



Kansas Health Statistics Report

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Healthy Kansans 2010 Update

Kansas has improved in six of the 19 objectives that comprise the state's Leading Health Indicators (see Table 11 on page 7). The six objectives are: increase the proportion of adults engaging in physical activity, reduce cigarette smoking by adults, reduce the proportion of adults engaging in binge drinking, increase the proportion of young children fully immunized, increase the proportion of adults 65 and older who are immunized against pneumococcal disease, and increase the proportion of persons with health insurance.

Tobacco use and immunization rates showed the most impressive improvements. The KDHE Behavior Risk Factor Surveillance Survey (BRFSS) reported that cigarette use among adults decreased from 20 percent in 2004 to 17.8 percent in 2005. Based on the National Immunization Survey, the proportion of young children who are fully immunized (4:3:1:3:3 series) increased from 77.5 percent in 2004 to 84 percent in 2005.

The smoking prevalence rate of 17.8 percent is an all time low for Kansas. The decrease in smoking prevalence is the result of KDHE and community efforts. Kansas' smoking prevalence rate is sixth in the nation, up from 11th the previous year, and compares to the state's ranking of 27th in 1990 when over 30 percent of the state's population used tobacco.

Kansas' most dramatic improvement was jumping from 43rd to 13th in the nation regarding childhood immunization rates. Thanks to a partnership with various organizations, implementation of Governor Sebelius' blue ribbon panel's recommendations and implementation of the statewide immunization database, Kansas' immunization rates have increased for four years.

Four objectives showed declines in comparison to the previous year. The other objectives showed no change or did not have data for an annual comparison.

The Healthy Kansans 2010 Indicators are the culmination of a multi-year planning effort that involved 200 representatives from over 100 different organizations that identified indicators from the National Healthy People 2010 objectives for special focus.

Kansas was recognized as one of the states with the highest overall health improvements in 2006 in a national study. According to the 17th annual edition of America's Health Rankings, Kansas had the fourth highest overall improvement in the nation compared to the previous year's report. Kansas jumped six spots in the report to 17th overall.

According to the report – produced by United Health Foundation in partnership with the American Public Health Association and the Partnership for Prevention – Kansas scored high in several of the 18 areas of consideration. Kansas' strengths include a low rate of uninsured population, a low prevalence of smoking, a low incidence of infectious disease, ready access to adequate health care, and high immunization coverage.

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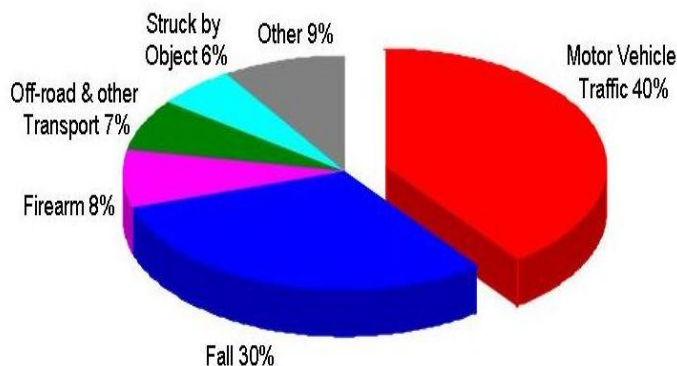
Motor Vehicle Trauma in Kansas

Unintentional injury is the leading cause of death for Kansans age 1 to 44 and the fifth leading cause of death for all ages. Motor vehicle crashes are the most common mechanism, accounting for 42 percent of deaths due to unintentional injury.¹ More than a

leading cause of death, injuries related to motor vehicle traffic constitute a heavy burden for the system of hospitals and emergency medical services (EMS) that care for them.

The Kansas Trauma Registry is a state-wide data repository for traumatic injuries in Kansas, containing demographic, clinical and other details on injured patients requiring either acute transfer or a hospital length of stay two days or longer. Data from the trauma registry indicate that, while falls among the elderly continue to be a leading cause of injury in the trauma system overall, motor vehicle trauma is the leading cause of severe injury (Figure 1). Among the most severely injured patients (Injury Severity Score 16 and over) in Kansas, motor vehicle crashes account for more hospital admissions, more total days spent in intensive care units and more total days spent in the hospital than any other mechanism of injury (Kansas Trauma Registry, 2005).

Figure 1. Primary Cause of Severe Injury (ISS ≥ 16). Displays the percentage of all severely injured patients with the indicated mechanism of injury. Mechanism is categorized based on primary E-code using the CDC suggested framework.² Injury severity is determined from ICD-9 diagnosis codes. The Injury Severity Score ranges from 1 (minor) to 75 (unsurvivable) and accounts for both the number of injuries and the severity of each injury. Kansas Trauma Registry, 2005.



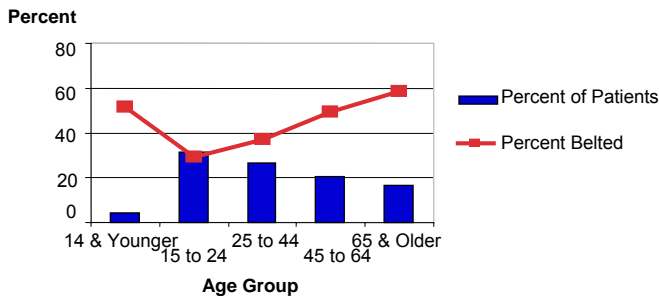
Seatbelts

The use of seatbelts is a proven way to reduce the number of fatalities and the severity of injuries from motor vehicle crashes. Kansas ranks 43rd among states reporting data on seatbelt use with an average observed usage of 69 percent in 2005.³ The rates are even lower among those treated for severe traumatic injuries (Injury Severity Score 16 and over) in trauma system hospitals. Young adults (15 to 24) accounted for the largest proportion of those trauma patients and also had the lowest usage rate with only 29 percent wearing seatbelts (Figure 2).

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Figure 2. Seatbelt Use in Severely Injured Patients (ISS ≥ 16). Displays the percentage of severely injured patients in each age group (bars) and the percentage of those that wore a seatbelt (line). Kansas Trauma Registry, 2005.



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References

1. Kansas Vital Statistics (2004).
2. Centers for Disease Control. (2005). Recommended framework of E-code groupings for presenting injury mortality and morbidity data (February 16, 2005). Retrieved January 30, 2007 from <http://www.cdc.gov/ncipc/whatsnew/matrix2.htm>
3. National Highway Traffic Safety Administration. (2006) Traffic Safety Facts. 2005 Data. Retrieved January 30, 2007 from <http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/TSF2005/OccupantProtectionTSF05.pdf>

Nursing Home Deaths: Search for an explanation of Kansas' deviation from the national average

During the years 1999-2002, the percentage of Kansas deaths occurring in nursing homes was consistently greater than the percentage of all US deaths occurring in nursing homes (Table 1). In the paragraphs that follow, we will provide context and explore the impact on state Medicaid expenditures.

Death locations for which Kansas percentages are lower than the corresponding national percentages

One possible reason for the difference in percentages of deaths in nursing homes could be the fact that the percentage of Kansas deaths occurring in hospitals and in residences was lower than the percentage of all US deaths occurring in those locations.^{1,2}

Both Kansas and the United States as a whole exhibited a steady reduction in the number of deaths occurring in hospitals during the period; a small, but fairly steady increase in the number of deaths occurring in residences; and a small increase in the number of deaths occurring in nursing homes.

Table 1. Location of death (percent of total deaths)

| Year | Nursing Home | | Hospital | | Residence | |
|------|--------------|------|----------|------|-----------|------|
| | US | KS | US | KS | US | KS |
| 1999 | 22.0 | 27.9 | 50.9 | 47.5 | 22.3 | 19.7 |
| 2000 | 22.3 | 28.9 | 50.0 | 46.2 | 22.7 | 19.7 |
| 2001 | 22.3 | 28.3 | 49.0 | 45.5 | 22.8 | 20.3 |
| 2002 | 22.4 | 28.7 | 48.5 | 43.6 | 23.3 | 20.6 |

Nursing home availability and utilization rates

A quick check of nursing home availability and usage rates indicates that Kansas has more nursing home beds available per 1,000 population 85 years of age or older than does the nation as a whole, and that a higher percentage of the population over 85 resides in nursing homes than in the nation as a whole. However,

Kansas still has a lower nursing home occupancy rate than the nation as a whole (Table 2).³

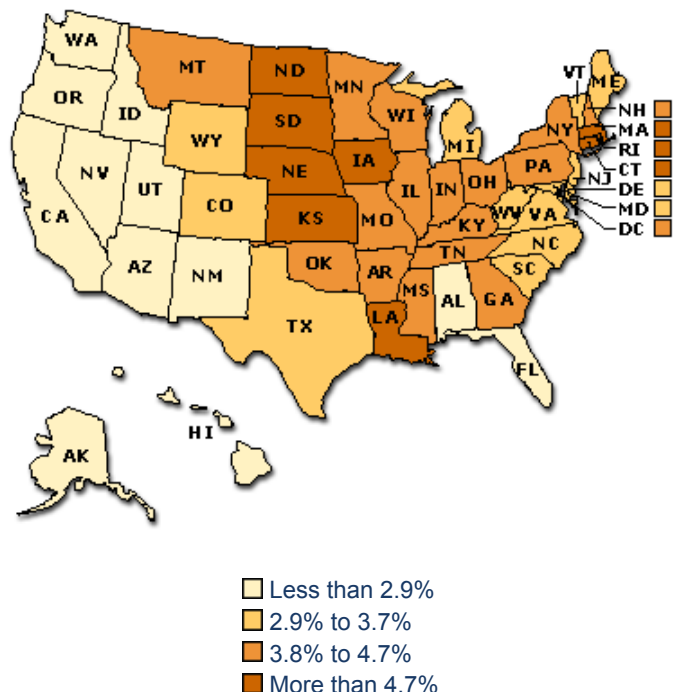
When compared with neighboring states, Kansas nursing home bed availability is not extremely high—Missouri, Nebraska and Oklahoma all have more beds available per 1,000 population 85 and over, and only Colorado has fewer.

However, Kansas and its neighbors all have more beds available per 1000 population 85 and over than do the states of Arizona and Florida, which have received migration by the elderly since the mid-20th century. It is possible that migration has created this disparity, by reducing the customer base for nursing homes in the Plains states while increasing it in the retirement magnet states.

The Kaiser Family Foundation (KFF) calculates rates of nursing home residents as a proportion of population, 65 years of age or older. While this rate includes

nursing home residents less than 65 years of age in the numerator, it is the basis for a KFF state comparison of nursing home residency⁵. That comparison shows Kansas in the highest category with 5.5 percent, fourth highest in the country (Figure 3). One limitation of this data is the affect the number of nursing home residents less than 65 years of age on the state rate.

Figure 3. Nursing Home Residents as a Percent of Population 65 and Older,⁵ 2005



| State | Total NH Population | NH Occupancy Rate (%) |
|-------|---------------------|-----------------------|
| KS | 21,085 | 78.0 |
| MO | 37,345 | 68.6 |
| NE | 13,598 | 83.0 |
| CO | 16,344 | 81.2 |
| OK | 21,679 | 66.2 |
| AZ | 12,245 | 80.5 |
| FL | 71,987 | 87.2 |
| US | 1,241,672 | 82.6 |

| State | NH beds per 1000 population age 85+ | NH residency per 1000 population age 85+ |
|-------|-------------------------------------|--|
| KS | 431 | 384.5 |
| MO | 500 | 361.1 |
| NE | 440 | 376.0 |
| CO | 357 | 300.7 |
| OK | 573 | 372.6 |
| AZ | 188 | 163.7 |
| FL | 215 | 193.7 |
| US | 345 | 308.0 |

Financial considerations

Kansas currently spends 61.0 percent of its long-term care dollars on institutional care—a lower percentage than the national average, and also lower than all the neighboring states other than Colorado. See Table 4 for a state by state breakdown.

Table 4. Long-term care (LTC) expenditures by state, 2002

| State | Total LTC Spending FY 2002 (millions) | % Change 2001-2002 | Institutional Care as % Total LTC Spending | Home Care as % Total LTC Spending |
|-------|---------------------------------------|--------------------|--|-----------------------------------|
| KS | 954.4 | 7.6 | 61.0 | 39.0 |
| MO | 1,954.4 | 16.5 | 72.9 | 27.1 |
| NE | 630.8 | 9.0 | 69.6 | 30.4 |
| CO | 845.9 | 10.1 | 48.6 | 51.4 |
| OK | 881.8 | 8.7 | 63.8 | 36.2 |
| AZ * | 22.3 | 10.1 | 84.0 | 16.0 |
| FL | 2,941.5 | 11.1 | 74.3 | 25.7 |
| US | 81,842.7 | 5.8 | 69.8 | 30.2 |

* Arizona has a statewide managed care system. The figures here reflect only expenses which fall outside that system.

Nationwide, long-term care consumes 35 percent of state Medicaid budgets. Kansas is one of five states where long-term care consumes more than 50 percent of the state Medicaid budget (the other four states being Connecticut, North Dakota, South Dakota, and Wisconsin).

A report at [Governing.com](http://www.governing.com) points out that nursing home costs are not significantly changed by simple reductions in nursing home populations, because nursing home costs are largely driven by overhead, regardless of occupancy rates. Medicaid savings can be realized only when a substantial percentage of the beds in a nursing home are closed or when a nursing home is shut down.⁶

Summary

It appears that Kansas' higher percentage (compared to national averages) of deaths occurring in nursing homes is due at least in part to the fact that the percentage of Kansans over 65 living in nursing homes is higher than the national average.

It is not clear whether a drive to reduce the State's Medicaid expenditures by reducing the amount of long-term care provided by nursing homes would in fact lead to an over-all expense reduction. If the change resulted in more deaths in hospitals, any savings in Medicaid expenses might be offset by increases for hospital care.

Colorado has placed a strong emphasis on providing long-term care in the home, and spends over half of its long-term care costs on home care. There is little doubt that such an approach would be welcomed by many seniors, who have traditionally dreaded the thought of being placed in a nursing home.

However, the [Governing.com](http://www.governing.com) article points out that institutional long-term care programs and in-home long-term care programs often serve distinct populations, and that at some point further expenditures on home care will not lead to further decreases in costs for institutional long-term care.

The balance is likely to be different for each state, and legislators and program managers are likely to find that balance only through a significant period of trial and error.

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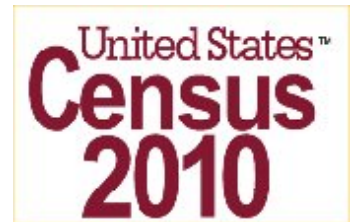
Notes & References

1. Kansas Vital Statistics. (2004). Unpublished data.
2. National Center for Health Statistics. (2007). *GMWK309 Deaths by Place of Death, Age, Race, and Sex: United States, 1999-2002*. Retrieved January 31, 2007, from http://www.cdc.gov/nchs/datawh/statab/unpubd/mortabs/gmwk309_10.htm
3. Health Care State Rankings 2006, Morgan Quitno Press, 2006.

4. StateMaster.com. (2007). Nursing Home Residents as a Percentage of 65+ Population by State. Retrieved January 31, 2007 from http://www.statemaster.com/graph/hea_nur_hom_res_as_of_65_pop-nursing-home-residents-65-pop.
5. Kaiser Family Foundation. (2005). *Total Certified Nursing Facility Residents as a Percent of the Population 65 Years and Older, 2005*. Retrieved January 31, 2007, from <http://www.statehealthfacts.org/cgi-bin/healthfacts.cgi?action=compare&category=Providers+%26+Service+Use&subcategory=Nursing+Homes&topic=Nursing+Home+Residents+as+%25+of+65%2b+Pop>.
6. Governing.com. (2004). *Long-term care: The Ticking Bomb*. Retrieved January 31, 2007 from <http://www.governing.com/gpp/2004/long.htm>.

Will Communities be Ready for 2010 Census Local Update of Census Addresses Program?

The Local Update of Census Addresses program, also known as LUCA, is a decennial census geographic partnership program that will allow the U.S. Census Bureau to benefit from local knowledge in developing its Master Address File for the 2010 Census and yearly ongoing household surveys. Tribal, state, and local governments can contribute to a complete enumeration of their community by reviewing and commenting on the list of housing units and group quarters addresses that the Census Bureau will use to deliver questionnaires within their community. The LUCA process is underway (Table 5).



LUCA Importance to a community

An accurate population count starts with an up-to-date and accurate address list. If a housing unit or group quarters address is listed on the Master Address File, it will ensure that the people residing at the address will be enumerated. A February 2003 Government Accountability Office report prepared for a congressional requestor indicated that in fiscal year 2000, about \$283 billion in federal grant money were distributed to state and local governments by formula; states received their share of this money based in part on factors such as annual population estimates derived from the 1990 decennial census. When the population estimates were updated to reflect the 2000 census results, an additional \$388 million in federal grant funding went predominantly to the 23 states that had above-average estimate revisions. Clearly the stakes are high, and a complete count is vital to cities and towns nationwide.

LUCA Program Administration

The LUCA program is made possible by the Census Address List Improvement Act of 1994 (Public Law 103-430), which provides an opportunity for designated representatives of tribal, state, and local governments to review the addresses contained on the census address list. The program operates as follows:

- The invited governments designate a LUCA liaison to review the portion of the census address list covering the area under its jurisdiction. The LUCA liaison will be subject to the same confidentiality requirements as census workers, which prohibit the disclosure of census information. The address list is confidential under Title 13 U.S. Code, and participants must review a set of security guidelines and sign a confidentiality agreement promising to protect the confidentiality of the addresses.
- The Census Bureau will send the LUCA liaison an address list from the Master Address File, corresponding maps, and address tallies.

- In areas with city-style addresses, the LUCA liaison can provide input regarding individual addresses on the list, as well as addresses missing from the list that should be added. The Census Bureau will verify this input during the Address Canvassing Operation and provide feedback to the participants about the results.
- In areas with non-city-style addresses (e.g., rural route and box number or post office box numbers), the LUCA liaisons will provide input regarding the count of housing unit and group quarters addresses. The Census Bureau will visit each census block during the Address Canvassing Operation and update the census address list. The Census Bureau will provide the LUCA participants with an updated address list and maps during the feedback phase.
- Public Law 103-430 allows the LUCA participants to appeal final Census Bureau decisions. All appeals must be adjudicated prior to Census Day to ensure that the housing unit is visited during the enumeration phase. An agency independent of the Census Bureau will review and decide on all appeals prior to Census Day, April 1, 2010

Table 5. Tentative 2010 Census LUCA Schedule

| Time Frame | Activity |
|---------------------------------|--|
| January 2007 | LUCA Advance notice letters mailed to the highest elected official and other contacts in all active functioning governments. |
| July 2007 | LUCA invitation letters and registration materials mailed to the highest elected official and other contacts of each government. |
| July 2007 to January 2008 | Invited governments register for LUCA, and the Census Bureau ships the LUCA review materials to each participating government. |
| August 2007 to March 2008 | LUCA participants review and update the address list and return their comments to the Census Bureau's Regional Office. |
| April 2008 to October 2008 | Census Bureau reviews the participant's LUCA submission and updates the Master Address File and the TIGER geographic database. |
| November 2008 to May 2009 | Census Bureau prepares for and conducts the Address Canvassing Operation using GPS equipped hand-held computers. |
| June 2009 to October 2009 | Census Bureau ships feedback materials to the LUCA participants to show how each government's submissions was processed. |
| September 2009 to December 2009 | LUCA participants review their LUCA feedback and have the opportunity to appeal the results to the LUCA Appeals Office. |
| September 2009 to January 2010 | LUCA Appeals Office reviews and adjudicates the appeals. |

Additional information is available at the LUCA website at: <http://www.census.gov/geo/www/luca2010/luca.html> or by contacting Craig Best, Supervisory Geographer, cbest@census.gov, or 913-551-6833

US Census Bureau

Poverty Estimates Released

The U.S. Census Bureau has released the 2004 Small Area Income and Poverty Estimates (SAIPE) for states, counties, and school districts. The bureau, with support from other Federal agencies, created SAIPE to provide more current estimates of selected income and poverty statistics than the most recent decennial census.

Kansas SAIPE values changed between 1989 and 2004; however, none of the changes are statistically significant, as the

90 percent Confidence Intervals for estimates and rates overlapped (Table 6).

Table 6. Model-based Small Area Income and Poverty Estimates, State of Kansas, 1989, 2004

| Year | Number | 90% Confidence Interval | Percent | 90% Confidence Interval |
|--|----------|-------------------------|---------|-------------------------|
| <i>All Ages in Poverty</i> | | | | |
| 2004 | 297,733 | 275,110 to 320,357 | 11.1 | 10.2 to 11.9 |
| 1989 | 262,486 | 251,373 to 273,599 | 10.8 | 10.3 to 11.3 |
| <i>Under age 18 in poverty</i> | | | | |
| 2004 | 98,641 | 88,073 to 109,208 | 14.6 | 13.1 to 16.2 |
| 1989 | 105,136 | 98,334 to 111,938 | 15.7 | 14.7 to 16.7 |
| <i>Ages 5-17 in families in poverty</i> | | | | |
| 2004 | 59,392 | 50,141 to 68,643 | 12.5 | 10.5 to 14.4 |
| 1989 | 64,214 | 58,845 to 69,583 | 13.7 | 12.6 to 14.9 |
| <i>Under age 5 in poverty</i> | | | | |
| 2004 | 35,005 | 30,008 to 40,003 | 18.7 | 16.0 to 21.4 |
| 1989 | 35,207 | 30,532 to 39,882 | 18.1 | 15.7 to 20.5 |
| <i>Median Household Income, in Dollars</i> | | | | |
| Year | Estimate | 90% Confidence Interval | | |
| 2004 | 41,664 | 40,198 to 43,130 | | |
| 1989 | 26,924 | 25,810 to 28,038 | | |

Source: US Census Bureau, <http://www.census.gov/hhes/www/saie/>

The main objective of this program is to provide updated estimates of income and poverty statistics for the administration of federal programs and the allocation of federal funds to local jurisdictions. A Government Accounting Office report issued in September 1990 identified \$30 billion in annual federal allocations that rely on decennial census data. In addition to these federal programs, there are hundreds of state and local programs that depend on income and poverty estimates for distributing funds and managing programs.

The SAIPE program:

- provides intercensal estimates of key income and poverty statistics for small geographic areas;
- provides measures of uncertainty of those estimates; and
- researches and investigates improved estimation methodology.

The bureau does not provide estimates for the number of poor children under five at the county level or the number of poor people 65 and over at the state and county levels, since it cannot improve on estimates from the preceding census or from national surveys. Intercensal estimates are being developed on a state and county basis for the following statistics:

- total number of people in poverty;
- number of children under age five in poverty (for states only);
- number of related children age five to 17 in families in poverty;
- number of children under age 18 in poverty; and
- median household income.

In addition, in order to implement provisions of the No Child Left Behind Act of 2001, estimates are prepared for school districts:

- total population;
- number of children age five to 17; and
- number of related children age five to 17 in families in poverty.

The estimates are not direct counts from enumerations or administrative records, nor direct estimates from sample surveys.

Data from those sources are not adequate to provide intercensal estimates for all counties. Instead, the bureau models the relation between income or poverty and tax and program data for the states and a subset of counties using estimates of income or poverty from the Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC). The modeled relations are used to obtain estimates for all states and counties. For school districts, the model-based county estimates and the decennial census distribution of the population of poor of each county over its constituent school districts is used.

US Census Bureau

Esophageal Cancer in Kansas and the US

Esophageal cancer is seldom recognized until the disease reaches an advanced stage.¹ Although esophageal cancer is relatively uncommon in the United States and accounts for only one percent of all cancers,² the long-term survival remains below 30 percent.¹ The American Cancer Society estimates that approximately 14,550 new cases of esophageal cancer would be diagnosed in 2006 and an estimated 13,770 people would die of the disease.³ Risk factors such as age, sex, gender, use of alcohol and/or tobacco, and the presence of acid reflux disease, obesity, dietary and other factors have been found to impact the risk for developing esophageal cancer.⁴ Census population data for 1999 – 2003 and data for the same time period from the Kansas Cancer Registry available in the Kansas Information for Communities (KIC) data system provide comparison data for analysis. Demographic findings for age, race and gender are presented in combination with supporting literature for other risk factors, and prevention and treatment strategies are summarized.

Demographic Risk Factors for Esophageal Cancer

The disease affects an estimated age-adjusted five per 100,000 people in the United States,⁵ while in Kansas an estimated age-adjusted four per 100,000 people are reported.

Nationally, esophageal cancer is three to five times more common among men than among women.^{3,4} In Kansas, esophageal cancer is 3.4 times more commonly reported among men (6.4 per 100,000) than women (1.9 per 100,000) (Table 7).

Table 7. Selected Kansas Resident Cancer Rates by Sex, Race, and Age-group, 1999-2003

| | All Cancers | Esophageal Cancer |
|--------|-------------|-------------------|
| Male | 483.5 | 6.4 |
| <45 | 46.0 | 0.3 |
| White | 48.8 | 0.3 |
| Black | 28.5 | 0.0 |
| Other | 29.4 | 0.0 |
| ≥45 | 1,351.3 | 19.2 |
| White | 1,344.5 | 18.5 |
| Black | 1,440.0 | 41.4 |
| Other | 1,836.9 | # |
| Female | 443.9 | 1.9 |
| <45 | 11.2 | 0.8 |
| White | 10.1 | 0.8 |
| Black | 5.7 | 0.0 |
| Other | 45.2 | 0.0 |
| ≥45 | 12.4 | 2.6 |
| White | 821.3 | 2.6 |
| Black | 1,137.7 | 6.5 |
| Other | 457.4 | 0.0 |

- Rates considered statistically unreliable

Rates per 100,000 population
Kansas Cancer Registry

Nationally, it is reported that esophageal cancer is 50 percent more common among Blacks than among Whites.³ However, in Kansas, it appears that the reported age-adjusted proportion of esophageal cancer is four per 100,000 for both Blacks and Whites and too small to report for the Other category. Because of the small size of the Black population in Kansas, rates for Blacks are considered unstable.

Table 8. Selected Kansas Resident Cancer Rates by Age-Group, 1999-2003

| | Less than 45 | Age 45 or Greater |
|-------------------|--------------|-------------------|
| All Cancer | 29.0 | 1,025.3 |
| Esophageal Cancer | 0.5 | 9.0 |

Rates per 100,000 population – age-specific
Kansas Cancer Registry

The risk of esophageal cancer increases with age. It is rarely found in people under age 40.³ Mirroring national trends; Kansans younger than age 45 have a reported age-group specific cancer rate of 29 per 100,000, while those age 45 and over have a reported cancer rate of 1,025 per 100,000. Kansans less than age 45 have a reported esophageal cancer rate of 0.5 per 100,000, while older Kansans have a reported esophageal cancer age-adjusted rate of nine per 100,000 (Table 8).

Demographic factors taken together or in combination can be important predictors of the development of esophageal cancer. In Kansas, older Black males have the highest reported rates (41.4 per 100,000) of esophageal cancer (Table 8). Among females, older Black females have the highest rates (6.5 per 100,000).

Prevention and Treatment

Like any cancer, the specific reason that one person gets esophageal cancer and another does not is unknown. There is no sure way to prevent esophageal cancer, but strategies have been identified that mitigate the risk.

- Avoiding use of tobacco and/or alcohol.^{6, 7, 1}
- Consuming fruits and vegetables, especially raw.^{3,8}
- Staying active.³
- Maintaining a healthy body weight.³
- Using of medications like H2 blockers and proton pump inhibitors to address acid reflux conditions.³
- Undergoing endoscope screening when frequent reflux symptoms occur.¹

Unfortunately, symptoms, i.e. difficulty swallowing, are often not recognized until esophageal cancer has reached an advanced stage. Recovery chances improve with early detection.¹ Newer treatments offer an increased hope of survival.⁴ Research is in progress, including surgical techniques and new ways to combine chemotherapy, drugs, and radiation treatment. Clinical trials are testing ways to strengthen patient immune systems to better fight cancer.³

Summary and Conclusion

Although esophageal cancer in Kansas represents 0.9 percent of all reported cancers, this particular type has a high mortality rate. Even with the advances in modern medicine, long-term survival remains below 30 percent.¹ Demographic factors such as age, race and gender affect the probability of having esophageal cancer. Further inquiry should be made to determine the cause of higher esophageal cancer rates among Kansas' categories of Males, Black males, Black females, and persons age 45 and over. Preventive health behaviors such as consumption of fruits and vegetables, staying active, and avoiding use of alcohol and tobacco, use of proactive screening and preventive medication, and maintaining a healthy body weight should be used to mitigate the risk of getting esophageal cancer. Research and new treatment strategies show promise in improving low survival rates for

esophageal cancer and may hold important policy implications for those most affected by this serious and often fatal disease.

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References

1. eMedicine Health.com. (2005). Cancer of the Esophagus. Retrieved October 25, 2005, from http://emedicine health.com/cancer_of_the_esophagus/article_em.htm.
2. Ries LAG, Miller BA, Hankey BG, et al. (1994). SEER Cancer Statistics Review, 1973-1991: Tables and Graphs, National Cancer Institute. NIH Publ. No. 94-2789, Bethesda, MD.
3. American Cancer Society. (2005). How Many People Get Cancer of the Esophagus? Retrieved January 31, 2007, from http://www.cancer.org/docroot/CRI/content/CRI_2_2_1X_How_many_people_get_esophagus_cancer_12.asp?sitearea=...
4. CancerAnswers.com. (2006) Esophagus Cancer. Retrieved February 2, 2007, from http://www.canceranswers.com/Esophagus_Cancer.html.
5. MedlinePlus Medical Encyclopedia, (2005). Esophageal Cancer, 5/25/2005.
6. Day NE and Munoz N: Esophagus. (1982) In *Cancer Epidemiology and Prevention*. (Schottenfeld D, Fraumeni JF Jr, eds.). Philadelphia: W.B. Saunders Company.
7. Schottenfeld D: (1984) Epidemiology of cancer of the esophagus. *Semin Oncol* 11:92-100, 1984.
8. Singh, AK, Digestive Care Center, <http://digestive-care.com/>, 2006.

Fall-related fatalities and Injuries among Older Adults – Kansas and United States

Among the population of adults age 65 and older, an estimated one-third fall each year.¹ In Kansas that amounts to about 119,000 persons who fall. Of those who fall, almost one in three suffer moderate to severe injuries that make it hard to get around or live alone and increase the chances of early death.² Older adults are hospitalized for fall-related injuries five times more often than they are for injuries from other causes².

Falls cause the majority of hip fractures, which often result in long-term functional impairments that might require admission to a nursing home for more than a year.³

Table 9. Kansas Resident Hospitalizations for Hip Fractures*, 2000-2004

| | Year | | | | | Total 2000-2004 |
|--------------|-------|-------|-------|-------|-------|--------------------|
| | 2000 | 2001 | 2002 | 2003 | 2004 | |
| Total | 3,459 | 3,401 | 3,351 | 3,397 | 3,592 | 17,200 |
| Male | 905 | 871 | 844 | 898 | 945 | 4,463 |
| White Male | 795 | 748 | 712 | 726 | 774 | 3,755 |
| Black Male | 18 | 67 | 31 | 22 | 17 | 155 |
| Female | 2,554 | 2,530 | 2,507 | 2,499 | 2,647 | 12,737 |
| White Female | 2,278 | 2,188 | 2,166 | 2,042 | 2,145 | 10,819 |
| Black Female | 29 | 148 | 91 | 36 | 38 | 342 |
| age 65-69 | 138 | 121 | 152 | 137 | 141 | 689 |
| age 70-74 | 249 | 255 | 276 | 285 | 266 | 1,331 |
| age 75-79 | 497 | 500 | 469 | 471 | 515 | 2,452 |
| age 80-84 | 757 | 787 | 761 | 818 | 887 | 4,010 |
| age 85+ | 1,818 | 1,738 | 1,693 | 1,686 | 1,783 | 8,718 |

* Hip fracture - ICD9 code 820 in primary or any secondary diagnosis field

Source: Kansas Hospital Association data

Between 2000 and 2004, 17,200 persons were discharged from a Kansas hospital with a primary or secondary diagnosis of a hip fracture involving a length of stay greater than 24 hours (Table 9).⁴ Almost three out of four (74.1%) of the discharges involved females. Over half (50.7%) the hip fractures occurred to persons age 85 and older. These figures do not take into account the persons treated in emergency departments (EDs) and released. During the same period 939 Kansas residents died from falls. This represented 16.7 percent of all unintentional injuries occurring during the five year period. Over eight out of 10 fall-related deaths occurred to persons 65 years and older (Table 10).

Table 10. Kansas Fall-related Resident Deaths*, 2000-2004

| | Age 65 and older | | All Ages |
|---------------------------------|------------------|------------|----------|
| | N | % of Total | N |
| Falls from the same level | 261 | 87.6 % | 298 |
| Falls from one level to another | 102 | 57.0 % | 179 |
| Unspecified falls | 409 | 88.5 % | 462 |
| Total | 772 | 82.2 % | 939 |

* ICD 10 Codes W00-W19

Source: Kansas Vital Statistics Database, Center for Health and Environmental Statistics

To examine national trends in fatal and nonfatal falls among older persons, the U.S. Centers for Disease Control and Prevention (CDC) analyzed fall related fatalities from 1993-2003 and non-fatal injuries resulting from falls in persons treated in EDs for 2001-2005. The CDC evaluation found that the overall rate of fatal falls among persons 65 and old increased.⁵ The report also showed that the rate of non-fatal injuries for hip fractures decreased between 2001 and 2005, although the change was not statistically significant. The decrease in hip fracture hospitalizations from 1993-2003 was statistically significant.

Decreasing mortality from chronic conditions (e.g., heart disease, cancer or stroke) has resulted in a Kansas and U.S. population with a greater proportion of older adults who are living with chronic diseases, leaving them at greater risk for falling and less likely to survive the injuries resulting from a fall. Research has identified interventions that can reduce falls, but the development and implementation of community-based programs remains limited.⁶ CDC reports additional measures are needed to successfully disseminate effective fall-prevention programs and to promote widespread adoption at the local level.

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References

1. Hornbrook MC, Stevens VJ, Wingfield DJ, Hollis JF, Greenlick MR, Ory MG. (1994) Preventing falls among community-dwelling older persons: results from a randomized trial. *The Gerontologist* 1994;34(1):16-23.
2. Alexander BH, Rivara FP, Wolf ME. (1992). The cost and frequency of hospitalization for all-related injuries in older adults. *American Journal of Public Health* 1992;82(7):1020-3.
3. Stevens JA, Corso PS, Finkelstein EA, Miller TR. (2006) The costs of fatal and nonfatal falls among older adults. *Inj Prev* 2006; 12:290-5.
4. Kansas Hospital Association, Inpatient Hospital Discharge Dataset.
5. Centers for Disease Control and Prevention. (2006). Fatalities and injuries from falls among older adults – United States, 1993-2003 and 2001-2005. *Morbidity and Mortality Weekly Report*. November 17, 2006. Vol. 55 No. 45.
6. Stevens JA. (2005). Falls among older adults – risk factors and prevention strategies. In: Falls free: promoting a national falls prevention action plan. Washington, DC: The National Council on Aging; 2005.

Table 11. Kansas Performance on 10 Leading Health Indicators

See first article on page 1

| Objective | Kansas Rate (Previous Rate) | Kansas Rate (Most Current Rate) | HP2010 Goal |
|---|--|---|---|
| Physical Activity | | | |
| Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardio-respiratory fitness 3 or more days per week for 20 or more minutes per occasion. | - | 70% (2005 KS Youth Risk Behavior Surveillance System, grades 9-12) | 85% (grades 9-12) |
| Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day. | 33% (2003 KS BRFSS) | 38% (2005 KS BRFSS) | 50% |
| Overweight and Obesity | | | |
| Reduce the proportion of children and adolescents who are overweight or obese. | - | 11% (ages 12-18, 2002 KS Youth Tobacco Survey) | 5% (ages 12-19) |
| Reduce the proportion of adults who are obese. | 23% (2004 KS BRFSS) | 24% (2005 KS BRFSS) | 15% |
| Tobacco Use | | | |
| Reduce cigarette smoking by adolescents. | - | 21% (2005 KS Youth Risk Behavior Surveillance Survey, grades 9-12) | 16% (grades 9-12) |
| Reduce cigarette smoking by adults. | 20% (2004 KS BRFSS) | 17.8% (2005 KS BRFSS) | 12% |
| Substance Abuse | | | |
| Increase the proportion of adolescents not using alcohol or any illicit drugs during the past 30 days. | - | 69% (6th, 8th, 10th, and 12th graders not using alcohol at least once in the past 30 days) 91% (6th, 8th, 10th, and 12th graders not using marijuana at least once in the past 30 days) (2005 Kansas Communities That Care Survey Youth Survey) | 89% |
| Reduce the proportion of adults engaging in binge drinking of alcoholic beverages during the past month. | 13% (2004 KS BRFSS) | 12% (2005 KS BRFSS) | 6% |
| Responsible Sexual Behavior | | | |
| Increase the proportion of adolescents who abstain from sexual intercourse. | - | 55% (Abstinence only - 2005 KS Youth Risk Behavior Surveillance System, grades 9-12) | 95% (includes abstinence or condom use if sexually active) |
| Mental Health | | | |
| Increase the proportion of adults with recognized depression who receive treatment. | No Kansas data available that is directly comparable to HP2010 target. | No Kansas data available that is directly comparable to HP2010 target. | 50% |
| Injury and Violence | | | |
| Reduce deaths caused by motor vehicle crashes. | 17.1 deaths per 100,000 population (2003 Vital Statistics, KDHE) | 17.5 deaths per 100,000 population (2004 Vital Statistics, KDHE) | 9.2 deaths per 100,000 population |
| Reduce homicides. | 4.3 homicides per 100,000 population (2003 KS Vital Statistics) | 4.3 homicides per 100,000 population (2004 KS Vital Statistics) | 3.0 homicides per 100,000 population |
| Environmental Quality | | | |
| Reduce the proportion of persons exposed to air that does not meet the U.S. Environmental Protection Agency's health-based standards for ozone. | 0% (EPA Aerometric Information Retrieval System) | 0% (EPA Aerometric Information Retrieval System) | 0% |
| Immunization | | | |
| Increase the proportion of young children who are fully immunized (4:3:1:3:3 series) | 77.5% (4:3:1:3:3 series - 2004 National Immunization Survey) | 84% (4:3:1:3:3 series - 2005 National Immunization Survey) | 80% (4:3:1:3:3 series) |
| Increase the proportion of non-institutionalized adults aged 65 years and older who are vaccinated annually against influenza. | 68% (2004 KS BRFSS) | 66% (2005 KS BRFSS) | 90% |
| Increase the proportion of adults aged 65 years and older ever vaccinated against pneumococcal disease. | 63% (2004 KS BRFSS) | 67% (2005 KS BRFSS) | 90% |
| Access to Health Care | | | |
| Increase the proportion of persons with health insurance. | 85% (2004 KS BRFSS) | 87% (2005 KS BRFSS) | 100% |
| Increase the proportion of persons who have a specific source of ongoing primary care. | 84% (2004 KS BRFSS) | 84% (2005 KS BRFSS) | 96% |
| Increase the proportion of pregnant women who begin prenatal care in the first trimester of pregnancy. | 88% (2003 Vital Statistics, KDHE) | 87% (2004 Vital Statistics, KDHE) | 90% |

News Notes

Health Care Costs Increase

Health care spending per privately insured person increased 7.4 percent in 2005, marking the third year that the cost trend hovered between 7 and 8 percent following double-digit trends in 2001 and 2002. Data for the first quarter of 2006 suggest continued stability. The 2005 trend reflected increased growth in spending for hospital and physician care, offsetting a sharp drop in spending growth for prescription drugs. Hospital utilization trends accelerated, while price trends decelerated in 2005. In contrast to stable spending trends in 2005, premium trends continued to decline in 2006, likely reflecting the lagged effects of earlier years' slowing in cost trends and perhaps signaling a turn in the insurance underwriting cycle.

*Health Affairs
Center for Studying Health System Change*

Longevity May be Related to Education

A number of researchers, many of who are economists, are pointing to education as a strong factor in life span of individuals. The researchers point to the social factor of education as being consistently linked to longer lives in every country where its been studied. The research, reported in *The New Age* indicated that factors like money and health insurance pale in comparison to education. Education is not the only factor in lifespan. Health behaviors, like smoking, also have an impact on the average life span of a population. The article also reviewed factors such as genetics and luck.

Another concern is what to do about the impact of education on health and lifespan. Scientists would like good evidence before advocating for more education funding or programs to keep students in school longer.

*Gina Kolata
New York Times*

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