

Infant Deaths During Sleep in 2019

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Illinois Child Death Review Teams (CDRTs) have been reviewing infant deaths for more than a quarter of a century. The goals of child death reviews include gaining a better understanding of the causes of child deaths and recommending changes in practice to prevent future deaths. Many of the reviews conducted by the CDRTs involve unsafe sleep, and for the past several years they have sought to bring increased attention to infant deaths due to unsafe sleep. As a result, the annual reports on child deaths that occurred in 2018 and 2019 have included a special chapter titled “Sudden Unexpected Infant Deaths During Sleep” that examines the deaths of infants younger than one year of age that occur suddenly and unexpectedly while sleeping.

Sudden unexpected infant deaths during sleep include deaths that are certified by a coroner or medical examiner as 1) unintentional suffocation or asphyxia in a sleeping environment; 2) undetermined with unsafe sleep conditions present; 3) Sudden Infant Death Syndrome (SIDS); and 4) Sudden Unexpected Infant Death (SUID). As a result, the information and data from several sections of the annual report are used to examine these deaths, including the sections on suffocation, undetermined, SIDS, and SUID (Illinois Department of Children and Family Services, 2021).

Research has revealed that infants’ sleep environments are critical for the safety of children. It was found that caretakers were unknowingly endangering children by following common cultural practices that have been used by many families for decades, including placing babies on their stomach for sleep, using blankets to keep them warm, placing items such as pillows, bumper pads, stuffed animals, toys and clothes in the infant’s sleeping environment, and bed-sharing with caretakers or other children. Research has shown that fewer infants die if they sleep alone, in a crib, on their back, and without items such as pillows, blankets, toys, and bumper pads (Kemp et al., 2000).

The combined categories of sudden unexpected infant deaths during sleep were the 3rd leading cause of death of children in Illinois for the calendar year 2019; 121 of the 1,214 total child deaths in Illinois that year involved these deaths. The Illinois Child Death Review therefore conducted a detailed examination of these deaths by child race/ethnicity, gender, age, sleeping position, and the locations and environments of the deaths. This brief highlights the findings of these analyses.

Examining Infant Deaths During Sleep by Cause of Death

Figure 1 examines infant deaths during sleep by cause of death and shows that 46% of these deaths were caused by suffocation or asphyxia, 43% were undetermined with unsafe sleep conditions, 7% were from SUID, and none were due to SIDS. Four infant deaths during sleep (3%) were ruled as viral pneumonia by a coroner, but unsafe sleep conditions were also present. Many coroners and medical examiners require irrefutable evidence of suffocation before ruling it as the cause of death, but suffocation is difficult to detect in autopsies, which may lead to some deaths being ruled with a different cause such as illness. For the examination of infant sleep deaths, however, pneumonia with unsafe sleep conditions was included as a cause of death.

Figure 1. Cause of Death

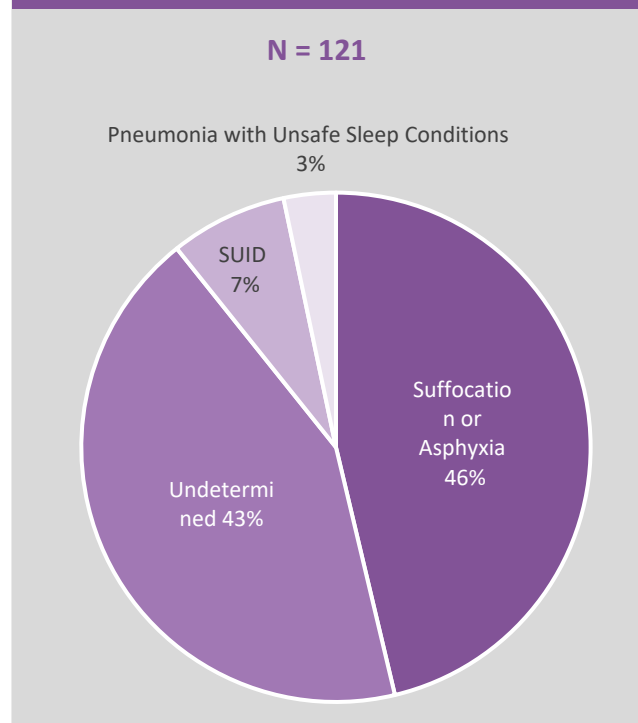
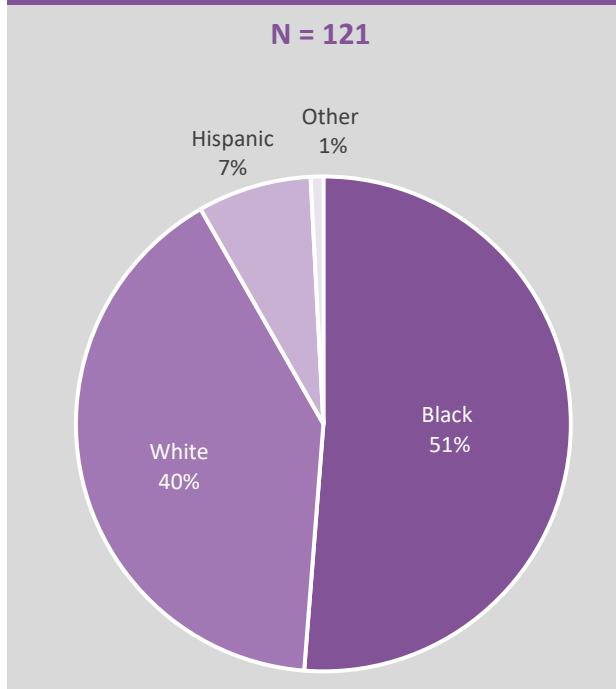


Figure 2. Deaths by Race/Ethnicity



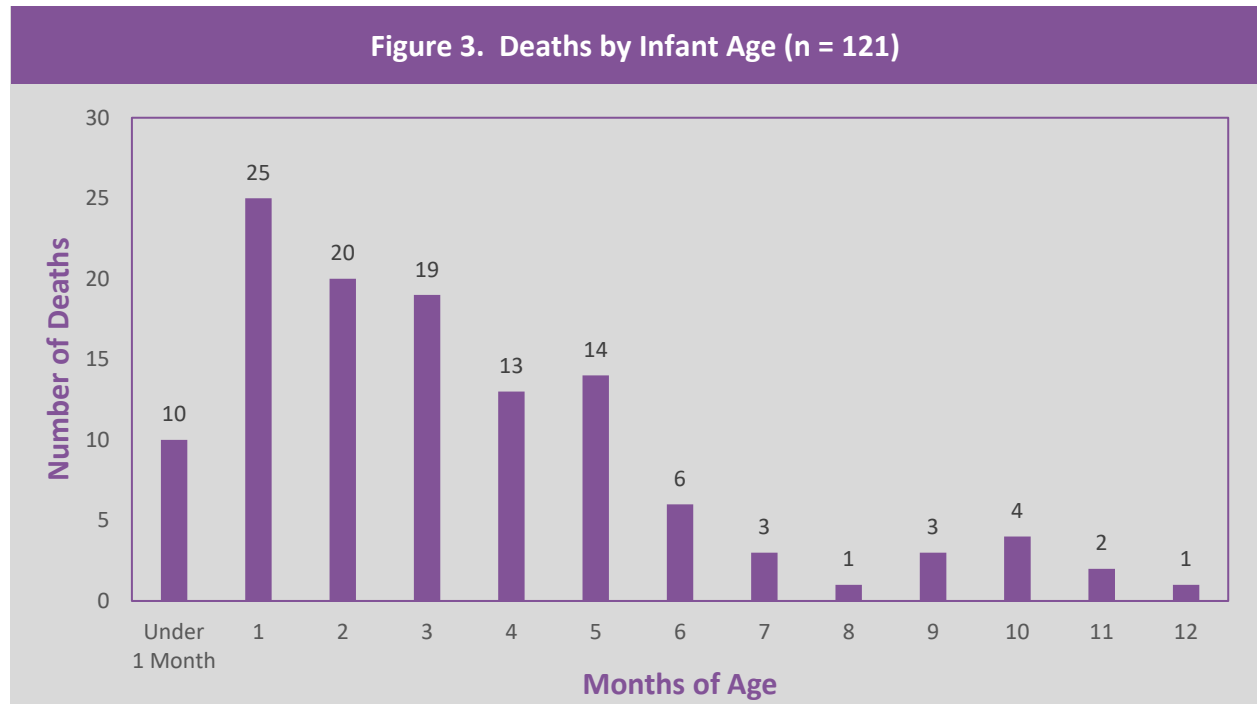
Examining Infant Deaths During Sleep by Race/Ethnicity, Age, and Gender

In 2019, 66% of children in Illinois were White, 15% were Black, 5% were Asian, and the remaining 14% were of other races. For reports on ethnicity, 25% self-identified as Hispanic or Latino (of any race), 51% were White (not Hispanic or Latino), and 24% were neither (U.S. Census Bureau, 2021).

As shown in Figure 2, the largest proportion of infant deaths during sleep were Black children (51%), followed by White children (40%), Hispanic children (7%), and children of other or unknown race/ethnicity (1%). These findings indicate that Black children are overrepresented in deaths relative to their overall population in the state.

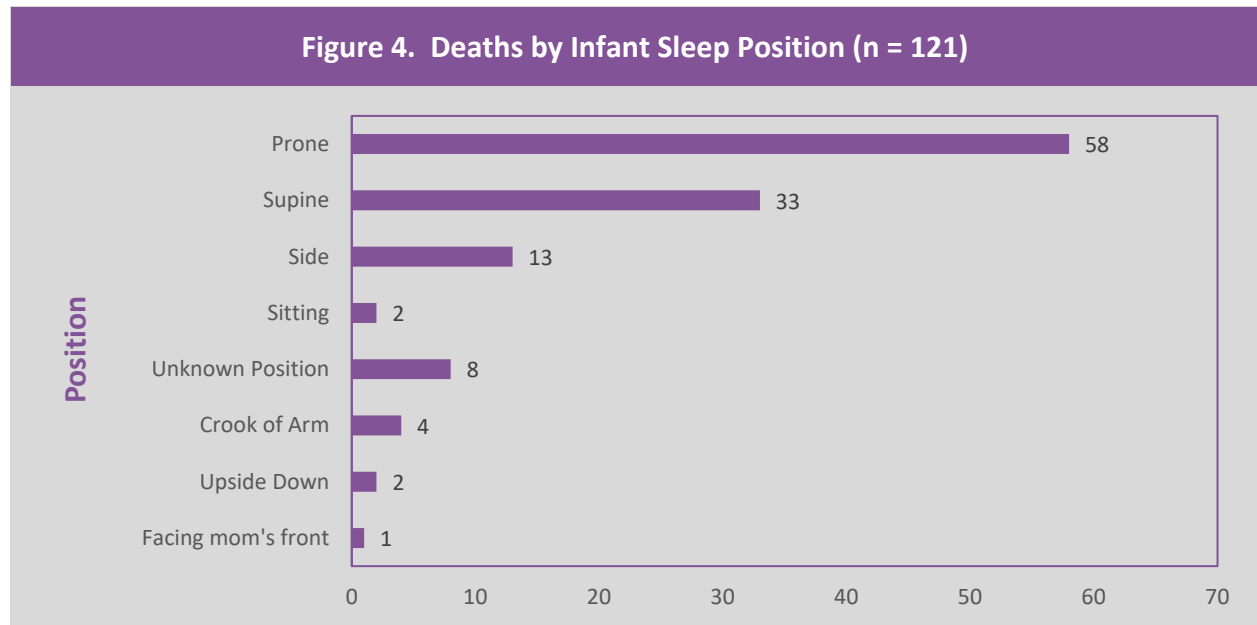
As seen in Figure 3, the majority of deaths are younger infants; infants five months and

under accounted for 83% of deaths, and the number of deaths decreased dramatically for older infants. In addition, these deaths were more likely to be infant boys (69%).



Examining Infant Deaths During Sleep and Environment

Figure 4 displays infant sleeping positions in these deaths. Infants were in a prone position (i.e., on stomach) in 58 of the 121 deaths (48%).



As seen in Figure 5, it was found that bed-sharing occurred for 61% of deaths. Alcohol or drug use was noted in 20% of deaths. These statistics reflect the findings in previous research that have associated sudden unexpected infant deaths during sleep with prone sleeping positions, caretaker use of drugs or alcohol, and bed-sharing.

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

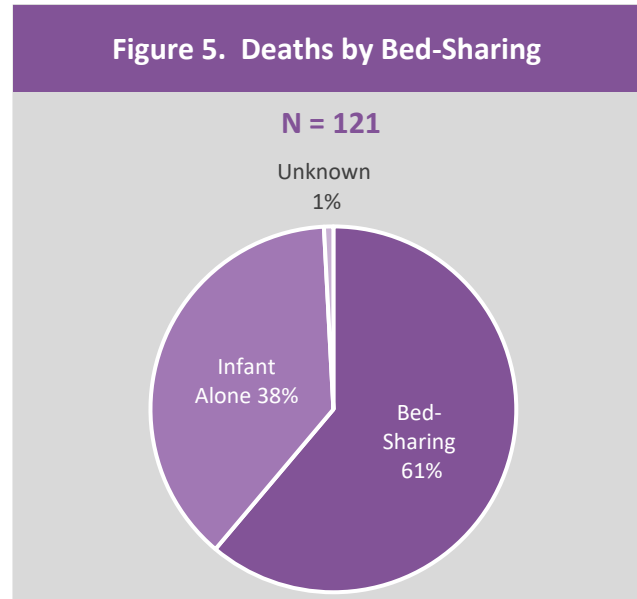


Table 1. Location and Environment of SUIDs During Sleep

Location of Infant	Counts		
	Number of Deaths	Number with Blanket/Bedding	Number with Pillows
Adult Bed	66	66	66
Couch	11	3	0
Crib	5	3	0
Bassinet	11	10	1
Pack n Play	10	7	3
Car Seat	3	2	0
Floor	5	5	0
Air Mattress	4	3	0
Futon	1	1	0
Unknown Location	2	0	1
Trundle Bed	1	1	0
Bouncy Seat	1	1	0
Baby Carrier	1	0	0
TOTAL	121	102	71

Conclusion

The Safe to Sleep (Back to Sleep) campaign was created to educate the public on safe sleeping practices, which identified bed-sharing, sleeping prone, 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 are still needed.

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Related Publications

Illinois Department of Children and Family Services. (2021). *The Illinois Child Death Review Team Annual Report — 2019*. Springfield, IL: Author.

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References

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