

Sudden Unexpected Infant Deaths During Sleep

Steve P. Tran and Bernadette Emery

September 2020

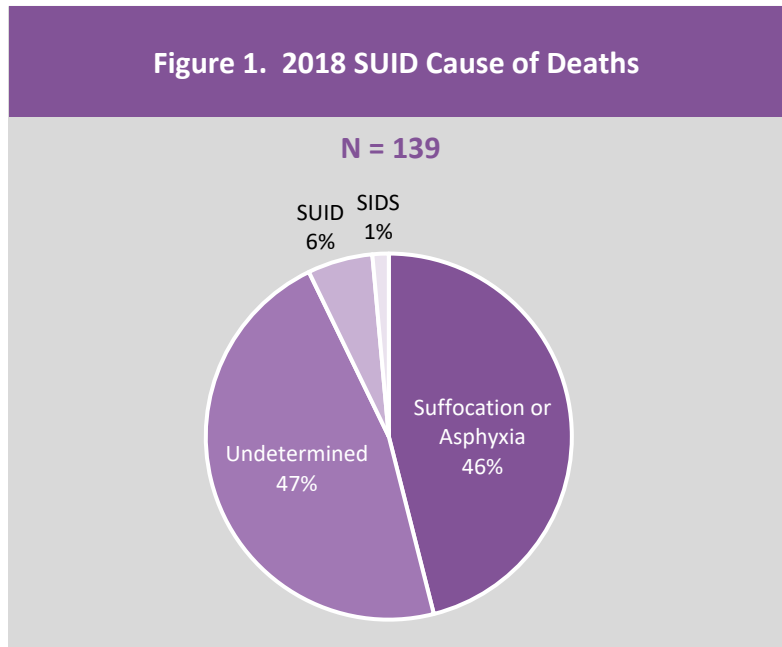
For several decades, the Child Death Review Teams (CDRTs) have been interested in understanding why babies were dying in their sleep. Sudden Unexpected Infant Deaths (SUIDs) during sleep refers to the death of an infant younger than one year of age that occurs suddenly and unexpectedly while sleeping. Sudden Unexpected Infant Deaths during sleep encompass all deaths that are certified as 1) unintentional suffocation or asphyxia; 2) undetermined; 3) Sudden Infant Death Syndrome (SIDS); and 4) Sudden Unexpected Infant Death (SUID). Sudden Infant Death Syndrome (SIDS) is the sudden death of an infant that cannot be explained after a thorough investigation is conducted that includes a complete autopsy, examination of the death scene and review of the clinical history. SUID refers to the death of an infant that cannot be explained because a thorough investigation was not conducted and the cause of death could not be determined. SUID is also used when accidental suffocation and strangulation in bed occurs.

Infants sleep deaths were assigned a classification of SIDS for many years. However, fewer deaths were identified as SIDS when the classification of SUID came into usage. Findings from research revealed that infants' sleep environments were critical for the safety of children. It was found that caretakers often unknowingly were endangering children by following common practices that have been used by many families for decades (Kemp et al., 2000). For example, caretakers often place babies on their stomach for sleep and use blankets to keep them warm. Items such as pillows, bumper pads, and stuffed animals are also common in an infant's sleeping environment, and infants are also often comforted in a caretaker's bed if they are being fussy. However, research now shows that fewer babies die if they sleep alone, in a crib, on their back without pillows, blankets, toys, and bumper pads.

Sudden Unexpected Infant Deaths were the 3rd leading cause of death of children in Illinois in 2018, and many of the deaths reviewed by the CDRTs were sleep related. The CDRT Executive Council and CDRTs therefore requested additional information on these deaths in the 2018 Child Death Review Teams annual report. This brief highlights findings from the special chapter on Sudden Unexpected Infant Deaths During Sleep from the 2018 annual report.

Examining SUID Child Deaths by Cause

Sudden unexpected infant deaths were the 3rd leading cause of death of children in Illinois in 2018; 139 infants died unexpectedly while sleeping in 2018, accounting for nearly 10% of the 1,398 total child deaths in 2018. As seen in Figure 1, 46% of these deaths were caused by suffocation or asphyxia, 47% were undetermined (while sleeping), 6% were from SUID, and 1% were from SIDS.



Examining SUID Child Deaths by Age, Gender, and Race/Ethnicity

As seen in Figure 2, the majority of SUIDs during sleep are younger infants; infants 3 months and under accounted for 68% of SUIDs during sleep. In addition, SUIDs during sleep were more common for boys (58%) than girls (42%).

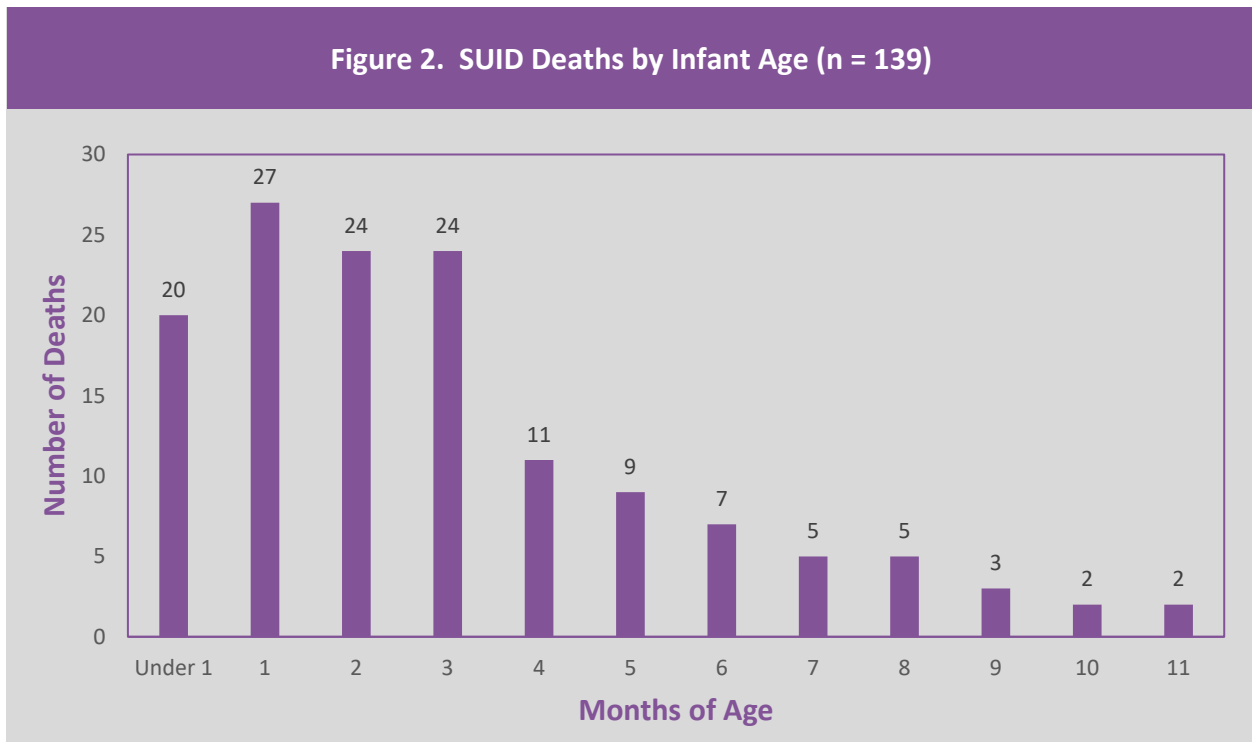
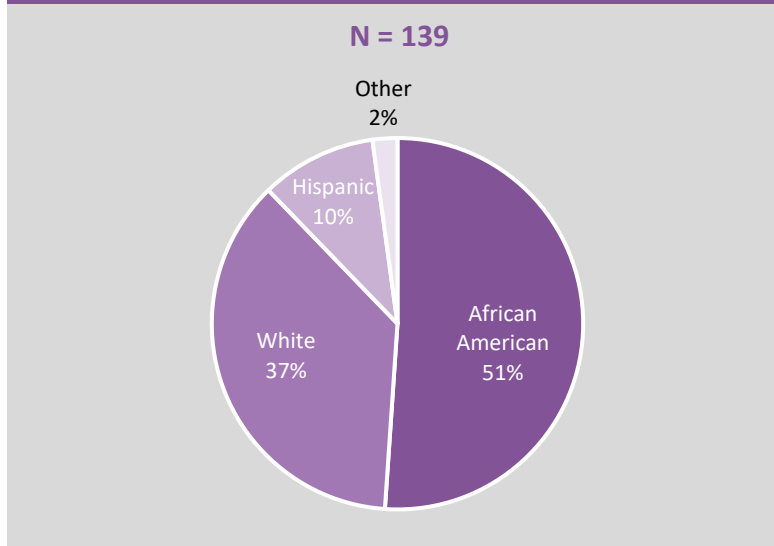


Figure 3. SUID Deaths by Infant Race/Ethnicity



In 2018, 67% of children in Illinois were White, 14% were African American, 5% were Asian, and the remaining 14% were of other races. For reports on ethnicity, 25% were Hispanic or Latino (of any race), 51% were White (not Hispanic or Latino), and 24% were neither Hispanic/Latino or White (U.S. Census Bureau, 2020).

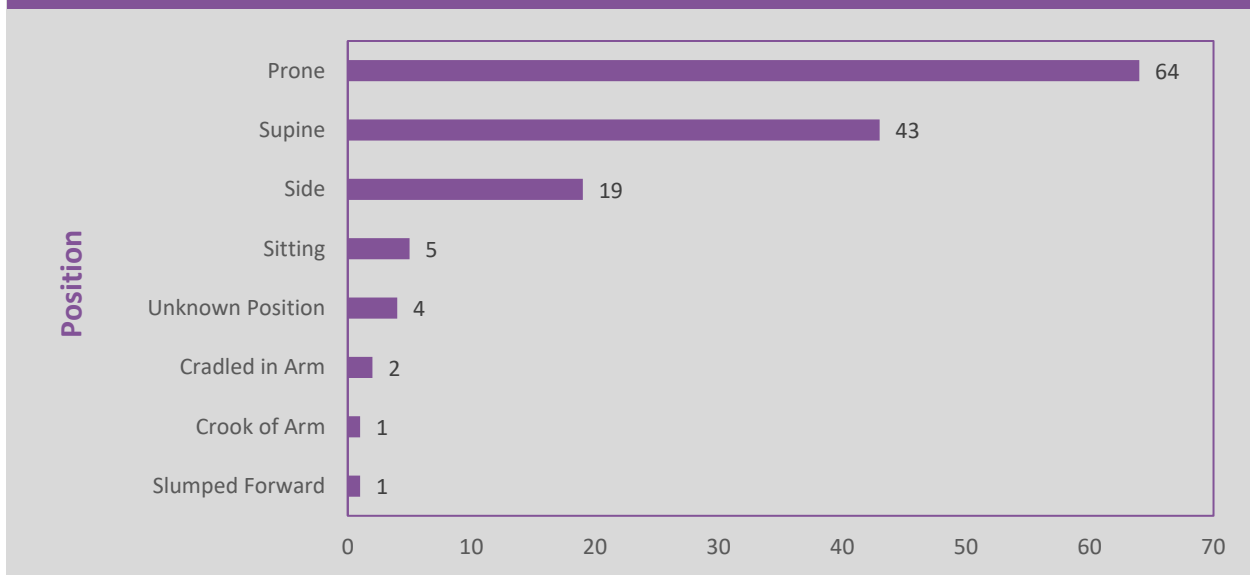
As shown in Figure 3, the largest proportion of SUIDs during sleep were African American children (51%), followed by White children (37%), Hispanic children (10%), and children of other or

unknown race/ethnicity (2%). These findings show that African American children are overrepresented in sleeping deaths relative to their overall population in the state.

Examining the SUID During Sleep and Environment

Figure 4 displays the sleeping positions of infants in SUIDs. Infants were in a prone position (i.e., on stomach) in 46% of SUIDs during sleep.

Figure 4. Infant Positions in SUIDs



In addition, alcohol use or drug use was noted in 23% of SUIDs during sleep and bed-sharing occurred in 71% of SUIDs during sleep. These findings are in line with previous research that have associated SUIDs during sleep with prone sleeping positions, caretaker use of drugs or alcohol, and bed-sharing.

Table 1 presents the locations and environments of the SUIDs during sleep. Adult beds were by far the most common location of SUIDs (59%). Blankets/bedding were present in 84% of deaths, and pillows were present in 65% of deaths.

Table 1. Location and Environment of SUIDs During Sleep			
Location of Infant	Counts		
	Number of Deaths	Number with Blanket/Bedding	Number with Pillows
Adult Bed	82	82	82
Couch	14	5	0
Crib	11	9	0
Bassinet	8	3	4
Pack n Play	4	4	2
Car Seat	4	3	0
Floor	3	3	0
Air Mattress	2	2	0
Bouncer	2	0	0
Futon	2	2	0
Unknown Location	2	2	0
Toddler Bed	1	1	0
Love Seat	1	0	1
Twin Mattress	1	1	0
Child Bed	1	0	1
Recliner	1	0	0
TOTAL	139	117	90

Conclusion

The Safe to Sleep (Back to Sleep) Campaign was created to educate the public on safe sleeping practices, which identified bed sharing, prone sleeping position, sleeping in an adult bed, the use of blankets, pillows, secondhand smoke, and caretaker inebriation or other drug use as

unsafe sleep conditions for infants (U.S. Department of Health and Human Services National Institutes of Health, n.d.). Although the campaign has experienced success in educating the public on safe infant sleep practices, traditions and cultural customs persist. For example, some professionals still are proponents of bed-sharing. In addition, placing infants on their stomach and the usage of blankets and pillows is still common within many households. Data from the most recent Illinois Child Death Review Team annual report show that these practices contribute to infant deaths during sleep and suggest that additional public education campaigns may be needed.

Recommended Citation

Tran, S.P., & Emery, B. (2020). *Sudden Unexpected Infant Deaths (SUID) During Sleep*. Urbana, IL: Children and Family Research Center, University of Illinois at Urbana-Champaign.

Related Publications

Illinois Department of Children and Family Services. (2020). *The Illinois Child Death Review Team Annual Report - 2018*. Springfield, IL: Author.

Acknowledgements

This research brief was supported by the Illinois Department of Children and Family Services. The information and opinions expressed herein reflect solely the position of the authors and should not be construed to indicate the support or endorsement of its content by the funding agency.

References

Kemp, J.S., Unger, B., Wilkins, D., Psara, R.M., Ledbetter, T.L., Graham, M.A., Case, M., & Thach, B.T. (2000). Unsafe sleep practices and an analysis of bedsharing among infants dying suddenly and unexpectedly: Results of a four-year, population-based, death-scene investigation study of sudden infant death syndrome and related deaths, *Pediatrics*, *106*, e41.

U.S. Census Bureau. (2020). 2018: ACS 5-Year Estimates Subject Tables. Retrieved from <https://data.census.gov/cedsci/table?q=children%20under%2018%20illinois&tid=ACSST5Y2018.S0901&t=Children>

U.S. Department of Health and Human Services National Institutes of Health (n.d.). Safe to sleep public education campaign. Retrieved from <https://safetosleep.nichd.nih.gov/activities/campaign>.