Welcome

Office for State, Tribal, Local and Territorial Support
presents

CDC Vital Signs Town Hall
Safe Sleep for Babies

January 16, 2018
2:00–3:00 PM (ET)
## Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Agenda Item</th>
<th>Speaker(s)</th>
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</thead>
<tbody>
<tr>
<td>2:00 pm</td>
<td>Welcome &amp; Introduction</td>
<td>Steven L. Reynolds, MPH</td>
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<td>Deputy Director, Office for State, Tribal, Local and Territorial Support</td>
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<tr>
<td>2:05 pm</td>
<td>Vital Signs Overview</td>
<td>Jennifer Bombard, MSPH</td>
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<td>Epidemiologist, Division of Reproductive Health, National Center for Chronic</td>
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<td>Disease Prevention &amp; Health Promotion, Centers for Disease Control and</td>
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<td>Prevention</td>
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<td>2:15 pm</td>
<td>Presentations</td>
<td>Sunah Hwang MD, MPH</td>
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<td>Assistant Professor of Pediatrics, University of Colorado School of Medicine</td>
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<td>Rachel Heitmann, MS</td>
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<td>Section Chief for Injury Prevention and Detection, Tennessee Department of</td>
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<td>Health</td>
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<td>2:35 pm</td>
<td>Q&amp;A and Discussion</td>
<td>Steven L. Reynolds, MPH</td>
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<td>2:55 pm</td>
<td>Wrap-up</td>
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<td>3:00 pm</td>
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to support STLT efforts and build momentum around the monthly release of CDC Vital Signs
Promoting Safe Sleep Practices to Reduce the Risk of Infant Sleep-Related Deaths

Jennifer Bombard, MSPH
Epidemiologist
Division of Reproductive Health
January 16, 2017
Objectives

- Explain the importance of promoting safe sleep practices and current American Academy of Pediatrics (AAP) recommendations

- Describe state-level trends and disparities in infant safe sleep practices

- Share what states and healthcare providers can do
Sleep-Related Infant Deaths

- 3,500 infants continue to die annually from sleep-related deaths

*SOURCE: CDC/NCHS, National Vital Statistics System, 1999-2015. Cause of death defined according to the International Classification of Diseases, Ninth Revision (ICD-9) for 1984-1998, and the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10). “Sleep-related deaths” or Sudden Unexpected Infant Death (SUID) includes cause of death ICD-9 and ICD-10 codes: Accidental Suffocation or Strangulation in Bed (ASSB) (E913.0; W75), Sudden Infant Death Syndrome (SIDS) (798.0; R95), and unknown cause, (799.9; R99).

AAP = American Academy of Pediatrics
SUID=Sudden Unexplained Infant Deaths
American Academy of Pediatrics

Recommendations for a Safe Sleep Environment

- Place infant on back (supine) at all sleep times
- Place infant on firm sleep surface, such as a mattress in a safety-approved crib or bassinet
- Avoid use of soft bedding (e.g., blankets, pillows, soft objects) in the infant sleep environment
- Infant and caregivers can room-share, but not bed-share

Additional Recommendations to Reduce the Risk for Sleep-Related Infant Deaths

- Avoid exposure to smoke, alcohol, illicit drugs
- Breastfeed
- Provide routinely recommended immunizations

Research Questions:

- What was the prevalence of unsafe infant sleep practices by state and select maternal characteristics in 2015?
  - Non-supine sleep positioning (on stomach; on side)
  - Bed-sharing
  - Use of soft bedding (bumper pads; thick blankets; positioner; pillows; stuffed toys)

- Has the prevalence of non-supine sleep positioning changed over time (2009-2015)?
Methods

Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

- Collects population-based data from women with a live birth 2 to 6 months after delivery about their attitudes/experiences before, during, after pregnancy
- Self report survey linked to birth certificate data
- Response rate: ≥65% (2009-11), ≥60% (2012-14), ≥55% (2015)

Questions on Infant Sleep Practices

All States:
- In which position do you most often lay your baby down to sleep now? (on side, on back, on stomach)

Select States:
- How often does your new baby sleep in the same bed with you or anyone else? (always, often, sometimes, rarely, never)
- Listed below are some things that describe how your new baby usually sleeps; T/F? (pillows, thick or plush blankets, bumper pads, stuffed toys, infant positioner)
Results

Percentage of Mothers Who Report Non-Supine Sleep Positioning in 32 States* and New York City (NYC), PRAMS, 2015

*32 states include: AL, AK, AR, CO, CT, DE, HI, IL, IA, LA, MD, MA, MI, MO, NE, NH, NJ, NM, NY, OH, OK, OR, PA, TN, TX, UT, VT, VA, WA, WV, WI, WY
Results (cont.)


*15 states include: DE, HI, IL, MD, MA, MO, NE, NJ, OK, PA, UT, VT, WA, WV, WY

** No significant decline over time
Results (cont.)

Prevalence of Non-Supine Sleep Positioning by Maternal Characteristics, 32 States* and NYC, PRAMS 2015

*32 states include: AL, AK, AR, CO, CT, DE, HI, IL, IA, LA, MD, MA, MI, MO, NE, NH, NJ, NM, NY, OH, OK, OR, PA, TN, TX, UT, VT, VA, WA, WV, WI, WY
Results (cont.)


*14 states include: AK, CT, DE, LA, NE, NJ, PA, TN, TX, VT, VA, WA, WV, WI
Results (cont.)

Prevalence of Soft Bedding Use by Maternal Characteristics, 13 States* and NYC, PRAMS, 2015

*13 states include: AK, IL, IA, LA, MD, MI, MO, NJ, NY, PA, TN, WV, WY
Conclusions

- About 1-in-5 mothers report non-supine sleep position, over half bed-share, and more than a third report soft bedding use
- Unsafe sleep practices varied by state, race/ethnicity, age, education, and participation in WIC

Limitations

- Limited to states that implement PRAMS, met required response rate threshold, included optional infant sleep practice questions
- PRAMS questions capture bed-sharing only, starting in 2016 – PRAMS questions also include room-sharing to better align with measuring AAP recommendations
- Maternal responses may be subject to recall and social desirability bias
States Can:

- Use PRAMS and Sudden Unexpected Infant Death (SUID) Case Registry data to help develop, inform, and evaluate safe-sleep prevention practices.

- Explore opportunities with state and national partnership initiatives using evidence-based metrics:
  - Safe Sleep Collaborative Improvement and Innovation Network (CoIIN) to Reduce Infant Mortality
  - National Action Partnership to Promote Safe Sleep Improvement and Innovation Network (NAPPSS-IIN)
Healthcare Providers Can:

- Ask caregivers how they place infant to sleep, identify challenges in following recommendations, and assist with finding solutions
- Advise caregivers to follow AAP recommendations on safe sleep practices
  - Mothers who received correct advice from their healthcare provider were less likely to place their infant to sleep on their stomach or side (OR: .5, 95% CI: .36-.67)*
- Model safe sleep practices for caregivers

Healthcare Provider Interventions

- Following presentations present their findings on hospital based interventions

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Telephone: 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov Web: http://www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
SIDS: Triple Risk Model

**Intrinsic Factors**
- Prenatal exposures
- Medullary serotonin system
- Genetic background
- Prematurity, IUGR

**Extrinsic/Modifiable Risk Factors**
- Breastfeeding
- Smoking
- Temperature regulation
- Sleep practices
# MA SUID Cases, 2012-2014

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<tr>
<th>Birth Characteristics</th>
<th>SUID Cases</th>
<th>All Births</th>
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<tr>
<td>Preterm (&lt;37 weeks)</td>
<td>26.7%</td>
<td>8.9%</td>
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<tr>
<td>Low Birth Weight (&lt;2500 grams)</td>
<td>26.7%</td>
<td>7.5%</td>
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<tr>
<td>Maternal Age &lt;20 years</td>
<td>10.0%</td>
<td>3.9%</td>
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<td>Public source of prenatal care</td>
<td>59.2%</td>
<td>38.3%</td>
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Source: Registry of Vital Statistics, MDPH.

*SUID includes: SIDS, unintentional suffocation in bed, and undetermined causes*
Safe Sleep Guidelines

TECHNICAL REPORT
SIDS and Other Sleep-Related Infant Deaths: Expansion of Recommendations for a Safe Infant Sleeping Environment
Local Improvement Effort: Safe Sleep in the NICU

South Shore Hospital and St. Elizabeth’s Medical Center
Implementation of Safe Sleep Practices in the NICU

AIMS:

• To increase the percentage of eligible infants engaging in safe sleep practices in the NICU.

• To increase the percentage of infants discharged from the NICU who engage in safe sleep practices at home.

• To increase NICU staff awareness about safe sleep practices and SIDS.
Project Components: Intervention

- Nursing education
- In-person presentation, bedside teaching
- On-line module: Continuing education program on SIDS risk reduction NICHD
- Nursing and physician designation and documentation of sleep position
Infant Therapeutic Positioning

- While your infant is hospitalized, he/she may be placed in positions other than the American Academy of Pediatrics “Back to Sleep” Guidelines because of medical reasons. Sleep positions may include:
  - Stomach
  - Side-lying
  - Elevated head of bed
- Developmental positioning aids and/or blanket rolls may also be used for medical purposes.

*Therapeutic positioning is NOT recommended or safe for your infant at home*

*Your infant will be introduced to Safe Sleep Practices when it is medically appropriate*

Safe to Sleep Practices

The American Academy of Pediatrics Safe Sleep Practices include:

- Back to Sleep
- Use a firm flat mattress in a crib or bassinet
- No sleeping in car seats, swings, or other positioning devices
- No loose bedding, blankets or soft objects in crib
- No bumpers, pillows, or stuffed toys in the crib
- Do not overheat infants
- No co-sleeping in bed, sofa, or other areas

*For more information from the American Academy of Pediatrics on how parents can create a safe sleep environment for their infants, please read the provided pamphlet and attend the NICU/SCN Discharge Class.*
Results

Hwang, Sullivan, Fitzgerald, Melvin et al.
J Perinatology 2015.
Expansion to and Comparison Across MA Units

SSP NICU Overall Compliance by Site
July 2015-August 2017

Overall = 70.3%
Post-Discharge Monitoring of NICU Infants

• Collaboration with Massachusetts Dept of Public Health Welcome Family Program

• Post-discharge survey about safe sleep practices and breastfeeding
  – Outpatient settings: primary care and infant follow up clinics
  – Email and text surveys to NICU parents
Acknowledgements

• Hospital safe sleep teams
• MA DPH
• March of Dimes
• Collaborative leadership
  • Hafsatou Diop
  • Munish Gupta
  • Susan Hwang
  • Patrice Melvin
  • Peggy Settle
THANK YOU FOR YOUR ATTENTION!
INNOVATIVE SAFE SLEEP INITIATIVES IN TENNESSEE

Rachel Heitmann, MS
Section Chief, Injury Prevention and Detection
Objectives

- Describe overall safe sleep implementation and evaluation efforts in Tennessee
- Explain the new interactive safe sleep WIC educational module
- Discuss retail partnerships
- Describe hospital based safe sleep efforts
- Describe housing development training
Tennessee Safe Sleep Campaign
WIC Educational Module

- Easy, fun and convenient lessons tailored to the learner.
- Utilizes the stages of change to assess and provide appropriate education to the learner.

Available at WIC online nutrition education at wichealth.org
WIC Online Education Safe Sleep Data

- Pre-Test: Assesses current safe sleep practices
  - Crib environment, pillows, bumper pads, blankets
  - Where and how their infant sleeps
  - Confidence in current safe sleep practices
- Post Test: Assesses intent to practice safe sleep after educational intervention
  - Measures intent to change from current practices
  - Write one lesson learned
Safe Sleep Actions and Intent

- Infant sleeping with blanket: Pre-Test = 52.2%, Post-Test = 16.1%
- Infant sleeping with bumper pads: Pre-Test = 21.5%, Post-Test = 6.8%
- Infant sleeping with pillows: Pre-Test = 12.8%, Post-Test = 3.6%

n=2616
Safe Sleep Practices

Importance of practicing safe sleep
- Pre-Test: 98.9%
- n=2984

Infant sleeps on back
- Pre-Test: 92.1%
- n=2984

Infant sleeps alone in crib
- Pre-Test: 85.6%
- n=2984

Infant shares room with parent
- Pre-Test: 80.1%
- n=2984
Retail Partnerships

- Dollar General utilized TDH materials to create a “shelf talker” to place on store shelves
- Other stores have placed the safe sleep floor talker in baby aisles – (Walmart, Kroger, CVS pharmacy and other independent retailers)
- Expanded to daycare providers, pediatrician offices and other state agencies
Safe Sleep Floor Talkers

Placement of Floor Talkers

- Health Dept, 251
- Child Care, 164
- Grocery stores, 58
- DCS, 57
- Doctor's offices, 49
- Other*, 40
- Hospital, 36

Total placed = 655
Safe Sleep Floor Talkers

Do you believe people visiting your building notice the floor talkers?

- Yes: 83.8%
- No: 16.2%

Total responses = 37
Safe Sleep Floor Talkers

Number of customer comments per week

- Zero: 35%
- One: 14%
- Two: 14%
- Three: 5%
- Four or more: 16%
- Unknown: 16%

Total comments per week = 203
Total responses = 37
Utility Company

- City of Franklin Utility Company
- Educational insert in the October monthly bill
- Includes community resources and information on how to get a portable crib
Hospital-Based Efforts

- Received the Cribs for Kids national safe sleep certification with a minimum of bronze level
  - Submitted the Tennessee Department of Health (TDH) annual safe sleep hospital policy report
  - Minimum of 90% of cribs met the American Academy of Pediatrics (AAP) safe sleep guidelines
Hospital-Based Efforts

Safe Sleep Crib Card

Follow the ABC’s of Safe Sleep
I should sleep **Alone, on my Back, in a safe Crib**

Name_________________________ Room_________________________
Doctor___________________________________________________
Mother’s Name_________________________ Date of Birth_____________
□ Female □ Male □ Weight ___________ Length ___________
Head __________________________ Chest __________________________
□ Breastfed □ Bottlefed __________________________
Mother’s Doctor __________________________

Tips on Safe Sleep for Your Baby

- **Always place your baby on their back to sleep for every sleep.**
- **The safest place for baby to sleep is in their own area, on a firm surface and in the same room as their caregiver.**
- **Do not overheat or overdress your baby during the night. If you are comfortable, so is your baby.**
- **Keep loose objects, toys, bumper pads and bedding out of your baby’s sleep area.**
- **Breastfeeding has a protective effect and is associated with a reduced risk of SIDS.**
- **Avoid smoking during pregnancy and do not smoke around your baby.**

For more information: Tennessee Department of Health safesleep.tn.gov
Housing Development Project

- Utilizes the Direct On Scene Education (DOSE) model used with first responders
- Teaches maintenance workers to recognize an unsafe sleep environment
- Provides resources to residents of housing developments to assist in obtaining a safe sleep environment
Contact Information

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Section Chief, Injury Prevention and Detection
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615-741-0368
CDC Vital Signs Electronic Media Resources

- Become a fan on Facebook
  www.facebook.com/cdc

- Follow us on Twitter
  www.twitter.com/CDCgov

- Syndicate Vital Signs on your website
  https://tools.cdc.gov/medialibrary/index.aspx#/media/id/305883

- Vital Signs interactive buttons and banners
  https://www.cdc.gov/socialmedia/tools/buttons/vitalsigns
Thank You

Provide feedback on this teleconference: OSTLTSFeedback@cdc.gov

Please mark your calendars for the next *Vital Signs* Town Hall Teleconference

February 13, 2018
2:00–3:00 PM (ET)

For more information, please contact Centers for Disease Control and Prevention.

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