



INFANT SAFE SLEEP PRACTICES AMONG MOTHERS GIVING BIRTH IN LOS ANGELES COUNTY 2012

- ❖ *Infant Safe Sleep Practices can prevent sudden infant death*
- ❖ *Supine (back) sleeping rates improved 10 percentage points from 2007 to 2012 (65% to 75%)*
- ❖ *Infant Safe Sleep Practices were less common if moms:*
 - *lived in South Los Angeles (SPA 8)*
 - *were under 20*
 - *had less than high school education*
 - *were African American*
 - *began prenatal care late or had no prenatal care*
 - *were on Medi-Cal*
 - *were unmarried/living alone*
 - *had unintended pregnancy*
 - *reported abuse during pregnancy*
 - *were exposed to second hand smoke.*

Why do Infant Safe Sleep Practices Matter?

Infant Safe Sleep Practices can contribute to the reduction of sudden unexpected infant deaths (SUID). Safe sleep practices include placing babies in the supine (back) sleeping position and not sharing the bed with the infant. SUID is defined as deaths in infants less than one year of age that occur suddenly and unexpectedly, and whose causes of death are not immediately obvious prior to investigation.¹ Frequently, a cause of death is determined after a thorough investigation and autopsy by a medical examiner and coroner. The three leading causes of SUID are: SIDS (Sudden Infant Death Syndrome, which includes unknown causes of death), accidental suffocation, and strangulation by bedclothes or blankets.

SUID is a significant public health concern as cases may be prevented by safe sleep practices and environments. Losing a baby is an indescribable, excruciatingly painful, and stressful event for parents and families. It may lead to unresolved grief, depression, and other mental health concerns. This can add stress in preparing for subsequent pregnancies and in parenting, which may affect the development of subsequent children.

Supine (back) sleeping has been found to be an important factor in the reduction of SIDS. The National Healthy People 2020 Objective for infant sleep position was to increase the proportion of infants placed on their backs to sleep to 76%.² In the United States, the number of infants sleeping on their backs has increased from 36% in 1996 to more than 70% in 2007. The rate of SIDS has decreased by more than 40% since supine sleeping was introduced in 1992.

The American Academy of Pediatrics (AAP) recommends that all infants not only be placed in a supine sleep position but also should not bed share. Infants should be placed on a firm surface, on their back, away from objects while sleeping, and although it is encouraged they are in the same room, they should not be bed sharing with anyone.³

This brief describes self-reported safe sleep practices, the trend of infant sleeping positions, and bed sharing practices among mothers in Los Angeles County (LA County). The data are from the Los Angeles Mommy and Baby survey (LAMB) during the 2007, 2010, and 2012 regular data collection cycles, identifying target groups for educating and promoting safe sleep messaging.

American Academy of Pediatrics recommends that infants be placed on their back for every sleep³

- **Use firm sleep surface**
- **Room-share without bed-sharing**
- **No soft objects and loose bedding in the crib**
- **Receive regular prenatal care**
- **Avoid smoke, second-hand smoke, alcohol and illicit drug exposure**
- **Consider offering a pacifier at nap time and bedtime**
- **Avoid overheating**

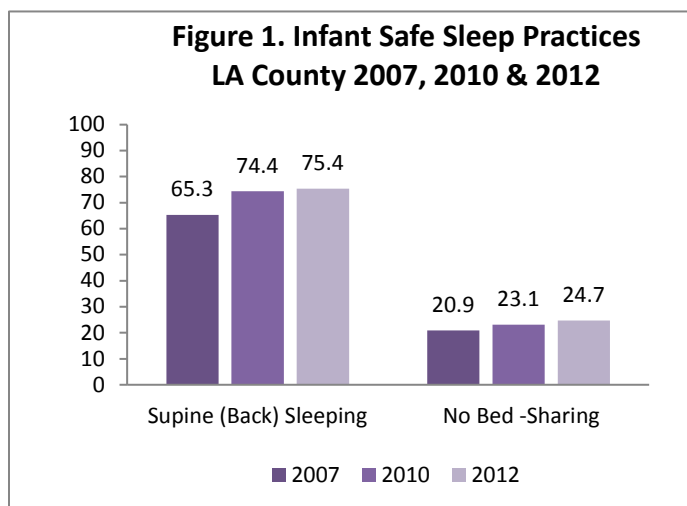
Methods

LAMB is a biennial population based mixed mode survey conducted by the Los Angeles County Department of Public Health, Maternal Child and Adolescent Health (MCAH) Programs. LAMB is based on self-reported experiences of mothers who recently delivered a live baby. The survey is designed to monitor events that may have occurred before, during, and after pregnancy to improve existing programs and identify emerging MCAH issues and policies in Los Angeles County. Findings from LAMB have supported local programs and community partners to design strategies to improve birth outcomes. Approximately 6,000 mothers responded to the survey each project cycle. The analyses included in this brief are based on two LAMB questions relevant to sleeping practices: (1) what position the infant is placed down to sleep most of the time and, (2) whether the infant sleeps in the same bed with the mother or anyone else.

Findings

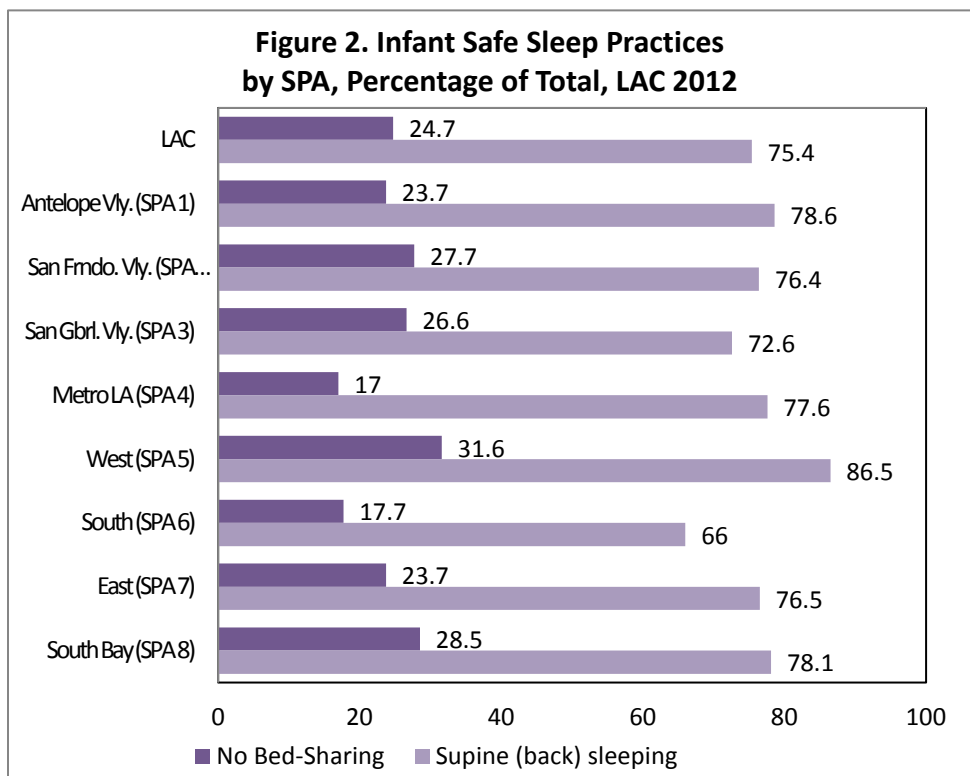
Prevalence of Sleep Practices among Mothers in LA County in 2007, 2010, and 2012

Since 2007, the prevalence of supine position sleeping has progressively increased from 65% to 75%. In contrast, not bed sharing among infants appears to remain more stable, with a modest increase from 21% to 25% between 2007 and 2012 (Figure 1).



Prevalence of Sleep Practices among Mothers by Service Planning Area (SPA) in LA County, 2012

LA County is divided into eight geographically distinct SPAs for public health planning purposes. Analysis of 2012 LAMB data revealed varying prevalence of infant sleep practices among mothers by SPA (Figure 2). Mothers who resided in South Los Angeles (SPA 6) and the San Gabriel Valley (SPA 3) were least likely to report placing their infants to sleep on their back. Bed sharing was highest among moms in the South Los Angeles (SPA 6) as well as Metro LA (SPA 4).



Infant Safe Sleep Practices by Maternal Characteristics

Although everyone’s situation is unique, understanding what maternal characteristics are associated with safe sleep practices helps health care and service providers to remove the barriers families may face and to improve outreach and health education messages. Table 1 presents the prevalence of infant safe sleep practices by mother’s characteristics. Demographics, social support, and financial status were all related to infant safe sleep practices.

With regard to demographics, younger mothers, particularly teen moms, as well as mothers with less than a high school education engaged in safe infant sleep practices less frequently than other and more educated moms. Similarly, Asian/Pacific Islander and African American moms reported less frequent safe sleep practices.

Having social support helped promote safe sleeping practices. Mothers who were unmarried/not living with their partners were associated with lower rates of back sleeping and higher rates of bed sharing. Mothers who reported abuse by their partner were significantly less likely to put their baby to sleep in a supine position and refrain from bed-share when compared to mothers who reported no abuse by their partners.

Financial status also was associated with infant safe sleep practices. Moms enrolled in the WIC program reported lower safe sleep practice rates. Further, women who carried private insurance at delivery indicated better supine sleeping rates than women with government-supported insurance. These associations indicate that women in lower socioeconomic categories engage in safe sleep practices less frequently than women in higher socioeconomic categories.

Table 1. Infant Safe Sleep Practices by Selected Maternal Characteristics

Maternal Characteristics	Significant Association (See Note)	Supine (Back) Sleeping 95% CL			Non Bed-Sharing 95% CL		
		Percent	Lower CL	Upper CL	Percent	Lower CL	Upper CL
Total All Mothers		75.4	72.9	77.9	24.7	22.6	26.7
Maternal Age							
Under 20 years	† ^	68.3	65.0	71.6	15.8	13.4	18.2
20 years and older		75.9	73.2	78.7	25.3	23.2	27.5
Maternal Education							
Less than high school		66.0	61.7	70.3	16.7	13.7	19.6
High school	† ^	69.3	62.7	75.8	28.5	22.2	34.8
Some college or college graduate		81.5	78.1	84.8	26.4	24.1	28.7
Maternal Race/Ethnicity							
White		84.6	82.2	87.0	35.8	32.9	38.7
Hispanic		74.9	72.5	77.2	23.2	21.0	25.3
Black	† ^	63.2	59.8	66.7	11.8	9.6	13.9
Asian/Pacific Islander		71.7	58.9	84.6	23.6	13.4	33.7
Native American/Other/Unknown		78.8	74.2	83.3	25.4	21.2	29.7

Table 1. Infant Safe Sleep Practices by Selected Maternal Characteristics (continued)

Maternal Characteristics	Significant Association (See Note)	Supine (Back) Sleeping 95% CL			Non Bed-Sharing 95% CL		
		Percent	Lower CL	Upper CL	Percent	Lower CL	Upper CL
Health Insurance at Delivery							
Medi-Cal/Other Gov't Programs	†	68.9	66.5	71.3	20.4	18.4	22.4
Private Insurance		85.7	84.1	87.3	29.7	27.6	31.9
Other/None/Self-Pay/Unknown		57.0*	25.9	88.2	28.2*	1.4	55.0
Marital Status							
Married	† ^	78.7	74.5	82.9	29.3	26.0	32.6
Never Married/Living Together		73.2	70.0	76.4	20.0	17.4	22.6
Unmarried/Not Living with Partner		67.0	62.9	71.2	17.8	14.3	21.2
Pregnancy Intention							
Intended	† ^	78.5	75.1	81.9	30.1	26.9	33.4
Unintended		71.7	67.8	75.5	18.7	16.6	20.8
Abuse by Partner							
Abuse during pregnancy	† ^	67.0	57.3	76.7	15.2	11.6	18.7
No abuse		76.8	74.4	79.2	26.3	24.1	28.6
WIC During Pregnancy							
Received WIC	† ^	71.8	69.6	73.9	20.7	18.9	22.5
Did not need or receive WIC		81.2	75.1	87.3	31.6	27.0	36.1
Second-hand Smoke Exposure							
Exposure	† ^	66.7	59.0	74.4	17.6	11.4	23.8
No Exposure		76.2	73.4	78.9	25.3	23.1	27.5

†= statistically significant association for supine (back) sleeping position

^= statistically significant association for non-bed sharing

*=statistically unstable

CL=Confidence Level. One way to represent how "good" an estimate is; the larger a 95% confidence interval for a particular estimate, the more caution is required when using the estimate.

Summary

In 2012, 25% of new LA County moms did not bed share with their infant and 75% of moms put their babies on their back to sleep. Maternal characteristics were significantly associated with infant safe sleep practices. Mothers who engaged in less frequent supine sleeping and more frequent bed-sharing tended to be young, minority, and

moms who reached less educational attainment when compared to their peers. Lower socioeconomic status also was tied to fewer safe sleep practices, as having public health insurance was tied to decreased back sleeping and bed-sharing. Having a present and supportive partner was also tied with better safe sleep practices.

LA County has a robust array of activities targeted at preventing SIDS as well as helping families through the grief of losing a child to SIDS like support groups and bereavement assistance. In Fiscal Year 2013-2014, 32 families utilized this support⁵.

Recommendations

For Parents and Caregivers

- Follow AAP recommendations for safe sleep practices to always place infants in a back to sleep position and avoid bed sharing.
- A safe sleep environment for a baby is alone in their own sleeping space, on their backs on a firm sleep surface; and in a crib or bassinet free of pillows, blankets, bumpers, sleep positioners, and other objects.⁴
- Share with all individuals who may care for your infant the risks associated with SIDS/SUID and significance of safe sleeping practices.

For Health Care Providers

- Discuss risk of SIDS/SUID with pregnant mothers during prenatal and/or perinatal visits.
- Provide women, particularly adolescent mothers, with health education on the importance of safe sleep practices and discourage bed sharing.
- Support and promote baby safe sleeping practices.

Data Analyses and Limitations

All data analyses were conducted using Statistical Analysis Software (SAS) version 9.3 and weighted to represent the experiences of all women who delivered a live birth in 2007, 2010, and 2012. Data from LAMB are based on participant self-report. There is some variation in the age of the infants at the time the mothers were interviewed and this may influence responses to sleep positioning and bed sharing.

Resources

Los Angeles County Department of Public Health: Maternal Child and Adolescent Health Programs, Sudden Infant Death Syndrome (SIDS) Program

<http://publichealth.lacounty.gov/mch/sids/sids.htm>

- A Message to Parents about Safe Sleep <http://www.publichealth.lacounty.gov/mch/sids/SafeSleepBilingualv2.pdf>
- Grief Support Resources for Parents and Families with Infant and Fetal Loss Los Angeles County http://www.publichealth.lacounty.gov/mch/sids/Grief%20Support%20Informations_complete.pdf
- Education Campaign for Health Care Professionals http://www.publichealth.lacounty.gov/mch/sids/sids_healthcareprofessionals.htm
- Education Campaign for Parents http://www.publichealth.lacounty.gov/mch/sids/sids_ParentsFamilies.htm

Safe to Sleep Campaign

<http://www.nichd.nih.gov/sts/Pages/default.aspx>

National Center for Education in Maternal and Child Health, Georgetown University, Sudden Unexpected Infant Death (SUID) & Sudden Infant Death Syndrome (SIDS) Gateway

<http://ncemch.org/suid-sids/index.php>

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4. FDA. Tips for Parents/Caregivers.
<http://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/SIDSPreventionClaims/ucm275782.htm>
5. County of Los Angeles. Maternal, Child and Adolescent Health (MCAH) Program Fiscal Year 2013-14 Annual Report.

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Los Angeles County Department of Public Health

Cynthia A. Harding, MPH, Interim Director

Maternal, Child and Adolescent Health Programs

Suzanne Bostwick, Interim Director

Research, Evaluation and Planning Unit

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Shin Margaret Chao, PhD, MPH, Chief
Diana Liu, MPH, Epidemiologist
Chandra Higgins, MPH, Epidemiologist
Sam Wing, MPH, Epidemiology Analyst
Marian Eldahaby, Research Analyst

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