

New parents often have unrealistic expectations about how their babies should sleep. To get them to sleep longer or more often, parents may inappropriately feed their babies. WIC staff can help parents understand their babies' sleep and waking patterns, thus encouraging more appropriate feeding.

Babies sleep most in 2 types of sleep. Both types are important:

#### LIGHT SLEEP:

- During light sleep, babies dream. They may move and make noises. Their eyes may move under their eye lids and they may actually open and close their eyes. They awaken easily.
- Light sleep is important for babies.
   During light sleep, blood flow to the brain is increased. This is important for brain development.
- The ability to awaken easily is important for babies' health and safety.
- Ways to increase light sleep include breastfeeding, laying babies down on their backs to sleep, and offering pacifiers to formula fed babies before they fall asleep.

#### DEEP SLEEP:

- During deep sleep, babies are very still and do not move much. Their breathing becomes more regular. They are harder to wake up.
- They may still make sucking movements and might startle, but this will not wake them.
- Deep sleep is important for complete rest.



### **SLEEP PATTERNS:**

Babies sleep differently than adults.

Newborns fall asleep into **light sleep**. After about 20 to 30 minutes, they go into **deep sleep**. Some babies are sensitive to position changes and may awaken easily when laid down right after falling asleep. For these babies, it is best to continue holding them until they stop moving and twitching or until the baby shows signs of deep sleep before laying them down.

Newborns spend about an equal amount of time in light sleep and deep sleep, in about 50 to 60 minute cycles. Initially, newborns may wake with each cycle, or every one or two hours.

Sleep patterns change as babies get older. Between 12 and 16 weeks, babies begin sleep in deep sleep, as adults do, and they also wake up less often. Parents think babies "sleep a lot better" around 4 months.

Young babies fall asleep in light sleep for 20 to 30 minutes.

Newborn sleep cycles are **50 to 60** minutes long.





# LONGEST STRETCH OF SLEEP:

By 2 to 6 weeks, young babies are able to sleep 2 to 4 hours at one time. Around 6 to 8 weeks of age, babies' sleep becomes more concentrated during the nighttime as they are more awake during the day.

By 3 months, babies are able to sleep about 4 hours at one time, and typically the longest stretch will be during the nighttime.

By 6 months, babies may be able to sleep up to 6 hours at one time.



#### **WAKING IS IMPORTANT:**

Young babies are supposed to wake up at night. Night waking may be essential to babies' health.

- Their needs must be met for feeding, comfort (wet diapers are not comfortable!), and warmth.
- Very young babies who sleep too deeply for long periods of time are at greater risk for Sudden Infant Death Syndrome (SIDS).
- Babies will wake less often at night as they get older.



# WHEN BABIES NEED TO BE AWAKENED:

Sometimes babies are very sleepy and may be hard to awaken for feeding. This may happen with newborns whose mothers were given medication during labor. When a parent or caregiver needs to wake a baby, it is best to use a variety of touches and sounds to stimulate the baby's brain.

### Examples include:

- · Change the baby's position
- Remove the baby's clothes or change the diaper
- Touch the baby gently in different places, such as the tummy, hands, bottoms of feet
- Talk to the baby

## SOME REASONS THAT BABIES WAKE MORE OFTEN THAN EXPECTED:

- Physical immaturity (such as prematurity)
- · Ineffective or poor feeding
- Illness or injury
- · Having a TV on in the room or other interruptions
- Caffeine or medications (breastfeeding mothers)
- · Changes in the baby's routine
- · Refer to doctor, as needed





- If the baby awakens easily right after falling asleep in someone's arms, suggest that the parent continue to hold him until he stops moving and twitching (or until signs of deep sleep).
- Include play time and physical activity during the day to encourage better sleep at night.
- Keep the TV off or out of the room where the baby sleeps.
- Try night lights or low lighting in areas
  used to care for the baby during the night.
  This will help both mom and baby get back
  to sleep more quickly once the baby is
  settled again. However, low lighting should
  not be used while doing something that
  requires a parent's full attention, such as
  giving medication to the baby.
- Suggest that the parent sleep with the baby close by so that the baby can be attended to more quickly.
- Getting at least 90 minutes of sleep at one time (the length of one adult sleep cycle) may help the parent feel more rested than a shorter nap. If at all possible, help parents find ways to sleep or rest quietly when the baby sleeps.

#### REFERENCES

Goodlin-Jones BL, Beth L, Burnham M, Gaylor E, Anders T. Night Waking, *Sleep-Wake Organization,* and *Self-Soothing in the First Year of Life.* J Dev & Behav Pediatri. 2001;22(4):226-33.

Burnham MM, Goodlin-Jones BL, Gaylor EE, Anders TF. Nighttime sleep-wake patterns and self-soothing from birth to one year of age: a longitudinal intervention study. J Child Psychol Psychiatry. 2002;43(6):713-25.

Heraghty JL, Hilliard TN, Henderson AJ, Fleming PJ. *The physiology of sleep in infants. Arch Dis Child.* 2008;93(11):982-5.

Coons S, Guilleminault C. Development of consolidated sleep and wakeful periods in relation to the day/night cycle in infancy. Dev Med Child Neurol. 1984;26(2):169-76.

Anders TF. Night-waking in infants during the first year of life. Pediatrics. 1979;63(6):860-4.

Anuntaseree W, Mo-suwan L, Vasiknanonte P, Kuasirikul S, Ma-a-lee A, Choprapawan C. *Night waking in Thai infants at 3 months of age: association between parental practices and infant sleep.* Sleep Med. 2008;9(5):564-71.

Peirano P, Algarín C, Uauy R. *Sleep-wake states and their regulatory mechanisms throughout early human development.* J Pediatr. 2003;143(4 Suppl):S70-9.

Skuladottir A, Thome M, Ramel A. *Improving day* and night sleep problems in infants by changing day time sleep rhythm: a single group before and after study. Int J Nurs Stud. 2005;42(8):843-50.

Lee KA, Gay CL. Can modifications to the bedroom environment improve the sleep of new parents? Two randomized controlled trials. Res Nur Health. 2011;34(1):7-19.





