

MINUTES OF THE SENATE HEALTH CARE STRATEGIES COMMITTEE

The meeting was called to order by Chairman Susan Wagle at 1:30 P.M. on February 3, 2005 in Room 231-N of the Capitol.

Committee members absent: Senator Peggy Palmer - excused

Committee staff present: Ms. Emalene Correll, Kansas Legislative Research Department  
Ms. Terri Weber, Kansas Legislative Research Department  
Mr. Jim Wilson, Revisor of Statutes Office  
Ms. Margaret Cianciarulo, Committee Secretary

Conferees appearing before the committee: Secretary Roderick Bremby,  
Kansas Department of Health & Development

### **Introduction of bills**

Upon calling the meeting to order, Chairperson Wagle announced that she would be introducing a bill for Senator Taddiken concerning one of his constituents who is wanting to become a licensed counselor. She has taken the required classes in the program, in addition, 12 hours of residency and clinic, which is one of the requirements of becoming licensed as a counselor. The constituent voluntarily took this class, however, the requirement states the class has to be in the program and since it was not, she was unable to get her license. Senator Taddiken would like to request the Committee to introduce legislation to correct this situation with the Board of Behavioral Sciences. Senator Jordan made a motion the Committee introduce the proposed legislation. It was seconded by Senator Barnett and the motion carried.

### **Overview of "Health Care Data Collections"**

The next order of business was a presentation from Secretary Roderick Bremby, Kansas Department of Health and Environment (KDHE), who stated he was presenting this overview on behalf of KDHE in response to an inquiry about the data collected by KDHE. A copy of his presentation and attachment are (Attachment 1) attached hereto and incorporated into the Minutes as referenced. Highlights included background information. (In 1995, the Health Care Data Governing Board published a document entitled Kansas Health Data Resources in an attempt to catalog the health data resources existing in Kansas, identifying 15,000 databases within the organization and their Office of Information Technology, and an attached spreadsheet that lists key health related databases along with their purpose and typical users of the data.)

Secretary Bremby then stood for questions and comments which came from Senators Barnett and Wagle and Ms. Correll including: are we utilizing the Health Insurance Data System and can it be enhanced, is there other information available on cost containment, did we over utilize, what type of data is coming in, would information collected by KDHE be transferred to the Cancer Registry, are we trying to combine/collaborate to use information to determine inference of disease, as the information must be turned into the insurance commissioner does the law allow the commissioner to request more information, do other states collect insurance information, is the Health Care Data Governing Board under KDHE, and what has been the story of financial support regarding collecting?

As there was no further questions or discussion, Chairperson Wagle thanked Secretary Bremby for his presentation.

### **Adjournment**

As there was no further business, the meeting was adjourned. The time was 2:30 p.m.

The next meeting is scheduled for February 9, 2005.

## GUEST LIST

DATE: Thursday, February 3,  
2005

<del>NAME</del> NAME	REPRESENTING
Alison Peterson	Kansas Medical Society
Chad Austin	Kansas Hosp Assoc.
Ira Stama	self
Kou Saadi	KDHE
Dick Morrissey	KDHE
Phil G. Hayes D.D.S.	KDA
Meg Holm	KDA
Shveta Shura	KDHE
Darrell Forey D.C.	Ks Chiropractic Assn
Ronald Liebman	Kansas Health Institute
Tanya Dorf	KACIL
Jared Holroyd	SRS/Medicaid
Mike Reecht	Kansas Chamber
Cindy Lash	Post Audit
Sarah London	Planned Parenthood



# K A N S A S

RODERICK L. BREMBY, SECRETARY

KATHLEEN SEBELIUS, GOVERNOR

DEPARTMENT OF HEALTH AND ENVIRONMENT

Testimony on KDHE Data Collections Presented To

Senate Health Care Strategies Committee

By Roderick L. Bremby  
Secretary

Kansas Department of Health and Environment

February 3, 2005

Madam Chair and members of the committee, I am Roderick L. Bremby, Secretary of the Kansas Department of Health and Environment (KDHE) testifying today on behalf of KDHE in response to an inquiry about the data collected by KDHE. We were asked why we collect the data and who uses it. In 1995 the Health Care Data Governing Board published a document entitled Kansas Health Data Resources. This document was an attempt to catalog the health data resources existing in Kansas. Secretary O'Connell wrote in the preface of the report that it was not possible for every database that exists about the health of Kansans to be identified in the document. Ten years later that task is no less difficult.

Data collection is a key component of our work at KDHE. We have identified some 15,000 databases within the organization and our Office of Information Technology maintains storage for 15 Terabytes of data. In contrast, the books in the Library of Congress contain some 20 Terabytes of text. While not all of the databases or data stored by the nine KDHE bureaus are health related, the Office of Vital Statistics alone maintains over 10 million vital records and adds 100,000 new ones annually.

Attached is a spreadsheet that lists key health related databases along with their purpose and typical users of the data. Upon reviewing this list, I will stand for questions.

*Senate Health Care Strategies Committee  
Date: February 3, 2005  
Attachment 1*

Health Databases Maintained in KDHE

Database Name	Database Purpose	Users of the Data
ACTION	Certification/licensure of nurse aides, approval of educational offerings and instructors, criminal history checks of all ACH employees	Adult care home managers, policy makers, program managers and the public
Adult Care Home Administrator Licensure/Renewal	Adult Care Home Administrator Licensure/Renewal data collection	Licensees, Board of ACH administrators, program managers, policy makers and
Newborn Hearing Screening System	Data collection, tracking & follow-up for newborn hearing screening	Program managers, policy makers, federal partners, researchers and the
Behavioral Risk Factor Surveillance System (BRFSS)	Monitor prevalence of health risks in adult Kansans 18 and over	Program managers, policy makers, researchers and the public
Blood Lead Test Results	Lab reports from blood lead testing for children and adults in Kansas	County health departments, CDC, HUD, EPA, policy makers, advisory board and program managers
Breast and Cervical Cancer Screening Data	Data collection to measure program effectiveness and meet federal reporting requirements	Program managers, policy makers and researchers
Cancer Registry	Data collected on reportable cancers	Program managers, policy makers, researchers and the public
CARE dataset	Client assessment information at hospital discharge (acquired from the Dept on Aging)	Nurses, Aging Program managers, Policy managers
Charitable Health Care Provider Database	Maintain a list of providers having an agreement with the Secretary to participate in the state Charitable Health Care Provider Program	Program managers, local health depts, primary care clinics, community health centers
Child Licensing and Registration Information System	Collection, tracking and dissemination of child care facility data and data on persons working in child care.	Program managers, policy makers and public
Congenital Malformation Reporting System	Hospital reports on congenital anomalies in babies born in Kansas	Program managers, policy makers, federal partners, researchers and the public
Dietitian Licensure/Renewal	Dietitian Licensure/Renewal data collection	Program managers, policy makers, licensees and public
Food and Lodging	Food Inspection and Licensing Renewal for Restaurant and Hotel/Motel Establishments	Program managers
HARS	HIV and AIDS monitoring	Program managers, federal partners
HAWK	Communicable disease surveillance tracking system-- based on reporting from physicians, laboratories, hospitals and local health departments	Program managers, policy makers, federal partners, local health departments, researchers and the public
Health Care Facility Medicare/Medicaid Certification	Health Care Facility Medicare/Medicaid Certification data collection system	Program managers

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Health Databases Maintained in KDHE

Health Care Provider Inventory	Acquire data from licensure entities to provide statistics about Kansas' health care providers and mailing lists	Program managers, policy makers, federal partners, researchers and the public
Home Health Agency Annual Survey	Home Health Agency Annual Survey data collection system	Program managers
Hospital Discharge	Assess the health status of Kansans requiring hospitalization	Program managers, policy makers, researchers and the public
Hospital Licensure Application	Hospital Licensure Application data collection system	Program managers
Induced Termination of Pregnancy	Preparation of health statistics	Program managers, policy makers, researchers and the public
Infant-Toddler Services System	Data collection for federal reporting and management purposes.	Program managers, policy makers, federal partners, researchers and the public
International Medical Graduates (J-1 Visa)	Tracking physicians with service obligations in medically underserved areas	Program managers, J-1 Visa physicians
Kansas Health Insurance Information System	Acquire health insurance information that can be used to identify factors that influence cost of health insurance premiums.	Program managers, policy makers and researchers
Kansas Trauma Registry	Collects data from hospitals from trauma patients for use in the Kansas Trauma System decision-making process	Program managers, Advisory Council on Trauma, hospitals and regional trauma councils
KWIC - Kansas WIC System	Certification, benefit issuance, and management information for the WIC program	Program managers, policy makers, federal partners, researchers and the public
Make a Difference Information Network	Tracking system for toll-free number used to identify family service needs for several public health and social service programs.	Program managers and federal partners
MCH System	Data collection on maternal and child health and women's health for federal reporting and management purposes	Program managers, policy makers, federal partners, researchers and the public
Migrant Farmworker	Client case management and health care provider claims processing	Case managers for migrant and seasonal farm workers who receive primary care through a statewide voucher system
Refugee Health Assessment	Tracks new arriving refugees and is used to reimburse health departments for health assessments	Program managers

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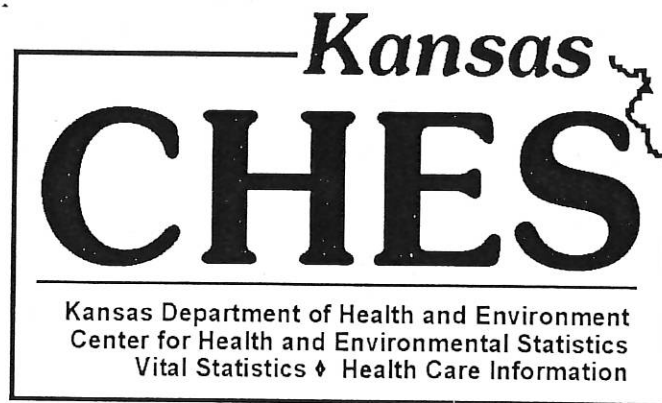
Health Databases Maintained in KDHE

Children with Special Health Care Needs (CSHCN) System	Data collection for federal reporting and management purposes	Program managers, policy makers, federal partners, researchers and the public
Speech Pathologist and Audiologist Licensure/Renewal	Speech Pathologist and Audiologist Licensure/Renewal data collection system	Program managers, policy makers, licensees and public
STD*MIS	Sexually Transmitted Disease case management	Program managers, federal partners, policy makers and the public
Tuberculosis Information Management System (TIMS)	Collect data from HAWK for transmission to CDC	Program managers, federal partners, policy makers and the public
Vital Statistics database	Registering, maintaining, and issuing certified copies of vital records	Program managers
Vital Statistics Point of Sale (POS) database	Vital record request accounting, customer, and record request information	Program managers
Vital Statistics Historical Files	Calculating statistics about health status of Kansans	Program managers, policy makers, researchers, federal agencies and the public
Workers Compensation Insurance Information System	Acquire workers compensation insurance information that can be used to develop a medical fee schedule for health services	Division of Workers Compensation
Youth Tobacco Survey	Measure attitudes, beliefs and practices of youth with respect to tobacco use (conducted periodically)	Program managers, policy makers, researchers and the public
Lab Certification	Data collection on laboratories certified by KDHE to conduct environmental testing	Laboratory improvement specialists, program managers, policy makers and the public
Laboratory Information Management System	Collect and store demographic and analytical data on samples and specimens presented to the laboratory for analysis	DHEL employees

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# Users Guide for the Kansas Information for Communities Interactive Data Query System



Supported by a grant from



Kansas Department of Health and Environment  
Roderick L. Bremby, Secretary

Center for Health and Environmental Statistics  
Lorne A. Phillips, PhD, Director and State Registrar

**Purpose of the Guide**

This document is intended to give individuals who are acquainted with the Internet and accessing web pages some familiarity with the Kansas Information for Communities (KIC) system. In order to save space in this User's Guide, graphics represent only a part of what will be visible in an HTML browser window. This guide 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.

**Resources Needed**

To use the KIC system you need an Internet-enabled computer. Even one connected via telephone line is acceptable as KIC is designed to return queries quickly. Actual response times may vary depending on network traffic and other factors, but will generally be 10 seconds or less. KIC works with Internet Explorer and Netscape.

Once online, type in: <http://kic.kdhe.state.ks.us/kic/>. Users should see the screen in figure 1. Links to the KIC datasets are in the left column. Births and deaths are the first data posted. Links will be in blue-colored text, and may not be underlined. Users may need to use their browser's back button to return to a previous page. Click on Notes and Limitations for definitions and on how KIC frequencies and rates are prepared.

**Birth Data**

The birth KIC includes 17 birth outcomes (Table 1). Selecting "Births, 1990-1999" displays figure 2 (top of HTML page shown). Scroll to the bottom of the page to click on links for a table menu or a map menu.

Birth Outcomes	
All Births	Single Births
Intermediate Prenatal Care	Adequate Prenatal Care
Adequate Plus Prenatal Care	No Prenatal Care
Care Began First Trimester	Mother's Weight Gain < 15 lbs
Mother's Weight Gain Normal	Mother's Weight Gain > 44 lbs
Cesarean Section	Vaginal Birth after Cesarean
Spacing < 18 Months	Premature

Table 1

Selecting "Map" and scrolling down slightly displays figure 3 with the selection criteria and birth outcomes available. The births map defaults to selecting all age-groups, all marital status, all races, 1999 data year, and total births. Users can define a narrower selection criteria by using the menu boxes for age-groups, marital status or race. Additional years can be added by selecting the boxes adjacent to the desired year.

Kansas Department of Health and Environment  
Center for Health and Environmental Statistics

## Kansas Information for Communities

**KIC Databases**

**Births 1990-1999**  
The Kansas Information for Communities (KIC) system gives data users the chance to prepare their own queries for vital event and other health care data. The queries designed into this system will answer many health data requests. As KIC is implemented, more data will be added to the list. KIC programs will allow you to generate your own table for specific characteristics, year of occurrence, age, rate, sex, and county.

**Deaths 1990-1998**

**Pregnancies 1990-1997**  
Core programming for the Kansas Information for Communities (KIC) was developed by the Missouri Department of Health and adopted by the State of Kansas. The graphics were developed using gd by Thomas Bouell and the database by using GNU database GDBM. This program cannot be copied in any form without the written permission of the Missouri Department of Health.

[Click here to see the notes and limitations on the KIC inquiries.](#)  
[Click here to send comments to the KIC coordinator.](#)

[Return to CHES Home Page](#)  
[Return to Health Care Data Governance Board Home Page](#)  
[Return to KDHE Home Page](#)

Figure 1

## KIC Kansas Information for Communities

### Birth Statistics

The following area will allow you to generate tables or maps for birth conditions, categorized by Year, Age Group, Sex, Race, and County.

The KIC system will hide small numbers from you in order to protect identities. If your query is too specific, then the table values will be filled in with # signs to let you know that confidentiality rules have been invoked. If this happens, simply make your query more general.

Birth Statistics are compiled from birth certificates which are filed by state law with the Center for Health and Environmental Statistics at the Kansas Department of Health and Environment. The Birth Certificate system has been in place in Kansas continuously since 1911, although changes in data items and definitions have taken place over the years.

Kansas cooperates with other states in the exchange of birth records. Therefore, data concerning births to Kansas residents include virtually all Kansas resident births regardless of where the birth took place. [Click here for residency definitions.](#)

Figure 2

This system allows you to generate a Kansas map for specific birth outcomes, categorized by Year, Age of Mother, Marital Status, and County.

Age of Mother:

Marital Status:

Race of Mother:

Which year or years would you like to include in your query?  
 1990  1991  1992  1993  1994  1995  1996  1997  1998  1999

Which birth outcome do you want to display on the map?

Would you like the data displayed by:  
 Quartiles (four divisions)  Quintiles (five divisions)

Figure 3

Users may select either quartiles or quintiles to display the results in four or five equal groupings. Click on "Submit Query" to run the query. Results are displayed in a color map with a table of frequency data below it (Figure 4). Header and footer information and confidentiality details are unique to each map created. KIC displays counties in colors that will print to unique shades of gray on a laser printer. The HTML page can be saved as a file and opened



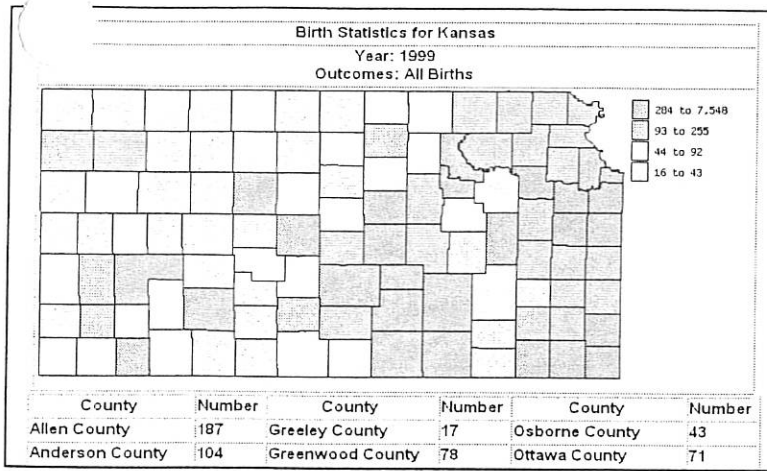


Figure 4

in some word processing programs.

Birth table queries involve the same selection criteria as map queries. Results display in a two-way table (Figure 5). Table queries enable the user to select from a menu box a group of counties that will be analyzed (Figure 6). While results are different in birth and death table, queries are formed in the same manner. The death statistics section will focus on creating table queries.

#### Death Data

KIC Death data is available for the years 1990 to 1998. Users can access the death statistics page from the KIC home page (Figure 1) by clicking on "Deaths, 1990-1998" in the left column. The death statistics page gives general information about the data available and at the bottom offers selections for a map query or a table query.

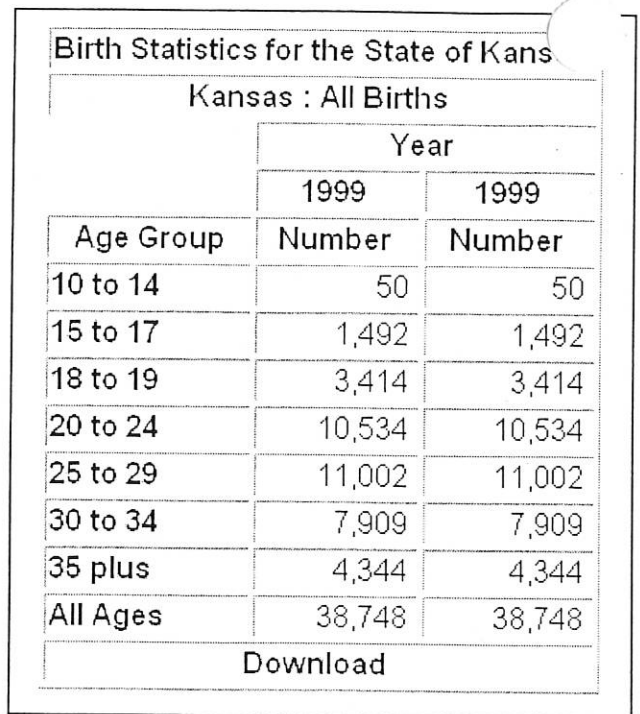


Figure 5

Which year(s) would you like to include in your query?  
 1990  1991  1992  1993  1994  1995  1996  1997  1998  1999

Now, select the county or counties that you wish to include in the search. To select multiple counties, pick the first county with your mouse, then hold the control key down and pick the additional counties.

State of Kansas  
 Allen County  
 Anderson County  
 Atchison County  
 Barber County

You can limit your search by the outcome of the birth. Select which outcome you wish to view from the following list.

All Births  
 4 or More Prior Births  
 Single Births  
 Inadequate Prenatal Care  
 Intermediate Prenatal Care

Finally, you can pick how you want to view the data.  
 Frequencies only  
 Frequencies and Percents By Column  
 Frequencies and Percents By Row

Submit Query

Figure 6

Total for all causes  
 Tuberculosis  
 Septicemias  
 Syphilis  
 Cancer  
 Diabetes  
 Heart Disease  
 Hypertension  
 Stroke  
 Arteriosclerosis

Figure 8

Selecting a table query brings the user to figure 7. Aggregate cause of death data is available by sex, race, age-group, county, year (Figure 7). Separate boxes further down enable users to select the specific cause of death (Figure 8) and county or group of counties

ties

State of Kansas  
 Allen County  
 Anderson County  
 Atchison County  
 Barber County

Figure 9

(Figure 9) to include in the analysis. Only a single cause of death can be selected.

Even though KIC returns a two-way data table for death queries, the user can create additional dimensions through the

use of the selection criteria (race, sex, and age-group). Separate analyses can be performed to create the additional dimensions.

For example, a user can create a table query of Cancer deaths for several counties by age-group. By modifying the selection criteria for the individual sexes, a three-way table (albeit in two reports) can be created (Figure 10).

### Death Statistics -Table

This system allows you to generate a table for specific causes of death, categorized by Year, Age Group, Sex, Race, and County. You may specify the row and column variables and you may then specify the specific outcome variables to which the row and column variables will apply

First, you need to pick which variables you want in your table. Pick the column and row variable. If you select "Counties" as a row variable, individual counties must be selected in order to view those totals.

Rows:  
 Year  
 Race  
 Sex  
 Age Group  
 Counties

Columns:  
 Year  
 Race  
 Sex  
 Age Group

Now, you can restrict your search by limiting certain variables, if you wish. Pick which variables you wish to limit by selecting the criteria. Note that if you picked one of these variables above as a row or column, then selecting it here will do nothing.

Race:

Sex:

Age:

Figure 7

KIC offers the user the opportunity to "drill down" into the cause of death categories. Two additional levels of detail can be accessed by clicking on the cause of death when it's in blue colored text. Continuing with Cancer example, figure 11 appears when the user clicks on the word "Cancer" in figure 10. Selecting a cause from this list redefines the query, drilling down to the next level (figure 12). If another level of

Select
14. Malignant neoplasms of lip - oral cavity and pharynx
15. Malignant neoplasms of digestive organs and peritoneum
16. Malignant neoplasms of respiratory and intrathoracic organs
17. Malignant neoplasm of breast
18. Malignant neoplasms of genital organs
19. Malignant neoplasms of urinary organs
20. Malignant neoplasms of other and unspecified sites
21. Leukemia
22. Other malignant neoplasms of lymphatic and hematopoietic tissues

Figure 11

detail exists, clicking on the cause of death text will identify that list enabling another query.

By selecting "Frequencies and Rates" from the death statistics page (Figure 7) KIC will generate population-based mortality rates. Rates are age-adjusted to the 2000 standard population (Figure 13). Queries using age groups produce mortality rates which are age-group specific, not age-adjusted. The KIC Notes and Limitations pages goes into greater detail on the differences between age-adjusted and crude mortality rates.

### Dealing with Output

KIC queries are returned as HTML pages which can be printed to any printer. A color printer will enable the user to retain the map details. Users may also change the layout of some tables by selecting "Rotate" when included in the output. This reverses the rows and columns for an output which is more user-friendly. Users may also download the table data in a comma-separated format, which can be opened in most spreadsheet programs. Detailed instructions on how to download are contained in Notes and Limitations.

### Problems?

In addition to the usual Internet network and server problems, something may occasionally go awry. If KIC does not appear to be working properly, users should notify: [Kansas.Health.Statistics@kdhe.state.ks.us](mailto:Kansas.Health.Statistics@kdhe.state.ks.us) and provide as much information as possible about the problem.

### Future KIC Datasets

KIC is an evolving system. The Missouri Department of Health developed MICA (Missouri Information for Community Assessment) on which KIC is based. As new software are implemented, changes will be made to KIC.

Additional years of data will be added to births and deaths when available. Other datasets for pregnancy outcomes, population, and hospital discharge data are also

Death Statistics for the State of Kansas						
Sex: Female						
Cancer						
Year: 1998						
County	Age					
	Under 15	15 to 24	25 to 44	45 to 64	65 and Over	All
Anderson County	0	0	1	1	12	14
Atchison County	0	0	2	1	21	24
Barber County	0	0	0	0	6	6
Total for Selection	0	0	3	2	39	44

Download

Figure 10

Death Statistics for the State of Kansas						
Sex: Female						
17. Malignant neoplasm of breast						
Year: 1998						
County	Age					
	Under 15	15 to 24	25 to 44	45 to 64	65 and Over	All
Anderson County	0	0	0	0	1	1
Atchison County	0	0	1	0	3	4
Barber County	0	0	0	0	0	0
Total for Selection	0	0	1	0	4	5

Download

Figure 12

Death Statistics for the State of Kansas						
Heart Disease						
Year: 1997 - 1998						
Race	Sex					
	Male		Female		Both Sexes	
	Number	Rate	Number	Rate	Number	Rate
White	6,614	317.6	7,072	195.7	13,686	248.1
Black	297	368.9	303	267.2	600	312.3
Other	55	234.0	46	144.0	101	177.4
All Races	6,968	319.3	7,421	198.1	14,389	250.1

Rotate      Download

footnote      Rates Per 100,000  
Age Adjustment uses 2000 standard population

Figure 13

contemplated.

If KIC does not create the health data results you are looking for, please contact the Office of Health Care Information at the e-mail address given above or by calling 785-296-8627. The office performs ad hoc data analyses. There may be a fee associated with those requests.

### Data Security

There are no names in KIC datasets. In addition, three confidentiality rules are built into the software. KIC invokes the rules when the demographic details raise the possibility someone could be identified on those details alone or with the assistance of other information. When KIC invokes the rules, an asterisk or other marker is used to signify the absence of a value. The system blanks population-based rates when the number of events is less than 20. This is occasionally the case in death data. Few birth outcome statistics are prepared as population-based rates.

# Kansas Health Statistics Report

Kansas Department of Health and Environment – Center for Health and Environmental Statistics – No 23 – November 2004

## Annual Summary Reports Decreased Teen Pregnancy Rates

Kansas teenagers were less likely to become pregnant in 2003 than at any time during the last decade, according to the 2003 *Kansas Annual Summary of Vital Statistics* published by the Center for Health and Environmental Statistics.

Table 1. Selected Vital Event Rates and Ratios, Kansas, 2002-2003

Vital Event	2002	2003
Live Births		
Number	39,338	39,353
Rate	14.5	14.4
Out-of-Wedlock Births		
Number	12,129	12,345
Ratio	30.8	31.4
Stillbirths (S.B.)		
Number	146	206
Rate	3.7	5.2
Hebdomadal Deaths (Under 7 days)		
Number	155	138
Rate	3.9	3.5
Perinatal Period III Deaths (S.B. & Hebdomadal)		
Number	301	344
Rate	7.6	8.7
Neonatal Deaths		
Number	192	177
Rate	4.9	4.5
Infant Deaths		
Number	282	262
Rate	7.2	6.7
Maternal Deaths		
Number	2	0
Rate	0.5	0.0
Deaths		
Number	24,968	24,417
Rate	9.2	9.0
Marriages		
Number	19,783	18,722
Rate	7.3	6.9
Marriage Dissolutions		
Number	9,654	8,644
Rate	3.6	3.2
Abortions		
Total Reported	11,844	11,697
Kansas Residents.	6,298	6,163
Out of State Residents	5,546	5,534

Residence data presented for births and deaths. Occurrence data presented for marriages, and marriage dissolutions

Department of Health and Environment'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. Analysis of trend data, county data, and a comparison of Kansas to the nation are included in this report.

Some of the highlights from the report include:

- The Kansas infant mortality rate, the ratio of infant deaths to live births, tied with the 2000 rate for the lowest ever

Teen pregnancies are defined as the sum of live births, stillbirths, and abortions. There were 3,542 pregnancies among Kansas teen residents in 2003.

The pregnancy rate for females ages 10-19 decreased 24.1 percent from 34.8 pregnancies per 1,000 female age-group population in 1994 to 26.4 in 2003.

Teen pregnancy rates for females ages 10-17 decreased 34.0 percent during the same time period. Pregnancy rates for 10-19 year old black mothers fell more steeply (down 42.5 percent) from 1994-2003 than rates for other population groups.

Information on teenage pregnancies is just part of the wealth of information provided in the *Kansas Annual Summary of Vital Statistics*. The Center prepares the summary as part of Kansas

recorded. There were 39,353 live births and 262 infant deaths to Kansas residents in 2003. This resulted in an infant mortality rate of 6.7 deaths per 1,000 live births and was a decrease of 6.9 percent from the infant mortality rate of 7.2 in 2002 (Table 1).

- The out-of-wedlock birth ratio has continued an upward trend over the years in both Kansas and the U.S. Out-of-wedlock births comprised 31.4 percent of all live births that occurred to Kansas residents in 2003, a 21.2 percent increase from 25.9 percent of live births in 1994.
- The abortion ratio for Kansas residents in 2003 was 156.6 per 1,000 live births, a decrease of 11.5 percent from the 177.0 ratio in 1994. Ratios increased from 1991 to a high of 186.3 in 1996, and then generally declined for the next seven years.
- For the first time since deaths were collected (1911), there were no maternal deaths to Kansas residents in 2003.
- The average age at death of Kansas residents in 2003 was 74.5 years. The average age at death for males was 70.4 years, for females 78.2. The average age at death for blacks was 64.0 years compared to 75.2 for whites.
- Unintentional injury and violent death accounted for nearly 50 (47.9) percent of deaths for those 1-44 years of age.
- The age-adjusted death rate for the leading cause of death, heart disease, was 210.3, and for cancer, the second leading cause of death, the age-adjusted death rate was 184.5 per 100,000 standard U.S. 2000 population. Together, these two causes accounted for almost 50 percent of all Kansas resident deaths.
- Couples in Kansas had fewer marriages in 2003, continuing a general downward trend that began in 1993. In 2003, 18,722 marriages occurred in Kansas, a decrease of 5.4 percent from the 2002 total of 19,783. The marriage rate (6.9 per 1,000 population) decreased 17.9 percent from the 1994 rate of 8.4. The number of marriage dissolutions (divorces and annulments) also continued a downward trend that began in the early 1990s.

The 2003 *Annual Summary* is available in a PDF format at <http://www.kdhe.state.ks.us/hci/annsumm.html>

Karen Sommer, MA  
Vital Statistics Data Analysis

## Smoking during Pregnancy

Cigarette smoking during pregnancy adversely affects the health of both mother and child. In a CDC comparison of 49 states, Kansas was one of several states showing an increase in maternal smoking percentages for teen mothers from 1990-1991 to 2001-2002.

In 2002 smoking during pregnancy was re-

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by 11.4 percent of all women giving birth in the United States. That represented a decrease of 38 percent from 1990, when 18.4 percent reported smoking. The percentage change for Kansas births was 11.2 percent (Table 2).

Table 2. Percentage of mothers who smoked during pregnancy, 1990, 1996 and 2002

	1990 %	1996 %	2002 %	% change 1990-2002
Kansas	14.3	12.9	12.7	-11.2
U.S. (1)	18.4	13.6	11.4	-38.0

(1) National totals may exclude certain states that did not collect maternal smoking data during the time period  
Source: Centers for Disease Control and Prevention

The percentage of females aged 15-19 years who smoked during pregnancy in Kansas rose a statistically significant seven percent between 1990-1991 to 2001-2002. For the latter time period, almost one in five teen mothers in Kansas reported smoking during pregnancy (Table 3)

Table 3. Percentage of females aged 15-19 years who smoked during pregnancy

	1990- 1991 %	1995- 1996 %	2001- 2002 %	% Change 1990-1991 to 2001-2002
Kansas	17.9	18.4	19.2	7
U.S.(1)	20.3	17.0	17.1	-16

(1) National totals may exclude certain states that did not collect maternal smoking data during the time period  
Source: Centers for Disease Control and Prevention

The CDC findings have two limitations 1) data on maternal smoking were not available from several states, including California, where 13.2 percent of the U.S. births occurred in 2002; and 2) prenatal smoking is underreported on birth certificates

*Morbidity and Mortality Weekly Report  
Centers for Disease Control and Prevention*

## Influenza Mortality Trends Studied

Pneumonia and influenza (P&I) related mortality is as common as sub-freezing temperatures during winter in Kansas. The official influenza or flu season runs from September through May.

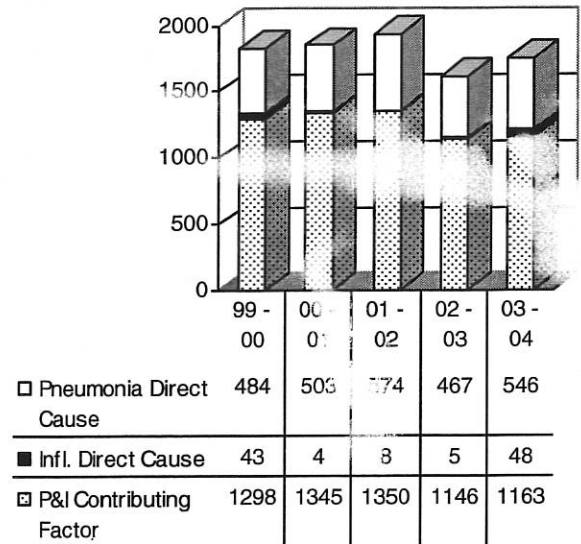
P&I deaths peak during January and February, the coldest months. While there is a lot of attention given to pneumonia and influenza deaths, the actual number of Kansas resident deaths directly attributable to pneumonia or influenza is less than one third the total deaths (29.9%).

During the last five flu seasons, a total of 8,984 P&I-related deaths were reported (Figure 1). Only 108 deaths (1.2%) were directly attributable to influenza. Pneumonia was the direct cause of death for 2,574 individuals.

The actual total of deaths directly attributable to influenza may be higher, but in the absence of confirming lab tests, physicians completing the death certificate may only indicate that influenza or pneumonia was a factor in the death. In those deaths other illnesses or causes were a greater factor or cause.

The challenge of arriving at a definitive cause of death in these respiratory deaths is one of the reasons that published P&I reports include all related deaths. The number of P&I deaths is a barometer, serving as a proxy of how much flu activity is occur-

Figure 1. Pneumonia & Influenza Deaths by Season and Type of Cause



ring in a community or state. Public health epidemiologists, who also survey physicians' offices and monitor lab test results, closely watch mortality numbers.

During the five most recent flu seasons the number of P&I related deaths has gone down slightly, 10.5 percent from the 1999-2000 season to 2003-2004 (Figure 1).

There is hidden good news in the mortality statistics. Since pneumonia and influenza were only factors in many of the P&I-related deaths, it means that if individuals take preventive steps to stay healthier and keep well during the flu season, they will be less likely to suffer life-threatening complications from influenza.

This is why it's so important to vaccinate the high risk population in Kansas. Many of those individuals have underlying health conditions that when combined with pneumonia and influenza make recovery difficult.

Information on how to stay healthier this flu season can be obtained from the Centers for Disease Control and Prevention at:

- <http://www.cdc.gov/flu/protect/preventing.htm>
- <http://www.cdc.gov/flu/protect/covercough.htm>
- <http://www.cdc.gov/germstopper/>

*Greg Crawford, Office of Health Care Information  
Gail Hansen, DVM, MPH, Epidemiologic Services*

## Kansas Whooping Cough Cases Increase in 2004

The Kansas Department of Health and Environment (KDHE) reported an increasing number of confirmed pertussis (Whooping Cough) cases in the state earlier this year. From May through September there were 31 confirmed cases of pertussis reported to KDHE, compared to an average of nine cases in the previous three years for the same months.

The Kansas counties with confirmed and probable cases during May to September include Douglas, Franklin, Johnson, Leavenworth, Lincoln, Miami, Saline, Sedgwick, Shawnee, and Wyandotte. An increase in the number of cases has also been reported in some other Midwestern states.

Pertussis, a highly contagious respiratory infection commonly referred to as Whooping Cough, is a potentially fatal childhood disease that is preventable with vaccination. The disease is

1-10

After the "whoop" sound children and adults often make when they try to inhale during or after a severe coughing spell.

People can get infected with pertussis by inhaling contaminated droplets from an infected person's cough or sneeze. A person with pertussis becomes contagious in the early stages of infection. During this period, the person usually just has a runny nose. They are still quite contagious the first 2 weeks after onset of the cough (approximately 21 days total).

According to the Centers for Disease Control and Prevention (CDC), mild cases of pertussis are difficult to diagnose because they resemble a cold. However, mild cases can be passed on to young children and can produce severe illness in the child. The CDC urges individuals who suspect they have pertussis to limit contact with unvaccinated children and see a physician as soon as possible.

Symptoms of pertussis are similar to those of a cold or flu including a runny nose, sneezing, fever, and a mild cough. Symptoms can last up to two weeks and are followed by increasingly severe coughing spells. Fever, if present, is usually mild. Symptoms appear between six to 21 days (average 7-10) after exposure to the bacteria.

During a classic coughing episode, the signature "Whoop" is heard when the patient struggles to breathe. Cough usually produces a thick mucus. Vomiting may occur after a coughing episode and the lips and nails may turn blue due to lack of oxygen. The patient is left exhausted after the coughing spell.

If you or a member of your family is exhibiting symptoms, including cough for two weeks or longer, without other explanation, please contact your physician. There are medications to treat the infection and relieve the symptoms.

The single most effective control measure is immunization of the most vulnerable population against pertussis. Immunization is recommended at 2, 4, 6, and 12 months of age with a booster at kindergarten entry.

Young infants are at highest risk for pertussis-related complications, including seizures, encephalitis (swelling of the brain), severe ear infection, anorexia (severe loss of appetite) and dehydration. Pneumonia is the most common complication and cause of infantile pertussis-related deaths.

According to the Centers for Disease Control and Prevention, <http://www.cdc.gov/nip/publications/pink/pert.pdf>, pertussis was responsible for approximately 280,000 deaths worldwide in 2001. Due to vaccination, the number of cases in the United States decreased by 98 percent in the mid-20th century from approximately 200,000 to 4,200.

*KDHE Bureau of Epidemiology and Disease Prevention*

## Child Death Review Board Report

The 2002 Report of the State Child Death Review Board (SCDRB) summarizes the investigation of 498 children who died that year. The board's report, while noting the number of deaths was slightly down from previous years, says trends that have been noted since reviews began in 1994 remained consistent.

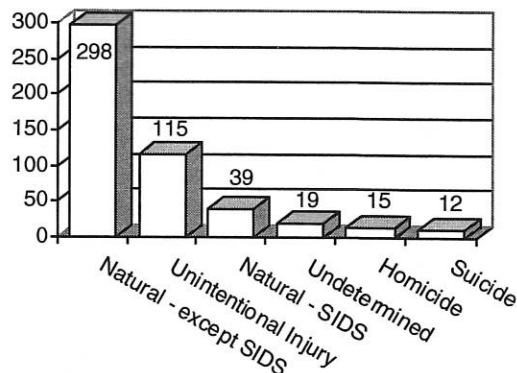
The board reported homicides and suicides among children were down slightly from 2001. The suicide level was at its lowest in nine years. Homicides classified as child abuse, however, rose from five to seven.

Unintentional injury deaths represented 23 percent of the deaths in 2002 (Figure 2). Sixty-nine percent of those were vehicular. Children, aged 15-17, have the most motor vehicle deaths, 52 percent of the vehicular total.

The largest category of deaths is natural deaths, representing 60 percent of the total. Children under one year made up over three-fourths of the deaths (76%).

Cases reviewed by the SCDRB begin with the KDHE Office of Vital Statistics providing a death certificate. The board then ob-

Figure 2. 2002 Child Deaths by Category



tains police reports and other records to perform a complete investigation into all of the circumstances surrounding the death. The board's findings and recommendations to prevent child deaths are contained in a report available at <http://www.ksag.org/Divisions/SCDRB/cdrb.htm>.

*2002 Annual Report  
State Child Death Review Board*

## Kansas Trauma Registry Progress

In calendar year 2003, 58 of 123 Kansas hospitals reported over 6,700 patient injury cases to the Kansas Trauma Registry. The Kansas Trauma Registry collects data for severely injured or transferred patients as required by state law. Starting in October, it is expected that data be reported on children who have been injured and admitted to a Kansas hospital regardless of their length of hospital stay. This is a change from adults, who only have data reported after they've been admitted to a hospital for 48 hours or more. Those patients who have minor injuries treated and are released are not reported to the State Registry.

The first two quarters of 2004 are off to a good start. Already 76 hospitals have reported over 3,900 injury cases to the state registry. Increased participation has been aided by more training available for hospital staff that manages the registries. The Kansas Department of Health and Environment houses the Kansas Trauma Registry and provides training, support and registry software to hospitals free of charge.

KDHE has also been reviewing all aspects of data completeness and data quality. Hospitals are required to report data on a quarterly basis. KDHE has developed a process by which the data is reviewed soon after it has been received. Hospitals should expect to receive a report on the completeness of their data within a week or two of when they submit it. Further improvements in the software will be made in the coming year as well as efforts to validate the data. A limited amount of information from the registry is currently being provided to each of the respective six regional trauma councils.

Analysis on future datasets will be possible due to the anticipated increase in number of Kansas hospitals reporting trauma cases to the Kansas Trauma Registry as well as an expected increase in data quality for completeness and accuracy.

*Susan Quinn  
Vital Statistics Data Analysis*

## News Notes

### Health Care Access among Hispanic/Latino Children

Having access to high-quality health care is one of the most important determinants of the well-being of America's children. Although much effort has been made to eliminate inequality in

and health care, disparities in access to care have continued to exist.

A recent National Center for Health Statistics (NCHS) report "Access to Health Care Among Hispanic/Latino Children: United States, 1998-2001" estimated that each year three million (25.7%) Hispanic/Latino children lacked health insurance coverage. At the time of a National Health Interview Survey, 1.6 million had no usual place to go for health care during the past year, and 1.4 million experienced unmet health care needs during the past year due to cost. Of the five Hispanic/Latino subgroups Mexican children were most likely to lack health insurance coverage.

NCHS combined surveys from 1998-2001 assessing health information about 14,284 Hispanic/Latino children under the age of 18 years. The findings are part of the *Advance Data from Vital and Health Statistics* series Number 344, June 24, 2004.

*National Center for Health Statistics*

### Trends in Health Insurance Coverage

Overall health insurance rates changed little among nonelderly black, Latino, and white Americans between 2001-2003, according to new findings from the Center for Studying Health Systems Change (HSC). But sources of coverage shifted – especially for Latinos – from employment-based insurance to public coverage, suggesting the economic downturn took a greater toll on Latinos. Low-income Latinos and whites were particularly hard hit by declines in employer coverage. Shifting sources of coverage had little effect on access to medical care.

With the sole exception of decreased access to specialists among blacks, access to care did not change between 2001-2003. Significant gaps in access to care among Latinos, blacks and whites persisted, with Latinos and blacks consistently reporting lower levels of access than whites.

*Tracking Report  
Center for Studying Health System Change*

### Census Bureau Publishes Bridged Race Data

The National Center for Health Statistics annually releases bridged-race population estimates of the resident population of the United States, based on Census 2000 counts, for use in calculating vital statistics rates. These estimates result from bridging the 31 race categories used in Census 2000, as specified in the 1997 Office of Management and Budget (OMB) standards for the collection of data on race and ethnicity, to the four race categories specified under the 1977 standards.

Many data systems, such as vital statistics, are continuing to use the 1977 OMB standards during transition to the new standards. The U. S. Census Bureau produces the bridged-race population estimates under a collaborative arrangement. The bridged race data and information on bridging methodology are available for download from <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>.

Although efforts were made to use the best available data and methods to produce the bridged estimates, the modeling process introduces error into the estimates. The potential for error will be greatest for the smallest population groups, particularly the smaller race groups and county level estimates.

*National Center for Health Statistics*

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