MODEL HOSPITAL POLICY MANUAL & TOOL KIT

Incorporating Infant Safe Sleep Practices In A Health Care Setting/ Tool Kit For Educating Parents and Caregivers About Infant Safe Sleep

ALLEGHENY COUNTY HEALTH DEPARTMENT

Perinatal Periods of Risk (PPOR) Team

PENNSYLVANIA CHAPTER, AMERICAN ACADEMY OF PEDIATRICS

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™
Pennsylvania Chapter

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Introduction

Infant death is an indicator of the health of a population. It reflects the overall state of maternal health as well as the quality and accessibility of primary health care available to pregnant women and infants. Although the overall United States infant mortality rate has reached record low levels, the rate of infant mortality in the United States remains among the highest in the industrialized world. Disparities in infant mortality rates between whites and specific racial and ethnic groups persist, both nationally and locally. Nationally, the infant mortality rate for African Americans remains twice that of whites; locally, infant mortality rate for African Americans (16.9/1000) is 3.31 times that of whites (5.1/1000). [1]

Reducing fetal and infant deaths is an objective (16-1) in Healthy People 2010 Objectives. Reducing postneonatal deaths is a subset of this objective:

Healthy People 2010 Objective 16-1e:
Postneonatal deaths (between 28 days and 1 year)
1998 Baseline=2.4 2010 Target=1.2
Rate per 1,000 live births

The U.S. postneonatal mortality rate in 2004 was 2.25 deaths per 1,000 live births.[2] The postneonatal death rate for Allegheny County was 1.6 per 1000 live births (2004). [1]

According to the United States Health and Human Services Center for Disease Control and Prevention (CDC), more than 4,500 infants die suddenly of no obvious cause annually in the United States. Half of these sudden, unexplained infant deaths are due to sudden infant death syndrome (SIDS).[3] SIDS is the leading cause of postneonatal death among all racial and ethnic groups, representing one-third of all cases of postneonatal death nationally (Year 2002) and over 50% of all cases locally (Year 2004).[1] SIDS is both a national and local health issue.

SIDS may be defined as the sudden death of an infant under 1 year of age, which remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of the clinical history.[3] The rate of SIDS among African Americans is 1.1 per 1,000 live births nationally (2004), twice the rate for Whites.[2] Locally, the rate of SIDS among African Americans is 2.57 per 1,000 live births, 17 times the rate for Whites (2002-03). Therefore, a reduction in the rate of death from SIDS, particularly among African Americans, would contribute greatly to reducing the overall infant mortality rate and particularly to closing the racial gap in postneonatal death.

HIGHLIGHT POINT
Nationally, minority infants die from SIDS at a rate two to three times higher than white infants. Locally, here in Allegheny County, SIDS rates for minority infants are 17 times those of white infants (2002-2003).

Healthy People 2010 Objective 16-13 focuses on increasing the percent of infants who are put down to sleep on their backs: Increase the percentage of healthy full-term infants who are put down to sleep on their backs; Target: 70%.

In 1992, the American Academy of Pediatrics (AAP) recommended that infants be laid down for sleep in a nonprone position as a strategy to reduce the risk of SIDS.[4] Since 1992, the SIDS rate has been declining along with a decrease in the infants prone sleeping rate. See Attachment 10. However, there has been a leveling of the previously declining SIDS rate and studies indicate this may be occurring coincidently with a slowing in the number of infant placed to sleep in the supine position. The prevalence of prone positioning in the United States, as assessed from ongoing national sampling, decreased from 70% in 1992 to 11.3% in 2002 and increased slightly to 13.0% in 2004.[5] Racial disparity in the prevalence of prone positioning may also be contributing to the continued disparity in SIDS rates between black and white infants.[5, 6, 7] The rate of SIDS among black infants was 2.5 times that of white infants in 2001[8]; the prevalence of prone positioning in 2001 among white infants was 11%, compared with 21% among black infants.[9]

American Academy of Pediatrics 2005 SIDS Policy Statement

In 2005, the American Academy of Pediatrics (AAP) Task Force on SIDS released the Policy Statement "The Changing Concept of Sudden Infant Death Syndrome: Diagnostic Coding Shifts, Controversies Regarding the Sleeping Environment, and New Variables to Consider in Reducing Risk".[5] In this revised Statement, the AAP no longer recognizes side sleeping as a reasonable alternative to fully supine sleeping and stressed the need to avoid redundant soft bedding and soft objects in the infant's sleeping environment, the hazards of adults and/or children sleeping with an infant in the same bed, the SIDS risk reduction associated with having infants sleep in the same room as adults and with using pacifiers at the time of sleep, the importance of educating secondary caregivers and neonatology practitioners on the importance of "back to sleep," and strategies to reduce the incidence of positional plagiocephaly associated with supine positioning. The AAP identified the following independent risk factors for SIDS: prone sleep position, sleeping on a soft surface, maternal smoking during pregnancy, overheating, late or no prenatal care, young maternal age, preterm birth and/or low birth weight, and male gender.[5]

Allegheny County Health Department
Infant Sleep Related Death Activities and Data

Between 2003-05, the Allegheny County Perinatal Periods of Risk (PPOR) Team worked to describe a safe-sleep environment for infants, one that reduces the risk of injury and death to infants when sleeping. The PPOR Team's goal was to develop safe sleep guidelines that would be acceptable to and promoted by all Allegheny County healthcare providers so that the education for parents and other caregivers is consistent, accurate and repetitive. Based on current literature and local data along with broad input from the healthcare community (i.e. physicians, nurses, lactation consultants, outreach workers, etc), the PPOR Team produced and distributed the document "A SAFE-SLEEP ENVIRONMENT FOR INFANTS: Guidelines for Healthcare Professionals" to over 1000 physicians and other health care providers.

Staff from the Allegheny County Health Department (ACHD) Office of Epidemiology and Biostatistics (OEB) and the Allegheny County Child Death Review Team (CDRT) reviewed cases of suspected Sudden Unexpected Infant Deaths related to infant sleep (SUID) that occurred between the years 2001-05. Between 2001 and 2005, there were 54 infant sleep related deaths in Allegheny County; these infant sleep related deaths included SIDS, accidental suffocation and strangulation in bed (ASSB), asphyxia, and other ill-defined cases of infant mortality (henceforth referred to as SUID). The ACHD Chief Epidemiologist determined that there was a significant difference between *all live infants born 02-03* versus an infant classified as dying from SUID based on the following variables: infant race, number of prenatal care visits received by birth mother, maternal age at infant's birth, infant's gestation age at birth, marital status, and infant's birth weight. See Attachments 7, 8 & 9 for local SUID data. More black infants (N=39/75%) died from SUID than white infants (n=13/25%) and more infants classified as dying from SUID were born to single mothers (N=44/88%) than to married mothers (N=6/12%).

Two variables that deviate from national data are race and gender. Regarding race, local data revealed that black infants died of SIDS seventeen times more often as white infants whereas black infants have a 2-3 greater risk of dying from SIDS than white infants nationally. Nationally, male gender has been consistently identified across studies as an independent risk factor for SIDS. Although not statistically significant, locally more female (28/51%) infants were classified as SUID than were male (26/49%) infants.

The OEB staff analyzed risk factors which nationally have been considered risk factors for SUID and SIDS such as infant's sleep environment (crib/bassinet vs. adult bed/sofa), infant's sleep position (back sleeping vs. tummy/side sleeping), exposure to prenatal and secondhand smoke, and infant sleeping on a soft surface (subjectively defined as infant sleeping in an area without firm support, with soft items such as pillows, comforters, etc). Local analysis revealed that more Allegheny County babies classified as dying from a SUID were found in a prone and/or side position for their last sleep versus in the recommended back/supine sleep position, were placed on a bed or sofa rather than placed in a safe crib or bassinet for their last sleep, were found on a soft surface than on a firm surface for their last sleep, were found in a sleep area with toys and other soft items for their last sleep rather than placed in a crib with no toys or other soft items, and were sleeping with someone on a sleep environment other than alone in a separate sleep area such as a crib. Overall, one or more potential SIDS risk factors were identified in 53 of the 54 SUID cases (98%); risk factors, other than sleep location and sleep position, were not available for one of the 54 cases. This data supports the Allegheny County PPOR Team's recommendations stated in publication "A SAFE-SLEEP ENVIRONMENT FOR INFANTS: Guidelines for Healthcare Professionals"-- that all babies should be positioned on their backs for sleep in their own sleeping space such as a safe crib, bassinet, or sidecar and that the infant's crib mattress should be firm and encased with a tight-fitted crib sheet, and that the infant sleeping space should be free of all soft or loose bedding and free of other soft items such as toys.

The PPOR Team recognizes the unique and important roles of nurses and physicians in the hospital setting as key communicators in delivering a consistent message to parents and caregivers about infant safe sleep. Therefore, as an adjunct to the document "A SAFE-SLEEP ENVIRONMENT FOR INFANTS: Guidelines for Healthcare Professionals",

the PPOR Team in conjunction with the Pennsylvania Chapter of the American Academy of Pediatrics produced this Model Hospital Policy and Protocol Manual: Incorporating Infant Safe Sleep Practices In a Health Care Setting & Tool Kit: Educating Parents and Caregivers About Infant Safe Sleep. The purpose of the manual is to assist hospitals and other health care facilities and agencies with implementing and modeling infant safe sleep protocols within their facility.

Positional Plagiocephaly and the Importance of "Tummy Time"

In 1992, the American Academy of Pediatrics (AAP) made the recommendation that infants sleep on their backs to reduce the risk of SIDS (Sudden Infant Death Syndrome).[4] The American Academy of Pediatrics also stated that "prone positioning when awake and observed tummy time are recommended for development of upper shoulder girdle strength and avoidance of positional plagiocephaly.[10]

Since the launching of the "Back to Sleep Campaign", infants have been spending a lot of time in the back position while sleeping as well as while in infant car seats, infant carriers, bouncy seats, and infant swings. While the Back to Sleep Campaign has made tremendous strides in reducing SIDS, there has also been an increase of the number of infants suffering from Positional Plagiocephaly or infants with flat head.[5, 10, 11, 12, 13, 15] The term plagiocephaly is a Greek derivative meaning "oblique head".[11] Positional plagiocephaly is a condition in which specific areas of an infant's head develop an abnormally flattened shape and appearance.[13, 14] Occipital plagiocephaly causes a flattening of one side of the back of the head, and is often a result of the infant consistently lying on his or her back.[13] A flat area may develop very quickly over several months.[13] In the vast majority of the cases when a baby develops a flattened head, the problem usually resolves with time (by 6 months to one year of age) as the baby spends more time awake, begins to roll to different positions by themselves, and/or completes positional therapy.[11, 12, 13, 14]

A small number of infants have positional plagiocephaly at birth.[13, 14] Since newborn infant skulls are very soft and malleable to help ease them through the birth canal, it is not unusual for newborns to have unusually shaped heads due to the pressure of birth.[13] This condition usually resolves itself by 6 weeks of age.[13] However, some infants show a preference for sleeping or sitting with their heads turned consistently in the same position, which may lead to positional plagiocephaly.[12, 13] Also, it has been suggested that parents may have over-interpreted the AAP recommendations regarding infant supine sleep and have avoided prone positioning even during the daytime.[12]

Health care professionals should continue to teach the protective benefits of supine sleeping for SIDS prevention, but they should combine this message with adequate information about the mechanisms causing positional plagiocephaly and of its likely consequences.[12, 15] Along with infant back sleeping and crib safety, parents/caregivers should be educated about the importance of providing their infant with regular periods of supervised prone play from an early age (i.e. tummy time); holding the infant upright for cuddles; not leaving the infant supine for long periods in car seats, on floor blankets, or in bouncers; and varying the head position when laying the very young infant down to sleep.[11, 12, 14,15] Other recommendations to prevent positional plagiocephaly are provided under "Topics Related to SIDS and Infant Safe Sleep" in the Tool Kit section.

Statement of Purpose

To provide written guidance for hospitals and other health care facilities about implementing and modeling infant safe sleep protocols within their facility. These infant sleep practices should be followed for all healthy infants up to one year of age.

Goals:

To provide accurate and consistent infant safe sleep information to hospital personnel including medical, nursing, breastfeeding, child birth education, and nutrition staff.

To enable hospitals to implement and model infant safe sleep practices throughout their facility.

To provide direction to health care facilities so that infant safe-sleep education for parents and other caregivers is consistent and repetitive.

To provide guidance to health care staff about infant safe sleep concerns and issues.

Long Range Goals:

To provide direction to health care professionals so that safe-sleep education for parents and other caregivers is consistent and repetitive.

To reduce the risk of injury and death to infants while sleeping.

Immediate Goal:

To describe an infant safe sleep message that will be acceptable to and promoted by all Allegheny County healthcare professionals.

Sample Infant Safe Sleep Policy

Healthcare professionals will follow infant safe sleep practices based on guidelines stated in "A SAFE-SLEEP ENVIRONMENT FOR INFANTS/Guidelines for Healthcare Professionals"

These guidelines include:

►Health Care Staff will model placing all healthy infants on their backs to sleep. This modeling will occur throughout the inpatient and outpatient hospital/agency system.

► Health Care Staff will instruct parents and/or caregivers to place all healthy infants on their backs to sleep and to change the direction that the infant lies in the crib weekly.

► Health Care Staff will instruct parents/caregivers to set up the infant's own safe sleeping area in the same room with the parents/caregivers especially during the infant's early months.

► Health Care Staff will instruct parents/caregivers to place healthy infants in cribs that meet the minimum federal safety standards as established by the Consumer Product Safety Commission. Additionally, staff will instruct parents/caregivers to

- ●Use a firm, tight-fitting mattress and a tight-fitted bottom sheet specifically made for the crib.
- ●Remove all soft or loose bedding including quilts, comforters, bumper pads, pillows, stuffed animals and soft toys from the infant's sleeping area.
- ●Use an infant sleeper or sleep sack instead of blankets. If a blanket must be used, instruct parent to place infant with feet to foot of the crib and tuck a thin blanket around the crib mattress, covering infant only as high as infant's chest.
- ●Dress the infant in a manner to avoid over-bundling or over-heating; set room temperature, if possible, at a comfortable level.
- ●Review other updated crib safety guidelines as listed by the Consumer Product Safety Commission.

► Health Care Staff will instruct parents/caregivers to never place an infant to sleep on a couch, sofa, recliner, cushioned chair, waterbed, beanbag chair, soft mattress, pillow, synthetic or natural animal skins (such as lambskins), or other soft surface such as "memory" foam mattress toppers and pillows designed for adults.

► Health Care Staff will encourage mother to breastfeed her infants for at least the first six months.

► Health Care Staff will instruct parents/caregivers that infants should sleep in a smoke-free home or environment.

► Health Care Staff will instruct parents/caregivers to position their infant prone (on stomach) when awake, often called supervised tummy time and will educate parents/caregivers about tummy time's role in the infant's development of shoulder girdle and arm strength, head control and stability of the trunk.

► Health Care Staff will advise parent/caregivers that infant sleep practices and standards apply for all nap times and sleeping at night, including time the infant is cared for by other family members, baby sitters or child care providers.

► Health Care Staff will attend yearly update training on infant safe sleep practices.

Special Instructions:

A physician's order along with explanation must be documented for those infants with medical conditions or other illnesses who should not be placed supine for sleep.

Infant Safe Sleep Practices and the Hospital Environment*

All healthcare professionals will reinforce infant safe sleep practices as outlined in the "A SAFE-SLEEP ENVIRONMENT FOR INFANTS: Guidelines for Healthcare Professionals" when caring for infants. The healthcare professional staff is responsible for teaching and role modeling infant safe sleep practices to parents/caregivers during both formal (i.e. childbirth, breastfeeding and newborn care classes; discharge instructions) and informal teaching opportunities (i.e. general conversation and demonstrations regarding infant care and safety).

Location: NEWBORN NURSERY:

All babies without a medical contraindication (i.e. congenital malformations, potentially impairing upper airway patency and selected infants with clinically symptomatic gastroesophageal reflux) should be placed supine for sleeping.

Only firm mattresses with a thin covering should be used.
Soft bulky items, like pillows and rolls of bedding are not permitted.
Staff should demonstrate proper swaddling to parents/caregivers.

Location: NEONATAL INTENSIVE CARE:

As there are developmental and physiological benefits of prone sleep for preterm and ill newborns, and since SIDS is not a phenomenon of the immediate newborn period, the NICU infant may sleep prone when continuously monitored and observed. However, when NICU infants are stable and convalescent, they will be positioned exclusively in supine position for sleeping. This transition should occur well before discharge in order to model safe sleep practices to families. Staff will present this change as a graduation event for the infant…. from prone to supine position. Staff will utilize this graduation as a celebration and opportunity to teach the family about the proper sleep position, safe sleep environment, and SIDS prevention strategies to follow at home. They will provide an explanation for the previous prone position.

Location: PEDIATRIC FLOOR:

Guidelines for the Newborn Nursery to be followed.

PROCEDURE:

A separate bed and bed space must be set up for each infant.
No equipment, blankets or objects should be near the infant's face while in the crib/bed.
When bundling infants, the top of the blanket should be kept at neck level or lower. If available, a sleep sac may be used.
When a mother-baby dyad is observed sleeping in a situation that is unsafe, such as the infant in the bed with mother or on a pillow, the nurse will move the child to the crib and teach the safe technique as soon as practical.
When performing bath demonstrations, the nurse will state that after bathing to place infant in crib, on back, and within same room as a parent or caregiver. Nurse will model placing infant on back with no loose items in the isolette/crib. After placing infant on his/her back to sleep in isolette/crib, nurse will encourage tummy time when infant is awake and mother/caregiver is able to supervise.

(*Sections adapted from West Penn Hospital's Safe Sleeping Practices)

Nurse will ask if mother/caregiver has a safe sleep environment (safety approved crib) for infant at home. Nurse will ask if parent/caregiver knows about the Consumer Product Safety Commission (CPSC) standards for a safe crib. For those who have not received this information, the nurse will provide an information sheet with the correct information. If parent/caregiver does not have safety-approved crib at home, nurse will provide appropriate referral. Nurse will also discuss the importance of using a tight fitting crib sheet.

Nurse will demonstrate the following:
Proper swaddling.
Proper "tummy time".
Proper use of blanket in a crib. (i.e. place baby with feet to foot of the crib, tuck a thin blanket around the crib mattress, cover baby only as high as his/her chest.)
Note: Nurse should encourage parent/caregiver to use an infant sleeper or sleep sack instead of blanket, to dress the infant in a manner to avoid over-bundling or over-heating, and to set room temperature at a comfortable level.

Nurse will ask if parent/caregiver about plans to bedshare. Nurse should remember that some families wish to practice bedsharing based on their cultural beliefs, environmental situation or other personal reasons. However, the nurse should educate all families about the risks involved with sleeping in the same bed with their infant.

Key points to review:
►Adult beds are not designed to meet federal safety standards for infants.
►Babies have been suffocated by becoming trapped or wedged between the bed and the wall or bed frame, have been injured by rolling off the bed, or have been suffocated by bedding. Infants have died when an adult rolled onto and suffocated them.
►Bedsharing **must** be avoided at all times when a mother or any other person is extremely fatigued, obese, a smoker, impaired by alcohol or drugs, legal or illegal. Sleeping with a baby under these conditions is extremely dangerous and may lead to the baby's death.
►Never place an infant to sleep on a couch, sofa, recliner, cushioned chair, waterbed, beanbag chair, soft mattress, pillow, synthetic or natural animal skins (such as lambskins), or other soft surface such as "memory" foam mattress toppers and pillows designed for adults.

Many studies have shown parent/infant roomsharing is protective against SIDS [5, 26, 28, 31, 35.]

If a mother <u>desires</u> to bed share despite the above warnings, continue to discuss and stress the importance of roomsharing as an alternative to bedsharing:

●Use a crib or "sidecar" next to mother's bed. A sidecar is a crib-like infant bed that attaches securely and safely next to the parent's bed; with this nighttime nurturing device, parents have their own sleeping space, baby has his or her own sleeping space, and baby and parents are in close touching and nursing distance to one another.
●Place infant back to crib after comforting or breastfeeding and/or when the parent is ready to sleep. Keep crib in the same room as parent/caregiver. Parents have their own

sleeping space, baby has his or her own sleeping space, and baby and parents are still in close touching and nursing distance to one another.

Reinforce concepts:
Infants should be breastfed for at least the first six months; Infants should always sleep in a smoke-free home or environment; Prone (on stomach) positioning when awake, often called supervised tummy time, is essential for development of shoulder girdle and arm strength, head control and stability of the trunk.
Remind parent/caregiver that these infant care practices and standards apply for all nap times and sleeping at night; Mother/caregiver should provide these directions to others who will be providing care to the infant.

Discharge Instructions (oral) to Parent/Caregiver:
►Place healthy infant on his/her back to sleep; change the direction that the infant lies in the crib weekly.
►Set up the infant's own safe sleeping area in the same room with the parents/caregivers especially during the infant's early months. If a mother decides to bed share despite the warnings, provide additional guidance (see attachment 12).
►Place healthy infant in a crib that meets the minimum federal safety standards as established by the Consumer Product Safety Commission. Additionally, staff will instruct parents/caregivers to

- ●Use a firm, tight-fitting mattress and a tight-fitted bottom sheet specifically made for the crib.
- ●Remove all soft or loose bedding including quilts, comforters, bumper pads, pillows, stuffed animals and soft toys from the infant's sleeping area.
- ●Use an infant sleeper or sleep sack instead of blankets. If a blanket must be used, instruct parent to place infant with feet to foot of the crib and tuck a thin blanket around the crib mattress, covering infant only as high as infant's chest.
- ●Dress the infant in a manner to avoid over-bundling or over-heating; set room temperature, if possible, at a comfortable level.
- ●Review other updated crib safety guidelines as listed by the Consumer Product Safety Commission.

►Never place an infant to sleep on a couch, sofa, recliner, cushioned chair, waterbed, beanbag chair, soft mattress, pillow, synthetic or natural animal skins (such as lambskins), or other soft surface such as "memory" foam mattress toppers and pillows designed for adults.
►Encourage mother to breastfeed her infant for at least the first six months.
►Keep infant in a smoke-free home or environment.
►Position infant prone (on stomach) when awake (i.e. supervised tummy time)
►Advise parent/caregivers that infant sleep practices and standards apply for all nap times and sleeping at night, including time the infant is cared for by other family members, baby sitters or child care providers.

Written Discharge Instructions to Parent/Caregiver:
►Hospital approved literature or see Written Resource section for suggestions.

Documentation
All verbal and written instructions will be documented in the Patient Record.

TOOL KIT-Infant Safe Sleep
Introduction

Nationally and locally, parents/caregivers have conveyed a number of reasons for not adhering to the infant safe sleep guidelines recommended by American Academy of Pediatricians and the Allegheny County Health Department Perinatal Periods of Risk Team.

Reasons for not following infant safe sleep guidelines include [61, 62, 63, 66]

- ►Comfort
- ►Safety
- ►Prior experience with other children
- ►Advice from close family members (particularly female)
- ►Convenience
- ►Lack of space for a crib
- ►Lack of money to secure a crib
- ►Lack of information or knowledge
- ►Negative, non-empathetic or condescending attitude of health professional
- ►Information presented in a non-competent culturally inappropriate manner.

Health professionals are encouraged to listen to the parent/caregiver's understanding regarding infant safe sleep and provide guidance in a sensitive and culturally appropriate manner. The following toolkit was developed to help guide nurses or other health care professionals to provide information about infant safe sleep in a sensitive and culturally appropriate way.

SIDS is defined as the sudden death of an infant under 1 year of age, which remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of the clinical history.

Some basic data about SIDS to share with parents/caregivers as appropriate:

- SIDS is the leading cause of death for babies 1-12 months
- Babies are most vulnerable to SIDS during the 2-4 month period.
- Mothers that smoke during pregnancy increase their baby's risk of SIDS more than 3 times
- Babies that breathe secondhand smoke are 2 times more likely to suffer from SIDS
- Babies that sleep on their tummies have 5 times the risk of dying from SIDS than those placed on their backs.
- More black infants (21%) are placed on their tummies to sleep than white infants (11%).
- Babies who are usually placed to sleep on the back but then are placed to sleep on their stomach or side increase their SIDS risk up to 18 times greater than that of an infant who is always placed to sleep on his or her back.

Questions To Begin Conversation about Infant Safe Sleep

Ask the mother/caregiver: "where and how will your baby sleep?" or "what plans have you and your family made to make sure your baby is placed to sleep safely?" or "what do you know about safely putting your baby to sleep?"

► Provide these 5 key infant safe sleep teaching points:

1. Back to Sleep (BTS)
-Points to cover: Back sleep is safest for infants and every sleep time counts; babies that sleep on their tummies have 5 times the risk of SIDS; explain how/why supervised "tummy time" is important. Mother should share this information with everyone who cares for her baby. Note to provider: share other data as needed.

2. Own Sleeping Area/Firm Sleep Surface/Safety Approved Crib
-Points to cover: Set up the infant's own safe sleeping area in the same room with the parents during the early months; use a firm, tight-fitting mattress and a tight-fitted bottom sheet specifically made for the crib; use a safe crib/one that meets minimum federal safety standards (Consumer Product Safety Commission Guidelines); never place infant on adult bed, couch, sofa, chair or other soft surface.

3. Nothing But Baby in the Crib/Keep the Infant Sleep Area Safe
-Points to cover: Keep all unnecessary items out of the infant's sleep area that are a suffocation hazard (no toys or stuffed animals, bumper pads, loose items including blankets/loose bedding, comforters or pillows; bumper pads or wedges are not needed); encourage use of an infant sleeper/sleep sack or demonstrate how to properly place an infant to sleep in a crib with a blanket (i.e. placing infant's feet at foot of crib/bassinet and tucked blanket in appropriately); one baby per crib or portable crib; dress infant in a manner to avoid over-bundling or over-heating; keep room temperature comfortable, not too hot.

4. No Smoking around Baby
-Points to cover: Babies that breathe secondhand smoke are 2.5 times more likely to suffer from SIDS; no smoking includes no cigarette smoke, other tobacco smoke and marijuana smoke.

5. Share Information about infant safe sleep with the parents/caregivers of the infants in their care. (Ask parent to distribute infant safe sleep brochures that include current information such as "Nothin But Baby" or "Grandma-Put Your Grandbaby on Her Back to Sleep" brochures to others who provide care to your baby about how to safely place your baby for sleep; some brochures are enclosed in this manual; others are available on line at http://www.achd.net)

Note: If mother is breastfeeding, encourage and support her. If mother needs help with breastfeeding, refer her to the Breastfeeding Help Line (412-247-1000).

►Discuss whether mother/caregiver has a safe crib or bassinet for the baby to sleep?

1. If yes, and has a crib:
    - ●Discuss how to make the crib or bassinet safe:
        - ►Use a safety approved crib with a tight-fitting mattress with tight fitting sheet.
        - ►Review CPSC safe crib guidelines/give follow-up literature.
    - ●Discuss the hazards of placing an infant to sleep on any soft surface or a sleep surface such as a couch, sofa or waterbed.
2. If no crib or bassinet, provide referral to 'Cribs for Kids' (412-322-5680).

►Discuss other sleep surfaces that are not considered safe infant sleep surfaces.

1. Ask the mother/caregiver what she knows about <u>and</u> how she feels about sharing a bed with her infant while sleeping?"

●Provide Guidance: Some families wish to practice bedsharing based on their cultural beliefs, environmental situation or other personal reasons. All families must be aware that there are risks involved with sleeping in the same bed with their infant.

Adult beds are not designed to meet federal safety standards for infants; babies have suffocated by becoming trapped or wedged between the bed and the wall or bed frame, have been injured by rolling off the bed, or have been suffocated by soft or loose bedding.

We recommend that infants not bedshare with anyone during sleep. Bedsharing is especially risky and must be avoided at all times when the mother or any other person is: extremely fatigued, obese, a smoker, impaired by alcohol or drugs, legal or illegal; sleeping with a baby under these conditions is extremely dangerous and may lead to the baby's death.

2. Ask the mother/caregiver what she knows about using a couch/sofa as an infant sleep area.

●Provide Guidance: It is extremely dangerous for an infant to sleep either alone or with someone on a couch, sofa, chair, waterbed, or any other soft surface.

►Encourage mother to breastfeed her infant.

Note: If mother is breastfeeding, encourage and support her. If mother needs help with breastfeeding, refer her to the Breastfeeding Help Line (412-247-1000).

65Using 8x11 Poster-"Safe Sleep Environment for Infants" review the following (Attachment 2):

Sometimes even with our best efforts/best intentions, bad things happen/babies may die. But sometimes there are steps you can take to reduce the risk of a baby dying. Here are some simple steps you can take to reduce the risks of your baby dying from SIDS.

●Put your baby on his/her back to sleep.

This is one of the most important steps you can take-- to always place your baby on his or her back to sleep. Positional preference appears to be a learned behavior among infants from birth to 4 to 6 months of age. Therefore, if placed on their back from day one, most babies become accustomed to the back sleeping position. Doctors now know that placing babies on their backs to sleep helps to protect them from SIDS. Babies have a difficult time lifting their head when they are sleeping on their tummies; they have not yet developed the upper body strength to do this.

Some parents worry that if they place their baby on his back to sleep, the baby will get a flat head from sleeping on his back. That is why doctors recommend that babies enjoy supervised periods of "Tummy Time" every day. Tummy time not only prevents infants from developing a flat head but it also helps the baby to strengthen the muscles in their neck, arms, and shoulders. It will also promote healthy brain development. Make sure that your baby gets to play on their stomach through out the day while an adult is watching them. Tummy time is a great way for dad or grandparents to get involved too. REMEMBER: TUMMY TO PLAY AND BACK TO SLEEP. (Attachment 6)

Note to Provider: If the mother/caregiver is African American, please discuss that locally African American infants have a 17 times greater risk of dying from SIDS than white infants. Experts believe that one reason for this disparity is that more African American infants are placed on their tummies to sleep than white infants and that additional work in promoting the appropriate infant sleep position (on the back) and sleeping environment is necessary to help reduce this disparity.

● Place "Nothing but Baby" in the Crib. (See Brochure: "Nothin' but Baby")

►No toys or stuffed animals in crib.
►Do not use excess bedding, comforters, or pillows.
►Bumper pads and wedges are not needed. .
►Avoid overheating.
►When using a blanket, place baby with feet to foot of the crib, tuck a thin blanket around the crib mattress, cover baby only as high as his/her chest.
►Only use a safety-approved crib with a firm mattress and a tight fitting sheet. Bumper pads are not needed in a safety-approved crib. Not buying bumper pads for your baby's crib will save you money as well as provide your baby with a safer sleep environment.
►Distribute Crib information sheet "What is a Safe Crib?" (Attachment 15)

●When caring for your baby, have her/him sleep in the same room as you but in a separate sleeping area (i.e. crib).

►Consider, placing the crib or pack n play next to your bed. The American Academy of Pediatrics, the Pennsylvania Chapter of the American Academy of Pediatrics, the Allegheny County Health Department PPOR Team and (**state your hospital's name)** do not recommend sleeping with a baby. Nationally and locally, babies have been

smothered to death while sleeping with someone on an adult bed, or a couch or a chair. Therefore, we recommend that you provide your baby with his/her own safe sleep environment. If you do sleep with your baby, I can talk to you and provide you with some tips about how to make bedsharing as safe as possible. See Attachment 11.
►**Do Not** Allow Any One to Smoke Around Your Baby.
►Breastfeeding is important for the health of your baby.
►One baby per crib.

●**Share this information with everyone who cares for your baby**
It is important that you (i.e. parents/caregivers) share this information with everyone who takes care of your baby. Your baby should be placed on his/her back to sleep every time, including nap time. Studies have shown that babies who are usually placed to sleep on the back but then are placed to sleep on their stomach or side increase their SIDS risk up to 18 times than of an infant who is always placed to sleep on his or her back.
Note: "Nothin But Baby" or "Grandma-Put Your Grandbaby on Her Back to Sleep" are two brochures that will help educate others about how to safely place your baby for sleep. Copies of these brochures are included in this manual or are available at http://www.achd.net .

Using 8x 11 Poster-"Not Safe Sleep Environment for Baby" (Attachment 3)

●No tummy sleeping-remember back to sleep and review unsafe crib section.
●Never place baby on couches, sofas, chairs, water beds, and adult beds to sleep.
●Make sure crib is safe-nothing should be loose in the crib, no loose blanket, no bumper pads, no toys, etc.
●Never let anyone use drugs or alcohol before or while caring for the baby.
●Share this information with everyone who cares for your baby---grandparents, aunts, uncles, babysitters, etc.
●Do not let anyone smoke around your baby.

Reason Stated for Not Following Infant Safe Sleep Practices: Comfort

Parent/caregiver believes infant appears more comfortable on tummy and appears to sleep longer on tummy or wakes up more frequently on back.

Parent/caregiver brings infant to bed with them because infant appears more comfortable there and sleeps better.

Parent/caregiver has own fears about sleeping alone.

Parent desire to be close to one's infant

"I sleep on my stomach, and I think that is the most comfortable way to sleep".

"My baby sleeps better on his stomach."

"My baby and I both sleep better when we are sleeping together."

Optional Responses to-Parent/caregiver believes infant appears more comfortable on tummy and appears to sleep longer on tummy or wakes up more frequently on back; Parent/caregiver brings infant to bed with them because infant appears more comfortable there and sleeps better.

#1. Although your baby may appear more comfortable on his/her tummy, it is safer for him/her to sleep on his/her back**. Infants placed on tummy or side have 5 times greater risk of dying from SIDS than those placed on back Although SIDS has declined over the years, nationally black infants die of SIDS 2-2 $^{1}/_{2}$ times more often than white infants, and black infants are placed to sleep on their tummies more often than white babies.** Experts agree with you that babies should be close to their parent/caregivers when sleeping….just not on the same sleep surface. Bringing your baby in the same room as you while the infant sleeps reduces the risk of SIDS. Placing your baby in a crib, bassinet or pack n play next to your adult sleep area will still let you take care of your baby and be close to your baby during the night while preventing you from rolling over onto your baby if you were sleeping on the same surface. The safest place for your baby is on his/her back in a crib next to your bed. Here in Allegheny County, there have been a number of cases in which the mother or another caregiver rolled over onto baby while sleeping in the same bed.

#2. Many parents believe that their baby is more comfortable on their tummy. However, if you start out with placing your baby on his back to sleep, he/she will find back sleeping comfortable. Although some babies may not like back sleeping at first, most babies get used to it. Most importantly, backsleeping is safer for your baby.

#3. Many parents believe that their baby is more comfortable on their tummy and thus sleep longer on their tummies. But remember that baby sleep cycles are different than those of adults; babies spend more time in rapid eye movement (REM) sleep, which is thought to be necessary for the extraordinary development happening in their brain. REM sleep is lighter than non-REM sleep, and more easily disrupted. So even though newborn babies sleep a lot (typically 12-16 hours a day), most babies don't stay asleep for more than two to four hours at a time, day or night, during the first few weeks of life.

#4. Infants who start out sleeping on their backs from day one become used to the back sleeping position. However, it is important to remember to have "tummy time" with your baby. Tummy time is when you place your baby on his/her tummy while awake and play.

Get on the floor and talk with him….read to him…..laugh and make funny noises with him.
Tummy time is a great time for you, or any one who loves your baby, to play with your baby. Tummy time should always occur when an adult is there to supervise. Think of tummy time as playtime.

Optional Responses to-Parents/caregivers has own fears about sleeping alone; Parent desire to be close to one's infant.
#1. Experts agree with you that babies should be close to their parent/caregivers when sleeping….just not on the same sleep surface area. Bringing your baby in the same room as you while the infant sleeps reduces the risk of SIDS. Placing your baby in a crib, bassinet or pack n play next to your adult sleep area will still let you take care of your baby and be close to your baby during the night while preventing you from rolling over onto your baby if you were sleeping on the same surface. It is safer for him/her to sleep in his/her own sleeping environment. The safest place for your baby is in a crib next to your bed. Here in Allegheny County, there have been a number of cases in which the mother or another caregiver rolled over onto baby while sleeping in the same bed.
#2. It is important to have your baby close to your while he/she sleeps, just not on the same sleep surface. Any soft sleeping surface is a danger for your baby—this includes adult beds, sofas, couches, water beds, or chairs. It is extremely dangerous to sleep with your baby on any couch, sofa, chair or other soft surface. The safest place for your baby is in a crib next to your bed.

Note: Nurses and other health care providers should be aware that a survey by the National Institute of Child Health and Human Development has found that about one-fifth of parents with infants up to eight months old said the baby usually shared a bed with them, more than triple the number of a decade ago. The trend appears to be driven largely by the increase in breastfeeding working mothers, who say it allows them to connect with their babies and still get some sleep. Many parents say they have felt compelled to hide their shared sleeping arrangements with others, particularly health care providers. Therefore, all healthcare providers are encouraged to handle this conversation in an open and culturally sensitive manner.

Other Discuss Points:
►**Encourage Roomsharing versus Bedsharing**.

{Definitions**:** Roomsharing (also referred to as co-sleeping in the literature)-infant and mother/caregiver are sleeping in the same room but infant sleeps on own sleep surface, such as in a crib or bassinet. Roomsharing has been shown to be protective against SIDS. The American Academy of Pediatrics, the Pennsylvania Chapter of the American Academy of Pediatrics, and the Allegheny County PPOR Team recommend that parent roomshare while the infant sleeps.

Bedsharing (also referred to as co-bedding in the literature)-infant and mother/caregiver are sleeping in the same bed or same sleep surface (couch, sofa, chair, etc). The American Academy of Pediatrics, the Pennsylvania Chapter of the American Academy of Pediatrics, and the Allegheny County PPOR Team do not recommend bedsharing.}

Bringing baby in the same room reduces the risk of SIDS. Suggest placing the infant in a crib, bassinet or pack n play next to adult sleep area which will provide the infant

closeness for parent/caregiver while preventing the adult from rolling over onto the infant if they were sleeping on the same surface.

Reinforce that sharing a bed with an infant **must be avoided at all times** when a mother or any other person is extremely fatigued, obese, a smoker and/or impaired by alcohol or drugs (legal or illegal). Infants should never sleep in the same bed with other siblings. Infants should never sleep with anyone on a sofas or waterbeds, or on any surface with soft bedding or adjacent to spaces that could entrap infant.

Discuss recent studies indicating that sharing a bed with an infant less than 3 months of age places the young infant of even greater risk than if the infant is older.

►Discuss how to make baby more secure and comfortable/reduce "disturbance" or frequent awakenings

● Swaddling (proper/blanket should come no higher than the infant's chest) may help.

● Spontaneous arousals (i.e. less deep sleep and frequent brief awakenings) may be protective against SIDS. Explain the protective nature of "disturbance" and encourage parents to seek strategies for getting more sleep--

■Encourage parent/caregiver to rest when baby is resting and to accept help from family and friends.

■Encourage use of pacifier if not breastfeeding; if breastfeeding, delay pacifier introduction until breastfeeding is established or until I month of age to ensure breastfeeding is firmly established. (Evolving literature suggests pacifier use may help with reducing the risk of SIDS).

THEORIES WHY PACIFIER MAY HELP REDUCE SIDS:
It may encourage more frequent awakenings and less deep sleep (lowered arousal threshold). Other theories include that the pacifier may prevent accidental hypoxia as a result of face being buried into soft bedding or overlaying by objects by providing an air passage created by the bulky handle or the sucking may enhance development of neutral pathways that control the patency of upper airway.

Suggested attachments to support above discussion:
Attachment 4: Supine Position and Aspiration
Attachment 5: Prone Position and Aspiration
Attachment 6: Tummy Time
Attachment 11: Bedsharing Alternatives
Attachments 12, 13, 14: Swaddling

Reason Stated for Not Following Infant Safe Sleep Practices: Safety (Choking)

Parent/ caregiver believes infant was safer on tummy or side/ unsafe for infant on back/concern about infant choking.

Parents want to know "Why is it important to place an infant on his/her back". They want the details and they want it explained in the language that is easily understood.

"It does not make sense to put a baby to sleep on its back, what if my baby has to throw up?"

Response to: Parent/ caregiver believes infant was safer on tummy or side/ unsafe for infant on back/concern about infant choking; Parents want to know "Why is it important to place an infant on his/her back". They want the details and they want it explained in the language that is easily understood.

#1. Many parents, and especially grandparents, fear that babies put to sleep on their backs could choke on spit-up or vomit. At one time, parents were even taught to put their babies on their stomachs or sides when they went to prevent the baby from choking during sleep. Doctors used to believe that if the baby slept on its back, that the baby might choke, because it did not have enough strength to turn its head. However, babies sleeping on their back have no difficulty turning their heads if they are sick. There has been no evidence of an increased risk of death from aspiration as a result of the Back to Sleep program. Infants are less likely to have their faces covered in pillows and blankets if they are placed on their back while sleeping. However, infants placed on tummy or side have 5 greater risk of dying from SIDS than those placed on back Although SIDS has declined over the years, nationally black infants die of SIDS 2-2 $^{1}/_{2}$ times more often than white infants, and black infants are placed to sleep on their tummies more often than white babies. Locally, black infants die of SIDS 17 times more often than white infants. We want fewer babies dying. By placing your baby on his/her back in a safe sleep environment, you will help reduce your baby's risk of dying from SIDS.

#2. Sleeping on the stomach was thought to prevent the baby from choking in its sleep. Experts now suggest that babies sleep on their backs. It is now known that normal infants do not choke on their vomit while sleeping on their backs. Infants sleeping on their stomachs are **five *times more likely to die*** of SIDS than those sleeping on their backs. In addition, the AAP has reviewed all the scientific literature and found that there is no additional risk of choking on vomit when babies sleep on their backs**.** Experts actually feel that babies are at a higher risk for choking or aspirating when placed on their tummies than they are when placed on their back. See Attachment 4 and Attachment 5 for visual explanation of why back sleeping does not increase risk of aspiration whereas the prone position makes it easier for the infant to aspirate.

#3. No, it is not safer for a baby to sleep on his/her tummy. There has been no increase in choking or other problems for babies who sleep on their backs. A healthy baby, who is sleeping on his back, will swallow or cough up fluids.

#4. Times have changed. At one time, parents believed that babies were safer traveling in their arms than in a car seat, whether traveling in car or an airplane. After many studies, we know that it is safer for an infant to travel in a car seat than just being held by

an adult. Now, after many studies, we also know that it is safer for an infant to sleep on his/her back than to sleep on his/her tummy.

Other Support Information to Share as appropriate:
According to the American Academy of Pediatrics, there is no increased risk of choking for healthy infants who sleep on their backs. Placing infants on their sides to sleep is not a good idea; there is too much risk that the infants will roll over onto their bellies while they sleep. It is now known that normal infants do not choke on their vomit while sleeping on their backs. Infants sleeping on their stomachs are **five *times more likely to die of SIDS*** than those sleeping on their backs. It has been shown that infants sleeping prone (on tummy) tend to have higher arousal thresholds to auditory challenges and poor or decreased cardiorespiratory responses to environmental stimuli. The cause of the increased arousal threshold is yet to be determined.

The Triple Risk Model suggests three elements must be present for SIDS to occur--a vulnerable infant, a critical developmental period and outside stressors. A November 2006 study released in the Journal of the American Medical Association supports this theory. The study suggested that SIDS babies have brain abnormalities that appear to affect the brainstem's ability to regulate breathing, heart rate, temperature, blood pressure and arousal; the finding is considered one of the strongest evidence to date suggesting that differences in a specific part of the brain may place some infants at increased risk for SIDS. When a baby's breathing is blocked - say by a stuffed animal or sleeping face down - the brain stem normally adjusts by sending a message to wake the baby or stimulate breathing. SIDS babies may have abnormal wiring in the brain stem that short circuits this alarm system. This finding supports the view that SIDS risk may greatly increase when an underlying predisposition combines with an environmental risk — such as sleeping face down — at a developmentally sensitive time in early life.

Although the exact mechanisms by which the prone sleeping position might lead to SIDS are not known, evidence from numerous countries, including the United States, suggests that changing babies from the prone to the supine sleeping position results in a substantial decline in the SIDS rate.

Suggested attachments to support above discussion:
Attachment 4: Supine Position and Aspiration
Attachment 5: Prone Position and Aspiration

Reason Stated for Not Following Infant Safe Sleep Practices: Advice from Family/Distrust of Health Care Providers

Parent/caregiver often makes choices about infant sleep position based on what their significant family members advised; they prefer to follow advice of female family member of friend rather than doctor.

"Docs not always right" or "not of same background" "like to experiment".

Optional Responses to- Parent/caregiver often makes choices about infant sleep position based on what their significant family members advised; they prefer to follow advice of female family member of friend rather than doctor.
#1. Some cases of SIDS are due to unknown causes whereas other infant sleep related deaths are often caused by something in the sleep environment. We want to prevent infant deaths caused by an unsafe sleep environment-soft bedding, sleeping on side or tummy, baby not in same room as parent/caregiver, baby sleeping on same sleep area as parent/caregiver, smoking around baby, not breastfeeding. At one time, parents and probably your grandparents were taught to put their babies on their stomachs when they went to bed; that position was thought to prevent the baby from choking in its sleep. Experts now recommend that babies sleep on their backs. In this position, babies are less likely to have their faces covered in pillows and blankets. It is also important to educate others who care for your infant about how to place your infant safely to sleep.
#2. Although we encourage you to trust your own instinct as a parent, it is important to be informed about new studies that help us make important decisions about caring for our babies. Although there is controversy regarding infants sleeping with parents, there is no controversy on the other safe sleep guidelines…especially putting the baby on his/her back to sleep. Although babies placed on their tummies to sleep do not always die, large and local studies have shown that babies placed on their backs to sleep are less likely to die of SIDS than those placed on their tummies.

Note to Healthcare Provider: A survey by the National Institute of Child Health and Human Development has found that about one-fifth of parents with infants up to eight months old said the baby usually shared a bed with them, more than triple the number a decade ago. The trend appears to be driven largely by the increase in breastfeeding working mothers, who say it allows them to connect with their babies and still get some sleep. However, many parents say they have felt compelled to hide their shared sleeping arrangements with others. Therefore, healthcare providers are encouraged to handle this conversation in an open and culturally sensitive manner.

Some parents do not trust the health care provider or did not listen to the health care provider because of their perceived attitude.
(See web site http://www.aafp.org/fpm/20001000/58cult.html#boxb.)

Other parents believed that the healthcare provider really did not know what caused SIDS and therefore was guessing what caused it or was experimenting on patients. Parent/caregiver trust own instincts and may be confused "why changes have occurred" ("they use to recommend tummy sleeping" or "I put my other children on their tummies to sleep and they are fine"). It is important for healthcare providers to know data regarding safe sleep environment and present information in a culturally appropriately manner. It is

also important to include significant others when discussing infant safe sleep; remember to pay special attention to the young teen, a mother with previous child-rearing experience and/or the teen who is living with a grandmother, and provide guidance accordingly.

Suggested attachments to support above discussion:
Attachment 4: Supine Position and Aspiration
Attachment 5: Prone Position and Aspiration

Reason Stated for Not Following Infant Safe Sleep Practices: Previous Experience

Family history of infants sleeping with their parents/Prior experience with other children

"I put my other children to sleep on their backs when they were babies, and they did just fine"
"I sleep on my stomach, and I think that is the most comfortable way to sleep."
"I slept with my other kids and they are just fine."

Optional Responses to- Family history of infants sleeping with their parents/Prior experience with other children.

#1. Although many infants have slept with their parents safely, there have been a number of cases, nationally and locally, where adults have rolled over their infants while sleeping in the same bed. Sleeping with your baby places him/her at increased risk for dying from SIDS or suffocation. Babies are at even greater risk of dying from SIDS or suffocation if the infant sleeping with the mother/parent/caregiver is younger than 3 months and/or if the infant sleeps with an adult on a couch, sofa or waterbed.

#2. Experts agree with you that babies should be close to their parent/caregivers when sleeping….just not on the same sleep surface. Bringing your baby in the same room as you while the infant sleeps reduces the risk of SIDS. Placing your baby in a crib, bassinet or pack n play next to your adult sleep area will provide your baby the closeness you desire as parent/caregiver while preventing you from rolling over onto your baby if you were sleeping on the same surface. The safest place for your baby is in a crib next to your bed. Here in Allegheny County, there have been a number of cases in which the mother or another caregiver rolled over onto baby while sleeping in the same bed. Babies are at even greater risk of dying from SIDS or asphyxiation if the infant sleeping with the mother/parent/caregiver is younger than 3 months and/or sleeps with an adult on a couch or waterbed.

#3. Think about how some people take an unnecessary risk when they speed while driving a car—they may not get a ticket the first or second time they speed but they may eventually get caught speeding and then suffer the consequence --a ticket or may get into a motor vehicle crash that may cause injury or even death. Some mothers/caregivers may have safely shared a bed while sleeping with her baby previously, but there is a chance of a roll over. It is an unnecessary risk that we recommend that you do not take.

#4. Mothers always try to do what is best for their babies, and many mothers slept with their infants because they thought it was safer for them. We now have new information from many national studies and local cases which showed that it is safer for an infant to sleep on a safe sleep surface separate from others. This sleep surface should be close to the mother or other caregiver but should be on a separate surface, such as a CPSC approved crib.

Note to Healthcare Provider: A survey by the National Institute of Child Health and Human Development has found that about one-fifth of parents with infants up to eight months old said the baby usually shared a bed with them, more than triple the number a decade ago. The trend appears to be driven largely by the increase in breastfeeding working mothers, who say it allows them to connect with their babies and still get some sleep. Many parents say they have felt compelled to hide their shared sleeping

arrangements with others; therefore, healthcare providers are encouraged to handle this conversation in an open and culturally sensitive manner. Discuss alternatives to bedsharing as a way to achieve the closeness the parent/caregiver desires. See attachment 11.

Terms describing infant sleep environments are often misunderstood.
Roomsharing is defined as an infant and mother/caregiver sleeping in the same room with baby but infant sleeps on own sleep surface, such as in a crib or bassinet; this is the sleep environment recommended by the American Academy of Pediatrics (AAP), the Pennsylvania Chapter of the American Academy of Pediatric (PA AAP) and the Allegheny County PPOR Team.
Bedsharing is defined as the mother/caregiver and infant sleeping on the same sleep area such as the adult bed. Neither the AAP, PA AAP or the Allegheny County PPOR Team recommends bedsharing.

Additional information:
Discuss recent studies indicating that sharing a bed with an infant less than 3 months of age places the young infant of even greater risk than if the infant was older than 3 months.

Reinforce that sharing a bed with an infant **must be avoided at all times** when a mother or any other person is extremely fatigued, obese, a smoker and/or impaired by alcohol or drugs (legal or illegal). Infants should never sleep in the same bed with other siblings. **Infants should never sleep alone or with anyone on sofas or waterbeds, or on any surface with soft bedding or adjacent to spaces that could entrap infant.**

Adult bedding material can be dangerous for infants, and infant/parent bedsharing may expose an infant to this risk. Studies are ongoing in an effort to answer questions concerning the risks versus benefits of bedsharing and whether it can be done in a manner that does not increase the SIDS risk. Until this information is available, it would seem prudent not to expose infants to the well-documented hazards of sleeping on adult bedding materials.

Many studies have shown parent/infant roomsharing is protective against SIDS [5, 26, 28, 31, 35]
If a mother desires to bed share despite the above warnings, continue to discuss and stress the importance of roomsharing as an alternative to bedsharing:

- Use a crib or “sidecar” next to mother’s bed. A sidecar is a crib-like infant bed that attaches securely and safely next to the parent's bed; with this nighttime nurturing device, parents have their own sleeping space, baby has his or her own sleeping space, and baby and parents are in close touching and nursing distance to one another.
- Place infant back to crib after comforting or breastfeeding and/or when the parent is ready to sleep. Keep crib in the same room as parent/caregiver. Parents have their own sleeping space, baby has his or her own sleeping space, and baby and parents are still in close touching and nursing distance to one another.

Suggested attachment to support above discussion:
Attachment 11: Bedsharing Alternatives

Reason Stated for Not Following Infant Safe Sleep Practices : **Knowledge**

Parent had limited or erroneous knowledge about recommendations.

"SIDS only happens in a crib".

Optional Responses to- Parent had limited or erroneous knowledge about recommendations.

#1. Sudden Infant Death Syndrome (SIDS) does not happen just in a crib. A lot of people used to call it crib death. SIDS is the sudden, unexpected death of a healthy baby under one year of age. More children between 1 month and under one year of age die due to SIDS than from any other cause. SIDS can occur on any sleep surface but there are ways to reduce the risks of your baby dying form SIDS. No one knows exactly what causes SIDS. It is not caused by abuse or neglect, or by an infection. It is not passed on from one family member to another. Some babies are at higher risk of SIDS than others. Experts believe that SIDS babies have brain abnormalities that appear to affect the brainstem's ability to regulate breathing, heart rate, temperature, blood pressure and arousal; the finding is considered one of the strongest evidence to date suggesting that differences in a specific part of the brain may place some infants at increased risk for SIDS. When a baby's breathing is blocked - say by a stuffed animal or sleeping face down - the brain stem normally adjusts by sending a message to wake the baby or stimulate breathing. SIDS babies may have abnormal wiring that short circuits this alarm system. This finding supports the view that SIDS risk may greatly increase when an underlying predisposition combines with an environmental risk — such as sleeping face down — at a developmentally sensitive time in early life. Besides always placing your baby to sleep on his/her back to sleep, here are some things you can do to reduce your baby's risks of SIDS.

Suggested attachments to support above discussion:
Attachment 2: Collage of Infant Safe Sleep Positions and Environments
Attachment 3: Collage of NOT Safe Infant Sleep Situations and Positions

Reason Stated for Not Following Infant Safe Sleep Practices : Convenience

Parents think it is easier to take care of baby when both are sleeping in same bed.

"It is easier to take care of my baby during the night when she/he is in bed with me".

Optional Response to- Parents think it is easier to take care of baby when both are sleeping in same bed.

#1. Experts agree with you that babies should be close to their parents/caregivers when sleeping….just not in the same sleep area. Bringing your baby in the same room as you while your infant sleeps reduces the risk of SIDS. Placing your baby in a crib, bassinet or pack n play next to your adult sleep area will still let you take care of your baby during the night while preventing you from rolling over onto your baby if you were sleeping on the same surface. The safest place for your baby is in a crib next to your bed. Here in Allegheny County, there have been a number of cases in which the mother or another caregiver rolled over onto baby while sleeping in the same bed.

Note to Provider: Discuss **roomsharing** as an alternative to **bedsharing** as a way to allow parent to have quick access as well as physical closeness to baby while not risking an accidental roll over. **Roomsharing** (also known as co-sleeping); defined as infant and mother/caregiver sleeping in the same room but infant sleeps on own sleep surface, such as in a crib or bassinet). **Bedsharing** (also known as co-bedding); defined as mother/caregiver and infant sleeping in the same bed or same sleep surface)

Reinforce that bedsharing **must** be avoided at all times, but especially when a mother or any other person is extremely fatigued, obese, a smoker and/or impaired by alcohol or drugs (legal or illegal). Infants should never co-sleep with other siblings. Infants should never sleep alone or co sleep on sofas or waterbeds, or on any surface with soft bedding or adjacent to spaces that could entrap infant.

Discuss recent studies indicating that sleeping on the same sleep surface with an infant less than 3 months of age is considered an especially high risk behavior.

Discuss that although some infants have slept with their parents safely, there have been a number of cases, nationally and locally, where adults have rolled over their infants while sleeping in the same bed. There is even greater risk if an infant sleeps with an adult on a couch or waterbed.

Encourage parent/primary caregiver to develop a support system (neighbor, church, relatives) that will allow parent/caregiver to rest during the day or that will assist with other infant or family care tasks.

Reason Stated for Not Following Infant Safe Sleep Practices : Space or Cost

Parent does not have money or room in the home for a crib.

"I do not have enough room in my home for a crib".
"I am staying at my aunt's and I only have a couch to sleep on. There is no room for a crib."

Response to- Parent does not have money or room in the home for a crib.
#1. Space is a big concern when you are talking about using a big crib. A pack and play will usually work even in the smallest of spaces. You can place the pack and play next to your bed or the couch when you are sleeping, and then pack it away until your baby is ready to sleep again. You can take the pack n play to the baby sitter as well to make sure she is also putting your baby down for a safe sleep.
#2. Money is a big concern for everyone. If you do not have money for a crib, a pack n play portable crib may be purchase for less money than a large crib. You may also want to call 'Cribs for Kids' to see if you are eligible under their guidelines to receive a pack and play portable crib. They may have a crib for you, or will refer you to another resource.
#3. Money is a big concern for everyone. If someone asks you what you need for the baby, suggest that they purchase a pack n play portable crib. A pack n play portable crib may be purchased for less money than a large crib. If anyone asks you about having a baby shower, suggest that they make it a "safe sleep baby shower" and include a crib or a pack n play portable crib as one of your top gift requests. You may also want to call 'Cribs for Kids' to see if you are eligible under their guidelines to receive a pack and play portable crib. They may have a crib for you, or will refer you to another resource.

Reason Stated for Not Following Infant Safe Sleep Practices : **Cosmetic (Bald spot on head or flat head)**

Parents are concerned with baby's appearance-flat head or bald spot.

"I've seen those babies who are put to sleep on their backs, and they have bald spots where their hair should be".
"I do not want my baby to have those funny flat heads."

Optional Responses to- Parents are concerned with baby's appearance-flat head or bald spot.
#1. Many parents are concerned that having babies on their backs too much will cause them to get a "flat head" or develop a "bald spot". You can limit your baby's chance of developing a "flat head" or hair balding by enjoying tummy time with him/her. Tummy time is when you place your baby on his/her tummy while awake and during play; tummy time should always occur when an adult is there to supervise. Experts agree that infants need to spend time on their tummies….not only to prevent flat heads but to help with motor skills such as crawling and sitting. Get on the floor and talk with him….read to him…..laugh and make funny noises with him. Tummy time is a great time for you, or any one who loves your baby, to play with your baby and to help your baby develop motor skills such as crawling and sitting. Think of tummy time as playtime. This may also be a good time for you to rest and let someone else who loves your baby enjoy "tummy time/play time". Flat spots can also be avoided by altering the back sleeping head position, such as turning the head to one side for a week or so and then changing to the other. Reversing the head-to-toe axis in the crib so the baby's head can continually face outside activity (e.g., the door to the room) helps maintain this position. You should also be sure to alternate arms when feeding and be sure that your baby does not spend too much time in car seats and carriers to further minimize the potential for a flat head.
#2. According to the AAP, placing your baby on the tummy to play when awake and being watched by an adult is good for two reasons: 1) it helps the baby develop strong muscles, and 2) tummy time helps to reduce the risk of the baby developing a flat spot on the back of the head. Also, flat spots can be avoided by altering the back sleeping head position, such as turning the head to one side for a week or so and then changing to the other. Reversing the head-to-toe axis in the crib so the baby's head can continually face outside activity (e.g., the door to the room) helps maintain this position. You should also be sure to alternate arms when feeding and be sure that your baby does not spend too much time in car seats and carriers to further minimize the potential for a flat head.

Note to Health Care Provider: Prone (on stomach) positioning when awake, often called supervised tummy time, is essential for development of shoulder girdle and arm strength, head control and stability of the trunk**.** This development provides the foundation for emerging motor skills such as sitting, crawling and transitioning. Tummy time will help to prevent the infant from developing positional plagiocephaly (flat head). When discussing safe sleep environments, it is crucial for providers to emphasize these facts with families in order to ensure appropriate infant developmental progress.

Suggested attachment to support above discussion:
Attachment 6: Tummy Time

Reason Stated for Not Following Infant Safe Sleep Practices: **Ability to Monitor**

Parent/caregiver brings infant to bed with them in order to observe/monitor them throughout the night.
or
Parents/caregivers believe that they are more likely to detect SIDS if sleeping next to the infant.
or
Parents/caregivers believe that they can better monitor infants' overall safety (fires, cockroaches, other potential threats) when the infant bedshares.

"I like having my baby next to me while I sleep so I can watch him better".

Response to- Parent/caregiver brings infant to bed with them in order to observe/monitor them throughout the night.; Parents/caregivers believe that they are more likely to detect SIDS if sleeping next to the infant.; Parents/caregivers believe that they can better monitor infants' overall safety (fires, cockroaches, other potential threats) when the infant bedshares.
#1. Many parents believe that having their baby close to them while sleeping is important for safety reasons. Experts also believe babies should be close to their parents/caregivers when sleeping….just not in the same sleep area. Bringing your baby in the same room as you while infant sleeps reduces the risk of SIDS. Placing your baby in a crib, bassinet or pack n play next to your adult sleep area will provide your baby the closeness you desire as parent/caregiver while preventing you from rolling over onto your baby if you were sleeping on the same surface. The safest place for your baby is in a crib next to your bed. Here in Allegheny County, there have been a number of cases in which the mother or another caregiver rolled over onto baby while sleeping in the same bed.

Discuss **roomsharing** (roomsharing/co-sleeping defined as infant and mother/caregiver sleeping in the same but infant sleeps on own sleep surface, such as in a crib or bassinet) as an alternative to **bedsharing** (bedsharing/co-bedding defined as mother/caregiver and infant sleeping in the same bed or same sleep surface) as a way to monitor the infant throughout the night while still achieving the closeness the parent/caregiver desires.

Note to Healthcare Provider: A survey by the National Institute of Child Health and Human Development has found that about one-fifth of parents with infants up to eight months old said the baby usually shared a bed with them, more than triple the number of a decade ago. The trend appears to be driven largely by the increase in breastfeeding working mothers, who say it allows them to connect with their babies and still get some sleep. Many parents say they have felt compelled to hide their shared sleeping arrangements with others, particularly health professionals; therefore, healthcare providers are encouraged to handle this conversation in an open and culturally sensitive manner.

Suggested attachment to support above discussion:
Attachment 11: Bedsharing Alternatives

Other Issue Pertaining to Infant Sleep

Babies Who Should be Placed Prone for Sleep:
Medical Doctor recommends prone sleep for infant.
Infants with certain medical disorders such as symptomatic gastro-esophageal reflux, babies with certain upper airway malformations such as Robin Syndrome.

Note: If it is decided to allow a baby to sleep prone, special care should be taken to avoid overheating and the use of soft bedding since these items are particularly hazardous for prone-sleeping infants.

Topics Related to SIDS and Infant Safe Sleep

Babysitters or Caregivers and Infant Safe Sleep Education:

Mother/caregiver should follow the previously described infant safe sleep practices and standards for all nap times and sleeping. Mother/caregiver should instruct other childcare providers (whether just babysitting or regular child care) about how to safely place her infant to sleep (refer to Attachments 2 & 3). Mother/caregiver should be instructed that even if infant is sick, it is best to keep the infant in close proximity/next to bed but not directly in bed with the mother/caregiver. [5]
Rational: Relatives and other caregivers may not be aware of the importance of placing an infant in a safe sleep environment which include encouraging a supine sleeping position, a smoke free environment, and other infant safe sleep practices.[64]

According to the American Academy of Pediatrics, two thirds of US infants younger than 12 months are in nonparental child care. Of the infants who are cared for by secondary (nonparental) caregivers, approximately 50% are cared for by relatives, 10% are cared for by an in-home babysitter, and the remainder are in organized child care (i.e. a child care center or family child care home). A number of studies have indicated that unaccustomed prone sleep increases the risk of SIDS: A study conducted by Kaiser Permanente in Northern and Southern California and supported by the National Institute of Child Health and Human Development (NICHD) found that infants placed on their tummies to sleep who usually were placed to sleep on their backs were at *greater risk (7-8 times)* for SIDS; another study found the SIDS risk to be as *high as 18-fold* when infants who were usually placed on their backs to sleep were then placed to sleep on the stomach or side. [16, 17, 18]

Back Sleeping and SIDS:

All healthy infants should be placed on their backs to sleep. Mother/caregiver should be instructed to place a healthy infant on his/her back to sleep.
Rational: Babies put to sleep on their backs are less likely to die from SIDS or accidental suffocation than babies placed on their tummies or sides. For infants with chronic gastroesophageal reflux disease [GERD] or certain upper airway malformations, sleeping on the stomach may be the better option; parents should consult with their child's doctor in these cases to determine the best sleeping position for the baby. [5, 6, 7, 10, 25, 27, 30, 32, 33, 43, 45, 52]

Note to Provider: National data reveals that African American parents are more likely to place their infants to sleep on their tummies than White parents.[5, 7, 9, 34] Many parents do not believe that the supine position reduces the risk of SIDS and that back sleeping increases and infant's chance of asphyxiation. Recommendation: health care providers should provide a consistent message about infant safe sleep, which includes back sleeping, along with an explanation that back sleeping does not increase an infant's chance of asphyxiation. See Attachment 4 (Supine Position and Aspiration) and Attachment 5 (Prone Position and Aspiration) which will help with this explanation.

Bedsharing:

Infants should not share a bed with anyone. If mother/family wishes to practice bedsharing based on her/their cultural beliefs, environmental situation or other personal reasons, discuss the risks involved with an infant sleeping in the same bed with a sibling or an adult or anyone else.
Rational: Adult beds are not designed to meet federal safety standards for infants. Babies have been suffocated by becoming trapped or wedged between the bed and the wall or bed frame, have been injured by rolling off the bed, or have been suffocated by bedding. Infants have died when an adult or sibling rolled onto and suffocated them.

Some families wish to practice bedsharing based on their cultural beliefs, environmental situation or other personal reasons.[21, 22, 34, 53, 61] Staff must educate all families about the risks involved with sleeping in the same bed with their infant. [5,19, 29, 32, 33, 34, 35, 36,40,41, 53, 61]

The risks associated with bedsharing include:

Adult beds are not designed to meet federal safety standards for infants.

- ●Infants have been suffocated by becoming trapped or wedged between the bed and the wall or bed frame, have been injured by rolling off the bed, or have been suffocated by bedding.
- ●Infants have died when an adult rolled onto and suffocated them.

Bedsharing **must** be avoided at all times when a mother or any other person is

- ●extremely fatigued [26]
- ●obese[23]
- ●a smoker [19, 20, 24, 25, 26. 27, 29, 30, 31, 52, 53]
- ●impaired by alcohol or drugs, legal or illegal [24, 26, 27,32]

Sleeping with a baby under these conditions is extremely dangerous and may lead to the baby's death.

Many studies have shown parent/infant roomsharing is protective against SIDS [5, 26, 28, 31, 35]

If a mother <u>desires</u> to bed share despite the above warnings, continue to discuss and stress the importance of roomsharing as an alternative to bedsharing:

●Use a crib or "sidecar" next to mother's bed. A sidecar is a crib-like infant bed that attaches securely and safely next to the parent's bed; with this nighttime nurturing device, parents have their own sleeping space, baby has his or her own sleeping space, and baby and parents are in close touching and nursing distance to one another.
●Place infant back to crib after comforting or breastfeeding and/or when the parent is ready to sleep. Keep crib in the same room as parent/caregiver. Parents have their own sleeping space, baby has his or her own sleeping space, and baby and parents are still in close touching and nursing distance to one another.

Although there is controversy regarding the safety of parents sleeping in the same bed with their infants, the American Academy of Pediatrics (AAP), Pennsylvania Chapter of the American Academy of Pediatrics (PA/AAP) and the Allegheny County PPOR Team believe that there is sufficient evidence to conclude that infant bedsharing is more hazardous than an infant sleeping on a separate sleep surface, such as a Consumer Product Safety Commission (CPSC) approved crib, and therefore recommend that

parents not sleep on the same sleep surface (i.e. bed, sofa, couch, chair, waterbed, etc.) as their infants; numerous national and international studies support this recommendation.[5, 19, 26, 27, 35] More recent studies indicate that sharing a bed with an infant less than 3 months of age places the young infant at even greater risk than if the infant is older than 3 months.[19, 20, 23, 26, 35] Furthermore, data from a number of studies indicate that the most protective sleep setting for an infant is in a safe crib in the parent's room. Studies that support this position are referenced in the publication "A Safe-Sleep Environment for Infants: Guidelines for Healthcare Professionals".

The American Academy of Pediatrics states that there are no scientific studies demonstrating that bedsharing reduces the risk of SIDS while there are many studies that strongly support the tenet that bedsharing increases the risk of SIDS, suffocation, overlay and accidental death.[5, 19] Studies indicate that roomsharing - keeping the baby in the same room as the parent/caregiver but infant sleeps in his own safe sleeping area, such as a crib or bassinet - may be protective against SIDS.[5, 24, 26, 28, 31, 35]

The National Infant Sleep Position Study (NISP) revealed the proportion of infants usually sharing an adult bed at night increased from 5.5 percent to 12.8 percent between 1993 and 2000.[21] Nearly 50 percent of infants in the study spent at least some time in the past two weeks sleeping on an adult bed at night. In addition, African American infants were four times more likely to bed share as White infants, and Asian/other infants were almost three times more likely to bed share than white infants. According to Marian Willinger, Ph.D., of the Pregnancy and Perinatology Branch, NICHD, infants of mothers under 18 years old were twice as likely as other infants to share a bed with a parent or caregiver. Low household income also increased the likelihood of bedsharing by 50 percent. The NISP study also found that bedsharing infants were almost twice as likely to be covered by a quilt or comforter than infants who did not share an adult bed. A quilt or comforter in the bedsharing environment is a potential hazard for SIDS if the baby's face or head gets covered. Additionally, there are hidden hazards in letting babies sleep on adult beds, including falls, suffocation, and getting trapped between the bed and a wall, the head board, or foot board.

Breastfeeding and SIDS:

Infant should be breastfed for at least six months, and if possible up to one year. Mother/caregiver will be instructed about the benefits of breastfeeding her infant. Caregivers, family and friends should be encouraged to support the breastfeeding mother.

Rational: Studies suggest that breastfeeding and/or factors associated with breastfeeding may be protective against SIDS. [5, 6, 27, 29, 36, 38, 39, 40, 43, 44, 54] Since breastfeeding is associated with a reduction in risk for postneonatal deaths, providers are encouraged to discuss various infant safe sleep options with the mother to assist the breastfeeding dyad with a successful and pleasurable experience.

For help with breastfeeding, call Breastfeeding Help Line: 412-247-1000.

Crib Safety Guidelines:

The Consumer Product Safety Commission (CPSC) is an independent federal regulatory agency charged with ensuring the safety of consumer goods. CPSC administers mandatory standards for cribs which include:
● No more than 2 $^{3}/_{8}$ inches between the crib slats so a baby's head or body cannot fit through the slats; no missing or cracked slats.
● A firm, tight fitting mattress so baby cannot get trapped between mattress and crib. Mattress should fit snugly - less than the width of two fingers between the edge of the mattress and the side of the crib.
● No missing, loose, broken, or improperly installed screws, brackets, or other hardware on the crib or mattress support.
● No corner posts over 1/16 th inch high so a baby's clothing cannot catch.
● No cutouts in the headboard or foot board so a baby's head cannot get trapped.

The CPSC recommends not placing a crib near draperies or blinds where a child could become entangled and strangle on the cords. When the child reaches 35 inches in height, or can climb and/or fall over the sides, the crib should be replaced with a bed. [46]

Bumper pads should not be placed in cribs or bassinets. A study that searched CPSC databases for deaths related to crib bumpers and for crib-related injuries that might have been prevented by bumpers concluded that crib and bassinet bumpers are dangerous, and should not be used. [67]

Instruct parents not to use any crib that is not safe. CPSC discourages the use of used cribs. Use a crib that meets Federal safety regulations and industry voluntary standards (ASTM) and make sure it has a tight fitting mattress. Check the labeling on these products to make sure they meet safety requirements.[46]

See the CPSC web site for additional information about safe cribs (**http://**www.cpsc.gov) or
call their TOLL-FREE HOTLINE 800-638-2772. The link to their "CRIB SAFETY TIPS" is http://www.cpsc.gov/CPSCPUB/PUBS/5030.pdf . The American Academy of Pediatrics web site also provides information about choosing a safe crib; web site address is **http://**www.aap.org/family/inffurn.htm . Refer to Attachment 15--Crib Safety.
Rational: Cribs that meet CPSC standards are more likely to prevent deaths and injuries from falls, entrapment, and contact with parts inside or outside a crib. [5, 46]

Bassinet, Cradle or Portable Crib:

These small beds are helpful and portable in the first few months. Although many cradles and bassinets provide a safe sleeping enclosure, safety standards have not been established for these items. When using a portable crib or playpen, use only the mattress or pad provided by the manufacturer. The CPSC recommends following the manufacturer's guidelines on weight and size of the baby in determining who can safely use these products. For safety reasons, be sure to look for a bassinet or cradle with the following: a sturdy bottom and a wide base for stability, smooth surfaces (no protruding staples or other hardware that may injure the baby), legs with strong, effective locks to prevent folding while in use, and a firm mattress that fits snugly. [46]

Over Bundling Infants and SIDS:

Infant should be dressed in a manner to avoid over-bundling or over-heating; room temperature should be set, if possible, at a comfortable level. Mother/caregiver should be instructed to how to avoid over bundling infant.
Rational: Mother/Caregiver should dress the baby as the mother/caregiver would dress for sleep. It is unclear whether clothing and climate are independent factors, or are a reflection of the various suffocating objects in the sleeping environment. [5, 6, 10, 19, 43, 45]

Positional Plagiocephaly:

Positional Plagiocephaly or “flat head” is caused when repeated external pressure is applied to back of the head and a flat spot occurs. In the vast majority of the cases when a baby develops a flattened head, the problem usually resolves with time (by 6 months to one year of age) as the baby spends more time awake, begins to roll to different positions by themselves, and/or completes positional therapy.[11, 12, 14] Health care professionals who provide care to infants should model and educate parents/caregiver on methods to decrease the risk of development of positional plagiocephaly.

Rational: Since the launching of the “Back to Sleep Campaign”, infants have been spending a lot of time in the back position while sleeping as well as while in infant car seats, infant carriers, bouncy seats, and infant swings. While the Back to Sleep Campaign has made tremendous strides in reducing SIDS, there has also been an increase of the number of infants suffering from Positional Plagiocephaly or infants with flat head.[5, 10,11, 12,13,15] It has been suggested that parents may have over-interpreted the AAP recommendations regarding infant supine sleep and have avoided prone positioning even during the daytime.[12] Parents/caregivers must be given enough information regarding **back sleeping**, **crib safety** AND must be informed about the importance of “**tummy time**” during play. During wakefulness and while supervised, it is best to allow babies time on their stomachs to enhance development. This would also have the effect of relieving constant pressure tending to flatten the head on one side.[5, 10,11, 12,13,15]

Recommendations to reduce the risk of “flat head”:

- Provide your baby with lots of **supervised** "tummy time" during the day when he/she is awake. This will not only enhance the shape of the head, but will strengthen the upper body muscles that are not used as much when babies sleep on their backs. It also allows for quality "exercise" or "play" time between you and your baby! (See attachment 6)
- When placing your baby on his/her back to sleep, alternate the direction your baby is placed to sleep in the crib.
- Move the mobile, mirror or other object of interest to the opposite side of the baby’s sleep and/or play area.
- Switch the arm with which your baby is held, especially during feeding times.
- Hold your baby upright for cuddles.

Prenatal Educational Classes and Infant Safe Sleep:

Mother/caregiver should attend prenatal educational classes, including childbirth classes and other classes that provide women/caregivers with education and skills to make informed decisions about their infant's health and well-being.
Rational: Besides receiving education about birthing babies, parents/caregivers receive infant safe sleep education. Antenatal classes can provide a forum that focuses on improving health literacy that provides women with skills they can use and that empowers women to make educated choices about their families' health [47, 48]

Race and SIDS:

Although SIDS rates have declined in all populations throughout the United States during the last decade, disparities in SIDS rates and in the prevalence of risk factors remain evident in certain groups. On a national level, SIDS rates are highest among American Indians, Alaskan Natives, and African Americans, and lowest among Asians, Pacific Islanders, and Hispanics. The rate of SIDS among black infants was 2.5 times that of white infants in 2001[8]; the prevalence of prone positioning in 2001 among white infants was 11%, compared with 21% among black infants. [9] Locally, African American infants are seventeen times more likely to die of SIDS than Caucasian infants.

National data reveals that African American parents are more likely to place their infants to sleep on their tummies than White parents.[5, 7, 9, 34, 64, 65] Additionally, according to the National Infant Sleep Position Study, African American infants were four times more likely to bed share as White infants, and Asian/other infants were almost three times more likely to bed share than white infants.[21]

From 1993 through 1996, the NICHD and the CDC supported a case-controlled study of infant deaths in Cook County (Illinois) that employed standardized death scene investigation and autopsy protocols to elucidate the unique factors of SIDS deaths. In this primarily African American, urban sample, prone sleeping was found to be a significant risk factor for SIDS, after adjusting for potential confounding variables and other sleep environment factors; approximately one-third of the SIDS deaths could be attributed to prone sleep position. Fewer case mothers of SIDS infants (46 percent) than control mothers of living infants (64 percent) reported being advised about sleep position in the hospital following delivery. Of those advised, a similar proportion of case mothers as control mothers were told to use the incorrect (stomach) position, but a higher proportion of African American mothers (cases and controls combined) were advised to use that position compared with non-black mothers.[7]

Rational: Infant prone sleeping is a significant risk factor for SIDS in the African American community, and national studies indicate that approximately one third of the SIDS deaths could be attributed to this factor. Greater and more effective educational outreach must be extended to African American families to reduce prone prevalence during sleep, which appears, in part, to contribute to the higher rates of SIDS among African American infants.

Since some families wish to practice bedsharing based on their cultural beliefs, environmental situation or other personal reasons, staff must educate all families about the risks involved with sleeping in the same bed with their infant and to handle this conversation in an open and culturally sensitive manner. In order to close the gap between SIDS risk factor compliance and apparent knowledge about SIDS risk factors, cultural explanation for specific infant care practices must be clearly understood by the targeted group.[61, 62, 63, 65]

Safe Sleep Surface for Infants and SIDS:

The infants should never be placed on a couch, sofa, recliner, cushioned chair, waterbed, beanbag chair, soft mattress, pillow, synthetic or natural animal skins (such as lambskins), or other soft surface such as "memory" foam mattress toppers and pillows designed for adults. Mother/caregiver should be instructed never to place an infant to sleep on a couch, sofa, recliner, cushioned chair, waterbed, beanbag chair, soft mattress, pillow, synthetic or natural animal skins (such as lambskins), or other soft surface such as "memory" foam mattress toppers and pillows designed for adults.

Infant's sleep surface should be firm.
Mother/caregiver should be instructed to use a firm, tight-fitting mattress and a tight-fitted bottom sheet specifically made for the crib. Mother/caregiver should be instructed never to use an adult sheet or any other loose or bedding, including loose blankets. Mother/caregiver should be instructed to remove all soft or loose bedding and encouraged to use an infant sleeper or sleep slack instead of blanket. If a blanket is used, place baby with feet to foot of the crib; tuck a thin blanket around the crib mattress, covering baby only as high as baby's chest. Bumper pads should not be placed in cribs or bassinets.
Rational: Sleeping on any of these puts the infant at great risk for suffocation as these items have high wedging and trapping potential. [5, 6, 10, 33, 45, 46] These risks are even greater when an infant sleeps with any other person on any of these surfaces.

Separate Sleep Surface for Infant and SIDS:

The infant should have his/her own sleeping space with nothing in the crib to cause injury or death. Mother/caregiver should be instructed that the infant should have own sleeping space with nothing in the crib to cause injury or death. Mother/caregiver should be instructed to place her healthy infant in own crib that meets the minimum federal safety standards, to use a firm, tight-fitting mattress with a tight-fitted bottom sheet specifically made for the crib, and should be encouraged to use a sleeper or sleep sack instead of blankets. Instruct mother/caregiver to place healthy infant in own crib that meet the minimum federal safety standards, to use a firm, tight-fitting mattress with a tight-fitted bottom sheet specifically made for the crib. Encourage mother/caregiver to use a sleeper or sleep sack instead of blankets.
Rational: A crib meeting federal safety standards is the safest place for baby to sleep. Baby may suffocate on a soft mattress, get trapped between the mattress and the crib or may get entangled with the sheet, if it becomes loose. Never use an adult sheet on a crib mattress. Baby may get strangled or entangled with a loose fitting sheet or blanket. If a blanket must be used, place baby with feet to foot of the crib; tuck a thin blanket around the crib mattress, covering baby only as high as his/her chest. [5, 7]

Infant should never be placed on a couch, sofa, recliner, cushioned chair, waterbed, beanbag chair, soft mattress, pillow, synthetic or natural animal skins (such as lambskins), or other soft surface such as "memory" foam mattress toppers and pillows designed for adults. Mother/caregiver should be instructed never to place an infant to sleep on a couch, sofa, recliner, cushioned chair, waterbed, beanbag chair, soft mattress, pillow, synthetic or natural animal skins (such as lambskins), or other soft surface such as "memory" foam mattress toppers and pillows designed for adults.
Rational: Sleeping on any of these puts the infant at great risk for suffocation as these items have high wedging and trapping potential. These risks are even greater when an infant sleeps with any other person on any of these surfaces. [5, 6, 19, 24, 25, 26, 29, 31, 65]

Sleeping with Infant in the Same Room as Parent and SIDS:

The infant and mother/caregiver should sleep in the same room. Mother/caregiver will be instructed to sleep in the same room with the infant.
Rational: Studies indicate that more infants die during their sleep when they are in a room by themselves than when they share a room with their parents. [5, 26, 28, 31, 35]

Note: Health professionals are encouraged to engage in an open dialogue with parents/caregivers about roomsharing (sometimes referred to as co-sleeping) vs. bedsharing (sometimes referred to as co-bedding) so that every parent makes an informed decision regarding how to safely put their infants to sleep. Roomsharing has been shown to be protective against SIDS. The American Academy of Pediatrics (AAP), the Pennsylvania Chapter of the American Academy of Pediatrics (PA/AAP), and the Allegheny County PPOR Team recommend that parent sleep in the same room as their sleeping infant (i.e. roomshare). The AAP, the PA/AAP and the Allegheny County PPOR Team do not recommend bedsharing.

Smoke-free Environment and SIDS:

The infant should be in a smoke free home/environment. Mother/caregiver will be instructed/encouraged to keep her infant in a smoke-free home or environment. If mother smokes, encourage her to quit. Provide support and guidance and referral.
Rational: Smoking, both maternal and environmental, has been shown to be a risk factor for SIDS.[10, 27, 30, 32, 41, 43, 44, 49, 50, 51, 52, 54]

Note: Studies indicate that mothers who smoke during pregnancy are approximately 3 times more likely to have a baby die from SIDS; babies who are exposed to second hand smoke are 1 ½ to 2 times more likely to die from SIDS. Parents should be sure to keep their babies in a smoke-free environment. Components of smoke, specifically nicotine, are believed to interfere with an infant's developing lungs and nervous system, and to disrupt a baby's ability to wake from sleep.

For help to stop smoking, call Tobacco Free Allegheny: 412-322-8321.

Swaddling:

Swaddling the baby from the nipple line down (under the arm pits) sometimes helps the baby become accustomed to the back sleeping position. Once the baby can kick out of the swaddle, swaddling should be discontinued so that there is no danger of the baby kicking the blanket over his/her head and face. Blankets used for swaddling should come no higher than the infant's chest.

Some experts advocate swaddling as a method to increase sleep efficiency and lower arousal thresholds during REM sleep whereas others suggest that swaddling not be recommended as a routine infant care technique due to reported potential complications, such as respiratory infections, pneumonia-related deaths, congenital hip dislocation, and hyperthermia.[58, 59, 60] Therefore, any swaddling technique use should not restrict the infant's hip movement or chest wall excursion, and should limit the infant's ability to break free from the swaddle.[58]

See attachments 12, 13 and 14 for further information and instructions on swaddling.

Triple Risk Theory and Research:

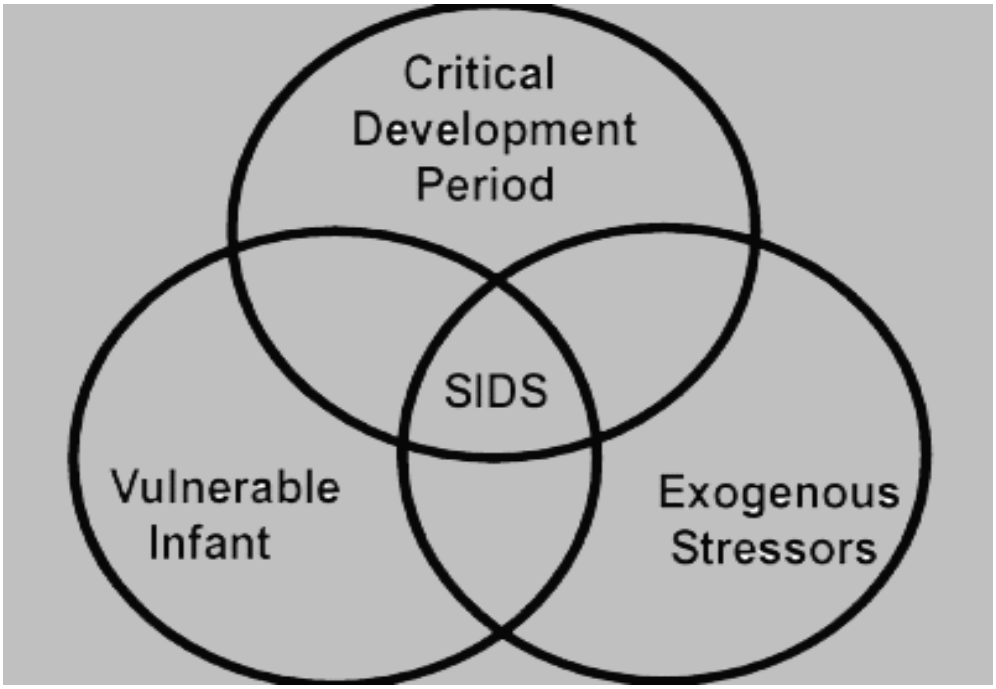
The most prominent theory regarding SIDS is the Triple Risk Model. This model requires the union of three elements to occur which may lead to the death of an infant from SIDS. The three elements are: a critical development period, a vulnerable infant, and outside stressors.[55]

Critical development period: first six months of infant's life; this is a period of rapid growth and an unstable system.

Vulnerable infant: represents infant with an underlying abnormality in brainstem or a genetic mutation

External or Exogenous stressors (outside or environmental challenges) stressors such as exposure to second-hand smoke, tummy sleeping or an upper respiratory infection alone do not cause death for healthy infants, but could trigger a sudden, unexpected death in a vulnerable infant.

It is theorized that babies (i.e. in a critical development period) who die of SIDS may be born with one or more conditions (i.e. brain abnormalities or a genetic mutation) that make them vulnerable (i.e. vulnerable infant) to the outside stressors (i.e. stomach sleeping, tobacco smoke, loose bedding, overheating, etc.). These stressors alone do not cause an infant's death but may reduce an infant's chance of surviving; it is therefore theorized that removing one or more outside stressors can help reduce the risk of SIDS particularly for the vulnerable infant who is in a critical development period. Since we do not know exactly what infants are vulnerable and when exactly the infants are going through a particularly critical development period, experts suggest removing external stressors for all infants as a method to reducing the risk of SIDS.[56]



Research:

Most researchers believe that there are numerous causes of SIDS. Research has focused on a number of areas including the brain and genetics. A recent study by Kinney et al suggested that certain infants have brain stem abnormalities that make them vulnerable for SIDS.[56] Many experts believe that SIDS babies have brain abnormalities that appear to affect the brainstem's ability to regulate breathing, heart rate, temperature, blood pressure and arousal; the finding is considered one of the strongest evidence to date suggesting that differences in a specific part of the brain may place some infants at increased risk for SIDS. When a baby's breathing is blocked - say by a stuffed animal or sleeping face down - the brain stem normally adjusts by sending a message to wake the baby or stimulate breathing. SIDS babies may have abnormal wiring in the brainstem that short circuits this alarm system. This finding supports the view that SIDS risk may greatly increase when an underlying predisposition combines with an environmental risk — such as sleeping face down or exposure to smoke — at a developmentally sensitive time in early life.

Tummy Time:

An awake infant should participate in daily supervised tummy time activities. Mother/caregiver should be instructed to prone (on stomach) position infant when awake, often called supervised tummy time. Tummy time is essential for development of shoulder girdle and arm strength, head control and stability of the trunk.
Rational: This development provides the foundation for emerging motor skills such as sitting, crawling and transitioning. Furthermore, supervised tummy time will help prevent the infant from developing positional plagiocephaly (flat head). When discussing safe sleep environments, providers must emphasize these facts with families in order to ensure appropriate infant developmental progress. [5, 10, 11, 12, 13, 15]

Preventing Positional Plagiocephaly: the Importance of "Tummy Time"

Since the launching of the "Back to Sleep Campaign", infants have been spending a lot of time in the back position while sleeping as well as while in infant car seats, infant carriers, bouncy seats, infant swings. While the Back to Sleep Campaign has made tremendous strides in reducing SIDS, there has also been a increase of the number of infants suffering from Positional Plagiocephaly or infants with flat head. Positional Plagiocephaly or "flat head" is caused when repeated external pressure is applied to back of the head and a flat spot occurs. In the vast majority of the cases when a baby develops a flattened head, the problem usually resolves with time (by 6 months to one year of age) as the baby spends more time awake, begins to roll to different positions by themselves, and/or completes positional therapy.[11, 12, 14]

Parents/caregivers must be given enough information regarding back sleeping, crib safety AND must be informed about the importance of "tummy time" during play. During wakefulness and while supervised, it is best to allow babies time on their stomachs to enhance development. This would also have the effect of relieving any constant pressure tending to flatten the head on one side."

Recommendations to reduce the risk of "flat head":
- Provide baby with lots of **supervised** "tummy time" during the day when they're awake. This will not only enhance the shape of the head, but will strengthen the upper body muscles that are not used as much when babies sleep on their backs. It also allows for quality "exercise" or "play" time between mother/father/caregiver and baby.
- Alternate the direction baby is placed to sleep in the crib (baby is placed to sleep on back);
- Move the mobile, mirror or other object of interest to the opposite side of the baby's sleep and/or play area;
- Switch the arm with which baby is held, especially during feeding times;
- Place the car seat on opposite sides of the car;
- Hold baby upright for cuddles.

See picture of "tummy time" on Attachment 6.

Telephone Resources in Allegheny County:
Issues Associated with Infant Safe Sleep

►For help with getting a crib, call 'Cribs for Kids': 412-322-5680.
►For help with breastfeeding, call Breastfeeding Help Line: 412-247-1000.
►For help to stop smoking, call Tobacco Free Allegheny: 412-322-8321.
►For help with mother and baby support/guidance: ACHD MCH Program 412-247-7950 or Healthy Start Help Line 412-247-1000.
►For confidential information, referral, and support for any non-medical parenting question, call: Parenting WARMLINE at Family Resources-(800) 641-4546**.**

Written Resources: Infant Safe Sleep

National Resources

National Institute of Child Health and Human Development (NICHD)
Telephone: 1-800-370-2943
TTY: 1-888-320-6942
http://www.nichd.nih.gov
http://www.nichd.nih.gov/sids

The National Institute of Child Health and Human Development (NICHD) works to reduce the number of SIDS deaths, both through the *Back to Sleep* campaign, and through research into the causes and features of SIDS.

The Back to Sleep campaign provides a variety of publications on the importance of placing babies on their backs to sleep to help reduce the risk of SIDS. Most are available both for order and viewing on line. *At the time of printing this manual, free resources (up to 200 copies per request) were available i*ncluding the following pamphlets:

Safe Sleep For Your Baby: Ten Ways to Reduce the Risk of Sudden Infant Death Syndrome (SIDS)--General Outreach

Safe Sleep For Your Baby: Reduce the Risk of Sudden Infant Death Syndrome (SIDS)--African American Outreach

First Candle/SIDS Alliance
1314 Bedford Avenue, Suite 210
Baltimore, MD 21208
http://www.sidsalliance.org

Through programs of advocacy, education and research, First Candle exists to promote infant health and survival during the prenatal period through two years of age. SIDS, Stillbirth and Other Infant Death bereavement services are a critical component of their mission.

Local Resources

SIDS of Pennsylvania/ 'Cribs for Kids'
Suite 250 Riverfront Place
810 River Avenue
Pittsburgh, PA 15212
412-322-5680 or 800-PA1-SIDS (800-721-7437)
http://www.cribsforkids.org

S.I.D.S. (Sudden Infant Death Services) **of Pennsylvania** is a statewide partnership of advocates whose mission it is to promote infant survival and grief support for those affected by a sudden infant death, sharing resources through education and research. They provide support to the public through their 'Cribs for Kids' Campaign, which has provided over 6,500 new cribs and mattresses to families throughout Western Pennsylvania since 1998. They provide education to first responders, nurses, doctors, funeral directors, parents and grandparents about the proper handling of a SIDS death and ways to reduce the risks of Sudden Infant Death Syndrome.

Allegheny County Health Department
3333 Forbes Avenue
Pittsburgh, PA 15213
http://www.achd.net

This manual/tool kit is available via the Allegheny County Health Department's web site. Two brochures, "Nothin' But Baby" and "Back to Sleep, Grandma" are also available for downloading and copying via internet.
Available via: http://www.achd.net/hvn/pubs/pdf/Nothin%20But%20Baby.pdf
http://www.achd.net/hvn/pubs/pdf/BackSleepBaby.pdf

Training Resources: Infant Safe Sleep

All Hospital staff should receive basic training on infant safe sleep practices.

Training should be provided to both Health Care Professionals and Non Medical Personnel.

National Resource
First Candle/SIDS Alliance
1314 Bedford Avenue, Suite 210
Baltimore, MD 21208
800-221-7437
http://www.sidsalliance.org
http://www.FirstCandle.org

Local Resource
SIDS of Pennsylvania/ 'Cribs for Kids'
Suite 250 Riverfront Place
810 River Avenue
Pittsburgh, PA 15212
412-322-5680 or 800-PA1-SIDS
http://www.cribsforkids.org

The National Institute of Child Health and Human Development (NICHD), in collaboration with the National Institute of Nursing Research and **First Candle/SIDS Alliance** developed a Nurse Continuing Education Program on SIDS risk reduction to reduce the incidence of SIDS. The goal of the program is to increase the capacity of nurses to educate families and caregivers about ways to reduce factors known to increase SIDS risk. NICHD subcontracted with Ogilvy Public Relations to complete the content and design specification as well as the application for Continuing Education Units from the Maryland Nursing Association. First Candle/SIDS Alliance reviewed all materials and provided feedback and editing. In addition, NICHD has subcontracted with First Candle to attend 10 or more national and regional nursing conferences to conduct training sessions and promote the Nurse Continuing Education Program on SIDS risk reduction using NICHD materials.

SIDS of Pennsylvania/ 'Cribs for Kids' program provides education to first responders, nurses, doctors, funeral directors, parents and grandparents about the proper handling of a SIDS death and ways to reduce the risks of Sudden Infant Death Syndrome. They also provide education to non-medical hospital personnel such as aides, maintenance workers, and others who enter the patient's room; education includes a basic overview of SIDS and infant safe sleep and how to notify a nurse, who will educate the parent/caregiver as necessary, if a sleeping baby is not in crib/isolette on his/her back.

Training Resources: Other

The Happiest Baby Education Program
909-980-8062
education@thehappiestbaby.org or http://**www.thehappiestbaby.org**

Healthcare professionals are trained and certified to teach Dr. Harvey Karp's Happiest Baby techniques through a home study course. Participants are provided with study materials and must pass a competency test upon completing the training.
Contact Person: Sherry Turney Mayeux ICCE, CLE, CD, CHBE- Director of Education

Attachments

Attachment 1: SIDS Definition

Attachment 2: Collage of Infant Safe Sleep Positions and Environments
"Safe Sleep Environment for Infants"

Attachment 3: Collage of NOT Safe Infant Sleep Situations and Positions
"Not Safe Sleep Environment for Baby"

Attachment 4: Supine Position and Aspiration

Attachment 5: Prone Position and Aspiration

Attachment 6: Tummy Time

Attachment 7: Local SUID Data

Attachment 8: Local SUID Data

Attachment 9: Local SUID Data

Attachment 10: SIDS Rate and Sleep Position Chart 1988-2003-National SIDS Data

Attachment 11: Bedsharing Alternatives

Attachment 12: Swaddling

Attachment 13: Swaddling/Guide for Parents: How to swaddle your baby

Attachment 14: Swaddling 101

Attachment 15: Crib Safety

Attachment 1:
Definition of SIDS

SIDS IS

- The leading cause of death in infants from one month to one year of age.
- A sudden and silent medical disorder that can happen to a seemingly healthy infant.
- A death often associated with sleep and with little or no signs of suffering.
- Determined only after autopsy, an examination of the death scene, and a review of the infant's and family's clinical histories.
- A diagnosis of exclusion, in which the cause of death can be determined only after ruling out other causes.

SIDS IS NOT

- Preventable, but the risk can be reduced
- Caused by vomiting and/or choking
- Caused by DPT vaccine or other immunizations
- Contagious
- The result of child abuse or neglect
- The cause of every unexpected infant death

Attachment 2:
Collage of Infant Safe Sleep Positions and Environments

SAFE SLEEP ENVIRONMENT FOR INFANTS

Separate Sleep Environment

Back To Sleep

Support

Breastfeeding

Supervised Tummy Time

If A Light Blanket Is Needed, Tuck All Sides Along Bottom Half Of Crib Below Baby's Arm

Nothing But Baby In The Crib

Attachment 3:
Collage of NOT Safe Infant Sleep Situations and Positions

NOT SAFE SLEEP ENVIRONMENTS FOR BABY

ON TUMMY
WHILE SLEEPING

ADULT BED

COUCHES

SOFAS

CHAIRS

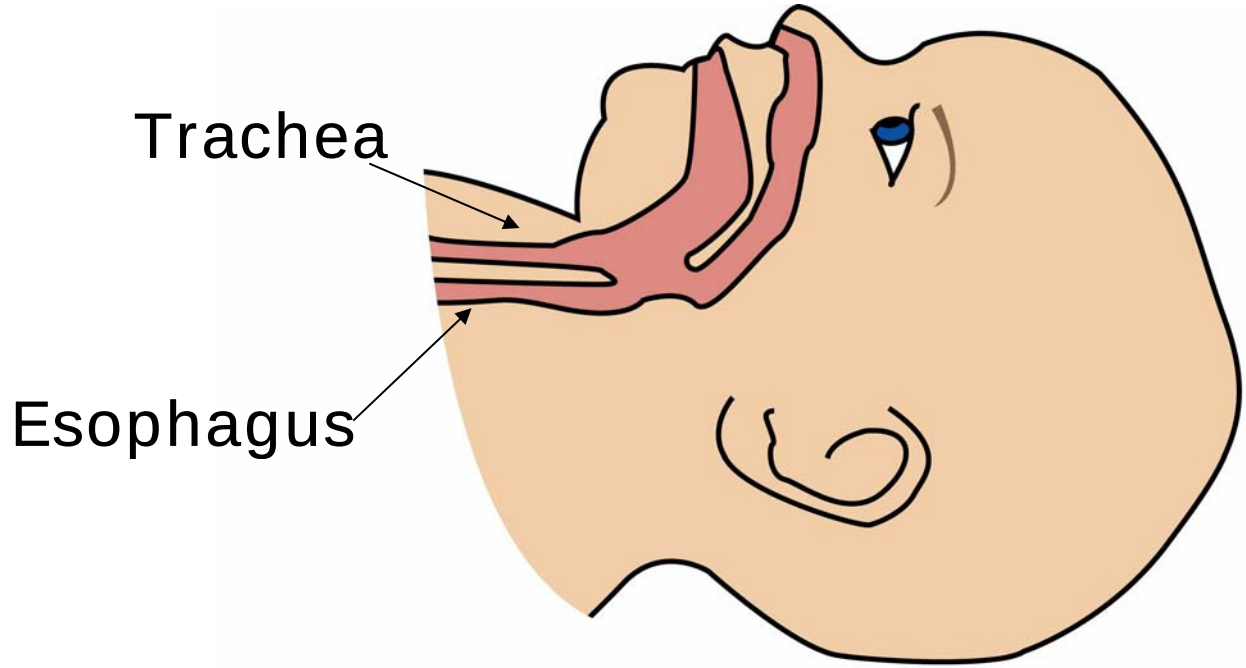
UNSAFE CRIB

LOOSE
BLANKETS

BUMPER PADS

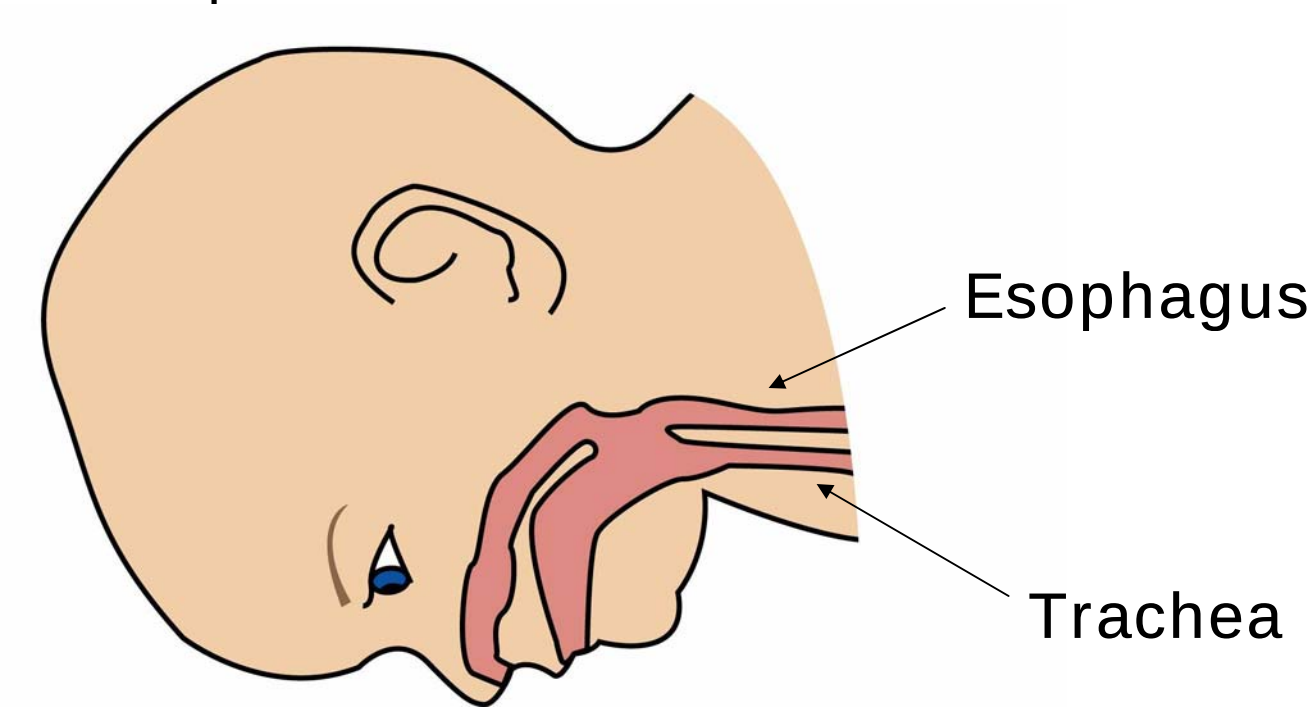
TOYS

Attachment 4:
Supine Position and Aspiration



In the supine position, the trachea lies on top of the esophagus. Anything regurgitated or refluxed from the esophagus has to go against gravity to be aspirated into the trachea.

Attachment 5:
Prone Position and Aspiration

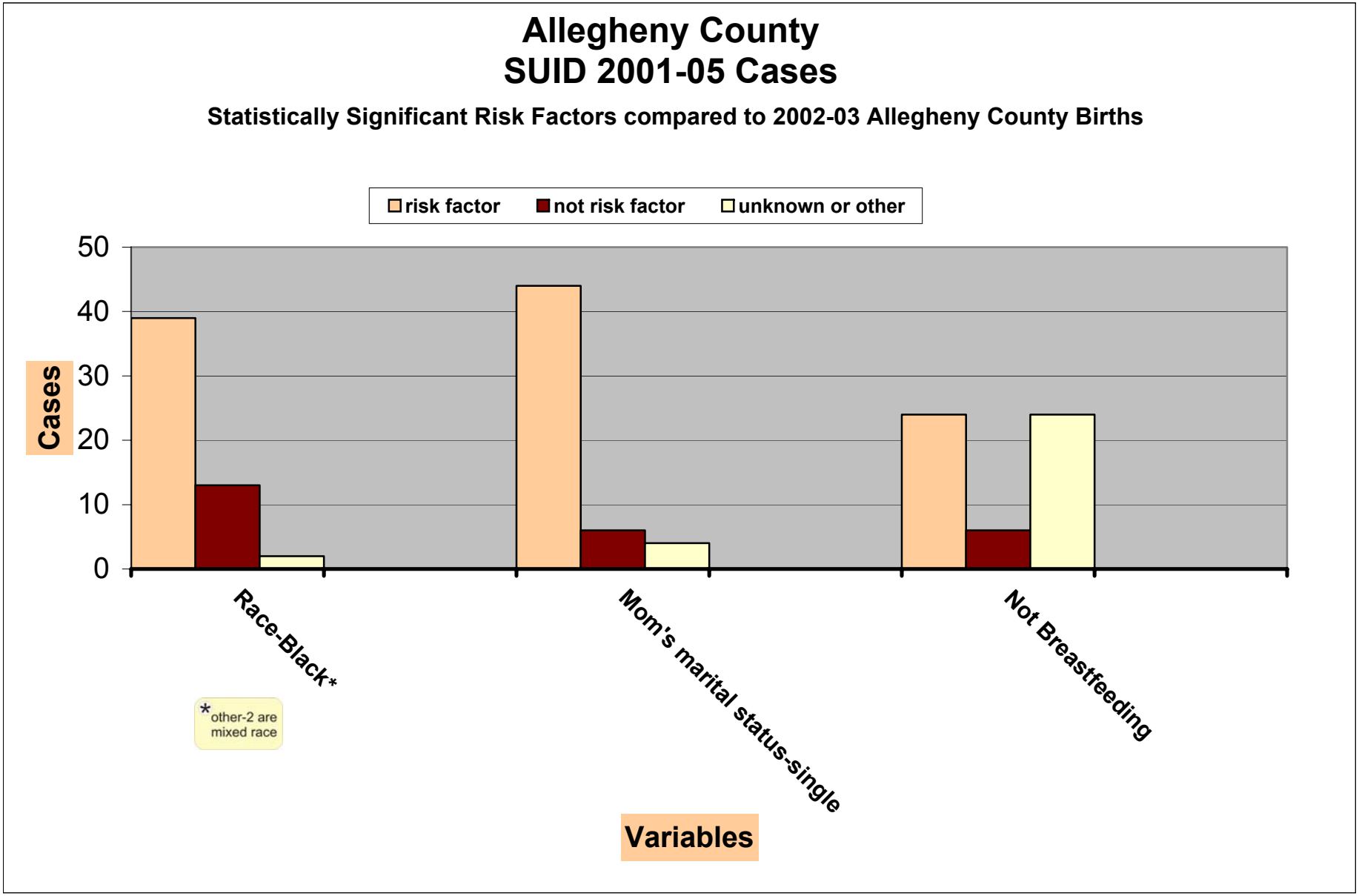


When a baby is in the prone position, anything regurgitated or reflux will pool at the opening of the trachea. This makes it much easier for the baby to aspirate.

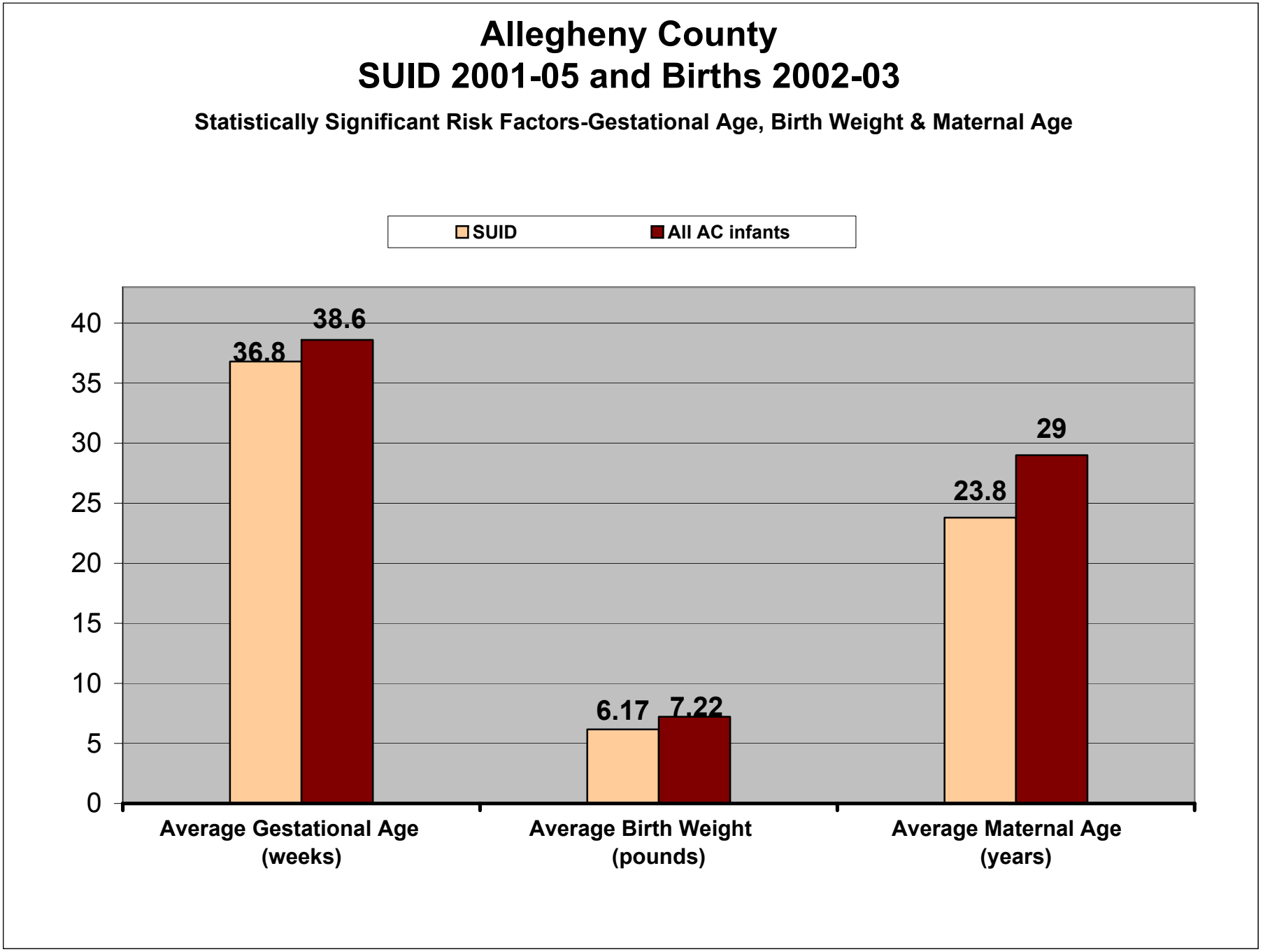
Attachment 6:
Tummy Time

Tummy Time-Stomach to Play/Back for Sleep

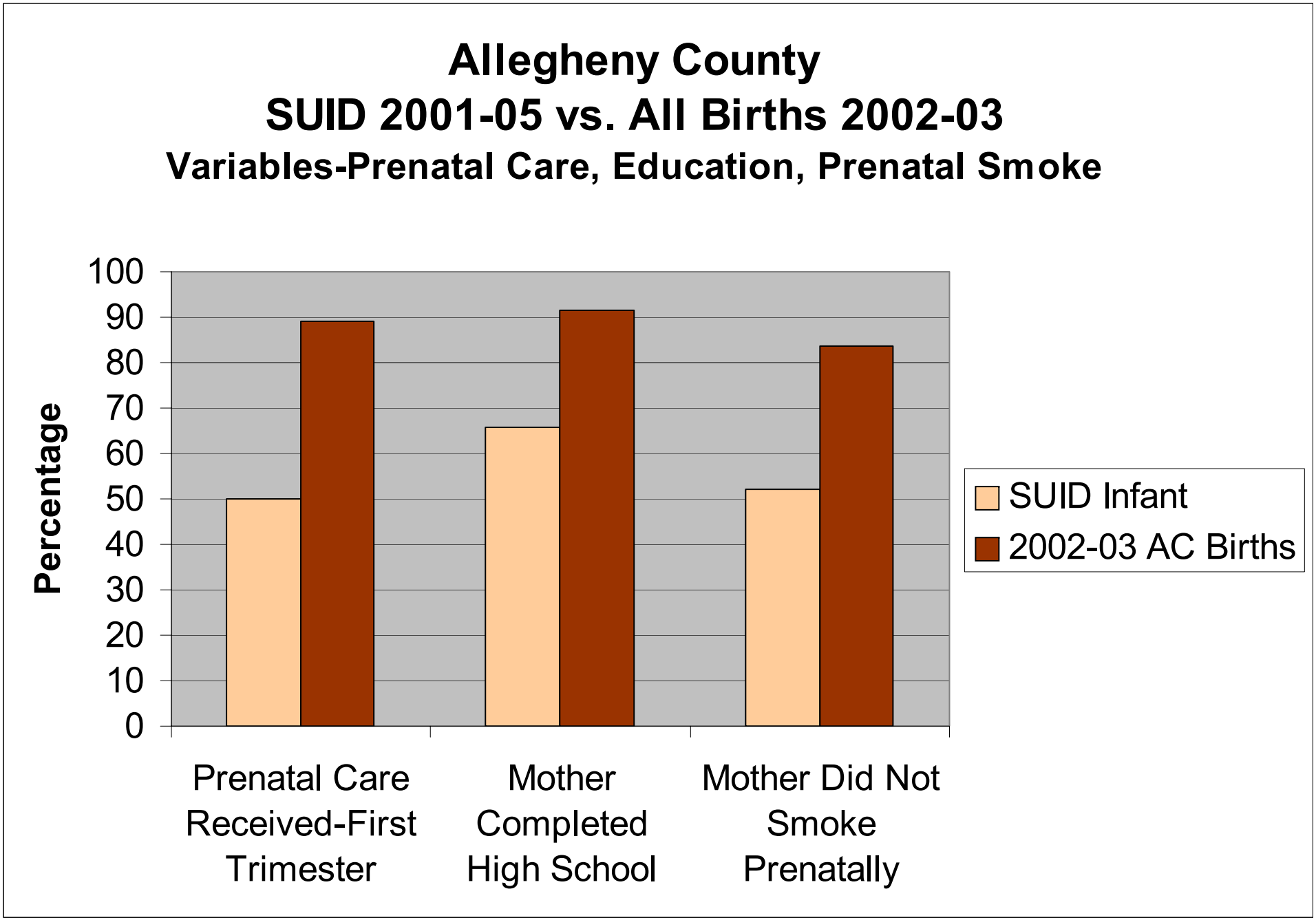
Attachment 7:
Local SUID Data



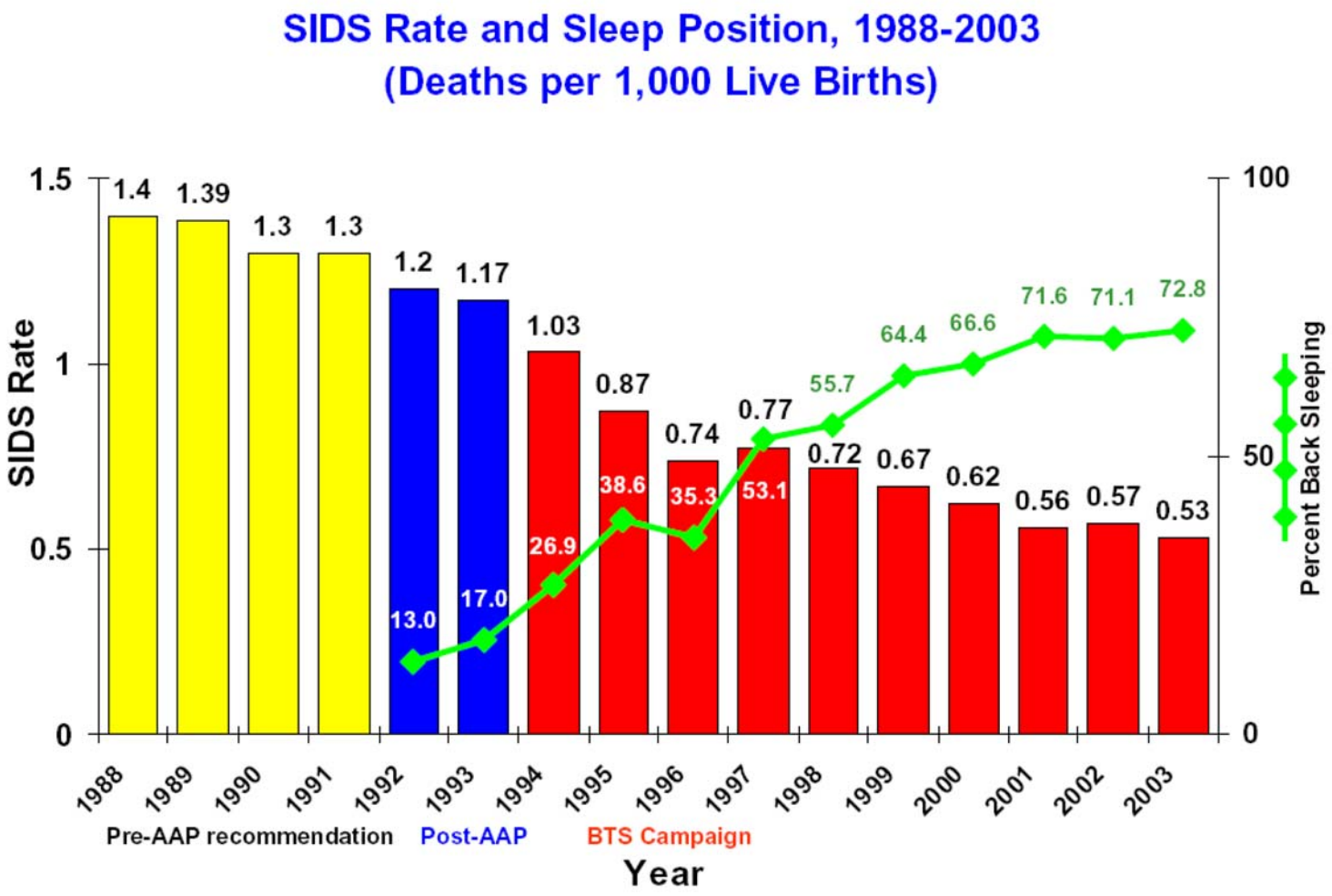
Attachment 8: Local SUID Data



Attachment 9: Local SUID Data



Attachment 10:
SIDS Rate and Sleep Position Chart 1988-2003/
National SIDS Data



Attachment 11:
Bedsharing Alternatives

According to the American Academy of Pediatrics, the Pennsylvania Chapter of the American Academy of Pediatrics and the Allegheny County Perinatal Periods of Risk Team, the safest place for a baby to sleep is on his/her back on a firm and on a separate sleep surface (i.e. safety approved crib, bassinet, etc.) next to the parent's bed. If a mother decides to bed share despite the dangers, offer this additional guidance:

Re-enforce, encourage and discuss Roomsharing (keeping the baby in the same room as parent/caregiver but infant sleeps in his own crib or bassinet):

●Use a crib or "sidecar" next to mother's bed. A sidecar is a crib-like infant bed that attaches securely and safely next to the parent's bed; with this nighttime nurturing device, parents have their own sleeping space, baby has his or her own sleeping space, and baby and parents are in close touching and nursing distance to one another. [5, 26, 28, 31, 35]
●Place infant back to crib after comforting or breastfeeding and/or when the parent is ready to sleep.

Other suggestions that <u>may</u> help make the environment safer but does not make the sleep environment as safe as a separate sleep surface specifically designed for an infant, such as a safety approved infant crib:

●Never sleep with a baby less than 3 months old.
●Never sleep with baby if you or others in the household smoke.
●Never sleep with baby if you use drugs, alcohol or other medication that cause sleepiness.
●Never sleep with baby if you are overly tired or excessively overweight.
●Never let the baby sleep alone or with anyone on a sofa, couch, chair, or waterbed.
●Never use heavy blankets, pillows or comforters that could cover baby's head and face; avoid overheating.
●Avoid overheating or over bundling baby.
●Place extra firm mattress on the floor for sleeping. Avoid crevices between the mattress and wall. Keep the firm mattress away from walls or hazardous items such as curtains, blinds, heaters, and windows. Avoid using any bed with side rails, head-boards and foot-boards that have slats that could entrap the baby's head and make sure that the mattress (firm) fits tightly against the headboard and away from any wall or other potential entrapment area.

Remember, adult beds are not made for babies.

Attachment 12:
Swaddling

Babies love the touch of our skin against theirs. However, some babies, especially fussy ones, need and like to be swaddled. A popular pattern of swaddling is described in Dr. Harvey Karp's DVD and book The Happiest Baby on the Block (**http://**www.thehappiestbaby.com).

Swaddling means wrapping the baby snugly in a thin blanket. It reminds him of the constant cuddling he enjoyed when he was snugly bundled up inside of you. Some babies may need to be swaddled 12-20 hours a day.

Swaddling is the first step in calming fussy babies and improving sleep. Do it snugly to keep your baby from wiggling out. (Babies cry and thrash even more when their hands are out.) Don't worry if your baby resists. Some wrapped babies get fussier at first, but after a minute or two of using the other "Ss" (listed below) most swaddled babies are calm and happy!
To swaddle safely and effectively:

- Avoid loose blankets.
- Swaddle snugly with arms straight at your baby's side.
- Avoid over heating. (Baby's ears and neck should not be hot or sweaty)
- Use a large (42" square) blanket, but keep the blanket off your baby's cheek. (It annoys some babies.)
- Feed your baby 7-10 times per day. (Some babies get so sleepy when swaddled they have to be awakened so they don't forget to eat.)

See Attachments 13 and 14 for further guidance on swaddling.

Attachment 13:
Swaddling/Guide for Parents: How to swaddle your baby

Contemporary PEDIATRICS

GUIDE FOR PARENTS

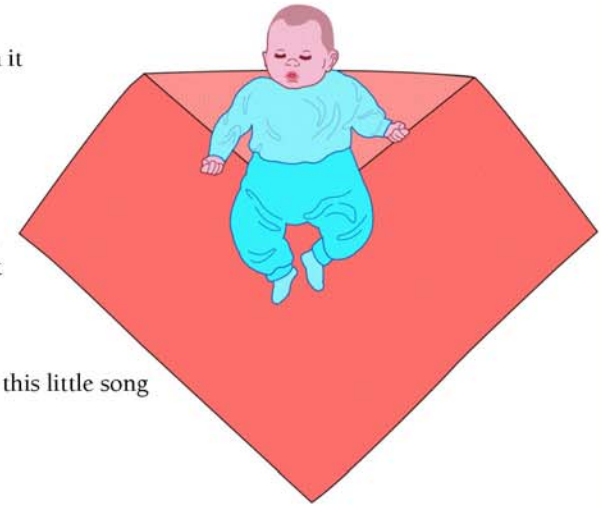
How to swaddle your baby

By Harvey Karp, MD

There are as many ways to swaddle a baby as there are to fold a napkin for a dinner party, but the method outlined here is, in my opinion, the best. I learned it from a midwife many years ago and call it the "DUDU" wrap. (DUDU, pronounced "doo doo," stands for **D**own-**U**p-**D**own-**U**p.)

When learning to wrap, practice on a doll or on your baby when he (or she) is calm.

Prepare to start swaddling



1. Place a large square blanket on your bed and position it like a diamond.

2. Fold the top corner down so the top point touches the center of the blanket.

3. Place your baby on the blanket so his neck lays on the top edge.

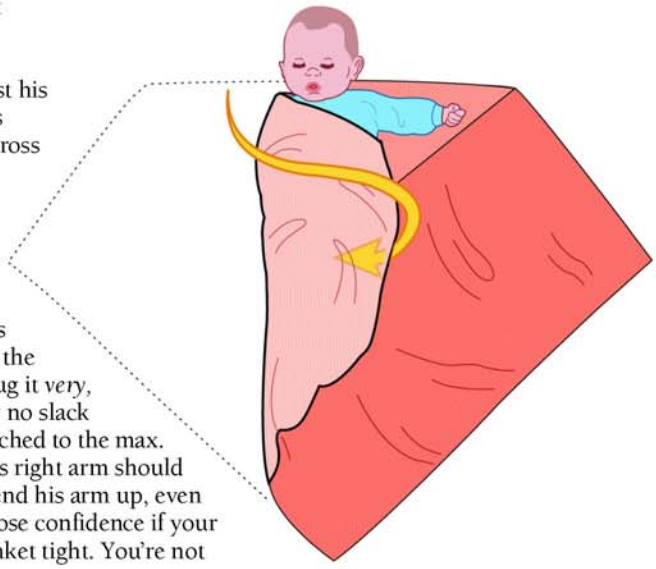
4. Hold your baby's right arm down straight at his side. If he resists, be patient. The arm will straighten after just a moment or two of gentle pressure.

Begin the DUDU wrap

An easy way to remember how to do this wrap is to say this little song as you go:

Down…tuck…snug
Up…tuck…snug
Down…a smidgen…hold
Up…across…snug

1. Down. Just as swaddling is the cornerstone of calming, this first DOWN is the cornerstone of swaddling. It must be done well or the wrap will unravel. Hold your baby's right arm straight against his side, grab the blanket three to four inches from his right shoulder, and pull it *very snugly down* and across his body. (The blanket should look like half of a V-neck sweater.)



Tuck. Keeping the blanket *taut*, finish pulling it all the way down and *tuck* it under his left buttocks and lower back. This anchors the wrap.

Snug. While firmly holding the blanket against his left hip (with your left hand), grab the top edge of the blanket next to his unwrapped left shoulder and tug it *very, very snug*. Pull the blanket until there is absolutely no slack around your baby's right arm and the fabric is stretched to the max.

After this first "DOWN…tuck…snug" the baby's right arm should be held so securely against his side that he can't bend his arm up, even if you let go of the blanket. Don't be surprised or lose confidence if your baby suddenly cries louder when you pull the blanket tight. You're not hurting him!

Continued

HILDA M./MINOS/M./MINOS MEDICAL VISUALS

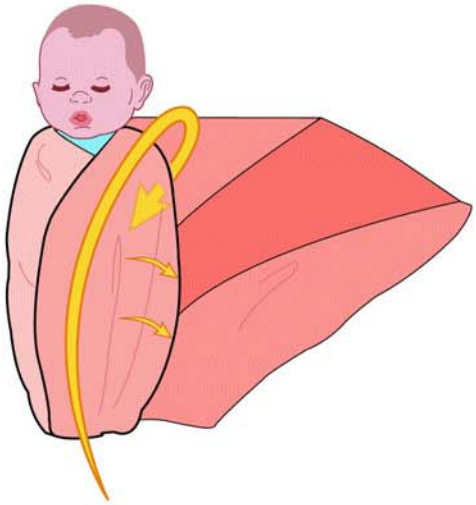
GUIDE FOR PARENTS

continued

2. Up. Now, straighten his left arm against his side and bring the bottom corner straight *up* to cover the arm. The bottom blanket point should reach up and over his left shoulder. It's okay if his legs are bent; that's how babies are positioned in the womb. But, be sure his arms are *straight*. If they're bent, he'll get out of the wrap as fast as you can say, "Oops, he did it again!" And, he'll cry even more.

Tuck. Tuck this corner tightly under his whole left arm with your right hand. Put your left hand on his straight left arm so it's pressed against his body.

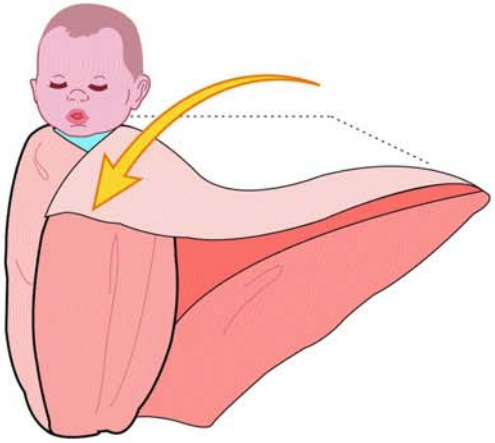
Snug. While your left hand still holds his left arm down, use your right hand to grab the blanket three inches from his left shoulder and *snug* it with a *continuous* pull (stretch it as much as possible). This removes any slack next to his right arm.



3. Down. Still holding the blanket three inches from his left shoulder, pull the blanket taut and *down*, but only a smidgen.

A smidgen. This DOWN should bring only *a smidgen* of fabric over his left shoulder to his upper chest, like the second half of the V-neck sweater. (A mistake parents often make with the DUDU wrap is to bring this down fold all the way to their baby's feet…remember, it's just a smidgen.)

Hold. Using your left hand, *hold* that small fold of blanket pressed against his breastbone, like you are holding down a ribbon while making a bow.

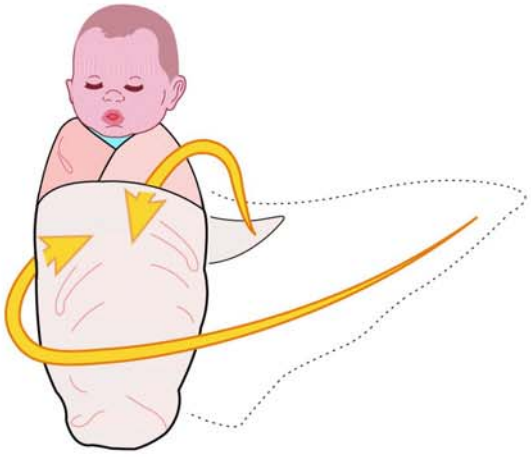


4. Up. As your left hand holds that fold, grab the last free blanket corner with your right hand and pull it firmly, straight out to your right. This will get every last bit of stretch and slack out of the wrap you've done so far. And, without releasing the tension, lift that corner in one smooth motion, *up* and…

Across. Bring it tightly *across* his waist and wrap it around his body like a belt. The belt should go right over his *forearms*, holding them snugly down against his sides.

Snug. The finishing touch of the DUDU wrap is to *snug* the "belt" by giving it one last tight pull to remove any slack. Then tuck the end into the blanket as shown in the diagram.

This last tight snug and tuck keeps the whole swaddle from popping open.



HILDA MUROS/MUROS MEDICAL VISUALS

Please refer to *The Happiest Baby on the Block* DVD and www.TheHappiestBaby.com for more information.

Attachment 14:
Swaddling 101

Contemporary PEDIATRICS

GUIDE FOR PARENTS

Swaddling 101

Remember—always put your baby to sleep on her back!

When can I start swaddling?

Babies can be swaddled as soon as they're born. It makes them feel cozy and warm, like they're "back home."

Do all babies need to be swaddled?

Many calm babies do well with no swaddling at all. But the fussier your baby is, the more she'll need to be swaddled. Tight bundling is so successful at soothing infants that some babies even have to be *u n*swaddled to wake them up for feedings.

Should the swaddling always be snug or are loose blankets okay?

Never put your baby into bed with loose blankets. Make sure her swaddling is snugly wrapped around her so it doesn't loosen during the night. Loose blankets can get around a baby's face and contribute to sudden infant death syndrome (SIDS).

How can I tell if my baby is overheated or overwrapped?

Premature babies often need incubators to keep them toasty, but full-term babies just need a little clothing, a blanket, and a room that is between 65∞and 70∞F. If the temperature in your home is warmer than that, you can skip some clothing. In hot weather, you can wrap your baby naked in a light cotton blanket. (Parents living in warm climates often put cornstarch powder on their baby's skin to absorb sweat and prevent rashes.)

Always check to see if your baby is overheated by feeling her ears and fingers. If she's hot, red, and sweaty, she's overwrapped. If she's only slightly warm and not sweaty, her temperature is probably perfect.

How can I tell if I'm swaddling my baby too tightly?

In traditional cultures, parents swaddle their babies tightly because loose wraps invariably pop open. Although some Americans worry about tight swaddling, most of the time bundling fails because it is done too loosely.

For your peace of mind, here's an easy way for you to make sure your wrapping is not too tight. Slide your hand between the blanket and your baby's chest. It should feel as snug as your hand slid between your pregnant belly and the elastic waistband of your pants at the end of your ninth month.

Continued

GUIDE FOR PARENTS

continued

Can swaddling help a baby sleep?

Yes! In fact, even babies who don't need wrapping to keep calm often sleep more when they're swaddled. Bundling keeps them from startling themselves awake. In my experience, swaddling plus white noise can add one to two hours to a baby's nighttime sleep.

If a baby has never been swaddled, at what age is it too late to start?

Even if you have never swaddled your baby before, swaddling may still help soothe her "fussies" during her first three months of life. But, be patient. You may have to wrap her a few times before she gets used to it. Try doing it when she's already sleepy and in her most receptive frame of mind.

When is a baby too old to continue to be swaddled?

The age for weaning off the wrapping varies from baby to baby. Many people think they should stop swaddling after a few weeks, when their baby starts resisting it. But, actually, this is when swaddling becomes the most valuable.

To decide if your infant no longer needs to be wrapped, try this: After she reaches 2 to 3 months of age, swaddle her with one arm out. If she gets fussier, continue wrapping (with both arms in) for a few more weeks. However, if she still sleeps well with one arm out, she probably doesn't need swaddling any more.

Most babies are ready to be weaned off wrapping by 3 to 4 months of age, although some continue to need the wrapping to help them sleep up to 9 months of age.

How many hours a day should a baby be wrapped?

All babies need some time to stretch, bathe, and get a massage. But, you'll probably notice your baby is calmer if she's swaddled 12 to 20 hours a day, to start with. (Remember, as a fetus, she was snuggled 24 hours a day.) After one or two months, you can reduce wrap time according to how calm she is without it.

Adapted from *The Happiest Baby on the Block* (Bantam Books, 2002)

Please refer to *The Happiest Baby on the Block* DVD and www.TheHappiestBaby.com for more information.

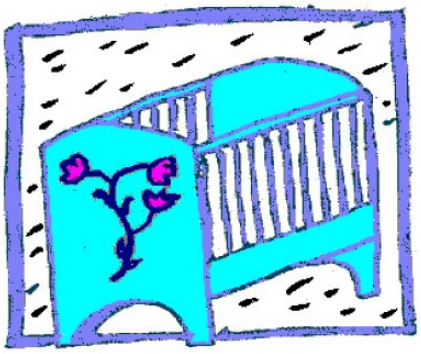
Article text continues on page 110

Attachment 15:
Crib Safety

CRIB SAFETY TIPS

Use Your Crib Safely

For infants less than 12 months of age, follow these practices to reduce the risk of SIDS (sudden infant death syndrome) and prevent suffocation:



- Place baby on his/her back in a crib with a firm, tight-fitting mattress.
- Do not put pillows, quilts, comforters, sheepskins, pillow-like bumper pads or pillow-like stuffed toys in the crib.
- Consider using a sleeper instead of a blanket.
- If you do use a blanket, place baby with feet to foot of the crib. Tuck a thin blanket around the crib mattress, covering baby only as high as his/her chest.
- Use only a fitted bottom sheet made specifically for crib use.

Check Your Crib for Safety

There should be:

- A firm, tight-fitting mattress so baby can't get trapped between the mattress and the crib.
- No missing, loose, broken or improperly installed screws, brackets, or other hardware on the crib or mattress support.
- No more than 2 3/8 inches (about the width of a soda can) between the crib slats so a baby's body can't fit through the slats; no missing or cracked slats.
- No corner posts over 1/16th inch high so a baby's clothing can't catch.
- No cutouts in the headboard or foot board so a baby's head can't get trapped.

⇨ *more on the other side*

For mesh-sided cribs and playpens, look for:

- Mesh less than ¼ inch in size, smaller than the tiny buttons on a baby's clothing.
- Mesh with no tears, holes or loose threads that could entangle a baby.
- Mesh securely attached to the top rail and floor plate.
- Top rail cover with no tears or holes.
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Acknowledgements

PERINATAL PERIODS OF RISK TEAM

With leadership from Allegheny County Health Department, a local Perinatal Periods of Risk (PPOR) Team was organized in 2003. Members participated in CityMatCH-sponsored training and introduced the Pittsburgh/Allegheny County community to PPOR Approach in June 2003. The Team expanded to include representatives from the University of Pittsburgh Graduate School of Public Health and Office of Child Development, the March of Dimes, SIDS of Pennsylvania, Healthy Start, Inc., Magee-Womens Hospital, and Western Pennsylvania Hospital. The Team involved the broad community in planning, funding, implementing and evaluating a SIDS prevention/safe sleep promotion program which is comprehensive, evidence-based and culturally appropriate. This tool kit is an outcome of that initiative.

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Model Hospital Policy and Protocol Manual: Incorporating Infant Safe Sleep Practices In a Health Care Setting & Tool Kit: Educating Parents and Caregivers About Infant Safe was produced through funds made available from the Pennsylvania Department of Health/ Bureau of Family Health.

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