

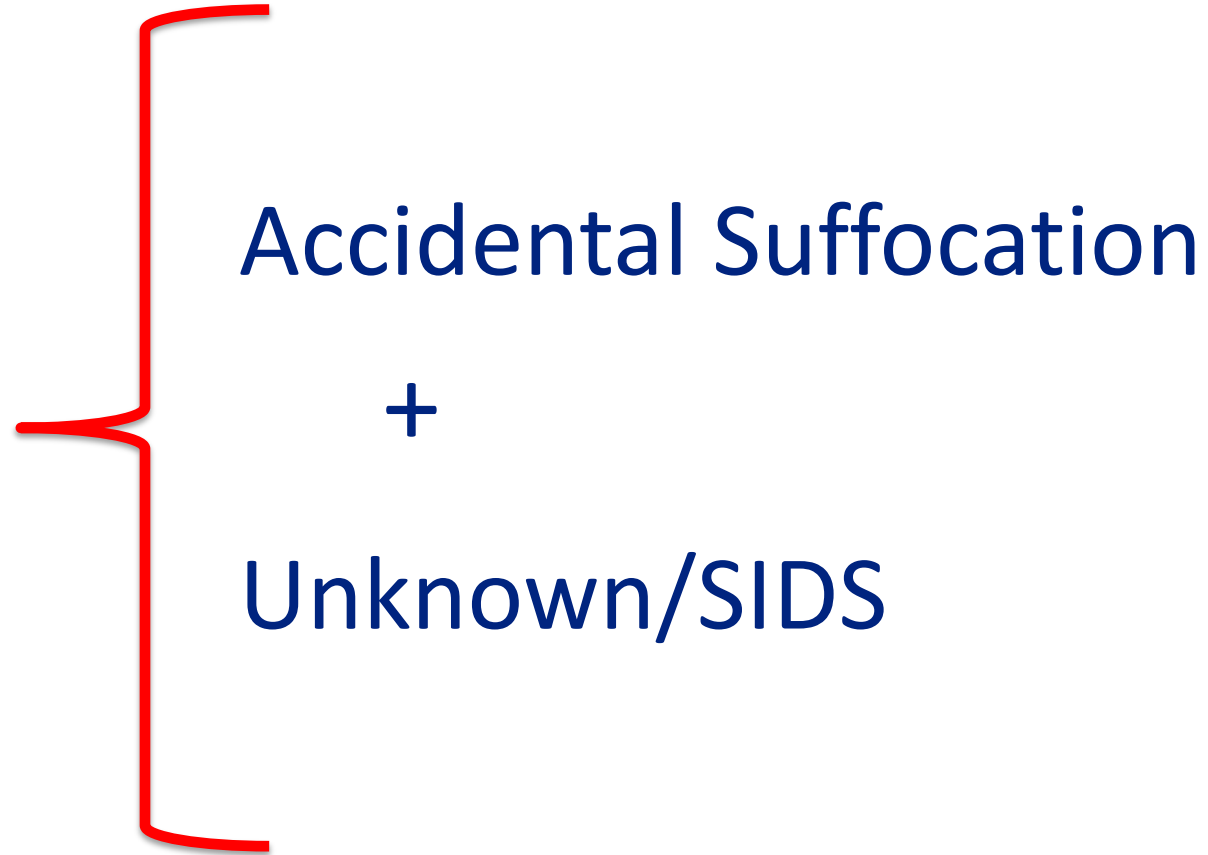
SUDDEN UNEXPECTED INFANT DEATH (SUID)

SUID AND INFANT MORTALITY RISK PERCEPTION AND DISPARITIES THE SUID CASE REGISTRY FOR COOK COUNTY

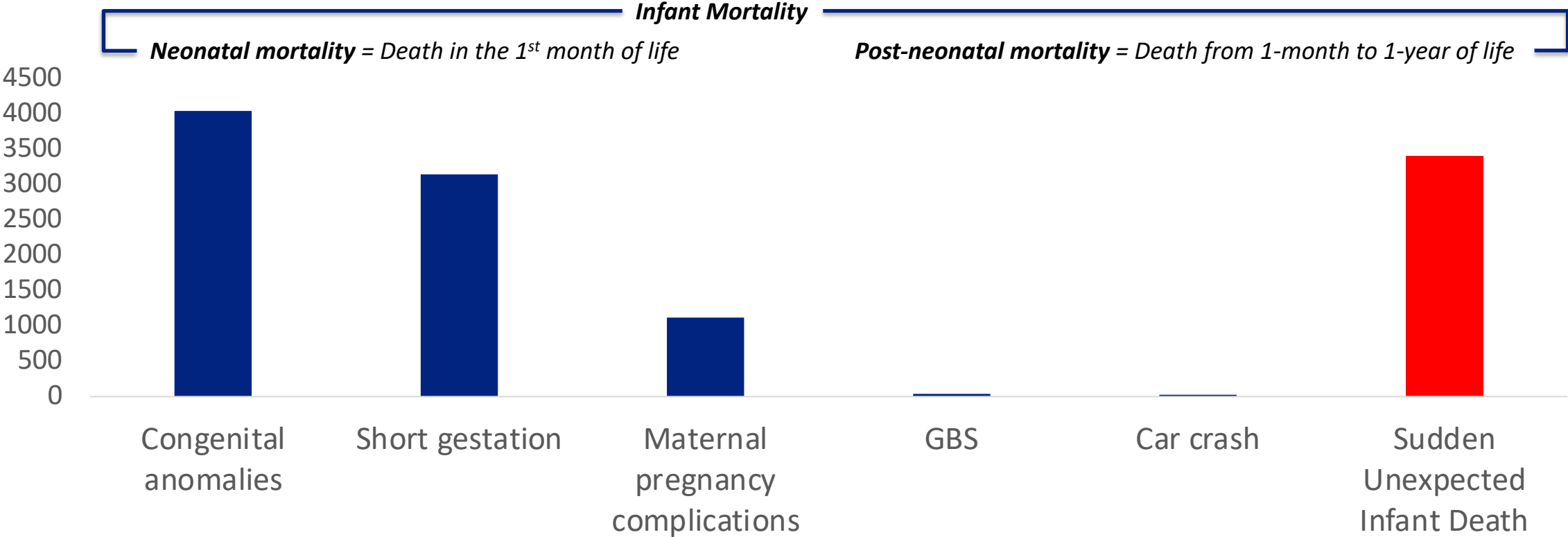
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Sudden Unexpected Infant Death

SUID



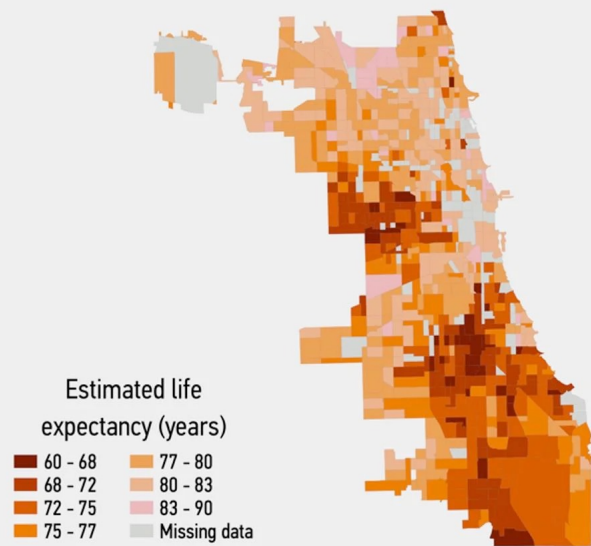
SUID IS A MAJOR CONTRIBUTOR TO INFANT MORTALITY



SUID is the leading threat to the lives of babies discharged from the hospital after birth – babies who were otherwise expected to live. Infant Mortality, US, 2020

INFANT MORTALITY IS THE 3RD LEADING DRIVER OF THE LIFE EXPECTANCY GAP IN CHICAGO

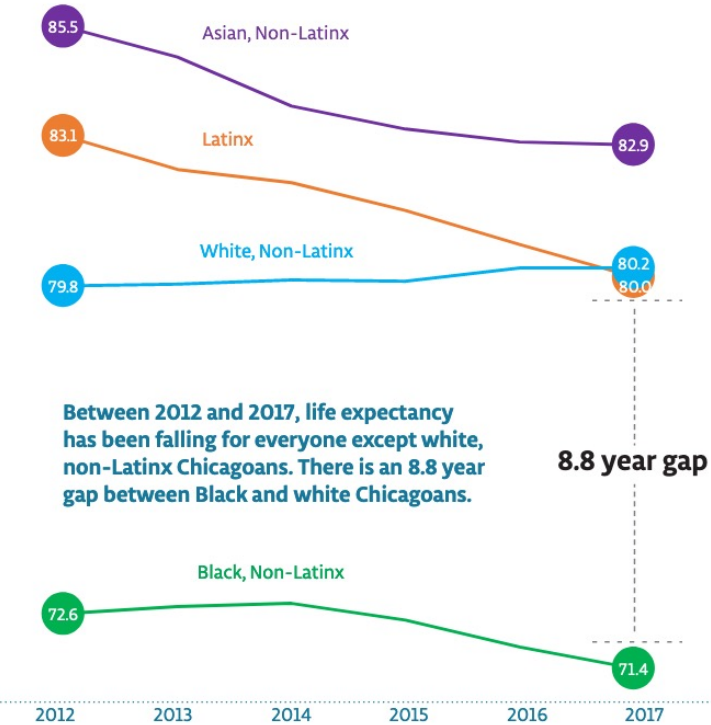
Neighborhood Life Expectancy in Chicago



Courtesy: CityLab | David Montgomery
NYU School of Medicine

CITYLAB

CHICAGO'S LIFE EXPECTANCY GAP, 2017



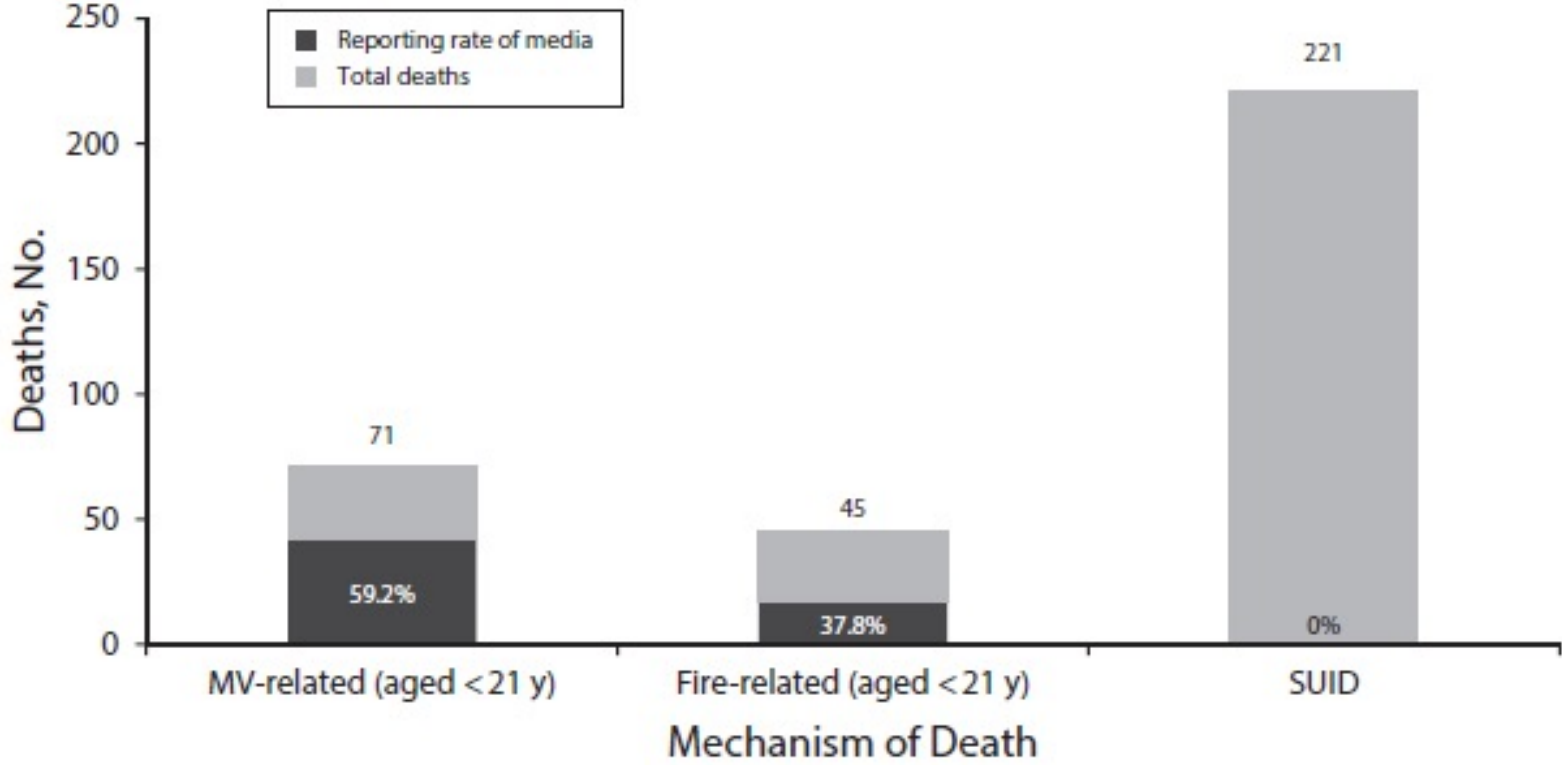
Between 2012 and 2017, life expectancy has been falling for everyone except white, non-Latinx Chicagoans. There is an 8.8 year gap between Black and white Chicagoans.

Top Five Drivers of the Gap



Data source and figure from Healthy Chicago 2025
Closing Our Life Expectancy Gap, 2022

Media Reporting of SUID



Note: MV = motor vehicle.

Source: Total deaths taken from Vital Statistics (<http://dph.illinois.gov>).

FIGURE 1—Child Deaths and Media Reporting Rates by Mechanism: Chicago, IL, 2011–2015

Roehler DR, Lowell GS, Silvestri JM, Eason EA, Quinlan KP. Differential Media Reporting of Unintentional Child Deaths in Chicago, 2011-2015. Am J Public Health. 2018 Oct;108(10):1318-1319.

Figure 2. Average annual age-specific death rates per 100,000 population for SUID and major injury causes, 2013-2015, United States

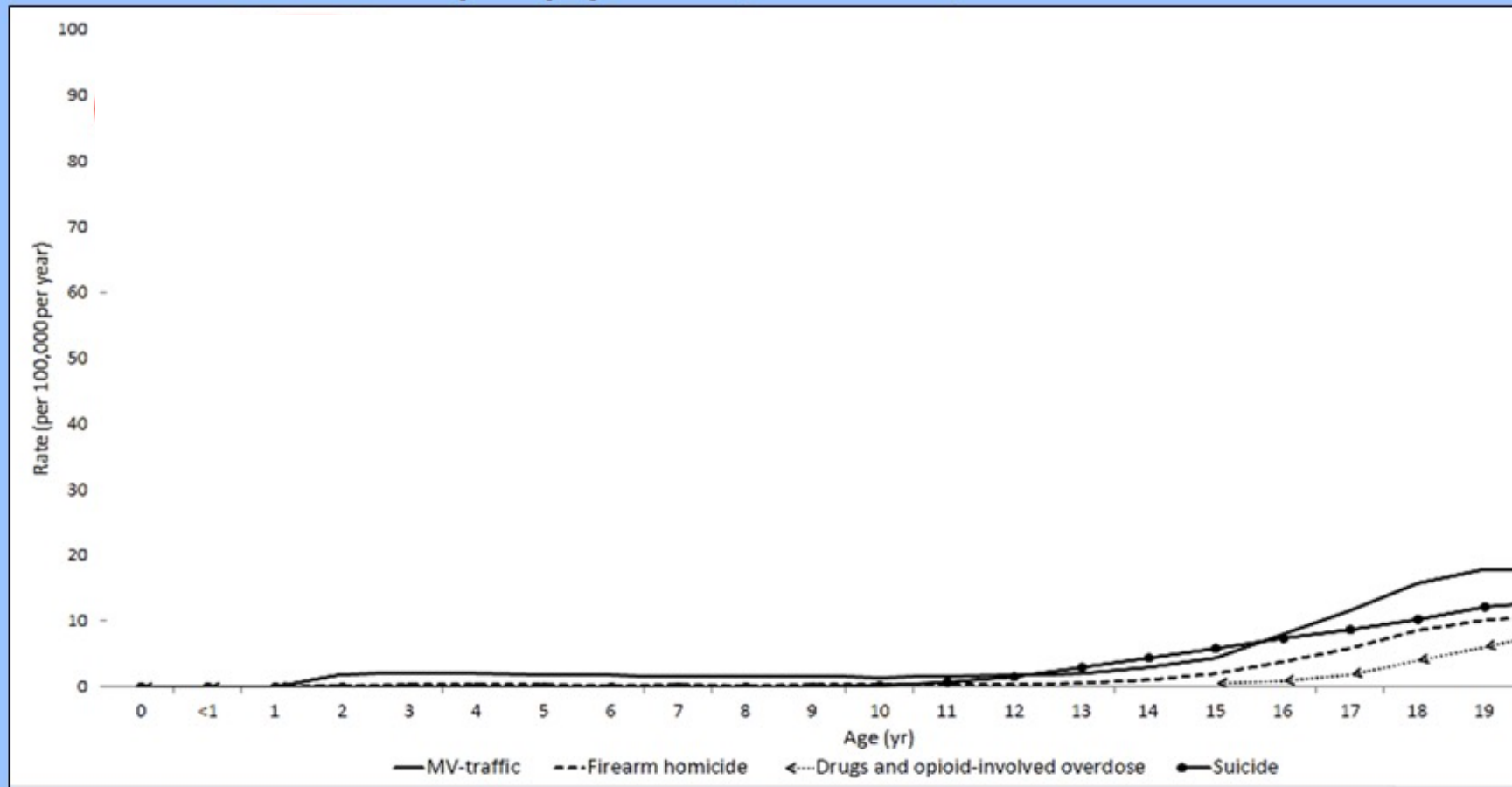
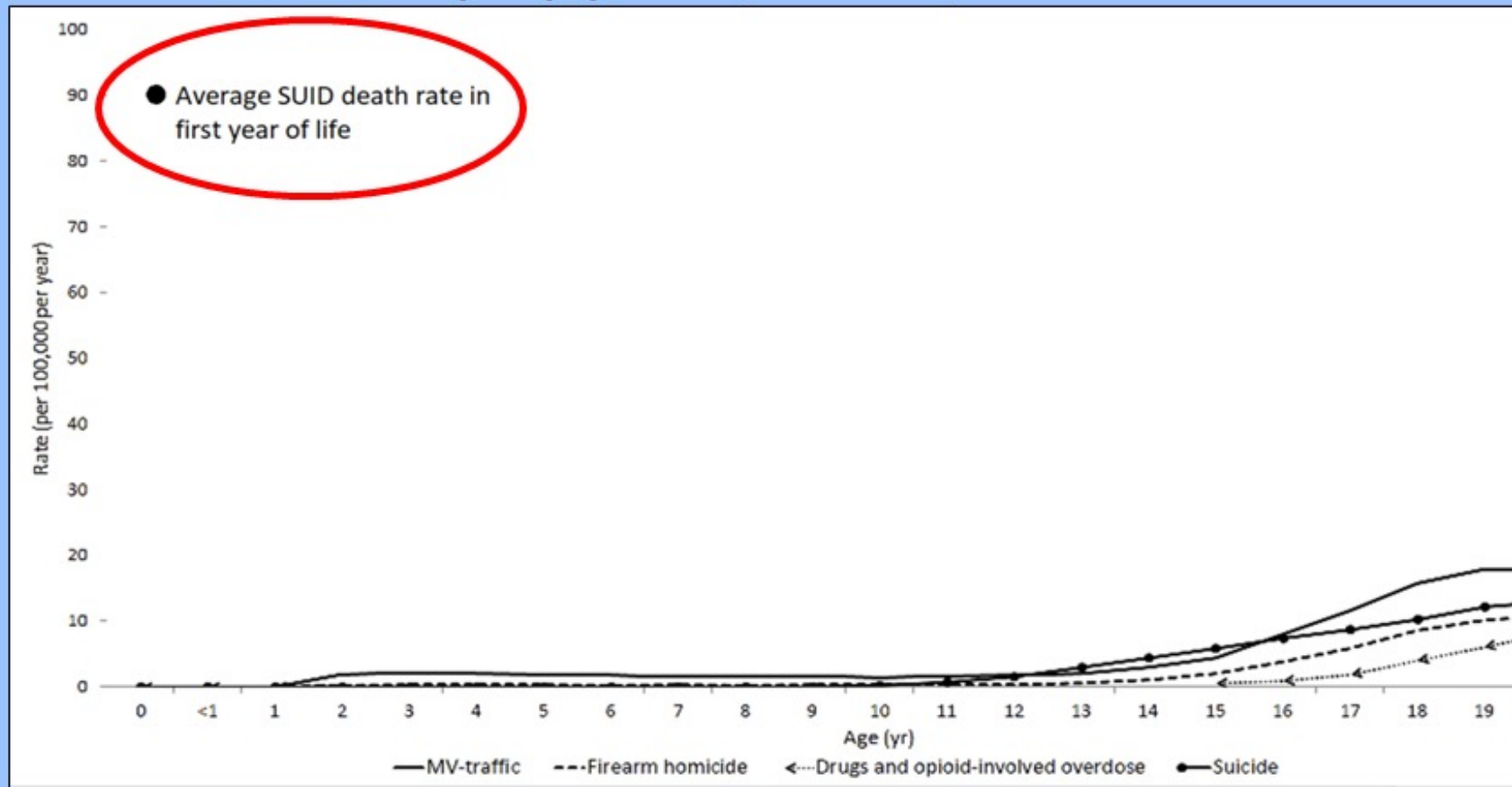
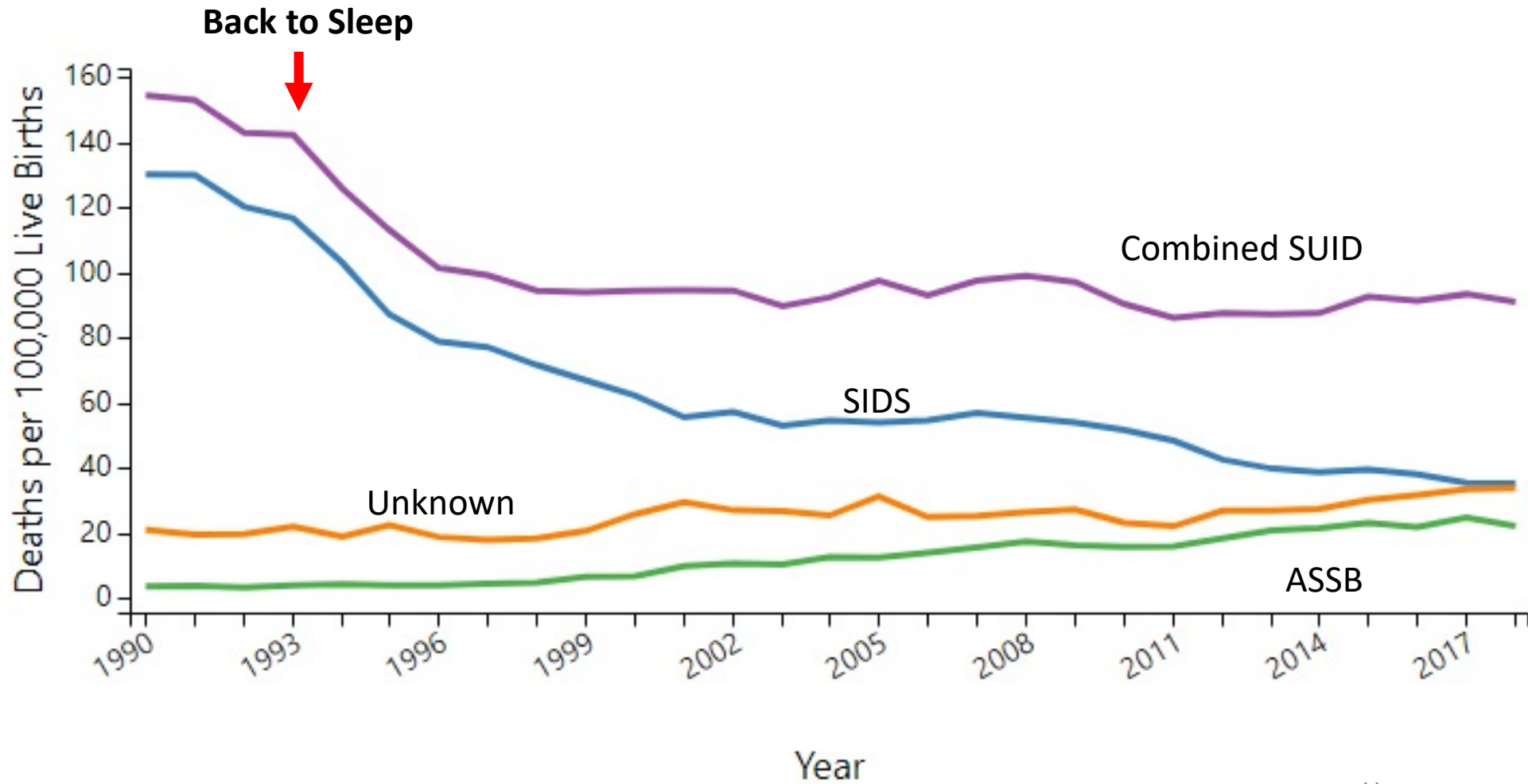


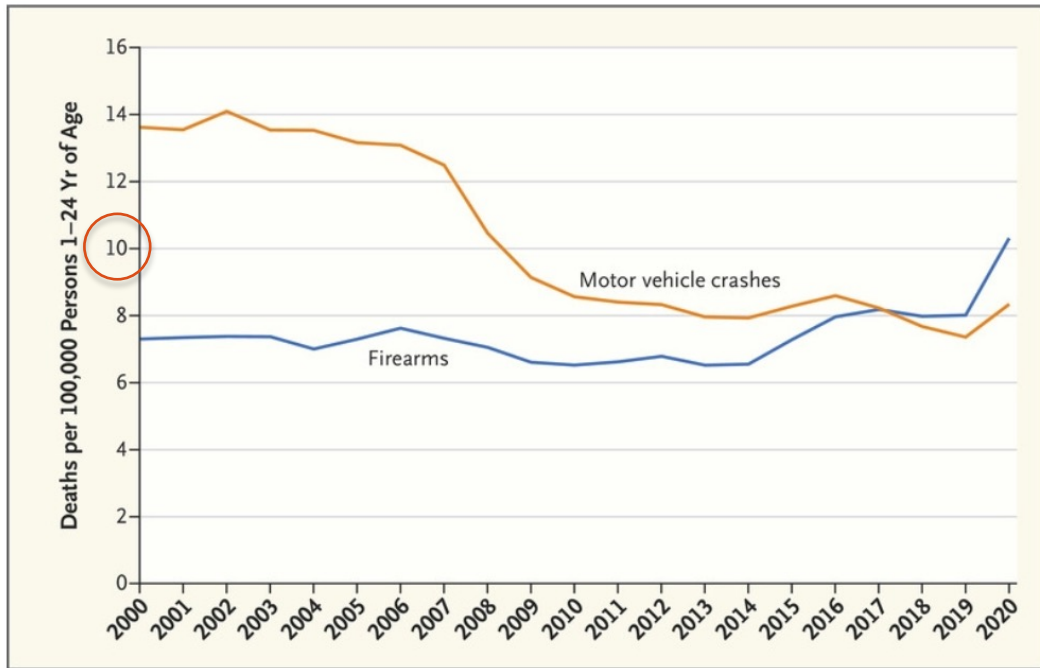
Figure 2. Average annual age-specific death rates per 100,000 population for SUID and major injury causes, 2013-2015, United States



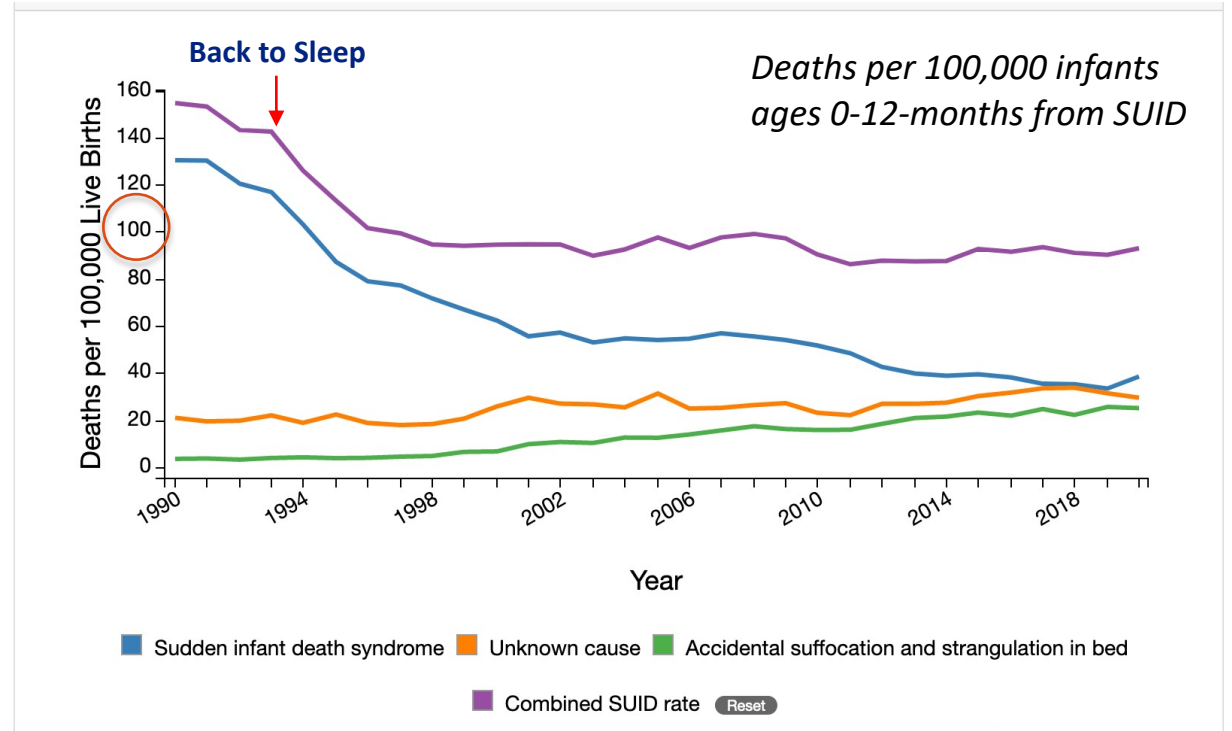
Trends in Sudden Unexpected Infant Death by Cause, 1990-2018



CHILDHOOD INJURY MORTALITY RATES AND PERCEIVED RISK



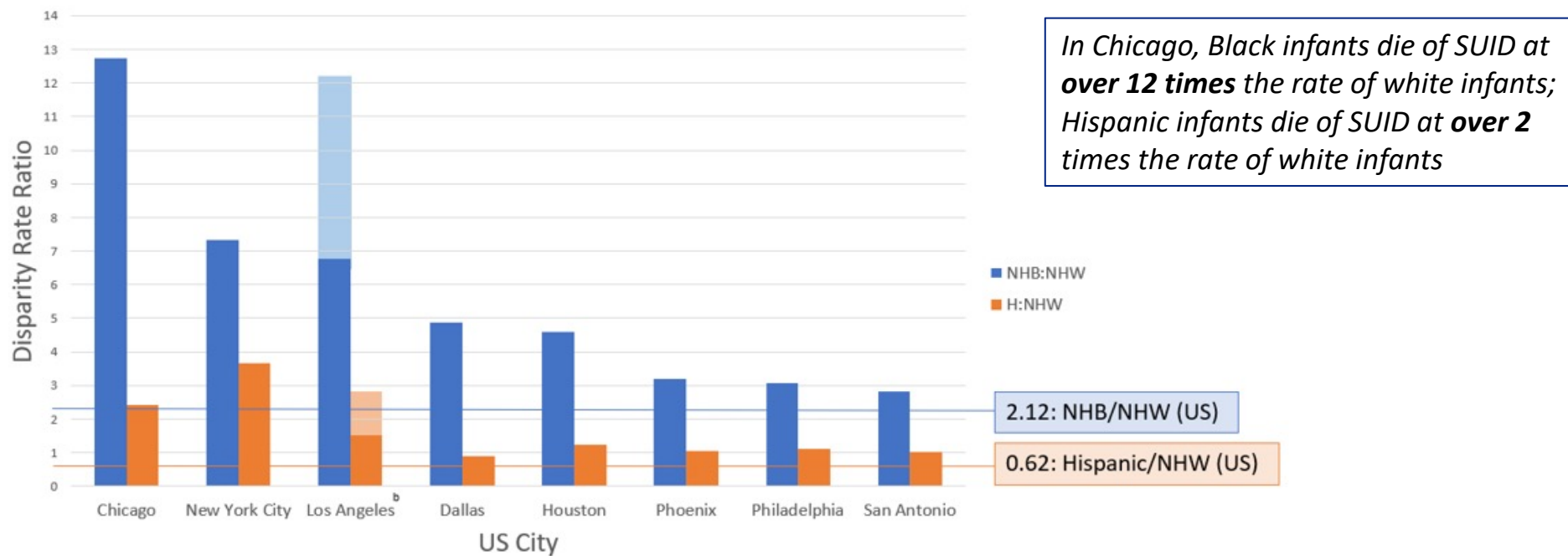
Deaths per 100,000 persons ages 1-24-years from MVC and Firearms



Our society is justifiably aware of the risk of death to children from motor vehicle crashes and firearms, however remains far less aware of the risk of death to infants from SUID – despite a 10 times risk to infants.

RACE AND ETHNIC SUID DISPARITIES ARE MAGNIFIED IN LARGE CITIES

Figure: Sudden Unexpected Infant Death Disparity Rate Ratios by Race and Ethnicity for 8 Large US Cities, 2011-2017.^a



^aTwo California cities (San Jose and San Diego) could not be included in the figure because some counts were suppressed due to small cell sizes.

^bFor Los Angeles, the Non-Hispanic Black:Non-Hispanic White ratio is shown as a minimum (dark blue vertical bar) and maximum (light blue vertical bar), and the Hispanic:Non-Hispanic White ratio is shown as a minimum (dark orange vertical bar) and maximum (light orange vertical bar) because some cells for Non-Hispanic White SUIDs were suppressed due to small cell sizes.

VOICES OF CHILD HEALTH IN CHICAGO - 2022

Figure 1. Most frequent unsafe infant sleep practices reported by Chicago parents and the proportion of parents who reported engaging in each

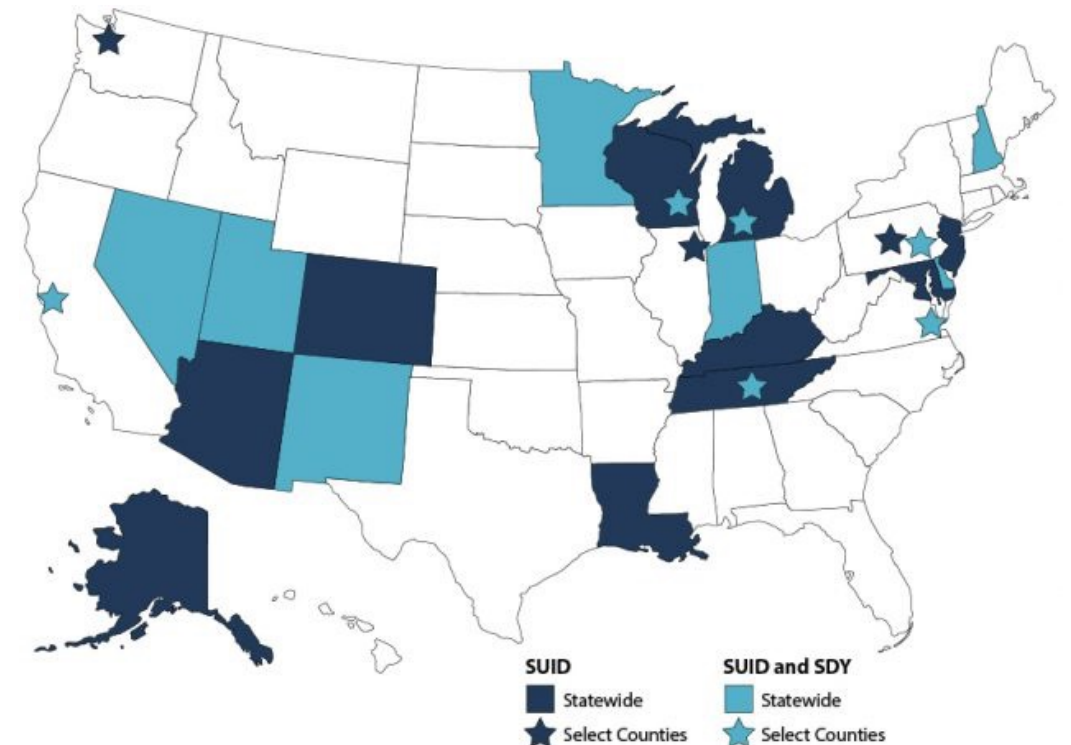
58% OF CHICAGO PARENTS ENGAGED IN ONE OR MORE UNSAFE INFANT SLEEP PRACTICES



Attridge M, Heffernan ME, Smith TL, Bendelow A, Menker C, Macy ML, Davis MM. Infant Sleep Practices in Chicago Families, Voices of Child Health in Chicago Report. Vol 4, Number 1. January 2022. Available at luriechildrens.org/voices.

What is the SUID Case Registry?

- As part of the Sudden Unexpected Infant Death (SUID) and Sudden Death in the Young (SDY) Case Registry, CDC's Division of Reproductive Health supports SUID monitoring programs in 22 states and jurisdictions, covering about 1 in 3 SUID cases in the United States.
- The SUID and SDY Case Registry builds on [child death review](#) programs and uses the [National Center for Fatality Review and Prevention's Case Reporting System](#), bringing together information about the circumstances associated with SUID and SDY cases, as well as information about investigations into these deaths.
- Participating states and jurisdictions use data about SUID and SDY trends and circumstances to develop strategies to reduce future deaths.



Cook County's SUID Case Registry began in 2019

Sudden Unexpected Infant Death

Cook County Report 2019



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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 SUID occur during sleep and these SUID 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.

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

Total deaths: 49

Sleep related deaths: 45

- Suffocation: 8
- Undetermined: 37

100%
All 45 sleep-related SUIDs occurred in an unsafe sleep environment.

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.



49%

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



78%

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



91%

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



Number of infants found in each location:

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

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



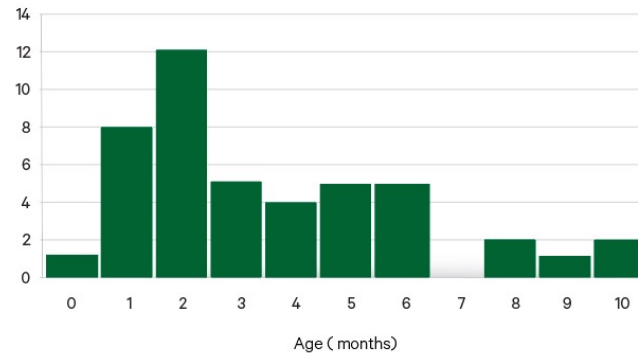
Soft bedding includes pillows, quilts, comforters, sheepskins, blankets, bumper pads, plush toys or stuffed animals.

Sleep-Related Infant Deaths (45) Demographics

Age

Though SUID may occur anytime between birth and 12 months old, there is a peak in SUID between the ages of 1 month and 4 months.

Sleep-Related Infant Deaths by Age (months)
Cook County 2019

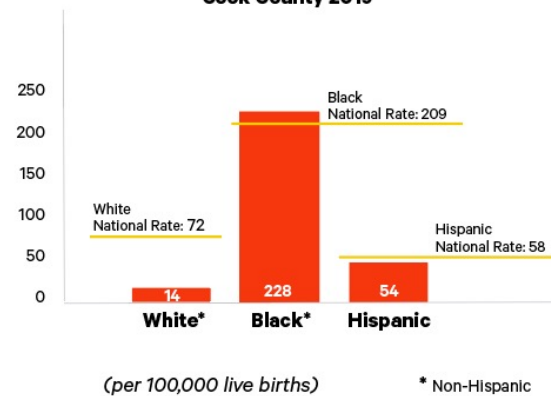


Race and ethnicity

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, however, SUID occurred 16 times more often in Black infants, and nearly 4 times more often in Hispanic infants, when compared with white infants.

SUID Rates by Race/Ethnicity
Cook County 2019



2019 SUID Disparities

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

* Non-Hispanic

Sleep-Related Infant Deaths (45) Risk Factors

Two known risk factors for SUID are prematurity and tobacco smoke exposure.

20%

of SUID occurred among infants who were born prematurely.

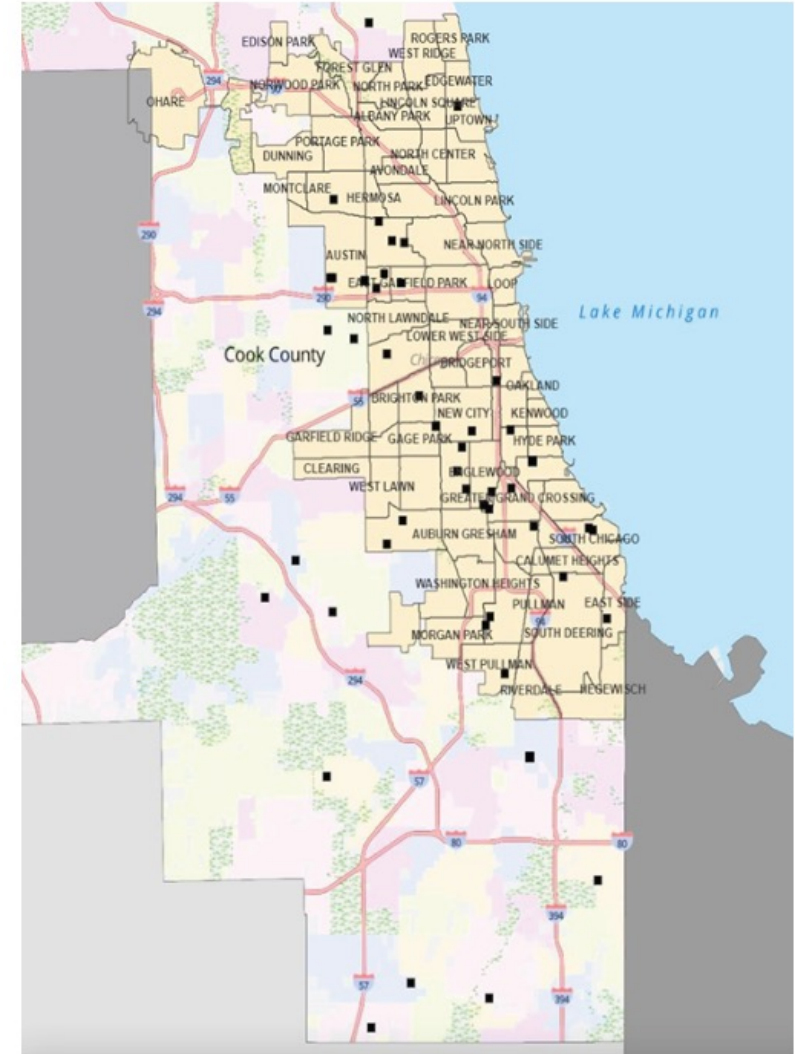
33%

of SUID occurred among infants who had prenatal and/or current smoke exposure.

Geographic distribution

Though SUID occurs throughout Cook County, mapping cases in 2019 clearly 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



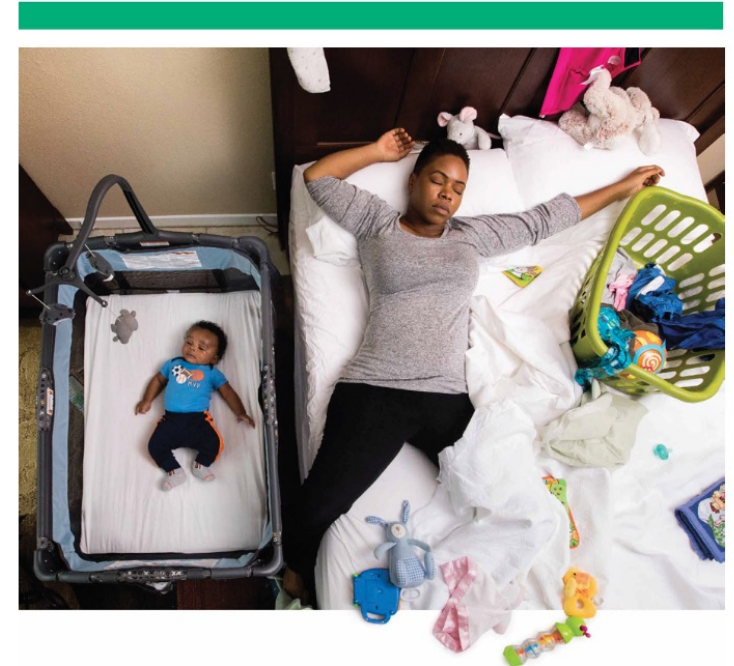
Moving Forward

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 SUID 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, prenatal and household cigarette smoke exposure are among the cited risk factors for SUID and these occurred frequently among Cook County SUID. 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 thus means 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://www.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

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, Family Connects Chicago nurses provide 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/

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've experienced such loss, processes learnings and makes system recommendations to promote better outcomes. FIMR's Interdisciplinary Community Action Team works to create meaningful change by addressing gaps in services, programs and advocate for supportive policies. 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

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

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/services/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/

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 IL MIECHV has supported infant safe sleep through the development and tracking of safe sleep benchmarks since 2018. 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

National resources

AAP Safe Sleep Toolkit: 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. <https://pediatrics.aappublications.org/content/138/5/e20162938>

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/

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

Safe to Sleep: Find education resources and campaign materials at this NIH web resource for organizations. safetosleep.nichd.nih.gov/



Scan the QR code to
view our safe sleep video:



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.



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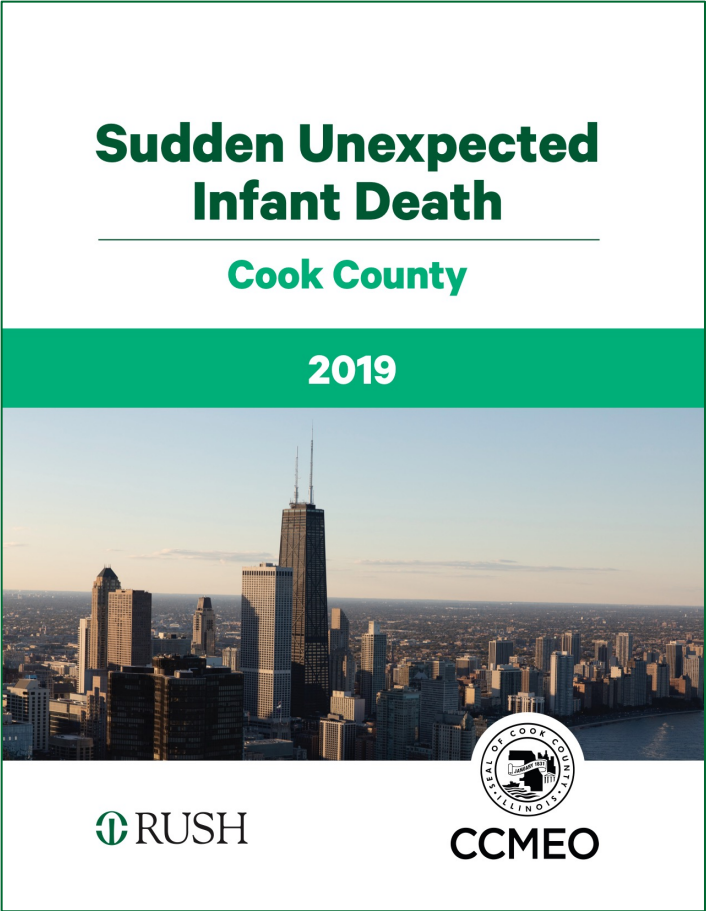
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2019 Cook County SUID Report Dissemination



Next week...

PREVENTING SUID: TURNING DATA TO ACTION WITH CPASS CHICAGO

CPASS CHICAGO SLEEPS SAFE!

COMMUNITY PARTNERSHIP APPROACHES FOR SAFE SLEEP



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