

## Sudden Unexpected Infant Death (SUID), 2012

In the United States today, around 24,500 infants do not live to celebrate their first birthday [1]. About 3,500 infants die of SUID [1,2]. Sudden infant death syndrome (SIDS), a major component of SUID, decreased by about 50 percent in the 1990s with the most decline occurring after the “Back to Sleep” campaign was initiated in 1994. Since then, the decline in the SIDS rate has been less dramatic. This slowed decline in SIDS is likely explained by increasing rates of infant deaths classified as “accidental suffocation” and “unknown cause” [3].

Healthy People 2020 (HP2020) includes a measure to track SUID. MICH-1.9 states, “Reduce the rate of infant deaths from sudden unexpected infant deaths (includes SIDS, unknown cause, accidental suffocation, and strangulation in bed)” with a target of 0.84 deaths per 1,000 live births. The ICD-10 codes for this objective includes R95 (SIDS), R99 (unknown cause) and W75 (accidental suffocation and strangulation in bed) [4].

### Kansas Highlights

- In 2012, there were 254 Kansas resident infant deaths. Sixteen percent (40) of these deaths were classified as SUID with a rate of 1.0 per 1,000 live births.
- Among the 40 SUID deaths, 60 percent were due to SIDS (24 deaths), 32.5 percent were due to unknown causes (13 deaths) and 7.5 percent were due to accidental suffocation or strangulation in bed (3 deaths).
- During 2008-2012, Multi race non-Hispanics had the highest SUID rate at 4.2 per 1,000 live births among the population groups and White non-Hispanics had the lowest SUID rate at 1.0 per 1,000 live births.
- SUID occurs mainly in the post-neonatal time period. In Kansas, 2008-2012, 29 deaths (12.3%) occurred in the neonatal period and 207 deaths (87.7%) occurred in the post-neonatal period.
- Among SUID deaths, Kansas, 2008-2012, 61.0 percent were male and 39.0 percent were female.
- To analyze gestational age, the linked birth and death file is used. Fifteen percent of SUID infants were premature (<37 weeks gestation) compared to 9.1 percent of all live births in the same time period.

**Table 1. SUID Rates, Kansas, by Population Group, 2008-2012**

Population Group	Total Births	SUID Deaths	Rate/1,000 live births
White non-Hispanic	145,715	150	1.0
Black non-Hispanic	13,936	38	2.7
American Indian/Alaskan Native non-Hispanic	1,125	4	na
Asian/Hawaiian and other Pacific Islander non-Hispanic	5,873	0	0.0
Multi race non-Hispanic	3,130	13	4.2
Other non-Hispanic	1,094	1	na
Unknown	862	3	na
Hispanic any Race	32,557	27	0.8

na = The rate is considered unstable, when the relative standard error is greater than 30.

### More Kansas Health Statistics and Publications

- For a list of all publications issued by KDHE go to [http://www.kdheks.gov/data\\_reports\\_stats.htm](http://www.kdheks.gov/data_reports_stats.htm).
- Visit Kansas Information for Communities (KIC) the department’s online data query tool at <http://kic.kdhe.state.ks.us/kic/index.html>.
- Community Health Needs Assessment information at <http://www.kansashealthmatters.org/>.

## Trends

While SUID rates fluctuated in the years 2005-2012, Joinpoint regression analysis showed a statically significant decreasing trend in SUID rates (Figure 1).

The SUID trend (2005-2012) by component showed a sharp decrease in number of SIDS deaths from 2008 to 2009 followed by a more gradual decrease through 2012, while unknown cause showed a slight increase in recent years. The trend in suffocation in bed has remained flat over time with some fluctuation (Figure 2).

## State and National Comparison

- In 2012, Kansas' SUID rate of 1.0 per 1,000 live births was 18 percent higher than the HP2020 target of 0.84 deaths per 1,000 live births.
- In 2010, the most recent year with national SUID data, the national rate was 0.9 per 1,000 live births (3,610 SUID deaths), while Kansas's rate was slightly higher at 1.0 per 1,000 live births (42 SUID deaths) [2, 5].

### Want to Know More?

Kansas Infant Death & SIDS Network, Inc.

<http://www.kidsks.org/>

State Child Death Review Board

<http://ag.ks.gov/about-the-office/affiliated-orgs/scdrb>

National SUID/SIDS Resource Center

<http://www.sidscenter.org/>

Figure 1. SUID Rate, Kansas Residents, by Year, 2005-2012

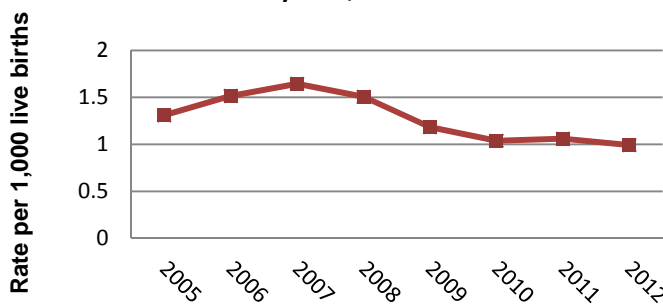
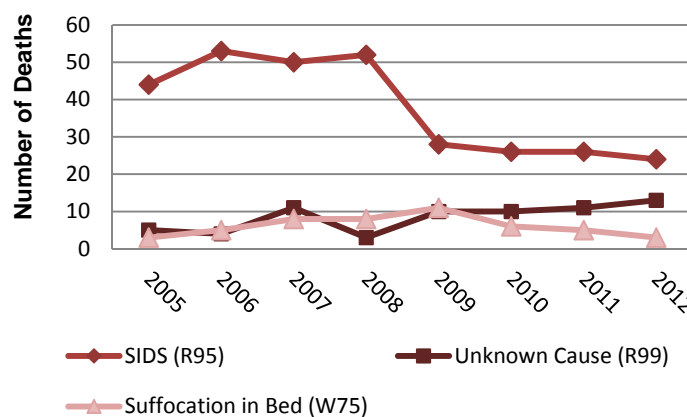


Figure 2. SUID Components, Kansas Residents, by Year, 2005-2012



**Authored by:** Carol Moyer, Cathryn Savage

### References:

- (1) Hoyert DL, Xu JQ. Deaths: preliminary data for 2011 [internet]. Hyattsville, (MD): National Center for Health Statistics. 2012. Oct 10 [cited 2013 Aug 16]; 61(6) Available from: [http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61\\_06.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_06.pdf)
- (2) Centers for Disease Control and Prevention [internet]. Atlanta (GA): [cited 2013 Aug 20]. Available from: <http://www.cdc.gov/sids/>
- (3) Shapiro-Mendoza CK, Camperlengo SY, Covington T. The sudden unexpected infant death registry: a method to improve surveillance. *Pediatrics*. 2012. Jan; 129:e486-e493.
- (4) Healthy People 2020 Goals and Objectives [Internet] Department of Health and Human Services. [Cited 14 Aug. 2013]. Available from: <http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=26>
- (5) Martin JA, Hamilton BE, Ventura SJ, et al. Births: Final data for 2010 [internet]. Hyattsville (MD): National Center for Health Statistics. 2012 Aug [cited 2013 Aug 20]; 61(1). Available from: [http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61\\_01.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_01.pdf)