SIDS, SUID and Other Sleep-Related Infant Deaths: Keeping Babies Safe

Presented by:

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Overview

- Definition of Sudden Infant Death Syndrome (SIDS), Sudden Unexpected Infant Death (SUID), and sleep-related deaths
- Recent research about why these babies die
- Statistics
- Why child care providers are important to the health and safety of babies
- AAP SIDS Task Force recommendations and why they are important
- Putting policies into place in child care
- Available resources

www.healthychildcare.org
What is SUID?

- Sudden Unexpected Infant Death where the exact cause is not immediately evident
- SUID is the umbrella category under which these causes of death fall
- ½ of the deaths in this category are SIDS deaths (approx. 2200/year)
- There are about 4500 SUID deaths per year
Definition of SIDS

- Sudden death which occurs before 1 year of age, usually in a previously healthy infant
- Cause of death unexplained after thorough investigation; including complete autopsy, death scene investigation, and review of child’s health history
- A diagnosis of exclusion
- SIDS is not predictable
Sleep-related Infant Deaths

- Most occur during infant sleep
- ASSB – Accidental Suffocation or Strangulation in Bed
- Suffocation
- Unknown/ undetermined
- SIDS
Why Do We Talk About SIDS, SUID, and Sleep-related Deaths?

While we don’t know the exact mechanism that causes SIDS, we have identified factors that put an infant at increased risk.

Eliminating these risk factors will ELIMINATE *suffocation* deaths.
SIDS Facts

• In 2010, there were about 2,063 SIDS cases (US)
• It is the leading cause of death for babies from 1 to 12 months of age
• Highest risk is at 2 to 4 months; 91% occur between 1 and 6 months of age
• Seasonal trend: there are more SIDS deaths in winter months
• More male babies die of SIDS
• Unaccustomed tummy sleeping increases risk as much as 18 times
Safe Sleep for Babies

Triple Risk Model

- Vulnerable Infant
- Critical Developmental Period
- Outside Stressor(s)

SIDS
Triple Risk Model

Brain stem dysfunction, arousal defect, gene polymorphism

Vulnerable Infant

Critical Developmental Period

Outside Stressor(s)

SIDS
Safe Sleep for Babies

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Highest risk at 2-4 months

Vulnerable Infant

Critical Developmental Period

SIDS

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Safe Sleep for Babies

Triple Risk Model

- Brainstem dysfunction, arousal defect, gene polymorphism
- Critical Developmental Period
- Vulnerable Infant
- SIDS
- Outside Stressor(s)

Highest risk at 2-4 months

tummy sleep position, smoke exposure, soft bedding

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Non-Modifiable Risk Factors for Childcare Providers

- Mother younger than 18 years old
- Maternal smoking during pregnancy
- Maternal alcohol and illegal drug use
- Late or no prenatal care
- Age – 2 to 4 months
- Low birth weight
- Prematurity
- Male gender
- African American
- American Indian

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Use Freely. Do Not Change.
Modifiable Risk Factors

- Tummy sleeping
- Soft or loose bedding
- Inappropriate sleep environments
- Overheating
- Environmental tobacco smoke
- Bed sharing
It’s Not Simple Math

Babies who *sleep on their tummies* have a 5 times greater risk of SIDS.

Babies who *sleep on soft bedding* have a 5 times greater risk of SIDS.

Babies who *sleep on their tummies on top of soft bedding* have a 21 times greater risk of SIDS.
Rebreathing Theory

- Infants in certain sleep environments are more likely to trap exhaled CO$_2$ around the face
  - Tummy sleeping and near-face-down/ face-down
  - Soft bedding
  - Tobacco smoke exposure
- Infants rebreathe exhaled CO$_2$
- Infants die if they cannot arouse/ respond appropriately
MEDICAL PROGRESS

Fig 1. Five Steps in the Putative Terminal Respiratory Pathway Associated with the Sudden Infant Death Syndrome. Death results from one or more failures in protective mechanisms against a life-threatening event during sleep in the vulnerable infant during a critical period. Complex genetic and environmental interactions influence the pathway.
Brain Dysfunction

- Brain Stem controls breathing, alertness, arousal, temperature and other autonomic functions.
Safe Sleep for Babies

SIDS Rate and Sleep Position, 1988-2003
(Deaths per 1,000 Live Births)

Year


Pre-AAP recommendation 1.4 1.39 1.3 1.3 1.2 1.17 1.03 0.87 0.74 0.77 0.72 0.67 0.62 0.56 0.57 0.53
Post-AAP
BTS Campaign

Sleep Position Source: NICHD Household Survey
SIDS Rate Source: National Center for Health Statistics, CDC

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Is That the Whole Story?

Proportion of Sleep-Related Deaths, US: 1995-2005

Source: CDC Wonder, 2011
SIDS Rates, U.S.

Source: National Center for Health Statistics, CDC

*Preliminary Data, 2003
Undetermined: US

Racial disparity in Undetermined deaths

Source: CDC Wonder
Black vs. Non-Black Prone Prevalence and SIDS Rates

Sources: National Center for Health Statistics, National Infant Sleep Position study
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Prone Prevalence by Race/Ethnicity

NISP, 2008

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A Quiet Revolt Against the Rules on SIDS

By BRIAN BRAIKER
Published: October 18, 2005

In homes across the country, parents like Mrs. Stanciu are mounting a minor mutiny against the medical establishment. For more than a decade, doctors have advocated putting babies to bed on their backs as a precaution against sudden infant death syndrome, or SIDS. Increasingly, however, some new parents are finding that the benefits of having babies sleep soundly - more likely when they sleep on their Tummies - outweigh the comparatively tiny risk of SIDS.
Child Care and SIDS

- 2/3 of US infants are in non-parental child care (Ehrle et al, 2001)
- Infants of employed mothers spend average of 22 hours/week in child care
- 32% infants are in child care full-time
- Of infants in child care:
  - 50% relative care
  - 10% in-home babysitter/nanny
  - 40% organized child care
Child Care and SIDS - 1990s

- 15-20% SIDS occurred in child care
- In 1990s, child care deaths associated with unaccustomed tummy position (Moon, 2000)
  - Child care providers were unaware of association of SIDS and sleep position
  - Misinformed about risks and benefits of various sleep positions
SIDS vs. Sleep Position

Supine: 1
Side: 2
Prone: 3
Unaccus Prone: 9

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Unaccustomed Tummy Sleeping

• Increases risk of SIDS (as much as 18 times)
  – Mitchell et al, 1999

• Non-parental caregivers may use tummy sleeping

• Less ability to lift head in tummy position

• Later development of upper body strength
  – Davis et al, 1998
Education Does Work!

Increased awareness and knowledge of Safe Sleep practices
Regulation and Legislation

- Child care providers are more likely to place infants on their backs to sleep if there is a regulation or written policy in place.
- States with regulation or legislation regarding sleep position in child care has increased.
  - In 2001, only 7 states had regulations for sleep position.
  - Now nearly all states have some safe sleep guidelines.
Sleep Position Regulations
(as of March 2012)

• 39 states require back positioning for infants in CCCs and FCCHs
  – Some states allow a waiver from physician and/or parent
• Several states allow back or side positioning
• 1 state only requires back positioning in CCCs
• 3 states only require back positioning in FCCHs
• 7 states do not regulate sleep position in CCCs or FCCHs
  – NE requires bumpers in cribs of babies <6 months of age
Child Care and Infant Deaths - 21st Century

• Still high proportion of infants die in child care, but decreasing (Moon, 2005)
  – 1/3 die in first week; of these, 1/2 die on the first day

• Sleep position is less an issue
  – Relatives and non-licensed caregivers may still be unaware of importance of back

• Infants in child care in safer sleep environment
  – More likely to be in a safe crib
  – Less likely to be in adult bed or sofa
But it Still Happens…

- In 2010, the parents of a 2-month-old baby girl placed her at a neighborhood church day care
- Religious organization – not subject to state regulations
- Baby was placed on her Tummy
- Found unresponsive
- “We always put them on their tummies…”
Reasons That People Place Babies on Their Tummies

- When the baby is on the back, s/he startles more easily and wakes up
- The baby will get a flat head (plagiocephaly) if the baby sleeps on the back
- The baby will get a bald spot from sleeping on the back
- When babies sleep on their backs, they don’t develop normally
Findings from National Study of Child Care Providers

- Training child care providers improves knowledge and practices
  - Sleep position
  - Lessens use of loose and soft bedding
- No change in provider attitudes about whether sleep position makes a difference
  - Policies and regulations are critical!
- Barriers: perceived parental objections, provider skepticism, lack of policies and training opportunities (Moon, 2008)
Online Child Care Provider Training Curriculum

- Revised in 2014
- Supporting documents
- [http://www.healthychildcare.org/sids.html](http://www.healthychildcare.org/sids.html)
AAP Recommendations: Child Care Can Make A Difference!

- Back Sleep Baby
- Use a Safe Crib
- Offer Pacifier
- No Soft bedding
- Do not Overheat baby.
- Tummy Time
Sleep Position: Side vs. Back?
Risk of Side Position

• Multiple studies have demonstrated that side position places infant at higher risk for SIDS than the back position
• Recent studies show that risk with side (aOR 2.0) and tummy (aOR 2.6) are similar (Li, 2003; Hauck, 2002)
• Side position is unstable – may lead to unaccustomed tummy positioning

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Back to Sleep for Every Sleep

• To reduce the risk of sleep related deaths and suffocation, back sleeping for every sleep
• Side sleeping is not safe and is not advised
• Supervised tummy time when babies are awake
Wedges and Positioners

- Not advised
But What About Choking?

• Back sleeping does not increase the risk of choking and aspiration in infants, even those with GE reflux
  – Protective airway mechanisms

• Infants with GE reflux should be placed back
  – RARE exception: infants for whom the risk of death from complications of GE reflux is greater than the risk of SIDS (i.e., those with upper airway disorders, for whom airway protective mechanisms are impaired)
  – Examples: infants with anatomic abnormalities (e.g., type 3 or 4 laryngeal clefts, who have not undergone anti-reflux surgery)

• Elevating the head of the infant’s crib while the infant is back is not recommended
  – Ineffective in reducing GE reflux
  – Infant may slide to the foot of the crib - may compromise respiration.
Remember the anatomy!

- **Trachea** (Airway)
- **Esophagus** (Swallowing)
Don’t babies sleep better on their tummies?
Babies DO Sleep Better on Tummy…

- Babies sleeping on the tummy have higher arousal thresholds, sleep longer and deeper.
- This increased arousal threshold may be dangerous, as arousal may be the issue surrounding sleep related deaths…
- Babies also startle more easily when on their back – this startle reflex is also protective.
- A baby who wakes up frequently is not a “bad” sleeper or a “bad” baby.
What About Rolling Over?

• No data about when it is safe for infants to sleep in the tummy or side position
  – Studies all include infants up to 1 year of age
• Infants should continue to be placed back until 1 year of age
• Once an infant can roll from back to tummy and from tummy to back, the infant can be allowed to remain in the sleep position that he or she assumes
*Break*
Avoidance of Plagiocephaly

Encourage “tummy time” when infant is awake and observed. This will also enhance motor development.
Car Seats and Bouncers

- Avoid having infant spend excessive time in car seats and “bouncers,” where pressure is applied to occiput
- Upright “cuddle time” is encouraged
Expect the Unexpected
Pacifiers

- Studies consistently demonstrate a protective effect of pacifiers on SIDS
- Mechanism unknown
  - Decreased arousal threshold (Franco)
  - Pacifiers dislodge within 15 minutes (Weiss and Kerbl) to 1 hour (Franco et al) of sleep
Pacifiers

- Recommended for Sleep time only.
- Do not allow pacifier to be attached to baby.
Do not use pacifier attachments
Dangers of Soft Bedding (CPSC Files)
Dangers of Soft Bedding

- Infants dying from SIDS are more likely to have:
  - used a pillow or soft mattress
  - been found with nose and mouth completely covered by bedding
  - assumed face-down posture
- Soft bedding increases risk of SIDS 5x, independent of tummy position
- Soft bedding + tummy = OR 21.0 (Hauck, 2003)
- Also increases risk of suffocation, strangulation, and entrapment
Soft Bedding (CPSC Files)
Soft Bedding (CPSC Files)
Use a Firm Sleep Surface

- To reduce SIDS and suffocation
- Firm crib mattress, covered by fitted sheet
  - A crib, bassinet, portable crib, or play yard that conforms to CPSC safety standards
  - Check for recalls
  - Do not use cribs with missing hardware; don’t try to fix broken cribs
- Use mattress designed for specific product
  - Mattress should be firm and maintain shape even when fitted sheet is used
- No pillows or blankets in addition to or instead of mattress under the infant
- No adult beds – risk of entrapment and suffocation
Avoid Overheating

- Increased risk of Sleep Related Infant Deaths
  - Definition of overheating varies
  - Cannot provide specific room temperature guidelines – Licensing May Provide
- Dress infants appropriately for the environment, with no greater than 1 layer more than an adult would wear to be comfortable
- There is currently insufficient evidence to recommend use of a fan as a SIDS risk-reduction strategy
Over-Bundling
Sleep Clothing

- Alternative to blankets
- Cotton or fleece
Swaddling

- Always place baby on the back.
- No soft bedding.
- Swaddling holds in body heat.
Other Recommendations

- Avoid second-hand & third-hand smoke exposure of the infant; maintain a smoke-free environment.
- Do not use apnea monitors as a strategy to prevent infant deaths
Legal Considerations

• Litigation
  – Wrongful death
  – Loss to society
  – Neglect
  – Breach of contract between parents and provider

• Back to sleep = STANDARD OF CARE
Benefits of a Safe Sleep Policy

- May save babies’ lives
- Shows parents baby’s health and safety is your #1 priority
- Educates staff
  - Consistent care
  - Educate parents
  - Professional development
- It empowers child care providers
- If followed, helps reduce your risk of liability
Elements of a Safe Sleep Policy

- Healthy babies always sleep on their backs
- Obtain physician’s note for non-back sleepers
  - The note should include prescribed sleep position and reason for not using the back position
- Use safety-approved cribs and firm mattresses
- Crib: free of toys, stuffed animals, and excess bedding
  - Alternative: sleep clothing
- Sleep only one baby per crib
Elements of a Safe Sleep Policy

- Room temperature is comfortable for a lightly clothed adult
- Monitor sleeping babies
- Have supervised tummy time for awake babies
- Teach staff about safe sleep policy and practices
- Provide parents with safe sleep policy
Safe Sleep for Babies

SAMPLE POLICY FOR USE IN CHILD CARE
Safe Infant Sleep in Child Care
(ININSERT NAME OF THE PROGRAM)

Providing infants with a safe place to grow and learn is very important. For this reason, (THE PROGRAM) has created a policy on safe sleep practices for infants up to 1-year-old. We follow the recommendations of the American Academy of Pediatrics (AAP) and the Consumer Product Safety Commission to provide a safe sleep environment and reduce the risk of sudden infant death syndrome (SIDS). SIDS is “the sudden death of an infant under 1 year of age, which remains unexplained after a thorough investigation.” The staff, substitute staff, and volunteers at (THE PROGRAM) follow the AAP safe sleep policy.

Sleep Position:
- Infants will be placed flat on their backs to sleep every time unless there is a physician, practitioner or clinician signed sleep position medical waiver up to date on file. In the case of a waiver, a waiver notice will be posted at the infant’s crib without identifying medical information. The full waiver will be kept in the infant’s file.
- Infants will not be placed on their side for sleep.
- Devices such as wedges or infant positioners will not be used since such devices are not proven to reduce the risk of SIDS.
- Infants who use pacifiers will be offered their pacifier when they are placed to sleep, and it will not be put back in should the pacifier fall out once they fall asleep.
- Pacifiers will be cleaned between each use, checked for tears, and will not be coated in any sweet or other solution.
- Parents are asked to provide replacement pacifiers on a regular basis.
- While infants will always be placed on their backs to sleep, when an infant can easily turn over from back to front and front to back, they can remain in whatever position they prefer to sleep.

Sleep Environment:
- Our program will use Consumer Product Safety Commission guidelines for safety-approved cribs and firm mattresses.
- Crib slats will be less than 2 3/8” apart.
- Infants will not be left in bed with drop side down
- Playpen weave will be less than 4”
- Consumer Product Safety Commission safety-approved cradles and bassinets may also be used for sleeping if the infant meets the weight and height requirements.
- Infants will not be placed to sleep on any standard bed, waterbeds, couches, air mattresses, or on other soft surfaces.
- Only one infant will be placed to sleep in each crib. Siblings, including twins and triplets, will be placed in separate cribs.
- The crib will have a firm tight fitting mattress covered by a fitted sheet and will be free from loose bedding, toys, and other soft objects (i.e., pillows, quilts, comforters, sheepskins, stuffed toys, etc.)

www.healthychildcare.org/doc/SIDSSSamplePolicy.doc
Safe Sleep for Babies

www.healthychildcare.org

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www.nchealthystart.org/downloads2/itssids/Safe_Sleep_Policy_Sample.pdf
Alternate Sleep Position

- Require written and signed physician’s note
  – Stipulates that a medical condition requires an alternative sleep position and clearly states the needed position.
- Inform all child care providers and substitutes
- Keep physician’s note in baby’s medical file and post notice on crib
ALTERNATIVE SLEEP POSITION WAIVER
Parent Request

This waiver may only be used for infants over the age of 6 months.

Child’s Name: ____________________________ Date of Birth: ____________ Age: ____________

Parent/Guardian’s Name: ____________________________

Address: ____________________________________________ ____________________________________________

Home Phone: ____________________________ Work Phone: ____________________________

Fax: ____________________________ Email: ____________________________________________

This childcare facility follows the safe sleep practice of placing all infants on their backs to sleep. As the parent or guardian of the above named child, you may request that he/she be placed to sleep in an alternative sleep position.

☐ I would like my child placed to sleep in an alternative sleep position.

(you must check the box for this waiver to be valid)

Please describe the request sleep position for the above named child:

________________________________________________________________________________________

________________________________________________________________________________________

Effective Dates of Waiver: from ____________ to ____________

“I, as the parent or guardian of the above mentioned child, do hereby release and hold harmless the child care facility listed below, its officers, directors, and employees, from any and all liability whatsoever associated with harm to my child due to Sudden Infant Death Syndrome (SIDS). I affirm and acknowledge that I have been provided with information concerning SIDS. I further authorize the child care facility and its employees to place my child in an alternative sleep position, as described above.”

Parent/Guardian Signature: ____________________________ Date: ____________________________

An authorized official with the childcare facility must complete the following section.

PARK ROAD BAPTIST CHILD DEVELOPMENT CENTER
ID NUMBER: 360708436

Facility Representative’s Signature: ____________________________ Date: ____________________________
A lot of parents want me to place their baby on the tummy for sleep, because this is what they do at home. How do I handle this?
Caring for Our Children: National Health and Safety Performance Standards, 3rd Ed.—2011

STANDARD 3.1.4.1: Safe Sleep Practices and SIDS/Suffocation Risk Reduction

- Facilities should have written policies
- Back sleep position for babies
- Physician’s note if position other than back
- Nothing in the crib except for baby and a pacifier
- No monitors or positioning devices, unless specified by a physician
Handling Parents’ Concerns

- Discuss Safe Sleep with parents
- Discuss sleep position policies
- Discuss medical waiver and implications
- Document your discussion!
Partners and Resources
Healthy Child Care America
Safe Sleep Resources

- American Academy of Pediatrics
  141 Northwest Point Blvd
  Elk Grove Village, IL 60007-1098
  - Phone: 888/227-5409 or 847/434-7951
  - Fax: 847/228-7320
  - E-mail: childcare@aap.org
  - Web site: www.healthychildcare.org

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Licensing Requirements

• National Resource Center for Health and Safety in Child Care
  – http://nrckids.org
  – 800/598-KIDS (5437)
  – Individual state licensing information
Safe to Sleep campaign

1-800-505-CRIB
http://www.nichd.nih.gov/SIDS/

www.healthychildcare.org
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First Candle

• Provide grief/bereavement services, support services
  – 1314 Bedford Ave, Suite 210, Baltimore, MD 21208
  – Phone: 800/221-7437 or 410/653-8226
  – Fax: 410/653-8709
  – E-mail: info@firstcandle.org
  – Web site: www.firstcandle.org
National SUID/SIDS Resource Center

- Provides information about SIDS and other forms of infant death and stillbirth
- Georgetown University
- 1-866-866-7437
- www.sidscenter.org
- info@sidscenter.org
CJ Foundation for SIDS

- 888/8CJ-SIDS (825-7437)
- www.cjsids.com
Summary

• What SIDS, SUID and Safe Sleep is and is NOT
• What are sleep-related deaths
• Risk factors
• Safe sleep practices to reduce the risk
• Caring for Our Children: National Health and Safety Performance Standards, 3rd Edition
• Developing a safe sleep policy for your program
• Resources for more information
Questions?
Practice Scenarios

• 4 scenarios that child care providers may encounter in their workplace
Scenario 1

You are the child care provider. A parent of a 2 month old baby requests that the child sleep on the side, propped by a pillow. This is how they do it at home. The mother says, “I don’t want to worry about my baby spitting up and it going down the wrong way.” What do you do?
Scenario 2

A parent has requested that his baby be placed on the tummy for naps. You showed him the policy that babies are to be placed on the back only unless there is a medical excuse. He takes the medical waiver form to the pediatrician. The pediatrician signs the waiver, but does not indicate a medical reason. In fact, the pediatrician has crossed through the section that asks for a medical reason. What do you do?
Scenario 3

You have just started as a new child care provider in the infant room of a large child care center. On your first day, you notice that all of the other providers are placing babies on their tummies for naps. You know from your training that back is best. What do you do?
Scenario 4

There is a new baby in the infant room. She is 2 months old. The mother tried to get the director to agree to put the baby on the tummy for sleep, since that is what they do at home. The director refused, and the mother finally said that was okay. You now place the baby on the back for a nap. The baby cries and refuses to go to sleep. What do you do?