



**Investigation into ways that State Government
departments can prevent or reduce sleep-related
infant deaths**

Ombudsman Western Australia
Serving Parliament – Serving Western Australians

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Ombudsman's Foreword

As Western Australian Ombudsman, I review certain child deaths, identify patterns and trends arising from these reviews and make recommendations designed to prevent or reduce child deaths.

In undertaking my child death review function, I identified a need to undertake an investigation into the number of deaths that have occurred after infants have been placed to sleep. In this report, I have called these 'sleep-related infant deaths'.

The investigation has principally involved the Department of Health but also involved the Department for Child Protection and the Department for Communities. The objectives of the investigation were to analyse all sleep-related infant deaths notified to my office, consider the results of our analysis in conjunction with the relevant research and practice literature, undertake consultation with key stakeholders and, from this analysis, research and consultation, recommend ways the departments can prevent or reduce sleep-related infant deaths.

This investigation has found that the Department of Health has undertaken a range of work to contribute to safe sleeping practices in Western Australia, however, there is still important work to be done. This work particularly includes establishing a comprehensive statement on safe sleeping that will form the basis for safe sleeping advice to parents, including advice on modifiable risk factors, that is sensitive and appropriate to both Indigenous and culturally and linguistically diverse communities and is consistently applied state-wide by health care professionals and non-government organisations at the antenatal, hospital-care and post-hospital stages. This statement and concomitant policies and practices should also be adopted, as relevant, by the Department for Child Protection and the Department for Communities.

The investigation has also found that a range of risk factors were prominent in sleep-related infant deaths reported to my office. Most of these risk factors are potentially modifiable and therefore present opportunities for the departments to assist parents, grandparents and carers to modify these risk factors and reduce or prevent sleep-related infant deaths.

Arising from this investigation, my report makes 23 recommendations about ways to prevent or reduce sleep-related infant deaths. I am very pleased that each department has agreed to these recommendations and has, more generally, been highly co-operative and positively engaged with our investigation.

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1 Executive summary

1.1 About the investigation

1.1.1 Functions of the Western Australian Ombudsman

The Western Australian Ombudsman (**the Ombudsman**) has four principal functions:

- to investigate and resolve complaints about public administration;
- to improve the standard of public administration over time;
- to review certain child deaths, and family and domestic violence fatalities; and
- to undertake certain inspectorate and other functions as specified in legislation.

1.1.2 The Ombudsman's Child Death Review function

On 30 June 2009, following the passage of the *Parliamentary Commissioner Amendment Act 2009*, the Ombudsman commenced a new jurisdiction that involved reviewing investigable child deaths. Investigable deaths are defined by section 19A(3) of the *Parliamentary Commissioner Act 1971*. For these investigable deaths, the Ombudsman's functions are outlined in section 19B(3) of the *Parliamentary Commissioner Act 1971* as follows:

- (a) to review the circumstances in which and why the deaths occurred;
- (b) to identify any patterns or trends in relation to the deaths;
- (c) to make recommendations to any department or authority about ways to prevent or reduce investigable deaths.

Through the review of the circumstances in which and why child deaths occurred, the Ombudsman identified a pattern of cases in which infants (in this report infants are defined as children under the age of 12 months) appeared to die suddenly and unexpectedly during their sleep. For this reason, the Ombudsman decided to undertake an investigation of these sleep-related infant deaths with a view to determining whether it was appropriate to make recommendations to any department or authority about ways to prevent or reduce such deaths.

1.2 Objectives of the investigation

The objectives of the investigation were to:

- analyse all sleep-related infant deaths notified to the Ombudsman between 1 July 2009 and 31 December 2011;
- undertake research, including a comprehensive literature and practice review, in relation to sleep-related infant deaths;
- undertake consultation with key stakeholders;

- identify patterns and trends specifically in relation to sleep-related infant deaths; and
- from this analysis, pattern and trend identification, research and consultation, identify opportunities for State Government departments to prevent or reduce sleep-related infant deaths, and make recommendations to these departments accordingly.

1.3 Overview of methodology

The Office of the Ombudsman (**the Office**):

- conducted a review of the relevant national and international literature regarding sleep-related infant deaths and current approaches to prevention (the information drawn from this review is referred to as **the research literature** throughout this report);
- consulted with key government and non-government stakeholders;
- analysed all sleep-related infant deaths notified to the Ombudsman between 1 July 2009 and 31 December 2011; the Office also obtained additional information regarding each of the cases from the Department of Health and included this information in its analysis;
- identified the current strategies and practices of State Government departments and authorities and other national and international agencies that were relevant to sleep-related infant deaths; considered whether these current strategies addressed the patterns and trends identified during the research and analysis; and
- made findings and developed recommendations about ways to prevent or reduce sleep-related infant deaths and opportunities for implementing these recommendations.

1.4 Infant deaths and sleep-related infant deaths

- Infant deaths have declined to historically low levels, from 100 deaths per 1,000 live births in the early-1900s to 3.6 deaths per 1,000 live births in 2010. However, infants born in very remote areas, as defined by the Australian Bureau of Statistics (**ABS**), Indigenous infants and infants born into socio-economic disadvantage had higher mortality rates than WA infants as a whole.¹
- Infant deaths formed a significant proportion of the child deaths notified to the Ombudsman. Over the period 1 July 2009 to 31 December 2011, the Chief Executive Officer (**CEO**) of the Department for Child Protection notified the Ombudsman of 242 child deaths. Ninety one (38 per cent) of these deaths concerned infants.

¹ Australian Bureau of Statistics, *Australian Historical Population Statistics, 2008*, ABS Canberra, (3105.0.65.001), 2008. <<http://www.abs.gov.au/ausstats/abs@.nsf/mf/3105.0.65.001>> Accessed: 19 March 2012. Available as at 30 October 2012. Australian Bureau of Statistics, *Deaths, Australia, 2010*. ABS Canberra,(3302.0), 2010. <<http://www.abs.gov.au/ausstats/abs@.nsf/Products/6BF83C1213FEDA97CA257943000CF105?opendocument>> Accessed: 19 March 2012. Available as at 13 July 2012; Glover, J, Tennant, S & Page, P, 'The impact of socio-economic status and geographical location on Indigenous mortality in Australia, 1997-99', *Occasional Paper Series No. 1*, 2004, Public Health Development Unit, Adelaide.

- In 54 (59 per cent) of the 91 cases of infant death notified to the Ombudsman, the information provided in the notification indicated that the infant appeared to die suddenly and unexpectedly during their sleep. Throughout this report, these 54 cases of sleep-related infant death are referred to as **the Ombudsman's cases**.
- The most frequent cause of sleep-related infant deaths is likely to be Sudden Infant Death Syndrome (commonly referred to as **SIDS**). SIDS is a classification of the cause of death used by medical practitioners and coroners.² A definition of SIDS that is widely accepted in Australia is:

The sudden and unexpected death of an infant, 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.³

- The Department of Health's Perinatal and Infant Mortality Committee (**PIMC**) investigates cases of infant deaths in WA and classifies each death using the standardised system developed by the Perinatal Society of Australia and New Zealand. Its latest report (**the PIMC report**) identified that there were 62 sudden and unexpected infant deaths over the period 2005-2007, and in 44 (71 per cent) of these cases, the PIMC classified the cause of death as SIDS.⁴

1.5 Infant characteristics

- The research literature identifies that certain factors increase the risk of SIDS, and refers to these as 'risk factors' for SIDS. Some of the identified risk factors concern infant characteristics (**infant risk factors**). It is important to note that these risk factors are correlative, not necessarily causal.⁵

² Blair PS, Byard RW & Fleming PJ, 'Proposal for an international classification of SUDI', *Scand J Forensic Sci*, vol.15, no.1, 2009, pp. 6-8.

³ Krous H, Beckwith J, Byard R, Rognum T, Bajanowski T, Corey T, Cutz E, Hanzlick R, Keens T & Mitchell E, 'Sudden infant death syndrome and unclassified infant deaths: A definitional and diagnostic approach', *Pediatrics*, vol.114, no.1, 2004, pp. 234-238.

⁴ Department of Health Western Australia, *The 13th Report of the Perinatal and Infant Mortality Committee of Western Australia for Deaths in the Triennium 2005-07*, December 2010, p. 68.

⁵ Child Death Review Unit, British Columbia Coroner's Service, *Safe and Sound: A Five-Year Retrospective Report on Sudden Infant Death in Sleep-related Circumstances*, 2009, p. 11.

- The infant risk factors are: infant is aged older than one month and less than four months; infant is male; infant was born prematurely; infant had low birth weight; and infant's mother smoked during pregnancy.⁶ These infant risk factors for SIDS have also been found to be relevant to other types of sleep-related infant deaths.⁷ Our analysis found that these infant risk factors were also prominent among the Ombudsman's cases.

1.6 Environmental characteristics

- Other identified risk factors for SIDS concern characteristics of the infant's sleeping environment (**environmental risk factors**). These environmental risk factors are: prone sleeping position; unsafe sleeping surface; unsafe bedding; and environmental tobacco smoke (within the infant's sleeping environment).⁸ These environmental risk factors for SIDS have also been found to be relevant to other types of sleep-related infant deaths.⁹ Our analysis found that these environmental risk factors were also prominent among the Ombudsman's cases.

⁶ Trachtenberg, FL, Haas, EA, Kinney, HC, Stanley, C & Krous, HF, 'Risk Factor Changes for Sudden Infant Death Syndrome After Initiation of Back-to-Sleep Campaign', *Pediatrics*, 2012; Department of Health Western Australia, *The 13th Report of the Perinatal Infant Mortality Committee of Western Australia for Deaths in the Triennium 2005–07*, December 2010; Child Death Review Unit, British Columbia Coroner's Service, *Safe and Sound: A Five-Year Retrospective Report on Sudden Infant Death in Sleep-related Circumstances*, 2009; Australian Bureau of Statistics, *SIDS in Australia 1981-2000, A statistical overview*. ABS Canberra, 2003. <<http://www.sidsandkids.org/research>> Accessed: 11 November 2010. Available as at 30 October 2012.

⁷ American Academy of Pediatrics, 'SIDS and Other Sleep-Related Infant Deaths: Expansion of Recommendations for a Safe Infant Sleeping Environment', *Pediatrics*, vol. 10, no. 12, 2011, pp. 2011-2284; Public Health Association of Australia, *Policy-at-a-glance – Sudden Unexpected Death in Infancy (SUDI) and Sudden Infant Death Syndrome (SIDS) Policy*, September 2009. It should be noted that, when co-sleeping is involved, the risk factor 'infant is aged under four months' is associated with an increased risk of sleep related infant death, including from causes other than SIDS, as discussed more fully in Chapter 4.

⁸ Trachtenberg, FL, Haas, EA, Kinney, HC, Stanley, C, & Krous, HF, 'Risk Factor Changes for Sudden Infant Death Syndrome After Initiation of Back-to-Sleep Campaign', *Pediatrics*, 2012; Vennemann, MM, Bajonowski, T, Brinkmann, B, Jorch, G, Sauerland, C, Mitchell, EA & the GeSID Study Group, 'Sleep Environment Risk Factors for Sudden Infant Death Syndrome: The German Sudden Infant Death Syndrome Study', *Pediatrics*, vol 23, no. 4, April 2009, pp. 1162-1170.

<<http://pediatrics.aappublications.org/content/123/4/1162.full?sid=80bdf1b6-aca8-4c92-8569-adb7b7e5ead3>> Accessed: 14 June 2012. Available as at 30 October 2012; Mitchell, EA, Scragg, R, Stewart, AW, Becroft, DM, Taylor, BJ, Ford, RP, Hassall, IB, Barry, DM, Allen, EM, & Roberts, AP, 'Results from the first year of the New Zealand Cot Death Study', *New Zealand Medical Journal*, vol.104, no.906, 1991, pp. 71-76; Child Death Review Unit, British Columbia Coroner's Service, *Safe and Sound: A Five-Year Retrospective Report on Sudden Infant Death in Sleep-related Circumstances*, 2009.

⁹ American Academy of Pediatrics, 'SIDS and Other Sleep-Related Infant Deaths: Expansion of Recommendations for a Safe Infant Sleeping Environment', *Pediatrics*, vol. 10, no. 12, 2011, pp. 2011-2284; Public Health Association of Australia, *Policy-at-a-glance – Sudden Unexpected Death in Infancy (SUDI) and Sudden Infant Death Syndrome (SIDS) Policy*, September 2009.

1.7 Key findings and recommendations

1.7.1 Eighty nine per cent of the Ombudsman's cases involved risk factors that are potentially modifiable and therefore present opportunities for State Government departments and authorities to assist parents and carers in relation to risk factors for sleep-related infant death

- Once an infant is born, it is obviously not possible for parents and carers to modify the infant characteristics of premature birth and low birth weight. Similarly, an infant's age and sex are obviously not modifiable. These infant characteristics are all risk factors for sleep-related infant death.
- On the other hand, it may be possible for parents and carers to modify other relevant risk factors. Forty eight (89 per cent) of the 54 Ombudsman's cases involved environmental risk factors or maternal smoking during pregnancy. This indicates that, by assisting parents and carers in relation to the possible modification of these risk factors, there are potential opportunities for State Government departments and authorities to prevent or reduce the number of sleep-related infant deaths beyond that action which is currently undertaken.
- Given its central role in promoting and protecting infant health, the Department of Health is well-placed to undertake this action. Our analysis indicates that two other departments with responsibilities for infant health and well-being, namely the Department for Child Protection and the Department for Communities, are also well-placed to take action on a number of the issues identified. The discussion and recommendations may also be of relevance, interest and importance to other State Government departments and authorities that have contact with families and infants, beyond the three departments specifically discussed in these sections.

1.7.2 More than half of the Ombudsman's cases involved one or more of the environmental risk factors that safe sleeping advice has traditionally and still commonly recommends should be avoided

- Four key messages about how to avoid the environmental risk factors set out at section 1.6 above were at the core of the advice about safe sleeping that was communicated in the *Reducing the Risk of Sudden Infant Death Syndrome* program (**the Reducing the Risk program**). This program was launched in 1991 by the National SIDS Council of Australia, trading as SIDS and Kids, a national not-for-profit organisation that provides information and education on how to place infants safely to sleep to reduce the risk of SIDS and fatal sleeping accidents. SIDS and Kids Western Australia (**SIDS and Kids WA**) is a member organisation of the National SIDS Council of Australia and is the service provider for WA.

- The four key messages were: place an infant on its back to sleep; use a safe sleeping surface; use safe bedding, keep infant's head uncovered, and avoid soft toys and other items in the infant's sleeping environment; and avoid environmental tobacco smoke.¹⁰
- A recent evaluation conducted by the Telethon Institute for Child Health Research (**the TICHR evaluation**) contained a detailed comparison of 12 current policies, guidelines and brochures produced by government and non-government organisations that provided advice on safe sleeping, particularly co-sleeping. It found that these key messages were still commonly promoted across the safe sleeping advice that was compared.¹¹
- A total of 30 (56 per cent) of the 54 Ombudsman's cases involved one or more of the environmental risk factors that safe sleeping advice, discussed above, has traditionally and still commonly recommends should be avoided. These findings point to the continued relevance of the four key messages common to safe sleeping advice and the importance of continuing to assist parents and carers to follow this advice when placing their infants to sleep.
- In 2008, the Department of Health issued an Operational Directive (**the Directive**) setting out its *Statewide Mother-Baby Co-Sleeping/Bed-Sharing Policy (the Policy)*. These are complemented by Clinical Guidelines (**the Guidelines**) developed by the Department of Health's Women and Newborn Health Service, in association with key stakeholders. All three materials aim to reduce the sudden death of infants while co-sleeping. The Directive, the Policy and the Guidelines apply to all healthcare workers in State Government hospitals and health services.¹² The Directive, the Policy and the Guidelines set out the department's policy on co-sleeping in hospital and on the advice to be provided to parents and carers about co-sleeping with their infant once they leave hospital. These materials are not intended to, and do not, focus on the wider issue of parents' and carers' practices when placing infants to sleep, beyond co-sleeping.

¹⁰ Mitchell, EA, Freemantle, J, Young, J & Byard, RW, 'Scientific consensus forum to review the evidence underpinning the recommendations of the Australian SIDS and Kids Safe Sleeping Health Promotion Programme – October 2010', *Journal of Paediatrics and Child Health*, 2011. <<http://dx.doi.org/10.1111/j.1440-1754.2011.02215.x>> Accessed: 8 May 2012. Available as at 30 October 2012; Report of First Australian SIDS Pathology Workshop, *Adoption of a National Consensus for the Definition of SIDS and Autopsy Approach to Unexpected Infant Death*, Canberra, 22-23 March 2004.

¹¹ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive State-wide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health, Western Australia, 2012, pp. 24-26.

¹² Department of Health Western Australia, *Operational Statewide Policy For Identifying And Responding To Mother-Baby Co-Sleeping/Bed-Sharing In WA Health Hospitals And Health Services*, May 2008. <www.health.wa.gov.au/circularsnew/pdfs/12410.pdf> Accessed: 13 March 2012. Available as at 30 October 2012.

Recommendation 1: It is recommended that the Department of Health establishes a statement on safe sleeping, either by expanding its existing Policy on co-sleeping, or by establishing an additional statement on safe sleeping, which:

- takes into account and complements existing information available from non-government organisations including SIDS and Kids WA, as appropriate;
- forms the basis for safe sleeping advice provided to parents and carers;
- forms the basis for strategies across State Government hospitals and health services to assist parents and carers understand and apply this advice; and
- is a guide for policies and strategies by other State Government departments and authorities aimed at achieving the same objective.

1.7.3 In eight of the Ombudsman’s cases, the infants were placed to sleep in a cot or bed somewhere other than their usual sleep location

- Our analysis of the 54 Ombudsman’s cases found that eight infants (15 per cent) were placed to sleep in a cot or bed, but somewhere other than their usual sleep location, including in a different location in the home or in the home of a relative. Recent research has suggested that the risk of SIDS is higher when the infant sleeps in a different location than their usual place of sleep, particularly if at a friend or relative’s house.¹³ These findings point to the need to emphasise that safe sleeping advice applies not only when placing an infant to sleep in their usual cot or bed, but at all times and places when placing an infant to sleep, including in places other than their usual sleep location. The various materials currently providing advice on how to place infants to sleep safely do not explicitly address this issue.¹⁴

Recommendation 2: It is recommended that the Department of Health ensures that its safe sleeping statement emphasises that parents and other carers should be advised to be vigilant about applying safe sleeping advice wherever they are placing infants to sleep, including in a location other than their usual sleep location, such as in another room within the family home, or at a relative or friend’s house.

¹³ Vennemann, MM, Bajanowski, T, Brinkmann, B, Jorch, G, Sauerland, C, Mitchell, EA & the GeSID Study Group, ‘Sleep Environment Risk Factors for Sudden Infant Death Syndrome: The German Sudden Infant Death Syndrome Study’, *Pediatrics*, vol 23, no. 4, April 2009, pp. 1162-1170.

<<http://pediatrics.aappublications.org/content/123/4/1162.full?sid=80bdf1b6-aca8-4c92-8569-adb7b7e5ead3>> Accessed: 14 June 2012. Available as at 30 October 2012.

¹⁴ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive Statewide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health, Western Australia, 2012, p. 26.

1.7.4 Twenty nine of the Ombudsman's cases reportedly involved co-sleeping, and in all of these cases infant and/or environmental risk factors were also involved

- In this report, as in much of the research literature, co-sleeping refers to an infant sharing the same sleeping surface (for example, a bed or a sofa) with an adult or child when both parties are sleeping. In 29 (54 per cent) of the 54 Ombudsman's cases, the infant was reported to be co-sleeping at the time of death.
- In all of the 29 Ombudsman's cases in which the infant was co-sleeping at the time of death, the circumstances of death also featured one or more of the infant and/or environmental characteristics that have been identified in the research literature as risk factors for sleep-related infant deaths. Infant risk factors were involved in 28 (97 per cent) of the 29 cases, and environmental risk factors were involved in 16 (55 per cent) of the 29 cases. In 15 (52 per cent) of the 29 Ombudsman's cases in which the infant was reportedly co-sleeping at the time of death, both infant and environmental risk factors featured in the circumstances of the infant's death.
- As discussed above, the Department of Health has a Directive, a Policy and Guidelines on co-sleeping. A report of an Inquest by the WA State Coroner into a co-sleeping death, released in 2010, states that 'the Clinical Guidelines and Operational Directive provide clear and accurate guidance on co-sleeping. They need to be actively promoted.'¹⁵ The effectiveness of the implementation and dissemination processes for the Directive and the Policy are analysed in the TICHR evaluation, which also makes 14 recommendations to increase this effectiveness.

1.7.5 More than half of the Ombudsman's cases involved infants whose mothers reported smoking during pregnancy

- Twenty eight (52 per cent) of the mothers of infants involved in the 54 Ombudsman's cases reported that they smoked during their pregnancy. By the early-1990s, there were more than 50 population-based studies that showed an increased risk of SIDS associated with maternal smoking during pregnancy. Since the *Reducing the Risk* program in 1991, this link has been confirmed by more than 17 studies.¹⁶
- The Department of Health already has in place a range of policies and strategies designed to inform pregnant women of the dangers of smoking and to assist them to give up smoking where they choose to do so. Our analysis points to the continued importance of these policies and strategies, as well as to the importance of linking strategies to deliver safe sleeping advice with the range of existing programs designed to assist people to give up smoking.

¹⁵ WA State Coroner, *Finding upon inquest into the death of Nathaniel West* (F/No: 384/06), January 2010.

¹⁶ Mitchell, EA, 'SIDS: past, present and future', *Acta Paediatr*, vol.98, no.11, 2009, pp. 1712-1719.

Recommendation 3: It is recommended that the Department of Health ensures that:

- its safe sleeping statement explicitly recognises the importance of avoiding smoking during pregnancy; and
- strategies for delivering the safe sleeping advice are closely linked with the range of existing programs designed to assist people to give up smoking, so that pregnant women who continue to smoke can be connected to this assistance as effectively as possible.

1.7.6 Thirty five per cent of the Ombudsman's cases involved Indigenous infants, even though Indigenous infants comprise only six per cent of WA infants

- Nineteen (35 per cent) of the 54 Ombudsman's cases involved Indigenous infants. For comparison, Indigenous infants comprise six per cent of all WA infants. This finding reflects the research literature, which has identified that Indigenous infants are over-represented among infants whose death is diagnosed as SIDS, and that the decline in the rate of SIDS has not been as significant in the Indigenous population as it has been in the non-Indigenous population.¹⁷
- Our analysis and the research literature indicate that strategies to assist Indigenous parents and carers to modify risk factors in their infant's sleeping environment, and to give up smoking where they choose to do so, have a role to play in achieving this objective.¹⁸ Environmental risk factors were involved in 11 (58 per cent) of the 19 Ombudsman's cases in which the infants were Indigenous (and in some cases multiple factors were present), as follows: three infants (16 per cent) were not placed on their backs to sleep; four infants (21 per cent) were placed to sleep on an unsafe surface; and eight infants (42 per cent) were placed to sleep with potentially unsafe bedding. In addition, 12 (63 per cent) of the 19 Indigenous infants were born to women who reported smoking during pregnancy.
- Our analysis of the 19 Ombudsman's cases points not only to the importance of strategies that are culturally appropriate for Indigenous people in general, but also to those Indigenous people who live in very remote WA and to young Indigenous mothers. In particular, all eight of the Ombudsman's cases that involved infants residing in very remote regions of WA involved Indigenous infants, and all of these deaths involved co-sleeping. In addition, the mothers of the Indigenous infants involved in the Ombudsman's cases were on average four years younger than the mothers of non-Indigenous infants involved in the Ombudsman's cases.

¹⁷ Freemantle, J, Read, AW, De Klerk, NH, McAullay, D, Anderson, IP & Stanley, FJ, 'Sudden Infant Death Syndrome and Unascertainable Deaths: Trends and disparities among Aboriginal and non-Aboriginal infants born in Western Australia from 1980 to 2001 inclusive', *Journal of Paediatrics and Child Health*, Volume 42, Issue 7-8, July/August 2006, pp. 445–451.

¹⁸ National Institute of Clinical Studies, 'Reducing the Risk of SIDS', *Evidence–Practice Gaps Report*, vol 2. 2005, NICS, Melbourne.

<http://www.nhmrc.gov.au/_files_nhmrc/file/nics/material_resources/evidence_practice_gaps_report_volume_2.pdf> Accessed: 27 March 2012. Available as at 30 October 2012; Queensland Government, *Safe infant care: to reduce the risk of sudden unexpected deaths in infancy, policy statement and guidelines*, 2008, p 34. <<http://www.health.qld.gov.au/qhpolicy/docs/pol/qh-pol-082.pdf>> Accessed: 20 November, 2010. Available as at 30 October 2012.

Recommendation 4: It is recommended that the Department of Health ensures that its strategies for delivering safe sleeping advice:

- assist Indigenous parents and carers, including Indigenous people living in very remote areas, to understand and apply this advice; and
- to Indigenous parents and carers are closely linked with the range of existing programs designed to assist people to give up smoking, so that Indigenous women who are pregnant and who continue to smoke can be connected to this assistance as effectively as possible.

1.7.7 At least three of the Ombudsman’s cases involved infants from culturally and linguistically diverse backgrounds, and all of these cases involved modifiable risk factors

- Two infants involved in the Ombudsman’s cases were born to women identified in the Department of Health’s information as Asian, and one was born to a mother identified as Indian. On this basis, we estimate that at least three (six per cent) of the 54 Ombudsman’s cases involved infants from culturally and linguistically diverse (**CaLD**) backgrounds. All three cases involved modifiable risk factors (apart from maternal smoking during pregnancy), and all three deaths occurred in circumstances that safe sleeping advice commonly recommends should be avoided.
- These findings point to the importance of strategies to assist parents and carers to modify risk factors in their infant’s sleeping environment being appropriate to people from CaLD backgrounds.

Recommendation 5: It is recommended that the Department of Health ensures that its strategies for delivering safe sleeping advice assist parents and carers from CaLD backgrounds to understand and apply this advice.

1.7.8 Thirty seven per cent of the Ombudsman’s cases involved infants from families whose children had already been the subject of concerns raised with the Department for Child Protection

- Twenty (37 per cent) of the 54 Ombudsman’s cases met the requirements of s.19A(3)(a) of the *Parliamentary Commissioner Act 1971*. That is, in the two years prior to the infant’s death, the Department for Child Protection had received information that raised concerns about the well-being of the child or a child relative of the child. In 15 of these 20 cases, the Department for Child Protection had determined that some action should be taken in regards to the child or a child relative of the child, and that action was taken. It is important to note that these concerns and actions were not necessarily related to modifiable risk factors associated with sleep-related infant deaths.
- Interactions between families and Department for Child Protection staff, however, particularly those that are more extensive and those that take place in the family home, provide an opportunity for these staff to work proactively with parents and carers to put safe sleeping advice into practice. It is important that the Department for Child

Protection builds on these opportunities by ensuring that its relevant staff understand safe sleeping advice, are equipped to deliver it and take up the opportunities to do so.

Recommendation 6: It is recommended that the Department for Child Protection collaborates with the Department of Health to establish a departmental policy on safe sleeping, based on the Department of Health's safe sleeping statement, to guide interactions between the Department for Child Protection staff and parents and carers.

Recommendation 7: It is recommended that the Department for Child Protection ensures that its Casework Practice Manual and its Safety and Well-being Assessment tool reflect the department's policy on safe sleeping and are kept up to date as information changes.

Recommendation 8: It is recommended that the Department for Child Protection ensures that its adoption of a departmental policy on safe sleeping is accompanied by strategies to:

- ensure that staff in direct contact with families, and the supervisors of these staff, have the skills and knowledge necessary to implement the policy;
- keep program workers' skills and knowledge up to date as information changes; and
- evaluate the implementation of its new procedures for providing the safe sleeping advice to families, particularly by those staff who have more extensive interactions with families such as those working in the Best Beginnings Service.

- In 14 (70 per cent) of the 20 Ombudsman's cases that met the requirements of s19A(3)(a) of the *Parliamentary Commissioner Act 1971*, the mothers reported that they smoked during pregnancy.

Recommendation 9: It is recommended that wherever practicable the Department for Child Protection assists women with whom they have established relationships, and who are pregnant or planning to become pregnant, by providing them with information regarding the risks of smoking and the range of existing programs that assist people give up smoking.

1.7.9 In 14 of the Ombudsman's cases, fathers or grandparents were immediately present at the time of the infant's death

- In 14 (26 per cent) of the Ombudsman's cases, the father or a grandparent was immediately present at the time of the infant's death. In two of these 14 cases, the infant was in the primary care of the father, and in another two cases, the infant was in the primary care of a grandparent. The research literature and our consultations with stakeholders also identify that as well as playing the role of direct carer, fathers and grandparents may influence how mothers place infants to sleep. In addition, the research literature identifies that it is difficult for a pregnant woman to quit smoking

while sharing a home with other smoking family members or her smoking partner.¹⁹ These findings point to the importance of ensuring that strategies to assist women to modify environmental risk factors and smoking during pregnancy are extended to include fathers and grandparents.

Recommendation 10: It is recommended that the Department of Health ensures that its strategies for delivering safe sleeping advice:

- assist fathers and grandparents to understand and apply the advice; and
- to fathers and grandparents are closely linked with the range of existing programs to assist people to give up smoking.

- The Department for Communities administers a range of programs at the local community level, including programs targeting Indigenous parents and carers, as well as grandparents, which our analysis identified as key audiences for safe sleeping advice. These programs present a good opportunity to deliver safe sleeping advice to these key audiences.

Recommendation 11: It is recommended that the Department for Communities collaborates with the Department of Health to establish a departmental policy on safe sleeping, based on the Department of Health's safe sleeping statement, to guide interactions between Department for Communities' staff and parents and carers.

Recommendation 12: It is recommended that the Department for Communities ensures that its adoption of the department's policy on safe sleeping is accompanied by strategies to:

- ensure that the relevant program workers have the skills and knowledge necessary to implement the policy in their programs;
- keep program workers' skills and knowledge up to date as information changes; and
- monitor and evaluate the implementation of its new procedures for providing the safe sleeping advice to families.

1.8 Opportunities identified by departments to put the key findings and recommendations into practice

- A woman's journey through pregnancy, birth and the first year of her infant's life can be broken into three key stages: antenatal, in hospital with a newborn infant (where the birth is not a home birth) and at home with the infant. During our investigation, stakeholders identified opportunities at each of these stages for putting the

¹⁹ Johnson, JL, Ratner, PA, Bortorff, JI, Hall, W & Dahinten, S, 'Preventing Smoking relapse in Postpartum Women', *Nursing Research*, vol.49(1), 2000, pp. 44-52. Cited by Quit Smoking Telephone Counselling Protocol for Pregnant and Postpartum Women, Ministry of Health, Canada. <<http://www.hc-sc.gc.ca/hc.ps/pubs/tobac-tabac/protocol/index-eng.php>> Accessed: 15 May 2012. Available as at 30 October 2012.

recommendations discussed above into practice. They aim to complement the education and awareness raising among the community as a whole, which is conducted by government and non-government organisations, including SIDS and Kids WA.

Opportunities during the antenatal period

- The antenatal period provides an opportunity to educate parents about safe sleeping environments and therefore provides opportunities to reduce the risks of sleep-related infant death, particularly as information provided at this time may also guide nursery preparation and purchases.²⁰
- The Pregnancy Health Record Western Australia is a recently introduced antenatal care strategy designed to involve pregnant women in communicating their health status and the plans for their care. The strategy involves a document that is held by these women, recording their health information during their pregnancy.²¹

Recommendation 13: It is recommended that the Department of Health ensures that the discussions associated with the Pregnancy Health Record reflect the safe sleeping statement set out in Recommendations 1 and 2.

- The Aboriginal Health Council of Western Australia has noted that ‘Aboriginal and Torres Strait Islander women attend antenatal care later and less frequently than non-Indigenous women’.²² This issue was also raised during our consultations. In 2010, the Department of Health, in partnership with the Australian Commonwealth Government, established the Aboriginal Maternity Services Support Unit (**the Unit**) to address this and other issues. Non-government organisations are also relevant stakeholders and work in this area. It would be useful for the Department of Health to consider further engaging with organisations and programs such as these to reach Indigenous people on their behalf.

Recommendation 14: It is recommended that the Department of Health considers further ways of working collaboratively with non-government organisations that are already working effectively in Indigenous communities to deliver safe sleeping advice to Indigenous women during the antenatal period.

²⁰ Office of the Child Safety Commissioner Victoria, *Tackling SIDS — A Community Responsibility, Child Death Group Analysis*, Office of the Child Safety Commissioner Victoria, November 2005, p. ix.

²¹ Department of Health Western Australia, Women and Newborn Health Service, *Services A – Z, King Edward Memorial Hospital, Pregnancy Health Record*.

<<http://www.kemh.health.wa.gov.au/services/mpowher/index.htm>> Accessed: 20 October 2011. Available as at 30 October 2012.

²² Aboriginal Health Council of Western Australia, *Maternal and Child Health Model of Care in the Aboriginal Community-Controlled Health Sector*, June 2010.

Opportunities in hospital

- Nearly 99 per cent of pregnant women in WA will give birth in a hospital.²³ The period that parents are in hospital with their newborn infant provides an opportunity for health professionals to discuss and demonstrate safe sleeping practices to nearly all parents and their families. It is therefore important that health professionals working in hospitals thoroughly understand the safe sleeping statement discussed in Recommendations 1 and 2 so that they can discuss and model the appropriate safe sleeping practices with and to parents.

Recommendation 15: It is recommended that the Department of Health ensures that health professionals are provided with professional development that enables them to accurately, consistently and appropriately discuss and model safe sleeping practices in hospitals.

Recommendation 16: It is recommended that the Department of Health monitors and evaluates the implementation, take-up and effectiveness of professional development, once the current plans for this are put into action.

- Under the Directive, while they are in hospital, mothers of newborn infants are provided with the Department of Health's *Women and Newborn Health Service Co-sleeping/Bed-sharing* brochure (**the Department of Health brochure**) and SIDS and Kids WA's *Safe Sleeping* brochure (**the SIDS and Kids brochure**). At this time, all parents are also provided with a Raising Children Network DVD produced by the Commonwealth Government as part of its *Stronger Families and Communities Strategy* (**the Raising Children Network DVD**).²⁴ Our review of these three materials indicates that there are certain potentially inconsistent messages about co-sleeping between these materials.

Recommendation 17: It is recommended that the Department of Health ensures that materials providing advice about co-sleeping to parents of newborn infants in hospital consistently reflect the Department of Health's safe sleeping statement set out in Recommendations 1 and 2.

- Our analysis of the Ombudsman's cases identified Indigenous parents and carers, younger Indigenous mothers, those from CaLD backgrounds, and fathers and grandparents as key audiences for the safe sleeping advice. These findings point to the need to reconsider the formats in which information is provided to mothers while they are in hospital with their newborn infant, and to include information through media other than brochures, and for audiences other than mothers. It may be necessary, for example, to use different formats tailored to each of these different groups.

²³ Department of Health Western Australia, Perinatal and Infant Mortality Committee, *Perinatal, Infant and Maternal Mortality in Western Australia 5-Year Cohort of 2004-2008 Births*, December 2010.

²⁴ Raising Children Network, *Australian parenting DVD a world first*, 2008. <<http://www.families.fahcsia.gov.au/our-responsibilities/families-and-children/publications-articles/frs-sector-e-news/edition-11-11-february-2008?HTML>> Accessed: 14 June 2012. Available as at 30 October 2012.

Recommendation 18: It is recommended that the Department of Health reviews its strategies for communicating the safe sleeping advice while mothers are in hospital with their newborn infant, to ensure that they are appropriate to the following key audiences: Indigenous parents and carers; parents and carers from CaLD backgrounds; fathers and grandparents, as well as mothers; and relatively young mothers.

Opportunities once the infant leaves hospital

- While it is important that parents are provided with information materials in hospital, the timing of the provision of this information can mean it is not always read and understood nor put into practice at home. It is therefore important to use opportunities once the mother and infant return home from hospital to reinforce the safe sleeping advice provided in hospital. Visiting midwives, community child health nurses and Aboriginal child health workers are all well-placed to provide advice on safe sleeping practices.

Recommendation 19: It is recommended that the Department of Health ensures that visiting midwives, community child health nurses and Aboriginal health workers apply the safe sleeping statement set out in Recommendations 1 and 2.

Recommendation 20: It is recommended that the Department of Health works with universities and colleges to ensure that midwives, community child health nurses and Aboriginal health workers are educated about the safe sleeping statement set out in Recommendations 1 and 2.

- The Best Beginnings Service (**the Service**) is a home-visiting service provided to primary caregivers (usually first-time mothers) with 'high-risk factors for poor life outcomes'.²⁵ The Service is a joint initiative between the Department for Child Protection and the Department of Health. As part of the Service, a SIDS Screening Tool is used to assess the parent's or caregiver's application of steps to reduce the risk of SIDS.²⁶ The assessment is conducted by a parent support worker during the 'Engagement' phase of the program, usually by the time that the infant is 7 weeks of age. Safe sleeping information and practices beyond SIDS are not covered.

Recommendation 21: It is recommended that the Department for Child Protection and the Department of Health review the Best Beginnings Service and the SIDS Screening Tool to ensure they reflect the safe sleeping statement set out in Recommendations 1 and 2, and are kept up to date as information changes.

²⁵ Department for Child Protection Western Australia, *Casework Practice Manual – Section 3.3 Best Beginnings Referral*. <<http://manuals.dcp.wa.gov.au/manuals/cpm/Pages/default.aspx>> Accessed: 27 January 2012. Available as at 30 October 2012.

²⁶ Department for Child Protection Western Australia, *Responsible Parenting Service and Practice Framework*, July 2009. <[http://www.dcp.wa.gov.au/Resources/Documents/Policies_and_Frameworks/Responsible Parenting Services and Practices Framework 2009.pdf](http://www.dcp.wa.gov.au/Resources/Documents/Policies_and_Frameworks/Responsible_Parenting_Services_and_Practices_Framework_2009.pdf)> Accessed: 19 April 2012. Available as at 30 October 2012.

Recommendation 22: It is recommended that the Department for Child Protection and the Department of Health consider modifying the program guidelines for the Best Beginnings Service so that the assessment using the SIDS Screening Tool is conducted within the first four weeks after the birth of the infant.

- Government and non-government organisations operate telephone helplines that directly or indirectly provide advice to parents about pregnancy and caring for infants. In WA, these include the Department for Communities' Parenting WA Line, Health Direct Australia's Pregnancy, Birth and Baby Helpline, the non-government organisation Ngala's Helpline and SIDS and Kids WA's Child Loss Support Line. During our consultations, one of these organisations advised that approximately 70 per cent of its contact with parents involved questions about infants and their sleep, and that program workers reported that they provided varying information regarding safe sleeping, particularly co-sleeping.

Recommendation 23: It is recommended that the Department of Health communicates to, and works with, relevant non-government organisations regarding its safe sleeping statement set out in Recommendations 1 and 2, so that these organisations can consider incorporating the statement into their own services.

1.9 Monitoring the implementation and effectiveness of recommendations

Each of the recommendations will be monitored by the Ombudsman to ensure their implementation and effectiveness in relation to the observations made in this investigation.

2 About the investigation

2.1 Functions of the Western Australian Ombudsman

The Western Australian Ombudsman (**the Ombudsman**) has four principal functions:

- to investigate and resolve complaints about public administration;
- to improve the standard of public administration over time;
- to review certain child deaths, and family and domestic violence fatalities; and
- to undertake certain inspectorate and other functions as specified in legislation.

2.1.1 The Ombudsman's Child Death Review function

On 30 June 2009, following the passage of the *Parliamentary Commissioner Amendment Act 2009*, the Ombudsman commenced a new jurisdiction that involves reviewing investigable child deaths. Section 19A(3) of the *Parliamentary Commissioner Act 1971* defines an investigable death as follows:

An investigable death occurs if a child dies and any of the following circumstances exists —

- (a) in the 2 years before the date of the child's death, the CEO had received information that raised concerns about the wellbeing of the child or a child relative of the child;
- (b) in the 2 years before the date of the child's death, the CEO, under section 32(1) of the CCS Act, had determined that action should be taken to safeguard or promote the wellbeing of the child or a child relative of the child;
- (c) in the 2 years before the date of the child's death, any of the actions listed in section 32(1) of the CCS Act was done in respect of the child or a child relative of the child;
- (d) protection proceedings are pending in respect of the child or a child relative of the child;
- (e) the child or a child relative of the child is in the CEO's care.

For these investigable deaths, the Ombudsman's functions are outlined in s.19B(3) of the *Parliamentary Commissioner Act 1971*, as follows:

- (a) to review the circumstances in which and why the deaths occurred;
- (b) to identify any patterns or trends in relation to the deaths;
- (c) to make recommendations to any department or authority about ways to prevent or reduce investigable deaths.

2.2 Rationale for the investigation

Through the review of the circumstances in which and why child deaths occurred, the Ombudsman identified a pattern of cases in which infants (in this report infants are defined as children under the age of 12 months) appeared to die suddenly and unexpectedly during their sleep. For this reason, the Ombudsman decided to undertake an investigation of these sleep-related infant deaths with a view to determining whether it was appropriate

to make recommendations to any department or authority about ways to prevent or reduce such deaths.

2.3 Objectives of the investigation

The objectives of the investigation were to:

- analyse all sleep-related infant deaths notified to the Ombudsman between 1 July 2009 and 31 December 2011;
- undertake research, including a comprehensive literature and practice review, in relation to sleep-related infant deaths;
- undertake consultation with key stakeholders;
- identify patterns and trends specifically in relation to sleep-related infant deaths; and
- from this analysis, pattern and trend identification, research and consultation, identify opportunities for State Government departments and authorities to prevent or reduce sleep-related infant deaths, and make recommendations to these departments and authorities accordingly.

2.4 Methodology

To inform the planning and conduct of the investigation, the Office of the Ombudsman (**the Office**):

- conducted a review of the relevant national and international literature regarding sleep-related infant deaths and current approaches to prevention (the information drawn from this review is referred to as **the research literature** throughout this report); and
- consulted with key government and non-government stakeholders.

The Office then analysed all sleep-related infant deaths notified to the Ombudsman between 1 July 2009 and 31 December 2011; the Office also obtained additional information regarding each of the cases from the Department of Health and included this information in its analysis.

Lastly, the Office:

- identified current strategies and practices of State Government departments and authorities and other relevant national and international agencies that are relevant to sleep-related infant deaths;
- considered whether these current strategies addressed the patterns and trends identified during the previous research and analysis; and
- made findings and developed recommendations about ways to prevent or reduce sleep-related infant deaths and opportunities for putting these recommendations into practice.

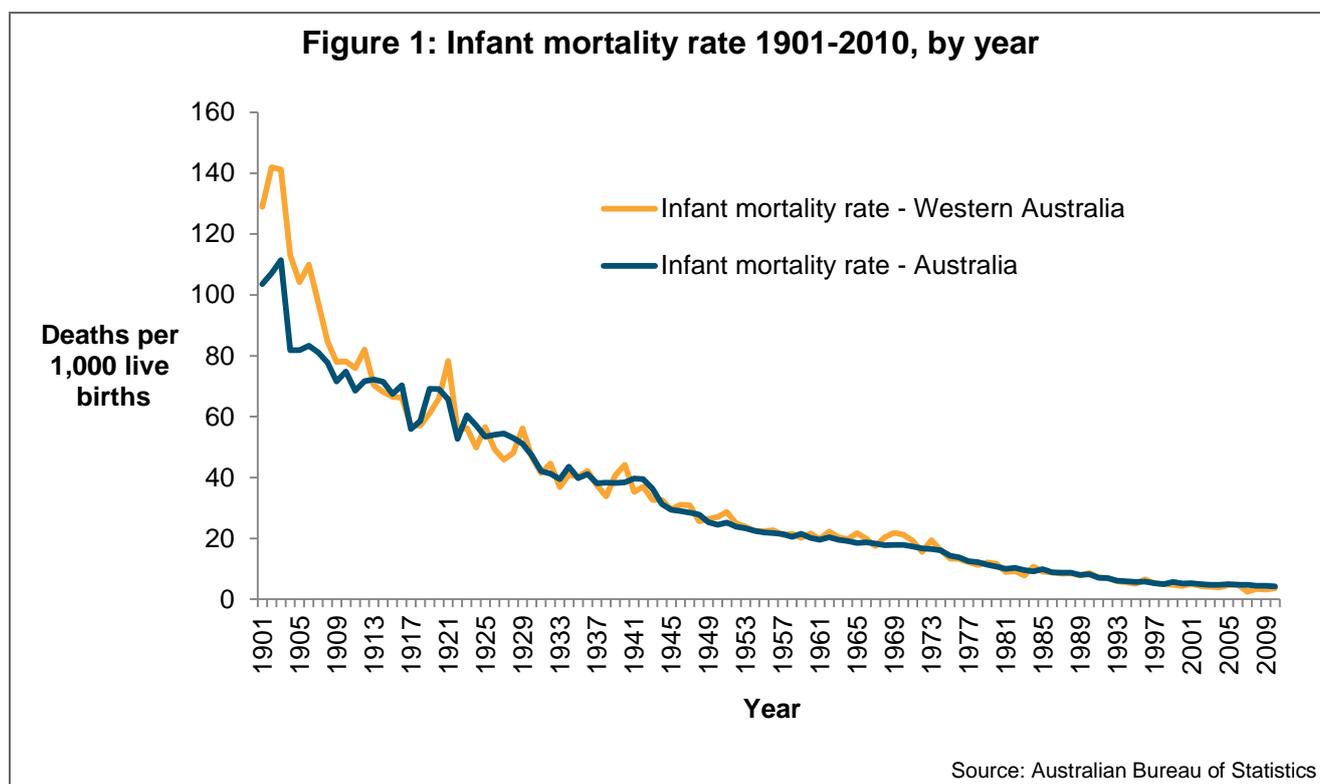
3 Infant deaths in Western Australia

3.1 Infant deaths

3.1.1 Infant mortality rates have declined to historically low levels, although the rates for certain groups of infants are relatively higher

Infant mortality in both Australia and WA has declined significantly since the early-1900s. In the first few years of the 20th century (1901-1903), more than 10 per cent of Australian infants died before their first birthday, the equivalent of more than 100 deaths per 1,000 live births. Over the next 50 years the infant mortality rate fell substantially, dropping below 25 deaths per 1,000 live births for the first time in 1950.²⁷ The infant mortality rate has since continued to fall to around four deaths per 1,000 live births in recent years.²⁸

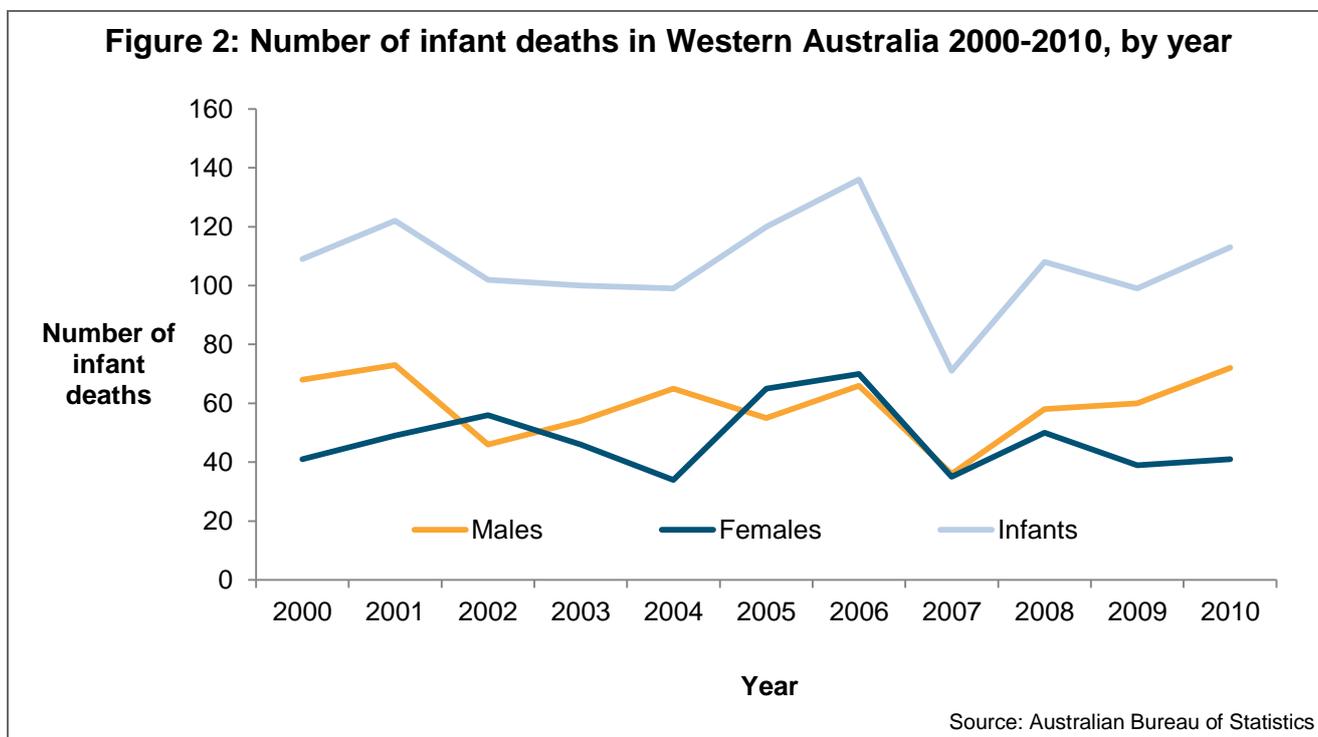
In 1901 there were around 130 infant deaths per 1,000 live births in WA, compared with 3.6 infant deaths per 1,000 live births in 2010, as shown in Figure 1 below.



²⁷ Australian Bureau of Statistics, *Australian Historical Population Statistics, 2008*, ABS Canberra, (3105.0.65.001), 2008. <<http://www.abs.gov.au/ausstats/abs@.nsf/mf/3105.0.65.001>> Accessed: 19 March 2012. Available as at 30 October 2012.

²⁸ Australian Bureau of Statistics, *Deaths, Australia, 2010*. ABS Canberra (3302.0), 2010. <<http://www.abs.gov.au/ausstats/abs@.nsf/Products/C6A9CBD96E6BA43DCA257943000CEDF5?opendocument>> Accessed: 27 February 2012. Available as at 30 October 2012.

Over the first decade of the 21st century, the number of infant deaths in WA has ranged between 71 and 136, as shown in Figure 2 below, with an average of 107 infant deaths per year.



While the overall infant mortality rate for WA has now reached historically low levels, certain groups of infants still have mortality rates that are higher than the infant mortality rate for WA infants as a whole. These infants are:

- Infants born in very remote areas – in 2010, the infant mortality rate for WA infants as a whole was 3.6 per 1,000 live births. Infants living in Perth (including the metropolitan area) had an infant mortality rate of three per 1,000 live births, while infants living in regions defined as remote or outer regional had an infant mortality rate of four and 4.2 per 1,000 live births respectively. Infants living in regions of WA defined by the Australian Bureau of Statistics (ABS) as very remote had an infant mortality rate of 10.6 per 1,000 live births.²⁹
- Indigenous infants – in 2010, the infant mortality rate for Indigenous infants in WA was approximately nine per 1,000 live births,³⁰ which was more than double that of WA infants as a whole and more than three times that of non-Indigenous infants, who had an infant mortality rate of 2.8 per 1,000 live births. This difference is discussed further in Chapter 7.

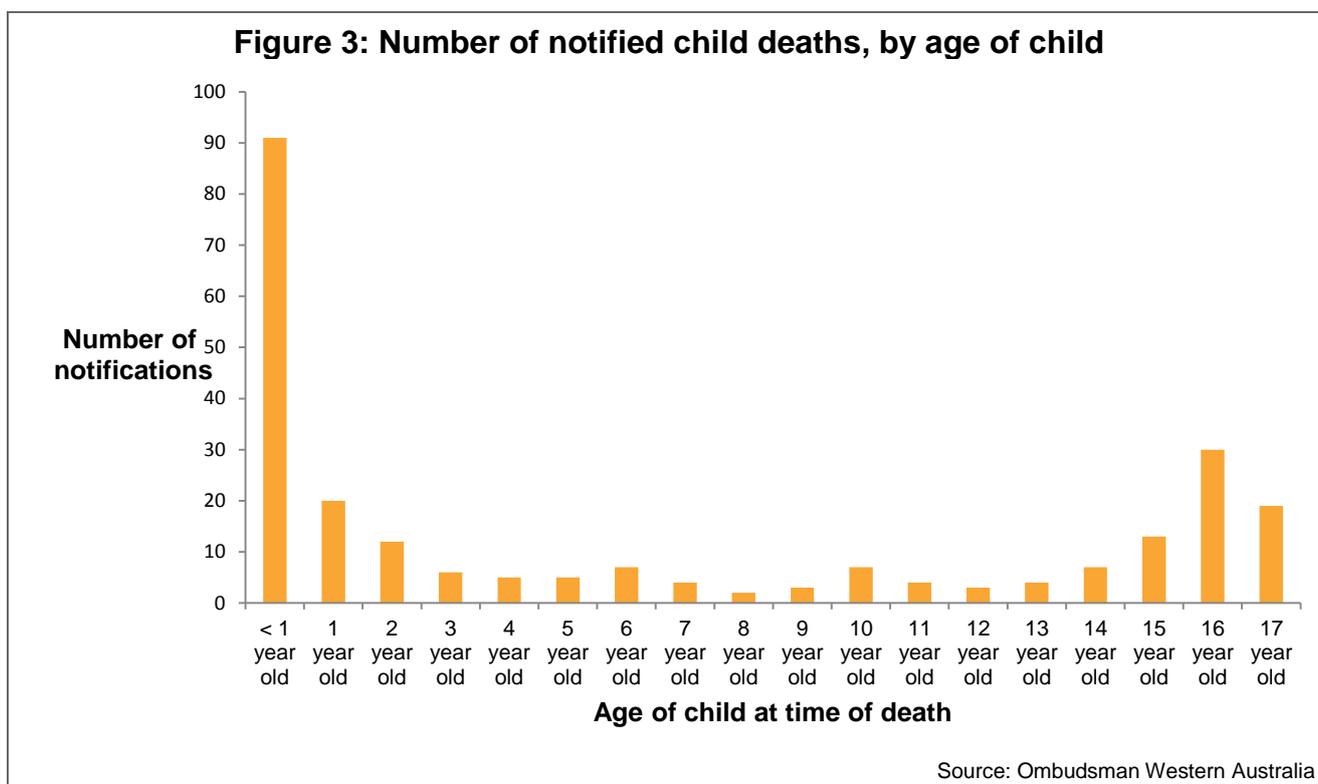
²⁹ Australian Bureau of Statistics, *Deaths, Australia, 2010*. ABS Canberra, (3302.0), 2010. <<http://www.abs.gov.au/ausstats/abs@.nsf/Products/6BF83C1213FEDA97CA257943000CF105?opendocument>> Accessed: 19 March 2012. Available as at 30 October 2012.

³⁰ Australian Bureau of Statistics, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples, 2010*. ABS Canberra, (4704.0.0), 2010. <<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4704.0Oct%202010?OpenDocumentt>> Accessed: 16 April 2012. Available as at 30 October 2012.

- Infants born into socio-economic disadvantage – the infant mortality rate for infants born into the most socio-economically disadvantaged areas (based on the ABS Index of Relative Socio-Economic Disadvantage and the infant’s usual residence) is approximately twice that of infants born into the least disadvantaged areas.³¹

3.1.2 Infant deaths formed a significant proportion of the child deaths notified to the Ombudsman

Over the period 1 July 2009 to 31 December 2011, the Chief Executive Officer (CEO) of the Department for Child Protection notified the Ombudsman of 242 deaths of children under 18 years of age. Ninety one (38 per cent) of these deaths concerned infants, as shown in Figure 3 below.



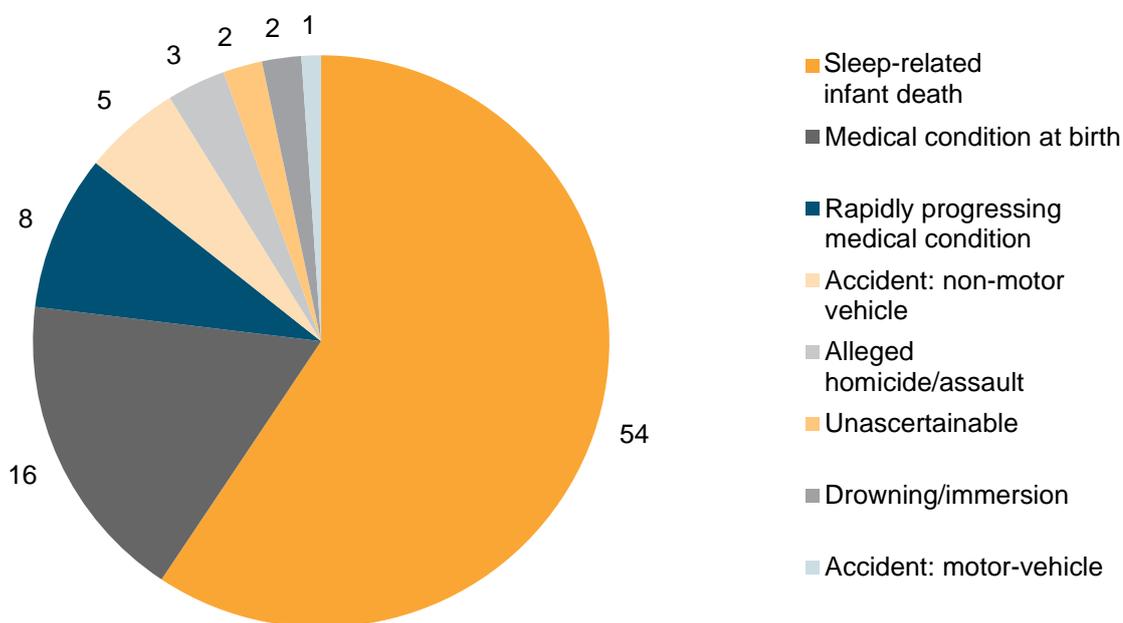
3.2 Sleep-related infant deaths

3.2.1 The majority of infant deaths notified to the Ombudsman occurred after the infant had been placed to sleep

In 54 (59 per cent) of the 91 cases of deaths of infants notified to the Ombudsman, the information provided in the notification indicated that the infant appeared to die suddenly and unexpectedly during their sleep. These sleep-related infant deaths are shown in Figure 4 below.

³¹ Glover, J, Tennant, S & Page, P, ‘The impact of socio-economic status and geographical location on Indigenous mortality in Australia, 1997-99,’ *Occasional Paper Series No. 1*, 2004, Public Health Development Unit, Adelaide.

**Figure 4: Infant deaths notified to the Ombudsman,
1 July 2009 to 31 December 2011, by circumstances of death**



Source: Ombudsman Western Australia

3.2.2 The most frequent cause of sleep-related infant deaths is likely to be SIDS

As a notification of death is provided to the Ombudsman soon after the death occurs, the Coroner's office has not necessarily concluded its investigation at the time that the notification is provided to the Ombudsman. The cause of death may therefore not be determined. For example, sleep-related infant deaths may later be determined to be caused by SIDS, postnatal infection or accidental asphyxiation.³²

SIDS is a classification of the cause of death, used by medical practitioners and coroners.³³ A definition of SIDS that is widely accepted in Australia is:

The sudden and unexpected death of an infant, 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.³⁴

SIDS has been recognised as a distinct cause of death since 1965.³⁵ Reliable data regarding deaths due to SIDS is available from 1981, when the infant mortality rate in

³² Department of Health Western Australia, *The 13th Report of the Perinatal and Infant Mortality Committee of Western Australia for Deaths in the Triennium 2005–07*, December 2010, p. iii & p. 69.

³³ Blair PS, Byard RW & Fleming PJ, 'Proposal for an international classification of SUDI', *Scand J Forensic Sci*, vol.15, no.1, 2009, pp. 6-8.

³⁴ Krous H, Beckwith J, Byard R, Rognum T, Bajanowski T, Corey T, Cutz E, Hanzlick R, Keens T & Mitchell E, 'Sudden infant death syndrome and unclassified infant deaths: A definitional and diagnostic approach', *Pediatrics*, vol.114, no.1, 2004, pp. 234–238.

³⁵ Mitchell, EA, 'SIDS: past, present and future', *Acta Paediatr*, vol.98, no.11, 2009, pp. 1712-1719.

Australia due to this cause was 1.8 deaths per 1,000 live births.³⁶ In Australia, in 2010, the infant mortality rate due to SIDS was 0.3 deaths per 1,000 live births.³⁷

The Department of Health's Perinatal and Infant Mortality Committee (**PIMC**) investigates cases of infant deaths in WA and classifies each death using the standardised system developed by the Perinatal Society of Australia and New Zealand. Its latest report (**the PIMC report**) identified that there were 62 sudden and unexpected infant deaths over the period 2005-2007, and in 44 (71 per cent) of these cases, the PIMC classified the cause of death as SIDS.³⁸

3.2.3 While infant deaths due to SIDS have declined over the last two decades, many of the risk factors that increase the likelihood of SIDS were also present in the circumstances of the sleep-related infant deaths notified to the Ombudsman

Over the 20-year period between 1985 and 2005, the number of deaths classified as SIDS in Australia as a whole declined by 83 per cent, from 523 deaths in 1985 to 87 deaths in 2005. This reduction in SIDS deaths played an important part in the decline in the infant mortality rate in Australia during the past two decades.³⁹

Some of this reduction in the number of SIDS deaths may have been due to definitional changes. Where an infant dies suddenly and unexpectedly during sleep, but one or more factors that could potentially explain the death were present, instead of using the term SIDS, a growing number of medical practitioners and coroners are using terms such as 'unascertained', 'borderline SIDS' and 'undetermined'.⁴⁰ Even so, researchers in WA have concluded that 'the true reduction in incidence (of SIDS deaths) is well over half'.⁴¹

The *Reducing the Risk of Sudden Infant Death Syndrome* program (**the Reducing the Risk program**) has been credited with bringing about the reduction in SIDS deaths. The program, launched in 1991 by SIDS and Kids, raised awareness of the risk factors that increase the likelihood of sudden infant death and promoted the importance of safer ways of placing infants to sleep, with the aim of reducing these risks.⁴² The most prominent message of the *Reducing the Risk* program, and the message most often credited for the reduction in SIDS deaths, was the placing of infants on their backs to sleep.⁴³ This

³⁶ SIDS and Kids Australia, *SIDS and Kids Facts and Figures: SIDS Deaths Australia 1981-2007* http://www.sidsandkids.org/wp-content/uploads/SIDS_Australia_Deaths-and-rates-1981-to-date.pdf. Accessed 9 July 2012. Available as at 30 October 2012.

³⁷ Australian Bureau of Statistics, *Causes of Death, Australia, 2010*, ABS Canberra (3303.0), 2012. <http://www.abs.gov.au/ausstats/abs@.nsf/Products/A1BE944753CE015FCA2579C6000F7049> Accessed: 9 July 2012. Available as at 30 October 2012.

³⁸ Department of Health Western Australia, *The 13th Report of the Perinatal and Infant Mortality Committee of Western Australia for Deaths in the Triennium 2005-07*, December 2010, p. 68-69.

³⁹ Australian Bureau of Statistics, *Australia's babies, 2007*, ABS Canberra (4102.0), 2007. <<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4102.02007>> Accessed: 19 March 2012. Available as at 30 October 2012.

⁴⁰ Blair PS, Byard RW & Fleming PJ, 'Proposal for an international classification of SUDI', *Scand J Forensic Sci*, vol.15, no.1, 2009, pp. 6-8.

⁴¹ Scurlock, J, Jennings, B, Nolte, J & Fremantle, J, 'Sudden Unexpected Death in Infancy', *Australian Doctor: How to Treat*, pp. 38-40, 11 August 2006.

⁴² Child Death Review Unit, British Columbia Coroner's Service, *Safe and Sound: A Five-Year Retrospective Report on Sudden Infant Death in Sleep-related Circumstances*, 2009, p. 4.

⁴³ Hauck, FR & Tanabe, KO, 'International Trends in Sudden Infant Death Syndrome: Stabilization of Rates Requires Further Action', *Pediatrics*, vol. 122, no.3, 2008, pp. 660-666.

message, and the program that promoted it, are considered to have helped save the lives of more than 4,000 babies in Australia since the program commenced.⁴⁴ Since 2005, the *Reducing the Risk* program has been complemented by the *Reducing the Risk of SIDS in Aboriginal Communities* program operated by SIDS and Kids Western Australia (**SIDS and Kids WA**). This latter program is discussed more fully in Chapter 7.

Our analysis found that many of the risk factors that increase the likelihood of SIDS are also present in the circumstances of the sleep-related deaths notified to the Ombudsman. These findings are explored throughout the following chapters of this report.

⁴⁴ Report of First Australian SIDS Pathology Workshop, *Adoption of a National Consensus for the Definition of SIDS and Autopsy Approach to Unexpected Infant Death*, Canberra, 22-23 March 2004, p. 7.

4 Infant characteristics

4.1 Introduction

The preceding chapter identified that 54 of the cases reported and notified to the Ombudsman as part of its Child Death Review function were identified as sleep-related infant deaths. These are referred to as the **Ombudsman's cases**. This chapter and the following two chapters set out our analysis of the characteristics of the Ombudsman's cases in order to identify patterns among them. This chapter focuses on the characteristics of the infants involved in the Ombudsman's cases.

This chapter also draws on the research literature and practice regarding the association between the various infant characteristics and sleep-related infant deaths, so as to take into account the consistency between the findings of our analysis of the Ombudsman's cases and those described in the research literature and practice.

Chapter 3 identified that the most frequent cause of sleep-related infant deaths is likely to be SIDS. The research literature identifies that certain factors increase the risk of SIDS and refers to these as 'risk factors' for SIDS. Some of the identified risk factors concern infant characteristics (**infant risk factors**). These infant risk factors are:

- infant is aged older than one month and less than four months;
- infant is male;
- infant was born prematurely;
- infant had low birth weight; and
- infant's mother smoked during pregnancy.⁴⁵

These infant risk factors for SIDS have also been found to be relevant to other types of sleep-related infant deaths.⁴⁶

It is important to note that these risk factors are correlative, not necessarily causal.⁴⁷

The key findings and implications of this analysis are discussed further in Chapter 7.

⁴⁵ Trachtenberg, FL, Haas, EA, Kinney, HC, Stanley, C & Krous, HF, 'Risk Factor Changes for Sudden Infant Death Syndrome After Initiation of Back-to-Sleep Campaign', *Pediatrics*, 2012; Department of Health Western Australia, *The 13th Report of the Perinatal Infant Mortality Committee of Western Australia for Deaths in the Triennium 2005-07*, December 2010; Child Death Review Unit, British Columbia Coroner's Service, *Safe and Sound: A Five-Year Retrospective Report on Sudden Infant Death in Sleep-related Circumstances*, 2009; Australian Bureau of Statistics, *SIDS in Australia 1981-2000, A statistical overview*. ABS Canberra, 2003. <<http://www.sidsandkids.org/research>> Accessed: 11 November 2010. Available as at 30 October 2012.

⁴⁶ American Academy of Pediatrics, 'SIDS and Other Sleep-Related Infant Deaths: Expansion of Recommendations for a Safe Infant Sleeping Environment', *Pediatrics*, vol. 10 no. 12, 2011, pp. 2011-2284; Public Health Association of Australia, *Policy-at-a-glance – Sudden Unexpected Death in Infancy (SUDI) and Sudden Infant Death Syndrome (SIDS) Policy*, September 2009.

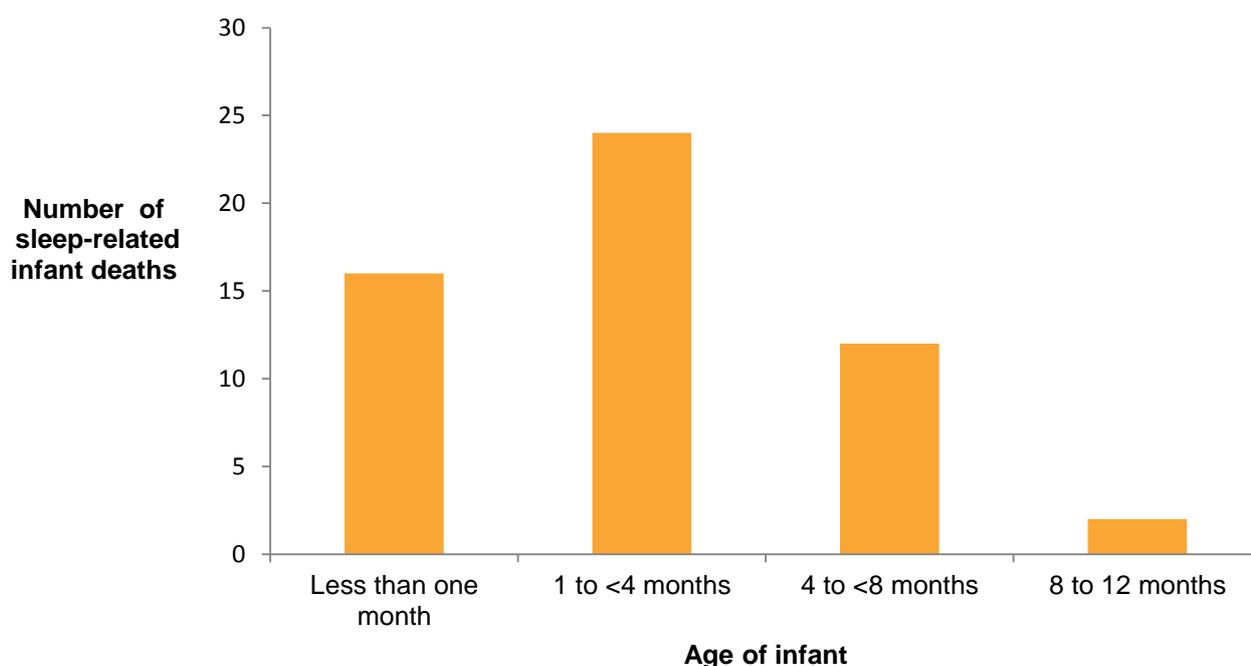
⁴⁷ Child Death Review Unit, British Columbia Coroner's Service, *Safe and Sound: A Five-Year Retrospective Report on Sudden Infant Death in Sleep-related Circumstances*, 2009, p. 11.

4.2 Age

Twenty four (44 per cent) of the 54 infants involved in the Ombudsman's cases were aged between one and four months. Sixteen (30 per cent) involved infants who were aged one month or less at the time of their death. Twelve infants (22 per cent) were aged between four months and eight months. Two (4 per cent) of the infants were more than eight months of age. Figure 5 below shows the number of infants in each of these age groups.

The age pattern described above and shown in Figure 5 is broadly consistent with the research literature regarding SIDS, which has found that 'there was a characteristic age distribution, with few deaths in the first month of life, mortality rates peaking at two to four months, then becoming increasingly uncommon'.⁴⁸ When co-sleeping is involved, the risk factor defined as 'infant aged under four months' is associated with an increased risk of sleep-related infant death, including from causes other than SIDS, such as accidental suffocation of the infant.⁴⁹

**Figure 5: Number of sleep-related infant deaths in Ombudsman's cases
1 July 2009 to 31 December 2011, by age group**



Source: Ombudsman Western Australia

4.3 Sex

Thirty eight (70 per cent) of the 54 Ombudsman's cases involved male infants.

⁴⁸ Mitchell, EA, 'SIDS: past, present and future', *Acta Paediatr*, vol. 98, no. 11, 2009, p. 1712; Australian Bureau of Statistics, *SIDS in Australia 1981-2000, A statistical overview*, ABS Canberra, 2003. <<http://www.sidsandkids.org/research/>> Accessed: 11 November 2010. Available as at 30 October 2012.

⁴⁹ SIDS and Kids Australia, *Safe Sleeping Information Statement, Sleeping with a Baby*, <<http://www.sidsandkids.org/safe-sleeping/information-statements/>> Accessed: 13 June 2012. Available as at 30 October 2012; Child Death Review Unit, British Columbia Coroner's Service, *Safe and Sound: A Five-Year Retrospective Report on Sudden Infant Death in Sleep-related Circumstances*, 2009, p. 11.

This is broadly consistent with the research literature, in which male infants were reported as being one-and-a-half times more likely to die from SIDS than female infants.⁵⁰ As the cause of SIDS is unknown, it is unclear why male infants (who represent 51 per cent of all children born in Australia⁵¹) are at a higher risk.

4.4 Premature birth and low birth weight

Ten (19 per cent) of the infants involved in the 54 Ombudsman's cases were born prematurely, that is, prior to 37 weeks' gestation. For comparison, 8.6 per cent of infants in the WA population are born prematurely.⁵²

These findings are consistent with the research literature, which has found that infants born prematurely are at increased risk of sleep-related infant death and that the risk increases with decreasing gestational age.⁵³

Seven (13 per cent) of the infants involved in the 54 Ombudsman's cases were born with a low birth weight, that is, under 2,500 grams. These infants were also born prematurely. For comparison, 6.7 per cent of infants are born with a low birth weight in the general WA population.⁵⁴

These findings are consistent with the research literature, which also observes that low birth weight is a risk factor for sleep-related infant death.⁵⁵

4.5 Maternal smoking during pregnancy

Twenty eight (52 per cent) of the mothers of infants involved in the 54 Ombudsman's cases reported⁵⁶ that they smoked during their pregnancy. By comparison, in 2009, 14.5 per cent of WA women reported that they smoked during pregnancy. This comprised 51.2 per cent of Indigenous women and 12.3 per cent of non-Indigenous women reporting that they smoked during pregnancy.⁵⁷

⁵⁰ SIDS and Kids Australia, *SIDS Information Paper*, August 2003; Child Death Review Unit, British Columbia Coroner's Service, *Safe and Sound: A Five-Year Retrospective Report on Sudden Infant Death in Sleep-related Circumstances*, 2009, p. 11.

⁵¹ Australian Bureau of Statistics, *3301.0 Births, Australia, 2010*, Canberra, 2011. <<http://www.abs.gov.au/ausstats/abs@.nsf/Products/EB94F978573DD478CA25793300167581?opendocument>> Accessed: 17 April 2012. Available as at 30 October 2012.

⁵² Department of Health Western Australia, *Perinatal Statistics in Western Australia 2008 - Twenty-sixth Annual Report of the Western Australian Midwives' Notification System*, October 2010.

⁵³ Child Death Review Unit, British Columbia Coroner's Service, *Safe and Sound: A Five-Year Retrospective Report on Sudden Infant Death in Sleep-related Circumstances*, 2009, p 12.

⁵⁴ Department of Health Western Australia, *Perinatal Statistics in Western Australia 2008 - Twenty-sixth Annual Report of the Western Australian Midwives' Notification System*, October 2010.

⁵⁵ Child Death Review Unit, British Columbia Coroner's Service, *Safe and Sound: A Five-Year Retrospective Report on Sudden Infant Death in Sleep-related Circumstances*, 2009, p 12.

⁵⁶ Self-reported to the Department of Health Western Australia.

⁵⁷ Department of Health Western Australia, *Western Australia's Mothers and Babies, 2009*, 2011. <http://www.health.wa.gov.au/publications/documents/perinatal/WA_Mothers_Babies_2009.pdf> Accessed 29 May 2012. Available as at 30 October 2012.

The findings from the Ombudsman's cases are consistent with the findings from the investigation of 44 SIDS deaths investigated by the PIMC over the period 2005-2007, 21 (48 per cent) of which involved maternal smoking during pregnancy.⁵⁸

The research literature has identified an increased risk of SIDS associated with maternal smoking during pregnancy.⁵⁹ This is discussed further in Chapter 7.

4.6 Indigenous infants

Nineteen (35 per cent) of the 54 Ombudsman's cases involved Indigenous infants. For comparison, six per cent of the infants born in the general WA population are Indigenous.⁶⁰

These findings are consistent with the research literature, which has found that since the inception of SIDS and Kids Australia's *Reducing the Risk* program in 1991, in WA, the decrease in the mortality rate due to SIDS among Indigenous infants has been slower than among non-Indigenous infants and the difference in the mortality rate due to SIDS between the two populations has increased.⁶¹ SIDS and Kids Australia has estimated that as a result of these differentials Indigenous infants are six times more likely to die of SIDS than non-Indigenous infants.⁶²

4.7 Infants from culturally and linguistically diverse backgrounds

The 54 Ombudsman's cases included infants from a variety of cultural and linguistic backgrounds. Using the Department of Health's categories of ethnicity, analysis of the Ombudsman's cases indicates that the majority of the infants were Caucasian (30 infants or 55 per cent), followed by Indigenous (19 infants or 35 per cent), then Asian (two infants or four per cent) and Indian (one infant or two per cent), with ethnicity identified as 'Other' in two (four per cent) of cases. This indicates that at least three (six per cent) of the 54 Ombudsman's cases involved infants from culturally and linguistically diverse

⁵⁸ Department of Health Western Australia, *The 13th Report of the Perinatal and Infant Mortality Committee of Western Australia for Deaths in the Triennium 2005-07*, December 2010, p. 46. <http://www.health.wa.gov.au/publications/subject_index/p/Perinatal_infant_maternal.cfm> Accessed: 13 March 2012. Available as at 30 October 2012.

⁵⁹ Mitchell, EA, 'SIDS: past, present and future', *Acta Paediatr*, vol. 98, no. 11, 2009, pp. 1712-1719; Laws, PJ, Grayson, N & Sullivan, EA, *Smoking and Pregnancy*, AIHW National Perinatal Statistics Unit Sydney, Cat. no. PER 33, 2006; NSW Department of Health (ed) *Background papers to the national clinical guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn*, NSW Department of Health Sydney, 2006.

⁶⁰ Australian Bureau of Statistics, *Births, Australia 2010*, ABS Canberra, (3301.0), 2010. <<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3301.02010?OpenDocument>> Accessed: 17 April 2012. Available as at 30 October 2012.

⁶¹ Freemantle, J, Read, AW, de Klerk, NH, McAullay, D, Anderson, IP & Stanley, FJ, 'Sudden Infant Death Syndrome and Unascertainable Deaths: Trends and disparities among Aboriginal and non-Aboriginal infants born in Western Australia from 1980 to 2001 inclusive', *Journal of Paediatrics and Child Health*, Volume 42, Issue 7-8, July/August 2006, pp. 445-451; Scurlock, J, Jennings, B, Nolte, J & Freemantle, J, 'Sudden Unexpected Death in Infancy', *Australian Doctor: How to Treat*, 11 August 2006, pp. 38-40; Freemantle, J, Stanley, F, Read, A & de Klerk, N, *The First Research Report: patterns and trends in mortality of Western Australian infants, children and young people 1980-2002*, Advisory Council on the Prevention of Deaths of Children and Young People, The Department for Community Development, Government of Western Australia, 2004.

⁶² SIDS and Kids Australia, *SIDS Information Paper*, August 2003.

backgrounds. This is broadly similar to the percentage of West Australians who were born overseas in countries in which English is not spoken as a first language.⁶³

4.8 Recent viral illness or symptoms

Fourteen (26 per cent) of the 54 Ombudsman's cases involved reports of recent viral symptoms in infants: for example, mild colds, runny nose and chest congestion.

The research literature has not found the presence of recent viral illness or symptoms to be a risk factor for sleep-related infant death. While studies have shown that up to 70 per cent of infants who die suddenly and unexpectedly have reported recent mild viral symptoms, particularly respiratory conditions, these types of mild infections are very common in infants and 'most infants with such illnesses or symptoms do not die, leading researchers to conclude that if infection does play a role it may be in conjunction with other risk factors'.⁶⁴

4.9 Location

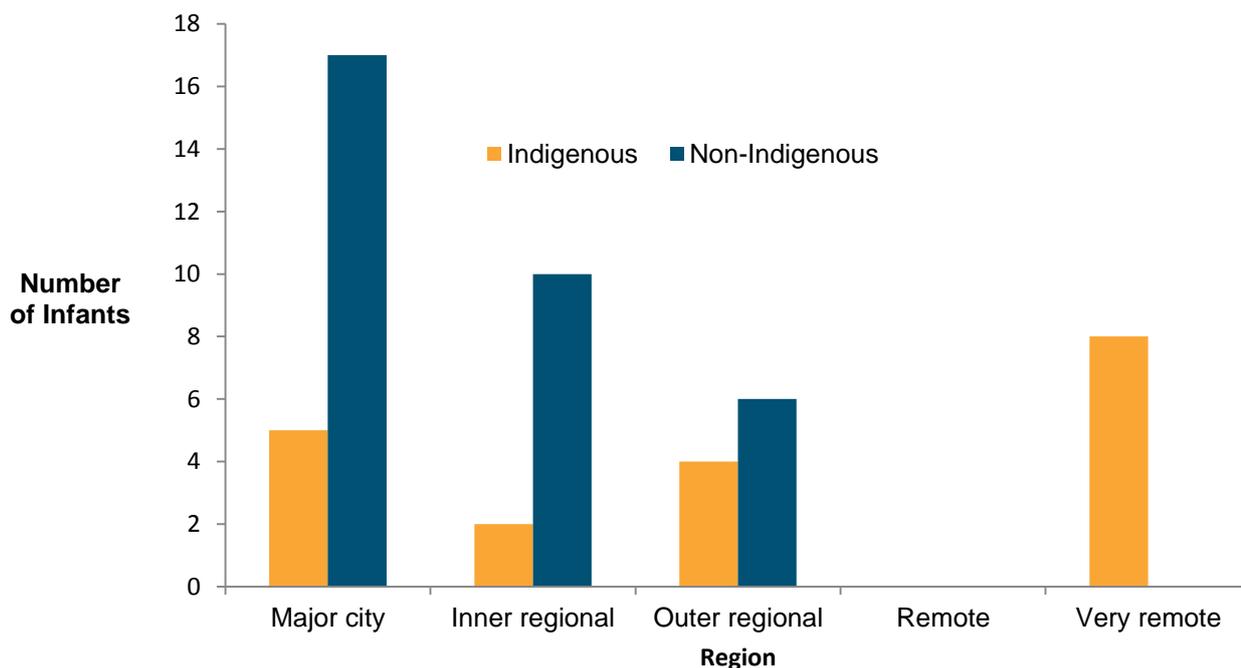
Twenty two (41 per cent) of the 54 Ombudsman's cases involved infants who were resident in the Perth metropolitan area. Eight (15 per cent) of the 54 Ombudsman's cases involved infants who were resident in the very remote regions of WA.

The place of residence and the Indigenous status of infants involved in the Ombudsman's cases are shown in Figure 6 below. The figure uses the classification system developed by the ABS termed the *Australian Standard Geographical Classification – Remoteness Area* (ASGC-RA).

⁶³ Department of Local Government, Office of Multicultural Interests, *Diversity Statistics*. <http://www.omi.wa.gov.au/omi_diversity_statistics.cfm> Accessed: 29 March 2012. Available as at 30 October 2012.

⁶⁴ Child Death Review Unit, British Columbia Coroner's Service, *Safe and Sound: A Five-Year Retrospective Report on Sudden Infant Death in Sleep-related Circumstances*, 2009, p. 12.

Figure 6: Place of residence of Ombudsman’s cases, by region



Source: Ombudsman Western Australia

All of the infants involved in the Ombudsman’s cases who were resident in the very remote regions of WA were Indigenous infants. For comparison, five (23 per cent) of the 22 infants involved in the Ombudsman’s cases who were resident in the Perth metropolitan area were Indigenous infants.

These findings are consistent with the research literature, which identifies that the infant mortality rate for the very remote regions of WA is higher than that for other regions in WA and that the mortality rate for Indigenous infants is higher than the mortality rate for WA infants as a whole.⁶⁵

4.10 Age of mother

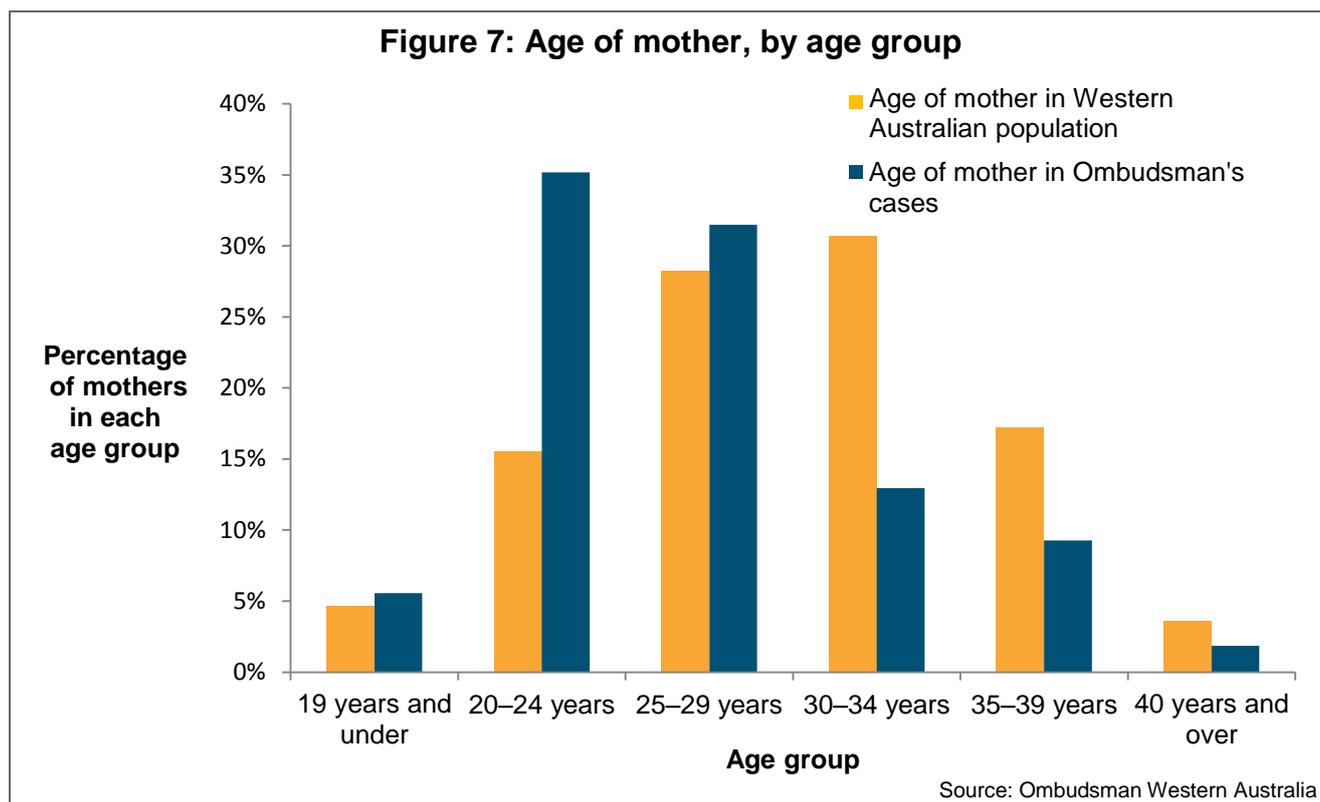
The ages of the mothers of the infants involved in the 54 Ombudsman’s cases ranged from 14 years to 42 years when their infants were born. Approximately 33 per cent of the mothers were aged between 20 and 24 years, and approximately 33 per cent were aged between 25 and 29 years, as shown in Figure 7.

Figure 7 also shows that the percentage of mothers involved in the Ombudsman’s cases who were in their early-20s was more than double that in the WA population. Conversely, the number of mothers in their 30s in the Ombudsman’s cases is less than half that in the

⁶⁵ Australian Bureau of Statistics, *Deaths, Australia, 2010*, ABS Canberra (3302.0), 2010. <<http://www.abs.gov.au/ausstats/abs@.nsf/Products/C6A9CBD96E6BA43DCA257943000CEDF5?opendocument>> Accessed: 19 March 2012. Available as at 30 October 2012.

WA population.⁶⁶ These findings are consistent with the research literature, which finds that the risk of SIDS decreases as the age of the mother increases.⁶⁷

All three of the mothers 19 years-of-age or younger, and six of the 11 mothers aged between 20 and 24 years at the time of the birth of their infant, were Indigenous. For comparison, in 2009, the birth rate for Indigenous women aged between 15 and 19 years was six times the rate for non-Indigenous women. In the age group 20-24 years, the birth rate for Indigenous women was more than three times the rate for non-Indigenous women.⁶⁸



4.11 Multiple infant risk factors

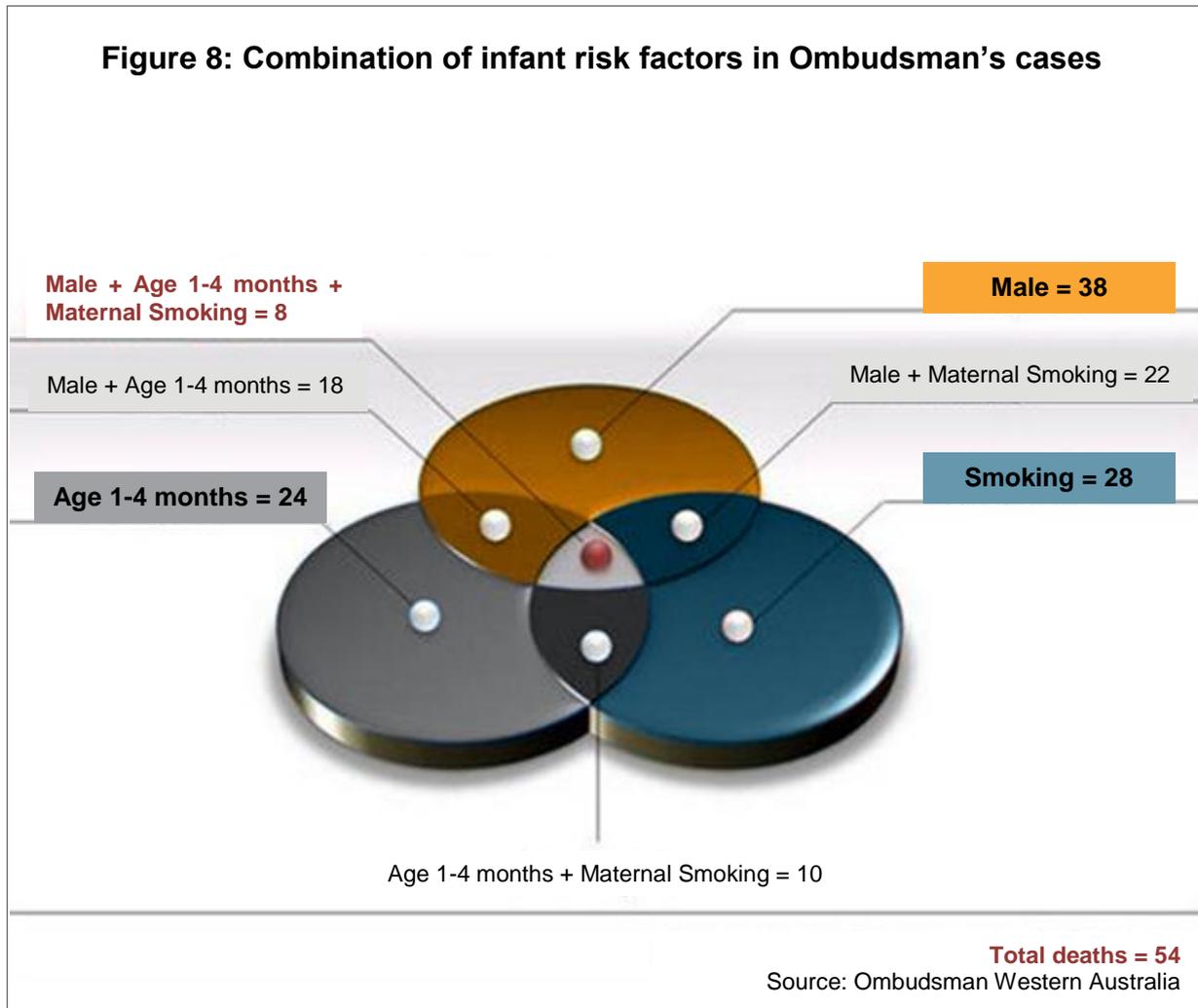
In addition to analysing the infant risk factors present in the Ombudsman's cases individually, our analysis also considered the occurrence of the three most prevalent infant risk factors in combination (infant is male, infant is aged between one and four months, and infant's mother reported smoking during pregnancy). Twenty two of the 54 infants involved in the Ombudsman's cases were both male and born to women who reported smoking during pregnancy. Of the 24 infants involved in the Ombudsman's cases who

⁶⁶ Australian Bureau of Statistics, *Births, Australia, 2010*, Canberra, Australia, 2011. <<http://www.abs.gov.au/ausstats/abs@.nsf/Products/EB94F978573DD478CA25793300167581?opendocument>> Accessed: 19 March 2012. Available as at 30 October 2012.

⁶⁷ Peterson, DR, Van Belle, G & Chinn, NM, 'Sudden infant death syndrome and maternal age: etiologic implications', *Jama: The Journal Of The American Medical Association*, vol. 247 (16), 1982, pp. 2250-2252. <<http://www.mendeley.com/research/sudden-infant-death-syndrome-and-maternal-age-etologic-implications>> Accessed: 29 March 2012. Available as at 30 October 2012.

⁶⁸ Department of Health Western Australia, *Western Australia's Mothers and Babies, 2009*, 2011. <http://www.health.wa.gov.au/publications/documents/perinatal/WA_Mothers_Babies_2009.pdf> Accessed: 29 May 2012. Available as at 30 October 2012.

were aged between one and four months, 18 were male. Of the same 24 infants, 10 were born to women who smoked during pregnancy. Eight infants were male, born to women who reported smoking during pregnancy and aged between one and four months. The figure below illustrates this combination of infant risk factors present in the Ombudsman's cases.



5 Environmental characteristics

5.1 Introduction

This chapter sets out our analysis of the characteristics of the Ombudsman's cases, focussing on characteristics of the infant's sleeping environment, as well as drawing on the research literature regarding the association between the various environmental characteristics and sleep-related infant deaths.

Chapter 3 identified that the most frequent cause of sleep-related infant deaths is likely to be SIDS. The research literature identifies that certain environmental characteristics are risk factors for SIDS (**environmental risk factors**). These environmental risk factors are:

- prone sleeping position;
- unsafe sleeping surface;
- unsafe bedding, including adult bedding such as doonas/duvets and pillows, and other items in the cot such as soft toys; and
- environmental tobacco smoke (within the infant's sleeping environment).⁶⁹

These environmental risk factors for SIDS have also been found to be relevant to other types of sleep-related infant deaths.

It is important to note that these risk factors are correlative, not necessarily causal.⁷⁰

The key findings and implications of this analysis are discussed further in Chapter 7.

5.2 Sleeping position

Of the 34 Ombudsman's cases where sleeping position was known, 17 (50 per cent) involved infants who were reported to be sleeping either on their stomach (prone sleeping position) or on their side: that is, not on their backs (supine sleeping position). Non-Indigenous infants were involved in 16 of these 17 cases, and an Indigenous infant was involved in one of these cases.

⁶⁹ Trachtenberg, FL, Haas, EA, Kinney, HC, Stanley, C & Krous, HF, 'Risk Factor Changes for Sudden Infant Death Syndrome After Initiation of Back-to-Sleep Campaign', *Pediatrics*, 2012; Vennemann, MM, Bajonowski, T, Brinkmann, B, Jorch, G, Sauerland, C, Mitchell, EA & the GeSID Study Group, 'Sleep Environment Risk Factors for Sudden Infant Death Syndrome: The German Sudden Infant Death Syndrome Study', *Pediatrics*, vol. 23, no. 4, April 2009, pp. 1162-1170.

<<http://pediatrics.aappublications.org/content/123/4/1162.full?sid=80bdf1b6-aca8-4c92-8569-adb7b7e5ead3>> Accessed: 14 June 2012. Available as at 30 October 2012; Mitchell, EA, Scragg, R, Stewart, AW, Becroft, DM, Taylor, BJ, Ford, RP, Hassall, IB, Barry, DM, Allen, EM, & Roberts, AP, 'Results from the first year of the New Zealand Cot Death Study', *New Zealand Medical Journal*, vol. 104, no. 906, 1991, pp. 71-76; Child Death Review Unit, British Columbia Coroner's Service, *Safe and Sound: A Five-Year Retrospective Report on Sudden Infant Death in Sleep-related Circumstances*, 2009.

⁷⁰ Child Death Review Unit, British Columbia Coroner's Service, *Safe and Sound: A Five-Year Retrospective Report on Sudden Infant Death in Sleep-related Circumstances*, 2009, p. 12.

The most prominent message of the *Reducing the Risk* program, and the message most often credited for the reduction in SIDS deaths, was the placing of infants on their backs to sleep.⁷¹

5.3 Sleeping surface

5.3.1 Cot condition

In one of the 54 Ombudsman's cases, the cot in which the infant was placed to sleep was reported to be in poor condition.

The research literature identifies that cots in poor condition increase the risk of entrapment and suffocation. Advice for parents recommends that cots should meet current Australian Standards, and all cots sold in Australia are required to meet the Australian Standard for household cots.⁷² Old and second-hand cots sold privately may not necessarily meet current Australian Standards.

5.3.2 Type of sleeping surface

In seven (13 per cent) of the 54 Ombudsman cases, the infant was placed to sleep on a surface other than a cot or bed. Of these seven infants, four were placed to sleep on a couch/sofa, two in strollers or prams, and one on a car seat. Four of these seven infants were Indigenous and three were non-Indigenous.

The research literature identifies that 'sleeping with an infant on a couch, sofa or chair, or placing an infant alone in an adult bed, significantly increases the risk of SIDS and fatal sleeping'.⁷³

5.4 Bedding

5.4.1 Bedding and other items in the infant's sleeping environment

A total of 13 (24 per cent) of the 54 Ombudsman's cases were reported to involve bedding and other items that are recognised as unsafe for use in the infant's sleeping environment. A further 12 (22 per cent) infants were reported to have been co-sleeping with parent(s) or a grandparent with unsafe bedding. This forms a total of 25 cases that were reported to involve unsafe bedding and/or other unsafe items in the infant's sleeping environment. Eight (32 per cent) of these 25 Ombudsman's cases involved Indigenous infants and 17 (68 per cent) cases involved non-Indigenous infants.

⁷¹ Hauck, FR & Tanabe, KO, 'International Trends in Sudden Infant Death Syndrome: Stabilization of Rates Requires Further Action', *Pediatrics*, vol. 122, no.3, 2008, pp. 660-666; Report of First Australian SIDS Pathology Workshop, *Adoption of a National Consensus for the Definition of SIDS and Autopsy Approach to Unexpected Infant Death*, Canberra, 22-23 March 2004, p.7; SIDS and Kids Australia, *Safe Sleeping*. <<http://www.sidsandkids.org/safe-sleeping>> Accessed: 23 May 2012; First Candle, *Frequently Asked Questions on SIDS/SUID*, October 2009. <<http://www.firstcandle.org/grieving-families/sids-suid/about-sids-suid/sids-suid-faq>> Accessed: 15 October 2010. Available as at 30 October 2012.

⁷² Gatto, R, 'Goodnight, sleep tight', *Choice Magazine*, June 2011. Available as at 30 October 2012.

⁷³ Queensland Government, *Safe infant care: to reduce the risk of sudden unexpected deaths in infancy, policy statement and guidelines*, 2008, p. 9. <<http://www.health.qld.gov.au/qhpolicy/docs/pol/qh-pol-082.pdf>> Accessed: 20 November, 2010. Available as at 30 October 2012.

The research literature identifies that, in an infant's sleeping environment, items of adult bedding such as quilts, doonas/duvets and pillows increase the risks of suffocation and strangulation, and are therefore potentially unsafe. Two studies using similar methodologies to examine SIDS deaths in Germany⁷⁴ and New Zealand⁷⁵ both found an increased risk of SIDS when infants' heads were covered by blankets and other forms of bedding. The proportion of SIDS cases where infants were found dead with their head covered was 15.6 per cent in the New Zealand study and 28.1 per cent in the German study. A later 2008 New Zealand study, using the same data, found the pooled prevalence of head-covering in SIDS cases from these two studies to be 24.6 per cent.⁷⁶ This study concluded that head-covering is causally related to SIDS.

These findings align with national and international recommendations to avoid head-covering as part of the risk-reduction strategies for SIDS. There are two common approaches to achieving this. The 'foot-to-bed' approach ensures a child's feet are placed at the end of the cot when put to sleep so they cannot slide down under the blankets. Alternatively, parents may use an infant 'sleeping bag', where a child is zipped into a sleeping bag with their head unable to slide into the bag.

Other items in the infant's sleeping environment sometimes referred to as 'cot clutter',⁷⁷ can also increase the risks of suffocation and strangulation, and are therefore also potentially unsafe. These include cot bumpers, lamb's wool and fluffy toys. The American Academy of Pediatrics recently found that cot bumpers in particular 'carry a potential risk of suffocation, strangulation or entrapment because infants lack the motor skills or strength to turn their heads should they roll into something that obstructs their breathing'.⁷⁸

5.4.2 Overheating

One of the Ombudsman's cases involved excessive bedding.

Since 1989, thermal stress, in the form of overheating, has been noted as a risk factor for SIDS.⁷⁹ The research literature, however, identifies that 'warm weather is generally not problematic if the infant can sweat and there is no impediment to evaporation'.⁸⁰ However, excessive bedding can contribute to the risk of thermal stress by providing insulation, thereby preventing infants from losing heat.

⁷⁴ Findeisen, M, Vennemann, M, Brinkmann, B, Ortmann, C, Röse, I, Köpcke, W, Jorch, G, & Bajanowski, T, 'German study on sudden infant death (GeSID): design, epidemiological and pathological profile', *International Journal of Legal Medicine*, vol. 118, no. 3, 2004, pp.163-169.

⁷⁵ Mitchell, EA, Scragg, R, Stewart, AW, Becroft, DM, Taylor, BJ, Ford, RP, Hassall, IB, Barry, DM, Allen, EM, Roberts, AP, 'Results from the first year of the New Zealand Cot Death Study', *New Zealand Medical Journal*, vol.104, no.906, 1991, pp. 71-76.

⁷⁶ Mitchell, EA, Thompson, J, Becroft, D, Bajanowski, T, Happe, A, Jorch, G, Blair, P, Sauerland, C & Vennemann, M, 'Head Covering and the Risk for SIDS: Findings From the New Zealand and German SIDS Case-Control Studies', *Pediatrics*, vol. 121, no. 6, 2008, pp. 1478-1483.

⁷⁷ Rosen, MM, 'Get bumpers out of cribs, doctor group urges', CNN, 18 October 2011. <<http://edition.cnn.com/2011/10/18/health/no-bumpers-cribs-sids-parenting/index.html>> Accessed: 21 March 2012. Available as at 30 October 2012.

⁷⁸ Rosen, MM, 'Get bumpers out of cribs, doctor group urges', CNN, 18 October 2011. <<http://edition.cnn.com/2011/10/18/health/no-bumpers-cribs-sids-parenting/index.html>> Accessed: 21 March 2012. Available as at 30 October 2012.

⁷⁹ Child Death Review Unit, British Columbia Coroner's Service, *Safe and Sound: A Five-Year Retrospective Report on Sudden Infant Death in Sleep-related Circumstances*, 2009, p. 16.

⁸⁰ Child Death Review Unit, British Columbia Coroner's Service, *Safe and Sound: A Five Year Retrospective Report on Sudden Infant Death in Sleep-related Circumstances*, 2009, p. 16.

Room heaters can also inhibit an infant's ability to lose heat. This was discussed in a recent Coroner's report.⁸¹ In five (nine per cent) of the 54 Ombudsman's cases, a heater was located in close proximity to the infant's sleeping location, with no ventilation to allow the room to cool.

5.5 Environmental tobacco smoke

The presence or absence of environmental tobacco smoke was specifically reported on in only nine of the 54 Ombudsman's cases. In seven of these nine cases, environmental tobacco smoke was reported to be present. The presence or absence of environmental tobacco smoke was not specified in 45 of the Ombudsman's cases. Six of the seven Ombudsman's cases where environmental tobacco smoke was reported involved non-Indigenous infants.

The research literature has repeatedly found a small but statistically significant link between environmental tobacco smoke and SIDS. By the early-1990s, there were more than 50 population-based studies that showed an increased risk of SIDS associated with smoking during pregnancy and exposure to tobacco smoke after birth. Since the *Reducing the Risk* program in 1991, this link has been confirmed by more than 17 studies.⁸²

5.6 Sleeping location

In 11 (20 per cent) of the 54 Ombudsman's cases, the infants were reported as being placed to sleep somewhere other than their usual sleep location. This included seven cases where the infant was taken from their usual sleep location to sleep elsewhere within the family home, and four cases where the infant was staying somewhere other than the family home, such as at a relative's home. Nine (82 per cent) of the 11 cases involved non-Indigenous infants.

Recent research has suggested that the risk of SIDS is higher when the infant sleeps in a different location than their usual place of sleep, particularly when it is at a friend or relative's house.⁸³ The research suggests that as many as one in five cases of SIDS in the United States of America occurred when infants were in the care of someone other than their parents and outside of the family home.⁸⁴

5.7 Multiple environmental risk factors

In addition to analysing the environmental risk factors present in the Ombudsman's cases individually, our analysis also considered the occurrence of the four environmental risk factors (prone sleeping position, unsafe sleeping surface, unsafe bedding, and environmental tobacco smoke) in combination. Eleven (20 per cent) of the 54 infants involved in the Ombudsman's cases were not placed to sleep on their back and were

⁸¹ WA State Coroner, *Record of Investigation into Death* (Ref No: 01/12), January 2012.

⁸² Mitchell, EA, 'SIDS: past, present and future', *Acta Paediatr*, vol. 98, no. 11, 2009, pp. 1712-1719.

⁸³ Vennemann, MM, Bajanowski, T, Brinkmann, B, Jorch, G, Sauerland, C, Mitchell, EA & the GeSID Study Group, 'Sleep Environment Risk Factors for Sudden Infant Death Syndrome: The German Sudden Infant Death Syndrome Study', *Pediatrics*, vol. 23, no. 4, April 2009, pp. 1162-1170. <<http://pediatrics.aappublications.org/content/123/4/1162.full?sid=80bdf1b6-aca8-4c92-8569-adb7b7e5ead3>> Accessed: 14 June 2012. Available as at 30 October 2012.

⁸⁴ Child Death Review Unit, British Columbia Coroner's Service, *Safe and Sound: A Five-Year Retrospective Report on Sudden Infant Death in Sleep-related Circumstances*, 2009.

placed to sleep with unsafe bedding. Of these 11 infants, two were also exposed to environmental tobacco smoke and one was placed on an unsafe surface. All of these 11 infants were aged less than four months old and eight of the 11 infants were male.

In the research literature, multiple environmental risk factors have been associated with an increased risk of SIDS.⁸⁵

⁸⁵ Trachtenberg, FL, Haas, EA, Kinney, HC, Stanley, C & Krous, HF, 'Risk Factor Changes for Sudden Infant Death Syndrome After Initiation of Back-to-Sleep Campaign', *Pediatrics*, 2012, p. 632.

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6 Co-sleeping

6.1 Introduction

In this report, co-sleeping refers to an infant sharing the same sleeping surface, for example a bed or a sofa, with an adult or a child when both parties are sleeping. The studies discussed here all use this definition, unless otherwise noted.

For deaths notified to the Ombudsman, information about whether or not an infant was co-sleeping at the time of their death is usually included in the notification of the death.

This chapter sets out our analysis of characteristics of the Ombudsman's cases, focussing on the incidence of co-sleeping, as reported in the notifications to the Ombudsman. The key findings and implications of this analysis are taken up and discussed further in Chapter 7.

6.2 Incidence of co-sleeping in the Ombudsman's cases

In 29 (54 per cent) of the 54 Ombudsman's cases, the infant was reported to be co-sleeping at the time of death. These 29 infants had been placed to sleep in the following environments:

- Twenty one infants were sleeping in a bed with one or both parents;
- Three infants were sleeping on a couch/sofa with either a parent or grandparent;
- One infant was sleeping in a bed with a grandparent;
- Two infants were sleeping with the mother on the ground;
- One infant was sleeping on a mattress on the floor with other children; and
- One infant was sleeping with the father in a car.

A survey of Australian bed-sharing patterns, conducted in 2000, found that co-sleeping is prevalent in Australia. The survey found that between 27 per cent and 45 per cent of infants could be identified as regularly sharing a bed to sleep with one or both of their parents and that 80 per cent of infants will share their parents' bed at some time in the first six months of life.⁸⁶ The TICHR evaluation found that of the 34 parents who participated in the study, 17 (50 per cent) regularly co-slept with their infants and six occasionally co-slept, with three of these six parents stating that either they or their partner occasionally co-slept with their babies on the couch/sofa.⁸⁷

⁸⁶ Rigda RS, McMillen, IC & Buckley, P, 'Bed sharing patterns in a cohort of Australian infants during the first six months after birth', *Journal of Paediatrics and Child Health*, 2000, vol. 36, pp. 117-121.

⁸⁷ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive Statewide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health Western Australia, 2012.

The TICHR evaluation observed that parents co-sleep with their infants for a number of reasons, including to bond with their infants, to establish and continue breastfeeding, to enable improved sleep for mothers and infants (including infants who are sick or restless), or because they accidentally fall asleep while breastfeeding or resting with their infants in the same bed (or couch/sofa).⁸⁸

6.3 Benefits of co-sleeping or room-sharing

The term 'room-sharing' refers to an infant sleeping in the same room as their primary carer but not sharing a sleeping surface with them.⁸⁹ Room-sharing has been shown to decrease the risk of SIDS by up to 50 per cent.⁹⁰ To achieve the benefit of this reduced risk of SIDS, the room needs to be smoke-free.⁹¹

Proponents of co-sleeping or room-sharing cite its benefits as promoting breastfeeding, bonding between infant and mother, and infant mental development.⁹² This cited connection is of particular interest to this report since research has linked breastfeeding with a reduction in the risk of SIDS. Case-control and other studies have found that infants who co-sleep or room-share are more likely to breastfeed successfully, and for longer.⁹³ In turn, breastfeeding has nutritional, immunological and growth benefits.⁹⁴

⁸⁸ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive Statewide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health Western Australia, 2012.

⁸⁹ Mitchell, EA, Thompson, JMD, 'Co-sleeping increases the risk of SIDS, but sleeping in the parents' bedroom lowers it', Rognum, TO 1995, *Sudden Infant Death Syndrome: New trends in the nineties*, Scandinavian University Press, 1995, pp. 266-269.

⁹⁰ McKenna, JJ & McDade, T, 'Why babies should never sleep alone: A review of the co-sleeping controversy in relation to SIDS, bed-sharing and breast feeding', *Paediatric Respiratory Reviews*, vol. 6, 2005, pp. 134-152.

⁹¹ Scragg, RKR, Mitchell, EA, Stewart, AW, Ford, RPK, Taylor, BJ, Hassall, IB, Williams, SM & Thompson, JMD, 'Infant room-sharing and prone sleep position in sudden infant death syndrome', *The Lancet*, vol. 347, no. 8993, 1996, pp. 7-12.

⁹² Ball, H, 'The latest on bed sharing and breastfeeding', *Community Practitioner*, vol. 85 (1), January 2012.

⁹³ Research includes: McKenna, JJ & McDade, T, 'Why babies should never sleep alone: A review of the co-sleeping controversy in relation to SIDS, bed sharing and breast feeding', *Paediatric Respiratory Reviews*, vol. 6, 2005, pp. 134-152; McKenna, JJ, Mosko, S & Richard, C, 'Bed sharing promotes breastfeeding', *Pediatrics*, vol. 100, 1997, pp. 214-219; Ball, H, 'The latest on bed sharing and breastfeeding', *Community Practitioner*, vol. 85 (1), January 2012.

⁹⁴ World Health Organization, *Infant and Young Child Feeding, Model chapter for textbooks for medical students and allied health professionals*, 2009.

<<http://www.who.int/nutrition/publications/infantfeeding/9789241597494/en>> Accessed: 13 March 2012. Available as at 30 October 2012; Department of Health and Ageing, *Australian National Breastfeeding Strategy 2010-2015*, 2009. <<http://www.health.gov.au/internet/main/publishing.nsf/Content/mr-yr09-dept-dept131109.htm>> Accessed: 1 March 2012. Available as at 30 October 2012.

Taking these health benefits into account, several Australian and international studies have gone on to estimate that significant economic costs arise from sub-optimal levels of breastfeeding and premature weaning, primarily because of the association between these factors and infant illness and infant hospitalisation.⁹⁵

Some studies have found that the benefits of breastfeeding include a reduction in the risk of SIDS. A 2009 New Zealand project reviewed a number of case-control studies examining the link between breastfeeding and SIDS.⁹⁶ This review concluded that breastfeeding reduced the risk of SIDS by 50 per cent. A 2011 meta-analysis identified 18 original case-control studies providing high-quality data on the relationship between breastfeeding and the risk of SIDS,⁹⁷ concluding that breastfeeding is 'protective' against SIDS and that this effect is stronger when the child is only breastfed.

While such studies show that breastfeeding reduces the risk of SIDS, it is unclear why. One theory is that the immunological properties of breast milk prevent infection. Minor symptoms of infection, especially of the respiratory tract, are present in many SIDS cases in the days preceding death. A second theory is that breastfed infants are more easily roused from sleep than formula-fed infants.⁹⁸

On the other hand, a 1996 United Kingdom inquiry into breastfeeding and SIDS, which published the findings of a case-control study of 975 infants, found that breastfeeding is strongly associated with socio-economic status, and that the protective effect of breastfeeding is no longer statistically significant after adjustment for this factor.⁹⁹ This has led some researchers to conclude that factors associated with breastfeeding, rather than breastfeeding itself, are 'protective'.¹⁰⁰

⁹⁵ Productivity Commission, *Paid Parental Leave: Support for Parents with Newborn Children*, Productivity Commission Inquiry Report, No. 47, 2009. <<http://www.pc.gov.au/projects/inquiry/parentalsupport/report>> Accessed: 7 March 2012. Available as at 30 October 2012. Individual studies include: Bartick, M & Reinhold, A, 'The burden of suboptimal breastfeeding in the United States: A Pediatric Cost Analysis', in *Pediatrics*, 125, e1048, 2010; Smith, JP, Thompson, JF & Ellwood, DA, 'Hospital system costs of artificial infant feeding: estimates for the Australian Capital Territory', *Australian and New Zealand Journal of Public Health*, vol. 26, no. 6, 2002.

⁹⁶ Vennemann, MM, Bajanowski, T, Brinkmann, B, Jorch, G, Yücesan, K, Sauerland, C, Mitchell, EA & the GeSID Study Group, 'Does breastfeeding reduce the risk of Sudden Infant Death Syndrome?', *Pediatrics*, vol. 123, no. 3, March 2009, pp. e406-e410. <<http://www.pediatrics.org/cgi/content/full/123/3/e406>> Accessed: 14 June 2012. Available as at 30 October 2012.

⁹⁷ Hauck, FR, Thompson, JMD, Tanabe, KO, Moon, RY & Vennemann, MM, 'Breastfeeding and Reduced Risk of Sudden Infant Death Syndrome: A Meta-analysis', *Pediatrics*, vol. 128, 2011, pp. 103-110.

⁹⁸ Horne, RSC, Parslow, P M, Ferens, D, Watts, A-M & Adamson, TM, 'Comparison of evoked arousability in breast- and formula-fed infants', *Arch Dis Child*, vol. 89, 2004, pp. 22-25; Hauck, FR, Thompson, JMD, Tanabe, KO, Moon, RY & Vennemann, MM, 'Breastfeeding and Reduced Risk of Sudden Infant Death Syndrome: A Meta-analysis', *Pediatrics*, vol. 128, 2011, pp. 103-110.

⁹⁹ Fleming, PJ, Blair, PS, Bacon, C, Bensley, D, Smith, I, Taylor, E, Berry, J, Golding, J, Tripp, J & the Confidential Enquiry into Stillbirths and Deaths Regional Coordinators and Researchers, 'Environment of infants during sleep and the risk of sudden infant death syndrome: results of 1993-1995 case-control study for confidential inquiry into stillbirths and deaths in infancy', *British Medical Journal*, vol. 313, no. 7051, 1996, pp. 191-195.

¹⁰⁰ Vennemann, MM, Bajanowski, T, Brinkmann, B, Jorch, G, Yücesan, K, Sauerland, C, Mitchell, EA & the GeSID Study Group, 'Does breastfeeding reduce the risk of Sudden Infant Death Syndrome?', *Pediatrics*, vol. 123, no. 3, March 2009, pp. e406-e410. <<http://www.pediatrics.org/cgi/content/full/123/3/e406>> Accessed: 14 June 2012. Available as at 30 October 2012; Ball, H, 'The latest on bed sharing and breastfeeding', *Community Practitioner*, vol. 85 (1), January 2012.

On the basis of the range of health benefits of breastfeeding discussed above, the World Health Organisation recommends exclusive breastfeeding up to six months of age, with continued breastfeeding, along with appropriate complementary foods, up to two years of age or beyond.¹⁰¹ Through its involvement in the Australian Health Ministers' Conference, the WA Government has endorsed the *Australian National Breastfeeding Strategy 2010-2015*.¹⁰² The objective of the strategy is 'to increase the percentage of babies who are fully breastfed from birth to six months of age, with continued breastfeeding and complementary foods to 12 months and beyond.'¹⁰³

SIDS and Kids Australia has also recently updated its advice on safe sleeping to recommend to mothers to 'breastfeed [your] baby, if you can'.¹⁰⁴

6.4 Risks of co-sleeping

6.4.1 Co-sleeping without any infant or environmental risk factors present

In the research literature, the risk of co-sleeping, without other risk factors being present, is the subject of debate. Numerous population-based studies have reached different conclusions as to whether co-sleeping is an independent risk factor for sleep-related infant death.

Co-sleeping and SIDS

Most research into the risks of co-sleeping examines the association between co-sleeping and SIDS. Some researchers have found that there is no evidence that co-sleeping is independently linked to SIDS, noting that almost all SIDS deaths associated with co-sleeping occur in conjunction with a history of parental smoking, parental drug use, the prone sleeping position, or unsafe sleeping surfaces, such as a couch/sofa or waterbed.¹⁰⁵

¹⁰¹ World Health Organization, *Infant and Young Child Feeding: Model chapter for textbooks for medical students and allied health professionals*, 2009.

<<http://www.who.int/nutrition/publications/infantfeeding/9789241597494/en>> Accessed: 13 March 2012. Available as at 30 October 2012.

¹⁰² Australian Government Department of Health and Ageing, *Australian National Breastfeeding Strategy 2010-2015*, 2009. <<http://www.health.gov.au/internet/main/publishing.nsf/Content/mr-yr09-dept-dept131109.htm>> Accessed: 1 March 2012. Available as at 30 October 2012.

¹⁰³ Australian Government Department of Health and Ageing, *Australian National Breastfeeding Strategy 2010-2015*, 2009. <<http://www.health.gov.au/internet/main/publishing.nsf/Content/mr-yr09-dept-dept131109.htm>> Accessed: 1 March 2012. Available as at 30 October 2012.

¹⁰⁴ SIDS and Kids Australia, *Safe Sleeping*. <<http://www.sidsandkids.org/safe-sleeping>> Accessed: 28 May 2012. Available as at 30 October 2012.

¹⁰⁵ These studies include Blair, PS, Fleming, PJ, Smith, IJ, Platt, MW, Young, J, Nadin, P, Berry, PJ, Golding, J & the CESDI SUDI research group, 'Babies sleeping with parents: case-control study of factors influencing the risk of the sudden infant death syndrome', *British Medical Journal*, vol. 319, 1999, pp. 1457-1462; Gessner, BD, Ives, GC & Perham-Hester, KA, 'Association between sudden infant death syndrome and prone sleeping position, bed sharing, and sleeping outside an infant crib in Alaska', *Pediatrics*, vol. 108, 2001, pp. 923-927; McKenna, JJ & McDade, T, 'Why babies should never sleep alone: A review of the co-sleeping controversy in relation to SIDS, bed sharing and breast feeding', *Paediatric Respiratory Reviews*, vol. 6, 2005, pp. 134-152.

A number of other research studies, however, have found that co-sleeping is independently associated with an increased risk of SIDS.¹⁰⁶ As a result, one researcher has concluded that 'bed-sharing is fine for cuddles and breastfeeding, but baby should be in its own bed when parents go to sleep'.¹⁰⁷

Co-sleeping and overlay/suffocation

While most research examining the risks of co-sleeping focuses on SIDS, when infants co-sleep with other parties there is also the risk of death through overlay and suffocation.

A study of co-sleeping and suffocation, for example, has shown that 'while the risk of suffocation death in an adult bed was at least 20 times the risk for babies in their own crib, the absolute risk was low at 12 to 25 deaths per 100,000 infants aged less than eight months'.¹⁰⁸ In WA, a 2010 coronial inquiry raised concerns about co-sleeping contributing to infant deaths through overlay and suffocation.¹⁰⁹ Recent reports from the Tasmanian Coroner,¹¹⁰ the Victorian Coroner,¹¹¹ the South Australian Coroner¹¹² and the New South Wales Child Death Review Team¹¹³ have raised similar concerns.

¹⁰⁶ These studies include: Tappin, D, Ecob, R & Brooke, H, 'Bed sharing, room sharing, and sudden infant death syndrome in Scotland: a case-control study', *The Journal of Pediatrics*, vol. 147, no. 1, 2005, pp. 32-37; Kemp, JS, Unge, B, Wilkins, D, Psara, RM, Ledbetter, TL, Graham, MA, Case, M & Thach, BT, 'Unsafe sleep practices and an analysis of bed sharing among infants dying suddenly and unexpectedly: results of a four-year, population-based, death-scene investigation study of sudden infant death syndrome and related deaths', *Pediatrics*, vol. 106, no. 3., 2000.

¹⁰⁷ Mitchell, EA, 'Sudden Infant Death Syndrome: past, present and future', *Acta Paediatr*, vol. 98, no. 11, 2009, pp. 1712-1719 & p. 1715.

¹⁰⁸ Department of Health Western Australia, *Operational Statewide Policy For Identifying And Responding To Mother-Baby Co-Sleeping/Bed-Sharing In WA Health Hospitals And Health Services*, May 2008. <www.health.wa.gov.au/circularsnew/pdfs/12410.pdf> Accessed: 13 March 2012. Available as at 30 October 2012.

¹⁰⁹ WA State Coroner, *Finding upon inquest into the death of Nathaniel West* (F/No: 384/06), January 2010.

¹¹⁰ Magistrate's Court of Tasmania, *Record of Investigation into Death (Without Inquest)*, 28 June 2012. <http://www.magistratescourt.tas.gov.au/decisions/coronial_findings/b/baby_a_-_2012_tascd_202?SQ_DESIGN_NAME> Accessed: 17 July 2012.

¹¹¹ Coroner's Court of Victoria at Melbourne, *Redacted Finding into Death with Inquest, Inquest into the Death of: Baby J.* <<http://www.coronerscourt.vic.gov.au/home/case+findings/findings+-inquest+into+the+death+of+babytj>> Accessed 10 July 2012. Available as at 30 October 2012.

¹¹² South Australian Coronial Inquest, Inquest Number 25/2009 (0979/2007, 1130/2007, 1358/2008, 1728/2008, 1763/2008)

<http://www.courts.sa.gov.au/courts/coroner/findings/findings_2010/Infant_Co-sleeping.pdf>

Accessed: 14 June 2012. Available as at 30 October 2012.

¹¹³ NSW Child Death Review Team, *A preliminary investigation of neonatal SUDI in NSW 1996-2008: opportunities for prevention*, NSW Commission for Children and Young People, 2010. <<http://kids.nsw.gov.au/uploads/documents/FinalSUDIneonates.pdf>> Accessed: 13 March 2012. Available as at 30 October 2012.

6.4.2 Co-sleeping in conjunction with infant and environmental risk factors

Although there is debate about the risks of co-sleeping without any other risk factors being present, researchers concur that co-sleeping in conjunction with certain identified infant and environmental risk factors is associated with an increased risk of sleep-related infant death. The PIMC report, for example, found a particularly increased risk when co-sleeping involved young infants (of less than four months of age) and/or infants whose birth weights had been low.¹¹⁴ The PIMC report also found that 81 per cent of the co-sleeping deaths they investigated were 'found to be associated with adverse maternal behavioural factors'.¹¹⁵ A large case-control study in England also found that when the infant was co-sleeping with smoking parents, there was nine times the risk of SIDS.¹¹⁶

The research literature has further found that the overall risk of infant death is dramatically increased when risk factors are combined, as in at-risk infants co-sleeping in situations where environmental risk factors are present. For example, an English study investigating the risks of SIDS and factors that may contribute to unsafe sleeping environments found that 'for the babies small at birth (pre-term or low birth weight), co-sleeping with smoking parents, there was 37 times the risk of SIDS'.¹¹⁷

6.5 Co-sleeping in the Ombudsman's cases

In all 29 Ombudsman's cases in which the infant was reportedly co-sleeping at the time of death, the circumstances of death also featured the infant and/or environmental characteristics that have been identified as risk factors. These were discussed in detail in Chapter 4 (which discussed infant risk factors) and Chapter 5 (which discussed environmental risk factors).

6.5.1 Co-sleeping in conjunction with infant characteristics

Co-sleeping in conjunction with infant risk factors

Twenty eight of the 29 Ombudsman's cases in which the infant was reportedly co-sleeping at the time of death also reported one or more of the infant risk factors (with age under four months being considered the most relevant infant risk factor once co-sleeping was involved). The pattern of infant risk factors among all reported co-sleeping cases is set out in Table 1 below. The total number of occasions reported in the table does not total 28, as several cases involved more than one infant risk factor.

¹¹⁴ Department of Health Western Australia, *The 13th Report of the Perinatal and Infant Mortality Committee of Western Australia for Deaths in the Triennium 2005–07*, December 2010, p. 74. <http://www.health.wa.gov.au/publications/subject_index/p/Perinatal_infant_maternal.cfm> Accessed: 13 March 2012. Available as at 30 October 2012.

¹¹⁵ Department of Health Western Australia, *The 13th report of the Perinatal and Infant Mortality Committee of Western Australia for deaths in the triennium 2005–07*, December 2010, p. 8. <http://www.health.wa.gov.au/publications/subject_index/p/Perinatal_infant_maternal.cfm> Accessed: 13 March 2012. Available as at 30 October 2012.

¹¹⁶ Blair, PS, Fleming, PJ, Smith, IJ, Platt, MW, Young, J, Nadin, P, Berry, PJ, Golding, J & the CESDI SUDI research group, 'Babies sleeping with parents: case-control study of factors influencing the risk of the sudden infant death syndrome', *British Medical Journal*, vol. 319, 1999, pp. 1457-1462. Cited in Department of Health Western Australia, Women and Newborn Health Service, *Strategies To Reduce Sudden Infant Death Syndrome (SIDS)*, December 2007, p. 4.

¹¹⁷ Department of Health Western Australia, Women and Newborn Health Service, *Strategies To Reduce Sudden Infant Death Syndrome (SIDS)*, December 2007, p. 4.

Table 1: Co-sleeping in conjunction with infant risk factors

| Infant risk factor | Number (and per cent) of 29 Ombudsman's cases involving both co-sleeping and the infant risk factor |
|---|---|
| Under four months of age (n=40): | 22 (76) |
| - Under one month of age (n=16) | 12 (41) |
| - Between one and four months of age (n=24) | 10 (34) |
| Sex (male) (n=38) | 20 (69) |
| Premature birth (n=10) | 7 (24) |
| Low birth weight (n=7) | 5 (17) |
| Maternal smoking (n = 28) | 16 (57) |

Co-sleeping in conjunction with other infant characteristics

The 29 Ombudsman's cases in which the infant was reportedly co-sleeping at the time of death were analysed to identify any other patterns among the infant's characteristics, and found as follows:

- Indigenous infants – 15 (52 per cent) of the 29 infants which were reportedly co-sleeping at the time of death were Indigenous. Thirteen (45 per cent) infants who were reportedly co-sleeping were non-Indigenous. One of the infant's Indigenous status was 'unknown'.

Some researchers and proponents of co-sleeping note that in many cultures co-sleeping is common practice. For example, the research literature has reported that, in Indigenous communities, the majority of infants appear to be placed on their side to sleep and/or co-sleep with their parents.¹¹⁸ The TICHR evaluation also reported that:

The six Aboriginal mother and grandmother participants described co-sleeping as natural, as being part of their family and cultural traditions, ensuring adequacy of breastfeeding and closeness, and enabling improved sleep for mothers and babies.¹¹⁹

¹¹⁸ National Institute of Clinical Studies, 'Reducing the Risk of SIDS', *Evidence-Practice Gaps Report*, vol. 2, 2005; Byard, RW, 'Should infants and adults sleep in the same bed?' *Medical Journal of Australia*, 2012, vol. 196 (1), pp. 10-11.

¹¹⁹ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive Statewide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health Western Australia, 2012.

- Age of the mother at the time of the infant’s birth – 15 (52 per cent) of the mothers in the 29 Ombudsman’s cases in which the infant was reportedly co-sleeping at the time of death were less than 25-years-old.
- Place of residence – eight (28 per cent) of the 29 Ombudsman’s cases in which the infant was reportedly co-sleeping at the time of death involved infants who lived in the very remote regions of WA.
- Infant not placed to sleep in their usual sleep location – in eight (28 per cent) of the 29 Ombudsman’s cases in which the infant was reportedly co-sleeping at the time of death, the child was placed to sleep in a location that was different to their usual sleep location.

6.5.2 Co-sleeping in conjunction with environmental characteristics

Sixteen (55 per cent) of the 29 Ombudsman’s cases in which the infant was reportedly co-sleeping at the time of death also reported the presence of an environmental risk factor. The pattern of environmental risk factors among all reported co-sleeping cases is set out in Table 2 below. The total number of occasions reported in the table does not add up to 16, as several cases involved more than one risk factor.

Table 2: Co-sleeping in conjunction with environmental risk factors

| Environmental risk factor | Number of Ombudsman’s cases in which this factor was specified | Number of 29 Ombudsman’s cases (and per cent) involving both co-sleeping and the environmental risk factor |
|--------------------------------|--|--|
| Sleeping position not on back | 14 | 7 (24) |
| Unsafe sleep surface | 29 | 4 (14) |
| Unsafe bedding and other items | 14 | 12 (41) |
| Environmental tobacco smoke | 2 | 2 (7) |

The 29 Ombudsman’s cases in which the infant was reportedly co-sleeping at the time of death were analysed to identify any other patterns among the environmental characteristics, and found as follows:

- Family environment – in 11 (38 per cent) of the 29 cases, the Department for Child Protection had received information that raised concerns about the well-being of the infant and/or a child relative of the infant.
- Co-sleeping parent under the influence of alcohol – in seven (24 per cent) of the 29 cases, the notifications indicated that the parent or parents who were co-sleeping were under the influence of alcohol at the time of the infant’s death.

- Co-sleeping parent taking medication – in two (seven per cent) of the 29 Ombudsman’s cases in which the infant was reportedly co-sleeping at the time of death, the parent of the infant was taking drugs prescribed for a specific medical need. The research literature has linked risks of co-sleeping with medication that impairs the co-sleeping parent’s rousability, including pain medication for women who have had caesarean operations.¹²⁰

6.5.3 Co-sleeping, infant risk factors and environmental risk factors combined

In 15 (52 per cent) of the 29 Ombudsman’s cases in which the infant was reportedly co-sleeping at the time of death, both infant risk factors and environmental risk factors featured in the circumstances of death.

Thirteen (45 per cent) of the 29 Ombudsman’s cases in which the infant was reportedly co-sleeping at the time of death involved infant risk factors (including infants under one month of age) but not environmental risk factors. One of the 29 Ombudsman’s cases in which the infant was reportedly co-sleeping at the time of death involved environmental risk factors, but not infant risk factors.

¹²⁰ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive Statewide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health Western Australia, 2012.

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7 Implications for the policies and strategies of State Government departments and authorities

7.1 Introduction

The preceding three chapters set out our analysis of the 54 Ombudsman's cases and considered our findings against the broader research literature. Drawing on this analysis, this chapter sets out our findings and corresponding recommendations about ways to prevent or reduce sleep-related infant deaths. The following chapter discusses opportunities identified by stakeholders for putting these recommendations into practice.

7.2 Opportunities for State Government departments and authorities to assist parents and carers in relation to risk factors for sleep-related infant death

Our analysis of the 54 Ombudsman's cases, discussed individually in the three preceding chapters, indicated that all cases involved one or more of the infant and/or environmental risk factors identified in the research literature. Table 3 below summarises this information.

Once an infant is born, it is obviously not possible for parents and carers to modify the infant characteristics of premature birth and low birth weight, although, in some circumstances, it may be possible to modify these two characteristics by addressing the general determinants of maternal and infant health during pregnancy. Similarly, the infant characteristics related to age and sex are obviously not modifiable. These infant characteristics are all risk factors for sleep-related infant death.

On the other hand, it may be possible for parents and carers to modify other relevant risk factors. A total of 48 (89 per cent) of the 54 Ombudsman's cases involved environmental risk factors or maternal smoking during pregnancy. This indicates that, by assisting parents and carers in relation to the possible modification of these risk factors, there are potential opportunities for State Government departments and authorities to prevent or reduce the number of sleep-related infant deaths beyond that action which is currently undertaken.

Given its central role in promoting and protecting infant health, the Department of Health is well-placed to undertake this action. Our analysis indicates that two other departments with responsibilities for infant health and well-being, namely the Department for Child Protection and the Department for Communities, are also well-placed to take action on a number of the issues identified. This analysis, as well as recommendations directed to the policies and strategies of all three departments, is discussed in the following sections. The discussion and recommendations may also be of relevance, interest and importance to other State Government departments and authorities that have contact with families and infants, beyond the three departments specifically discussed in these sections.

Table 3: Ombudsman’s cases, infant and environmental risk factors involved

| Risk factor | Risk factor is modifiable or not modifiable | Number (and per cent) of Ombudsman of cases where risk factor was present |
|---|---|---|
| <i>Infant risk factors</i> | | |
| Aged between one and four months old | Not modifiable | 24 (44) |
| Sex (male) | Not modifiable | 38 (70) |
| Premature birth | Not modifiable once infant is born | 10 (19) |
| Low birth weight | Not modifiable once infant is born | 7 (13) |
| Maternal smoking during pregnancy | Modifiable | 28 (52) |
| <i>Environmental risk factors</i> | | |
| Sleeping position on stomach or side | Modifiable | 17 (31) |
| Unsafe sleeping surface | Modifiable | 7 (13) |
| Unsafe bedding (an additional 12 infants, or 22 per cent, were reportedly co-sleeping in an adult bed and could also have had unsafe bedding) | Modifiable | 13 (24) |
| - Soft toys or other items in cot | Modifiable | 2 (4) |
| Environmental tobacco smoke | Modifiable | 7 (13) |

The findings of our analysis are consistent with a 2005 review of deaths occurring in New South Wales (**NSW**), undertaken by the NSW Child Death Review team, which also identified that the majority of sleep-related infant deaths involved ‘modifiable’ risk factors. Of the 186 sudden and unexpected infant deaths investigated by the NSW Child Death Review team, similar modifiable risk factors were present in 86.6 per cent of cases.¹²¹

¹²¹ NSW Child Death Review Team, *Sudden Unexpected Deaths in Infancy: the New South Wales Experience*. Report written for the NSW Child Death Review Team by the Commission for Children and Young People, Sydney, NSW Commission for Children and Young People, NSW Child Death Review Team, 2005.

7.3 Environmental risk factors which safe sleeping advice has traditionally and still commonly recommends should be avoided

Four key messages about how to avoid environmental risk factors were at the core of advice about safe sleeping that was communicated in the *Reducing the Risk* program launched in 1991. These four key messages were:

- Place an infant on its back to sleep;
- Use a safe sleeping surface;
- Use safe bedding, keep infant's head uncovered, and avoid soft toys and other items in the infant's sleeping environment; and
- Avoid environmental tobacco smoke.¹²²

The TICHR evaluation contained a detailed comparison of 12 current policies, guidelines and brochures produced by government and non-government organisations, which currently provide advice on safe sleeping, particularly co-sleeping. It found that these four key messages are still commonly being promoted across the safe sleeping advice that the evaluation compared.¹²³

Our analysis of the 54 Ombudsman's cases, discussed individually in Chapter 5, found that a total of 30 cases (56 per cent) involved one or more of the environmental risk factors that safe sleeping advice has traditionally and still commonly recommends should be avoided, as shown in Table 3 above. Our findings point to the continued relevance of the four key messages common to safe sleeping advice. They also point to the importance of continuing to assist parents and carers to follow this advice when placing their infants to sleep.

In 2008, the Department of Health issued an Operational Directive (**the Directive**) setting out its *Statewide Mother-Baby Co-Sleeping/Bed-Sharing Policy (the Policy)*. These are complemented by Clinical Guidelines (**the Guidelines**) developed by the Department of Health's Women and Newborn Health Service, in association with key stakeholders. All three materials aim to reduce the sudden death of infants while co-sleeping. The Directive, the Policy and the Guidelines apply to all healthcare workers in State Government hospitals and health services.¹²⁴ The Directive, the Policy and the Guidelines set out the

¹²² Mitchell, EA, Freemantle, J, Young, J & Byard, RW, 'Scientific consensus forum to review the evidence underpinning the recommendations of the Australian SIDS and Kids Safe Sleeping Health Promotion Programme – October 2010', *Journal of Paediatrics and Child Health*, 2011. <<http://dx.doi.org/10.1111/j.1440-1754.2011.02215.x>> Accessed: 8 May 2012. Available as at 30 October 2012; Report of First Australian SIDS Pathology Workshop, *Adoption of a National Consensus for the Definition of SIDS and Autopsy Approach to Unexpected Infant Death*, Canberra, 22-23 March 2004.

¹²³ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive Statewide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health Western Australia, 2012, pp. 24-26.

¹²⁴ Department of Health Western Australia, *Operational Statewide Policy For Identifying And Responding To Mother-Baby Co-Sleeping/Bed-Sharing In WA Health Hospitals And Health Services*, May 2008. <www.health.wa.gov.au/circularsnew/pdfs/12410.pdf> Accessed: 13 March 2012. Available as at 30 October 2012.

department's policy on co-sleeping in hospital and on the advice to be provided to parents and carers about co-sleeping with their infant once they leave hospital. These materials are not intended to, and do not, focus on the wider issue of parents' and carers' practices when placing infants to sleep, beyond co-sleeping.

Recommendation 1: It is recommended that the Department of Health establishes a statement on safe sleeping, either by expanding its existing Policy on co-sleeping, or by establishing an additional statement on safe sleeping, which:

- takes into account and complements existing information available from non-government organisations including SIDS and Kids WA, as appropriate;
- forms the basis for safe sleeping advice provided to parents and carers;
- forms the basis for strategies across State Government hospitals and health services to assist parents and carers understand and apply this advice; and
- is a guide for policies and strategies by other State Government departments and authorities aimed at achieving the same objective.

It should be noted that SIDS and Kids Australia's advice now also incorporates recommendations regarding 'sleeping baby in a cot next to the parent's bed for the first 6-12 months' and 'breastfeed baby if you can.'¹²⁵

7.4 Infants who were placed to sleep somewhere other than their usual sleep location

In eight (15 per cent) of the 54 Ombudsman's cases, the infants were placed to sleep in a cot or bed, but somewhere other than their usual sleep location, as shown Table 4 below. This issue was also identified in the research literature, as discussed in section 5.6. These findings point to the need to emphasise that parents and carers should continue to be vigilant about following safe sleeping advice when placing an infant to sleep in a different location within the family home or in another house. The various materials providing advice on how to place infants to sleep safely do not explicitly address this issue.¹²⁶

¹²⁵ SIDS and Kids Australia, *Safe Sleeping*. <<http://www.sidsandkids.org/safe-sleeping>> Accessed: 28 May 2012. Available as at 30 October 2012.

¹²⁶ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive Statewide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health Western Australia, 2012, p. 26.

Table 4: Infant placed to sleep in a cot or bed but not in their usual sleep location

| Circumstances of death | Number (and per cent) of Ombudsman's cases where circumstance was reported |
|--|--|
| Placed to sleep in a different location in the house | 6 (11) |
| Placed to sleep in the house of a relative | 2 (4) |

Recommendation 2: It is recommended that the Department of Health ensures that its safe sleeping statement emphasises that parents and other carers should be advised to be vigilant about applying safe sleeping advice wherever they are placing infants to sleep, including in a location other than their usual sleep location, such as in another room within the family home, or at a relative or friend's house.

7.5 Infants who were reportedly co-sleeping

As discussed in Chapter 6, there were 29 Ombudsman's cases in which the infant was reportedly co-sleeping at the time of death. Our analysis indicates that in all 29 cases, the circumstances of death also featured the infant and/or environmental characteristics identified in the research literature as risk factors for sleep-related infant deaths. Infant risk factors were involved in 28 of the 29 cases. In particular, our analysis identified that 12 (75 per cent) of the 16 Ombudsman cases where the infant was under one month of age were reportedly co-sleeping. Environmental risk factors were involved in 16 of the 29 cases. The incidence of these risk factors among the Ombudsman's cases is set out in Table 1 and Table 2.

A report of an Inquest by the WA State Coroner into a co-sleeping death, released in 2010, stated that 'the Clinical Guidelines and Operational Directive provide clear and accurate guidance on co-sleeping. They need to be actively promoted.'¹²⁷ The effectiveness of the implementation and dissemination processes for the Directive and the Policy are analysed in the TICHR evaluation, which makes 14 recommendations designed to improve implementation of the Directive in hospitals and health services. The Department of Health accepted all 14 recommendations of the TICHR evaluation and is currently developing an implementation plan for them.¹²⁸

7.6 Infants whose mothers reported smoking during pregnancy

As discussed in Chapter 4, 28 (52 per cent) of the mothers of infants involved in the 54 Ombudsman's cases reported¹²⁹ that they smoked during their pregnancy. In four of these

¹²⁷ WA State Coroner, *Finding upon inquest into the death of Nathaniel West* (F/No: 384/06), January 2010.

¹²⁸ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive Statewide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health Western Australia, 2012.

¹²⁹ Self-reported to the Department of Health Western Australia.

28 cases, the notifications of the infant's death to the Ombudsman also made observations about environmental tobacco smoke. These four cases are included in the seven cases discussed in Chapter 5, where environmental tobacco smoke was reported to be present.

Maternal smoking during pregnancy and SIDS

The research literature has identified an increased risk of SIDS associated with maternal smoking during pregnancy.¹³⁰ Some of this research literature has specifically identified impaired arousal processes among the infants studied and linked this to maternal smoking during pregnancy, particularly for infants aged two to four weeks and five to six months of age.¹³¹ Table 5 below shows the association of the factor 'mother reported smoking during pregnancy' with the infant risk factors discussed in Chapter 4. The table also identifies that this factor is associated with a high proportion (92 per cent) of the Ombudsman's cases involving infants aged between four and eight months.

Considering these factors in combination identifies that 12 (22 per cent) of the 54 Ombudsman's cases involved infants aged between four and eight months, in 11 of these 12 cases the mothers of the infants reported that they smoked during pregnancy, and nine of these 11 cases involved male infants.

Maternal smoking during pregnancy, premature birth and low birth weight

Maternal smoking during pregnancy has also been linked to babies being born prematurely and with a low birth weight. These factors, in turn, are infant risk factors for SIDS.¹³² In the 10 Ombudsman's cases where the infants were born prematurely, six mothers reported that they smoked during pregnancy. In the seven Ombudsman's cases where the babies were born with low birth weight, four mothers reported that they smoked during pregnancy.

The average gestation of the 26 infants whose mothers reported that they did not smoke during pregnancy was 0.5 weeks longer than the average gestation of the 28 infants whose mothers reported that they smoked during pregnancy. The average birth weight of the 26 infants whose mothers reported that they did not smoke during pregnancy was 10 per cent higher, at 3.3 kilograms, than the average birth weight of the 28 infants whose mothers reported that they smoked during pregnancy, which was 3 kilograms.

¹³⁰ Mitchell, EA, 'SIDS: past, present and future', *Acta Paediatr*, vol. 98, no. 11, 2009, pp. 1712-1719; Laws, PJ, Grayson, N & Sullivan, EA, Australian Institute of Health and Welfare, *Smoking and Pregnancy*, AIHW National Perinatal Statistics Unit Sydney, Cat. no. PER 33, 2006; NSW Department of Health (ed) *Background papers to the national clinical guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn*, NSW Department of Health Sydney, 2006.

¹³¹ Richardson, HL, Walker, AM, Horne, RSC, 'Maternal Smoking Impairs Arousal Patterns in Sleeping Infants,' *Pediatric Sleep*, vol. 32, Issue 4, 2009, pp. 515-521.

¹³² US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, Washington DC, 'The Health Consequences of Smoking: A Report of the Surgeon General, Atlanta, GA 2004', 2004, p. 5. <http://www.cdc.gov/tobacco/data_statistics/sgr/2004/index.htm> Accessed: 7 May 2012. Available as at 30 October 2012.

Table 5: Infant characteristic and whether infant's mother reported smoking during pregnancy in Ombudsman's cases

| Infant characteristic | Mother reported <u>not</u> smoking during pregnancy (n=26) | Mother reported smoking during pregnancy (n=28) |
|--------------------------------------|--|---|
| Age: | | |
| – Less than one month | 9 | 7 |
| – One to four months | 14 | 10 |
| – Over four to eight months | 1 | 11 |
| – Over eight and less than 12 months | 2 | 0 |
| Sex (male) | 16 | 22 |
| Premature birth | 4 | 6 |
| Low birth weight | 3 | 4 |

In 2007, the Department of Health published the *Western Australian Tobacco Action Plan 2007-2011 (the Action Plan)*, which addressed maternal smoking under the community education action area. The Action Plan was targeted at general practitioners, Indigenous medical services, Healthway, and health services that are part of the Department of Health. The Action Plan included a recommended action to 'encourage women planning a pregnancy, pregnant women, new mothers and their partners to quit smoking through targeted education campaigns, programs, and brief intervention screening'.¹³³

The Department of Health and a number of other government and non-government agencies have a range of brochures designed to inform pregnant women of the dangers of smoking, such as brochures entitled *Smoking and Your Baby*¹³⁴ and *How your baby grows!*¹³⁵ The Australian Government Department of Health and Ageing also provides information about the benefits of a smoke-free pregnancy, the risks created by second-hand smoke for partners who smoke, smoking and SIDS, and the effects of second-hand smoke on children.¹³⁶ In addition, the TICHR evaluation's comparison of 12 current

¹³³ Department of Health Western Australia, *Western Australian Tobacco Action Plan 2007-2011*, Action Area 2.13, p. 23. <<http://www.watap.health.wa.gov.au/home/>> Accessed: 29 May 2012. Available as at 30 October 2012.

¹³⁴ Department of Health Western Australia, *Smoking and Your Baby, A Guide for Pregnant Women or Mothers*. <<http://www.health.wa.gov.au/havingababy/during/lifestyle.cfm>> Accessed: 3 May 2012. Available as at 30 October 2012.

¹³⁵ Asthma Foundation of Western Australia Inc, Kulunga Research Network, Telethon Institute for Child Health Research and Office of Aboriginal Health, *How your baby grows! Fresh air grows solid babies!* <http://www.ichr.uwa.edu.au/files/user6/FINAL_Booklet.pdf>. Accessed 25 May 2012. Available as at 30 October 2012.

¹³⁶ Australian Government Department of Health and Ageing, *Smoking and pregnancy*. <<http://www.quitnow.gov.au/internet/quitnow/publishing.nsf/Content/smoking-and-pregnancy>> Accessed: 14 May 2012. Available as at 30 October 2012.

materials that provide advice specifically on safe sleeping identified that all materials advise women to avoid smoking during pregnancy.¹³⁷

Our analysis of the Ombudsman's cases points to the continued importance of strategies that inform pregnant women of the dangers of smoking and assist them to give up smoking where they choose to do so.

Recommendation 3: It is recommended that the Department of Health ensures that:

- its safe sleeping statement explicitly recognises the importance of avoiding smoking during pregnancy; and
- strategies for delivering the safe sleeping advice are closely linked with the range of existing programs designed to assist people to give up smoking, so that pregnant women who continue to smoke can be connected to this assistance as effectively as possible.

7.7 Indigenous infants

As discussed in Chapter 4, our analysis of the 54 Ombudsman's cases indicated that 35 per cent involved Indigenous infants. For comparison, Indigenous infants comprise six per cent of all infants in WA. This finding reflects the research literature, which identified that Indigenous infants are over-represented among infants whose death is diagnosed as SIDS and that the decline in the rate of SIDS has not been as significant in the Indigenous population as it has been in the non-Indigenous population.¹³⁸

Modifiable risk factors were involved in 58 per cent of the Ombudsman's cases involving Indigenous infants

Our analysis and the research literature indicate that strategies to assist Indigenous parents and carers to modify risk factors in their infant's sleeping environment, and to give up smoking where they choose to do so, have a role to play in preventing or reducing child deaths. Of the 19 Ombudsman's cases involving Indigenous infants, modifiable risk factors were involved in 11 (58 per cent) cases (and in some cases multiple factors were present), as follows:

- Three of the 11 infants were not placed on their backs to sleep;
- Four of the 11 infants were placed to sleep on an unsafe surface; and
- Eight of the 11 infants were placed to sleep with potentially unsafe bedding.

¹³⁷ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive Statewide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health Western Australia, 2012, p. 26.

¹³⁸ For example, Freemantle, J, Read, AW, De Klerk, NH, McAullay, D, Anderson, IP & Stanley, FJ, 'Sudden Infant Death Syndrome and Unascertainable Deaths: Trends and disparities among Aboriginal and non-Aboriginal infants born in Western Australia from 1980 to 2001 inclusive', *Journal of Paediatrics and Child Health*, Volume 42, Issue 7-8, July/August 2006, pp. 445–451.

Of the 15 Indigenous mothers involved in these 19 Ombudsman's cases, 10 (67%) reported smoking during pregnancy.

A 2005 report found that in Indigenous communities the majority of infants appear to be placed on their side to sleep and/or co-sleep with their parents.¹³⁹ Queensland Government studies have also found that modifiable risk factors associated with sleep-related infant death are more prevalent among Indigenous families. One of these studies found, for example, that Indigenous infants 'were more likely to be placed on the side or prone position to sleep, exposed to environmental tobacco smoke in utero, have smokers in the home environment after birth, and bed-share with a smoker'.¹⁴⁰

Culturally appropriate information is an important part of strategies to assist Indigenous parents and carers to modify the risk factors in their infant's sleeping environment

A number of the studies cited above argue that culturally appropriate information is an important part of strategies to assist Indigenous parents and carers to modify the risk factors in their infant's sleeping environment. Queensland Health Policy, for example, observed that the disparity in SIDS rates between Indigenous and non-Indigenous infants strongly suggests that the available health promotion and education messages targeting SIDS risk factors are not reaching Indigenous communities.¹⁴¹ In WA, the TICHHR evaluation found that there is a similar lack of culturally appropriate and relevant information about co-sleeping for Aboriginal women. The TICHHR evaluation made a number of suggestions about the form this information might take.¹⁴²

Since 2005, SIDS and Kids WA has operated the *Reducing the Risk of SIDS in Aboriginal Communities* program (**the RROSIAC program**). The RROSIAC program aims to address the gap in SIDS rates between Indigenous and non-Indigenous infants. One component of the program is to develop and distribute culturally appropriate resources for the prevention of SIDS in WA Indigenous communities.¹⁴³

A 2010 evaluation of the RROSIAC program found that the model adopted by the program was 'an effective way to engage and empower marginalised people and communities'.¹⁴⁴ The evaluation also found that a substantial proportion of community members and

¹³⁹ National Institute of Clinical Studies, 'Reducing the Risk of SIDS', *Evidence-Practice Gaps Report*, vol. 2. 2005, NICS, Melbourne.

<http://www.nhmrc.gov.au/_files_nhmrc/file/nics/material_resources/evidence_practice_gaps_report_volume_2.pdf> Accessed: 27 March 2012, p. 12. Available as at 30 October 2012.

¹⁴⁰ Queensland Government, *Safe infant care: to reduce the risk of sudden unexpected deaths in infancy, policy statement and guidelines*, 2008, p. 34. <<http://www.health.qld.gov.au/qhpolicy/docs/pol/qh-pol-082.pdf>> Accessed: 20 November, 2010. Available as at 30 October 2012.

¹⁴¹ Queensland Government, *Safe infant care: to reduce the risk of sudden unexpected deaths in infancy, policy statement and guidelines*, 2008. <<http://www.health.qld.gov.au/qhpolicy/docs/pol/qh-pol-082.pdf>> Accessed: 20 November, 2010. Available as at 30 October 2012.

¹⁴² Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive Statewide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health Western Australia, 2012, pp. 9-10.

¹⁴³ Wichmann, H, Vicary, D, & Piek, J, *Evaluation of Reducing the Risk of SIDS in Aboriginal Communities (RROSIAC) Project: Final Report to SIDS and Kids Western Australia, Community Service Consultation 45232-1*, Curtin Health Innovation Research Institute, Curtin University of Technology, Bentley, 2010.

¹⁴⁴ Wichmann, H, Vicary, D & Piek, J, *Evaluation of Reducing the Risk of SIDS in Aboriginal Communities (RROSIAC) Project: Final Report to SIDS and Kids Western Australia, Community Service Consultation 45232-1*, Curtin Health Innovation Research Institute, Curtin University of Technology, Bentley, 2010.

professionals who had participated in the program were able to recall the key safe sleeping messages at the end of the process. When followed up 33 months later, however, their ability to recall these messages was greatly reduced. The evaluators suggest, therefore, that 'more work is required to ensure the SIDS safe sleeping message circulates continuously within the Aboriginal community'.¹⁴⁵

During our consultations, stakeholders observed that a culturally appropriate model, which understands Indigenous family dynamics, culture and beliefs, allows those in contact with Indigenous parents and carers to deliver messages that are more likely to be heard and put into action. For example, stakeholders noted that in some Indigenous families it may be more effective to inform grandmothers of the importance of safe sleeping, as they have great influence over the family and their practices when placing their infant to sleep. Our consultations with stakeholders identified two additional issues with the terminology used to deliver existing messages about safe sleeping:

- Stakeholders noted that the term 'safe sleeping' has been interpreted by Indigenous mothers as meaning keeping infants safe from other people in the house and this is being implemented by the mother taking the infant to bed; and
- Misunderstandings of the term 'cot death,' which has sometimes been used interchangeably with SIDS. As the Coroner has observed:

Apart from the misinformation this ['cot death' terminology] provided with respect to the ability to minimise some of these deaths by following simple guidelines, the terms SIDS and "cot death" actually provided erroneous education. For example, the term "cot death" in some Indigenous communities had been taken to mean a baby should not be placed in a cot because it was the cot which was responsible for the death.¹⁴⁶

Our analysis of the 19 Ombudsman's cases points not only to the importance of strategies that are culturally appropriate for Indigenous people in general, but also to those Indigenous people who live in very remote WA and to young Indigenous mothers, as follows:

- All eight of the Ombudsman's cases that involved infants residing in the very remote regions of WA involved Indigenous infants and all of these deaths involved co-sleeping; and
- The mothers of the Indigenous infants involved in the Ombudsman's cases were on average four years younger than the mothers of non-Indigenous infants involved in the Ombudsman's cases; in addition, all three of the mothers 19 years of age or younger and six of the 11 mothers aged between 20 and 24 year at the time of the birth of their infant were Indigenous.

¹⁴⁵ Wichmann, H, Vicary, D & Piek, J, *Evaluation of Reducing the Risk of SIDS in Aboriginal Communities (RROSIAC) Project: Final Report to SIDS and Kids Western Australia, Community Service Consultation 45232-1*, Curtin Health Innovation Research Institute, Curtin University of Technology, Bentley, 2010.

¹⁴⁶ WA State Coroner, *Finding upon inquest into the death of Nathaniel West* (F/No: 384/06), January 2010.

Strategies to assist Indigenous women to give up smoking during pregnancy also need to be culturally appropriate

In 2008, just over 13 per cent of non-Indigenous women smoked during their pregnancy, and this figure had decreased by 20 per cent since 2003. By comparison, 52 per cent of Indigenous women smoked during pregnancy in 2008, and this figure had decreased by only two per cent since 2003.¹⁴⁷

The Department of Health conducted an Indigenous Women's Project in 2009 to encourage pregnant women, new mothers and their Indigenous family members to protect the foetus and newborn baby from passive smoke. This project promoted the message 'fresh air grows solid babies'. The project initiatives included delivering intervention training to health professionals who work with pregnant women and mothers who are Indigenous, throughout WA.

In 2011, the Telethon Institute for Child Health Research undertook an audit, funded by the Department of Health, of the prevention of alcohol and tobacco use in pregnancy. This audit focused on the Department of Health's antenatal services of 24 medical clinics in WA. Participants who worked in health services utilised by large numbers of Indigenous women found that the standard support and resources for quitting smoking were not effective with Indigenous women.¹⁴⁸

The information discussed above and the findings of our analysis of the Ombudsman's cases point to the importance of linking strategies for delivering safe sleeping advice with programs designed to assist Indigenous women to give up smoking during pregnancy.

Recommendation 4: It is recommended that the Department of Health ensures that its strategies for delivering safe sleeping advice:

- assist Indigenous parents and carers, including Indigenous people living in very remote areas, to understand and apply this advice; and
- to Indigenous parents and carers are closely linked with the range of existing programs designed to assist people to give up smoking, so that Indigenous women who are pregnant and who continue to smoke can be connected to this assistance as effectively as possible.

7.8 Infants from culturally and linguistically diverse backgrounds

At least three of the Ombudsman's cases involved infants from culturally and linguistically diverse (CaLD) backgrounds and all of these cases involved modifiable risk factors. This estimate is based on two infants involved in the Ombudsman's cases being born to women identified in the Department of Health's information as Asian and one being born to a

¹⁴⁷ Commissioner for Children and Young People Western Australia. *The State of Western Australia's Children and Young People*, Edition One, February 2011. <<http://www.cyp.wa.gov.au/stateofcyp/>> Accessed: 14 June 2012. Available as at 30 October 2012.

¹⁴⁸ Telethon Institute for Child Health Research. *Prevention of Alcohol and Tobacco Use in Pregnancy: Audit of WA Department of Health Antenatal Services Use of Alcohol & Tobacco Brief Interventions in Pregnancy*, September 2011, pp. 8-10.

woman identified as Indian. All three cases involved environmental risk factors and all three deaths occurred in circumstances that safe sleeping advice commonly recommends should be avoided.

The TICHR evaluation included women from CaLD backgrounds (which it refers to as 'CaLDB women'), explored the ways in which they were provided with information about co-sleeping, and determined the cultural appropriateness of the information and the educational processes used. The evaluation states:¹⁴⁹

Community midwives working in multicultural health settings and child health nurses caring for CaLDB women all identified:

- A need for more culturally and language-appropriate information for CaLDB women;
- Appropriate language translators for CaLDB women attending major government maternity hospitals are available and used by maternity health staff; and
- The risk factor of overheating associated with 'wrapping' is a key issue requiring more education, clarification and information for both health workers and CaLDB women.

These findings point to the importance of strategies to assist parents and carers to modify risk factors in their infant's sleeping environment that are appropriate to people from CaLD backgrounds.

Recommendation 5: It is recommended that the Department of Health ensures that its strategies for delivering safe sleeping advice assist parents and carers from CaLD backgrounds to understand and apply this advice.

7.9 Infants from families whose children had already been the subject of concerns raised with the Department for Child Protection

Thirty seven per cent of the Ombudsman's cases involved infants from families whose children had already been the subject of concerns raised with the Department for Child Protection. Our analysis of the 54 Ombudsman's cases found that 20 (37 per cent) cases met the requirements of s19A(3)(a). This means that in the two years prior to the infant's death, the Department for Child Protection had received information that raised concerns about the well-being of the child or a child relative of the child. In 15 of these 20 cases, the Department for Child Protection had determined that some action should be taken in regards to the child or a child relative of the child, and that action was taken.

It is important to note that these concerns and actions were not necessarily related to modifiable risk factors associated with sleep-related infant deaths.

¹⁴⁹ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive State-wide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health, Western Australia, 2012, p. 10.

Interactions between families and Department for Child Protection staff, however, particularly those that are more extensive, those that take place in the family home, and those that occur in the Best Beginnings Service (discussed in more detail in Chapter 8), provide an opportunity for these staff to work proactively with the families they are already involved with to put safe sleeping advice into practice.

The Department for Child Protection has recently revised its Casework Practice Manual to include a section on co-sleeping, which provides guidance to staff working with families and carers of infants.¹⁵⁰ These changes were made in August 2011 in response to a number of the Ombudsman's reviews of individual child deaths. The changes require Department for Child Protection staff to consider the sleeping arrangements of families with infants and to provide them with information about co-sleeping. The information to be provided includes the brochures produced by SIDS and Kids WA and the Department of Health respectively.¹⁵¹

Recommendation 6: It is recommended that the Department for Child Protection collaborates with the Department of Health to establish a departmental policy on safe sleeping, based on the Department of Health's safe sleeping statement, to guide interactions between the Department for Child Protection staff and parents and carers.

Changes to the Casework Practice Manual have been accompanied by updates to the Safety and Well-being Assessment (**the Assessment**), a tool used by the Department for Child Protection to determine whether any action should be taken to safeguard or promote a child's well-being and whether a child may be in need of protection.¹⁵² The Assessment has been updated to include attention to co-sleeping.

Recommendation 7: It is recommended that the Department for Child Protection ensures that its Casework Practice Manual and its Safety and Well-being Assessment tool reflect the department's policy on safe sleeping and are kept up to date as information changes.

The Department for Child Protection has indicated that it is the responsibility of District Offices to ensure that their staff implement the Casework Practice Manual, including the new sections on co-sleeping.

¹⁵⁰ Department for Child Protection Western Australia, *Casework Practice Manual – Section 3.23 Co-sleeping*. <<http://manuals.dcp.wa.gov.au/manuals/cpm/Pages/default.aspx>> Accessed: 25 August 2011. Available as at 30 October 2012.

¹⁵¹ Department for Child Protection Western Australia, *Casework Practice Manual – Section 3.23 Co-sleeping*. <<http://manuals.dcp.wa.gov.au/manuals/cpm/Pages/default.aspx>> Accessed: 25 August 2011. Available as at 30 October 2012.

¹⁵² Department for Child Protection Western Australia, *Casework Practice Manual – Section 3.23 Co-sleeping*. <<http://manuals.dcp.wa.gov.au/manuals/cpm/Pages/default.aspx>> Accessed: 25 August 2011. Available as at 30 October 2012.

Recommendation 8: It is recommended that the Department for Child Protection ensures that its adoption of a departmental policy on safe sleeping is accompanied by strategies to:

- ensure that staff in direct contact with families, and the supervisors of these staff, have the skills and knowledge necessary to implement the policy;
- keep program workers' skills and knowledge up to date as information changes; and
- evaluate the implementation of its new procedures for providing the safe sleeping advice to families, particularly by those staff who have more extensive interactions with families such as those working in the Best Beginnings Service.

One possible model for pursuing this recommendation is the High Risk Infants' (HRI) Service Quality Initiative operating in Victoria, which encompasses a similar role for child protection workers.¹⁵³ Established in 1997, this targeted health promotion program includes the provision of in-service training to all child protection workers on the factors that reduce the risk of SIDS and increase the safety of sleeping environments.¹⁵⁴ As part of the program, child protection workers seek to link families who are at increased risk of SIDS to the maternal and child health nurse in their community, for further advice and support. The program was evaluated in 2000 by the University of Melbourne, which reported that:

Overall the HRI initiatives to date have shown a marked impact in those cases [examined by the University of Melbourne study] where there has been specific deployment of the HRI initiatives, especially with respect to risk assessment, case planning and infant-relevant parenting assistance.¹⁵⁵

In 14 (70 per cent) of the 20 Ombudsman's cases that met the requirements of s19A(3)(a) of the *Parliamentary Commissioner Act 1971*, the mothers reported that they smoked during pregnancy. Our analysis of the Ombudsman's cases points to the importance of using appropriate opportunities that arise during interactions between the Department for Child Protection and women who are pregnant or planning to become pregnant, to provide them with information about the risks of smoking and the range of existing programs designed to assist people give up smoking.

Recommendation 9: It is recommended that wherever practicable the Department for Child Protection assists women with whom they have established relationships, and who are pregnant or planning to become pregnant, by providing them with information regarding the risks of smoking and the range of existing programs that assist people give up smoking.

¹⁵³ Office of the Child Safety Commissioner Victoria, *Tackling SIDS—a community responsibility, Child death group analysis*, Office of the Child Safety Commissioner Victoria, November 2005.

¹⁵⁴ Department for Child Protection Western Australia, *Casework Practice Manual – Section 5.1 Safety and Wellbeing Assessment*. <<http://manuals.dcp.wa.gov.au/manuals/cpm/Pages/default.aspx>>

Accessed: 25 August 2011. Available as at 30 October 2012.

¹⁵⁵ Campbell, L, Jackson, AC, Cameron, N, Smith, S & Goodman, H, *High Risk Infants Service Quality Improvement Initiatives-Evaluation Report*, Victorian Department of Human Services, 2000.

7.10 The involvement of fathers or grandparents

Our analysis of the 54 Ombudsman's cases identified 14 (26 per cent) cases in which the father or grandparents were immediately present.

In two of these 14 cases, the infant was in the primary care of their father, while in 10 of these cases, the fathers of infants, along with the mothers, were sharing the care of the infant. In 2006, the ABS found that 60 per cent of Australian fathers with children under the age of four years were involved in minding their children. On average, these fathers spent just over 25 hours per week minding their child.¹⁵⁶ More recently, the TICHR evaluation discussed the role of fathers and found that 'child health nurses and Aboriginal health workers maintained that co-sleeping education and information that is appropriate and relevant for fathers and other relatives and carers about safe co-sleeping requires development'.¹⁵⁷

In two of the 14 cases, the infant was in the primary care of a grandparent. In 2002, the ABS identified that 52 per cent of Australian children aged from zero to two years were in the care of their grandparents at some point during the previous year.¹⁵⁸ In a 2003 report produced by the Council on the Ageing, Indigenous survey respondents noted that many Indigenous grandparents had full-time responsibility for the children for intermittent periods of time, or had one or both parents and the grandchildren living with them.¹⁵⁹

These views were supported by stakeholders in our consultations, who identified that fathers and grandparents may both influence how mothers place the infant to sleep, and/or play the role of direct carer. This point was made in relation to both Indigenous and non-Indigenous families.

These findings point to the need to ensure that safe sleeping advice is communicated to, and put into practice by, fathers and grandparents who are caring for infants and placing them to sleep, either for their nightly sleep or for a daytime nap.

In addition, the research literature identifies that it is difficult for a pregnant woman to quit smoking while sharing a home with other smoking family members or her partner. When compared with pregnant women living with non-smokers, those women living with smokers were less likely to stop smoking during pregnancy and more likely to resume smoking after the delivery of their babies.¹⁶⁰ For this reason, it is important that partners and family

¹⁵⁶ Australian Bureau of Statistics, *How Australians Use Their Time, 2006* (4153.0), <<http://www.abs.gov.au/ausstats/abs@.nsf/mf/4153.0>> Accessed: 18 April 2012. Available as at 30 October 2012.

¹⁵⁷ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive State-wide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health, Western Australia, 2012, p. 9.

¹⁵⁸ Australian Bureau of Statistics, *Family Characteristics, Australia, June 2003* (4442.0), <<http://www.abs.gov.au/ausstats/abs@.nsf/mf/4442.0>> Accessed: 27 March 2012. Available as at 30 October 2012.

¹⁵⁹ Council on the Ageing (COTA) National Seniors (2003), *Grandparents Raising Grandchildren*, <<http://www.facs.gov.au/internet/facsinternet.nsf/VIA/grandparentsRaisingGrandchildrenReport.pdf>> Accessed 27 March 2012. Available as at 30 October 2012.

¹⁶⁰ Johnson, JL, Ratner, PA, Bortorff, JI, Hall, W & Dahinten, S, 'Preventing Smoking relapse in Postpartum Women', *Nursing Research*, vol.49(1), 2000, pp. 44-52. Cited by Ministry of Health, Canada, *Quit Smoking Telephone Counselling Protocol for Pregnant and Postpartum Women*. <<http://www.hc-sc.gc.ca/hc.ps/pubs/tobac-tabac/protocol/index-eng.php>> Accessed: 15 May 2012. Available as at 30 October 2012.

members of pregnant women are targeted as part of smoking-cessation programs.¹⁶¹

Recommendation 10: It is recommended that the Department of Health ensures that its strategies for delivering safe sleeping advice:

- assist fathers and grandparents to understand and apply the advice; and
- to fathers and grandparents are closely linked with the range of existing programs to assist people to give up smoking.

The Department for Communities administers a range of programs at the local community level that target the key audiences for safe sleeping advice, as identified by our analysis. These are: Indigenous parents and carers; and fathers and grandparents. Our consultations indicated that program workers are asked by participants to provide advice on a wide range of matters about infant and child care, including whether co-sleeping should be practised. These programs are not covered by the current Directive on co-sleeping or a similar statement. During our consultations, program workers reported that they provide varying information regarding safe sleeping, particularly co-sleeping. Given their frequent contact with the key audiences for safe sleeping advice identified in our research and analysis, these programs present a good opportunity to deliver safe sleeping advice to these audiences.

The Department for Communities will also need to ensure that program workers have the necessary skills and knowledge to provide the safe sleeping advice.

Recommendation 11: It is recommended that the Department for Communities collaborates with the Department of Health to establish a departmental policy on safe sleeping, based on the Department of Health's safe sleeping statement, to guide interactions between Department for Communities' staff and parents and carers.

Recommendation 12: It is recommended that the Department for Communities ensures that its adoption of the department's policy on safe sleeping is accompanied by strategies to:

- ensure that the relevant program workers have the skills and knowledge necessary to implement the policy in their programs;
- keep program workers' skills and knowledge up to date as information changes; and
- monitor and evaluate the implementation of its new procedures for providing the safe sleeping advice to families

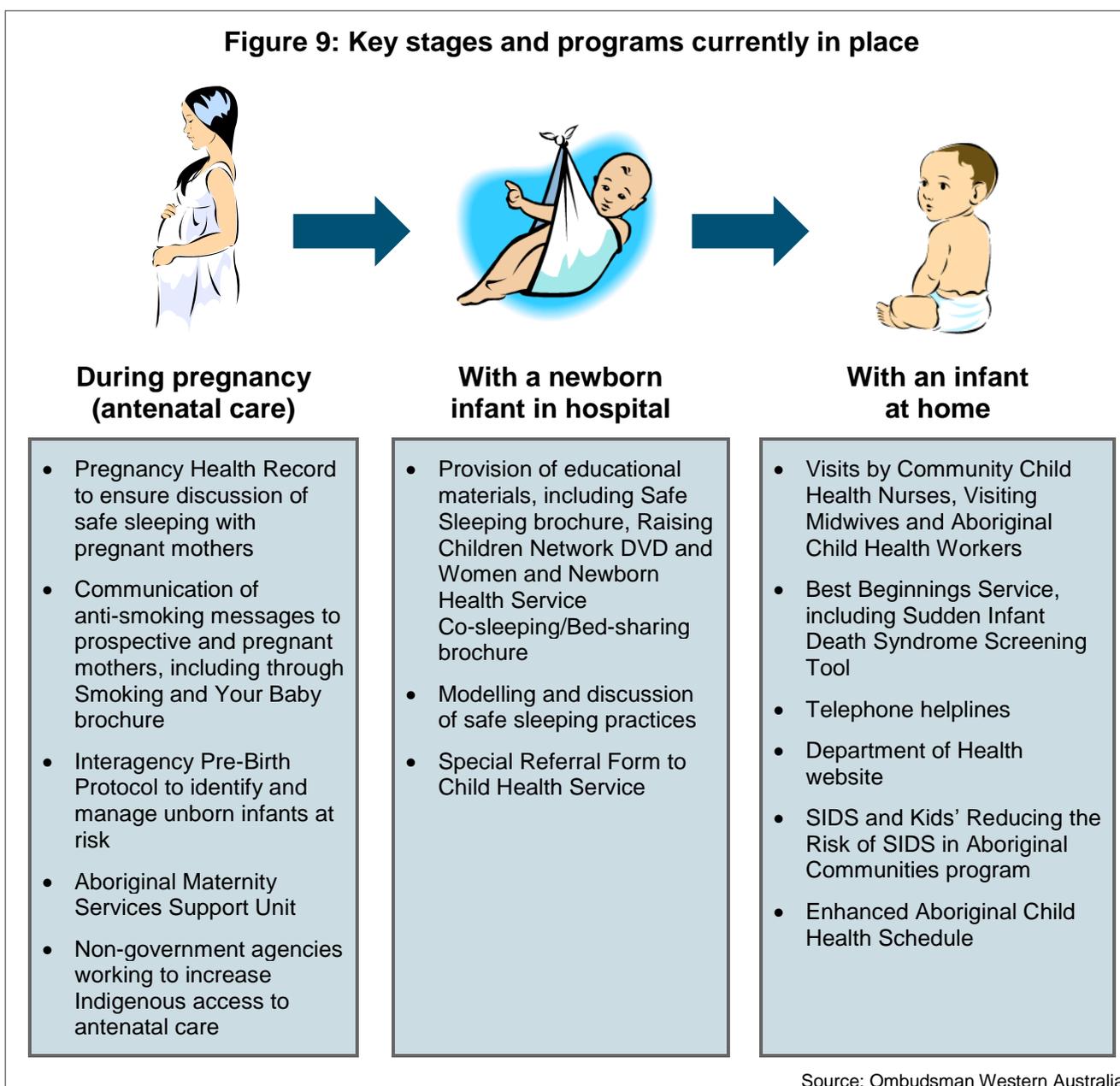
¹⁶¹ Ministry of Health, Canada, *Quit Smoking Telephone Counselling Protocol for Pregnant and Postpartum Women*. <<http://www.hc-sc.gc.ca/hc.ps/pubs/tobac-tabac/protocol/index-eng.php>> Accessed: 15 May 2012. Available as at 30 October 2012.

8 Opportunities identified by departments to put the recommendations into practice

8.1 Introduction

A woman's journey through pregnancy, birth and the first year of her infant's life can be broken into three key stages, as illustrated in Figure 9 below. At each of the three stages, State Government hospitals and health services, the private health sector (including private maternity hospitals and general practitioners), Aboriginal health and medical services, and community sector organisations play an important role. At each of the stages, there also are government and non-government programs that, as a whole or in part, aim to assist parents and carers to ensure the safest possible sleeping environment for infants. A range of relevant programs are listed in the figure and discussed in more detail below.

Figure 9: Key stages and programs currently in place



During our investigation, stakeholders identified opportunities for putting recommendations identified in the preceding chapter into practice. This chapter discusses those opportunities. They aim to complement the education and awareness-raising among the community as a whole, which is conducted by government and non-government organisations, including SIDS and Kids WA.

8.2 Opportunities in the antenatal period

8.2.1 Structured antenatal care provides early opportunities for communicating safe sleeping advice

The antenatal period provides an opportunity to educate parents about safe sleeping environments and therefore provides opportunities to reduce the risks of sleep-related infant death, particularly as information provided at this time may also guide nursery preparation and purchases.¹⁶² During this time, structured antenatal education (often referred to as 'antenatal care') may be provided by general practitioners, obstetricians, midwives, community child health nurses and Aboriginal health and medical services, possibly in conjunction with hospitals.

The Pregnancy Health Record Western Australia (**the Pregnancy Health Record WA**) is a recently introduced antenatal care strategy designed to involve pregnant women in communicating their health status and the plans for their care. The strategy involves a document to be held by women recording their health information during their pregnancy.¹⁶³ Since the first distribution of the Pregnancy Health Record in September 2005, this strategy has been implemented for all pregnant women at King Edward Memorial Hospital, as well as all other hospitals and health regions.¹⁶⁴

The Pregnancy Health Record WA includes a section on safe sleeping that emphasises the safe sleeping recommendations provided on SIDS and Kids Australia's website and incorporates the SIDS and Kids-developed pictures depicting safe sleeping techniques.¹⁶⁵ The Pregnancy Health Record WA also contains a checklist of pregnancy education, which prompts health workers to discuss with pregnant women the risks associated with SIDS, as well as the risks associated with co-sleeping. This also presents an opportunity for the Department of Health to implement the safe sleeping statement set out in Recommendations 1 and 2, by ensuring that the discussions associated with the Pregnancy Health Record reflect the safe sleeping statement.

¹⁶² Office of the Child Safety Commissioner Victoria, *Tackling SIDS—a community responsibility, Child death group analysis*, Office of the Child Safety Commissioner Victoria, November 2005, p. ix.

¹⁶³ Department of Health Western Australia, Women and Newborn Health Service, *Services A – Z, King Edward Memorial Hospital, Pregnancy Health Record*.

<<http://www.kemh.health.wa.gov.au/services/mpowher/index.htm>> Accessed: 20 October 2011. Available as at 30 October 2012.

¹⁶⁴ Department of Health Western Australia, Women and Newborn Health Service, *Services A – Z, King Edward Memorial Hospital, Pregnancy Health Record*.

<<http://www.kemh.health.wa.gov.au/services/mpowher/index.htm>> Accessed: 20 October 2011. Available as at 30 October 2012.

¹⁶⁵ Department of Health Western Australia, Women and Newborn Health Service, *Pregnancy Health Record*, September 2009.

Recommendation 13: It is recommended that the Department of Health ensures that the discussions associated with the Pregnancy Health Record reflect the safe sleeping statement set out in Recommendations 1 and 2.

8.2.2 Access to antenatal care by Indigenous women will need to be improved if this is to be an effective strategy for communicating safe sleeping advice to them

The Aboriginal Health Council of WA has noted that ‘Aboriginal and Torres Strait Islander women attend antenatal care later and less frequently than non-Indigenous women’.¹⁶⁶ This issue was also raised during our consultations, with stakeholders reporting that Indigenous women will frequently present to a general practitioner or hospital in their third trimester of pregnancy. The stakeholders who we consulted indicated that this is due to a fear of hospitals in general and fear of being pressured to give birth in a hospital distant from home.

In 2010, the Department of Health, in partnership with the Commonwealth Government, established the Aboriginal Maternity Services Support Unit (**the Unit**). Two key elements of the Unit’s strategic plan are to:

- increase access to antenatal care, particularly for young Indigenous women; and
- increase access to antenatal, postnatal, child and maternal health services to Indigenous families, with an emphasis on early presentation and regular visits throughout pregnancy.¹⁶⁷

Non-government organisations are also relevant stakeholders and work in this area, using models which, for example, involve recruiting respected Indigenous women working in their own communities to identify pregnant women and encourage them to access antenatal care. During our consultations, several stakeholders suggested that Indigenous health and medical services also have good connections with Indigenous communities. It would be useful for the Department of Health to consider further engaging with organisations and programs such as these to reach Indigenous people on their behalf.

Recommendation 14: It is recommended that the Department of Health considers further ways of working collaboratively with non-government organisations that are already working effectively in Indigenous communities to deliver safe sleeping advice to Indigenous women during the antenatal period.

¹⁶⁶ Aboriginal Health Council of Western Australia, *Maternal and Child Health Model of Care in the Aboriginal Community Controlled Health Sector*, June 2010.

¹⁶⁷ Department of Health Western Australia, Women and Newborn Health Service, *Aboriginal Maternity Service Support Unit Strategic Plan 2010-2014*, 2010.

8.3 Opportunities while newborn infants are in hospital

8.3.1 Modelling how to create a safe sleeping environment in hospital could be one of the most powerful ways of communicating safe sleeping advice

Nearly 99 per cent of pregnant women in WA will give birth in a hospital.¹⁶⁸ The period that parents are in hospital with their newborn infant provides an opportunity for health professionals to discuss and demonstrate safe sleeping practices to nearly all parents and their families. For example, a NSW report noted that:

Numerous studies have pointed to the importance of the provision of information on safe sleeping by health professionals. Parents who place their infant to sleep on their backs are most likely to cite recommendations from a health professional as the primary reason for choosing that particular sleep position.¹⁶⁹

It is therefore important that health professionals working in hospitals thoroughly understand the safe sleeping statement set out in Recommendations 1 and 2 so that they can discuss and model the appropriate safe sleeping practices with and to parents. However, the TICHR evaluation identified that some hospital-based midwives are still modelling placing infants to sleep on their stomachs,¹⁷⁰ with the report finding that the 'majority of health professional/worker participants agreeing that midwives in regional and metropolitan maternity units needed to be educated consistently about modelling and showing women how to settle their babies so that they slept on their backs'.¹⁷¹

Responsibility for ensuring that health workers in State Government health services are educated in implementing the current Directive setting out instructions regarding co-sleeping lies with individual Area Health Services, which are part of the Department of Health.¹⁷² The TICHR evaluation found that health professionals in hospitals were not consistently modelling the co-sleeping instructions in the Directive, attributing this to evidence that 'dissemination processes for the Directive were effective, but the "how to" implementation of the Directive was not clear'.¹⁷³

¹⁶⁸ Department of Health Western Australia, Perinatal and Infant Mortality Committee, *Perinatal, Infant and Maternal Mortality in Western Australia 5 Year Cohort of 2004-2008 Births*, December 2010.

¹⁶⁹ NSW Child Death Review Team, *Sudden Unexpected Deaths in Infancy: the New South Wales Experience*, Report written for the NSW Child Death Review Team by the Commission for Children and Young People, Sydney, NSW Commission for Children and Young People, NSW Child Death Review Team, 2005.

¹⁷⁰ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive State-wide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health, Western Australia, 2012, p. 38.

¹⁷¹ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive State-wide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health, Western Australia, 2012, p. 42.

¹⁷² Department of Health Western Australia, *Operational Statewide Policy For Identifying And Responding To Motherbaby Co-Sleeping/Bed-Sharing In WA Health Hospitals And Health Services*, May 2008.

¹⁷³ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive State-wide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health, Western Australia, 2012, p. 29.

To address this, the TICHR evaluation recommended that:

Professional development about co-sleeping is ongoing, utilises a “train the trainer” method and interactive “e-learning” modules that enable health professionals in a range of maternity system services to collaborate and discuss diverse “case studies” and co-sleeping issues.¹⁷⁴

The Department of Health, in partnership with SIDS and Kids WA, has recently completed an e-learning package on co-sleeping with infants, to provide training for health professionals including hospital staff in contact with new parents. The objective of the e-learning package is to reinforce the consistent implementation of the Directive and the associated Guidelines and ensure that co-sleeping practices are modelled and discussed accurately, consistently and appropriately.

At this early stage, there are no plans to make completion of the e-learning package mandatory for health workers likely to have contact with infants and their families. It would be useful to put arrangements in place to monitor its take-up and completion, and resulting changes in practice.

Recommendation 15: It is recommended that the Department of Health ensures that health professionals are provided with professional development that enables them to accurately, consistently and appropriately discuss and model safe sleeping practices in hospitals.

Recommendation 16: It is recommended that the Department of Health monitors and evaluates the implementation, take-up and effectiveness of professional development, once the current plans for this are put into action.

8.3.2 Information materials on safe sleeping are currently distributed in hospital but need to be consistent and tailored to key audiences

Consistency between information materials

Under the Directive, while in hospital, mothers of newborn infants are provided with the Department of Health’s *Women and Newborn Health Service Co-sleeping/Bed-sharing* brochure (**the Department of Health brochure**) and SIDS and Kids WA’s *Safe Sleeping* brochure (**the SIDS and Kids brochure**). At this time, all parents are also provided with a Raising Children Network DVD produced by the Commonwealth Government as part of its *Stronger Families and Communities Strategy* (**the Raising Children Network DVD**).¹⁷⁵ Our review of these three materials indicates that there are certain potentially inconsistent messages about co-sleeping between these materials.

¹⁷⁴ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive State-wide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health, Western Australia, 2012, Recommendation 3, p. 13.

¹⁷⁵ Raising Children Network, Australian parenting DVD a world first, 2008. <<http://www.families.fahcsia.gov.au/our-responsibilities/families-and-children/publications-articles/frs-sector-e-news/edition-11-11-february-2008?HTML>> Accessed: 14 June 2012. Available as at 30 October 2012.

The Department of Health brochure implements the Department of Health policy position on co-sleeping, as set out in the Directive. The Department of Health brochure points out the link between co-sleeping and SIDS, and describing situations where this is a high risk. It also provides parents with tips on how to minimise risks when co-sleeping with an infant more than three months of age.¹⁷⁶ The Raising Children Network DVD advises parents that ‘the most important thing is that bed-sharing is done safely’¹⁷⁷ and providing instructions for doing so.

The SIDS and Kids brochure contains illustrations of different sleeping situations marked with a tick or a cross. The brochure shows a cross next to an image of co-sleeping and a tick next to a cot in the parents’ room. It states that the ‘safest place for baby to sleep is in a safe cot next to the parents’ bed’. No information is provided on how to minimise risks when co-sleeping.

The TICHR evaluation found that inconsistency in the messages contained in the different materials creates confusion for parents.¹⁷⁸ This issue was also raised during our consultations.

Recommendation 17: It is recommended that the Department of Health ensures that materials providing advice about co-sleeping to parents of newborn infants in hospital consistently reflect the Department of Health’s safe sleeping statement set out in Recommendations 1 and 2.

Appropriateness of information formats for intended audiences

As discussed in Chapter 7, our analysis of the Ombudsman’s cases identified Indigenous parents and carers, those from CaLD backgrounds, and fathers and grandparents as key audiences for the safe sleeping advice. In addition, our detailed analysis of the 19 Ombudsman’s cases that involved Indigenous infants, discussed in section 7.7, indicated that the mothers of Indigenous infants were younger than the mothers of the non-Indigenous infants involved in the Ombudsman’s cases. These findings point to the need to reconsider the formats in which information is provided to mothers while they are in hospital with their newborn infant, to include information through media other than brochures, and for audiences other than mothers. It may be necessary, for example, to use different formats tailored to each of these different groups.

SIDS and Kids WA has developed and distributed modified resources to provide safe sleeping messages to different populations in the WA community¹⁷⁹; for example, its brochure entitled *Reducing the Risk of SIDS*, which was specifically designed for Indigenous communities. The Department of Health, however, has advised that it is no

¹⁷⁶ Department of Health Western Australia, *Operational Statewide Policy For Identifying And Responding To Motherbaby Co-Sleeping/Bed-Sharing In WA Health Hospitals And Health Services*, May 2008.

¹⁷⁷ Raising Children Network, *Sharing your bed with baby*. <http://raisingchildren.net.au/articles/sharing_your_bed_with_your_baby.html?highlight=co-sleeping> Accessed: 11 November 2011. Available as at 30 October 2012.

¹⁷⁸ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive State-wide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health, Western Australia, 2012, Recommendation 3, p.13.

¹⁷⁹ SIDS and Kids WA, *Education resources*. <<http://sidsandkidswa.org/safe-sleeping/education-resources.aspx>> Accessed: 8 November 2011. Available as at 30 October 2012.

longer distributing this brochure, although it is continuing to distribute the two brochures and the DVD discussed above.

Recommendation 18: It is recommended that the Department of Health reviews its strategies for communicating the safe sleeping advice while mothers are in hospital with their newborn infant, to ensure that they are appropriate to the following key audiences: Indigenous parents and carers; parents and carers from CaLD backgrounds; fathers and grandparents, as well as mothers; and relatively young mothers.

8.4 Opportunities once the infant leaves hospital

8.4.1 Home-visiting programs could provide one-on-one assistance to parents and carers with putting the safe sleeping advice into action

While it is important that parents are provided with information materials in hospital, the timing of the provision of this information can mean it is not always read, understood and put into practice at home. It is therefore important to use opportunities once the mother and infant return home from hospital to reinforce the safe sleeping advice provided in hospital. There are several existing strategies by which this can happen, as discussed below, together with some recommended additional strategies identified by stakeholders during our consultations or through our research and analysis.

Visiting Midwifery Services

When a woman leaves hospital with her infant she may be visited at home by a midwife working for the Department of Health's Visiting Midwifery Services (**the Midwifery Services**). The Midwifery Services are available to women who do not stay in hospital after the birth of their infant. Through the Midwifery Services, a midwife will visit a mother and her infant at home every one or two days until day ten after the infant's birth, or longer if necessary. Like a midwife in hospital, a visiting midwife provides support and advice to new parents.¹⁸⁰ If a visiting midwife has concerns regarding the mother or the infant's progress, he/she is able to refer the mother for further assistance (for example, to her general practitioner, to community health services or back to the hospital system). Visiting midwives could also provide advice on safe sleeping practices.

Visits by Community Child Health Nurses

The Department of Health has advised that community child health nurses, along with Aboriginal health workers (where applicable), visit the mother and her infant at home within the first 10 days of a child's life. The Western Australian Auditor General, in a 2010 report on child health checks (**the Auditor General's Report**), found that 99 per cent of the initial home visits had been conducted.¹⁸¹

These visits provide an early opportunity to educate parents about safe sleeping practices. Procedures for the visits are detailed in the Community Health Guidelines, which include a

¹⁸⁰ Department of Health Western Australia, *Improving Maternity Services: Working together across Western Australia, A Policy Framework*, 2008.

¹⁸¹ Department of Health Western Australia, *Guidelines for Birth to School Entry, Universal Contact Schedule, Community Health, Policies Procedures and Guidelines*, 2007.

sleep assessment, to be conducted during the initial visit. As part of the sleep assessment, the community child health nurse is instructed to determine whether parents are demonstrating safe sleeping practices, by asking about or observing the infant's normal sleeping position, and by determining if parents are aware of all of the situations when bed-sharing and co-sleeping with their infant are considered high-risk.

In addition to the initial visit, the Department of Health intends that community child health nurses offer, and proactively schedule, free child health checks to parents of infants at six to eight weeks, three to four months, and eight months of age. These checks potentially provide opportunities for community child health nurses to reinforce safe sleeping advice throughout a child's first year of life, including during the high-risk period between one and four months of age. The Auditor General's Report found that the proportion of conducted checks declined as infants aged, to 95 per cent at six to eight weeks of age, and 80 per cent at three to four months of age.¹⁸² The State Government recently announced that, as part of the 2012-2013 State Budget, it will be allocating \$58.5 million over four years for up to 100 additional community health nurses.¹⁸³

Referral of high-risk infants for priority access to child health services

In September 2011, the Department of Health introduced a new process for identifying infants in need of priority care by community child health nurses and a mechanism for notifying community child health nurses of these cases. As part of the new process, a Special Referral Form to Child Health Service (**the Form**) can be completed at any time before or after birth where certain risk factors have been identified. These risk factors include parental alcohol abuse, parental anxiety and family instability, as well as infant factors such as low birth weight, prematurity and difficulty in feeding.

The Form is to be provided to the central child health services team, which is then responsible for determining the child health centre to be notified. The local community child health nurse is to consider the identified risk factors and use their clinical judgement to prioritise contact with the family, identify the family's needs and manage or refer the family as required. As part of this program, community child health nurses are also well-placed to provide advice on safe sleeping practices.

The Enhanced Aboriginal Child Health Schedule

As described above, a universal schedule of child health checks is offered to families in WA. In 2008, the Enhanced Aboriginal Child Health Schedule (**the Enhanced Schedule**) was developed to offer a child health service to Indigenous families of children who are considered at risk or have high needs. The Enhanced Schedule was initially rolled out in the Perth metropolitan area, and training is now underway with the aim of extending the services to regional areas. The Enhanced Schedule involves a child health worker conducting a total of 15 home visits (an additional seven visits to the universal schedule) to Indigenous families over the first five years of the child's life, in order to provide them with a child healthcare service tailored to suit their needs. These visits are designed to be conducted as home visits but can be offered at a different venue at the request of the family. At each visit, the child health worker will address, among other aspects of health,

¹⁸² Office of the Auditor General for Western Australia, *Universal Child Health Checks*, Report 11, November 2010.

¹⁸³ Government of Western Australia, 2012-13 State Budget. <<http://ourstatebudget.wa.gov.au>> Accessed: 30 May 2012. Available as at 30 October 2012.

parental lifestyle factors such as smoking, alcohol use and drug abuse. As part of this program, Aboriginal health workers and other staff will also provide advice on safe sleeping practices.

A pilot of the Enhanced Schedule has been conducted and is currently being reviewed by the Telethon Institute for Child Health Research.

Visiting midwives, community child health nurses and Aboriginal health workers could reinforce the safe sleeping advice provided in hospital

Visiting midwives, community child health nurses and Aboriginal health workers working for State Government health services are required to comply with the Directive when providing advice on infant sleeping practices. However, the TICHR evaluation found that the Directive was not universally known to midwives and community child health nurses. Those midwives working in community health settings, and child health nurses working in regional settings or Aboriginal-controlled health organisations were less likely than other evaluation participants to know about the Directive.¹⁸⁴ Some evaluation participants from these backgrounds had not heard of the Directive at all.¹⁸⁵ In response to these findings, the TICHR evaluation has recommended that ‘the OD [Operational Directive] is distributed to diverse maternity health system services, including those not connected to the Department’s “global email”, such as community, women’s health, multicultural and Aboriginal community-controlled organisations’.¹⁸⁶ Our findings point to a similar need to ensure that all visiting midwives, community child health nurses and Aboriginal health workers are aware of the revised safe sleeping statement set out in Recommendations 1 and 2.

The TICHR evaluation also found that education was needed during university or college training, as well as annually within workplaces. This finding reflected concerns raised by health professionals and workers in Aboriginal community-controlled health organisations that university and college curriculums did not include any information or education about the sudden unexpected death of infants.¹⁸⁷ These concerns apply equally to the safe sleeping advice discussed in this report.

¹⁸⁴ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive State-wide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health, Western Australia, 2012, p. 49.

¹⁸⁵ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive State-wide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health, Western Australia, 2012, p. 34.

¹⁸⁶ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive State-wide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health, Western Australia, 2012, p. 12.

¹⁸⁷ Dodd, J, *Evaluation of the Department of Health Western Australia Operational Directive State-wide Co-sleeping/Bed-sharing Policy for WA Health hospitals and health services*, Collaboration for Applied Research and Evaluation, Telethon Institute for Child Health Research under contract with the Department of Health, Western Australia, 2012, p. 33.

Recommendation 19: It is recommended that the Department of Health ensures that visiting midwives, community child health nurses and Aboriginal health workers apply the safe sleeping statement set out in Recommendations 1 and 2.

Recommendation 20: It is recommended that the Department of Health works with universities and colleges to ensure that midwives, community child health nurses and Aboriginal health workers are educated about the safe sleeping statement set out in Recommendations 1 and 2.

8.4.2 The Best Beginnings Service is well-placed to assist in delivering safe sleeping advice to parents and carers needing extra support

The Best Beginnings Service (**the Service**) is a home-visiting service provided to primary caregivers (usually first-time mothers) with 'high-risk factors for poor life outcomes'.¹⁸⁸ The Service is a joint initiative between the Department for Child Protection and the Department of Health that 'provides primary caregivers with professional support that aims to empower them to create a safe and nurturing home environment and facilitate access to supportive social links'.¹⁸⁹ The Service is structured according to individual needs, ideally beginning during the antenatal period and extending until the child is two years' old.¹⁹⁰

The Service commenced in late-2000 and is delivered by staff from the Department for Child Protection, the Department of Health, and community agencies.¹⁹¹ Referrals to the Service can be made by the Department for Child Protection, community child health nurses, hospitals, mental health agencies, and non-government organisations. Families of children about whom concerns have been raised with the Department for Child Protection are not to be referred to the Service.

The Service has a range of objectives in the areas of child health and well-being, parent and family functioning, and social support networks. One objective in the area of child health and well-being is that parents or caregivers demonstrate appropriate SIDS-prevention behaviour. The SIDS Screening Tool is used to assess the parents' or caregiver's application of steps to reduce the risk of SIDS.¹⁹² The assessment is conducted by the parent support worker during the 'Engagement' phase of the program,

¹⁸⁸ Department for Child Protection Western Australia, *Casework Practice Manual – Section 3.3 Best Beginnings Referral*. <<http://manuals.dcp.wa.gov.au/manuals/cpm/Pages/default.aspx>> Accessed: 27 January 2012. Available as at 30 October 2012.

¹⁸⁹ Department for Child Protection Western Australia, *Casework Practice Manual – Section 3.3 Best Beginnings Referral*. <<http://manuals.dcp.wa.gov.au/manuals/cpm/Pages/default.aspx>> Accessed: 27 January 2012. Available as at 30 October 2012.

¹⁹⁰ Department for Child Protection Western Australia, *Best Beginnings*. <<http://www.dcp.wa.gov.au/SUPPORTINGINDIVIDUALSANDFAMILIES/Pages/BestBeginnings.aspx>> Accessed: 19 April 2012. Available as at 30 October 2012.

¹⁹¹ Department for Child Protection Western Australia, *Best Beginnings*. <<http://www.dcp.wa.gov.au/SUPPORTINGINDIVIDUALSANDFAMILIES/Pages/BestBeginnings.aspx>> Accessed: 19 April 2012. Available as at 30 October 2012.

¹⁹² Department for Child Protection Western Australia, *Responsible Parenting Service and Practice Framework*, July 2009. <[http://www.dcp.wa.gov.au/Resources/Documents/Policies and Frameworks/Responsible Parenting Services and Practices Framework 2009.pdf](http://www.dcp.wa.gov.au/Resources/Documents/Policies_and_Frameworks/Responsible_Parenting_Services_and_Practices_Framework_2009.pdf)> Accessed: 19 April 2012. Available as at 30 October 2012.

usually by the time that the infant is 7 weeks of age. Safe sleeping information and practices more broadly are not covered.

Recommendation 21: It is recommended that the Department for Child Protection and the Department of Health review the Best Beginnings Service and the SIDS Screening Tool to ensure they reflect the safe sleeping statement set out in Recommendations 1 and 2, and are kept up to date as information changes.

Recommendation 22: It is recommended that the Department for Child Protection and the Department of Health consider modifying the program guidelines for the Best Beginnings Service so that the assessment using the SIDS Screening Tool is conducted within the first four weeks after the birth of the infant.

8.4.3 Telephone helplines already provide advice to many parents and carers and could help deliver safe sleeping advice

Government and non-government organisations operate telephone helplines that directly or indirectly provide advice to parents about pregnancy and caring for infants. In WA, these include the Department for Communities' Parenting WA Line, Health Direct Australia's Pregnancy, Birth and Baby Helpline, the non-government organisation Ngala's Helpline and SIDS and Kids WA's Child Loss Support Line.

During our consultations, one of these organisations advised that approximately 70 per cent of its contact with parents involved questions about infants and their sleep. Program workers reported that they provided varying information regarding safe sleeping, particularly co-sleeping. For example, program workers advised that they may:

- provide information consistent with SIDS and Kids WA's recommendations;
- inform parents of the different positions of both SIDS and Kids WA and co-sleeping proponents, and allow parents to make their own decision;
- have no fixed position on co-sleeping; and/or
- provide information to parents and carers on a case-by-case basis, taking individual and family circumstances into account.

This is potentially confusing for parents and carers. All stakeholders consulted viewed the Department of Health as an authoritative source of information about infant health and were keen to obtain further information about the Directive for incorporation into their own procedures. It would therefore be useful for the Department of Health to communicate with relevant non-government organisations regarding its statement on safe sleeping, so that these organisations can voluntarily incorporate this position on safe sleeping into their work services.

Recommendation 23: It is recommended that the Department of Health communicates to, and works with, relevant non-government organisations regarding its safe sleeping statement set out in Recommendations 1 and 2, so that these organisations can consider incorporating the statement into their own services.

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