July 2021

Infant safe sleeping

Clinical guidance

|  |
| --- |
|  |
| To receive this publication in an accessible format phone 03 9096 1384,  using the National Relay Service 13 36 77 if required, or [email Safer Care Victoria](mailto:info@safercarevictoria.vic.gov.au) <info@[safercarevictoria.vic](mailto:safercarevictoria@dhhs.vic).gov.au>  Authorised and published by the Victorian Government, 1 Treasury Place, Melbourne.  © State of Victoria, Australia, Safer Care Victoria, July 2021  ISBN 978-1-76096-356-9 (pdf/online/MS word)  Available at the [Safer Care Victoria website](https://www.safercare.vic.gov.au) <https://[www.safercare.vic](http://www.safercare.vic).gov.au>  Victoria State Government |

# Introduction

By following simple safe sleeping practices, the risk of sudden unexpected death in infancy (SUDI) can be significantly reduced. This guidance aims to help maternity and neonatal care providers provide consistent advice to parents and caregivers, and model safe sleeping practices in their health service.

|  |
| --- |
| **Definitions**  SUDI refers to all cases of sudden and unexpected death in infancy, including deaths from sudden infant death syndrome (SIDS) and fatal sleeping accidents.  SIDS is ‘the sudden and unexpected death of an infant under one year of age, with onset of the lethal episode apparently occurring during sleep, which remains unexplained after a thorough investigation including performance of a complete autopsy and review of the circumstances of death and the clinical history’.2  A fatal sleep accident is a preventable infant death associated with suffocation or entrapment from factors within the sleep environment. |

## Background

Although the rates of SUDI continue to decline in Australia, it remains a significant cause of death in infants under one year of age.1 In 2018 there were 93 deaths classified as SUDI in Australia, which includes SIDS and fatal sleeping accidents (a rate of 0.3 deaths per 1,000 births).3

For more information, read Red Nose Australia’s [facts and figures](https://rednose.org.au/page/facts-and-figures) <https://rednose.org.au/page/facts-and-figures>.

In Victoria, all infant deaths are reportable to the Consultative Council on Obstetric and Paediatric Mortality and Morbidity (CCOPMM).

## Using this guidance

Use this guidance to:

* provide all parents with advice about safe sleeping for their infant as part of routine ante-natal and post-natal care
* use safe sleeping practices in all maternity and neonatal settings to role model the appropriate practices to parents.

# Identifying infants at risk

Infants are at the highest risk in the first four months of life, although SUDI deaths continue to occur beyond this period.

The following infants are at increased risk of SUDI:4,5,6,7

* Low birth weight (<2500 grams).
* Preterm (<37 weeks’ gestation).
* Any infant who has been admitted to a neonatal unit.
* Twins and other multiples.

Risks are greater if either parent smokes or uses alcohol or drugs (prescription or illegal) that cause sedation and impair their ability to respond to their infant.

Infants born to Aboriginal women are at increased risk, as are those in single parent families or where mothers have psychological vulnerabilities and where families are in crisis (family violence, social deprivation).1,5,6,7,8

## Diagnosing SUDI

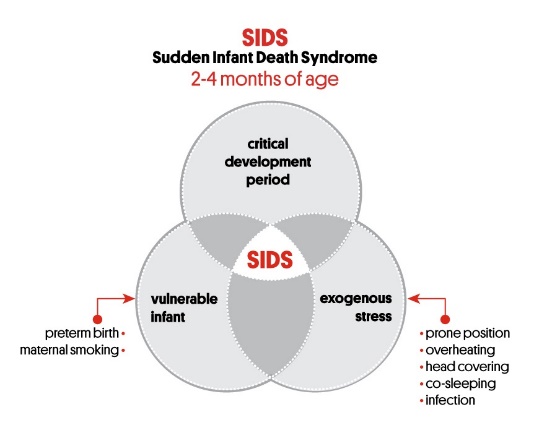
The best way to determine why an infant may have died suddenly and unexpectedly is to perform an autopsy, review the clinical history and to thoroughly investigate the circumstances of death, including the death scene.

Sometimes these investigations will reveal causes of death including asphyxiation by bed clothes, pillows, infection, metabolic disorders, genetic disorders, or non-accidental injury such as homicide, while others are unexplained.

SIDS is a diagnosis of exclusion with extensive research undertaken into the underlying mechanism. The current proposed model is the ‘triple risk hypothesis’9 where an infant is:

* a vulnerable infant (i.e. preterm or exposed to smoking)
* at a critical but unstable development period in homeostatic (self-regulating) control (2–4 months of age)4
* exposed to an exogenous (external) stressor, (e.g. prone position).4

Triple risk hypothesis model, 2–4 months9



Read more about [the triple risk model](https://rednose.org.au/article/the-triple-risk-model) <https://rednose.org.au/article/the-triple-risk-model>.

# Providing advice to families

It is essential that all families – including parents, extended family and other caregivers – receive clear and consistent information about safe sleeping and reducing the risk of SUDI. Encourage parents to discuss safe sleeping before and after birth and to complete a safe sleeping checklist with their maternal child health nurse at home.

Document that you have provided verbal and written information consistent with the below in the relevant clinical notes.

Red Nose Australia has a range of [parent resources and fact sheets](https://rednose.org.au/resources/education) < https://rednose.org.au/resources/education>

## Preparing the home environment

### Choosing a cot

Sleep infants on a firm, flat surface, preferably in a cot/bassinet that meets Australian safety standards, with a well-fitting mattress and lightweight bedding.

Choose a cot/bassinet that is not faulty or damaged. Using fragile or broken infant and nursery products increases the risk of entrapment and fatal sleeping accidents.

Do not use commercially available nests/cocoons/hammocks that may curve the infant’s position, resulting in the chin falling towards the chest and obstructing the airway.

Do not elevate cots/bassinets. All infants should sleep on a flat surface. Elevating the cot of an infant sleeping on their back does not reduce gastro-oesophageal reflux.

### Keep infants smoke free

Keep infants in a smoke-free environment before and after birth.

Do not smoke around infants or near where infants sleep.

## While in hospital

A responsible third party should observe skin-to-skin contact and early breastfeeding in the first hours after birth.

### Skin to skin contact immediately after birth

Safe skin-to-skin contact involves placing a naked newborn chest down on the mother’s bare chest, ensuring the infant’s face can always be seen, that their mouth and nose are not covered, and their head is turned to the side with a straight neck. Cover the infants head with a hat and body with a blanket to help keep them warm and dry.17

### Breastfeeding

Breastfeeding reduces the risk of SUDI.13 Encourage and help mothers wishing to breastfeed, including those who smoke.

## At home

### Sleep position

Educate parents and caregivers about the need to sleep infants on their back from birth, not on their tummy or side.

Provide parents and caregivers with information on helping infants sleep and settle.11

For more information, download Red Nose Australia’s [Safe sleeping brochure](https://rednose.org.au/downloads/RedNose-SafeSleep-HealthProfEducators_Mar21.pdf) <https://rednose.org.au/downloads/RedNose-SafeSleep-HealthProfEducators\_Mar21.pdf>

#### Sleep infants with their head and face uncovered

Avoid loose or soft bedding that could cover an infant’s face (i.e. doonas, loose blankets, pillows). Do not have cot bumpers, sheepskins or toys in the cot/bassinet.

Sleep infants at the foot of the cot to reduce accidental head covering by bedding.

Sleeping bags should be the appropriate size, lightweight, with a fitted neck and armholes or sleeves and must not have a hood.

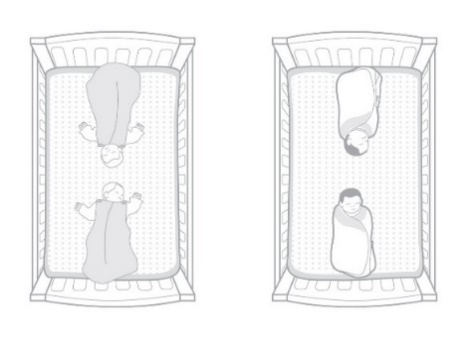
Hats/bonnets are not required indoors, especially if the infant is sleeping.

#### Co-bedding of twins/multiples

Co-sleeping of twins/multiples cannot be recommended.

If parents choose to co-sleep their twins or multiples, the principles of safe sleeping apply to the sleeping environment of each infant. For example, using an ‘end to end’ arrangement may be the safest way to achieve a safe sleeping environment for each infant.

End to end arrangement18



#### Swaddling or wrapping

There is no evidence that swaddling decreases the risk of SUDI.

Swaddled infants must never be placed prone (on their tummy) to sleep.

Stop swaddling as soon as the infant shows developmental signs of being able to roll as they need their arms free once able to roll (approximately three months of age).

Use only lightweight wraps such as cotton or muslin to reduce the risk of overheating.

Use extreme caution with commercially available swaddle products as these are not recommended.

For more information, download Red Nose Australia’s [Safe wrapping brochure](https://rednose.org.au/downloads/RN3356_SafeWrapping_DL_Oct2018_1.pdf) <https://rednose.org.au/downloads/RN3356\_SafeWrapping\_DL\_Oct2018\_1.pdf>

### Room sharing/co-sleeping

The safest place for an infant to sleep is in their own cot, in the same room as the parent/adult care giver until at least six months of age (preferably 12 months).10

It is recognised that co-sleeping (sharing the same sleep surface) may be valued, convenient, support the establishment of breastfeeding and promote parent and infant mental health.12

If parents choose to co-sleep, provide them with information about the risks and benefits of co-sleeping, so they can make an informed decision for their individual family circumstances. Advise parents of the risks of co-sleeping for all infants under three months of age, even if they don’t smoke or drink alcohol and their infant is breastfed.

Co-sleeping with an infant if the parents/caregivers smoke, drink alcohol or take drugs that may affect their consciousness, is especially dangerous. Warn parents of the significantly increased risk and recommend they have strategies in place to avoid bed sharing in these circumstances.

Advise parents/caregivers that sleeping on a couch/sofa or other soft surface (e.g. beanbag) with an infant, significantly increases the risk of entrapment and other fatal sleeping accidents and therefore, must be avoided.

For more information, download Red Nose Australia’s [Co-sleeping](https://rednose.org.au/downloads/CosleepingGuideforParents_Mar21.pdf) guide for parents <https://rednose.org.au/downloads/CosleepingGuideforParents\_Mar21.pdf>

#### Home monitoring

Home monitors are not recommended for preventing SUDI. Encourage parents to seek the advice of their paediatrician, general practitioner, or maternal child health nurse before purchasing or using a monitor at home.

### Other considerations

#### Dummy use

The routine use of a dummy is associated with a reduced risk of SUDI.14 Do not use dummy strings/cords as they may increase the risk of entanglement.

Supported the establishment of planned breastfeeding before introducing a dummy.

#### Infant carriers and slings

Infant deaths associated with the use of carriers and slings have been reported.

Refer to the ‘Tight, In view at all times, Close enough to kiss, Keep chin off the chest, Supported back’ (TICKS.)19,20 principles when choosing a carrier or sling for babywearing. That is:

* the sling/carrier is tight, and the infant is upright
* they can see their infants face
* the infant’s airways are always supported and clear (i.e. chin off the chest)
* the back is in a natural position.

For more information, download the Australian Competition and Consumer Commission’s [Keeping baby safe: A guide to infant and nursery products](https://www.accc.gov.au/publications/keeping-baby-safe-a-guide-to-infant-and-nursery-products) <https://www.accc.gov.au/publications/keeping-baby-safe-a-guide-to-infant-and-nursery-products>.

### Immunisation

It is recommended that immunisation occurs according to the standard schedule for Australian children.15 Preterm infants are in a special risk group and may need extra doses.16

For more information, read our [Immunisation of preterm infants clinical guidance](https://www.bettersafercare.vic.gov.au/clinical-guidance/neonatal/immunisation-of-preterm-infants) <https://www.bettersafercare.vic.gov.au/clinical-guidance/neonatal/immunisation-of-preterm-infants>

# Safe sleep in the hospital setting

Parents are significantly influenced by the practices of healthcare professionals observed in the hospital setting, so it is imperative that staff model recommended safe sleeping practices.

[Download our sample checklist](https://www.bettersafercare.vic.gov.au/clinical-guidance/neonatal/infant-safe-sleeping) <https://www.bettersafercare.vic.gov.au/clinical-guidance/neonatal/infant-safe-sleeping> to help implement the below.

## 1. Maternity setting

Some mothers may be at increased risk of falling asleep with their infant when feeding or settling in a hospital bed, especially when receiving narcotic analgesia in first 24 hours after a caesarean section.

Be vigilant in the early post-natal period to support these mothers. As well as regular monitoring and support, consider:

* lowering the bed
* placing a call bell within reach of the mother
* ensuring covers or pillows are clear of the infant
* ensuring rails or other equipment do not create a risk of entrapment
* use of an alternative sleeping space if available.7,8

## 2. Alternative safe sleeping space

The Pēpi-Pod® Program, which provides a portable sleeping space, has been successfully trialled in Australia21 and New Zealand.5

Pēpi-Pods® are small plastic tubs, purpose-built to create a safe sleep place for infants when they are on an adult bed, a couch or in a makeshift setting away from home.5 These situations have a higher risk of accidental suffocation and the Pēpi-Pod® provides a protected sleep space in these environments.

Early studies suggest that use of the Pēpi-Pod® or more traditional alternatives23 along with safe sleeping education is safe, convenient and acceptable to families.5,13 The provision of such an alternative safe sleeping space to vulnerable families has been recommended as a strategy to reduce SUDI risk in Victoria.23

## 3. Neonatal units

Some infants cared for in a neonatal unit may be positioned prone or on their side and may be supported by ‘nests’ or receive other developmental care interventions that differ from the safe sleep guidelines, outlined above.

In these cases, please note the following:

* Sleep the preterm infant supine as soon as stable and as clinical care allows.
* Any infant positioned in any way other than supine, or with nests/rolls present, must have continuous cardiorespiratory monitoring (as appropriate to their clinical condition, i.e. oxygen saturation +/- ECG leads) as well as frequent nurse/midwife observation.
* Do not use prone positioning as a settling strategy regardless of the cardiorespiratory monitoring in-situ.8
* Advise parents that these alternative sleep practices are no longer appropriate once the infant is nearing readiness for home. These practices will stop as soon as clinically and developmentally appropriate (usually by around 34 weeks’ corrected gestation) and well in advance of discharge.8
* Do not elevate cots/bassinets unless medically indicated.
* Do not use cot covers with open cots.
* Adhere to safe sleeping practices when cardiorespiratory monitoring is ceased. All infants must be following safe sleeping guidelines prior to discharge, or any ‘rooming in’ with parents.8
* Remind parents that preterm infants are in a greater risk category for SUDI and reiterate the key messages of safe sleeping and avoiding co-sleeping at discharge.

# References

1. Australian Institute of Health and Welfare, Deaths in Australia, AIHW, Canberra, 2019
2. Krous HF, Beckwith JB, Byard RW, Rognum TO, Bajanowski T, Corey T, Cutz E, Hanzlick R, Keens TG, Mitchell EA. Sudden infant death syndrome and unclassified sudden infant deaths: a definitional and diagnostic approach. Pediatrics. 2004 Jul 1;114(1):234-8.
3. Australian Bureau of Statistics. Causes of Death, Australia 2019. ABS, Canberra. 2020 Oct. Accessed May 7, 2021.
4. Moon RY, Hauck FR. SIDS Risk: It's More Than Just the Sleep Environment. Pediatrics. 2016 Jan 1;137(1). Available from: [10.1542/peds.2015-3665](https://doi.org/10.1542/peds.2015-3665)
5. Child and Youth Mortality Review Committee. Te Ròpù Arotake Auau Mate o te Hunga Tamariki, Taiohi. 2009. Fifth Report to the Minister of Health: Reporting mortality. 2002;2008. Accessed May 24, 2021. <https://www.hqsc.govt.nz/our-programmes/mrc/cymrc/publications-and-resources/publication/2948/>
6. Task Force on Sudden Infant Death Syndrome. SIDS and other sleep-related infant deaths: updated 2016 recommendations for a safe infant sleeping environment. Pediatrics. 2016 Nov 1;138(5).
7. NSW Health. Infants – Safe Sleeping Practices, Procedure. 2019 Aug. Accessed May 24, 2021 <https://www.slhd.nsw.gov.au/RPA/neonatal%5Ccontent/pdf/guidelines/NSW_Health_Infants_Safe_Sleeping_Practices_PD2019_038.pdf>
8. Royal Women’s Hospital. Safe Sleeping for Babies Guideline. 2021 Accessed May 24, 2021 [Clinical Guidelines | The Royal Women's Hospital (thewomens.org.au)](https://thewomens.org.au/health-professionals/clinical-resources/clinical-guidelines-gps)
9. Red Nose. National Scientific Advisory Group (NSAG). 2016. Information Statement: The Triple Risk Model. Melbourne, Red Nose. Accessed May 24, 2021. <https://rednose.org.au/article/the-triple-risk-model>
10. Red Nose Australia. Safe Sleeping. 2021 Jan. Accessed May 24, 2021. <https://rednose.org.au/downloads/RedNose-SafeSleep-HealthProfEducators_Mar21.pdf>
11. Raising Children Network Australia. Helping infants sleep and settle: 0-6 months. 2021 Feb. Accessed May 24, 2021. [https://raisingchildren.net.au/infants/sleep/settling-routines/helping-infants-sleep-settle-0-6-months](https://raisingchildren.net.au/babies/sleep/settling-routines/helping-babies-sleep-settle-0-6-months)
12. 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 Apr;36(2):117-21.
13. The Ritchie Centre, Monash University, and the Red Nose National Scientific Advisory Group, 2019. Clinical Practice Infant Safe Sleeping Guideline.
14. Red Nose. National Scientific Advisory Group (NSAG). 2014. Information Statement: Using a dummy or pacifier. Melbourne, Red Nose. Accessed May 24, 2021. <https://rednose.org.au/article/using-a-dummy-or-pacifier>
15. Australian Government, Department of Health. National Immunisation Program Schedule. 2021 Jan. Accessed May 24, 2021. <https://www.health.gov.au/health-topics/immunisation/immunisation-throughout-life/national-immunisation-program-schedule>
16. Australian Government, Department of Health. Australian Immunisation Handbook - Vaccination for preterm infants. 2020 Jun. Accessed May 24, 2021. <https://immunisationhandbook.health.gov.au/vaccination-for-special-risk-groups/vaccination-for-preterm-infants>
17. Monash Health. Skin-to-skin contact at caesarean birth, Procedure. 2020 Jul. Accessed May 24, 2021. <file:///C:/Users/vic73f5/Downloads/Skin%20to%20skin%20at%20a%20caesarean%20birth.pdf>
18. Red Nose Australia. What is the safest way to sleep twins? 2020 Mar. Accessed May 24, 2021. <https://rednose.org.au/article/sleeping-twins-in-the-same-safe-cot>
19. Red Nose. National Scientific Advisory Group (NSAG). Information Statement: Slings, Infant Carriers and Backpacks. Melbourne, Red Nose Australia. The T.I.C.K.S. Rule for Safe Babywearing. 2021 Feb. Accessed May 24, 2021. <https://rednose.org.au/downloads/RN0215_20_infostatements_Slings.pdf>
20. UK Sling Consortium Infant Sling Safety. The T.I.C.K.S rule for safe babywearing. 2012. Accessed May 24, 2021. [http://infantslingsafety.co.uk](http://babyslingsafety.co.uk)
21. Young J, Craigie L, Hine H, Kosiak M. Safe sleep advice to safe sleep action: trial of an innovative Safe Infant Sleep Enabler—The Pepi-Pod. Women and Birth. 2013 Oct 1;26:S40.
22. Baddock SA, Tipene-Leach D, Williams SM, Tangiora A, Jones R, Iosua E, Macleod EC, Taylor BJ. Wahakura versus bassinet for safe infant sleep: a randomized trial. Pediatrics. 2017 Feb 1;139(2). Available from: <https://doi.org/10.1542/peds.2016-0162>
23. Consultative Council on Obstetric and Paediatric Mortality and Morbidity, Victoria’s Mothers, Infants and Children 2016: 55th survey of perinatal deaths in Victoria, Department of Health and Human Services. 2017 Nov. Accessed May 24, 2021. [https://www2.health.vic.gov.au/hospitals-and-health-services/quality-safety-service/consultative-councils/council-obstetric-paediatric-mortality/mothers-infants-children-report](https://www2.health.vic.gov.au/hospitals-and-health-services/quality-safety-service/consultative-councils/council-obstetric-paediatric-mortality/mothers-babies-children-report)

# Acknowledgment

We acknowledge and are grateful to the work of the Red Nose National Scientific Advisory Group and the Infant and Child Health Research Group, The Ritchie Centre, Monash University.