

RE: Room-sharing Versus Bed-sharing

This report has a combined section on room-sharing and bed-sharing (recommendation #4). As such, it is difficult to discern the sudden unexpected infant death-reducing effectiveness of a separate bed versus a shared room. Does the up to 50% reduction apply to both or just room-sharing? All else equal, what is the reduction in infant deaths between children sleeping in their own bed in their caregivers' room versus sleeping in their own bed in their own room?

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CONFLICT OF INTEREST: None declared.

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RE: Room-sharing Until 12 Months

It is very difficult to take issue with something as serious and well intentioned as guidelines to prevent sudden unexpected infant death. However, there are some major unknowns, which make these recommendations unreasonable and even questionable from a child development and family relationships perspective.

All 4 of the studies cited to support room-sharing were conducted with samples of European parents and European infants. Yes, from a life-saving perspective, it might make sense that parents in the United States are in the same room as their infants for the first year (this scenario has not been studied yet, as just noted), but is this something that parents in our American culture can do? American families are living under very different contexts than European families; most notably, American mothers are expected to (and do return to) work when their infants are much younger in age than their European counterparts.¹ This difference warrants further consideration by the task force

representing the American Academy of Pediatrics because these recommendations are being given to mothers who are living under different cultural expectations than mothers of infants in Europe.

Infants in their second half-year of life are more aware of the world around them and, later in their second half-year of life, are developmentally capable of engaging in acts such as vocalizing to get the attention of their parents. Researchers should investigate how room-sharing affects parental sleep deprivation and parents' stress.

Transitioning an infant aged <6 months from room-sharing to his or her own crib is likely much easier than transitioning a 12-month-old. Infants in the later part of their second half-year of life are extremely aware of the world around them and are used to routines. It seems highly improbable that the transition from room-sharing to sleeping independently will happen without the infant (and, in turn, their parents) encountering lots of stress if it is done at 1 year of age.

The members of the Task Force on Sudden Infant Death Syndrome who wrote the 2016 recommendations are a highly respected group of medical physicians with expertise in pediatrics, family medicine, and public health. However, their recommendation that children room-share until 12 months of age might not be realistic or optimal at all from both a child development and family relations perspective. This recommendation should be investigated by researchers studying sleep safety in the United States from a public health perspective that is more sensitive to the emotional needs of infants and the unique cultural context of families living in the United States.

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Author's Response

Mr Cooper and Dr Frankel have questioned the recommendation that infants sleep in the parental bedroom, on a separate sleep surface close to the parents' bed, ideally for 1 year but at least for 6 months.¹

First, we would like to note that the 2016 policy statement is not significantly different from the 2011 policy statement with regard to room-sharing. For some inexplicable reason, the media chose to highlight the "room-sharing ideally for a year, but at least for 6 months" as an important and more stringent change. In fact, in 2011, our recommendation was that all of the recommendations should be followed until the infant is 1 year of age. Thus, this advice was a loosening of the recommendations. We believe that the most important changes in the recommendations about sleep location are as follows: (1) infants should never fall asleep on couches, sofas, or cushioned chairs; and (2) parents who might fall asleep while feeding their infant in their adult bed should rid the bed of any extraneous bedding.

Case-control studies in England, New Zealand, and Scotland have shown that room-sharing decreases the risk of sudden infant death syndrome compared with sleeping in a separate room. Our statement that the decline in risk was ~50% is very conservative. The study by Blair et al² found that the adjusted odds ratio of death for infants who slept in a separate room, compared with those who slept in the parents' room, was 10.49 (95% confidence interval [CI], 4.26–25.81). The New Zealand Cot Death study found that infants who room-shared

for the last sleep had a 65% lower risk of death, compared with sleeping in a separate room (adjusted odds ratio, 0.35 [95% CI, 0.26–0.49]), and usual room-sharing had a similar protective effect.³ Tappin et al⁴ reported that the adjusted odds ratio of death when sleeping in a separate room, compared with room-sharing, was 3.26 (95% CI, 1.03–10.35). Although the study by Tappin et al only found this reduction in risk to be present if the parent was a smoker, Blair reported this reduction to be present for both smoker and nonsmoker parents (P. Blair, personal communication, 2016). Furthermore, the most recent data from the New Zealand sudden and unexplained death in infancy study found a 64% protection with room-sharing, compared with solitary sleeping (adjusted odds ratio, 0.36 [95% CI, 0.19–0.71]) (E. Mitchell, personal communication, 2016). Unfortunately, these studies did not stratify the risk according to infant age in months, which is why we recommended in 2011 that the guidelines be followed for the first year. However, more recent analyses of case-control studies^{5,6} and registry databases⁷ emphasize the importance in general of sleep location in the first few months of the infant's life, which seems to be a very vulnerable time. Ninety percent of sleep-related deaths occur in the first 6 months, and the peak occurs between 1 and 4 months of age.

An infant's ability to arouse is critical physiologically, and a leading hypothesis is that failure to arouse makes infants vulnerable to sudden infant death syndrome.⁸ The failure to arouse may explain why prone sleeping is so dangerous; infants who sleep prone have higher arousal thresholds. Room-sharing infants have more small awakenings (which may manifest as stirring or moving around and not full awakening) during the night.^{9,10} It has been postulated that room-sharing

without bed-sharing may offer a protective effect from the small awakenings. Furthermore, room-sharing facilitates continued breastfeeding,¹¹ another measure that reduces the risk.

One study that has looked at the impact of room-sharing on parental sleep quality found that room-sharing mothers have more sleep disturbances than mothers who sleep in a separate room.¹² In this study, room-sharing and solitary sleeping infants have similar sleep quality. Other studies have found that room-sharing infants experience more frequent awakenings.^{9,10} On the other hand, some studies have shown that the sleep quality of breastfeeding mothers (who are more likely to be room-sharing) is similar to or better than that of formula-feeding mothers and that sleep quantity in these 2 groups is similar.^{13,14} One study found that mothers who exclusively breastfeed sleep, on average, 30 minutes longer than formula-feeding mothers.¹⁴

Clearly, more research is needed to better understand the physiology of infant sleep and arousal when infants room-share with their parents, as well as the downstream consequences of room-sharing on parental and child sleep.

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Author's Response

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