Safer infant sleep

Clinical Guideline Presentation v1.0

45 minutes
Towards CPD Hours

Clinical Excellence Queensland
Queensland Government

References:

Queensland Clinical Guideline: *Safer infant sleep* is the primary reference for this package.

Recommended citation:

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Disclaimer:

This presentation is an implementation tool and should be used in conjunction with the published guideline. This information does not supersede or replace the guideline. Consult the guideline for further information and references.

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Terms

Abbreviation	Term
SIDS	Sudden infant death syndrome Sudden unexpected death of a baby under 1 year of age, apparently occurring during sleep, that remains unexplained after a thorough investigation including the performance of a complete autopsy and review of circumstances of death and the clinical history.
SUDI	Sudden unexpected death in infancy A classification used to describe the sudden death of an infant, usually during sleep, with no immediately obvious cause at time of death. After investigation deaths may be explained (e.g. infection, fatal sleeping accidents) or remain unexplained (e.g. SIDS).

Learning objectives

- Identify the key components of:
  - A risk minimisation approach
  - The *Triple Risk Model* and SUDI
  - Normal infant development and risk of SUDI
- Identify the mechanisms of airway protection
- Discuss safer infant sleep practices that minimise the risk of SUDI

Risk minimisation

- Queensland Health recommends a *risk minimisation* model for safer infant sleep (as opposed to *risk elimination*)
- Includes:
    - Offering caregivers information about the risks and benefits of various sleep environments
    - Co-design of strategies to reduce risk and increase safety

Safer sleep messages

Amara and Hakim are pregnant with their first baby. Amara tells you her neighbour's baby died of SIDS. She asks how to minimise risk for her baby.

What key safe sleep messages will you discuss with Amara and Hakim?

- Smoke free before and after birth
- Place on back for sleep
- Head and face uncovered
- Sleep in the same room
- Breastfeeding is recommended
- Keep sleep space clear for every sleep (i.e. free of items that can compromise breathing)

Useful gist message

Easy to breathe – safer to sleep

Talking about safer sleep

During your conversations with Amara and Hakim about safer sleep, what discussion points will you include?

Discuss:

- Their plans for infant sleep
- Knowledge of, and experiences with, infant sleep
- Risks and benefits of different environments
- Strategies for creating safer infant sleep spaces
- Shared sleeping (intentional and unintentional situations)
- Strategies for when tired or unwell

Home visiting provides an opportunity to:

- View infant's sleep space
- Tailor conversations and discussions to individual need

Triple Risk Model and SUDI

Hakim asks what factors increase the risk of SUDI for babies.

Using the Triple Risk model as a framework, how could you group predisposing factors?

- Inherent vulnerabilities (e.g. preterm or low birth weight, exposure to tobacco smoke)
- Critical periods of development as baby grows and capabilities change
- External (exogenous) stressors (e.g. unsafe sleep environment, prone sleep position, over heating)

Important considerations

- Effects may be cumulative
- One factor may contribute to risk more than others
- Factors change as baby grows

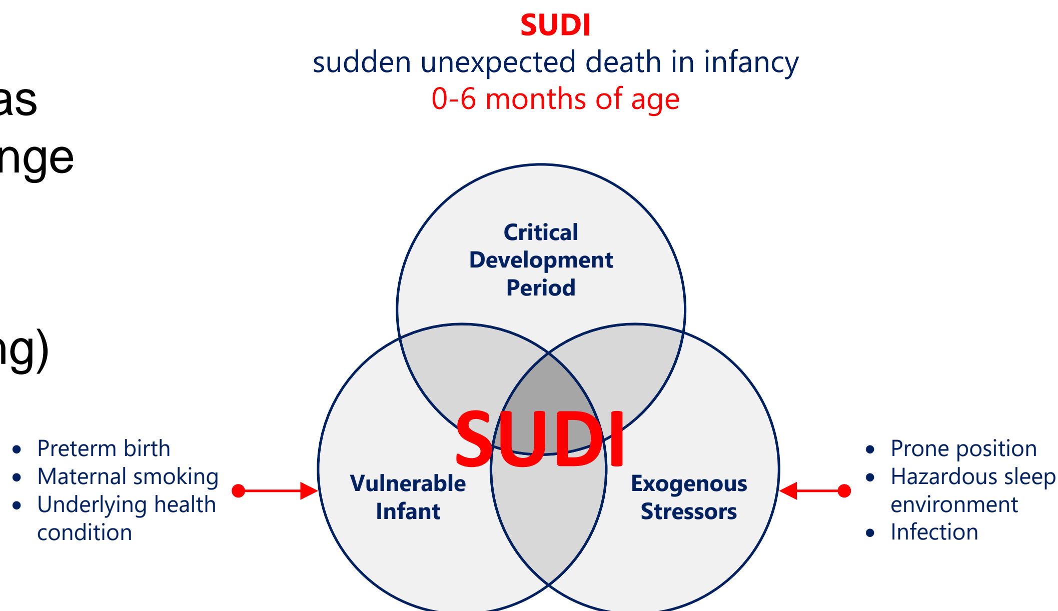


Image: Adapted from Filiano JJ, Kinney HC et al. A perspective on neuropathologic findings in victims of the sudden infant death syndrome: the triple-risk model (1994)

Infant development

Amara says her sister's baby is now 8 months old and is very active. She asks about the newborn stage and safer sleep.

What safe sleep considerations will you discuss for a baby 0–3 months?

- Most babies can't roll if on a firm, flat level surface
- Can move head to the side if placed supine
- Not able to remove objects that may cover face as they move their head during sleep (e.g. hats, pillows)
- When prone, can't raise head for long periods so may be unable to breathe easily if positioned with face down

Strategies 0–3 months

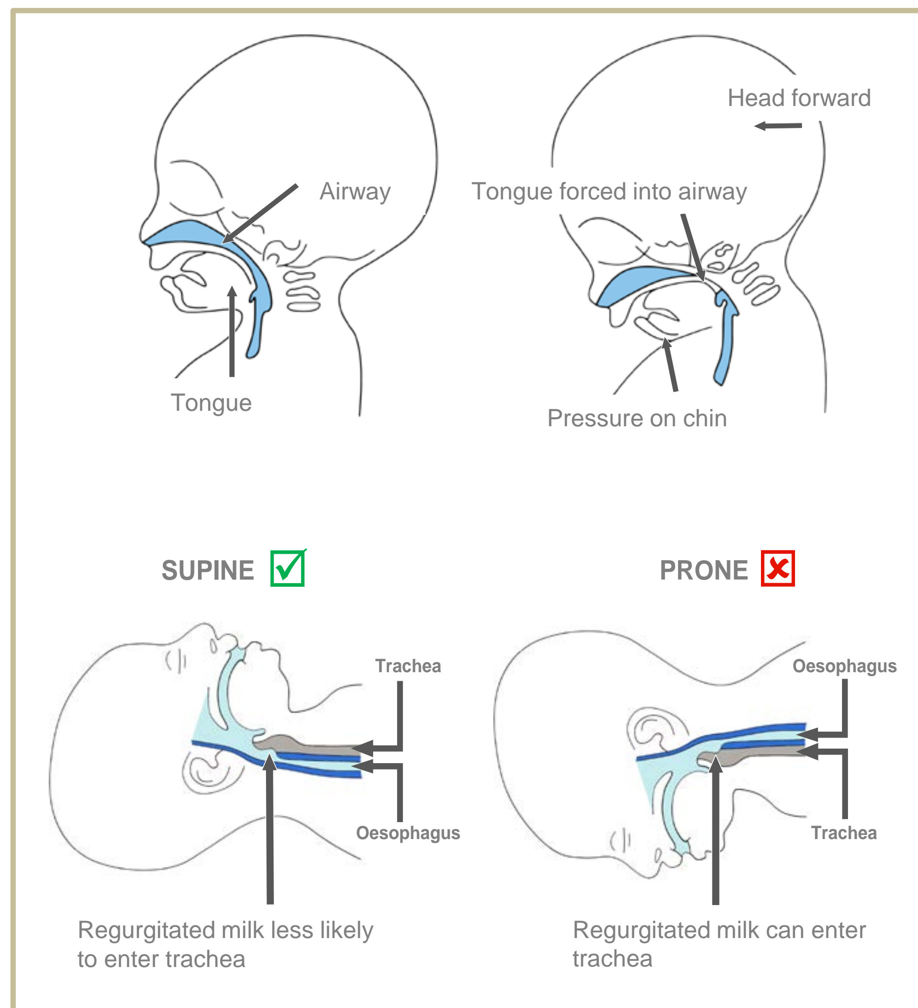
- Discontinue wrapping at first sign of rolling
- Arms free when startle reflex disappears
- Avoid prop feeding or leaving bottles in sleep space
- Keep sleep space clear of items for every sleep

Supine sleep position

Amara asks why sleeping on the back is safer.

What can you tell Amara about the safety of the supine sleep position?

- Decreases risk of air obstruction, rebreathing carbon dioxide, and of choking
- Protective airway mechanisms of arousal and swallowing work best when supine
- Confirmed as safest sleep position by robust evidence
- Prone, side and inclined sleep positions increase the risk of SUDI



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Shared sleep: risks and benefits

Amara's pregnancy progresses uneventfully. At one visit, Hakim tells you they are now planning to sleep with the baby in their bed.

What can you tell Amara and Hakim about the benefits of shared sleep?

- Enhances bonding
- Improves settling and reduces crying
- Aligns mother and baby sleep and arousal patterns
- If breastfeeding, increases frequency and duration

What can you tell Amara and Hakim about the risks of shared sleep?

- Increases risk of SUDI in some circumstances, for example if:
  - Exposed to tobacco smoke
  - Infant sleeps prone
  - Entrapment hazards present (e.g. sleep on sofa, couches, armchairs)
  - Infant movement is restricted (e.g. wrapped/swaddled)
  - Multiple bed sharers (e.g. siblings, pets)
  - Caregiver excessively tired, or sedated by alcohol or drugs

Minimising risk

You discuss Amara and Hakim's plans for sharing a sleep space with their newborn baby.

What strategies will you identify with Amara and Hakim that minimise risk of SUDI?

- Mattress is firm, flat, level (avoid soft surfaces)
- Bed is big enough for shared sleeping
- Clear space around baby - free of items that can cover baby's face and compromise breathing (e.g. pillows, doonas, other bedding)
- Avoid sharing when unwell or affected by substances
- Avoid placing baby to sleep with other siblings or pets

What can you recommend with regard to baby's sleepwear?

- Ideally, use an infant sleep suit or sleeping bag and avoid use of adult bedding for baby (i.e. use separate bedding for baby to avoid movement of bedding during sleep
- Remove necklaces, (e.g. teething, religious) beanies and hats for sleep
- Dress to avoid overheating

Strategies for safer shared sleep

You discuss other ways to minimise risk with Amara and Hakim's.

What can you recommend about positioning baby in their bed?

- Place baby supine to the side of one parent (not in the middle of 2 parents)
- Place baby where they cannot become entrapped between mattress and wall or fall off bed
- Don't wrap baby if sharing a sleep surface
- Position baby in a clear space away from adult bedding (e.g. pillows, doona, blankets)

Image: used with permission from Professor Jeanine Young

Never leave baby alone on an adult bed.
Never leave baby on sofa, bean bag or waterbed.

Strategies for safer shared sleep

You would also advise:

It is *not* safe to share a sleep surface with a baby if either parent is:

- A smoker
- Under the influence of alcohol or illicit drugs
- Under the influence of medication that causes sedation
- Is excessively tired or obese

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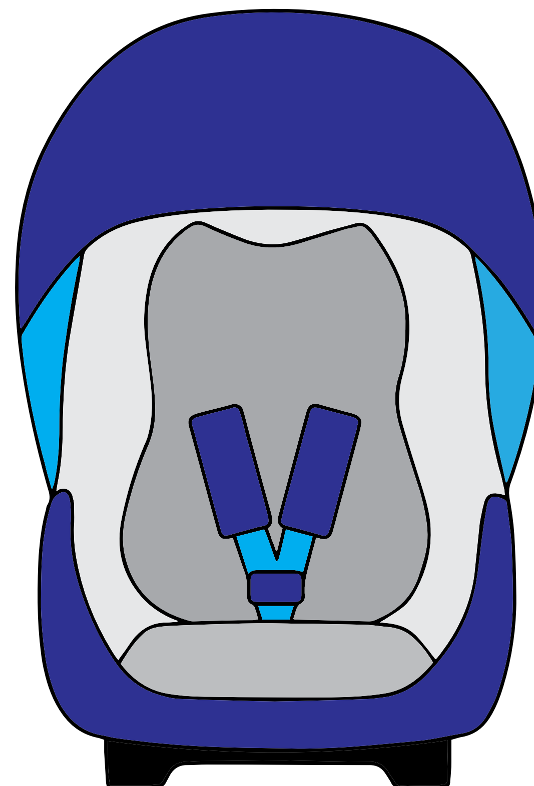
- Help Amira and Hakim identify strategies they could use to create a ‘safe sleep plan.’
- Troubleshoot strategies relevant to Amira and Hakim’s situation, cultural and personal beliefs and parenting plans

Inclined position

Amara shows you a picture of the car capsule they are planning to get. She says it will be good for the baby to sleep in during the day.

What will you discuss with Amara about sleeping in the capsule?

- Better to transfer baby to a clear safe sleep space because airway compromise can occur in capsule
- If used, close supervision with baby's face always visible is needed
- Use capsule as per manufacture instructions
- Revisit Amira's safe sleep plan and discuss potential safety strategies



In hospital

Amara gives birth to a baby boy (Joseph) prematurely. Joseph is admitted to a neonatal unit with respiratory distress. Amara ask why Joseph is prone.

What will you discuss with Amara?

- Prone positioning is a specific treatment for his respiratory condition and is temporary
- Joseph is being continuously monitored and observed while prone
- When his condition improves, Joseph will be placed supine to sleep
- Before discharge, safe sleep strategies will be introduced for Amara and Hakim to practice
- When Joseph goes home, Amara should follow all safe sleep strategies

Dummy (pacifier) use

Joseph is ready for discharge. Amara asks about using a dummy at home because Joseph is frequently unsettled.

What can you tell Amara about dummy use and risk of SUDI?

- Dummy use is associated with a reduced risk of SUDI, however the mechanism is unknown and may be a marker for another factor, as yet unidentified
- There are advantages and disadvantages
- No specific recommendations for or against use in Australia: parent choice
- Remove cords, strings, and ribbons to reduce risk of strangulation

When to use?

- If breastfeeding, recommend to wait until after breastfeeding established (usually 4–6 weeks after birth)
- If using a dummy, offer at every sleep
- If bottle feeding, can offer from birth
- Avoid coating dummy in anything sweet
- If baby refuses dummy, don't force
- If dummy falls out during sleep, do not reinsert it