Infant Safe Sleep

Colin Parks, Manager, Children's Protective Services
ParksC@michigan.gov
517-388-5125

Objectives

- Define & describe what is considered a sleep-related infant death.
- Review American Academy of Pediatrics guidelines for infant sleep safety.
- Review the role of Children's Protective Services in sleep-related death investigations.
- Present scope of problem and data on sleep-related infant deaths.
- Provide an overview of current state-level activities occurring within MDHHS & the community.

What is a sleep-related infant death ?

- The death of an infant less than 1 year of age that occurs suddenly and unexpectedly, including suffocation/positional asphyxia, Sudden Infant Death Syndrome (SIDS), Undetermined/Sudden Unexplained Infant Death (SUID), and other causes wherein an *unsafe sleep environment* was likely to have contributed to the death.

An unsafe sleep environment includes one or more of the following characteristics:

- Infant co-sleeping with another adult or child.
- Soft bedding, such as blankets or pillows.
- Any objects in the crib, such as stuffed animals, bumper pads, pillows, etc.
- Infant sleeping in an adult bed, on a couch, on the floor, or any other location that is not a crib, bassinet or portable play yard.
- Infant sleeping on the stomach or side.
- Infant overdressed/overheated.

Sudden Infant Death: "SIDS"

- The use of the term "SIDS" has decreased dramatically in Michigan in the last 10 years, but why?
  - Due to improved death scene investigations, medical examiners are determining more sleep-related infant deaths to be caused by positional asphyxia (suffocation).
  - If medical examiners do not believe that there is enough evidence to make a suffocation determination, they are more often using the term "Sudden Unexpected Infant Death" (SUID),rather than "SIDS."

SUID: Sudden Unexpected Infant Death

- The sudden and unexpected death of an infant in which the manner and cause of death are not immediately obvious prior to investigation, includes:
- **SIDS (Sudden Infant Death Syndrome)** – Death ***remains unexplained*** after a negative autopsy, a negative death scene investigation and no significant medical history
- **ASSB (Accidental Suffocation and Strangulation in Bed)**
- **"Undetermined"** is often assigned as a cause of death if the Medical Examiner does not feel that there is clear enough evidence to call it "Suffocation"

Children's Protective Services

- All CPS staff (investigator's and managers) in the state are required to participate in infant safe sleep training by the end of 2015.
  - Training provides education on tenets of safe sleep as well as ways to assist families to better understand the importance of safe sleep and connecting them to resources.

- During ***any*** CPS investigation where a child in the home is under the age of one, the CPS worker must:
  - Provide the parent with educational materials regarding safe sleep.
  - View the sleeping arrangements for the infant.

The Role of Children's Protective Services in Sleep-related death investigations

- Child death complaints are assigned for investigation by Children's Protective Services (CPS) if the death is sudden and unexplained.
- CPS workers are **required** to seek the assistance of and cooperate with law enforcement at the point the investigation is commenced.
  - Coordination of death scene reenactments, viewing/photographing the scene, interviews with parents/others present, etc.

Children's Protective Services investigation

- If an unsafe sleep environment may have been a contributing factor in the child's death, the CPS worker must inquire about caregiver knowledge of safe sleep and document this in the investigative report.
  - A parent's knowledge of safe sleep does not constitute child abuse or neglect.
  - An unsafe sleep environment does not in and of itself constitute child abuse or neglect.

Evidence of the following must be considered:

- Substance abuse:
  - The parent/caregiver was under the influence of alcohol or drugs, and there was evidence that his/her behavior or judgment was impaired and/or adversely affected his/her ability to safely care for the infant.
- Supervision:
  - The parent/caretaker did not check on the infant at a reasonable frequency consistent with the infant's age and medical or developmental needs, or the parent left the infant with a person he/she knew or should have known was incapable of safely caring for the infant.
- Hazardous environment:
  - The environmental conditions in the home were hazardous or unsanitary and adversely affected the safety of the infant.

American Academy of Pediatrics (AAP) Infant Safe Sleep Guidelines

- Infants should *always* be placed to sleep:
  - **ALONE**
  - On their **BACK**
  - In a **CRIB** or other approved infant sleep space such as a bassinet or portable play yard.

- Infants should be placed to sleep on a firm mattress with a tight fitted sheet.
- Place the crib in an area that is always smoke free.
- Adult beds, chairs, baby swings, car seats, bouncy seats, or rockers, are **not** safe sleep environments for babies.

Additional AAP recommendations to reduce risk of sleep related death:

- Breastfeeding is recommended.
- Regular tummy time while babies are awake helps strengthen muscles in neck and arms.
- Infants should attend all well-child check ups and maintain up to date immunizations.
- Sleep positioners/wedges should never be utilized unless medically prescribed due to an infant's health condition.
- Bumper pads, soft objects and loose bedding should **not** be used in cribs.
  - There is no evidence that bumper pads prevent injuries, and there is a potential risk of suffocation, strangulation or entrapment.

Myths and Facts

- *Myth: If my baby sleeps on his tummy, he won't choke on spit up or vomit.*
- Fact: It is safer for your baby if he spits up while on his back. Your baby is far less likely to choke in this position.

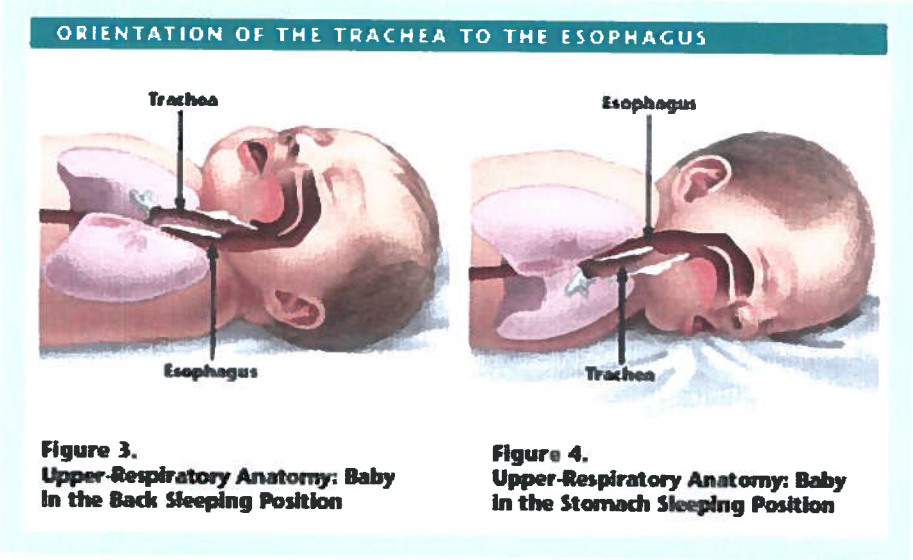


Figure 3.
Upper-Respiratory Anatomy: Baby in the Back Sleeping Position

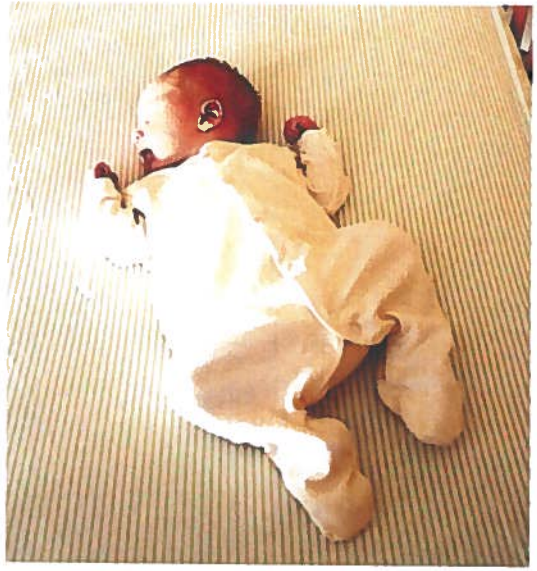
Figure 4.
Upper-Respiratory Anatomy: Baby in the Stomach Sleeping Position

Myths and Facts

- *Myth's: "I slept on my stomach as a baby and I survived."*

"My other babies slept on their stomachs and they survived."

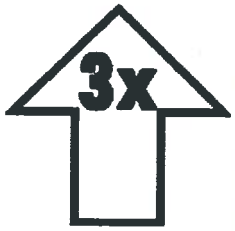
- Fact: Many babies have slept on their stomachs and survived, but that doesn't mean that was the safest way for them to sleep, it means they were lucky. There is no way to look at a baby and determine if he or she is at risk. Why take the chance?



Myths and Facts

- ***Myth**: Baby is safe sleeping in an adult bed, and will cry, kick, or turn his head if he can't breathe.*
- **Fact**: Placing a baby to sleep in an adult bed, or on couches, armchairs or cushions is dangerous.
  - An adult can roll over on baby or another person's arm may cover baby's head or neck.
  - Baby can roll or move on his own and end up in a dangerous place.
  - Babies brains are not fully developed and therefore may not yet have the instinct to turn his head, cry, or kick when in crisis.

What we know about sleep-related deaths in Michigan



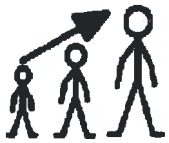
African American infants die at a rate 3x greater than White infants

1 in 4 infants was born preterm (less than 37 weeks)

Males accounted for more sleep-related deaths than females (57% vs. 43%)

3 in 4 infants had publicly-funded coverage

2 in 3 infants died before the age of 4 months

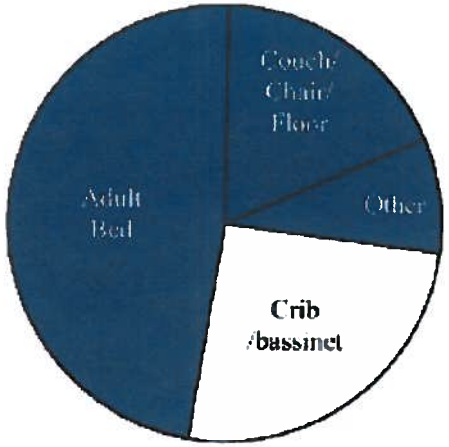


The average age of the mother was 25 years

All of these deaths are 100% preventable

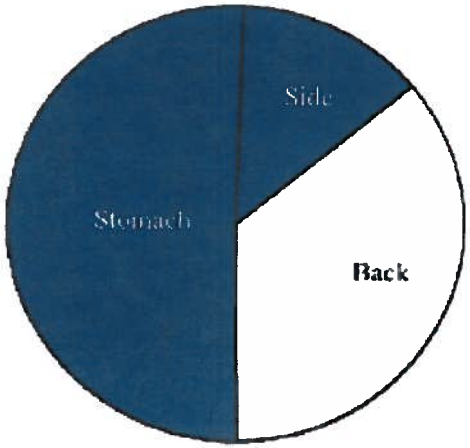
Sleep- related deaths in Michigan

3 in 4 sleep-related deaths occur in an unsafe sleep location



Sleep-related infant death is the 3rd leading cause of death among infants less than 1 year in Michigan.

2 in 3 infants found unresponsive are not on their backs



3 in 5 sleep-related deaths involve an infant sharing a sleep surface

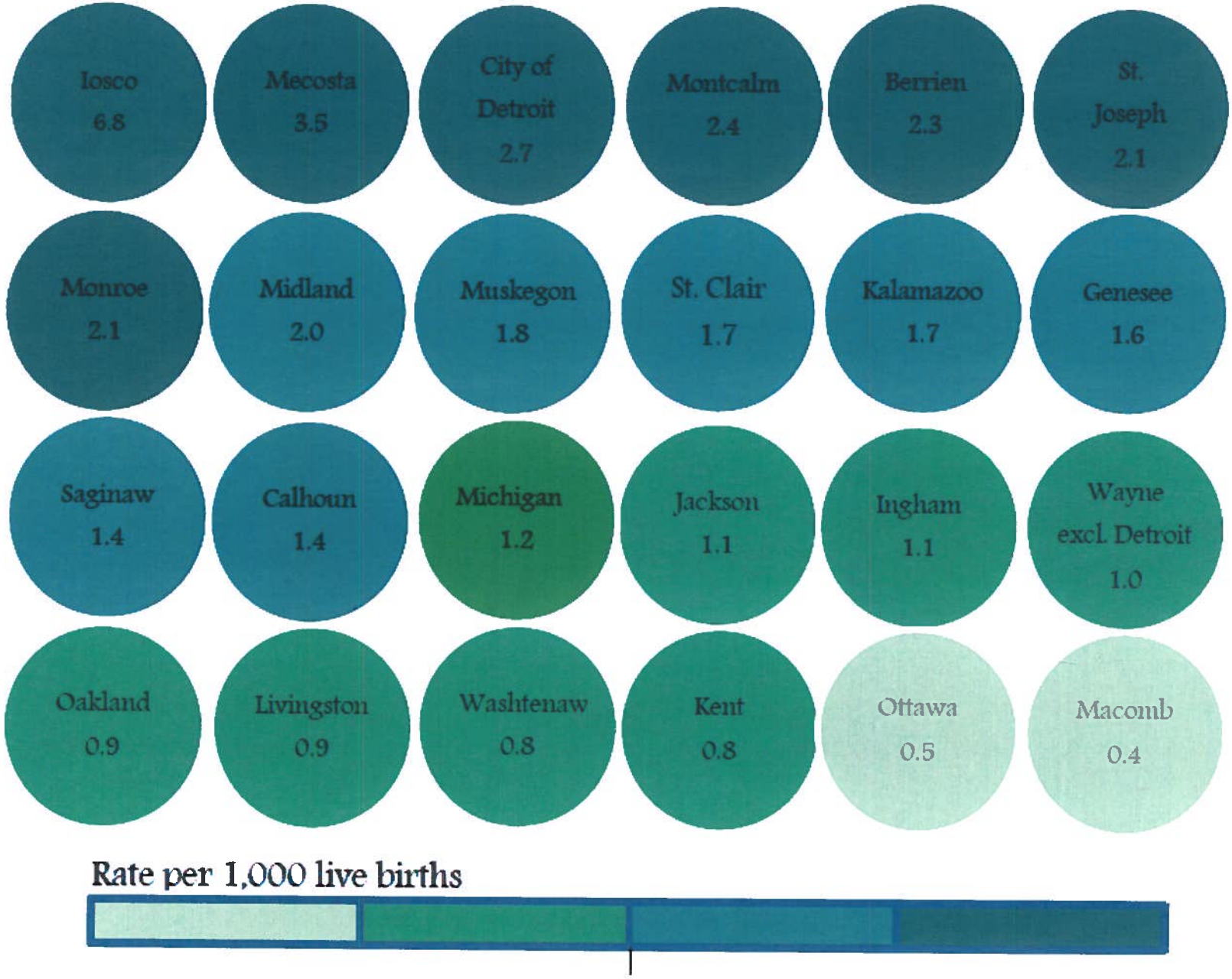
Sleep related deaths by year:

- From 2010 to 2013, there were ***560*** *sleep-related infant deaths*, which is a rate of 1.2 deaths per 1,000 live births.
  - 140 deaths in 2010
  - 147 deaths in 2011
  - 131 deaths in 2012
  - 142 deaths in 2013

  - Official number of deaths for 2014 & 2015 are not yet available, however, it is anticipated that 2014 will show an increase, and in ***2015 sleep-related deaths will likely be at the highest number of infant deaths yet.***

Sleep Related Infant Death Rates 2010-2013		
COUNTY	Number of SRDs	SRD Rate
Wayne	164	1.7
Detroit	110	2.7
Wayne excl. Detroit	54	1.0
Oakland	49	0.9
Genesee	33	1.7
Kent	29	0.8
Kalamazoo	21	1.7
Berrien	17	2.3
Muskegon	15	1.8
Ingham	15	1.1
Macomb	15	0.4
Monroe	13	2.1
Saginaw	13	1.4
Washtenaw	12	0.8
St Clair	11	1.7
Calhoun	9	1.4
Jackson	8	1.1
Montcalm	7	2.4
St Jospeh	7	2.1
Midland	7	2.0
Ottawa	7	0.5
Iosco	6	6.8
Mecosta	6	3.5
Livingston	6	0.9
Michigan	560	1.2

Sleep-Related Infant Deaths County Rates 2010-2013



So far in 2015…

- **January:** 11 sleep-related deaths occurred in 8 counties.
- **February**: 14 sleep-related deaths occurred in 10 counties.
- **March**: 12 sleep-related deaths occurred in 8 counties.
- **April**: 13 sleep-related deaths occurred in 8 counties.
- **May**: 15 sleep-related deaths occurred in 6 counties.
- **June:** 16 sleep-related deaths occurred in Michigan
  - *Three of these deaths occurred in the same day.*
- **July**: 14 sleep-related deaths occurred in 10 counties.

*These numbers remain preliminary until the investigations are complete. However, each of these deaths occurred while an infant was placed to sleep in an unsafe sleep environment.

Despite prevention efforts, why do the number of sleep related deaths remain high?

- Although attention has been raised, *behavior has not changed.*
- There is a need for ways to better engage with parents and caregivers regarding infant safe sleep.
- There is a need for connecting parents with resources and supports in a way that is culturally appropriate and non-threatening.

Recent Progress in Michigan

- The Safe Sleep Act was passed in May of 2014 and requires that all hospitals provide safe sleep educational material to new parents.
- Governor Rick Snyder Declared September Infant Safe Sleep Awareness Month.
- MDHHS and First Lady Sue Snyder have participated in press conferences at Michigan's birthing hospitals to promote Safe Sleep legislation.

What can we do?

- Implement and maintain an infant safe sleep education campaign, including multiple strategies to inform and influence the behavior of all persons who care for infants, as well as their support persons.
- Proactively address the impacts of poverty, affordable housing, and access to resources designing services for high-risk families and infants.
- Use presentations and other materials that are relevant and accessible to all cultures and populations.
- Educate all professionals who work in health care and other human service delivery fields on infant safe sleep.
- Coordinate statewide development, updating and dissemination of infant safe sleep resource materials for use by a wide variety of disciplines.

Current strategies

- Increasing awareness through social media:
  - MDHHS Twitter and Facebook updates.
  - Mobile Display Banners
  - Google key word search
  - Promotion of MDHHS safe sleep website:
    - www.michigan.gov/safesleep

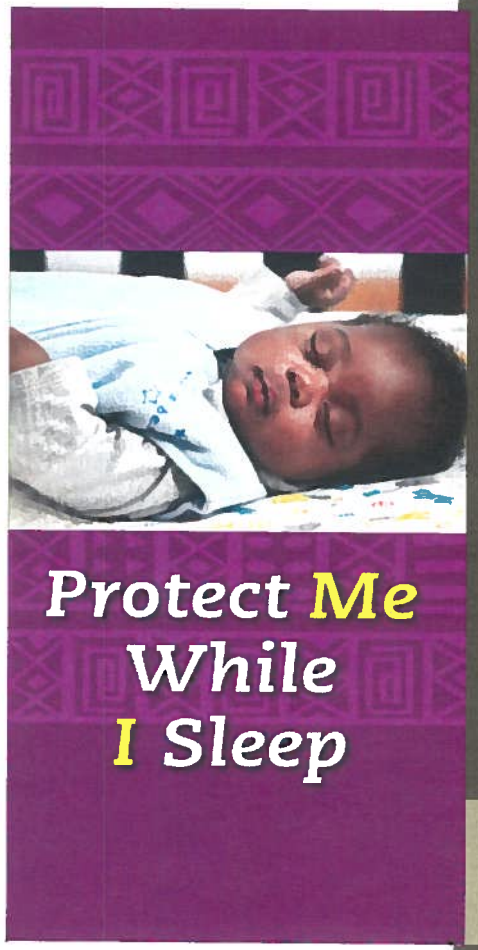
- Increasing awareness through other means:
  - Doctor's Office Campaign (Detroit & Grand Rapids)
  - Public Service Announcements
    - Including MDHHS offices & Public Health Departments
  - Reaching out to faith based community

Current strategies

- Increase awareness and education through provision of educational materials

- Available free of charge from Tomorrow's Child www.tomorrowschildmi.org

  - Brochures – English, Spanish & Arabic
  - Posters – English & Spanish; 2 sizes
  - DVD
  - Door hangers

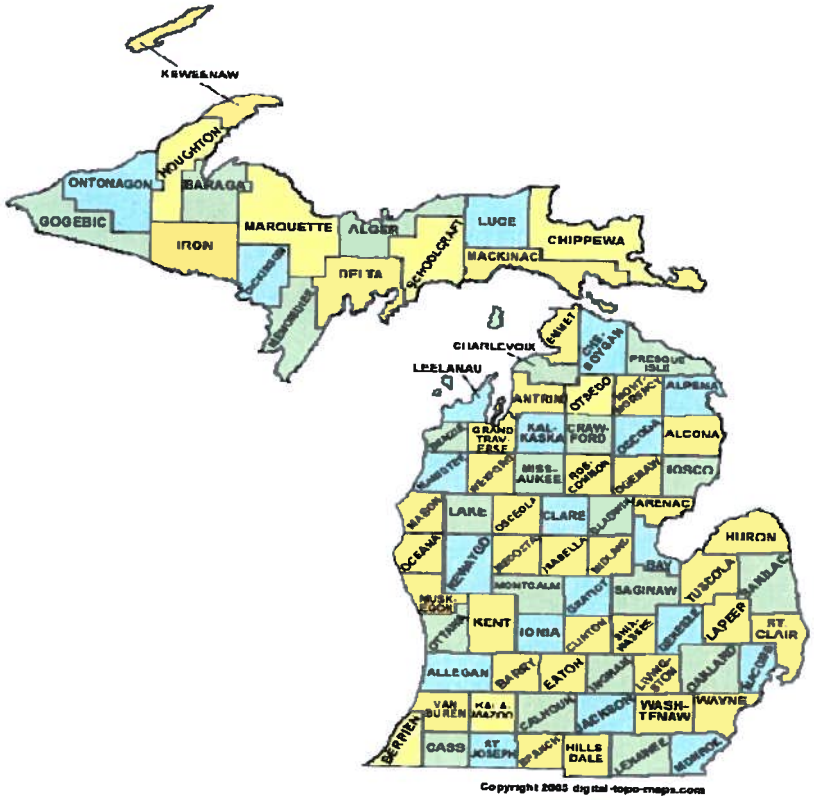


Current strategies

- Direct On Scene Education
  - First Responders are trained to identify and remove hazards from an infant's sleep space while on scene during emergency and non-emergency 911 calls.
- Trainings
  - With the assistance of the Michigan Public Health Institute (MPHI), MDHHS provides online trainings available to both daycare providers as well as those in the medical field.
  - MDHHS Staff are able and willing to provide training on infant safe sleep throughout Michigan when requested.

Current strategies

- Support local efforts through the Infant safe sleep mini-grant program
  - Grants to 14 local health departments & the Inter Tribal Council of Michigan – based on number of SUIDs
    - Berrien
    - Calhoun
    - City of Detroit
    - Genesee
    - Ingham
    - Kalamazoo
    - Kent
    - Macomb
    - Muskegon
    - Oakland
    - Saginaw
    - St. Clair
    - Wayne
    - Washtenaw



Infant Safe Sleep Forum: *Community Conversations & Collaborations*

- Through speakers and concurrent sessions, attendees will walk away with an enhanced knowledge and strategies to work towards establishing infant safe sleep as a social norm.

September 15, 2015

8am – 4pm

Vista Tech Center, Schoolcraft College

18600 Haggerty Rd.

Livonia, MI

Visit www.tomorrowschildmi.org for more information

State resources

- MDHHS Safe Sleep website - www.michigan.gov/safesleep
  - variety of information for parents and professionals
  - links to additional resources (including free educational materials) and trainings.

- MDHHS Infant Health Unit
  - Request trainings/presentations; assistance with program development.
  - Contact: Patti Kelly, Infant Safe Sleep Program Coordinator, kellyp2@michigan.gov or 517.335.5911

- Two online trainings hosted on MPHI learning network - www.learning.mihealth.org

- Tomorrow's Child - www.tomorrowschildmi.org
  - order educational materials & request trainings
  - additional resources on safe sleep and bereavement

State resources

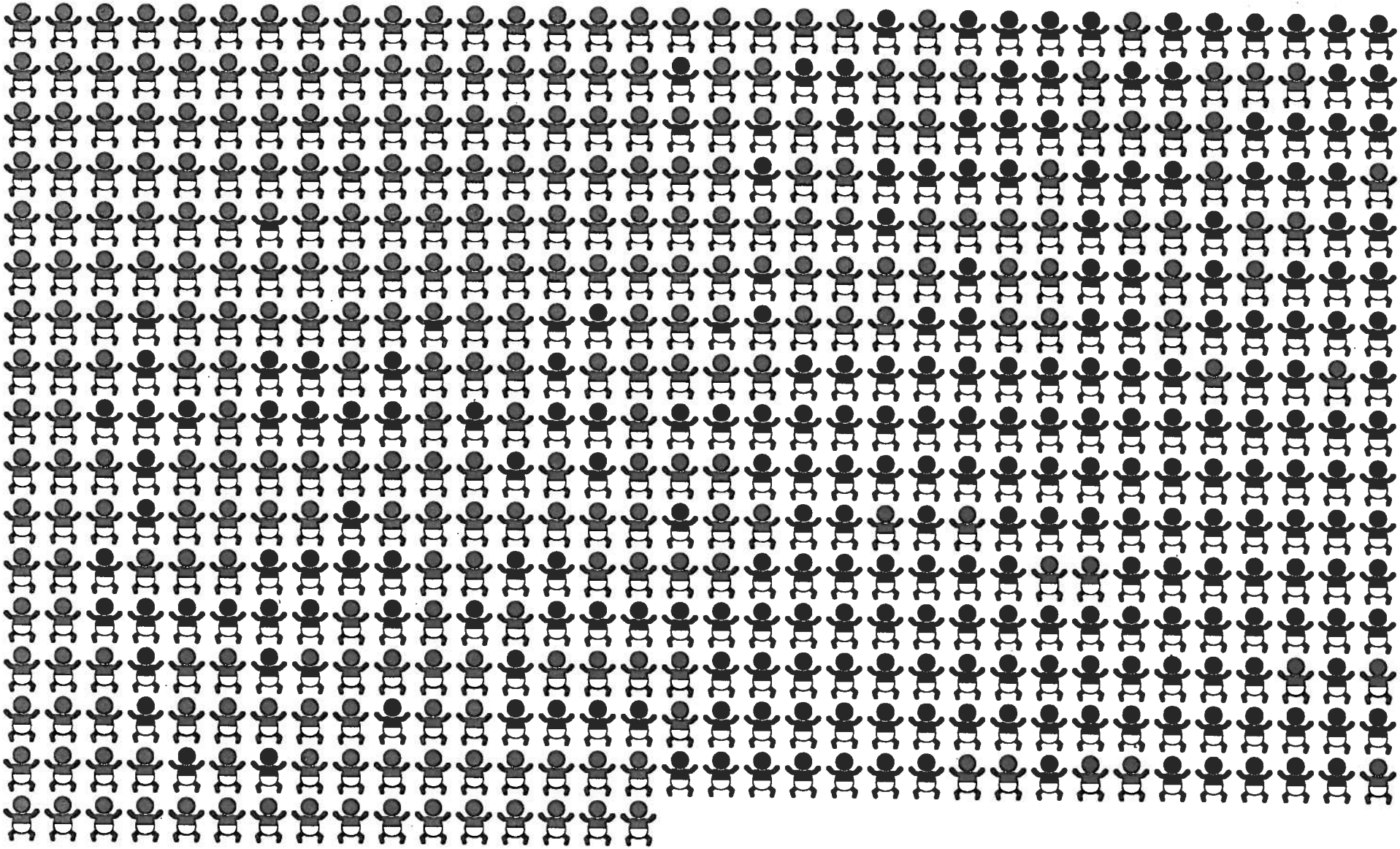
- If you are interested in reviewing data on sleep-related infant deaths either state-wide or in your community, contact:
  - Michigan Public Health Institute (MPHI) – Lindsay Gross, lgross@mphi.org or 517-324-7340
  - MDHHS Infant Health Unit – Patti Kelly, kellyp2@michigan.gov or 517.335.5911
  - State of Michigan vital statistics

National resources

- American Academy of Pediatrics
  - www.aappolicy.org
- Consumer Product Safety Commission
  - www.cpsc.org
- Cribs for Kids
  - www.cribsforkids.org
- Eunice Kennedy Shriver National Institute of Child Health & Human Development – Safe to Sleep Campaign
  - www.nichd.nih.gov/sts
- National Action Partnership to Promote Safe Sleep
  - www.napps.org

Between 2010 and 2013

560 otherwise healthy Michigan babies died as a result of unsafe sleep



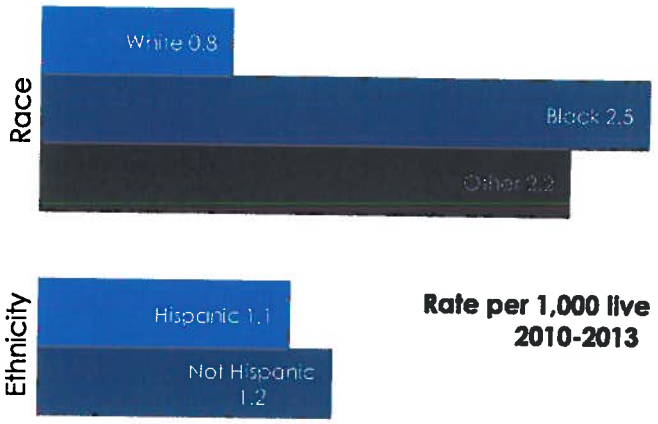
July 2015

Sleep-Related Infant Deaths in Michigan

Sleep-related infant deaths are those wherein the sleep environment was likely to have contributed to the death, including those ruled SIDS, SUID, suffocation, and other causes.

Sleep-related infant death is the 2nd leading cause of death among infants less than 1 year in Michigan. From 2010 to 2013, there were 560 sleep-related infant deaths, which is a rate of 1.2 deaths per 1,000 live births. The *Healthy People 2020* objective is to reduce the rate of sudden unexpected infant deaths by 10%. If Michigan is to achieve this goal, the sleep-related infant death rate needs to decrease to 1.1 per 1,000 live births by 2020.

There is a significant racial disparity in the rate of sleep-related infant deaths in Michigan.

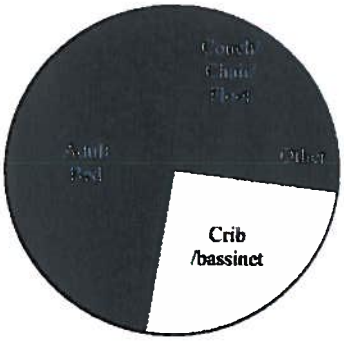


Rate per 1,000 live births, 2010-2013

A safe sleep environment can reduce the risk of all sleep-related infant deaths. The American Academy of Pediatrics (AAP) recommends that infants: 1) sleep in a safety-approved crib, bassinet, or portable crib with a firm mattress and tight-fitting sheet, 2) sleep on surfaces separate from adults or other children free of blankets, pillows, or toys, 3) be placed on his or her back for every sleep time.

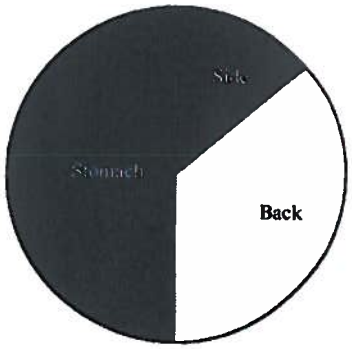
In Michigan:

3 in 4 sleep-related deaths occur in an unsafe sleep location



3 in 5 sleep-related deaths involve an infant sharing a sleep surface

2 in 3 infants found unresponsive are not on their backs



Note: Incident sleep place was unknown in 2.5% of deaths; Sleep surface sharing was unknown in 4.8% of deaths; Sleep position was unknown in 16.6% of deaths.

There are a variety of factors that impact a caregiver's choices regarding their child's sleep environment and its importance in the caregiver's daily life. For many caregivers, these include the challenges of caring for a new infant without basic needs such as a social support system, transportation, stable housing, and healthy food.