

# Sudden Unexpected Infant Death

Cook County Report 2020-2021

2020-2021



CCMEO

# Executive Summary

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## Background

Each year in the United States, approximately 3,500 infants die suddenly and unexpectedly before their first birthday. Almost all of these occur in the baby's sleep environment. These Sudden Unexpected Infant Deaths (SUIDs) take more lives than any other cause between the ages of 1 month and 12 months.

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 report provides details of the SUIDs in Cook County for 2020-2021, two years impacted by the COVID-19 pandemic.

## Findings

From 2020-2021, 99 infants died suddenly and unexpectedly. Of these, 96 were sleep-related.

Here are a few key findings:

- Ninety-nine percent of the sleep-related deaths involved an unsafe sleep situation.\*
- In Cook County, the SUID rate for Black\*\* infants was **14** times that of white infants. The SUID rate for Hispanic infants was **2.5** times that of white infants.
- SUIDs were more frequently seen on the West and South sides.
- Of the 96 infants, 87 (91%) died with soft bedding or items in their sleeping environment.
- Of the 96 infants, 71 (74%) died while sleeping on an adult bed or couch with another person.
- Of the 96 infants, 24 (25%) died of suffocation.\*\*\*
- Of the 96 infants, 79 (82%) died before the age of 6 months with a peak between 1 and 2 months. This peak is slightly younger than that of 2019.
- Of the 95 infants with gestational age information, 26 (27%) had a history of prematurity.

## Conclusion

In Cook County during the pandemic, infants continued to die suddenly and unexpectedly about once a week, typically in an unsafe sleep situation. There remains a large race and ethnic disparity with Black and Hispanic infants dying at rates 14 and 2.5 times higher than white infants respectively. Much work remains to raise awareness of these tragedies and effectively promote safe infant sleep practices to prevent them.

\*Ninety-two babies died in unsafe sleep situations. There were three 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 either "suffocation" or "possible suffocation."

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

SUID is the term used to describe Sudden Unexpected Infant Deaths. 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). Almost all SUIDs happen during sleep, and these are commonly referred to as sleep-related infant deaths.

## What is the SUID Case Registry?

The Centers for Disease Control and Prevention (CDC) began the SUID Case Registry in 2009 to improve the quality and consistency of SUID data, monitor SUID rates and advance understanding of factors that may affect SUID risk. The SUID Case Registry builds upon state and local Child Death Review programs and uses the National Center for Fatality Review and Prevention's Case Reporting System. SUID Case Registry programs are currently supported in 32 states and jurisdictions, covering about 2 in 5 SUID cases in the U.S. In 2019, this work began in Cook County. The Cook County SUID Case Registry team works collaboratively with the Cook County Medical Examiner's Office and the Cook County Child Death Review teams to collect, analyze and disseminate detailed information regarding the circumstances of these infant deaths to bring heightened awareness to Cook County SUIDs and to influence, develop and partner with SUID prevention advocates.

**About once a week in Cook County, an infant dies during sleep.**

**Sleep-related deaths among Black and Hispanic infants happen at much higher rates than among white infants.**

In Cook County today, the greatest threat to the lives of infants ages 1 month to 1 year is SUID. These deaths are almost always related to sleeping in an unsafe sleep situation. During the pandemic years of 2020 and 2021 in Cook County, infants continued to die nearly once a week.

The rate of sleep-related deaths among Black infants was more than 14 times higher than that of white infants, and 2.5 times higher among Hispanic infants as compared to white infants.

**This report details Cook County's 2020-2021 SUID data to inform communities, providers and families of this public health threat to infants and to encourage potential prevention strategies.**

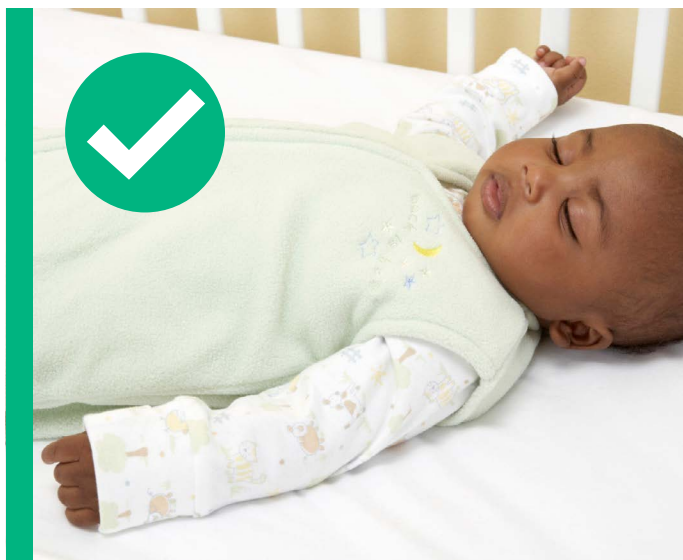
# The Sleep Environment

## 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





# 2020-2021 Cook County SUID

From 2020-2021, 99 infants died suddenly and unexpectedly. Ninety-six of these deaths occurred during sleep. This report details the circumstances of these 96 sleep-related infant deaths.

Of the 96 sleep-related infant deaths, 24 (25%) occurred due to suffocation and 72 were undetermined. Nearly all sleep-related infant deaths with complete\* case information had one or more unsafe sleep factors.

*\*Three of 96 sleep-related infant deaths had incomplete case information. One infant was not in an unsafe sleep environment.*

**Total deaths: 99**

**Sleep-related deaths: 96**

- **Suffocation: 24**
- **Undetermined: 72**

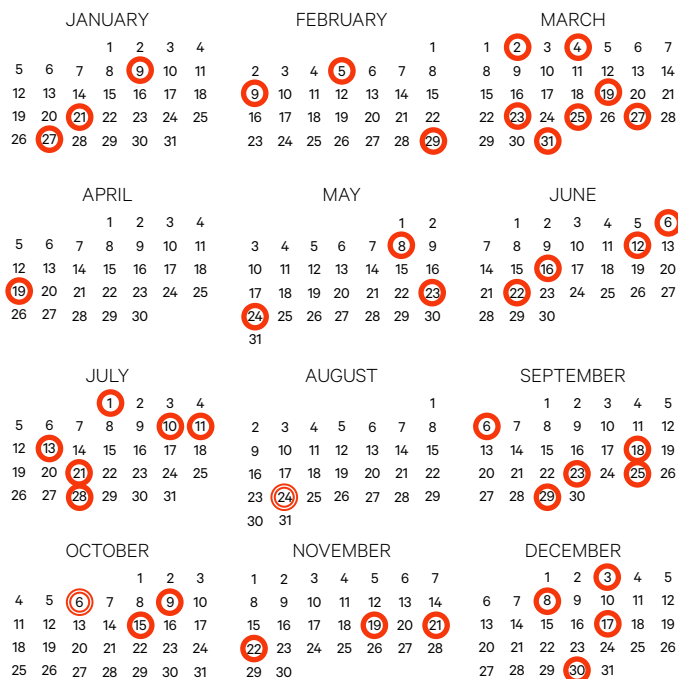
**99%**

**Nearly all 96 sleep-related infant deaths occurred in an unsafe sleep environment.**

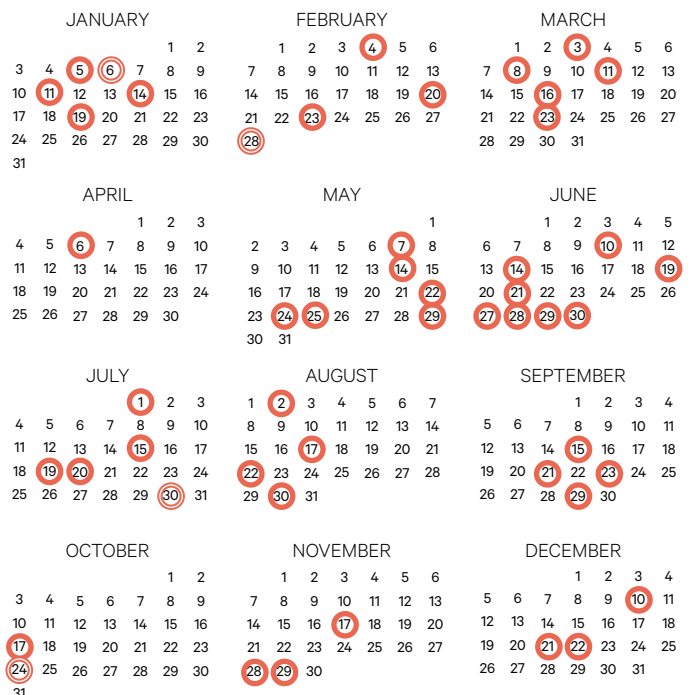
## 2020-2021 Calendar

The red circles on the calendar represent the days that infants died suddenly and unexpectedly in 2020 and 2021.

### 2020



### 2021



## Sleep-Related Infant Deaths (96)

### Unsafe sleep factors

22%

Or 21 infants were found on their stomach in their sleep space.



**Hazard: Stomach sleeping**

89%

Or 85 infants were found in places NOT approved for infant sleep.



**Hazard: Non-crib sleeping**

#### Number of infants found in each location:

**71 Adult beds**

**8 Couches**

**1** Floor

**1** Futon

**1** Carseat

**3** Other

## Sleep-Related Infant Deaths (96)

### Unsafe sleep factors

74%

Or 71 infants were sleeping with another person, increasing their risk of suffocation.



**Hazard: Bed-sharing**

91%

Or 87 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.**

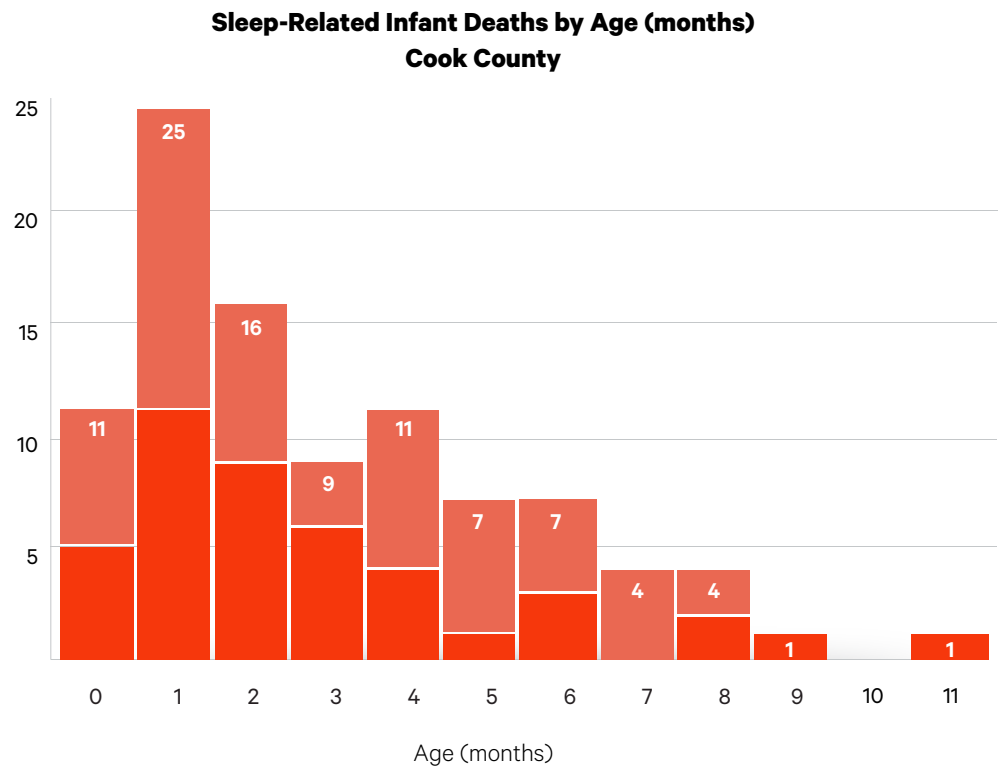
# Sleep-Related Infant Deaths (96)

## Demographics

### Age

Though SUID may occur anytime between birth and 1 year, 79 (82%) infants died before the age of 6 months with a peak between 1 and 2 months. This peak is slightly younger than that of 2019.

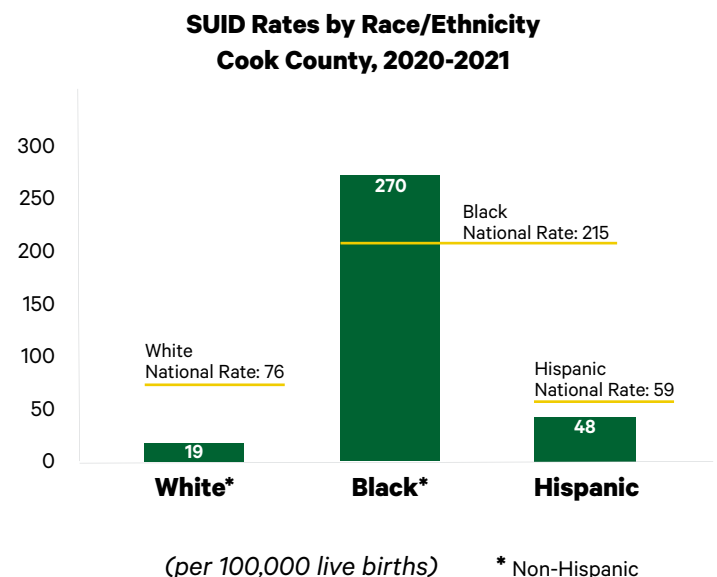
2021  
2020



### 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 14 times more often in Black infants, and 2.5 times more often in Hispanic infants when compared with white infants.**





## SUID Disparities

	Cook County (2020-2021)			United States*** (2020)			
	White*	Black*	Hispanic	White*	Black*	Hispanic	
<b>Sleep-related SUID</b>	8	70	15	1,393	1,134	511	* Non-Hispanic
<b>Births</b>	42,033	25,955	31,579	1,839,565	528,448	863,949	** (per 100,000 births)
<b>Rate**</b>	19	270	48	76	215	59	***U.S. data represent all SUID and are not limited to sleep-related SUID; U.S. data for 2021 are not yet available.
<b>Rate Ratio</b>	Referent	14.2	2.5	Referent	2.8	0.78	

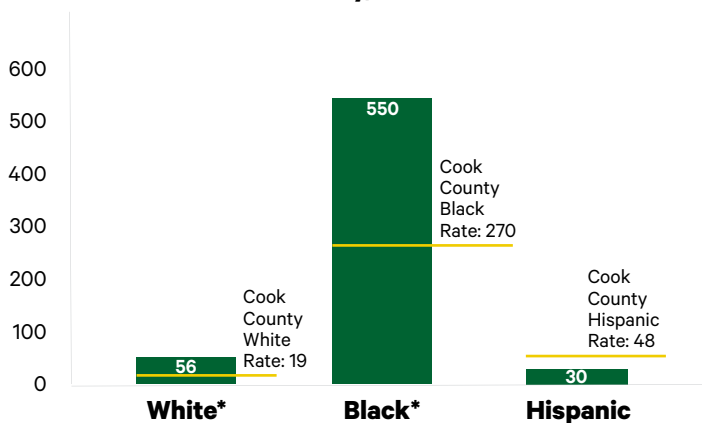
**SUID Disparities**  
**Data sources:**

- For 2020 U.S. SUID numbers and rates: Shapiro-Mendoza CK, Woodworth KR, Cottengim CR, Erck Lambert AB, Harvey EM, Monsour M, Parks SE, Barfield WD. Sudden Unexpected Infant Deaths: 2015-2020. Pediatrics. 2023 Apr 1;151(4):e2022058820.
- For 2020 U.S. live births: <https://www.cdc.gov/nchs/data/vsrr/vsrr012-508.pdf>

Preterm infants are those infants born before 37 weeks gestational age. SUID occurred in preterm Black infants at a rate more than double that for all Black infants; and occurred in preterm white infants at a rate nearly triple that for all white infants.

The SUID rate for preterm Hispanic infants was less than the rate for all Hispanic infants.

**SUID Preterm Rates by Race/Ethnicity**  
**Cook County, 2020-2021**



(per 100,000 live preterm births)

\* Non-Hispanic

**Cook County Preterm Births (2020-2021)**

	White*	Black*	Hispanic
<b>Sleep-related SUID</b>	2	21	1
<b>Preterm Births**</b>	3,559	3,821	3,285
<b>Rate</b>	56	550	30
<b>Rate Ratio</b>	Referent	9.8	0.54

\*\*Illinois Department of Public Health (IDPH)

## Sleep-Related Infant Deaths (96)

Prematurity and tobacco smoke exposure are known risk factors for SUID.

# 27%

**Twenty-six SUIDs occurred among infants who were born prematurely.**  
**One in 182 preterm Black infants died of SUID.**

# 10%

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

### COVID-19 impact

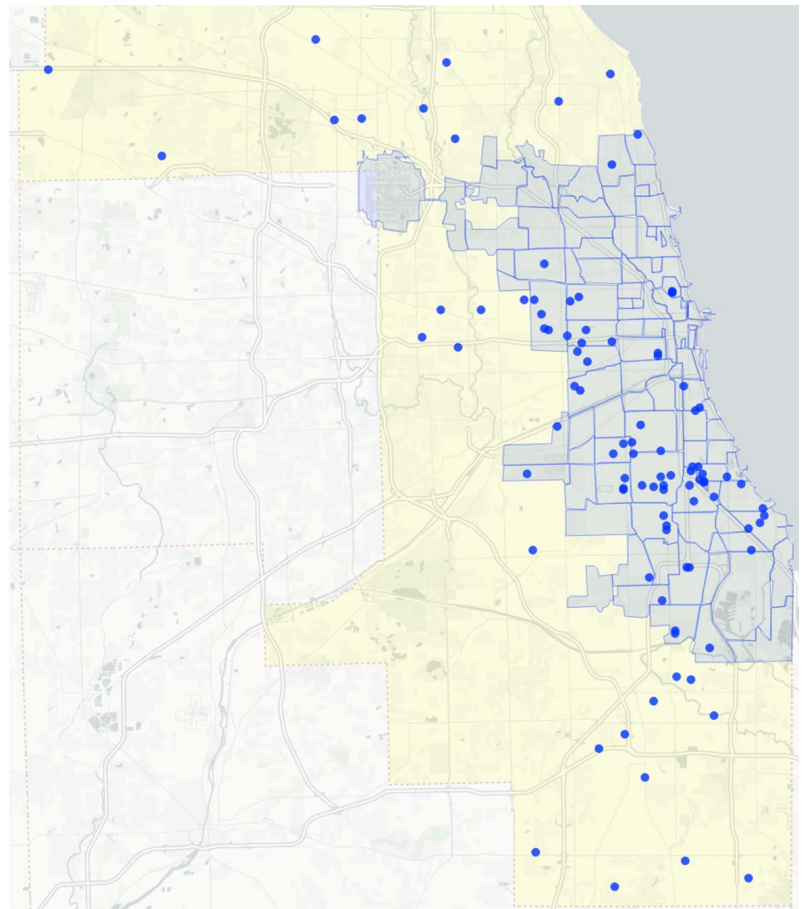
# 2%

Two infants tested positive for COVID-19 on viral testing at autopsy. These infants showed only minor or no symptoms in the days prior to death, and COVID-19 infection was not indicated as the cause of death for either infant.

### Geographic distribution

Though SUID occurs throughout Cook County, mapping cases from 2020-2021 reveal a clustering of SUID on the county's West and South sides.

**Map to the right:**  
***Sudden Unexpected Infants Deaths Cook County 2020-2021***  
***Each circle represents a sleep-related infant death (96)***

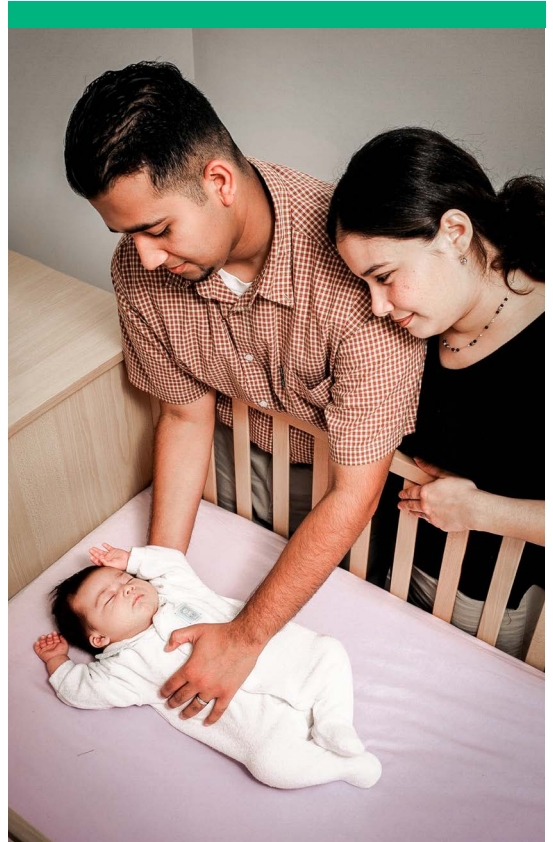


## Conclusions

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From 2020-2021 in Cook County, 96 more families lost their infants to sleep-related SUID. SUIDs occurred primarily in Cook County's West and South side communities and affected Black and Hispanic infants at rates 14 and 2.5 times that of white infants, respectively. Prematurity compounded SUID risk for Black infants, such that 1 of every 182 preterm Black infants in Cook County died of SUID.

During this time, Cook County's communities were overwhelmed with the impact and consequences of the COVID-19 pandemic, which disproportionately affected the same communities in which SUIDs continued to occur. Community impact, illness, disability and death from COVID-19 disrupted families to a degree we still haven't fully understood: caregiver loss, family isolation, disrupted employment, fluctuations in child care, resource instability and mental distress interacted to adversely affect family health and well-being. Though the SUID rate for non-Hispanic white and Hispanic infants was variable during this time, the SUID rate for non-Hispanic Black infants increased compared to the rate for non-Hispanic Black infants in 2019. Such an increase in the SUID rate for Black infants was likewise seen nationally, while SUID rates for all other race and ethnic groups did not significantly change. (Shapiro-Mendoza, 2023)



In Cook County, almost all infants were found in unsafe sleep environments, and 1 in 4 deaths were due to accidental suffocation. Bedsharing (74%) and using sleep environments not approved for infant sleep (89%) were higher in 2020-2021 as compared to 2019. Two-thirds of infants who were not sleeping in a crib or bassinet had a crib or bassinet available in the home.

Cook County is the second most populous county in the country. With 5.2 million people, our county is widely diverse — culturally, racially, ethnically and socioeconomically. Such a diverse population is rich with history and interconnectedness yet burdened by systemic decisions — both past and present — whose repercussions drive significant and often widening health disparities. Raising awareness regarding SUID disparities, uncovering and addressing factors driving maternal-infant health disparities, and collaborating with public health, healthcare, community-based organizations and families, can help bridge our efforts to prevent SUID. These are critical steps toward improving our collective understanding of SUID frequency and risk in our communities, as well as the approaches that work to value, center and support families in safe sleep that respects the real circumstances of their lives.

## Partnering for prevention

### **In 2022, funding to support SUID awareness and prevention resulted in the following initiatives:**

- **Illinois Safe Sleep Support:** The Illinois Department of Human Services (IDHS) partnered with the Chicago, Cook County and Illinois Departments of Public Health to develop a coordinated Safe Sleep awareness campaign: Illinois Safe Sleep Support. This campaign launched in October 2022 and aims to develop clear and consistent messaging regarding SUID and safe sleep for parents, community health and healthcare providers.
- **Community Partnership Approaches to Safe Sleep (CPASS):** The American Academy of Pediatrics awarded funding to five children's hospitals partnered with community-based organizations to develop community partnership approaches to distribute safe sleep resources and education in communities most impacted by SUID. In Chicago, RUSH University Children's Hospital and Family Focus received this grant funding and successfully launched CPASS Chicago in February 2022, engaging community members in conversation at over 60 community events and distributing 200 safe sleep kits by year's end in Cook County's communities most impacted by SUID.
- **BabyZZZ:** The Illinois Department of Public Health (IDPH) funded four community-based agencies throughout Illinois to provide safe sleep education and trainings through community outreach activities. In Chicago, Sinai Community Institute partnered with Catholic Charities and SIDS of Illinois to launch their BabyZZZ initiative in February of 2023, holding training and outreach events across a large catchment area covering the West and South side communities of Chicago.

The impact of these initiatives may be captured by ongoing Cook County SUID-CR surveillance following their implementation. It may also be measured through better understanding of the power of conversations to break past the typical teaching of the ABC's of Safe Sleep to engage with parents about what matters to them personally, in their family and culturally. Respectful conversations allow time to reflect on SUID disparities experienced by our communities, as well as the barriers to safe sleep experienced by our families. It also provides the opportunity for parents to share their hopes, fears and the real circumstances of their lives, empowering them to lead the way in establishing and maintaining a safe sleep environment for their babies.



## Chicago resources

**Everthrive Illinois** is a champion for health equity, focused on advocating for access to high-quality healthcare for women, children and families in Illinois. Through campaigns, strategic partnerships and community engagement, Everthrive continues to advance maternal-infant health equity.

<https://everthriveil.org/>

**Family Connects Chicago** is a public health, nurse home visit service available to Chicago families with newborns. Currently in phase 1 expansion, Family Connects Chicago is led by the Chicago Department of Public Health in partnership with Chicago birthing hospitals and Regional Alignment Boards anchored at Everthrive IL, Sinai Community Institute, Sinai Urban Health Institute and Metropolitan Family Services to provide a comprehensive spectrum of in-home support, guidance and connections to resources that offer family support inclusive of safe sleep guidance and resource support. <https://www.chicago.gov/city/en/sites/onechifam/home/family-wellness/family-connects.html>

**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. In addition to ensuring family access to grief and bereavement services, FIMR Chicago 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.

<https://www.fimrchicago.org/>

**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.

<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 infant developmental 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/)

## 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](https://igrowillinois.org)

**SIDS of Illinois, Inc.**, is committed to helping Illinois families who have lost a baby under the age of 1 year, regardless of cause or manner of death, as well as providing gentle, culturally appropriate, and accessible safe sleep education to all families to lower sleep related deaths in Illinois. [sidsillinois.org](https://sidsillinois.org)

**Illinois Safe Sleep Support** is a program for families in Illinois to learn about the safest ways for their babies to sleep, get answers to their sleep safety questions and access to items they need to keep their babies safe.

<https://www.dhs.state.il.us/page.aspx?item=146357>

## 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. [bit.ly/aap-policy](https://bit.ly/aap-policy)

**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/](https://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.

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We extend our deepest gratitude to the 99 Cook County families who lost their treasured infants. Without their participation in the multiple investigations into the cause of their infants' deaths, we would not have the ability to know more fully the circumstances of their deaths in order to better understand how to prevent them.

