## Analyzing Methods to Improve Infant Sleep Safety





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Disclaimer: This project is submitted in partial fulfillment of the degree requirements of Worcester Polytechnic Institute. The views and opinions expressed herein are those of the authors and do not necessarily reflect the positions or opinions of the United States Consumer Product Safety Commission or Worcester Polytechnic Institute.

## **Presentation Outline**

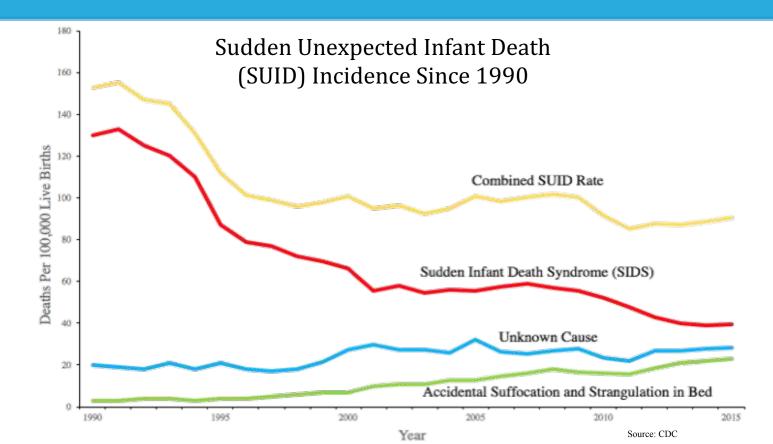


## The Problem

- Safe sleep can be difficult for parents and caretakers, especially if they are under a lot of stress
- Sudden Unexpected Infant Death (SUID) claims the lives of 3,500 seemingly healthy infants in the US every year



## Background



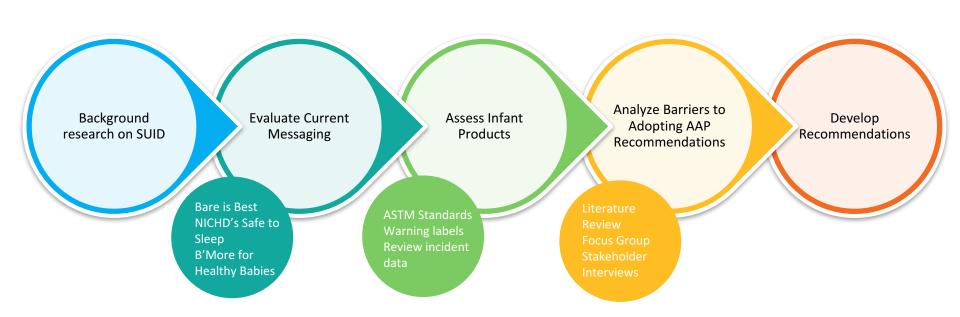
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## **Project Goals**

- Understand barriers that prevent caregivers from following AAP recommendations
- Identify organizations concerned with infant sleep safety
- Provide recommendations for methods to reduce sleep related deaths



## Methodology





## **Stakeholder Interviews**

**Non-Profits** 







Helping Babies Survive & Thrive •







#### Manufacturers





Stylish • Quality • Essentials



#### Messaging and Campaigns





OVERNMENT OF THE DISTRICT OF COLUMBIA



Researchers



6

## Focus Group

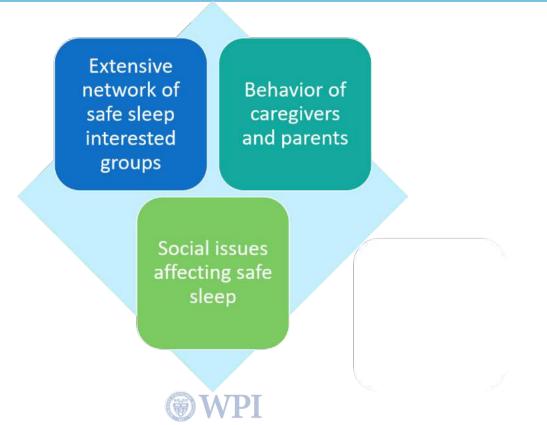
- Can you tell us about your personal experience following the AAP recommendations?
- Where is it that you get information about what products are safe?
- How do reviews and other parents influence your decision about how you will use a certain product?
- How can the presentation of safe sleep information be improved?

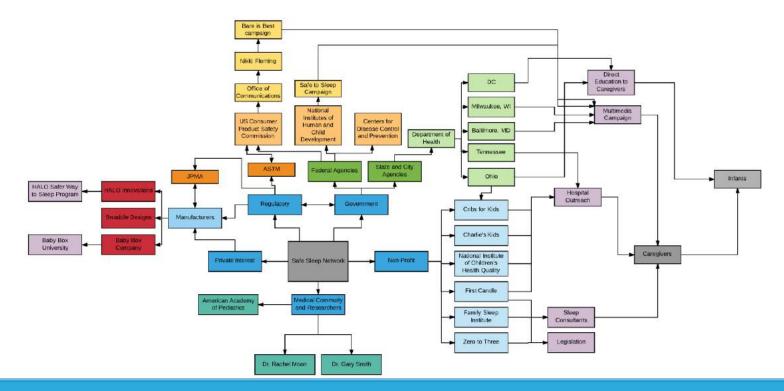
What Are The Barriers To Following Safe Sleep Recommendations?



Source: Florida Department of Health

## Findings





Extensive network of safe sleep interested groups and organizations



## Desperation for sleep often leads to unsafe behaviors

## Caregivers want less risky alternatives to bed sharing

Source: Bambu Productions/The Image Bank/Getty Images

# Bare is Best!

Caregivers generally know the recommendations, but they don't understand reasoning



HEALTH & LIFESTVLE +

Parents, know your ABCs of safe sleep

BREASTFEEDING - BABY - PARENTING -

2 weather alerts ALEDT

PREGNANCY -

CINN

Q

BIRTH -

#### What about babies who cannot sleep on their backs?

Kristina Sauerwein

posted: March 12, 2015, 8:16 am

In: Baby, Pregnant, You and Your Family, Dilemmas, Health & Safety, Me & My Kids, News, Mom Stories

Safe Cosleeping Guidelines

Guidelines to Sleeping Safe with Infants:

Sleep Laboratory, University of Notre Dame.



#### Parents can get a free Baby Box that helps reduce SIDS risks

System developed in Finland, which has one of lowest infant mortality rates

By Aimee Heckel

For the Camera

POSTED: 11/21/2017 07:06:39 PM:MST | UPDATED: 7 DAVE AGO

#### Charlie's Kids Foundation, Inc., Statement on the Use of Cardboard Boxes to Promote Safe Sleep

March 9, 2017

in recent months, there has been an increased focus on using a cardboard box (frequently called "baby boxes") to encourage safe sleep practices in the United States. It is a practice that has been used for generations in Finland. Finnish babies are sent home with a starter kit - a box full of diaper clothes and toiletries for baby. When all the gifts are removed, the box itself can be used as baby's first hed

= mbgrelationships



Adapted from: Maximizing the chances of Safe Infant Sleep in the Solitary and Cosleeping (Specifically, Bed-

sharing) Contexts, by James J. McKenna, Ph.D. Professor of Biological Anthropology, Director, Mother-Baby

## Parents often receive conflicting information

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By Amazon Customer on December 3, 2016 Color: Elephant Love Gray Verified Purchase

This is the best lounger pillow. Easy to just lay anywhere and it holds your baby. You don't have to worry about your baby falling off until they get to the age where they can scoot and roll over. That's when you would have to use it with caution. But for the first few months it did the job and my baby looked comfortable it in. Infact, my son would sleep on it at night with us on the bed. He liked it better than his crib or his pack and play bassinet.



#### Features:

- Recessed interior cradles smaller babies
- Wipeable fabric or machine wash entire pillow
- Only use when your baby's awake

## As consumers, parents are highly influenced by peers and other caregivers' reviews

Sleep environments are often depicted unsafely in media and advertising

"For the first two months or so, the safest way for babies to sleep is on their fronts, head to one side, or else curled up on one side. Then if they are sick there is no chance that they will choke."

Kohner (1984) Pregnancy Book published by the Health Education Council: London.



Many older caregivers are not up to date on current recommendations

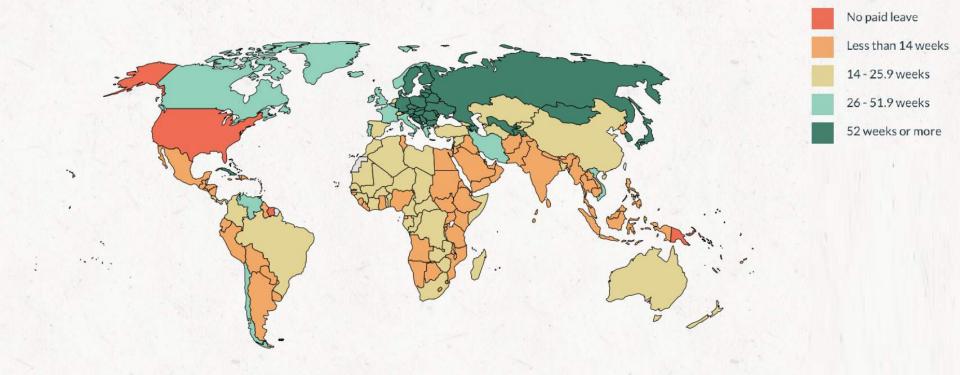
## Sudden Infant Death Syndrome (SIDS)

Source: Medifit Biologicals

"Preventable' and 'SIDS' cannot be used in the same sentence."



## Many caregivers don't think they can prevent SIDS but believe suffocation is preventable



## Parents in the U.S. lack national parental leave policy available in other industrialized countries

## AWARNING

- Failure to follow these warnings and instructions could result in serious injury or death.
- Never leave child unattended.
- Avoid serious injury from falling out or sliding out. Always use restraint system.
- Maximum weight 25 lbs.
- Never use for a child able to sit up unassisted.
- SUFFOCATION HAZARDS: NEVER use on a soft surface (e.g. bed, sofa, cushion). Seat

ALL ALL ANTIPOL



### **WARNING**

FALL HAZARD: Children have suffered serious injuries after falling from changing tables. Falls can happen quickly.

STAY in arm's reach of your child.

**SUFFOCATION HAZARD**: Babies have suffocated while sleeping on changing pads. Changing pads are not designed for safe sleeping.

NEVER allow baby to sleep on changing pad.

FIG. 13 Sample Label – e.g. Contoured Changing Pad

## Messages on warning labels are unclear

floor.Never

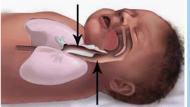
### Recommendations for CPSC Communications and Network







Trachea (Tube to lungs)



Esophagus (Tube to stomach)

Educate parents about how to reduce the risk of SUID while bedsharing Standardize sleep education across child care specialties Add safe sleep education to high school health curriculum Develop a suffocation based campaign

Consumer Health Digest 21

### Recommendations for CPSC and Industry







Work with manufacturers and retailers to promote safe sleep through advertisements Incentivize manufacturers and retailers to refute reviews from parents promoting unsafe product use

Update and improve warning labels



## Parents balance many risks

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## Questions or Comments?

Source: Halo Innovations