

Reducing Sleep-Related Deaths in Maine

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OBJECTIVES/TAKE HOME POINTS

- Death occurring during unsafe sleep is not SIDS
- In Maine, 10-12 babies die in unsafe sleep circumstances every year
- "Back to Sleep" is becoming "Safe to Sleep"
- Instruct families about ways to keep their baby safe during sleep at the first visit, in the newborn nursery, and before birth
- Babies can also be injured during unsafe sleep, including due to falls
- There is not a guaranteed "safe way" to bed share

Nomenclature

- Unsafe sleep:
 - Bed-sharing
 - Prone or side sleep position
 - Unapproved sleep surface (couch)
 - Presence of other items in the sleeping area (pillows, bumper pads, etc).



Nomenclature

- Bed-sharing
 - Infant sharing a sleep surface with 1 or more adults or other children
- Co-sleeping
 - Infant sleeping proximate but not with others
 - Confusing, removed from AAP statement

SUID

- SUID: "Sudden Unexpected Infant Death"
 - Primarily overlay injury
 - Died during unsafe sleep conditions:
 - Bed-sharing
 - Sleeping on couch
 - Over-bundled/over-heated
 - Inappropriate items in sleep area



Maine



- "Maine: The way life should be, but infant sleep shouldn't"
- Joint review by physicians at MMC, MidCoast and State Medical Examiners Office
 - To evaluate the association between sudden, unexpected infant deaths and unsafe sleeping in Maine
 - Inform public policy and clinical practice

Tip of the iceberg

- Blair, et al, BMJ 2009
 - Bed sharing
 - 5.23 times more likely to die while asleep (vs sleeping in crib)
 - Bed sharing + drug/alcohol
 - 53.26 times more likely to die while asleep (vs sleeping in crib)
 - Drug/alcohol alone = no increased risk



Adults¹
Unbelted rear OR = 2.7
Child
Unbelted rear OR = 2.6
In Taiwan² OR= 1.54

¹Halman, BMJ, 11May2002; ²Asian Institute of Technology

- Interesting:
 - 150% more deaths in Maine than in the study area
 - Median age 66 days

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“Safe” Bed-sharing

- “High risk” situations:
 - Alcohol intoxication
 - Drug use (prescription and over-the-counter)
 - Tobacco use
 - Fatigue (!!)
 - Couch

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“Safe Bed-sharing?”

- Canada Child Death Review, 2009
 - None of deaths met “safe” criteria
- Ateah, Hamelin, 2008
 - 212 people who bed-share regularly or occasionally
 - 13% report rolling onto infant

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Why is this happening?

- Influence of media
 - Moon, Pediatrics 2009
 - 36% meet AAP safe-sleep criteria
- Breast feeding
 - Santos, J Peds, 2009
 - Perception that bed sharing begets breastfeeding
 - High level of infant death

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AAP Sleep Task Force, 2011

- **Level A recommendations**
 - Back to sleep for every sleep
 - Use a firm sleep surface
 - Room-sharing without bed-sharing is recommended
 - Keep soft objects and loose bedding out of the crib
 - Pregnant women should receive regular prenatal care
 - Avoid smoke exposure, and alcohol and illicit drug use during pregnancy and after birth

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AAP Sleep Task Force, 2011

- **Level A, continued**
 - Breastfeeding is recommended
 - Consider offering a pacifier at nap time and bedtime
 - Avoid overheating
 - Do not use home cardiorespiratory monitors as a strategy for reducing the risk of SIDS
 - Expand the national campaign to reduce the risks of SIDS to include a major focus on the safe sleep environment
 - **pediatricians, family physicians, and other primary care providers should actively participate in this campaign**



AAP Sleep Task Force, 2011

- **Level B recommendations**
- Infants should be immunized
- Avoid commercial devices marketed to reduce the risk of SIDS
- Supervised, awake tummy time is recommended

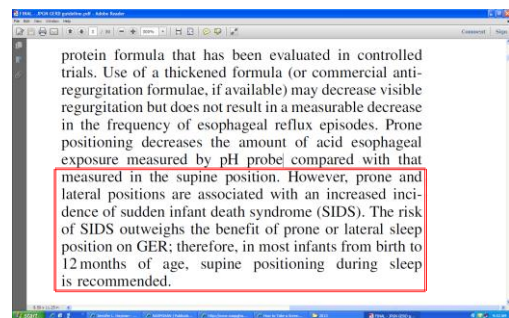


Pediatric Gastroesophageal Reflux Clinical Practice Guidelines, 2009

- Supine with head elevated = OR > supine and flat
- Semi-supine position **INCREASES** reflux
 - Car seat.....
- Prone positioning decreases reflux
 - At a cost.....



Pediatric Gastroesophageal Reflux Clinical Practice Guidelines, 2009



What about the hospital?

- “We” are role models
 - Natl Assn Neonatal Nurses
 - First Candle (SIDS Alliance)
 - AAP: “parents should be encouraged to follow safe-sleep practices for infants”



In-Hospital Falls of Newborn Infants: Data From a Multihospital Health Care System

- 18 hospitals 3 year time frame
- 88,774 live births
- 14 in hospital falls
 - 1.6/10,000
- Potentially 600-700 falls per year in the US



Safe to Sleep

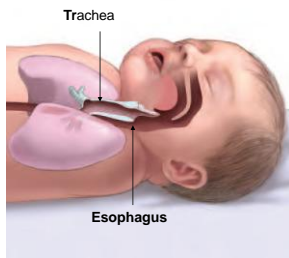


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De-bunk the myths

- Positional plagiocephaly
- Head stuck in crib slats
 - Importance of industry standard cribs
- Choking
- “Safe bed-sharing”

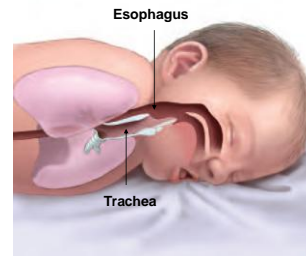
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In the supine position, the trachea lies on top of the esophagus. Anything regurgitated or refluxed from the esophagus has to go against gravity to be aspirated into the trachea.

<http://www.nichd.nih.gov/sids>

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

<http://www.nichd.nih.gov/sids>

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Academy of Breastfeeding Medicine Protocol #6: Guideline on Co-Sleeping and Breast Feeding (March 2008)

1. Some potentially unsafe practices related to bed sharing/co-sleeping have been identified either in the peer-reviewed literature or as a consensus of expert opinion:
 - Environmental smoke exposure and maternal smoking
 - Sharing sofas, couches, or daybeds with infants
 - Sharing waterbeds or the use of soft bedding materials
 - Sharing beds with adjacent spaces that could trap an infant
 - Placement of the infant in the adult bed in the prone or side position
 - The use of alcohol or mind-altering drugs by the adult(s) who is bed sharing
 - Infants bed sharing with other children
 - **Bed sharing with younger babies (<8-14 weeks of age) may be more strongly associated with SIDS**

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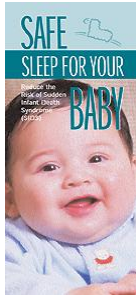
Academy of Breastfeeding Medicine Protocol #6: Guideline on Co-Sleeping and Breast Feeding (March 2008)

- Inform families that adult beds have potential risks and are not designed to meet federal safety standards for infants.
- Ensure that there are no spaces between the mattress and headboard, walls, and other surfaces, which may entrap the infant and lead to suffocation.

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What can you do?!?!

- Staff education that safe sleep is more than “Back to Sleep”
- Follow up to hospital discharge teaching
 - NICHHD pamphlet
 - “Safe Sleep Top 10” based on AAP recommendations



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Free materials from NICHHD



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New NIH Campaign



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New Materials

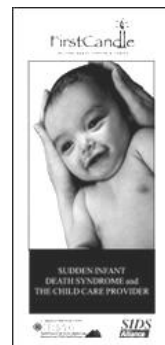


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- Always place your baby on his or her back to sleep, for naps and at night, to reduce the risk of SIDS.
- Use a firm sleep surface, covered by a fitted sheet, to reduce the risk of SIDS and other sleep-related causes of infant death.
- Your baby should not sleep in an adult bed, on a couch, or on a chair alone, with you, or with anyone else.
- Keep soft objects, toys, and loose bedding out of your baby's sleep area to reduce the risk of SIDS and other sleep-related causes of infant death.
- To reduce the risk of SIDS, women should: Get regular health care during pregnancy, and
- Not smoke, drink alcohol, or use illegal drugs during pregnancy or after the baby is born.
- To reduce the risk of SIDS, do not smoke during pregnancy, and do not smoke or allow smoking around your baby.
- Breastfeed your baby to reduce the risk of SIDS.
- Give your baby a dry pacifier that is not attached to a string for naps and at night to reduce the risk of SIDS.
- Do not let your baby get too hot during sleep.
- Follow health care provider guidance on your baby's vaccines and regular health checkups.
- Avoid products that claim to reduce the risk of SIDS and other sleep-related causes of infant death.
- Do not use home heart or breathing monitors to reduce the risk of SIDS.
- Give your baby plenty of Tummy Time when he or she is awake and when someone is watching.

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For Child Care Providers



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Free On-line training
<http://www.nichd.nih.gov/SIDS/nursececourse/Welcome.aspx>



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Resources

- NICHD
 – <http://www.nichd.nih.gov/SIDS/>
- SIDS Alliance www.firstcandle.org
- “Cribs for Kids” <http://www.cribsforkids.org/>
 – Contact info:
 - Maine Children's Trust at 623-5120
 - OR
 - Maine Home Visiting Program; website:
www.maineamilies.org

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Additional Resources

- To report un-safe products:
 – www.saferproducts.gov
- Safe sleep list serv
 – Infantsafesleep-request@listserve.com

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Safe Sleep Video-Free on website



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www.safesoundbabies.com

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