safer sleep guidance
for maternity healthcare professionals
Key messages

• Some babies are at higher risk of dying unexpectedly in infancy – these include babies born prematurely or small for gestational age; babies whose parents smoked during pregnancy and/or after the birth and babies born into households living with multiple deprivation and vulnerabilities, including substance misuse, and babies sleeping in an unsafe sleep environment.

• All carers (parents and anyone caring for the baby) need clear, tailored advice about how to reduce the risk of Sudden Unexpected Death in Infancy (SUDI) for their baby; midwives and maternity support workers (MSWs) should provide verbal and written advice, that is revisited at different times.

• Safer sleep advice is not consistently followed or understood by parents – this guidance includes information about the importance of a clear, flat, uncluttered sleeping space for the baby in their parents’ bedroom; information about how to avoid overheating and about the risks of ‘overlying’ when sharing a sleep space with a baby, particularly when sharing a sofa.
Introduction

Sudden Unexpected Death in Infancy (SUDI) is defined as ‘the death of an infant which was not anticipated as a significant possibility or where there was a similarly unexpected collapse leading to or precipitating the events which led to the death’1. Sudden Unexpected Deaths in Infancy include sudden infant death syndrome (SIDS), accidental suffocation in a sleeping environment, and other deaths from known causes. The categorisation SUDI includes all unexpected infant deaths, both explained (congenital issues, sudden onset illnesses, accidents and infanticides), and unexplained.

One fifth of SUDI in the UK are found to have a medical cause2 and those which remain unexplained are classified as SIDS. The advice in this guidance will be referring to how healthcare professionals can reduce the risk of SIDS, therefore of those deaths with no known medical cause.

Around 640,000 babies are born every year across England and Wales. Each year, approximately 300 infants under one year of age in England and Wales die suddenly and unexpectedly (SUDI), and of these, no cause is found for the deaths of approximately 230 babies (i.e. SIDS). These deaths are referred to as unexplained SUDI SIDS3 (www.ons.gov.uk); death often occurs unobserved, during infant sleep, with no discernible signs of a major illness. The diagnosis is reached by exclusion, by failing to demonstrate an adequate cause of death. SIDS deaths are uncommon in the first weeks of life, peak at two – three months old with few deaths after eight months. Like other infant deaths, SUDI are more common in males and occur across all social strata, but are more common in socio-economically deprived groups and are strongly associated with parental smoking. Lower birthweight and shorter gestation are more prevalent and maternal factors are important; the risk is higher with young maternal age and higher parity and the risk increases with multiple births4.

The rate of unexpected infant death has reduced dramatically since the early 1990s when the ‘Back to Sleep’ advice was introduced5. This improvement has slowed but numbers are still falling year on year in the UK. It is vital that healthcare professionals ensure that all carers are made aware of the risk factors for SIDS, and how they can mitigate those risks through behaviour change.

Investigations into SIDS have identified that many of these deaths happen in a context of an unsafe sleep environment. A high proportion of babies who die unexpectedly live in an environment of social disadvantage6.

To minimise the risk of SIDS associated with unsafe sleep environments, midwives and others involved in antenatal and early postnatal care, should provide families with consistent safer sleep advice following NICE guidance on postnatal care, that is also tailored to the context of each baby and family.
Which babies are at greatest risk?

There are three key factors for SIDS:

1. Physical vulnerability of the baby. This includes prematurity, an antenatal history of abnormalities, exposure to tobacco smoke in utero, small for gestational age, a higher preponderance in males, and age of the baby.

2. Social and financial context. Local provision of healthcare and support services, housing arrangement, social vulnerabilities including being a young, unsupported parent.

3. Sleeping environment sleeping position and routine, bedding and sleep environment, bed sharing in hazardous circumstance, exposure to tobacco smoke.

Current evidence on SIDS

Unsafe sleep position

There is strong evidence that placing infants to sleep prone (on their front) or on their side (increasing the likelihood of being found prone) increases the risk of SIDS and this risk increases further if the baby is unaccustomed to a non-supine position. The reason behind the effectiveness of the supine position in reducing SIDS is still unknown. Physiological studies to date suggest the possibility of multiple, probably interacting mechanisms (thermoregulation, higher arousal thresholds, response to inhaled carbon dioxide etc.) making infants more vulnerable in the prone sleep position.

Smoking

Evidence from a very large number of studies worldwide consistently demonstrates that maternal smoking both during pregnancy and after the baby is born increases the risk of SIDS. The risk appears to be dose related. Smoking during pregnancy is associated with low birth weight and a range of other risk factors (maternal age, parity, marital status, education, breastfeeding, sleeping position, Family situation and sex of infant) but remains significant when adjusted for these covariates. It has been suggested that if maternal smoking during pregnancy were eliminated, the SIDS rate would be reduced by up to 61%.

Breathing regulation

Studies have demonstrated the link between breathing regulation development and impairment of the protective response against SIDS, hence the increased risk of SIDS in premature babies and those exposed to smoke in pregnancy.
Co-sleeping
Co-sleeping refers to the practice of a parent or carer sharing a surface (a bed, sofa, armchair or other surface), with an infant for sleep, which can take place either intentionally or unintentionally. The majority of research studies conducted over the past 20 years have found that sharing a sleeping surface with an infant creates an environment where the potential risk of SIDS increases, with the level of risk varying according to how the co-sleeping is arranged and individual factors relating to the infant and caregiver. NICE guidelines caution us to remember that the cause of SIDS is multifactorial and none of the studies conducted to date provide evidence that co-sleeping causes SIDS, but that the two are linked through mediating factors. A UK study found no association between SIDS and bed-sharing in the absence of key hazardous circumstances for infants under three months of age and found an association that was in the direction of protection for infants of three months and older. This UK data emphasise the greatly increased association between bed-sharing/co-sleeping and SIDS in the presence of alcohol, smoking, drugs, and sleeping on sofas. These are the key circumstances that should be avoided.

Alternative sleeping spaces
Products like hammocks, nests or pods, car seats, swings and bouncers are not firm and flat and are not usually designed as sleeping places. These are not recommended for use as sleeping spaces, as they make it harder to achieve the safer sleep advice of a firm, flat, clear sleeping place. Sitting devices like car seats and bouncers can increase the risk of asphyxia or strangulation due to the lack of head/neck support.

Breastfeeding
Evidence shows that SIDS risk is halved in babies who are breastfed for at least two months. The World Health Organisation, the UK and Scottish Governments currently recommend that all babies are exclusively breastfed for at least six months and up to two years of age, with the introduction of complimentary nutrition at six months of age, should mum and baby wish to do so. Both partial and exclusive breastfeeding have been shown to be linked with a lower SIDS rate, but exclusive breastfeeding was associated with the lowest risk.

Dummies
Studies have found a reduced risk of SIDS associated with dummy use but the protective mechanism is not clear. Given that dummies often fall out soon after the onset of sleep and SIDS often occurs towards the end of sleep, any protection is not afforded by the dummy being in the mouth. Recent findings suggest the absence of a dummy for habitual users is associated with an increased risk of SIDS, often when the infant is co-sleeping. If parents choose to use a dummy or pacifier, they should be advised to wait until breastfeeding is established and use it consistently for every sleep, this should not be forced on the infant or coated with anything. The dummy also should not have any attachments on it and should be taken away between six and 12 months of age to reduce the rate of otitis media.

A UK study found no association between SIDS and bed-sharing in the absence of key hazardous circumstances.
Thermal regulation

Heat stress is extremely dangerous for infants, especially from around three months of age, when thermal regulation is more effective at heat conservation because of a thicker layer of subcutaneous fat, and the peripheral vasomotor response to cold is more effective. Healthcare professionals should reiterate the importance of keeping room temperature in the safe range (16–20 degrees) and adjust the baby’s clothes layering accordingly – the rule of thumb is to dress baby with one more layer than the parent/carer is wearing to be comfortable in the same environment.

Baby slings and carriers

Some baby slings have been associated with SUDI due to their bag-shaped style which can lead to the baby curling up in the sling, pressing their chin towards the chest. Parents should be encouraged to follow the manufacturer advice on slings/carrier and get advice from reliable resources on how to safely use them.

Healthcare professionals should reiterate the importance of keeping room temperature in the safe range 16–20 degrees.

Other factors

Head-covering, overwrapping, and infant illness have been identified as being associated with increased risk, alongside soft bedding and soft sleep surfaces, SIDS has been shown to be more common among infants who sleep in a separate room from their parents. Healthcare professionals should consider the main risk factors for SIDS (Table 1) when having a discussion on safer sleep both antenatally and postnatally. If any risk factors are identified, then those should be highlighted to the family and the recommendation should be based on those. If the baby is at increased risk of SIDS, this needs to be discussed clearly and openly with the family.

Most babies (91%) who die as SIDS have one or more known risk factors present, 75% have two or more risk factors present. The pivotal role of midwives and all maternity staff is in ensuring women and their families receive the most up-to-date information around safer sleeping and are advised and supported towards the best behavioural changes for their circumstances. This will mean that midwives and others should ensure all mothers understand how to make co-sleeping safe, and that for some babies (especially young low birthweight and premature babies) any co-sleeping should be avoided.
Table 1. Risk factors for SUDI

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Description</th>
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<tr>
<td><strong>Age</strong></td>
<td>Babies under the age of one year are most at risk - especially during the first six months of life</td>
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<td><strong>Birth weight</strong></td>
<td>Rates of SUDI are higher in low birth weight babies (less than 2,500g (5lb 5oz))</td>
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<td><strong>Poverty</strong></td>
<td>Deprivation has been linked to the occurrence of SUDI and higher risk is observed when infants are within families of a lower socioeconomic group</td>
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<td><strong>Prematurity</strong></td>
<td>Babies born preterm (less than 37 weeks gestation) are at four times the risk of SUDI when compared to babies born at term</td>
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<td><strong>Smoking</strong></td>
<td>Babies are at greater risk when a mother smokes during pregnancy or if there is smoking in the home.</td>
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<td></td>
<td>This risk of SIDS is up to four times higher if a smoking parent bed-shares with the baby.</td>
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<tr>
<td><strong>Sleeping habits</strong></td>
<td>Unsafe sleep position (prone, side)</td>
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<td></td>
<td>Sleeping a car seat, bouncy chair, or baby carrier</td>
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<td></td>
<td>Co-sleeping in hazardous circumstances, particularly on a sofa, or armchair</td>
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<tr>
<td><strong>Drugs and Alcohol</strong></td>
<td>Bed-sharing with a baby when a parent is under the influence of drugs or alcohol increases the risk of SIDS by 18 times (bed-sharing and smoking increases the risk four times)</td>
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Families bed-share both intentionally and unintentionally and this needs to be acknowledged. It is crucial that we discuss safer sleep with parents as early as possible in pregnancy and that we facilitate an open discussion, so that they will feel free and safe to discuss their circumstances.

Carers should be advised that the baby should sleep in the room where the carer is for all sleeps and a clear flat sleep space (such as a cot or moses basket) should be provided for at least the first six months of life.

Bed-sharing should be discussed with all families, regardless of their social circumstances, cultural backgrounds, whether they have expressed or have not expressed their wish to bed-share with their baby.

Parents should be advised that the safest place for a baby to sleep, is a clear, flat sleep surface in the same room as the parents. The easiest way for most families to achieve this is by using a cot or moses basket. Parents should also be advised never to share a bed with their infant if they have been drinking alcohol or taken any drugs or medication that would lead to heavier sleep.

Parents who smoke or whose baby was born prematurely or small for gestational age should be advised never to share a bed with their baby.

All parents should receive advice on bed-sharing safety - should this happen intentionally or unintentionally - to ensure that the baby cannot fall and become trapped between the edge of the bed and a wall or furniture; the baby should lie flat on their back, without a pillow or the parents’ bed covering, which is likely to be too thick for a baby. Health professionals should discuss how to maintain safety for infants during sleep when bedsharing has been advised against – acknowledge that it can happen by accident and plan alternative strategies that the family can use to both minimise the risks to the infant if it does happen, and ways to avoid it in the first place.

Midwives and health visitors have a pivotal role in reducing the risk of SIDS, and this could be by a face-to-face-discussion antenatally and a risk assessment of the sleep environment in the post-partum period.
There are three key areas healthcare professionals should discuss with families during pregnancy and beyond:

1. Create a clear, flat and safer sleep space
   - Babies should sleep in the same room as their parent or carer for all sleeps (day and night) for at least the first six months of life on a clear flat sleep surface
   - Baby sleep surfaces should never be tilted to manage reflux symptoms
   - Always place the baby on their back to sleep and at the bottom of the cot
   - They need a firm, flat mattress with no raised or soft sides
   - Clear sleep space means: No pillows, no quilts or duvets, no bumpers, no pods, nests or sleep positioners
   - Never sleep on a sofa or on an armchair with the baby (or sleep in a position where this could happen) as this greatly increases the risk of SIDS
   - Never sleep in the same bed as your baby if you smoke, have drunk alcohol, have taken any drugs or are extremely tired, or if your baby was born prematurely or was of low birth weight
   - Postnatal people in hospital should have easy access to the call bell system, be shown how to use it and ensure it is working – they should be provided with a bed-side cot for the baby to use while in hospital
   - Baby’s head should be kept uncovered so they don’t get too hot. Room temperature should be between 16 and 20 degrees (if they are using a sleeping bag, babies do not need to use any extra bedding)
   - Ensure that the sleep space is kept clear of all items (especially dangerous are blind cords and nappy sacks)
   - If the baby sleeps in a sling or baby carrier, make sure parents are aware of the T.I.C.K.S. guidance for safer sleep
   - Babies MUST NOT be left to sleep in a bouncer, car seat or swing, as they are not fit for sleeping infants, especially not unobserved or overnight sleeps

2. Keep babies smoke-free
   - Babies should be kept smoke free both before and after birth
   - Discuss smoking with the family and offer smoking cessation support at the earliest opportunity in pregnancy
   - Question beyond the immediate family – visitors, other members of the family
   - Discuss the link between co-sleeping and smoking – the risk of SIDS is up to four times more if a baby shares a bed with a smoking parent

3. Support breastfeeding
   - Risk of SIDS is halved in babies who are breastfed for at least the first two months
   - In the antenatal period, discuss infant feeding and how to get breastfeeding off to a good start. Let families know that breastmilk is all a baby needs for the first six months, and thereafter alongside other foods for two years and beyond
   - Refer families to support networks to help keep breastfeeding going (local and national support)

Information discussed with families should be recorded in the woman’s notes. If risk factors have been identified, a record of what information and advice has been given on safer sleep should be kept. Staff should seek feedback from women to ensure that they have understood the information given.

Using motivational interview or teach-back techniques help to enhance collaborative conversations and promote positive health behaviours (Table 2).
Three main charities in the UK promote SIDS risk reduction messages and these are The Lullaby Trust in England and Wales, the Scottish Cot Death Trust in Scotland and the Baby Sleep Information Source (Basis) which all work closely with UNICEF in providing advice and up-to-date information on safer sleep for both parents/carers and healthcare professionals.

National bereavement care pathways have been developed and are in use across England and are currently being piloted in Scotland. Additionally, the SIDS pathway includes support for staff who have been involved in the SIDS process.

Safer sleep training has also been developed by the Lullaby Trust, BASIS UK and the Scottish Cot Death Trust for midwives and other health professionals who see pregnant women and look after families in both the ante-natal and post-natal periods. Currently this is available, free of charge, in Scotland.

Table 2. Motivational interview technique

1. **Open-ended questions**
   Questions start with “who”, “what”, “when”, “where” and “Tell me about...” to non-judgementally encourage disclosure. E.g. “why did that feel important to you?”

2. **Affirmation**
   Remember example of good decision-making, health management, and behaviour change that you can use at a later stage. E.g. “I agree with your idea of taping that medication list on a kitchen cabinet, as this will remind you to take them.”

3. **Reflective listening**
   Intuitive and non-threatening way to uncover deeper meaning and to encourage healthy self-awareness. In more advanced applications of reflective listening, you can reframe and summarize what the patient has said to acknowledge it.

4. **Summarise and teach-back**
   Summarise and highlight all strengths and future steps that have been discussed. E.g. “Tell me about your plans” or ask, “What else will you do?”. This will help to address any gaps and will act as a reminder of actions and responsibilities.
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Helpful weblinks:

www.nice.org.uk/guidance/ng194
www.bestbeginnings.org.uk/babybuddy
www.basisonline.org.uk/sleep-health-safety/
www.safesleepscotland.org/
www.scottishcotdeathtrust.org/nisp/
www.safesleepscotland.org/book-an-education-session/
www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding
www.lullabytrust.org.uk/bereavement-support/how-we-can-support-you/our-care-of-next-infant-scheme/
Ready, Steady, Baby www.nhsinform.scot/ready-steady-baby
Caring for your Baby at Night - A Health Professionals’ Guide (www.unicef.org.uk)

References


29. www.nice.org.uk/guidance/ng1/chapter/1-Recommendations#initial-management-of-gor-and-gord


