

# Sudden Unexpected Infant Death

---

Cook County

2019



CCMEO

# Executive Summary

---

## Background

Each year in the United States, approximately 3,500 infants die suddenly and unexpectedly before their first birthday. These Sudden Unexpected Infant Deaths (SUID) are the leading threat to life between 1 month and 1 years old. For the past two decades there has been little progress in preventing these deaths. However, beginning in 2019, SUIDs in Cook County were added to a national surveillance system to shed light on the circumstances of these deaths and provide information that could aid in prevention. This is the first annual report of the Sudden Unexpected Infant Death Case Registry for Cook County.

## Findings

In 2019, 49 infants who resided in Cook County died suddenly and unexpectedly. Of these, 45 deaths were sleep-related. Here are a few key findings:

- All sleep-related deaths involved the baby being in an unsafe sleep situation.\*
- In Cook County, SUID occurred 16 times more often in Black infants, and nearly 4 times more often in Hispanic infants when compared with white infants.\*\*
- SUID were more frequently seen on the West and South sides.
- Forty-one out of the 45 infants (91%) died with soft bedding or items in their sleeping environment.
- Twenty-two out of 45 infant deaths (50%) died while sleeping in a bed with another person.
- Eight of the sleep-related deaths (18%) were from suffocation.\*\*\*
- Thirty-five out of 45 infants (78%) died before the age of 6 months with a peak at 2 months.
- Nine out of 45 infants (20%) had a history of prematurity.

## Conclusion

About once a week in Cook County, an infant dies unexpectedly, typically in an unsafe sleep situation. There is a large racial and ethnic disparity among these deaths, with Black and Hispanic infants dying at rates 16 and 4 times that of white infants respectively. Much work is needed to raise awareness of these tragedies and effectively promote safe infant sleep practices to help prevent them.

*\*Forty-three babies died in unsafe sleep situations. There were two sleep-related deaths that did not have complete case information.*

*\*\*Throughout this report, Black non-Hispanic and white non-Hispanic infants are referred to as Black and white infants respectively.*

*\*\*\*Thorough review of these deaths in the Cook County Child Death Review System determined they were caused by "possible suffocation" or "suffocation."*

## What is SUID? And what happened to SIDS?

SUID is the term used to describe **S**udden **U**nexpected **I**nfant **D**eaths. These deaths used to be called SIDS. The causes of unexpected infant deaths in Cook County are now more accurately described as either due to suffocation, or undetermined, if no cause can be determined after thorough investigation. Most SUIDs occur during sleep and these are commonly referred to as sleep-related infant deaths.

### **Nearly every week in Cook County an infant dies suddenly and unexpectedly.**

In Cook County today, the greatest threat to the lives of infants ages 30 days old to 1 year is SUID. These deaths typically occur during sleep and frequently involve an unsafe sleep environment. In 2009, the Centers for Disease Control and Prevention began funding work across the U.S. to collect detailed information on the circumstances of these deaths to help prevent them. In 2019, this work began in Cook County, and this report details Cook County's 2019 SUID data to inform communities, providers and families of this public health threat to infants and to encourage potential prevention strategies.

# The Sleep Environment

## Safe sleep

Placing infants on their back to sleep has been the cornerstone of preventing SIDS since 1994. Greater understanding of other hazards in an infant's sleep environment have emerged over the past two decades — including sleeping with another person, sleeping with soft bedding, and sleeping on a sleep surface that is not a safety approved mattress. All of these situations have been found to be risks associated with SUID.

**An infant sleeping safely is defined as:**

- On their back
- In their own crib or bassinet
- With nothing in the crib or bassinet





# 2019 Cook County SUID

In 2019, 49 infants younger than 12 months died suddenly and unexpectedly. Forty-five of these deaths occurred during sleep. This report details the circumstances of these 45 sleep-related infant deaths.

Of the 45 sleep-related infant deaths, eight occurred due to suffocation and 37 were undetermined. All sleep-related infant deaths with complete\* case information had one or more unsafe sleep factors.

**Total deaths: 49**

**Sleep related deaths: 45**

- Suffocation: 8
- Undetermined: 37

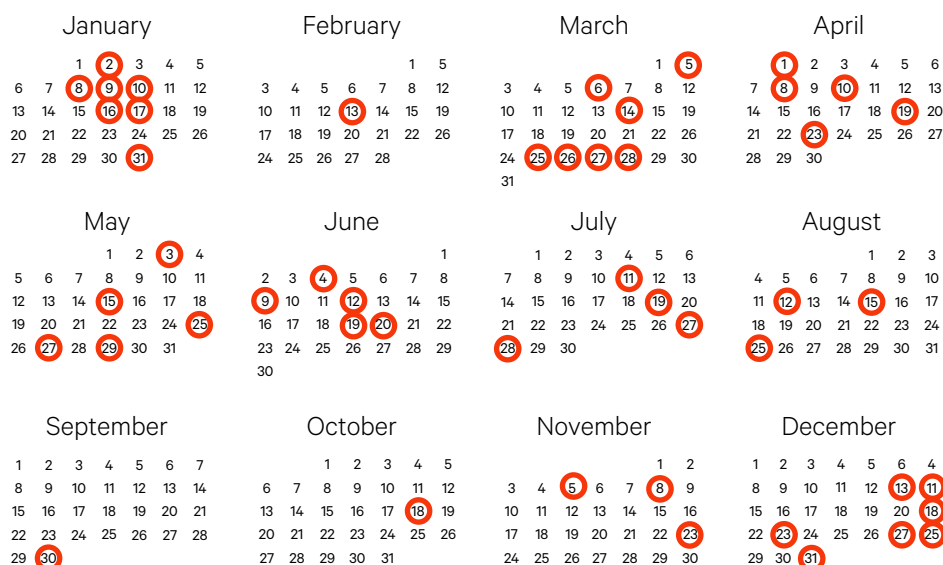
# 100%

**All 45 sleep-related SUIDs occurred in an unsafe sleep environment.**

*\*Two out of 45 sleep-related deaths had incomplete case information*

## 2019 Calendar

The red circles on the calendar represent the days that infants died suddenly and unexpectedly in 2019.



# Sleep-Related Infant Deaths (45)

## Unsafe sleep factors

33%

Or 15 infants were found on their stomach in their sleep space.



**Hazard: Stomach sleeping**

78%

Or 35 infants were found in places NOT approved for infant sleep.



**Hazard: Non-crib sleeping**

### Number of infants found in each location:

*\*Inclined sleep products for infants have been recalled. See this article from Consumer Reports: [bit.ly/inclined-sleeper-safety](https://bit.ly/inclined-sleeper-safety)*



- 24 Adult beds**
- 4 Couches**
- 1** Car seat
- 2** Inclined sitting/sleeping products\*
- 4** Other

## Sleep-Related Infant Deaths (45)

### Unsafe sleep factors

49%

Or 22 infants were sleeping with another person, increasing their risk of suffocation.



**Hazard: Bed-sharing**

91%

Or 41 infants were found with soft bedding in their sleep space.



**Hazard: Soft bedding**

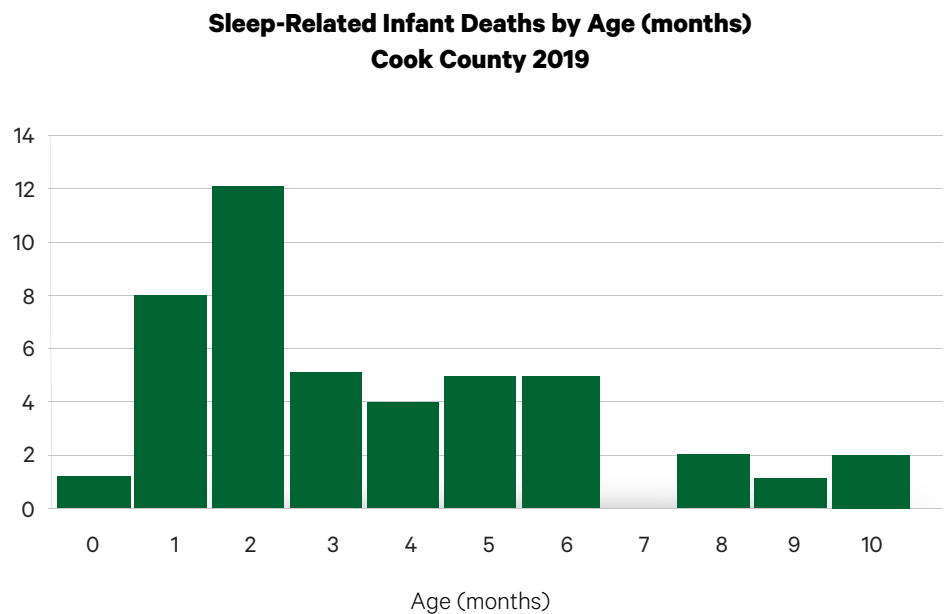
**Soft bedding includes pillows, quilts, comforters, sheepskins, blankets, bumper pads, plush toys or stuffed animals.**

# Sleep-Related Infant Deaths (45)

## Demographics

### Age

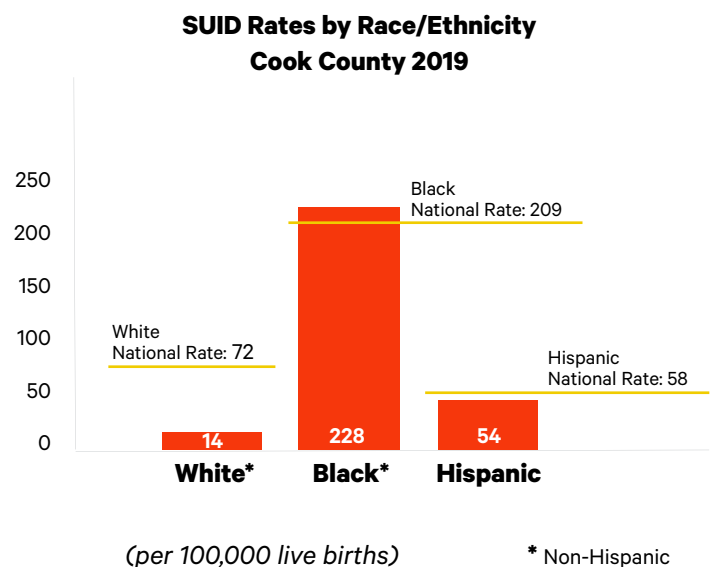
Though SUID may occur any time between birth and one year, there is a peak in SUID between the ages of 1 month and 3 months.



### Race and ethnicity

Nationally, SUID occurs more than twice as often among Black, non-Hispanic infants, and about half as often among Hispanic infants, as compared to white, non-Hispanic infants.

**In Cook County, SUID occurred 16 times more often in Black infants, and nearly 4 times more often in Hispanic infants when compared with white infants.**







## 2019 SUID Disparities

	Cook County			United States		
	White*	Black*	Hispanic	White*	Black*	Hispanic
<b>Sleep-related SUID</b>	3	33	9	1,425	1,214	575
<b>Births</b>	21,627	14,468	16,770	1,972,635	580,525	983,479
<b>Rate</b> (per 100,000 births)	14	228	54	72	209	58
<b>Rate Ratio</b> (compared to white infants)	Referent	16.4	3.9	Referent	2.9	0.8

\* Non-Hispanic

# Sleep-Related Infant Deaths (45)

## Risk factors

Prematurity and tobacco smoke exposure increase the risk of SUID.

20%

Nine SUIDs occurred among infants who were born prematurely.

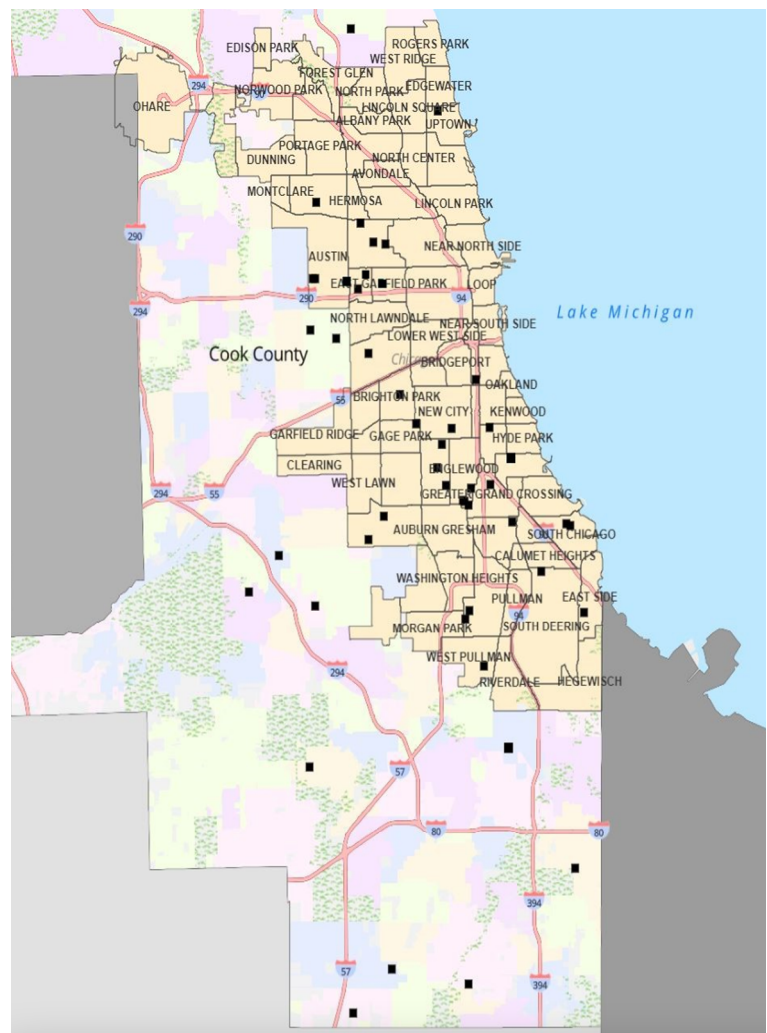
33%

Fifteen SUIDs occurred among infants who had prenatal and/or current smoke exposure.

## Geographic distribution

Though SUID occurs throughout Cook County, mapping cases in 2019 reveals a clustering of SUID on the county's West and South sides.

**Map to the right:**  
***Sudden Unexpected Infant Deaths***  
***Cook County 2019***  
***Each square represents an infant death***



## Prevention Efforts

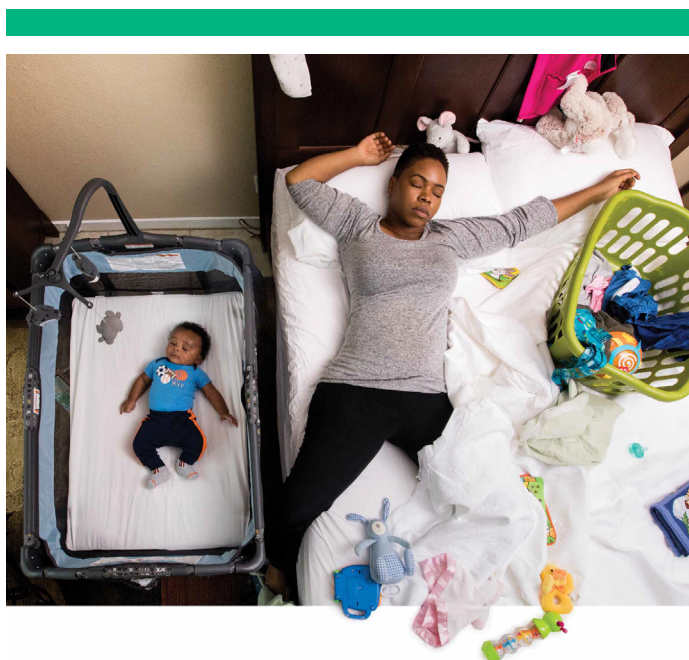
---

There has been very little progress in preventing SUID over the past 20 years. SUID rates in the U.S. have remained nearly unchanged. In Cook County, that means one infant dies suddenly and unexpectedly every week.

Cook County's SUID typically occurred when infants were not in a safe sleep environment: infants were often bed-sharing with one or more adults or children, and soft bedding was frequently used. What is not known, however, is how often these sleep circumstances occur on a routine basis for all infants in Cook County — and why many infants survive in an “unsafe” sleep environment while those who died from SUID did not.

Cook County's SUIDs occurred disproportionately among Black and Hispanic infants on the city's South and West sides, and within neighborhoods with historical disinvestment and high economic hardship. Prematurity, and prenatal and household cigarette smoke exposure are known risk factors for SUID, and these occurred frequently among Cook County SUIDs. The intersection of these circumstances coupled with an unsafe sleep environment only partially explains the substantially higher rate of SUID for Black and Hispanic infants.

Community health is the collective well-being of its people, and disparities in health indicators across communities are typically driven by inequitable access to necessary resources. We must understand and address that the health of a community that is home to an infant is also part of the environment that may place an infant at risk for — or protect them from — SUID. SUID prevention must include addressing the root causes of health inequities — alongside promoting safe sleep strategies that work — to protect our infants, families and communities.



### IT MIGHT NOT BE PRETTY. BUT IT CAN BE PEACEFUL.

Getting sleep with a newborn is not easy. But when babies are put to bed in their own, clutter-free space, it's safer for them and offers peace of mind for you.

Help baby sleep safely so you can sleep soundly.  
[healthychildren.org/safesleep](https://healthychildren.org/safesleep)

American Academy  
of Pediatrics  
DEDICATED TO THE HEALTH OF ALL CHILDREN®

## Partnering for prevention

Preventing SUID starts with information sharing and collaborating with communities that hold a disproportionate burden of SUID. Continuing the work of the Cook County SUID Case Registry is an important step in identifying, collecting and analyzing SUID data. Communicating this data in partnership with public health departments, health care entities, community organizations and other networks, will be essential to enabling collaboration with communities in efforts towards prevention. By initiating dialogue with families and those who support them, we can gain a deeper understanding of the circumstances within our communities, and can help create better pathways to prevention efforts.

---

### Chicago resources

**Everthrive Illinois** is a champion for health equity, focused on advocating for access to high-quality health care for women, children and families in Illinois. Through campaigns, strategic partnerships and community engagement, Everthrive continues to advance maternal-infant health equity. [everthriveil.org](https://everthriveil.org)

**Family Connects Chicago** is a public health, nurse home visit service available to Chicago families with newborns. Currently in its pilot phase, Family Connects led by the Chicago Department of Public Health, provides a comprehensive spectrum of in-home support, guidance and connections to resources that offer family support inclusive of safe sleep guidance. [healthychicagobabies.org/family-connects/](https://healthychicagobabies.org/family-connects/)

**The Fetal Infant Mortality Review (FIMR)** study in Chicago is a community-based approach to identifying services and support system issues families experienced that may have contributed to fetal and infant losses. FIMR interviews families who have lost an infant, analyzes those experiences, and makes system recommendations to promote better outcomes in the future. FIMR's Interdisciplinary Community Action Team works to create meaningful change by addressing gaps in services and programs, and advocates for supportive policies. [ncfrp.org/fimr/](https://ncfrp.org/fimr/)

**HealthConnect One** advances equitable, community-based, peer-to-peer support for pregnancy, birth, breastfeeding and early parenting. They provide breastfeeding peer counselors and community based doula support — promoting protective factors for healthy babies and families. [healthconnectone.org](https://healthconnectone.org)

**Kids In Danger (KID)** is a nonprofit organization dedicated to protecting children by fighting for product safety. KID was founded in 1998 by the parents of 16-month-old Danny Keysar, who died when a recalled portable crib collapsed around his neck in his Chicago child care home. KID's mission is to save lives by enhancing transparency and accountability through safer product development, better education and stronger advocacy for children. KID disseminates its monthly recall digest to share accurate and timely child product recall information. [kidsindanger.org](https://kidsindanger.org)

**The Fussy Baby Network** provides in-home or virtual support from infants specialists, who support families struggling with infant crying, feeding and sleeping. [erikson.edu/fussy-baby-network/](https://erikson.edu/fussy-baby-network/)

**Westside Healthy Start** program at ACCESS supports families from Chicago's West Side neighborhoods of North Lawndale, Austin, Humboldt Park, East and West Garfield Park, providing expecting and parenting families with preconception, prenatal and postpartum services to improve the health outcomes of the mother, baby and family. With the support of a dedicated care team, they partner with community members to reduce the infant mortality rate and empower families to create stronger, healthier communities. [achn.net/services-programs/westside-healthy-start/](https://achn.net/services-programs/westside-healthy-start/)



## Partnering for prevention

### Regional resources

**Illinois' Home Visiting** programs support healthy, thriving pregnant and parenting families with young children through support services that include parent coaching, education and connections to infant and early childhood health and early learning resources. Home Visiting programs routinely incorporate safe sleep education for families with infants, and the Illinois Maternal Infant Early Childhood Home Visiting program has supported infant safe sleep through the development and tracking of safe sleep benchmarks since 2018. [igrowillinois.org](http://igrowillinois.org)

**SIDS of Illinois, Inc.**, offers a range of services including grief and bereavement support, educational programs and materials for families and professionals, and supports research efforts to eradicate SUID. [sidsillinois.org](http://sidsillinois.org)

### National resources

**AAP Safe Sleep Toolkit:** [safetosleep.nichd.nih.gov/resources/sids-awareness-toolkit](https://safetosleep.nichd.nih.gov/resources/sids-awareness-toolkit)

**AAP policy statement:** Find the latest recommendations for infant sleep from the AAP's Task Force on SIDS. [publications.aap.org/pediatrics/article/150/1/e2022057990/188304/Sleep-Related-Infant-Deaths-Updated-2022?searchresult=1](https://publications.aap.org/pediatrics/article/150/1/e2022057990/188304/Sleep-Related-Infant-Deaths-Updated-2022?searchresult=1)

**Cribs for Kids:** Find cribs and safe sleep education resources for families in your communities, as well as information on how to become a safe sleep champion at this resource for health care and community providers. [cribsforkids.org/](http://cribsforkids.org/)

**Healthychildren.org:** Find information on your infant's sleep concerns from this AAP web resource. [healthychildren.org/English/ages-stages/baby/sleep/Pages/default.aspx](https://healthychildren.org/English/ages-stages/baby/sleep/Pages/default.aspx)

**Safe to Sleep:** Find education resources and campaign materials at this NIH web resource for organizations. [safetosleep.nichd.nih.gov/](https://safetosleep.nichd.nih.gov/)



Scan the QR code to  
view our safe sleep video:



[bit.ly/safe-sleep-infants](https://bit.ly/safe-sleep-infants)

The data in this report are from the Sudden Unexpected Infant Death-Case Registry (SUID-CR) system for Cook County, which is housed at Rush University Medical Center in close affiliation with the Cook County Medical Examiner's Office. The details of each case are extracted from the Medical Examiner's Lablynx data system. The categorization of each case with regards to cause (e.g., Suffocation, Possible Suffocation or Undetermined with Unsafe Sleep Factors) was determined in a CDC-defined process during the discussion of the case at the Child Death Review.

For more information, please email Rojin Ahadi, MPH, at [seyedeh\\_r\\_ahadi@rush.edu](mailto:seyedeh_r_ahadi@rush.edu).

---

## Contributors

### Rush University Medical Center

Kyran Quinlan, MD, MPH — *Principal Investigator*

Gina Lowell, MD, MPH — *Co-Investigator*

Abbey Mastroianni, MPH

Seyedeh Rojin Ahadi, MPH

### Cook County Medical Examiner's Office

Eric Eason, MD

Michael Eckhardt, MD

Felicia Clark, D-ABMDI

Meredith Reynolds, MD

