



CHILD FATALITY REVIEW ANNUAL REPORT

2005 Deaths

Stark County, Ohio


Report Prepared by:

Stark County Health Department

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July 2007



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Stark County Child Fatality Review Board

Greetings:

The following document is the sixth annual report of the Stark County Child Fatality Review Board. Dedicated professionals from public health, children services, health care, law enforcement, safety forces, mental health, and other social and community services have diligently been working to review the deaths from the year 2005 and to bring forth recommendations to the community.

In 2005 there were 60 childhood deaths (under the age of 18) in Stark County. This is an increase from the previous years of 40,49 and 59 for 2004,2003, and 2002. The review board concluded that 14 (23%) of the childhood deaths reviewed this past year were preventable. Of these, 11 were attributable to the leading cause of childhood mortality, accidents.

Many of the professionals in our community are working hard, through the Safe Kids Coalition, to prevent these accidental deaths. This year the Child Fatality Review Board has targeted safe sleep for infants as a community priority. Through help from the Safe Kids Coalition, already efforts have begun to address this issue in Stark County.

Sincerely,

William J. Franks, MPH, Chair

Stark County Child Fatality Review Board

Purpose of Child Fatality Review

In 2000, legislation was enacted that required every county in Ohio to create a Child Fatality Review Board to review the deaths of all children age 17 and under. The ultimate purpose of the Child Fatality Review Board is to decrease the incidence of preventable child deaths by:

- Promoting cooperation, collaboration, and communication between all groups, professions, agencies, and entities that serve families and children.
- Maintaining a comprehensive database of all fetal and child deaths that occur in Stark County in order to develop an understanding of the causes and incidence of those deaths.
- Making recommendations to local agencies for the development of new programs and changes to current programs that will help to prevent fetal and child deaths.
- Advising the Ohio Department of Health of aggregate data, trends, and patterns concerning child deaths.

Child Fatality Review Board Members

The mandated board members include: county coroner, chief of police or sheriff, executive director of a public children services agency, public health official, executive director of a board of alcohol, drug addiction, or mental health board, and a physician.

After reviewing the child deaths for the year 2000, the original board members of the Stark County Child Fatality Review Team decided that additional members from various specialty fields would benefit the review process. Individuals from several different agencies from different areas of the county were invited to join the review team.

Those agencies that joined the team in 2002 include experts from areas such as hospital administration, public health, child and family health services, emergency medical services, and fire prevention services. A local retired pediatrician has also volunteered his time to help with the team.

In 2004, a representative from Stark Metropolitan Housing joined the Child Fatality Review Board.

Stark County, Ohio

Based on data from the 2000 U.S. Census, the population of Stark County, Ohio is 378,098. Females comprise 52.0% (196,510) of the population and males 48.0% (181,588). For the 2000 U.S. Census, residents were able to select multiple race categories. Based on this data, 91.6% of Stark County residents (346,221) identify themselves as white and 8.0% (30,070) identify themselves as Black or African American. Children under the age of 18 account for 24.8% (93,936) of the total population of Stark County.

Summary of 2005 Deaths

The Stark County Child Fatality Review Board has reviewed all 60 deaths of children age 17 and younger that occurred in 2005. These 60 deaths represent an increase in the total number of deaths from 2004 (41 deaths).

In 2005:

- 78.3% of deaths (47 of 60 deaths) were due to natural causes
- 61.7% of deaths (37 of 60 deaths) occurred in males
- 76.7% of deaths (46 of 60 deaths) occurred in white children
- 65.0% of deaths (39 of 60 deaths) were in infants less than 1 year old

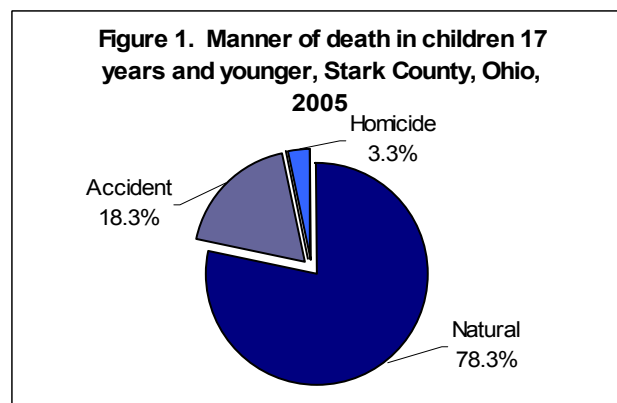


Table 1. Deaths in children 17 years and younger in Stark County, Ohio, 2005

Manner of Death classifications are defined as follows:

Natural: Death resulting from inherent, existing conditions (congenital anomalies, disease, SIDS, etc.).

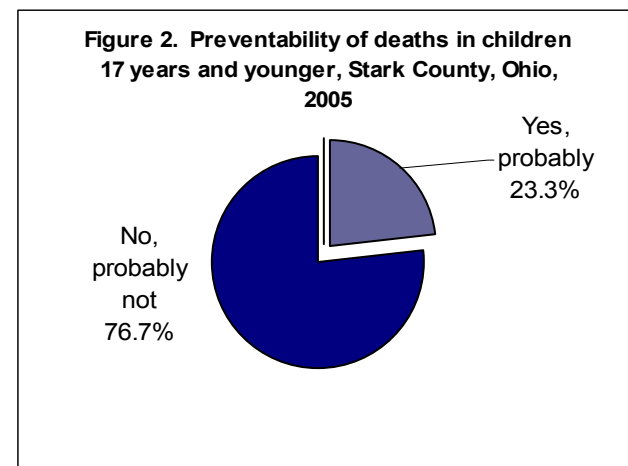
Accident: Death resulting from non-intentional trauma.

Suicide: Intentional self-caused death.

Homicide: Death caused by another.

Undetermined: Unable to determine manner of death.

		Manner of Death					Total
		Natural	Accident	Suicide	Homicide	Undetermined	
Age Group	<1	35	4	0	0	0	39
	1-4	6	3	0	0	0	9
	5-9	0	0	0	0	0	0
	10-14	3	1	0	0	0	4
	15-17	3	3	0	2	0	8
	Total	47	11	0	2	0	60
Sex	Male	27	8	0	2	0	37
	Female	20	3	0	0	0	23
	Total	47	11	0	2	0	60
Race	White	38	8	0	0	0	46
	Black	8	3	0	2	0	13
	Multiracial	1	0	0	0	0	1
	Total	47	11	0	2	0	60



After circumstances surrounding each child death are examined, the committee attempts to make a determination about the preventability of the death. Of the 60 deaths reviewed from 2005, it was determined that no action could have been taken to prevent 46 (76.7%) of the deaths and 14 deaths (23.3%) could have been prevented.

Natural Deaths

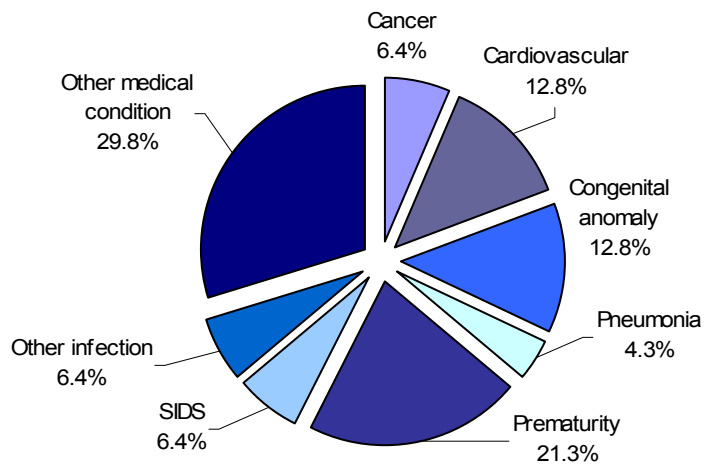
Table 2. Natural deaths in children 17 years and younger by age group, Stark County, Ohio, 2005

	Age Group					Total
	<1	1-4	5-9	10-14	15-17	
Cancer	0	2	0	0	1	3
Cardiovascular	3	1	0	1	1	6
Congenital anomaly	5	1	0	0	0	6
Pneumonia	1	1	0	0	0	2
Prematurity	10	0	0	0	0	10
SIDS	3	0	0	0	0	3
Other infection	2	1	0	0	0	3
Other medical condition	11	0	0	2	1	14
Total	35	6	0	3	3	47

Since the Child Fatality Review process began in 2000, natural deaths have represented the largest percentage of deaths each year. Deaths from natural causes continue to represent the largest proportion of local child deaths. In 2005, 78.3% of all deaths (47 of 60 total deaths) were due to natural causes. These causes included:

- cancer (6.4% of natural deaths)
- cardiovascular disease (12.8% of natural deaths)
- congenital anomalies (12.8% of natural deaths)
- pneumonia (4.3% of natural deaths)
- prematurity (21.3% of natural deaths)
- SIDS (6.4% of natural deaths)
- other infections (6.4% of natural deaths)
- other medical conditions (29.8% of natural deaths)

Figure 3. Natural deaths in children 17 years and younger, Stark County, Ohio, 2005



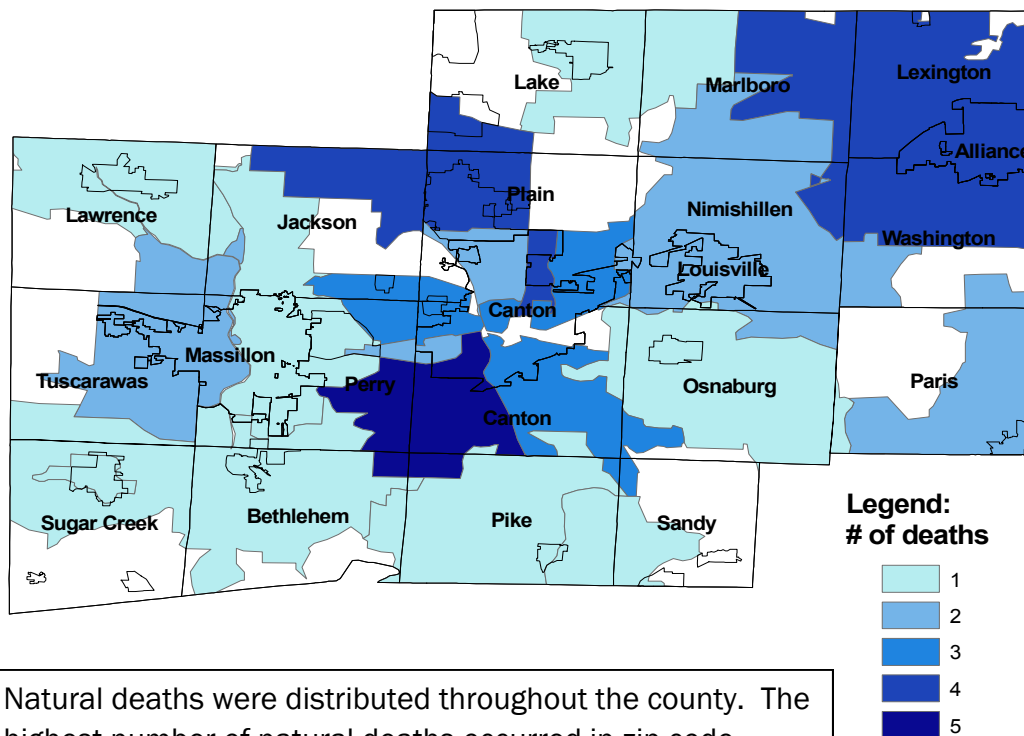
Recent changes to the Child Fatality Review reporting tool and data system have allowed natural deaths to be classified with more detail than in the past. Deaths due to “Other medical conditions” represented the largest percentage (29.8%) of all natural deaths in 2005. These deaths included many different medical conditions that in past years may have been classified as congenital anomaly or prematurity. Prematurity represented the next largest percentage of natural deaths (21.3%, 10 of 47 natural deaths). Many of these children lived for only hours or days.

Natural Deaths

Table 3. Natural deaths in children 17 years and younger by zip code, Stark County, Ohio, 2005

Zip Code	# of Natural Deaths
44601	4
44613	1
44614	1
44626	1
44632	1
44641	2
44643	1
44646	1
44647	2
44657	2
44662	1
44703	3
44705	3
44706	5
44707	3
44708	3
44709	2
44710	2
44714	4
44720	4
44730	1
Total	47

Figure 4. Natural deaths in children 17 years and younger by zip code of residence, Stark County, Ohio, 2005



Natural deaths were distributed throughout the county. The highest number of natural deaths occurred in zip code 44706. These 5 natural deaths represented 83.3% of all deaths in zip code 44706 (6 total deaths in the zip code).

Infant Deaths

Table 4. Deaths in infants (less than 1 year old) Stark County, Ohio,

	Manner of Death		
	Natural	Accident	Total
Total Reviewed	35	4	39
Premature (< 37 weeks)	26	0	26
Low Birth Weight (< 2500 grams)	24	0	24
Intrauterine Smoke Exposure	10	0	10
Intrauterine Alcohol Exposure	1	0	1
Intrauterine Drug Exposure	4	0	4
Late (> 6 weeks) or No Prenatal Care	4	0	4

Of the 39 deaths reviewed for children less than 1 year old, 35 were due to natural causes (89.7%). The 4 infant deaths that were found to be accidents were all suffocation deaths related to unsafe sleep environments.

The data displayed above represents select risk factors from all 39 infant deaths reviewed. Each child could have had one or more risk factors, thus the numbers do not total 39. For example, 3 infants were exposed to both intrauterine smoke and illegal drugs.

Sleep-related Deaths

Recent changes to the Child Fatality Review case report tool have allowed for a more detailed analysis of the circumstances surrounding child deaths. Sleep-related deaths include those deaths attributed to SIDS and accidental suffocation. Of the 8 sleep-related deaths in Stark County in 2005, 5 (62.5%) were due to suffocation and 3 (37.5%) were determined to be SIDS deaths. Of these deaths, 75.0% (6 of 8 deaths) occurred in males. The 2 deaths in black infants from sleep-related causes represent 25.0% of all sleep-related deaths in 2005.

Table 5. Sleep-related deaths in children by cause, Stark County, Ohio, 2005

	Cause of Death		
	SIDS	Suffocation	Total
0-1 Months	0	2	2
2-3 Months	2	0	2
4-5 Months	1	0	1
8-11 Months	0	2	2
1-4 Years	0	1	1
Total	3	5	8

Male	3	3	6
Female	0	2	2
Total	3	5	8

White	3	3	6
Black	0	2	2
Total	3	5	8

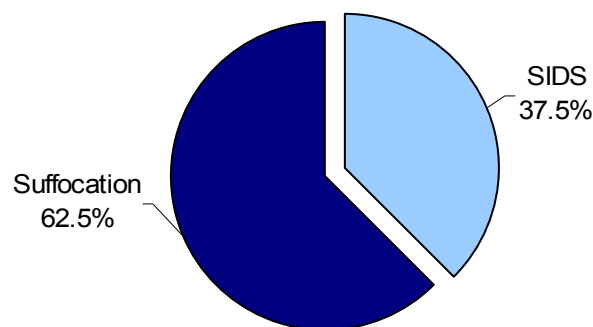
Sudden Infant Death Syndrome (SIDS) is the sudden death of an infant under one year of age that remains unexplained after a comprehensive investigation. Some of the known risk factors for SIDS include: infants sleeping on their stomachs, soft infant sleep surfaces and bedding, maternal smoking during pregnancy, second-hand smoke exposure, overheating, and prematurity or low birthweight. Of the 3 SIDS deaths in Stark County in 2005, 2 infants were sleeping with blankets and soft bedding, 1 had been born prematurely, and 1 had second-hand and maternal smoke exposure.

Because SIDS is a diagnosis of exclusion, extensive investigation must be conducted through autopsy, at the death scene, and by reviewing the infant's health history in order to eliminate other potential causes, such as suffocation or other medical causes.

Deaths due to suffocation in a sleep environment can fall into several categories:

- **Overlay:** A person who is sleeping with a child rolls onto the child and unintentionally smothers the child.
- **Positional asphyxia:** A child's face becomes trapped in soft bedding or wedged or trapped in a small space such as a mattress and a wall or couch cushions.
- **Covering of face or chest:** An object (such as heavy blankets) covers a child's face or compresses the chest.

Figure 5. Sleep-related deaths in children by cause, Stark County, Ohio, 2005



Sleep-related Deaths

Figure 6. Sleep-related deaths in children by zip code, Stark County, Ohio, 2005

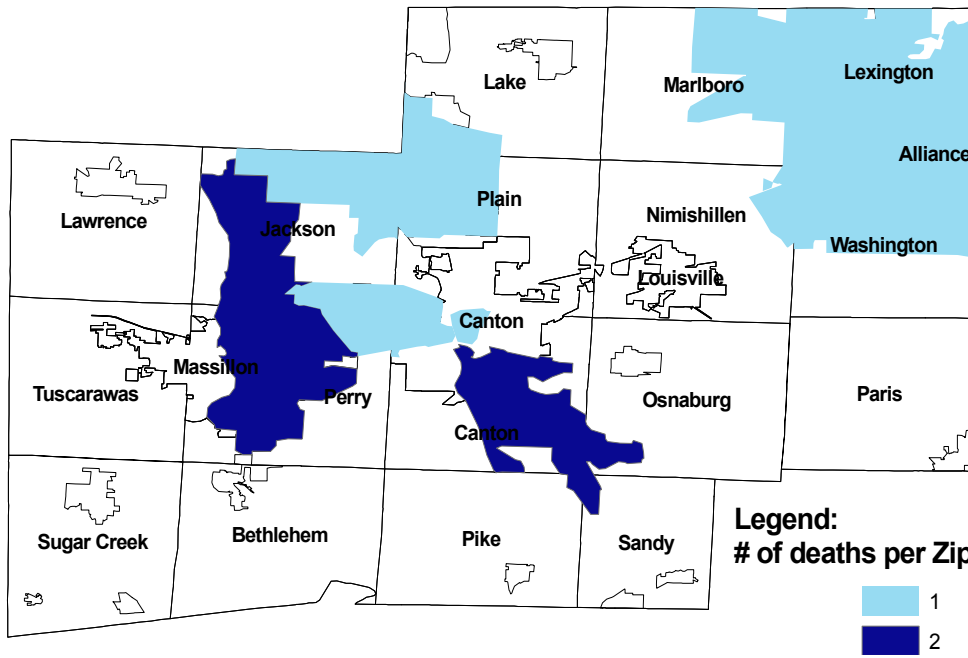


Table 6. Sleep-related deaths in children by zip code, Stark County, Ohio, 2005

Zip Code	Number of Deaths
44601	1
44646	2
44703	1
44707	2
44708	1
44720	1
Total	8

Of the 319 child deaths reviewed from 2000–2005, 11.0% (35 deaths) were sleep-related. The percent of deaths from sleep-related causes for each individual year has ranged from 6.1% (3 of 49 deaths) in 2003 to 17.1% (7 of 41 deaths) in 2004.

Sleep-related deaths occurred more frequently in males (65.7% of all sleep-related deaths) than females. Males represent only 48.0% of the total population of Stark County.

While 91.6% of Stark County residents identify themselves as white and 8.0% identify themselves as Black or African American, black infants accounted for 28.6% of all sleep-related deaths during this time period.

Figure 7. Sleep-related deaths in children, Stark County, Ohio, 2000 - 2005

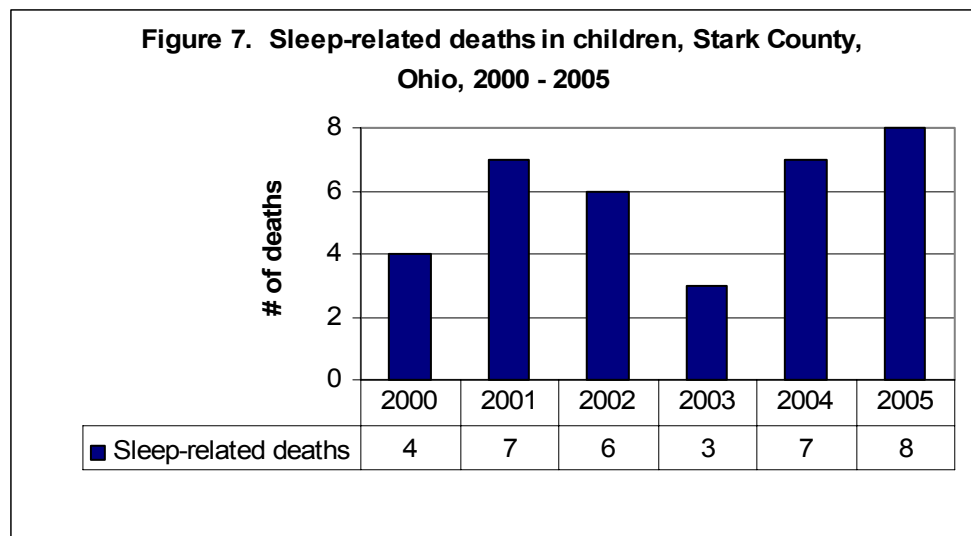
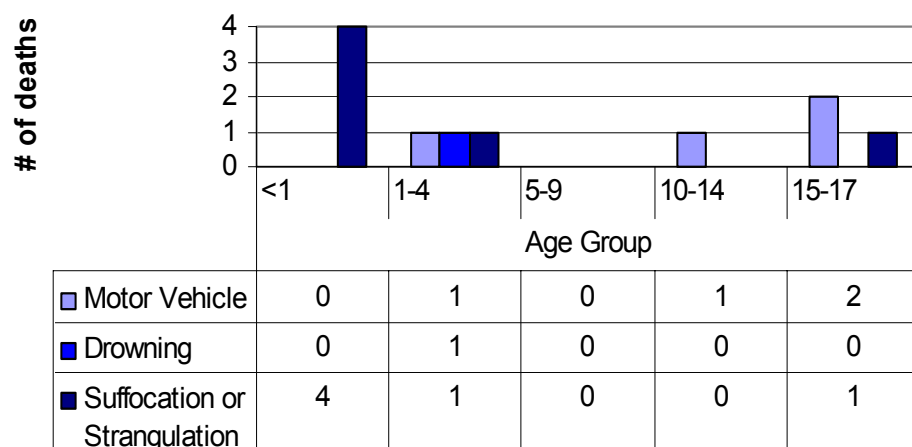


Table 7. Sleep-related deaths in children, Stark County, Ohio, 2000 - 2005

		Sleep-related Deaths						
		2000	2001	2002	2003	2004	2005	Total
Sex	Male	1	6	3	2	5	6	23
	Female	3	1	3	1	2	2	12
	Total	4	7	6	3	7	8	35
Race	White	2	4	4	3	5	6	24
	Black	2	2	2	0	2	2	10
	Asian	0	1	0	0	0	0	1
	Total	4	7	6	3	7	8	35

Accidents

Figure 8. Accident-related deaths in children 17 years and younger, Stark County, Ohio, 2005



In 2005, 11 child deaths in Stark County were determined to be accidents. These deaths included:

- 4 deaths related to motor vehicle accidents
- 1 death due to drowning (in a backyard pool)
- 5 deaths due to suffocation in unsafe sleep environments
- 1 death from strangulation during the “choking game”

Motor vehicle related accidents accounted for 36.4% of all accidental child deaths in Stark County in 2005 (4 of 11 deaths). Of the motor vehicle related deaths:

- 2 children died in automobile accidents in which a parent was driving and was also killed.
- 1 child died in a pedestrian-vehicle accident.
- 1 child died as the result of a dirt-bike accident.

The “choking game” is a dangerous activity, most popular among 9–14 year olds, in which the child or a friend restricts blood and oxygen flow to the brain by compressing the chest or neck. This lack of oxygen creates a “high”. When the pressure on the chest or neck is released, the surge of blood back to the brain creates a “rush”. To some youth this game seems like a “safe” way to get a high. Unfortunately, the game can result in loss of consciousness or death, especially when the child is alone and is unable to release the restriction. In 2005 in Stark County, 1 child death resulted from this dangerous activity.

Homicide

In 2005, 2 of 14 preventable deaths were classified as homicides. These deaths were both in 17 year old males and resulted from fatal gunshot wounds incurred during altercations. The shootings occurred at locations about one-tenth of a mile apart, one in July 2005 and one in December 2005. There is no indication that the two altercations are linked to each other in any way. These 2 homicide deaths accounted for 3.3% of all deaths (60 total deaths) in 2005. In 2004, homicide deaths represented 4.9% (2 of 41 total deaths) of all deaths.

Recommendations

- Educational campaigns for helmet use during bicycle and other non-motorized wheeled sports have seen great success in recent years. Motorized off-road vehicles, such as dirt bikes and go-carts, can also pose a safety danger. It is important to use helmets and other safety equipment during their operation. The board recommends educating both parents and children on the importance of helmet use when operating off-road vehicles, including dirt bikes and go-carts.
- Backyard swimming pools can provide a dangerous enticement to young children if proper precautions are not taken to ensure safety. There are many safety and security devices available for private swimming pools, ranging from basic fencing to alarms that detect the movement of water in the pool. The board recommends educating parents about the potential dangers of swimming pools and the options available to make them safer.
- A dangerous activity, sometimes called the “choking game”, has risen in popularity in recent years, especially among 9-14 year olds. Children intentionally cut off their oxygen supply (using belts, ties, or their hands) in order to feel the dizzy “high” that comes right before they pass out and the “rush” that follows as the restriction is loosened. Unfortunately, children have died as a result of the game, most often when they are alone and cannot loosen the “noose” that was used to stop their oxygen flow. The board recommends that an educational program about the dangers of the “choking game” be developed and presented at area schools.
- One of the most devastating risks to young infants is an unsafe sleep environment. Recently, additional attention has been paid to the dangerous practice of co-bedding (an infant sleeping with an adult or another child). Co-bedding deaths are usually the result of overlay (the person sleeping with the infant rolls onto him or her) or positional asphyxia (the infant’s face becomes trapped in soft bedding or wedged into a small space). The board recommends the development of an educational campaign about the dangers of co-bedding.

Resources

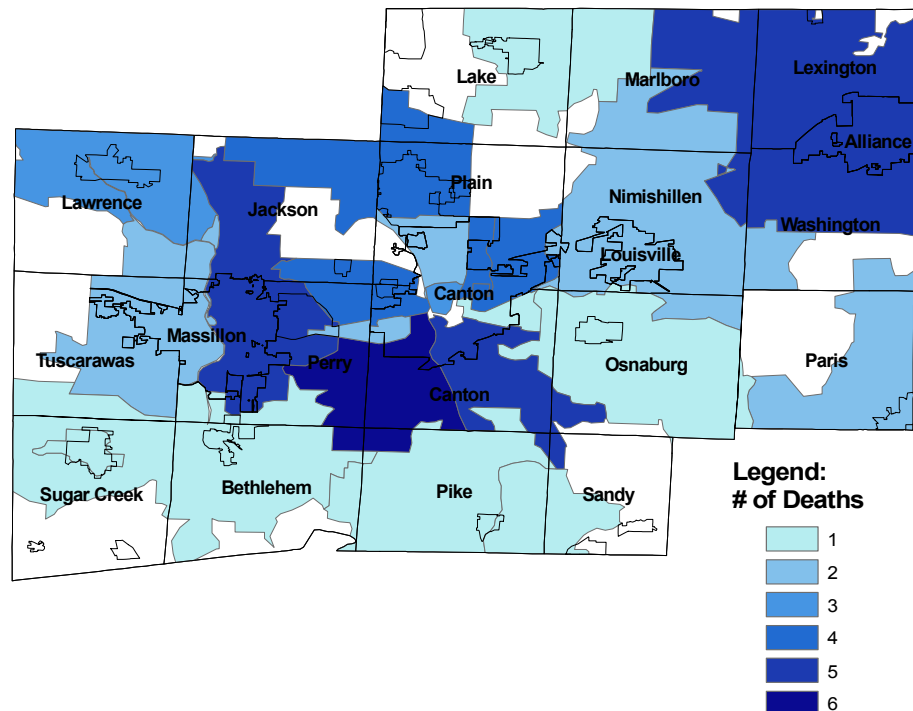
- National Center for Child Death Review: <http://www.childdeathreview.org/>
- Ohio Department of Health Child Fatality Review: <http://www.odh.ohio.gov/odhPrograms/cfhs/cfr/cfr1.aspx>
- Stark County Health Department: <http://www.starkhealth.org/>
- U.S. Census Bureau: <http://www.census.gov/>

Stark County Child Deaths, 2005

All 60 deaths in children age 17 and younger in 2005 were reviewed by the Stark County Child Fatality Review Board. Of these deaths:

- 47 deaths were due to natural causes (78.3% of all deaths)
- 39 deaths occurred in infants less than 1 year old (65.0% of all deaths)
- 8 deaths were sleep-related (13.3% of all deaths)
- 5 of the 8 sleep-related deaths were linked to an unsafe sleep environment (8.3% of all deaths)

Figure 9. Deaths in children 17 years and younger, Stark County, Ohio, 2005



Stark County Child Fatality Review

STARK COUNTY HEALTH DEPARTMENT

3951 CONVENIENCE CIRCLE NW

CANTON, OH 44718