

## 2011 Survey of Excessive Heat Policies and Practices in Kansas Schools

### Introduction

Kansas does not have a statewide policy or guidelines in place to address excessive heat health and safety issues in schools. Children are vulnerable to excessive heat because their metabolisms differ from the metabolisms of adults and they rely on others to regulate the temperature of their environment and provide adequate fluid intake [1]. The National Weather Service reports that occasionally temperatures can exceed 90° Fahrenheit in May and June when Kansas schools are still in session [2]. In 2011, Kansas had more than 75 days with temperature at or exceeding 90° [3]. Many public schools in Kansas already have an excessive heat policy in place. However, the nature and extent of these school policies and practices are not well known. A survey was sent to public school superintendents inquiring about their school policies and practices in regards to excessive heat policies.

### Methods

A voluntary, electronic survey asked district superintendents 18 questions about school policies related to excessive heat health and safety issues, staff training, knowledge of heat related health conditions, and air conditioning equipment status. Emails were sent to all district superintendents of public schools in Kansas beginning Aug. 31, 2011. Five email reminders spaced 2.5 weeks apart were sent to superintendents who did not complete the survey until the survey was closed on Nov. 1, 2011. District superintendents were able to review and change their answers before submitting the survey. The Kansas State Department of Education (KSDE) provided the e-mail addresses of the superintendents and gave personal reminders to those who did not complete the survey during the KSDE regional meetings.

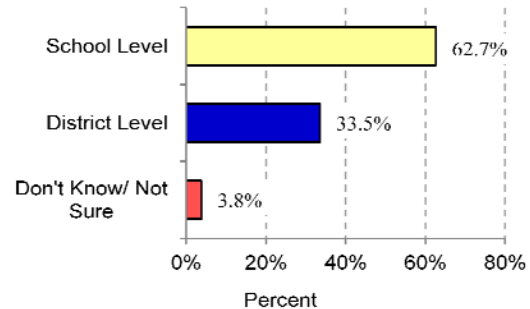
To facilitate the interpretation of the survey's results, additional unpublished data on district extracurricular activities were supplied by the Kansas State High School Activities Association (KSHSAA), Kansas Association for Middle School Administrators, and KSDE. The most recent response (including incomplete surveys) by district superintendents were used for this analysis. Counties were considered to be rural if they were contained in the peer groups for frontier, rural, or densely-settled rural counties according to the Annual Summary of Vital Statistics [4].

### Results

Of the 290 district superintendents of public schools in Kansas, 238 responded to the survey, which represents a response rate of 82.1 percent. All but one responding school districts were members of the KSHSAA. Of the responding school districts, 66.4 percent (n=158) reported having an excessive heat policy in place and 33.6 percent (n=80) reported not having an excessive heat policy. Although the earliest reported enactment of an excessive heat policy for a responding school district was in 1975, 40.3 percent (n=63) of responding school districts that had an excessive heat policy enacted after 2003. Thirty-three percent of responding school districts reported it was a district decision to activate their excessive heat policy (Figure 1). Of the responding school districts with excessive heat policies, 18.9 percent (n=30) allowed for early dismissal or cancellation of school for students and 5.6 per-

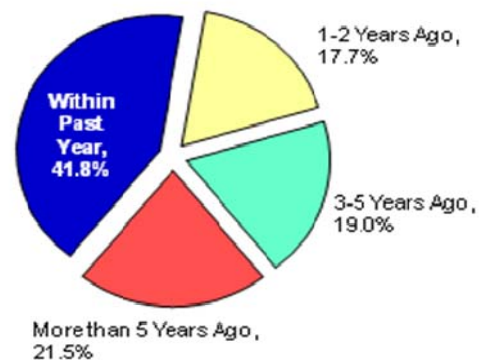
cent (n=9) did not know if their district allowed for early dismissal or cancellation of school for students. However, half of the responding school districts (n=16) with early dismissal or school cancellation in their excessive heat policy have never used it. Forty-two percent of responding public school districts had revised their policy in the past year (Figure 2).

Figure 1. Hierarchy of decision making in responding school districts with excessive heat policies,\* Kansas, 2011



Note: \* 158 responding districts had an excessive heat policy

Figure 2. Time since last revision of excessive heat policies in responding school districts,\* Kansas, 2011



Note: \* 158 responding districts had an excessive heat policy

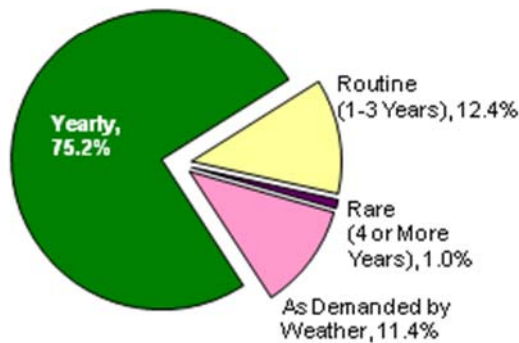
### Inside

2011 Survey of Excessive Heat Policies and Practices in Kansas Schools	1
Selected Statistics, Stillbirths and Infant Deaths, Kansas, 2010 Report Issued	3
Occupational Health Indicators in Kansas	4
Adequacy of Prenatal Care Reported	4
Adolescent and Teen Pregnancy Report Issued	5
Announcements	6
FastStats	8

At the time of survey, 81.7 percent (n=237) of responding school districts reported that all schools in their districts had building wide air-conditioning. However, 13.9 percent of responding school districts did not have all of their buildings air-conditioned, 2.1 percent had none of their schools air-conditioned, and 2.1 percent declined to disclose the status of air-conditioning in their district. Five percent (n=9) of responding districts with excessive heat policy had a contingency plan that included temporary cooling equipment. Of the 38 responding school districts that reported that none or not all of their schools had air-conditioning, 63.2 percent (n=24) of those districts reported having an excessive heat policy in place.

Sixty-seven percent (n=105) of responding school districts with an excessive heat policy offered in-service education/training to staff. Of the districts who offer training (n=105), 23.8 percent trained only coaches, 60.0 percent trained coaches and physical education teachers, 13.3 percent trained all staff, and 2.9 percent trained other types of staff. Among responding districts that hold trainings, 75.2 percent train staff yearly (Figure 3).

Figure 3. Frequency of staff trainings on excessive heat policies\*, Kansas, 2011

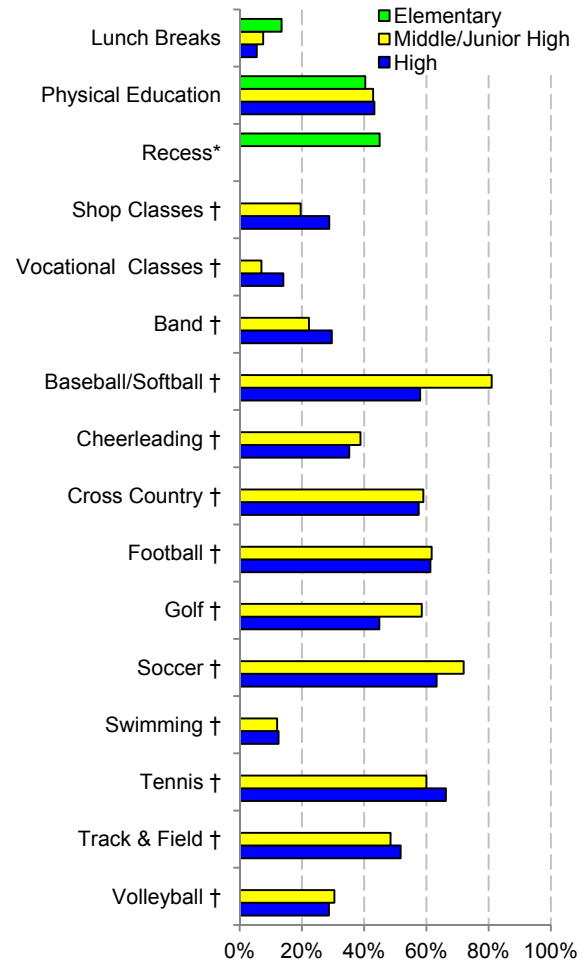


Note: \* 105 responding districts provide training

A greater percentage of responding middle school and high school districts had excessive heat policies for football versus shop classes or lunch breaks (Figure 4). When excessive heat policies were in place, the policies were more likely to encourage students to drink water and reduce or eliminate physical activity versus keeping students out of the sun or ensuring that boxed lunches are stored in a cool area (Figure 5).

Since 2000, 13.9 percent (n=33) of responding school districts were aware of students seeking medical treatment for heat related illness and 32.3 percent (n=77) did not know if a student sought medical treatment for a heat related illness. Of the 33 responding school districts that reported a heat related illness, 81.8 percent reported only a single incident of a student seeking medical treatment. More districts with an excessive heat policy (19.6 percent) reported knowing of students receiving medical treatment for a heat related illness than districts without an excessive heat policy (2.5 percent). Eighty percent of responding school districts with a heat policy and knew of a student that sought medical treatment for a heat related illness (n=31) have updated or revised their excessive heat policy since the incident.

Figure 4. Percent of responding school districts that have an excessive heat policy by type of activity and school level covered, Kansas, 2011

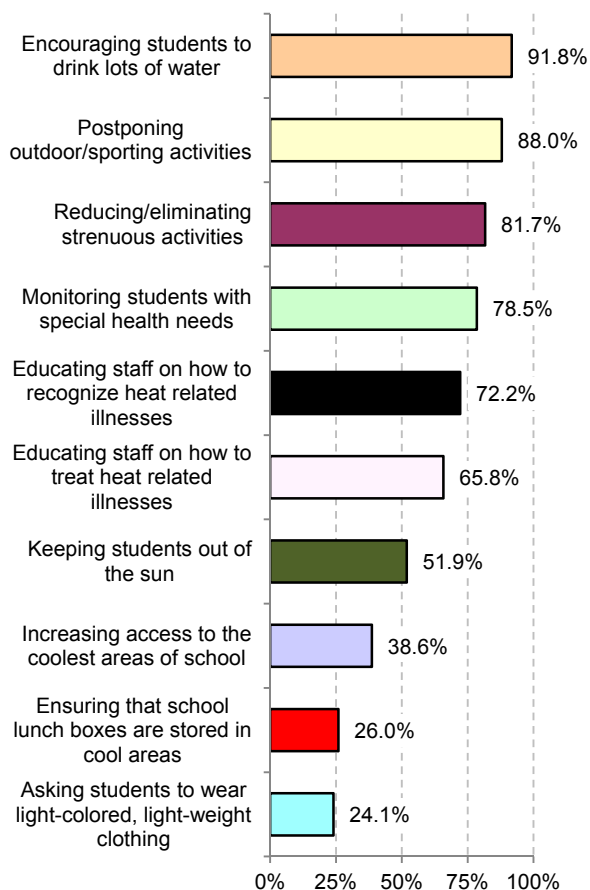


Notes:

\* Activity typically exists only at Elementary School level

† Activity typically exists only at Middle or High School level

Figure 5. Type of health and safety messaging addressed in excessive heat policies,\* Kansas, 2011



Note \* 158 responding districts had an excessive heat policy

### Discussion

Sixty-six percent of responding public school superintendents were aware of an excessive heat policy in their school district. However, these excessive heat policies differed widely in their recommendations to limit heat exposure and the activities covered by the policy. The KSHSAA recommends that all its members should have a written policy in place for all athletes [5]. The majority of public school districts with excessive heat policies hold regular staff trainings. However, these trainings tend to involve only coaches and physical education instructors. Fifty-nine percent of public school districts with an excessive heat policy have had their policy revised or updated in the past three years. The higher percentage of students seeking medical treatment for a heat-related illness in districts with an excessive heat policy might be explained by greater awareness and training of staff to identify heat related illness, and a more developed infrastructure for the reporting and recording of heat related illnesses in students. The low percentage of public school districts with temporary cooling equipment may under represent the contingency plans in place at districts because the survey did not capture portable and easily installed items (like sprinklers) during times of excessive heat.

Several limitations may affect how accurately the results represent the excessive heat policies in Kansas public school districts. The ability of superintendents to recall specific policies and recommendations because of time restraint or the inability to access their school districts policies may impair the accuracy and completeness of their responses. District superintendents and their staff may not be familiar with or accurately identify children suffering from heat-related illnesses. The limited number of ques-

tions asking about school policies may not capture all of the excessive heat policies and recommendations that may be present in districts. Because private schools were not surveyed, it is not known how private schools compare to public school districts.

Garry Kelley, MS  
Henri Menager, MPH  
KDHE, Bureau of Epidemiology and Public Health Informatics  
Dale M. Dennis, MS, Ed.S.  
KSDE, Deputy Commissioner of Education

### References

1. Matthies, F; Bickler, G.; Marin, N.C.; Hales, S. *Heat-Health Action Plans Guidance*. World Health Organization, Regional Office for Europe: Copenhagen, Denmark, 2008; pp 4.
2. Watson, B.M. *A guide to developing excessive weather emergency plans for schools*; National Oceanic and Atmospheric Administration, National Weather Service. 2002. <http://www.erh.noaa.gov/lwx/swep/>. (Accessed 5 Jan 2012).
3. National Oceanic and Atmospheric Administration. National and Environmental Satellite and Data Information Services. National Climatic Data Center. Quality Controlled Local Climatological Data. Kansas, 2011. (Accessed 27 February 2012).
4. Oakley, D.; Crawford, G.; Moyer, C.; Zornes, R. *Kansas Annual Summary of Vital Statistics, 2010*. Kansas Department of Health and Environment, Bureau of Epidemiology and Public Health Informatics, 2011, pp 174. [http://www.kdheks.gov/hci/as/2010/AS\\_2010.pdf](http://www.kdheks.gov/hci/as/2010/AS_2010.pdf) (Accessed 22 May 2012).
5. Kansas State High School Activities Association, Kansas Athletic Trainer's Society. *Heat and Hydration Information*. 2009. <http://www.kshsaa.org/Public/PDF/Heat.pdf>. (Accessed 9 Jan 2012).

### Selected Statistics, Stillbirths and Infant Deaths, Kansas, 2010 Report Issued

The Bureau of Epidemiology and Public Health Informatics has issued the 2010 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 (91.4%) from 73.5 deaths per 1,000 live births in 1912 (2,795 infant deaths) to 6.3 in 2010 (253 infant deaths).
- Even when considering the last 20 years (1991-2010), the overall trend in the infant mortality rate decreased significantly, from 9.0 in 1991 to 6.3 in 2010.
- There was not a statistically significant decline in infant mortality in the last five years.
- In the last 20 years (1991-2010), 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 2.6.
- Analysis of the underlying cause of death by population group (2006-2010) 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 (2006-2010) included Sedgwick (317 or 21.5% of the total), Johnson (227 or 15.4% of the total), Wyandotte (121 or 8.2% of the total) and Shawnee (106 or 7.2% of the

total). These four counties accounted for 52.4 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 (22.2), Neosho (15.5), Cowley (10.9), Geary (10.4) and Reno (8.9) while the counties with the lowest rates were Leavenworth (5.0), Douglas and Finney (both 5.2), Riley (5.8), and Johnson and Butler (both 5.9).
- Analysis of the linked birth/death file (2006-2010) shows that prematurity (less than 37 weeks gestation) was a primary risk factor in 62 percent (62.2) 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 (72.0% of infant deaths), Hispanic population (65.6%), and the White non-Hispanic population (59.1%).
  - Gestational age specific analysis shows an infant mortality rate of 46.5/1,000 live births for infants born prematurely, 16 times that for infants born term.
  - Similarly, the infant mortality rate for very premature infants (206.5/1,000) was 72 times higher than the rate for infants born term.

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

*Carol Moyer, MPA  
Bureau of Epidemiology and Public Health Informatics*

## Occupational Health Indicators in Kansas Released

Surveillance indicators allow a state to compare its health or risk status with that of other states, evaluate trends over time within the state and helps guide priorities for prevention and intervention efforts. A new report entitled *Occupational Health Indicators in Kansas* presents 20 occupational health indicators that provide information about the health status of the working population in Kansas with respect to workplace injuries and illnesses.

Of note, in 2009, Kansas experienced a statistically significantly higher incidence of nonfatal injuries and illnesses, 410 per 10,000 workers, compared to the national rate of 360 per 10,000 workers. In the same year, 76 workers were fatally injured on the job in Kansas. The rate of fatal work-related injuries was 5.3 per 100,000 workers, while nationally the rate was 3.5 per 100,000 workers. Part of the difference in the rates of nonfatal and fatal injuries and illnesses between Kansas and the United States could be explained by the percentage of workers in high risk jobs. In 2009, 8.8 percent of the employed population in Kansas was employed in a high morbidity risk industry compared to 7.1 percent of the employed population nationally. In Kansas, 22.5 percent of the employed population was employed in a high morbidity risk occupation compared to 15.6 percent of the employed population in the United States.

Also of note, the prevalence rate of elevated blood lead levels (BLL) among adults was also high among Kansas adults compared to national rates. In 2007, the rate of BLL  $\geq 25$   $\mu\text{g/dL}$  was 26.8 cases per 100,000 workers in Kansas, while the national rate was 7.4 cases per 100,000 workers.

Finally, the number of occupational safety and health professionals in Kansas is lacking. In 2009, there were less than one occupational medicine physician, 2.7 occupational health nurses and 1.9 industrial hygienists per 100,000 workers. Occupational safety and health professionals help to identify hazardous conditions or practices in the workplace and help employers and work-

ers reduce the risk of injuries and illnesses in the workplace. The availability of these specialists is necessary to implement occupational health preventive services.

To read the full report, please go to <http://www.kdheks.gov/epi/eph.htm#occupational> under the heading “Occupational and Environmental Health Epidemiology.”

*Farah S. Ahmed, MPH, PhD  
Bureau of Epidemiology and Public Health Informatics*

## Adequacy of Prenatal Care Reported

Prenatal care is defined as pregnancy-related health care services provided to a woman between conception and delivery. It is important to track because there is a strong association between prenatal care and pregnancy outcome. Pregnant women who receive inadequate care are at increased risk of bearing infants who have low birth weight, are stillborn, or die within the first year of life [1, 2]. Prenatal care data can be analyzed to suggest population groups and geographic areas in need of intervention, thereby protecting the health of future Kansans.

The report *Adequacy of Prenatal Care Utilization Index, 2010*, issued by the Bureau of Epidemiology and Public Health Informatics, reviews the most recent available data to assess prenatal care. The adequacy of prenatal care utilization (APNCU) index can be calculated where the number of prenatal visits, date of first prenatal visit, and the date of last menses are reported on the birth certificate. Among the 40,439 Kansas resident live births in 2010, the APNCU index could be calculated for 38,823 (96.0%). For these 38,823 births, 79.8 percent of the mothers received adequate or better prenatal care, including 30.6 percent with adequate-plus care; 20.2 percent received less than adequate prenatal care, including 14.2 percent with inadequate care.

### Other findings

- Among mothers whose prenatal care utilization was classified as inadequate (5,521), the vast majority (5,269) were due to late initiation of care. Only a minority of women (252) who initiated their care within the first four months of care received inadequate care.
- Among mothers of low birth weight infants, 81.1 percent received adequate or better care, while 16.2 percent received inadequate care.
- The proportion of mothers who received adequate or better prenatal care was highest among the White non-Hispanic population group (84.4%), followed by Asian/Pacific Islander non-Hispanic (80.4%) and Other non-Hispanic (77.1%) population groups. The Hispanic population group had the lowest percentage of mothers receiving adequate or better prenatal care (63.8%).
- The population groups reporting the highest proportion of mothers with inadequate care were Native American non-Hispanic (19.6%), Black non-Hispanic (24.2%) and Hispanic (27.4%). These rates are near twice that of White non-Hispanic women, who experienced inadequate care at a rate of 10.4 percent.
- Private insurance was the payer with the highest proportion of mothers who received adequate or better prenatal care (90.2%), followed by Champus/TRICARE (77.8%). The payer with the highest proportion of mothers with inadequate prenatal care was self pay (33.3%).
- Among first births, the percent of mothers with adequate or better prenatal care was 82.4 percent, compared to 78.2 percent for women having a second or successive birth.
- In all age groups, the proportion of mothers with inadequate prenatal care was significantly higher for second and higher order live births than for first births.

Accurate measurement of prenatal care depends on the accuracy of the index used. Beginning with 1998 data, KDHE transitioned from a modified Kessner Index to the Adequacy of Prenatal Care Utilization (APNCU) Index (often referred to as the Kotelchuck Index). [3] This index attempts to characterize prenatal care (PNC) utilization on two independent and distinctive dimensions: adequacy of initiation of PNC and adequacy of received services (once PNC has begun). Because of changes in the method of calculating the month prenatal care began – a key component in creating a PNC value – data from 2005 and successive years are not comparable to that for prior years. The report can be found at <http://www.kdheks.gov/hci/kacui.html>

David Oakley  
Bureau of Epidemiology and Public Health Informatics

### References

1. Mills, C. A., Fine, A., and Adams-Taylor, S. Monitoring Children's Health: Key Indicators (2nd edition), American Public Health Association, 1989.
2. Moyer, C. Perinatal deaths using linked death and birth files, Kansas, 2005 and 2006. Kansas Health Statistics Report, 2008, 38:2-4.
3. Kotelchuck, M. An Evaluation of the Kessner Adequacy of Prenatal Care Index and a proposed Adequacy of Prenatal Care Utilization Index. American Journal of Public Health, 1994; 84:1414-1420.

Pregnancies to females aged 10-19 accounted for 10.0 percent (n=4,501) of the 44,830 pregnancies reported in 2010. Pregnancies in this age group resulted in live birth 86.2 percent (n=3,879), in abortion 13.3 percent (n=599) and in stillbirth 0.3 percent (n=23).

Other findings include:

- The pregnancy rate for females aged 10-19 was 23.1 per 1,000 females in 2010, down 13.8 percent from 2009 (26.8).
- The rates for age-groups 10-14, 10-17 and 15-19 were 0.6, 8.8, and 45.1 births per 1,000 females, respectively. The rate for age-group 10-14 was unchanged from 2010, while the rates for age-groups 10-17 and 15-19 declined 12.0 and 12.6 percent, respectively, from the corresponding rates for 2009.
- The number and rate of adolescent and teenage pregnancies (ages 10-19) decreased in 2010, continuing the decline seen in 2009. The longer term trend is also downward: adolescent and teenage pregnancy rates (ages 10-19) have dropped 30.6 percent overall during the past two decades (1991-2010).

The report can be found at <http://www.kdheks.gov/hci/teenpreg.html>

David Oakley  
Bureau of Epidemiology and Public Health Informatics

## Adolescent and Teen Pregnancy Report Issued

The Bureau of Epidemiology and Public Health Informatics has issued the 2010 Adolescent and Teen Pregnancy Report. The report contains a series of summary tables detailing pregnancy outcomes (live births, abortions, and stillbirths, excluding miscarriages below 351 grams) for women aged 10-19.

Table 8. Teen and Adolescent Pregnancies\* by Number and Rate for Mothers Under 20, Kansas Residents, 1991-2010

Year	# (10-19)	Age-Group					Rate† (10-19)	Pregnancy Rate†				
		10-14	15-17	18-19	10-17	15-19		10-14	15-17	18-19	10-17	15-19
1991	5,743	98	1,904	3,741	2,002	5,645	33.3	1.1	39.0	113.6	14.4	69.0
1992	6,165	111	2,110	3,944	2,221	6,054	34.8	1.2	41.4	121.1	15.4	72.6
1993	6,405	133	2,219	4,053	2,352	6,272	35.2	1.4	42.4	120.5	15.9	73.3
1994	6,500	124	2,302	4,074	2,426	6,376	34.8	1.3	42.4	117.6	15.9	71.9
1995	6,552	153	2,332	4,067	2,485	6,399	34.5	1.6	41.3	113.4	16.1	69.5
1996	6,498	133	2,276	4,089	2,409	6,365	33.9	1.4	38.9	110.4	15.6	67.0
1997	6,469	123	2,260	4,086	2,383	6,346	33.3	1.3	37.4	107.6	15.3	64.7
1998	6,444	108	2,087	4,249	2,195	6,336	32.4	1.1	34.1	106.3	13.8	62.0
1999	6,402	103	1,979	4,320	2,082	6,299	31.9	1.1	32.4	105.0	13.1	60.7
2000	6,090	94	1,819	4,177	1,913	5,996	30.3	0.9	30.1	101.4	12.0	58.7
2001	5,818	79	1,819	3,920	1,898	5,739	28.8	0.8	30.2	96.0	11.9	56.0
2002	5,586	86	1,684	3,816	1,770	5,500	28.3	0.9	28.3	92.9	11.3	54.7
2003	5,174	73	1,559	3,542	1,632	5,101	26.4	0.8	26.6	86.8	10.5	51.3
2004	5,026	71	1,492	3,463	1,583	4,955	26.1	0.8	25.8	85.1	10.3	50.3
2005	5,044	69	1,483	3,492	1,552	4,975	26.7	0.8	25.7	87.1	10.4	50.8
2006	5,192	85	1,507	3,600	1,592	5,107	27.1	0.9	25.5	93.1	10.4	52.2
2007	5,268	70	1,573	3,625	1,643	5,198	27.8	0.8	26.8	93.1	10.9	53.2
2008	5,371	66	1,552	3,753	1,618	5,305	28.6	0.7	27.1	95.7	10.9	55.0
2009	5,036	56	1,417	3,563	1,473	4,980	26.8	0.6	25.2	88.5	10.0	51.6
2010	4,501	59	1,298	3,144	1,357	4,442	23.1	0.6	22.4	77.6	8.8	45.1

\*Pregnancies are the sum of live births, stillbirths and abortions.

†Rate per 1,000 female age-group population

## Announcements

### Kansas Health Matters Supports Assessment

Kansas Health Matters (KHM), a web site designed to support local hospitals and health departments pursuing community health needs assessment and health improvement planning, is now active. The site, at <http://www.kansashealthmatters.org/index.php>, combines a community dashboard approach to health statistics with support from the University of Kansas Community Toolbox, to guide organizations through health assessment and improvement planning – two major components for health department accreditation or hospital compliance with federal requirements.

The dashboards use a series of symbols (Figure 1) to indicate progress. The indicator color of green signifies good movement. Red is movement in the wrong direction. Fuel gauges compare a rate to a state or national average. No change is represented by an “equals sign”.

What makes KHM unique is the ability to compare statistics and trends at a county, region, and state level. Since many counties have relatively few events, KHM aggregates events over multiple years to provide comparable rates. In instances where rates are still unreliable, communities can use the region values. The regions are the 15 health preparedness regions in Kansas.

Over 70 health indicators and social determinants are available from Kansas Health Matters. Communities may use as many of the indicators as they wish for their planning. More indicators and updated information, when available, are added quarterly.

KHM complements Kansas Information for Communities (KIC), the Kansas Department of Health and Environment's online data query tool. Collaboratively developed by the Kansas Partnership for Improving Community Health, Kansas Health Matters includes an “Ask the Expert” feature to ensure that no questions go unanswered.

*Kansas Partnership for Improving Community Health*

### Community Health Assessment Receives Boost

The Kansas Department of Health and Environment (KDHE) and the Kansas Hospital Association (KHA) have awarded 12 Kansas rural communities a grant to support local community health assessment efforts.

KDHE, in addition to conducting health assessment, strategic planning, and health improvement planning at the state level, is assisting local hospitals and health departments in their assessment and planning. These grants support outset initiatives spearheaded by the community's health care providers and its hospitals to address the health needs of the community, which could include events like holding town hall meetings or conducting community surveys.

The counties receiving these community health assessment grants are Clay, Comanche, Cowley, Ellsworth, Edwards, Lincoln, Mitchell, Osborne, Rawlins, Scott, Stafford and Stevens. Each county will receive up to \$4,000.

Several larger Kansas counties have been actively involved in health needs assessment and improvement plans. In some rural areas of the state, groups of counties that make up health preparedness regions have banded together for health assessment activities. KDHE Secretary and State Health Officer Robert Moser, M.D. said, “KDHE is committed to supporting those initiatives through investments like this where communities are not just taking a closer, comprehensive look at their health indicators, but are focused on partnering to help leverage available resources.”

These health assessments could result in enhancing a local system of transportation for getting residents to health appoint-

ments, organizing more diabetic support groups, or building a stronger partnership to plan for and apply for funding to develop a safety net clinic.

KDHE support involves sites like Kansas Information for Communities, Kansas Health Matters and the University of Kansas Community Toolbox for statistics and resources. Agency staff are also providing technical assistance to counties.

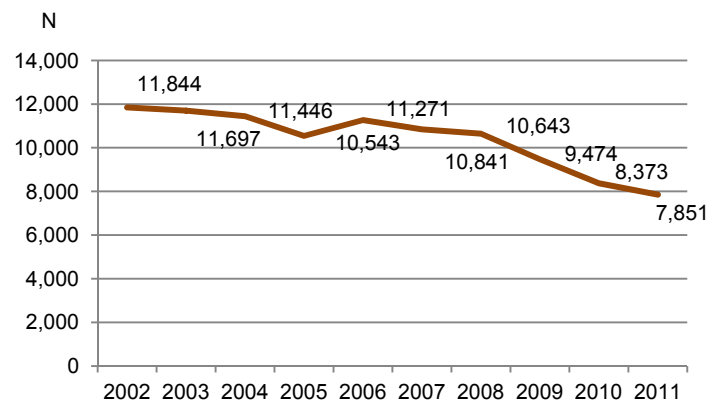
For more information on KDHE's and KHA's rural health partnership efforts please visit <http://krhop.net/projects.php>.

*Bureau of Community Health Systems*

### Preliminary 2011 Abortion Report Issued

There were 7,851 abortions reported in Kansas during 2011, a decrease of 6.2 percent from final 2010 reports (522 fewer). The preliminary total represents a 33.7 decrease in abortions reported in Kansas since 2002 (Figure 1). Of the abortions reported in Kansas during 2011, a total of 3,912 (49.8%) occurred to Kansas residents. The number of Kansas residents obtaining abortions decreased by 7.4 percent compared to 2010. Of the 3,939 out-of-state residents who obtained abortions in Kansas, 3,857 (97.9%) were Missouri residents.

Figure 1. Number of Abortions by Year, Kansas, 2002 – 2011



Women 20-24 years of age comprised the largest age-group seeking abortions (33.4%). The largest decline in the number of procedures also occurred to women 20-24 years of age, which decreased by 189 procedures (6.7%) from 2010. There were 32 abortions to girls under age 15 reported in 2011, 20.0 percent fewer than in 2010.

White non-Hispanic women accounted for three out of five (58.8%) of the abortions reported. Hispanic women of any race accounted for about one out of 10 (10.3%) of abortions reported. Black non-Hispanic women accounted for about one out of five (22.0%) abortions reported. All three of these population groups had declines in the number of abortions reported. The largest percentage decrease (7.7%) occurred among White non-Hispanic women.

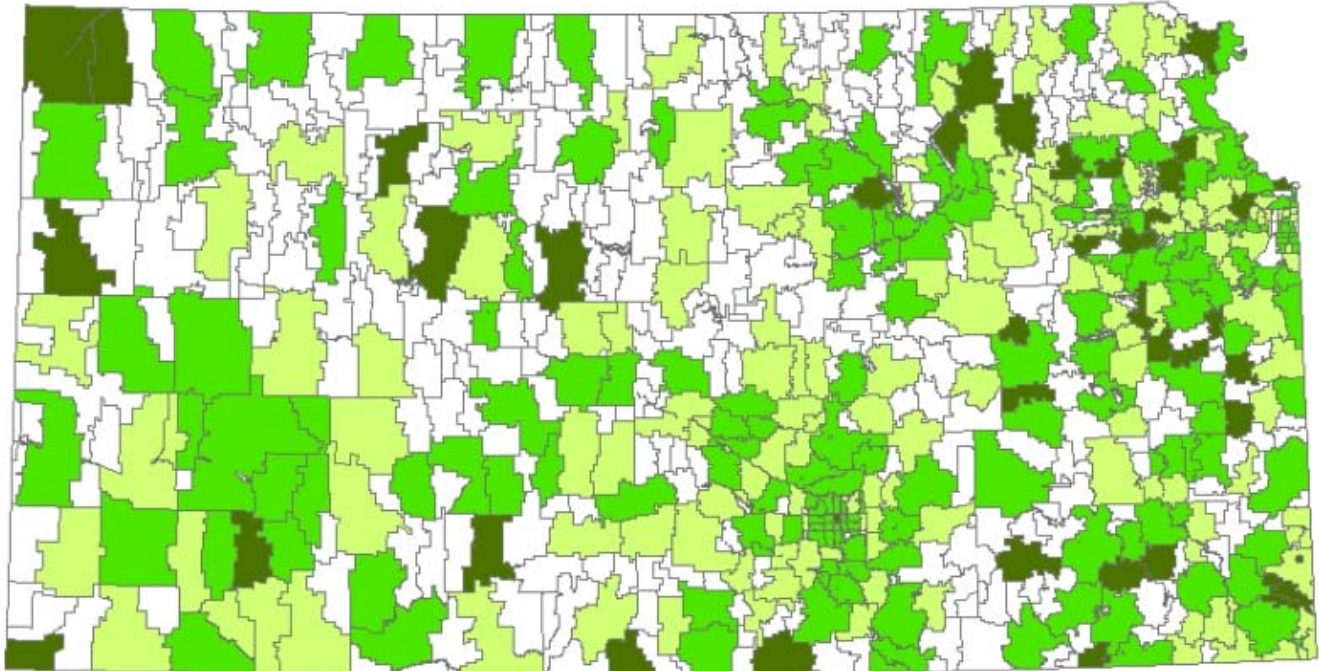
Over four out of five Kansas-reported abortions occurred to unmarried women (85.3%), virtually unchanged from 2010. More than three out of five (63.4%) of all reported abortions occurred prior to nine completed weeks of gestational age. This is a slight decrease from 2010.

No late term abortions were performed in Kansas in 2011. Eight Kansas women obtained late term abortions out of state in 2011.

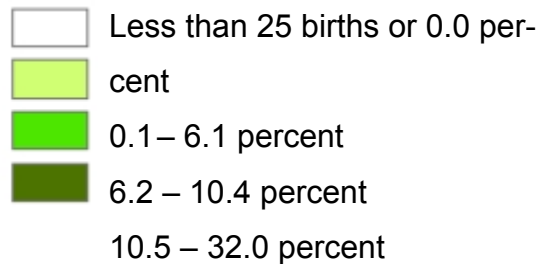
The 2011 Preliminary Abortion Report is available at <http://www.kdheks.gov/hci/absumm.html>. The final tally of Kansas abortions will be available in the 2011 Annual Summary of Vital Statistics.

*Bureau of Epidemiology and Public Health Informatics*

## Percent of Resident Births with Birthweight less than 2,500 grams by ZIP Code, Kansas, 2008-2010



### Legend - Percent of Births with Low Birth Weight



Birth weight is one of the most important factors in an infant's chance of survival. Infant mortality rates are much higher for infants born at low birth weight or very low birth weight (<1,500 grams) than for heavier babies. Statewide for 2008-2010 7.2 percent of all resident births involved a birth weight less than 2,500 grams. That rate was relatively unchanged after a slight uptick earlier in the decade, <http://www.kansashealthmatters.org/modules.php?op=modload&name=NS-Indicator&file=indicator&iid=96922>. Choropleth maps represent a valuable way to display statistics spatially to assist public health officials identify areas of greatest need. ZIP Codes with the darkest green shading represent the areas of Kansas with the highest percentage of low birth weight babies.

Source: KDHE Bureau of Epidemiology and Public Health Informatics, 2008-2011

The Public Health Informatics (PHI) of the Kansas Department of Health and Environment's Bureau of Epidemiology and Public Health Informatics produces *Kansas Health Statistics Report* to inform the public about availability and uses of health data. Material in this publication may be reproduced without permission; citation as to source, however, is appreciated. Send comments, questions, address changes and articles on health data intended for publication to: PHI, 1000 SW Jackson, Suite 130 Topeka, KS, 66612-1354, [Kansas.Health.Statistics@kdheks.gov](mailto:Kansas.Health.Statistics@kdheks.gov), or 785-296-8627. Robert Moser, MD, Secretary KDHE; D Charles Hunt, MPH, State Epidemiologist and Director, BEPHI; Elizabeth W. Saadi, PhD, State Registrar, Deputy Director, BEPHI; Greg Crawford, Editor.

PRST STD  
US Postage  
Paid  
Topeka, KS  
Permit No. 157

264-39  
Bureau of Epidemiology and Public Health Informatics  
Kansas Dept. of Health & Environment  
1000 SW Jackson, Suite 130  
Topeka, KS 66612-1354