

## Bed sharing and co-sleeping - the research

Co-sleeping is when parents or carers sleep with a baby on a bed, sofa or chair, and has been extensively studied over the past decades. Bedsharing is specifically where a baby shares the bed with an adult for most of the night including for sleep, not just to be comforted or fed. It may be intentional or may occur unintentionally during nighttime care. While research findings on bedsharing vary, evidence is generally more favourable when it occurs in the absence of known risk factors. However, there is clearer and more consistent evidence showing increased danger when specific risk factors, such as soft bedding, parental smoking, or substance use, are present.



People bedshare with their children for a variety of reasons. When interviewed, parents can express cultural or religious beliefs, links between lactation and night-time feeding, and reflect an urge for close contact with their infant. People also bedshare because it is practical for them, or because they have nowhere else to place their baby at night<sup>1-8</sup>. Bedsharing can also occur unintentionally, such as during disruptions to the family’s usual routine, for example on holiday and “just this once”, or as a completely accidental event<sup>9</sup>.

Co-sleeping was considered as a potential risk factor for what is now termed sudden infant death syndrome (SIDS) for thousands of years. “Overlaying” was described in The Bible, in Greek and Egyptian literature, and in various works and legal statutes in the intervening two millennia<sup>10</sup>. In modern science, co-sleeping was explored in a study in the 1940s<sup>11</sup>, and subsequently in the 1970s<sup>12</sup>. Following the success of the Back to Sleep campaign in 1991, the overall number of SIDS cases fell dramatically, by 80% for infants in sleeping in cots and 50% in infants who co-sleep. As a result, the *proportion* of SIDS deaths occurring during co-sleeping appeared to increase. However, this change was found to be due to the fall in cot SIDS cases, rather than a new increased risk from co-sleeping<sup>13,14</sup>.

Academic work over the subsequent decades has sought to tease out the exact factors around the risk. Initial studies were case controlled but did not disentangle specific hazards and risks. As further data emerged, meta-analyses of all case-controlled studies were undertaken. One analysis of worldwide studies found that there was an overall risk of SIDS with co-sleeping of nearly threefold. However, subgroup analyses showed the risk of co-sleeping when it was combined with maternal smoking, particularly for infants under 12 weeks old. Routine co-sleeping without other risk factors was not significantly associated with SIDS<sup>15</sup>. The authors raised concerns about previously less examined risks, such as alcohol use and sofa sleeping, as avenues for future work. Subsequently, an analysis of two case-controlled longitudinal studies in the UK found no significant risk from bedsharing specifically, when other hazards were absent<sup>16</sup>.

Researchers have explored the physiology of infants who co-sleep. Some laboratory studies have shown that co-sleeping reduced the number of obstructive apnoeas, suggesting it improves infant arousal<sup>7-20</sup>. However, another study found potentially negative effects, such as an increase in the number of mild desaturation events in their co-sleeping cohort, as well as more “rebreathing events” where the infant re-inhales their exhaled breath<sup>21</sup>. Despite the potential physiological benefits, no epidemiological study has shown co-sleeping to be protective against sudden infant death.

Bedsharing is thought, however, to have wider benefits, such as in supporting breastfeeding. It significantly increases the frequency of breastfeeds, and the duration of breastfeeding<sup>22-29</sup>. Parents who are breastfeeding and bedshare wake more frequently to feed, but for shorter periods and fall back to sleep more rapidly, achieving longer sleep duration and less sleep disruption<sup>2,8,20,30,31</sup>. One longitudinal study showed a strong bidirectional relationship between breastfeeding and bed sharing<sup>32</sup>.

Bedsharing can be a personal decision, or an unplanned event or accident, and it is therefore the focus of safe sleep advice to provide advice on making co-sleeping/ bedsharing safer and advising on hazards which make the risk of SIDS greater when bedsharing<sup>33</sup>. As it can occur dynamically, it is recommended that parents make a safe co-sleeping plan, and that parents who routinely bedshare have a safe space for their infant to sleep if they are not able to co-sleep on one night<sup>34</sup>.

Co-sleeping in the context of other risk factors is associated with an increased risk of SIDS. These risk factors include having a parent or carer who smokes, if there was smoking in pregnancy, if the parent or carer has been drinking alcohol or taking recreational drugs, or an infant who was born before 37 weeks’ gestation or with a low birthweight.

Infants who were born prematurely, before 37 weeks’ gestation, or with a low birthweight, have an increased risk of SIDS whilst co-sleeping, regardless of other risk factors. Babies whose weight at birth were in the lowest quartile of one study were nearly three times more likely to die from SIDS whilst co-sleeping, when compared with their co-sleeping heavier peers<sup>36</sup>.

The link between smoking and bedsharing/co-sleeping, as a joint risk factor for SIDS, was firmly established in a large study in New Zealand in the 1990s<sup>37</sup>, and found again in other studies<sup>38,39</sup>. It was subsequently demonstrated in meta-analyses<sup>15,16</sup> and further work by the New Zealand team<sup>40</sup>. These showed that the risk to an infant of SIDS was more than fourfold, compared with co-sleeping having not been exposed to smoking, and more than 9-fold risk for under three-month-old infants<sup>16</sup>. It has not been elucidated whether the risk is from foetal exposure to tobacco smoke, postnatal passive exposure, or if smoking is a proxy marker for another unmeasured parental behaviour<sup>6</sup>. However, the correlation in population studies is unequivocal, infants who are exposed to smoking and bedshare/co-sleep with their parents, are at significant risk of SIDS.

Infants co-sleeping (including bedsharing) with a parent or carer who has another reason for deeper sleep, such as consuming alcohol, drugs or medications have a greater risk of SIDS. One large study found that co-sleeping next to an adult who has

consumed more than two units of alcohol increased the risk of infant death by 18 times<sup>16</sup>. The combination of co-sleeping after alcohol or drug use was nine times more prevalent in one study among the parents of SIDS infants than among random control infants; this risk was mitigated by not co-sleeping<sup>41</sup>. Other environmental factors, such as thick infant clothing or bedding, was found in one study to increase the risk of SIDS 6-fold whilst bedsharing<sup>36</sup>.

Sometimes, parents and carers sleep with their infant on a sofa. However, research has shown that, compared with co-sleeping in a bed, this has an 18-fold increased risk of infant death<sup>16</sup>. Another study found that a higher proportion of infant deaths on sofas occurred in younger infants, under two months, or those exposed to smoking<sup>35</sup>, implying a layered risk of sofa sleeping with other risk factors.

Bedsharing with an infant in an adult bed also carries a risk of death or injury from mechanical causes. These incidents are rare, though implicated in 394 deaths of children under 2 years old in the USA between 1990 and 1997. They would not be recorded as SIDS but are still an important part of safer sleep advice. Specifically, research has documented injuries and deaths from entrapment or wedging of infants between the mattress of an adult bed and another object, head entrapment in bed railings, and suffocation on waterbeds<sup>42</sup>. Infant deaths on the sofa are twice as likely to be from accidental suffocation or strangulation, compared with other locations<sup>35</sup>. Injuries from use of bedside cribs are rare but the majority are associated with improper assembly<sup>43</sup>. It is therefore important to ensure that the bedside crib is fitted correctly, there is no gap between the crib and the adult mattress and that it complies to the British Safety Standard BS EN 1130:2019. When using a bedside crib, it is advised that the side of the crib is up when baby is inside the crib to ensure parental bedding is kept away from the baby. It's also important to consider the adult bed, ensuring slatted or decorated headboards are removed so that a baby cannot become trapped in the bedframe, the headboard or between the bed and the wall.

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## Frequently asked questions

### What does the research show?

Co-sleeping refers to situations where a parent or carer sleeps alongside a baby on a bed, sofa, or chair, while bedsharing specifically means a baby sleeps in the same bed as their parent or carer. People bedshare for many reasons, including cultural or religious beliefs, convenience during breastfeeding, the desire for closeness, or simply because there is nowhere else for the baby to sleep. Sometimes bedsharing is unplanned, happening during disruptions to routine or by accident. Research shows that while the overall findings on bedsharing vary, it is safer when known risk factors are not present.

Although co-sleeping has been discussed as a possible risk for sudden infant death for thousands of years, modern research has clarified that the main dangers come from specific hazardous conditions. Large studies and meta-analyses have shown that the overall risk of SIDS increases when bedsharing is combined with factors such as parental smoking, alcohol or drug use or soft bedding. Prematurity and low birthweight also raise the risk of SIDS during bedsharing, even without other hazards. While rare, mechanical hazards in adult beds, such as entrapment or suffocation, can also happen. Co-sleeping with an infant in other places, such as on the sofa, also significantly increases the risk of SIDS.

At the same time, researchers have also studied possible benefits of co-sleeping. Some laboratory work suggests it may help infant arousal and reduce obstructive apnoeas, though other findings show potentially negative effects such as

mild oxygen desaturation. Bedsharing has not been shown to protect against SIDS, but it is linked to increased breastfeeding. Bedsharing supports more frequent and longer-term breastfeeding, and breastfeeding parents who bedshare tend to wake more often but for shorter periods and may achieve better overall sleep. The relationship between breastfeeding and bedsharing appears to go both ways, with each reinforcing the other.

Because bedsharing can be intentional or accidental, current safer sleep guidance focuses on helping parents reduce the risks when co-sleeping occurs. Families are encouraged to plan for safe co-sleeping and to have an alternative separate infant sleep space available when needed.

### **I'm worried I might fall asleep while I breastfeed my baby at night, is that ok?**

Breastfeeding reduces the risk of SIDS. If you feel you might fall asleep, we recommend you prepare the bed to make it safer for your baby. Make sure you know the advice on when you should definitely avoid co-sleeping, so you know when to take particular care, such as if anyone in the bed smokes or has had any alcohol or medicines that make them sleepy, or your baby was premature or had a low birth weight. It's also really important not to accidentally fall asleep with your baby on a sofa or armchair. If you think you might fall asleep on a sofa or armchair, put the baby down in a safer place to sleep such as a cot or Moses basket.

### **Should I co-sleep with my baby?**

The safest place for a baby is their own separate sleep space, such as a cot or Moses basket. If you do choose to co-sleep, we advise you to read all the information on co-sleeping and how to reduce the risk of SIDS, so you can make an informed decision for you and your baby. There are some circumstances where we strongly recommend against co-sleeping, such as on a sofa or armchair, if anyone in the bed smokes or has drunk alcohol or if your baby was premature or had a low birth weight.

### **How should I co-sleep safely with a baby?**

If you do choose to co-sleep with your baby, there are things you can do to make it safer:

- Keep pillows and adult bedding away from the baby.
- Remove slatted and decorated headboards.
- Don't bring other children or pets into the bed with you.
- Make sure there's nowhere the baby could get trapped such as between the mattress and the wall.
- Don't leave the baby alone in an adult bed.
- Plus, follow our safer sleep advice to reduce the risk of SIDS, such as sleeping baby on their back.

There are also times and places when it's essential not to co-sleep, such as on a sofa or armchair, if anyone in the bed smokes, baby was exposed to smoking in pregnancy or if anyone in the bed has drunk alcohol or taken medicines than make them sleepy, or your baby was premature or a had a low birth weight.

## **Can I co-sleep with twins or multiples?**

If you choose to bedshare with twins or multiples we would advise not to bedshare with more than one baby at a time – as there is a greater risk of accidents.

## **Is it safer to co-sleep using a nest or pod than with a baby just lying on an adult bed?**

No. We don't recommend that babies sleep on soft surfaces such as pods or nests. If you choose to co-sleep with your baby, the safest place is in a clear space on a firm, flat mattress – the same as we advise with a cot.

## **Why do you advise against co-sleeping in certain scenarios?**

Research suggests that around half of SIDS deaths happen whilst co-sleeping, and most of these occur in high risk situations. While the exact cause of SIDS is not known, we do know that there are certain risk factors, and avoiding these greatly lowers the risk. This is why we strongly advise against co-sleeping when there are certain risk factors, as mentioned above. Especially if your baby was premature or low birth weight, an adult in the bed has drunk alcohol or taken medicines that make them sleepy, if the baby was exposed to smoke during pregnancy or anyone in the bed smokes.

## **What bedding should I use for my baby when we co-sleep?**

Keep adult bedding away from your baby, along with any belts or cords from clothing. Keep adult bedding at your waist height and wear an extra layer of clothing to keep warm. A baby sleeping bag is a good way of giving your baby their own bedding when bed sharing. Baby sleeping bags should be well fitted so the baby can't wriggle down inside. Most sleeping bags are fitted according to a baby's weight, rather than age.

## **What is the key takeaway for families?**

Co-sleeping/bedsharing is a personal choice, and many families find it meaningful or necessary. However, understanding and avoiding key risks- like smoking, alcohol, sofa sleeping, unsafe bedding and not to co-sleep with a premature or low birth weight infant is essential. Sometimes unplanned bedsharing happens, and parents should make a plan as to how to do this safely. Sometimes, infants who usually co-sleep need to sleep in their own space, such as if their parent is unwell, and a plan should be made for this as well.