

## Trends in Illinois Child Deaths Between 2010 and 2019

Steve P. Tran and Tamara Fuller

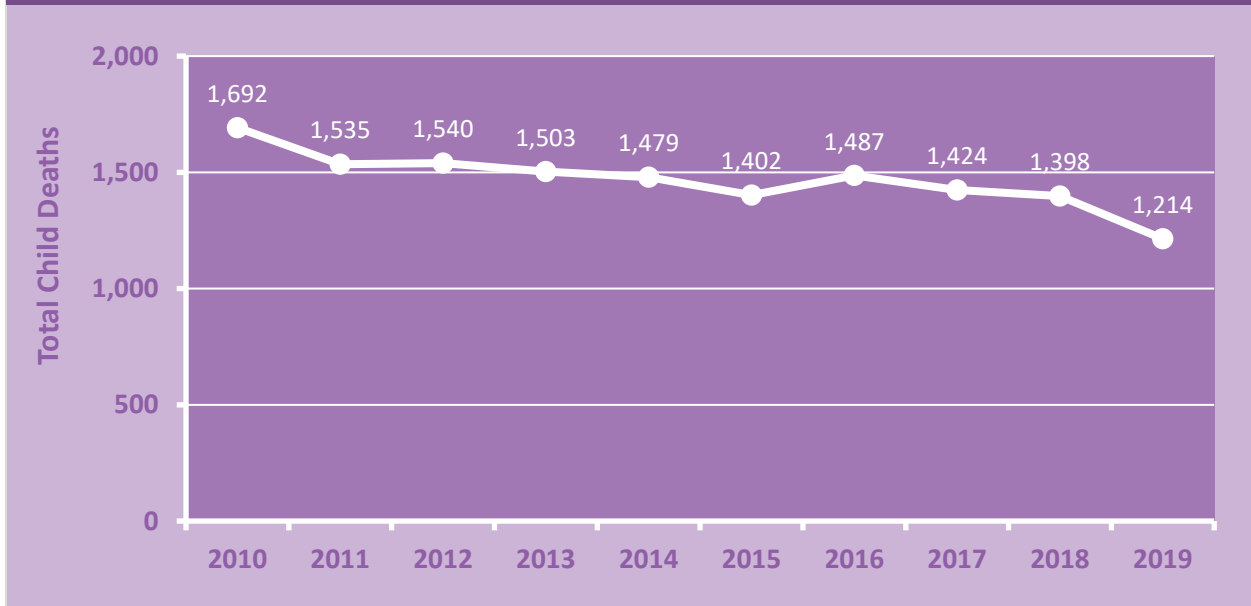
August 2021

To better understand existing child deaths and prevent future deaths, Illinois' Child Death Review Teams (CDRTs) meet monthly, bi-monthly, or quarterly to systematically review the circumstances of certain child deaths and make recommendations to the Department of Children and Family Services (DCFS). As part of this effort, DCFS and the CDRT Executive Council collaborate with the Children and Family Research Center at the University of Illinois to publish and disseminate an annual report that examines child deaths in Illinois (Illinois Department of Children and Family Services, 2021). This research brief uses data from the annual CDRT reports to examine trends in child deaths over the past decade to highlight areas where additional efforts in prevention and intervention are needed or illuminate areas in which policy and practice changes may be working to reduce deaths.

### *Total Child Deaths and Child Deaths by Age*

National child death rates have dropped considerably since 2000. For infants less than one year of age, the rate dropped from 690 per 100,000 in 2000 to 570 per 100,000 in 2018 (National Center for Health Statistics, 2019), the lowest rate on record. Death rates for children in other age groups also fell during this period. The rate for children 1 to 4 years dropped from 32 to 24 per 100,000, children ages 5 to 9 years dropped from 16 to 12 per 100,000, children ages 10 to 14 years dropped from 20 to 15 per 100,000, and youth age 15 to 19 years declined from 67 to 49 per 100,000 (National Center for Health Statistics, 2020). Similar to the national trend, the total number of child deaths in Illinois has decreased over the past decade from a high of 1,692 in 2010 to a current low of 1,214 in 2019 (see Figure 1).

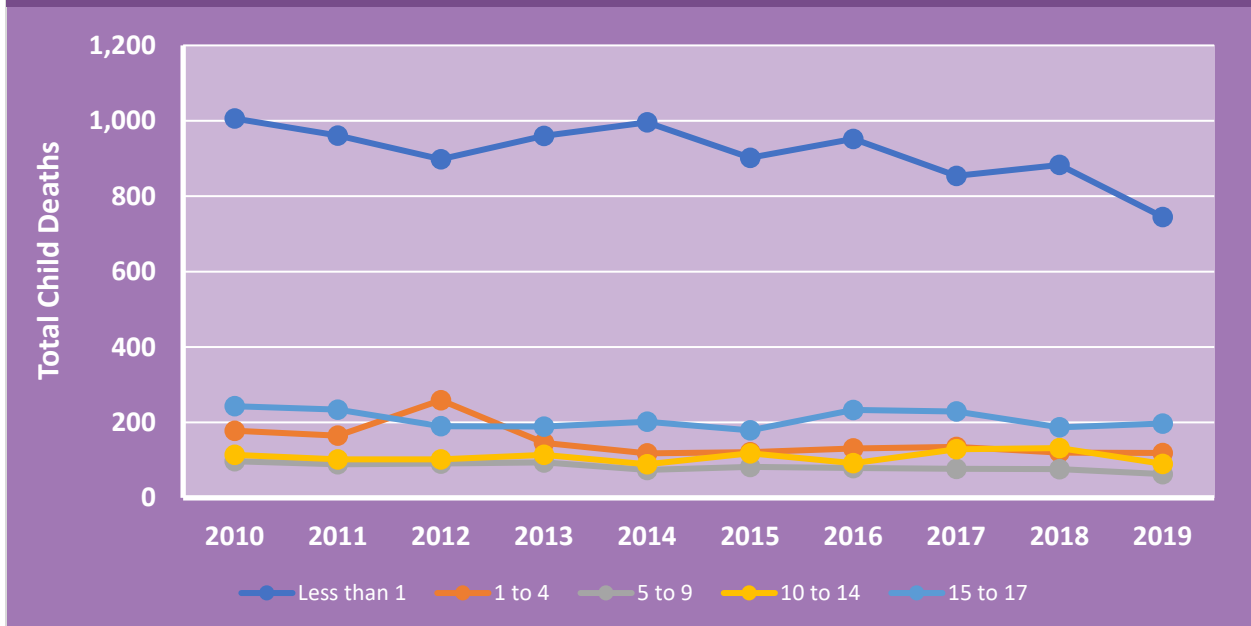
Figure 1. Child Deaths in Illinois 2010-2019\*



\*Number of child deaths between 2010 and 2011 were those reported to the Illinois Department of Public Health (IDPH) before data were consolidated with DCFS in 2012.

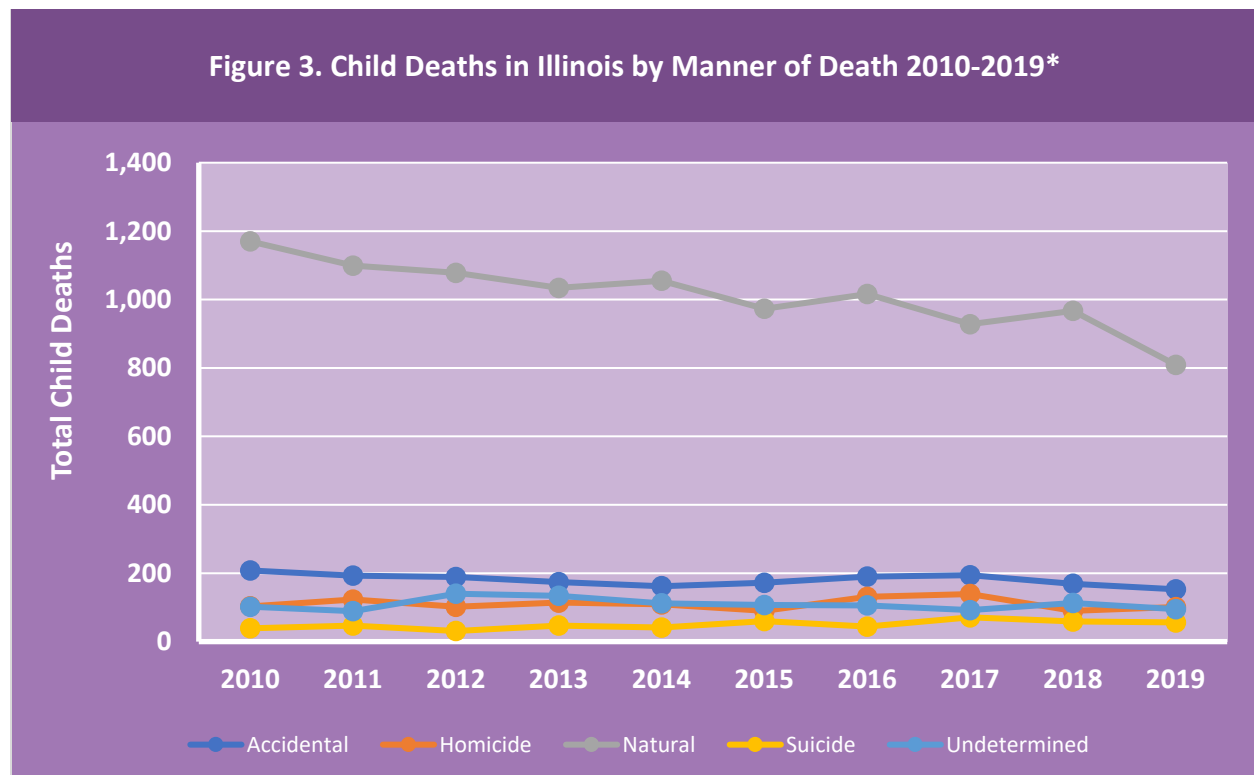
Figure 2 shows the number of child deaths in Illinois by age reported to the CDRTs from 2010 to 2019. Similar to national data, the majority of child deaths each year occur among infants under one year of age. However, the number of deaths among children in this age group has generally decreased in recent years.

Figure 2. Child Deaths in Illinois by Age Group 2010-2019\*



## Child Deaths by Manner of Death

Manner of death is a categorization used by medical examiners, coroners, and physicians when completing a death certificate to clarify the circumstances of death. In most states, including Illinois, manner of death is classified into one of five categories: natural causes, accident, homicide, suicide, and undetermined. Figure 3 shows the number of child deaths by manner of death from 2010 through 2019. The majority of child deaths in Illinois are due to natural causes, which have drastically decreased from a high of 1,170 in 2010 to a current low of 809 in 2019, a 31% decrease. The numbers of deaths due to accidents, homicides, suicides, and undetermined causes are much smaller and have been relatively stable over the ten-year period.

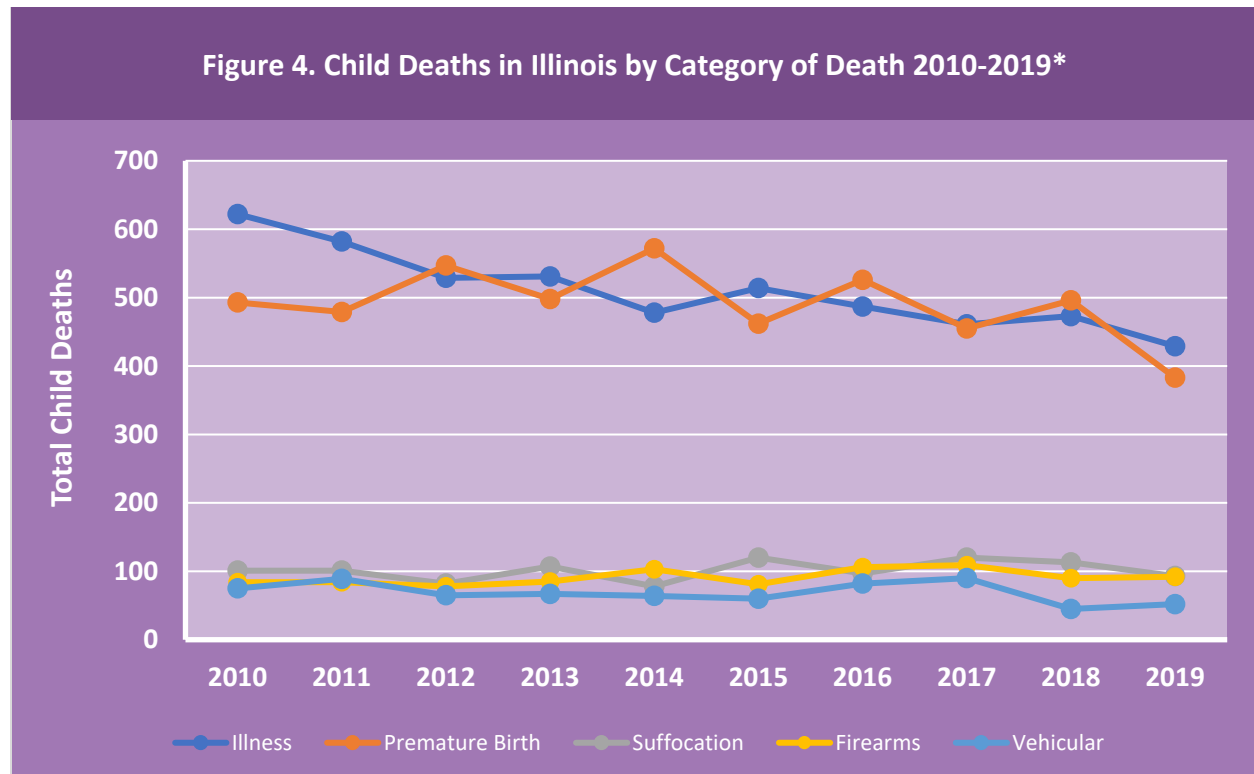


\*Deaths reported to the CDRTS.

## Child Deaths by Category of Death

The CDRT Executive Council has identified 13 categories of death that are used during their reviews, along with categories for undetermined and “other” deaths. Category of death is used to describe what caused the death. For example, if a teenager died after being accidentally shot while hunting, the manner of death would be “accident,” and the category of death would be “firearm.” Trends in the numbers for the most common categories of death are shown in Figure 4. The most common category of death over the past decade and in 2019 was illness. Although it remains the most common category, the number of deaths due to illness reached its lowest point in the last ten years in 2019 (429). The second most common category of death in the past decade and in 2019 was premature birth; these deaths have also dropped to their lowest point in the last ten years in 2019 (383). Some of the other common categories of deaths are

suffocation, firearms, and vehicular. The number of deaths due to suffocation and firearms have remained somewhat consistent, while the number of vehicle deaths has dropped in the last two years.



\*Deaths reported to the CDRTS.

## Conclusion

The number of child deaths has dropped by 28% between 2010 and 2019. When trends in Illinois child deaths are examined by age groups, the number of deaths has decreased most among children under one year of age and have dropped by 26% since 2010. The Illinois Department of Human Services' (IDHS) integrated delivery of the Family Case Management Program (FCM) and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is aimed at reducing the number of child deaths. A recent report shows that these two programs served an average of 21% of all infants and 58% of Medicaid-eligible infants born in Illinois in the 2017 calendar year (Illinois Department of Human Services, 2017). In addition, IDHS supplements the aforementioned statewide programs with the Better Birth Outcomes (BBO) program, which provides more intensive care coordination for high-risk pregnant women who are more likely to have their infants die before their first year of life. The Illinois Child Health (Title V) program at state's department of public health supports a variety of initiatives and programs that address infant outcomes (Illinois Department of Public Health, 2020). For example, the Illinois Perinatal Quality Collaboratives (ILPQC) utilizes improvement projects in birthing hospitals to make sure pregnant women and infants received high-quality care, and

they are also attempting to address maternal health disparities by aiming to have 75% of the state’s hospitals participate in their Birth Equity initiative by December 2023 (Illinois Department of Public Health, 2020; Illinois Perinatal Quality Collaborative, 2021). It is possible that these programs aimed at improving maternal and child health may have had an impact in reducing child deaths due to prematurity and will prevent future deaths. Other trends such as the drop in child vehicular deaths reflects national downtrends on child and teenage motor vehicle fatalities (Insurance Institute for Highway Safety, 2020).

### Recommended Citation

Tran, S.P., & Fuller, T. (2021). *Trends in Child Deaths in Illinois Between 2010 and 2019*. Urbana, IL: Children and Family Research Center, University of Illinois at Urbana-Champaign.

### 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.

### Related Publications

Fuller, T., & Tran, S.P. (2020). *Understanding Child Death Review in Illinois*. Urbana, IL: Children and Family Research Center, University of Illinois at Urbana-Champaign.

Tran, S.P., & Fuller, T. (2021). *Examining Child Deaths in Illinois: Highlights from the FY2021 Child Death Review Team Annual Report*. Urbana, IL: Children and Family Research Center, University of Illinois at Urbana-Champaign.

### References

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

Illinois Department of Human Services. (2018). *The Reduction of Infant Mortality in Illinois – Fiscal Year 2017*. Springfield, IL: Author.

<https://www.dhs.state.il.us/OneNetLibrary/27897/documents/Child%20Care/InfantMortalityAR2017050420.pdf>

Illinois Department of Public Health. (2020). *Illinois Infant Mortality Report*.

<https://dph.illinois.gov/sites/default/files/publications/illinois-infant-mortality-data-report-2020-december.pdf>

Insurance Institute for Highway Safety. (2020). *Fatality facts 2019: Children*.

<https://www.iihs.org/topics/fatality-statistics/detail/children#Age-and-gender>

Insurance Institute for Highway Safety. (2020). *Fatality facts 2019: Teenagers*.

<https://www.iihs.org/topics/fatality-statistics/detail/teenagers>

Illinois Perinatal Quality Collaborative. (2021, August 19). *Birth Equity (BE)*.

<https://ilpqc.org/birthequity/>

National Center for Health Statistics. (2019). *Health, United States, 2019 — Data Finder*.

<https://www.cdc.gov/nchs/data/hus/2019/003-508.pdf>

National Center for Health Statistics. (2020). *Mortality trends in the United States, 1900–2018*.

<https://www.cdc.gov/nchs/data-visualization/mortality-trends>