

# Kansas Health Statistics Report

Kansas Department of Health and Environment – Center for Health and Environmental Statistics – No 29 – May 2006

## KIC Query Tool Highlights Significant Mortality Decline

While useful for producing a table of counts for births or hospital discharges, the Kansas Information for Communities (KIC) interactive query tool can also be used for statistical investigations, including confidence intervals to test for significance. One example is using KIC to review the drop in mortality between 2003 and 2004. An analysis, conducted by using KIC, indicated the decline was associated primarily with two causes of death and was offset in part by an increase in external cause mortality.

The number of Kansas residents that died in 2004 decreased by 697 from 2003 (Table 1). The 2.9 percent decline was statistically significant. ( $p=0.01$ ). Resident female deaths decreased by 424 or 3.3 percent. The 273 fewer male deaths represented a 2.4 percent decrease.

Table 1. Selected Statistics of Resident Deaths by Year, Kansas, 2003-2004

Category	2003	2004	Percent Change
Gender			
Males	11,533	11,260	-2.4
Females	12,884	12,460	-3.3
Age-Groups			
Under 15	388	415	7.0
15-24	308	312	1.3
25-44	1,019	1,033	1.4
45-64	3,778	3,839	1.6
Over 64	18,924	18,121	-4.2
Total	24,417	23,720	-2.9

The only age group experiencing a decline in mortality was 65 and older. The age group specific mortality rate for this population group decreased by 4.5 percent ( $p=0.01$ ) or 803 fewer deaths.

Over the period, deaths among the younger age groups increased by 106. Sixty-one additional deaths occurred among the 45 to 64 age group, and 27 additional deaths occurred among persons under age 15.

The age-adjusted mortality rate for whites went from 807.9 per 100,000 population in 2003 to 779.4 in 2004, a statistically significant decrease of 3.5 percent ( $p=0.01$ ). The age-adjusted mortality rate for blacks went from 1,089.7 per 100,000 population in 2003 to 1,102.8 in 2004. The 1.2 percent increase was not statistically significant.

The KIC system groups causes of death into 30 categories, which are similar to the "List of 39 Leading Causes of Death" published by the National Center for Health Statistics. From 2003 to 2004 deaths in 15 categories decreased. Deaths in 14 categories increased and in one category there was no change.

Heart disease deaths declined from 6,428 to 6,002 between the two years. The age-adjusted mortality rate fell from 210.3 deaths per 100,000 population in 2003 to 195.7 in 2004, which was statistically significant ( $p=0.01$ ) (Table 2). Pneumonia and influenza deaths declined from 686 to 558. The age-adjusted mortality rate dropped 19.0 percent ( $p=0.05$ ). The decreases in these two causes of deaths accounted for 79.5 percent of the 697 fewer deaths reported in 2004.

Table 2. Age-adjusted Mortality Rates 15 Selected Leading Resident Causes of Death by Year, Kansas, 2003-2004 \*

Cause of Death	2003			2004		
	Rate	95% Confidence Interval	2003 Rank	Rate	95% Confidence Interval	2004 Rank
Heart Disease	210.3	205.2 to 215.6	1	195.7	190.7 to 200.7	1
Cancer	184.5	179.5 to 189.6	2	182.1	172. to 187.1	2
Cerebrovascular Disease	56.5	53.9 to 59.2	3	51.4	48.9 to 54.0	3
Chronic Lower Respiratory Disease	48.9	46.4 to 51.5	4	44.7	42.3 to 47.2	4
Alzheimer's Disease	24.3	22.6 to 26.1	5	23.7	22.1 to 25.5	5
Diabetes	22.9	21.2 to 24.7	6	23.2	21.5 to 25.0	6
All Other Accidents **	19.9	189.3 to 21.7	8	21.9	20.2 to 23.7	7
Kidney Diseases	17.3	15.9 to 18.9	9	17.9	16.4 to 19.4	8
Motor Vehicle Accidents **	17.1	15.5 to 18.7	10	17.5	15.9 to 19.1	9
Pneumonia & Influenza	21.6	20.0 to 23.3	7	17.5	16.1 to 19.0	10
Suicide	12.6	11.3 to 14.0	11	13.4	12.1 to 14.9	11
Atherosclerosis	11.0	9.9 to 12.3	12	9.8	8.8 to 11.0	12
Septicemia	10.2	9.1 to 11.4	13	9.3	8.3 to 10.5	13
Chronic Liver Disease & cirrhosis	7.2	6.2 to 8.3	14	7.1	6.2 to 8.2	14
Essential Hypertension	5.6	4.8 to 6.5	16	5.8	5.0 to 6.7	15

\* Ranking based on 2004 age-adjusted mortality rates. Rankings and rates vary from those published in the *Annual Summary of Vital Statistics* because the Kansas Information for Communities (KIC) aggregates to 30 cause of death categories instead of List of 39 Leading Causes of Death

\*\* MVAs and Other Accidental Injuries are broken out in (KIC) even though they are grouped together to represent a selected leading cause of death nationally.

Decreases in P&I and heart disease deaths were offset in part by an increase in the number of external cause deaths, 1,565 in 2003 to 1,687 in 2004 (Table 3). Among the categories that comprise external causes, other accidents (other unintentional injuries) had the largest increase, 55 deaths or 9.5 percent. Twenty-four more suicides occurred in 2004, representing a seven percent increase over 2003.

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Table 3. Selected Statistics External Cause Resident Deaths by Year, Kansas, 2003-2004

Category	2003	2004	Change	Percent Change
Other Accidents	577	632	55	9.5
MVAs	474	487	13	2.7
Suicide	344	368	24	7.0
Homicide	117	118	1	0.9
Other External Causes	53	82	29	54.7
Total	1,565	1,687	122	7.8

ber 2004 may be due in part to the milder 2004-2005 flu season (Table 4). Further study is needed.

Table 4. Resident Deaths by Month and Year of Occurrence, Kansas, 2003-2004

Month	2003	2004	Percent Change
Jan	2,291	2,338	2.1%
Feb	1,975	2,072	4.9%
Mar	2,160	2,087	-3.4%
Apr	1,985	1,940	-2.3%
May	1,951	1,888	-3.2%
Jun	1,792	1,826	1.9%
Jul	1,866	1,890	1.3%
Aug	1,902	1,895	-0.4%
Sep	1,867	1,803	-3.4%
Oct	2,024	1,945	-3.9%
Nov	2,076	1,932	-6.9%
Dec	2,527	2,104	-16.7%
Total	24,416	23,720	-2.9%

The number of deaths by month of occurrence (not available through KIC) was extracted to evaluate the change and potential impact of a milder pneumonia and influenza season in late 2004. Flu seasons overlap calendar years. The decline in the number of deaths in December 2004 may be due in part to the milder 2004-2005 flu season (Table 4). Further study is needed.

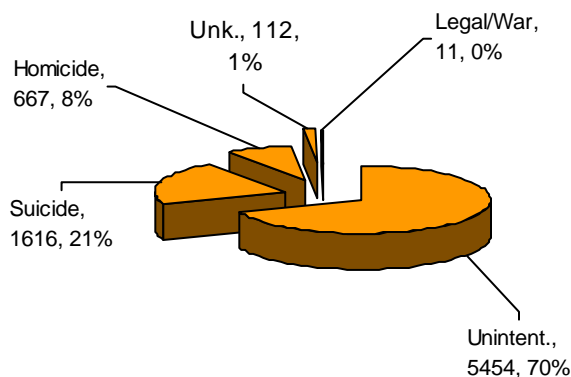
These are but a few of the findings that KIC can generate. If further investigation was necessary, age-group specific and county-based mortality rates are possible. Based on these preliminary investigations public health officials can determine whether a more detailed study is needed. This would be the case should one want to assess what factors were behind the decrease of 426 heart disease deaths from 2003 to 2004.

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## Injury Mortality Chart Book Published

The KDHE Office of Health Promotion has published *Injury Mortality in Kansas 1999-2003* summarizing five years of injury deaths to Kansas residents. The publication is the latest in a series of injury mortality chart books, based on death certificates obtained by the Center for Health and Environmental Statistics.

Figure 1. Injury Mortality by Intent Kansas, 1999-2003



*Injury Mortality in Kansas 1999-2003* reviewed 7,860 deaths during the five year period, graphically displaying the findings by manner, intent, age group and sex. The External Cause of Injury Mortality Matrix for ICD-10 was used to categorize the causes of death for this detailed analysis.

Seven of 10 deaths were due to unintentional injury (Figure 1). Half of all injury deaths involved motor vehicle-related crashes or firearms. Suicides accounted for over one in five (21 percent) injury deaths.

The full report can be obtained from the KDHE Web site at [www.kdheks.gov/idp/core\\_injury.html](http://www.kdheks.gov/idp/core_injury.html). You will need Adobe Reader to view the report.

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## Reported Abortions Decrease

The Kansas Department of Health and Environment recorded 10,542 abortions in 2005. This number represents 5,548 Kansas resident women who obtained an induced termination of pregnancy in Kansas, 80 Kansas women who went out of state for an abortion, and 4,914 out-of-state women who obtained abortions in Kansas. The information is contained in the department's *Preliminary Report of Abortions in Kansas, 2005*, prepared by the Division of Health's Center for Health and Environmental Statistics.

The number represents a decrease of 904 abortions (7.9 percent) compared to the 2004 final tally of 11,446 reported in the Kansas Annual Summary of Vital Statistics. Since 1999, when the number of abortions was the highest ever reported (12,445), the decrease has been 15.3 percent.

Fewer than one in five (17.5 percent) abortion recipients were under age 20 (Table 5). Two out of three recipients were white, and just one in 10 (10.3 percent) were Hispanic. Fewer than one in five (18.3 percent) were married.

Suction curettage was the most frequently used abortion procedure, accounting for almost four of every five procedures performed. RU 486, also known as mifepristone, was used in almost one of every 10 (8.7 percent) procedures. No partial birth abortions were performed.

Most of the out-of-state women who obtained abortions in Kansas resided in Missouri (87 percent). Oklahoma was second with 221 resident women obtaining abortions, followed by Texas with 50.

The final abortion totals will be included in the *2005 Kansas Annual Summary of Vital Statistics*. The *Preliminary Report of Abortions in Kansas, 2005* is available on the KDHE Web site at

Table 5. Selected Statistics Induced Abortions, All Reported, Kansas, 2005

Age Group of Patient:	N	Percent
Under 15 years	56	0.5
15-19 years	1,793	17.0
20-24 years	3,645	34.6
25-29 years	2,470	23.4
30-34 years	1,428	13.6
35-39 years	846	8.0
40-44 years	280	2.7
45 years and over	24	0.2
Not Stated	0	n.a.
Race of Patient:		
White	7,033	67.0
Black	2,341	22.3
Native American	69	0.7
Asian	402	3.8
Native Hawaiian/Other Pacific Islander	11	0.1
Other	422	4.0
Multi-Race	221	2.1
Not Stated <sup>1</sup>	43	n.a.
Hispanic Origin <sup>2</sup>		
Hispanic	1,058	10.3
Non-Hispanic	9,220	89.7
Not Stated <sup>1</sup>	264	n.a.
Total Reported	10,542	100.0

<sup>1</sup> Patient refused to answer or information not collected by state submitting report.

<sup>2</sup> Hispanic can be of any race.

## Health Disparities among Kansans Living with a Disability

Disability is a significant public health problem directly and indirectly affecting the lives of approximately 50 million Americans yearly (1). To adequately address this concern, the United States Healthy People Initiative stated clear objectives for disability in its 2010 objective plan. The objectives of Healthy People 2010 aim to promote the health of people with disabilities, prevent secondary conditions, and eliminate disparities between people living with and without disabilities (2).

Since the inclusion of disability in the Healthy People 2010 national set of health objectives, public health policy makers, program developers, and service providers have worked on different fronts to reduce the prevalence of disability and the health disparities that exist between the disabled and non-disabled populations. Despite this concerted effort, significant health disparities still persist between people living with disability and those living without disability.

According to data from 2004 Kansas Behavioral Risk Factor Surveillance System (BRFSS), an estimated 503,332 adult Kansans (18.4%) were living with a disability (defined as those who reported an activity limitation due to physical, mental and emotional problems or who reported a health problem that requires them to use special equipment such as a cane, wheelchair, special bed, or special telephone) (3).

Table 6. Percentage of Adults with Various Health Indicators Living with and without Disability, Kansas BRFSS, 2004

Health Indicators	Kansans with Disabilities		Kansans without Disabilities	
	N	Weighted Percentage (95% C.I)*	N	Weighted Percentage (95% C.I.)
Adults with fair or poor perceived health status	824	42.8 (40.2-45.4)	446	6.4 (5.6-7.1)
Adults with poor mental health for 14 or more days	315	16.9 (14.8-19.0)	379	5.6 (5.0-6.3)
Adults (18-64 years) with no health care coverage	169	18.0 (15.1-21.0)	682	14.8 (13.6-16.1)
Adults with current Asthma	264	13.8 (12.1-15.6)	387	6.1 (5.4-6.8)
Adults with diagnosed diabetes	302	14.4 (12.7-16.1)	374	4.7 (4.2-5.2)
Adults who are obese - with BMI >=30	613	34.5 (32.0-37.1)	1313	20.7 (19.6-21.9)
Women without pap smear test within the last 3 years	146	21.9 (18.3-25.5)	355	12.3 (10.9-13.7)
Women, 40 years and older without a mammogram within the last 2 years	288	27.9 (24.9-30.9)	573	22.4 (20.6-24.2)

\* 95% Confidence Interval

According to the BRFSS data, a higher percentage of Kansans living with disabilities reported poor mental health, asthma, diabetes and obesity as compared to Kansans living without disabilities. Utilization of preventive services is also lower among those living with disabilities as compared to those living without disabilities (Table 6). Thus, there is a need to intensify coordi-

nated efforts from all tiers of health and social care to minimize the health disparities between the disabled and non-disabled population.

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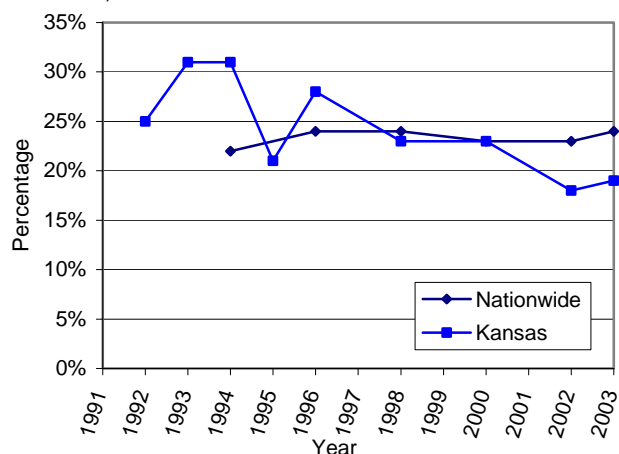
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## Small Percentage of Adult Kansans Meet Recommendation for Fruits and Vegetables

Fruits and vegetables have many beneficial health effects, including reducing the risk of cancer, cardiovascular disease, hypertension, stroke, diabetes, obesity and some birth defects (1). To receive the full health benefits that fruits and vegetables provide, it is recommended that adults consume five to nine servings of a variety of fruits and vegetables each day. To examine what percentage of adult Kansans are meeting the fruits and vegetables consumption guidelines and to examine how Kansas compares with the nation, data from the 2003 Behavioral Risk Factor Surveillance System (BRFSS) were analyzed.

The nationwide median percentage of adults consuming fruits and vegetables at least five times per day has remained fairly stable. However, the percentage of adult Kansans consuming fruits and vegetables at least five times per day has been decreasing since 1996. Particularly during the past two years, Kansas has been lower than the national median percentage. In 2003, 24 percent of adults in the United States and 19 percent of adults in Kansas consumed fruits and vegetables at least five times per day (Figure 2).

Figure 2. Percentage of Adults Consuming Fruits and Vegetables at Least Five Times Per Day, 1992-2003, BRFSS \*



\* No data for Nationwide: 1992, 1993, 1995, 1997, 1999, 2001  
No data for Kansas: 1997, 1999, 2001

Among adult Kansans, disparate populations are identified. Fewer males than females consumed fruits and vegetables at least five times per day (16 percent vs. 22 percent). Also, fewer adults less than 65 years old consumed fruits and vegetables at least five times per day compared to adults 65 years and older

(18 percent vs. 27 percent). These trends are similar to nationwide percentages. However, the Kansas percentages are lower than the national percentages in regards to sex and age. National percentages for fruit and vegetable consumption are: 18 percent males, 28 percent females, 22 percent adults younger than 65 years and 30 percent of adults 65 years and older.

Overall, not only are a small percentage of adult Kansans meeting the recommendation of fruits and vegetables consumption each day but also this percentage is lower than the national median percentage. Public health efforts in Kansas should increase public awareness of the need to eat five or more servings of fruits and vegetables every day for better health, increase the availability of fruits and vegetables where food is served such as at home, school, and work, and incorporate more fruits and vegetables into the daily routines of all Kansans.

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## Trauma Legislation Passed

The Kansas Legislature passed House Bill 2752 expanding the statewide Trauma Program and Registry rule and regulation authority of the Secretary of the Kansas Department of Health and Environment. The bill signed into law by Governor Sebelius authorizes the fixing, charging and collecting fees from trauma facilities to recover expenses incurred in the designation of such facilities. The bill also gives the Secretary the responsibility of designating trauma facilities based on their level of care. Information obtained by the registry may be disclosed if necessary to protect the public health and to support quality improvement.

## Mumps Outbreak Investigation

The Kansas Department of Health and Environment (KDHE) is conducting an epidemiological investigation into the largest outbreak of mumps the state has seen in the past 12 years (Table 7). As of May 12, 2006, the agency had received reports of 546 confirmed or probable mumps cases in over 55 Kansas counties. The majority of the cases are in Douglas County. The majority of the cases have been in individuals between age 20 and 30, but a few cases have been in children under age 10 and in individuals over age 30.

"We are working closely with local health departments and physicians to investigate each of the cases to determine links to other states," said Dr. Gail Hansen, KDHE State Epidemiologist.

Kansas is among a handful of Midwest states experiencing an increase in mumps cases. Iowa is experiencing an outbreak and currently reports more than 1,609 cases (confirmed, probable and suspect). Nebraska also has more than 225 cases.

"We have not determined a link between Kansas and Iowa cases at this time. "Since mumps is a contagious illness and we have a very mobile society, we would expect some cases in surrounding states," said Dr. Howard Rodenberg, Division of Health Director and State Health Officer.

Mumps is usually a relatively mild viral infection. It is transmitted through saliva, coughing, sneezing or being in close contact

(within three feet of the person for an hour). Symptoms include fever, swelling and tenderness in glands around the neck and jaw. Laboratory tests can be useful in diagnosis, especially if the symptoms are not typical, if a person has been vaccinated, or had the disease in the past.

Visit [www.kdheks.gov/immunize/mumps.html](http://www.kdheks.gov/immunize/mumps.html) for Information on Mumps

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Office of Communications*

## Influenza Season Winds Down

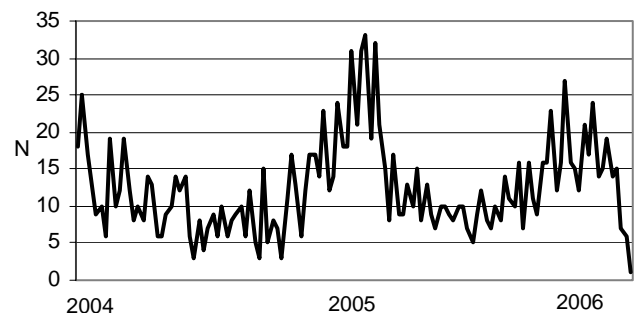
The 2005-2006 flu season has been milder than the previous season in terms of deaths in Kansas. As of April 30, 2006, 1,436 pneumonia and influenza (P&I) related deaths had occurred. This figure was 24 percent lower than the 1,889 deaths reported for the 2004-2005 season.

A P&I related death is defined as any death in which pneumonia or influenza was the direct cause of the death or where pneumonia and influenza were contributing factors in the death.

Flu seasons typically run from September 1 to May 31 of the year following. Final numbers for the 2005-2006 season are likely to increase slightly as totals for May are included but are not expected to exceed figures for the last season.

Influenza was the direct cause of death in 19 deaths or 1.3 percent of the pneumonia and influenza related deaths in the 2005-2006 season. This compares to 33 deaths in the last season. Pneumonia was the direct cause of death for 439 or 30.6 percent of the P&I related deaths. In the remaining 978 deaths for the 2005-2006 season, pneumonia or influenza were contributing factors.

Figure 3. P&I Related Deaths by Week, Kansas, 2004-2006



P&I related mortality typically peaks in the winter months and drops during the warmer months (Figure 3).

Pneumonia and Influenza were directly responsible for 558 deaths in calendar year 2004.

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## Nation's Population One-Third Minority

About one in every three U.S. residents was part of a group other than single-race, non-Hispanic white according to national estimates by race, Hispanic origin and age released by the U.S. Census Bureau. In 2005, the nation's minority population totaled 98 million, or 33 percent, of the country's total of 296.4 million.

Hispanics continue to be the largest minority group at 42.7 million. With a 3.3 percent increase in population from July 1, 2004, to July 1, 2005, they are the fastest-growing group.

Unless otherwise specified, the data refer to the population who reported a race alone or in combination with one or more other races. The second largest minority group was blacks (39.7 million), followed by Asians (14.4 million), American Indians and

Alaska natives (4.5 million), and native Hawaiians and other Pacific islanders (990,000). The population of non-Hispanic whites who indicated no other race totaled 198.4 million in 2005.

US Census Bureau

## Most Popular Baby Names Listed

Aiden has hung on for a second year as the most popular boys name given to newborns by Kansas parents in 2005 (Table 7). The trend for Celtic and English boys names continues with names such as--Aiden, Kaden, Conner, Dylan and Logan included in the top 25.

Emma occupies the top spot on the girls' list for the third year running. Hailey, Emily, Kaitlyn and Madison join Emma in the top five.

This information was prepared by the Kansas Department of Health and Environment, Division of Health's Center for Health and Environmental Statistics. The lists are derived from birth certificate information kept on file by the Office of Vital Statistics.

Dropping off the list of 25 most popular girls' names were Katherine, Kylie, Sarah and Sydney. Joining the list were Ashley, Ava, Isabella and Natalie. Leaving the list of 25 most popular boys' names were Austin, John, Ryan and Samuel. Joining the list were Daniel, Gabriel, Joseph and Mason.

Popular baby names are one of the more regularly requested items produced by the Office of Health Care Information. While the list reflects popular culture and names frequently used in the media, other information from birth certificates and other vital records stored with the Office of Vital Statistics is used to gauge health trends in the state.

The popular baby names lists are available on the KDHE Web site at: [www.kdhe.state.ks.us/hci](http://www.kdhe.state.ks.us/hci).

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## State Rankings of Access to Primary Care

Adequate access to an appropriate level of primary health care at the right time is considered a key social determinant contributing to good health outcomes. Individuals and families need to receive evaluation and advice from health care professionals regarding their health status. They also need guidance through all life stages to adopt healthy daily behaviors and to implement recommended preventive services or treatment for chronic conditions. When health conditions are not properly managed, the frequent result is unnecessary or more intensive services including expensive hospitalizations.

To support recruitment and improve the supply and distribution of health professionals, several federal programs were established through the Public Health Service Act. These programs, designed to support recruitment in shortage areas, include state and federal scholarships, loan repayment assistance and loan forgiveness programs for medical, dental and mental health professionals.

Other programs aid the recruitment of international medical school graduates to rural communities and offer higher Medicare payments to doctors in rural underserved areas. To benefit from these programs, service areas such as cities and counties must be designated as "medically underserved." These "health professional shortage area (HPSA)" designations are established through a program administered by the KDHE Office of Local and Rural Health.

To determine if a shortage of professionals exists, service areas are evaluated using federally established criteria and methodology using data collected at the state and local level. KDHE prepares and submits designation applications to the Bureau of Health Professions in the Health Resources and Services Administration. Kansas currently has 82 HPSAs designated for medical care, 91 HPSAs for dental care and 98 counties covered by mental health HPSAs (1).

The designation of Medically Underserved Areas and Medically Underserved populations has allowed Kansas to establish 10 federally qualified health centers and receive federal Community Health Center grants (2, 3). Using federal provisions granting state governors the ability to make underserved area designations for a limited purpose, Kansas has obtained designations that qualify the state for its current 182 federally certified Rural Health Clinics.

According to a recent publication of state health rankings for 2006 (4), approximately 11.5 percent of the US population lacks access to primary care. Kansas ranks 13<sup>th</sup> in the nation with 15.4 percent of Kansans lacking access to primary medical care using the HPSAs as a measure. In addition, states surrounding Kansas have varied experiences with access to primary care (Table 8).

Table 8. Primary Care Access by Percent Lacking and National Ranking, Selected Midwest States, 2005

National Ranking	State	Percent Lacking Access
5	Missouri	22.9
13	Kansas	15.4
14	Oklahoma	15.3
28	Colorado	10.3
46	Nebraska	5.7

In comparing rankings, one must consider these statistics can vary between states depending on the degree to which state offices pursue the federal shortage area designation. In Kansas, the goal is to obtain federal designation, and the resulting benefits, for all qualifying areas. In some states, the designations are only pursued when needed locally for a specific purpose. For more information on the health professional work force analysis program in Kansas, see the OLRH Web site at [www.kdheks.gov/olrh/SD.htm](http://www.kdheks.gov/olrh/SD.htm).

Elizabeth W. Saadi, PhD, Office of Health Care Information  
Barbara Gibson, Office of Local and Rural Health

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## National Death Index is Excellent Resource for Researchers

The National Death Index (NDI) is a central index of death record information compiled from all states. A select amount of identifying and cause of death information is submitted under contractual arrangements to the National Center for Health Statistics (NCHS) by the State vital statistics offices.

The Index, beginning with deaths occurring in 1979, contains a standard set of identifying data for each decedent recorded. The data are used in searches of the NDI to identify and locate death records filed in the state offices.

The NDI enables investigators conducting statistical studies to determine if persons in their studies may have died; if so, the Index provides the names of the states where the deaths occurred, the corresponding death certificate numbers, and the dates of death. The NDI user can then make the necessary arrangements with the appropriate state offices to procure copies of death certificates or specific statistical information such as cause of death.

The NDI is primarily designed to facilitate prospective and retrospective studies in medical and health research by reducing the time, expense, and effort involved in ascertaining deaths, either for an entire cohort of study subjects or just for those subjects lost

to follow up. Investigators planning to use the NDI are encouraged to collect or compile as many of the NDI data items as possible: first and last names, middle initial, father's surname, Social Security number, date of birth, state of birth, state of residence, sex, race, marital status, and age at death. NCHS provides the NDI user with an indication that a particular individual in the user's file has been involved in a possible match with one or more records in the NDI file. It is the user's responsibility to (a) assess the quality of each possible NDI record match that occurs (b) determine which NDI records appear to be associated with the persons under investigation, and (c) obtain copies of relevant death certificates or specific death records information from the appropriate state vital statistics offices.

Death registration is a state responsibility with death certificates filed in the states in which the deaths occur. Each state vital statistics office retains the authority to furnish NDI users with copies of death certifications or statistical data from death certificates in accordance with its legislation, regulations and policies.

Beginning with deaths occurring in 1979, the NDI file contains death record information for all 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands. The data base management system in which the data are stored is updated annually. Approximately 2 million death records are added to the NDI file each year. All state data for a given calendar year are received, processed, and added to the national file approximately 12 months after the end of the calendar year.

To learn more visit [www.cdc.gov/nchs/ndi.htm](http://www.cdc.gov/nchs/ndi.htm).

*National Death Index  
National Center for Health Statistics*

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