Kansas Infant Mortality Rate Drops To 6.7

The 2000 Kansas infant mortality rate, the ratio of infant deaths to live births, was the lowest ever recorded, according to the 2000 Kansas Annual Summary of Vital Statistics published by the Center for Health and Environmental Statistics (CHES) at the Kansas Department of Health and Environment (KDHE).

There were 39,654 live births and 266 infant deaths to Kansas residents in 2000. This resulted in an infant mortality rate of 6.7 deaths per 1,000 live births and was a decrease of 8.2 percent from the infant death rate of 7.3 in 1999 (Table 1). The 2000 infant mortality rate of 11.5 for black residents of Kansas was the second lowest rate in the past 30 years, higher only than the rate of 9.7 in 1998.

During 2000, 24,676 resident deaths occurred, 20,426 marriages were performed, and 10,105 marriages were dissolved (divorce or annulment).

Selected Vital Event Rates and Ratios

<table>
<thead>
<tr>
<th>Vital Event</th>
<th>Kansas, 1999-2000</th>
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<tbody>
<tr>
<td>Live Births</td>
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<tr>
<td>Number</td>
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<td>Fetal Deaths</td>
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<td>Rate</td>
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<td>Rate</td>
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<td>Rate</td>
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<td>Rate</td>
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<td>Abortions</td>
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<tr>
<td>Out of State Residents</td>
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</tr>
</tbody>
</table>

Table 1

Residence data are presented for births and deaths. Occurrence data are presented for marriages, divorces and annulments.

Center Relocates

The Center for Health and Environmental Statistics has moved to new offices at 1000 SW Jackson in Topeka. State Registrar and Center Director Dr. Lorne A. Phillips said the move went smoothly. The Office of Vital Statistics resumed full operations on the Monday following the October 19 move. The Office of Health Care Information had moved into the new building earlier that week. Center phone numbers have not changed. Walk in customers to the Center will go to Suite 120.

The new mailing addresses are:

Center for Health and Environmental Statistics
Kansas Department of Health and Environment
1000 SW Jackson, Suite 110
Topeka, KS 66612-2221

Office of Vital Statistics
Kansas Department of Health and Environment
1000 SW Jackson, Suite 110
Topeka, KS 66612-2221

Office of Health Care Information
Kansas Department of Health and Environment
1000 SW Jackson, Suite 130
Topeka, KS 66612-1354

Kansas Annual Summary of Vital Statistics

The Center for Health and Environmental Statistics prepares the Kansas Annual Summary of Vital Statistics as part of KDHE’s fundamental responsibility for assessing the health of Kansas residents. The data compiled are used by program managers and policy makers at state and local levels to address health concerns.

During 2000, the number of couples married in Kansas continued to decline. The marriage rate (7.6) decreased 3.8 percent from the 1999 rate of 7.9 per 1,000 population. Over half (10,363) of the marriages in 2000 were first marriages for both the bride and groom.

A downward trend in Kansas marriage dissolutions that begin in the early 1990s reversed in 2000. The 10,105 divorces and annulments represented a 1.8 percent increase compared to the 1999 figure of 9,926 dissolutions.

The Center for Health and Environmental Statistics has changed. Walk in customers to the Center will go to Suite 120. The new mailing addresses are:

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Office of Health Care Information
Kansas Department of Health and Environment
1000 SW Jackson, Suite 130
Topeka, KS 66612-1354
Asthma Hospitalizations in Kansas: Trends, Influence of Socioeconomic and Demographic Factors on Hospitalization

Asthma is a chronic lung condition that can develop at any age. It is one of the most common respiratory diseases among children, affecting 7 percent of the pediatric population under 18 (1-3).

In 1994, the estimated number of people with self-reported asthma in the United States was 14.6 million, and from 1980 to 1994 the prevalence of self-reported asthma in the U.S. increased by 75 percent (4-6). Asthma accounted for an average of 450,000 hospitalizations annually, at an estimated cost of over $11 billion per year.

Asthma trends between 1995 and 2000 were studied by analyzing Kansas Hospital Association (KHA) hospitalization data. Discharge data has been compiled from surveys submitted by virtually all Kansas Community hospitals, which include institutions that are non federal, short term, general and other special hospitals whose facilities are open to the public. Occurrence data were age and race adjusted to account for differences in population among demographic categories. The number of asthma hospitalizations in Kansas showed a decreasing trend from 1995 to 2000 with an exception in 1999 (Figure 1). The rate of asthma hospitalizations in Kansas among females was approximately one-and-a-half times higher than that of their male counterparts. Children under 15 and persons aged 65 years and above accounted for the majority of the asthma hospitalizations (Figure 2).

Figure 1

Asthma Hospitalization Rate by Year 1995-2000, Kansas

Race-group Adjusted Asthma Hospitalizations by Percent, 1995-2000

Figure 3

While minorities are over represented in asthma-related hospitalizations, whites accounted for only small portion of similar hospitalizations in Kansas (Figure 3). Cross-linking of the hospitalization data by county with Kansas poverty-level data (obtained from the Centers for Disease Control)

Asthma Hospitalization Rate by Percent of Population Under Poverty Level, 1995-2000

Figure 4

indicates a statistically significant positive correlation \( p<0.01 \) between asthma hospitalization and poverty level (Figure 4).

The rate of asthma hospitalizations was found to decrease with the increase in population density by area in Kansas. As defined by “Population density peer groups (7),” residents living in Frontier areas had the highest rate of asthma hospitalization, while residents living in Urban areas had the lowest rate of hospitalization (Figure 5).

Because asthma is reported to have a strong association with pollution levels (8), the lower rate of asthma hospitalizations in Urban areas seems rather surprising. Higher asthma hospitalization rates in Frontier and Rural areas may be related to lack of access to primary care in such areas (9).

The influence of demographic and socioeconomic factors on
Asthma Hospitalization Rate by Peer Group, 1995-2000

Figure 5

Asthma hospitalization such as gender, race, age and poverty level in Kansas mirrors national trends and trends found in other states. Prevalence of asthma was reported to be higher among blacks and minorities, women, children, senior citizens and among the poor (1-5, 8-10). However, while national trends indicate a stable asthma hospitalization rate between 1995 and 1998 (11-13), in general a decreasing trend is observed in Kansas over the last six years. Nonetheless, the hospitalization rate simply measures an infrequent, severe outcome of this disease.

Further investigation of asthma in relation to outpatient, professional and emergency room visits is necessary to assess asthma from a broader perspective. Evaluation of the impact of various demographic and socioeconomic factors on this disease is also essential in designing future strategies and policies for preventing and tracking asthma.

Swapan K Saha, PhD
Health Care Data

References:
7. “Population density peer group” defined by Office of Local and Rural Health as: Less than 6.0 persons per sq mile - Frontier; 6.0-19.9 persons per sq mile - Rural; 20.0-39.9 persons per sq mile - Densely Settled Rural; 40.0-149.9 persons per sq mile - Semi Urban; 150.0 or more persons per sq mile - Urban.

State Library Distributes Census Information

(Editor's Note: The Census Bureau has announced its decision to use unadjusted data for non-redistricting purposes. The Census Bureau will release the remaining Census 2000 data products, post-censal estimates, and survey controls using unadjusted data. For detailed information, including the Executive Steering Committee report, please go to the Census Bureau site at http://www.census.gov/dmd/www/EsccapRep2.html)

The State Library of Kansas, lead agency in the Kansas State Data Center, is one of the first recipients of the 2000 Census data. The State Library, along with other members of the Kansas State Data Center, will assist Census data users in many ways, including providing technical advice with data terminology, data geography and data concepts. The library will also direct users to proper tables, generate tables, and assist with the Census Bureau's American FactFinder interface to the 2000 data.

The 2000 U.S. Census rolled out the first Kansas data in the spring of 2001. As provided for by law, the initial data, referred to as the PL 94-171 or the redistricting data, relates specifically to the constitutional requirement to reapportion Congress every 10 years. The PL 94-171 data includes population data for states, counties, cities, and other sub-county geographies and voting districts. The actual data elements are limited to total population, population 18 years and older, and cross tabulations of that data by race and ethnicity, including the many iterations of race and Hispanic Origin categories. The 2000 Census will also include the first-ever count of the U.S. population by self-declared multiple race categories.

In the spring of 2001 the Bureau of Census began the release of additional data items, all of which are generated from the 2000 Census short form. The Census short form questionnaire was sent to every household in the U.S. This data, also referred to as the 100 percent data or Summary File 1 data, includes items for population by gender and population by detailed age groups. The Summary File 1 data also includes some data for households by relationship of persons to the household, such as the count of spouses, children, non-relatives and similar data for families. These 100 percent files, which have already been released, are the place to look for the number of persons 65 years old or over and to find data on the number of persons in group quarters such as nursing homes and dormitories.

Beginning next year, probably about mid-2002, the Census Bureau will begin to release data from the 2000 Census long form, or what is called sample data. The long form questionnaire was sent to approximately one in six households. The sample data, issued as Summary File 3, includes much of the data that...
is most frequently asked for, including ancestry, place of birth, school enrollment, educational attainment, language spoken, disability data, income, and much more.

Most members of the State Data Center also host Web sites and use those sites to add value to the census data. A link to all of the Kansas State Data Center member Web sites can be found at: http://skyways.lib.ks.us/KSL/Ref/sdc1.html.

Among the many products the Census Bureau is making available via their Web site is the ability to generate Census maps. Not only can individual data users generate a specific map, but he or she can also print maps on their own desktop printer. What users often cannot do is print a full size census map, but he or she can also print maps on their own desktop printer. What users often cannot do is print a full size census map, but he or she can also print maps on their own desktop printer. What users often cannot do is print a full size census map, but he or she can also print maps on their own desktop printer. What users often cannot do is print a full size census map, but he or she can also print maps on their own desktop printer. What users often cannot do is print a full size census map, but he or she can also print maps on their own desktop printer.

The State Library will collect the complete series of full size Census 2000 maps and make copies available, at the cost of duplication, to anyone who needs them.

While attention is currently focused on the 2000 Census, the State Library and other members of the Kansas State Data Center also maintain an extensive collection of data and maps from previous decennial census years, as well as of survey data issued during interim census years.

In addition to collecting and assisting with access to actual census data, the State Library also collects and contracts for access to some of the products made available by entrepreneurs who repackaged census data and sell it in formats designed to help all sorts of data users. The State Library also occasionally hosts Census user workshops and plans to schedule several sessions during the next twelve months.

Data inquiries or other questions may be directed to Marc Galbraith or Cindy Roupe at the State Library at 785-296-3296 or 800 432-3919 or by email at marcg@ink.org or cindyr@ink.org.

Marc Galbraith, MLS, MPA
State Library of Kansas

Injury and Illness Reports Produced

The Center for Health and Environmental Statistics recorded fewer work-related deaths in 1999 than in previous years as summarized in the 1999 Census of Fatal Occupational Injuries (CFOI).

Although falling slightly below 1997 and 1998 figures, agriculture, forestry, and fishing still remained the most hazardous industry in Kansas for 1999, with 21 deaths, or 26 percent of the work-related total (Figure 6). Sixteen of the 21 deaths in this industry occurred in the agricultural production of crops, while the agricultural production of livestock claimed three.

Transportation and public utilities industries had the second highest number of fatal occupational injuries in 1999 with 15. Ten of the 15 were in trucking and warehousing, while three were in electric, gas, and sanitary services. Prior to 1999, the highest number of fatalities was in 1997, with 17, while the lowest was in 1995 and 1998, with only nine fatalities.

The construction industry ranked third, with 13 occupational deaths in 1999. Special trade contractors had the majority of those deaths, accounting for 10 of the total. The remaining three deaths occurred in heavy construction.

Service industry accidents claimed nine lives in 1999, with three in business services. This figure tied with 1997 for the third highest in this industry from 1991-1999, with the highest number of fatal accidents recorded in 1998, with 12, and the lowest in 1997, with five.

The wholesale trade and manufacturing industries both accounted for eight fatal occupational injuries in 1999. Wholesale trade claimed four workers in durable goods and four in non-durable goods. Manufacturing remained fairly steady in the number of deaths since 1991, except 1992, which recorded an unusually high number of fatalities with 12 deaths.

Government workers experienced five fatalities in 1999, the lowest ever for this industry in Kansas. Fatalities in this industry have been declining since reaching a high of 17 work-related deaths in 1995.

More information is contained in the full CFOI publication, currently available through the Office of Health Care Information. Also available upon request are the Fatal Occupational Injury tables for the year 2000.

OHCI also surveys employers on occupational injuries and illnesses. It has recently completed a report covering nonfatal work-related injuries and illnesses, Occupational Injuries and Illnesses, Kansas, 1998.

It has also produced tables of information for more current years’ surveys. Persons seeking a copy of the Non-fatal Occupational Injury and Illness tables for 1999 can call 785-296-1058.


If a copy of the publication is needed in an alternative form because of a disability, contact the Office of Health Care Information at the phone number listed above. Requests can also be faxed to (785) 291-3612.

Rachelle Hazelton
Occupational Injury Surveillance

Center Enhances Vital Statistics Data Quality

The Center for Health and Environmental Statistics has initiated an effort to enhance the quality of vital records data received from hospitals and other providers. The Center has hired Fred Gatlin as quality assurance/quality control coordinator. Mr. Gatlin will work closely with all sections of the Center to identify ways to assure vital record information is complete and accurate.

“Fred will initially be concentrating on the birth registration process with an expanded comparative study of birth records to hospital records,” said Dr. Lorne A. Phillips, State Registrar and Center Director. “In time we will also be addressing the death registration, and marriage and divorce registration processes from a quality assurance perspective.”

Mr. Gatlin is a former legislator, and served as a special assistant in the Office of the KDHE Secretary before being hired to his current position. He has been visiting with hospital officials in order to gain additional understanding of the birth record data collection process.

In addition to the important civil registration function of vital
records, birth and death registration records contain valuable health information. The bottom portion of the certificates contains information summarized and used by health and social researchers, health policy makers, and legislators. Birth record information is an amalgam of data transcribed from various hospital or physician records. Errors can occur throughout the process, even as the data is entered into the Electronic Birth Registration software.

Previous studies showed that discrepancies occur between the birth record and hospital medical records, which are the primary source of birth information. This new effort is a positive approach to determine how those errors occur and develop educational programs to enhance the data collection process. The effort to improve quality and accuracy will coincide with the Center’s goal to achieve the highest level of timeliness and accuracy in the collection process.

KDHE Center for Health and Environmental Statistics

Annual Report on Child Deaths Released

Attorney General Carla J. Stovall and the State Child Death Review Board (SCDRB) have released a report on the number and causes of death of Kansas children during 1998.

“In 1998, 526 children died before celebrating their 18th birthdays,” Stovall said. “The largest group of children, 298, died of natural causes. Unintentional injuries - which include motor vehicle fatalities, drownings, suffocations, fire deaths, and shootings - claimed the lives of 123 children.”

Stovall said that 36 children were murdered, 32 children died from Sudden Infant Death Syndrome (SIDS), and 26 children committed suicide in 1998 (Table 2). Eleven deaths were categorized as undetermined, a category which is used when there has been a thorough review of all available information and the manner of death cannot be conclusively determined.

The report also highlights five years of data collected by the SCDRB from 1994 through 1998. The SCDRB used the information gathered during this five-year period to develop prevention points and recommendations. “The guiding principle of the SCDRB is to reduce the number of preventable child fatalities by promoting public and professional education and recommending policy,” Stovall said.

The SCDRB is a multi-disciplinary, multi-agency board that examines the circumstances surrounding the deaths of all Kansas children and children who are not residents, but who die in the state. The board membership includes a variety of professionals from the public health and law enforcement fields. The annual report can be accessed on the Internet at: http://www.ink.org/public/ksag/contents/scdb/main.htm

| Child Death by Manner and Year, Kansas, 1994-1998 Ages Birth - 17 |
|---------------------------|----------------|----------------|----------------|----------------|----------------|
| Natural                   | 264  | 226  | 328  | 281  | 298  | 1,397 |
| Unintentional Injury      | 98   | 84   | 125  | 107  | 123  | 537   |
| SIDS                      | 49   | 44   | 35   | 46   | 32   | 206   |
| Homicide                  | 33   | 25   | 31   | 22   | 36   | 147   |
| Suicide                   | 15   | 12   | 16   | 21   | 26   | 90    |
| Undetermined              | 5    | 13   | 20   | 17   | 11   | 66    |
| Total                     | 464  | 404  | 555  | 494  | 526  | 2,443 |

Table 2

Kansas Trauma Registry Initiates Data Collection

Data collection for the Kansas Trauma Registry is expected to begin in 2002. The process, overseen by the state’s Advisory Committee on Trauma (ACT), will be carried out by the Bureau of Local and Rural Health and the Center for Health and Environmental Statistics (CHES). CHES’s Office of Health Care Information will serve as the data repository, collecting and analyzing the data submitted by hospitals in the state.

Collection of injury information by hospitals will start in the 1st quarter of 2002. It will start with hospitals that already have hospital trauma registries in place. The collected data will be entered into the state’s central site registry on a quarterly interval.

It is the ACT’s intent that all Kansas hospitals will be reporting trauma data in the future. The outcomes from the data will be reported to the National Trauma Data Bank, for assistance at the national level in trauma care, and to state regional committees, which are in the process of being developed. The regional committees will be responsible for using the information to improve their local trauma delivery systems and to educate their residents on preventable injury.

The data collection process is the culmination of a two-year effort. Registry implementation entailed a multi-stage process to ascertain the best trauma registry software for users’ needs. Vendor demonstrations and an RFP process resulted in the selection of a software which will meet hospital needs and enable uniform statewide data collection. Based on an extensive analysis, Digital Innovation’s Collector was selected as the trauma registry software product to be used for the Kansas Trauma Registry system. The software has been unveiled to hospitals through a collaboration with the Kansas Hospital Association.

The Office of Health Care Information is working in conjunction with Digital Innovation in the process of developing customized software requirements specific to the needs of Kansas hospital users. Once these requirements are completed and tested, training on software usage will begin for the initial hospital users. These beginning training sessions are expected to be completed by the end of 2001.

Data collection is expected to pay public health dividends for the state. Data on trauma, damage of the body resulting from exposure to thermal, mechanical, electrical or chemical injury, will enable the ACT and regional trauma committees to improve the coordination and delivery of treatment and emergency services. The state’s trauma registry will house applicable data regarding these types of injuries. Through analysis and monitoring, the registry will report outcome information to assist in improving treatment.

Sherry Davis MBA
Vital Statistics Data Analysis

1940 - 2000 Teen Births Decline

A new National Center for Health Statistics (NCHS) report on teen birth rates shows that rates declined significantly in all states over the past decade, with declines of 11 to 36 percent reported. The report from NCHS, a unit of the Centers for Disease Control and Prevention, also includes the latest analysis of data by state.

Other key findings:

- The 2000 rate (49 births per 1,000 women ages 15-19) is about half the peak rate recorded in 1957. The teen birth rate reached a record low in 2000, with rates steadily declining throughout the 1990s. Birth rates for teenagers generally declined in the United States since the late 1950s--reflecting the downturn in fertility for women of all ages--
except for a brief, but steep, upward climb in the late 1980s until 1991.

- The decline in teen birth rates has meant fewer babies born to teenage mothers. If the teen birth rate had remained at 1991 levels throughout the 1990s and with the rising number of teenagers in the United States, there would have been about 550,000 additional births to teenagers over the decade.

- During the 1990s rate declines were especially large for black teenagers—down 31 percent nationwide and showing declines of at least 40 percent in 7 states. Black teens still have one of the highest rates. Overall, rates are highest for Hispanic teens and lowest for Asian teens.

- Birth rates have fallen for teens overall in the 1990s as well as for unmarried teens since mid-decade; however, the proportion of births to teenagers who are unmarried has continued to rise, from 14 percent in 1940 to 67 percent in 1990 and 79 percent in 2000. This is because fewer teens are marrying today and the birth rate for married teens has dropped substantially. Nevertheless, teens do not account for the majority of births to unmarried women, only 28 percent in 2000.

- The U.S. teen birth rate remains the highest among developed countries. According to the latest data available, the rate is lowest in Japan, at about 4 births per 1,000 women, and is below 10 per 1,000 in a number of countries, including Denmark, Finland, France, Germany, Italy, the Netherlands, Spain, Sweden, and Switzerland.

Births to Teenagers in the United States, 1940-2000 is based on birth certificates filed in state vital statistics offices. Copies of the report can be viewed or downloaded from the CDC Home Page at http://www.cdc.gov/nchs.

In 1999 the birth rate for Kansas teens ages 15-17, as cited in the CDC report, was 24.2 births per 1,000 women of that age-group, representing a 17.6 percent decline from 1990. The national rate, which was higher than Kansas’, was 28.7, a 25.9 percent decline from 1990.

The 1999 Kansas birth rate for teens ages 15-19 was 47.4 per 1,000 women, representing a 14.4 percent decline from 1990. The national rate of 49.6 was slightly higher than Kansas but had a greater decline since 1990, 20.1 percent.

Kansas’ 1999 birth rate for teens aged 18-19, as cited by CDC, was 81.5 per 1,000 women and represented a 13.4 percent decline from 1990. The national rate (80.3) was lower than Kansas’ and had a decline of 14.9 percent.

The Kansas Annual Summary of Vital Statistics reports teen pregnancy rates, which are not comparable to the CDC-reported teen birth rates. The rates however can be calculated from Annual Summary. Researchers interested in studying teen birth rates can call the CHES Office of Health Care Information for data.