

# Encyclopedia of Sleep and Dreaming

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CO-SLEEPING

by

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## CO-SLEEPING

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*Co-sleeping* is a relatively new term that describes the extremely old human practice of infants and children sleeping in contact or close proximity to their parents. The most obvious form of co-sleeping is an infant or child sleeping in the same bed with her or his parent(s). From the child's perspective, co-sleeping also occurs when the child is rocked or held while sleeping or when the parent and child are close enough to hear, feel, or smell one another. Although co-sleeping can also occur among siblings, the term generally means sleep contact between parents and children.

### How Widespread Is Co-Sleeping?

The practice of infants and children sleeping beside their parents is found in the great majority of contemporary world cultures. In fact, parents and children sharing the same sleeping place was common for all peoples, including all industrialized countries, up until about 200 years ago (Thenevin, 1987). Most people in the world today live in one-room shelters, and mothers nurse their infants on demand throughout the first 2 years of life. This context virtually guarantees co-sleeping.

Where and exactly how infants sleep with their parents vary from one culture to another. In pre-industrial societies, co-sleeping more often takes the form of infants sleeping on floor mats or on animal skins next to or between their parents, or at least within reach, sometimes as they sleep in baskets hanging above their parents' heads. Among a variety of Native American, East European, and Asian cultures infants either sleep alongside their mothers in physical contact or within a few meters in cradleboards, nets, hammocks, or baskets made of roots, twigs, grasses, and/or plant fibers.

Preindustrial and non-agriculturally based societies are not, however, the only ones that practice parent–infant co-sleeping. In Japan, parent–infant co-sleeping on a mat or *futon* is common. In the United States among most members of La Leche League, an organization composed of mothers committed to breastfeeding, late weaning, and close parent–infant physical contact, co-sleeping is advocated and practiced. A study by Elias, Nicolson, and Konner (1986) shows that between 60 percent and 70 percent of La Leche League infants aged 2 to 13 months regularly sleep with their mothers.

Co-sleeping is also common in both urban and rural areas throughout the Near and Middle East as well as in India, Pakistan, and Bangladesh. Hundreds of diverse cultures in China, Vietnam, Thailand, Burma, and Java also co-sleep, although the characteristics of the bed and bedding materials vary a great deal across cultures (Table 1).

Most infants around the world not only co-sleep at night, but also nap in a pouch, sling, or shawl tied to their mother's back or chest. Infants sleep sporadically as mothers walk to water holes, dig for roots, work in garden plots, prepare food, or collect berries. In many societies, the mother's economic role as food collector is critical. But unlike industrialized societies where alternate forms of child care may permit some mothers to leave the infant at home for lengthy periods, most infants in the world today accompany their mothers wherever they go; mother and child are necessarily linked by the infant's need to breastfeed. Hence, even daytime sleep is social sleep.

### Parent–Infant Sleep Arrangements and Cultural Values: What's the Connection?

The idea that cultures guide the ways children are raised, including the way children sleep, is illustrated by considering Japan and the United States. Social interdependence and group harmony are two values rigorously enforced in Japan. Parents there sleep with their infants partly to encourage this interdependence. In contrast, the qualities Japanese parents hope to instill in their children are the very ones that Americans attempt to inhibit or suppress.

American parents want their children to learn how to be self-reliant and display their individu-

ality. They teach their infants to sleep alone. Japanese children are taught to "harmonize with the group," so sleeping with their parents is no coincidence. Sleeping arrangements reflect larger social values and goals.

### Co-Sleeping in the United States

In societies such as the United States where co-sleeping is discouraged, the task of collecting reliable data on how many families actually practice it is difficult. Many parents are reluctant to admit to taking their infants or children to bed with them. Lozoff, Wolf, and Davis (1984) overcame the research difficulties to find that 29 percent of 150 Cleveland, Ohio families practiced some form of co-sleeping during the month prior to the interview. Although 65 percent of the mothers disclosed that they did not have any body contact with their child at bedtime, fewer than 35 percent of these mothers indicated that they always avoided co-sleeping, especially if the child continued to wake up during the night or was ill or frightened.

Schachter and colleagues (1989) found that among Hispanic-Americans in Harlem over 20 percent of the families slept with their children all night at least three times a week, whereas only 6 percent of the white families did so. Moreover, only one fourth of the white families but nearly half of the black families in Lozoff and colleagues' (1984) study in Cleveland regularly co-slept at least three nights a week.

In a different survey conducted near Boston, Massachusetts, Madansky and Edelbrock (1990), confirmed differences between black and white families in how they manage childhood sleep. These researchers report that 76 percent of black families reported co-sleeping compared with only 53% of white families. Black families in this area were more than twice as likely as white families to co-sleep more than once a week.

Among Hispanic-Americans, Schachter and colleagues (1989) found co-sleeping occurred more frequently with first-born or only children, with infants past the age of 12 months, and among households with extended families. In non-Hispanic populations it appears that co-sleeping occurs more regularly in single-parent households; and although infants from poor families are found sleeping with their parents more

often than are infants from more affluent families, co-sleeping does not appear to be related to the number of bedrooms available. In most cases, and regardless of family income and ethnicity, co-sleeping children were reported to have had available to them another bed or another sleeping place.

### **Why Co-Sleeping Is Discouraged in European and Western Urban Societies**

In most Western industrialized cultures, co-sleeping, or sharing the "family bed" as Tine Thenevin called it, is not usually recommended by pediatricians. They worry about the accidental suffocation of infants sleeping in soft modern beds where infants potentially could roll under a sleeping parent, especially if the parent is drunk, obese, or desensitized by drugs. Pediatricians and sleep experts suggest that co-sleeping may create excessive infant/child dependence on parents, retard the infant's social maturation, or possibly interfere with the husband-wife relationship, although no data have ever demonstrated these contentions. They maintain that even at a very young age infants are more than capable of sleeping alone and should do so. If infants and children cry and continue to resist sleeping alone, they argue, parents can implement on a gradual basis steps to distance themselves from their children to condition them to sleep alone (Ferber, 1985).

Most parents who elect to co-sleep will admit that in our culture sleeping with an infant or child confronts parents with new experiences and special challenges, especially for those parents used to getting an uninterrupted night's sleep and who work on schedules typical of Western urban life. The fact that sleep may be more fragmented when co-sleeping leads health professionals to worry that tired parents may prove less attentive or sympathetic caregivers during the day. Kung Bushman mothers of the Kalahari Desert in South Africa who sleep with their children regularly, however, insist that it is natural for infants to awaken during the night; hence, night waking is not regarded as a problem or a concern. They do not define their own sleep as "disturbed." When a Kung mother awakens to the stirring of her infant lying next to her she returns immediately back to sleep or she nurses her baby;

in this case even if the infant were sleeping in a different place, the mother would still have to awaken. Cultural expectations and needs of both parents and infants cannot be disregarded in the attempt to understand the benefits or disadvantages of parent-infant co-sleeping.

How and where we expect infants and children to sleep are clearly learned. Parents from different backgrounds and cultures typically think their method of child care is natural. For example, just as many American parents seem to be surprised, if not horrified, at the prospects of infants and children sleeping in their beds, as Kung Bushman parents are shocked when told of how Western parents make their infants sleep alone, a practice unheard of and unthinkable in Kung culture. As all Kung mothers slept as children with their own mothers, co-sleeping is familiar and expected, but not to American parents. Moreover, because bottle feeding and cow's milk is not an available option for Kung mothers, as it may be for mothers elsewhere in the world, infants must be close to the mother during the night for feeding.

### **Co-Sleeping and Evolution: How "Natural?" How Old? How Do We Know?**

Despite all of these cultural complexities, in many ways co-sleeping makes good biological sense. From an evolutionary perspective, protection from predators and the access to food that nighttime co-sleeping provides are beneficial to infants, especially the human infant who develops more slowly than any other mammal and who begins life with the least developed nervous system and brain—only 25 percent of its adult brain volume. Moreover, purely from a biological point of view, the human infant "expects" to be in physical contact with his or her parent throughout the night. The infant's body temperature, heart rates, and growth patterns are now known to be affected by forms of physical and social contact with a caregiver (McKenna, 1986; McKenna and Mosko, 1990).

Because infants are unable to locomote on their own for months or sometimes years, or unable to digest anything but milk for the first few months of life, all primate infants are carried on their mothers' bodies day and night and never left alone. Even today not all human infants live in

**Table 1. Cross-Cultural Survey of Infant Sleeping Arrangements: With Whom and on What Do Infants Sleep?**

Culture	Geographic Location	Subsistence Pattern	With Whom Baby Sleeps	On What Baby Sleeps
Ainu	North Hokkaido, Japan	Gathering, fishing, animal husbandry	First month with mother	First month—floor mat; afterward—hanging cradle
Bemba	Central Africa	Gardening, horticulture, tribal-level society	With parents first 3 years	Wood beds
Bhil	Eastern Rajasthan and western Pradesh, in western Ghats	Market economy mixed with crops, animal husbandry	With mother	Soft blanket on floor
Cuna	Panama	Gardening, cash crops, gathering, fishing, crafts	With mother	On mother's hammock or hard mats made of cibu tree covered with plantain leaves
Flores	Indonesia	Gardening, fishing	With parents	Bamboo sleeping bench
Gund	Manchuria, northern China	Gardening	With mother	Fiber mats
Gusii	Kenya	Gardening, gathering, animal husbandry, maize/coffee cultivation, wage labor in urban areas	First month with mother	On blankets
Ifugao	Northern Philippines	Gardening, gathering, trade	With parents	Raised woven blanket on floor
Maori	New Zealand	Cash crops, wage labor, gardening, gathering, animal husbandry	With parents	Summer—scooped-out earthen hut; winter—sleeping huts
Nahaue	Pradesh State, northwestern India	Hunting, gathering, small crops, gardening	With parents	In skin hammocks hung within mother's reach
Navaho	Southwestern United States	Mixed: traditional pastoralists, business (trade), wage labor	Next to parents, swaddled in cradleboard	
San Kung	Southern Africa (Kalahari Desert)	Gathering, hunting	With mother	Blankets, mats
Santal	India	Agriculture, trade, pastoralism; caste society	With parents until 13	String beds
Semang	Malaysia	Gardening, trading, fishing	With parents	Mattress of split bamboo

Table 1. (Cont.)

Tarahumara	Northern Mexico	Collecting, gathering, hunting, small gardens; tribal-level state	With parents	Summer—open canvas; winter—wood beds
Tiwi	Northern Australia	Hunting, gathering, fishing, gardening, wage labor	With parents	Mats of paper bark
Trobrianders	Northeastern New Guinea	Gardening, fishing	With mother	Raised bedstead with small fire underneath
Turadja	Indonesia	Small crops, gardening, gathering, trade	Between parents	Mats of reeds or cloth, and pillows
Tzeltul	Central America		With parents	On mats of leather or bark
Yapese	Pacific Micronesia	Horticulture, fishing	With mother	Hanging baskets

predator-safe environments. Just as nonhuman primate infants can be and sometimes are eaten by leopards, tigers, hyenas, or other predators, human infants are potential prey of the large and medium-sized predator cats, dogs, and hyenas in Africa and many other parts of the Old World, especially at night. For both human and nonhuman primates constant maternal monitoring reduces the chances of infant mortality.

What factors led to the increased neurological immaturity of the human newborn in the first place that made parent–infant co-sleeping necessary? The answer is quite surprising. Anthropologists have learned that as upright posture, that is, bipedalism, became more and more useful to early human beings, the pelvis had to change its shape to accommodate this form of walking. Unfortunately for mothers and infants, these physical changes made it much more difficult for babies to be born quickly, safely, and easily.

The fossil records from Africa some 4 to 5 million years ago indicate that as our ancestors descended from the trees to live on the ground, the hip (pelvis) bones of the first representatives of the human lineage, the Australopithecines (also referred to as the first hominids), rotated forward and broadened. This structural change was necessary so that the abdominal muscles can attach to bony structures to prevent our organs and intestines from jostling about when we stand up and

walk. At the same time, though, the bottom of the pelvis, the ischium, pushed up and shortened to stabilize these broadening hips and to permit the muscles of the legs and buttocks to work efficiently as we walk. The overall result of these bipedal adaptations, however, was the reduction of the size of the birth opening relative to the size of the head.

These changes alone were enough to make birth difficult for our evolving ancestors; but to make matters even worse, at the same time as the pelvic (birth) opening was diminishing because of the usefulness of bipedalism, natural selection was also favoring increased fetal head size. Fetuses and infants were fast acquiring larger brains providing the potential for more complex learning and postnatal sociality—two major adaptive characteristics of our species. The adaptive compromise to this potentially disastrous evolutionary dilemma was, and continues to be, the birth of exceedingly neurologically immature infants for whom the vast majority of this added brain growth occurs after birth, not before.

In short, increased parental contact and care including co-sleeping emerged early in human evolution. Some 4 to 5 million years ago as our evolving hominid ancestors left the trees, so too, and somewhat early, did hominid infants have to leave their wombs. Completion of a gestation process that could not be completed safely in utero was at stake.

### Is Co-Sleeping Adaptive?

Whiting (1981) studied cultural data from over 180 societies. Most but not all of these were smaller traditional societies and less technologically advanced than Western industrialized societies. He found that infant care practices including where and how infants sleep to a large extent depend on the challenges imposed by the physical environment, especially the average winter temperature. In cold climates, for example, where the temperature in the winter averaged below 50° F, in the majority of the cultures studied mothers swaddled their infants heavily; that is, they wrapped them tightly in thick blankets and strapped them into cradleboards to minimize heat loss. Infants slept in proximity (same room) to mother but tended not to sleep in skin-to-skin contact. In this way babies could be kept warmer.

In warmer climates, however, where winters averaged above this mean temperature, infants slept next to the mother's body, skin-to-skin. Rather than being carried in cradleboards in these milder and warmer environments, mostly infants were carried in shawls, nets, or baskets. Whiting argues that in addition to reflecting cultural values, different sleeping arrangements around the world reflect responses to different environmental pressures and the strategies by which parents best protect infants from cold temperatures.

The idea that parent–infant co-sleeping may contribute to infant well-being in yet other ways and possibly offset other human infant vulnerabilities is proposed by McKenna and colleagues (McKenna, 1986; McKenna and Mosko, 1990; McKenna et al., 1990). Their data show that when mothers and their infants sleep together in the same bed in a sleep laboratory, they exhibit overlapping, partner-induced arousals. These interruptions are thought to give infants practice in arousing. Such practice may be important because of the suspected relationship between infantile arousal deficiencies and the SUDDEN INFANT DEATH SYNDROME (SIDS). McKenna (1986) also suggests that the co-sleeping environment represents the infant's "natural ecological setting" for sleep, and that co-sleeping may change the breathing and the unfolding nighttime pattern of deep and light sleep of the infant in ways that make it more difficult for deadly arousal

deficits to find expression in SIDS. Though not a preventive measure for all potential SIDS victims, McKenna suggests that co-sleeping may help some. Co-sleeping may help certain infants with unspecified deficits to override the deficits and to avoid potential life-threatening events. But much work must be done to test this assertion.

(See also CHILDHOOD, SLEEP DURING.)

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