Strengthen the Evidence for MCH Programs: Environmental Scan of Strategies

National Performance Measure (NPM) #5: Safe Sleep
Percent of infants placed to sleep on their backs

Introduction

This environmental scan identifies collections of strategies to advance performance for NPM #5, Safe Sleep. The information provided in this document focuses on strategies to achieve the NPM, not on the content of care or specified health outcomes. Please note that the quality of the evidence in this compilation has not been evaluated, and that data sources describing a single strategy, rather than a collection of strategies, have been excluded.

This compilation includes the following sections:

- **Reviews and Compilations:** Identifies existing compilations for strategies that intend to improve performance for each measure
- **Frameworks and Landmark Initiatives:** Frameworks includes conceptual models underlying strategy implementation; Landmark Initiatives include seminal programs/policies related to the NPM
- **Data Sources:** Indicates sources, search criteria, links to search strategy and selected organizational websites
- **Inclusion and Exclusion Criteria**: Denotes types of studies, setting, populations of interest and exclusion criteria

Technical assistance for State Title V MCH programs related to using evidence to inform State Action Plans, selection of strategies, and development of evidence-based or evidence-informed Strategy Measures may be requested at http://www.semch.org/technical-assistance.html

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Reviews and Compilations

Review/Compilation	Summary	Web Link
American Academy of Pediatrics. (2011). SIDS and Other Sleep-Related Infant Death: Expansion of Recommendations for a Safe Infant Sleeping Environment. *Pediatrics*. [Target[1]: B,C]	- Outlines the most recent American Academy of Pediatrics (AAP) recommendations for infant safe sleep practices - Educational and intervention campaigns are often effective in altering practice - Primary care-based educational interventions that address caregiver concerns and misconceptions about safe sleep recommendations - Interventions for improving behavior of medical and nursing staff and child care providers	http://dx.doi.org/10.1542/peds.2011-2285
Moon et al. (2016). Safe Infant Sleep Interventions: What is the Evidence for Successful Behavior Change? *Current Pediatric Reviews* [Target: A,B,C,D,E,G,H]	- Explores examples of interventions that aim to influence caregivers' behaviors in order to foster a safe infant sleep environment, and evidence of their effectiveness - Discusses interventions categorized by focus: - Health Messaging (e.g. public service campaigns, videos featuring parent testimonial) - Education of Professionals (e.g. quality improvement programs, training sessions) - Breaking Down Barriers (e.g. provision of free/reduced cost cribs, smoking cessation interventions) - Utilization of Culture and Tradition (e.g. safe sleep books available in English/Spanish, safety themed community baby showers) - Legislation and Regulation (e.g. child care regulations, mandated safe sleep education in hospitals)	N/A
Ward & Balfour. (2015). Infant Safe Sleep Interventions, 1990-2015: A Review. *Journal of Community Health.* [Target: B,C,D,G]	- Review of twenty-nine articles between 1990-2015 that describe interventions to reduce the risk of sleep-related deaths - Interventions strategies include: - Family-focused interventions - Provide print educational materials (e.g. "Back to Sleep" crib cards), visual displays, (e.g. posters), and videos or DVDs	http://dx.doi.org/10.1007/s10900-015-0060-y

	▪ Distribute resources (e.g. portable cribs, wearable blankets, "This Side Up" infant t-shirt) ▪ Offer educational sessions (e.g. group-based, one-on-one, peer educational models) o Interventions aimed at health professionals ▪ Change organizational policies ▪ Provide educational methods (e.g. in-service education, train-the-trainer models) ▪ Incorporate assessment of sleep environment into nursing care assessment ▪ Create/distribute patient-education resources (e.g. safe sleep checklists)	
Association of Maternal & Child Health Programs (AMCHP). (2012). Forging a Comprehensive Initiative to Improve Birth Outcomes and Reduce Infant Mortality: Policy and Program Options for State Planning [Target: A,B,C,D,G]	• Compendium of state/national efforts, as well as programmatic and policy options states can consider in their work to improve birth outcomes and reduce infant mortality • Strategies to promote safe sleep campaigns include: o Distribute information and education about sleep-related deaths o Support programs that provide cribs for low-income families o Work with retailers, such as grocery and baby stores, to promote safe sleep messages in baby-product aisles o Work with hospitals to create standard safe sleep and SIDS risk reduction curricula for providers, including training on the AAP safe sleep guidelines o Partner with community service providers and other agencies to conduct trainings on infant safe sleep that target parents, child care providers, grandparents, home health care professionals and staff of obstetric and pediatric clinics o Create safe sleep bassinet cards for nursery staff, child care providers and families	http://www.amchp.org/AboutTitleV/Resources/Documents/AMCHP%20Birth%20Outcomes%20Compendium.pdf
AMCHP Innovation Station [Target: A,B]	• Back to Sleep Training for Nursery Room Nurses o Location: Missouri	http://www.amchp.org/programsandtopics/BestPractices/Innovatio

	- Training aimed at improving the knowledge, skills and beliefs of hospital nursing staff regarding proper positioning of infants during sleep - Back to Sleep training curriculum was developed in two versions: a train the trainer format in which a group of nurses were trained and then encouraged to train other staff members, and a computer-based version	nStation/ISDocs/Back%20to%20Sleep_2015.pdf
	- Tennessee Safe Sleep Hospital Project - Location: Tennessee - One component of a statewide campaign to increase awareness of safe sleep practices - Hospitals were tasked with: developing a safe sleep policy that incorporates the latest AAP recommendations; providing safe sleep training to all staff; implementing safe sleep practices in the hospital; and monitoring staff compliance with safe sleep policy	http://www.amchp.org/programsandtopics/BestPractices/InnovationStation/ISDocs/TN_Safe_Sleep_Hospital_2015.pdf
AMCHP. (2012). Issue Brief: Data-Driven Decisions: Using Surveillance Data to Inform Infant Safe Sleep Programs. [Target: A,D,H]	- Discusses the increasing need for epidemiologists to be involved in the planning of state public health programs, specifically, through use of data to inform work and influence policies regarding safe sleep practices - Highlights eight states (Alaska, Arkansas, Florida, Hawaii, Louisiana, Michigan, New Jersey, and Virginia) who have used PRAMS data in informing programmatic change	http://www.amchp.org/Calendar/Webinars/Documents/Data-Driven%20Decisions-Using%20Surveillance%20Data.pdf
Association of State and Territorial Health Officials (ASTHO). (2013). Safe Infant Sleep Fact Sheet. [Target: A,B,C,D,G,H]	- Includes recommended safe sleep practices, strategies for state and territorial health agencies, and public health recommendations - Laws and regulations - Mandatory training on SIDS (AZ, CA, FL, IL, IN, MN, NE, TN, TX, WA, WV, WI) - Ban of sale of crib bumpers in MD in 2012 (MD DHMH) - Cribs for Kids: free crib distribution program for low-income families (New Mexico Department of Health, Nevada Department of Health and Human Services)	http://www.astho.org/Programs/Access/Maternal-and-Child-Health/Safe-Sleep/Safe-Sleep-Factsheet/

	• Safe sleep campaigns: promotional materials to spread safe sleep message to parents and caregivers (Tennessee Department of Health)
	• WIC messaging: safe sleep messages on WIC vouchers, board books with safe sleep messages, demonstration displays in WIC offices (GA, LA, MI, TN)
	• Recommendations
	  o Incorporate infant safe sleep education and behavior modification into home-visiting programs
	  o Facilitate partnerships with other state agencies, hospitals, nonprofits, media and other stakeholders to develop innovative programs and policies that promote safe infant sleep, reduce infant mortality, encourage
	  o smoking cessation, and promote breastfeeding, immunizations, and prenatal care
	  o Advocate for legislation that requires training for childcare providers, first responders, and law enforcement officers in the prevention, recognition, treatment, or investigation protocols of SIDS/SUID	

Centers for Disease Control and Prevention. (2015). About SUID and SIDS. [Target: A,B,C,D,G]	• Resources, materials, and information about safe infant sleep promotion and support through families, communities, health care, research and surveillance, including SUID case registry	http://www.cdc.gov/sids/aboutsuidandsids.htm
Georgetown University: National Center for Education in Maternal and Child Health [Target: A,B,C,D,G,H]	• Infant Safe Sleep Campaigns and Materials: a collection of infant safe sleep national, state, and local campaigns and materials that adhere to the 2011 American Academy of Pediatrics (AAP) guidelines to reduce the risk of sudden infant death	http://ncemch.org/suid-sids/safesleep/campaigns.php
	• SUID/SIDS Training Toolkit: training curricula, resources, programs	http://ncemch.org/suid-sids/trainingtoolkit.php
National Action Partnership to	• Interventions with single formal infant care service related sectors	http://nappss.org/resources/evidence-base.php

| Promote Safe Sleep (NAPPSS). Evidence Base for Safe Sleep Interventions. [Target: A,B,D,F,G] | Hospital Safe Sleep Initiative (Franklin County, OH) Provided training and monitoring of safe sleep practices in birthing hospitals, provided training for child care providers Increase in supine placement, decrease in cribs with blankets and toys Model Behavior: The Most Important Modeling Job of Your Life Training nurses in Missouri NICUS and well-baby nurseries for CEUs Increase in nurse reporting using back-only position and those who endorse supine sleep Safe Sleep Nursing Policy (Wichita, KS) Developed a nursing policy on safe sleep that required education of families during postpartum room orientation, not at discharge Increase in supine placement, high percentage of families planning on placing baby supine to sleep and no reporting plans to co-sleep Michigan Demonstration Project Drafted new policies/procedures and provided in-service trainings to nurses Increase in nurses who knew APP recommendations, nurses who held the opinion that back sleep is safest, infants sleeping supine, and mothers told about infant safe sleep Healthy Childcare America Back to Sleep Campaign New childcare curricula on child care settings Increase in exclusive use of supine sleep and childcare provider awareness of AAP recommendations WIC Education Study (DC) Health educator led short educational interventions to discuss safe sleep practices with African American families as a prerequisite to obtaining food vouchers | |

- ▪ Increase in planning to use supine position
- Interventions within single sectors that are part of caregivers natural networks of support
  - o Church Peer Educators (Alameda, CA)
    - ▪ Recruited peer health educations from African American churches to demonstrate safe sleep messages at church events and at caregiver service centers
    - ▪ Increased delivery of safe sleep messages by trusted, culturally concordant messengers
  - o Culturally Competent Media Messages (NC)
    - ▪ Developed media messages and training materials with a focus on grandmothers, supported parents' self-efficacy
    - ▪ Increase in supine sleeping over 5 years
  - o Always Right Program (NYC)
    - ▪ Discussion and peer interaction respecting parents' power to make their own decisions about safe sleep in high schools for pregnant/parenting teens
    - ▪ Changed policy and implementation in schools' childcare settings, safe sleep messages integrated into lessons/classroom discussions
  - o Sisters United Initiative (AR)
    - ▪ African American sororities trained members of their chapters and communities about SUID and safe sleep
    - ▪ Web-based info on safe sleep, safety showers for at-risk pregnant women
- Interventions where an organization with the goal of promoting safe sleep encourages multiple partners to deliver safe sleep messages
  - o SIDS Risk Reduction Education (Chicago, IL)
    - ▪ SIDS risk reduction education to black neighborhoods
    - ▪ Increase in knowledge and reported use of some

	safe sleep practices	
	o Upstate Community Partners Program (Greenville, SC)	
	▪ Trained community partners referred families for education	
	▪ All babies in the program survived to their 1st birthdays	
	• Interventions that create an integrated systems approach	
	o Public/Private Safe Sleep Initiative (MI)	
	▪ Create better coordination to promote safe sleep, engage community members in creation of materials and messages	
	▪ Official safe sleep message for use in all public health agencies	

[1] Target specifies Target Audience for the strategies mentioned in each Review/Compilation: A = Hospital Inpatient (includes physical, mental, and oral health); B = Hospital Outpatient (includes physical, mental, and oral health); C = Non-Hospital Outpatient Providers (e.g. community health centers, private medical groups, health maintenance organizations); D = Community Organizations (e.g. WIC, advocacy organizations, child care providers, home visiting services); E = Social Service Organizations (e.g. Head Start, child welfare); F = Schools and School Systems; G = Consumers/Families; H = Other

Frameworks and Landmark Initiatives

Framework/Initiative	Summary	Web Link
Cribs for Kids National Safe Sleep Initiative	• Provides AAP recommendations, educational materials for parents/families, guidelines for safe sleep images in the media, and information for implementing a Hospital Safe Sleep Initiative and earning a National Safe Sleep Hospital Certification • Offers Cribs for Kids Toolkits (free of charge) to organizations interested in the collaboration • Supplies portable cribs to families in need	http://www.cribsforkids.org/
National Institute of Child and Human Development Safe to	• Official website for the Safe to Sleep campaign • Includes information about safe sleep/SIDS and campaign materials for parents & caregivers and providers & health	http://www.nichd.nih.gov/sts/Pages/default.aspx

Sleep Campaign	workers	
National Resource Center for Health and Safety in Child Care and Early Education	• Safe Sleep Practices and SIDS/Suffocation Risk Reduction 　○ Standards on qualifications of staff and orientation, training, continuing education, as well as safe sleep position and environment, and policies	http://cfoc.nrckids.org/StandardView/SpcCol/Safe_sleep
National Action Partnership to Promote Safe Sleep (NAPPSS)	• National coalition charged with developing and implementing the National Action Plan to Increase Safe Infant Sleep and support efforts to integrate safe sleep and breastfeeding into systems	http://nappss.org/
	• NAPPSS Conceptual Model 　○ Social ecological model: infant caregivers, influencers, organizations, safe sleep expert/leadership, public policy, society	http://nappss.org/conceptual-model.php

Data Sources

Data Source*	Search Criteria	Web Link
Cochrane Library	Search Term: safe sleep Search Limits: Cochrane Reviews/Review; Other Reviews Sort by relevance: high to low	N/A
	Search Term: sleep position Search Limits: Cochrane Reviews/Review; Other Reviews Sort by relevance: high to low	
	Search Term: SIDS Search Limits: Cochrane Reviews/Review; Other Reviews Sort by relevance: high to low	
	Search Term: SIDS prevention Search Limits: Cochrane Reviews/Review; Other Reviews Sort by relevance: high to low	
Campbell Systematic Reviews	Search Term: safe sleep	http://www.campbellcollaboration.org/lib/?go=monograph&search=safe+sleep&search_criteria=title
	Search Term: sleep position	http://www.campbellcollaboration.org/lib/?go=monograph&search=sleep+position&search_criteria=title

	Search Term: SIDS	http://www.campbellcollaboration.org/lib/?go=monograph&search=SIDS&search_criteria=title
	Search Term: SIDS prevention	http://www.campbellcollaboration.org/lib/?go=monograph&search=SIDS+prevention&search_criteria=title
PubMed	Search Term: safe sleep Article Types: Meta-analysis, Review, Systematic Reviews Species: Humans Languages: English Ages: Infant: birth-23 months Sort by relevance	http://www.ncbi.nlm.nih.gov/pubmed/?term=safe+sleep
	Search Term: infant safe sleep Article Types: Meta-analysis, Review, Systematic Reviews Species: Humans Languages: English Ages: Infant: birth-23 months Sort by relevance	http://www.ncbi.nlm.nih.gov/pubmed/?term=infant+safe+sleep
	Search Term: back to sleep Article Types: Meta-analysis, Review, Systematic Reviews Species: Humans Languages: English Ages: Infant: birth-23 months Sort by relevance	http://www.ncbi.nlm.nih.gov/pubmed/?term=back+to+sleep
	Search Term: sleep position Article Types: Meta-analysis, Review, Systematic Reviews Species: Humans Languages: English Ages: Infant: birth-23 months Sort by relevance	http://www.ncbi.nlm.nih.gov/pubmed/?term=sleep+position
	Search Term: SIDS Article Types: Meta-analysis, Review, Systematic Reviews Species: Humans Languages: English Ages: Infant: birth-23 months Sort by relevance	http://www.ncbi.nlm.nih.gov/pubmed/?term=SIDS

	Search Term: SIDS prevention Article Types: Meta-analysis, Review, Systematic Reviews Species: Humans Languages: English Ages: Infant: birth-23 months Sort by relevance	http://www.ncbi.nlm.nih.gov/pubmed/?term=SIDS+prevention
Google Scholar	Search Term: safe sleep Sort by relevance	https://scholar.google.com/scholar?hl=en&q=safe+sleep&btnG=&as_sdt=1%2C21&as_sdtp=
	Search Term: sleep position Sort by relevance	https://scholar.google.com/scholar?q=sleep+position&btnG=&hl=en&as_sdt=0%2C21
	Search Term: SIDS Sort by relevance	https://scholar.google.com/scholar?q=SIDS&btnG=&hl=en&as_sdt=0%2C21
	Search Term: SIDS prevention Sort by relevance	https://scholar.google.com/scholar?q=SIDS+prevention&btnG=&hl=en&as_sdt=0%2C21
CINAHL Plus	Search Term: safe sleep Source Types: all results Sort by Relevance	N/A
	Search Term: sleep position Source Types: all results Sort by Relevance	N/A
	Search Term: SIDS Source Types: all results Sort by Relevance	N/A
	Search Term: SIDS prevention Source Types: all results Sort by Relevance	N/A
AMCHP Innovation Station	State: all Region: all Practice Category: all Primary Topic: all National Performance Measures: all Year: N/A	http://www.amchp.org/programsandtopics/BestPractices/InnovationStation/Pages/default.aspx

	Keywords: N/A	
Georgetown Knowledge Base	MCH Knowledge Base and Library Collection → Professional Resource Guides and Briefs → Safe Sleep	http://ncemch.org/evidence/NPM-5-safe-sleep.php
	MCH Knowledge Base and Library Collection → Professional Resource Guides and Briefs → SUID/SIDS Gateway	http://ncemch.org/suid-sids/index.php
	MCH Knowledge Base and Library Collection → Professional Resource Guides and Briefs → SUID/SIDS Training Toolkit	http://ncemch.org/suid-sids/trainingtoolkit.php
Healthy People 2020 Structured Evidence Queries	Search by Topic Area → Maternal, Infant, and Child Health → PubMed Search MICH-20	http://phpartners.org/hp2020/
National Action Partnership to Promote Safe Sleep (NAPPSS)	Search Term: safe sleep	http://nappss.org/
National Institute for Children's Health Quality	Search Term: safe sleep	http://www.nichq.org/
National Center for Review and Prevention of Child Deaths	Search Term: safe sleep	https://www.childdeathreview.org/
Children's Safety Network	Search Term: safe sleep	http://www.childrenssafetynetwork.org/
CDC: SUID and SIDS	N/A	http://www.cdc.gov/sids/aboutsuidandsids.htm
National Institute of Child and Human Development Safe to Sleep Campaign	Search Term: safe sleep	http://www.nichd.nih.gov/sts/Pages/default.aspx
First Candle	N/A	http://www.firstcandle.org/
CJ Foundation for SIDS	Search Term: safe sleep	http://www.cjsids.org/
American Association of SIDS Prevention Physicians	N/A	http://aaspp.net/
Cribs for Kids	Search Term: safe sleep	http://www.cribsforkids.org/
CDC SUID Case Registry	N/A	http://www.cdc.gov/sids/caseregistry.htm

*The Strengthen the Evidence Team of Experts and selected HRSA discretionary grantees contributed to the identification of data sources

Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
• Reviews of studies, websites, compilations of specific interventions/strategies aimed at promoting safe sleep in infants as a primary goal • Language: English • Populations: English	• Articles describing single strategies that are not part of a larger review/compilation • Studies performed or primarily focused on international populations (included reviews of studies if US studies were included) • Studies without specific information regarding implementation of interventions