HSC Public Health Agency

Promoting Safer Sleeping for Infants

Guidance for Practitioners

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Promoting Safer Sleeping for Infants and Reducing the Risk of Sudden Infant Death

Introduction:

The terminology used in the area of sudden infant death is complex. Firstly, the distinction between Sudden Infant Death Syndrome *(*SIDS) and other Sudden Unexplained Deaths in Infancy (SUDI) is difficult particularly in the context of co-sleeping (Shapiro-Mendoza et al., 2006). For consistency within this guidance it is important to clarify these terms.

Sudden Unexpected Death in Infancy (SUDI): is essentially a research term to describe all deaths, whether explained or unexplained, including SIDS (see below), which occurs during the first year of life (Jensen et al., 2014). Cases of SUDI that remains unexplained after a thorough investigation including a complete autopsy and review of the circumstances of death are often classified as SIDS (Horne et al., 2015). However, more frequently, forensic paediatric pathologists are now using the term 'unascertained'. Babies who die suddenly over the age of 12 months may be registered as Sudden Unexpected Death in Childhood: (SUDC).

Sudden Infant Death Syndrome (SIDS): occurs when a sleeping, seemingly healthy infant less than one year of age, dies for no apparent reason. SIDS is defined as 'the sudden and unexpected death of an infant under 1 year of age, with the onset of the lethal episode apparently occurring during sleep, that remains unexplained after a thorough investigation including performance of a complete autopsy, and a review of the circumstances of death' (Krous et al., 2004).

The risk of an infant dying suddenly is extremely low, but it does happen. As such it is important that factors which are modifiable are understood by parents, carers and health professionals. The research evidence is clear in respect of some simple measures which can increase parents' understanding about risks to their child, and how they can mitigate these.

The Triple Risk Model (Filiano and Kinney, 1994) suggests that Sudden Infant Death occurs due to a combination of factors including:

- The infant is vulnerable.
- The infant is at a critical period of development
- There is an external factor in action

When an infant or child dies, it is a tragic loss to parents, extended family and the greater community. However, when an infant dies both suddenly and unexpectedly many questions are raised regarding what, if anything could have been done to prevent it.

This guidance was initially developed by the Public Health Agency (PHA) in consultation with key stakeholders due to concerns about the number of infants who die each year in sleep situations and also as a result of a survey commissioned by the PHA (PHA, 2018) that showed many adults in NI are unaware of the main risk factors associated with sudden infant death. The survey indicated very low levels of awareness of safer sleeping and dangers of co sleeping across the general population.

This is now the 3rd version of the guidance first issued by the Public Health Agency in 2019 which includes a section of current evidence-based advice that should be discussed with parents/carers when addressing safer sleeping. It aims to provide health practitioners with information that promotes standardised practice in relation to reducing risks associated with sudden infant death.

At present the knowledge base about safer sleep is robust, while still evolving. Our main advice is that parents/carers need to be supported to have open, honest and sensitive discussions about sleep arrangements and sleep practices for their infant. Practitioners in health and social care have an important role to play in creating an open dialogue, where parents/carers do not feel judged, especially in relation to factors that are beyond their control in their wider social and economic situation. In doing so, parents/carers can be supported in ways which are sensitive to their cultural and personal circumstances. Appendices 1, 2 and 3 provide evidence-based advice that should be discussed with parents/ carers when there is an identified risk.

It is acknowledged that consistent messages about safer sleeping should be provided regularly both in the antenatal and postnatal periods.

Midwives, health visitors, nurses, paediatricians, GPs and other health and social care staff who interact with pregnant women and their partners during the antenatal period and with parents or carers of new or very young babies at home or in the community should use the opportunity to:

- Talk more openly about Sudden Infant Death, enquire about sleeping arrangements for the infant and promote safer sleeping messages.
- Provide information to parents and carers on a case-by-case basis, taking individual and family circumstances into account.
- Identify risk factors, and put measures in place to help minimise the impact of these.
- Plan how to avoid unsafe accidental bed sharing, and those nights when something different happens.

- Assist fathers, grandparents, older siblings and other household members to understand and apply the advice.
- Model and discuss safe sleeping practices.
- Promote and support breastfeeding, and the right of parents to make informed choices about their infant's care. Understand that bed sharing is an important practice in maintaining breastfeeding and that in the absence of any risk factors breastfed babies who bed share with their mothers are at low risk of sudden infant death.
- Talk sensitively around cultural differences for infant's sleep environments.

There is no advice that guarantees the prevention of sudden infant death but parents/carers should be informed that by following evidence informed advice, it is possible to reduce the likelihood of sudden infant death occurring. The current body of evidence supports the following key messages, which should be conveyed to all parents:

- **The safest place for your baby to sleep is in a cot in the same room as you (even during daytime naps) for the first 6 months.**
- **Sleeping with your baby on a sofa/chair puts your baby at greatest risk.**
- **Your baby should be placed to sleep on their back in the "feet to foot" position (feet touching the bottom of the cot)**
- **Your baby should not overheat**

A baby **should not** share a bed with anyone who:

- **Is a smoker (including if a mother smoked during pregnancy)**
- **Has consumed alcohol.**
- **Has taken drugs (legal or illegal) that makes them sleepy**.

- **Is excessively tired**

Professionals should be confident in telling families if their circumstances mean that they are in a high-risk group and should not bed share. If a family's risk for sudden infant death is high it is important to explain why. People are much more likely to follow advice if they understand the reason. It is important to give families the tools and information to make an informed decision with clear, consistent advice.

The Public Health Agency continues to take measures to raise both public and professional awareness regarding safer sleeping messages. In consultation with practitioners from the key disciplines across all five HSCT's the following resources have been developed.

1. A Parent Information Card
2. Identifying Risks: A checklist for professionals
3. Promoting Safer Sleeping Guidance Document
4. Posters for display in public places
5. Social Media Video clip by Consultant Paediatrician

Parent Information Card

1. The parent information card and advice in relation to safer sleeping practices should be introduced and discussed by the midwife in the early antenatal period. Prior to discharge from hospital, midwives/nurses should discuss and reinforce safer sleeping messages. This should be further reinforced by the community midwife at initial home visit and again prior to discharge to health visiting services.

2. The health visitor/family nurse during the Healthy Child Healthy Futures antenatal home visit and/or the subsequent new birth visit should also discuss safer sleeping messages.

3. The health visitor/family nurse should revisit safe sleep advice at both the 6 week and 14-16 week review.

Health professionals should signpost parents/carers to the Pregnancy and Birth to Five Books for further information.

Identifying Risks: A Checklist for Professionals

The checklist has been developed using the evidence base regarding sudden infant death and associated risk factors. It is intended that professionals use the checklist to identify any concern regarding risks or sleeping practices. This should create opportunities to:

- Have honest conversations with parents/carers based on their individual circumstances and needs regarding infant sleeping practices.
- Discuss evidence-based measures to promote safer sleeping practices and reduce risks.

Resources are available electronically on the PHA website at http://www.publichealth.hscni.net/directorate-nursing-and-allied-health-professions/nursing/safeguarding-children-and-young-people .

http://www.publichealth.hscni.net/publications/safe-sleeping-reducing-risk-sudden-infant-death

Recording

Information discussed with families should be recorded in professional records. If risk factors have been identified, a record of what information and advice has been given on safer sleep should be detailed.

If you require any additional information please contact: emily.roberts@hscni.net

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Appendix 1

Table 1: Factors Associated with Sudden Infant Death

Factors Associated with Increased Sudden Infant Death	Evidence	Comments/Advice to parents/carers
1. Sleeping position	Sleeping prone (face down) is associated with Sudden Infant Death (Li et al., 2003) Sleeping on the back carried the lowest risk of Sudden Infant Death (Henderson- Smart et al.,1998; Hauck, 2001) Side sleeping is associated with in Sudden Infant Death (Mitchell 1997), especially for babies born prematurely or of low birth weight (Blare et al., 2006)	The safest place for baby to sleep is on their back day and night, in the presence of a parent or carer. Babies should always be placed on their back to sleep; not on their front or side. When babies learn to roll from their back to their front on their own, they should still be put to sleep on their back Parents do not need to worry about them rolling into other positions that are comfortable for them. Feet to foot position in their cot or Moses basket reduced the chance of an infant wriggling down and his/her head becoming covered. Some babies may have been nursed in special care units in a prone position for medical reasons; this must only be continued at home on advice of a paediatrician. http://www.lullabytrust.org.uk/back-to-sleep

Factors Associated with Increased Sudden Infant Death	Evidence	Comments/Advice to parents/carers
2. Unsafe Sleep environments	NICE clinical guidelines 194: Post Natal Care Co Sleeping Risk Factors (2021) The aim of the evidence review was to identify factors that may impact the risk of sudden unexpected death in infancy (SUDI) when co-sleeping. The evidence suggested that co-sleeping is associated with sudden infant death, but does NOT mean that co-sleeping in and of itself causes sudden infant death and therefore safer sleeping advice should be provided in this context. https://www.nice.org.uk/guidance/ng194/evidence/n-cosleeping-risk-factors-pdf-326764485978	Health practitioners should engage in sensitive open and honest conversations with parents, based on parents/carers individual circumstances and needs of infant sleeping practices. Key messages related to bed sharing risk factors and Sudden Infant Death should be kept proportionate and contextualised within a broader discussion on night time care to help parents relate to the guidance to the reality of their life style.

Factors Associated with Increased Sudden Infant Death	Evidence	Comments/Advice to parents/carers
Bed sharing	Bed sharing with others (for example other children or pets) carries a greater risk of SUDI than bed sharing with a mother or mother and partner. (Hauck et al., 2003) https://www.unicef.org.uk/babyfriendly/baby-friendly-resources/sleep-and-night-time-resources/caring-for-your-baby-at-night/	Parents/carers should be advised of circumstances when bed sharing might not be safe and should be strongly advised against. Including: • if their baby was low birth weight or if either parent/carer: • has had 2 or more units of alcohol • smoker • has taken medicine that causes drowsiness • has used recreational drugs. If parents/carers choose to share a bed with their baby, they should be aware of the baby's presence and apply all other safer sleeping guidance. (Lullaby Trust evidence) Other children or pets should not bed share with a baby. However, whether a parent/carer chooses to co-bed/sleep twins in the same cot or Moses basket, all other safer sleep advice should be followed for each baby for each sleep, day or night and reviewed as they grow. Safer sleep for twins - The Lullaby Trust https://www.basisonline.org.uk/twins/ The safest place for a baby to sleep, day and night, is in a Moses basket or cot in the same room as the parent/carer for the first 6 months.

Factors Associated with Increased Sudden Infant Death	Evidence	Comments/Advice to parents/carers
Infant sleeping on sofa, armchair, beanbag or other sleeping device with or without parent or carer	Sleeping with a baby on a sofa is associated with Sudden Infant Death, co-sleeping on a sofa has a greater association than co-sleeping on a bed (Rechtman et al., 2014; Blair et al., 2014) An infant may get wedged in the sofa, armchair, beanbag leading to overheating or suffocation. A parent may roll over on a sofa and suffocate the infant.	Although there is evidence that co-sleeping on a sofa has a higher association with infant death than co-sleeping in a bed, there was a lack of evidence from NICE to make separate recommendations on this. With this in mind, it is important that health practitioners do not inadvertently drive tired parents to feeding and caring for their baby on a sofa by overstating the risks of staying in bed (UNICEF Baby Friendly Initiative Dec 2014) (NICE 2021) Evidence from three case-control studies showed that co-sleeping on a sofa carried a greater risk of sudden unexpected death in infancy than co-sleeping in a bed or alternative surface that was not a sofa Parents/carers sleeping on a sofa or in an armchair with their baby is one of the most high-risk situations for them. Parents/carers should make sure that they do not accidentally fall asleep with their baby on a sofa. If they think they might fall asleep, they should put the baby down in a safe place to sleep. Breastfeeding mothers should be shown how to breastfeed their baby in the lying down C shaped position as evidence shows this is a protective position in case the mother inadvertently falls asleep during feeding. Practitioners can refer to: UNICEF UK Baby Friendly Initiative “Caring for your baby at night” Health Practitioners guide leaflet.

Factors Associated with Increased Sudden Infant Death	Evidence	Comments/Advice to parents/carers
		Parents/carers can bring a baby into bed to feed and settle the baby but should be advised to return the baby to his/her own cot in the same room as the parent/carer to sleep. https://www.lullabytrust.org.uk/safer-sleep-advice/room-sharing/
3. Pre-term/low birth weight/very young infants	The association with Sudden Infant Death is increased for babies born prematurely (born before 37 weeks) or of low birth weight (less than 2.5kg or 5lb 8ozs) (Carpenter, 2006, Blair, et al., 2006)) Younger infant age is associated with an increased Sudden Infant Death (Carpenter et al., 2004) The association with Sudden Infant Death is increased when babies under 12 weeks of age share an adult bed, even if the parents are non-smokers and the baby is breastfed (Tappin et al., 2005; Blair et al., 2006; Crawford, 2001)	The association between co-sleeping (sleeping on a bed or sofa or chair with an infant) and Sudden Infant Death may be greater with low birth weight, premature infants or under the age of 12 weeks. Where infants in the neonatal unit have become accustomed to the prone position, there should be efforts made to acclimatise the infant to the supine position before discharge home. Neonatal wards are usually kept at a high temperature. On discharge their house does not need to be at a similar temperature. https://www.lullabytrust.org.uk/safer-sleep-advice/premature-babies/
4. Smoking	Co-sleeping has an association with increased incidence of Sudden Infant	The association between co-sleeping (sleeping on a bed or sofa or chair with an infant) and Sudden Infant Death is likely to be

Factors Associated with Increased Sudden Infant Death	Evidence	Comments/Advice to parents/carers
	Death, with the association highest amongst mothers who smoke (Huack et al., 2003; Carpenter et al., 2004; Tappin et al, 2005; McGarvey et al., 2006) Infant's bed-sharing with non-smoking mothers are at increased risk of dying in their sleep compared with infants of smoking mothers who do not bed-share (Blair et al., 2006). Thus bed-sharing poses a risk whether parents/carers smoke or not. More than one-quarter of the deaths due to Sudden Infant Death are attributable to smoking during pregnancy and exposure to second-hand smoke, particularly in the home (Rodgers, 2009; Abbot, 2012; Rubens & Sarnat, 2013) The risk of Sudden Infant Death is trebled in infants whose mothers smoke both during and after pregnancy (McDonnell Naughton et al., 2012)	greater when a mother, has smoked in pregnancy/smokes or their partner smokes. https://www.unicef.org.uk/babyfriendly/baby-friendly-resources/sleep-and-night-time-resources/co-sleeping-and-sids/ Parents and carers who smoke should never bed-share with babies or infants, no matter how many cigarettes, or where they smoke, even if they never smoke around the baby. New legislation brought in from 1st February, 2022 makes it illegal to smoke in cars where there is a child aged under 18. Babies and children should not be exposed to passive smoke in the house or in the car. Smoking and vaping regulations in Northern Ireland | nidirect If parents/carers do smoke they should be advised to delay contact with their baby for at least half an hour, wash their hands before touching the baby and if possible, change their clothing. Parents/carers should smoke seven steps away from the house as moving into another room, opening the window or door is not sufficient to keep the house smoke free. http://www.freshne.com/what-we-do/our-campaigns/take-7-steps-out/overview Parents and members of extended family should be sign posted to local stop smoking services.

Factors Associated with Increased Sudden Infant Death	Evidence	Comments/Advice to parents/carers
	The effects of smoking are dose-related, the more cigarettes smoked, the higher the risk of an infant dying (Fleming et al., 2000) 1-9 cigarettes/day=4 times the risk 10-19 cigarettes/day-6 times the risk 20+ cigarettes/day=8 times the risk	https://www.lullabytrust.org.uk/safer-sleep-advice/smoking/
5. Other parental life styles factors *Alcohol use* *Medication* *Excessive tiredness*	The association between co-sleeping and sudden infant death may be greater with parental or carer recent alcohol consumption and use of illegal drugs (Carpenter et al., 2013) Alcohol use sedates parents and impairs their level of consciousness and reduces a parent's responsiveness and awareness of the infant (Scragg et al., 1993).	There is an increased association between co-sleeping and sudden infant death when a parent/carer has had recent alcohol consumption or used any sedating medication due to impaired level of awareness/arousal and responsiveness to the needs of their baby. Parents/carers should never sleep with their baby if any of the below points apply to them: • If either parent/carer has drunk alcohol (more than 2 units that day) or taken drugs (including any medications that may make them drowsy) • If parent/carer is extremely tired • If the baby was born premature (37 weeks or less) • If the baby was born at a low weight (2.5kg or 5lbs 5ozs or less)

Factors Associated with Increased Sudden Infant Death	Evidence	Comments/Advice to parents/carers
		https://www.lullabytrust.org.uk/safer-sleep-advice/premature-babies/ https://www.lullabytrust.org.uk/safer-sleep-advice/co-sleeping/
6. Bedding and mattresses	Co-sleeping on an adult bed is likely to be associated with SIDS (Blair et al., 2009). • Adult mattresses are not designed for infants. Adult pillows and bedding may contribute to suffocation (Hauck et al., 2003). • Adult duvets can contribute to overheating – the ideal temperature for an infants' room is 16-20^{o}C. • Other children or pets may be sharing the parental bed and this may lead to suffocation or over-heating. • Infants may be squashed/suffocated by	Sleeping surfaces should be firm, flat and waterproof whether a baby is sleeping at home, in temporary accommodation or with relatives/friends. **Infant Cot and Mattresses** It is recommended that a new cot mattress is used for each infant. If parents are using a "used" mattress from a previous child they should ensure that it is waterproof, has no tears or holes. Make sure the mattress fits snugly, there should be no corner post or decorative cut outs in the headboard, or foot board which could trap a baby's limbs. Always follow the manufacturer's instructions. If none are available with the product, search online for them or contact the manufacturer directly for a copy (http://www.nct.org.uk/parenting/sleeping-safely-cot) **Using a second-hand cot** Parents/carers must check that the cot is safe for baby. The same cot safety points apply when using a second-hand cot. If the cot is painted it will need to be stripped and re-painted as there is always a possibility that old paint may have lead in it

Factors Associated with Increased Sudden Infant Death	Evidence	Comments/Advice to parents/carers
	parents or others in the bed. • Infants may get wedged in the bed or may wriggle into a position from which they can't get out. • Infants may roll out of bed and be injured. Sheepskins have been found to increase the risk of Sudden Infant Death in babies who sleep prone (Vennemann et al., 2009) Although not evidentially cause and effect, second hand mattresses that are not water proof may increase the risk of Sudden Infant Death (Brooke, 1992) Sleeping bags may reduce Sudden Infant Death by avoiding head-covering and rolling onto a prone position	(http://www.defra.gov.uk/environment/chemicals/lead/advice3.htm) **Moses basket** If using a Moses basket, the lining should be thin to allow ventilation. Moses baskets are only designed for use by babies up to a maximum of six months of age. Manufacturing guidelines should be followed with caution exercised according to the weight and size of the baby. **Pillows/bumpers/wedges** Babies should never sleep using pillows, wedges, sleep positioners, bedding rolls, bumper or duvets. These items should be avoided to present the baby from being trapped, suffocated or overheating. **Sleeping bags** Specially designed sleeping bags are useful for babies who are kicking off their blankets. However, practitioners must advice parents who are using these to check the weight and size of the sleeping bag is suitable for their baby depending on the room/baby's temperature. **Travel Cots** There is no evidence that travel cots are less safe as long as the same consideration over mattresses quality and fitting is adhered to. https://www.lullabytrust.org.uk/safer-sleep-advice/mattresses-and-bedding/

Factors Associated with Increased Sudden Infant Death	Evidence	Comments/Advice to parents/carers
	(Blair et al, 2009). They appear to be as safe as sheets and blankets, if well-fitted and there are no other risk factors.	
7. Temperature and overwrapping	Overheating (heating on all night, excess bedding) is associated with Sudden Infant Death. (Venneman et al., 2005; Mitchell, 2007). The combination of overwrapping (excessive layers of bedding and/or clothing, including hats) and signs of infection are association with Sudden Infant Death. (Gilbert et al., 2005: Vennemann et al., 2005) Likewise, the combination of overwrapping and prone sleeping carries a higher association than either alone (Gilbert et al., 2005). Factors such as a temperature following an infection, prone sleeping position, overwrapping or bedclothes covering the head, can affect	A clear cot is safest- remove any toys when a baby is put down to sleep, day or night. **Temperature** Between 16-20^{o}C is an ideal temperature for the baby's room and that using a room thermometer can help. Babies' cot or Moses basket should not be placed next to a heater radiator or in the direct sunlight. If a baby falls asleep in a pram or car seat and is brought indoors, outdoor clothing including hats should be removed even if it wakes the baby. **Home from hospital** Hospital environments are normally hotter than homes. Home temperature does not need to be this warm. See above. Some maternity hospitals use a hat when a baby is first born. However babies should not wear outdoor hats indoors. **Bedding** Sheets and blankets are ideal and should be the right size for the cot/crib/Moses basket. Never to use duvets, quilts or pillows for babies under one year. It is important to note that a folded blanket provides twice the insulation.

Factors Associated with Increased Sudden Infant Death	Evidence	Comments/Advice to parents/carers
	the baby's thermal balance by either making too hot or reducing their ability to lose heat (Blackwell, 2004). Babies should not wear hats for sleeping day or night as Sudden Infant Death is increased by three times (Tonkin, 1986)	The cot should be made up so that the blanket and sheets are halfway down the cot, and tucked under the mattress so that the baby lies with their feet at the end of the cot: feet to foot position (this makes it difficult for the baby to wriggle down under the bedding). Observe for signs of overheating a child: • To look for sweating • To check if their tummies feel hot. If the baby is too hot a layer can be removed and if too cold a layer can be added. https://www.lullabytrust.org.uk/safer-sleep-advice/baby-room-temperature/
8. Poor antenatal care	Later antenatal care and fewer appointments is associated with an increase in Sudden Infant death (Getahun, 2004)	All women should receive the recommended number and schedule of antenatal appointments during pregnancy.

Appendix 2

Table 2: Factors Associated with a Decreased Risk of Sudden Infant Death

Factors associated with a decreased risk of Sudden Infant Death	Evidence	Advice to parents/carers
1. Room Sharing	There is evidence that when infants are placed in the same room as their parents but they do not share the same sleep surface (i.e. room sharing not bed-sharing), a significant decrease in the risk of Sudden Infant Death is seen (Blair et al., 1999; Carpenter et al., 2004)	The safest place for the baby to sleep, day or night, for the first six months is in the separate cot/crib/Moses basket in the same room as the parents/carers. https://www.lullabytrust.org.uk/safer-sleep-advice/room-sharing/
2. Breastfeeding	Breastfeeding reduces the risk of Sudden Infant Death by half (Thompson et al., 2017) Several studies have found that breastfeeding has a protective association with Sudden Infant Death and should be recommended as a protective measure (Vennemann et al., 2005; Ip et	Every effort should be made to promote breastfeeding. Practitioners should discuss with mothers the management of their feeding practices in particular night time feeds and the potential risk of falling asleep with their baby even if they do not intend to. Breastfeeding mothers should be shown how to feed in the protective lying down C shape position, and sign posted for more information using the UNICEF Caring for your Baby at Night leaflet.

Factors associated with a decreased risk of Sudden Infant Death	Evidence	Advice to parents/carers
	al., 2007; Hauck et al., 2011; Thompson et al., 2017) It is recognised that mothers who bring their babies into bed to feed tend to continue to breast feed longer than those who do not (Blair et al., 2010; Thompson et al., 2017)	The universal/key message about safe sleeping still apply to breasting mothers (UNICEF, 2008). https://www.unicef.org.uk/babyfriendly/baby-friendly-resources/sleep-and-night-time-resources/caring-for-your-baby-at -night/ https://www.rcm.org.uk/media/5713/safer-sleep-guidance.pdf
3. Dummy (pacifier) use	Foundation for Study of Infant Deaths (FSI) and several studies have identified a significant protective association between dummy (pacifier) use and reduced risk of Sudden Infant Death (Hauck et al., 2005; Alm et al., 2016) If babies use a dummy, the degree of protection is better with consistent use (McGarvey et al, 2003)	If parents/carers choose to use a dummy, practitioners should make them aware that: • If they choose to use a dummy, wait until breastfeeding is well established (at up to about four weeks old). • Stop giving a dummy to the baby to go to sleep between six and 12 months. • Don't force the baby to take a dummy or put it back in if the baby spits it out. Don't use a neck cord. • Don't put anything sweet on the dummy, and don't offer during awake time. • Using an orthodontic dummy is best as it adapts to the baby's mouth shape. • If a baby is accustomed to using a dummy as part of their sleep routine, they should be given it on every occasion.

Factors associated with a decreased risk of Sudden Infant Death	Evidence	Advice to parents/carers
		https://www.lullabytrust.org.uk/safer-sleep-advice/dummies-and-sids/
4. Immunisations	Immunised infants have a significantly lower risk of Sudden Infant Death (Vennemann et al., 2007)	Babies should receive all scheduled immunisations where possible.

Appendix 3

Table 3: Factors Needing Further Research to Determine their Relationship to Sudden Infant Death

Factors needing further research to determine their relationship to Sudden Infant Death	Evidence	Advice to Parents/Carers
1. Swaddling	It has been suggested that swaddling has an emerging association with Sudden Infant Death; however, the research is currently inconclusive. Swaddling is common place in many cultures. (Hauck et al., 2003; Pease, 2016)	Practitioners should advise parents/carers that if they do decide to swaddle their baby it should be done with extreme caution: • Baby's head should not be covered and use only thin materials. • Baby must be un-swaddled once they are asleep. • Swaddling should cease once a bay learns to roll over • All other safer sleep advice applies https://www.lullabytrust.org.uk/safer-sleep-advice/swaddling-slings/
2. Car Seats and other sitting devices	Infants, particularly pre-term infants or those with pre-existing health care conditions, are at risk of respiratory problems if sleeping in the semi-reclined position of car seats (Merchant et al., 2001) There is little evidence on the use of other sitting	Car seats are designed to keep babies safe whilst travelling so therefore parents/carers should: • Always remove infant from car seat and place in cot/crib/Moses basket following journey. • When travelling long distances (longer than 2 hours), parents should be recommended to make regular stops and take baby out of the car seat for short intervals. The safest place for a baby to sleep is in a cot or Moses basket, day or night in the same room as a parent/carer

	devices such as bouncers, pushchairs and swings.	https://www.lullabytrust.org.uk/safer-sleep-advice/car-seats-and-sids/ http://www.childcarseats.org.uk/
3. Slings	There is currently a lack of significant data on the use of baby slings and Sudden Infant Death. Baby slings can pose a risk to the baby if they are too loose or if they baby has moved into a position where they are not visible to the parent (Bergounioux et al., 2015)	Parents/carers who wish to use baby slings should be advised to follow the guidance given by the Consortium of UK Sling Manufacturers and Retailers which provides the following advice to baby sling wearers: **Tight –** the sling should be secure. **In** view at all times – the adult should always be able to see their baby's face by simply glancing down. **Close** enough to kiss – the adult can kiss their baby's head by tipping their head forward. **Keep** chin off the chest – the baby must never be curled up so their chin is forced into their chest as this can restrict their breathing. **Supported** back – a baby's back should always be supported. http://www.rospa.com/home-safety/advice/product/baby-slings/ (accessed April 2022) https://www.lullabytrust.org.uk/safer-sleep-advice/swaddling-slings/
4. Infant Sleep Positioners/Products *Straps* *Hammocks* *Nests* *Pods*	There is lack of available evidence around the use of sleep positioners and risk of Sudden Infant Death	Parents should be discouraged from using positioners whilst baby is sleeping. **Hammocks/nests/pods/straps** These are not suitable for sleeping babies as they do not provide a flat, firm surface or can cause suffocation. Straps can cause entrapment.

Baby boxes# *Sidecar cots*	Consumer safety advice has implicated some deaths involving suffocation, strangulation and entrapment (US Centres for Disease Control and Prevention, 2012) There is no evidence on the risks or benefits of purposely produced carboard baby boxes, issued in some parts of the world or side car cots	https://www.lullabytrust.org.uk/safer-sleep-advice/sleeping-products/ **Baby boxes** These may be suitable for babies under 3 months in the absence of a more suitable sleeping place; a cot or Moses basket. All other safer sleeping advice should be followed. https://www.lullabytrust.org.uk/experts-raise-safety-concerns-about-cardboard-baby-boxes/
5. Signs of ill health	The exact role of illness in Sudden Infant Death is not well understood and many of the babies who have died have not shown any signs of illness (Emura et al., 2011)	It is recommended that medical advice be sought if a baby shows signs of illness that persist for more than 24 hours. Practitioners should advice parents/carers on indicators that the baby is unwell. Sleeping with or swaddling an ill baby or a baby with a high temperature may increase the risk of infant death.
6. Electronic (E) cigarettes/vaping devices	There is no evidence available to associate the use of E cigarettes in pregnancy or exposure to second hand vapour with Sudden Infant Death.	Caution is advised Parents/carers/family members should be signposted to smoking cessation resources https://www.nhs.uk/live-well/quit-smoking/using-e-cigarettes-to-stop-smoking/

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