

# Kansas Health Statistics Report

Kansas Department of Health and Environment – Center for Health and Environmental Statistics – No 15 – November 2002

## Dental Staffing in Kansas Evaluated

The Office of Health Care Information, through the Health Care Data Governing Board, released the "Kansas Primary Care Dentist FTE Report by County 2000." The biennial update of Dental FTEs (full-time equivalents) was prepared in accordance with guidelines set forth by the Code of Federal Regulations.

The Kansas Dental Board provided the 4<sup>th</sup> quarter 2000 License data used in this report. The dataset contains dentist-provided information (General and Pediatric) about the quantity and location of primary care in Kansas. FTEs were age-adjusted as required by federal health professional shortage area regulations.

For each dentist, total practice hours at all sites combined were constrained to a maximum value of 40 for the purposes of calculating FTEs. The state had 1,090 primary care dentists practicing at 1,161 different sites. The number of age-adjusted primary care FTE dentists was 979 (Table 1).

**Table 1. Age-adjusted Dental FTEs**

	Actual FTE	Adjusted FTE	Actual Hours	Adjusted Hours
Statewide Totals	893.90	979.30	36,027	35,756
Per Site (n=1,161)	0.77	0.84	31.03	30.80
Per Dentist (n=1090)	0.82	0.90	33.05	32.80

Using the 2000 Census non-institutionalized population, the state averaged 2,662 persons per primary care FTE dentist. Twenty-six counties had ratios below the state average, and the ratios for 69 counties were above the state average.

Ten counties had zero dental FTEs, and an additional 14 counties had less than one FTE each. All of these counties are wholly or partially designated as dental health professional shortage areas (for more information on shortage designations, see [http://www.kdhe.state.ks.us/olrh/SD\\_hpsa\\_maps.htm](http://www.kdhe.state.ks.us/olrh/SD_hpsa_maps.htm)).

Of those counties with an FTE greater than zero, Wabaunsee had the most people per FTE dentist and Logan had the fewest people per FTE dentist.

Table 2 contains calculated values for each practice site grouped into the appropriate peer group. All figures represent the indicated value per site, not per dentist. This is not the same as per dental office, since three dentists, for example, sharing a single office would be counted as three sites, and a single dentist with two offices would count as two sites. Hours reported by dentists for activities other than direct patient care (e.g., teaching, administration, research, and other) are not included in the calculations of FTEs. Data collection does not allow the distribution of these hours across practice locations. In reviewing hours reported, it is likely that their impact on overall FTE calculations would be negligible.

There is an important disparity of service level among county peer groups when site FTEs are considered. It appears the more urbanized regions receive higher average FTEs and service hours.

It appears that younger dentists report full-time status more often, but work less than a full FTE. Older dentists more often report part-time status and work less than one half FTE (Table 3).

**Table 2. Site Summary**

Pop Density Peer Group	Mean Age	Mean Actual Hrs	Mean Adj Hrs	Mean Actual FTE	Mean Adj FTE
Frontier	44.9	25.2	24.9	0.62	0.71
Rural	49.3	29.1	29.0	0.73	0.77
Densely-Settled Rural	48.1	31.5	31.3	0.78	0.85
Semi-Urban	48.8	31.6	31.5	0.79	0.86
Urban	47.7	31.4	31.1	0.78	0.85

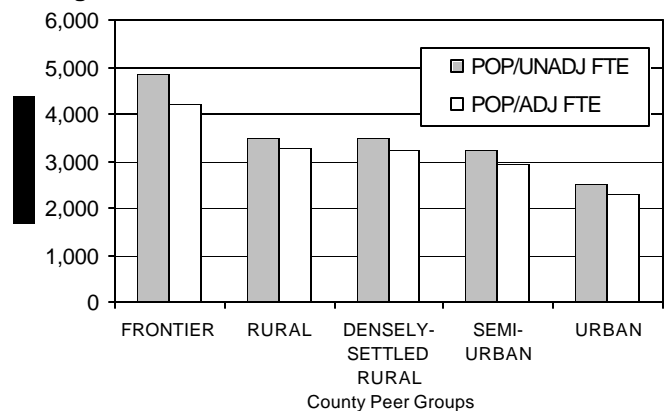
**Table 3. Dental FTEs by Work Status**

STATUS	Mean Actual FTE	Mean Adjusted FTE
Active Full	0.85	0.94
Active Part	0.44	0.38

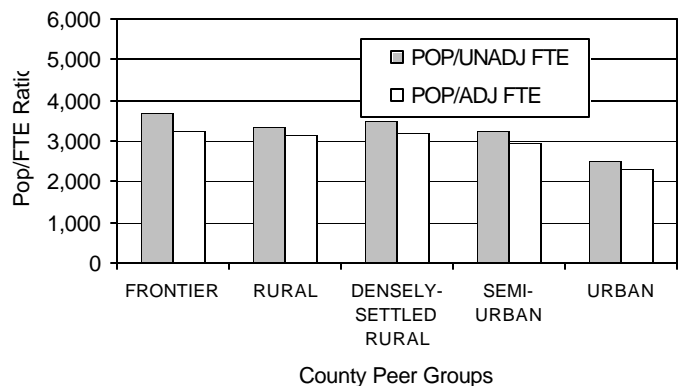
Figures 1 and 2 show the ratios of non-institutionalized population to age-adjusted and unadjusted FTEs for counties grouped by population density peer groups. In Figure 1, all counties in each peer group are included in the calculation of ratios. In

Figure 2, only counties reporting FTEs greater than zero are in-

**Figure 1. Population/FTE Ratios by Peer Groups Including Counties with FTE=0**



**Figure 2. Population/FTE Ratios by Peer Groups Excluding Counties with FTE=0**



cluded in the calculation.

Disparity in service level distribution is most evident for the Frontier region. In reviewing Figures 1 and 2, if it is assumed that dentists located in Frontier counties provide service to residents of other Frontier counties with zero FTEs, then the ratio of people to dentist FTE for all Frontier counties combined would be nearly 5,000 to one using FTEs unadjusted for age, or about 4,200 to one using age-adjusted FTEs (Figure 1). If, on the other hand, we assume that dentists providing care in Frontier counties serve only the counties where their practice sites are located, then the ratio of people to dentist FTE for the Frontier group is about 3,700 to one unadjusted FTE, or about 3,200 using age-adjusted FTEs (Figure 2). Figure 2 ignores the demand for dental care from residents of counties with zero FTEs.

Although still present, service level disparity is less evident in the Rural group of counties. In the Rural grouping where zero FTE counties are included in the analysis, the unadjusted ratio of person per dentist is about 3,500 (Figure 1). The unadjusted ratio falls to 3,300 per dentist when counties with zero FTE are excluded (Figure 2).

The remaining three county groups have the same ratios in both figures, since all counties in these groups have FTEs greater than zero.

**Table 4. Dentists Per Site**

No. of Dentists	No. of Sites per Dentist	No. of Counties	Total No. of Sites
1	3	3	3
2	3	2	6
24	2	1	48
41	2	2	82
1022	1	1	1022
1090			1161

Frontier. Six primary care dentists provide service in two Kansas counties that are neighboring Frontier and Rural counties, while two dentists provide service in two contiguous Frontier counties. Further outreach is critical to the provision of adequate dental service in Kansas.

Contact the Office of Health Care Information at 785-368-7394 with questions or for a copy of the full report.

*Donald Owen  
Health Care Data*

## Birth Certificate Data Quality Reviewed

The Center for Health and Environmental Statistics compared paper medical records to birth certificates from year 2000 at two hospitals to assess data accuracy and surveyed birth clerks at 78 Kansas birthing hospitals to identify data entry issues. A randomly selected sample of 324 births was surveyed at an urban Kansas hospital serving a large regional population. An entire year's cohort, 84 births, was reviewed at a rural hospital.

Thirty-nine data elements, falling into six categories and comprising demographic information frequently used in the process of applying for a certificate and health information needed for research, were surveyed. Information entered into the medical record within two days of birth that matched the birth certificate information was defined as accurate. Birth certificate worksheets, not routinely retained at either hospital, were not reviewed. Survey methods were modified for better data collection efficiency at the rural hospital. The results were not affected.

Results were similar at both hospitals. The highest match rates generally occurred with demographic information: names, times, birth dates, and residency information. Match rates were generally lower overall for the health information categories from

the confidential part of the birth certificate. Among health information categories, previous pregnancy information had the highest overall match rates.

The birth clerk telephone survey identified variability in how clerks gathered information for the birth certificate worksheet. The worksheets were not routinely kept by many hospitals. That was the case for the two hospitals where medical records were reviewed.

Over one-third (35.9%) of birth clerks said they believe birth mothers frequently or occasionally report inaccurate information for the worksheets. A majority of the clerks did not favor moving data elements from Worksheet part 1 to part 2 to alleviate misinformation concerns. In each of four questions asking about the hospital's and birth clerk's capacity to use a possible web-based electronic birth registration system, over two-thirds felt capable.

The hospital medical record findings indicate paper medical records generated or available within two days of birth did not provide sufficient matching information for certain data to be considered accurate. Incomplete or contradictory information in the medical record could not be resolved from a worksheet.

The impact of mismatched information would be minimal on the issuance process where name and date accuracy is imperative. However, lower match rates for some medical fields raise concern about the validity of eliminating the worksheet and collecting the information solely from medical records. Birth clerk surveys show an inconsistent application of birth data collection protocols, but a desire for training and accuracy.

Recommendations include:

- Improve quantity and quality of birth clerk training,
- Retain the worksheet as a data collection tool and require it be maintained in the medical record,
- Enhance computerized edit checks and validation programs to identify data anomalies, and
- Use health information from the mother for the certificate when the information is not available in the medical record within the time period the mother is in the hospital.

*Fred Gatlin & Greg Crawford  
Center for Health and Environmental Statistics*

## Survey Reports Increased Immunization Rates

The KDHE Bureau of Epidemiology and Disease Prevention assessed immunization coverage rates of children two years of age in 2000 at local health departments to see whether Kansas was reaching the 90% coverage goals set by the Centers for Disease Control and Prevention (CDC). Immunization coverage rates were measured for four doses of diphtheria, tetanus, and pertussis (DTP4), three doses of polio (Polio3), one dose of measles, mumps, and rubella (MMR1), three doses of H. influenzae (Hib3), three doses of hepatitis B (HepB3) and the combination of DTP4, Polio3, MMR1, Hib3, and HepB3 (4-3-1-3-3). One-year old children were also included in this assessment in order to identify non-immunized and under-immunized children sooner. Evaluation of coverage rates for the one-year old children in 2000 included the following: three doses of diphtheria, tetanus, and pertussis (DTP3), two doses of polio (Polio2), two doses of H. influenzae (Hib2), two doses of hepatitis B (HepB2), and the combination of DTP3, Polio2, Hib2, and HepB2 (3-2-2-2).

For the children in the two-year old cohort, the number of local health departments achieving the 90% coverage goal has increased for all single vaccines and the 4-3-1-3-3 combination compared to 1999. Despite the increases, only 33 counties achieved 90% coverage rates for the 4-3-1-3-3 combination. The statewide mean coverage rates for all single vaccines and the 4-3-1-3-3 combination have increased compared to the mean

coverage rates from the previous year. Coverage rates for Polio3, MMR1, Hib3, and HepB3 have surpassed the goal of 90% coverage. DTP4 and the 4-3-1-3-3 combination had mean coverage rates of 80%.

For the one-year olds, the statewide mean coverage rates have increased for all the single vaccines and the 3-2-2-2 combination. For the Polio2, Hib2, and HepB2, the coverage rates are at least 90%, and for DTP2 and 3-2-2-2 combination coverage rates are at least 85%.

Coverage rates were also evaluated at the interim time points. In both cohorts at three months of age, at least 80% of the children were adequately immunized. However, coverage rates decreased by at least 30 percentage points by seven months of age. The coverage rates at 12 months of age increased and were at levels similar to those at three months of age. However, in the two-year old cohort, coverage rates decreased again at 16 months of age, by 25 percentage points, and then began to rise again until 24 months of age when more than 80% of the children were fully immunized.

Children who started their immunization series on time at three months of age were compared to children who started the series late. In the two-year old cohort, children who started on time were 1.7 times more likely to complete the series on time at 24 months of age than those who started late. In the one-year old cohort, children who started on time were 2.1 times more likely to complete the series on time at 12 months of age than those who started late.

The full report is available from the Bureau at 785-296-1113.

*Jennifer M. Hill, MPH*  
Bureau of Epidemiology and Disease Prevention

## Underserved Areas Report Issued

The KDHE Office of Local and Rural Health has released its Primary Care Underserved Areas Report: Kansas 2002. The report clarifies the often confusing methods and language used by state and federal programs to identify and designate geographic areas and communities with underserved population groups.

The report explains the statistical methods used to identify health care shortages within different programs, and describes the benefits of each type of designation for primary care "underservice."

Information in the report is derived from health professional licensure data compiled and analyzed by the Kansas Health Care Data Governing Board. It lists six categories of underserved areas, a table of county designations and the benefits of receiving shortage designations. The full report is available from the office at 785-296-1200

*Office of Local and Rural Health*

## Infant Mortality Disparity Remains

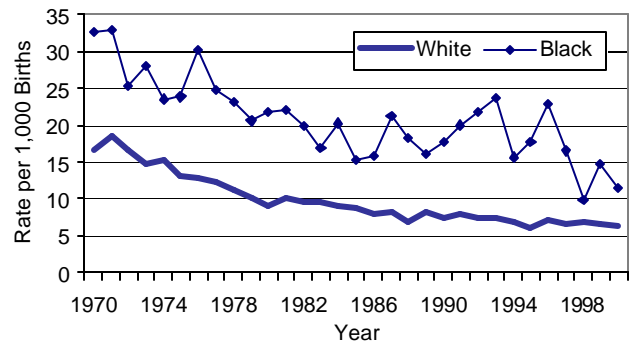
The US Centers for Disease Control and Prevention (CDC) reports that despite substantial reductions in U.S. infant mortality during the past several decades, black-white disparities in infant mortality rates persist. One of the Healthy People 2010 national objectives for maternal and infant health is to reduce deaths among infants aged under one to = 4.6 per 1,000 live births among all racial groups.

The CDC attributes the widened overall gap in black-white infant mortality to a) the persistence of a two- to three-fold risk for low birth weight (LBW) or very low birth weight (VLBW) among black infants compared to white infants and b) smaller reductions in birth weight specific mortality rates among black VLBW births compared to white VLBW births.

In Kansas, the white infant mortality rate has dropped from 16.7 in 1970 to 6.4 in 2000 (Figure 3). The black infant mortality

rate fell from 32.7 in 1970 to 11.5 in 2000. Live births to blacks accounted for 7.2% of the 39,654 live births to Kansas residents in 2000. The 33 black infant deaths represented 12.4% of all resident infant deaths in 2000.

**Figure 3. Infant Death Rates by Race of Mother, Kansas, 1970-2000**



Because the number of black births is small, changes in the number of black infant deaths result in wide fluctuations in the black infant mortality rate from year to year. This variability makes the downward trend in black infant mortality less statistically reliable.

*Greg Crawford*  
Vital Statistics Data Analysis

## Healthy People 2000 Progress in Largest Cities Reviewed

The Kansas City, Missouri, metropolitan area met five of 11 selected Healthy People 2000 goals reviewed by the State University of New York Downstate Medical Center. The Wichita metropolitan area met four of the goals. The results were detailed in *Healthy Cities, Healthy Suburbs: Progress in Meeting Healthy People Goals for the Nation's 100 Largest Cities & Their Suburbs*.

The metropolitan area meeting the highest number of goals, eight, was Portland, Oregon. Goals included: Low birth weight, infant mortality, Tuberculosis, AIDS, Syphilis, Gonorrhea and homicide. Four of the goals had breakouts for the city vs. the suburbs, bringing to 11 the number of indicators.

For the Kansas City metropolitan area, Healthy People 2000 goals were met for infant mortality in the suburbs, Tuberculosis in the suburbs, AIDS in the metropolitan area, syphilis in the city, and homicide in the suburbs. Kansas City, MO, was considered the city in the evaluation with all of the surrounding metropolitan area, including Wyandotte County, as the suburbs.

The four goals met in the Wichita metropolitan area were: Tuberculosis in the suburbs, AIDS in the metropolitan area, syphilis in the city, and homicide in the suburbs.

The report notes that in the 100 largest cities, the review documents considerable but inconsistent progress toward improving health in urban and suburban America. The report can be found at [http://www.downstate.edu/urbansoc\\_healthdata/](http://www.downstate.edu/urbansoc_healthdata/).

*SUNY Downstate Medical Center*

## KIC Mortality Query Tool Updated

Mortality queries conducted using the Kansas Information for Communities web site will now produce results using the International Classification of Diseases, 10<sup>th</sup> revision. The modified query tool was posted to <http://kic/kdhe.state.ks.us/kic/> after weeks of testing and data conversion.

The Center for Health and Environmental Statistics began coding mortality under ICD-10 in 1999. Deaths prior to that time were coded to ICD-9, and the old KIC query tool used that classification.

The new mortality query tool (Figure 4) has two levels of detail instead of the three associated with the previous version. The first level of detail, the one users will see when they create a query, contains a modified list of the 39 Selected Causes of Death, as defined by the National Center for Health Statistics (NCHS). The second level of detail closely follows the 113 Selected Causes of Death list from NCHS.

Figure 4. KIC Mortality Page



The new lists of mortality causes are the same as used by the Missouri Department of Health and Senior Services, which operates the Missouri Information for Community Assessment (MICA) health data query system for that state. Mortality queries based on one of the listed causes of death will return results with like coded deaths.

KIC users are cautioned about comparisons of mortality data before 1999 to current data. The KIC tool, because of its design, does not incorporate the use of a comparability ratio created by NCHS for the specific purpose of comparing mortality rates between 1998 and 1999. While most of the comparability ratios are less than five percent, some causes of death had greater ratios, and KIC results would not take that into account. Users can apply the comparability ratios to pre-1999 mortality rates when performing comparisons.

For more information on the application of comparability ratios and a comparison of mortality rates between the ICD revisions, go to <http://www.kdhe.state.ks.us/ches/icd9-10.pdf>. Core programming for the Kansas Information for Communities (KIC) was developed by the Missouri Department of Health and Senior Services and adapted by the State of Kansas. KIC is supported in part by project U93 MC00139-03 as a Special Project of Regional and National Significance (SPRANS), Title V (as amended), Social Security Act, administered by the Maternal and Child Health Bureau, Health Resources and Services Administration, United States Department of Health and Human Services.

*Greg Crawford  
Vital Statistics Data Analysis*

## Diabetes Affects Minorities Disproportionately

Type 2 diabetes has increased dramatically in the last decade due to an increase in the number of older Americans and a greater prevalence of obesity and sedentary lifestyle. The rate of diabetes in the US has risen since 1997 from 4.0% to 7.3% in 2000; and trends show, according to the Centers for Disease Control and Prevention (CDC), that the disease disproportionately affects minority populations.

At the same time, health care costs for diabetes are increasing. According to the American Association of Clinical Endocrinologists, it costs an average of \$9,200 a year to care for each US patient with diabetes under the age of 65 and \$16,500 for those over 65. The financial implications of diabetes can be traced to complications from the disease that include stroke, kidney disease, heart disease, nerve disease, amputations, and

blindness. Proper screening and management of the disease by the physician and patient can cut the complication rate in half, resulting nationally in savings of \$54 billion a year and enhanced patient quality of life.

In Kansas, the prevalence rate of diagnosed diabetes among adults was estimated at 5.8% in 2001. Between July and September 2001, the Behavioral Risk Factor Surveillance Unit of the Kansas Department of Health and Environment conducted a list-assisted random sample telephone survey of 470 persons with diabetes in Sedgwick County to assess the quality of care provided to patients with diabetes from the patient's point of view.

Data were analyzed to estimate the prevalence of 13 diabetes preventive care practices, including influenza vaccination, pneumococcal vaccination, health care provider counseling about physical activity, cholesterol testing, awareness of hemoglobin A1c, dilated eye exams, provider foot exams, the practice of removing socks and shoes before seeing the doctor, daily self-monitoring of blood glucose, the practice of examining patients' home glucose records, frequency of patient visits for diabetes care, and the practice of sending appointment reminders to patients.

Compared to the latest available data from the Kansas Behavioral Risk Factor Surveillance System (BRFSS), the prevalence of those preventive practices (indicators) as reported by the Sedgwick County patients is shown in Table 5 (Not all questions that were on the special diabetes survey were included on the Kansas BRFSS).

Table 5. Diabetes Preventive Practices

Preventive Practice	SG Co.	KS
Influenza vaccination <sup>a</sup>	54%	60%
Pneumococcal vaccination <sup>b</sup>	50%	50%
Health care provider counseling about physical activity <sup>c</sup>	79%	68%
Cholesterol testing <sup>d</sup>	88%	92%
Ever heard of Hemoglobin A1c <sup>e</sup>	57%	46%
Dilated eye exams <sup>f</sup>	85%	79%
Provider foot exams <sup>g</sup>	61%	49%
Regular foot self-exams <sup>h</sup>	71%	72%
Removing socks and shoes before seeing the doctor <sup>i</sup>	36%	35%
Daily self-monitoring of blood glucose <sup>j</sup>	76%	81%
Examining patient home glucose records <sup>k</sup>	71%	NA
Frequency of visits <sup>l</sup>	73%	65%
Appointment reminders <sup>m</sup>	52%	NA

### Definitions:

- a. Respondents who reported receiving an influenza vaccine during the past 12 months.
- b. Respondents who reported ever receiving a pneumococcal vaccine.
- c. Respondents who reported ever being counseled by a health care provider about physical activity.
- d. Respondents who reported that they have had a cholesterol test in the past two years.
- e. Respondents who reported that they had heard of hemoglobin A1c.
- f. Respondents who reported that they have had a dilated eye exam in the past two years, among respondents with diabetes for at least five years.
- g. Respondents who reported that a health professional checked their feet for sores or irritation two or more times in the past 12 months (among respondents with two or more visits for diabetes in the past 12 months).

- h. Respondents who reported examining their feet an average of at least once per day.
- i. Respondents with diabetes who reported that they are usually told to remove their socks and shoes before they see their doctor.
- j. Respondents on insulin who reported checking their blood sugar an average of at least once per day.
- k. Respondents who reported that their doctor usually or always asks to see records of home blood sugars (among respondents who perform home glucose monitoring).
- l. Respondents who reported they saw a health care provider for their diabetes at least twice in the past 12 months among non-insulin users, and at least four times in the past 12 months among insulin users.
- m. Respondents with diabetes who reported that they receive a mail or phone reminder when they are due for their next diabetes appointment.

Even though the data has several limitations, it suggests that a substantial proportion of people with diabetes are not receiving recommended preventive care in Sedgwick County. There was considerable variation based on patient demographics and other factors. While not universal across indicators, prevalence estimates were generally lower among those with low access to and low satisfaction with the health care system in Sedgwick County.

For example, a higher proportion of African Americans/Blacks, patients with no insurance, and patients earning less than \$20,000 a year were not being immunized against influenza and pneumococcal disease than the entire survey population. Patients with low access to health care and those who had low satisfaction with the health care they receive were less likely than the entire survey population to have their cholesterol checked, to be aware of hemoglobin A1c, and to perform daily self-monitoring of blood glucose. Of note, respondents who reported ever having a sore on their foot which took more than four weeks to heal reported two provider foot exams in the past 12 months at the same frequency as all respondents.

In order to further assess the quality of diabetes care in Sedgwick County, the Kansas Diabetes Control Program (DCP) in the Bureau of Health Promotion is currently working with private physician practices in Wichita to promote and evaluate a diabetes electronic management system and to collect data about diabetes management practices. The data will be analyzed and shared with the provider community in Wichita periodically throughout the life of the project. In addition, the Kansas Diabetes Control Program is partnering with four federally qualified health centers on a similar effort to collect data and to promote better management of diabetes. These centers include Konza Prairie - Junction City, Shawnee County Health Agency - Topeka, Flint Hills - Emporia, and Hunter Health - Wichita. For more information on this initiative, please contact Kathy Summers, Kansas DCP Manager, at 785-291-3739.

## References

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## Most Popular Baby Names

Kaitlyn and Jacob were the most popular names Kansas parents gave to their newborns in 2001. Jacob remained the most popular boys name for the seventh year in a row. Kaitlyn recaptured first place among popular girl's names. This information

was prepared by the Center for Health and Environmental Statistics. The lists are derived from birth certificate information which the Centers Office of Vital Statistics keeps on file.

Dropping off the list of 25 most popular girls names were Bailey, and Samantha. Joining the list were Jessica, and Madeline. Leaving the list of 25 most popular boys names were Cameron, David, and Hunter. Joining the list were Logan, Brayden, and Samuel.

Popular baby names are one of the more regularly requested items produced by the Centers 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 Centers 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: <http://www.kdhe.state.ks.us/hci/babynome.html>.

*Karen Sommer  
Vital Statistics Data Analysis*

## Violent Acts in the Kansas Workplace

Kansas averaged 272 assaults and violent acts in the workplace between 1996 and 2000. The low was 103 in 1998 and the high 543 in 1997. This is from statistics derived from the Annual Survey of Occupational Injuries and Illnesses, a sample survey conducted in the state by the Office of Health Care Information, Occupational Injury Surveillance Section, in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

Assaults and violent acts include cases in which a person was injured or made ill by intentional assaults or by violent, harmful actions of unknown intent. These cases can be 1) assaults and violent acts, unspecified; 2) Assaults and violent acts by persons; 3) Self-inflicted Injury; and 4) Assaults by animals.

Assaults by people include cases in which the worker was injured or made ill by assaults, or by violent, harmful actions of unknown intent by another person in the workplace. The most significant year for this type of case was 1997, when 521 of the 543 cases were reported as being caused by other people in the work environment, with 447, or 86% of these assaults involving health care patients as the source. In 1998, only 43 of the 103 reported cases, or 42%, were from other people in the workplace.

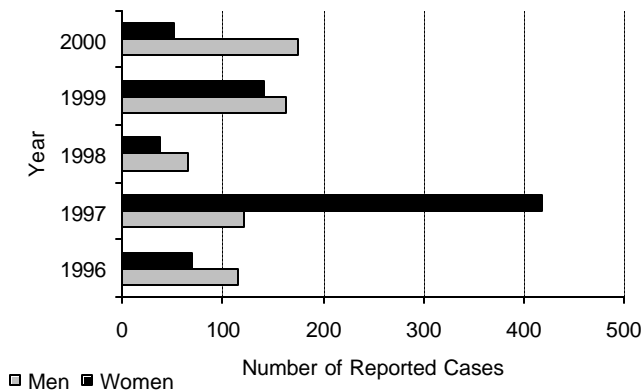
Assaults by animals include cases in which the worker was injured or made ill from either a non-venomous bite or some other violent act by animals (i.e., stomping, kicking, being thrown from a horse, etc.). In most years, assaults by animals were the minority, except in 1998, when 60 of the 103 cases were categorized in this field, or 58% of the total. In 1997, the opposite occurred, of the 543 cases reported, only 4%, or 22 cases were assaults and violent acts by animals.

Nationwide, the male population was less frequently the victim of assaults and violent acts in the workforce, representing an average of 42% over the last 5 years. In Kansas, however, the opposite was true, with males representing the majority (56%) of cases (Figure 5). The one exception occurred in 1997, when males represented only 23% of the 543 cases. In 2000, 77% of all reported cases of assaults were directed towards males, with 174 occurrences.

Prior to 2000, the agriculture, forestry, and fishing industry in Kansas had never experienced a publishable amount of cases for workforce assaults and violent acts. In 2000 the industry reported 66 cases. This represented 53.8 assaults and violent acts, all by animals, for every 10,000 workers.

In contrast to the previous four years, the retail trade industry also reported a significant amount of cases related to assaults and violent acts among their workers in 2000. The industry reported 111 cases, comprising 49% of all assaults and violent acts, all of which were by other people in their working environment.

**Figure 5. Assaults & Violent Acts  
By Sex of Worker, Kansas, 1996-2000**



Although there were no obvious trends with assaults and violent acts occurring to Kansans in the workforce, there were some significant highlights over the last five years. The year 1997 was significant for people being assaulted by other people. In 1998, it was assaults by animals being in the majority. Men, contrary to the national trends, experienced the majority of reported assault cases in Kansas over the five-year period, with the exception of 1997. In 2000, two industries stood out as having an unusually high incidence of reported assault cases, making that year stand out among the rest.

The service industry made up the majority of cases of workplace assaults and violent acts in four of the last five years. When compared with other cases, assaults and violent acts in Kansas represented a very small portion of total work related injury and illness cases, accounting for an average 1.8% of all cases in the workforce.

*Charlie Sann  
Occupational Injury Surveillance*

## News Notes

### Kansas Rural Health Information Service Initiated

The KDHE Office of Local and Rural Health has established the Kansas Rural Health Information Service (KRHIS). Individuals can register on-line to receive important information about rural health in Kansas. The service is free, and open to anyone interested in rural health. The service, via brief e-mail or fax messages, will provide information on a range of issues, including bioterrorism preparedness, education and training opportunities, grants and funding, workforce and recruitment, regulation and reimbursement. Notices sent by email and fax also will be posted to the Kansas Rural Health Information Service web site. To register for the service, visit <http://www.kdhe.state.ks.us/olrh/>.

*Office of Local and Rural Health*

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