

Secondhand Smoke Exposure and Smoke-Free Household and Vehicle Rules Among Kansas High School Students

Introduction

In 2010, Kansas enacted a statewide indoor clean air law barring smoking in most indoor public places. While such laws are effective at reducing exposure to secondhand smoke (SHS) and are widely supported [1], children and adults are still exposed to SHS at home, in vehicles and other public and private places. During the 2011/2012 school year, Kansas implemented the Youth Tobacco Survey (YTS) to assess knowledge, attitudes and behaviors related to tobacco in high school students. This report demonstrates a negative association between the prevalence of household and vehicle smoke-free rules and SHS exposure. This association persists regardless of whether or not students live with someone who smokes cigarettes. In general, Kansas high school students who live in households with smoke-free rules have a lower prevalence of SHS exposure than those who live in households without such rules.

Background

The 1986 Surgeon General’s report, *The Health Consequences of Involuntary Smoking*, concluded that involuntary smoking causes disease, including lung cancer, in healthy nonsmokers; the children of parents who smoke have an increased frequency of respiratory infections and respiratory symptoms; and separating smokers and nonsmokers within the same air space does not eliminate exposure to SHS. The 2006 Surgeon General’s report, *The Health Consequences of Involuntary Exposure to Tobacco Smoke*, expands on these findings, concluding that SHS causes premature death and disease in children and in adults who do not smoke; children exposed to SHS are at an increased risk of sudden infant death syndrome (SIDS), acute respiratory infections, ear problems and more severe asthma; exposure of adults to SHS has immediate adverse effects on the cardiovascular system and causes coronary heart disease and lung cancer; the evidence indicates there is no risk-free level of exposure to SHS; millions are still exposed to SHS in their homes and workplaces despite substantial progress in tobacco control; and eliminating smoking in indoor spaces is needed to fully protect nonsmokers from exposure to SHS.

Methods

The Kansas high school YTS is conducted every two years by the Kansas Department of Health and Environment. It is a school-based survey of students in grades 9-12 that uses a two-stage cluster sampling design. During the 2011/2012 school year, 1,118 high school students participated in the state survey, providing weighted results representative of all Kansas high school students.

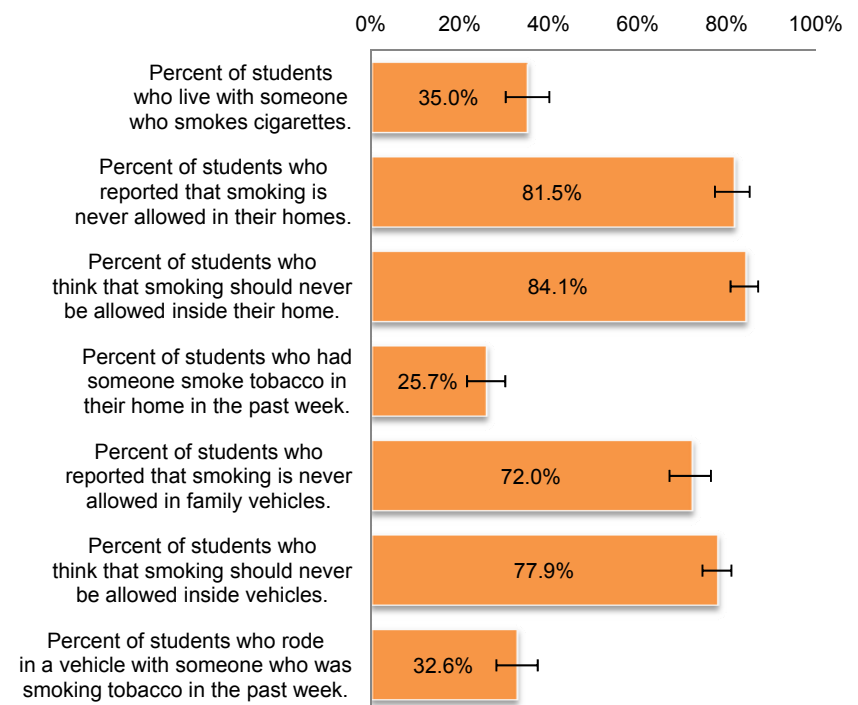
Two separate logistic regression models were constructed to calculate prevalence odds ratios (POR) to compare the prevalence of (1) SHS exposure in the home among students with household rules preventing smoking in the home to those without such rules and (2) SHS exposure in a vehicle among students with household rules preventing smoking in family vehicles to

those without such rules. The logistic regression models were adjusted for gender, age, and whether the student lived with someone who smokes cigarettes. These same logistic regression models were also used to compute adjusted POR of SHS exposure in the home and in a vehicle among students who lived with someone who smokes cigarettes. Models were fit using procedures that adjust variance estimation to account for sampling design. Students who were not 14-18 years old were excluded from the regression analyses. All statistical analyses were conducted using SAS 9.3 software.

Results

About 1 in 3 high school students (35%) in Kansas live with someone who smokes cigarettes. One in 4 high school students (25.7%) were exposed to SHS in the home in the preceding week, and 1 in 3 (32.6%) were exposed to SHS in a vehicle in the preceding week. Most high school students live in households with rules about never allowing smoking inside the home (81.5%) or in a vehicle (72%) (Figure 1).

Figure 1. Percent of Kansas High School Students Experiencing Second hand Smoke Exposure, 2011/2012



Source: Kansas Youth Tobacco Survey

Inside

| | |
|---|----------|
| Secondhand Smoke Exposure and Smoke-Free Household and Vehicle Rules Among Kansas High School Students | 1 |
| Prevalence and Disparities of Walking Among Kansas Adults with Arthritis – 2011 | 2 |
| Kansas Influenza Surveillance, 2012-2013..... | 4 |
| Kansas Inpatient Hospital Deaths Decline..... | 5 |
| 2012 Vital Statistics Counts Published | 6 |
| FastStats..... | 7 |

Table 1. Adjusted prevalence odds ratios (POR) of secondhand smoke (SHS) exposure at home or in a vehicle in the past week among Kansas high school students who live in households with smoke-free rules, Kansas Youth Tobacco Survey, 2011/2012

| | Adj. POR | 95% Confidence Limit | |
|-----------------------|----------|----------------------|-------|
| Home SHS Exposure* | 0.113 | 0.075 | 0.171 |
| Vehicle SHS Exposure† | 0.203 | 0.124 | 0.332 |

*Reference = No household rule preventing all smoking in the home.
 †Reference = No household rule preventing all smoking in family vehicles.

Note: POR are adjusted for gender, age and whether the student lived with someone who smokes cigarettes

Rules about never allowing smoking inside the home and in the vehicle were negatively associated with prevalence of exposure to SHS in the past week at home and in family vehicles, respectively (table 1). The prevalence odds of being exposed to SHS in the preceding week in the home among youth who lived in a household with rules preventing any smoking in the house were 0.113 times the prevalence odds of being exposed to SHS in the home for those who do not live in a house with such rules. Similarly, the prevalence odds of being exposed to SHS in a vehicle in the past week among students who live in households with rules preventing smoking in family vehicles were 0.203 times the prevalence odds of being exposed to SHS in a vehicle for students who do not live in a household with such rules. These associations remained significant after controlling for gender, age and whether students lived with someone who smokes cigarettes.

Table 2. Adjusted prevalence odds ratios (POR) of secondhand smoke (SHS) exposure at home or in a vehicle in the past week among Kansas high school students who live with someone who smokes cigarettes, Kansas Youth Tobacco Survey, 2011/2012

| | Adj. POR | 95% Confidence Limit | |
|-----------------------|----------|----------------------|-------|
| Home SHS Exposure* | 15.59 | 10.47 | 23.21 |
| Vehicle SHS Exposure* | 4.60 | 3.09 | 6.83 |

*Reference = Do not live with someone who smokes cigarettes.

Note: POR are adjusted for gender, age and whether the student lived in a household with smoke-free rules.

Table 2 provides the adjusted POR of SHS exposure in homes and vehicles among those who live with smokers. Although household smoke-free rules are negatively associated with SHS exposure, high school students who live with someone who smokes cigarettes still have a higher prevalence of SHS exposure than those who do not live with someone who smokes cigarettes. The prevalence odds of preceding-week SHS exposure in the home among high school students who live with someone who smokes cigarettes were 15.59 times higher than high school students who do not live with someone who smokes cigarettes. The prevalence odds of preceding-week SHS exposure in a vehicle were 4.6 times higher among high school students who live with someone who smokes cigarettes than among high school students who do not live with someone who smokes cigarettes.

Discussion

In Kansas, 79 percent of adults have smoke-free home rules and 72 percent have smoke-free vehicle rules.[2] Nationally, the prevalence of smoke-free rules was generally higher among adult women than men, older adults, those with more education and in localities with comprehensive smoke-free laws prohibiting smoking in public places and worksites. This analysis demonstrates that household smoke-free rules are associated with reduced prevalence of SHS exposure among youth at home and in family vehicles, regardless of whether students live with a smoker.

Although smoke-free household rules are negatively associated with SHS exposure in high school students, students who live with someone who smokes cigarettes still have a higher prevalence of SHS exposure than students who do not live with some-

one who smokes cigarettes. Parents and guardians interested in protecting their children from SHS exposure should consider enacting smoke-free household rules and quitting smoking. Free help to quit using tobacco is available from the Kansas Tobacco Quitline, 1-800-QUIT-NOW (784-8669) or www.KSquit.org.

This study has several limitations to consider. All data is self-reported and under or over reporting cannot be determined. The YTS is only representative of children in school, and children not in school may have a different risk of SHS exposure or living in a household without smoke-free rules. YTS parental permission procedures varied by school policy, which may contribute to bias in estimates. The YTS is cross-sectional, so temporal relationships between variables cannot be inferred from the data and causal attribution is inappropriate.

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References

1. Kansas Department of Health and Environment. Tobacco and Kansas Adults. Available at: http://www.kdheks.gov/brfss/PDF/2011_BRFSS_Kansas_Tobacco.pdf. Accessed June 14, 2013.
2. King BA, Dube SR, Homa DM. Smoke-Free Rules and Secondhand Smoke Exposure in Homes and Vehicles Among US Adults, 2009–2010. *Prev Chronic Dis* 2013;10:120218. DOI: <http://dx.doi.org/10.5888/pcd10.120218>.

Prevalence and Disparities of Walking Among Kansas Adults with Arthritis - 2011 Kansas Behavioral Risk Factor Surveillance System

Background

Physical activity provides significant health benefits for adults [1]. Walking is a type of physical activity that is potentially accessible, inexpensive and can be done year-round [2]. Walking is the most preferred exercise among adults with arthritis and has been shown to ease arthritis associated symptoms, help improve physical function, speed, strength, balance, and quality-of-life [3]. Before 2011, data on prevalence of walking among adults with arthritis were not available. This information was collected for the first time in Kansas as a part of the 2011 Kansas BRFSS.

Objective

To provide prevalence and disparities of walking among adults with arthritis in Kansas.

Methods

The 2011 Kansas BRFSS data were used for this report. Kansas BRFSS is an ongoing, annual, population-based, random, digit-dial survey of non-institutionalized adults ages 18 years and older living in a private residence with landline and/or cell phone service in Kansas. The question to determine arthritis status was, "Have you ever been told by a doctor or health professional that you have arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?"

The question to determine which adults participate in any physical activity or exercise was, "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?" Those who responded "yes" were asked to report the frequency, duration, and type of activity for the two activities they spent the most time doing during the previous month or week. Walking was the most common activity reported. To calculate the time spent in walking per week, number of walking sessions per week was multiplied by the minutes per walking session. Walking minutes were dichotomized to less than 90 minutes per week and more than or equal to 90 minutes per week. (Continued on page 4)

Table 1. Prevalence of walking <90 minutes per week among adults 18 years and older with arthritis by sociodemographic characteristics and comorbid conditions in Kansas, 2011 BRFSS

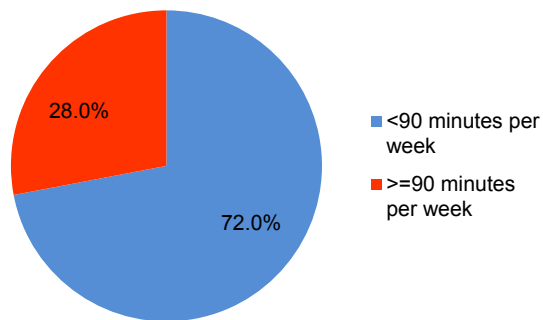
| Sociodemographic characteristics and comorbid conditions | Prevalence of walking <90 minutes per week among adults with arthritis | | | |
|--|--|---------------------|-------------------------------|-------------------------------|
| | Unweighted Frequency | Weighted Percentage | Lower 95% Confidence Interval | Upper 95% Confidence Interval |
| Total | 4410 | 72.0 | 70.6 | 73.3 |
| Age groups | | | | |
| 18 - 44 years | 326 | 72.1 | 67.5 | 76.8 |
| 45 - 64 years | 1890 | 72.4 | 70.4 | 74.3 |
| 65 years and older | 2194 | 71.4 | 69.6 | 73.2 |
| Gender | | | | |
| Male | 1430 | 73.5 | 71.2 | 75.8 |
| Female | 2980 | 70.9 | 69.2 | 72.5 |
| Race | | | | |
| White only | 3990 | 71.9 | 70.5 | 73.3 |
| Black or African American only | 202 | 76.2 | 69.1 | 83.2 |
| Other Race only | 125 | 67.3 | 58.8 | 75.8 |
| More than one race | 81 | 76.1 | 67.6 | 84.6 |
| Ethnicity | | | | |
| Hispanic | 111 | 75.0 | 67.1 | 82.8 |
| Non-Hispanic | 4294 | 71.8 | 70.5 | 73.2 |
| Annual Household Income | | | | |
| Less than \$15,000 | 547 | 75.9 | 71.9 | 79.8 |
| \$15,000 - \$24,999 | 851 | 75.0 | 71.9 | 78.1 |
| \$25,000 - \$34,999 | 597 | 71.3 | 67.5 | 75.1 |
| \$35,000 - \$49,999 | 623 | 70.0 | 66.4 | 73.6 |
| \$50,000 or higher | 1146 | 69.2 | 66.6 | 71.7 |
| Education | | | | |
| Less than high school | 376 | 79.5 | 75.3 | 83.6 |
| High school graduate or G.E.D | 1557 | 75.3 | 73.0 | 77.5 |
| Some college | 1335 | 70.0 | 67.4 | 72.5 |
| College graduate | 1137 | 65.3 | 62.8 | 67.9 |
| Marital Status | | | | |
| Married or member of an unmarried couple | 2294 | 72.7 | 70.9 | 74.4 |
| Divorced or separated | 813 | 69.7 | 66.3 | 73.2 |
| Widowed | 1008 | 71.0 | 68.2 | 73.7 |
| Never married | 285 | 73.4 | 67.2 | 79.6 |
| Employment Status | | | | |
| Employed for wages or Self-employed | 1520 | 72.7 | 70.4 | 75.0 |
| Out of work | 185 | 75.1 | 69.3 | 81.0 |
| Homemaker or Student | 232 | 68.6 | 62.0 | 75.1 |
| Retired | 1902 | 68.8 | 66.8 | 70.8 |
| Unable to work | 565 | 78.3 | 74.7 | 82.0 |
| Disability Status | | | | |
| Living with a disability | 2666 | 76.5 | 74.8 | 78.2 |
| Living without a disability | 1726 | 66.5 | 64.4 | 68.7 |
| Insurance Status | | | | |
| Insured | 4071 | 71.3 | 69.9 | 72.7 |
| Uninsured | 332 | 77.5 | 72.7 | 82.2 |
| Weight Categories | | | | |
| Normal or Underweight (BMI<25) | 1053 | 66.9 | 64.0 | 69.8 |
| Overweight (25<=BMI<30) | 1385 | 69.8 | 67.4 | 72.2 |
| Obese (BMI>=30) | 1754 | 76.4 | 74.3 | 78.5 |
| Diabetes Status | | | | |
| Have diabetes | 971 | 77.7 | 75.1 | 80.4 |
| No diabetes | 3435 | 70.6 | 69.0 | 72.1 |
| Self-Perceived Health Status | | | | |
| Fair or poor health | 1599 | 80.8 | 78.7 | 82.9 |
| Excellent, very good or good health | 2794 | 67.7 | 66.0 | 69.4 |
| Mental Health Indicator | | | | |
| 14+ days mental health not good | 625 | 76.3 | 72.4 | 80.1 |
| <14 days mental health not good | 3689 | 71.0 | 69.6 | 72.5 |

The Arthritis Foundation's Walk With Ease (WWE) program recommends walking 90 minutes or more per week (3 days per week with approximately 30 minutes of total walking time per session) to help improve arthritis symptoms [4]. Prevalence estimates and 95% confidence intervals (CI) were calculated. Data were weighted using the new raking method [5]. SAS 9.3 software was used for analysis.

Results

In 2011, 72.0% (95% CI: 70.6 -73.3) of adults with arthritis reported walking less than 90 minutes per week (Figure 1).

Figure 1. Prevalence of walking <90 minutes per week among adults 18 years and older



Higher prevalence of adults with arthritis who reported walking less than 90 minutes per week was seen among those who have lower income and those who have lower education. Prevalence of walking less than 90 minutes per week was also relatively higher among adults with diabetes, those who are obese, those who reported fair or poor self-perceived health, and those living with a disability (Table 1 on page 3).

Conclusions

Walking is a recommended form of exercise to help reduce arthritis-related symptoms among adults with arthritis. High prevalence of little (<90 minutes) or no walking per week is seen among adults with arthritis in Kansas. Disparities in walking prevalence are also seen with respect to various socio-demographic sub groups and among those with certain health conditions and behaviors. These population-based survey results indicate the need for public health strategies to address issues related to high prevalence of little or no walking among Kansas adults with arthritis.

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References

1. CDC. Physical Activity and Arthritis Overview. Available at: http://www.cdc.gov/arthritis/pa_overview.htm . Accessed on July16, 2013.
2. Manning VL, Hurley MV, Scott DL, Bearne LM. Are patients meeting the updated physical activity guidelines? Physical activity participation, recommendations, and preferences among inner-city adults with rheumatic diseases. *J Clin Rheumatol* 2012;18:399–404.
3. CDC. State-Specific Prevalence of Walking Among Adults with Arthritis — United States, 2011. *MMWR* 2013; 62:331–4.
4. Arthritis Foundation. Walk With Ease. Available at: <http://www.arthritis.org/resources/community-programs/walk-with-ease/> . Accessed on July16, 2013.
5. CDC. Methodologic changes in the Behavioral Risk Factor Surveillance System in 2011 and potential effects on prevalence estimates. *MMWR* 2012;61:410–3.

Kansas Influenza Surveillance, 2012-2013

Influenza is not a nationally notifiable disease, nor is it a notifiable disease in Kansas. Because patient-level data other than pediatric influenza deaths is not reported to state health departments or to the Centers for Disease Control and Prevention (CDC), the burden of disease must be tracked through methods other than case-based surveillance. Influenza surveillance in Kansas consists of four components that provide data on outpatient influenza-like illness, influenza viruses, and influenza-associated deaths.

Methods

The Outpatient Influenza-Like Illness Surveillance Network (ILINet) is a collaboration between the CDC, state, local, and territorial health departments and participating outpatient clinics. The purpose of the surveillance is to track influenza-like illness (ILI), recognize trends in influenza transmission, determine the types of influenza viruses circulating, and detect changes in influenza viruses. Influenza-like illness is defined by the CDC as fever ($\geq 100^{\circ}\text{F}$ or $\geq 37.8^{\circ}\text{C}$, measured either at the ILINet site or at the patient's home) with cough or sore throat, in the absence of a known cause other than influenza.

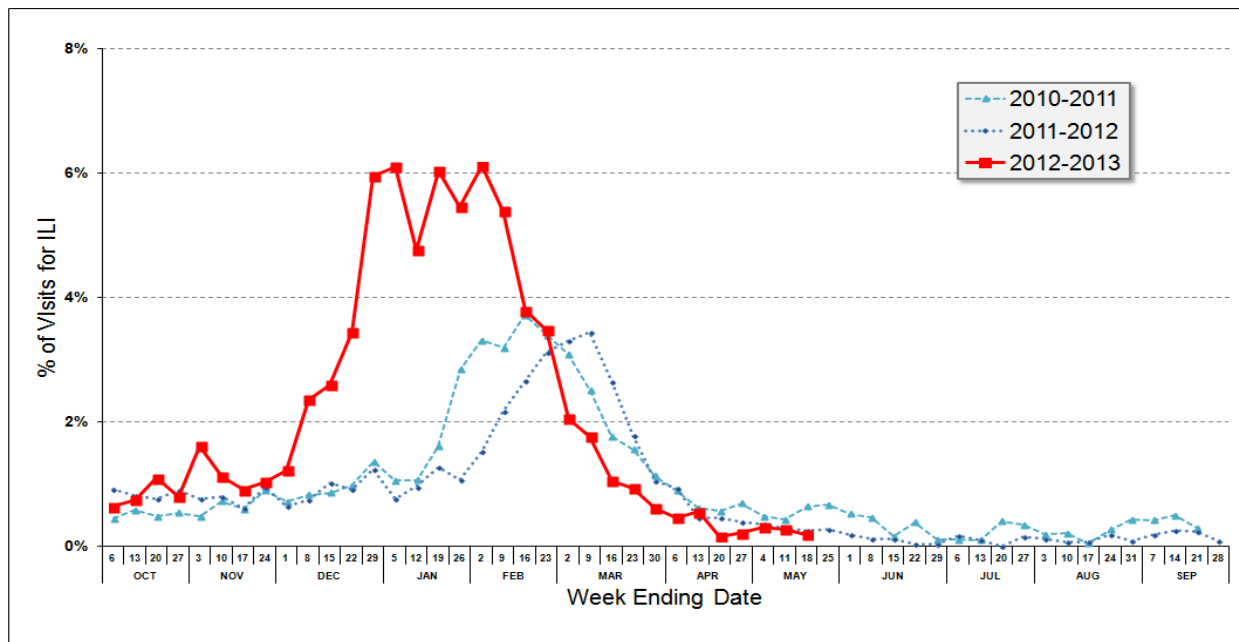
The Bureau of Epidemiology and Public Health Informatics (BEPHI) at the Kansas Department of Health and Environment (KDHE) recruited health care providers throughout Kansas to participate in ILINet. Each week, ILINet site personnel determine the total number of patients seen with ILI during the previous week by age group — preschool (0-4 years), school age through college (5-24 years), adults (25-49 years and 50-64 years), and older adults (>64 years). In addition, the total number of patients seen during the previous week is recorded. This data is submitted to the CDC via the internet or fax; sites are asked to report the previous week's data by 11:00 AM each Tuesday.

When the surveillance period of the week ending October 6, 2012 began, 44 health care providers were enrolled in ILINet. One site dropped out during the week ending December 1, 2012, and another dropped out during the week ending January 12, 2013. As a result, the 2012-2013 surveillance data was collected from 42 sites throughout the state: 24 family practice clinics, nine hospital emergency departments, five university student health centers, and four pediatric clinics.

Results

During the influenza surveillance period starting September 30, 2012 (week 40) and ending May 18, 2013 (week 20), sites observed a total of 241,283 patients—5,614 (2.3%) sought care for ILI. The rate of ILI rose steadily from December 2012 through January 2013. The ILI rate peaked at 6.1% during the week ending February 2, 2013. Typically, ILI in Kansas has peaked in December, January, or February. The rate of ILI dropped below 1% during the week ending March 23, 2013 and remained low through the end of the surveillance period.

Figure 1. Percentage of visits for influenza-like illness (ILI) reported by ILINet sites, Kansas, October 2012 – May 2013 and previous two surveillance periods*



*ILINet sites may vary in number and type (student health, family practice, etc.) each season. Data from the previous two surveillance years are plotted according to week number corresponding to the 2012-2013 week ending date; for example, week 40 ended October 6, 2012, week 40 of 2011 ended October 8, 2011, and week 40 of 2010 ended October 9, 2010.

The Kansas Health and Environmental Laboratories (KHEL) provided confirmatory testing for selected ILINet site patients with ILI, as well as for hospitalized patients throughout the state. Polymerase chain reaction (PCR) tests were used to analyze nasal and nasopharyngeal swabs for the presence of influenza virus. Laboratory data were sent weekly to CDC by KHEL. In addition, KHEL forwarded a subset of its specimens to CDC for subtyping, antigenic characterization, and antiviral resistance testing.

From October 1, 2012, when the first respiratory specimen for influenza testing was received, until May 18, 2013, when the 2012-2013 surveillance period ended, KHEL tested 194 specimens for influenza. ILINet sites submitted 154 (79%) specimens; the remainder were primarily submitted by hospitals. Influenza was detected in 104 (54%) of the specimens. Both influenza type A and B viruses were detected. Two influenza A subtypes, A/H1 and A/H3, were seen. (Table 1). Subtypes seen in Kansas reflected national trends, with A/H3 viruses detected most frequently, followed by influenza B and A/H1 strains.

Table 1: Laboratory-confirmed influenza viruses by subtype, Kansas, October 1, 2012 – May 18, 2013 (n=104)

| Influenza subtype | Number | Percent of Total |
|-------------------|--------|------------------|
| A/H3 | 71 | 68% |
| B | 29 | 28% |
| A/H1 | 4 | 4% |

The 2013-2014 influenza seasonal surveillance will begin on October 5, 2013. ILINet relies on data submitted by volunteer sites — if you know of a family practice clinic, hospital emergency department, student health center, or pediatric clinic that may wish to participate in ILINet, please contact Amie Worthington aworthington@kdheks.gov, 785-296-2898, KDHE's influenza surveillance coordinator.

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Kansas Inpatient Hospital Deaths Decline

The National Center for Health Statistics (NCHS) Data Brief Number 118 of March 2013 presents National Hospital Discharge Survey (NHDS) data for 2000 through 2010 on patients who died while hospitalized. The number of deaths decreased over that time period, while the number of total hospitalizations increased. Comparisons were made based on sex, age distribution, first-listed diagnosis, and length of stay. [1] The current paper attempts the same comparisons for Kansas community hospitals.

Methods

Kansas community hospital discharge data were provided to the Kansas Department of Health and Environment, Bureau of Epidemiology and Public Health Informatics (BEPHI) by the Kansas Hospital Association. Data included in the analysis were for Kansas residents and non-Kansas residents hospitalized in non-federal, non-institutional general hospitals located in Kansas. An individual appears more than once in the dataset if admitted multiple times.

Death certificate data collected by the Office of Vital Statistics of BEPHI were used to determine where non-hospital deaths occurred. The certificate contains a field which identifies the place of death as inpatient, ER/outpatient, decedent residence, etc. Since the death and hospital discharge datasets represent distinctly different cohorts, direct comparison of trends was not possible.

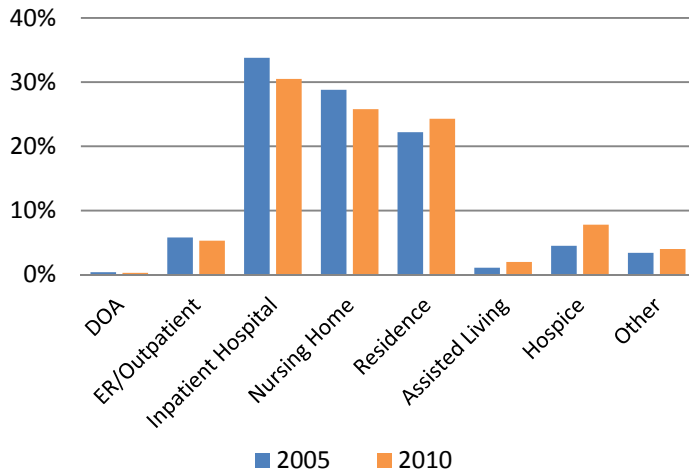
Results

In Kansas hospitals contained in the discharge data, the number of inpatient hospital deaths decreased 21 percent, from 7,190 in 2000 to 5,674 in 2010. The number of total hospitalizations decreased slightly (1.3%), from 327,230 in 2000 to 322,832 in 2010.

An analysis of death certificate data for Kansas residents showed increasing numbers of deaths occurring at home, in assisted living facilities, and in Hospice in 2010, compared to 2005

(assisted living and hospice were not present as categories on the death certificate prior to 2005). Decreases occurred in hospitals, both inpatient and emergency room/outpatient, and in nursing homes (Figure 1).

Figure 1. Place of Death for Kansas Residents, 2005 and 2010



In the hospital discharge data, the number of females dying while hospitalized decreased 26 percent, and the number of males decreased 16 percent. In 2000, three percent of males (2.7 %) and two percent of females (1.9 %) died while hospitalized. In 2010, the percentages fell to two percent (2.2 %) and one percent (1.4 %), respectively (Table 1).

From 2000 to 2010, the percent of decedents aged less than 65 increased from 23 percent to 27 percent. The greatest percentage decrease was in the 75-84 age group, from 32 percent to 27 percent. The average age of patients who died during hospitalization remained between 71 and 72 years.

In Kansas, inpatient death rates decreased for eight major primary diagnoses from 2000 to 2010. Same as for national data, the largest decrease was in the death rate for kidney disease (59 percent). While the national rate for septicemia increased, the Kansas rate showed a decline of 16 percent (Table 1). However, the number of inpatient deaths with primary diagnosis of septicemia in Kansas in 2010 (877) was over twice the number in 2000 (373), while the national data brief reported three times the number in 2010 as 2000. The eight primary diagnoses in Table 2 accounted for over 60 percent of inpatient deaths in all years from 2000 to 2010.

Table 1. Inpatient Death Rates* by Primary Diagnosis: Kansas, 2000, 2005, and 2010

| Primary Diagnosis | 2000 Rate | 2005 Rate | 2010 Rate | Percent Change 2000 to 2010 |
|---------------------------------------|-----------|-----------|-----------|-----------------------------|
| Respiratory Failure | 25.5 | 18.4 | 14.0 | -45% |
| Pneumonitis due to solids and liquids | 18.7 | 13.3 | 10.3 | -45% |
| Septicemia | 15.4 | 16.0 | 13.0 | -16% |
| Kidney Disease | 11.7 | 7.5 | 4.8 | -59% |
| Cancer | 7.3 | 6.0 | 5.1 | -30% |
| Stroke | 6.5 | 5.6 | 5.2 | -20% |
| Pneumonia | 4.8 | 3.4 | 3.3 | -31% |
| Heart Disease | 4.1 | 3.1 | 3.0 | -27% |

* Rate of deaths per 100 persons hospitalized with this primary diagnosis

For all years from 2000 to 2010, approximately 20 percent of hospitalizations and between 35 and 40 percent of inpatient deaths had length of stay greater than 5 days. Nationally, average

lengths of hospital stays were greater for patients who died while hospitalized than for the general hospitalized population.

Conclusions

Analysis of inpatient deaths by use of Kansas hospital discharge data produces similar findings to those of the NCHS data brief: decreasing numbers of inpatient deaths from 2000 to 2010, little change in age distribution of decedents (over one-quarter aged 85 and over), and falling death rates (per 100 hospitalizations) for major primary diagnoses. In Kansas, and nationally, there was a notable increase in the number of patients with a primary diagnosis of septicemia.

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Reference

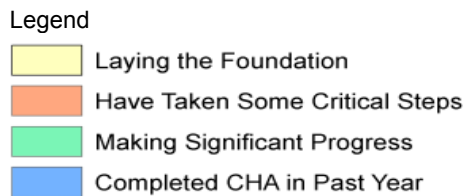
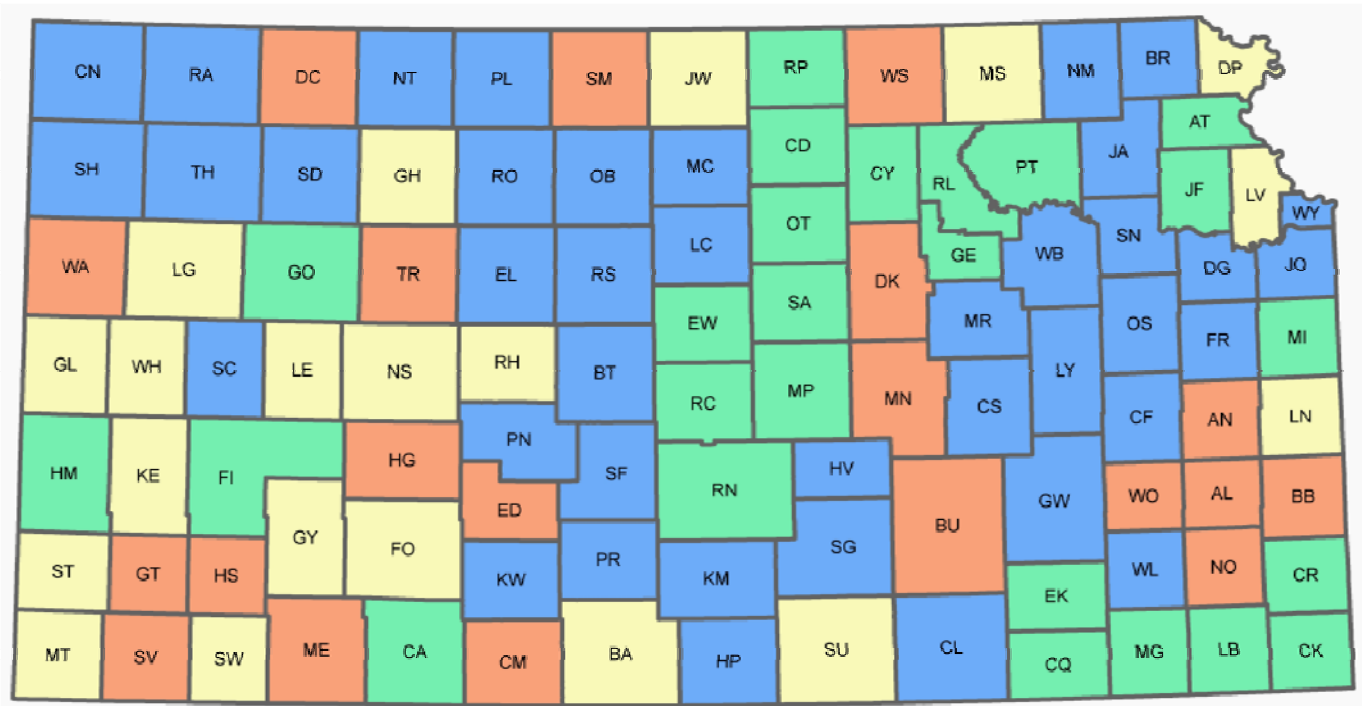
- Hall MF, Levant S, DeFrances CJ. Trends in inpatient hospital deaths: National Hospital Discharge Survey, 2000-2010. NCHS data brief, no 118. Hyattsville, MD: National Center for Health Statistics. 2013. Available at <http://www.cdc.gov/nchs/data/databriefs/db118.pdf>. Accessed March 28, 2013.

2012 Vital Statistics Counts Published

The Bureau of Epidemiology and Public Health Informatics (BEPHI) has posted a selected list of Annual Statistical Tables for 2012 to the Kansas Information for Communities (KIC) website: <http://kic.kdhe.state.ks.us/kic/OHA/anntable12.html>. This set of 25 tables includes county and city level counts of births, deaths, infant deaths, marriages and marriage dissolutions.

Individual birth tables also include limited information on maternal demographics and the circumstances of delivery, while individual death tables include limited information on the cause and circumstances of death. These tables contain counts only. More detailed information and rates will be included in the 2012 Kansas Annual Summary of Vital Statistics, due for release later this year.

Community Health Assessment Progress in Kansas Counties, March 2013



The Kansas Department of Health and Environment Bureau of Community Health Systems surveys local health departments on the extent of their progress on Community Health Assessment (CHA). CHA, Community Health Improvement Planning, and a strategic plan are three mandatory components for health departments becoming accredited. The March 2013 survey of health departments indicates that 40 have completed a community health assessment, up from just three in March 2012. Survey responses for laying the foundation for CHA, the first activity level, dropped from 60 in March 2012 to 20 health departments in March 2013. Community health assessment is considered one of the ten essential services of public health agencies.

Data Source – March 2013 reports for SFY 2014 formula applications. Bureau of Community Health Systems, Kansas Department of Health and Environment. Categories determined by responses to pre-determined set of “Steps toward Completion of Community Health Assessment.”

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