would require the support and commitment of key agencies…Improved communication and co-ordination of services would be a positive outcome for such a plan.'*

There was no indication of when a plan would be developed or what improvements were to be made to early childhood services on the APY Lands.

The Committee made recommendations about reducing the incidence of chronic ear infections. SA Health acknowledged that otitis media was prevalent in Aboriginal communities across Australia and a program had been funded to address this issue from 2004-2007, but gave no further information about what was being done now to deal with this problem.

The Committee was pleased to be informed that AARD recognised the value of swimming pool programs for children on the APY Lands and was committed to providing ongoing support for these programs.

DECS indicated that a fit-out of acoustic enhancement to all classrooms on the APY Lands had been completed and that assessments and advice on the need for acoustic upgrades where provided when required.

The Committee also recommended the implementation of care plans and the need for a 'lead agency' to take responsibility for this implementation. Families SA, AARD and DECS all supported this recommendation and expressed willingness to assist with its development and implementation. However, none of these agencies has yet accepted this role.

Finding ways to monitor the actions taken by agencies in response to its recommendations continues to be a challenge for the Committee. The health and wellbeing of Aboriginal children is a focus of State and National initiatives and the Committee will seek to monitor the impact of these programs via the framework outlined in Section 3.6 *Ongoing Issues.*

3.5.7 Monitoring Recommendations About Exchange of Information

In 2007, after reviewing the death of a young child, the relevant and timely exchange of information between responsible agencies was identified as an issue. The Committee recommended legislative change to enable Centrelink to exchange information with Families SA and any other relevant South Australian Government agency which is providing support to children.

At the COAG meeting of 2 October 2008, it was agreed that new Commonwealth-State measures should be developed to improve information sharing about children and families at risk. A protocol addressing these issues became operational in March 2009 and should contribute to the improved care, safety, welfare and wellbeing of Australian children. The Committee expects that COAG will in due course evaluate the use and effectiveness of this policy.

3.5.8 Monitoring Recommendations About Infant Safe Sleeping

In the Committee's previous report (CDSIRC, 2008) it was noted that the Minister for Health had recently informed the Committee that SA Health was committing $300 000 over three years to assist with the prevention of infant deaths in unsafe sleeping environments. Under the auspices of the CYWHS, the Safe Sleeping Advisory Committee was established to address the recommendations made by the Coroner, the Maternal, Perinatal and Infant Mortality Committee and the Child Death and Serious Injury Review Committee. In November 2008 the Committee met for the first time and a representative of the Child Death and Serious Injury Review Committee has attended each meeting. To date, CYWHS has determined that the safe sleeping campaign will be based on market research findings, and has also funded non-government organisations to provide health professional training. The Committee has supported the promotion of a standard set of guidelines for safe sleeping across government.

Given the prevalence of sudden and unexpected deaths of infants where safe sleeping is an issue, the Committee wishes to see outcomes from this project as soon as possible.

3.5.9 Monitoring Recommendations About Product Safety

The Committee noted the implementation of recommendations associated with blind cord legislation (See Section 2.6.3 *Accidents*) and guidelines about rainwater tanks and child safety (See Section 3.3.2 *In-Depth Review: Drowning*).

The Committee has been active in supporting the efforts of other agencies to identify and review potentially unsafe infant sleeping products such as pillows, cot inserts etc. The Committee notes that a large range of infant sleeping products that are not recommended as part of a safe sleep environment are available in retail outlets. Where relevant the Committee refers product safety concerns to the Office of Consumer and Business Affairs through the Minister for Families and Communities.

3.6 ONGOING ISSUES

The Committee has a statutory obligation to review cases of child death and to make recommendations for systemic change that may prevent further deaths in similar circumstances. All members of the Committee have a personal commitment to the review of deaths and the identification of issues for prevention. In order to achieve systemic change the Committee recognises the need to foster constructive working relationships with agencies whose files it reviews and which are the subject of its recommendations. The Committee has not focussed on the errors of individual parents or workers but has looked instead for ways to improve the systems through which care is provided to children and their families.

The Committee appreciates the preparation of responses is a time and resource consuming exercise. But too often agency responses provide little more than a detailed description of policies and procedures and do not say how they are put in place and how their outcomes are evaluated. Appropriate evidence-based policies and procedures are crucial but equally important is whether these policies and procedures are being put in place routinely and whether their outcomes are being monitored and evaluated to ensure the policies are achieving their stated goals.

One of the most successful ways of evaluating the impact of particular policies and procedures was through information from the Guardian for Children and Young People about the impact of Families SA's transition policies.

Another useful source for evaluations may be through the work of the Council for the Care of Children. In July this year, the Council launched its monitoring framework for improving the lives of young South Australians: *Look out for young South Australians.* The framework seeks to examine the wellbeing of South Australian children from birth to 17 years of age across five dimensions of their lives: health, safety, achievement and enjoyment of life, relationships with family, peers, community culture and society, and preparedness for adulthood.

The Council has provided at least one baseline indicator or measure for each of these dimensions and

plans to report on progress across these measures every three years. The Framework will be a useful way for the Committee to monitor the impact of its recommendations on the wellbeing of South Australian children. However, a three-year reporting period may not allow the Committee to measure this impact in a timely way. The Committee will seek the advice of the Council about:

- identification of the measures that may reflect the impact of its recommendations, and
- identification of the source of these measures and seeking information from these sources - this may involve working with the Council to host a forum for key stakeholders such as non-government service providers, to seek their opinion and expertise regarding particular aspects of the wellbeing of young South Australians or recommending to the Minister for Families and Communities that such a forum should be held.

The Council's framework and further information relating to its work can be found on the website at: [21]

http://www.childrensa.sa.gov.au/

In addition, the Committee will continue to request information from sources such as the Guardian regarding the impact of policies and procedures on young South Australians.

21 Council for the Care of Children, website last accessed on 1 September 2009.

Section 4

Other Matters

Section 4: Other Matters

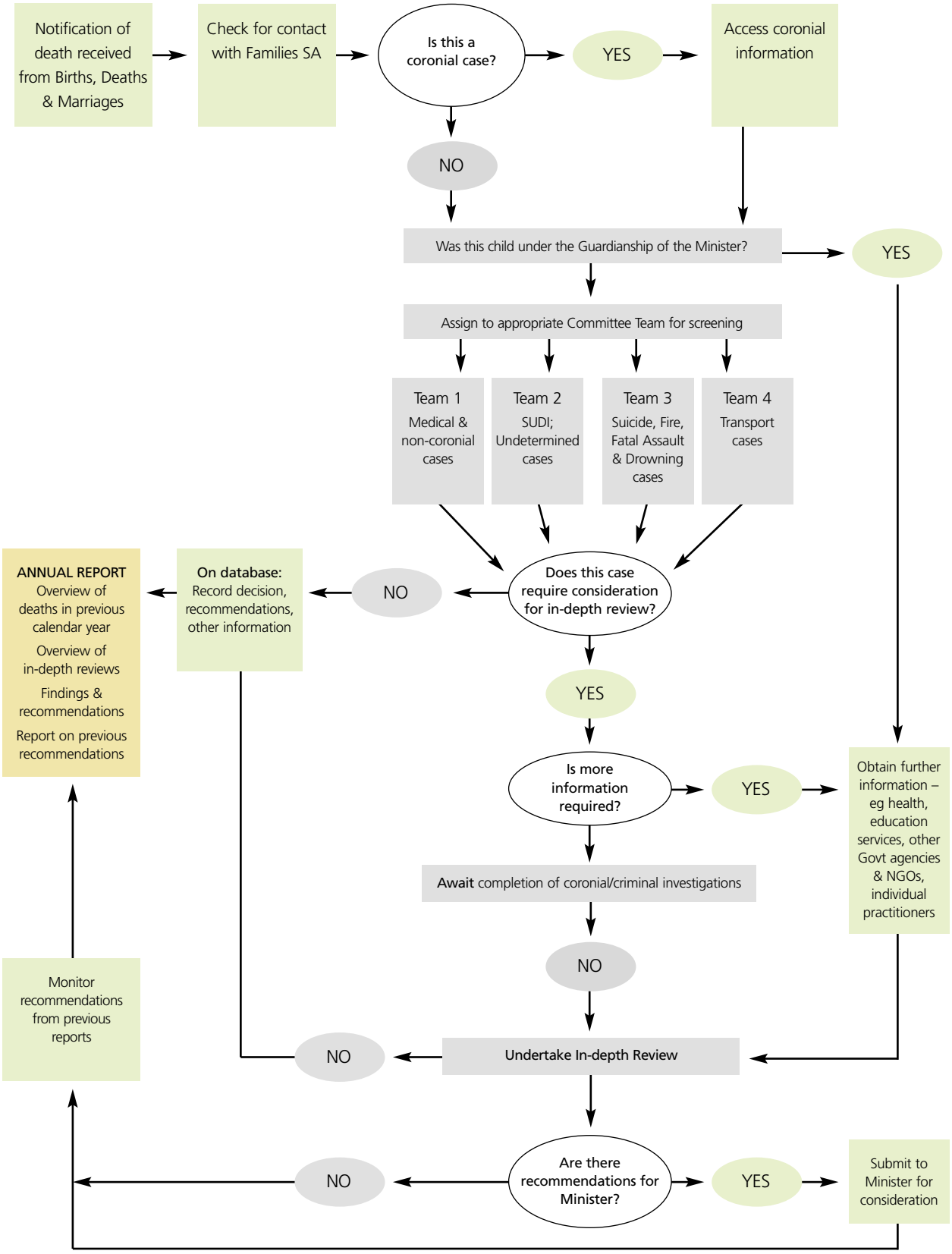
4.1 METHODOLOGICAL ISSUES

This section provides details concerning the Committee's processes for obtaining, analysing and storing information; for screening deaths, and for classifying causes of death.

4.1.1 Access to Information and the Process for Screening and Review of Deaths

Diagram 1 (over page) indicates the key sources of information available to the Committee concerning the deaths of children in South Australia and illustrates the processes the Committee uses to screen and review this information.

Diagram 1: Committee's Screening and Reviewing Process



The Office of Births, Deaths and Marriages

The number of deaths the Committee reports on each year is based on information received from the Office of Births, Deaths and Marriages. The Committee reports on the number of deaths each year that have been registered with the Office of Births, Deaths and Marriages. This figure includes infants whose deaths were registered with the Office notwithstanding that the length of gestation was <20 weeks and/or birth weight was <400grams.

The Committee currently holds a protocol with the Registrar for the release of information about the deaths of children and young people in South Australia. This information is provided to the Committee on a monthly basis.

The Office of the State Coroner

In 2008 SAPOL conducted a review of its response and investigation procedures about coronial investigations. The review examined coronial investigation processes as well as the role and structure of the SAPOL Coronial Investigation Section. On 20 May 2009 the 'Three Tier Coronial Response and Investigation Model' commenced across SAPOL. The model has application to some 1200 reportable deaths per year: 70 percent in the metropolitan area and 30 percent in the country.

The model introduces roles and responsibilities for general duties patrols, investigators, supervisors, Coronial Investigation Section investigators and Officers in Charge of Local Service Areas. The model also introduces the *Coroner's Act 2003* and coronial issues into the curriculum for all promotional examinations and provides for training about coronial investigations on all SAPOL courses.

The SAPOL Coronial Investigation Section staffing was increased by 40 percent and now includes a revised Quality Assurance section and five new positions of major crime (homicide) detectives.

In relation to the deaths of children the model requires that the investigation of all child deaths, under 18 years (previously under 5 years) be allocated to CIB investigators who conduct a review of the preliminary investigation and identify further areas for investigation.

The spirit of the model is for all levels of investigators and managers to work together to improve the quality of coronial files and also to align the investigation to the requisite knowledge, skills and aptitudes of SAPOL members.

Release of Information from Government Agencies

The Committee has protocols regarding release of information with the Department for Families and Communities, which includes Families SA, the Department of Health, the Department for Education and Children's Services and South Australia Police.

4.1.2 The Committee's Classification of Cause of Death

In Section 2 *Child Deaths South Australia 2008* the Committee's classification of the cause of death has been used. In many cases, the Committee has multiple sources of information available about children (including health, welfare and education records) and is not limited to the causes of death recorded in post-mortem reports or death certificates. Accordingly, the Committee's classification for a particular death may vary from the ICD-10 classification (See Section 4.1.3 *ICD-10 Coding of Cause of Deaths* for an explanation of this coding). For example, deaths the Committee has attributed to suicide may have been coded using ICD-10 coding as intentional self-harm (X60-X84), an event of undetermined intent (Y10-Y34) or be included amongst deaths attributed to other accidental threats to breathing (W75-W84). The impact of this group of deaths will be lost with the ICD-10 system of coding.

At the time of classifying a death, the Committee will consider all available information. However in some cases, further information may become available that may give rise to a change in the classification assigned to a particular death or group of deaths. Any changes will be noted as an addendum in the subsequent Annual Report. In addition, the Committee will continue to review its definitional guidelines in the light of available information.

The guidelines the Committee uses to classify deaths to external causes are described below. These guidelines are usually also stated at the beginning of the relevant section of the report.

Transport Deaths

Transport deaths include deaths arising from incidents involving a device used for, or designed to be used for moving people or goods from one place to another. These incidents may involve pedestrians and include railway or water transport. Incidents may occur on public highways or places other than a public highway.

Accidents

Accidents exclude deaths attributed to transport incidents, fires or drowning. Also referred to as deaths from unintentional injuries, accidents most commonly include suffocation, strangulation and choking, falls and poisoning.

Suicide

In any report about suicide, the issue of definition is crucial. Most studies about suicide rates usually conclude that because of definitional issues, the rates of suicide in any community are under-reported. The focus of these definitional issues is often whether it can be clearly established under the law that the person intended to kill themselves. The Committee classifies a death as suicide where the intent of the child was clearly established. It also attributes a death to suicide if careful examination of coronial, police, health and education records indicated a probable intention to die.

Fatal Assault

The Committee characterises a fatal assault as 'the death of a child from acts of violence perpetrated upon him or her by another person' (Lawrence, 2004; p 842).

Fatal Neglect

The Committee defines fatal neglect as a death resulting from an act of omission by the child's carer(s) including:

- failure to provide for the child's basic needs;
- abandonment;
- inadequate supervision; and
- refusal or delay in provision of medical care.

This definition can account for both chronic neglect and single incidents of neglect, or a combination of both (NSW Child Death Review Team 2003; p 15). The Committee is mindful of the evidence which indicates that the changing nature of child development will strongly influence the ways in which neglect can have an impact on a child (Lawrence & Irvine, 2004).

Health System-Related Adverse Event

These deaths have been classified as such by the Committee based on written records which may not necessarily be complete. The Committee places a death in this category based on consideration of preventable aspects in the circumstances of the death and a focus on future prevention strategies rather than an investigation of the cause of death.

Sudden Unexpected Death of Infants (SUDI) and Sudden Infant Death Syndrome (SIDS)

Sudden unexpected death in infancy (SUDI) has been described as an 'umbrella' term that is used for all sudden unexpected deaths of infants under one year of age.

The Definition of 'Sudden Unexpected Death in Infancy'

In December 2007 the Australian and New Zealand national meeting of child death review teams and committees agreed to work towards a common reporting framework that was based on the definition of SUDI proposed by Fleming et al. (2000) definition of SUDI. This agreed framework removed one criterion: 'deaths occurring in the course of a sudden acute illness of less than 24 hours' duration in a previously healthy infant, or a death that occurred after this if intensive care had been instituted within 24 hours of the onset of the illness;' and extended the age range to infants dying in the first seven days of life. Based on this agreement, the SUDI definition used to classify deaths in this report is:

Infants from birth to 365 completed days of life whose deaths:

1. were unexpected and unexplained at autopsy;
2. occurred in the course of an acute illness that was not recognised by carers and/or by health professionals as potentially life-threatening;
3. arose from a pre-existing condition that had not been previously recognised by health professionals; and
4. resulted from any form of accident, trauma or poisoning.

The Definition of Sudden Infant Death Syndrome (SIDS)

The criteria used to determine a death attributed to SIDS in this report continues to be the San Diego definition proposed by Krous et al. (2004): (see Table 10).

Using the modified CESDI definition of SUDI, and the San Diego definition of SIDS, sudden unexpected deaths of infants fall into one of two categories:

- explained deaths of infants which incorporate criteria 2. to 4. of the above definition; and

Table 10: Definition of Sudden Infant Death Syndrome

General Definition of SIDS

SIDS is defined as the sudden unexpected deaths of an infant <1 year of age, with onset of the fatal episode apparently occurring during sleep, that remains unexplained after a thorough investigation, including performance of a complete autopsy and review of the circumstances of death and the clinical history.

Category IA SIDS: Classic features of SIDS present and completely documented

Category IA included deaths that meet the requirements of the general definition and also all of the following requirements.

Clinical

- > 21 days and < 9 months of age;
- Normal clinical history including term pregnancy (gestational age > 37 weeks);
- Normal growth and development;
- No similar deaths among siblings, close genetic relatives (uncles, aunts or first degree cousins), or other infants in the custody of the same caregiver.

Circumstances of Death

- Investigations of the various scenes where incidents leading to death might have occurred and determination that they do not provide an explanation for the death;
- Found in a safe sleeping environment, with no evidence of accidental death.

Autopsy

- Absence of potentially fatal pathologic findings. Minor respiratory system inflammatory infiltrates are acceptable; intrathoracic petechial haemorrhage is a supportive but not obligatory or diagnostic finding;
- No evidence of unexplained trauma, abuse neglect or unintentional injury;
- No evidence of substantial thymic stress effect (thymic weight < 15g and/ or moderate/severe cortical lymphocyte depletion). Occasional 'starry sky' macrophages or minor cortical depletion is acceptable;
- Negative results of toxicologic, microbiologic, radiologic, vitreous chemistry and metabolic screening studies.

Category IB SIDS: Classic features of SIDS present but incompletely documented

Category IB includes infant deaths that met the requirements of the general definition and also meet all of the criteria for category IA except that investigation of the various scenes where incidents leading to death might have occurred was not performed and/ or >1 of the following analyses were not performed: toxicologic, microbiologic, radiologic, vitreous chemistry or metabolic screening studies.

Category II SIDS

Category II includes infants that meet category I except for > 1 of the following.

Clinical

- Age range outside that of category IA or IB (i.e. 0-21 days or 270 days (9 months) through to first birthday);
- Similar deaths among siblings, close relatives or infants in the custody of the same caregiver that are not considered suspect for infanticide or recognised genetic disorders;
- Neonatal or perinatal conditions (e.g. those resulting from pre-term birth) that have resolved by the time of death.

Circumstances of Death

- Mechanical asphyxia or suffocation caused by overlaying not determined with certainty.

Autopsy

- Abnormal growth or development not thought to have contributed to death;
- Marked inflammatory changes or abnormalities not sufficient to be unequivocal causes of death.

Unclassified sudden infant death

Includes deaths that do not meet the criteria for category I or II SIDS, but for which alternative diagnoses of natural or unnatural conditions are equivocal, including cases where autopsies were not performed.

Post resuscitation cases

Infants found in extremis who are resuscitated and later die ('temporarily interrupted SIDS') may be included in the aforementioned categories, depending on the fulfilment of relevant criteria.

Source: Krous, Beckwith, Byard et al. 2004

- unexplained deaths of infants – accounted for by criteria 1. of the CESDI definition and incorporating the San Diego definition of SIDS.

4.1.3 ICD-10 Coding for Cause of Death

Deaths have also been coded using the World Health Organization's (WHO) International Classification of Diseases (Version 10: ICD-10). Using this coding system, the underlying cause of death is considered the primary cause of death for classification. The primary cause of death is defined as '(a) the disease or injury which initiated the train of morbid events leading directly to death, or (b) the circumstances of the accident or violence which produced the fatal injury'. The WHO has agreed that the most effective public health objective is to prevent the precipitating cause from operating and with this in mind have determined this coding convention. [22]

ICD-10 coding of deaths has been undertaken by the National Centre for Classification in Health – Brisbane (NCCH–Brisbane) under a contractual arrangement and with the agreement of the Minister for Families and Communities, the Registrar, and the Coroner.

ICD-10 coding of causes of death for 2005, 2006, 2007 and 2008 are reported in Section 4.2 *Deaths of Children by ICD-10 Chapter Description.*

4.1.4 Aboriginal and Torres Strait Islander Status

The information received from the Registrar has an Aboriginal or Torres Strait Islander indicator for each case. The Committee has determined that, in the absence of any other form of reliable indicator of Indigenous status, this indicator will be used.

4.1.5 Usual Place of Residence

The information received from the Registrar indicates the 'last place of residence' for each case. This information is taken to indicate the child's usual place of residence for review and reporting purposes. The Committee acknowledges that this information may have been variously interpreted by the person giving the information and may not reflect a consistent definition of a person's usual residence.

The Committee will indicate the number of cases where the information from the Registrar shows that the child's last place of residence was outside South Australia. Where relevant, this information will be noted.

4.1.6 Reporting Period

Section 52W of the *Act* outlines the reporting responsibilities of the Committee. It requires the Committee to report periodically to the Minister for Families and Communities, and also to provide an annual report on the performance of its statutory functions during the preceding financial year.

4.1.7 Deaths Included in the Report

The Committee considered the two common ways of reporting on deaths – either through the date of registration of the death with the Registrar or the date of the child's death. It was decided that for ease of understanding, the date of death would be used as the marker for its inclusion in the data set for that year.

4.1.8 ARIA$^+$ Index of Remoteness and Accessibility

ARIA$^+$ stands for Accessibility/Remoteness Index of Australia. The ARIA$^+$ methodology was developed by the Australian Government Department of Health and Aged Care in 1977. Minor changes have been made to this original methodology, resulting in the ARIA$^+$ index of remoteness. This Index is a distance-based measure of remoteness (AIHW, 2004). It defines five categories of remoteness based on road distance to service centres: Major City, Inner and Outer Regional, Remote and Very Remote. The Very Remote category indicates very little accessibility of goods, services and opportunities for social interaction. ARIA$^+$ Index is an indicator of the degree of geographic remoteness of an area and is a more accurate indicator of disadvantage than subjective labels such as 'rural' or 'country'.

4.1.9 SEIFA Index of Socioeconomic Disadvantage

The SEIFA (Socio-Economic Indexes for Areas) Index of Relative Socio-economic Disadvantage (IRSD) draws on a variety of personal and household characteristics (available from the 2006 Census) to rank household and socioeconomic status. The IRSD is calculated to show the relativity of areas to the Australian average for the particular set of variables which comprise it.

22 Extracted from ICD-10 Second Edition, 2005, 4. Rules and guidelines for mortality and morbidity coding.

This average is set at 1000. Scores below 1000 indicate areas with relatively disadvantaged populations under this measure, and scores above 1000 indicate areas with relatively advantaged populations. In this report SEIFA scores are divided into five quintiles, with the least disadvantaged populations represented in quintile 1 and the most disadvantaged in quintile 5.

4.1.10 Storage and Analysis of Information

Information about the circumstances and causes of child deaths in South Australia are stored in a custom built Windows application, utilising the Microsoft NET 2.0 Framework and SQL Server 2005 database, designed for use in a Microsoft Windows environment.

4.1.11 Death Rates

Crude death rates have been calculated using ABS population projections (ABS, 2008). Rates are not calculated when there are less than four deaths. Given the small numbers of deaths of children in South Australia, this is often the case.

Children who died in South Australia but whose usual residence was outside of the State are excluded from the calculation of crude death rates.

The Infant Mortality Rate is calculated according to the deaths of children less than one year old per 1000 live births in the same year. The South Australian Maternal, Perinatal and Infant Mortality Committee provided data about live births in the previous year. In 2008, there were 19 819 live births in South Australia.

4.2 DEATHS OF CHILDREN BY ICD–10 CHAPTER DESCRIPTION

Table 11 details the ICD –10 causes of death for 2005, 2006, 2007 and 2008

Table 11: Deaths of children by ICD –10 chapter description of cause of death, South Australia 2005 – 2008*

ICD – 10 CODE	ICD-10 CHAPTER DESCRIPTION	Number of deaths per year 2005	2006	2007	2008	TOTAL NO.	TOTAL %
Illness or Disease *(Natural Causes)*							
A00-B99	*Certain infections and parasitic diseases*	3	1	1	1	6	1.2
C00-D48	*Neoplasms*	8	10	7	12	37	7.4
E00-E90	*Endocrine, nutritional and metabolic diseases*	5	1	2	3	11	2.2
G00-G99	*Diseases of the nervous system*	5	11	8	4	28	5.6
H00-H59	*Diseases of the eye and adnexa*		1			1	0.2
I00-I99	*Diseases of the circulatory system*	2	2	3	2	9	1.8
J00-J99	*Diseases of the respiratory system*	3	2		2	7	1.4
K00-K93	*Diseases of the digestive system*	1	1	1		3	0.6
M00-M99	*Diseases of the musculoskeletal system and connective tissue*	2			1	3	0.6
P00-P96	*Certain conditions originating in the perinatal period*	44	22	41	34	141	28.4
Q00-Q99	*Congenital malformations, deformations and chromosomal abnormalities*	20	25	19	27	91	18.3
Total number of deaths from Illness or Disease		**93**	**76**	**82**	**86**	**337**	**67.8**
SIDS and undetermined causes							
R00-R99	*Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified*	6	9	11	8	34	6.8
External Causes							
V01-V99	*Transport-related*	17	11	18	10	56	11.3
W00-W19	*Falls*	1	1		3	0.6	
W20-W49	*Exposure to inanimate mechanical forces*	1	1	3	1	6	1.2
W65-W74	*Accidental drowning and submersion*	2	4	2	2	10	2.0
W75-W84	*Other accidental threats to breathing*	6	7	2	2	17	3.4
X00-X09	*Exposure to smoke fire and flames*	2				2	0.4
X40-X49	*Accidental poisoning by exposure to noxious substance*		1	1	1	3	0.6
X60-X84	*Intentional self harm*	1	2		2	5	1.0
X85-Y09	*Assault*	3	6		4	13	2.6
Y10-Y34	*Event of undetermined intent*	4	1	1	1	7	1.4
Y70-Y82	*Medical devices associated with adverse incidents*			1		1	0.2
Total number of deaths from External Causes		**36**	**34**	**30**	**23**	**123**	**24.7**
Other							
	Cause not yet known				3	3	0.6
TOTAL OF ALL DEATHS		**135**	**119**	**123**	**120**	**497**	

**Source: Child Death and Serious Injury Review Committee database*

Nearly 500 children died in South Australia between 1 January 2005 and 31 December 2008; an average of 124 deaths per year. Overall, two thirds of these deaths (68%) have been attributed to illness or disease, and one quarter to external causes. The remaining deaths (7%) were from SIDS and undetermined causes.

The leading causes of death in this four year period were those associated with illnesses or diseases occurring in the time between late pregnancy and the first weeks after birth (28%). Congenital or chromosomal abnormalities accounted for 18 percent of deaths. Transport crashes were the third most common cause of death (11%), followed by deaths attributed to some form of cancer (7%) and those attributed to SIDS or undetermined causes (7%).

4.3 CAUSES OF DEATH BY AGE

This section provides greater detail about the causes of child deaths by age grouping.

Children Aged less than 28 Days

Forty percent of the deaths in 2008 were of children less than 28 days old (48 deaths). The age of infants ranged from several minutes to 23 days; 32 infants were less than one day old. Twenty-six were male and three were Aboriginal.

All except two deaths were from illness and disease. Twenty-nine infants died from various conditions originating in the perinatal period – the time between late pregnancy and the weeks after birth. Fifteen infants died from conditions associated with congenital or chromosomal abnormalities such as Down's syndrome.

Children Aged less than 28 Days

Table 12: Deaths of children less than 28 days old by cause of death and sex, South Australia 2008*

CHILDREN < 28 DAYS	FEMALE	MALE	TOTAL
ILLNESS OR DISEASE			
Certain conditions originating in the perinatal period	10	19	29
The following were the most common conditions: *Fetus & newborn affected by maternal factors and by complications of pregnancy, labour or delivery (8)* *Disorders related to length of gestation and fetal growth (4)* *Haemorrhagic & haematological disorders (4)*			
Congenital malformations, deformations and chromosomal abnormalities	10	5	15
The following were the most common conditions: *Chromosomal abnormalities (5)* *Malformation of the circulatory system (3)*			
Other Illness or disease	1	1	2
Illness or Disease - Total	**21**	**25**	**46**
OTHER CAUSES			
Undetermined		1	1
Health-system related	1		
Other Causes – Total	**1**	**1**	**2**
CHILDREN < 28 DAYS - TOTAL	**22**	**26**	**48**

**Source: Child Death and Serious Injury Review Committee database.*

Children Aged 28 Days to 1 Year

Table 13: Deaths of children aged 28 days - 1 year by cause of death and sex, South Australia 2008*

CHILDREN 28 DAYS – 1 YEAR	FEMALE	MALE	TOTAL
ILLNESS OR DISEASE			
Certain conditions originating in the perinatal period		3	3
Congenital malformations, deformations and chromosomal abnormalities	3	1	4
Diseases of the nervous system	1	1	2
Diseases of the circulatory system	1	1	2
Other illnesses or disease	2	1	3
Illness or Disease – Total	***7***	***7***	***14***
SIDS & UNDETERMINED			
Undetermined		5	5
EXTERNAL			
Accidents	1		1
Transport	1		1
Fatal assault	1	1	2
External Causes – Total	**3**	**1**	**4**
CHILDREN 28 DAYS – 1 YEAR – TOTAL	**10**	**13**	**23**

**Source: Child Death and Serious Injury Review Committee database.*

Children aged 28 days to one year accounted for 19 percent of the deaths in 2008 (23 deaths). Thirteen were male and three were Aboriginal.

Fourteen infants died from various illnesses; four were related to congenital or chromosomal abnormalities and three deaths were associated with conditions originating in the perinatal period. Five male infants died from undetermined causes. No deaths of infants in 2008 were attributed to Sudden Infant Death Syndrome. Four infants died from external causes including two from fatal assault.

Children Aged 1 – 4 Years

Table 14: Deaths of children aged 1 – 4 years by cause of death and sex, South Australia 2008*

CHILDREN 1 – 4 YEARS	F	M	Total
ILLNESS OR DISEASE			
Cancer	1	1	2
Congenital malformations, deformations and chromosomal abnormalities	2		2
Other Illnesses or Disease		2	2
Illness or Disease – Total	**3**	**3**	**6**
UNDETERMINED			
Undetermined	1		1
EXTERNAL			
Accidents		1	1
Transport	1		1
Transport	1	1	2
Fatal Assault		1	1
External Causes – Total	**2**	**3**	**5**
CHILDREN 1 – 4 YEARS – TOTAL	**6**	**6**	**12**

**Source: Child Death and Serious Injury Review Committee database.*

Ten percent of children who died in 2008 were aged between one and four years (12 deaths). There were equal numbers of males and females and two children were Aboriginal.

Six children died from illness or disease with two deaths attributed to cancer and two to conditions associated with congenital or chromosomal abnormalities; one death in this age group was attributed to asthma. Five children died from external causes. Four children died in accidents including two deaths from drowning. The cause of death for one child was undetermined.

Children Aged 5 – 9 Years

Table 15: Deaths of children aged 5 – 9 years by cause of death and sex, South Australia 2008*

CHILDREN 5 – 9 YEARS	F	M	Total
ILLNESS OR DISEASE			
Cancer	2	2	4
Congenital malformations, deformations and chromosomal abnormalities	1	1	2
Other Illnesses or Disease	1	1	2
Illness or Disease – Total	**4**	**4**	**8**
UNDETERMINED			
Undetermined	1		1
EXTERNAL			
Transport	1	2	3
CHILDREN 5 – 9 YEARS – TOTAL	**6**	**6**	**12**

** Source: Child Death and Serious Injury Review Committee database*

Ten percent of children who died in 2008 were aged between five and nine years (12 deaths). There were equal numbers of males and females and only one child was Aboriginal.

The majority of these children died from illness or disease (8 deaths) with four deaths attributed to cancer and two to congenital or chromosomal abnormalities. One death in this age group was also attributed to asthma. Three children died in transport crashes.

Children Aged 10 – 14 Years

Table 16: Deaths of children aged 10 – 14 years by cause of death and sex, South Australia 2008*

CHILDREN 10 – 14 YEARS	F	M	Total
ILLNESS OR DISEASE			
Cancer		2	2
Other Illnesses or Disease		1	1
Illness or Disease – Total		**3**	**3**
EXTERNAL			
Fatal Assault		1	1
Accidents		1	1
External Causes – Total		**2**	**2**
CHILDREN 10 – 14 YEARS – TOTAL		**5**	**5**

** Source: Child Death and Serious Injury Review Committee database*

Only four percent of deaths in 2008 occurred in children aged between ten and 14 years (5 deaths). All five of these children were male. Two of the three deaths from illness or disease were attributed to cancer.

Children Aged 15 – 17 Years

Table 17: Deaths of children aged 15 – 17 years by cause of death and sex, South Australia 2008*

CHILDREN 15 – 17 YEARS	F	M	Total
ILLNESS OR DISEASE			
Cancer	1	2	3
Congenital malformations, deformations and chromosomal abnormalities	1	2	3
Other Illnesses or Disease		2	2
Illness or Disease – Total	**2**	**6**	**8**
EXTERNAL			
Transport	1	5	6
Accidents		1	1
Suicide		2	2
Fatal Assault		1	1
External Causes – Total	**1**	**9**	**10**
Cause not yet known		**2**	**2**
CHILDREN 5 – 9 YEARS – TOTAL	**3**	**17**	**20**

** Source: Child Death and Serious Injury Review Committee database*

Seventeen percent of deaths in 2008, the third highest percentage of deaths, were of children aged between 15-17 years (20 deaths). Seventeen of these young people were males; this included two deaths where cause of death is not yet known. Two deaths were of young Aboriginal males.

Three of the eight deaths attributed to illness or disease were from some form of cancer, with two of these deaths from acute forms of leukeamia. Three deaths were related to congenital or chromosomal conditions and one death was attributed to diabetes. Six of the eight deaths from external causes involved transport crashes and two of these eight deaths were attributed to suicide. As in previous years the Committee notes issues in this age group around risk-taking, alcohol consumption and parental supervision.

4.4 REFERENCES

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