Kansas Health Statistics Report

Kansas Department of Health and Environment – Center for Health and Environmental Statistics – No 18 – August 2003

Population Figures Updated

The U.S. Census Bureau has released 2002 Kansas county population estimates (Table 1). Estimates are as of July 1, 2002. Kansas population increased slightly (0.8 percent) from 2,694,641 residents in 2001 to 2,715,884. You can access this table and additional Kansas estimates at: http://www.census.gov/.

Table 1. Kansas County Population Estimates, July 1, 2002

County	Total	County	Total
Total	2,715,884		
Allen	14,234	Linn	9,674
Anderson	8,147	Logan	2,998
Atchison	16,683	Lyon	35,904
Barber	5,085	Marion	13,248
Barton	27,743	Marshall	10,583
Bourbon	15,171	McPherson	29,413
Brown	10,501	Meade	4,620
Butler	60,534	Miami	28,904
Chase	2,930	Mitchell	6,693
Chautauqua	4,210	Montgomery	35,307
Cherokee	21,953	Morris	6,082
Cheyenne	3,123	Morton	3,360
Clark	2,382	Nemaha	10,463
Clay	8,704	Neosho	16,638
Cloud	9,932	Ness	3,316
Coffey	8,902	Norton	5,879
Comanche	1,985	Osage	16,928
Cowley	36,427	Osborne	4,236
Crawford	38,052	Ottawa	6,289
Decatur	3,407	Pawnee	6,946
Dickinson	19,144	Phillips	5,871
Doniphan	8,215	Pottawatomie	18,489
Douglas	102,316	Pratt	9,541
Edwards	3,337	Rawlins	2,887
Elk	3,138	Reno	63,790
Ellis	27,274	Republic	5,468
Ellsworth	6,418	Rice	10,501
Finney	39,732	Riley	61,480
Ford	32,662	Rooks	5,492
Franklin	25,322	Rush	3,492
Geary	26,410	Russell	7,055
Gove	2,992	Saline	53,910
Graham	2,847	Scott	4,923
Grant	7,895	Sedgwick	461,937
Gray	6,045	Seward	23,072
Greeley	1,472	Shawnee	170,748
Greenwood	7,653	Sheridan	2,641
Hamilton	2,658	Sherman	6,398
Harper	6,278	Smith	4,365
Harvey	33,375	Stafford	4,662
Haskell	4,291	Stanton	2,410
Hodgeman	2,149	Stevens	5,332
Jackson	12,741	Sumner	25,533
Jefferson	18,664	Thomas	8,092
Jewell	3,495	Trego	3,140
Johnson	476,536	Wabaunsee	6,715
Kearny	4,543	Wallace	1,692
Kingman	8,426	Washington	6,271
Kiowa	3,107	Wichita	2,502
Labette	22,281	Wilson	10,143
Lane	2,000	Woodson	3,668
Leavenworth	70,789	Wyandotte	158,331
Lincoln	3,542		

Kansas Life Tables Published

The Center for Health and Environmental Statistics (CHES) has published 2000 Kansas abridged life tables for selected population groups. The last life tables were created using the 1990 Census.

Life expectancy for a Kansas resident born in 2000 was 77.4 years. This is a 0.4-year increase over life expectancy for a Kansas resident born in 1990. The U.S. life expectancy at birth was 76.9 years in 2000.

Life expectancy for males was 74.9 years, increasing 1.4 years from a life expectancy of 73.5 years in 1990. U.S. life expectancy for males was 74.1 years in 2000.

Life expectancy for females was 79.8 years, a decrease of 0.5 years from a life expectancy of 80.3 years in 1990. U.S. life expectancy for females was 79.5 years in 2000. Since life expectancy at birth values reflect the mortality experience of a given year, small decreases may be noted when comparing different years. Such decreases in life expectancy are also noted in national life tables.

Life expectancy for the Kansas white population born in 2000 was 77.2 years. The U.S. white population life expectancy was 77.4 years. Life expectancy for the Kansas black population born in 2000 was 71.2 years. The U.S. black population life expectancy was 71.7 years. The difference in the Kansas life expectancy between the white and black populations was 6.0 years. This compares to a 5.7-year difference between the two populations in the U.S. life expectancy.

Period (or current) life tables present what would happen to a hypothetical cohort if it experienced throughout its entire life the mortality conditions of a particular period in time. A period life table can be characterized as a snapshot of current mortality experience and shows the long-range implications of a set of age-specific death rates that prevailed in a given year. The most frequently used life table statistic is life expectancy (e_x), which is the average number of years of life remaining for persons who have attained a given age (x).

An abridged or collapsed version of the complete life table can be prepared that shows life table functions for five-year rather than single-year intervals. Life expectancy at age 30 (e_{30}) for example, has the same value regardless of whether the age interval is 30-31 years or 30-35 years.

CHES uses an abridged period life table data in calculating years of potential life lost for selected causes of death. Since the *1992 Annual Summary of Vital Statistics*, CHES has used 1990 life tables prepared by the Kansas Division of Budget.

The data used to prepare the 2000 Kansas abridged life tables are final deaths for the year 2000 and final births for 1999 and 2000, as reported by CHES. The 1990 abridged life tables are comprised of final 1990 death data and final birth

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data from 1989 and 1990.

The report is at http://www.kdhe.state.ks.us/ches/liftab00.pdf.

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Vital Statistics Data Analysis
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Most Popular Baby Names

Emily and Jacob were the most popular names Kansas parents gave to their newborns in 2002. Jacob remained in first place among popular boys' names for the eighth year in a row. Emily replaced Kaitlyn as the most popular girl's name. This information was prepared by the Center for Health and Environmental Statistics. The lists are derived from birth certificate information that the Center's Office of Vital Statistics keeps on file.

Dropping off the list of 25 most popular girls' names were Anna, Jessica and Megan. Joining the list were Allison, Olivia and Riley. Dropping off the list of 25 most popular boys' names were Brandon, Christian, Christopher, Nathan and Ryan. Joining the list were Aidan, Caden, Daniel, Gabriel and Isaac.

Popular baby names are one of the more regularly requested items produced by the Center's 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 list and a compilation of data from records, the *Annual Summary of Vital Statistics*, are available on the KDHE Web site at: http://www.kdhe.state.ks.us/hci/. Basic customized statistics can be found at the KIC (Kansas Information for Communities) website: http://kic.kdhe.state.ks.us./kic/. The Office of Health Care Information also prepares special data analyses on a fee-for-service basis.

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ARNP FTE Report Prepared

In March of 2003, the Center for Health and Environmental Statistics Office of Health Care Information used 2002 licensure and practice data obtained from the Kansas State Board of Nursing to compile a report and calculate full time equivalents (FTEs) for the Advanced Registered Nurse Practitioner (ARNP) workforce currently engaged in direct patient care in primary care specialties. The analysis included a report of the total FTEs for ARNPs practicing in each county. A similar report was prepared using data obtained from the Kansas Board of Healing Arts for Physician Assistants (PA).

The purpose of the analysis and resulting FTE report was to allow inclusion of these two non-physician medical care professions into the assessment of the primary medical care evaluation of underserved areas and Health Professional Shortage Areas (HPSAs). This was the first year data has been collected and analyzed in this manner for ARNPs and PAs. For a number of years, an annual KDHE survey of physician practice characteristics has been used for primary care physician FTE supply and distribution reports. More recently, dentist and dental hygienist data have been collected and FTEs calculated.

For the first time, data on individual ARNP providers has been calculated and allocated by actual practice hours in primary care at each practice location (work setting). One FTE is based on a 40-hour workweek. Only hours at publicly accessible, ambulatory work settings were used in the calculation of an FTE for the individual. This method of analysis will allow for the distribution of hours/week for an individual ARNP to more than one county. For each county the total FTE was calculated using the sum of FTEs for all ARNPs practicing (full or part time) at sites for all ARNPs practicing (full or part time) at sites located in the county.

Currently, the report of FTEs for ARNPs at the county level is of limited value when studied independently, but it will contribute a great deal when included in county-level calculation of the combined, adjusted primary care FTEs - the sum of FTEs for physicians, PAs, and ARNPs.

Adequate primary care access depends upon a sufficient supply of providers for an agreed upon number of individuals. In the case of federal Health Professional Shortage Areas, access is considered inadequate if there is not at least one primary care FTE per 3,500 persons. Primary care supply can also be expressed as a rate (number physicians per 100,000 population) with the inadequate access level, by federal standards, of fewer than 28.57 physicians per 100,000 population.

Federal methodology for determination of Health Professional Shortage Areas is expected to change in the near future to add ARNPs and PAs to the calculation of FTEs and determination of primary care provider to population ratios. The implications for Kansas are great due to the increased acceptance and reliance on "mid-level" providers across the state and the requirement that each of the state's 156 Rural Health Clinics (RHCs) employ at least 0.5 FTE nurse practitioners or physician assistants.

Without mandatory reporting, it took a number of years for physicians to fully participate in the annual voluntary survey process. The same might be expected for nurse practitioners. The current ARNP FTE report has assigned persons to the counties of the mailing address and assigned 0.0 FTE for those who did not provide practice data. The results suggest that of the 861 licensees included in this report, only 325 ARNPs are actively practicing in Kansas totaling 214.49 FTEs for the state.

Additional work will be needed to instruct and inform the licensees regarding the value and purpose of the data being collected. We are encouraged that this first year effort was a useful "trial run" for survey content and collection method. We would like to express our appreciation to the Kansas State Board of Nursing and the Office of Local and Rural Health for providing guidance, support and encouragement to this first-time effort. We welcome comments and recommendations. Summary county reports containing FTE counts for ARNPs and a number of other healthcare professionals can be obtained by contacting the Office of Health Care Information at 785-296-8629.

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Office of Health Care Information

Bioterrorism Program Starts Fourth Year

The Kansas Bioterrorism Program will begin its fourth year of existence with the awarding of a continuation grant from the Centers for Disease Control and Prevention for fiscal year 2004. The program is conducting ongoing training to prepare local health officials for an outbreak of smallpox or other biological agent. The following is a partial list of the accomplishments and highlights of the Bioterrorism Program over the last three years:

- In FFY2003, $5,350,000 in grant funds was directly distributed to local health departments throughout Kansas. An additional $6,125,000 will be directly distributed in the next fiscal year.
- Under the Kansas Bioterrorism Program, 448 Kansans have been vaccinated against smallpox. Most of the vaccinated individuals are members of the 46 vaccination teams located in 23 counties. These teams have been trained to conduct mass vaccinations throughout the state in the event of an act of terrorism using the smallpox virus.

- Live smallpox vaccination training via satellite has been conducted at six remote sites using a satellite uplink at the Bob Dole Media Center at Kansas State University.
- High-speed Internet connection is being provided to one third of the county health departments through the Health Alert Network (HAN) and funded by the Bioterrorism Program.
- Training in critical areas such as disease outbreak surveillance and risk communications has been provided to local public health officials throughout the state. Additional training aimed at special needs populations will continue throughout the next year.
- Ongoing preparedness training for a bioterrorism attack has improved the Bureau of Epidemiology and Disease Prevention's ability to respond to uncommon disease outbreaks such as hantavirus, monkeypox, SARS and West Nile virus. Informational town hall meetings were conducted in Morton, Finney and Ford Counties in early June after a fatality due to Hantavirus Respiratory Syndrome occurred in southwest Kansas.
- An F-4 tornado hit the town of Franklin and other locations in Crawford County on May 4, 2003. The Crawford County Health Department, using procedures learned during smallpox vaccination training, administered over 400 tetanus vaccinations in the town of Franklin alone.

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Article Review: 2001 Prescription Drug Expenditures - Another Year of Escalating Costs

The National Institute for Health Care Management (NIHCM) recently published study findings relating to cost trends for prescription drug expenditures. Prescription drug expenditures continue to be the fastest growing component of health care. A number of research groups and the federal government have found that prescription drug spending has risen 15% or more per year over the past several years (1,2,3). Although spending on prescription drugs accounts for about 10% of total spending on health care in the US, it has contributed disproportionately to a sharp upturn in overall health costs. This trend has attracted considerable political attention and caused a number of states to pass cost containment measures. Legislatures and health officials in many states are searching for strategies to reduce prescription drug costs in the Medicaid program.

Prescription drug costs are rising for a several reasons.

- The incidence and prevalence of many chronic conditions have increased in recent years e.g., asthma, diabetes, elevated cholesterol and arthritis. In part, this is due to an aging population and because the population is less healthy e.g., rising numbers of overweight Americans.
- Physicians are diagnosing and treating chronic illnesses at an increasingly higher rate with a wider variety of drugs.
- Managed care health plans cover more of the costs for prescription drugs than did previous traditional health insurers.
- Newly approved pharmaceuticals are being heavily marketed to both physicians and consumers.
- Many brand name drug companies prolong the "franchise" of brand name drugs with modified formulations.

After reviewing 2000-2001 data from two research firms that specialize in gathering pharmaceutical marketplace data, the NIHCM study concluded that prescription drug spending in the US continues to rise at a brisk pace, propelled by increases in the sales of a relatively small number of top-selling drugs each year. More people are taking more expensive medicines for a wider array of conditions and diseases. Data showed that the increase in pharmaceutical spending is principally caused by a rise in the volume of prescriptions. This includes three non-mutually-exclusive trends: (a) more new first time users of prescription medications, (b) a greater number of current users taking medicines for longer periods, and (c) increased multiple medication consumers.

Although the rise in prescription drug spending appears to be impacting the landscape of health care in the US, the most important question from a health care financing perspective is whether the growing use of prescription drugs will, over time, add to overall health care costs or yield savings as they supplant and reduce the need for other, more expensive medical treatments. While there appears to be an accelerated shift of health care costs to consumers and increasing pressure directed toward the addition of a prescription drug benefit to the Medicare program, prescription drugs have been extremely valuable contributors to the improved treatment of many medical conditions, illnesses and diseases in recent years.

National Institute for Health Care Management Foundation
May 6, 2002
Reviewed by Rachel Lindbloom, MA, LSCSW
Health Care Data Analysis

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2. Stunk, Paul B. Ginsburg and Jon R. Gable, "Tracking Health Care Costs,"*Health Affairs* web exclusive, (Sept 26, 2001), http://www.healthaffairs.org;
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YPLL65 Mortality Data Reviewed

One method for assessing premature mortality is calculating years of potential life lost (YPLL). Statisticians began calculating YPLL values for specific diseases in 1947 (1). The process was expanded to all diseases, using a similar approach, but adjusting for different age structures. The years of potential life lost would be the difference between the age at death and an arbitrarily set age value signifying the upper end point. The YPLL value for a selected cause or geographic region would be the sum of YPLL values for each individual in that category.

The *Kansas Annual Summary of Vital Statistics* contains a table that calculates YPLL values on estimated life expectancy at birth. Other researchers use a fixed age value for the YPLL calculation. Some studies of premature mortality among a younger population use an upper age limit of 65 for the calculation.

One of the controversies in YPLL calculations is the definition of the upper end point. In calculating YPLL65 one concern is that deaths in the older age-groups of the under 65 cohort are underrepresented by the upper age limit of 65 years. However, the method preserves the emphasis on causes of mortality among younger persons.

YPLL65 values were calculated for Kansas counties and 31 selected leading causes using calendar year 2000 mortality data. Of 24,676 deaths, 5,123 occurred to individuals less than 65 years of age.

Reporting selected causes of death by total YPLL65 produces a different ranking from the entire 2000 mortality cohort (2) (Table 2). Cancer and cardiovascular disease remain leading causes of death, but their order is reversed. The higher rankings for motor vehicle accidents, other unintentional injuries, suicide, and homicide show the impact of these causes of death on the younger population. As expected, perinatal period conditions,

congenital anomalies and SIDS also have an impact on the under 65 mortality experience.

Table 2. Selected Leading Causes of Death to Kansas Residents under 65, by Total YPLL65, Number and Annual Summary Ranking, 2000

Cause	Total YPLL 65	N	All Deaths Ranking
Cancer	16,049	1,372	2
Cardiovascular Disease	13,284	1,127	1
Motor Vehicle Accidents	12,908	391	5
Other Unintentional Injuries	8,348	280	
Suicide	7,509	282	11
Perinatal period Conditions	7,150	110	16
Congenital Anomalies	6,055	107	15
Homicide	4,814	138	14
SIDS	2,730	42	-
Diabetes	1,752	143	7
Liver Diseases	1,369	100	12

YPLL65 values were calculated by county for all deaths under the age of 65. YPLL65 rates per 100,000 age-group population were also calculated to offset the bias of more deaths occurring in counties with greater population. YPLL65 rates were considered statistically unreliable if based on a count of fewer than 20 deaths. Only 44 counties had reliable YPLL65 rates.

Russell County had the highest YPLL65 rate (Table 3). Riley County had the lowest rate in 2000. Sedgwick County with the highest Total YPLL65 (18,244 years) had an YPLL65 rate of 4,546.3/100,000 population, due in part to the large under 65 population in the county. Only the larger counties had statistically reliable YPLL65 rates for selected leading causes of death.

Table 3. Counties with Highest and Lowest YPLL65 Rates, Kansas, 2000

	YPLL65 per 100,000	N
Counties with highest YPLL65		
Russell	8,166.5	26
Marion	7,535.4	36
Linn	7,212.3	22
Anderson	7,048.1	24
Wyandotte	6,612.3	480
Counties with lowest YPLL65		
Barton	2,970.4	59
Johnson	2,870.6	564
Douglas	2,861.2	114
Ellis	2,477.9	37
Riley	1,462.6	47

Because of the relatively small number of deaths to persons under 65 in Kansas, YPLL65 calculations may not provide valuable insight except in the largest counties. Still it is an interesting indicator of the impact of mortality – much of it preventable – on the state's younger population.

Inquiries about YPLL65 can be directed to the Office of Health Care Information at 785-296-8627.

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Vital Statistics Data Analysis

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2. Kansas Department of Health and Environment. 2000 Kansas Annual Summary of Vital Statistics. Topeka, Kansas: 2001.

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