

MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES INFANT SAFE SLEEP STATEWIDE HOSPITAL TRAINING PROGRAM



PROJECT BACKGROUND

Sleep-related infant death is a leading cause of death among infants less than 1 year of age in Michigan¹. Persistent racial and ethnic disparities exist in sleep-related causes, both in Michigan and nationally. In Michigan between 2015 and 2017, a black infant was **3.6 times** more likely to die from a sleep-related cause than a white infant; an infant of a race other than white or black was **1.9 times** more likely to die. Over time, the disparity gap for black infants has worsened while the disparity gap for infants of other races has shown improvement. Data from the Centers for Disease Control and Prevention (CDC) Sudden Unexpected Infant Death (SUID) Case Registry shows factors contributing to sleep-related deaths in Michigan:

- Baby not sleeping in a crib, bassinet or portable play yard (75 percent of deaths)
- Baby found unresponsive not on the back (54 percent of the deaths)
- Baby sleeping in an adult bed (48 percent of deaths)
- Baby sleeping with objects (such as blankets, comforters, pillows, bumper pads) (73 percent of deaths)

Case for Training Hospitals and Their Staff

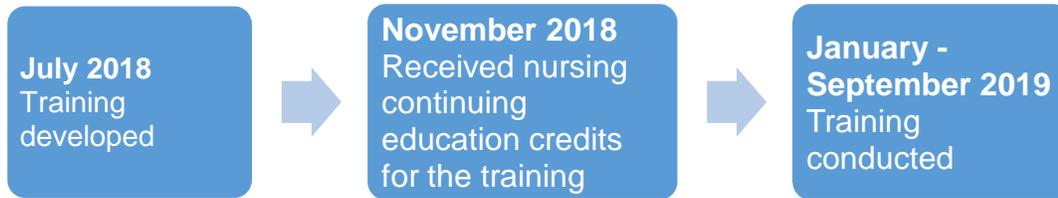
In 2018, the Michigan Department of Health and Human Services Infant Safe Sleep Program identified birth hospitals as a major point of contact that was underdeveloped. Most Michigan babies are born in hospitals (99 percent), making it an almost universal point of access to reach parents with infant safe sleep education. In 2014, legislation was passed in Michigan requiring that birth hospitals provide infant safe sleep education to parents prior to discharge. Moreover, studies have shown:^{3,4,5}

- Parents model the advice and **actions** of the nursing staff.
- New parents tend to have trust in the nurses who care for their infants.
- Practices by nurses in the nursery are one of the most important factors in parents' determination of and adherence to safe sleep practices.

Goal

Train staff at eight birth hospitals by September 30, 2019.

Timeline



Marketing and Promotion of Trainings

A detailed training flyer was shared with numerous organizations including the Nurse Administrator's Forum (NAF), the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN), Regional Perinatal Quality Collaboratives and the Michigan Infant Safe Sleep State Advisory Committee. The flyer was widely distributed at conferences, meetings, webinars and [Infant Safe Sleep for Professionals email list](#).

Material Development and Training Results

Development:

- The hospital training was developed based on the 2016 American of Academy of Pediatrics (AAP) Recommendations for Infant Safe Sleep and on what program staff learned from a review of published studies of other efforts in this area.
- Twelve nurses who work in birth hospitals across the state and numerous MDHHS staff reviewed the training and provided invaluable feedback.

Training:

- Hospitals completed a pre-survey to provide baseline information on current infant safe sleep practices and policies.
- The training consists of a one-hour PowerPoint presentation (approved for one nursing contact hour).
- Each unit at the hospital that services infants receives:
 - A binder containing resource material and ordering information for Infant Safe Sleep, WIC, Tobacco, Maternal Infant Health Program and Immunizations are provided for each unit at the hospital that serves infants.
 - Sample crib audit forms and Neonatal Intensive Care Unit (NICU) crib cards.
 - Copy of the Power Point and the AAP Infant Safe Sleep Recommendations and Technical Report.
 - Copies of the laminated *Infant Safe Sleep Resource Guide*.

Evaluation:

- Evaluation forms are completed by all participants and sent to the Montana Nurses Association per their nursing contact hour protocol.

- Of participants who completed pre-/post-training evaluations:
 - The percentage of staff that felt confident or very confident they could describe the scope of the problem related to sleep-related infant deaths increased from 57 percent prior to the training to 98 percent following the training.
 - The percentage of staff that felt confident or very confident they could educate families on AAP recommendations increased from 67 percent prior to the training to 99 percent following the training.
 - After the hospital training, 99 percent of staff were able to state at least one way that they could help patients practice safe sleep.

Numbers Trained

From January through September 2019:

- 19 birth hospitals were trained, representing almost one quarter of Michigan’s birth hospitals.
- 80 trainings sessions were conducted.
- 764 hospital staff were trained.

Other Lessons

Nurses indicated intention to:

- Designate Safe Sleep Champions on the unit.
- Seek approval from management to institute use of safe sleep crib cards in the NICU.
- Institute crib audits.
- Check donations to the hospital (that are intended to be given to patients) to make sure they are consistent with safe sleep.

Nurses requested:

- Additional training sessions.
- A video of the training so it could be shared with those who couldn’t attend in person.
- Material in the Bengali language.
- Information on using sleep-sacks during the hospital stay.
- Educational materials (with visuals) for clients on overheating, swaddling and skin-to-skin.

Nurses appreciated:

- Provision of a free nursing contact hour.
- Resource binder.
- The laminated infant safe sleep resource guide, especially the stomach/back diagrams.
- Having a contact person for MDHHS infant safe sleep and meeting them in person.
- Simple language for explaining to patients the “whys” behind the guidelines.

Other take-aways:

- During and after the training, the nurses often talked about why some unsafe practices continue on the unit (e.g., elevating the head of the bassinet, bulb syringe in the bassinet, double swaddling and hat use after first bath, etc.) and most often it is because they “have always done it that way.” The importance of these impromptu discussions and their potential for future change in individual nursing practices and hospital protocol cannot be downplayed.

Next Steps

- Train other hospitals in areas with high numbers of sleep-related infant deaths.
- Develop a follow-up protocol to maintain relationships with birth hospital staff.
- Conduct a follow-up survey to gauge and capture the following:
 - Activities implemented since the training
 - Strategies that have and have not worked
 - Other supports that are needed

Sources

1. CDC SUID Case Registry, Michigan Public Health Institute; Michigan Resident Birth Files, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services.
2. CDC/National Center for Health Statistics, National Vital Statistics System, Compressed Mortality File.
3. Carrier, CT. Back to sleep: a culture change to improve practice (Abstract). *Newborn Infant Nurs.* 2009;9(3):163-168.
4. Shaefer, SJM, Herman, SE, Frank, SJ, Adkins, M & Terhaar, M. Translating infant safe sleep evidence into nursing practice. *J. Obstet. Gynecol. Neonatal. Nurs.* 2010; 39(2):618-626.
5. Fowler, AJ, Evans, PW, Etchegaray, JM, Ottenbacher, A & Arnold, C. Safe sleep practices and sudden infant death syndrome risk reduction: NICU and well-baby nursery graduates. *Clin. Pediatr.* 2013;52 (11):1044-1053

For more information, visit www.michigan.gov/safesleep or contact Colleen Nelson, LMSW, Infant Safe Sleep Program Coordinator, at nelsonc7@michigan.gov.