**Suggested PSNA Application Content**

**Title of activity:**

“Evidence-based and Best Practices for Safe Sleep with Well Newborns” On-Line Training Module

**Activity type:**

Provider-directed, learner-paced: Enduring material, web-based

**Professional practice gap:**

Description of the problem

Each year in the United States, ~3500 infants die of sleep-related infant deaths, including sudden infant death syndrome (SIDS) (International Classification of Diseases, 10th Revision [ICD-10] R95), ill-defined deaths (ICD-10 R99), and accidental suffocation and strangulation in bed (ICD-10 W75) (American Academy of Pediatrics [AAP] 2022 policy statement). Philadelphia has a high rate of infant death. Philadelphia’s Department of Public Health’s (PDPH) most recent data published in March 2019, states that, “for the years 2011 to 2017, Philadelphia had an average of over 32 Sleep-Related Infant Deaths (SRDs) per year”. In addition, “accidental suffocations (e.g. positional asphyxia, mechanical asphyxia, wedging, overlay) accounted for 57 (25%) of the SRDs”. Every one of these 57 suffocation deaths could have been prevented had the infant been placed in a safe sleep environment.

To enhance HC providers’ knowledge this module was developed to deliver training on Sudden Unexpected Infant Death (SUID) accidental strangulation and suffocation and SIDS as well as incorporating evidence-based safe sleep practices and risk reduction methods for infants into the clinical setting. This independent-guided learning on-line module was developed to train all nursing staff in the women’s health departments in Pennsylvania birthing hospitals. Module content presents effective ways to promote and model safe sleep practices and increase awareness of unsafe practices in clinical care.

**Evidence to validate the professional practice gap:**

Input from stakeholders such as learners, managers, or subject matter experts

Statistics from AAP Policy Statement and Philadelphia Department of Health

Data cited in section 1 (description of the problem)

**Educational need that underlies the professional practice gap:**

Knowledge

**Target audience:**

Registered Nurse

**Desired learning outcome:**

The professional nurse completing the enduring module will gain knowledge in the ability to:

1. Define SUID and describe risk factors

2. Describe, demonstrate, and role model evidence-based best practices related to promoting safe sleep for infants in the hospital environment

3. Incorporate consistent surveillance of infant’s sleep environment into daily practice

4. Identify when an unsafe sleep environment exists

5. Demonstrate proper actions to effectively correct an unsafe sleep environment

**Description of evaluation method:**

Criteria for successful completion:

Credit awarded commensurate with completion of the enduring module in the health system’s Learning Management System:

Completion of evaluation form

Description of evaluation method:

Self-assessment questions will be integrated throughout the module to test learners’ knowledge of the content and application to clinical care. Responses will be tracked and downloaded to evaluate learning, provide a learner specific performance report, and summary data for the overall impact of the module. A safe sleep environmental assessment audit tool has been created to compare results of pre and post-learning module practice compliance.

Short-term evaluation option:

Intent to change practice

Long-term evaluation options:

Self-reported change in practice

Change in quality outcome measure

**Description of evidence-based content with supporting references or resources:**

**Content for this educational activity was chosen from:**

Organization

CDC, American Academy of Pediatrics (AAP) – Safe Sleep Guidelines

Peer-reviewed journal articles

Moon RY, Carlin RF, Hand I; AAP Task Force on Sudden Infant Death Syndrome; AAP Committee on Fetus and Newborn. Sleep-Related Infant Deaths: Updated 2022 Recommendations for Reducing Infant Deaths in the Sleep Environment. Pediatrics. 022;150(1):e2022057990

Moon R, Carlin R, Hand I, et al. Evidence Base for 2022 Updated Recommendations for a Safe Infant Sleeping Environment to Reduce the Risk of Sleep-Related Infant Deaths. Pediatrics. 2022;150(1):e2022057991

Expert resource

AAP Task Force on Sudden Infant Death Syndrome

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| **Objectives** | | |
| 1.Define SUID and describe risk factors  2.Describe, demonstrate and role model evidence based practices related to safe sleep in the hospital environment  3.Incorporate consistent surveillance of infant’s sleep environment into daily practices  4. Identify when an unsafe sleep environment exists  5.Demonstrate proper actions to effectively correct an unsafe sleep environment | | |
| **Content based on Objectives** | **References/Resources** | **Time** |
| Background Information: Definition and risk factors related to Sudden Unexplained Infant Death (SUID)   * Definition of SUID * Types and causes of SUID * Accidental Suffocation and Strangulation in bed (ASSB) * Three types of SUID * AAP recommendations * Incidence and sociodemographic risk * Philadelphia incidence and risk factors * Incidence in the United States * Sociodemographic risks in the United States | AAP task force on sudden infant death syndrome. (2022)  <https://www.cdc.gov/sids/>  http://www.phila.gov/health/Commissioner/DataResearch.html  Becher et al., 2012; Herlenius et al., 2013  Moon et al., 2016  Mitchell EA, Milerad J. 2006; Dietz PM, England LJ et al., 2010).  Stratton et al., 2003; Vennemann et al., 2007).  Chan et al., 2012; Rubens et al., 2008)  Colson et al., 2013).  Ruys et al., 2007; Ball et al., 2016; Huang et al., 2013  Kendall-Tacker et al, 2010  Shapiro-Mendoza, 2016  Vennemann et al, 2009;  Joyner et al., 2009. | 15 min. |
| Practices to Reduce SUID: Evidence based practices related to safe sleep in the hospital environment   * Recommendations related to:   Positioning, Skin to Skin, Preterm Infants, Infants that roll, Sleep surfaces, Sitting Devices, Sleep locations and bed sharing, Feeding while in bed, Providing guidance to parents, Crib safety, sitting devices, Environmental safety and temperature control, Swaddling, Tummy time, Breastfeeding, Pacifiers | AAP task force on sudden infant death syndrome. (2022)  Batra et al, 2015  Moon, 2016  Ruys et al, 2007  Shapiro-Mendoza et al, 2014  Ball et al, 2016  Colson et al, 2013  Kendall-Tackett et al, 2010 | 30 min. |
| Educational Interventions for Parents and Caregivers:  Surveillance of safe sleep in daily practices and actions to correct an unsafe sleep environment   * Education and interventions for parents and caregivers including swaddling evidence, tummy time recommendations, immunizations, hearing screening and environmental toxicants * Safe sleep videos and written education * Modeling Safe Sleep in the Hospital * Media Messages and their role in influencing beliefs and attitudes | Moon et al., 2016  Joyner et al., 2009  Dietz et al, 2010  Farquhar et al, 2008  Miller et al, 2015  Moro et al, 2015  Vennemann et al 2007  Mitchell & Milerad, 2006 | 15 min. |
| **Full Reference List** | | |
| * Moon RY, Carlin RF, Hand I; AAP Task Force on Sudden Infant Death Syndrome; AAP Committee on Fetus and Newborn. Sleep-Related Infant Deaths: Updated 2022 Recommendations for Reducing Infant Deaths in the Sleep Environment. Pediatrics. 2022;150(1):e2022057990 * Moon R, Carlin R, Hand I, et al. Evidence Base for 2022 Updated Recommendations for a Safe Infant Sleeping Environment to Reduce the Risk of Sleep-Related Infant Deaths. Pediatrics. 2022;150(1):e2022057991   Pediatrics. 138(5): e20162938. Doi: 10.1542/peds2016-2938.   * Ball H.L., Howel D., Bryant A., Best E., Russell C., & Ward-Platt M. (2016). Bed-sharing by breastfeeding mothers: Who bedshares and what is the relationship with breastfeeding duration? Acta Paediatrics, 105(6):628–634. * Batra E.K., Midgett J.D., & Moon R.Y. (2015). Hazards associated with sitting and carrying devices for children two years and younger. Journal of Pediatrics,167(1):183–187. * Colson E.R., Willinger M., Rybin D., et al. (2013). Trends and factors associated with infant bed sharing, 1993-2010: The National Infant Sleep Position Study. JAMA Pediatrics, 167(11):1032–1037. * Does breastfeeding reduce the risk of sudden infant death syndrome? Pediatrics, 123(3). Retrieved from: www.pediatrics.org/cgi/content/full/123/3/e406. * Eunice Kennedy Shriver National Institute of Child Health and Human Development, Safe to sleep campaign, Risk reduction for SIDS and other sleep related causes of infant death: Curriculum for Nurses. Retrieved from https://www.nichd.nih.gov/sts/about/Pages/default.aspx * Chan R.S., McPherson B., & Zhang V.W. (2012). * Neonatal optoacoustic emission screening and sudden infant death syndrome. International Journal of Pediatric Otorhinolaryngology, 76(10):1485–1489. * Department of Disease Prevention and Health Promotion. (2017). Maternal, Infant and Child objectives. Retrieved from: <https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives> * Dietz PM, England LJ, Shapiro-Mendoza CK, Tong VT, Farr SL, Callaghan WM. Infant morbidity and mortality attributable to prenatal smoking in the U.S. American Journal of Preventive Medicine 2010; 39(1): 45–52 * Farquhar L.J., & Jennings P. (2008). Newborn hearing screen results for infants that died of SIDS in Michigan 2004-2006. Early Human Devolpement;84(10):699-384. * Huang Y., Hauck F.R., Signore C, et al. (2013). Influence of bedsharing activity on breastfeeding duration among US mothers. JAMA Pediatrics, 167(11):1038–1044. * Immunization Safety Review Committee. Stratton K, Almario DA, Wizemann TM, McCormick MC, eds. Immunization Safety Review: Vaccinations and Sudden Unexpected Death in Infancy. Washington, DC: National Academies Press; 2003 * Joyner BL, Gill-Bailey C, & Moon RY. (2009). 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SIDS and Other Sleep-Related Infant Deaths: Evidence Base for 2016 Updated Recommendations for a Safe Infant Sleeping Environment. Pediatrics, 138(5). pii: e20162940. * Moro P.L., Arana J., Cano M., Lewis P., & Shimabukuro T.T. (2015) Deaths reported to the Vaccine Adverse Event Reporting System, United States, 1997-2013. Clinical Infectious Disease. 61(6):980–987 * Philadelphia Department of Public Health 2016. Community Health Assessment 2015. Retrieved from: http://www.phila.gov/health/Commissioner/DataResearch.html * Philadelphia Department of Public Health’s Medical Examiner Office. (2013) Child Death Review Report 2009-2010. <http://www.phila.gov/health/pdfs/PhiladelphiaChildDeathReviewReport2009_2010.pdf> * Rubens D.D., Vohr B.R., Tucker R., O’Neil C.A., & Chung W. (2008). Newborn oto-acousticemission hearing screening tests: preliminary evidence for a marker of susceptibility to SIDS. 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Do immunizations reduce the risk for SIDS? A meta-analysis. Vaccine. 2007;25(26):4875–4879 | | |

**Learner engagement strategies:**

Active participation in the interactive self-learning module with embedded multiple choice questions that must be completed correctly in order to complete the educational activity, and achieve NCPD hours.

**Number of contact hours awarded and calculation method:**

This learning activity will award 1 contact hour upon completion. The education is presented in a self-paced e-learning module format, which takes 1 hour to complete. The health system’s Learning Management System (LMS) will display the module as completed when all sections have been reviewed, and all self-check questions have been answered.

**Criteria for awarding contact hours:**

Credit awarded commensurate with participation.

Completion/submission of evaluation form