On the basis of the New Zealand Cot Study and European data, in 1992 the American Academy of Pediatrics (AAP) recommended that infants no longer sleep in the prone position.1 By 1994, the National Institutes of Health, with other stakeholders, introduced the Back to Sleep campaign. Over the next 10 years, the sudden infant death syndrome (SIDS) rate in the United States fell 53%, correlating with an increase in exclusive supine sleep from <10% to 78%.2 The AAP considers this 1 of the 7 great achievements in pediatric research in the last 40 years.3 But since 2002, the story has become more complicated. The AAP recommendations evolved to back is better than side and then back only in 2005. Other risk factors emerged, such as soft bedding and bed-sharing, and the education campaign became Safe to Sleep in 2012.4 And although the incidence of SIDS continued to decline, other deaths (including accidental suffocation and strangulation in bed and undetermined deaths) began to increase, suggesting a possible “diagnostic coding shift.”5 These sleep-related deaths became known as sudden unexpected infant death (SUID). Unfortunately, the latest drop in SIDS has been offset by these other deaths, resulting in little change in the incidence of SUID in recent years.6

One of the most frustrating trends in infant sleep safety involves the lack of progress in increasing supine sleep rates. Once thought of as low-hanging fruit, overall supine sleep rates have stubbornly stagnated and have actually declined in the African American population, in which SUID rates remain significantly higher compared with white infants.7 Qualitative research has shed light onto some of the barriers to supine sleep and other safe sleep recommendations, such as fear of aspiration and the perceived lack of infant comfort.8,9

A key source of information regarding the infant sleep environment has been the National Infant Sleep Position study; however, funding for this study ended in 2010. Further progress with safe sleep behaviors in the home requires current data on supine sleep to enhance our understanding of how families make these decisions. In this issue of Pediatrics, Colson et al10 provide exactly the kind of information we need to guide providers and public health officials in their efforts to help families maintain the safest sleep environments for their infants.

In this study, the researchers provide a snapshot of infant sleep positioning in the United States by using a large sample of ~3300 mothers surveyed from 32 hospitals nationwide with an oversampling of African American and Hispanic mothers. Two critical components of this study were the comparison of intentions to actual practice and the evaluation of not just usual sleep positioning but all sleep positions used by the mother. The study reveals we have made little progress in terms of promoting the supine sleep position in the past 15 years (73% vs 77%).11 More concerning is that only 49% of mothers exclusively placed their infants in the supine position because unaccustomed prone sleeping presents a significant increased risk of SIDS (adjusted odds
2017

Can Do Better!

Improvements in Infant Sleep Position: We

Goodstein and Ostfeld

1542/peds.‍
org/10.‍

risk of SIDS

education continue to be more likely

mothers with less than high school

SIDS in these populations.‍7,

persistent discrepancy in the rates of

breastfeed, all of which increase the

are more likely to use soft bedding

demonstrated these same groups also

are more likely to use soft bedding

and bed-sharing and are less likely to

breastfeed, all of which increase the

risk of SIDS and partially explains the

discrepancy between intention to use

the correct position (49

6%) who intended to exclusively

use the supine position maintain

(57

45)

in these results is most mothers

(57.6%) who intended to exclusively

use the supine position maintain

the correct position (49.2%). The

discrepancy between intention to use

the supine position and the actual

practice is consistent with a study of

video recordings of parents that

showed infants starting in a safe

sleep environment frequently end up

in an unsafe environment later in the

night.12

A worrisome finding by Colson et al10

is that African American mothers and

mothers with less than high school

education continue to be more likely

to use prone positioning, which is

associated with a twofold increased

risk of SIDS. Other researchers have

demonstrated these same groups also

are more likely to use soft bedding

and bed-sharing and are less likely to

breastfeed, all of which increase the

risk of SIDS and partially explains the

persistent discrepancy in the rates of

SIDS in these populations.7,13,14

What guidance does this study provide for moving forward? Colson et al10 found a lack of perceived

control resulted in a 2.6-fold increased risk of sleeping prone. Mothers who want to practice safe

sleep need to be empowered to insist

that other caregivers in their lives

support their parenting decisions.

As suggested by the National Action

Partnership to Promote Safe Sleep, we

must extend our education of safe

sleep to the influencers of parents,

such as friends, child care providers,

and family, especially grandparents.

Finally, we must look at how we can

help change personal attitudes and

societal norms in favor of supine

sleep, because these issues were

found to be some of the strongest

predictors of prone sleep position

in this study. We must engage

photographers, advertisers, and

the media to promote safe sleep

images. We must engage families

through open, frank, nonjudgmental conversations about their sleep

practices. Perhaps shifting

the conversation from SIDS to

suffocation may be beneficial because

researchers for 1 study determined that

when suffocation was the

outcome risk, mothers had greater

self-confidence that their actions

could keep their infant safe.15

And we as health care providers

need to provide clear and consistent

message also in both word and

behavior. Studies continue to reveal

health care providers disregarding

the evidence-based medicine behind

SUID risk factors and failing to model

safe sleep in the hospital setting.16,17

If we can’t maintain a safe sleep

environment in our birthing

hospitals, what message are we

sending to new parents?

ABBREVIATIONS

AAP: American Academy of

Pediatrics

SIDS: sudden infant death

syndrome

SUID: sudden unexpected infant

death

REFERENCES

1. American Academy of Pediatrics AAP

Task Force on infant positioning and


2. Moon RY; Task Force on Sudden Infant

Death Syndrome. SIDS and other sleep-

related infant deaths: expansion of

recommendations for a safe infant


3. American Academy of Pediatrics;

Pediatric Policy Council. 7 great

achievements in pediatric research in

the last 40 years. Available at: https://

www.aap.org/en-us/Documents/
federalaffairs_seven_great_achievements_in_pediatric_research.

4. National Institutes of Child Health

and Human Development; National

Institutes of Health. Safe to sleep

campaign. Available at: www.nichd.nih.

5. American Academy of Pediatrics

Task Force on Sudden Infant

Death Syndrome. The changing

concept of sudden infant death

syndrome: diagnostic coding shifts,

controversies regarding the sleeping

environment, and new variables to


6. Centers for Disease Control and

Prevention. Sudden unexpected infant
death and sudden infant

death syndrome: data and statistics.

Available at: https://www.cdc.gov/sids/

7. Moon RY; Task Force on Sudden Infant

Death Syndrome. SIDS and other sleep-

related infant deaths: evidence base

for 2016 updated recommendations


8. Oden RP, Joyner BL, Ajao TI, Moon RY.

Factors influencing African American

mothers’ decisions about sleep


Assoc. 2010;102(10):870–872; 875–880


Barriers to following the back-to-sleep

recommendations: insights from focus


10. Colson ER, Geller NL, Heerten T, Corwin

MJ. Factors associated with choice


11. Colson ER, Rybin D, Smith LA, Colton

T, Lister G, Corwin MJ. Trends and

factors associated with infant sleeping

position: the national infant sleep


Adolesc Med. 2009;163(12):1122–1128

12. Batra EK, Teti DM, Schaefer EW,

Neumann BA, Meek EA, Paul IM.

Nocturnal video assessment of infant


13. Shapiro-Mendoza CK, Colson ER,

Willinger M, Rybin DV, Camperlengo

L, Corwin MJ. Trends in infant

bedding use: National Infant Sleep


Trends and factors associated with


Improvements in Infant Sleep Position: We Can Do Better!
Michael H. Goodstein and Barbara M. Ostfeld
Pediatrics; originally published online August 21, 2017;
DOI: 10.1542/peds.2017-2068

Updated Information & Services
including high resolution figures, can be found at:
/content/early/2017/08/17/peds.2017-2068.full

References
This article cites 14 articles, 7 of which can be accessed free at:
/content/early/2017/08/17/peds.2017-2068.full.html#ref-list-1

Subspecialty Collections
This article, along with others on similar topics, appears in the following collection(s):
Fetus/Newborn Infant
/cgi/collection/fetus:newborn_infant_sub
SIDS
/cgi/collection/sids_sub
Injury, Violence & Poison Prevention
/cgi/collection/injury_violence_-_poison_prevention_sub

Permissions & Licensing
Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:
/site/misc/Permissions.xhtml

Reprints
Information about ordering reprints can be found online:
/site/misc/reprints.xhtml
Improvements in Infant Sleep Position: We Can Do Better!
Michael H. Goodstein and Barbara M. Ostfeld

*Pediatrics*; originally published online August 21, 2017;
DOI: 10.1542/peds.2017-2068

The online version of this article, along with updated information and services, is located on the World Wide Web at:
/content/early/2017/08/17/peds.2017-2068.full