

Prevalence, Disparities and Reasons Among Adults With Depressive Feelings Who Did Not Receive Treatment - 2011 Kansas Behavioral Risk Factor Surveillance System (BRFSS)

Background

One of the objectives of addressing mental health issues recommended by the Healthy People 2020 plan is to increase the proportion of adults with recognized depression who receive treatment. [1] Depression is a treatable condition. [2] Available medications and psychological treatments, alone or in combination, can help 80 percent of those with depression. With adequate treatment, future episodes of depression can be prevented or reduced in severity. Treatment for depression can enable people to return to satisfactory, functioning lives. [3] The Healthy People 2020 target is for 65 percent of adults aged 18 years and older with recognized depression to receive treatment. [1]

Objective

To provide status of adults with depressive feelings not receiving treatment.

Methods

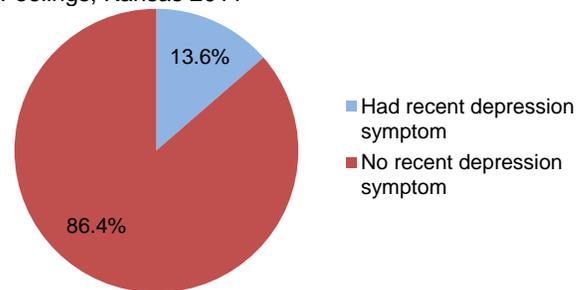
The 2011 Kansas BRFSS data were used for this report. Kansas BRFSS is an ongoing, annual, population-based, random, digit-dial survey of non-institutionalized adults ages 18 years and older living in a private residence with landline or cell phone service in Kansas. Kansas BRFSS uses a split questionnaire design. The core section is asked of all respondents, and the survey then splits into two "branches" (version A or version B) consisting of state-selected optional modules/state-added modules. Approximately half of the respondents that are asked core questions are randomly assigned to either questionnaire version A or questionnaire version B of the survey. Questions related to depression treatment were part of questionnaire version B of the survey. The question used to assess whether a respondent had depressive feelings was, "During the past 12 months, have you had a period of two weeks or longer when you felt sad, discouraged or uninterested?" Those who responded "yes" were asked additional questions related to receiving treatment for depressive feelings: "Did you receive any treatment for your sadness, discouragement or lack of interest at any time in the past 12 months by a medical doctor or other health professional? (By health professional we mean psychologists, counselors, spiritual advisors, herbalists, acupuncturists, and other healing professionals.)"; "During the past 12 months, did you get a prescription medicine for your sadness, discouragement or lack of interest?"; "During the past 12 months, did you receive counseling or therapy from a medical doctor or other health professional for your sadness, discouragement or lack of interest? (By health professional we mean psychologists, counselors, spiritual advisors, herbalists, acupuncturists, and other healing professionals.)"; "During the past 12 months, how many different times have you stayed overnight or longer in a hospital to receive treatment for your sadness, discouragement or lack of interest?"; and "What was the main reason you did not receive treatment that you needed for your sadness, discouragement or lack of interest in the past 12 months?" The respondents were considered to not be receiving treatment for their depressive feelings if they responded that they did not receive treatment from any health professional, prescription medicine, counseling or therapy, and were not hospitalized for their sadness, discouragement or lack of interest at any time in the

past twelve months. Data from the 2011 Kansas BRFSS were analyzed to assess status of receiving treatment for depressive feelings in various population subgroups. Also, the reasons for not receiving treatment were examined. Prevalence estimates and 95% confidence intervals (CI) were calculated. Data were weighted using the new raking method. [4] SAS 9.3 software was used for analysis.

Results

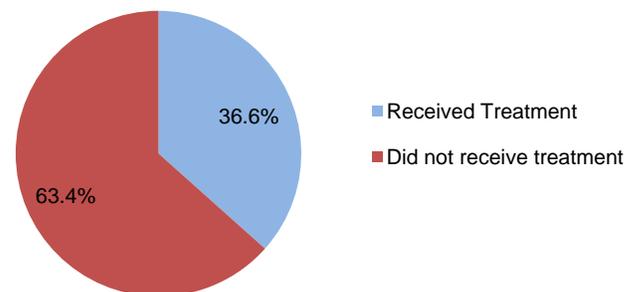
In 2011, an estimated 292,085 (13.6%, 95% CI: 12.2 -15.0) adults had a period of two weeks or longer when they felt sad, discouraged or uninterested (depressive feelings) in the past twelve months (Figure 1).

Figure 1. Percentage of Adults 18 Years and Older with Depressive Feelings, Kansas 2011



Among those that had a period of two weeks or longer when they felt sad, discouraged or uninterested (depressive feelings) in the past twelve months, about 63.4 percent did not receive any treatment, including prescription medicine, counseling or therapy, or hospitalization (Figure 2).

Figure 2. Percentage of Adults 18 Years and Older with Depressive Feelings not Receiving any Treatment.



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A higher percentage of adults with depressive feelings that did not receive treatment was observed among very young and older adults, males, and those living without a disability. The percentage of adults with depressive feelings that did not receive treatment was also relatively higher among the uninsured (Table 1). About one in three adults (31.3%) with depressive feelings did not receive treatment because they did not feel the need or thought the condition was not severe enough. Another main reason for not receiving treatment was cost (Table 2).

Table 1. Percentage of adults 18 years and older with depressive feelings that did not receive any treatment, by sociodemographic characteristics and selected indicators in Kansas, 2011 BRFSS

Sociodemographic Characteristics and selected indicators	Percentage of Adults 18 Years and Older with depressive feelings that did not receive any treatment			
	Unweighted Frequency	Weighted Percentage	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Total	568	63.4	58.5	68.4
Age groups				
18 - 24 years	18	80.6	62.9	98.4
25 - 34 years	34	67.0	52.3	81.7
35 - 44 years	64	57.0	47.0	67.0
45 - 54 years	124	53.4	45.6	61.2
55 - 64 years	141	59.0	52.1	65.8
65 years and older	187	70.0	63.9	76.1
Gender				
Male	183	72.7	65.0	80.4
Female	385	55.8	49.9	61.6
Race				
White Only	505	62.8	57.4	68.1
Black or African American only	31	67.3	47.5	87.0
Other Race Only	17	66.3	44.8	87.7
More than one race	12	69.1	46.0	92.1
Ethnicity				
Hispanic	17	69.9	49.2	90.7
Non-Hispanic	551	63.0	57.9	68.1
Annual Household Income				
Less than \$15,000	75	65.9	54.6	77.3
\$15,000 - \$24,999	118	70.7	61.1	80.2
\$25,000 - \$34,999	68	67.5	54.4	80.7
\$35,000 - \$49,999	80	62.3	49.3	75.2
\$50,000 or higher	156	56.0	47.8	64.1
Education				
Less than high school	50	79.1	67.1	91.1
High school graduate or G.E.D	178	64.9	55.6	74.2
Some college	185	59.0	50.6	67.4
College graduate	154	58.5	50.0	67.1
Marital Status				
Married or member of an unmarried couple	277	59.4	53.4	65.4
Divorced or separated	96	57.4	47.8	67.0
Widowed	134	67.5	59.7	75.4
Never married	60	73.6	60.4	86.7
Employment Status				
Employed for wages or Self-employed	228	66.2	59.2	73.2
Out of work	57	76.1	64.9	87.3
Homemaker or Student	47	63.3	45.4	81.3
Retired	171	65.0	58.0	72.1
Unable to work	65	42.9	32.4	53.4
Disability Status				
Living with a disability	259	52.9	45.9	59.9
Living without a disability	305	71.6	65.1	78.1
Veteran Status				
Served on active duty	70	54.8	41.5	68.1
Not served on active duty	498	64.5	59.3	69.8
Health Insurance Status				
Insured	486	57.3	51.9	62.7
Uninsured	80	82.4	74.8	90.1

Source: 2011 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

Table 2. The main reason provided for not receiving treatment for depressive feelings

Reasons For Not Receiving Treatment	Unweighted Frequency	Weighted Percentage	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Did not feel need/not severe enough for treatment	185	31.3	24.4	38.2
Could not afford/cost/too expensive	66	17.5	11.4	23.6
Just did not seek treatment	95	15.4	10.6	20.3
Illness or death of family member or friend	88	11.7	6.2	17.2
Fear/apprehension/nervousness/ dislike going	16	5.2	1.4	9.0
Denial that needs treatment	13	4.0	0.0	7.9
Work related situation or stress	20	3.6	1.5	5.7
Hours are not convenient	4	2.0	0.0	5.3
Other physical ailments	15	1.5	0.6	2.4
Do not have/know a health provider	8	1.3	0.1	2.5
Other situations preventing seeking treatment	11	1.3	0.4	2.2
Doctor did not address problem	4	1.3	0.0	3.2
Do not want to take prescribed medications	8	1.1	0.2	2.0
Social support (Religious/Family/Friend)	6	1.1	0.0	2.2
Lack transportation/too far away	6	0.6	0.1	1.2
Side effects of medication	3	0.4	0.0	0.8
Provider will not accept my insurance, including Medicaid	3	0.3	0.0	0.7
Already received treatment/counseling	3	0.2	0.0	0.4
Previous treatment did not work	2	0.2	0.0	0.4

Source: 2011 Kansas Behavioral Risk Factor Surveillance System, Bureau of Health Promotion, KDHE.

Conclusions

The percentage of adults with depressive feelings that did not receive treatment was high in Kansas. Disparities were also seen with respect to various socio-demographic sub groups and among health insurance status. The two main reasons for not receiving treatment were not feeling the need and cost. These population-based survey results indicate the need for public health strategies to address issues related to depressive feelings and its treatment among Kansas adults.

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Emerging Issues in Maternal Mortality

In Kansas, maternal mortality, though rare, has risen in the last 20 years. This increasing trend is statistically significant. Complete and accurate identification of all deaths associated with pregnancy is a critical first step in the prevention of such deaths.

Maternal mortality is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.

Using the maternal mortality definition, an estimated 287,000 maternal deaths occurred globally in 2010, a decline of 47 percent from levels in 1990. Sub-Saharan Africa and Southern Asia accounted for 85 percent of the global burden. In 2010, the global maternal mortality ratio (MMR) was 210 deaths per 100,000 live births, down from 400 maternal deaths per 100,000 live births in

1990. The United States (2010) ranked 47th, along with Hungary and Iran, with 21 maternal deaths per 100,000 live births [1]. Kansas had seven resident maternal deaths in 2010 as defined using the maternal mortality definition. Combining three years (2009-2011) to increase stability, Kansas had 19 maternal deaths, or 15.6 deaths per 100,000 live births, 26.9 percent higher than the Healthy people 2020 target of 11.4 maternal deaths per 100,000 live births [2].

Death records identifying the cause of death are an important data source; however, previous studies have shown that physicians fail to report pregnancy or recent pregnancy in 50 percent or more of these cases [3]. To address this issue, in 1986, the Centers for Disease Control and Prevention and the American College of Obstetricians and Gynecologists developed the term “pregnancy-associated death” to expand the definition of maternal mortality. A pregnancy-associated death refers to a death that occurs during pregnancy or within one year after pregnancy regardless of the outcome of the pregnancy or the cause or manner of death. This is considered an improvement in capturing maternal or pregnancy-associated deaths [4]. Since cause-of-death information may not identify death directly caused by pregnancy (e.g., ectopic pregnancy), additional sources of data are necessary for a more complete ascertainment of pregnancy-associated deaths. Two additional methods to ascertain maternal deaths include linkage of records and a pregnancy check box on the death certificate.

In Kansas, pregnancy-associated deaths could be identified with the pregnancy check box starting in 2005, with the 2003 revision of the standard death certificate. Comparison of Kansas data on pregnancy-associated deaths with other states and nationally is difficult since all states do not use the revised death certificate with the pregnancy check boxes; and among the states with the revised certificate, the pregnancy check box options are worded differently. Due to different definitions among the states, maternal mortality is not included in the most current final National Vital Statistics System (NVSS) reports [5].

Methods

The ICD-10 codes for the different categories of maternal deaths discussed in this article are presented in Table 1. Pregnancy-related death is another category referred to in the literature. This category includes maternal deaths expanding the time period to within one year but not from accidental or incidental causes (Table 1). This definition is not used for analysis in this article.

Table 1. Maternal death definitions used in the literature

Standard definitions	ICD-10 Codes
Maternal deaths	A34, O00-O95, O98-O99
Pregnancy-related deaths	A34, O00-O96, O98-O99
Pregnancy-associated deaths	A34, O00-O96, O98-O99 And the pregnancy check box checked Pregnant at the time of death, not pregnant, but pregnant within 42 days of death, or not pregnant, but pregnant 43 days to <1 year.

To make sure all the pregnancy-associated deaths were included in this analysis, Kansas resident female deaths in the years 2005-2011 were linked with mothers of stillborn and live born infants in the years 2004-2011.

This analysis included pregnancy-associated deaths (PAD) that met the following criteria:

- 1) The woman's death was linked to a live birth or stillbirth and occurred up to 365 days after the delivery.
- 2) The response on the death certificate was "yes" to one of the pregnancy questions indicating the woman was pregnant at the time of death or she delivered up to 365 days before her death.
- 3) The cause of death diagnosis code (International Classification of Diseases or ICD-10 code) indicated a death classified as being due to "Pregnancy, Childbirth, and the Puerperium (O00-O09).

Pregnancy O codes are commonly used to identify maternal or pregnancy associated deaths; however, in the time period analyzed for this article, the pregnancy-associated deaths identified by the linking process as well as deaths classified as accidents, homicides or suicides were not coded with pregnancy ICD-10 O codes. Additionally, many of the underlying O codes only indicated the time of death in relation to the pregnancy. Among deaths that occurred 43-365 days after the delivery, all the deaths coded with an ICD-10 O code except one had an O96 ICD-10 underlying code, which only indicates the time framework in which the death occurred.

For consistency, due to the reasons stated above, the underlying cause code was re-coded by the KDHE nosologist based on the literal text supplied by the certifying physician, except for deaths where the underlying cause of death was clearly pregnancy-related. Deaths that can only occur during pregnancy, such as amniotic fluid embolism (an **obstetric** emergency in which **amniotic fluid**, fetal cells, hair, or other debris enters the mother's blood stream via the **placental** bed of the uterus and triggers an allergic reaction), eclampsia, preeclampsia, or an ectopic pregnancy were not re-coded.

Maternal death or maternal mortality rates were defined as, the number of deaths divided by the number of live births in the same time period, times 100,000. Statistical analysis included using the z-test to test differences in proportions, relative standard error to determine rate suppression. To calculate the proportion of female deaths by cause, the maternal deaths were subtracted from all female deaths.

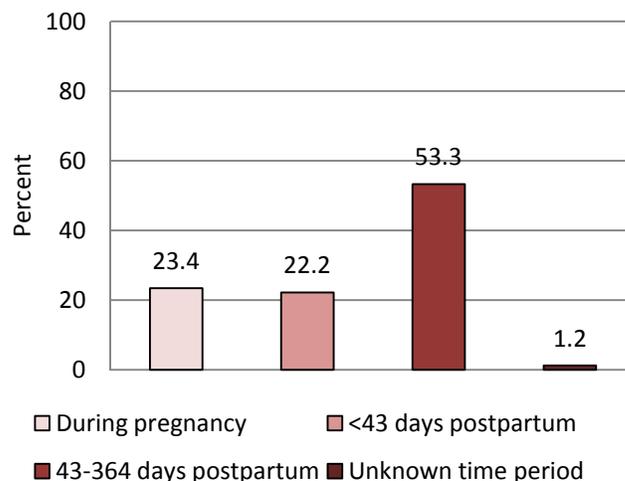
This data analysis only included Kansas resident pregnancy-associated deaths.

Results and Discussion

For the years 2005 through 2011, the standard definition for pregnancy-associated deaths using the ICD-10 O codes and the pregnancy check box yielded 119 deaths. Linking female death data with live birth and stillbirth mothers yielded an additional 48 deaths, or 167 deaths total, a ratio of 58.4 pregnancy-associated deaths per 100,000 live births. The highest percentage (53.3% or 89 deaths) occurred 43-364 days postpartum. Thirty-nine deaths (23.4%) occurred during pregnancy, and 37 (22.2%) occurred in

the 42 days postpartum time period. The time period of death was unknown for 2 deaths (Figure 1).

Figure 1. Time distribution of pregnancy-associated deaths



The highest ratio of pregnancy-associated deaths was among accidental deaths, including poisoning by drugs or alcohol (21.3 per 100,000 live births) followed by cardiovascular (8.0). There were 14 pregnancy-associated homicides and 11 pregnancy-associated suicides, yielding a pregnancy associated violent deaths ratio of 8.7 per 100,000 live births (Table 2).

Table 2. Pregnancy-associated deaths by cause, Kansas residents, 2005-2011

Cause of Death	Number	Percent	Ratio per 100,000 Live Births
Accidents excluding poisoning by drugs, alcohol (V01-X59),	37	22.2	12.9
Poisoning by drugs or alcohol* (X40-X459, F10-F19, Y10-Y15)	24	14.4	8.4
Cardiovascular Disorders (I00-I99) excluding hypertension	23	13.8	8.0
Homicide (X85-Y09)	14	8.4	4.9
Neoplasms (C00-C99)	11	6.6	3.8
Suicide (X60-X84, Y870)	11	6.6	3.8
Hypertensive disorders (I10-I15)	4	2.4	*
Hemorrhage (D65-D69, R58)	3	1.8	*
Infection (A00-B99)	3	1.8	*
Respiratory Disease (J00-J99)	3	1.8	*
Amniotic Fluid Embolism (O881)	3	1.8	*
Endocrine, nutritional and metabolic disease (E10-E649)	2	1.2	*
Congenital anomalies (Q00-Q99)	2	1.2	*
Ectopic pregnancy (O00)	2	1.2	*
Other causes	23	13.8	*
Unknown cause of death	2	1.2	*
Total	167		58.4

* Rates with a relative standard error greater than 50% have been suppressed.

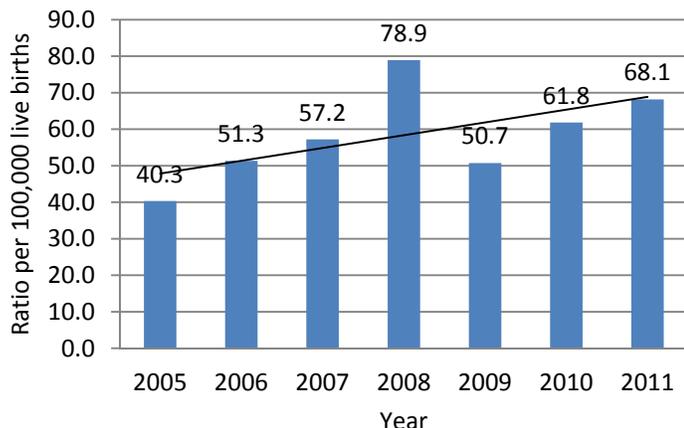
Black non-Hispanic mothers had the highest ratio (25.5 per 100,000 live births), three times that of White non-Hispanic mothers (6.8) or Hispanic mothers (8.7).

Analysis of violent pregnancy-associated deaths by age group shows the highest risk in 10-19 year olds (17.4 per 100,000 live births) followed by 20-24 year old mothers (14.0).

To better understand the prevalence of violent pregnancy-associated deaths, it is necessary to compare the proportion of pregnancy-associated deaths with non-pregnancy-associated deaths in the same time period. The proportion of deaths caused by violence was not significantly different than the percent of deaths among women aged 15-44 in the same time period. This is a serious public health concern in both groups of women.

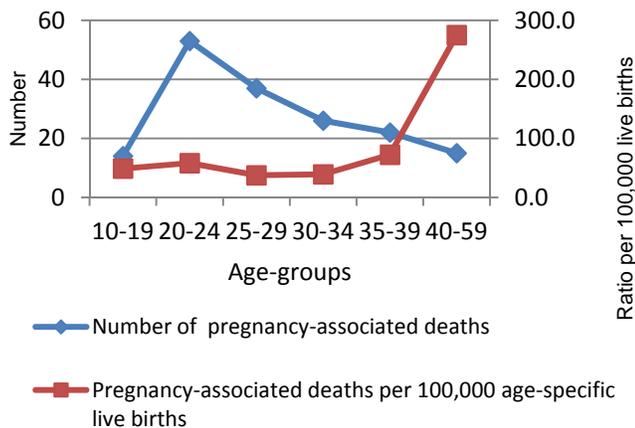
The trend in pregnancy-associated deaths (PAD) appears to be increasing, with a low of 40.3 per 100,000 live births in 2005 and a high of 78.9 in 2008, but this increase is not statistically significant (Figure 2).

Figure 2. PAD ratios by year of death, Kansas, 2005-2011



Mother's age was an important factor in pregnancy-associated deaths (Figure 3). The highest number of pregnancy-associated deaths occurred among mothers aged 20-24 (52 deaths). The ratio of maternal deaths per 100,000 live births increased with age. Mothers aged 40-59 had a significantly greater risk of death, at 275.1 deaths per 100,000 live births (15 deaths), when compared to younger mothers (Figure 3).

Figure 3. PAD by age-group, Kansas 2005-2011



Analysis of pregnancy-associated deaths by population group shows that Black non-Hispanic women had the highest ratio at 76.6 per 100,000 live births. Other non-Hispanic women had the lowest ratio at 43.9 per 100,000 live births. There is no statistically significant difference between the groups (Table 3).

Table 3. Pregnancy-associated deaths by population group, Kansas residents, 2005-2011

Population Group	Pregnancy Associated Deaths		Live Births	Ratio per 100,000 live Births	Confidence Intervals	
	Number	Percent			LCI	UCI
White non-Hispanic	126	75.5	205,181	61.4	50.7	72.1
Black non-Hispanic	15	8.6	19,581	76.6	42.9	126.3
Other non-Hispanic	6	3.7	15,244	39.4	14.4	85.7
Hispanic (all races)	20	12.3	45,588	43.9	26.8	67.8
Total	167	100.0	285,818	58.4	49.6	67.3

Conclusion

Pregnancy-associated deaths, at 68.1 deaths per 100,000 live births in 2011, are a public health problem in Kansas. Women greater than 35 years of age and Black non-Hispanic women have the greatest risk of pregnancy-associated deaths. Higher pregnancy-associated deaths for older women may be a growing public health concern in the future due to the increasing age-specific fertility rates in women over 35 years of age in the last 20 years. To be able to fully understand factors related to pregnancy-associated deaths, it is necessary to implement a maternal review program using multiple data sources and a multidisciplinary case review team including experts such as obstetricians, mental health professionals, coroners, and representatives from law enforcement and the department of transportation.

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Selected Statistics, Stillbirths and Infant Deaths, Kansas, 2011 Report Issued

The Bureau of Epidemiology and Public Health Informatics has issued the 2011 Selected Statistics, Stillbirths and Infant Deaths Report summarizing vital records data on stillbirths and infant deaths.

The purpose of this report is to move beyond single-year statistics reported in the *Annual Summary of Vital Statistics* and provide a more long-term view of stillbirth and infant mortality data and statistics. In an attempt to increase data reliability, years are combined, with preselected intervals. The intervals include 5 years, 20 years or approximately 100 years.

Findings included the following:

- In the last century, the Kansas infant mortality rate (IMR) has decreased dramatically (91.6%), from 73.5 deaths per 1,000 live births in 1912 (2,795 infant deaths) to 6.2 in 2011 (247 infant deaths).

- Even when considering the last 20 years (1992-2011), the overall trend in the infant mortality rate decreased significantly, from 8.8 in 1991 to 6.2 in 2011.
- In the last 20 years (1992-2011), the Black non-Hispanic infant mortality rate has remained at least twice that of the White non-Hispanic population in most years, with an average ratio of 2.5.
- Analysis of the underlying cause of death by population group (2007-2011) shows that “prematurity or low birthweight” was the leading cause of death among Black non-Hispanic infants and “congenital anomalies” was the leading cause of death among White non-Hispanic and Hispanic infants.
- The counties with the highest number of infant deaths (2007-2011) included Sedgwick (312 or 21.9% of the total), Johnson (211 or 14.8% of the total), Wyandotte (117 or 8.2% of the total) and Shawnee (105 or 7.4% of the total). These four counties accounted for 52.2 percent of the infant deaths.
- The counties with the highest infant mortality rates and a relative standard error of 30 percent or lower included Marion (20.7), Neosho (12.9), Cowley (11.2), Geary (9.9) and Cherokee (9.2), while the counties with the lowest rates were Leavenworth (4.0), Douglas (4.5), Finney and Riley (both 5.3), and Johnson (5.5).
- Analysis of the linked birth/death file (2007-2011) shows that prematurity (less than 37 weeks gestation) was a primary risk factor in 63 percent (62.5) of all infant deaths even when the underlying cause of death was not “prematurity or low birthweight.”
- Prematurity was an important risk factor for the non-Hispanic Black population (71.0% of infant deaths), Hispanic population (67.4%), and the White non-Hispanic population (60.0%).
 - Gestational age specific analysis shows an infant mortality rate of 46.4/1,000 live births for infants born prematurely, 17 times that for infants born at term.
 - Similarly, the infant mortality rate for very premature infants (206.4/1,000) was 74 times higher than the rate for infants born at term.

This report, which summarizes vital records data on stillbirths and infant deaths can be found at http://www.kdheks.gov/hci/infant_mortality.htm. Persons inquiring about additional data needs can call (785) 296-8627.

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Kansas State Child Death Review Board 2012 Annual Report

In December 2012, the Kansas Attorney General’s office released the *2012 Annual Report of the Kansas State Child Death Review Board* (SCDRB), examining deaths of Kansas children from birth to age 17 in 2010. In addition, the report addresses deaths of any children from outside Kansas whose death occurred in the State in 2010. The report presents an overview of the 441 deaths investigated by the board, discussing causes and contributing factors, as well as providing specific prevention strategies and public policy recommendations.

The SCDRB was statutorily enacted in 1992 and is made up of 10 volunteer members: eight from various state agencies; one representative of a child advocacy group; and one county or district attorney. The board meets monthly to review child fatality cases. The case files may contain birth and death certificates,

medical reports, law enforcement reports, coroner information, autopsy reports, reports from social services, and any other records which could provide a complete picture of the circumstances leading up to the death. Upon completion of their review, the SCDRB classifies each death by manner and cause, which may differ from the initial manner determined by the coroner.

The goals of the SCDRB include identifying patterns, trends, and risk factors in order to develop prevention strategies and ultimately decrease the number of child deaths in Kansas. The SCDRB also serves as one of three Citizen Review Panels in the state, performing activities required by the Federal Child Abuse Prevention and Treatment Act (CAPTA) in order to receive federal funding for child abuse prevention services.

In 2010, 58 percent of the children whose deaths were investigated were younger than one year of age. For them, the leading cause of death was prematurity. The rate of deaths (per 1,000 live births) resulting from prematurity was almost twice as high as the rate from congenital malformations and 5 times as high as the rate from metabolic/genetic factors. Furthermore, of the children less than one year old whose deaths were determined to be from natural causes, 77 percent were born at less than 37 weeks gestation, compared to nine percent of all live births.

Consequently, the SCDRB places an emphasis on prevention of prematurity, calling for improvement in women’s preconception health. The board recognizes the importance of women having regular health care prior to and throughout pregnancy. Reasoning that “Healthy women are more likely to have a healthy pregnancy,” the board recommends measures to reduce obesity, manage chronic health conditions, improve nutritional status, and avoid negative behaviors such as smoking and drinking. The board supports the recommendations of the Governor’s Blue Ribbon Panel on Infant Mortality, delivered to the Secretary of the Kansas Department of Health and Environment (KDHE) in February 2010. For more information on those recommendations, visit <http://www.kansasinfantmortality.org/>.

Another point of emphasis for the board, concerning infants, is the number of deaths classified as Sudden Infant Death Syndrome (SIDS) where it was impossible to exclude overlay or mechanical asphyxia as a cause of death (33 out of 40 SIDS deaths in 2010). These are instances where the infant was found in sleeping situations other than those identified as safest: supine, on a firm surface, alone, and without loose, soft materials present. Additionally in 2010, five infants were classified as having died from suffocation/strangulation. The SCDRB supports an improved safe-sleep campaign, such as the one created by the Kansas Infant Death and SIDS Network, Inc. (formerly the SIDS Network of Kansas) which has been tested in Sedgwick County and is currently being circulated statewide.

For children aged 1-17 years, 40 percent of deaths were the result of unintentional injuries, including 30 percent from motor vehicle crashes. Of the 55 children who died as a result of a motor vehicle crash, 71 percent were not using a safety restraint. Other risk factors noted were driver inexperience/inattentive driving (36 %) and excessive speed (17 %). It was noted that parents bear a responsibility to model the use of safety restraints and safe driving behaviors. Legislation has already been passed to address inexperience and inattention among young drivers: in January 2010, the revised graduated driver’s license system was enacted to limit driving privileges until a person has reached age 17 and had significant supervised driving time. Also, as of January 1, 2011, anyone operating a motor vehicle is prohibited from sending, receiving, or reading a text message.

Additional policy recommendations of the SCDRB include support for:

- A statewide awareness campaign to prevent drowning by increasing awareness of the importance of supervision and water safety.

- The “Cocoon Pilot Program” by KDHE, intended to reduce infants’ exposure to pertussis through immunization of parents and caretakers.
- Legislation governing the ownership and operation of all-terrain vehicles.
- Legislation imposing a fine for leaving a child under the age of 5 alone in a vehicle.
- Changes to the Kansas Farm Permit (driving) law to restrict the driving privileges of young, inexperienced drivers in rural settings.

There are instances where the deliberations of the SCDRB do not result in a determination of manner of death, either because of multiple circumstances with no single identifiable cause, or because of incompleteness of information available. In 2010, the board classified 13 deaths as being of “undetermined manner.” The board is committed to understanding the factors leading to each child’s death, resulting in the final policy recommendation for continued comprehensive and thorough investigations of child deaths, including complete autopsy and toxicology reports when a child dies from something other than a natural cause.

The SCDRB continues operating under the principles of the National Center for Child Death Review, that upon the death of a child, the community bears responsibility for identifying risks to other children in order to prevent further deaths. For the complete 2012 Annual Report of the Kansas State Child Death Review Board, see <http://ag.ks.gov/docs/documents/scdrb-annual-report-2012.pdf?sfvrsn=6>.

The Office of Kansas Attorney General Derek Schmidt, the SCDRB, the Regional Community Policing Training Institute at Wichita State University, and the Kansas Law Enforcement Training Center have collaborated to present a free one-day workshop providing training on a variety of subjects related to child fatalities. Intended for child advocates, coroners, and professionals in law enforcement, medicine, and social work, it will cover subjects such as suicide prevention, recognizing child abuse, SIDS, death scene investigation, and autopsies. Dates and locations are as follows: June 14, 2013 in Scott City, KS; September 20, 2013 in Pittsburg, KS; and November 15, 2013 in Topeka, KS. The registration form may be obtained at [http://webs.wichita.edu/depttools/depttoolsmemberfiles/rcpi/trainings/2013%20RCPI%20Training%20brochure%20\(2\).pdf](http://webs.wichita.edu/depttools/depttoolsmemberfiles/rcpi/trainings/2013%20RCPI%20Training%20brochure%20(2).pdf).

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New Federal Statistical Delineations Released

The U.S. Census Bureau has established revised delineations for the Nation’s Metropolitan Statistical Areas, Micropolitan Statistical Areas, and Combined Statistical Areas. The new designations are in effect.

A change in the standards as well as their application to new Census Bureau data has resulted in an increase in the number of Combined Statistical Areas. First introduced in the 2000 standards, Combined Statistical Areas can serve as an important geographic tool for the Federal statistical data community. They can be characterized as representing larger regions that reflect broader social and economic interactions, such as wholesaling, commodity distribution, and weekend recreation activities, and are likely to be of considerable interest to regional authorities and

the private sector. If specified criteria are met, adjacent Metropolitan and Micropolitan Statistical Areas, in various combinations, may become the components of a Combined Statistical Area. It should be noted that Combined Statistical Areas complement, but do not supersede Metropolitan and Micropolitan Statistical Areas, which retain their separate component identities.

Kansas now has 25 delineations for Metropolitan Statistical Areas, Micropolitan Statistical Areas, and Combined Statistical Areas (Table 1).

Table 1. Census Bureau Statistical Delineations, Kansas, 2013

Area	Code	Area Type
Arkansas City-Winfield, KS	11680	Micropolitan Statistical Area
Atchison, KS	11860	Micropolitan Statistical Area
Coffeyville, KS	17700	Micropolitan Statistical Area
Dodge City, KS	19980	Micropolitan Statistical Area
Emporia, KS	21380	Micropolitan Statistical Area
Garden City, KS	23780	Micropolitan Statistical Area
Great Bend, KS	24460	Micropolitan Statistical Area
Hays, KS	25700	Micropolitan Statistical Area
Hutchinson, KS	26740	Micropolitan Statistical Area
Junction City, KS	27920	Micropolitan Statistical Area
Kansas City, MO-KS (part)	28140	Metropolitan Statistical Area
Kansas City-Overland Park-Kansas City, MO-KS (part)	312	Combined Statistical Area
Lawrence, KS	29940	Metropolitan Statistical Area
Liberal, KS	30580	Micropolitan Statistical Area
Manhattan, KS	31740	Metropolitan Statistical Area
Manhattan-Junction City, KS	358	Combined Statistical Area
McPherson, KS	32700	Micropolitan Statistical Area
Ottawa, KS	36840	Micropolitan Statistical Area
Parsons, KS	37660	Micropolitan Statistical Area
Pittsburg, KS	38260	Micropolitan Statistical Area
St. Joseph, MO-KS (part)	41140	Metropolitan Statistical Area
Salina, KS	41460	Micropolitan Statistical Area
Topeka, KS	45820	Metropolitan Statistical Area
Wichita, KS	48620	Metropolitan Statistical Area
Wichita-Arkansas City-Winfield, KS	556	Combined Statistical Area

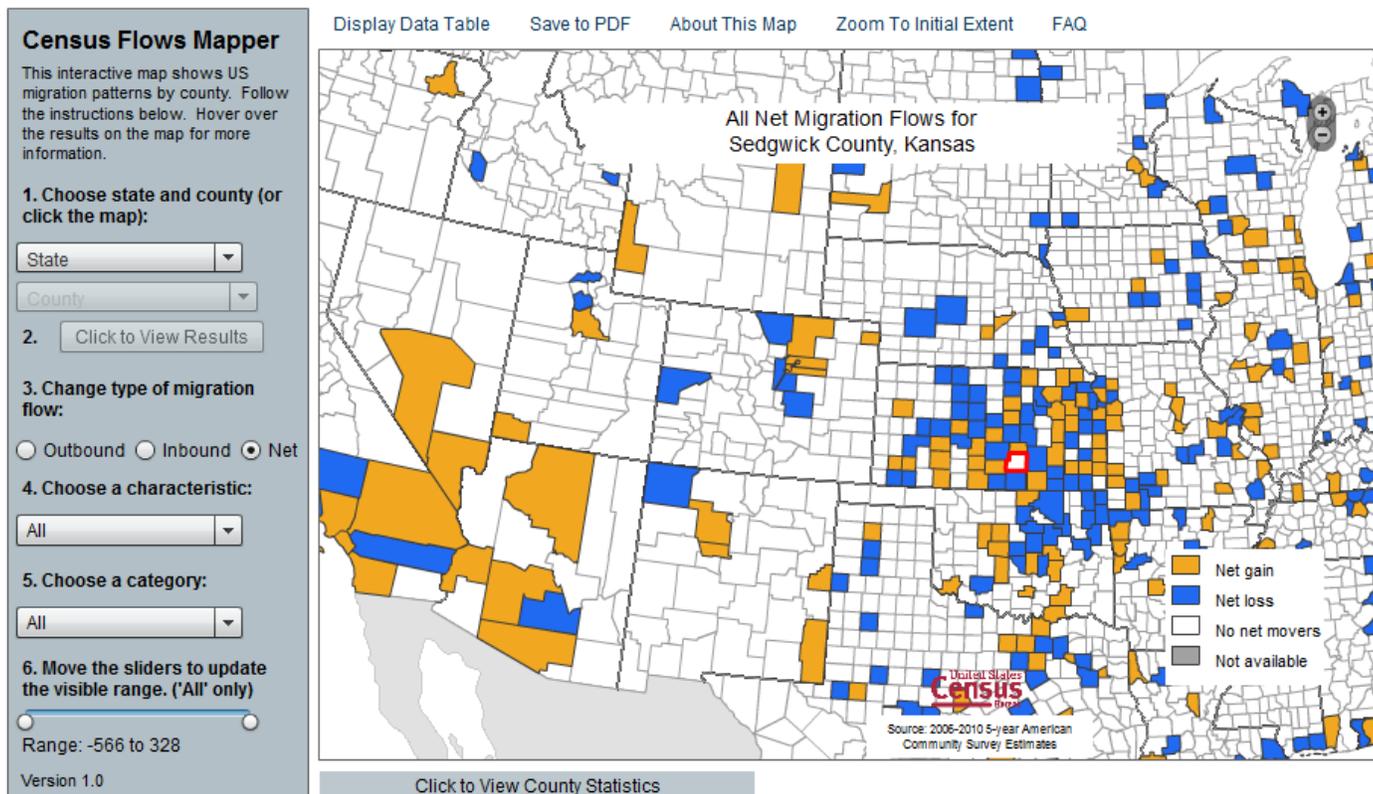
Source: US Census Bureau

The new delineations will not alter current statistics reporting within KDHE that uses counties, peer group counties, and health preparedness regions. The delineations may result in more information from the federal level being made available for areas in Kansas. This information will be helpful to community health assessment in Kansas. For information on the Census Bureau action, visit

<http://www.census.gov/newsroom/releases/archives/population/cb13-46.html>. For general census questions, the Kansas State Library serves as the State Census Data Center. Their website is <http://www.kslib.info/government-information/kansas-information/state-data-center.html>, and their email is KSLIB_SDC@library.ks.gov.

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Net Migration Flows for Sedgwick County



In-migration and out-migration, along with births and deaths, factor into the U.S. Census Bureau's population estimates for states and counties. The KDHE Bureau of Epidemiology and Public Health Informatics provides birth and death statistics. Migration is determined by an analysis of the residence of tax filers. The above graphic shows the net migration flows for Sedgwick County as presented by the U.S. Census Bureau's **Census Flows Mapper** at <http://flowsmapper.geo.census.gov/flowsmapper/map.html>. Migration flows by race, sex, age group, and Hispanic origin can be mapped. Communities conducting community health assessment can gauge the changes in population make of their communities. The Census Flows Mapper is a web mapping application intended to provide users with a simple interface to view, save and print county-to-county migration flows maps of the United States. The data are from the 2006-2010 American Community Survey.

Source: U.S. Census Bureau
 Prepared by: KDHE Bureau of Epidemiology and Public Health Informatics

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