# Wake Up: Our Babies Deserve Better! Time for Safe Sleep!!!

Cincinnati Children's Hospital Medical Center Nursing Grand Rounds December 9, 2015



#### Cincinnati Children's

# Objectives

Discuss the significance of safe sleep for infants.

Describe the application of effective safe sleep initiatives in daily practice.

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# **Magnet Components**

- Exemplary Professional Practice
- Structural Empowerment



# Safe Sleep

- · Creates a safe environment for infants while sleeping
- · Aims to reduce the number of sleepassociated deaths



(Ohio Department of Health, 2015)

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# Statistics

3,500 infants die suddenly and unexpectedly each year in the U.S.

Most are sleep-related.

(Centers for Disease Control and Prevention, 2015)



# Statistics

522 babies died in Hamilton County from 2010 to 2014. This puts our infant mortality rate among the worst 10% in the nation.

Why is this?

- Community FactorsBehavioral Factors
- · Healthcare Factors

(Cradle Cincinnati, 2014)

### History

**1969**: SIDS (Sudden Infant Death Syndrome) first identified/named.

**1974**: Congress passed Sudden Infant Death Syndrome Act of 1974.

1988-1992: Research reveals that sleeping on stomach is significantly linked to SIDS.



(U.S. Department of Health and Human Services, 2013)

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#### History

1992: American Academy of Pediatrics (AAP) recommends babies on back or sides for safe sleep.

1996: AAP recommends infants only be placed on backs sleep

**1997**: Research shows that co-sleeping increases SIDS risks.

 Tipper Gore partners with Gerber to advertise Back to Sleep Campaign.



(U.S. Department of Health and Human Services, 2013)

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# History

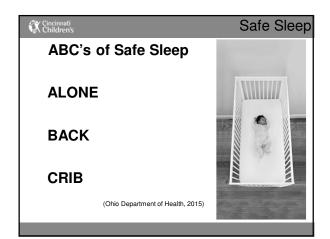
**1998**: AAP issues safety alert reminding parents of the need for firm bedding with no soft blankets or toys.

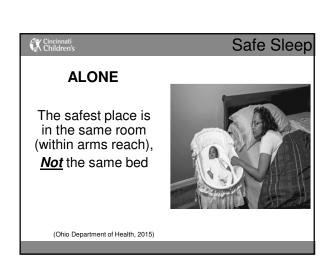
2000: AAP changes stance on safe sleep to safest ALONE on BACK and in a CRIB



**2005**: AAP revises policy: back sleeping position, firm sleep surface, no loose bedding/blankets, avoid overheating, adding a pacifier helps to reduce risk

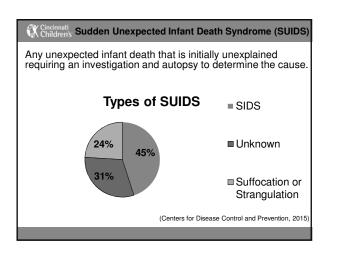
# 2006: Continuing Education Program on SIDS Risk Reduction: Curriculum for Nurses released. 2010: Dr. Hannah Kinney discovered that SIDS is linked to low serotonin levels and low serotonin receptor cell in brain stems of babies affected by SIDS. 2012: Back to Sleep changed to "Safe to Sleep" to encompass safe sleep environments with back sleeping. 2013: Safe to Sleep website launched.





# BACK Babies sleep safest on their backs Less likely to choke than when on stomach Mouth and nose are not blocked Able to turn head Not rebreathing carbon dioxide (Ohio Department of Health, 2015)

# CRIB • Firm surface with fitted sheet only (No quilts/loose sheets) • Eliminate bumper pads, positioners, stuffed animals, blankets, pillows (Ohio Department of Health, 2015)



## Children's Accidental Suffocation/Strangulation

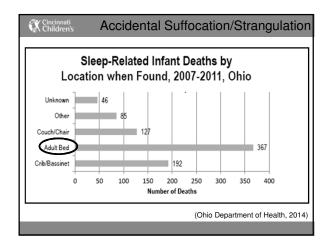
#### Potential Causes:

- Suffocation related to bumpers or blankets
- · Person-rolls over or against baby



- Entrapment/Wedging-mattress and wall, positioners and furniture
- Strangulation-bumper ties, crib railings

(Centers for Disease Control and Prevention, 2015)



#### Children's Sudden Infant Death Syndrome (SIDS)

Leading cause of infant mortality in the U.S. from 1 month to 1 year of age

Primarily age 6 months and under (90% cases), however, it can occur up to 1 year of age.

Exact cause is unknown

Evidence suggests infant brain abnormalities increase vulnerability, but it is not lone cause

(Ohio Department of Health, 2015)

# Sudden Infant Death Syndrome

Not caused by apnea, immunizations, child abuse, or suffocation

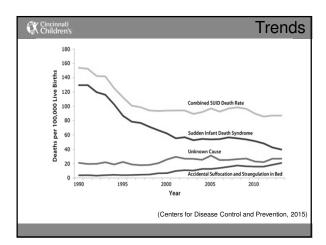
Not communicable

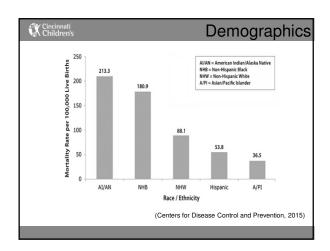
Cardiac and respiratory monitoring does not prevent SIDS

Not result from actions of parents/caregivers

Unpredictable

(Ohio Department of Health, 2015)





# **Risk Factors** Cincinnati Children's **Maternal Risks** · Placental abnormalities Smoking during pregnancy (triples risk) · Low weight gain during · Smoke exposure pregnancy · Anemia • < 20 years old during first pregnancy · Alcohol and substance · Short interval between abuse pregnancies • Hx. of STI's or UTI's · Late or no prenatal care Risk Factors **Environmental Risk Factors** · Sleep positions · Cigarette smoke exposure during pregnancy or infancy · Soft bedding • Objects in crib (toys/stuffed animals)

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· Co-sleeping · Sleep surfaces · Fall and Winter months

Overheating

# Risk Factors

(Ohio Department of Health, 2015)

#### Infant Risk Factors

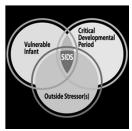
- · Male (almost twice as many in Ohio)
- · Low birth weight
- Prematurity
- · Multiple births
- African American (2-3x higher)
- Native American (2-3x higher)

(Ohio Department of Health, 2015)

# Triple Risk Model

# **Convergence of 3 Conditions Leads to SIDS**

- 1. Vulnerability
- 2. Critical Development Period
- 3. Outside Stressors



(Department of Health and Human Services, 2006)

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# Decreasing the Risk

- · Eliminate co sleeping
- · Use bare cribs
- Avoid sleep positioners/wedges
- · Place infants to sleep on back
- Avoid overheating
- · Receive vaccinations
- · Decrease time spent in car seats, strollers, and swings

(Ohio Department of Health, 2014)



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# Decreasing the Risk

- Breastfeeding (decreases SIDS risk 60%)
- · Avoid smoke exposure
- · Tummy time while awake
- Pacifier use (once breastfeeding is established)
- · Regular prenatal care
- Avoid alcohol/drug use prenatal and after birth
- Make sure every caregiver understands the ABC's of safe sleep
- "Room" share

(Ohio Department of Health, 2014)

# How to Address Barriers

Address the Barriers when Teaching Caregivers about the

A B C's of Safe Sleep



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#### **Barriers**

Will only sleeping on back cause flat spots to back of baby's head?

- Prolonged time on back
- · Goes away on its own
- Tummy time when not sleeping



(U.S. Department of Health and Human Services, 2013)

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#### Barriers

Other caregivers place baby on stomach for sleep.

 Infants who normally sleep on their back and are placed on their stomach occasionally for naps are at a very high risk for SIDS.

Caregiver Considerations:

- Dads
- Grandparents
- Babysitters
- · Daycare providers
- · Healthcare providers
- Foster care

#### Barriers

Baby rolls over in sleep.

- If baby starts rolling over, ok to leave in that position
- Continue putting babies under 1 year to sleep on back



(U.S. Department of Health and Human Services, 2013)

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#### Barriers

"Baby sleeps better on stomach"

- Remember...Safety more important than comfort
  - · Most babies will adjust if repeated
  - Stomach sleeping increases the rebreathing of CO2
- · Causes upper airway obstruction
- · Leads to overheating
- · Less reactive to noise
- Experience sudden *decreases* in blood pressure and heart rate
- · Less arousable, sleep deeper, and move less.

(U.S. Department of Health and Human Services, 2013)



#### Barriers

"Baby needs warmth and comfort from blankets, pillows, bumper pads"

- Can cause suffocation in a matter of seconds
- Crib safety standards with standard rail width
- · Sleep sacks

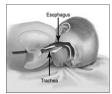


#### Barriers

"Fear of choking from spitting up/vomiting in sleep"

- Trachea over esophagus in back sleeping
- Regurgitated fluid must go against gravity to interfere with the airway





(U.S. Department of Health and Human Services, 2013)

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#### Barriers

#### Reflux

- 70% of infants <12 months have regurgitation
- · Less with breastfed infants
- · Increased by tobacco smoke exposure
- Elevating HOB does not reduce reflux and is NOT recommended
- Flat, back sleeping is best for airway protection (no side lying), according to AAP

(SIDS and Kids, 2013)

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#### Barriers

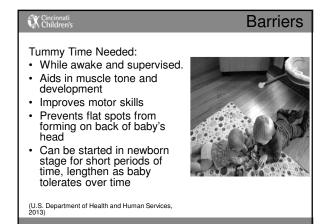
#### **Vaccines**

Multiple studies have been done proving there is no link between vaccinations and SIDS.

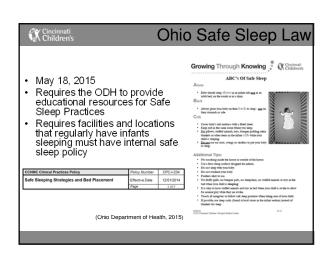
- · Institute of Medicine
- Vaccine Adverse Event Reporting System (VAERS)



(Centers for Disease Control and Prevention, 2015)







# Ohio Safe Sleep Law

Specifies the distribution of safe sleep materials to:

- · Childbirth educators
- OB offices
- · Pediatric physicians' offices
- · Freestanding birth centers and certain hospitals
- · Help Me Grow program
- · Child Care facilities in Ohio
- · Public children services agency

(Ohio Department of Health, 2015)

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# Ohio Safe Sleep Law

- Infant safe sleep screening procedure for hospitals with maternity license
- Resources when there is lack of safe sleep environment
- Hospitals are required annually to report data as specified in model screening form

(Ohio Department of Health, 2015)

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# What is CCHMC doing?

#### CCHMC Nurse's Role:

- Nurses behavior serves as a model of how caregivers will care for infants.
- If we practice safe sleep, they will, too!
- Online module education (Mosby)
- Audits (iRounds)
- Sleep sacks (Coming Soon)
- Decrease in the number of infant blankets and quilts on linen carts once sleep sacks available
- · Knowing Notes: ABCs of Safe Sleep

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Report genera	ated on: 12/2/20	115				
Facility	Unit	Rounds	Overall Sleep Compliance - Yes	Location Compliance - Yes	Position Compliance - Yes	Items in Crib Compliance - Yes
Burnet	A3N	8	30 %	100 %	88 %	50 %
	ASS	1	0 %	100 %	100 %	0 %
	A6C	30	93 %	100 %	100 %	93 %
	A7C1	1	100 %	100 %	100 %	100 %
	A702	1	0 %	100 %	100 %	0 %
	B4N1	5	20 %	60 %	100 %	20 %
Total Burnet		46	72 %	96 %	98 %	74 %
Liberty	LA1W	1	0 %	0 %	100 %	100 %
Total Liberty		1	0 %	0 %	100 %	100 %

Audited):

Overall Sleep Compliance: 72% (59% in October)

Location Compliance: 96% (couch, recliner, swing/bouncy seat, held by

parent/caregiver)
Position Compliance: 98% (stomach)
Items in Crib Compliance: 74% (61 % in October) (loose blankets, diapers/wipes, toys, pillows, cultural/religious items and misc.)

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# What is CCHMC doing?

Safe Sleeping Strategy and Bed Placement Policy

- Infants should sleep alone in appropriate sized bed.
- · Infants under one year must be in a crib unless deemed medically necessary by patient's attending physician or designee.
- Follow AAP recommendations (ABC's of Safe Sleep)



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# What is CCHMC doing?

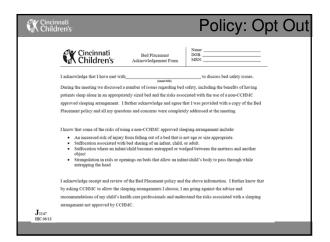
- · Bed sharing only allowed in circumstances of a dying patient or an inconsolable patient (who once is consoled, is to sleep alone)
- · No patients allowed to sleep in the parent/caregiver's bed



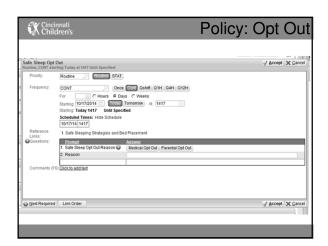
#### Cincinnati Children's Policy: Opt Out **Parental Opt Out:** • Staff should provide safe sleep recommendations (education/Knowing Note, etc.)

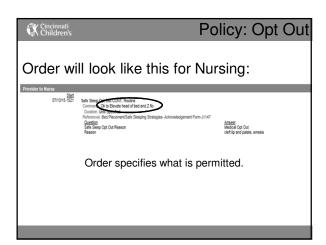
- Bed acknowledgement/safe sleeping recommendation signed and placed in chart
- · Parents receive a copy
- Documentation of ongoing education
- Specific orders by provider for bed arrangement with explanation

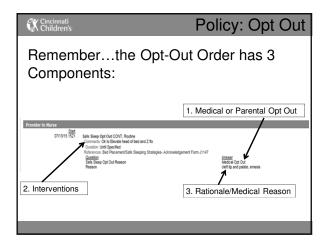
CCHMC Clinical Practices Policy	Policy Number	CPC-I-234	
Safe Sleeping Strategies and Bed Placement	Effective Date	12/01/2014	
	Page	Lof3	



Cincinnati Children's	Policy: Opt Out
Medical Opt Out:	
	r order for any condition olicy that excludes safe
	eeping arrangements that nce with safe sleep





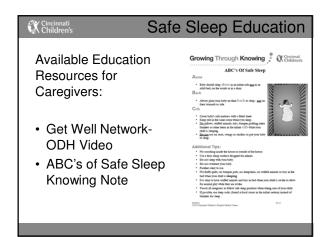


# Policy: Opt Out

Safe Sleep exclusions that do not require an order:

- · Invasive or noninvasive ventilatory support
- Infant <1500 grams
- · Tracheostomy in place
- · Post-op need for non-supine positioning
- Infants with gastroesophageal reflux with the risk of death greater than the risk of SIDS, specifically upper airway disorders who have not undergone anti-reflux surgery
- Additional concerns as outlined in ICU safe sleep guidelines/algorithms

# Policy: Opt Out Transition to Safe Sleep Transition to safe sleep as medical needs decrease. Transitions but safe sleep as medical needs decrease. Transitions but sheep Manage My Version\* Naming Numing Possortions use of decisionmental aids or proposing devices Numing Possortions use of decisionmental aids or proposing devices Numing Possortions use of decisionmental aids or proposing devices Numing Possortions use of decisionmental aids or proposing devices Numing Possortions of blanks Possortions use of decisionmental aids or proposing devices Numing Possortions of blanks Possortions of blanks Numing Numing Possortions of blanks Numing Numi





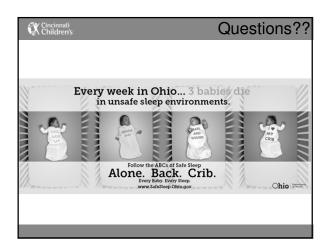
#### Conclusion

Safe Sleep Matters...

We CAN Make a Difference!

Follow/Role Model the ABC's of Safe Sleep

**EDUCATE Caregivers!** 



#### Cincinnati

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