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Trends in Illinois Child Deaths Between 2007 and 2016

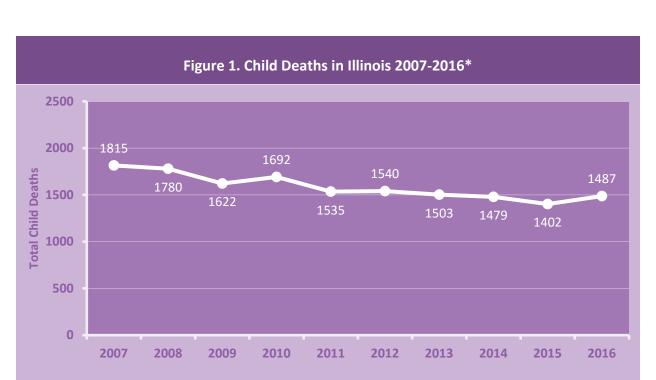
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In an effort to understand existing child deaths and prevent future deaths, Illinois' Child Death Review Teams (CDRTs) meet quarterly to systematically review the circumstances of certain child deaths and make recommendations to the Department of Children 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, 2018). This research brief, the third in a series that highlights the important work of the CDRTs in Illinois, uses data from the annual CDRT reports to examine trends in child deaths over the past decade. This effort can 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.

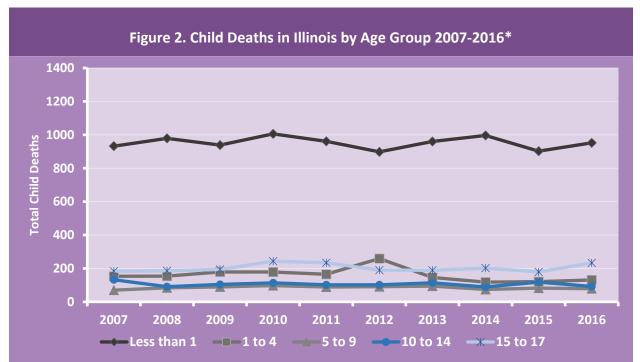
Child Deaths by Age

Nationally, child death rates have fallen dramatically since 1980, and have fallen most dramatically among infants under one year of age: from 1,288 per 100,000 in 1980 to 588 per 100,000 in 2014. During this same time period, death rates for children ages one to four years dropped from 64 to 24 per 100,000, rates among children age 5 to 14 years dropped from 31 to 13 per 100,000, and rates for teens ages 15 to 19 years declined from 98 to 46 per 100,000 (Child Trends DataBank, 2016). Similar to the national trend, the total number of child deaths in Illinois has decreased over the past decade: from 1,815 in 2007 to 1,487 in 2016 (see Figure 1).



*Number of child deaths between 2007 and 2011 were those reported to the Illinois Department of Public Health (IDPH) before data were consolidated with DCFS in 2012.

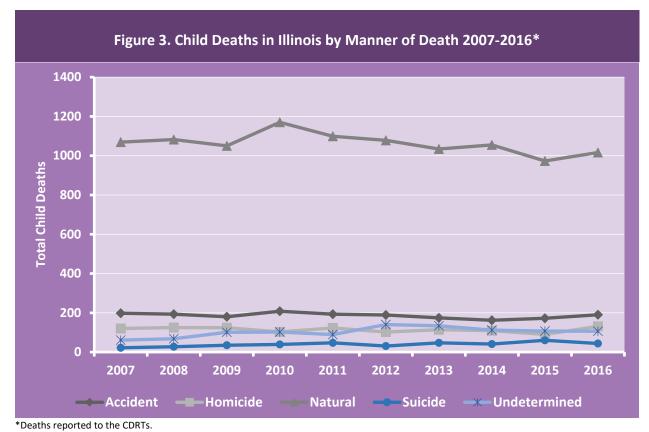
Figure 2 shows the number of child deaths in Illinois reported to the CDRTs from 2007 to 2016, examined by child age. Most notably, and similar to the national data, the vast majority of child deaths each year occur among infants under one year of age. The number of infants that die each year has been relatively stable – fluctuating between 900 and 1,000 each year.



*Number of deaths reported to the CDRTs. In years prior to 2012, the total number of deaths in each age group may not sum to the total deaths reported in Figure 1. This is because of a reporting discrepancy between IDPH and the CDRTs. This issue has been corrected since 2012, and no data suggests any systematic over- or under-counting of deaths by age group or other category.

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 2007 through 2016. The majority of child deaths in Illinois are due to natural causes, and those numbers have been generally stable over the last 10 years, although there was a notably higher number of deaths due to natural causes in 2010. The numbers of deaths due to accidents, homicides, suicides, and undetermined causes are much smaller and have shown no clear trend over the ten-year period.

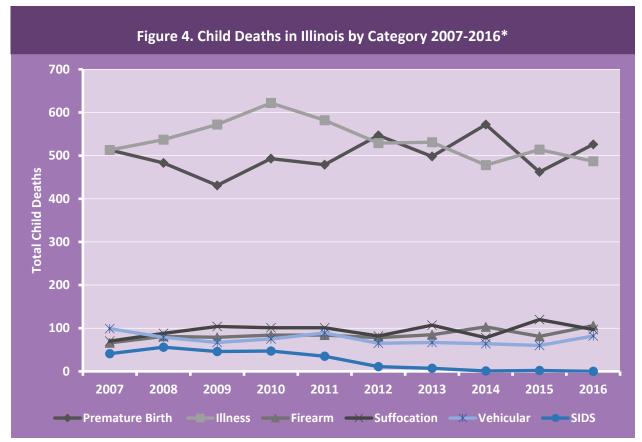


Child Deaths by Category of Death

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 number of prematurity deaths declined to a low of 431 in 2009 but has had an overall upward

trend since then. The number of deaths from illness peaked in 2010 at 622 and has declined since then. Firearm deaths show the largest increase, rising from 66 in 2007 to 106 in 2016, a 61% relative increase. Deaths due to suffocation have increased from 70 in 2007 to 97 in 2016. One category that has seen a significant decrease is deaths due to Sudden Infant Death Syndrome (SIDS), which have declined steadily from 41 in 2007 to none in 2016. This decline corresponds with the Back to Sleep campaign and other similar efforts to avoid any obstruction to infant airways.



*Deaths reported to CDRTs.

Conclusion

In the decade between 2007 and 2016, the number of child deaths in Illinois has declined by almost 20%. A more detailed examination of the trends among different subgroups of children suggests that the overall decline in child deaths is not specific to one age group of children or manner of death. However, there has been a notable decrease in the number of child deaths due to certain categories of death, including illness and SIDS, and notable increases in other categories of death, such as vehicular accidents and suffocations. This suggests that programs aimed at improving maternal and child health and campaigns aimed at improving "safe sleep" practices may have had an impact in reducing child deaths (Illinois Department of Human Services, 2014). Recent increases in other types of child deaths suggest that new campaigns aimed at preventing deaths due to vehicular accidents or suffocations may be needed.

Recommended Citation

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Acknowledgements

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Related Publications

Fuller, T., Braun, M.T., & Zhang, S. (2016). *Understanding Child Death Review in Illinois*. Urbana, IL: Children and Family Research Center, University of Illinois at Urbana-Champaign.

Tran, S.P., & Fuller, T. (2018). *Examining Child Deaths in Illinois: Highlights from the Child Death Review Team Annual Report*. Urbana, IL: Children and Family Research Center, University of Illinois at Urbana-Champaign.

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Child Trends Databank. (2016). *Infant, child, and teen mortality: Indicators on child and youth well-being*. Retrieved from https://www.childtrends.org/indicators/infant-child-and-teen-mortality.

Illinois Department of Children and Family Services. (2018). *The Illinois Child Death Review Team Annual Report - 2016.* Springfield, IL: Author.

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